

**Product Range  
International  
2010**

**PVC-U**  
piping systems for  
industrial application

Pipe, Fittings,  
Valves and Accessories





# More than 50 Years of Application Know How



Our long experience in plastic piping systems applications is also for your security. Approvals and third party controls are guarantee for continuously high

quality. Many of our products have the necessary approvals of the relevant institutes and thanks to the batch identification they are traceable.

## Fields of applications

Our specialists are proving their wide material knowledge and their application experience day by day in various industries:

- Water treatment
- Waste water treatment
- Galvanics
- Chemical industry
- Automotive industry
- Electronic industry
- Energy
- Swimming pools
- Cellulose and paper industry
- Photo industry

- Textile industry
- Shipbuilding
- Beverage industry
- Exhaust gas cleaning
- Chlorine industry
- Cooling and air conditioning
- Refrigeration plants
- Food
- Mining

Do you miss your application in the above list? No problem. Please call us, and we will find a solution according to your specifications.

## Approvals

**kiwa**

**IIP**

**NF**



Lebensmittelzulassung

## Drinking water approvals

**WRAS**  
APPROVED PRODUCT

**MAIRIE DE PARIS**

**kiwa**

## Shipbuilding approvals



**BUREAU VERITAS**



**Germanischer Lloyd**



**DET NORSKE VERITAS**

**Lloyd's Register**

# Quality Products with Advantages



## Advantage of Wide Product Ranges

Fittings

Hand Operated Valves

Pipes

Joining Systems

Actuated Valves

Measure and Control Technology

Machines and Tools

available in four standards: ISO/DIN, ASTM/ANSI, BS and JIS



Quality management system certified according to ISO 9001/EN 29001 and ISO



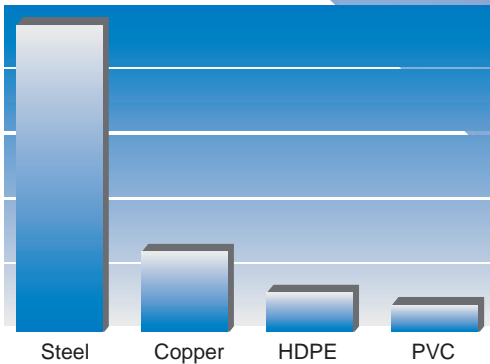
## Advantage of Quality

Compound

Our own compound and strict quality controls for each raw material delivery form the basis for GF Piping Systems high quality products.

Production Know-How

Due to know-how gathered over 50 years we are able to produce our products to exceptionally high tolerances.

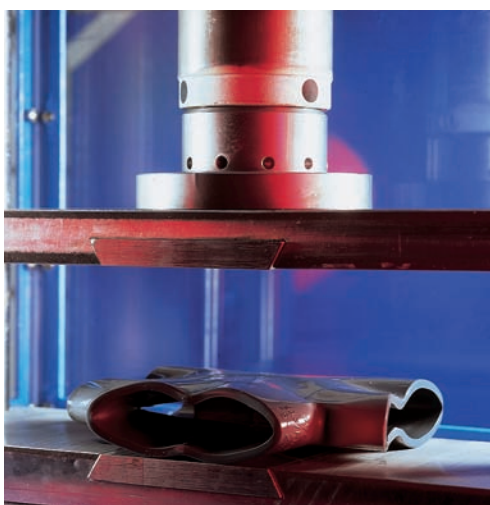


Source: TCI

Energy required for 100 m pressurised pipe

## Advantage for the Environment

In addition to the economical advantage of PVC-U, PVC-C and ABS there are also ecological advantages:  
 Preserving diminishing natural resources  
 Less energy required  
 Possibility of recycling  
 Very long life span



## Advantage of Production Quality Control Tests

Pressure Pulsation Testing 1000 h Test  
 Chemical Resistance Functions  
 Temperature Cycling Test  
 Cyclic Bending Test

Independently accredited test laboratory for components of plastic piping systems according to SN EN ISO 45001

# for Professional Users

## Advantage in Planning

### One-stop-shopping for complete systems

Many customers prefer to purchase the complete piping system from one supplier. Because only systems that are designed to complement each other guarantee easy planning, installing and efficient functioning of the piping system.

### CAD Product Library

For drawing and providing a list of orders GF Piping Systems CAD Product Library is an optimal solution. Can be used with AutoCAD and other CAD systems.



## Advantage of Choosing the Right Material

For maximum safety and optimal durability of a piping system the choice of raw material and pressure class of the pipe parts is highly important. The raw material's suitability to the medium can be checked with the help of our chemical resistance list.



## Advantage of Installation Technique

Cement jointing is simple, fast, economical and very reliable.

Over 100 million homogenous joints have been made over the total life time of piping systems, achieving the highest quality requirements.



## Advantage of Support

### Training

GF Piping Systems offers training possibilities at our regional sales companies, in our own training center in Schaffhausen or at your premises. For cement jointing we can also provide you with a training video.

### Worldwide Distribution

Sales companies, representatives and dealers from GF Piping Systems can supply you with complete technical advice, punctual distribution and fast service in almost every corner of the world.



# GF Piping Systems quality is no coincidence!

More than 50 years of research, development and experience have shaped our high standard of quality. You will find the solution to your problem in our extensive product range:

## Solvent Cemented Systems

### PVC-U

Unplasticised  
Polyvinyl Chloride

**Range of sizes:**  
6–400 mm, BS 3/8" – 8"

**Resistant to:**  
Acids and alkalis

**Recommended applications:**  
Drinking water, distilled water, general purpose water, waste water, coolant brines, sea water, construction of plant and apparatus, foodstuffs, beverages. Universally applicable plastic with the widest range of fittings and valves

**Not recommended for:**  
Aromatic solvents, ester, ketones, chlorinated hydrocarbons  
low temperature uses (< 0 °C)  
high temperature uses (> 60 °C)

### PVC-C

post-chlorinated PVC-U

**Range of sizes:**  
16–225 mm

**Resistant to:**  
Acids and alkalis at high temps (max. 90 °C) and high concentrations

**Recommended applications:**  
Hot and aggressive mediums, high temperature, high corrosive environments, chemical industry generally (e.g. mixed acid waste) and hot water industrial applications

**Not recommended for:**  
Aromatic solvents, ester, ketones, chlorinated hydrocarbons  
low temperature uses (< 0 °C)

### ABS

Acrylonitrile Butadiene  
Styrene

**Range of sizes:**  
16–315 mm  
BS 3/8" – 8"

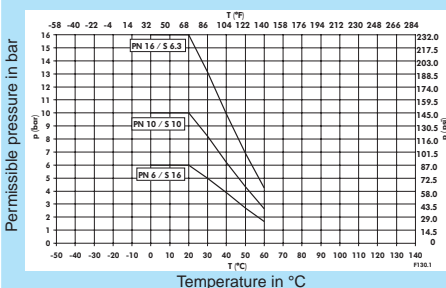
**Resistant to:**  
Alkalis, weak acids, and salts

**Recommended applications:**  
Low temperature brine, chilled water, refrigerants, air conditioning, drinking water, water treatment, process water, mining industry, and foodstuffs

**Not recommended for:**  
High temperature uses (> 60 °C)  
bleaches, aromatic solvents, ester, ketones and alcohols

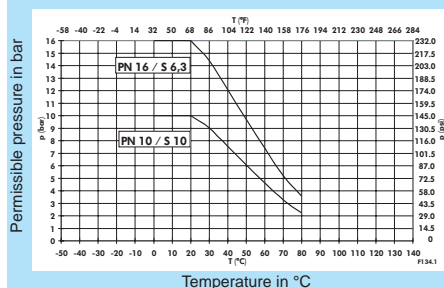
### Application Limits for Pipes and Fittings in PVC-U

25-year values with Design Factor C included at 20 °C water



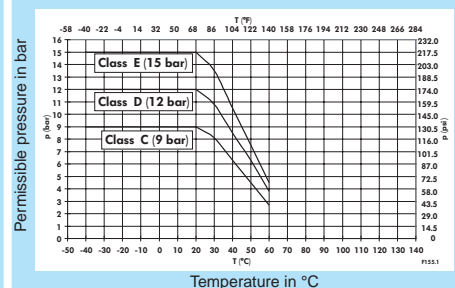
### Application Limits for Pipes and Fittings in PVC-C

25-year values with Design Factor C included at 20 °C water
















### Application Limits for Pipes and Fittings in ABS










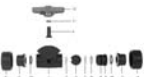

25-year values with Design Factor C included at 20 °C water













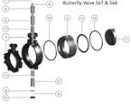


These diagrams are subject to adaptations to new European standards about to be issued. Ask your GF Piping Systems dealer for more information.

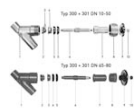
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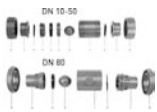
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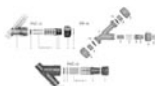
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# Fittings

## General information

### Materials

The material PVC-U conforms with the corresponding recommendations of the German Federal Board of Health.

### Standards

All the main dimensions of solvent cement fittings and adaptor pipe fittings, such as nominal bore, z dimensions, socket depth and diameter, are in accordance with ISO Recommendations, ISO Draft Resolutions for millimetre pipes and DIN 8063.

Solvent cement joint	Threaded joint	Flange joints
ISO 727 DIN 8063 DIN EN ISO 15493 NF T54-028/016 DIN EN 1452-3 ASTM D-2464 ANSI B 1.20.1	ISO 7/1 ISO 228/1 DIN 2999 UNI 338 BSI 21	DIN 2501/8063 ISO 7005 BS 4504 ANSI / B16.5

For PVC-U Fittings in British Standard please request our special literature.

### Joining

**Solvent cement jointing:**  
Pipes with outside diameter tolerances in accordance with ISO 11922-3 can be readily jointed with GF Piping Systems fittings.

**Threaded joint:**  
Threaded plastic fittings should be jointed to plastic pipes or to other plastic parts. Jointing to metal pipes or fittings is permissible only where there is little stress, and should be carried out with great care.

### Solvent Cement

A cement with gap-filling properties must be used. Our instructions for solvent connections are based on the use of TANGIT solvent cement.

### Nominal Pressure

Unless otherwise stated:  
Conditional pressure for solvent cement fittings and adaptor fittings:  
PN 16, i.e. 16 bar at 20°C (water).  
Conditional pressure for threaded fittings:  
PN 10, i.e. 10 bar at 20°C (water).

### Marking

Solvent cement and adaptor pipe fittings from GF Piping Systems are marked as follows:

- +GF+
- pipe o.d. or pipe thread size
- Material

Pressure rating:

M	=	PN 16
unmarked	=	PN 10
S 6.3/PN 16	=	PN 16
S 10/PN 10	=	PN 10

Threaded pipe fittings from GF Piping Systems are marked as follows:

- +GF+
- pipe thread size
- Material

Reducing fittings are marked in the following sequence (Fig. 1):

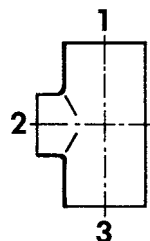


Fig. 1

### Angle Marking

PVC fittings for solvent cement jointing from GF Piping Systems are being supplied with a 45° angle marking (Fig. 2).

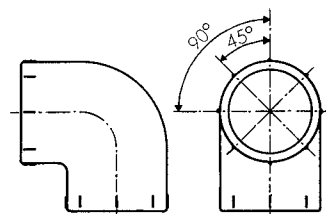


Fig. 2

### Dimensions

All dimensions are given in mm.

### Information Service

For detailed information see our Catalogue «Plastic Piping Systems».

### Quality Mark

The GF Piping Systems PVC-U fittings are tested to the following national standards institutes. The quality and test levels of our PVC-U fittings are constantly inspected by these institutes in our works.

BSI, Kite Mark, England  
NF, Marque de qualité, France  
KIWA, Netherlands  
UNI, Istituto Italiano Plastici, Italy  
ÖNORM, Austria Plastics Institute, Austria  
DIBT, TÜV Bavaria, Germany

### Orders

Always quote the GF Piping Systems code number when placing orders.

### Ordering example

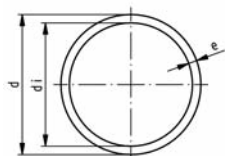
90° bend 721 000 111

# List of abbreviations

ANSI	American National Standard	DN	Nominal bore
ASTM	American Society for Testing and Materials	PN	Nominal pressure at 20°C, water
BS	British Standard	kg	Weight in kilograms
DIN	Deutsche Industrie-Normen	SP	Standard pack. The figure given indicates the quantity of fittings contained in a standard pack
ISO	International Standardization Organisation	GP	Gross pack. The figure given indicates the quantity of fittings contained in a gross pack
ABS	Acrylnitril Butadien Styrene	G	Pipe thread, not pressure tight in the thread to ISO 228-1
PVC-U	Polyvinyl Chloride	NPT	Taper male thread pressure tight in the thread to ANSI B 1.20.1
PVC-C	Polyvinyl Chloride chlorinated	R	Taper male thread, pressure tight in the thread to ISO 7-1/DIN 2999-1
PP	Polypropylene, heat stabilised	Rc	Taper female thread, pressure tight in the thread to ISO 7-1/DIN 2999-1
PE	Polyethylene	Rp	Parallel female thread, pressure tight in the thread to ISO 7-1/DIN 2999-1
PVDF	Polyvinylidene fluoride	Tr	Trapezoid thread
EPDM	Ethylene Propylene Rubber	SC	Size of hexagon bolts
FPM	Fluorine Rubber, e.g. Viton®	s	A/F
NBR	Nitrile Rubber	e	Wall thickness
IIR	Butyl Rubber	AL	Number of bolt holes
CSM	Chlore Sulphonyl Polythene, e.g. Hypalon®	®	Registered trade-mark
CR	Chloroprene Rubber, e.g. Neoprene®		
PTFE	Polytetrafluorethylene, e.g. Teflon®		
PBTP	Polybutylene terephthalate		
UP-GF	Unsaturated polyester resin glassfibre reinforced		
St	Steel		
Ms	Brass		
Tg	Malleable Iron		
d	Pipe outside diameter		

## Pipes metric

61 01 71



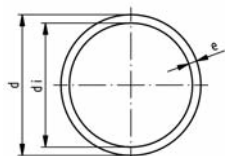
### Pipe PVC-U grey Series S6.3 SDR13.6 nominal pressure PN16

**Model:**

- Material: PVC-U, Polyvinylchloride unplasticised DIN 8061
- Colour: RAL 7011 - dark-grey
- Dimension: DIN EN ISO 15493, DIN 8062
- Pipe length: 5m, with plain ends
- Minimum order quantity: 1 length

d [mm]	d [inch]	PN	Code	e [mm]	di [mm]	Weight [kg/m]
12		16	<b>161 017 104</b>	1.0	10.0	0.055
16		16	<b>161 017 105</b>	1.2	13.6	0.090
20		16	<b>161 017 106</b>	1.5	17.0	0.137
25		16	<b>161 017 107</b>	1.9	21.2	0.212
32		16	<b>161 017 108</b>	2.4	27.2	0.342
40		16	<b>161 017 109</b>	3.0	34.0	0.525
50		16	<b>161 017 110</b>	3.7	42.6	0.809
63		16	<b>161 017 111</b>	4.7	53.6	1.290
75	2 ½	16	<b>161 017 112</b>	5.6	63.8	1.820
90		16	<b>161 017 113</b>	6.7	76.6	2.610
110		16	<b>161 017 114</b>	8.1	93.8	3.900
125		16	<b>161 017 115</b>	9.2	106.6	5.010
140	5	16	<b>161 017 116</b>	10.8	118.4	6.270
160		16	<b>161 017 117</b>	11.8	136.4	8.170

61 01 71



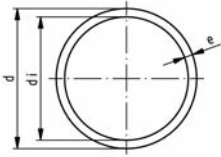
### Pipe PVC-U grey Series S4 SDR9 nominal pressure PN16

**Model:**

- Material: PVC-U, Polyvinylchloride unplasticised DIN 8061
- Colour: RAL 7011 - dark-grey
- Dimension: DIN EN ISO 15493, DIN 8062
- Pipe length: 5m, with plain ends
- **Increased wall thickness for industrial use**
- Minimum order quantity: 1 length

d [mm]	PN	Code	e [mm]	di [mm]	Weight [kg/m]
6	16	<b>161 017 126</b>	1.0	4.0	0.025
8	16	<b>161 017 127</b>	1.0	6.0	0.035
10	16	<b>161 017 128</b>	1.2	7.6	0.053
12	16	<b>161 017 129</b>	1.4	9.2	0.073
16	16	<b>161 017 130</b>	1.8	12.4	0.123
20	16	<b>161 017 131</b>	2.3	15.4	0.196
25	16	<b>161 017 132</b>	2.8	19.4	0.294
32	16	<b>161 017 133</b>	3.6	24.8	0.482
40	16	<b>161 017 134</b>	4.5	31.0	0.750
50	16	<b>161 017 135</b>	5.6	38.8	1.160
63	16	<b>161 017 136</b>	7.0	49.0	1.820
75	16	<b>161 017 137</b>	8.4	58.2	2.600
90	16	<b>161 017 138</b>	10.0	70.0	3.700
110	16	<b>161 017 139</b>	12.3	85.4	5.560

61 01 70



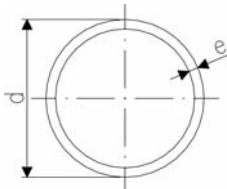
## Pipe PVC-U grey Series S10 SDR21 nominal pressure PN10

### Model:

- Material: PVC-U, Polyvinylchloride unplasticised DIN 8061
- Colour: RAL 7011 - dark-grey
- Dimension: DIN EN ISO 15493, DIN 8062
- Pipe length: 5m, with plain ends
- Minimum order quantity: 1 length

\* See comments regarding PN in +GF+ planning fundamentals

d [mm]	PN	Code	e [mm]	di [mm]	Weight [kg/m]
25	10	<b>161 017 082</b>	1.5	22.0	0.174
32	10	<b>161 017 083</b>	1.8	28.4	0.264
40	10	<b>161 017 084</b>	1.9	36.2	0.350
50	10	<b>161 017 085</b>	2.4	45.2	0.552
63	10	<b>161 017 086</b>	3.0	57.0	0.854
75	10	<b>161 017 087</b>	3.6	67.8	1.220
90	10	<b>161 017 088</b>	4.3	81.4	1.750
110	10	<b>161 017 089</b>	5.3	99.4	2.610
125	10	<b>161 017 090</b>	6.0	113.0	3.340
140	10	<b>161 017 091</b>	6.7	126.6	4.180
160	10	<b>161 017 092</b>	7.7	144.6	5.470
180	10	<b>161 017 093</b>	8.6	162.8	6.880
200	10	<b>161 017 094</b>	9.6	180.8	8.510
225	10	<b>161 017 095</b>	10.8	203.4	10.800
250	10	<b>161 017 096</b>	11.9	226.2	13.200
280	10	<b>161 017 097</b>	13.4	253.2	16.000
* 315	6	<b>161 017 098</b>	15.0	285.0	20.900



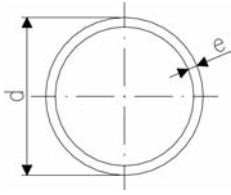
## Pipe PVC-U grey SDR34.3 nominal pressure PN6

### Model:

- Material: PVC-U, Polyvinylchloride unplasticised DIN 8061
- Colour: RAL 7011 - dark-grey
- Dimension: DIN EN ISO 15493, DIN 8062
- Pipe length: 5m, with plain ends
- Minimum order quantity: 1 length

d [mm]	PN	Code	e [mm]	di [mm]	Weight [kg/m]
50	6	<b>161 017 060</b>	1.8	46.4	0.422
63	6	<b>161 017 061</b>	1.9	59.2	0.562
75	6	<b>161 017 062</b>	2.2	70.6	0.782
90	6	<b>161 017 063</b>	2.7	84.6	1.130
110	6	<b>161 017 064</b>	3.2	103.6	1.640
140	6	<b>161 017 066</b>	4.1	131.8	2.650
160	6	<b>161 017 067</b>	4.7	150.6	3.440
180	6	<b>161 017 068</b>	5.3	169.4	4.370
200	6	<b>161 017 069</b>	5.9	188.2	5.370
225	6	<b>161 017 070</b>	6.6	211.6	6.760
250	6	<b>161 017 071</b>	7.3	235.4	8.310
315	6	<b>161 017 072</b>	9.2	296.6	13.200
355	6	<b>161 017 073</b>	10.4	334.2	16.700
400	6	<b>161 017 074</b>	11.7	376.6	21.100



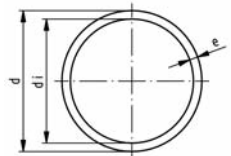


## Pipe PVC-U grey SDR51 nominal pressure PN4

### Model:

- Material: PVC-U, Polyvinylchloride unplasticised DIN 8061
- Colour: RAL 7011 - dark-grey
- Dimension: DIN EN ISO 15493, DIN 8062
- Pipe length: 5m, with plain ends
- Minimum order quantity: 1 length

d [mm]	PN	Code	e [mm]	di [mm]	Weight [kg/m]
75	4	<b>161 017 037</b>	1.8	71.4	0.642
90	4	<b>161 017 038</b>	1.8	86.4	0.774
110	4	<b>161 017 039</b>	2.2	105.6	1.160
125	4	<b>161 017 040</b>	2.5	120.0	1.480
140	4	<b>161 017 041</b>	2.8	134.4	1.840
160	4	<b>161 017 042</b>	3.2	153.6	2.410
180	4	<b>161 017 043</b>	3.6	172.8	3.020
200	4	<b>161 017 044</b>	4.0	192.0	3.700
225	4	<b>161 017 045</b>	4.5	216.0	4.700
250	4	<b>161 017 046</b>	4.9	240.2	5.650
280	4	<b>161 017 047</b>	5.5	269.0	7.110
315	4	<b>161 017 048</b>	6.2	302.6	9.020

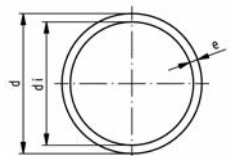


## Pipe PVC-U transparent Series S6.25 SDR13.5 nominal pressure PN16

### Model:

- Material: PVC-U, Polyvinylchloride unplasticised DIN 8061
- Colour: transparent
- Dimension: DIN EN ISO 15493, DIN 8062
- Pipe length: 5m, with plain ends
- The material used fulfills the requirements of DIN 8061 in all aspects except longterm pressure test
- Minimum order quantity: 1 length

d [mm]	PN	Code	e [mm]	di [mm]	Weight [kg/m]
12	16	<b>192 017 104</b>	1.0	10.0	0.055
16	16	<b>192 017 105</b>	1.2	13.6	0.090
20	16	<b>192 017 106</b>	1.5	17.0	0.137
25	16	<b>192 017 107</b>	1.9	21.2	0.212
32	16	<b>192 017 108</b>	2.4	27.2	0.342
40	16	<b>192 017 109</b>	3.0	34.0	0.525
50	16	<b>192 017 110</b>	3.7	42.6	0.809
63	16	<b>192 017 111</b>	4.7	53.6	1.290



## Pipe PVC-U transparent Series S10 SDR21 nominal pressure PN10

### Model:

- Material: PVC-U, Polyvinylchloride unplasticised DIN 8061
- Colour: transparent
- Dimension: DIN EN ISO 15493, DIN 8062
- Pipe length: 5m, with plain ends
- Minimum order quantity: 1 length

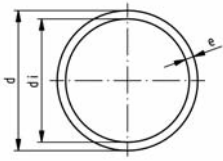
d [mm]	PN	Code	e [mm]	di [mm]	Weight [kg/m]
25	10	<b>192 017 082</b>	1.5	22.0	0.174
32	10	<b>192 017 083</b>	1.8	28.4	0.264
40	10	<b>192 017 084</b>	1.9	36.2	0.366
50	10	<b>192 017 085</b>	2.4	45.2	0.552
63	10	<b>192 017 086</b>	3.0	57.0	0.854
75	10	<b>192 017 087</b>	3.6	67.8	1.220
90	10	<b>192 017 088</b>	4.3	81.4	1.750
110	10	<b>192 017 089</b>	5.3	99.4	2.610



## Pipe PVC-U transparent Series S16.7 SDR34.3 nominal pressure PN6

### Model:

- Material: PVC-U, Polyvinylchloride unplasticised DIN 8061
- Colour: transparent
- Dimension: DIN EN ISO 15493, DIN 8062
- Pipe length: 5m, with plain ends
- The material used fullfills the requirements of DIN 8061 in all aspects except longterm pressure test
- Minimum order quantity: 1 length



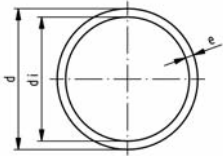
d [mm]	PN	Code	e [mm]	di [mm]	Weight [kg/m]
50	6	<b>192 017 060</b>	1.8	46.4	0.422
160	6	<b>192 017 080</b>	4.7	150.6	3.440



## Pipe PVC-U transparent Series S25 SDR51 nominal pressure PN4

### Model:

- Material: PVC-U, Polyvinylchloride unplasticised DIN 8061
- Colour: transparent
- Dimension: DIN EN ISO 15493, DIN 8062
- Pipe length: 5m, with plain ends
- The material used fullfills the requirements of DIN 8061 in all aspects except longterm pressure test
- Minimum order quantity: 1 length



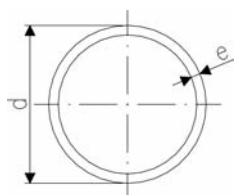
d [mm]	PN	Code	e [mm]	di [mm]	Weight [kg/m]
63	4	<b>192 017 036</b>	1.8	59.4	0.532
75	4	<b>192 017 037</b>	1.8	71.4	0.642
90	4	<b>192 017 038</b>	1.8	86.4	0.774
110	4	<b>192 017 039</b>	2.2	105.6	1.160
125	4	<b>192 017 040</b>	2.5	120.0	1.480
140	4	<b>192 017 041</b>	2.8	134.4	1.840
160	4	<b>192 017 042</b>	3.2	153.6	2.410
200	4	<b>192 017 044</b>	4.0	192.0	3.700
225	4	<b>192 017 045</b>	4.5	216.0	5.650
250	4	<b>192 017 046</b>	4.9	240.2	5.650
280	4	<b>192 017 047</b>	5.5	269.0	7.600

# Pipes Inch BS

## Pipe PVC-U grey class E 15 bar at 20°C



- Material: PVC-U, Polyvinylchloride unplasticised
- Dimensions: BS EN 1452 Part 1 & 2 (formally BS 3505)
- Pipe length: 6m with plain ends
- Minimum order quantity: 1 length

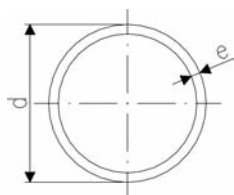


d [inch]	PN	Code	kg/m	e [mm]	di [mm]
3/8	15	<b>161 018 080</b>	0.114	1.9	5.0
1/2	15	<b>161 018 082</b>	0.161	1.9	8.0
3/4	15	<b>161 018 083</b>	0.225	2.1	14.0
1	15	<b>161 018 084</b>	0.325	2.5	20.0
1 1/4	15	<b>161 018 085</b>	0.503	3.1	25.0
1 1/2	15	<b>161 018 086</b>	0.659	3.7	30.0
2	15	<b>161 018 087</b>	1.038	4.5	41.0
2 1/2	16	<b>161 017 112</b>	1.820	5.6	63.8
3	15	<b>161 018 088</b>	2.245	6.7	62.0
4	15	<b>161 018 089</b>	3.667	8.6	84.0
5	16	<b>161 017 116</b>	6.215	10.8	118.4
6	15	<b>161 018 092</b>	8.330	10.8	146.4

## Pipe PVC-U grey class C 9 bar at 20°C



- Material: PVC-U, Polyvinylchloride unplasticised
- Dimensions: BS EN 1452 Part 1 & 2 (formally BS 3505)
- Pipe length: 6m with plain ends
- Minimum order quantity: 1 length

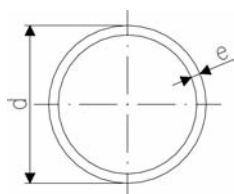


d [inch]	PN	Code	kg/m	e [mm]	di [mm]
2	9	<b>161 018 036</b>	0.694	2,8	45
3	9	<b>161 018 038</b>	1.434	4,1	68
4	9	<b>161 018 039</b>	2.358	5,3	91
6	9	<b>161 018 042</b>	5.058	7,8	111
8	9	<b>161 018 045</b>	1.388	8,8	135

## Pipe PVC-U grey class D 12 bar at 20°C



- Material: PVC-U, Polyvinylchloride unplasticised
- Dimensions: BS EN 1452 Part 1 & 2 (formally BS 3505)
- Pipe length: 6m with plain ends
- Minimum order quantity: 1 length

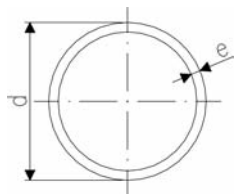


d [inch]	PN	Code	kg/m	e [mm]	di [mm]
1 1/4	12	<b>161 018 059</b>	0.420	2,2	27
1 1/2	12	<b>161 018 060</b>	0.550	2,9	32
2	12	<b>161 018 061</b>	0.900	3,7	43
3	12	<b>161 018 063</b>	1.930	5,4	65
4	12	<b>161 018 064</b>	3.230	7,0	87

## Pipe PVC-U grey class 7 (T) 12 bar at 20°C



- Thick wall pipe to allow for threading
- Material: PVC-U, Polyvinylchloride unplasticised
- Dimensions: BS EN 1452 Part 1 & 2 (formally BS 3505)
- Pipe length: 6m with plain ends
- Minimum order quantity: 1 length



d [inch]	PN	Code	kg/m	e [mm]	di [mm]
3/8	12	<b>161 018 255</b>	0.210	3,8	1
1/2	12	<b>161 018 256</b>	0.310	4,0	4
3/4	12	<b>161 018 257</b>	0.420	4,2	10
1	12	<b>161 018 258</b>	0.620	4,8	15
1 1/4	12	<b>161 018 259</b>	0.860	5,2	21
1 1/2	12	<b>161 018 260</b>	1.050	5,5	27
2	12	<b>161 018 261</b>	1.430	6,0	38

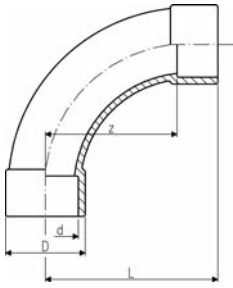
# Fittings metric

21 00 01

## Bends 90°, PVC-U metric



$r=2d$



d [mm]	d [inch]	PN	Code	SP	GP	kg	z [mm]	D [mm]	L [mm]
20		16	721 000 106	10	100	0.028	40	27	56
25		16	721 000 107	10	100	0.049	50	33	69
32		16	721 000 108	10	50	0.067	64	38	86
40		16	721 000 109	30	-	0.130	80	47	106
50		16	721 000 110	5	-	0.277	100	61	131
63		16	721 000 111	5	-	0.515	126	76	164
75	2 ½	16	721 000 112	5	-	0.786	150	90	194
90		16	721 000 113	5	-	1.334	180	108	231
110		16	721 000 114	5	-	2.960	220	137	281
140	5	16	721 000 116	2	-	5.100	280	168	356
160		16	721 000 117	1	-	7.300	320	192	406

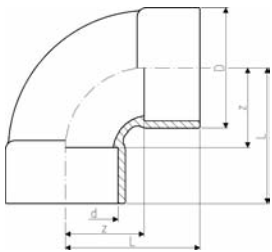
21 01 01

## Bends 90° short pattern, PVC-U metric

\* See comments regarding PN in +GF+ planning fundamentals



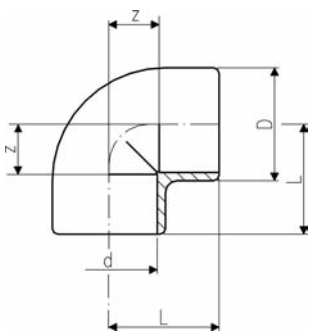
$r = 0,75 d$



d [mm]	PN	Code	SP	GP	kg	z [mm]	D [mm]	L [mm]
225	10	721 010 120	1	1	7.400	168	256	287
280	10	721 010 122	1	-	16.100	210	318	357
* 315	6	721 010 123	1	-	21.200	237	356	402
400	6	721 010 125	1	-	30.000	300	442	521

21 10 01

## Elbow 90° PVC-U metric



d [mm]	d [inch]	PN	Code	SP	GP	kg	z [mm]	D [mm]	L [mm]
6		16	721 100 101	10	700	0.004	4	11	16
8		16	721 100 102	10	550	0.004	5	13	17
10		16	721 100 103	10	500	0.004	6	14	18
12		16	721 100 104	10	150	0.006	7	17	19
16		16	721 100 105	10	100	0.009	9	21	23
20		16	721 100 106	10	100	0.013	11	25	27
25		16	721 100 107	10	100	0.025	14	32	33
32		16	721 100 108	10	100	0.041	17	40	39
40		16	721 100 109	10	50	0.064	23	47	49
50		16	721 100 110	10	100	0.109	26	59	57
63		16	721 100 111	10	-	0.204	33	73	71
75	2 ½	16	721 100 112	5	-	0.329	40	87	83
90		16	721 100 113	5	-	0.573	46	105	97
110		16	721 100 114	4	-	1.036	55	128	116
125		16	721 100 115	1	-	1.460	63	146	131
140	5	16	721 100 116	4	-	2.340	70	162	146
160		16	721 100 117	2	-	3.475	80	185	166
200	10	16	721 100 119	1	-	4.700	101	225	207
225	10	16	721 100 120	1	1	6.950	114	252	233
250	10	16	721 100 121	1	-	9.500	131	282	263

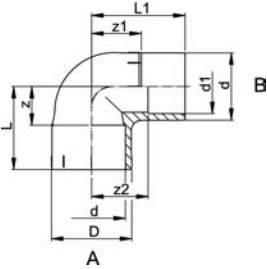
21 10 03

**PRO-FIT Elbows 90°, PVC-U metric**



**Model:**

- Outlet: A = Solvent cemented socket metric
- Outlet: B = Solvent cemented spigot in combination with reducing socket metric
- Direct connection from fitting to fitting allowing shortest possible overall length



d [mm]	d1 [mm]	PN	Code	SP	GP	kg	z [mm]	z1 [mm]	z2 [mm]	D [mm]	L [mm]	L1 [mm]
20	16	16	721 100 306	10	100	0.013	11	16	18	25	27	32
25	20	16	721 100 307	10	100	0.022	14	18	21	31	33	37
32	25	16	721 100 308	10	100	0.040	17	22	25	38	39	44
40	32	16	721 100 309	10	50	0.070	23	30	34	47	49	56
50	40	16	721 100 310	10	50	0.122	26	36	41	58	57	67
63	50	16	721 100 311	10	-	0.237	33	45	52	73	71	83

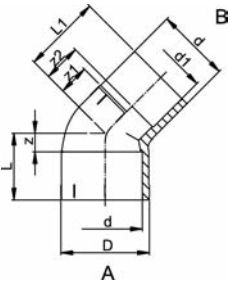
21 15 03

**PRO-FIT Elbows 45°, PVC-U metric**



**Model:**

- Outlet: A = Solvent cemented socket metric
- Outlet: B = Solvent cemented spigot in combination with reducing socket metric
- Direct connection from fitting to fitting allowing shortest possible overall length

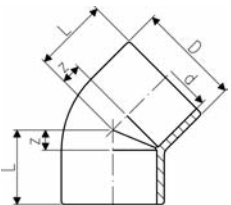


d [mm]	d1 [mm]	PN	Code	SP	GP	kg	z [mm]	z1 [mm]	z2 [mm]	D [mm]	L [mm]	L1 [mm]
20	16	16	721 150 306	10	100	0.010	5	9	11	25	21	25
25	20	16	721 150 307	10	100	0.016	6	11	14	31	25	30
32	25	16	721 150 308	10	100	0.030	8	13	16	38	30	35
40	32	16	721 150 309	5	50	0.052	10	17	21	47	36	43
50	40	16	721 150 310	5	50	0.090	12	18	23	58	43	49
63	50	16	721 150 311	5	50	0.176	14	23	30	73	52	61

21 15 01

**Elbow 45° PVC-U metric**

\* See comments regarding PN in +GF+ planning fundamentals

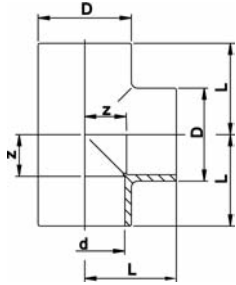


d [mm]	d [inch]	PN	Code	SP	GP	kg	z [mm]	D [mm]	L [mm]
16		16	721 150 105	10	100	0.008	5	21	19
20		16	721 150 106	10	100	0.011	5	25	21
25		16	721 150 107	10	100	0.018	6	31	25
32		16	721 150 108	10	100	0.029	8	38	30
40		16	721 150 109	10	50	0.049	10	47	36
50		16	721 150 110	5	50	0.089	12	59	43
63		16	721 150 111	5	50	0.161	14	73	52
75	2 ½	16	721 150 112	5	-	0.250	17	87	61
90		16	721 150 113	5	-	0.431	20	105	71
110		16	721 150 114	5	-	0.733	25	127	86
125		16	721 150 115	1	-	1.162	28	146	97
140	5	16	721 150 116	1	-	1.639	32	162	108
160		16	721 150 117	4	-	2.520	36	185	122
200		10	721 150 119	2	-	3.300	43	225	149
225		10	721 150 120	1	-	4.900	49	250	168
250		10	721 150 121	1	-	7.150	60	282	192
280		10	721 150 122	1	-	10.800	66	318	213
* 315		10	721 150 123	1	-	14.900	74	356	239
400		6	721 150 125	1	-	24.000	94	442	302

21 20 01

**Tee 90° equal PVC-U metric**

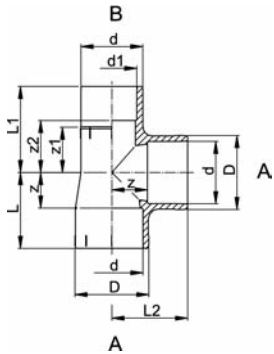
\* See comments regarding PN in +GF+ planning fundamentals



d [mm]	d [inch]	PN	Code	SP	GP	kg	z [mm]	D [mm]	L [mm]
6		16	<b>721 200 101</b>	10	550	0.004	4	11	16
8		16	<b>721 200 102</b>	10	500	0.008	5	13	17
10		16	<b>721 200 103</b>	10	350	0.008	6	16	18
12		16	<b>721 200 104</b>	10	280	0.016	7	19	19
16		16	<b>721 200 105</b>	10	100	0.012	9	21	23
20		16	<b>721 200 106</b>	10	100	0.017	11	25	27
25		16	<b>721 200 107</b>	10	100	0.029	14	31	33
32		16	<b>721 200 108</b>	10	100	0.055	17	38	39
40		16	<b>721 200 109</b>	10	50	0.100	23	48	49
50		16	<b>721 200 110</b>	10	-	0.153	26	58	57
63		16	<b>721 200 111</b>	10	-	0.334	33	73	71
75	2 ½	16	<b>721 200 112</b>	5	-	0.473	39	87	83
90		16	<b>721 200 113</b>	5	-	0.822	46	105	97
110		16	<b>721 200 114</b>	6	-	1.392	55	127	116
125		16	<b>721 200 115</b>	2	-	2.400	66	151	135
140	5	16	<b>721 200 116</b>	1	1	3.546	71	169	147
160		16	<b>721 200 117</b>	1	1	4.963	81	193	167
200		10	<b>721 200 119</b>	1	-	5.763	101	225	207
225		10	<b>721 200 120</b>	1	-	9.067	114	256	233
250		10	<b>721 200 121</b>	1	-	12.500	132	282	263
280		10	<b>721 200 122</b>	1	-	17.480	152	318	298
* 315		10	<b>721 200 123</b>	1	-	24.350	168	356	332
400		6	<b>721 200 125</b>	1	-	39.500	214	442	420

21 20 03

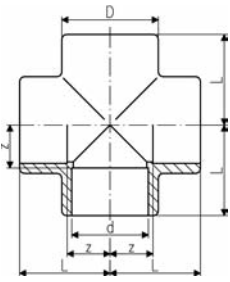
**PRO-FIT Tees 90° equal, PVC-U metric**



d [mm]	d1 [mm]	PN	Code	SP	GP	kg	z [mm]	z1 [mm]	z2 [mm]	D [mm]	L [mm]	L1 [mm]	L2 [mm]
20	16	16	<b>721 200 306</b>	10	100	0.017	11	17	19	25	27	33	27
25	20	16	<b>721 200 307</b>	10	100	0.028	14	19	22	31	33	38	33
32	25	16	<b>721 200 308</b>	10	100	0.052	17	24	27	38	39	46	39
40	32	16	<b>721 200 309</b>	10	50	0.098	23	30	34	47	47	56	49
50	40	16	<b>721 200 310</b>	10	-	0.173	26	36	41	58	57	67	57
63	50	16	<b>721 200 311</b>	10	-	0.329	33	45	52	73	71	83	71

21 30 01

**Crosses, PVC-U  
metric**

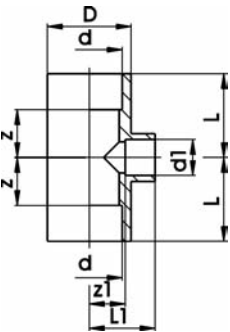


d [mm]	d [inch]	PN	Code	SP	GP	kg	z [mm]	D [mm]	L [mm]
10		16	<b>721 300 103</b>	100	-	0.009	7	16	19
12		16	<b>721 300 104</b>	100	-	0.011	8	18	20
16		16	<b>721 300 105</b>	100	-	0.020	10	23	24
20		16	<b>721 300 106</b>	10	100	0.037	11	29	27
25		16	<b>721 300 107</b>	10	100	0.058	14	35	33
32		16	<b>721 300 108</b>	10	50	0.092	17	43	39
40		16	<b>721 300 109</b>	5	50	0.155	23	52	49
50		16	<b>721 300 110</b>	5	30	0.265	28	63	59
63		16	<b>721 300 111</b>	5	-	0.480	34	79	72
75	2 1/2	10	<b>721 300 112</b>	3	-	0.660	40	92	83
90		10	<b>721 300 113</b>	4	-	0.960	48	106	97
110		10	<b>721 300 114</b>	4	-	1.600	58	128	117

21 20 01

**Tees 90° reducing, PVC-U  
metric**

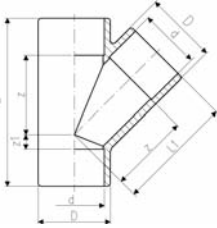
\* See comments regarding PN in +GF+ planning fundamentals



d [mm]	d1 [mm]	PN	Code	SP	GP	kg	z [mm]	z1 [mm]	D [mm]	L [mm]	L1 [mm]
25	20	16	<b>721 200 134</b>	10	100	0.055	14	14	33	33	30
32	20	16	<b>721 200 141</b>	10	100	0.089	17	17	41	39	33
32	25	16	<b>721 200 138</b>	10	100	0.092	17	17	41	39	36
40	20	16	<b>721 200 155</b>	10	20	0.105	23	23	50	49	39
40	25	16	<b>721 200 151</b>	10	50	0.107	23	23	50	49	42
40	32	16	<b>721 200 147</b>	10	20	0.161	23	23	50	49	45
50	20	16	<b>721 200 009</b>	5	50	0.180	28	28	62	59	44
50	25	16	<b>721 200 010</b>	5	50	0.184	28	28	62	59	47
50	32	16	<b>721 200 164</b>	5	20	0.189	28	28	62	59	50
50	40	16	<b>721 200 161</b>	5	20	0.198	28	28	62	59	54
63	25	16	<b>721 200 011</b>	10	-	0.330	35	34	77	73	53
63	32	16	<b>721 200 178</b>	5	-	0.335	35	34	77	73	56
63	40	16	<b>721 200 174</b>	5	-	0.340	35	34	77	73	60
63	50	16	<b>721 200 170</b>	5	-	0.360	35	34	77	73	65
75	32	16	<b>721 200 181</b>	9	-	0.520	40	41	92	84	63
75	40	16	<b>721 200 182</b>	9	-	0.515	40	41	92	84	67
75	50	16	<b>721 200 183</b>	8	-	0.510	40	41	92	84	72
75	63	16	<b>721 200 184</b>	8	-	0.560	40	41	92	84	79
90	32	16	<b>721 200 142</b>	6	-	0.830	46	55	110	97	77
90	50	16	<b>721 200 144</b>	6	-	0.860	46	55	110	97	86
90	63	16	<b>721 200 145</b>	5	-	0.890	46	55	110	97	93
90	75	16	<b>721 200 146</b>	5	-	0.950	46	55	110	97	99
110	32	16	<b>721 200 135</b>	3	-	1.400	56	67	133	117	89
110	50	16	<b>721 200 136</b>	3	-	1.425	56	67	133	117	98
110	63	16	<b>721 200 132</b>	3	-	1.490	56	65	133	117	103
110	75	16	<b>721 200 133</b>	3	-	1.520	56	65	133	117	109
110	90	16	<b>721 200 137</b>	3	-	1.500	56	65	133	117	116
125	50	16	<b>721 200 139</b>	4	-	1.970	64	75	151	133	106
125	90	16	<b>721 200 140</b>	4	-	2.200	64	75	151	133	126
140	50	16	<b>721 200 148</b>	1	-	3.000	72	82	172	148	113
140	75	16	<b>721 200 149</b>	1	-	3.000	72	78	172	148	122
140	110	16	<b>721 200 150</b>	1	-	3.200	72	74	172	148	135
160	110	16	<b>721 200 152</b>	1	-	4.100	81	81	192	167	142
200	110	10	<b>721 200 153</b>	1	-	7.450	107	131	232	213	192
200	160	10	<b>721 200 154</b>	1	-	8.230	107	106	232	213	192
225	110	10	<b>721 200 156</b>	1	-	9.200	120	143	257	239	204
225	160	10	<b>721 200 157</b>	1	-	10.000	120	119	257	239	205
250	160	10	<b>721 200 159</b>	1	-	11.500	132	151	282	263	237
250	200	10	<b>721 200 162</b>	1	-	12.300	132	131	282	263	237
280	160	10	<b>721 200 165</b>	1	-	18.200	120	180	318	266	266
280	225	10	<b>721 200 167</b>	1	-	16.200	120	148	318	266	268
* 315	160	10	<b>721 200 169</b>	1	-	22.300	120	197	356	284	283
* 315	225	10	<b>721 200 172</b>	1	-	20.300	120	165	356	284	284
400	225	6	<b>721 200 176</b>	1	-	36.500	163	258	442	369	377
400	315	6	<b>721 200 180</b>	1	-	32.000	163	213	442	369	377

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## Tees 45°, PVC-U metric



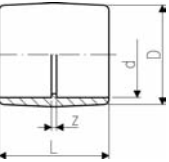
d [mm]	d [inch]	PN	Code	SP	GP	kg	z [mm]	z1 [mm]	D [mm]	L [mm]	L1 [mm]
10		10	721 250 103	100	-	0.013	18	4	16	46	30
12		10	721 250 104	100	-	0.014	21	4	18	49	33
16		10	721 250 105	100	-	0.023	25	5	23	58	39
20		10	721 250 106	10	50	0.037	30	6	28	68	46
25		10	721 250 107	10	50	0.057	36	9	33	83	55
32		10	721 250 108	10	50	0.096	45	10	41	99	67
40		10	721 250 109	10	-	0.157	56	10	50	118	82
50		10	721 250 110	10	-	0.266	66	12	60	140	97
63		10	721 250 111	5	-	0.435	85	14	74	175	123
75	2 ½	6	721 250 112	5	-	0.810	101	18	91	207	145
90		6	721 250 113	1	-	1.290	122	20	107	245	173
110		6	721 250 114	3	-	2.540	149	27	134	298	210
125		6	721 250 115	2	-	3.605	167	30	147	335	236
140	5	6	721 250 116	1	-	3.800	190	34	168	376	266
160		6	721 250 117	1	-	6.600	213	41	190	428	300
200		6	721 250 119	1	-	11.650	265	48	232	527	372
225		6	721 250 120	1	-	15.800	296	54	260	590	416
250		6	721 250 121	1	-	20.350	330	60	286	654	462

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## Socket equal PVC-U metric

\* See comments regarding PN in +GF+ planning fundamentals

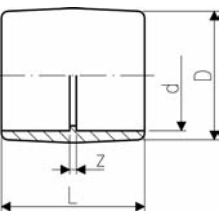
¹ Socket d355 and d400 fabricated from pipe



d [mm]	d [inch]	PN	Code	SP	GP	kg	z [mm]	D [mm]	L [mm]
6		16	721 910 101	10	1000	0.004	3	12	27
8		16	721 910 102	10	600	0.005	3	14	27
10		16	721 910 103	10	500	0.005	3	16	27
12		16	721 910 104	400	-	0.006	3	19	27
16		16	721 910 105	10	100	0.007	3	22	31
20		16	721 910 106	10	100	0.011	3	26	35
25		16	721 910 107	10	100	0.015	3	32	41
32		16	721 910 108	10	100	0.026	3	39	47
40		16	721 910 109	10	100	0.046	3	48	55
50		16	721 910 110	10	50	0.065	3	58	65
63		16	721 910 111	10	50	0.119	3	73	79
75	2 ½	16	721 910 112	10	-	0.191	4	87	92
90		16	721 910 113	10	-	0.328	5	105	107
110		16	721 910 114	5	-	0.560	6	128	128
125		16	721 910 115	4	-	0.740	7	142	145
140	5	16	721 910 116	2	-	1.200	7	162	159
160		16	721 910 117	1	-	1.542	8	183	180
200		10	721 910 119	4	-	2.031	9	221	221
225		10	721 910 120	2	-	3.790	10	253	248
250		10	721 910 121	1	-	5.600	16	284	284
280		10	721 910 122	1	-	6.680	16	321	314
* 315		10	721 910 123	1	-	8.300	16	356	348
¹ 355		6	721 910 124	-	-	8.000	68	377	454
¹ 400		6	721 910 125	-	-	8.300	73	425	505

52 91 01

## Socket equal PVC-U transparent metric



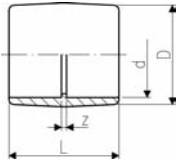
d [mm]	PN	Code	SP	GP	kg	z [mm]	D [mm]	L [mm]
16	16	752 910 105	10	350	0.009	3	23	31
20	16	752 910 106	10	240	0.012	3	27	35
25	16	752 910 107	10	150	0.021	3	32	41
32	16	752 910 108	10	80	0.028	3	40	47
40	16	752 910 109	10	100	0.057	3	52	55
50	16	752 910 110	10	60	0.069	3	60	65
63	16	752 910 111	5	10	0.138	3	75	79



21 91 31

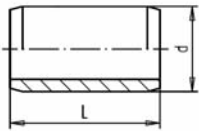
**Adaptor socket PVC-U metric Inch/BS****Model:**

- With solvent cement sockets metric and BS inch



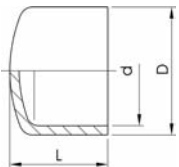
d [mm]	d [inch]	PN	Code	SP	GP	kg	z [mm]	D [mm]	L [mm]
16	3/8	16	<b>721 913 105</b>	10	800	0.010	5	23	35
20	1/2	16	<b>721 913 106</b>	10	500	0.013	5	27	38
25	3/4	16	<b>721 913 107</b>	10	200	0.020	5	33	45
32	1	16	<b>721 913 108</b>	10	100	0.031	5	41	51
40	1 1/4	16	<b>721 913 109</b>	10	50	0.054	5	51	60
50	1 1/2	16	<b>721 913 110</b>	10	60	0.076	4	59	65
63	2	16	<b>721 913 111</b>	5	10	0.154	5	75	79
90	3	16	<b>721 913 113</b>	10	-	0.340	6	104	108
110	4	16	<b>721 913 115</b>	5	-	0.485	4	128	128

21 90 09

**Barrel Nipples, PVC-U metric**

d [mm]	d [inch]	PN	Code	SP	GP	kg	L [mm]
16		16	<b>721 900 905</b>	-	-	0.002	28
20		16	<b>721 900 906</b>	-	-	0.004	32
25		16	<b>721 900 907</b>	-	-	0.008	38
32		16	<b>721 900 908</b>	-	-	0.015	44
40		16	<b>721 900 909</b>	-	-	0.027	52
50		16	<b>721 900 910</b>	-	-	0.050	62
63		16	<b>721 900 911</b>	-	-	0.098	76
75	2 1/2	16	<b>721 900 912</b>	-	-	0.160	88
90		16	<b>721 900 913</b>	-	-	0.266	102
110		16	<b>721 900 914</b>	-	-	0.476	122
125		16	<b>721 900 915</b>	-	-	0.691	138
140	5	16	<b>721 900 916</b>	-	-	0.953	152
160		16	<b>721 900 917</b>	-	-	1.569	192
200		10	<b>721 900 919</b>	-	-	1.804	212
225		10	<b>721 900 920</b>	-	-	2.570	238

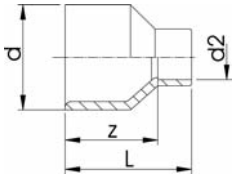
21 96 01

**Caps, PVC-U metric**

d [mm]	d [inch]	PN	Code	SP	GP	kg	D [mm]	L [mm]
12		16	<b>721 960 104</b>	10	500	0.004	19	15
16		16	<b>721 960 105</b>	10	100	0.006	23	21
20		16	<b>721 960 106</b>	10	100	0.009	27	24
25		16	<b>721 960 107</b>	10	100	0.014	33	28
32		16	<b>721 960 108</b>	10	100	0.021	40	32
40		16	<b>721 960 109</b>	10	100	0.031	47	38
50		16	<b>721 960 110</b>	10	100	0.052	59	45
63		16	<b>721 960 111</b>	5	50	0.092	74	56
75	2 1/2	16	<b>721 960 112</b>	5	50	0.152	87	65
90		16	<b>721 960 113</b>	5	-	0.270	105	77
110		16	<b>721 960 114</b>	1	12	0.460	128	94
140	5	10	<b>721 960 116</b>	10	-	0.880	164	92
160		10	<b>721 960 117</b>	2	-	1.490	188	130

## 21 91 03

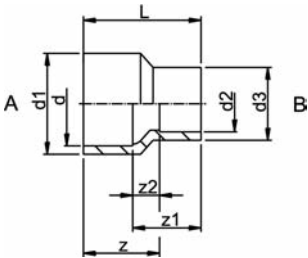
## Reducing bush long PVC-U metric



d [mm]	d2 [mm]	PN	Code	SP	GP	kg	z [mm]	L [mm]
8	6	16	721 910 323	10	800	0.003	15	27
10	6	16	721 910 326	10	700	0.003	15	27
10	8	16	721 910 325	10	700	0.003	15	27
20	16	16	721 910 334	10	320	0.010	21	35
25	20	16	721 910 337	10	220	0.015	25	41
32	25	16	721 910 341	10	120	0.025	30	49
40	32	16	721 910 346	10	100	0.044	36	58
50	40	16	721 910 352	10	50	0.075	44	70
63	50	16	721 910 358	5	50	0.146	54	85
75	63	16	721 910 364	5	50	0.220	62	100
90	75	16	721 910 370	5	-	0.335	74	118
140	110	16	721 910 385	2	-	0.814	111	172

## 21 91 09

## PRO-FIT Reducing Bushes, PVC-U metric



### Model:

- Outlet: A and B = Solvent cemented spigot in combination with reducing socket metric

d [mm]	d1 [mm]	d2 [mm]	d3 [mm]	PN	Code	SP	GP	kg	z [mm]	z1 [mm]	z2 [mm]	L [mm]
10	14	8	12	16	721 910 903	10	700	0.003	15	15	3	27
12	16	8	12	16	721 910 905	10	100	0.003	18	18	6	30
12	16	10	16	16	721 910 906	10	600	0.006	18	18	6	30
16	20	10	16	16	721 910 908	10	500	0.005	21	19	7	33
16	20	12	16	16	721 910 909	10	400	0.005	21	19	7	33
20	25	12	16	16	721 910 910	10	300	0.008	25	21	9	37
20	25	16	20	16	721 910 911	10	100	0.008	25	23	9	39
25	32	12	16	16	721 910 912	10	100	0.014	30	23	11	42
25	32	16	20	16	721 910 913	10	100	0.015	30	26	12	44
25	32	20	25	16	721 910 914	10	100	0.017	30	27	11	46
32	40	16	20	16	721 910 915	100	-	0.025	36	28	14	50
32	40	20	25	16	721 910 916	10	100	0.027	36	30	14	52
32	40	25	32	16	721 910 917	10	100	0.032	36	33	14	55
40	50	20	25	16	721 910 918	10	100	0.046	44	34	18	60
40	50	25	32	16	721 910 919	10	100	0.052	44	37	18	63
40	50	32	40	16	721 910 920	10	100	0.059	44	40	18	66
50	63	25	32	16	721 910 921	5	50	0.092	54	42	23	73
50	63	32	40	16	721 910 922	5	50	0.099	54	45	23	76
50	63	40	50	16	721 910 923	5	50	0.112	54	49	23	80
63	75	32	40	16	721 910 924	5	50	0.128	62	46	24	84
63	75	40	50	16	721 910 925	5	50	0.139	62	50	24	88
63	75	50	63	16	721 910 926	5	50	0.169	62	55	24	93
75	90	40	50	16	721 910 927	10	-	0.232	74	56	30	100
75	90	50	63	16	721 910 928	10	-	0.260	74	61	30	105
75	90	63	75	16	721 910 929	10	-	0.275	74	68	30	112

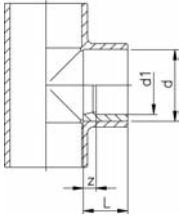
21 90 03

## Reducing bush short PVC-U metric

**Model:**

- With solvent cement spigot and socket metric

\* See comments regarding PN in +GF+ planning fundamentals



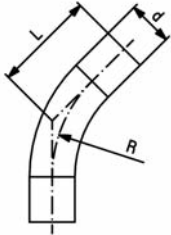
d [mm]	d1 [mm]	PN	Code	SP	GP	kg	z [mm]	L [mm]
* 12	8	16	<b>721 900 329</b>	10	1200	0.002	2	14
* 16	12	16	<b>721 900 331</b>	10	1000	0.002	2	14
* 20	16	16	<b>721 900 334</b>	10	500	0.003	2	16
* 25	20	16	<b>721 900 337</b>	10	450	0.005	3	19
* 32	20	16	<b>721 900 342</b>	10	100	0.014	6	22
* 32	25	16	<b>721 900 341</b>	10	100	0.009	3	22
40	20	16	<b>721 900 348</b>	10	100	0.021	10	26
40	25	16	<b>721 900 347</b>	10	100	0.021	7	26
* 40	32	16	<b>721 900 346</b>	10	100	0.016	4	26
50	20	16	<b>721 900 355</b>	10	100	0.033	15	31
50	25	16	<b>721 900 354</b>	10	100	0.034	12	31
50	32	16	<b>721 900 353</b>	10	100	0.037	9	31
* 50	40	16	<b>721 900 352</b>	100	-	0.030	5	31
63	32	16	<b>721 900 360</b>	10	100	0.061	16	38
63	40	16	<b>721 900 359</b>	10	100	0.068	12	38
* 63	50	16	<b>721 900 358</b>	10	100	0.058	7	38
75	50	16	<b>721 900 365</b>	10	50	0.106	13	44
* 75	63	16	<b>721 900 364</b>	10	50	0.077	6	44
90	50	16	<b>721 900 372</b>	10	-	0.179	20	51
90	63	16	<b>721 900 371</b>	10	-	0.183	13	51
* 90	75	16	<b>721 900 370</b>	10	-	0.136	7	51
110	50	16	<b>721 900 379</b>	5	-	0.309	30	61
110	63	16	<b>721 900 378</b>	5	-	0.313	23	61
110	75	16	<b>721 900 377</b>	20	-	0.255	17	61
* 110	90	16	<b>721 900 376</b>	5	-	0.259	10	61
125	90	16	<b>721 900 381</b>	5	-	0.442	18	69
* 125	110	16	<b>721 900 380</b>	5	-	0.266	8	69
140	90	16	<b>721 900 386</b>	5	-	0.560	25	76
* 140	110	16	<b>721 900 385</b>	5	-	0.599	15	76
* 140	125	16	<b>721 900 384</b>	5	-	0.420	7	76
160	90	16	<b>721 900 391</b>	5	-	0.750	35	86
160	110	16	<b>721 900 390</b>	5	-	0.868	25	86
* 160	140	16	<b>721 900 388</b>	5	-	0.547	10	86
200	110	10	<b>721 900 393</b>	3	-	1.900	45	106
200	125	10	<b>721 900 325</b>	3	-	1.940	37	106
200	140	10	<b>721 900 394</b>	3	-	1.850	30	106
200	160	10	<b>721 900 392</b>	2	-	1.070	20	106
225	110	10	<b>721 900 397</b>	4	-	2.450	58	119
225	125	10	<b>721 900 399</b>	4	-	2.500	50	119
225	140	10	<b>721 900 398</b>	4	-	2.500	43	119
225	160	10	<b>721 900 396</b>	2	-	2.200	33	119
* 225	200	10	<b>721 900 181</b>	4	-	1.360	13	119
250	125	10	<b>721 900 326</b>	4	-	3.150	62	131
250	140	10	<b>721 900 300</b>	4	-	3.200	55	131
250	160	10	<b>721 900 301</b>	4	-	3.080	45	131
* 250	200	10	<b>721 900 302</b>	4	-	3.150	25	131
* 250	225	10	<b>721 900 303</b>	4	-	1.700	12	131
280	140	10	<b>721 900 307</b>	1	-	4.000	69	148
280	160	10	<b>721 900 308</b>	1	-	4.100	59	148
280	200	10	<b>721 900 304</b>	1	-	4.250	40	146
* 280	225	10	<b>721 900 305</b>	1	-	4.300	27	146
* 280	250	10	<b>721 900 306</b>	1	-	2.500	15	146
315	160	10	<b>721 900 313</b>	1	-	2.050	77	166
315	200	10	<b>721 900 309</b>	1	-	5.300	57	166
315	225	10	<b>721 900 310</b>	1	-	5.500	45	164
* 315	250	10	<b>721 900 311</b>	1	-	6.300	33	164
* 315	280	10	<b>721 900 312</b>	1	-	3.550	17	164
355	315	6	<b>721 900 315</b>	1	-	5.300	20	184
400	250	6	<b>721 900 319</b>	1	-	9.000	75	206
400	280	6	<b>721 900 320</b>	1	-	9.200	60	206
400	315	6	<b>721 900 321</b>	1	-	13.100	42	206
* 400	355	6	<b>721 900 322</b>	1	-	7.600	22	206

# Fittings Inch BS

21 15 11

## Long radius bend 45° PVC-U Inch BS

Other angles and sizes are available on request

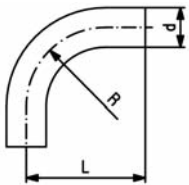


d [inch]	PN	Code	kg	R [mm]	L [mm]
1/2	15	721 151 176	0.175	51	50
3/4	15	721 151 177	0.321	76	63
1	15	721 151 178	0.508	102	75
1 1/4	15	721 151 179	0.103	127	100
1 1/2	15	721 151 180	0.152	152	112
2	15	721 151 181	0.328	203	150
2 1/2	15	721 151 182	1.444	255	200
3	15	721 151 183	1.125	305	238
4	15	721 151 184	2.202	406	301
6	15	721 151 185	10.260	610	451

21 00 16

## Long radius bend 90° PVC-U Inch BS

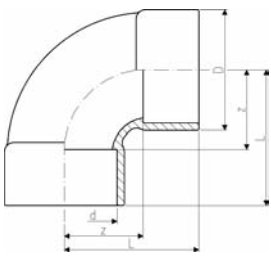
Other angles and sizes are available on request



d [inch]	PN	Code	kg	R [mm]	L [mm]
1/2	15	721 001 656	0.029	51	71
3/4	15	721 001 657	0.046	76	108
1	15	721 001 658	0.073	102	133
1 1/4	15	721 001 659	0.143	127	170
1 1/2	15	721 001 660	0.220	152	201
2	15	721 001 661	0.480	203	272
2 1/2	15	721 001 662	1.444	255	340
3	15	721 001 663	1.500	305	402
4	15	721 001 664	3.146	406	544
6	15	721 001 665	12.825	610	817

21 01 11

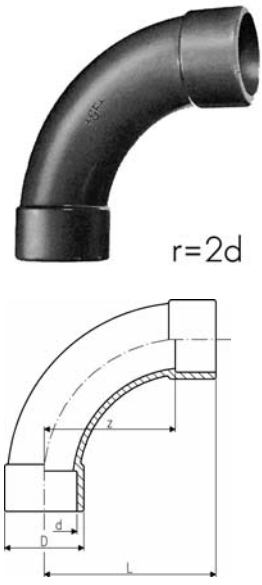
## Bend 90° short pattern PVC-U Inch BS



d [inch]	PN	Code	SP	GP	kg	z [mm]	D [mm]	L [mm]
8	9	721 011 120	1	1	9.275	168	256	287

21 00 11

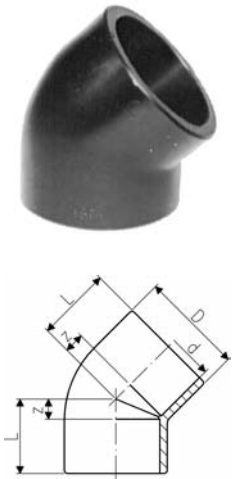
**Bend 90° PVC-U Inch BS**



d [inch]	PN	Code	SP	GP	kg	z [mm]	D [mm]	L [mm]
½	15	721 001 106	10	100	0.036	40	29	58
¾	15	721 001 107	10	40	0.063	50	35	71
1	15	721 001 108	10	40	0.070	64	43	88
1 ¼	15	721 001 109	5	-	0.195	80	54	109
1 ½	15	721 001 110	5	-	0.289	100	64	131
2	15	721 001 111	5	-	0.528	126	76	163
2 ½	16	721 000 112	5	-	0.786	150	90	194
3	15	721 001 113	5	-	1.780	180	113	231
4	15	721 001 115	2	-	2.730	220	137	284
5	16	721 000 116	2	-	5.100	280	168	356
6	15	721 001 117	1	-	7.700	320	201	411

21 15 11

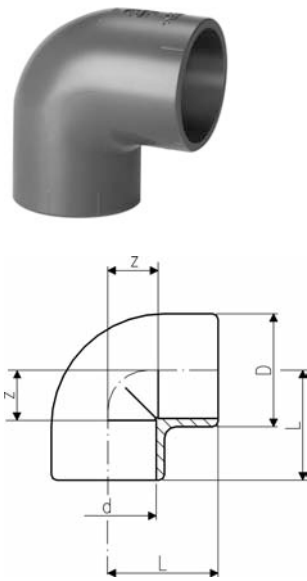
**Elbow 45° PVC-U Inch BS**



d [inch]	PN	Code	SP	GP	kg	z [mm]	D [mm]	L [mm]
¾	15	721 151 105	10	260	0.008	4	23	20
½	15	721 151 106	10	150	0.015	7	28	24
¾	15	721 151 107	10	90	0.026	8	33	29
1	15	721 151 108	10	100	0.046	10	41	33
1 ¼	15	721 151 109	10	30	0.068	11	51	40
1 ½	15	721 151 110	5	45	0.066	11	57	41
2	15	721 151 111	5	50	0.136	15	72	51
2 ½	16	721 150 112	5	-	0.250	17	87	61
3	15	721 151 113	5	-	0.612	21	105	71
4	15	721 151 115	10	-	0.951	26	135	89
5	16	721 150 116	1	-	1.639	32	162	108
6	15	721 151 117	2	-	2.520	38	198	129
8	9	721 151 120	1	-	5.800	49	205	168

21 10 11

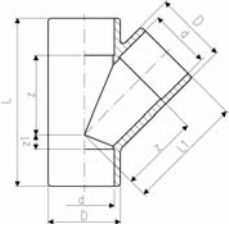
**Elbow 90° PVC-U Inch BS**



d [inch]	PN	Code	SP	GP	kg	z [mm]	D [mm]	L [mm]
¾	15	721 101 105	10	220	0.014	10	24	25
½	15	721 101 106	10	100	0.018	13	27	30
¾	15	721 101 107	10	60	0.026	14	33	34
1	15	721 101 108	10	100	0.042	17	40	39
1 ¼	15	721 101 109	10	50	0.081	22	51	49
1 ½	15	721 101 110	10	50	0.122	26	58	56
2	15	721 101 111	1	10	0.247	32	72	68
2 ½	16	721 100 112	5	-	0.329	40	87	83
3	15	721 101 113	5	-	0.602	46	107	97
4	15	721 101 115	6	-	1.190	59	137	122
5	16	721 100 116	4	-	2.340	70	162	146
6	15	721 101 117	1	1	4.530	86	201	176

21 25 11

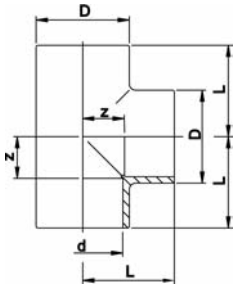
**Tee 45° PVC-U Inch BS**



d [inch]	PN	Code	SP	GP	kg	z [mm]	z1 [mm]	D [mm]	L [mm]	L1 [mm]
1/2	9	721 251 106	10	50	0.035	30	6	28	68	46
3/4	9	721 251 107	10	50	0.052	35	8	33	83	55
1	9	721 251 108	10	50	0.091	43	8	41	99	67
1 1/4	9	721 251 109	10	-	0.163	55	9	50	118	82
1 1/2	9	721 251 110	10	-	0.276	67	13	60	140	97
2	9	721 251 111	10	-	0.500	87	16	74	175	123
2 1/2	6	721 250 112	5	-	0.810	101	18	91	207	145
3	6	721 251 113	1	-	1.246	122	20	107	245	173
4	6	721 251 115	3	-	2.380	147	25	134	298	210
5	6	721 250 116	1	-	3.800	190	34	168	376	266

21 20 11

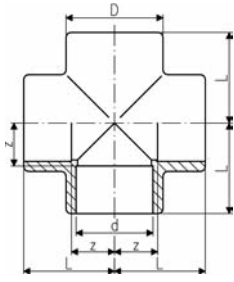
**Tee 90° equal PVC-U Inch BS**



d [inch]	PN	Code	SP	GP	kg	z [mm]	D [mm]	L [mm]
3/8	15	721 201 105	10	100	0.018	10	25	25
1/2	15	721 201 106	10	100	0.025	13	30	30
3/4	15	721 201 107	10	50	0.051	16	35	37
1	15	721 201 108	10	100	0.080	19	43	43
1 1/4	15	721 201 109	10	30	0.086	22	50	51
1 1/2	15	721 201 110	5	50	0.126	26	57	56
2	15	721 201 111	5	-	0.293	32	72	68
2 1/2	16	721 200 112	5	-	0.473	39	87	83
3	15	721 201 113	5	-	0.843	46	107	97
4	15	721 201 115	8	-	1.879	59	138	122
5	16	721 200 116	1	1	3.546	71	169	147
6	15	721 201 117	1	1	5.800	86	202	176
8	9	721 201 120	1	-	9.100	114	256	233

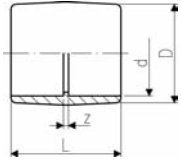
21 30 11

**Cross PVC-U Inch BS**



d [inch]	PN	Code	SP	GP	kg	z [mm]	D [mm]	L [mm]
3/4	12	721 301 107	10	40	0.050	14	36	33
1	12	721 301 108	10	50	0.100	17	44	39
1 1/4	12	721 301 109	5	50	0.150	22	53	49
1 1/2	12	721 301 110	5	-	0.300	30	64	60
2	12	721 301 111	5	-	0.560	37	80	74
2 1/2	10	721 300 112	3	-	0.660	40	92	83

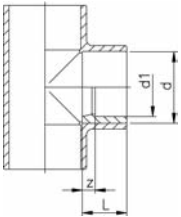
21 91 11



Socket equal PVC-U Inch BS

d [inch]	PN	Code	SP	GP	kg	z [mm]	D [mm]	L [mm]
3/8	15	721 911 105	10	350	0.007	3	23	32
1/2	15	721 911 106	10	150	0.011	3	27	36
3/4	15	721 911 107	10	100	0.016	3	33	45
1	15	721 911 108	10	100	0.028	3	41	51
1 1/4	15	721 911 109	10	50	0.048	3	51	57
1 1/2	15	721 911 110	10	50	0.089	3	58	63
2	15	721 911 111	5	50	0.126	3	72	77
2 1/2	16	721 910 112	10	-	0.191	4	87	92
3	15	721 911 113	10	-	0.350	7	104	107
4	15	721 911 115	15	-	0.600	8	134	135
5	16	721 910 116	2	-	1.200	7	162	159
6	15	721 911 117	2	-	1.800	11	197	192
8	9	721 911 120	1	1	4.140	10	253	248

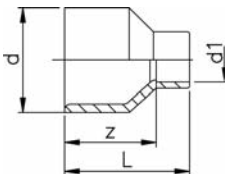
21 91 13



Reducing bush short pattern PVC-U Inch BS

d [inch]	d1 [inch]	PN	Code	SP	GP	kg	z [mm]	L [mm]
* 1/2	3/8	15	721 901 334	10	500	0.004	2	18
* 3/4	3/8	15	721 901 338	10	400	0.013	5	21
* 3/4	1/2	15	721 901 337	10	400	0.005	3	21
1	3/8	15	721 901 343	10	100	0.013	8	24
* 1	1/2	15	721 901 342	10	250	0.015	6	24
* 1	3/4	15	721 901 341	10	240	0.009	3	24
1 1/4	3/8	15	721 901 349	10	240	0.024	13	29
1 1/4	1/2	15	721 901 348	10	100	0.024	11	29
1 1/4	3/4	15	721 901 347	10	100	0.022	8	29
* 1 1/4	1	15	721 901 346	10	100	0.018	5	29
1 1/2	1/2	15	721 901 355	10	100	0.045	13	30
1 1/2	3/4	15	721 901 354	10	100	0.037	10	30
* 1 1/2	1	15	721 901 353	10	100	0.036	6	30
* 1 1/2	1 1/4	15	721 901 352	10	100	0.014	2	30
2	3/4	15	721 901 361	10	100	0.066	16	37
2	1	15	721 901 360	10	100	0.064	13	37
* 2	1 1/4	15	721 901 359	10	100	0.070	8	37
* 2	1 1/2	15	721 901 358	10	100	0.052	6	37
* 2 1/2	2	15	721 901 364	10	50	0.100	8	45
3	1	15	721 901 374	10	-	0.183	3	50
3	1 1/2	15	721 901 372	10	-	0.175	3	50
3	2	15	721 901 371	10	-	0.220	3	50
* 3	2 1/2	15	721 901 370	10	-	0.126	6	51
* 4	3	15	721 901 381	20	-	0.262	13	64
* 5	4	15	721 901 384	12	-	0.734	13	76
* 6	5	15	721 901 388	5	-	0.850	15	91
8	6	9	721 901 396	2	-	1.780	33	119

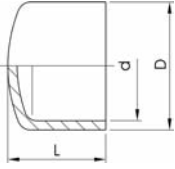
21 91 13



Reducing bush long pattern PVC-U Inch BS

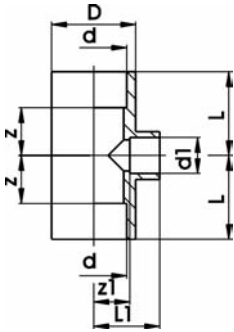
d [inch]	d1 [inch]	PN	Code	SP	GP	kg	z [mm]	L [mm]
5	3	15	721 911 386	10	-	0.730	111	162
6	4	15	721 911 389	6	-	1.300	133	197

21 96 11

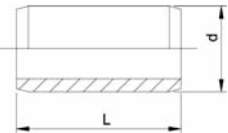
**Cap PVC-U Inch BS**

d [inch]	PN	Code	SP	GP	kg	D [mm]	L [mm]
3/8	15	<b>721 961 105</b>	10	560	0.006	26	23
1/2	15	<b>721 961 106</b>	10	250	0.009	30	25
3/4	15	<b>721 961 107</b>	10	200	0.016	37	30
1	15	<b>721 961 108</b>	10	100	0.026	44	34
1 1/4	15	<b>721 961 109</b>	10	100	0.039	55	41
1 1/2	15	<b>721 961 110</b>	80	100	0.071	62	44
2	15	<b>721 961 111</b>	10	100	0.146	78	54
2 1/2	16	<b>721 960 112</b>	5	50	0.152	87	65
3	15	<b>721 961 113</b>	10	-	0.350	112	77
4	15	<b>721 962 115</b>	5	-	0.800	145	101
5	10	<b>721 960 116</b>	10	-	0.880	164	92

21 20 11

**Tee 90° reducing Inch BS**

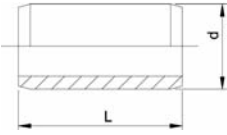
d-d [inch]	PN	Code	SP	GP	kg	z [mm]	z1 [mm]	D [mm]	L [mm]	L1 [mm]
3/4 - 1/2	15	<b>721 201 134</b>	10	100	0.034	14	14	33	33	30
1 - 1/2	15	<b>721 201 141</b>	10	100	0.056	17	17	41	39	33
1 - 3/4	15	<b>721 201 138</b>	10	100	0.058	17	17	41	39	36
1 1/4 - 3/4	15	<b>721 201 151</b>	-	-	0.132	22	22	50	49	42
1 1/4 - 1	15	<b>721 201 147</b>	-	-	0.128	29	28	62	59	44
1 1/2 - 1/2	15	<b>721 201 009</b>	5	60	0.206	29	28	62	59	50
1 1/2 - 3/4	15	<b>721 201 010</b>	-	-	0.185	37	34	77	73	53
1 1/2 - 1	15	<b>721 201 164</b>	20	-	0.211	37	34	77	73	56
2 - 3/4	15	<b>721 201 011</b>	10	-	0.330	37	32	77	73	53
2 - 1	15	<b>721 201 178</b>	5	-	0.335	37	32	77	73	56
2 - 1 1/2	15	<b>721 201 170</b>	-	-	0.511	38	32	73	68	68
4 - 3	15	<b>721 201 137</b>	-	-	1.990	72	59	138	122	122
	16	<b>721 200 149</b>	1	-	3.000	72	78	172	148	122

**Barrel nipple PVC-U Inch BS****Model:**

- With solvent cement spigots on both sides
- For the shortest possible distance between fittings
- Overall length L = 2 x socket length

d [inch]	PN	Code	SP	GP	kg	L [mm]
3/8	16	<b>721 901 905</b>	-	-	0.002	29
1/2	16	<b>721 901 906</b>	-	-	0.004	33
3/4	16	<b>721 901 907</b>	-	-	0.008	39
1	16	<b>721 901 908</b>	-	-	0.015	45
1 1/4	16	<b>721 901 909</b>	-	-	0.027	54
1 1/2	16	<b>721 901 910</b>	-	-	0.050	60
2	16	<b>721 901 911</b>	-	-	0.098	72
2 1/2	16	<b>721 900 912</b>	-	-	0.160	88
3	16	<b>721 901 913</b>	-	-	0.226	101
4	16	<b>721 901 914</b>	-	-	0.476	126
5	16	<b>721 900 916</b>	-	-	0.953	152





## Barrel nipple PVC-U Inch BS

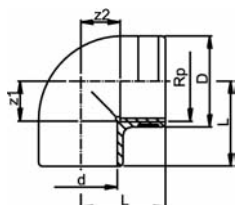
### Model:

- For the shortest possible distance between fittings
- Overall length  $L = 2 \times$  socket length
- With solvent cement spigots on both sides

d [inch]	PN [bar]	Code	SP	GP	kg	L [mm]
3/8	10	<b>721 911 505</b>	-	-	0.010	28
1/2	10	<b>721 911 506</b>	-	-	0.012	32
3/4	10	<b>721 911 507</b>	-	-	0.023	38
1	10	<b>721 911 508</b>	-	-	0.135	44
1 1/4	10	<b>721 911 509</b>	-	-	0.040	52
1 1/2	10	<b>721 911 510</b>	-	-	0.060	62
2	10	<b>721 911 511</b>	-	-	0.120	76
3	10	<b>721 911 513</b>	-	-	0.300	102
4	10	<b>721 911 515</b>	-	-	0.560	122

# Adaptor fittings metric

21 10 02



## Elbow 90° PVC-U metric Rp

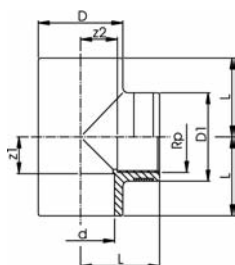
### Model:

- With solvent cement socket metric and parallel female thread Rp
- Reinforcing ring stainless (A2)
- Connection to plastic or metal threads
- Do not use thread sealing pastes that are harmful to PVC-U
- Install with low mechanical stress and avoid large cyclic temperature changes

\* without reinforcement, connection for plastic threads only

d [mm]	Rp [inch]	PN	Code	SP	GP	kg	z1 [mm]	z2 [mm]	D [mm]	L [mm]
12	1/4	16	721 100 204	10	100	0.011	7	7	20	19
16	3/8	16	721 100 205	10	100	0.015	9	9	25	23
20	1/2	16	721 100 206	10	100	0.025	13	11	30	27
25	3/4	16	721 100 207	10	80	0.034	16	15	35	33
32	1	16	721 100 208	10	40	0.060	19	19	45	39
40	1 1/4	16	721 100 209	10	100	0.123	23	27	55	50
50	1 1/2	16	721 100 210	5	30	0.185	27	36	62	58
63	2	16	721 100 211	10	-	0.326	33	46	75	73
* 75	2 1/2	10	721 100 212	5	-	0.438	40	56	90	84
* 90	3	10	721 100 213	5	-	0.800	48	68	108	99
* 110	4	10	721 100 214	1	-	1.245	58	82	132	119

21 20 02



## Tee 90° PVC-U metric Rp

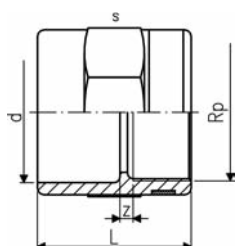
### Model:

- With solvent cement socket metric, branch with parallel female thread Rp
- Reinforcing ring stainless (A2)
- Connection to plastic or metal threads
- Do not use thread sealing pastes that are harmful to PVC-U
- Install with low mechanical stress and avoid large cyclic temperature changes

\* without reinforcement, connection for plastic threads only

d [mm]	Rp [inch]	PN	Code	SP	GP	kg	z1 [mm]	z2 [mm]	D [mm]	D1 [mm]	L [mm]
12	1/4	16	721 200 204	10	280	0.015	7	7	17	20	19
16	3/8	16	721 200 205	10	100	0.027	9	9	21	25	23
20	1/2	16	721 200 206	10	100	0.025	11	13	26	30	29
25	3/4	16	721 200 207	10	100	0.039	14	15	32	35	33
32	1	16	721 200 208	10	30	0.071	17	19	40	45	39
40	1 1/4	16	721 200 209	10	50	0.140	23	26	47	55	49
50	1 1/2	16	721 200 210	5	10	0.190	27	36	59	59	59
63	2	16	721 200 211	5	-	0.360	33	46	74	75	71
* 75	2 1/2	10	721 200 212	5	-	0.609	40	56	92	92	84
* 90	3	10	721 200 213	5	-	1.076	48	68	110	110	99
* 110	4	10	721 200 214	1	1	1.686	58	82	133	132	119

21 91 02



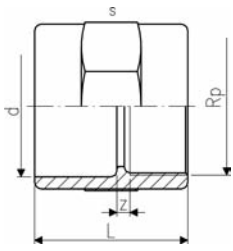
## Adaptor socket PVC-U metric Rp

### Model:

- With solvent cement socket metric and parallel female thread Rp
- Reinforcing ring stainless (A2)
- Connection to plastic or metal threads
- Do not use thread sealing pastes that are harmful to PVC-U
- Install with low mechanical stress and avoid large cyclic temperature changes

d [mm]	Rp [inch]	PN	Code	SP	GP	kg	z [mm]	L [mm]	s [mm]
12	1/4	16	721 910 204	10	100	0.010	4	27	22
16	3/8	16	721 910 205	10	100	0.017	5	31	27
20	1/2	16	721 910 206	10	100	0.025	5	36	32
25	3/4	16	721 910 207	10	100	0.032	5	40	36
32	1	16	721 910 208	10	100	0.070	5	45	46
40	1 1/4	16	721 910 209	10	50	0.085	5	51	55
50	1 1/2	16	721 910 210	10	50	0.125	7	59	65
63	2	16	721 910 211	5	50	0.170	7	69	80

## 21 91 60



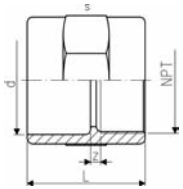
## Adaptor socket PVC-U metric Rp

### Model:

- With solvent cement socket metric and parallel female thread Rp
- Connection to plastic threads only
- Do not use thread sealing pastes that are harmful to PVC-U
- Install with low mechanical stress and avoid large cyclic temperature changes

d [mm]	Rp [inch]	PN	Code	SP	GP	kg	z [mm]	L [mm]	s [mm]
75	2 ½	10	<b>721 916 012</b>	10	-	0.223	7	82	90
90	3	10	<b>721 916 013</b>	5	-	0.374	9	94	110
110	4	10	<b>721 916 014</b>	5	-	0.542	9	110	130

## 21 91 42



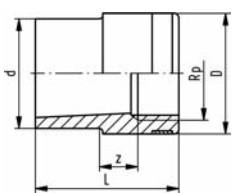
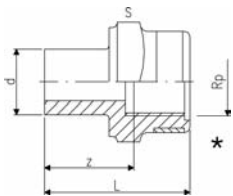
## Adaptor socket PVC-U metric NPT

### Model:

- With solvent cement socket metric and NPT (ASTM) taper female thread
- Connection to plastic threads only
- Do not use thread sealing pastes that are harmful to PVC-U
- Install with low mechanical stress and avoid large cyclic temperature changes

d [mm]	NPT [inch]	PN	Code	SP	GP	kg	z [mm]	L [mm]	s [mm]
20	½	10	<b>721 914 206</b>	10	100	0.022	5	35	32
25	¾	10	<b>721 914 207</b>	10	100	0.027	6	40	36
32	1	10	<b>721 914 208</b>	10	100	0.050	6	45	46
40	1 ¼	10	<b>721 914 209</b>	10	100	0.075	6	51	55
50	1 ½	10	<b>721 914 210</b>	10	50	0.109	10	59	65
63	2	10	<b>721 914 211</b>	5	50	0.176	10	69	80
75	2 ½	10	<b>721 914 212</b>	10	-	0.247	11	82	90
90	3	10	<b>721 914 213</b>	5	-	0.381	14	94	110
110	4	10	<b>721 914 214</b>	5	-	0.557	18	110	130

## 21 91 04



## Reducing bush PVC-U metric Rp

### Model:

- With solvent cement spigot metric and parallel female thread Rp
- Reinforcing ring stainless (A2)
- Connection to plastic or metal threads
- Do not use thread sealing pastes that are harmful to PVC-U
- Install with low mechanical stress and avoid large cyclic temperature changes

d [mm]	Rp [inch]	PN	Code	SP	GP	kg	z [mm]	D [mm]	L [mm]	s [mm]
* 12	¼	16	<b>721 910 404</b>	10	250	0.007	17	20	27	22
20	¾	16	<b>721 910 434</b>	10	100	0.014	24	25	35	15
25	½	16	<b>721 910 437</b>	10	100	0.021	27	30	41	21
32	¾	16	<b>721 910 441</b>	10	100	0.032	32	35	48	33
40	1	16	<b>721 910 446</b>	10	100	0.060	38	45	56	60
50	1 ¼	16	<b>721 910 452</b>	10	60	0.097	46	55	66	99
63	1 ½	16	<b>721 910 458</b>	5	45	0.148	57	62	77	150

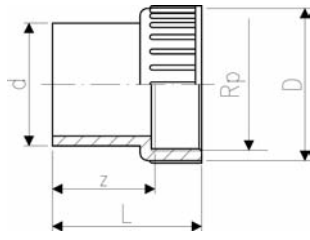
21 90 04

## Adaptor bush equal PVC-U metric Rp



**Model:**

- With solvent cement spigot metric and parallel female thread Rp
- Connection to plastic threads only
- Do not use thread sealing pastes that are harmful to PVC-U
- Install with low mechanical stress and avoid large cyclic temperature changes



d [mm]	Rp [inch]	PN	Code	SP	GP	kg	z [mm]	D [mm]	L [mm]
20	3/8	10	721 900 406	10	100	0.012	22	28	37
25	1/4	10	721 900 407	10	100	0.020	25	34	41
32	1	10	721 900 408	10	100	0.037	29	42	48
40	1 1/4	10	721 900 409	10	100	0.063	34	52	56
50	1 1/2	10	721 900 410	10	100	0.102	40	62	61
63	2	10	721 900 411	5	50	0.178	49	77	74

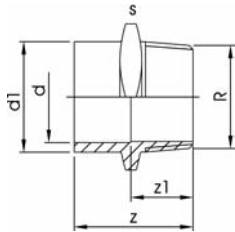
21 91 05

## Adaptor socket nipple PVC-U metric R



**Model:**

- With solvent cement spigot/socket reducing metric and taper male thread R
- Do not use thread sealing pastes that are harmful to PVC-U
- Install with low mechanical stress and avoid large cyclic temperature changes



d [mm]	d1 [mm]	R [inch]	PN	Code	SP	GP	kg	z [mm]	z1 [mm]	s [mm]
12	16	3/8	16	721 910 555	10	100	0.011	35	23	27
16	20	1/2	16	721 910 556	10	100	0.019	42	28	32
20	25	3/4	16	721 910 557	10	100	0.025	47	31	36
25	32	1	16	721 910 558	10	100	0.040	54	35	46
32	40	1 1/4	16	721 910 559	10	100	0.062	60	38	55
40	50	1 1/2	16	721 910 560	10	50	0.093	66	40	65
50	63	2	16	721 910 561	5	60	0.165	78	47	80

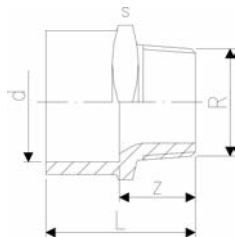
21 91 07

## Adaptor bush equal PVC-U metric R



**Model:**

- With solvent cement socket metric and taper male thread R
- Do not use thread sealing pastes that are harmful to PVC-U
- Install with low mechanical stress and avoid large cyclic temperature changes



d [mm]	R [inch]	PN	Code	SP	GP	kg	z [mm]	L [mm]	s [mm]
16	3/8	16	721 910 705	10	100	0.012	20	34	27
20	1/2	16	721 910 706	10	100	0.018	24	40	32
25	3/4	16	721 910 707	10	100	0.024	25	44	36
32	1	16	721 910 708	10	100	0.039	28	50	46
40	1 1/4	16	721 910 709	10	100	0.063	31	57	55
50	1 1/2	16	721 910 710	10	100	0.088	32	63	65
63	2	16	721 910 711	5	50	0.158	38	76	80
75	2 1/2	10	721 910 712	5	-	0.223	42	86	90
90	3	10	721 910 713	5	-	0.355	46	97	110
110	4	10	721 910 714	5	-	0.572	53	114	130

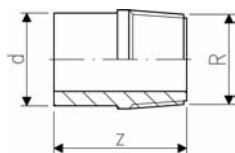
21 91 35

## Adaptor nipple PVC-U metric R



**Model:**

- With solvent cement spigot metric and taper male thread R
- Do not use thread sealing pastes that are harmful to PVC-U
- Install with low mechanical stress and avoid large cyclic temperature changes



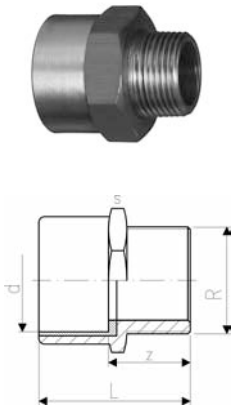
d [mm]	R [inch]	PN	Code	SP	GP	kg	z [mm]
16	3/8	10	721 913 505	10	100	0.006	31
20	1/2	10	721 913 506	10	100	0.010	35
25	3/4	10	721 913 507	10	100	0.015	40
32	1	10	721 913 508	10	100	0.027	46

20 91 07

## Adaptor socket brass/PVC-U metric R

**Model:**

- Brass with taper male thread R and PVC-U solvent cement socket insert, metric
- Install with low mechanical stress and avoid large cyclic temperature changes



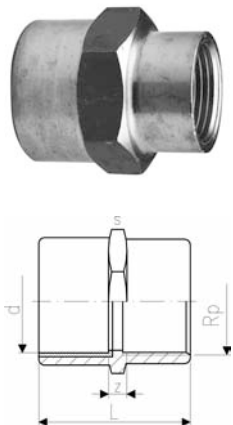
d [mm]	R [inch]	PN	Code	SP	GP	kg	z [mm]	L [mm]	s [mm]
20	1/2	16	<b>720 910 706</b>	-	-	0.159	27	45	36
25	3/4	16	<b>720 910 707</b>	-	-	0.193	28	49	40
32	1	16	<b>720 910 708</b>	-	-	0.305	33	57	48
40	1 1/4	16	<b>720 910 709</b>	-	-	0.300	36	64	58
50	1 1/2	16	<b>720 910 710</b>	-	-	0.680	38	72	70
63	2	16	<b>720 910 711</b>	-	-	0.960	43	84	85

20 91 02

## Adaptor socket brass/PVC-U metric Rp

**Model:**

- Brass with parallel female thread Rp and PVC-U solvent cement socket insert, metric
- Install with low mechanical stress and avoid large cyclic temperature changes



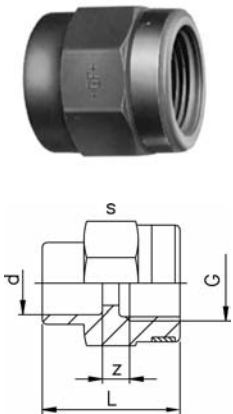
d [mm]	Rp [inch]	PN	Code	SP	GP	kg	z [mm]	L [mm]	s [mm]
20	1/2	16	<b>720 910 206</b>	-	-	0.162	14	46	36
25	3/4	16	<b>720 910 207</b>	-	-	0.204	14	50	40
32	1	16	<b>720 910 208</b>	-	-	0.323	16	58	48
40	1 1/4	16	<b>720 910 209</b>	-	-	0.489	17	66	58
50	1 1/2	16	<b>720 910 210</b>	-	-	0.767	19	74	70
63	2	16	<b>720 910 211</b>	-	-	1.102	19	86	83

21 91 62

## Manometer adaptor sockets PVC-U metric G

**Model:**

- With solvent cement socket metric and female thread G
- Reinforcing ring stainless (A2)
- Connection to plastic or metal threads
- Do not use thread sealing pastes that are harmful to PVC-U
- Install with low mechanical stress and avoid large cyclic temperature changes



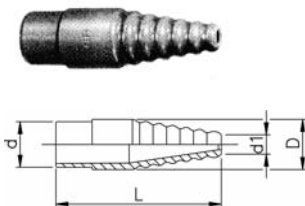
d [mm]	G [inch]	PN	Code	SP	GP	kg	z [mm]	L [mm]	s [mm]
12	1/4	16	<b>721 916 204</b>	10	100	0.010	4	27	22
16	1/2	16	<b>721 916 206</b>	10	100	0.028	7	36	32

21 96 03

## Hose connector PVC-U metric

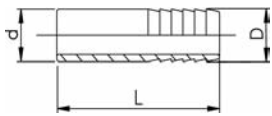
**Model:**

- With solvent cement spigot metric and tapered hose connection



d [mm]	PN	Code	SP	GP	kg	d1 [mm]	D [mm]	L [mm]
10	16	<b>721 960 303</b>	10	650	0.004	6	12	51
12	16	<b>721 960 304</b>	10	650	0.004	6	12	51
16	16	<b>721 960 305</b>	10	400	0.007	8	16	57
20	16	<b>721 960 306</b>	10	230	0.016	11	22	73

21 96 04



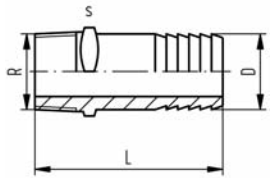
## Hose connector PVC-U metric

**Model:**

- With solvent cement spigot metric and parallel hose connection

d [mm]	PN	Code	SP	GP	kg	D [mm]	L [mm]
10	16	<b>721 960 403</b>	10	750	0.002	8	47
12	16	<b>721 960 404</b>	10	600	0.004	12	51
16	16	<b>721 960 405</b>	10	350	0.009	16	57
20	16	<b>721 960 406</b>	10	100	0.015	20	73
25	16	<b>721 960 407</b>	10	100	0.021	25	79
32	16	<b>721 960 408</b>	10	100	0.036	30	89
40	16	<b>721 960 409</b>	5	50	0.061	40	100
50	16	<b>721 960 410</b>	5	50	0.111	50	105
63	16	<b>721 960 411</b>	5	50	0.178	60	120

21 96 07



## Hose connector PVC-U R

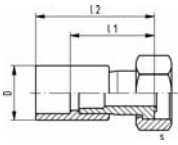
**Model:**

- With taper male thread R
- With parallel hose connector
- Do not use thread sealing pastes that are harmful to PVC-U

R [inch]	PN	Code	SP	GP	kg	D [mm]	L [mm]	s [mm]
1/4	10	<b>721 960 704</b>	10	500	0.005	12	59	14
3/8	10	<b>721 960 705</b>	10	280	0.011	16	67	19
1/2	10	<b>721 960 706</b>	10	100	0.020	20	86	22
3/4	10	<b>721 960 707</b>	10	100	0.028	25	92	27
1	10	<b>721 960 708</b>	5	50	0.048	30	103	36
1 1/4	10	<b>721 960 709</b>	5	50	0.078	40	115	46

# Adaptor fittings Inch BS

21 55 14



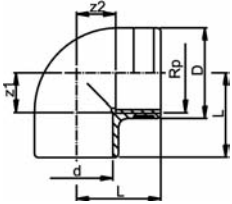
## Tap connector PVC-U Inch BS Rp

**Model:**

- With solvent cement socket BS Inch and brass parallel female thread Rp

d [inch]	Rp [inch]	Code Code	SP	GP	kg	D [mm]	I1 [mm]	I2 [mm]	s [mm]
3/8	1/2	<b>721 551 405</b>	-	-	0.040	23	39	55	24
1/2	3/4	<b>721 551 406</b>	-	-	0.042	27	43	60	31

21 10 12

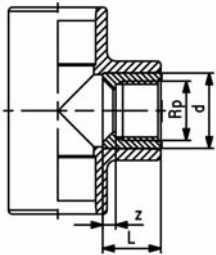


## Elbow 90° PVC-U Inch BS Rp

**Model:**

- With solvent cement socket BS Inch and parallel female thread Rp
- Reinforcing ring stainless (A2)
- Connection to plastic or metal threads
- Do not use thread sealing pastes that are harmful to PVC-U
- Install with low mechanical stress and avoid large cyclic temperature changes

d [inch]	Rp [inch]	PN	Code	SP	GP	kg	z1 [mm]	z2 [mm]	D [mm]	L [mm]
1/2	1/2	15	<b>721 101 206</b>	150	-	0.022	10	15	30	27
3/4	3/4	15	<b>721 101 207</b>	100	-	0.033	13	19	35	33
1	1	15	<b>721 101 208</b>	40	-	0.058	16	24	45	39



## Reducing bush short PVC-U Inch BS Rp

**Model:**

- With solvent cement spigot BS and parallel female thread Rp
- Connection to plastic threads only
- Do not use thread sealing pastes that are harmful to PVC-U
- Install with low mechanical stress and avoid large cyclic temperature changes

d [inch]	Rp [inch]	PN	Code Code	SP	GP	kg	z [mm]	L [mm]
1/2	3/8	15	<b>721 901 534</b>	-	-	0.005	3	18
3/4	1/2	15	<b>721 901 537</b>	-	-	0.011	5	21
1	3/4	15	<b>721 901 541</b>	10	100	0.011	4	24
1	1/2	15	<b>721 901 542</b>	-	-	0.020	8	24

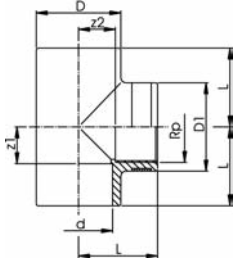
21 20 12

## Tee 90° PVC-U Inch BS Rp



**Model:**

- With solvent cement socket BS Inch and parallel female thread Rp
- Reinforcing ring stainless (A2)
- Connection to plastic or metal threads
- Do not use thread sealing pastes that are harmful to PVC-U
- Install with low mechanical stress and avoid large cyclic temperature changes



d [inch]	Rp [inch]	PN	Code	SP	GP	kg	z1 [mm]	z2 [mm]	D [mm]	D1 [mm]	L [mm]
3/8	3/8	16	<b>721 201 205</b>	10	100	0.028	10	14	25	25	26
1/2	1/2	16	<b>721 201 206</b>	10	100	0.043	10	13	30	26	29
3/4	3/4	16	<b>721 201 207</b>	10	100	0.060	13	15	35	32	33
1	1	16	<b>721 201 208</b>	60	-	0.111	17	19	45	40	39

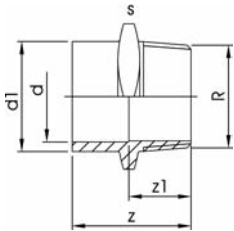
21 91 15

## Adaptor socket nipple PVC-U Inch BS R



**Model:**

- With solvent cement spigot/reducing socket and taper male thread R
- Do not use thread sealing pastes that are harmful to PVC-U
- Install with low mechanical stress and avoid large cyclic temperature changes



d [inch]	d1 [inch]	R [inch]	PN	Code Code	SP	GP	kg	z [mm]	z1 [mm]	s [mm]
1/4	3/8	3/8	15	<b>721 911 555</b>	-	-	0.011	36	21	27
3/8	1/2	1/2	15	<b>721 911 556</b>	-	-	0.020	43	28	32
1/2	3/4	3/4	15	<b>721 911 557</b>	-	-	0.019	48	31	36
3/4	1	1	15	<b>721 911 558</b>	-	-	0.040	55	35	46

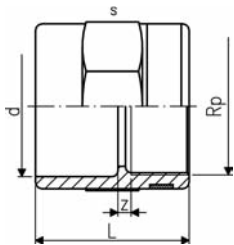
21 91 10

## Adaptor socket PVC-U Inch BS Rp



**Model:**

- With solvent cement socket BS Inch and parallel female thread Rp
- Reinforcing ring stainless (A2)
- Connection to plastic or metal threads
- Do not use thread sealing pastes that are harmful to PVC-U
- Install with low mechanical stress and avoid large cyclic temperature changes



d [inch]	Rp [inch]	PN	Code Code	SP	GP	kg	z [mm]	L [mm]	s [mm]
3/8	3/8	15	<b>721 911 005</b>	10	280	0.016	4	31	27
1/2	1/2	15	<b>721 911 006</b>	10	150	0.030	4	35	32
3/4	3/4	15	<b>721 911 007</b>	10	100	0.032	3	40	36
1	1	15	<b>721 911 008</b>	10	70	0.053	3	45	46
1 1/4	1 1/4	15	<b>721 911 009</b>	10	70	0.079	3	51	55
1 1/2	1 1/2	15	<b>721 911 010</b>	10	50	0.130	8	59	65
2	2	15	<b>721 911 011</b>	5	60	0.195	8	69	80



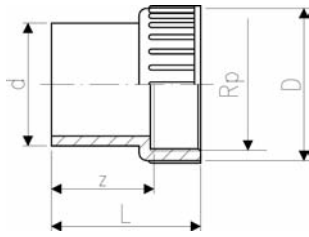
21 90 14

## Adaptor bush equal PVC-U Inch BS Rp



**Model:**

- With solvent cement socket BS Inch and parallel female thread Rp
- Connection to plastic threads only
- Do not use thread sealing pastes that are harmful to PVC-U
- Install with low mechanical stress and avoid large cyclic temperature changes



d [inch]	Rp [inch]	PN	Code Code	SP	GP	kg	z [mm]	D [mm]	L [mm]
1/2	1/2	15	721 901 406	10	100	0.013	21	28	37
3/4	3/4	15	721 901 407	10	100	0.021	23	34	41
1	1	15	721 901 408	10	100	0.039	27	42	48
1 1/4	1 1/4	15	721 901 409	10	100	0.067	33	52	56
1 1/2	1 1/2	15	721 901 410	10	100	0.097	38	62	61
2	2	15	721 901 411	5	50	0.168	47	77	74

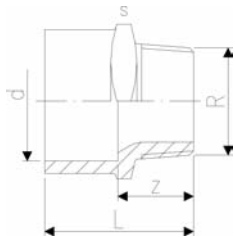
21 91 17

## Adaptor bush equal PVC-U Inch BS R



**Model:**

- With solvent cement socket BS Inch and taper male thread R
- Do not use thread sealing pastes that are harmful to PVC-U
- Install with low mechanical stress and avoid large cyclic temperature changes



d [inch]	R [inch]	PN	Code Code	SP	GP	kg	z [mm]	L [mm]	s [mm]
3/8	3/8	15	721 911 705	10	230	0.013	20	34	27
1/2	1/2	15	721 911 706	10	150	0.019	24	40	32
3/4	3/4	15	721 911 707	10	100	0.022	25	44	36
1	1	15	721 911 708	10	70	0.036	28	50	46
1 1/4	1 1/4	15	721 911 709	10	100	0.057	31	57	55
1 1/2	1 1/2	15	721 911 710	10	50	0.095	32	63	65
2	2	15	721 911 711	5	60	0.180	38	76	80
	2 1/2	10	721 910 712	5	-	0.223	42	86	90

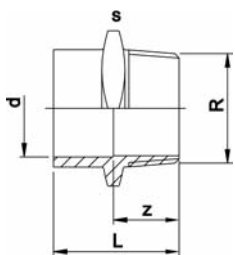
21 91 17

## Adaptor bush reducing PVC-U Inch BS R



**Model:**

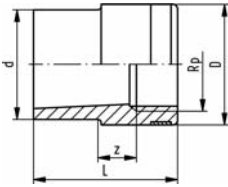
- With solvent cement socket BS Inch and taper male thread R
- Do not use thread sealing pastes that are harmful to PVC-U
- Install with low mechanical stress and avoid large cyclic temperature changes



d [inch]	R [inch]	PN	Code Code	SP	GP	kg	z [mm]	L [mm]	s [mm]
1/2	3/4	15	721 911 737	120	-	0.050	22	40	36
3/4	1	15	721 911 741	70	-	0.034	27	48	46
1	1 1/4	15	721 911 746	70	-	0.052	29	53	55
1 1/4	1 1/2	15	721 911 752	60	-	0.060	29	58	65
1 1/2	2	15	721 911 758	75	-	0.071	34	64	80

21 91 14

## Reducing bush PVC-U Inch BS



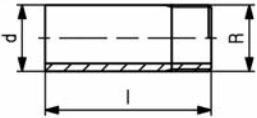
**Model:**

- With solvent cement socket BS Inch and parallel female thread Rp
- Reinforcing ring stainless (A2)
- Connection to plastic or metal threads
- Do not use thread sealing pastes that are harmful to PVC-U
- Install with low mechanical stress and avoid large cyclic temperature changes

d [inch]	Rp [inch]	PN	Code Code	SP	GP	kg	D [mm]	L [mm]	z [mm]
3/8	1/2	16	721 911 434	10	100	0.020	30	40	8

21 91 39

## Adaptor nipple PVC-U Inch BS R



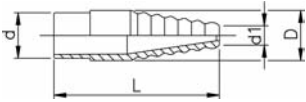
**Model:**

- With solvent cement spigot BS Inch and taper male thread R
- Do not use thread sealing pastes that are harmful to PVC-U
- Install with low mechanical stress and avoid large cyclic temperature changes

d [inch]	R [inch]	PN	Code Code	SP	GP	kg	L [mm]
3/8	3/8	15	721 913 905	-	-	0.010	43
1/2	1/2	15	721 913 906	-	-	0.015	50
3/4	3/4	15	721 913 907	-	-	0.020	56
1	1	15	721 913 908	-	-	0.135	63
1 1/4	1 1/4	15	721 913 909	-	-	0.040	75
1 1/2	1 1/2	15	721 913 910	-	-	0.060	88
2	2	15	721 913 911	-	-	0.120	88
3	3	15	721 913 913	-	-	0.300	128
4	4	15	721 913 915	-	-	0.560	153

21 96 13

## Hose connector PVC-U Inch BS



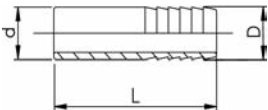
**Model:**

- With solvent cement spigot and taper hose connector

d [inch]	PN	Code	SP	GP	kg	d1 [mm]	D [mm]	L [mm]
1/4	15	721 961 304	10	-	0.004	6	12	51

21 96 14

## Hose connector PVC-U Inch BS



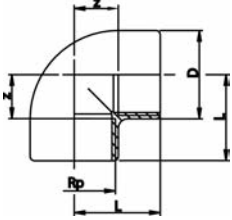
**Model:**

- With solvent cement spigot and parallel hose connection

d [inch]	PN	Code	SP	GP	kg	D [mm]	L [mm]
1/8	15	721 961 403	10	700	0.003	8	47
1/4	15	721 961 404	10	-	0.005	12	51

# Threaded fittings metric

21 10 16



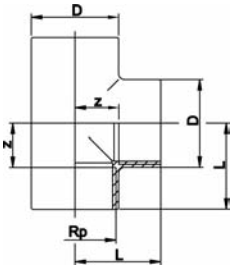
## Elbow 90° PVC-U Rp

**Model:**

- With parallel female thread Rp
- Connection to plastic threads only
- Do not use thread sealing pastes that are harmful to PVC-U
- Install with low mechanical stress and avoid large cyclic temperature changes

Rp [inch]	PN	Code	SP	GP	kg	z [mm]	D [mm]	L [mm]
3/8	10	721 101 605	10	100	0.013	9	23	23
1/2	10	721 101 606	10	100	0.018	12	27	27
3/4	10	721 101 607	10	100	0.028	15	33	33
1	10	721 101 608	10	100	0.042	19	39	39
1 1/4	10	721 101 609	10	50	0.069	27	48	49
1 1/2	10	721 101 610	5	50	0.176	35	61	59
2	10	721 101 611	5	-	0.319	44	75	72
2 1/2	10	721 101 612	24	-	0.450	56	90	84
3	10	721 101 613	5	-	0.858	68	108	99
4	10	721 101 614	1	1	1.233	82	132	119

21 20 16



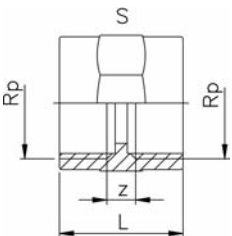
## Tee 90° equal PVC-U Rp

**Model:**

- With parallel female thread Rp
- Connection to plastic threads only
- Do not use thread sealing pastes that are harmful to PVC-U
- Install with low mechanical stress and avoid large cyclic temperature changes

Rp [inch]	PN	Code	SP	GP	kg	z [mm]	D [mm]	L [mm]
3/8	10	721 201 605	10	100	0.017	9	23	23
1/2	10	721 201 606	10	100	0.027	12	28	27
3/4	10	721 201 607	10	50	0.041	15	33	33
1	10	721 201 608	10	50	0.070	19	41	39
1 1/4	10	721 201 609	10	10	0.117	27	50	49
1 1/2	10	721 201 610	10	-	0.290	36	62	60
2	10	721 201 611	10	-	0.497	44	77	72
2 1/2	10	721 201 612	8	-	0.642	56	92	84
3	10	721 201 613	-	-	1.149	68	110	99
4	10	721 201 614	1	1	1.662	82	133	119

21 91 06



## Socket PVC-U Rp

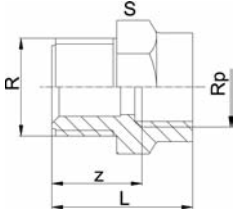
**Model:**

- With parallel female thread Rp
- Connection to plastic threads only
- Do not use thread sealing pastes that are harmful to PVC-U
- Install with low mechanical stress and avoid large cyclic temperature changes

Rp [inch]	PN	Code	SP	GP	kg	z [mm]	L [mm]	s [mm]
1/4	10	721 910 604	10	300	0.010	7	27	22
3/8	10	721 910 605	10	280	0.015	7	29	27
1/2	10	721 910 606	10	150	0.025	9	35	32
3/4	10	721 910 607	10	100	0.030	9	39	36
1	10	721 910 608	10	80	0.055	11	45	46
1 1/4	10	721 910 609	10	100	0.076	11	49	55
1 1/2	10	721 910 610	10	60	0.106	11	49	65
2	10	721 910 611	5	75	0.181	11	57	80

21 91 08

## Reducing bush PVC-U R Rp



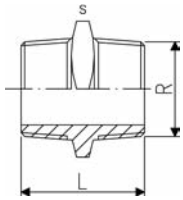
**Model:**

- With taper male thread R and parallel female thread Rp
- Connection to plastic threads only
- Do not use thread sealing pastes that are harmful to PVC-U
- Install with low mechanical stress and avoid large cyclic temperature changes

R [inch]	Rp [inch]	PN	Code	SP	GP	kg	z [mm]	L [mm]	s [mm]
1/2	3/8	10	721 910 834	10	100	0.015	25	36	27
3/4	1/2	10	721 910 837	10	100	0.021	25	39	32
1	1/2	10	721 910 842	10	100	0.028	31	45	32
1	3/4	10	721 910 841	10	100	0.030	29	45	36
1 1/4	1	10	721 910 846	10	100	0.051	32	50	46
1 1/2	1 1/4	10	721 910 852	10	50	0.071	35	55	55
2	1 1/2	10	721 910 858	5	50	0.126	45	65	65

21 91 19

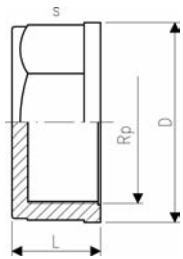
## Hexagon nipple PVC-U R



R [inch]	PN	Code	SP	GP	kg	L [mm]	s [mm]
3/8	10	721 911 905	10	100	0.007	37	19
1/2	10	721 911 906	10	100	0.012	45	22
3/4	10	721 911 907	10	100	0.019	49	27
1	10	721 911 908	10	50	0.035	57	36
1 1/4	10	721 911 909	10	50	0.053	62	46
1 1/2	10	721 911 910	10	50	0.071	67	50
2	10	721 911 911	5	50	0.124	76	65

21 96 06

## Cap PVC-U Rp



**Model:**

- With parallel female thread Rp
- Connection to plastic threads only
- Do not use thread sealing pastes that are harmful to PVC-U
- Install with low mechanical stress and avoid large cyclic temperature changes

Rp [inch]	PN	Code	SP	GP	kg	D [mm]	L [mm]	s [mm]
1/8	10	721 960 603	10	-	0.013	20	14	17
1/4	10	721 960 604	10	-	0.024	25	16	22
3/8	10	721 960 605	10	100	0.005	31	19	27
1/2	10	721 960 606	10	100	0.018	37	21	32
3/4	10	721 960 607	10	100	0.024	42	24	36
1	10	721 960 608	10	100	0.040	50	26	46
1 1/4	10	721 960 609	10	100	0.060	60	29	55
1 1/2	10	721 960 610	10	100	0.073	65	31	60
2	10	721 960 611	5	50	0.128	81	36	75

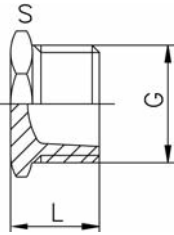
21 96 09



## Plug PVC-U G

**Model:**

- With parallel male thread G
- Connection to plastic threads only
- Flat gasket necessary for sealing
- Do not use thread sealing pastes that are harmful to PVC-U
- Install with low mechanical stress and avoid large cyclic temperature changes



G [inch]	PN	Code	SP	GP	kg	L [mm]	s [mm]
3/8	10	<b>721 960 905</b>	10	450	0.006	21	22
1/2	10	<b>721 960 906</b>	10	320	0.010	25	27
3/4	10	<b>721 960 907</b>	10	100	0.019	29	36
1	10	<b>721 960 908</b>	10	100	0.030	32	41
1 1/4	10	<b>721 960 909</b>	10	100	0.048	36	50
1 1/2	10	<b>721 960 910</b>	10	100	0.069	37	60
2	10	<b>721 960 911</b>	5	50	0.120	42	75

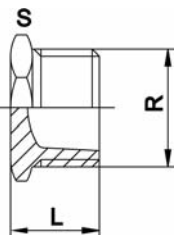
21 96 19



## Plug PVC-U R

**Model:**

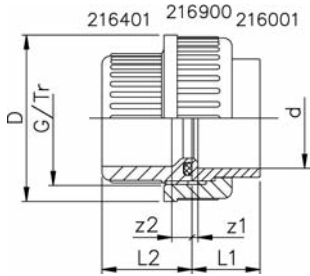
- With taper male thread R
- Connection to plastic threads only
- Do not use thread sealing pastes that are harmful to PVC-U
- Install with low mechanical stress and avoid large cyclic temperature changes



R [inch]	PN	Code	SP	GP	kg	L [mm]	s [mm]
3/8	10	<b>721 961 905</b>	10	450	0.006	21	22
1/2	10	<b>721 961 906</b>	10	320	0.010	25	27
3/4	10	<b>721 961 907</b>	10	100	0.019	29	36
1	10	<b>721 961 908</b>	10	100	0.030	32	41
1 1/4	10	<b>721 961 909</b>	10	100	0.048	36	50
1 1/2	10	<b>721 961 910</b>	10	100	0.070	37	60
2	10	<b>721 961 911</b>	5	50	0.117	42	75

# Unions metric

21 51 01



## Union for solvent cement jointing PVC-U metric

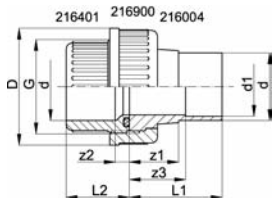
**Model:**

- Union End: solvent socket metric
- Union Bush: Solvent socket metric
- Jointing face: With O-ring groove
- Gasket: O-Ring EPDM No. 48 41 00, FPM No. 49 41 00

d [mm]	d [inch]	PN	EPDM Code	FPM Code	SP	GP	kg
10		16	721 510 103	721 510 128	10	100	0.020
12		16	721 510 104	721 510 129	10	100	0.019
16		16	721 510 105	721 510 130	10	100	0.025
20		16	721 510 106	721 510 131	10	80	0.040
25		16	721 510 107	721 510 132	10	100	0.066
32		16	721 510 108	721 510 133	10	60	0.090
40		16	721 510 109	721 510 134	10	30	0.153
50		16	721 510 110	721 510 135	2	60	0.204
63		16	721 510 111	721 510 136	10	-	0.367
75	2 1/2	10	721 510 112	721 510 137	2	-	0.615
90		10	721 510 313	721 510 338	2	-	0.925
110		10	721 510 114	721 510 139	1	-	1.425

d [mm]	z1 [mm]	z2 [mm]	D [mm]	L1 [mm]	L2 [mm]	G/Tr
10	3	10	31	15	22	5/8
12	3	10	31	15	22	5/8
16	3	10	35	17	24	3/4
20	3	10	43	19	26	1
25	3	10	51	22	29	1 1/4
32	3	10	58	25	33	1 1/2
40	3	12	72	29	39	2
50	3	14	83	34	46	2 1/4
63	3	18	100	41	58	2 3/4
75	3	18	135	47	62	Tr108x5
90	5	18	158	56	69	Tr128x5
110	5	11	188	66	72	Tr154x6

21 51 03



## PRO-FIT Unions for solvent cement jointing, PVC-U metric

**Model:**

- Union End: Solvent cemented spigot in combination with reducing socket metric
- Union Bush: Solvent socket metric
- Gasket: O-Ring EPDM No. 48 41 00, FPM No. 49 41 00

d [mm]	d1 [mm]	PN	EPDM Code	FPM Code	SP	GP	kg
* 16	12	16	721 510 305	721 510 330	10	-	0.029
* 20	16	16	721 510 306	721 510 331	10	-	0.044
* 25	20	16	721 510 307	721 510 332	10	-	0.073
* 32	25	16	721 510 308	721 510 333	10	-	0.105
40	32	16	721 510 309	721 510 334	10	-	0.171
50	40	16	721 510 310	721 510 335	10	-	0.250
63	50	16	721 510 311	721 510 336	10	-	0.449

d [mm]	z1 [mm]	z2 [mm]	z3 [mm]	D [mm]	L1 [mm]	L2 [mm]	G [inch]
* 16	22	10	24	35	36	24	3/4
* 20	24	10	26	43	40	26	1
* 25	25	10	28	51	44	29	1 1/4
* 32	27	10	30	58	49	33	1 1/2
40	31	12	35	74	57	39	2
50	35	14	40	83	66	46	2 1/4
63	39	18	46	100	77	58	2 3/4

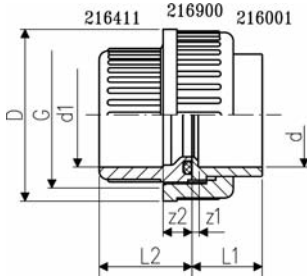
## 21 51 31



## Adaptor union PVC-U metric Inch BS

### Model:

- Union End: Solvent cement socket metric
- Union Bush: Solvent cement socket BS inch
- Gasket: O-ring EPDM No. 48 41 00
- Can be supplied with FPM O-Ring No. 49 41 00



d [mm]	d1 [inch]	PN	Code	SP	GP	kg	z1 [mm]	z2 [mm]	D [mm]	L1 [mm]	L2 [mm]	G [inch]
16	3/8	16	<b>721 513 105</b>	100	-	0.025	3	8	35	17	24	3/4
20	1/2	16	<b>721 513 106</b>	10	100	0.040	3	9	43	19	26	1
25	3/4	16	<b>721 513 107</b>	50	-	0.065	3	9	51	22	29	1 1/4
32	1	16	<b>721 513 108</b>	35	-	0.090	3	9	58	25	33	1 1/2
40	1 1/4	16	<b>721 513 109</b>	20	-	0.155	3	10	72	29	39	2
50	1 1/2	16	<b>721 513 110</b>	15	-	0.200	3	10	83	34	46	2 1/4
63	2	16	<b>721 513 111</b>	10	-	0.355	3	10	100	41	58	2 3/4

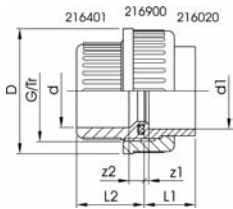
## 21 51 41



## Union for solvent cement jointing PVC-U metric/ASTM

### Model:

- Union End: Solvent cement socket ASTM
- Union Bush: Solvent socket metric
- Gasket: O-ring EPDM No. 48 41 00
- Can be supplied with FPM O-Ring No. 49 41 00

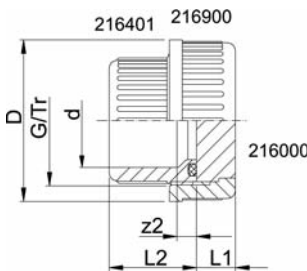


d [mm]	d1 [inch]	PN	Code	kg	z1 [mm]	z2 [mm]	D [mm]	L1 [mm]	L2 [mm]	G [inch]
16	3/8	16	<b>721 514 105</b>	0.022	3	10	35	22	24	3/4
20	1/2	16	<b>721 514 106</b>	0.047	3	10	43	25	26	1
25	3/4	16	<b>721 514 107</b>	0.065	3	10	51	28	29	1 1/4
32	1	16	<b>721 514 108</b>	0.103	3	10	58	32	33	1 1/2
40	1 1/4	16	<b>721 514 109</b>	0.174	3	12	72	35	39	2
50	1 1/2	16	<b>721 514 110</b>	0.239	3	14	83	38	46	2 1/4
63	2	16	<b>721 514 111</b>	0.435	3	18	100	41	58	2 3/4

## 21 51 00

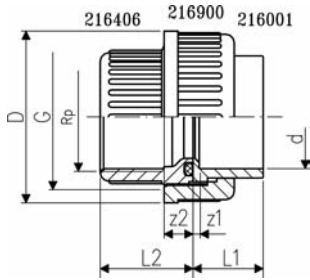


## Union with union end blank PVC-U metric



d [mm]	PN	EPDM Code	FPM Code	SP	GP	kg	z2 [mm]	D [mm]	L1 [mm]	L2 [mm]	G/Tr
10	16	<b>721 510 003</b>	<b>721 510 028</b>	10	100	0.020	9	31	10	22	5/8
12	16	<b>721 510 004</b>	<b>721 510 029</b>	10	100	0.020	9	31	15	22	5/8
16	16	<b>721 510 005</b>	<b>721 510 030</b>	10	100	0.026	10	35	10	24	3/4
20	16	<b>721 510 006</b>	<b>721 510 031</b>	10	80	0.041	10	43	11	26	1
25	16	<b>721 510 007</b>	<b>721 510 032</b>	10	100	0.068	10	51	11	29	1 1/4
32	16	<b>721 510 008</b>	<b>721 510 033</b>	10	60	0.095	10	58	12	33	1 1/2
40	16	<b>721 510 009</b>	<b>721 510 034</b>	10	30	0.159	12	72	13	39	2
50	16	<b>721 510 010</b>	<b>721 510 035</b>	5	50	0.227	14	83	16	46	2 1/4
63	16	<b>721 510 011</b>	<b>721 510 036</b>	10	-	0.405	18	100	18	58	2 3/4
75	10	<b>721 510 012</b>	<b>721 510 037</b>	2	-	0.693	18	135	22	62	Tr108x5
90	10	<b>721 510 213</b>	<b>721 510 238</b>	2	-	1.022	18	158	24	69	Tr128x5
110	10	<b>721 510 014</b>	<b>721 510 039</b>	1	-	1.573	11	188	26	72	Tr154x6

## 21 51 02



## Adaptor Unions, PVC-U metric - Rp

### Model:

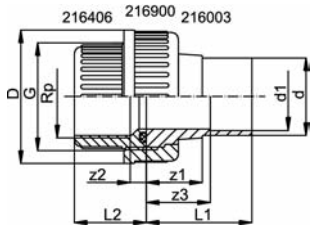
- Union End: Solvent cement socket metric
- Union Bush: Parallel female thread Rp
- Gasket: O-Ring No. 48 41 00
- Can be supplied with FPM O-Ring No. 49 41 00
- Connection to plastic threads only
- Do not use thread sealing pastes that are harmful to PVC-U

d [mm]	Rp [inch]	PN	Code	SP	GP	kg	z1 [mm]	z2 [mm]	D [mm]	L1 [mm]	L2 [mm]	G [inch]
12	1/4	10	721 510 204	10	220	0.019	3	12	31	15	22	5/8
16	3/8	10	721 510 205	10	140	0.020	3	13	35	17	24	3/4
20	1/2	10	721 510 206	10	80	0.042	3	13	43	19	26	1
25	3/4	10	721 510 207	10	100	0.072	3	14	51	22	29	1 1/4
32	1	10	721 510 208	10	60	0.095	3	15	58	25	33	1 1/2
40	1 1/4	10	721 510 209	10	30	0.160	3	19	72	29	39	2
50	1 1/2	10	721 510 210	2	60	0.255	3	26	83	34	46	2 1/4
63	2	10	721 510 211	2	32	0.400	3	33	100	41	58	2 3/4

## 21 51 04



\*



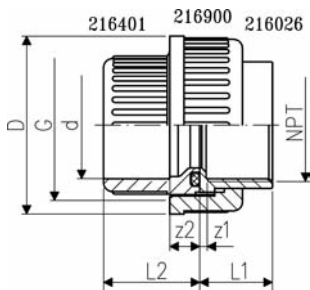
## PRO-FIT Adaptor Unions, PVC-U metric - Rp

### Model:

- Union End: Solvent cemented spigot in combination with reducing socket metric
- Union Bush: Threaded socket with parallel female thread Rp
- Gasket: O-Ring EPDM No. 48 41 00, FPM No. 49 41 00
- Can be supplied with FPM O-Ring No. 49 41 00
- Connection to plastic threads only
- Do not use thread sealing pastes that are harmful to PVC-U

d [mm]	d1 [mm]	Rp [inch]	PN	EPDM Code	SP	GP	kg	z1 [mm]	z2 [mm]	z3 [mm]	D [mm]	L1 [mm]	L2 [mm]	G [inch]
* 16	12	3/8	10	721 510 405	10	-	0.032	22	13	24	35	36	24	3/4
* 20	16	1/2	10	721 510 406	10	10	0.046	24	13	26	43	40	26	1
* 25	20	3/4	10	721 510 407	10	-	0.079	25	14	28	51	44	29	1 1/4
* 32	25	1	10	721 510 408	10	-	0.116	27	15	30	58	49	32	1 1/2
40	32	1 1/4	10	721 510 409	10	-	0.192	31	19	35	74	57	38	2
50	40	1 1/2	10	721 510 410	10	-	0.301	35	26	40	83	66	45	2 1/4
63	50	2	10	721 510 411	10	10	0.496	39	33	46	100	77	56	2 3/4

## 21 51 42



## Adaptor Unions, PVC-U metric - NPT

### Model:

- Union End: Taper female thread NPT (ASTM)
- Union Bush: Solvent socket metric
- Gasket: O-ring EPDM No. 48 41 00
- Can be supplied with FPM O-Ring No. 49 41 00
- Connection to plastic threads only
- Do not use thread sealing pastes that are harmful to PVC-U

d [mm]	NPT [inch]	PN	Code	kg	z1 [mm]	z2 [mm]	D [mm]	L1 [mm]	L2 [mm]	G [inch]
16	3/8	10	721 514 205	0.026	4	10	35	17	24	3/4
20	1/2	10	721 514 206	0.042	2	10	43	19	26	1
25	3/4	10	721 514 207	0.068	4	10	51	22	29	1 1/4
32	1	10	721 514 208	0.093	4	10	58	25	33	1 1/2
40	1 1/4	10	721 514 209	0.163	6	12	72	29	39	2
50	1 1/2	10	721 514 210	0.221	11	14	83	34	46	2 1/4
63	2	10	721 514 211	0.395	17	18	100	41	58	2 3/4



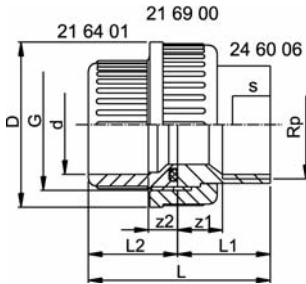
21 54 02



## Adaptor Unions, PVC-U / Stainless Steel metric - Rp

### Model:

- Union End: Stainless Steel 1.4404 (316L), parallel female thread Rp
- Union Bush: Solvent cement socket PVC-U metric
- Union nut: PVC-U
- Gasket: O-Ring EPDM No. 48 41 00, FPM No. 49 41 00



d [mm]	Rp [inch]	PN	EPDM Code	FPM Code	SP	kg
16	3/8	16	721 540 205	721 540 230	-	0.053
20	1/2	16	721 540 206	721 540 231	-	0.096
25	3/4	16	721 540 207	721 540 232	-	0.154
32	1	16	721 540 208	721 540 233	-	0.212
40	1 1/4	16	721 540 209	721 540 234	-	0.356
50	1 1/2	16	721 540 210	721 540 235	-	0.455
63	2	16	721 540 211	721 540 236	-	0.721

d [mm]	z1 [mm]	z2 [mm]	D [mm]	L [mm]	L1 [mm]	L2 [mm]	G [inch]	s [mm]
16	9	10	35	43	19	24	3/4	19
20	11	10	43	50	24	26	1	24
25	11	10	51	55	26	29	1 1/4	29
32	12	10	58	61	29	33	1 1/2	36
40	14	12	72	71	33	39	2	45
50	15	14	83	79	34	46	2 1/4	54
63	15	18	100	95	39	58	2 3/4	63

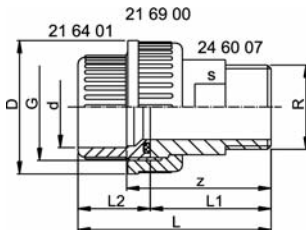
21 54 07



## Adaptor Unions, PVC-U / Stainless Steel metric - R

### Model:

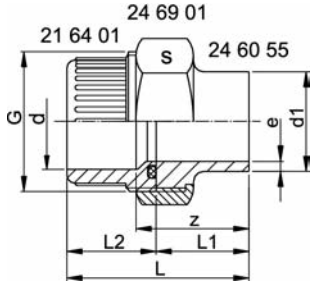
- Union End: Stainless Steel 1.4404 (316L), taper male thread R
- Union Bush: Solvent cement socket PVC-U metric
- Union nut: PVC-U
- Gasket: O-Ring EPDM No. 48 41 00, FPM No. 49 41 00



d [mm]	R [inch]	PN	EPDM Code	FPM Code	SP	kg
16	3/8	16	721 540 705	721 540 730	-	0.073
20	1/2	16	721 540 706	721 540 731	-	0.126
25	3/4	16	721 540 707	721 540 732	-	0.174
32	1	16	721 540 708	721 540 733	-	0.262
40	1 1/4	16	721 540 709	721 540 734	-	0.476
50	1 1/2	16	721 540 710	721 540 735	-	0.535
63	2	16	721 540 711	721 540 736	-	0.931

d [mm]	z [mm]	D [mm]	L [mm]	L1 [mm]	L2 [mm]	G [inch]	s [mm]
16	40	35	54	30	24	3/4	19
20	44	43	60	34	26	1	24
25	46	51	65	36	29	1 1/4	32
32	50	58	72	40	33	1 1/2	37
40	58	72	84	46	39	2	48
50	62	83	93	48	46	2 1/4	54
63	73	100	111	55	58	2 3/4	69

21 54 55



## Adaptor Unions, PVC-U / Stainless Steel metric - Welding End

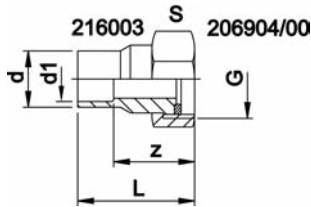
### Model:

- Union End: Stainless Steel 1.4404 (316L) with welding end
- Union Bush: Solvent cement socket PVC-U metric
- Union Nut: Stainless Steel WN 1.4404 (316L)
- Gasket: O-Ring EPDM No. 48 41 00, FPM No. 49 41 00

d [mm]	d1 [mm]	PN	EPDM Code	FPM Code	SP	GP	kg
16	17	16	721 545 505	721 545 530	-	-	0.101
20	21	16	721 545 506	721 545 531	-	-	0.176
25	27	16	721 545 507	721 545 532	-	-	0.204
32	34	16	721 545 508	721 545 533	-	-	0.313
40	42	16	721 545 509	721 545 534	-	-	0.493
50	48	16	721 545 510	721 545 535	-	-	0.566
63	60	16	721 545 511	721 545 536	-	-	0.902

d [mm]	z [mm]	L [mm]	L1 [mm]	L2 [mm]	e [mm]	G [inch]	s [mm]
16	28	42	18	24	1.6	3/4	32
20	32	48	22	26	2.0	1	41
25	33	52	23	29	2.0	1 1/4	46
32	36	58	26	33	2.0	1 1/2	55
40	38	64	26	39	2.0	2	68
50	42	73	28	46	2.0	2 1/4	74
63	50	88	32	58	2.6	2 3/4	88

21 55 03



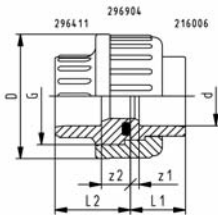
## Tap Connectors, PVC-U / Brass metric - G

### Model:

- Union End: PVC-U, solvent cement socket / spigot metric
- Union Nut: brass with female thread G
- Gasket: flat gasket EPDM No. 48 40 02

d [mm]	d1 [mm]	G [inch]	PN	Code	SP	GP	kg	z [mm]	L [mm]	s [mm]
16	12	1/2	16	721 550 305	10	280	0.031	22	34	24
20	16	3/4	16	721 550 306	10	160	0.049	24	38	30
25	20	1	16	721 550 307	10	80	0.079	27	43	38

21 51 06



## Thread Unions, PVC-U Rp-Rp

### Model:

- Union End: Parallel female thread Rp
- Union Bush: Parallel female thread Rp
- Union nut: PVC-U
- Gasket: O-Ring EPDM No. 48 41 00
- Can be supplied with FPM O-Ring No. 49 41 00
- Connection to plastic threads only
- Do not use thread sealing pastes that are harmful to PVC-U

Rp [inch]	PN	Code	SP	GP	kg	z1 [mm]	z2 [mm]	D [mm]	L1 [mm]	L2 [mm]	G [inch]
1/4	10	721 510 604	10	220	0.019	3	12	31	22	15	5/8
3/8	10	721 510 605	10	140	0.027	3	13	35	24	17	3/4
1/2	10	721 510 606	10	80	0.042	3	13	43	26	19	1
3/4	10	721 510 607	10	110	0.065	3	14	51	29	22	1 1/4
1	10	721 510 608	10	60	0.093	3	15	58	32	25	1 1/2
1 1/4	10	721 510 609	10	30	0.160	3	19	72	38	29	2
1 1/2	10	721 510 610	2	60	0.220	3	26	83	45	34	2 1/4
2	10	721 510 611	2	32	0.410	3	33	100	56	41	2 3/4

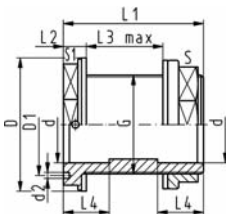
610504

## Tank Adaptors Type 050 Compact, PVC-U metric



**Model:**

- End connection: solvent cement socket, metric
- Gasket: flat gasket EPDM
- Washer: PP
- Run-out holes: Two holes in octagonal head



d [mm]	PN	EPDM Code	SP	GP	kg
16	16	<b>161 050 445</b>	75	-	0.041
20	16	<b>161 050 446</b>	50	-	0.066
25	16	<b>161 050 447</b>	70	-	0.109
32	16	<b>161 050 448</b>	50	-	0.153
40	16	<b>161 050 449</b>	30	-	0.225
50	16	<b>161 050 450</b>	20	-	0.260
63	16	<b>161 050 451</b>	20	-	0.390

d [mm]	d2 [mm]	D [mm]	D1 [mm]	L1 [mm]	L2 [mm]	L3 max [mm]	L4 [mm]	G [inch]	S [mm]	S1 [mm]	Diameter of bore in tank side [mm]
16	5	44	29	58	11	28	14	3/4	32	40	28
20	5	54	35	61	12	28	16	1	40	50	35
25	5	60	42	65	13	28	19	1 1/4	50	55	43
32	5	69	49	67	13	28	22	1 1/2	56	65	49
40	5	84	59	72	13	29	26	2	69	80	61
50	5	92	70	76	15	30	31	2 1/4	76	85	67
63	5	108	82	84	15	35	38	2 3/4	95	100	83

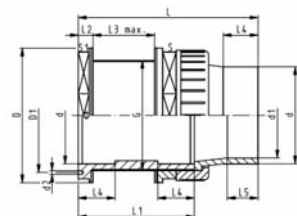
610503

## Tank Adaptors Type 050, PVC-U Union End with Spigot reducing socket, metric



**Model:**

- End connection: union with union end spigot/reducing socket, metric
- Gasket: flat gasket EPDM
- Washer: PP
- Run-out holes: Two holes in octagonal head



d [mm]	d1 [mm]	PN	EPDM Code	SP	GP	kg
16	12	16	<b>161 050 345</b>	1	-	0.064
20	16	16	<b>161 050 346</b>	1	-	0.102
25	20	16	<b>161 050 347</b>	1	-	0.157
32	25	16	<b>161 050 348</b>	1	-	0.220
40	32	16	<b>161 050 349</b>	1	-	0.333
50	40	16	<b>161 050 350</b>	1	-	0.438
63	50	16	<b>161 050 351</b>	1	-	0.680

d [mm]	d2 [mm]	D [mm]	D1 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 max [mm]	L4 [mm]	L5 [mm]	G [inch]	S [mm]	S1 [mm]	Diameter of bore in tank side [mm]
16	5	44	29	96	58	11	19	14	12	3/4	32	40	28
20	5	54	35	104	61	12	17	16	14	1	40	50	35
25	5	60	42	112	65	13	18	19	16	1 1/4	50	55	43
32	5	69	49	119	67	13	19	22	19	1 1/2	56	65	49
40	5	84	59	132	72	13	16	26	22	2	69	80	61
50	5	92	70	145	76	15	16	31	26	2 1/4	76	85	67
63	5	108	82	163	84	15	19	38	31	2 3/4	95	100	83

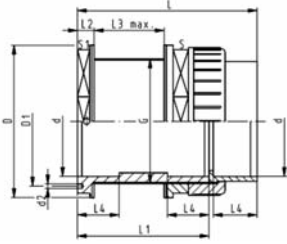
610502



## Tank Adaptor Type 050, PVC-U Union End with socket, metric

### Model:

- End connection: union with solvent cement socket, metric
- Gasket: flat gasket EPDM
- Washer: PP
- Run-out holes: Two holes in octagonal head



d [mm]	PN	Code	SP	GP	kg
16	16	<b>161 050 245</b>	1	-	0.040
20	16	<b>161 050 246</b>	1	-	0.070
25	16	<b>161 050 247</b>	-	-	0.100
32	16	<b>161 050 248</b>	1	-	0.196
40	16	<b>161 050 249</b>	1	-	0.240
50	16	<b>161 050 250</b>	1	-	0.350
63	16	<b>161 050 251</b>	1	-	0.530

d [mm]	d2 [mm]	D [mm]	D1 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 max [mm]	L4 [mm]	G [inch]	S [mm]	S1 [mm]	Diameter of bore in tank side [mm]
16	5	44	29	77	58	11	19	14	¾	32	40	28
20	5	54	35	83	61	12	17	16	1	40	50	35
25	5	60	42	90	65	13	18	19	1 ¼	50	55	43
32	5	69	49	95	67	13	19	22	1 ½	56	65	49
40	5	84	59	104	72	13	16	26	2	69	80	61
50	5	92	70	113	76	15	16	31	2 ¼	76	85	67
63	5	108	82	128	84	15	19	38	2 ¾	95	100	83

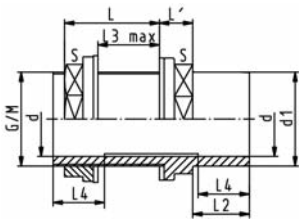
610502



## Tank Adaptor Type 050, PVC-U metric

### Model:

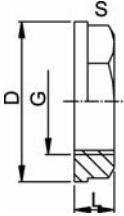
- End connection: solvent cement socket and spigot, metric
- Gasket: flat gasket EPDM
- Washer: PP



d [mm]	d1 [mm]	Code	SP	GP	kg
20	25	<b>161 050 206</b>	75	-	0.040
25	32	<b>161 050 207</b>	50	-	0.070
32	40	<b>161 050 208</b>	50	-	0.100
40	50	<b>161 050 209</b>	35	-	0.190
50	63	<b>161 050 210</b>	25	-	0.240
63	75	<b>161 050 211</b>	15	-	0.350
75	90	<b>161 050 212</b>	20	-	0.530
90	110	<b>161 050 213</b>	10	-	1.050
110	125	<b>161 050 214</b>	6	-	1.350

d [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 max [mm]	L4 [mm]	G [inch]	M	s [mm]	Diameter of bore in tank side [mm]
20	42	13	19	23	16	¾		32	28
25	45	15	22	23	19	1		40	35
32	27	17	26	24	22	1 ¼		50	43
40	48	19	31	21	26	1 ¾		60	55
50	52	21	38	21	31	2		69	61
63	53	23	44	23	38	2 ½		85	77
75	56	26	51	20	44	3		100	89
90	62	32	61	20	51		M113	125	115
110	66	36	69	22	61		M133	147	135

61 49 06



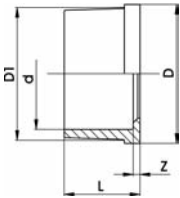
## Backing Nut, PVC-U

### Model:

- With G thread ISO 228/1
- For Tank Adaptor Type 050

G [inch]	Code	SP	GP	kg	D [mm]	L [mm]	s [mm]
3/4	<b>161 490 630</b>	400	-	0.007	39	13	32
1	<b>161 490 632</b>	200	-	0.012	48	15	40
1 1/4	<b>161 490 634</b>	100	-	0.020	58	17	50
1 1/2	<b>161 490 635</b>	100	-	0.025	65	18	56
1 3/4	<b>161 490 636</b>	75	-	0.036	72	19	64
2	<b>161 490 637</b>	50	-	0.044	79	21	69
2 1/4	<b>161 490 638</b>	50	-	0.053	86	21	76
2 1/2	<b>161 490 639</b>	25	-	0.063	94	23	85
2 3/4	<b>161 490 640</b>	25	-	0.080	106	25	95
3	<b>161 490 641</b>	20	-	0.101	112	26	100
4	<b>161 490 644</b>	10	-	0.164	139	32	126

21 60 01



## Union Ends, PVC-U metric

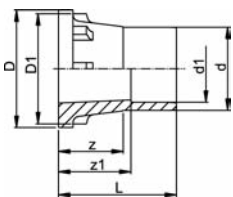
### Model:

- Solvent cement socket metric
- Suitable for unions, tank connectors and diaphragm valves Type 314

\* for Adaptor Unions 21 53 02, 21 53 07, 21 55 02, 21 55 07 old version

d [mm]	PN	Code	SP	GP	kg	z [mm]	D [mm]	D1 [mm]	L [mm]
10	16	<b>721 600 103</b>	-	-	0.004	3	20	18	15
12	16	<b>721 600 104</b>	-	-	0.004	3	20	18	15
16	16	<b>721 600 105</b>	-	-	0.006	3	24	22	17
20	16	<b>721 600 106</b>	-	-	0.009	3	30	28	19
25	16	<b>721 600 107</b>	-	-	0.015	3	39	36	22
32	16	<b>721 600 108</b>	-	-	0.020	3	45	42	25
40	16	<b>721 600 109</b>	-	-	0.038	3	57	53	29
50	16	<b>721 600 110</b>	-	-	0.039	3	63	59	34
63	16	<b>721 600 111</b>	-	-	0.072	3	78	74	41
75	10	<b>721 600 162</b>	-	-	0.140	3	101	90	47
90	10	<b>721 600 163</b>	-	-	0.242	5	121	108	56
110	10	<b>721 600 164</b>	-	-	0.390	5	146	131	66
* 75	10	<b>721 600 112</b>	110	-	0.155	3	97	90	47
* 90	10	<b>721 600 113</b>	-	-	0.196	5	110	105	56

21 60 04



## Union Ends with Spigot, PVC-U metric

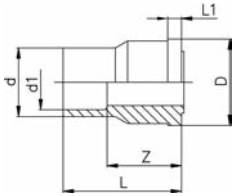
### Model:

- Solvent cement spigot in combination with reducing socket metric
- Suitable for unions, tank connectors and diaphragm valves Type 314

d [mm]	d1 [mm]	PN	Code	SP	GP	kg	z [mm]	z1 [mm]	D [mm]	D1 [mm]	L [mm]
* 16	12	16	<b>721 600 405</b>	1800	10	0.010	22	24	24	22	36
* 20	16	16	<b>721 600 406</b>	2100	-	0.013	24	26	30	28	40
* 25	20	16	<b>721 600 407</b>	1200	-	0.022	25	28	39	36	44
* 32	25	16	<b>721 600 408</b>	740	-	0.035	27	30	45	42	49
40	32	16	<b>721 600 409</b>	260	-	0.057	31	35	57	53	57
50	40	16	<b>721 600 410</b>	190	-	0.086	35	40	63	59	66
63	50	16	<b>721 600 411</b>	110	-	0.153	39	46	79	74	77

21 60 03

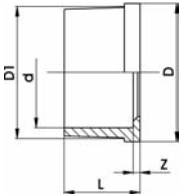
**Union Ends, PVC-U  
metric**



d [mm]	d1 [mm]	PN	Code	SP	GP	kg	z [mm]	D [mm]	L [mm]	L1 [mm]
16	12	16	721 600 305	-	-	0.005	22	19	34	3
20	16	16	721 600 306	-	-	0.009	24	24	38	5
25	20	16	721 600 307	-	-	0.016	27	30	43	5

21 60 20

**Union Ends, PVC-U  
ASTM**



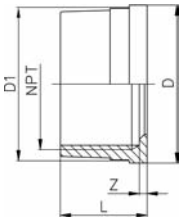
**Model:**

- With solvent cement socket ASTM

d [inch]	PN	Code	SP	GP	kg	z [mm]	D [mm]	D1 [mm]	L [mm]
3/8	16	721 602 005	-	-	0.006	3	24	22	22
1/2	16	721 602 006	-	-	0.009	3	30	28	25
3/4	16	721 602 007	-	-	0.016	3	39	36	28
1	16	721 602 008	-	-	0.022	3	45	42	32
1 1/4	16	721 602 009	-	-	0.037	3	57	53	35
1 1/2	16	721 602 010	-	-	0.052	3	63	59	38
2	16	721 602 011	-	-	0.088	3	78	74	41
2 1/2	10	721 602 012	-	-	0.140	3	101	90	47
3	10	721 602 013	-	-	0.255	5	121	108	56
3 1/2	10	721 602 014	-	-	0.390	5	146	131	66

21 60 26

**Union Ends, PVC-U  
NPT (ASTM)**



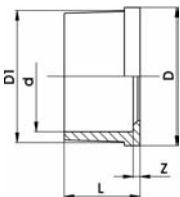
**Model:**

- Taper female thread NPT (ASTM)

NPT [inch]	PN	Code	SP	GP	kg	z [mm]	D [mm]	D1 [mm]	L [mm]
3/8	10	721 602 655	-	-	0.005	4	24	22	17
1/2	10	721 602 656	-	-	0.008	2	30	28	19
3/4	10	721 602 657	-	-	0.016	4	39	36	22
1	10	721 602 658	-	-	0.022	3	45	42	25
1 1/4	10	721 602 659	-	-	0.040	6	57	53	29
1 1/2	10	721 602 660	-	-	0.058	11	63	59	34
2	10	721 602 661	-	-	0.128	17	78	74	41

21 60 11

**Union Ends, PVC-U  
BS Inch**

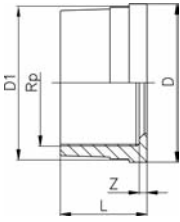


**Model:**

- Solvent cement socket BS inch

d [inch]	PN	Code	SP	GP	kg	z [mm]	D [mm]	D1 [mm]	L [mm]
3/8	15	721 601 105	-	-	0.005	3	24	22	19
1/2	15	721 601 106	-	-	0.008	3	30	27	21
3/4	15	721 601 107	-	-	0.014	3	38	36	24
1	15	721 601 108	-	-	0.019	3	44	41	27
1 1/4	15	721 601 109	1	-	0.033	3	56	53	32
1 1/2	15	721 601 110	-	-	0.043	3	62	59	33
2	15	721 601 111	-	-	0.082	3	78	74	40

## 21 60 06



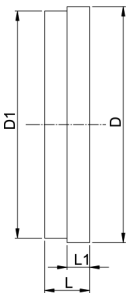
## Union Ends, PVC-U Rp

### Model:

- Parallel female thread Rp

Rp [inch]	PN	Code	SP	GP	kg	z [mm]	D [mm]	D1 [mm]	L [mm]
1/4	10	721 600 654	-	-	0.004	5	20	18	15
3/8	10	721 600 655	-	-	0.005	6	24	22	17
1/2	10	721 600 656	1430	-	0.010	6	30	28	19
3/4	10	721 600 657	-	-	0.013	7	39	36	22
1	10	721 600 658	-	-	0.021	8	45	42	25
1 1/4	10	721 600 659	-	-	0.038	10	57	53	29
1 1/2	10	721 600 660	-	-	0.045	11	63	59	34
2	10	721 600 661	-	-	0.110	18	78	74	41

## 21 60 00



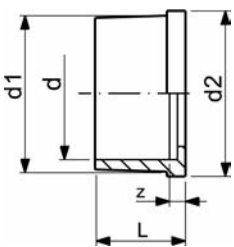
## Union Ends Blank, PVC-U

### Model:

- For Unions, Tank Adaptor and Diaphragm Valve Type 314
- Flat sealing faces

d [mm]	DN [mm]	Inch	PN	Code	SP	GP	kg	D [mm]	D1 [mm]	L [mm]	L1 [mm]
10	6	1/8	16	721 600 004	-	-	0.004	20	18	9	4
16	10	3/8	16	721 600 005	-	-	0.006	24	22	10	5
20	15	1/2	16	721 600 006	-	-	0.010	30	28	11	5
25	20	3/4	16	721 600 007	-	-	0.017	39	36	11	6
32	25	1	16	721 600 008	-	-	0.025	45	42	12	6
40	32	1 1/4	16	721 600 009	-	-	0.043	57	53	13	7
50	40	1 1/2	16	721 600 010	-	-	0.062	63	59	16	7
63	50	2	16	721 600 011	-	-	0.110	78	74	18	8
75	65	2 1/2	10	721 600 012	-	-	0.218	101	90	22	10
90	80	3	10	721 600 013	-	-	0.339	121	108	24	11
110	100	4	10	721 600 014	-	-	0.538	146	131	26	12

## 34 60 01



## Union Ends, PE80

### Model:

- With fusion socket metric
- Suitable for unions, tank connectors and diaphragm valves Type 314

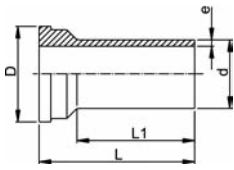
d [mm]	PN	Code	SP	GP	kg	d1 [mm]	d2 [mm]	L [mm]	L1 [mm]	z [mm]
20	10	734 600 106	-	-	0.006	28	30	19	5	5
25	10	734 600 107	-	-	0.012	36	39	21	5	5
32	10	734 600 108	-	-	0.015	42	45	23	6	5
40	10	734 600 109	-	-	0.026	53	57	25	6	5
50	10	734 600 110	-	-	0.027	59	63	28	7	5
63	10	734 600 111	-	-	0.045	74	79	32	8	5



## Union Ends long, PE100

### Model:

- For butt-, IR Plus® and electrofusion
- Suitable for unions, tank connectors and diaphragm valves Type 314



d [mm]	PN	FM	Code	SP	GP	kg	D [mm]	L [mm]	L1 [mm]	e [mm]
20	16	IR	753 608 616	1	-	0.011	30	67	52	1,9
25	16	IR	753 608 617	1	-	0.019	39	71	53	2,3
32	16	IR	753 608 618	1	-	0.027	45	73	55	2,9
40	16	IR	753 608 619	1	-	0.045	57	81	60	3,7
50	16	IR	753 608 620	1	-	0.062	63	87	66	4,6
63	16	IR	753 608 621	1	-	0.119	78	93	70	5,8

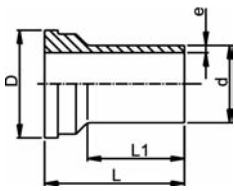
## 53 60 86



## Union Ends, PE100 SDR11

### Model:

- Conventional butt-welding according to DVS 2207 part 1
- IR = Infrared- (IR Plus®) compatible.
- For the dimensions d75-110 please see instructions for the installation



d [mm]	PN	FM	Code	SP	GP	kg	D [mm]	L [mm]	L1 [mm]	e [mm]
20	16	IR	753 608 606	-	-	0.011	30	54	38	1,9
25	16	IR	753 608 607	-	-	0.018	39	57	42	2,3
32	16	IR	753 608 608	-	-	0.027	45	60	41	2,9
40	16	IR	753 608 609	-	-	0.045	57	63	42	3,7
50	16	IR	753 608 610	-	-	0.062	63	66	44	4,6
63	16	IR	753 608 611	-	-	0.100	78	69	45	5,8
75	10	IR	753 608 612	-	-	0.147	101	66	34	6,8
90	10	IR	753 608 613	-	-	0.156	101	66	45	8,2
110	10	IR	753 608 614	-	-	0.226	121	66	40	10,0

## 24 60 06

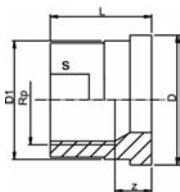


## Union Ends, Stainless Steel 1.4404 (316L)

### Rp

### Model:

- Material: Stainless Steel 1.4404 (316L)
- Parallel female thread Rp



Rp [inch]	PN	Code	SP	GP	kg	z [mm]	D [mm]	D1 [mm]	L [mm]	s [mm]
3/8	16	724 600 655	-	-	0.030	9	24	22	19	19
1/2	16	724 600 656	-	-	0.060	11	30	28	24	24
3/4	16	724 600 657	-	-	0.100	11	39	36	26	29
1	16	724 600 658	-	-	0.140	12	45	42	29	36
1 1/4	16	724 600 659	-	-	0.230	14	57	53	33	45
1 1/2	16	724 600 660	-	-	0.320	15	63	59	34	54
2	16	724 600 661	-	-	0.450	15	78	74	39	63

## 24 60 07

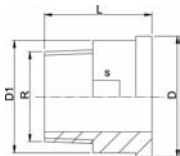


## Union Ends, Stainless Steel 1.4404 (316L)

### R

### Model:

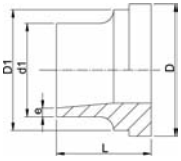
- Material: Stainless Steel 1.4404 (316L)
- Taper male thread R



R [inch]	PN	Code	SP	GP	kg	D [mm]	D1 [mm]	L [mm]	s [mm]
3/8	16	724 600 705	-	-	0.050	24	22	30	19
1/2	16	724 600 706	-	-	0.090	30	28	34	24
3/4	16	724 600 707	-	-	0.120	39	36	36	32
1	16	724 600 708	-	-	0.190	45	42	40	37
1 1/4	16	724 600 709	-	-	0.350	57	53	46	48
1 1/2	16	724 600 710	-	-	0.400	63	59	48	54
2	16	724 600 711	-	-	0.660	78	74	55	69



24 60 55



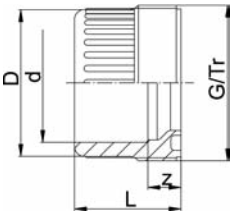
## Union Ends, Stainless Steel 1.4404 (316L) Welding End

**Model:**

- Material: Stainless Steel 1.4404 (316L)

d [mm]	d1 [mm]	PN	Code	SP	GP	kg	D [mm]	D1 [mm]	L [mm]	e [mm]
16	17	16	<b>724 605 505</b>	-	-	0.030	24	22	18	1.6
20	21	16	<b>724 605 506</b>	-	-	0.050	30	28	22	2.0
25	26	16	<b>724 605 507</b>	-	-	0.080	39	36	23	2.0
32	33	16	<b>724 605 508</b>	-	-	0.110	45	42	26	2.0
40	42	16	<b>724 605 509</b>	-	-	0.190	57	53	26	2.0
50	48	16	<b>724 605 510</b>	-	-	0.220	63	59	28	2.0
63	60	16	<b>724 605 511</b>	-	-	0.370	78	74	32	2.6

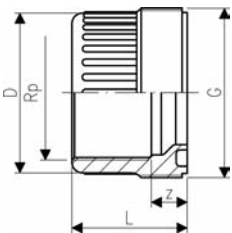
21 64 01



## Union Bushes, PVC-U metric

d [mm]	PN	Code	SP	GP	kg	z [mm]	D [mm]	L [mm]	G/Tr
10	16	<b>721 640 103</b>	-	-	0.007	10	20	22	5/8
12	16	<b>721 640 104</b>	-	-	0.007	10	20	22	5/8
16	16	<b>721 640 105</b>	-	-	0.009	10	24	24	3/4
20	16	<b>721 640 106</b>	10	-	0.014	10	29	26	1
25	16	<b>721 640 107</b>	10	-	0.023	10	34	29	1 1/4
32	16	<b>721 640 108</b>	-	-	0.032	10	42	33	1 1/2
40	16	<b>721 640 109</b>	10	-	0.058	12	52	39	2
50	16	<b>721 640 110</b>	10	-	0.039	14	62	46	2 1/4
63	16	<b>721 640 111</b>	10	-	0.132	18	78	58	2 3/4
75	10	<b>721 640 112</b>	10	-	0.210	18	93	62	Tr108x5
90	10	<b>721 640 123</b>	-	-	0.355	18	110	69	Tr128x5
110	10	<b>721 640 114</b>	-	-	0.445	11	133	72	Tr154x6

21 64 06



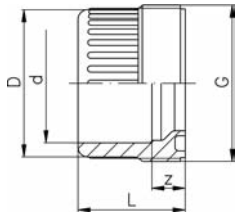
## Union Bushes, PVC-U Rp

**Model:**

- With parallel female thread Rp
- Jointing face: With O-Ring groove
- Gasket: O-Ring EPDM No. 48 41 00, FPM No. 49 41 00
- Connection to plastic threads only
- Do not use thread sealing pastes that are harmful to PVC-U

Rp [inch]	PN	Code	SP	GP	kg	z [mm]	D [mm]	L [mm]	G [inch]
1/4	10	<b>721 640 604</b>	-	-	0.006	12	20	22	5/8
3/8	10	<b>721 640 605</b>	-	-	0.008	13	24	24	3/4
1/2	10	<b>721 640 606</b>	-	-	0.013	13	29	26	1
3/4	10	<b>721 640 607</b>	-	-	0.021	14	34	29	1 1/4
1	10	<b>721 640 608</b>	-	-	0.032	15	42	32	1 1/2
1 1/4	10	<b>721 640 609</b>	-	-	0.057	19	53	38	2
1 1/2	10	<b>721 640 610</b>	-	-	0.095	26	63	45	2 1/4
2	10	<b>721 640 611</b>	10	-	0.160	33	78	56	2 3/4

21 64 11



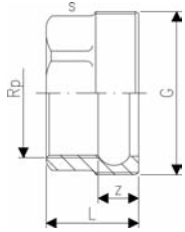
## Union Bushes, PVC-U BS Inch

**Model:**

- Solvent cement socket BS inch
- Jointing face: With O-Ring groove
- Gasket: O-Ring EPDM No. 48 41 00, FPM No. 49 41 00

d [inch]	PN	Code	SP	GP	kg	z [mm]	D [mm]	L [mm]	G [inch]
3/8	15	<b>721 641 105</b>	-	-	0.008	8	24	24	3/4"
1/2	15	<b>721 641 106</b>	-	-	0.012	9	29	26	1"
3/4	15	<b>721 641 107</b>	-	-	0.021	9	34	29	1 1/4"
1	15	<b>721 641 108</b>	-	-	0.031	9	42	33	1 1/2"
1 1/4	15	<b>721 641 109</b>	-	-	0.056	10	52	39	2"
1 1/2	15	<b>721 641 110</b>	10	-	0.075	10	62	46	2 1/4"
2	15	<b>721 641 111</b>	-	-	0.139	10	78	58	2 3/4"

24 63 06



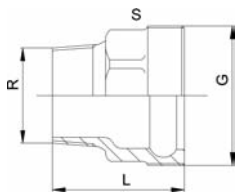
## Union Bushes, Malleable Iron Galvanized Rp

**Model:**

- Parallel female thread Rp

d [mm]	Rp [inch]	PN	Code	kg	z [mm]	L [mm]	G [inch]	s [mm]
20	1/2	16	<b>724 630 606</b>	0.058	12	25	1	25
25	3/4	16	<b>724 630 607</b>	0.096	13	28	1 1/4	31
32	1	16	<b>724 630 608</b>	0.127	14	31	1 1/2	28
40	1 1/4	16	<b>724 630 609</b>	0.204	14	33	2	47
50	1 1/2	16	<b>724 630 610</b>	0.268	17	36	2 1/4	53
63	2	16	<b>724 630 611</b>	0.443	18	42	2 3/4	66
75	2 1/2	16	<b>724 630 612</b>	0.737	19	46	3 1/2	82
90	3	16	<b>724 630 613</b>	0.913	22	52	4	96

24 63 09



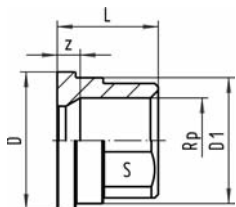
## Union Bushes, Malleable Iron Galvanized R

**Model:**

- Taper male thread R

d [mm]	R [inch]	PN	Code	kg	L [mm]	G [inch]	s [mm]
20	1/2	16	<b>724 630 906</b>	0.085	43	1	25
25	3/4	16	<b>724 630 907</b>	0.147	49	1 1/4	31
32	1	16	<b>724 630 908</b>	0.210	53	1 1/2	38
40	1 1/4	16	<b>724 630 909</b>	0.315	58	2	47
50	1 1/2	16	<b>724 630 910</b>	0.411	62	2 1/4	53
63	2	16	<b>724 630 911</b>	0.665	71	2 3/4	66
75	2 1/2	16	<b>724 630 912</b>	0.897	78	3 1/4	82
90	3	16	<b>724 630 913</b>	1.146	87	4	96

20 60 02



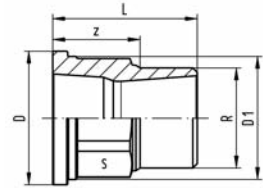
## Union end brass Rp

**Model:**

- Union End: Brass with parallel female thread Rp

d [mm]	Rp [inch]	Code	SP	GP	kg	D [mm]	D1 [mm]	z [mm]	L [mm]	s [mm]
20	1/2	<b>720 600 236</b>	1	-	0.059	30	28	5	22	25
25	3/4	<b>720 600 237</b>	1	-	0.100	39	36	6	25	30
32	1	<b>720 600 238</b>	1	-	0.128	45	42	6	27	36
40	1 1/4	<b>720 600 239</b>	1	-	0.232	56	53	7	31	46
50	1 1/2	<b>720 600 240</b>	1	-	0.324	62	59	7	35	55
63	2	<b>720 600 241</b>	1	-	0.510	78	74	8	40	65
75	2 1/2	<b>720 600 242</b>	1	-	0.941	100	92	10	47	85
90	3	<b>720 600 243</b>	1	-	1.395	121	110	11	52	95

20 60 02



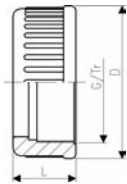
## Union end brass R

**Model:**

- Union End: Brass with taper male thread R

d [mm]	R [inch]	Code	SP	GP	kg	D [mm]	D1 [mm]	L [mm]	z [mm]	s [mm]
20	3/4	<b>720 600 246</b>	1	-	0.098	30	28	37	22	25
25	1	<b>720 600 247</b>	1	-	0.151	39	36	42	25	30
32	1	<b>720 600 248</b>	1	-	0.232	45	42	46	28	36
32	1 1/4	<b>720 600 249</b>	1	-	0.408	56	53	52	32	46
50	1 1/2	<b>720 600 250</b>	1	-	0.538	62	59	56	36	55
63	2	<b>720 600 251</b>	1	-	0.859	78	74	67	42	65
75	2 1/2	<b>720 600 252</b>	1	-	1.446	100	92	77	49	85
90	3	<b>720 600 253</b>	1	-	2.063	121	110	86	54	95

21 69 00

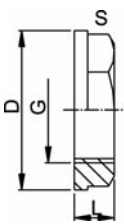


## Union Nuts, PVC-U

\* for Adaptor unions PVC-U / malleable iron only

d [mm]	PN	Code	SP	GP	kg	D [mm]	L [mm]	G [inch]	Tr
10 - 12	16	<b>721 690 004</b>	-	-	0.009	31	19	5/8	
16	16	<b>721 690 005</b>	-	-	0.013	35	21	3/4	
20	16	<b>721 690 006</b>	-	-	0.020	43	23	1	
25	16	<b>721 690 007</b>	-	-	0.022	51	24	1 1/4	
32	16	<b>721 690 008</b>	-	-	0.031	58	26	1 1/2	
40	16	<b>721 690 009</b>	-	-	0.050	72	29	2	
50	16	<b>721 690 010</b>	-	-	0.087	83	34	2 1/4	
63	16	<b>721 690 011</b>	-	-	0.130	100	38	2 3/4	
75	10	<b>721 690 012</b>	-	-	0.130	135	40		Tr 108x5
90	10	<b>721 690 013</b>	-	-	0.355	158	43		Tr 128x5
110	10	<b>721 690 014</b>	-	-	0.575	188	48		Tr 154x6

61 49 06



## Backing Nut, PVC-U

**Model:**

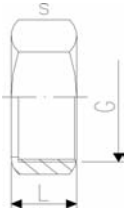
- With G thread ISO 228/1
- For Tank Adaptor Type 050

G [inch]	Code	SP	GP	kg	D [mm]	L [mm]	s [mm]
3/4	<b>161 490 630</b>	400	-	0.007	39	13	32
1	<b>161 490 632</b>	200	-	0.012	48	15	40
1 1/4	<b>161 490 634</b>	100	-	0.020	58	17	50
1 1/2	<b>161 490 635</b>	100	-	0.025	65	18	56
1 3/4	<b>161 490 636</b>	75	-	0.036	72	19	64
2	<b>161 490 637</b>	50	-	0.044	79	21	69
2 1/4	<b>161 490 638</b>	50	-	0.053	86	21	76
2 1/2	<b>161 490 639</b>	25	-	0.063	94	23	85
2 3/4	<b>161 490 640</b>	25	-	0.080	106	25	95
3	<b>161 490 641</b>	20	-	0.101	112	26	100
4	<b>161 490 644</b>	10	-	0.164	139	32	126

24 69 01

## Union nut stainless steel 1.4404 (316L)

\* Octagon union nut

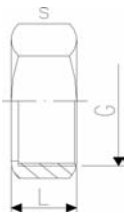


d [mm]	PN	Code	SP	GP	kg	L [mm]	G [inch]	s [mm]	closest inch
16	16	724 690 105	-	-	0.060	19	3/4	32	3/8
20	16	724 690 106	-	-	0.110	21	1	41	1/2
25	16	724 690 107	-	-	0.100	23	1 1/4	46	3/4
32	16	724 690 108	-	-	0.170	24	1 1/2	55	1
* 40	16	724 690 109	-	-	0.240	27	2	68	1 1/4
* 50	16	724 690 110	-	-	0.300	31	2 1/4	74	1 1/2
* 63	16	724 690 111	-	-	0.390	35	2 3/4	88	2

20 69 00  
20 69 04

## Union nut brass

• d12 - d20 for tap connector No. 21 55 03



d [mm]	G [inch]	PN	Code	SP	GP	kg	L [mm]	s [mm]
16	1/2	16	720 690 405	-	-	0.026	16	24
16	3/4	16	720 690 005	1	-	0.042	17	30
20	1	16	720 690 006	1	-	0.060	19	38
25	1 1/4	16	720 690 007	1	-	0.108	20	47
32	1 1/2	16	720 690 008	1	-	0.105	22	52
40	2	16	720 690 009	1	-	0.199	25	66
50	2 1/4	16	720 690 010	1	-	0.268	25	72
63	2 3/4	16	720 690 011	1	-	0.280	27	87
75	3 1/2	16	720 690 012	1	-	0.675	34	110

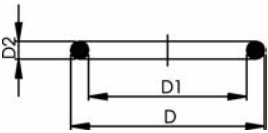
EPDM 48 41 00  
FPM 49 41 00

## O-Ring Gaskets

Model:

- For unions and adaptor unions
- Hardness approx. 65° Shore
- EPDM minimum temperature -40°C
- FPM minimum temperature -15°C

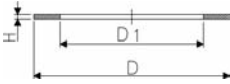
\* for unions PVC-U, PVC-C and ABS: 21 51 01, 21 51 11, 21 53 03, 21 53 08, 21 55 04, 21 55 13, 21 55 18, 23 51 01 and 29 51 01 only



d [mm]	DN [mm]	EPDM Code	FPM Code	SP	GP	kg	D [mm]	D1 [mm]	D2 [mm]	closest inch
10 - 12	8	748 410 004	749 410 004	-	-	0.002	18	12	2.62	1/4
16	10	748 410 005	749 410 005	-	-	0.002	21	16	2.62	3/8
20	15	748 410 006	749 410 006	-	-	0.002	27	20	3.53	1/2
25	20	748 410 007	749 410 007	100	1400	0.002	35	28	3.53	3/4
32	25	748 410 008	749 410 008	100	-	0.002	40	33	3.53	1
40	32	748 410 009	749 410 009	-	-	0.006	51	41	5.34	1 1/4
50	40	748 410 010	749 410 010	-	-	0.007	58	47	5.34	1 1/2
63	50	748 410 011	749 410 011	100	3500	0.010	70	60	5.34	2
75	65	748 410 014	749 410 014	100	600	0.012	93	82	5.34	2 1/2
90	80	748 410 015	749 410 015	100	600	0.015	112	101	5.34	3
110	100	748 410 016	749 410 016	50	200	0.031	134	120	6.99	4

EPDM 48 40 00  
FPM 49 40 00

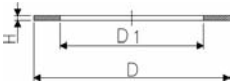
## Flat Gaskets



d [mm]	Inch	EPDM Code	FPM Code	kg	D [mm]	D1 [mm]	H [mm]
12	1/4	748 400 004	-	0.002	20	13	2
16	3/8	748 400 005	749 400 005	0.002	24	17	2
20	1/2	748 400 006	749 400 006	0.003	30	21	3
25	3/4	748 400 007	749 400 007	0.004	38	27	3
32	1	748 400 008	749 400 008	0.002	44	32	3
40	1 1/4	748 400 009	749 400 009	0.003	55	42	3
50	1 1/2	748 400 010	749 400 010	0.004	62	46	3
63	2	748 400 011	749 400 011	0.006	78	60	3
75	2 1/2	748 400 012	749 400 012	0.009	97	75	3
90	3	748 400 013	749 400 013	0.011	109	88	3

EPDM 48 40 02

## Flat Gaskets



### Model:

- Hardness approx. 65° Shore
- For tap connectors No. 21 55 03

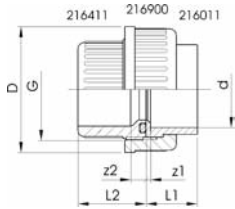
### Attention:

- For tap connector d16 - 1/2": 748 400 030
- For tap connector d20 - 3/4": 748 400 005
- For tap connector d25 - 1": 748 400 006

EPDM Code	SP	GP	kg	D [mm]	D1 [mm]	H [mm]
748 400 030	-	-	0.003	18	14	2
748 400 005	1	-	0.001	24	17	2
748 400 006	1	-	0.003	30	21	3

# Unions Inch BS

21 51 11



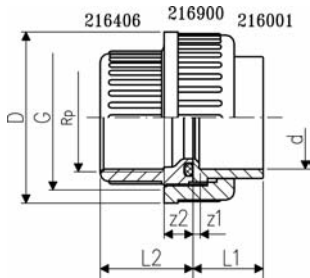
## Union for solvent cement jointing PVC-U Inch BS

**Model:**

- Union End: Solvent cement socket BS Inch
- Union Bush: Solvent cement socket BS Inch
- Gasket: O-Ring EPDM No. 48 41 00, FPM No. 49 41 00

d [inch]	PN	EPDM Code	FPM Code	SP	GP	kg	z1 [mm]	z2 [mm]	D [mm]	L1 [mm]	L2 [mm]	G/Tr
3/8	15	721 511 105	721 511 130	-	-	0.025	3	8	35	19	24	3/4
1/2	15	721 511 106	721 511 131	-	-	0.040	3	9	43	21	26	1
3/4	15	721 511 107	721 511 132	-	-	0.064	3	9	51	24	29	1 1/4
1	15	721 511 108	721 511 133	10	50	0.088	3	9	58	27	33	1 1/2
1 1/4	15	721 511 109	721 511 134	-	-	0.049	3	10	72	32	39	2
1 1/2	15	721 511 110	721 511 135	-	-	0.204	3	10	83	33	46	2 1/4
2	15	721 511 111	721 511 136	10	-	0.366	3	10	100	40	58	2 3/4
2 1/2	10	721 510 112	721 510 137	2	-	0.615	3	18	135	47	62	Tr108x5

21 51 12



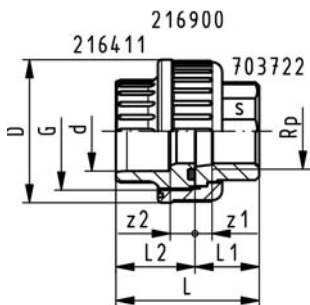
## Adaptor union PVC-U Inch BS Rp

**Model:**

- Union End: Solvent cement socket BS Inch
- Union Bush: Parallel female thread Rp
- Gasket: O-Ring No. 48 41 00
- Connection to plastic threads only
- Do not use thread sealing pastes that are harmful to PVC-U

d [inch]	Rp [inch]	PN	Code	SP	GP	kg	z1 [mm]	z2 [mm]	D [mm]	L1 [mm]	L2 [mm]	G [inch]
3/8	3/8	10	721 511 205	-	-	0.025	3	13	35	17	24	3/4
1/2	1/2	10	721 511 206	10	80	0.042	3	13	43	19	26	1
3/4	3/4	10	721 511 207	-	-	0.068	3	14	51	22	29	1 1/4
1	1	10	721 511 208	-	-	0.094	3	15	58	25	32	1 1/2
1 1/4	1 1/4	10	721 511 209	-	-	0.168	3	19	72	29	38	2
1 1/2	1 1/2	10	721 511 210	-	-	0.223	3	26	83	34	45	2 1/4
2	2	10	721 511 211	5	-	0.405	3	33	100	41	56	2 3/4

21 53 13



## Adaptor union PVC-U/malleable iron Inch BS Rp



**Model:**

- Union nut: PVC-U
- Union Bush: Solvent cement socket BS Inch
- Union End: malleable iron with parallel female thread Rp
- Gasket: O-Ring EPDM No. 48 41 00

d [inch]	Rp [inch]	Code	SP	GP	kg	D [mm]	L [mm]	L1 [mm]	L2 [mm]	z1 [mm]	z2 [mm]	G [inch]	s [mm]
1/2	1/2	721 531 306	10	7	0.120	43	48	22	26	9	10	1	25
3/4	3/4	721 531 307	5	10	0.190	51	51	22	29	7	10	1 1/4	31
1	1	721 531 308	2	18	0.250	58	58	26	33	9	10	1 1/2	38
1 1/4	1 1/4	721 531 309	2	8	0.400	72	69	31	39	12	12	2	48
1 1/2	1 1/2	721 531 310	2	7	0.510	83	78	33	46	14	14	2 1/4	54
2	2	721 531 311	5	10	0.780	100	91	35	58	11	18	2 3/4	67
	2 1/2	721 530 312	2	-	1.100	127	101	39	62	12	18	Tr 108x5	85
3	3	721 531 313	2	-	1.740	150	114	45	69	15	19	Tr 128x5	96

21 53 18

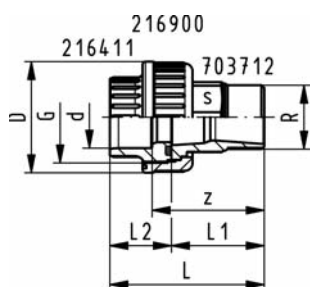


## Adaptor union PVC-U/malleable iron Inch BS R



**Model:**

- Union nut: PVC-U
- Union Bush: Solvent cement socket BS Inch
- Union End: Malleable iron with taper male thread R
- Gasket: O-Ring EPDM No. 48 41 00



d [inch]	R [inch]	Code	SP	GP	kg	D [mm]	L [mm]	L1 [mm]	L2 [mm]	z [mm]	G [inch]	s [mm]
1/2	1/2	<b>721 531 806</b>	1	1	0.156	43	66	40	26	50	1	25
3/4	3/4	<b>721 531 807</b>	1	1	0.230	51	72	43	29	53	1 1/4	31
1	1	<b>721 531 808</b>	1	1	0.330	58	80	48	33	58	1 1/2	38
1 1/4	1 1/4	<b>721 531 809</b>	1	1	0.480	72	95	57	39	69	2	48
1 1/2	1 1/2	<b>721 531 810</b>	1	1	0.683	83	104	59	46	73	2 1/4	54
2	2	<b>721 531 811</b>	8	5	1.082	100	118	62	58	80	2 3/4	67
2 1/2	2 1/2	<b>721 530 812</b>	2	2	1.360	127	137	75	62	93	Tr 108x5	85
3	3	<b>721 531 813</b>	1	2	2.035	150	149	80	69	99	Tr 128x5	96

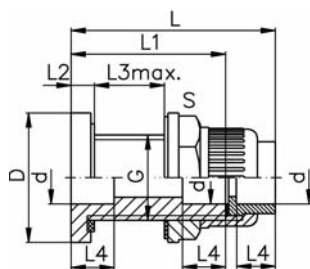
61 05 02



## Tank adaptor PVC-U Inch BS

**Model:**

- End connection: Union with solvent cement socket BS Inch
- Gasket: flat gasket EPDM



d [inch]	Code Code	SP	GP	kg
3/8	<b>161 050 225</b>	-	-	0.040
1/2	<b>161 050 226</b>	-	-	0.070
3/4	<b>161 050 227</b>	1	-	0.100
1	<b>161 050 228</b>	-	-	0.196
1 1/4	<b>161 050 229</b>	1	-	0.240
1 1/2	<b>161 050 230</b>	1	-	0.350
2	<b>161 050 231</b>	1	-	0.530

d [inch]	D [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 max [mm]	L4 [mm]	G [inch]	s [mm]	Diameter of bore in tank side [mm]
3/8	44	85	65	10	32	14	3/4"	33	28
1/2	56	89	67	11	30	16	1"	46	35
3/4	65	97	72	12	32	19	1 1/4"	50	43
1	70	103	75	12	33	22	1 1/2"	60	49
1 1/4	95	111	78	12	32	26	2"	80	61
1 1/2	95	119	82	13	32	31	2 1/4"	80	67
2	115	131	87	13	33	38	2 3/4"	95	83

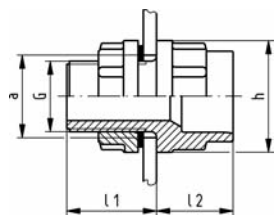
61 10 87



## Tank adaptor PVC-U Inch BS

**Model:**

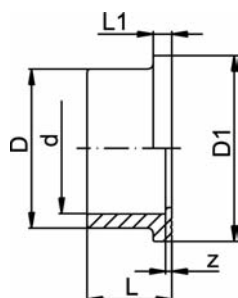
- With solvent cement socket BS Inch and parallel female thread G
- Gasket: flat gasket EPDM



d [inch]	PN	Code Code	SP	GP	kg	h [mm]	l1 [mm]	l2 [mm]	a [mm]	G [inch]
1/2	15	<b>161 108 706</b>	-	-	0.050	37	34	24	23	1/2
3/4	15	<b>161 108 707</b>	-	-	0.048	42	34	29	28	3/4

# Flange Adaptors and Flanges metric

21 79 01



## Flange Adaptors, PVC-U Jointing face serrated, metric

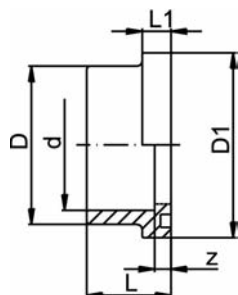
### Model:

- Solvent cement socket metric
- d16 - d50: Jointing face flat
- d63 - d400: Combined Jointing face flat and serrated
- Gasket: Profile flange gasket EPDM No. 48 44 07, FPM No. 49 44 07 or Flat gasket EPDM No. 48 40 03  
Only use O-ring EPDM No. 48 41 01, FPM No. 49 41 01 in combination with counterpart Flange Adaptor No. 21 81 01
- Flange: PVC-U No. 21 70 00, PP with steel ring No. 27 70 02, Backing Flange PP-V for socket systems metric No. 27 70 04

**Note: The flat gasket affects the maximum allowable operating pressure!**

d [mm]	d [inch]	DN [mm]	PN	Code	SP	GP	kg	z [mm]	D [mm]	D1 [mm]	L [mm]	L1 [mm]
63	2 1/2	50	16	721 790 111	10	50	0.103	3	77	90	41	9
75		65	16	721 790 112	10	-	0.155	3	91	106	47	10
90		80	16	721 790 113	10	-	0.254	5	108	125	56	11
110		100	16	721 790 114	10	-	0.418	5	131	150	66	12
125		100	16	721 790 115	5	-	0.548	5	148	170	74	13
140	5	125	16	721 790 116	6	-	0.740	5	165	188	81	14
160		150	16	721 790 117	2	-	1.077	5	188	213	91	16
200		200	10	721 790 119	2	-	1.476	6	224	250	112	24
225		200	10	721 790 120	2	-	1.758	6	248	274	125	25
250		250	10	721 790 121	1	-	2.150	9	274	303	140	23
280		250	10	721 790 122	1	1	2.895	5	308	329	151	23
315		300	6	721 790 123	1	1	4.450	8	346	379	172	27
355		350	6	721 790 124	1	-	5.800	10	384	430	194	32
400		400	6	721 790 125	1	-	8.900	10	438	482	216	34

21 81 01



## Flange Adaptors, PVC-U Jointing face with O-ring groove, metric

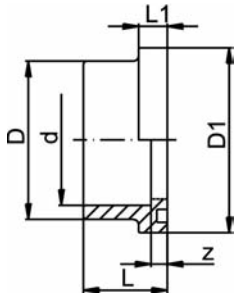
### Model:

- Solvent cement socket metric
- Counterpart: Flange Adaptor flat No. 21 80 01  
Combined Flange Adaptor (d160, d200, d225, d280, d315)
- Gasket: O-ring EPDM No. 48 41 01, FPM No. 49 41 01
- Flange: PVC-U No. 21 70 00, PP/Steel Nr. 27 70 02, PP-V for socket systems metric No. 27 70 04

d [mm]	DN [mm]	d [inch]	PN	Code	SP	GP	kg	z [mm]	D [mm]	D1 [mm]	L [mm]	L1 [mm]
16	10	2 1/2	16	721 810 105	10	100	0.008	6	22	29	20	9
20	15		16	721 810 106	100	-	0.011	6	27	34	22	9
25	20		16	721 810 107	10	100	0.018	6	33	41	25	10
32	25		16	721 810 108	10	100	0.027	6	41	50	28	10
40	32		16	721 810 109	10	100	0.045	8	50	61	34	13
50	40		16	721 810 110	10	50	0.068	8	61	73	39	13
63	50		16	721 810 111	10	50	0.120	8	77	90	46	14
75	65		16	721 810 112	10	-	0.182	8	91	106	52	15
90	80		16	721 810 113	10	-	0.291	10	108	125	61	16

table continued next page





d [mm]	DN [mm]	d [inch]	PN	Code	SP	GP	kg	z [mm]	D [mm]	D1 [mm]	L [mm]	L1 [mm]
110	100		16	721 810 114	10	-	0.468	11	131	150	72	18
125	100		16	721 810 115	5	-	0.753	11	148	170	80	19
140	125	5	16	721 810 116	6	-	0.830	11	165	188	87	20
160	150		16	721 810 117	2	-	1.180	11	188	213	97	22
200	200		10	721 810 119	2	-	1.593	12	224	250	118	30
225	200		10	721 810 120	2	-	1.895	12	248	274	131	31
250	250		10	721 810 121	1	-	2.150	9	274	303	140	23
280	250		10	721 810 122	1	-	3.100	13	308	329	158	30
315	300		6	721 810 123	1	-	4.830	17	346	379	180	35

21 70 00

## Backing flange PVC-U metric

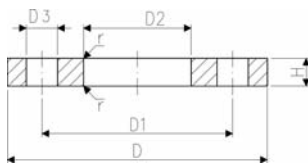
### Model:

- For socket systems
- Connecting dimension: ISO 7005, EN 1092, BS 4504, DIN 2501
- Maximum medium- or ambient temperature 45 °C
- Bolt circle PN 10

<sup>1</sup> Connecting dimension: ISO 2536, bolt circle acc. DN125, suitable for flange adaptor d125/DN100

<sup>2</sup> Connecting dimension: ISO 2536, bolt circle acc. DN225, suitable for flange adaptor d250/DN250

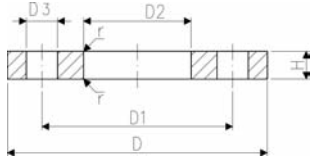
AL: number of holes



d [mm]	DN [mm]	Inch	PN	Code	GP	kg
16	10	3/8	10	721 700 005	-	0.055
20	15	1/2	10	721 700 006	-	0.069
25	20	3/4	10	721 700 007	-	0.092
32	25	1	10	721 700 008	-	0.132
40	32	1 1/4	10	721 700 009	-	0.194
50	40	1 1/2	10	721 700 010	-	0.245
63	50	2	10	721 700 011	-	0.311
75	65	2 1/2	10	721 700 012	-	0.375
90	80	3	10	721 700 013	-	0.471
110	100	4	10	721 700 014	-	0.554
<sup>1</sup> 125	125	4 1/2	10	721 700 015	-	0.995
140	125	5	10	721 700 016	-	0.746
200	200	7	10	721 700 019	-	1.658
225	200	8	10	721 700 020	-	1.380
250	250	9	6	721 700 021	-	1.700
<sup>2</sup> 250	225	9	6	721 700 136	-	1.700
280	250	10	6	721 700 137	-	1.730
315	300	12	6	721 700 138	-	2.350
355	350	14	6	721 700 139	-	3.400
400	400	16	6	721 700 140	-	4.500

d [mm]	D [mm]	D1 [mm]	D2 [mm]	D3 [mm]	H [mm]	r [mm]	AL	SC
16	90	60	23	14	10	1	4	M12
20	95	65	28	14	11	1	4	M12
25	105	75	34	14	12	2	4	M12
32	115	85	42	14	14	2	4	M12
40	140	100	51	18	15	2	4	M16
50	150	110	62	18	16	2	4	M16
63	165	125	78	18	18	3	4	M16
75	185	145	92	18	19	3	4	M16
90	200	160	110	18	20	3	8	M16
110	220	180	133	18	22	3	8	M16
<sup>1</sup> 125	250	210	150	18	26	5	8	M16
140	250	210	167	18	26	4	8	M16
200	340	295	226	22	32	4	8	M20
225	340	295	250	22	32	4	8	M20
250	395	350	277	22	36	4	12	M20
<sup>2</sup> 250	370	325	277	22	36	4	8	M20
280	395	350	310	22	36	4	12	M20
315	445	400	348	22	36	4	12	M20
355	505	460	388	22	38	5	16	M20
400	565	515	442	26	42	5	16	M24

21 70 22



## Backing Flanges, PVC-U Inch ASTM / ANSI

**Model:**

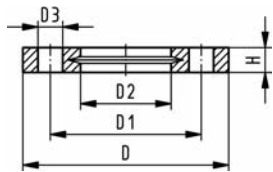
- For socket systems
- For Flange Adaptors BS/ANSI
- Connecting dimension: ANSI/ASME B 16.5 class 150, ASTM D 4024, BS 1560, BS EN 1759
- **Bolt circle class 150**

\* Only for use with metric flange adaptors

AL: number of holes

Inch	DN [mm]	d [mm]	PN	Code	SP	GP	kg	D [mm]	D1 [mm]	D2 [mm]	D3 [mm]	H [mm]	r [mm]	AL
1/2	15		10	721 702 206	90	-	0.067	95	60	28	16	11	1	4
3/4	20		10	721 702 207	50	-	0.088	105	70	34	16	12	2	4
1	25		10	721 702 208	40	-	0.128	115	79	42	16	14	2	4
1 1/4	32		10	721 702 209	25	-	0.204	140	89	51	16	15	2	4
1 1/2	40		10	721 702 210	20	-	0.253	150	98	62	16	16	2	4
2	50		10	721 702 211	30	-	0.305	165	121	78	19	18	3	4
2 1/2	65		10	721 702 212	27	-	0.382	185	140	92	19	19	3	4
3	80		10	721 702 213	20	-	0.498	200	152	110	19	20	3	4
4	100		10	721 702 214	-	-	0.515	220	190	138	19	22	3	8
* 4	100	110	10	161 483 180	30	-	0.563	220	190	133	19	22	3	8
5	125		10	721 702 216	12	-	0.727	250	216	167	22	26	4	8
6	150		10	721 702 217	9	-	1.910	285	241	200	22	28	4	8
8	200		10	721 702 220	8	-	1.349	340	298	250	22	32	4	8

27 70 04  
27 70 05



## Backing Flanges, PP-V For socket systems metric

**Model:**

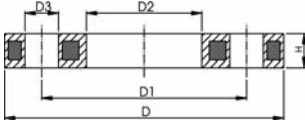
- Modern full-plastic flange PP-GF (30 % glass-fibre reinforced)
- With V-groove which applies force evenly on collar
- With integrated bolt retainers as an assembly aid
- UV-resistant. Applicable for outside applications
- Connecting dimension: ISO 7005, EN 1092, BS 4504, DIN 2501
- **Bolt circle PN 10**

AL: number of holes

d [mm]	Inch	DN [mm]	PN	Code	SP	GP	kg	D [mm]	D1 [mm]	D2 [mm]	D3 [mm]	H [mm]	AL	SC
20		15	16	727 700 406	56	-	0.080	95	65	28	14	16	4	M12
25		20	16	727 700 407	38	-	0.100	105	75	34	14	17	4	M12
32		25	16	727 700 408	80	-	0.140	115	85	42	14	18	4	M12
40		32	16	727 700 409	40	-	0.220	140	100	51	18	20	4	M16
50		40	16	727 700 410	30	-	0.210	150	110	62	18	22	4	M16
63		50	16	727 700 411	25	-	0.380	165	125	78	18	24	4	M16
75		65	16	727 700 412	19	-	0.480	185	145	92	18	26	4	M16
90		80	16	727 700 413	15	-	0.520	200	160	110	18	27	8	M16
110		100	16	727 700 414	13	-	0.680	220	180	133	18	28	8	M16
140		125	16	727 700 416	10	-	0.800	250	210	167	18	30	8	M16
160	6	150	16	727 700 417	-	-	1.200	285	241	190	22	32	8	M20
200		200	16	727 700 419	-	-	1.500	340	296	226	22	34	8	M20
225	8	200	16	727 700 420	-	-	1.400	340	295	250	22	34	8	M20
250		250	16	727 700 421	-	-	1.700	395	350	277	22	38	12	M20
280		250	16	727 700 422	-	-	1.700	395	350	310	22	38	12	M20
315		300	16	727 700 423	-	-	2.400	445	400	348	22	42	12	M20
355		350	10	727 700 424	-	-	3.000	515	460	388	22	46	16	M20
400		400	10	727 700 425	-	-	3.500	574	515	442	26	50	16	M24

27 70 02

## Backing flange PP-Steel For socket systems metric



**Model:**

- PP-GF (30% glass-fibre reinforced) with steel ring
- UV-resistant. Applicable for outside applications
- Connecting dimension: ISO 7005, EN 1092, BS 4504, DIN 2501
- **Bolt circle PN 10**

<sup>1</sup> Connecting dimension: ISO 2536, bolt circle acc. DN125, suitable for flange adaptor d125/DN100

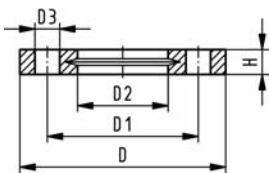
<sup>2</sup> Connecting dimension: ISO 2536, bolt circle acc. DN225, suitable for flange adaptor d250/DN250

AL: number of holes

d [mm]	d [inch]	DN [mm]	PN	Code	kg	D [mm]	D1 [mm]	D2 [mm]	D3 [mm]	H [mm]	AL	SC
20		15	16	727 700 206	0.220	95	65	28	14	12	4	M12
25		20	16	727 700 207	0.260	105	75	34	14	12	4	M12
32		25	16	727 700 208	0.430	115	85	42	14	16	4	M12
40		32	16	727 700 209	0.650	140	100	51	18	16	4	M16
50		40	16	727 700 210	0.820	150	110	62	18	20	4	M16
63		50	16	727 700 211	0.940	165	125	78	18	20	4	M16
75		65	16	727 700 212	1.300	185	145	92	18	20	4	M16
90		80	16	727 700 213	1.400	200	160	110	18	20	8	M16
110		100	16	727 700 214	1.560	220	180	133	18	20	8	M16
125		125	16	727 700 215	2.590	250	210	150	18	24	8	M16
140		125	16	727 700 216	2.120	250	210	167	18	24	8	M16
160	6	150	16	727 700 217	3.390	285	240	190	22	24	8	M20
200		200	16	727 700 219	5.850	340	295	226	22	27	8	M20
225		200	16	727 700 220	4.410	340	295	250	22	27	8	M20
250		250	16	727 700 021	8.340	395	350	277	22	30	12	M20
250		225	16	727 700 221	8.340	395	325	277	22	30	8	M20
280		250	16	727 700 222	5.520	395	350	310	22	30	12	M20
315		300	16	727 700 223	7.600	445	400	348	22	34	12	M20
355		350	16	727 700 224	13.960	515	460	388	23	40	16	M20
400		400	16	727 700 225	17.380	574	515	442	26	40	16	M24

27 70 14  
27 70 15

## Backing Flanges, PP-V For socket systems Inch/ANSI



**Model:**

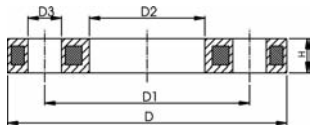
- Modern full-plastic flange PP-GF (30 % glass-fibre reinforced)
- With V-groove which applies force evenly on collar
- With integrated bolt-fixing as an assembly aid
- UV-resistant. Applicable for outside applications
- Connecting dimension: ANSI/ASME B 16.5 class 150, ASTM D 4024, BS 1560, BS EN 1759
- **Bolt circle class 150**

<sup>1</sup>) Suitable for socket- and butt fusion systems (no pictograph on flange)

AL: number of holes

Inch	DN [mm]	PN	Code	kg	D [mm]	D1 [mm]	D2 [mm]	D3 [mm]	H [mm]	AL	SC
1 1/2	15	16	727 701 406	0.080	95	60	28	16	16	4	M12
1 3/4	20	16	727 701 407	0.100	105	70	34	16	17	4	M12
1	25	16	727 701 408	0.140	115	79	42	16	18	4	M12
1 1/4	32	16	727 701 409	0.220	140	89	51	16	20	4	M16
1 1/2	40	16	727 701 410	0.210	150	98	62	16	22	4	M16
2	50	16	727 701 411	0.380	165	121	78	19	24	4	M16
2 1/2	65	16	727 701 412	0.480	185	140	92	19	26	4	M16
3	80	16	727 701 413	0.520	200	152	110	19	27	4	M16
4	100	16	727 701 414	0.680	229	190	133	19	28	8	M16
6	150	16	727 700 417	1.200	285	241	190	22	32	8	M20
10	250	16	727 701 422	1.700	406	362	310	26	38	12	M20
12	300	16	727 701 423	2.400	483	432	348	26	42	12	M20

27 70 12



## Backing flange PP-Steel For socket systems Inch/ANSI

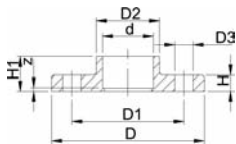
### Model:

- For Flange Adaptors BS/ANSI
- Material: PP (30 % glass-fibre reinforced) with steel ring
- UV-resistant. Applicable for outside applications
- Connecting dimension: ANSI/ASME B 16.5 class 150, ASTM D 4024, BS 1560, BS EN 1759
- **Bolt circle class 150**
- DN100 and DN150: only for use with original metric flange adaptors

AL: number of holes

d [inch]	DN [mm]	d [mm]	PN	Code	GP	kg	D1 [mm]	D2 [mm]	D3 [mm]	D [mm]	H [mm]	AL
1/2	15	20	16	<b>727 701 206</b>	-	0.210	60	28	16	95	12	4
3/4	20	25	16	<b>727 701 207</b>	-	0.250	70	34	16	105	12	4
1	25	32	16	<b>727 701 208</b>	-	0.420	79	42	16	115	16	4
1 1/4	32	40	16	<b>727 701 209</b>	-	0.670	89	51	16	140	16	4
1 1/2	40	50	16	<b>727 701 210</b>	-	0.860	98	62	16	150	18	4
2	50	63	16	<b>727 701 211</b>	-	0.930	121	78	19	165	18	4
2 1/2	65	75	16	<b>727 701 212</b>	-	1.340	140	92	19	185	18	4
3	80	90	16	<b>727 701 213</b>	-	1.550	152	110	19	200	20	4
4	100	110	16	<b>727 701 214</b>	-	1.810	190	133	19	229	20	8
8	200	200	16	<b>727 701 220</b>	-	4.410	298	250	22	340	27	8

21 73 02



## Fixed Flanges, PVC-U Jointing face flat, metric

### Model:

- Solvent cement socket metric
- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, BS 4504 PN 10
- **Bolt circle PN 10**

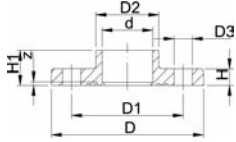
\* Combined Flange, connecting dimensions EN1092 PN 10 and ANSI B 16.5 Class 150

d [mm]	DN [mm]	Inch	PN	Code	GP	kg
20	15	1/2	16	<b>721 730 206</b>	-	0.105
25	20	3/4	16	<b>721 730 207</b>	-	0.130
32	25	1	16	<b>721 730 208</b>	-	0.183
40	32	1 1/4	16	<b>721 730 209</b>	-	0.305
50	40	1 1/2	16	<b>721 730 210</b>	-	0.365
63	50	2	16	<b>721 730 211</b>	-	0.510
* 75	65	2 1/2	10	<b>721 730 212</b>	-	0.520
* 90	80	3	10	<b>721 730 213</b>	-	0.720
* 110	100	4	10	<b>721 730 214</b>	-	0.920
* 140	125	5	10	<b>721 730 216</b>	-	1.380
* 160	150	6	10	<b>721 730 217</b>	-	2.020

d [mm]	D [mm]	D1 [mm]	D2 [mm]	D3 [mm]	z [mm]	H [mm]	H1 [mm]	AL	SC
20	95	65	27	14	3	12	19	4	M12
25	105	75	33	14	3	13	22	4	M12
32	115	85	41	14	3	14	25	4	M12
40	140	100	51	18	3	17	29	4	M16
50	150	110	62	18	3	17	34	4	M16
63	165	125	77	18	3	20	41	4	M16
* 75	185	142	91	22	3	21	47	4	M20
* 90	200	156	108	22	5	22	56	8	M20
* 110	220	186	131	24	5	24	66	8	M20
* 140	250	215	165	23	5	28	91	8	M20
* 160	285	240	188	23	5	30	91	8	M20

21 74 01

## Fixed Flanges, PVC-U Joining face serrated, metric

**Model:**

- Solvent cement socket metric
- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, BS 4504 PN 10
- **Bolt circle PN 10**

\* Combined Flange, connecting dimensions EN1092 PN 10 and ANSI B 16.5 Class 150  
d75 - d110: bolt hole as long hole version

AL: number of holes

d [mm]	DN [mm]	d [inch]	PN	Code	GP	kg
20	15		16	<b>721 740 106</b>	-	0.100
25	20		16	<b>721 740 107</b>	-	0.130
32	25		16	<b>721 740 108</b>	-	0.185
40	32		16	<b>721 740 109</b>	-	0.305
50	40		16	<b>721 740 110</b>	-	0.368
63	50		16	<b>721 740 111</b>	-	0.510
* 75	65	2 ½	10	<b>721 740 112</b>	-	0.520
* 90	80	3	10	<b>721 740 113</b>	-	0.720
* 110	100	4	10	<b>721 740 114</b>	-	0.920
* 140	125	5	10	<b>721 740 116</b>	-	1.380
* 160	150	6	10	<b>721 740 117</b>	-	2.020

d [mm]	D [mm]	D1 [mm]	D1 max. [mm]	D1 min. [mm]	D2 [mm]	D3 [mm]	H [mm]	H1 [mm]	z [mm]	AL	SC
20	95	65			27	14	12	19	3	4	M12
25	105	75			33	14	13	22	3	4	M12
32	115	85			41	14	14	25	3	4	M12
40	140	100			51	18	17	29	3	4	M16
50	150	110			62	18	17	34	3	4	M16
63	165	125			77	18	20	41	3	4	M16
* 75	185		139.5	144.0	91	19	21	47	3	4	M16
* 90	200		152.5	159.0	108	19	22	56	5	8	M16
* 110	220		181.0	190.5	131	24	24	66	5	8	M20
* 140	250	215			165	23	28	91	5	8	M20
* 160	285	240			188	23	30	91	5	8	M20



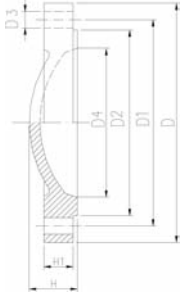
## Blanking Flanges, PVC-U Jointing face serrated, metric

### Model:

- Connecting dimension: ISO 7005 PN10, EN 1092 PN10, DIN 2501 PN10
- **d63 to d160: combined jointing face (serrated and flat)**
- d250: connecting dimension: ISO 2536
- **Bolt circle PN 10**

\* Combined Flange, connecting dimensions EN1092 PN 10 and ANSI B 16.5 Class 150  
d20 - d110: bolt hole as long hole version

AL: number of holes



d [mm]	DN [mm]	Inch	PN	Code	GP	kg
* 20	15	1/2	10	<b>721 700 506</b>	-	0.075
* 25	20	3/4	10	<b>721 700 507</b>	-	0.097
* 32	25	1	10	<b>721 700 508</b>	-	0.145
* 40	32	1 1/4	10	<b>721 700 509</b>	-	0.222
* 50	40	1 1/2	10	<b>721 700 510</b>	-	0.278
* 63	50	2	10	<b>721 700 511</b>	-	0.380
* 75	65	2 1/2	10	<b>721 700 512</b>	-	0.534
* 90	80	3	10	<b>721 700 513</b>	-	0.667
* 110	100	4	10	<b>721 700 514</b>	-	0.872
* 140	125	5	10	<b>721 700 516</b>	-	1.312
* 160	150	6	10	<b>721 700 517</b>	-	1.730
225	200	8	10	<b>721 700 520</b>	-	2.600
250	250	10	10	<b>721 700 521</b>	-	3.300
280	250	10	10	<b>721 700 522</b>	-	4.650
315	300	12	6	<b>721 700 523</b>	-	5.750
355	350	14	6	<b>721 700 524</b>	-	6.800
400	400	16	6	<b>721 700 525</b>	-	9.000

d [mm]	D [mm]	D1 [mm]	D1 min. [mm]	D1 max. [mm]	D2 [mm]	D3 [mm]	D4 [mm]	H [mm]	H1 [mm]	AL
* 20	95		61.0	63.0	34	16	15	15	12	4
* 25	105		70.0	73.0	41	16	20	16	13	4
* 32	115		79.0	83.0	50	16	25	19	15	4
* 40	140		91.0	100.0	61	18	34	20	16	4
* 50	150		101.0	110.0	74	18	44	22	17	4
* 63	165		121.0	124.0	91	19	57	25	20	4
* 75	185		140.0	145.0	106	22	69	29	21	4
* 90	200		152.0	160.0	125	22	82	32	22	8
* 110	220		180.0	191.0	150	24	102	36	24	8
* 140	250	215			184	23	120	41	28	8
* 160	285	240			212	23	152	45	30	8
225	340	295			273	22	213	63	36	8
250	370	325			303	22	238	63	36	8
280	395	350			328	22	266	65	36	12
315	445	400			378	22	299	65	36	12
355	505	460			430	22	341	67	38	16
400	565	515			482	26	384	71	42	16

## Flange adaptors Inch BS

21 79 11

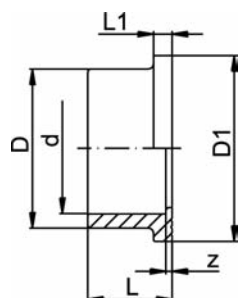


### Flange adaptor PVC-U

#### Combined jointing face flat and serrated Inch BS

**Model:**

- Counterpart:  
Flange Adaptor serrated BS Inch No. 21 79 11  
Flange Adaptor flat BS inch No. 21 80 11  
Flange Adaptor serrated metric No. 21 79 01
- Gasket: Flat gasket EPDM No. 48 40 03



d [inch]	DN [mm]	PN	Code	SP	GP	kg	z [mm]	D [mm]	D1 [mm]	L [mm]	L1 [mm]
1/2	15	15	<b>721 791 106</b>	10	100	0.010	3	27	34	21	6
3/4	20	15	<b>721 791 107</b>	-	-	0.015	3	33	41	24	7
1	25	15	<b>721 791 108</b>	10	100	0.023	3	41	50	27	7
1 1/4	32	15	<b>721 791 109</b>	-	-	0.036	3	50	61	32	8
1 1/2	40	15	<b>721 791 110</b>	10	50	0.048	3	61	73	33	8
2	50	15	<b>721 791 111</b>	5	50	0.107	3	77	91	40	9
2 1/2	65	16	<b>721 790 112</b>	10	-	0.155	3	91	106	47	10
3	80	15	<b>721 791 113</b>	20	-	0.225	5	108	125	56	11
4	100	15	<b>721 791 115</b>	10	-	0.430	5	136	155	69	12
5	125	16	<b>721 790 116</b>	6	-	0.740	5	165	188	81	14
6	150	15	<b>721 791 117</b>	2	-	1.250	5	198	217	96	16
8	200	9	<b>721 791 120</b>	2	-	2.035	6	248	274	122	20
10	250	9	<b>721 791 122</b>	1	-	3.020	9	307	329	151	23
12	300	6	<b>721 791 123</b>	1	-	3.400	4	346	379	172	27

21 80 11

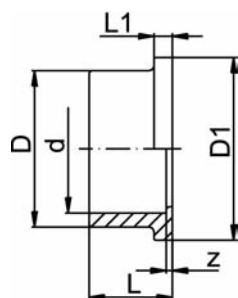


### Flange adaptor PVC-U

#### Jointing face flat Inch BS

**Model:**

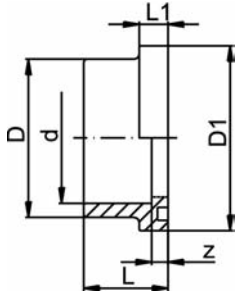
- Counterpart: Flange Adaptor with groove BS Inch No. 21 81 11
- Gasket: Flat gasket No. 48 40 03 EPDM



d [inch]	DN [mm]	PN	Code	SP	GP	kg	z [mm]	D [mm]	D1 [mm]	L [mm]	L1 [mm]
2	50	15	<b>721 801 111</b>	2	50	0.108	3	77	91	41	9
3	80	15	<b>721 801 113</b>	18	-	0.265	5	108	125	56	11
4	100	15	<b>721 801 115</b>	20	-	0.430	5	136	155	69	12
6	150	15	<b>721 801 117</b>	2	-	1.250	5	198	217	96	16
8	200	9	<b>721 801 120</b>	2	-	1.943	6	248	274	122	20

21 81 11

## Flange adaptor PVC-U Jointing face with O-ring groove Inch BS



d [inch]	DN [mm]	PN	Code	SP	GP	kg	z [mm]	D [mm]	D1 [mm]	L [mm]	L1 [mm]
1/2	15	15	<b>721 811 106</b>				6	27	34	21	9
3/4	20	15	<b>721 811 107</b>				6	33	41	24	10
1	32	15	<b>721 811 108</b>				6	41	50	27	10
1 1/4	40	15	<b>721 811 109</b>				8	50	61	32	11
2	50	15	<b>721 811 111</b>	5	50	0.125	8	77	91	46	14
2 1/2	65	16	<b>721 810 112</b>	10	-	0.182	8	91	106	52	15
3	80	15	<b>721 811 113</b>	18	-	0.305	10	108	125	61	16
4	100	15	<b>721 811 115</b>	8	-	0.482	11	136	155	69	18
5	125	16	<b>721 810 116</b>	6	-	0.830	11	165	188	87	20
6	150	15	<b>721 811 117</b>	2	-	1.350	11	198	217	96	22
8	200	9	<b>721 811 120</b>	-	-	2.070	12	248	274	128	26



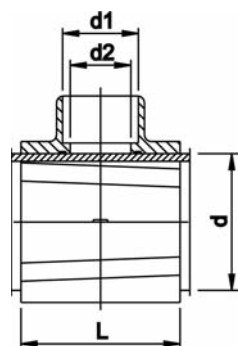
# Branch and Tapping Saddles

21 111



## Branch Saddle

- Outlet with solvent cement socket metric
- For operating pressure up to 10 bar water
- Top saddle with rubber seal
- Seal: NBR (Nitrile-Rubber) shore hardness: 60 ±5 Shore A



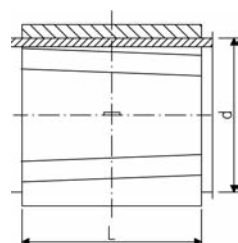
d [mm]	Code	SP	GP	kg	d1 [mm]	d2 [mm]	L [mm]
63	<b>161 111 035</b>	1	1	0.699	40	22	105
63	<b>161 111 036</b>	1	1	0.730	50	22	105
75	<b>161 111 046</b>	1	4	0.797	50	31	105
90	<b>161 111 055</b>	1	12	0.826	40	31	105
90	<b>161 111 056</b>	1	12	0.856	50	31	105
110	<b>161 111 065</b>	1	12	0.935	40	31	105
110	<b>161 111 066</b>	1	12	0.949	50	40	105
110	<b>161 111 067</b>	1	12	0.995	63	40	105
160	<b>161 111 095</b>	1	8	1.430	40	31	120
160	<b>161 111 096</b>	1	8	1.260	50	40	120
160	<b>161 111 097</b>	1	8	1.300	63	40	120
225	<b>161 111 116</b>	1	-	1.587	50	40	120
225	<b>161 111 117</b>	1	-	1.624	63	40	120

21 110 200



## Repair Saddle

- For operating pressure up to 10 bar water
- For repair of damaged pipes
- Saddle halves can be solvent cemented
- Cementing only possible on dry mains without pressure



d [mm]	Code	SP	GP	kg	Max. pipe aperture e [mm]	L [mm]
63	<b>161 110 230</b>	1	4	0.584	39	105
90	<b>161 110 250</b>	1	4	0.678	48	105
110	<b>161 110 260</b>	1	12	0.795	48	105
160	<b>161 110 290</b>	1	8	1.213	60	120
225	<b>161 110 310</b>	1	-	1.340	60	120

# Sensor-Installation Fittings

21 31 20



## Installation fitting type 312 PVC-U metric glue on saddle

**Model:**

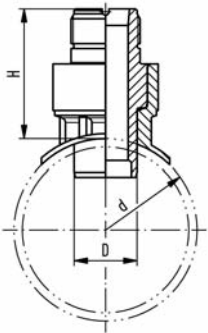
- Material: PVC-U
- Saddle with threaded outlet 1 1/4" NPSM
- Top saddle for solvent cement bonding

**Range of use:**

- compatible signet flow sensors: type 2551, 2537, 515, 8510, 2536, 8512

**Attention:**

- sensor length depends on installation fitting



d [mm]	DN [mm]	PN	Code	SP	GP	kg	D [mm]	H [mm]	Sensor Type
75	65	10	721 312 012	-	-	0.220	38	89	flow X1
90	80	10	721 312 013	-	-	0.225	38	89	flow X1
110	100	10	721 312 014	-	-	0.226	38	89	flow X1
125	100	10	721 312 015	-	-	0.224	38	81	flow X1
140	125	10	721 312 016	-	-	0.211	38	79	flow X1
160	150	10	721 312 017	-	-	0.217	38	76	flow X1
200	200	10	721 312 019	-	-	0.199	38	69	flow X1
225	200	10	721 312 020	-	-	0.301	38	141	flow X2
250	250	10	721 312 021	-	-	0.298	38	137	flow X2
315	300	10	721 312 023	1	-	0.294	38	127	flow X2

21 31 00



## Installation fitting type 310 PVC-U For socket systems metric

**Model:**

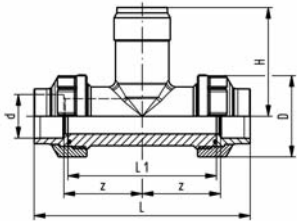
- Material: PVC-U
- Threaded outlet 1 1/4" NPSM
- Union end with solvent cement socket PVC-U

**Range of use:**

- compatible signet flow sensors: type 2551, 2537, 515, 8510, 2536, 8512
- compatible signet pH/ORP sensors: type 2724, 2725, 2726

**Attention:**

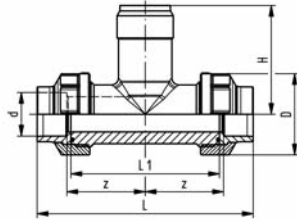
- sensor length depends on installation fitting



d [mm]	DN [mm]	PN	EPDM Code	FPM Code	kg
20	15	16	721 310 006	721 310 036	0.181
25	20	16	721 310 007	721 310 037	0.244
32	25	16	721 310 008	721 310 038	0.333
40	32	16	721 310 009	721 310 039	0.440
50	40	16	721 310 010	721 310 040	0.700
63	50	16	721 310 011	721 310 041	1.011

d [mm]	DN [mm]	D [mm]	z [mm]	L [mm]	L1 [mm]	H [mm]	Sensor Type
20	15	43	48	128	90	76	flow X0, pH XX
25	20	51	53	144	100	78	flow X0, pH XX
32	25	58	58	160	110	81	flow X0, pH XX
40	32	72	58	168	110	85	flow X0, pH XX
50	40	83	63	188	120	89	flow X0, pH XX
63	50	100	68	212	130	95	flow X0, pH XX

21 31 03



## Installation fitting type 310 PVC-U For socket systems Inch BS

### Model:

- Material: PVC-U
- Threaded outlet 1 ¼" NPSM
- Union end with solvent cement socket PVC-U

### Range of use:

- compatible signet flow sensors: type 2551, 2537, 515, 8510, 2536, 8512
- compatible signet pH/ORP sensors: type 2724, 2725, 2726

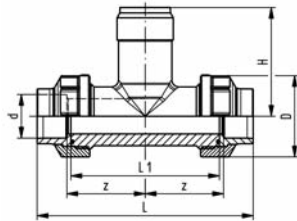
### Attention:

- sensor length depends on installation fitting

d [inch]	DN [mm]	PN	EPDM Code	FPM Code	kg	
½	15	15	721 310 306	721 310 336	0.181	
¾	20	15	721 310 307	721 310 337	0.244	
1	25	15	721 310 308	721 310 338	0.333	
1 ¼	32	15	721 310 309	721 310 339	0.440	
1 ½	40	15	721 310 310	721 310 340	0.700	
2	50	15	721 310 311	721 310 341	1.011	

d [inch]	DN [mm]	D [mm]	z [mm]	L [mm]	L1 [mm]	H [mm]	Sensor Type
½	15	43	48	131	90	76	flow X0, pH XX
¾	20	51	53	147	100	78	flow X0, pH XX
1	25	58	58	164	110	81	flow X0, pH XX
1 ¼	32	72	58	171	110	85	flow X0, pH XX
1 ½	40	83	63	188	120	89	flow X0, pH XX
2	50	100	68	211	130	95	flow X0, pH XX

21 31 04



## Installation fitting type 310 PVC-U for socket systems Inch ASTM

### Model:

- Material: PVC-U
- Threaded outlet 1 ¼" NPSM
- Union end with solvent cement socket PVC-U

### Range of use:

- compatible signet flow sensors: type 2551, 2537, 515, 8510, 2536, 8512
- compatible signet pH/ORP sensors: type 2724, 2725, 2726

### Attention:

- sensor length depends on installation fitting

d [inch]	DN [mm]	PN	EPDM Code	FPM Code	kg	
½	15	16	721 310 406	721 310 436	0.181	
¾	20	16	721 310 407	721 310 437	0.244	
1	25	16	721 310 408	721 310 438	0.333	
1 ¼	32	16	721 310 409	721 310 439	0.440	
1 ½	40	16	721 310 410	721 310 440	0.700	
2	50	16	721 310 411	721 310 441	1.011	

d [inch]	DN [mm]	D [mm]	z [mm]	L [mm]	L1 [mm]	H [mm]	Sensor Type
½	15	43	48	140	90	76	flow X0, pH XX
¾	20	51	53	156	100	78	flow X0, pH XX
1	25	58	58	174	110	81	flow X0, pH XX
1 ¼	32	72	58	180	110	85	flow X0, pH XX
1 ½	40	83	63	196	120	89	flow X0, pH XX
2	50	100	68	212	130	95	flow X0, pH XX

# Copiable

## Configurator GF Ball Valve Type 546 PVC-U

You will find a large selection of different versions in our range of products. New system elements also provide you with new opportunities for use. In order for us to supply exactly the ball valve you need for your application, we put together a selection menu for you (the maximum working pressure of the whole valve is determined by the maximum permissible nominal pressure of the connecting part).

### Ball valve

A01 Ball valve 546

#### Material

B01 PVC-U

#### Dimension

C05	d 16	DN 10	3/8"
C06	d 20	DN 15	1/2"
C07	d 25	DN 20	3/4"
C08	d 32	DN 25	1"
C09	d 40	DN 32	1 1/4"
C10	d 50	DN 40	1 1/2"
C11	d 63	DN 50	2"
C12	d 75	DN 65	2 1/2"
C13	d 90	DN 80	3"
C14	d 110	DN 100	4"
C15	d 160	DN 150	6"

#### Version

D01	standard, PTFE ball seal
D02	oilfree, PTFE ball seal (only with specific connecting parts)
D03	silicon-free, PTFE ball seal for inch ASTM (only with specific connecting parts)
D04	silicon-free, PVDF ball seal for metric (only with specific connecting parts)

#### Seals

E01	EPDM seals
E02	FPM seals
E03	FFPM (KALREZ®) seals

#### Threaded inserts

F01	without threaded inserts
F02	with threaded inserts

#### Connecting parts

G01	PVC-U Cement socket metric
G03	PVC-U Cement socket inch ASTM
G04	PVC-U Cement socket inch BS
G05	PVC-U Cement spigot metric
G06	PVC-U Threaded socket Rp
G07	PVC-U Threaded socket Rp reinforced (DN10-50)
G09	PVC-U Threaded socket NPT
G30	PP-H Fusion socket metric
G32	PP-H Socket fusion spigot metric
G33	PP-H Threaded socket Rp
G34	PP-H Threaded socket NPT reinforced
G35	PP-H Butt fusion spigot SDR 11 metric IR-PLUS
G36	PP-H Butt fusion spigot SDR 17.6 metric (limited dimension range)
G37	PP-H Butt fusion spigot long SDR11 metric
G40	PE-100 Fusion socket metric
G41	PE-100 Butt fusion spigot SDR11 metric
G42	PE-100 Butt fusion spigot SDR17.6 metric (limited dimension range)
G43	PE-100 Butt fusion spigot long SDR11 metric
G44	PE-100 Butt fusion spigot long SDR17.6 metric (DN65-100)
G60	Fixed flange PVC-U serrated metric
G61	Fixed flange PVC-U flat metric
G70	Backing flange PVC-U metric
G71	Backing flange PVC-U inch ANSI
G72	Backing flange PP-steel metric
G73	Backing flange PP-steel ANSI
G78	Backing flange PVC-U JIS (DN65-100)
G80	PVC-U Valve end blank

#### Multi-functional module

I01	No multi-functional module
I02	Empty module
I03	Module with 2 limit switches Ag, Ni
I04	Module with 2 limit switches Au
I05	Module with 2 inductive switches Namur
I06	Module with 2 inductive switches PNP
I07	Module with 2 inductive switches NPN

#### Handle

K01	Standard handle red
K02	Standard handle black
K11	Multi-functional handle red

#### Mounting plate

L01	without mounting plate
L02	with mounting plate

**A01 B01 C D E F G G I K L**

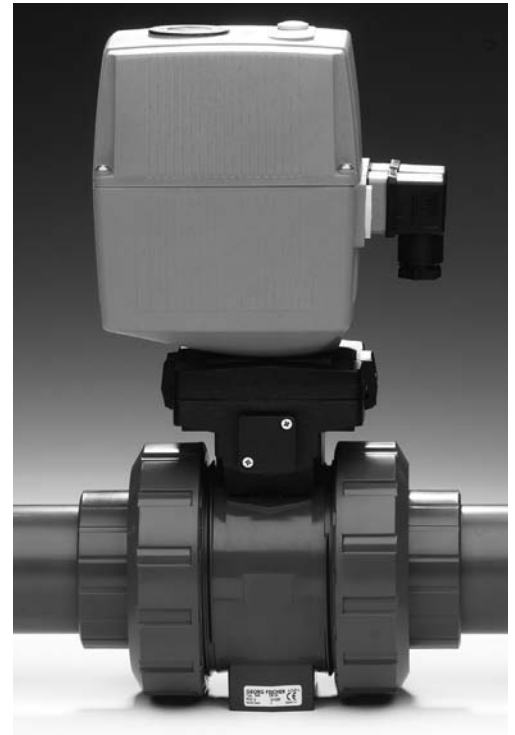
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# Copiable GF ball valve type 546 with electric Actuator

## It's so easy to actuate the type 546:

With the configurator, you have a choice of new electric actuators, the EA11 for standard applications and the EA21 with modular design and accessories, for practically any type of operation.

**We supply what you put together.**



### Electric Actuator EA11

- T01 EA11 24 V
- T02 EA11 100-230 V

### Accessories EA11

- U01 No accessories
- U02 2 limit switches Ag, Ni
- U03 Heating element
- U04 Fail-safe return
- U05 2 limit switches Ag, Ni normally open

### Electric Actuator EA21/31

- T03 EA21/31 24 V
- T04 EA21/31 100-230 V

### Accessories EA21

- W01 No accessories
- W02 Heating element
- W03 Cycle time module
- W04 Cycle time monitoring
- W05 Cycles monitoring
- W06 Motor current monitoring
- W07 2 limit switches Ag, Ni
- W08 2 limit switches Gold
- W09 2 limit switches NPN
- W10 2 limit switches PNP
- W 1 Positioner
- W12 Electric position indicator
- W14 Fail-safe return unit
- W15 Switch intermediate position
- W27 2 limit switches Ag, Ni normally open with connector
- W 1 Positioner PE25 with galv. separation

<b>T</b>	<b>U</b>	<b>T</b>	<b>W</b>	<b>W</b>	<b>W</b>	<b>W</b>	<b>W</b>	<b>W</b>

# Copiable

## Configurator GF Ball Valve Type 546 PVC-U

You will find a large selection of different versions in our range of products. New system elements also provide you with new opportunities for use. In order for us to supply exactly the ball valve you need for your application, we put together a selection menu for you (the maximum working pressure of the whole valve is determined by the maximum permissible nominal pressure of the connecting part).

### Ball valve

A01 Ball valve 546

#### Material

B01 PVC-U

#### Dimension

C05	d 16	DN 10	3/8"
C06	d 20	DN 15	1/2"
C07	d 25	DN 20	3/4"
C08	d 32	DN 25	1"
C09	d 40	DN 32	1 1/4"
C10	d 50	DN 40	1 1/2"
C11	d 63	DN 50	2"
C12	d 75	DN 65	2 1/2"
C13	d 90	DN 80	3"
C14	d 110	DN 100	4"
C15	d 160	DN 150	6"

#### Version

D01	standard, PTFE ball seal
D02	oilfree, PTFE ball seal (only with specific connecting parts)
D03	silicon-free, PTFE ball seal for inch ASTM (only with specific connecting parts)
D04	silicon-free, PVDF ball seal for metric (only with specific connecting parts)

#### Seals

E01	EPDM seals
E02	FPM seals
E03	FFPM (KALREZ®) seals

#### Threaded inserts

F01	without threaded inserts
F02	with threaded inserts

#### Connecting parts

G01	PVC-U Cement socket metric
G03	PVC-U Cement socket inch ASTM
G04	PVC-U Cement socket inch BS
G05	PVC-U Cement spigot metric
G06	PVC-U Threaded socket Rp
G07	PVC-U Threaded socket Rp reinforced (DN10-50)
G09	PVC-U Threaded socket NPT
G30	PP-H Fusion socket metric
G32	PP-H Socket fusion spigot metric
G33	PP-H Threaded socket Rp
G34	PP-H Threaded socket NPT reinforced
G35	PP-H Butt fusion spigot SDR 11 metric IR-PLUS
G36	PP-H Butt fusion spigot SDR 17.6 metric (limited dimension range)
G37	PP-H Butt fusion spigot long SDR11 metric
G40	PE-100 Fusion socket metric
G41	PE-100 Butt fusion spigot SDR11 metric
G42	PE-100 Butt fusion spigot SDR17.6 metric (limited dimension range)
G43	PE-100 Butt fusion spigot long SDR11 metric
G44	PE-100 Butt fusion spigot long SDR17.6 metric (DN65-100)
G60	Fixed flange PVC-U serrated metric
G61	Fixed flange PVC-U flat metric
G70	Backing flange PVC-U metric
G71	Backing flange PVC-U inch ANSI
G72	Backing flange PP-steel metric
G73	Backing flange PP-steel ANSI
G78	Backing flange PVC-U JIS (DN65-100)
G80	PVC-U Valve end blank

#### Multi-functional module

I01	No multi-functional module
I02	Empty module
I03	Module with 2 limit switches Ag, Ni
I04	Module with 2 limit switches Au
I05	Module with 2 inductive switches Namur
I06	Module with 2 inductive switches PNP
I07	Module with 2 inductive switches NPN

#### Handle

K01	Standard handle red
K02	Standard handle black
K11	Multi-functional handle red

#### Mounting plate

L01	without mounting plate
L02	with mounting plate

**A01 B01 C D E F G G I K L**

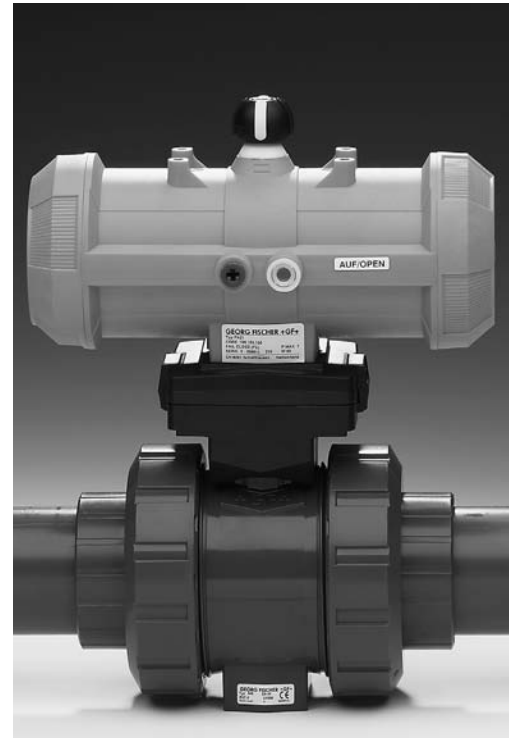
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# Copiable GF ball valve type 546 with pneumatic actuator

## It's so easy to configurate the type 546:

With the configurator, you have a choice of new pneumatic actuators PA11 and PA21 in 2 optimized sizes including a large range of accessories.

**We supply what you put together.**



### Pneumatic actuators PA11/PA21

- P01 Fail safe to close PA11/PA21
- P02 Fail safe to open PA11/21
- P03 Double acting PA11/21
- P30 Fail safe to close PA30/90
- P31 Fail safe to open PA30/90
- P32 Double acting PA30/90

### Manual override

- Q01 without manual override
- Q02 with manual override

### Stroke limiter

- R01 without stroke limiter
- R02 with stroke limiter

<b>P</b>	<b>Q</b>	<b>R</b>	
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# Ball valves type 546 metric

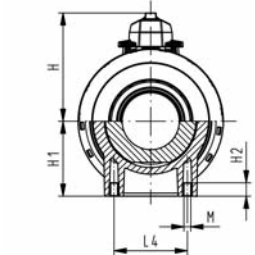
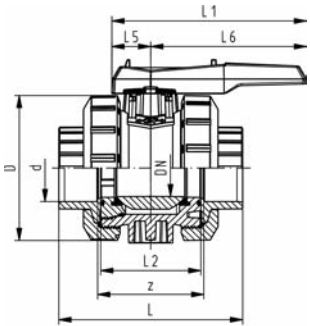
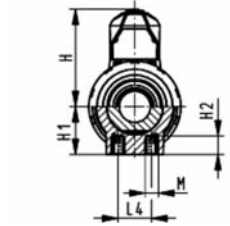
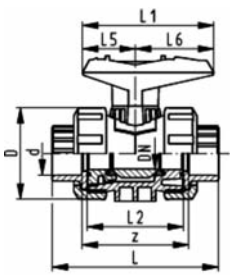
## Ball valve type 546 PVC-U

### With mounting inserts

### With solvent cement sockets metric



DN10/15 - 50



#### Model:

- For easy installation and removal
- Ball seals PTFE
- Integrated stainless steel mounting inserts
- z-dimension, valve end and union nut are **not compatible** with type 346 (DN10/15-50) resp. type 370 (DN65-100)

#### Option:

- Individual configuration of the valve (see diagram)
- Multifunctional module with integrated limit switches
- Pneumatic or electric actuators from +GF+

d [mm]	Inch	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	GP	kg
16		10	16	71	161 546 061	161 546 071	10	0.150
20		15	16	185	161 546 062	161 546 072	10	0.150
25		20	16	350	161 546 063	161 546 073	10	0.230
32		25	16	700	161 546 064	161 546 074	10	0.330
40		32	16	1000	161 546 065	161 546 075	6	0.600
50		40	16	1600	161 546 066	161 546 076	6	0.800
63		50	16	3100	161 546 067	161 546 077	4	1.460
75	2 ½	65	16	5000	161 546 068	161 546 078	-	4.900
90		80	16	7000	161 546 069	161 546 079	-	7.400
110		100	16	11000	161 546 070	161 546 080	-	11.600

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	M	z [mm]	closest inch
16	50	57	27	12	92	77	56	25	32	45	6	64	¾
20	50	57	27	12	95	77	56	25	32	45	6	64	½
25	58	67	30	12	110	97	65	25	39	58	6	72	¾
32	68	73	36	12	123	97	71	25	39	58	6	79	1
40	84	90	44	15	146	128	85	45	54	74	8	94	1 ¼
50	97	97	51	15	157	128	89	45	54	74	8	95	1 ½
63	124	116	64	15	183	152	101	45	66	87	8	107	2
75	166	149	85	15	233	270	136	70	64	206	8	144	2 ½
90	200	161	105	15	254	270	141	70	64	206	8	151	3
110	238	178	123	22	301	320	164	120	64	256	12	174	4





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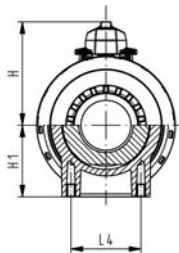
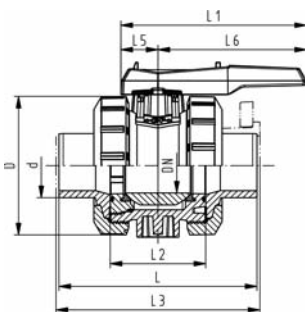
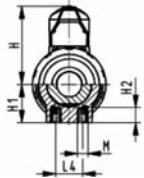
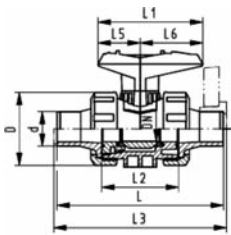
## Ball valve type 546 PVC-U With mounting inserts With solvent cement spigots metric

### Model:

- For easy installation and removal
- Ball seals PTFE
- Integrated stainless steel mounting inserts
- z-dimension, valve end and union nut are **not compatible** with type 346 (DN10/15-50) resp. type 370 (DN65-100)

### Option:

- Individual configuration of the valve (see diagram)
- Multifunctional module with integrated limit switches
- Pneumatic or electric actuators from +GF+



d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	GP	kg
16	10	16	71	<b>161 546 721</b>	<b>161 546 731</b>	10	0.157
20	15	16	185	<b>161 546 722</b>	<b>161 546 732</b>	10	0.157
25	20	16	350	<b>161 546 723</b>	<b>161 546 733</b>	10	0.242
32	25	16	700	<b>161 546 724</b>	<b>161 546 734</b>	10	0.347
40	32	16	1000	<b>161 546 725</b>	<b>161 546 735</b>	6	0.620
50	40	16	1600	<b>161 546 726</b>	<b>161 546 736</b>	6	0.845
63	50	16	3100	<b>161 546 727</b>	<b>161 546 737</b>	4	1.550
75	65	16	5000	<b>161 546 728</b>	<b>161 546 738</b>	-	5.100
90	80	16	7000	<b>161 546 729</b>	<b>161 546 739</b>	-	7.500
110	100	16	11000	<b>161 546 730</b>	<b>161 546 740</b>	-	11.900

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	M	closest inch
16	50	57	27	12	114	77	56	130	25	32	45	M6	3/8
20	50	57	27	12	124	77	56	130	25	32	45	M6	1/2
25	58	67	30	12	144	97	65	150	25	39	58	M6	3/4
32	68	73	36	12	154	97	71	160	25	39	58	M6	1
40	84	90	44	15	174	128	85	180	45	54	74	M8	1 1/4
50	97	97	51	15	194	128	89	200	45	54	74	M8	1 1/2
63	124	116	64	15	224	152	101	230	45	66	87	M8	2
75	166	149	85	15	284	270	136	290	70	64	206	M8	2 1/2
90	200	161	105	15	300	270	141	310	70	64	206	M8	3
110	238	178	123	22	340	320	164	350	120	64	256	M12	4



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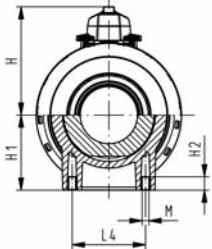
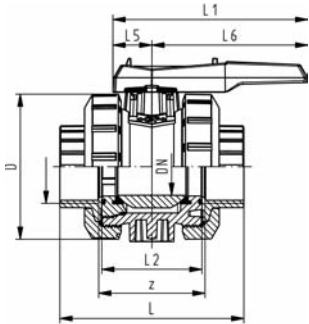
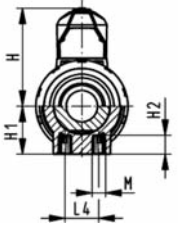
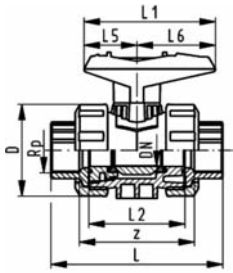
## Ball valve type 546 PVC-U With mounting inserts With threaded sockets Rp

### Model:

- For easy installation and removal
- Ball seals PTFE
- Integrated stainless steel mounting inserts
- z-dimension, valve end and union nut are **not compatible** with type 346 (DN10/15-50) resp. type 370 (DN65-100)

### Option:

- Individual configuration of the valve (see diagram)
- Multifunctional module with integrated limit switches
- Pneumatic or electric actuators from +GF+

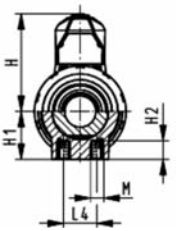
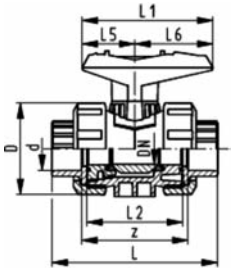


Rp [inch]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	GP	kg
3/8	10	10	71	161 546 741	161 546 751	10	0.152
1/2	15	10	185	161 546 742	161 546 752	10	0.152
3/4	20	10	350	161 546 743	161 546 753	10	0.232
1	25	10	700	161 546 744	161 546 754	6	0.332
1 1/4	32	10	1000	161 546 745	161 546 755	6	0.605
1 1/2	40	10	1600	161 546 746	161 546 756	6	0.805
2	50	10	3100	161 546 747	161 546 757	4	1.465
2 1/2	65	10	5000	161 546 748	161 546 758	-	5.000
3	80	10	7000	161 546 749	161 546 759	-	7.500
4	100	10	11000	161 546 750	161 546 760	-	11.700

Rp [inch]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	M	z [mm]
3/8	50	57	27	12	95	77	56	25	32	45	M6	69
1/2	50	57	27	12	100	77	56	25	32	45	M6	67
3/4	58	67	30	12	114	97	65	25	39	58	M6	78
1	68	73	36	12	127	97	71	25	39	58	M6	85
1 1/4	84	90	44	15	146	128	85	45	54	74	M8	100
1 1/2	97	97	51	15	152	128	89	45	54	74	M8	106
2	124	116	64	15	177	152	101	45	66	87	M8	121
2 1/2	166	149	85	15	233	270	136	70	64	206	M8	144
3	200	161	105	15	254	270	141	70	64	206	M8	151
4	238	178	123	22	301	320	164	120	64	256	M12	174



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## Ball valve type 546 PVC-U With mounting inserts With fusion sockets PE100 metric

### Model:

- For easy installation and removal
- Ball seals PTFE
- Integrated stainless steel mounting inserts
- z-dimension, valve end and union nut are not compatible with type 346

### Option:

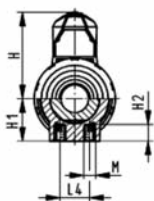
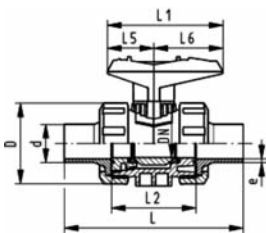
- Individual configuration of the valve (see diagram)
- Multifunctional module with integrated limit switches
- Pneumatic or electric actuators from +GF+

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	16	71	161 546 761	161 546 771	0.150
20	15	16	185	161 546 762	161 546 772	0.150
25	20	16	350	161 546 763	161 546 773	0.220
32	25	16	700	161 546 764	161 546 774	0.310
40	32	16	1000	161 546 765	161 546 775	0.550
50	40	16	1600	161 546 766	161 546 776	0.750
63	50	16	3100	161 546 767	161 546 777	1.360

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	M	z [mm]	closest inch
16	50	57	27	12	93	77	56	25	32	45	M6	67	3/8
20	50	57	27	12	95	77	56	25	32	45	M6	66	1/2
25	58	67	30	12	108	97	65	25	39	58	M6	77	3/4
32	68	73	36	12	119	97	71	25	39	58	M6	83	1
40	84	90	44	15	137	128	85	45	54	74	M8	99	1 1/4
50	97	97	51	15	147	128	89	45	54	74	M8	105	1 1/2
63	124	116	64	15	168	152	101	45	66	87	M8	113	2



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## Ball valve type 546 PVC-U With mounting inserts With butt fusion spigots PE100 SDR11 metric

### Model:

- For easy installation and removal
- Ball seals PTFE
- Integrated stainless steel mounting inserts
- z-dimension, valve end and union nut are not compatible with type 346

### Option:

- Individual configuration of the valve (see diagram)
- Multifunctional module with integrated limit switches
- Pneumatic or electric actuators from +GF+

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
20	15	16	185	161 546 782	161 546 792	0.150
25	20	16	350	161 546 783	161 546 793	0.220
32	25	16	700	161 546 784	161 546 794	0.310
40	32	16	1000	161 546 785	161 546 795	0.550
50	40	16	1600	161 546 786	161 546 796	0.750
63	50	16	3100	161 546 787	161 546 797	1.360

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	M	e [mm]	closest inch
20	50	57	27	12	130	77	56	25	32	45	M6	1,9	1/2
25	58	67	30	12	134	97	65	25	39	58	M6	2,3	3/4
32	68	73	36	12	150	97	71	25	39	58	M6	2,9	1
40	84	90	44	15	171	128	85	45	54	74	M8	3,7	1 1/4
50	97	97	51	15	191	128	89	45	54	74	M8	4,6	1 1/2
63	124	116	64	15	220	152	101	45	66	87	M8	5,8	2



DN10/15 - 50



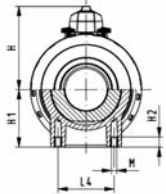
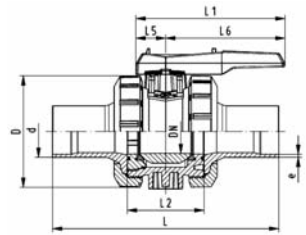
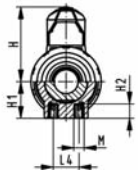
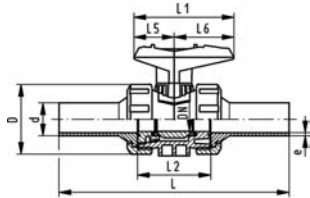
## Ball valve type 546 PVC-U With mounting inserts With butt fusion spigots long PE100 SDR11 metric

### Model:

- For easy installation and removal
- Ball seals PTFE
- Integrated stainless steel mounting inserts
- z-dimension, valve end and union nut are **not compatible** with type 346 (DN10/15-50) resp. type 370 (DN65-100)

### Option:

- Individual configuration of the valve (see diagram)
- Multifunctional module with integrated limit switches
- Pneumatic or electric actuators from +GF+

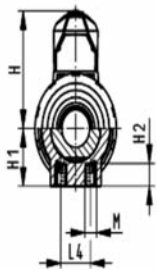
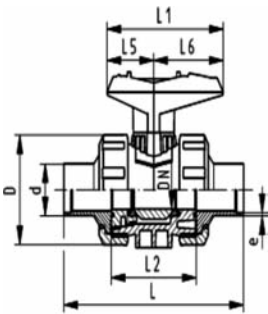


d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
20	15	16	185	161 546 822	161 546 832	0.150
25	20	16	350	161 546 823	161 546 833	0.220
32	25	16	700	161 546 824	161 546 834	0.310
40	32	16	1000	161 546 825	161 546 835	0.550
50	40	16	1600	161 546 826	161 546 836	0.750
63	50	16	3100	161 546 827	161 546 837	1.360
75	65	16	5000	161 546 828	161 546 838	5.000
90	80	16	7000	161 546 829	161 546 839	7.500
110	100	16	11000	161 546 830	161 546 840	11.800

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	M	e [mm]	closest inch
20	50	57	27	12	193	77	56	25	32	45	M6	2,25	1/2
25	58	67	30	12	216	97	65	25	39	58	M6	2,3	3/4
32	68	73	36	12	223	97	71	25	39	58	M6	2,9	1
40	84	90	44	15	249	128	85	45	54	74	M8	3,7	1 1/4
50	97	97	51	15	271	128	89	45	54	74	M8	4,6	1 1/2
63	124	116	64	15	321	152	101	45	66	87	M8	5,8	2
75	166	149	85	15	386	270	136	70	64	206	M8	6,8	2 1/2
90	200	161	105	15	421	270	141	70	64	206	M8	8,2	3
110	238	178	123	22	484	320	164	120	64	256	M12	10,0	4



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## Ball valve type 546 PVC-U With mounting inserts With butt fusion spigots PE100 SDR17.6 metric

### Model:

- For easy installation and removal
- Ball seals PTFE
- Integrated stainless steel mounting inserts
- z-dimension, valve end and union nut are not compatible with type 346

### Option:

- Individual configuration of the valve (see diagram)
- Multifunctional module with integrated limit switches
- Pneumatic or electric actuators from +GF+

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
40	32	10	1000	<b>161 546 805</b>	<b>161 546 815</b>	0.550
50	40	10	1600	<b>161 546 806</b>	<b>161 546 816</b>	0.750
63	50	10	3100	<b>161 546 807</b>	<b>161 546 817</b>	1.360

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	M	e [mm]	closest inch
40	84	90	44	15	171	128	85	45	54	74	M8	2,3	1 ¼
50	97	97	51	15	191	128	89	45	54	74	M8	2,9	1 ½
63	124	116	64	15	220	152	101	45	66	87	M8	3,6	2



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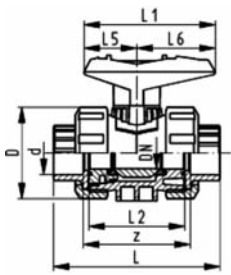
## Ball valve type 546 PVC-U without mounting inserts With solvent cement sockets metric

### Model:

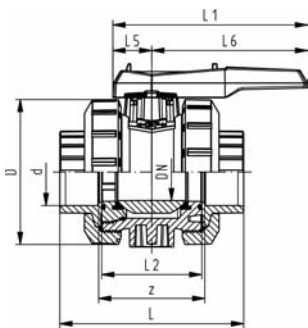
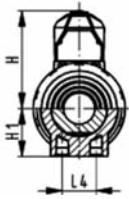
- For easy installation and removal
- Ball seals PTFE
- Without mounting inserts
- z-dimension, valve end and union nut are **not compatible** with type 346 (DN10/15-50) resp. type 370 (DN65-100)

### Option:

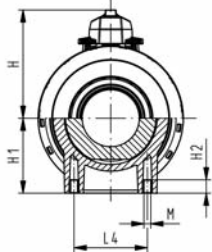
- Individual configuration of the valve (see diagram)
- Multifunctional module with integrated limit switches
- Pneumatic or electric actuators from +GF+



d [mm]	Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	GP	kg
16		10	16	71	161 546 001	161 546 011	10	0.150
20		15	16	185	161 546 002	161 546 012	10	0.150
25		20	16	350	161 546 003	161 546 013	10	0.230
32		25	16	700	161 546 004	161 546 014	10	0.330
40		32	16	1000	161 546 005	161 546 015	6	0.600
50		40	16	1600	161 546 006	161 546 016	6	0.800
63		50	16	3100	161 546 007	161 546 017	4	1.460
75	2 1/2	65	16	5000	161 546 008	161 546 018	-	4.900
90		80	16	7000	161 546 009	161 546 019	-	7.400
110		100	16	11000	161 546 010	161 546 020	-	11.600



d [mm]	D [mm]	H [mm]	H1 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	z [mm]	closest inch
16	50	57	27	92	77	56	25	32	45	64	3/8
20	50	57	27	95	77	56	25	32	45	64	1/2
25	58	67	30	110	97	65	25	39	58	72	3/4
32	68	73	36	123	97	71	25	39	58	79	1
40	84	90	44	146	128	85	45	54	74	94	1 1/4
50	97	97	51	157	128	89	45	54	74	95	1 1/2
63	124	116	64	183	152	101	45	66	87	107	2
75	166	149	85	233	270	136	70	64	206	144	2 1/2
90	200	161	105	254	270	141	70	64	206	151	3
110	238	178	123	301	320	164	120	64	256	174	4





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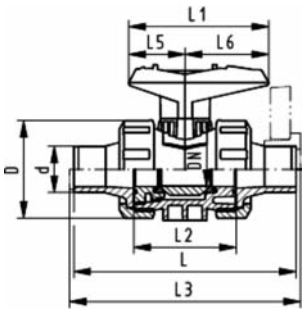
## Ball valve type 546 PVC-U without mounting inserts With solvent cement spigots metric

### Model:

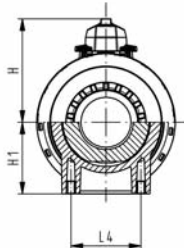
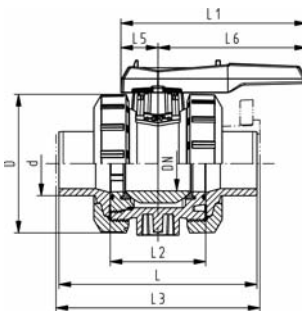
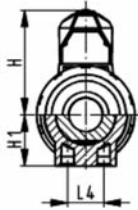
- For easy installation and removal
- Ball seals PTFE
- Without mounting inserts
- z-dimension, valve end and union nut are **not compatible** with type 346 (DN10/15-50) resp. type 370 (DN65-100)

### Option:

- Individual configuration of the valve (see diagram)
- Multifunctional module with integrated limit switches
- Pneumatic or electric actuators from +GF+



d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	GP	kg
16	10	16	71	<b>161 546 041</b>	<b>161 546 051</b>	10	0.155
20	15	16	185	<b>161 546 042</b>	<b>161 546 052</b>	10	0.155
25	20	16	350	<b>161 546 043</b>	<b>161 546 053</b>	10	0.240
32	25	16	700	<b>161 546 044</b>	<b>161 546 054</b>	10	0.345
40	32	16	1000	<b>161 546 045</b>	<b>161 546 055</b>	6	0.615
50	40	16	1600	<b>161 546 046</b>	<b>161 546 056</b>	6	0.840
63	50	16	3100	<b>161 546 047</b>	<b>161 546 057</b>	4	1.545
75	65	16	5000	<b>161 546 048</b>	<b>161 546 058</b>	-	5.100
90	80	16	7000	<b>161 546 049</b>	<b>161 546 059</b>	-	7.500
110	100	16	11000	<b>161 546 050</b>	<b>161 546 060</b>	-	11.900



d [mm]	D [mm]	H [mm]	H1 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	closest inch
16	50	57	27	114	77	56		25	32	45	3/8
20	50	57	27	124	77	56	130	25	32	45	1/2
25	58	67	30	144	97	65	150	25	39	58	3/4
32	68	73	36	154	97	71	160	25	39	58	1
40	84	90	44	174	128	85	180	45	54	74	1 1/4
50	97	97	51	194	128	89	200	45	54	74	1 1/2
63	124	116	64	224	152	101	230	45	66	87	2
75	166	149	85	284	270	136	290	70	64	206	2 1/2
90	200	161	105	300	270	141	310	70	64	206	3
110	238	178	123	340	320	164	350	120	64	256	4



DN10/15 - 50



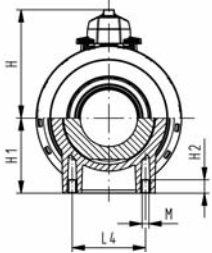
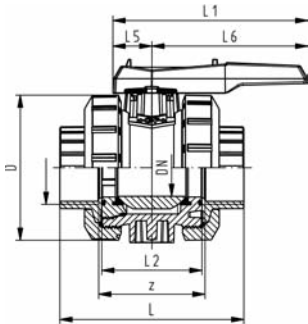
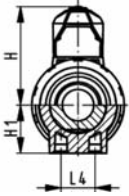
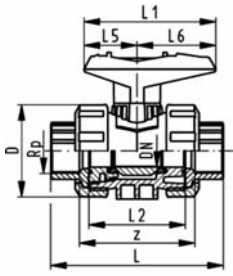
## Ball valve type 546 PVC-U without mounting inserts With threaded sockets Rp

### Model:

- For easy installation and removal
- Ball seals PTFE
- Without mounting inserts
- z-dimension, valve end and union nut are **not compatible** with type 346 (DN10/15-50) resp. type 370 (DN65-100)

### Option:

- Individual configuration of the valve (see diagram)
- Multifunctional module with integrated limit switches
- Pneumatic or electric actuators from +GF+



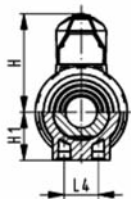
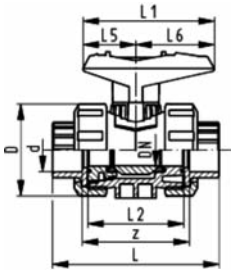
Rp [inch]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	GP	kg
3/8	10	10	71	161 546 021	161 546 031	10	0.150
1/2	15	10	185	161 546 022	161 546 032	10	0.150
3/4	20	10	350	161 546 023	161 546 033	10	0.230
1	25	10	700	161 546 024	161 546 034	10	0.330
1 1/4	32	10	1000	161 546 025	161 546 035	6	0.600
1 1/2	40	10	1600	161 546 026	161 546 036	6	0.800
2	50	10	3100	161 546 027	161 546 037	4	1.460
2 1/2	65	10	5000	161 546 028	161 546 038	-	5.000
3	80	10	7000	161 546 029	161 546 039	-	7.500
4	100	10	11000	161 546 030	161 546 040	-	11.700

Rp [inch]	D [mm]	H [mm]	H1 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	z [mm]
3/8	50	57	27	95	77	56	25	32	45	69
1/2	50	57	27	100	77	56	25	32	45	67
3/4	58	67	30	114	97	65	25	39	58	78
1	68	73	36	127	97	71	25	39	58	85
1 1/4	84	90	44	146	128	85	45	54	74	100
1 1/2	97	97	51	152	128	89	45	54	74	106
2	124	116	64	177	152	101	45	66	87	121
2 1/2	166	149	85	233	270	136	70	64	206	144
3	200	161	105	254	270	141	70	64	206	151
4	238	178	123	301	320	164	120	64	256	174





DN10/15 - 50



## Ball valve type 546 PVC-U without mounting inserts With fusion sockets PE100 metric

### Model:

- For easy installation and removal
- Ball seals PTFE
- Without mounting inserts
- z-dimension, valve end and union nut are not compatible with type 346

### Option:

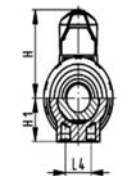
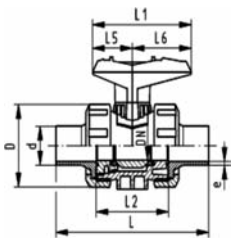
- Individual configuration of the valve (see diagram)
- Multifunctional module with integrated limit switches
- Pneumatic or electric actuators from +GF+

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	GP	kg
16	10	16	71	800 000 101	800 000 111	10	0.170
20	15	16	185	800 000 102	800 000 112	10	0.170
25	20	16	350	800 000 103	800 000 113	10	0.240
32	25	16	700	800 000 104	800 000 114	10	0.340
40	32	16	1000	800 000 105	800 000 115	6	0.610
50	40	16	1600	800 000 106	800 000 116	6	0.850
63	50	16	3100	800 000 107	800 000 117	4	1.550

d [mm]	D [mm]	H [mm]	H1 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	z [mm]	closest inch
16	50	57	27	93	77	56	25	32	45	67	3/8
20	50	57	27	95	77	56	25	32	45	66	1/2
25	58	67	30	108	97	65	25	39	58	77	3/4
32	68	73	36	119	97	71	25	39	58	83	1
40	84	90	44	137	128	85	45	54	74	99	1 1/4
50	97	97	51	147	128	89	45	54	74	105	1 1/2
63	124	116	64	168	152	101	45	66	87	113	2



DN10/15 - 50



## Ball valve type 546 PVC-U without mounting inserts With butt fusion spigots PE100 SDR11 metric

### Model:

- For easy installation and removal
- Ball seals PTFE
- Without mounting inserts
- z-dimension, valve end and union nut are not compatible with type 346

### Option:

- Individual configuration of the valve (see diagram)
- Multifunctional module with integrated limit switches
- Pneumatic or electric actuators from +GF+

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	GP	kg
20	15	16	185	800 000 142	800 000 152	-	0.160
25	20	16	350	800 000 143	800 000 153	-	0.240
32	25	16	700	800 000 144	800 000 154	-	0.340
40	32	16	1000	800 000 145	800 000 155	-	0.600
50	40	16	1600	800 000 146	800 000 156	-	0.830
63	50	16	3100	800 000 147	800 000 157	-	1.560

d [mm]	D [mm]	H [mm]	H1 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	e [mm]	closest inch
20	50	57	27	130	77	56	25	32	45	1,9	1/2
25	58	67	30	134	97	65	25	39	58	2,3	3/4
32	68	73	36	150	97	71	25	39	58	3	1
40	84	90	44	171	128	85	45	54	74	3,7	1 1/4
50	97	97	51	191	128	89	45	54	74	4,6	1 1/2
63	124	116	64	220	152	101	45	66	87	5,8	2



DN10/15 - 50



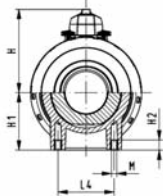
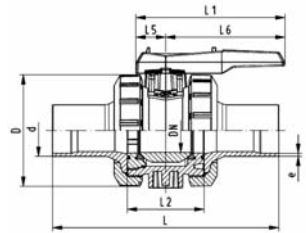
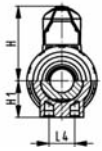
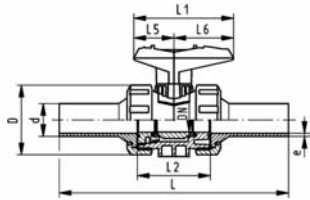
## Ball valve type 546 PVC-U without mounting inserts With butt fusion spigots long PE100 SDR11 metric

### Model:

- For easy installation and removal
- Ball seals PTFE
- Without mounting inserts
- z-dimension, valve end and union nut are **not compatible** with type 346 (DN10/15-50) resp. type 370 (DN65-100)

### Option:

- Individual configuration of the valve (see diagram)
- Multifunctional module with integrated limit switches
- Pneumatic or electric actuators from +GF+

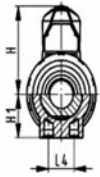
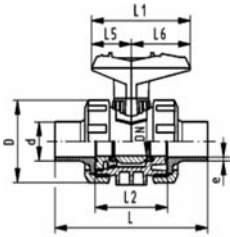


d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	GP	kg
20	15	16	185	800 000 282	800 000 292	-	0.170
25	20	16	350	800 000 283	800 000 293	-	0.250
32	25	16	700	800 000 284	800 000 294	-	0.370
40	32	16	1000	800 000 285	800 000 295	-	0.640
50	40	16	1600	800 000 286	800 000 296	-	0.910
63	50	16	3100	800 000 287	800 000 297	-	1.680
75	65	16	5000	800 000 288	800 000 298	-	5.000
90	80	16	7000	800 000 289	800 000 299	-	7.500
110	100	16	11000	800 000 290	800 000 300	-	11.800

d [mm]	D [mm]	H [mm]	H1 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	e [mm]	closest inch
20	50	57	27	193	77	56	25	32	45	2,25	1/2
25	58	67	30	216	97	65	25	39	58	2,3	3/4
32	68	73	36	223	97	71	25	39	58	3	1
40	84	90	44	249	128	85	45	54	74	3,7	1 1/4
50	97	97	51	271	128	89	45	54	74	4,6	1 1/2
63	124	116	64	321	152	101	45	66	87	5,8	2
75	166	149	85	386	270	136	70	64	206	6,8	2 1/2
90	200	161	105	421	270	141	70	64	206	8,2	3
110	238	178	123	484	320	164	120	64	256	10	4



DN10/15 - 50



## Ball valve type 546 PVC-U without mounting inserts With butt fusion spigots PE100 SDR17.6 metric

### Model:

- For easy installation and removal
- Ball seals PTFE
- Without mounting inserts
- z-dimension, valve end and union nut are not compatible with type 346

### Option:

- Individual configuration of the valve (see diagram)
- Multifunctional module with integrated limit switches
- Pneumatic or electric actuators from +GF+

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	GP	kg
40	32	10	1000	800 000 125	800 000 135	-	0.600
50	40	10	1600	800 000 126	800 000 136	-	0.830
63	50	10	3100	800 000 127	800 000 137	-	1.560

d [mm]	D [mm]	H [mm]	H1 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	e [mm]	closest inch
40	84	90	44	171	128	85	45	54	74	2,3	1 ¼
50	97	97	51	191	128	89	45	54	74	2,9	1 ½
63	124	116	64	220	152	101	45	66	87	3,6	2



DN10/15 - 50



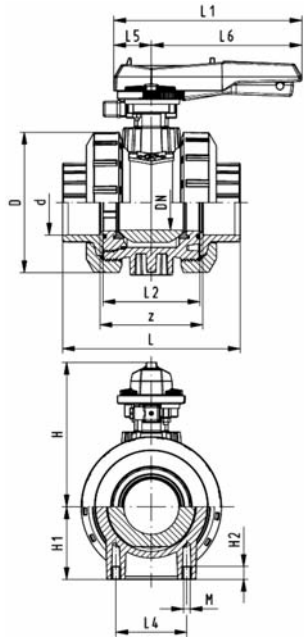
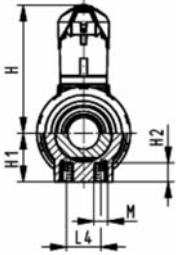
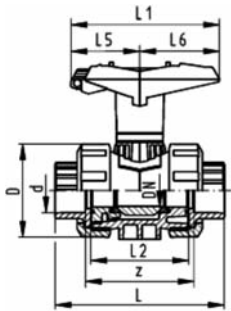
## Ball valve type 546 PVC-U With lockable handle With solvent cement sockets metric

### Model:

- For easy installation and removal
- Ball seals PTFE
- Integrated stainless steel mounting inserts
- z-dimension, valve end and union nut are **not compatible** with type 346 (DN10/15-50) resp. type 370 (DN65-100)
- Lockable hand lever with ratchet settings

### Option:

- Individual configuration of the valve (see diagram)
- Multifunctional module with integrated limit switches
- Pneumatic or electric actuators from +GF+

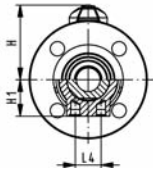
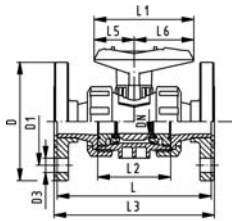


d [mm]	Inch	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	GP	kg
16		10	16	71	<b>161 546 081</b>	<b>161 546 091</b>	10	0.165
20		15	16	185	<b>161 546 082</b>	<b>161 546 092</b>	10	0.165
25		20	16	350	<b>161 546 083</b>	<b>161 546 093</b>	10	0.255
32		25	16	700	<b>161 546 084</b>	<b>161 546 094</b>	6	0.355
40		32	16	1000	<b>161 546 085</b>	<b>161 546 095</b>	6	0.640
50		40	16	1600	<b>161 546 086</b>	<b>161 546 096</b>	4	0.840
63		50	16	3100	<b>161 546 087</b>	<b>161 546 097</b>	4	1.500
75	2 ½	65	16	5000	<b>161 546 088</b>	<b>161 546 098</b>	-	5.200
90		80	16	7000	<b>161 546 089</b>	<b>161 546 099</b>	-	7.700
110		100	16	11000	<b>161 546 090</b>	<b>161 546 100</b>	-	12.000

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	M	z [mm]	closest inch
16	50	79	27	12	92	87	56	25	42	45	M6	64	¾
20	50	79	27	12	95	87	56	25	42	45	M6	64	½
25	58	88	30	12	110	108	65	25	50	58	M6	72	¾
32	68	94	36	12	123	108	71	25	50	58	M6	79	1
40	84	113	44	15	146	140	85	45	66	75	M8	94	1 ¼
50	97	119	51	15	157	140	89	45	66	75	M8	95	1 ½
63	124	141	64	15	183	165	101	45	78	87	M8	107	2
75	166	224	85	15	233	270	136	70	64	206	M8	144	2 ½
90	200	235	105	15	254	270	141	70	64	206	M8	151	3
110	238	245	123	22	301	320	164	120	64	256	M12	174	4



DN10/15 - 50



## Ball valve type 546 PVC-U without mounting inserts With fixed flanges PVC-U serrated metric

### Model:

- For easy installation and removal
- Ball seals PTFE
- Without mounting inserts
- z-dimension, valve end and union nut are not compatible with type 346
- Overall length according to EN 558
- Connecting dimension: ISO 7005 PN10, EN 1092 PN10, DIN 2501 PN10

### Option:

- Individual configuration of the valve (see diagram)
- Multifunctional module with integrated limit switches
- Pneumatic or electric actuators from +GF+

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	GP	kg
20	15	16	185	800 000 182	800 000 192	-	0.370
25	20	16	350	800 000 183	800 000 193	-	0.510
32	25	16	700	800 000 184	800 000 194	-	0.740
40	32	16	1000	800 000 185	800 000 195	-	1.230
50	40	16	1600	800 000 186	800 000 196	-	1.610
63	50	16	3100	800 000 187	800 000 197	-	2.710

d [mm]	D [mm]	D1 [mm]	D3 [mm]	H [mm]	H1 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	closest inch
20	95	65	14	57	27	124	77	56	130	25	32	45	1/2
25	105	75	14	67	30	144	97	65	150	25	39	58	3/4
32	115	85	14	73	36	154	97	71	160	25	39	58	1
40	140	100	18	90	44	174	128	85	180	45	54	74	1 1/4
50	150	110	18	97	51	194	128	89	200	45	54	74	1 1/2
63	165	125	18	116	64	224	152	101	230	45	66	87	2

# Ball valves type 546 Inch BS

## Ball valve type 546 PVC-U With solvent cement sockets Inch BS

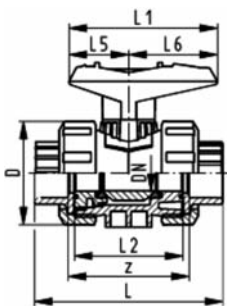


### Model:

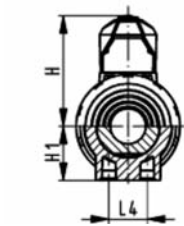
- For easy installation and removal
- z-dimension, valve end and union nut are **not compatible** with type 346 (DN10/15-50) resp. type 370 (DN65-100)
- Ball seals PTFE
- Without mounting inserts

### Option:

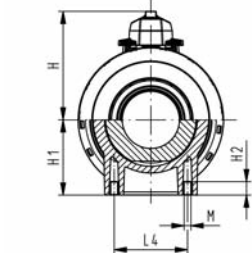
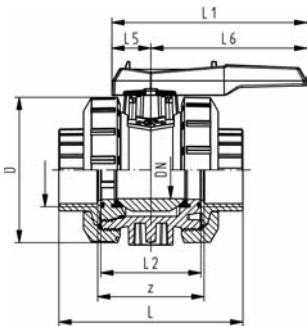
- Individual configuration of the valve (see diagram)
- Multifunctional module with integrated limit switches
- Pneumatic or electric actuators from +GF+



Inch	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	GP	kg
3/8	10	16	71	<b>161 546 201</b>	<b>161 546 211</b>	10	0.150
1/2	15	16	185	<b>161 546 202</b>	<b>161 546 212</b>	10	0.150
3/4	20	16	350	<b>161 546 203</b>	<b>161 546 213</b>	10	0.230
1	25	16	700	<b>161 546 204</b>	<b>161 546 214</b>	10	0.330
1 1/4	32	16	1000	<b>161 546 205</b>	<b>161 546 215</b>	6	0.585
1 1/2	40	16	1600	<b>161 546 206</b>	<b>161 546 216</b>	6	0.815
2	50	16	3100	<b>161 546 207</b>	<b>161 546 217</b>	4	1.490
2 1/2	65	16	5000	<b>161 546 008</b>	<b>161 546 018</b>	-	4.900
3	80	16	7000	<b>161 546 209</b>	<b>161 546 219</b>	-	7.400
4	100	16	11000	<b>161 546 210</b>	<b>161 546 220</b>	-	11.600



Inch	D [mm]	H [mm]	H1 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	z [mm]
3/8	50	57	27	92	77	56	25	32	45	60
1/2	50	57	27	95	77	56	25	32	45	60
3/4	58	67	30	110	97	65	25	39	58	69
1	68	73	36	123	97	71	25	39	58	75
1 1/4	84	90	44	146	128	85	45	54	74	89
1 1/2	97	97	51	157	128	89	45	54	74	97
2	124	116	64	183	152	101	45	66	87	110
2 1/2	166	149	85	233	270	136	70	64	206	144
3	200	161	105	254	270	141	70	64	206	151
4	238	178	123	301	320	164	120	64	256	174





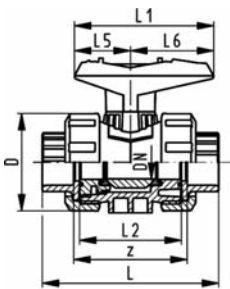
## Ball valve type 546 PVC-U With mounting inserts With solvent cement sockets inch BS

### Model:

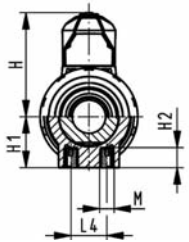
- For easy installation and removal
- z-dimension, valve end and union nut are **not compatible** with type 346 (DN10/15-50) resp. type 370 (DN65-100)
- Ball seals PTFE
- Integrated stainless steel mounting inserts

### Option:

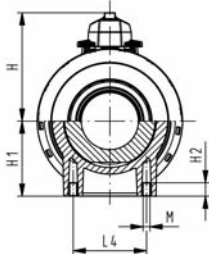
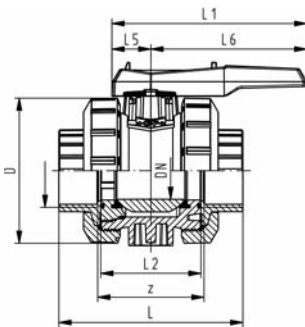
- Individual configuration of the valve (see diagram)
- Multifunctional module with integrated limit switches
- Pneumatic or electric actuators from +GF+

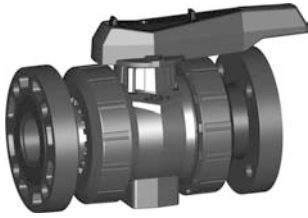


Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	GP	kg
3/8	10	16	71	<b>161 546 241</b>	<b>161 546 251</b>	10	0.150
1/2	15	16	185	<b>161 546 242</b>	<b>161 546 252</b>	10	0.150
3/4	20	16	350	<b>161 546 243</b>	<b>161 546 253</b>	10	0.230
1	25	16	700	<b>161 546 244</b>	<b>161 546 254</b>	10	0.330
1 1/4	32	16	1000	<b>161 546 245</b>	<b>161 546 255</b>	6	0.585
1 1/2	40	16	1600	<b>161 546 246</b>	<b>161 546 256</b>	6	0.815
2	50	16	3100	<b>161 546 247</b>	<b>161 546 257</b>	4	1.490
2 1/2	65	16	5000	<b>161 546 068</b>	<b>161 546 078</b>	-	4.900
3	80	16	7000	<b>161 546 249</b>	<b>161 546 259</b>	-	7.400
4	100	16	11000	<b>161 546 250</b>	<b>161 546 260</b>	-	11.600



Inch	D [mm]	H [mm]	H1 [mm]	H2 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	M	z [mm]
3/8	50	57	27	12	92	77	56	25	32	45	6	67
1/2	50	57	27	12	95	77	56	25	32	45	6	61
3/4	58	67	30	12	110	97	65	25	39	58	6	70
1	68	73	36	12	123	97	71	25	39	58	6	76
1 1/4	84	90	44	15	146	128	85	45	54	74	8	90
1 1/2	97	97	51	15	157	128	89	45	54	74	8	94
2	124	116	64	15	183	152	101	45	66	87	8	107
2 1/2	166	149	85	15	233	270	136	70	64	206	8	144
3	200	161	105	15	254	270	141	70	64	206	8	151
4	238	178	123	22	301	320	164	120	64	256	12	174





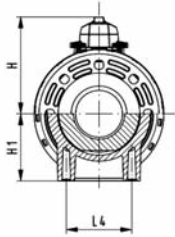
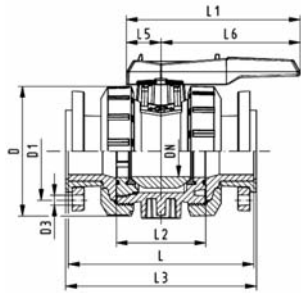
## Ball valve type 546 PVC-U With mounting inserts With backing flanges PVC-U ASTM/ANSI

### Model:

- For easy installation and removal
- z-dimension, valve end and union nut are **not compatible** with type 346 (DN10/15-50) resp. type 370 (DN65-100)
- Ball seals PTFE
- Integrated stainless steel mounting inserts
- Overall length according to EN 558
- Connecting dimension: ANSI/ASME B 16.5 class 150, ASTM D 4024, BS 1560, BS EN 1759

### Option:

- Individual configuration of the valve (see diagram)
- Multifunctional module with integrated limit switches
- Pneumatic or electric actuators from +GF+



Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	GP	kg
2 1/2	65	10	5000	<b>161 546 168</b>	<b>161 546 178</b>	-	7.300
3	80	10	7000	<b>161 546 169</b>	<b>161 546 179</b>	-	10.600
4	100	10	11000	<b>161 546 170</b>	<b>161 546 180</b>	-	16.400

Inch	D [mm]	D1 [mm]	D3 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	H [mm]	H1 [mm]	M
2 1/2	166	140	19	284	270	136	290	70	64	206	149	85	8
3	200	152	19	300	270	141	310	70	64	206	161	105	8
4	238	191	19	340	320	164	350	120	64	256	178	123	12





DN10/15 - 50



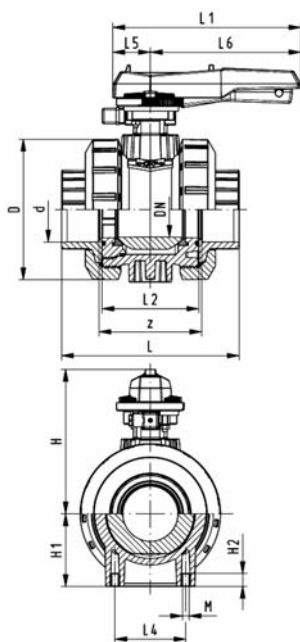
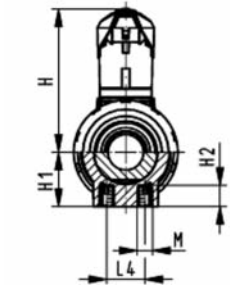
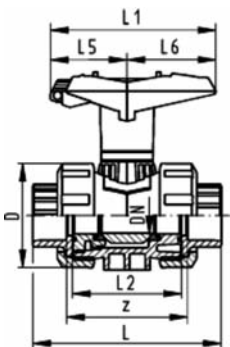
## Ball valve type 546 PVC-U With lockable handle With solvent cement sockets Inch BS

### Model:

- For easy installation and removal
- z-dimension, valve end and union nut are **not compatible** with type 346 (DN10/15-50) resp. type 370 (DN65-100)
- Ball seals PTFE
- Integrated stainless steel mounting inserts
- Lockable hand lever with ratchet settings

### Option:

- Individual configuration of the valve (see diagram)
- Multifunctional module with integrated limit switches
- Pneumatic or electric actuators from +GF+



Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	GP	kg
3/8	10	16	71	161 546 221	161 546 231	10	0.165
1/2	15	16	185	161 546 222	161 546 232	10	0.165
3/4	20	16	350	161 546 223	161 546 233	10	0.255
1	25	16	700	161 546 224	161 546 234	6	0.355
1 1/4	32	16	1000	161 546 225	161 546 235	6	0.625
1 1/2	40	16	1600	161 546 226	161 546 236	4	0.855
2	50	16	3100	161 546 227	161 546 237	4	1.535
2 1/2	65	16	5000	161 546 088	161 546 098	-	5.200
3	80	16	7000	161 546 229	161 546 239	-	7.700
4	100	16	11000	161 546 230	161 546 240	-	12.000

Inch	D [mm]	H [mm]	H1 [mm]	H2 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	M	z [mm]
3/8	50	79	27	12	92	87	56	25	42	45	M6	60
1/2	50	79	27	12	95	87	56	25	42	45	M6	60
3/4	58	88	30	12	110	108	65	25	50	58	M6	69
1	68	94	36	12	123	108	71	25	50	58	M6	75
1 1/4	84	113	44	15	146	140	85	45	66	75	M8	89
1 1/2	97	119	51	15	157	140	89	45	66	75	M8	97
2	124	141	64	15	183	165	101	45	78	87	M8	110
2 1/2	166	224	85	15	233	270	136	70	64	206	M8	144
3	200	235	105	15	254	270	141	70	64	206	M8	151
4	238	245	123	22	301	320	164	120	64	256	M12	174

# Ball valves type 546 ASTM/ANSI

## Ball valve type 546 PVC-U

With solvent cement sockets Inch ASTM  
Inclusive 2 threaded valve ends NPT



DN10/15 - 50

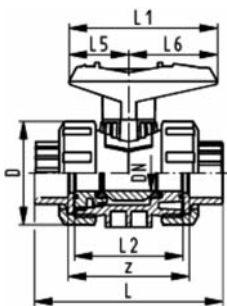


### Model:

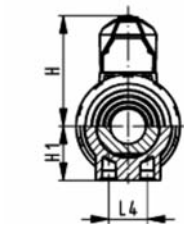
- For easy installation and removal
- z-dimension, valve end and union nut are **not compatible** with type 346 (DN10/15-50) resp. type 370 (DN65-100)
- Ball seals PTFE
- Without mounting inserts
- Threaded valve ends are only enclosed for DN10/15-50

### Option:

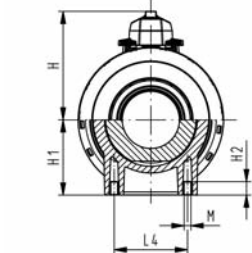
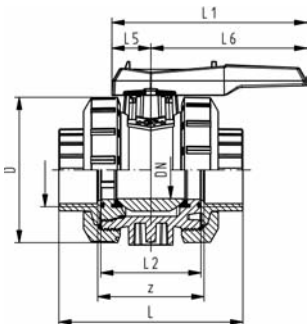
- Individual configuration of the valve (see diagram)
- Multifunctional module with integrated limit switches
- Pneumatic or electric actuators from +GF+



Inch	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	GP	kg
3/8	10	16	71	161 546 301	161 546 311	10	0.180
1/2	15	16	185	161 546 302	161 546 312	10	0.190
3/4	20	16	350	161 546 303	161 546 313	10	0.290
1	25	16	700	161 546 304	161 546 314	10	0.425
1 1/4	32	16	1000	161 546 305	161 546 315	6	0.730
1 1/2	40	16	1600	161 546 306	161 546 316	6	0.990
2	50	16	3100	161 546 307	161 546 317	4	1.775
2 1/2	65	16	5000	161 546 308	161 546 318	-	4.900
3	80	16	7000	161 546 309	161 546 319	-	7.400
4	100	16	11000	161 546 310	161 546 320	-	11.500



Inch	D [mm]	H [mm]	H1 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	z [mm]
3/8	50	57	27	105	77	56	25	32	45	67
1/2	50	57	27	105	77	56	25	32	45	61
3/4	58	67	30	121	97	65	25	39	58	70
1	68	73	36	133	97	71	25	39	58	76
1 1/4	84	90	44	154	128	85	45	54	74	90
1 1/2	97	97	51	164	128	89	45	54	74	94
2	124	116	64	183	152	101	45	66	87	107
2 1/2	166	149	85	233	270	136	70	64	206	144
3	200	161	105	254	270	141	70	64	206	151
4	238	178	123	301	320	164	120	64	256	174





DN10/15 - 50



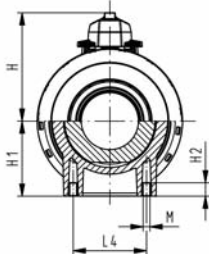
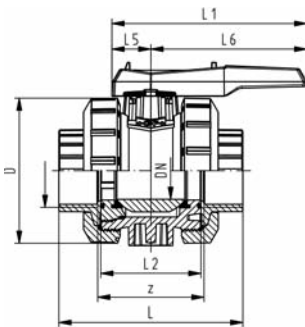
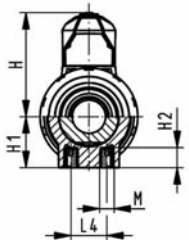
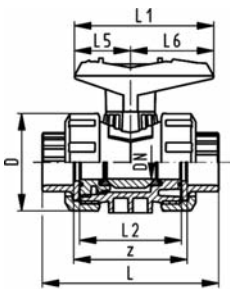
## Ball valve type 546 PVC-U With mounting inserts With solvent cement sockets Inch ASTM Inclusive 2 threaded valve ends NPT

### Model:

- For easy installation and removal
- z-dimension, valve end and union nut are **not compatible** with type 346 (DN10/15-50) resp. type 370 (DN65-100)
- Ball seals PTFE
- Integrated stainless steel mounting inserts
- Threaded valve ends are only enclosed for DN10/15-50

### Option:

- Individual configuration of the valve (see diagram)
- Multifunctional module with integrated limit switches
- Pneumatic or electric actuators from +GF+



Inch	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	GP	kg
3/8	10	16	71	<b>161 546 341</b>	<b>161 546 351</b>	10	0.184
1/2	15	16	185	<b>161 546 342</b>	<b>161 546 352</b>	10	0.194
3/4	20	16	350	<b>161 546 343</b>	<b>161 546 353</b>	10	0.294
1	25	16	700	<b>161 546 344</b>	<b>161 546 354</b>	10	0.429
1 1/4	32	16	1000	<b>161 546 345</b>	<b>161 546 355</b>	6	0.740
1 1/2	40	16	1600	<b>161 546 346</b>	<b>161 546 356</b>	6	1.000
2	50	16	3100	<b>161 546 347</b>	<b>161 546 357</b>	4	1.785
2 1/2	65	16	5000	<b>161 546 348</b>	<b>161 546 358</b>	-	4.900
3	80	16	7000	<b>161 546 349</b>	<b>161 546 359</b>	-	7.400
4	100	16	11000	<b>161 546 350</b>	<b>161 546 360</b>	-	11.500

Inch	D [mm]	H [mm]	H1 [mm]	H2 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	M	z [mm]
3/8	50	57	27	12	105	77	56	25	32	45	6	67
1/2	50	57	27	12	105	77	56	25	32	45	6	61
3/4	58	67	30	12	121	97	65	25	39	58	6	70
1	68	73	36	12	133	97	71	25	39	58	6	76
1 1/4	84	90	44	15	154	128	85	45	54	74	8	90
1 1/2	97	97	51	15	164	128	89	45	54	74	8	94
2	124	116	64	15	183	152	101	45	66	87	8	107
2 1/2	166	149	85	15	233	270	136	70	64	206	8	144
3	200	161	105	15	254	270	141	70	64	206	8	151
4	238	178	123	22	301	320	164	120	64	256	12	174



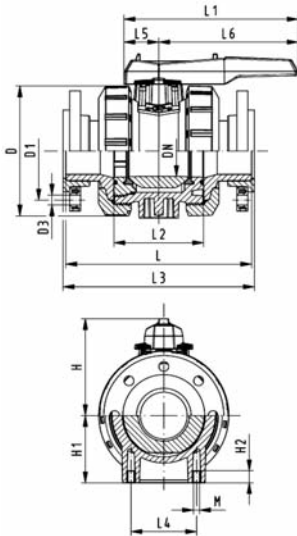
## Ball valve type 546 PVC-U With mounting inserts With backing flanges PP-st Inch ANSI

### Model:

- For easy installation and removal
- z-dimension, valve end and union nut are **not compatible** with type 346 (DN10/15-50) resp. type 370 (DN65-100)
- Ball seals PTFE
- Integrated stainless steel mounting inserts
- For easy installation and removal
- z-dimension, valve end and union nut are **not compatible** with type 346 (DN10/15-50) resp. type 370 (DN65-100)
- Ball seals PTFE
- Integrated stainless steel mounting inserts
- Overall length according to EN 558
- Connecting dimension ANSI/ASME B 16.5 / ASTM D 4024

### Option:

- Individual configuration of the valve (see diagram)
- Multifunctional module with integrated limit switches
- Pneumatic or electric actuators from +GF+
- Individual configuration of the valve (see diagram)
- Multifunctional module with integrated limit switches
- Pneumatic or electric actuators from +GF+



Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	GP	kg						
2 1/2	65	16	5000	<b>161 546 968</b>	<b>161 546 978</b>	-	9.200						
3	80	16	7000	<b>161 546 969</b>	<b>161 546 979</b>	-	12.700						
4	100	16	11000	<b>161 546 970</b>	<b>161 546 980</b>	-	19.000						

Inch	D [mm]	D1 [mm]	D3 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	H [mm]	H1 [mm]	M		
2 1/2	166	140	19	284	270	136	290	70	64	206	149	85	8		
3	200	152	19	300	270	141	310	70	64	206	161	105	8		
4	238	191	19	340	320	164	350	120	64	256	178	123	12		



DN10/15 - 50



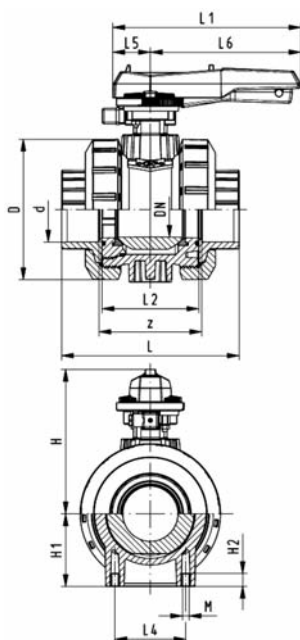
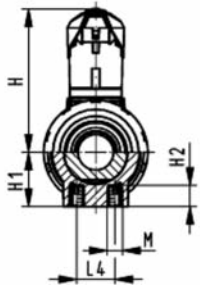
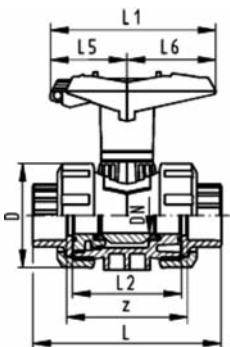
## Ball valve type 546 PVC-U With lockable handle With solvent cement sockets Inch ASTM Inclusive 2 threaded valve ends NPT

### Model:

- For easy installation and removal
- z-dimension, valve end and union nut are **not compatible** with type 346 (DN10/15-50) resp. type 370 (DN65-100)
- Ball seals PTFE
- Lockable hand lever with ratchet settings
- Integrated stainless steel mounting inserts
- Threaded valve ends are only enclosed for DN10/15-50

### Option:

- Individual configuration of the valve (see diagram)
- Multifunctional module with integrated limit switches
- Pneumatic or electric actuators from +GF+



Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	GP	kg
3/8	10	16	71	<b>161 546 361</b>	<b>161 546 371</b>	10	0.195
1/2	15	16	185	<b>161 546 362</b>	<b>161 546 372</b>	10	0.205
3/4	20	16	350	<b>161 546 363</b>	<b>161 546 373</b>	6	0.315
1	25	16	700	<b>161 546 364</b>	<b>161 546 374</b>	6	0.450
1 1/4	32	16	1000	<b>161 546 365</b>	<b>161 546 375</b>	4	0.770
1 1/2	40	16	1600	<b>161 546 366</b>	<b>161 546 376</b>	4	1.030
2	50	16	3100	<b>161 546 367</b>	<b>161 546 377</b>	4	1.820
2 1/2	65	16	5000	<b>161 546 368</b>	<b>161 546 378</b>	-	5.300
3	80	16	7000	<b>161 546 369</b>	<b>161 546 379</b>	-	7.700
4	100	16	11000	<b>161 546 370</b>	<b>161 546 380</b>	-	11.900

Inch	D [mm]	H [mm]	H1 [mm]	H2 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	M	z [mm]
3/8	50	79	27	12	105	87	56	25	42	45	M6	67
1/2	50	79	27	12	105	87	56	25	42	45	M6	61
3/4	58	88	30	12	121	108	65	25	50	58	M6	70
1	68	94	36	12	133	108	71	25	50	58	M6	76
1 1/4	84	113	44	15	154	140	85	45	66	74	M8	90
1 1/2	97	119	51	15	164	140	89	45	66	74	M8	94
2	124	141	64	15	183	165	101	45	78	87	M8	107
2 1/2	166	224	85	15	233	270	136	70	64	206	M8	144
3	200	235	105	15	254	270	141	70	64	206	M8	151
4	238	245	123	22	301	320	164	120	64	256	M12	174

# Find the fitting solution with the Configurator

**Ball valve**  
A01 Ball valve 546

**Material**  
B01 PVC-U

**Dimension**  
C05 DN 10 3/8"  
C06 DN 15 1/2"  
C07 DN 20 3/4"  
C08 DN 25 1"  
C09 DN 32 1 1/4"  
C10 DN 40 1 1/2"  
C11 DN 50 2"

**Version**  
D01 standard, PTFE ball seal  
D02 oilfree, PTFE ball seal  
D03 silicon-free / paint compatible, PTFE ball seal for inch ASTM  
D04 silicon-free / paint compatible, PVDF ball seal for metric

**Seals**  
E01 EPDM seals  
E02 FPM seals

**Threaded inserts**  
F01 without threaded inserts  
F02 with threaded inserts

**Connecting parts**  
G01 PVC-U Cement socket metric  
G02 PVC-U Cement socket JIS  
G03 PVC-U Cement socket inch ASTM  
G04 PVC-U Cement socket inch BS  
G05 PVC-U Cement spigot metric  
G06 PVC-U Threaded socket Rp  
G07 PVC-U Threaded socket Rp reinforced  
G08 PVC-U Threaded socket Rc  
G09 PVC-U Threaded socket NPT  
G30 PP-H Fusion socket metric  
G32 PP-H Socket fusion spigot metric  
G33 PP-H Threaded socket Rp reinforced  
G34 PP-H Threaded socket NPT reinforced  
G35 PP-H Butt fusion spigot SDR11 metric IR-PLUS  
G36 PP-H Butt fusion spigot SDR17.6 metric  
G37 PP-H Butt fusion spigot long SDR11 metric  
G40 PE-100 Fusion socket metric  
G41 PE-100 Butt fusion spigot SDR11 metric  
G42 PE-100 Butt fusion spigot SDR17.6 metric  
G43 PE-100 Butt fusion spigot long SDR11 metric  
G60 Fixed flange PVC-U serrated metric  
G61 Fixed flange PVC-U flat metric  
G62 Fixed flange PVC-U JIS  
G70 Backing flange PVC-U metric  
G71 Backing flange PVC-U inch ANSI  
G72 Backing flange PP-steel metric

**Multi-functional module**  
I01 No multi-functional module  
I02 Empty multi-functional module  
I03 Module with 2 limit switches Ag, Ni  
I04 Module with 2 limit switches Au  
I05 Module with 2 inductive switches Namur  
I06 Module with 2 inductive switches PNP  
I07 Module with 2 inductive switches NPN

**Handle**  
K01 Standard handle red  
K02 Standard handle black  
K11 Multi-functional handle red

**Mounting plate**  
L01 without mounting plate  
L02 with mounting plate

## Example:

Type 546 PVC-U, dimension DN 32  
PTFE ball seal, EPDM seals,  
with threaded inserts and mounting plate,  
connecting part left: PVC-U cement socket metric,  
right: PE-100 butt fusion spigot lang SDR11 metric

**That's all it takes to configure your ball valve.**



## Pneumatische Antriebe PA11/PA21

P01 PA 11/21 FC  
P02 PA 11/21 FO  
P03 PA 11/21 DA

**Manual override**  
Q01 without manual override  
Q02 with manual override

**Stroke limiter**  
R01 without stroke limiter  
R02 with stroke limiter

A01 B01 C09 D01 E01 F02 G01 G41 I05 **K** L01

left right

P02 Q01 R01 =



# Copiable

## Configurator +GF+ Ball Valve Type 546 PVC-U

### Ball valve

- A01 Ball valve 546
- A02 Linear Ball Valve 110

### Material

- B01 PVC-U

### Dimension

- C05 DN 10 3/8"
- C06 DN 15 1/2"
- C07 DN 20 3/4"
- C08 DN 25 1"
- C09 DN 32 1 1/4"
- C10 DN 40 1 1/2"
- C11 DN 50 2"

### Version

- D01 standard, PTFE ball seal
- D02 oilfree, PTFE ball seal
- D03 silicon-free / paint compatible, PTFE ball seal for inch ASTM
- D04 silicon-free / paint compatible, PVDF ball seal for metric

### Seals

- E01 EPDM seals
- E02 FPM seals
- E03 FFPM (Kalrez) seals

### Threaded inserts

- F01 without threaded inserts
- F02 with threaded inserts

### Connection parts

- G01 PVC-U Cement socket metric
- G02 PVC-U Cement socket JIS
- G03 PVC-U Cement socket inch ASTM
- G04 PVC-U Cement socket inch BS
- G05 PVC-U Cement spigot metric
- G06 PVC-U Threaded socket Rp
- G07 PVC-U Threaded socket Rp reinforced
- G08 PVC-U Threaded socket Rc
- G09 PVC-U Threaded socket NPT
- G30 PP-H Fusion socket metric
- G32 PP-H Socket fusion spigot metric
- G33 PP-H Threaded socket Rp reinforced
- G34 PP-H Threaded socket NPT reinforced
- G35 PP-H Butt fusion spigot SDR11 metric IR-PLUS
- G36 PP-H Butt fusion spigot SDR17.6 metric
- G37 PP-H Butt fusion spigot long SDR11 metric
- G40 PE-100 Fusion socket metric
- G41 PE-100 Butt fusion spigot SDR11 metric
- G42 PE-100 Butt fusion spigot SDR17.6 metric
- G43 PE-100 Butt fusion spigot long SDR11 metric
- G60 Fixed flange PVC-U serrated metric
- G61 Fixed flange PVC-U flat metric
- G62 Fixed flange PVC-U JIS
- G70 Backing flange PVC-U metric
- G71 Backing flange PVC-U inch ANSI
- G72 Backing flange PP-steel metric
- G73 Backing flange PP-steel inch ANSI
- G80 PVC-U Valve end blank

### Multi-funktional module

- I01 No multi-functional module
- I02 Empty multi-functional module
- I03 Module with 2 limit switches Ag, Ni
- I04 Module with 2 limit switches Au
- I05 Module with 2 inductive switches Namur
- I06 Module with 2 inductive switches PNP
- I07 Module with 2 inductive switches NPN

### Handle

- K01 Standard handle red
- K02 Standard handle black
- K11 Multi-functional handle red

### Mounting

- L01 without mounting plate
- L02 with mounting plate

You will find a large selection of different versions in our range of products. New system elements also provide you with new opportunities for use. In order for us to supply exactly the ball valve you need for your application, we put together a selection menu for you (the maximum working pressure of the whole valve is determined by the maximum permissible nominal pressure of the connection part).

**We supply what you put together.**

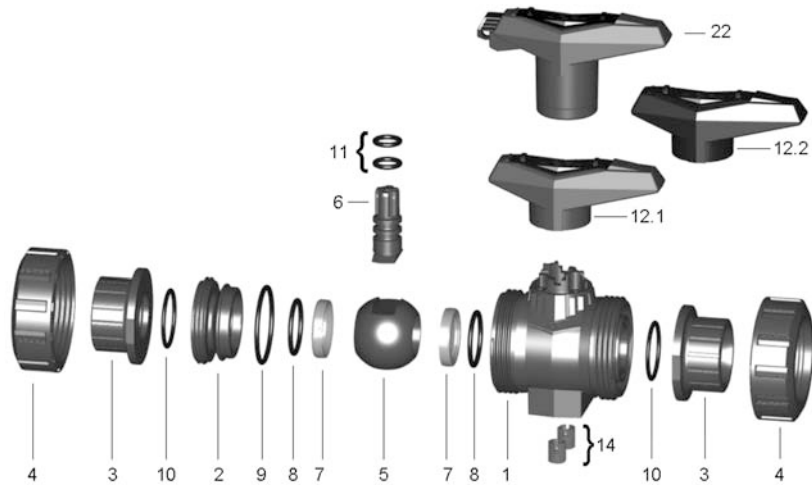
<b>A01</b>	<b>B01</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>F</b>	<b>G</b>	<b>G</b>	<b>I</b>	<b>K</b>	<b>L</b>
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left

right

# Spare parts ball valve type 546

## Spare parts ball valve type 546



### Central part

#### Model:

- Every connecting pieces and union nuts are listed on product range industry valves
- Ball seals standard in PTFE
- Central part consisting of: body (1), union bush (2), ball (5), stem (6), ball-, backing-, body-, face- and stem seal (7-11), standard lever (12) and threaded inserts stainless steel (14)

d [mm]	Inch	DN [mm]	PVC-U EPDM Code	PVC-U FPM Code	kg
16	3/8	10	161 486 151	161 486 163	0.095
20	1/2	15	161 486 151	161 486 163	0.095
25	3/4	20	161 486 152	161 486 164	0.150
32	1	25	161 486 153	161 486 165	0.220
40	1 1/4	32	161 486 154	161 486 166	0.390
50	1 1/2	40	161 486 155	161 486 167	0.510
63	2	50	161 486 156	161 486 168	0.895
75	2 1/2	65	161 486 157	161 486 169	3.330
90	3	80	161 486 158	161 486 170	4.850
110	4	100	161 486 159	161 486 171	7.650



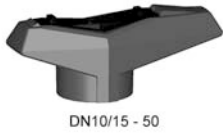
### Ball set

#### Model:

- Ball seals standard in PTFE
- Ball set consisting of: ball (5), stem (6), ball-, backing-, body- and stem seal (7-9,11)

d [mm]	Inch	DN [mm]	PVC-U EPDM Code	PVC-U FPM Code	kg
16	3/8	10	161 486 375	161 486 385	0.016
20	1/2	15	161 486 375	161 486 385	0.016
25	3/4	20	161 486 376	161 486 386	0.025
32	1	25	161 486 377	161 486 387	0.042
40	1 1/4	32	161 486 378	161 486 388	0.082
50	1 1/2	40	161 486 379	161 486 389	0.130
63	2	50	161 486 380	161 486 390	0.250
75	2 1/2	65	161 486 381	161 486 391	0.493
90	3	80	161 486 382	161 486 392	0.777
110	4	100	161 486 383	161 486 393	1.288





DN10/15 - 50



DN10/15 - 50



## Lever

d [mm]	Inch	DN [mm]	Standard lever red Code	Standard lever black Code	Multifunctional lever Code	kg
16	3/8	10	167 484 088	167 484 076	167 484 100	0.026
20	1/2	15	167 484 088	167 484 076	167 484 100	0.026
25	3/4	20	167 484 089	167 484 077	167 484 101	0.045
32	1	25	167 484 090	167 484 078	167 484 102	0.045
40	1 1/4	32	167 484 091	167 484 079	167 484 103	0.082
50	1 1/2	40	167 484 092	167 484 080	167 484 104	0.082
63	2	50	167 484 093	167 484 081	167 484 105	0.104
75	2 1/2	65	167 484 094	167 484 082	161 486 689	0.480
90	3	80	167 484 095	167 484 083	161 486 690	0.480
110	4	100	167 484 096	167 484 084	161 486 691	0.480



## Face seal

d [mm]	Inch	DN [mm]	EPDM Code	FPM Code	kg
16	3/8	10	748 410 059	749 410 059	0.002
20	1/2	15	748 410 059	749 410 059	0.002
25	3/4	20	748 410 106	749 410 106	0.002
32	1	25	748 410 151	749 410 151	0.002
40	1 1/4	32	748 410 062	749 410 062	0.005
50	1 1/2	40	748 410 003	749 410 003	0.007
63	2	50	748 410 231	749 410 231	0.002
75	2 1/2	65	748 410 119	749 410 119	0.010
90	3	80	748 410 023	749 410 023	0.012
110	4	100	748 410 254	749 410 254	0.030



## Seal set

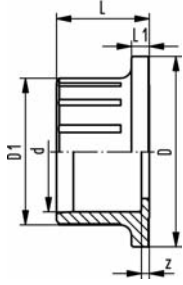
### Model:

- Seal set consisting of: backing-, body-, face- and stem seal (8-11)

d [mm]	Inch	DN [mm]	EPDM Code	FPM Code	kg
16	3/8	10	161 486 400	161 486 410	0.003
20	1/2	15	161 486 400	161 486 410	0.003
25	3/4	20	161 486 401	161 486 411	0.005
32	1	25	161 486 402	161 486 412	0.006
40	1 1/4	32	161 486 403	161 486 413	0.010
50	1 1/2	40	161 486 404	161 486 414	0.023
63	2	50	161 486 405	161 486 415	0.031
75	2 1/2	65	161 486 406	161 486 416	0.024
90	3	80	161 486 407	161 486 417	0.034
110	4	100	161 486 408	161 486 418	0.058



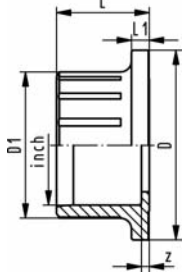
## Valve end 546 PVC-U (G01) With solvent cement socket metric



d [mm]	PN	Code	GP	kg	D [mm]	D1 [mm]	L [mm]	L1 [mm]	z [mm]
16	16	<b>161 490 666</b>	-	0.009	38	23	18	4	4
20	16	<b>161 490 667</b>	-	0.011	38	27	20	4	4
25	16	<b>161 490 668</b>	-	0.016	44	33	23	5	4
32	16	<b>161 490 669</b>	-	0.025	53	41	26	5	4
40	16	<b>161 490 670</b>	-	0.043	65	51	31	5	5
50	16	<b>161 490 671</b>	-	0.064	77	62	34	6	3
63	16	<b>161 490 672</b>	-	0.119	99	77	41	7	3
75	16	<b>161 490 673</b>	-	0.227	125	92	49	9	4
90	16	<b>161 490 674</b>	-	0.376	150	110	57	10	5
110	16	<b>161 490 675</b>	-	0.639	180	134	69	11	5



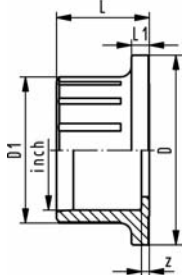
## Valve end 546 PVC-U (G03) With solvent cement socket Inch ASTM



Inch	d [mm]	PN	Code	GP	kg	D [mm]	D1 [mm]	L [mm]	L1 [mm]	z [mm]
3/8	16	16	<b>161 490 712</b>	-	0.012	38	24	25	4	6
1/2	20	16	<b>161 490 713</b>	-	0.014	38	30	25	4	2
3/4	25	16	<b>161 490 714</b>	-	0.020	44	35	28	5	3
1	32	16	<b>161 490 715</b>	-	0.031	53	43	31	5	3
1 1/4	40	16	<b>161 490 716</b>	-	0.046	65	53	34	5	3
1 1/2	50	16	<b>161 490 717</b>	-	0.067	77	60	38	6	3
2	63	16	<b>161 490 718</b>	-	0.118	99	73	41	7	3
2 1/2	75	16	<b>161 490 719</b>	-	0.241	125	92	49	9	4
3	90	16	<b>161 490 720</b>	-	0.394	150	110	57	10	9
4	110	16	<b>161 490 721</b>	-	0.582	180	134	69	11	11



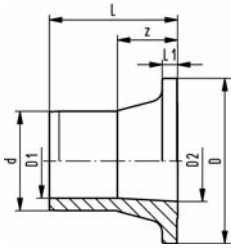
## Valve end 546 PVC-U (G04) With solvent cement socket Inch BS



Inch	d [mm]	PN	Code	GP	kg	D [mm]	D1 [mm]	L [mm]	L1 [mm]	z [mm]
3/8	16	16	<b>161 490 734</b>	-	0.009	38	23	18	4	2
1/2	20	16	<b>161 490 735</b>	-	0.009	38	27	20	4	2
3/4	25	16	<b>161 490 736</b>	-	0.013	44	33	23	5	2
1	32	16	<b>161 490 737</b>	-	0.022	53	41	26	5	2
1 1/4	40	16	<b>161 490 738</b>	-	0.036	65	51	31	5	2
1 1/2	50	16	<b>161 490 739</b>	-	0.071	77	62	34	6	4
2	63	16	<b>161 490 740</b>	-	0.135	99	77	41	7	5
	75	16	<b>161 490 673</b>	-	0.227	125	92	49	9	4
3	90	16	<b>161 490 742</b>	-	0.390	150	110	57	10	6
4	110	16	<b>161 490 743</b>	-	0.577	180	134	69	11	5



## Valve end 546 PVC-U (G05) With solvent cement spigot metric



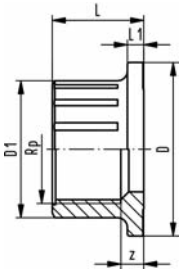
d [mm]	PN	Code	GP	kg	D [mm]	D1 [mm]	D2 [mm]	L [mm]	L1 [mm]	z [mm]
16	16	161 490 701	-	0.011	38	10	16	29	4	15
20	16	161 490 702	-	0.014	38	14	16	34	4	18
25	16	161 490 703	-	0.021	44	19	20	39	5	20
32	16	161 490 704	-	0.033	53	24	26	42	5	20
40	16	161 490 705	-	0.050	65	31	33	45	5	19
50	16	161 490 706	-	0.085	77	39	41	53	6	22
63	16	161 490 707	-	0.161	99	49	51	62	7	24
75	16	161 490 708	-	0.302	125	58	65	74	9	30
90	16	161 490 709	-	0.467	150	70	90	80	10	28
110	16	161 490 710	-	0.747	180	86	100	88	11	27



## Valve end 546 PVC-U (G06) With threaded socket Rp

### Model:

- Connection to plastic threads only
- Do not use thread sealing pastes that are harmful to PVC-U



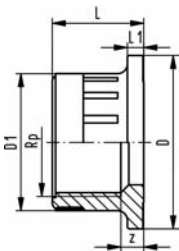
Rp [inch]	PN	Code	GP	kg	D [mm]	D1 [mm]	L [mm]	L1 [mm]	z [mm]
3/8	10	161 490 690	-	0.011	38	24	20	4	7
1/2	10	161 490 691	-	0.013	38	28	22	4	6
3/4	10	161 490 692	-	0.019	44	34	25	5	7
1	10	161 490 693	-	0.031	53	42	28	5	7
1 1/4	10	161 490 694	-	0.047	65	52	30	5	7
1 1/2	10	161 490 695	-	0.081	77	63	32	6	9
2	10	161 490 696	-	0.150	99	78	38	7	10
2 1/2	10	161 490 697	-	0.255	125	58	49	9	18
3	10	161 490 698	-	0.436	150	110	57	10	23
4	10	161 490 699	-	0.645	180	134	69	11	29



## Valve end 546 PVC-U (G07) With threaded socket Rp reinforced

### Model:

- Connection to plastic or metal threads
- Reinforcing ring stainless (A2)
- Do not use thread sealing pastes that are harmful to PVC-U



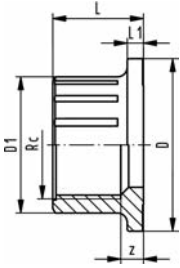
Rp [inch]	PN	Code	GP	kg	D [mm]	D1 [mm]	L [mm]	L1 [mm]	z [mm]
3/8	16	161 490 825	-	0.013	38	24	20	4	7
1/2	16	161 490 826	-	0.016	38	28	22	4	6
3/4	16	161 490 827	-	0.023	44	34	25	5	7
1	16	161 490 828	-	0.040	53	42	28	5	7
1 1/4	16	161 490 829	-	0.058	65	52	30	5	7
1 1/2	16	161 490 830	-	0.097	77	63	32	6	9
2	16	161 490 831	-	0.166	99	78	38	7	10



## Valve end 546 PVC-U (G08) With threaded socket Rc

### Model:

- Connection to plastic threads only
- Do not use thread sealing pastes that are harmful to PVC-U



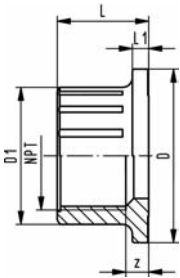
Rc [inch]	PN	Code	GP	kg	D [mm]	D1 [mm]	L [mm]	L1 [mm]	z [mm]
1/2	10	161 490 755	-	0.013	38	28	22	4	5
3/4	10	161 490 756	-	0.019	44	34	25	5	7
1	10	161 490 757	-	0.033	53	42	28	5	7
1 1/4	10	161 490 758	-	0.047	65	52	30	5	6
1 1/2	10	161 490 759	-	0.081	77	63	32	6	8
2	10	161 490 760	-	0.150	99	78	38	7	9
2 1/2	10	161 490 761	-	0.261	125	58	49	9	18
3	10	161 490 762	-	0.444	150	110	57	10	23
4	10	161 490 763	-	0.682	180	134	69	11	29



## Valve end 546 PVC-U (G09) With threaded socket NPT

### Model:

- Connection to plastic threads only
- Do not use thread sealing pastes that are harmful to PVC-U



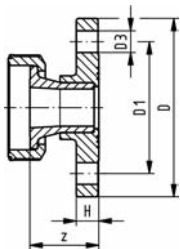
NPT [inch]	PN	Code	GP	kg	D [mm]	D1 [mm]	L [mm]	L1 [mm]	z [mm]
3/8	10	161 490 723	-	0.014	38	26	21	4	7
1/2	10	161 490 724	-	0.019	38	33	21	4	4
3/4	10	161 490 725	-	0.026	44	39	23	5	5
1	10	161 490 726	-	0.043	53	47	28	5	6
1 1/4	10	161 490 727	-	0.064	65	57	31	5	7
1 1/2	10	161 490 728	-	0.093	77	65	34	6	11
2	10	161 490 729	-	0.157	99	77	41	7	17
2 1/2	10	161 490 730	-	0.287	125	58	49	9	15
3	10	161 490 731	-	0.451	150	110	57	10	21
4	10	161 490 732	-	0.692	180	134	69	11	31



## Valve end 546 PVC-U (G60) Assembly with fixed flange PVC-U metric

### Model:

- Joint made with special adhesive Tangit for PVC-U
- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504
- Combined jointing face: flat and serrated



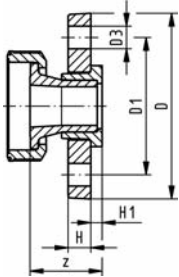
d [mm]	DN [mm]	PN	Code	GP	kg	D [mm]	D1 [mm]	D3 [mm]	H [mm]	z [mm]
20	15	16	161 486 360	-	0.131	95	65	14	12	37
25	20	16	161 486 361	-	0.175	105	75	14	13	42
32	25	16	161 486 362	-	0.256	115	85	14	15	45
40	32	16	161 486 363	-	0.417	140	100	18	17	48
50	40	16	161 486 364	-	0.544	150	110	18	18	56
63	50	16	161 486 365	-	0.861	165	125	18	20	65



## Valve end 546 PVC-U (G70) Assembly with backing flange PVC-U metric

### Model:

- Joint made with special adhesive Tangit for PVC-U
- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504



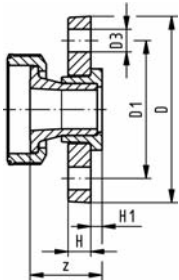
d [mm]	DN [mm]	PN	Code	GP	kg	D [mm]	D1 [mm]	D3 [mm]	H [mm]	H1 [mm]	z [mm]
20	15	16	161 486 265	-	0.110	95	65	14	11	6	37
25	20	16	161 486 266	-	0.155	105	75	14	12	7	42
32	25	16	161 486 267	-	0.230	115	85	14	14	7	45
40	32	16	161 486 268	-	0.360	140	100	18	15	8	48
50	40	16	161 486 269	-	0.500	150	110	18	16	8	56
63	50	16	161 486 270	-	0.770	165	125	18	18	9	65
75	65	10	161 486 271	-	1.429	185	145	18	19	10	77
90	80	10	161 486 272	-	2.109	200	160	18	20	11	85
110	100	10	161 486 273	-	3.067	220	180	18	22	12	93



## Valve end 546 PVC-U (G71) Assembly with backing flange PVC-U Inch ANSI

### Model:

- Joint made with special adhesive Tangit for PVC-U
- Connecting dimensions: ANSI/ASME B 16.5, ASTM D 4024, BS 1560 (bolt circle 150 lbs)



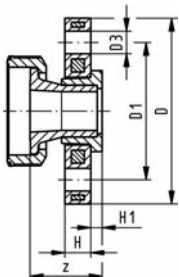
Inch	d [mm]	PN	Code	GP	kg	D [mm]	D1 [mm]	D3 [mm]	H [mm]	H1 [mm]	z [mm]
1/2	20	16	161 486 275	-	0.110	95	60	14	11	6	37
3/4	25	16	161 486 276	-	0.150	105	70	14	12	7	42
1	32	16	161 486 277	-	0.225	115	79	14	14	7	45
1 1/4	40	16	161 486 278	-	0.375	140	89	18	15	8	48
1 1/2	50	16	161 486 279	-	0.495	150	98	18	16	8	56
2	63	16	161 486 280	-	0.760	165	121	18	18	9	65
2 1/2	75	10	161 486 281	-	1.429	185	140	19	19	10	77
3	90	10	161 486 282	-	2.109	200	152	19	20	11	85
4	110	10	161 486 283	-	3.067	220	190	19	22	12	93



## Valve end 546 PVC-U (G72) Assembly with backing flange PP-st metric

### Model:

- Joint made with special adhesive Tangit for PVC-U
- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504



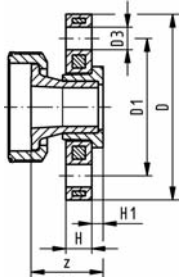
d [mm]	DN [mm]	PN	Code	GP	kg	D [mm]	D1 [mm]	D3 [mm]	H [mm]	H1 [mm]	z [mm]
20	15	16	161 486 285	-	0.265	95	65	14	12	6	37
25	20	16	161 486 286	-	0.325	105	75	14	12	7	42
32	25	16	161 486 287	-	0.530	115	85	14	16	7	45
40	32	16	161 486 288	-	0.815	140	100	18	16	8	48
50	40	16	161 486 289	-	1.070	150	110	18	18	8	56
63	50	16	161 486 290	-	1.395	165	125	18	18	9	65
75	65	16	161 486 291	-	2.319	185	145	18	18	10	77
90	80	16	161 486 292	-	2.905	200	160	18	20	11	85
110	100	16	161 486 293	-	4.079	220	180	18	20	12	93



## Valve end 546 PVC-U (G73) Assembly with backing flange PP-st inch

### Model:

- Joint made with special adhesive Tangit for PVC-U
- Connecting dimensions: ANSI/ASME B 16.5, ASTM D 4024, BS 1560 (bolt circle 150 lbs)



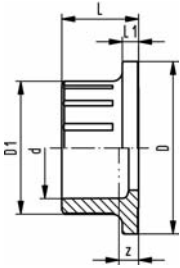
Inch	DN [mm]	PN	Code	GP	kg	D [mm]	D1 [mm]	D3 [mm]	H [mm]	H1 [mm]	z [mm]
1/2	15	16	<b>161 486 425</b>	-	0.250	95	60	16	12	6	37
3/4	20	16	<b>161 486 426</b>	-	0.310	105	70	16	12	7	42
1	25	16	<b>161 486 427</b>	-	0.520	115	79	16	16	7	45
1 1/4	32	16	<b>161 486 428</b>	-	0.835	140	89	16	16	8	48
1 1/2	40	16	<b>161 486 429</b>	-	1.110	150	98	16	18	8	56
2	50	16	<b>161 486 430</b>	-	1.385	165	121	19	18	9	65
2 1/2	65	16	<b>161 486 431</b>	-	2.319	185	140	19	18	10	77
3	80	16	<b>161 486 432</b>	-	2.905	200	152	19	20	11	85
4	100	16	<b>161 486 433</b>	-	4.079	229	190	19	20	12	93



## Valve end 546 PP-H (G30) With fusion socket metric

### Model:

- Material: PP-H



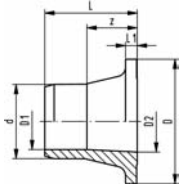
d [mm]	PN	Code	GP	kg	D [mm]	D1 [mm]	L [mm]	L1 [mm]	z [mm]
16	10	<b>167 482 900</b>	-	0.006	38	23	19	4	5
20	10	<b>167 482 901</b>	-	0.007	38	27	20	4	5
25	10	<b>167 482 902</b>	-	0.011	44	33	22	5	6
32	10	<b>167 482 903</b>	-	0.017	53	41	24	5	6
40	10	<b>167 482 904</b>	-	0.027	65	51	26	5	7
50	10	<b>167 482 905</b>	-	0.040	77	62	29	6	8
63	10	<b>167 482 906</b>	-	0.070	99	77	34	7	6
75	10	<b>167 482 907</b>	-	0.168	125	92	49	9	20
90	10	<b>167 482 908</b>	-	0.272	150	110	57	10	24
110	10	<b>167 482 909</b>	-	0.467	180	134	69	11	30



## Valve end 546 PP-H (G32) With socket fusion spigot metric

### Model:

- Material: PP-H



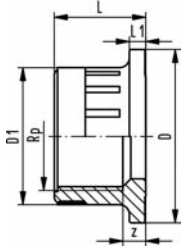
d [mm]	PN	Code	GP	kg	D [mm]	D1 [mm]	D2 [mm]	L [mm]	L1 [mm]	L2 [mm]	z [mm]
16	10	<b>167 482 922</b>	-	0.007	38	10	16	27	4	13	14
20	10	<b>167 482 923</b>	-	0.009	38	14	16	32	4	14	18
25	10	<b>167 482 924</b>	-	0.013	44	19	20	37	5	16	21
32	10	<b>167 482 925</b>	-	0.021	53	24	26	40	5	18	22
40	10	<b>167 482 926</b>	-	0.032	65	31	33	43	5	20	23
50	10	<b>167 482 927</b>	-	0.055	77	39	41	51	6	23	28
63	10	<b>167 482 928</b>	-	0.103	99	49	51	60	7	27	33
75	10	<b>167 482 929</b>	-	0.195	125	58	65	72	9	48	24
90	10	<b>167 482 930</b>	-	0.307	150	70	90	78	10	48	29
110	10	<b>167 482 931</b>	-	0.495	180	86	100	86	11	54	32



## Valve end 546 PP-H (G33) With threaded socket Rp reinforced

### Model:

- Material: PP-H
- Connection to plastic or metal threads
- Reinforcing ring stainless (A2)
- Do not use thread sealing pastes that are harmful to PP



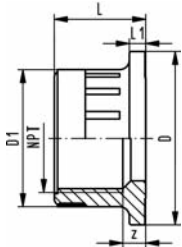
Rp [inch]	PN	Code	GP	kg	D [mm]	D1 [mm]	L [mm]	L1 [mm]	z [mm]
3/8	16	<b>167 482 911</b>	-	0.008	38	24	20	4	7
1/2	16	<b>167 482 912</b>	-	0.009	38	28	21	4	6
3/4	16	<b>167 482 913</b>	-	0.012	44	34	23	5	7
1	16	<b>167 482 914</b>	-	0.024	53	42	28	5	7
1 1/4	16	<b>167 482 915</b>	-	0.037	65	52	31	5	7
1 1/2	16	<b>167 482 916</b>	-	0.052	77	63	34	6	9
2	16	<b>167 482 917</b>	-	0.091	99	78	41	7	10



## Valve end 546 PP-H (G34) With threaded socket NPT reinforced

### Model:

- Material: PP-H
- Connection to plastic or metal threads
- Reinforcing ring stainless (A2)
- Do not use thread sealing pastes that are harmful to PP



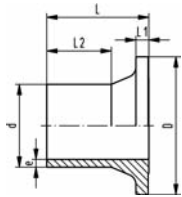
NPT [inch]	PN	Code	GP	kg	D [mm]	D1 [mm]	L [mm]	L1 [mm]	z [mm]
3/8	16	<b>167 482 966</b>	-	0.008	38	26	20	4	7
1/2	16	<b>167 482 967</b>	-	0.009	38	33	21	4	4
3/4	16	<b>167 482 968</b>	-	0.012	44	39	23	5	5
1	16	<b>167 482 969</b>	-	0.024	53	47	28	5	6
1 1/4	16	<b>167 482 970</b>	-	0.037	65	57	31	5	7
1 1/2	16	<b>167 482 971</b>	-	0.052	77	65	34	6	11
2	16	<b>167 482 972</b>	-	0.091	99	77	41	7	17



## Valve end 546 PP-H (G35) With butt fusion spigot IR-Plus® SDR11 metric

### Model:

- Material: PP-H



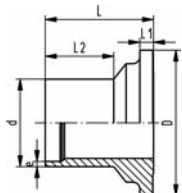
d [mm]	FM	PN	Code	GP	kg	D [mm]	e [mm]	L [mm]	L1 [mm]	L2 [mm]
20	IR	10	<b>167 482 945</b>	-	0.007	38	1,9	37	4	25
25	IR	10	<b>167 482 946</b>	-	0.011	44	2,3	39	5	25
32	IR	10	<b>167 482 947</b>	-	0.017	53	2,9	40	5	25
40	IR	10	<b>167 482 948</b>	-	0.028	65	3,7	43	5	25
50	IR	10	<b>167 482 949</b>	-	0.045	77	4,6	51	6	25
63	IR	10	<b>167 482 950</b>	-	0.096	99	5,8	60	7	28
75	IR	10	<b>167 482 951</b>	-	0.193	125	6,8	65	9	41
90	IR	10	<b>167 482 952</b>	-	0.270	150	8,2	62	10	33
110	IR	10	<b>167 482 953</b>	-	0.421	180	10,0	69	11	37



## Valve end 546 PP-H (G36) With butt fusion spigot IR-Plus® SDR17,6 metric

### Model:

- Material: PP-H

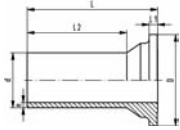


d [mm]	FM	PN	Code	GP	kg	D [mm]	e [mm]	L [mm]	L1 [mm]	L2 [mm]
40	IR	6	<b>167 482 937</b>	-	0.032	65	2,3	43	5	25
50	IR	6	<b>167 482 938</b>	-	0.053	77	2,9	51	6	25
63	IR	6	<b>167 482 939</b>	-	0.099	99	3,6	60	7	28
75	IR	6	<b>167 482 940</b>	-	0.189	125	4.65	65	9	41
90	IR	6	<b>167 482 941</b>	-	0.265	150	5.5	62	10	33
110	IR	6	<b>167 482 942</b>	-	0.414	180	6.75	69	11	37



## Valve end 546 PP-H (G37) With butt fusion spigot long SDR11 metric

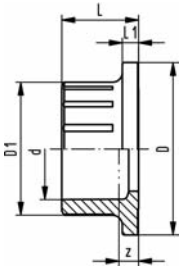
Model:  
• Material: PP-H



d [mm]	PN	Code	GP	kg	D [mm]	e [mm]	L [mm]	L1 [mm]	L2 [mm]
20	10	<b>167 482 956</b>	-	0.012	38	2,3	69	4	53
25	10	<b>167 482 957</b>	-	0.019	44	2,3	76	5	58
32	10	<b>167 482 958</b>	-	0.029	53	2,9	76	5	58
40	10	<b>167 482 959</b>	-	0.048	65	3,7	82	5	61
50	10	<b>167 482 960</b>	-	0.082	77	4,6	91	6	63
63	10	<b>167 482 961</b>	-	0.157	99	5,8	110	7	77



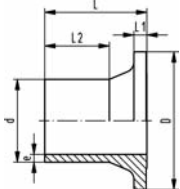
## Valve end 546 PE 100 (G40) With fusion socket metric



d [mm]	PN	Code	GP	kg	D [mm]	D1 [mm]	L [mm]	L1 [mm]	z [mm]
16	16	<b>193 480 175</b>	-	0.007	38	23	19	4	5
20	16	<b>193 480 176</b>	-	0.008	38	27	20	4	5
25	16	<b>193 480 177</b>	-	0.012	44	33	22	5	6
32	16	<b>193 480 178</b>	-	0.019	53	41	24	5	6
40	16	<b>193 480 179</b>	-	0.033	65	51	26	5	7
50	16	<b>193 480 180</b>	-	0.050	77	62	29	6	8
63	16	<b>193 480 181</b>	-	0.095	99	77	34	7	8



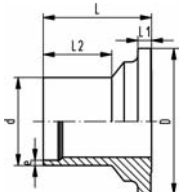
## Valve end 546 PE 100 (G41) With butt fusion spigot IR-Plus® SDR11 metric



d [mm]	FM	PN	Code	GP	kg	D [mm]	e [mm]	L [mm]	L1 [mm]	L2 [mm]
20	IR	16	<b>193 480 102</b>	-	0.007	38	1,9	37	4	25
25	IR	16	<b>193 480 103</b>	-	0.011	44	2,3	39	5	25
32	IR	16	<b>193 480 104</b>	-	0.017	53	2,9	40	5	25
40	IR	16	<b>193 480 105</b>	-	0.028	65	3,7	43	5	25
50	IR	16	<b>193 480 106</b>	-	0.045	77	4,6	51	6	25
63	IR	16	<b>193 480 107</b>	-	0.096	99	5,8	60	7	28

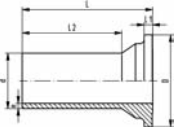


## Valve end 546 PE 100 (G42) With butt fusion spigot IR-Plus® SDR17,6 metric



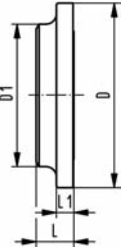
d [mm]	FM	PN	Code	GP	kg	D [mm]	e [mm]	L [mm]	L1 [mm]	L2 [mm]
40	IR	10	<b>193 480 086</b>	-	0.028	65	2,3	43	5	25
50	IR	10	<b>193 480 087</b>	-	0.045	77	2,9	51	6	25
63	IR	10	<b>193 480 088</b>	-	0.096	99	3,6	60	7	28





## Valve end 546 PE 100 (G43) With butt fusion spigot long SDR11 metric

d [mm]	PN	Code	GP	kg	D [mm]	e [mm]	L [mm]	L1 [mm]	L2 [mm]
20	16	<b>193 480 152</b>	-	0.012	38	2,25	69	4	53
25	16	<b>193 480 153</b>	-	0.019	44	2,3	76	5	58
32	16	<b>193 480 154</b>	-	0.029	53	2,9	76	5	58
40	16	<b>193 480 155</b>	-	0.048	65	3,7	82	5	61
50	16	<b>193 480 156</b>	-	0.082	77	4,6	91	6	63
63	16	<b>193 480 157</b>	-	0.157	99	5,8	110	7	77
75	16	<b>193 480 158</b>	-	0.277	125	6,8	125	9	89
90	16	<b>193 480 159</b>	-	0.439	150	8,2	140	10	103
110	16	<b>193 480 160</b>	-	0.731	180	10,0	160	11	117

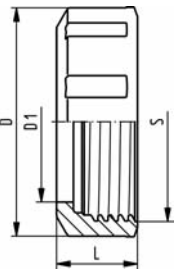


## Valve end blank 546 PVC-U (G80)

Model:

- Flat sealing faces

d [mm]	DN [mm]	Inch	PN	Code	GP	kg	D [mm]	D1 [mm]	L [mm]	L1 [mm]
20	15	½	16	<b>161 490 837</b>	-	0.009	38	23	8	4
25	20	¾	16	<b>161 490 838</b>	-	0.013	44	33	10	5
32	25	1	16	<b>161 490 839</b>	-	0.021	53	41	11	5
40	32	1 ¼	16	<b>161 490 840</b>	-	0.034	65	51	11	5
50	40	1 ½	16	<b>161 490 841</b>	-	0.057	77	62	14	6
63	50	2	16	<b>161 490 842</b>	-	0.113	99	77	17	7

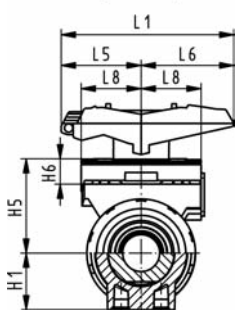
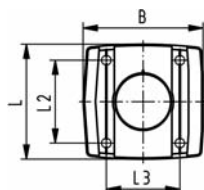


## Union nut 546 PVC-U

d [mm]	DN [mm]	Code	GP	kg	D [mm]	D1 [mm]	L [mm]	S [mm]	Closest inch
16 - 20	10 - 15	<b>161 490 538</b>	-	0.019	50	34	19	42	¾ - ½
25	20	<b>161 490 539</b>	-	0.026	58	39	20	48	¾
32	25	<b>161 490 540</b>	-	0.041	68	47	24	58	1
40	32	<b>161 490 541</b>	-	0.077	84	57	27	71	1 ¼
50	40	<b>161 490 542</b>	-	0.111	97	65	30	84	1 ½
63	50	<b>161 490 543</b>	-	0.191	124	79	36	106	2
75	65	<b>161 490 544</b>	-	0.562	166	94	48	135	2 ½
90	80	<b>161 490 545</b>	-	0.882	200	113	54	135	3
110	100	<b>161 490 546</b>	-	1.355	238	137	60	198	4



DN10/15 - 50



## Multifunctional module (I02) PP-GF Module empty

### Model:

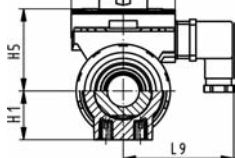
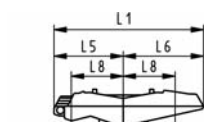
- Accessory to Ball Valve Type 546
- Multifunctional module acts as an intermediate element for actuators
- Including screws to mount the module and stainless steel coupling piece (V2A) for dimension DN65-100
- The multifunctional module from d75 - d110 has a master gauge F07 according to EN ISO 5211.

d-d [mm]	Inch [inch]	DN-DN [mm]	Code	GP	kg
16 - 20	3/8 - 1/2	10 - 15	<b>167 482 680</b>	-	0.055
25 - 32	3/4 - 1	20 - 25	<b>167 482 681</b>	-	0.070
40 - 50	1 1/4 - 1 1/2	32 - 40	<b>167 482 682</b>	-	0.080
- 63	2	- 50	<b>167 482 683</b>	-	0.120
75 - 90	2 1/2 - 3	65 - 80	<b>167 482 684</b>	-	0.135
- 110	4	- 100	<b>167 482 685</b>	-	0.175

d-d [mm]	B [mm]	H1 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L5 [mm]	L6 [mm]	L8 [mm]
16 - 20	67	27	50	17	72	87	54	40	42	45	34
25 - 32	75	30	53	16	72	108	52	46	50	58	38
40 - 50	81	44	72	16	80	140	60	50	66	75	41
- 63	91	64	94	19	93	165	68	65	78	87	46
75 - 90	90	85	157	23	85	270			64	206	
- 110	106	123	175	23	97	320			64	256	



DN10/15 - 50



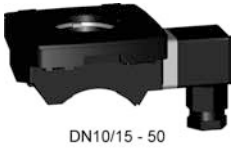
## Multifunctional module (I03) PP-GF With mechanical limit switches Ag Ni

### Model:

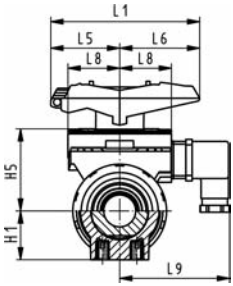
- Accessory to Ball Valve Type 546
- Multifunctional module acts as an intermediate element for actuators
- Including Plug 3P+E / Protection: IP65
- Including screws to mount the module and stainless steel coupling piece (V2A) for dimension DN65-100

d-d [mm]	Inch [inch]	DN-DN [mm]	Code	GP	kg
16 - 20	3/8 - 1/2	10 - 15	<b>167 482 626</b>	-	0.110
25 - 32	3/4 - 1	20 - 25	<b>167 482 627</b>	-	0.120
40 - 50	1 1/4 - 1 1/2	32 - 40	<b>167 482 628</b>	-	0.135
- 63	2	- 50	<b>167 482 629</b>	-	0.175
75 - 90	2 1/2 - 3	65 - 80	<b>167 482 630</b>	4	0.460
- 110	4	- 100	<b>167 482 631</b>	4	0.480

d-d [mm]	H1 [mm]	H5 [mm]	L1 [mm]	L5 [mm]	L6 [mm]	L8 [mm]	L9 [mm]
16 - 20	27	50	87	42	45	34	73
25 - 32	30	53	108	50	58	38	77
40 - 50	44	72	140	66	75	41	80
- 63	64	94	165	78	87	46	85
75 - 90	85	157	270	64	206		
- 110	123	175	320	64	256		



DN10/15 - 50



## Multifunctional module (I04) PP-GF With mechanical limit switches Au

### Model:

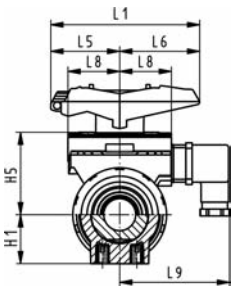
- Accessory to Ball Valve Type 546
- Multifunctional module acts as an intermediate element for actuators
- Including Plug 3P+E / Protection: IP65
- Including screws to mount the module and stainless steel coupling piece (V2A) for dimension DN65-100

d-d [mm]	Inch [inch]	DN-DN [mm]	Code	GP	kg
16 - 20	3/8 - 1/2	10 - 15	<b>167 482 635</b>	-	0.110
25 - 32	3/4 - 1	20 - 25	<b>167 482 636</b>	-	0.120
40 - 50	1 1/4 - 1 1/2	32 - 40	<b>167 482 637</b>	-	0.135
- 63	2	- 50	<b>167 482 638</b>	-	0.175
75 - 90	2 1/2 - 3	65 - 80	<b>167 482 639</b>	6	0.460
- 110	4	- 100	<b>167 482 640</b>	6	0.480

d-d [mm]	H1 [mm]	H5 [mm]	L1 [mm]	L5 [mm]	L6 [mm]	L8 [mm]	L9 [mm]
16 - 20	27	50	87	42	45	34	73
25 - 32	30	53	108	50	58	38	77
40 - 50	44	72	140	66	75	41	80
- 63	64	94	165	78	87	46	85
75 - 90	85	157	270	64	206		
- 110	123	175	320	64	256		



DN10/15 - 50



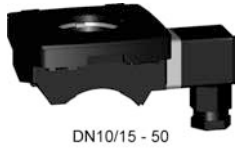
## Multifunctional module (I05) PP-GF With inductive limit switches Namur

### Model:

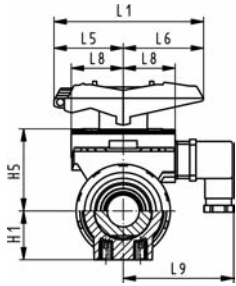
- Accessory to Ball Valve Type 546
- Multifunctional module acts as an intermediate element for actuators
- Including Plug 3P+E / Protection: IP65
- Including screws to mount the module and stainless steel coupling piece (V2A) for dimension DN65-100

d-d [mm]	Inch [inch]	DN-DN [mm]	Code	GP	kg
16 - 20	3/8 - 1/2	10 - 15	<b>167 482 671</b>	-	0.110
25 - 32	3/4 - 1	20 - 25	<b>167 482 672</b>	-	0.120
40 - 50	1 1/4 - 1 1/2	32 - 40	<b>167 482 673</b>	-	0.135
- 63	2	- 50	<b>167 482 674</b>	-	0.175
75 - 90	2 1/2 - 3	65 - 80	<b>167 482 675</b>	6	0.460
- 110	4	- 100	<b>167 482 676</b>	6	0.480

d-d [mm]	H1 [mm]	H5 [mm]	L1 [mm]	L5 [mm]	L6 [mm]	L8 [mm]	L9 [mm]
16 - 20	27	50	87	42	45	34	73
25 - 32	30	53	108	50	58	38	77
40 - 50	44	72	140	66	75	41	80
- 63	64	94	165	78	87	46	85
75 - 90	85	157	270	64	206		
- 110	123	175	320	64	256		



DN10/15 - 50



## Multifunctional module (I06) PP-GF With inductive limit switches PNP

### Model:

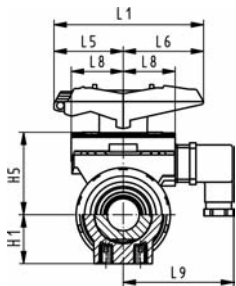
- Accessory to Ball Valve Type 546
- Multifunctional module acts as an intermediate element for actuators
- Including Plug 3P+E / Protection: IP65
- Including screws to mount the module and stainless steel coupling piece (V2A) for dimension DN65-100

d-d [mm]	Inch [inch]	DN-DN [mm]	Code	GP	kg
16 - 20	3/8 - 1/2	10 - 15	<b>167 482 662</b>	-	0.110
25 - 32	3/4 - 1	20 - 25	<b>167 482 663</b>	-	0.120
40 - 50	1 1/4 - 1 1/2	32 - 40	<b>167 482 664</b>	-	0.135
- 63	2	- 50	<b>167 482 665</b>	-	0.175
75 - 90	2 1/2 - 3	65 - 80	<b>167 482 666</b>	4	0.460
- 110	4	- 100	<b>167 482 667</b>	6	0.480

d-d [mm]	H1 [mm]	H5 [mm]	L1 [mm]	L5 [mm]	L6 [mm]	L8 [mm]	L9 [mm]
16 - 20	27	50	87	42	45	34	73
25 - 32	30	53	108	50	58	38	77
40 - 50	44	72	140	66	75	41	80
- 63	64	94	165	78	87	46	85
75 - 90	85	157	270	64	206		
- 110	123	175	320	64	256		



DN10/15 - 50



## Multifunctional module (I07) PP-GF With inductive limit switches NPN

### Model:

- Accessory to Ball Valve Type 546
- Multifunctional module acts as an intermediate element for actuators
- Including Plug 3P+E / Protection: IP65
- Including screws to mount the module and stainless steel coupling piece (V2A) for dimension DN65-100

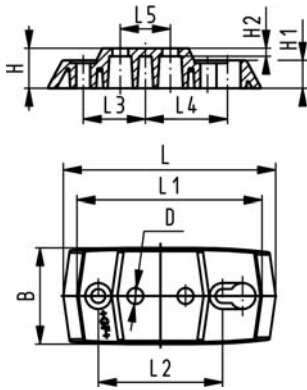
d-d [mm]	Inch [inch]	DN-DN [mm]	Code	GP	kg
16 - 20	3/8 - 1/2	10 - 15	<b>167 482 653</b>	-	0.110
25 - 32	3/4 - 1	20 - 25	<b>167 482 654</b>	-	0.120
40 - 50	1 1/4 - 1 1/2	32 - 40	<b>167 482 655</b>	-	0.135
- 63	2	- 50	<b>167 482 656</b>	-	0.175
75 - 90	2 1/2 - 3	65 - 80	<b>167 482 657</b>	4	0.460
- 110	4	- 100	<b>167 482 658</b>	6	0.480

d-d [mm]	H1 [mm]	H5 [mm]	L1 [mm]	L5 [mm]	L6 [mm]	L8 [mm]	L9 [mm]
16 - 20	27	50	87	42	45	34	73
25 - 32	30	53	108	50	58	38	77
40 - 50	44	72	140	66	75	41	80
- 63	64	94	165	78	87	46	85
75 - 90	85	157	270	64	206		
- 110	123	175	320	64	256		



## Mounting plate 546 and 543 PP-GF (L02)

- 2 mounting screws inclusive



d-d [mm]	Inch [inch]	DN-DN [mm]	Code	GP	kg
16 - 32	3/8 - 1	10 - 25	<b>167 484 110</b>	-	0.055
40 - 63	1 1/4 - 2	32 - 50	<b>167 484 111</b>	-	0.086

d-d [mm]	B [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]
16 - 32	48	8	20	14	4	106	92	62	31	41	25
40 - 63	54	9	20	14	4	149	134	104	52	62	45

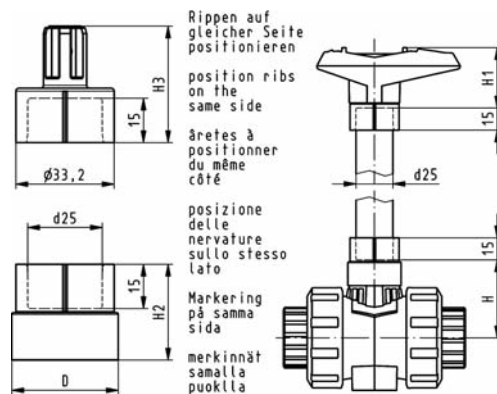


## Handle extension 546 and 543 PVC-U metric

### Model:

- For ball valve type 546 and 543
- Composed of adapter sockets for handle connection and stem connection
- PVC-U pipe in suitable length has to be obtained on site

d-d [mm]	DN-DN [mm]	Code	GP	kg	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	D [mm]
16 - 20	10 - 15	<b>161 486 435</b>	-	0.032	41	52	29	36	26
25 - 32	20 - 25	<b>161 486 436</b>	-	0.037	50	62	32	39	36
40 - 50	32 - 40	<b>161 486 437</b>	-	0.047	65	76	34	44	40
- 63	- 50	<b>161 486 438</b>	-	0.058	84	87	37	48	44



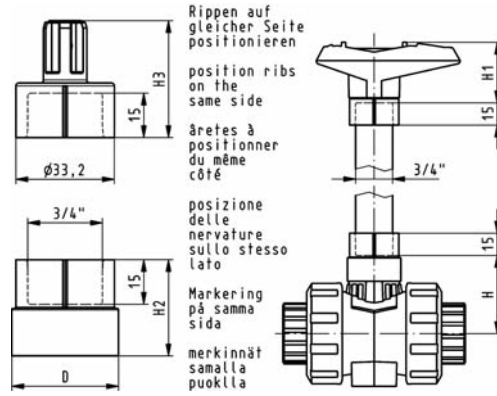


## Handle extension 546 PVC-U inch BS/ASTM

### Model:

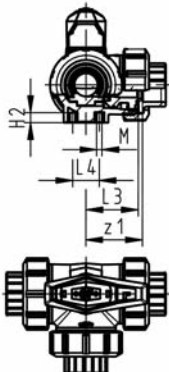
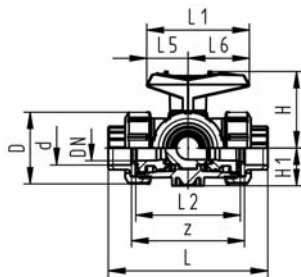
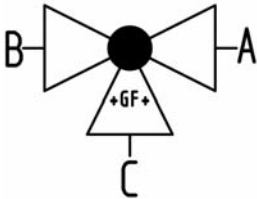
- For Ball Valve Type 546

DN-DN [mm]	Inch	Code	GP	kg	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	D [mm]
10 - 15	3/8-1/2	<b>161 486 443</b>	-	0.032	41	52	29	36	26
20 - 25	3/4-1	<b>161 486 444</b>	-	0.037	50	62	32	39	36
32 - 40	1 1/4-1 1/2	<b>161 486 445</b>	10	0.047	65	76	34	44	40
50 -	2	<b>161 486 446</b>	-	0.058	84	87	37	48	44



# Ball valves type 543 metric

## 3-Way ball valve type 543 PVC-U Horizontal/L-port With solvent cement sockets metric



### Model:

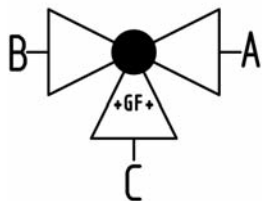
- For easy installation and removal (valve end and union nut are compatible with type 546)
- Ball seals PTFE
- Pneumatic or electric actuator available separately
- Angle of operation 360° without turn limiter
- Turn limiter 90° enclosed, in different positions usable as a clip-on ring
- Integrated stainless steel mounting inserts
- Delivery status A-C opened, see flow scheme

d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	50	161 543 001	161 543 011	0.245
20	15	10	75	161 543 002	161 543 012	0.251
25	20	10	150	161 543 003	161 543 013	0.361
32	25	10	280	161 543 004	161 543 014	0.551
40	32	10	480	161 543 005	161 543 015	0.938
50	40	10	620	161 543 006	161 543 016	1.390
63	50	10	1230	161 543 007	161 543 017	2.705

d [mm]	D [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	H [mm]	H1 [mm]	H2 [mm]	M	z [mm]	z1 [mm]	closest inch
16	50	109	77	73	36	25	32	45	57	28	8	6	81	40	3/8
20	50	112	77	73	36	25	32	45	57	28	8	6	81	40	1/2
25	58	131	97	86	43	25	39	58	67	32	8	6	94	47	3/4
32	68	151	97	99	50	25	39	58	73	36	8	6	107	54	1
40	84	181	128	120	60	45	54	74	90	45	9	8	130	65	1 1/4
50	97	205	128	137	69	45	54	74	97	51	9	8	143	72	1 1/2
63	124	261	152	179	89	45	66	87	116	65	9	8	185	92	2



## 3-Way ball valve type 543 PVC-U Horizontal/L-port With threaded sockets Rp

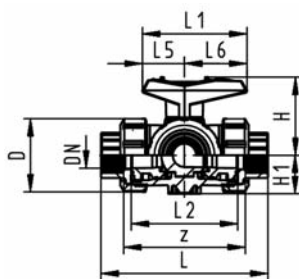


### Model:

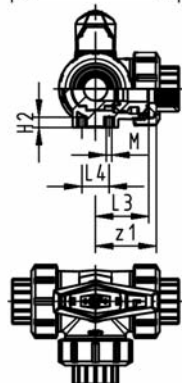
- For easy installation and removal (valve end and union nut are compatible with type 546)
- Ball seals PTFE
- Pneumatic or electric actuator available separately
- Angle of operation 360° without turn limiter
- Turn limiter 90° enclosed, in different positions usable as a clip-on ring
- Integrated stainless steel mounting inserts
- Delivery status A-C opened, see flow scheme



Rp [inch]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
3/8	10	10	50	<b>161 543 041</b>	<b>161 543 051</b>	0.245
1/2	15	10	75	<b>161 543 042</b>	<b>161 543 052</b>	0.251
3/4	20	10	150	<b>161 543 043</b>	<b>161 543 053</b>	0.361
1	25	10	280	<b>161 543 044</b>	<b>161 543 054</b>	0.551
1 1/4	32	10	480	<b>161 543 045</b>	<b>161 543 055</b>	0.938
1 1/2	40	10	620	<b>161 543 046</b>	<b>161 543 056</b>	1.390
2	50	10	1230	<b>161 543 047</b>	<b>161 543 057</b>	2.705



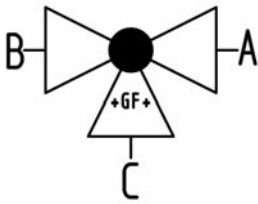
Rp [inch]	D [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	H [mm]	H1 [mm]	H2 [mm]	M	z [mm]	z1 [mm]
3/8	50	113	77	73	36	25	32	45	57	28	8	6	87	43
1/2	50	117	77	73	36	25	32	45	57	28	8	6	85	42
3/4	58	135	97	86	43	25	39	58	67	32	8	6	100	50
1	68	155	97	99	50	25	39	58	73	36	8	6	113	57
1 1/4	84	179	128	120	60	45	54	74	90	45	9	8	134	67
1 1/2	97	201	128	137	69	45	54	74	97	51	9	8	155	78
2	124	255	152	179	89	45	66	87	116	65	9	8	199	99





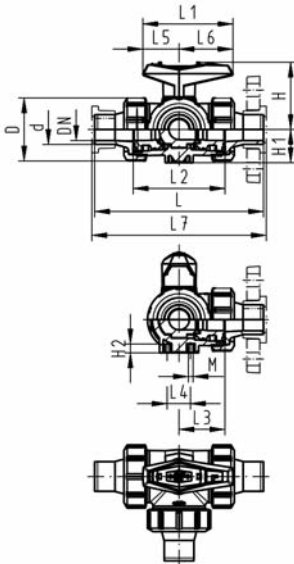


### 3-Way ball valve type 543 PVC-U Horizontal/L-port With solvent cement spigots metric



**Model:**

- For easy installation and removal (valve end and union nut are compatible with type 546)
- Ball seals PTFE
- Pneumatic or electric actuator available separately
- Angle of operation 360° without turn limiter
- Turn limiter 90° enclosed, in different positions usable as a clip-on ring
- Integrated stainless steel mounting inserts
- Delivery status A-C opened, see flow scheme

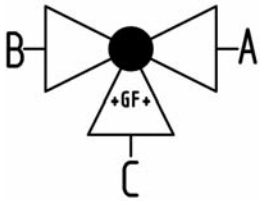


d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	50	161 543 021	161 543 031	0.251
20	15	10	75	161 543 022	161 543 032	0.260
25	20	10	150	161 543 023	161 543 033	0.376
32	25	10	280	161 543 024	161 543 034	0.575
40	32	10	480	161 543 025	161 543 035	0.959
50	40	10	620	161 543 026	161 543 036	1.453
63	50	10	1230	161 543 027	161 543 037	2.831

d [mm]	D [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	H [mm]	H1 [mm]	H2 [mm]	M	closest inch
16	50	131	77	73	36	25	32	45	137	57	28	8	6	3/8
20	50	141	77	73	36	25	32	45	147	57	28	8	6	1/2
25	58	165	97	86	43	25	39	58	171	67	32	8	6	3/4
32	68	182	97	99	50	25	39	58	188	73	36	8	6	1
40	84	209	128	120	60	45	54	74	215	90	45	9	8	1 1/4
50	97	242	128	137	69	45	54	74	248	97	51	9	8	1 1/2
63	124	302	152	179	89	45	66	87	308	116	65	9	8	2



### 3-Way ball valve type 543 PVC-U Horizontal/L-port With butt fusion spigots long PE100 SDR11 metric

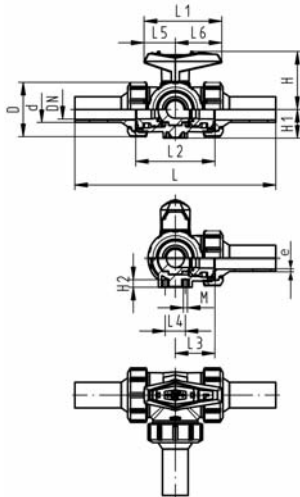


#### Model:

- For easy installation and removal (valve end and union nut are compatible with type 546)
- Ball seals PTFE
- Pneumatic or electric actuator available separately
- Angle of operation 360° without turn limiter
- Turn limiter 90° enclosed, in different positions usable as a clip-on ring
- Integrated stainless steel mounting inserts
- Delivery status A-C opened, see flow scheme



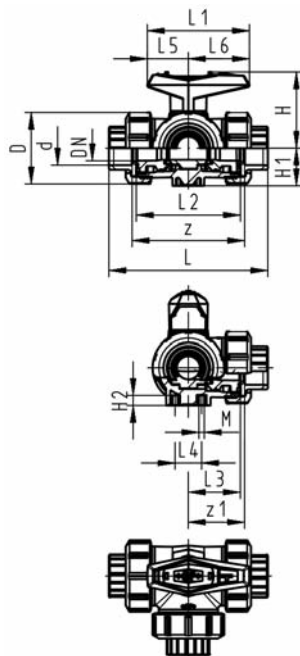
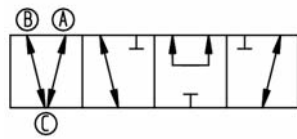
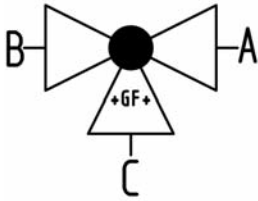
d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
20	15	10	75	<b>161 543 462</b>	<b>161 543 472</b>	0.254
25	20	10	150	<b>161 543 463</b>	<b>161 543 473</b>	0.370
32	25	10	280	<b>161 543 464</b>	<b>161 543 474</b>	0.563
40	32	10	480	<b>161 543 465</b>	<b>161 543 475</b>	0.953
50	40	10	620	<b>161 543 466</b>	<b>161 543 476</b>	1.444
63	50	10	1230	<b>161 543 467</b>	<b>161 543 477</b>	3.141



d [mm]	D [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	H [mm]	H1 [mm]	H2 [mm]	M [mm]	e [mm]	closest inch
20	50	210	77	73	36	25	32	45	57	28	8	6	2.3	1/2
25	58	237	97	86	43	25	39	58	67	32	8	6	2.3	3/4
32	68	251	97	99	50	25	39	58	73	36	8	6	2.9	1
40	84	283	128	120	60	45	54	74	90	45	9	8	3.7	1 1/4
50	97	319	128	137	69	45	54	74	97	51	9	8	4.6	1 1/2
63	124	399	152	179	89	45	66	87	116	65	9	8	5.8	2



### 3-Way ball valve type 543 PVC-U Horizontal/T-port With solvent cement sockets metric



#### Model:

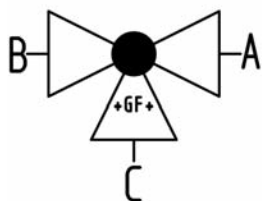
- For easy installation and removal (valve end and union nut are compatible with type 546)
- Ball seals PTFE
- Pneumatic or electric actuator available separately
- Angle of operation 360° without turn limiter
- Turn limiter 90° enclosed, in different positions usable as a clip-on ring
- Integrated stainless steel mounting inserts
- Delivery status A-B-C opened, see flow scheme

d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	140	<b>161 543 201</b>	<b>161 543 211</b>	0.244
20	15	10	200	<b>161 543 202</b>	<b>161 543 212</b>	0.250
25	20	10	470	<b>161 543 203</b>	<b>161 543 213</b>	0.359
32	25	10	793	<b>161 543 204</b>	<b>161 543 214</b>	0.544
40	32	10	1290	<b>161 543 205</b>	<b>161 543 215</b>	0.927
50	40	10	1910	<b>161 543 206</b>	<b>161 543 216</b>	1.369
63	50	10	3100	<b>161 543 207</b>	<b>161 543 217</b>	2.660

d [mm]	D [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	H [mm]	H1 [mm]	H2 [mm]	M	z [mm]	z1 [mm]	closest inch
16	50	109	77	73	36	25	32	45	57	28	8	6	81	40	3/8
20	50	112	77	73	36	25	32	45	57	28	8	6	81	40	1/2
25	58	131	97	86	43	25	39	58	67	32	8	6	94	47	3/4
32	68	151	97	99	50	25	39	58	73	36	8	6	107	54	1
40	84	181	128	120	60	45	54	74	90	45	9	8	130	65	1 1/4
50	97	205	128	137	69	45	54	74	97	51	9	8	143	72	1 1/2
63	124	261	152	179	89	45	66	87	116	65	9	8	185	92	2

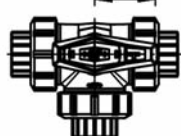
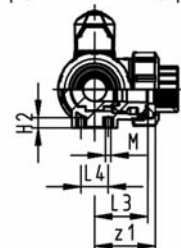
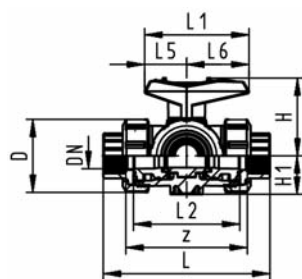
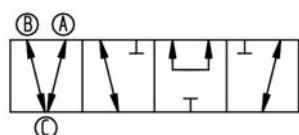


## 3-Way ball valve type 543 PVC-U Horizontal/T-port With threaded sockets Rp



### Model:

- For easy installation and removal (valve end and union nut are compatible with type 546)
- Ball seals PTFE
- Pneumatic or electric actuator available separately
- Angle of operation 360° without turn limiter
- Turn limiter 90° enclosed, in different positions usable as a clip-on ring
- Integrated stainless steel mounting inserts
- Delivery status A-B-C opened, see flow scheme

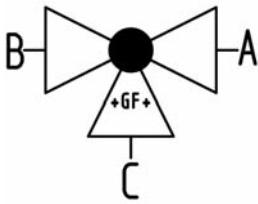


Rp [inch]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
3/8	10	10	140	<b>161 543 241</b>	<b>161 543 251</b>	0.244
1/2	15	10	200	<b>161 543 242</b>	<b>161 543 252</b>	0.250
3/4	20	10	470	<b>161 543 243</b>	<b>161 543 253</b>	0.359
1	25	10	793	<b>161 543 244</b>	<b>161 543 254</b>	0.544
1 1/4	32	10	1290	<b>161 543 245</b>	<b>161 543 255</b>	0.927
1 1/2	40	10	1910	<b>161 543 246</b>	<b>161 543 256</b>	1.369
2	50	10	3100	<b>161 543 247</b>	<b>161 543 257</b>	2.660

Rp [inch]	D [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	H [mm]	H1 [mm]	H2 [mm]	M	z [mm]	z1 [mm]
3/8	50	113	77	73	36	25	32	45	57	28	8	6	87	43
1/2	50	117	77	73	36	25	32	45	57	28	8	6	85	42
3/4	58	135	97	86	43	25	39	58	67	32	8	6	100	50
1	68	155	97	99	50	25	39	58	73	36	8	6	113	57
1 1/4	84	179	128	120	60	45	54	74	90	45	9	8	134	67
1 1/2	97	201	128	137	69	45	54	74	97	51	9	8	155	78
2	124	255	152	179	89	45	66	87	116	65	9	8	199	99

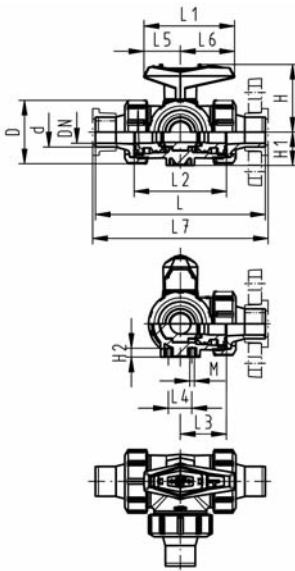
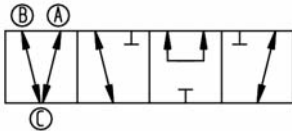


### 3-Way ball valve type 543 PVC-U Horizontal/T-port With solvent cement spigots metric



**Model:**

- For easy installation and removal (valve end and union nut are compatible with type 546)
- Ball seals PTFE
- Pneumatic or electric actuator available separately
- Angle of operation 360° without turn limiter
- Turn limiter 90° enclosed, in different positions usable as a clip-on ring
- Integrated stainless steel mounting inserts
- Delivery status A-B-C opened, see flow scheme

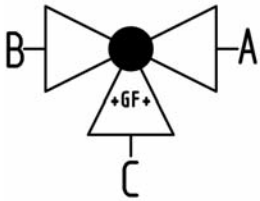


d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	140	161 543 221	161 543 231	0.250
20	15	10	200	161 543 222	161 543 232	0.259
25	20	10	470	161 543 223	161 543 233	0.374
32	25	10	793	161 543 224	161 543 234	0.568
40	32	10	1290	161 543 225	161 543 235	0.948
50	40	10	1910	161 543 226	161 543 236	1.432
63	50	10	3100	161 543 227	161 543 237	2.786

d [mm]	D [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	H [mm]	H1 [mm]	H2 [mm]	M	closest inch
16	50	131	77	73	36	25	32	45	137	57	28	8	6	3/8
20	50	141	77	73	36	25	32	45	147	57	28	8	6	1/2
25	58	165	97	86	43	25	39	58	171	67	32	8	6	3/4
32	68	182	97	99	50	25	39	58	188	73	36	8	6	1
40	84	209	128	120	60	45	54	74	215	90	45	9	8	1 1/4
50	97	242	128	137	69	45	54	74	248	97	51	9	8	1 1/2
63	124	302	152	179	89	45	66	87	308	116	65	9	8	2

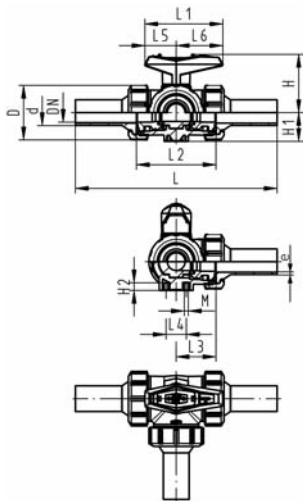
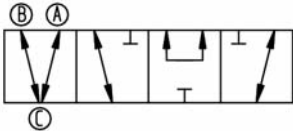


### 3-Way ball valve type 543 PVC-U Horizontal/T-port With butt fusion spigots long PE100 SDR11 metric



**Model:**

- For easy installation and removal (valve end and union nut are compatible with type 546)
- Ball seals PTFE
- Pneumatic or electric actuator available separately
- Angle of operation 360° without turn limiter
- Turn limiter 90° enclosed, in different positions usable as a clip-on ring
- Integrated stainless steel mounting inserts
- Delivery status A-B-C opened, see flow scheme

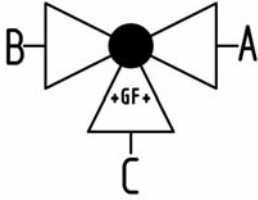


d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
20	15	10	200	<b>161 543 482</b>	<b>161 543 492</b>	0.253
25	20	10	470	<b>161 543 483</b>	<b>161 543 493</b>	0.368
32	25	10	793	<b>161 543 484</b>	<b>161 543 494</b>	0.556
40	32	10	1290	<b>161 543 485</b>	<b>161 543 495</b>	0.942
50	40	10	1910	<b>161 543 486</b>	<b>161 543 496</b>	1.423
63	50	10	3100	<b>161 543 487</b>	<b>161 543 497</b>	3.096

d [mm]	D [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	H [mm]	H1 [mm]	H2 [mm]	M [mm]	e [mm]	closest inch
20	50	210	77	73	36	25	32	45	57	28	8	6	2.3	1/2
25	58	237	97	86	43	25	39	58	67	32	8	6	2.3	3/4
32	68	251	97	99	50	25	39	58	73	36	8	6	2.9	1
40	84	283	128	120	60	45	54	74	90	45	9	8	3.7	1 1/4
50	97	319	128	137	69	45	54	74	97	51	9	8	4.6	1 1/2
63	124	399	152	179	89	45	66	87	116	65	9	8	5.8	2



### 3-Way ball valve type 543 PVC-U Horizontal/L-port With lockable handle With solvent cement sockets metric

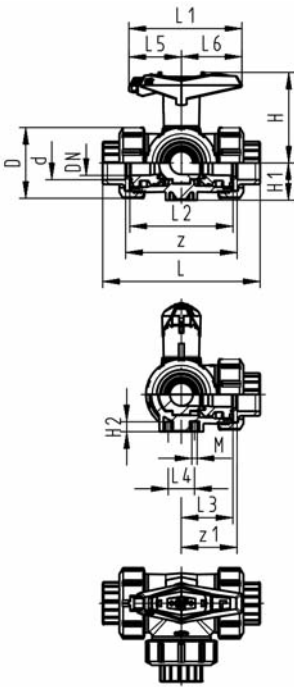


**Model:**

- For easy installation and removal (valve end and union nut are compatible with type 546)
- Ball seals PTFE
- Pneumatic or electric actuator available separately
- Angle of operation 360° without turn limiter
- Turn limiter 90° enclosed, in different positions usable as a clip-on ring
- Integrated stainless steel mounting inserts
- Multifunctional lever red with ratched setting 45°, lockable
- Delivery status A-C opened, see flow scheme



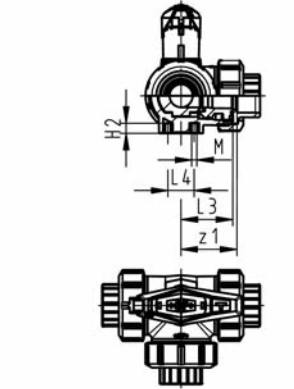
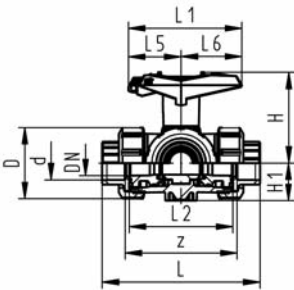
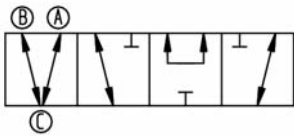
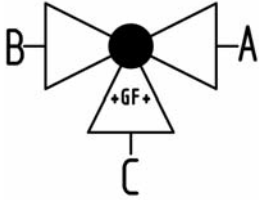
d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	50	161 543 161	161 543 171	0.259
20	15	10	75	161 543 162	161 543 172	0.265
25	20	10	150	161 543 163	161 543 173	0.378
32	25	10	280	161 543 164	161 543 174	0.568
40	32	10	480	161 543 165	161 543 175	0.961
50	40	10	620	161 543 166	161 543 176	1.413
63	50	10	1230	161 543 167	161 543 177	2.736



d [mm]	D [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	H [mm]	H1 [mm]	H2 [mm]	M	z [mm]	z1 [mm]	closest inch
16	50	109	87	73	36	25	42	45	79	28	8	6	81	40	3/8
20	50	112	87	73	36	25	42	45	79	28	8	6	81	40	1/2
25	58	131	108	86	43	25	50	58	88	32	8	6	94	47	3/4
32	68	151	108	99	50	25	50	58	94	36	8	6	107	54	1
40	84	181	141	120	60	45	66	75	113	45	9	8	130	65	1 1/4
50	97	205	141	137	69	45	66	75	119	51	9	8	143	72	1 1/2
63	124	261	165	179	89	45	78	87	141	65	9	8	185	92	2



## 3-Way ball valve type 543 PVC-U Horizontal/T-port With lockable handle With solvent cement sockets metric



### Model:

- For easy installation and removal (valve end and union nut are compatible with type 546)
- Ball seals PTFE
- Pneumatic or electric actuator available separately
- Angle of operation 360° without turn limiter
- Turn limiter 90° enclosed, in different positions usable as a clip-on ring
- Integrated stainless steel mounting inserts
- Multifunctional lever red with ratched setting 45°, lockable
- Delivery status A-B-C opened, see flow scheme

d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	140	<b>161 543 361</b>	<b>161 543 371</b>	0.258
20	15	10	200	<b>161 543 362</b>	<b>161 543 372</b>	0.264
25	20	10	470	<b>161 543 363</b>	<b>161 543 373</b>	0.376
32	25	10	793	<b>161 543 364</b>	<b>161 543 374</b>	0.561
40	32	10	1290	<b>161 543 365</b>	<b>161 543 375</b>	0.950
50	40	10	1910	<b>161 543 366</b>	<b>161 543 376</b>	1.392
63	50	10	3100	<b>161 543 367</b>	<b>161 543 377</b>	2.691

d [mm]	D [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	H [mm]	H1 [mm]	H2 [mm]	M	z [mm]	z1 [mm]	closest inch
16	50	109	87	73	36	25	42	45	79	28	8	6	81	40	3/8
20	50	112	87	73	36	25	42	45	79	28	8	6	81	40	1/2
25	58	131	108	86	43	25	50	58	88	32	8	6	94	47	3/4
32	68	151	108	99	50	25	50	58	94	36	8	6	107	54	1
40	84	181	141	120	60	45	66	75	113	45	9	8	130	65	1 1/4
50	97	205	141	137	69	45	66	75	119	51	9	8	143	72	1 1/2
63	124	261	165	179	89	45	78	87	141	65	9	8	185	92	2





## 3-Way ball valve type 543 PVC-U Vertical/L-port With solvent cement sockets metric

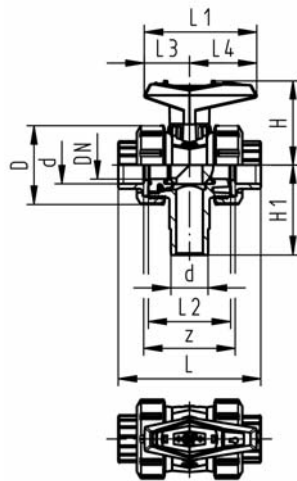
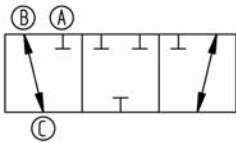
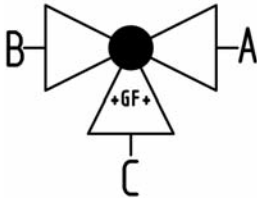


### Model:

- Vertical inlet solvent cement spigot metric
- Easy installation and removal using union on third outlet
- Ball seals PTFE
- Electric actuator available separately
- Angle of operation 360° without turn limiter
- Delivery status B-C opened, see flow scheme

### Mode of action:

- For interconnection of two inputs



d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	GP	kg
16	10	10	49	161 543 401	161 543 411	10	0.162
20	15	10	77	161 543 402	161 543 412	10	0.166
25	20	10	146	161 543 403	161 543 413	10	0.255
32	25	10	260	161 543 404	161 543 414	6	0.372
40	32	10	437	161 543 405	161 543 415	6	0.622
50	40	10	667	161 543 406	161 543 416	4	0.886
63	50	10	1293	161 543 407	161 543 417	8	1.617

d [mm]	D [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	H [mm]	H1 [mm]	z [mm]	closest inch
16	50	92	77	56	32	45	57	62	64	3/8
20	50	95	77	56	32	45	57	62	64	1/2
25	58	111	97	66	39	58	67	72	74	3/4
32	68	123	97	71	39	58	73	77	79	1
40	84	146	128	85	54	74	90	87	95	1 1/4
50	97	157	128	89	54	74	97	97	95	1 1/2
63	124	183	152	101	66	87	116	112	107	2



## 3-Way ball valve type 543 PVC-U Vertical/L-port With threaded sockets Rp

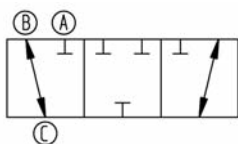
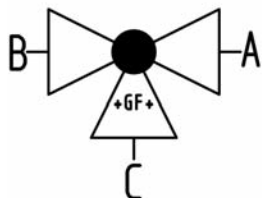


### Model:

- Vertical inlet solvent cement spigot metric
- Easy installation and removal using union on third outlet
- Ball seals PTFE
- Electric actuator available separately
- Angle of operation 360° without turn limiter
- Delivery status B-C opened, see flow scheme

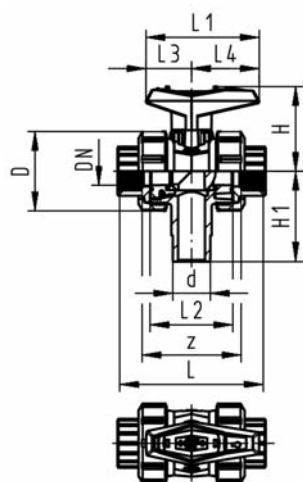
### Mode of action:

- For interconnection of two inputs



Rp [inch]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	GP	kg
3/8	10	10	49	<b>161 543 421</b>	<b>161 543 431</b>	10	0.162
1/2	15	10	77	<b>161 543 422</b>	<b>161 543 432</b>	10	0.166
3/4	20	10	146	<b>161 543 423</b>	<b>161 543 433</b>	10	0.255
1	25	10	260	<b>161 543 424</b>	<b>161 543 434</b>	6	0.372
1 1/4	32	10	437	<b>161 543 425</b>	<b>161 543 435</b>	6	0.622
1 1/2	40	10	667	<b>161 543 426</b>	<b>161 543 436</b>	4	0.886
2	50	10	1293	<b>161 543 427</b>	<b>161 543 437</b>	8	1.617

Rp [inch]	D [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	H [mm]	H1 [mm]	z [mm]
3/8	50	96	77	56	32	45	57	62	69
1/2	50	99	77	56	32	45	57	62	67
3/4	58	115	97	66	39	58	67	72	78
1	68	127	97	71	39	58	73	77	85
1 1/4	84	144	128	85	54	74	90	87	100
1 1/2	97	153	128	89	54	74	97	97	106
2	124	177	152	101	66	87	116	112	121



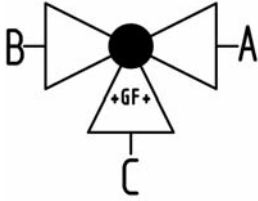


### 3-Way ball valve type 543 PVC-U Vertical/L-port With solvent cement spigots metric



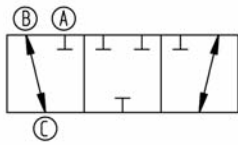
#### Model:

- Vertical inlet solvent cement spigot metric
- Easy installation and removal using union on third outlet
- Ball seals PTFE
- Electric actuator available separately
- Angle of operation 360° without turn limiter
- Delivery status B-C opened, see flow scheme

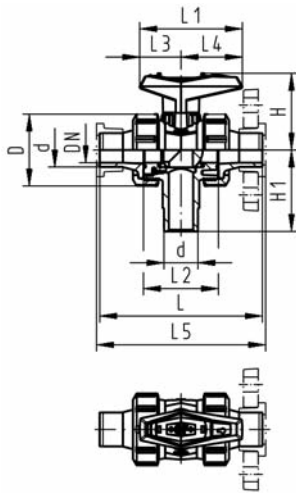


#### Mode of action:

- For interconnection of two inputs



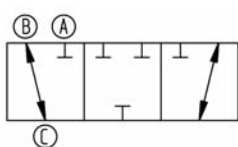
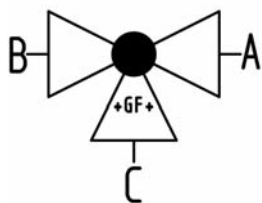
d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	GP	kg
16	10	10	49	161 543 441	161 543 451	10	0.166
20	15	10	77	161 543 442	161 543 452	-	0.172
25	20	10	146	161 543 443	161 543 453	6	0.265
32	25	10	260	161 543 444	161 543 454	6	0.388
40	32	10	437	161 543 445	161 543 455	6	0.636
50	40	10	667	161 543 446	161 543 456	4	0.928
63	50	10	1293	161 543 447	161 543 457	8	1.701



d [mm]	D [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	H [mm]	H1 [mm]	closest inch
16	50	114	77	56	32	45	120	57	62	3/8
20	50	124	77	56	32	45	130	57	62	1/2
25	58	144	97	66	39	58	150	67	72	3/4
32	68	154	97	71	39	58	160	73	77	1
40	84	174	128	85	54	74	180	90	87	1 1/4
50	97	194	128	89	54	74	200	97	97	1 1/2
63	124	224	152	101	66	87	230	116	112	2



## 3-Way ball valve type 543 PVC-U Vertical/L-port With lockable handle With solvent cement sockets metric



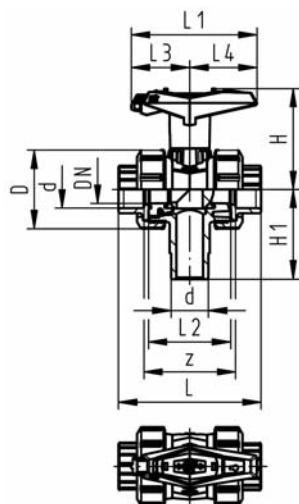
### Model:

- Vertical inlet solvent cement spigot metric
- Easy installation and removal using union on third outlet
- Ball seals PTFE
- Electric actuator available separately
- Angle of operation 360° without turn limiter
- Multifunctional lever red with ratched setting 45°, lockable
- Delivery status B-C opened, see flow scheme

### Mode of action:

- For interconnection of two inputs

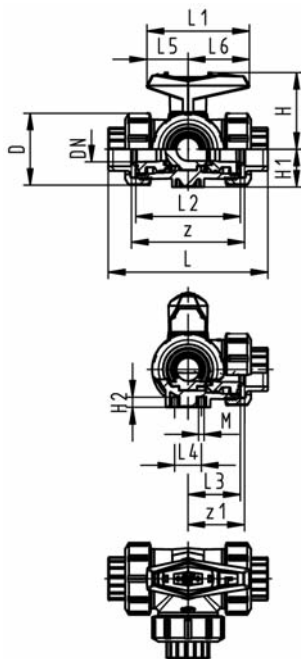
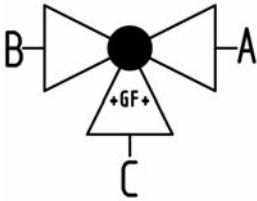
d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	GP	kg
16	10	10	49	161 543 501	161 543 511	-	0.185
20	15	10	77	161 543 502	161 543 512	-	0.189
25	20	10	146	161 543 503	161 543 513	-	0.281
32	25	10	260	161 543 504	161 543 514	-	0.398
40	32	10	437	161 543 505	161 543 515	-	0.663
50	40	10	667	161 543 506	161 543 516	-	0.927
63	50	10	1293	161 543 507	161 543 517	-	1.666



d [mm]	D [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	H [mm]	H1 [mm]	z [mm]	closest inch
16	50	92	87	56	42	45	79	62	64	$\frac{3}{8}$
20	50	95	87	56	42	45	79	62	64	$\frac{1}{2}$
25	58	111	108	66	50	58	88	72	74	$\frac{3}{4}$
32	68	123	108	71	50	58	94	77	79	1
40	84	146	140	85	66	74	113	87	95	$1 \frac{1}{4}$
50	97	157	140	89	66	74	119	97	95	$1 \frac{1}{2}$
63	124	183	165	101	78	87	141	112	107	2

# Ball valves type 543 Inch BS

## 3-Way ball valve type 543 PVC-U Horizontal/L-port With solvent cement sockets BS



### Model:

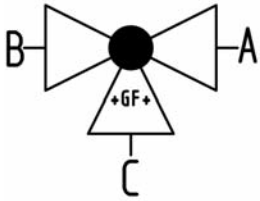
- For easy installation and removal (valve end and union nut are compatible with type 546)
- Ball seals PTFE
- Pneumatic or electric actuator available separately
- Angle of operation 360° without turn limiter
- Turn limiter 90° enclosed, in different positions usable as a clip-on ring
- Integrated stainless steel mounting inserts
- Delivery status A-C opened, see flow scheme

Inch	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
3/8	10	10	50	161 543 061	161 543 071	0.245
1/2	15	10	75	161 543 062	161 543 072	0.251
3/4	20	10	150	161 543 063	161 543 073	0.361
1	25	10	280	161 543 064	161 543 074	0.551
1 1/4	32	10	480	161 543 065	161 543 075	0.938
1 1/2	40	10	620	161 543 066	161 543 076	1.390
2	50	10	1230	161 543 067	161 543 077	2.705

Inch	D [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	H [mm]	H1 [mm]	H2 [mm]	M	z [mm]	z1 [mm]
3/8	50	109	77	73	36	25	32	45	57	28	8	6	77	38
1/2	50	112	77	73	36	25	32	45	57	28	8	6	77	38
3/4	58	131	97	86	43	25	39	58	67	32	8	6	90	45
1	68	151	97	99	50	25	39	58	73	36	8	6	103	52
1 1/4	84	181	128	120	60	45	54	74	90	45	9	8	124	62
1 1/2	97	205	128	137	69	45	54	74	97	51	9	8	145	73
2	124	261	152	179	89	45	66	87	116	65	9	8	189	94

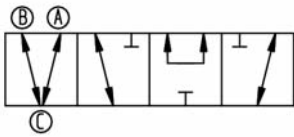


## 3-Way ball valve type 543 PVC-U Horizontal/T-port With solvent cement sockets BS

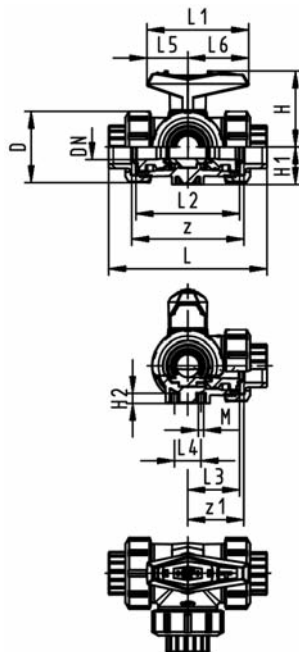


### Model:

- For easy installation and removal (valve end and union nut are compatible with type 546)
- Ball seals PTFE
- Pneumatic or electric actuator available separately
- Angle of operation 360° without turn limiter
- Turn limiter 90° enclosed, in different positions usable as a clip-on ring
- Integrated stainless steel mounting inserts
- Delivery status A-B-C opened, see flow scheme



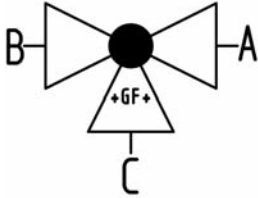
Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
3/8	10	10	140	<b>161 543 261</b>	<b>161 543 271</b>	0.244
1/2	15	10	200	<b>161 543 262</b>	<b>161 543 272</b>	0.250
3/4	20	10	470	<b>161 543 263</b>	<b>161 543 273</b>	0.359
1	25	10	793	<b>161 543 264</b>	<b>161 543 274</b>	0.544
1 1/4	32	10	1290	<b>161 543 265</b>	<b>161 543 275</b>	0.927
1 1/2	40	10	1910	<b>161 543 266</b>	<b>161 543 276</b>	1.369
2	50	10	3100	<b>161 543 267</b>	<b>161 543 277</b>	2.660



Inch	D [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	H [mm]	H1 [mm]	H2 [mm]	M	z [mm]	z1 [mm]
3/8	50	109	77	73	36	25	32	45	57	28	8	6	77	38
1/2	50	112	77	73	36	25	32	45	57	28	8	6	77	38
3/4	58	131	97	86	43	25	39	58	67	32	8	6	90	45
1	68	151	97	99	50	25	39	58	73	36	8	6	103	52
1 1/4	84	181	128	120	60	45	54	74	90	45	9	8	124	62
1 1/2	97	205	128	137	69	45	54	74	97	51	9	8	145	73
2	124	261	152	179	89	45	66	87	116	65	9	8	189	94



### 3-Way ball valve type 543 PVC-U Horizontal/L-port With lockable handle With solvent cement sockets BS

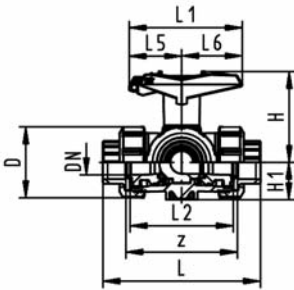


**Model:**

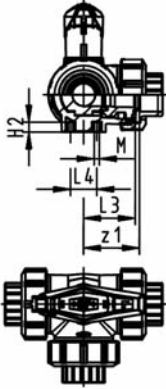
- For easy installation and removal (valve end and union nut are compatible with type 546)
- Ball seals PTFE
- Pneumatic or electric actuator available separately
- Angle of operation 360° without turn limiter
- Turn limiter 90° enclosed, in different positions usable as a clip-on ring
- Integrated stainless steel mounting inserts
- Multifunctional lever red with ratched setting 45°, lockable
- Delivery status A-C opened, see flow scheme



Inch	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
3/8	10	10	50	161 543 861	161 543 871	0.259
1/2	15	10	75	161 543 862	161 543 872	0.265
3/4	20	10	150	161 543 863	161 543 873	0.378
1	25	10	280	161 543 864	161 543 874	0.568
1 1/4	32	10	480	161 543 865	161 543 875	0.961
1 1/2	40	10	620	161 543 866	161 543 876	1.413
2	50	10	1230	161 543 867	161 543 877	2.736

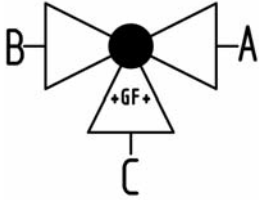


Inch	D [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	H [mm]	H1 [mm]	H2 [mm]	M	z [mm]	z1 [mm]
3/8	50	109	87	73	36	25	42	45	79	28	8	6	77	38
1/2	50	112	87	73	36	25	42	45	79	28	8	6	77	38
3/4	58	131	108	86	43	25	50	58	88	32	8	6	90	45
1	68	151	108	99	50	25	50	58	94	36	8	6	103	52
1 1/4	84	181	141	120	60	45	66	75	113	45	9	8	124	62
1 1/2	97	205	141	137	69	45	66	75	119	51	9	8	145	73
2	124	261	165	179	89	45	78	87	141	65	9	8	189	94



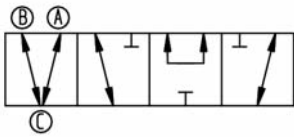


## 3-Way ball valve type 543 PVC-U Horizontal/T-port With lockable handle With solvent cement sockets BS

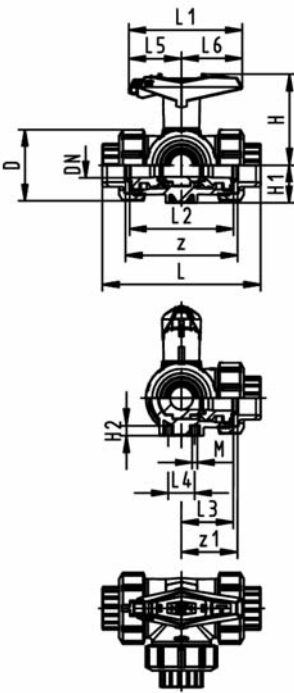


### Model:

- For easy installation and removal (valve end and union nut are compatible with type 546)
- Ball seals PTFE
- Pneumatic or electric actuator available separately
- Angle of operation 360° without turn limiter
- Turn limiter 90° enclosed, in different positions usable as a clip-on ring
- Integrated stainless steel mounting inserts
- Multifunctional lever red with ratched setting 45°, lockable
- Delivery status A-B-C opened, see flow scheme



Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
3/8	10	10	140	<b>161 543 881</b>	<b>161 543 891</b>	0.258
1/2	15	10	200	<b>161 543 882</b>	<b>161 543 892</b>	0.264
3/4	20	10	470	<b>161 543 883</b>	<b>161 543 893</b>	0.376
1	25	10	793	<b>161 543 884</b>	<b>161 543 894</b>	0.561
1 1/4	32	10	1290	<b>161 543 885</b>	<b>161 543 895</b>	0.950
1 1/2	40	10	1910	<b>161 543 886</b>	<b>161 543 896</b>	1.392
2	50	10	3100	<b>161 543 887</b>	<b>161 543 897</b>	2.691



Inch	D [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	H [mm]	H1 [mm]	H2 [mm]	M	z [mm]	z1 [mm]
3/8	50	109	87	73	36	25	42	45	79	28	8	6	77	38
1/2	50	112	87	73	36	25	42	45	79	28	8	6	77	38
3/4	58	131	108	86	43	25	50	58	88	32	8	6	90	45
1	68	151	108	99	50	25	50	58	94	36	8	6	103	52
1 1/4	84	181	141	120	60	45	66	75	113	45	9	8	124	62
1 1/2	97	205	141	137	69	45	66	75	119	51	9	8	145	73
2	124	261	165	179	89	45	78	87	141	65	9	8	189	94





### 3-Way ball valve type 543 PVC-U Vertical/L-port With solvent cement sockets BS

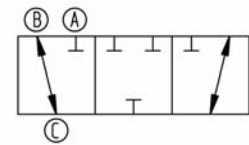
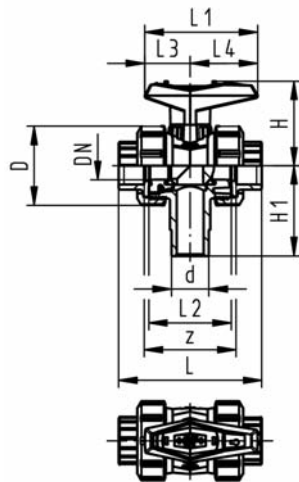
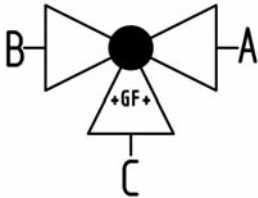


#### Model:

- Vertical inlet solvent cement spigot metric
- Easy installation and removal using union on third outlet
- Ball seals PTFE
- Electric actuator available separately
- Angle of operation 360° without turn limiter
- Delivery status B-C opened, see flow scheme

#### Mode of action:

- For interconnection of two inputs

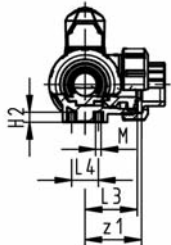
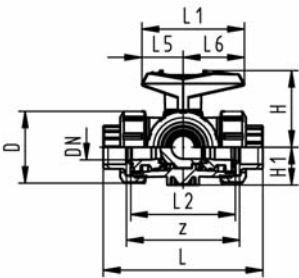
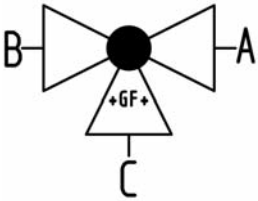


Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	GP	kg
3/8	10	10	49	<b>161 543 601</b>	<b>161 543 611</b>	10	0.162
1/2	15	10	77	<b>161 543 602</b>	<b>161 543 612</b>	10	0.166
3/4	20	10	146	<b>161 543 603</b>	<b>161 543 613</b>	10	0.255
1	25	10	260	<b>161 543 604</b>	<b>161 543 614</b>	6	0.372
1 1/4	32	10	437	<b>161 543 605</b>	<b>161 543 615</b>	6	0.622
1 1/2	40	10	667	<b>161 543 606</b>	<b>161 543 616</b>	4	0.886
2	50	10	1293	<b>161 543 607</b>	<b>161 543 617</b>	8	1.617

Inch	D [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	H [mm]	H1 [mm]	z [mm]
3/8	50	92	77	56	32	45	57	62	60
1/2	50	95	77	56	32	45	57	62	60
3/4	58	111	97	66	39	58	67	72	69
1	68	123	97	71	39	58	73	77	75
1 1/4	84	146	128	85	54	74	90	87	89
1 1/2	97	157	128	89	54	74	97	97	97
2	124	183	152	101	66	87	116	112	110

# Ball valves type 543 ASTM/ANSI

## 3-Way ball valve type 543 PVC-U Horizontal/L-port With solvent cement sockets ASTM



### Model:

- For easy installation and removal (valve end and union nut are compatible with type 546)
- Ball seals PTFE
- Pneumatic or electric actuator available separately
- Angle of operation 360° without turn limiter
- Turn limiter 90° enclosed, in different positions usable as a clip-on ring
- Integrated stainless steel mounting inserts
- Delivery status A-C opened, see flow scheme

Inch	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
3/8	10	10	50	161 543 081	161 543 091	0.245
1/2	15	10	75	161 543 082	161 543 092	0.251
3/4	20	10	150	161 543 083	161 543 093	0.361
1	25	10	280	161 543 084	161 543 094	0.551
1 1/4	32	10	480	161 543 085	161 543 095	0.938
1 1/2	40	10	620	161 543 086	161 543 096	1.390
2	50	10	1230	161 543 087	161 543 097	2.705

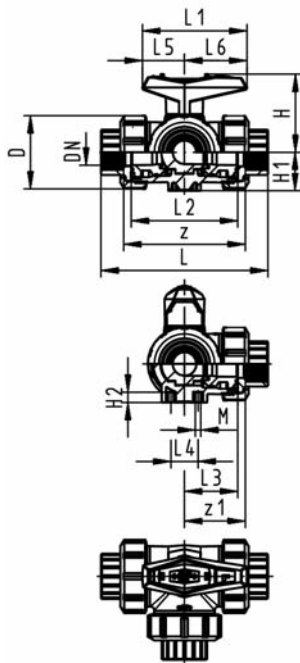
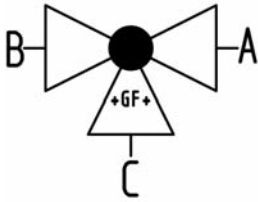
Inch	D [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	H [mm]	H1 [mm]	H2 [mm]	M	z [mm]	z1 [mm]
3/8	50	123	77	73	36	25	32	45	57	28	8	6	85	42
1/2	50	122	77	73	36	25	32	45	57	28	8	6	77	38
3/4	58	141	97	86	43	25	39	58	67	32	8	6	92	46
1	68	161	97	99	50	25	39	58	73	36	8	6	105	53
1 1/4	84	187	128	120	60	45	54	74	90	45	9	8	126	63
1 1/2	97	213	128	137	69	45	54	74	97	51	9	8	143	72
2	124	261	152	179	89	45	66	87	116	65	9	8	185	92



### 3-Way ball valve type 543 PVC-U Horizontal/L-port With threaded sockets NPT

**Model:**

- For easy installation and removal (valve end and union nut are compatible with type 546)
- Ball seals PTFE
- Pneumatic or electric actuator available separately
- Angle of operation 360° without turn limiter
- Turn limiter 90° enclosed, in different positions usable as a clip-on ring
- Integrated stainless steel mounting inserts
- Delivery status A-C opened, see flow scheme

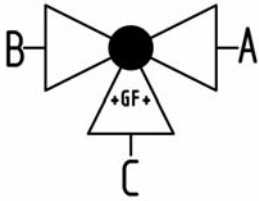


NPT [inch]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
3/8	10	10	50	<b>161 543 101</b>	<b>161 543 111</b>	0.245
1/2	15	10	75	<b>161 543 102</b>	<b>161 543 112</b>	0.251
3/4	20	10	150	<b>161 543 103</b>	<b>161 543 113</b>	0.361
1	25	10	280	<b>161 543 104</b>	<b>161 543 114</b>	0.551
1 1/4	32	10	480	<b>161 543 105</b>	<b>161 543 115</b>	0.938
1 1/2	40	10	620	<b>161 543 106</b>	<b>161 543 116</b>	1.390
2	50	10	1230	<b>161 543 107</b>	<b>161 543 117</b>	2.705

NPT [inch]	D [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	H [mm]	H1 [mm]	H2 [mm]	M	z [mm]	z1 [mm]
3/8	50	115	77	73	36	25	32	45	57	28	8	6	87	43
1/2	50	114	77	73	36	25	32	45	57	28	8	6	81	40
3/4	58	131	97	86	43	25	39	58	67	32	8	6	96	48
1	68	155	97	99	50	25	39	58	73	36	8	6	111	56
1 1/4	84	181	128	120	60	45	54	74	90	45	9	8	134	67
1 1/2	97	205	128	137	69	45	54	74	97	51	9	8	159	80
2	124	261	152	179	89	45	66	87	116	65	9	8	213	106

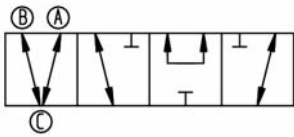


## 3-Way ball valve type 543 PVC-U Horizontal/T-port With solvent cement sockets ASTM

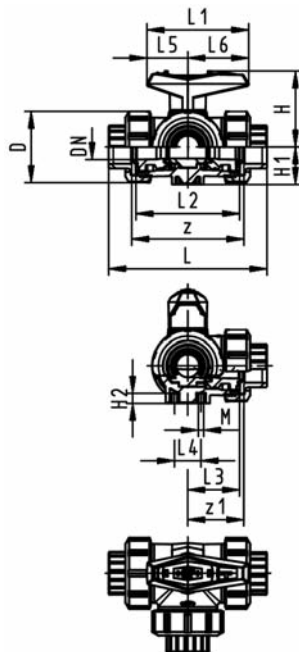


### Model:

- For easy installation and removal (valve end and union nut are compatible with type 546)
- Ball seals PTFE
- Pneumatic or electric actuator available separately
- Angle of operation 360° without turn limiter
- Turn limiter 90° enclosed, in different positions usable as a clip-on ring
- Integrated stainless steel mounting inserts
- Delivery status A-B-C opened, see flow scheme



Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
3/8	10	10	140	<b>161 543 281</b>	<b>161 543 291</b>	0.244
1/2	15	10	200	<b>161 543 282</b>	<b>161 543 292</b>	0.250
3/4	20	10	470	<b>161 543 283</b>	<b>161 543 293</b>	0.359
1	25	10	793	<b>161 543 284</b>	<b>161 543 294</b>	0.544
1 1/4	32	10	1290	<b>161 543 285</b>	<b>161 543 295</b>	0.927
1 1/2	40	10	1910	<b>161 543 286</b>	<b>161 543 296</b>	1.369
2	50	10	3100	<b>161 543 287</b>	<b>161 543 297</b>	2.660



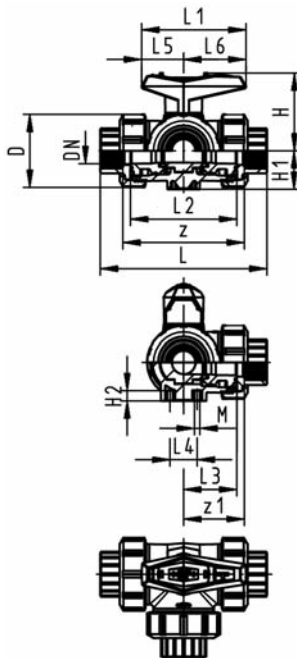
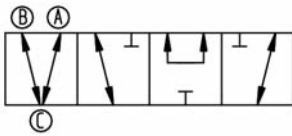
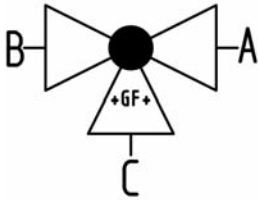
Inch	D [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	H [mm]	H1 [mm]	H2 [mm]	M	z [mm]	z1 [mm]
3/8	50	123	77	73	36	25	32	45	57	28	8	6	85	42
1/2	50	122	77	73	36	25	32	45	57	28	8	6	77	38
3/4	58	141	97	86	43	25	39	58	67	32	8	6	92	46
1	68	161	97	99	50	25	39	58	73	36	8	6	105	53
1 1/4	84	187	128	120	60	45	54	74	90	45	9	8	126	63
1 1/2	97	213	128	137	69	45	54	74	97	51	9	8	143	72
2	124	261	152	179	89	45	66	87	116	65	9	8	185	92



### 3-Way ball valve type 543 PVC-U Horizontal/T-port With threaded sockets NPT

**Model:**

- For easy installation and removal (valve end and union nut are compatible with type 546)
- Ball seals PTFE
- Pneumatic or electric actuator available separately
- Angle of operation 360° without turn limiter
- Turn limiter 90° enclosed, in different positions usable as a clip-on ring
- Integrated stainless steel mounting inserts
- Delivery status A-B-C opened, see flow scheme

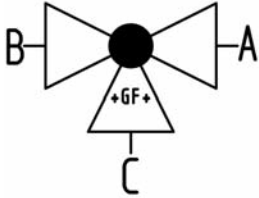


NPT [inch]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
3/8	10	10	140	161 543 301	161 543 311	0.244
1/2	15	10	200	161 543 302	161 543 312	0.250
3/4	20	10	470	161 543 303	161 543 313	0.359
1	25	10	793	161 543 304	161 543 314	0.544
1 1/4	32	10	1290	161 543 305	161 543 315	0.927
1 1/2	40	10	1910	161 543 306	161 543 316	1.369
2	50	10	3100	161 543 307	161 543 317	2.660

NPT [inch]	D [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	H [mm]	H1 [mm]	H2 [mm]	M	z [mm]	z1 [mm]
3/8	50	115	77	73	36	25	32	45	57	28	8	6	87	43
1/2	50	114	77	73	36	25	32	45	57	28	8	6	81	40
3/4	58	131	97	86	43	25	39	58	67	32	8	6	96	48
1	68	155	97	99	50	25	39	58	73	36	8	6	111	56
1 1/4	84	181	128	120	60	45	54	74	90	45	9	8	134	67
1 1/2	97	205	128	137	69	45	54	74	97	51	9	8	159	80
2	124	261	152	179	89	45	66	87	116	65	9	8	213	106



## 3-Way ball valve type 543 PVC-U Horizontal/L-port With lockable handle With solvent cement sockets ASTM

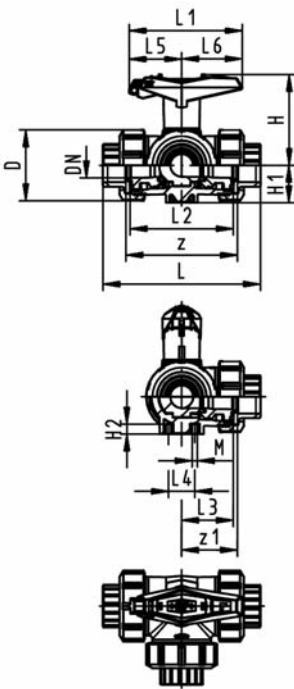


### Model:

- For easy installation and removal (valve end and union nut are compatible with type 546)
- Ball seals PTFE
- Pneumatic or electric actuator available separately
- Angle of operation 360° without turn limiter
- Turn limiter 90° enclosed, in different positions usable as a clip-on ring
- Integrated stainless steel mounting inserts
- Multifunctional lever red with ratched setting 45°, lockable
- Delivery status A-C opened, see flow scheme



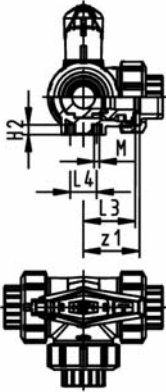
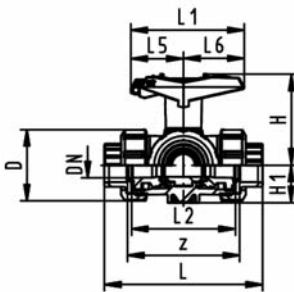
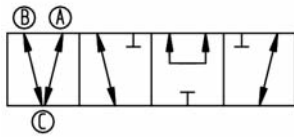
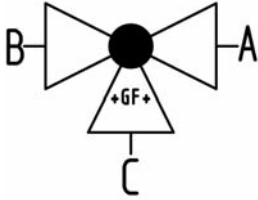
Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
3/8	10	10	50	161 543 741	161 543 751	0.259
1/2	15	10	75	161 543 742	161 543 752	0.265
3/4	20	10	150	161 543 743	161 543 753	0.378
1	25	10	280	161 543 744	161 543 754	0.568
1 1/4	32	10	480	161 543 745	161 543 755	0.961
1 1/2	40	10	620	161 543 746	161 543 756	1.413
2	50	10	1230	161 543 747	161 543 757	2.736



Inch	D [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	H [mm]	H1 [mm]	H2 [mm]	M	z [mm]	z1 [mm]
3/8	50	123	87	73	36	25	42	45	79	28	8	6	85	42
1/2	50	122	87	73	36	25	42	45	79	28	8	6	77	38
3/4	58	141	108	86	43	25	50	58	88	32	8	6	92	46
1	68	161	108	99	50	25	50	58	94	36	8	6	105	53
1 1/4	84	187	141	120	60	45	66	75	113	45	9	8	126	63
1 1/2	97	213	141	137	69	45	66	75	119	51	9	8	143	72
2	124	261	165	179	89	45	78	87	141	65	9	8	185	92



### 3-Way ball valve type 543 PVC-U Horizontal/T-port With lockable handle With solvent cement sockets ASTM



#### Model:

- For easy installation and removal (valve end and union nut are compatible with type 546)
- Ball seals PTFE
- Pneumatic or electric actuator available separately
- Angle of operation 360° without turn limiter
- Turn limiter 90° enclosed, in different positions usable as a clip-on ring
- Integrated stainless steel mounting inserts
- Multifunctional lever red with ratched setting 45°, lockable
- Delivery status A-B-C opened, see flow scheme

Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
3/8	10	10	140	<b>161 543 761</b>	<b>161 543 771</b>	0.258
1/2	15	10	200	<b>161 543 762</b>	<b>161 543 772</b>	0.264
3/4	20	10	470	<b>161 543 763</b>	<b>161 543 773</b>	0.376
1	25	10	793	<b>161 543 764</b>	<b>161 543 774</b>	0.561
1 1/4	32	10	1290	<b>161 543 765</b>	<b>161 543 775</b>	0.950
1 1/2	40	10	1910	<b>161 543 766</b>	<b>161 543 776</b>	1.392
2	50	10	3100	<b>161 543 767</b>	<b>161 543 777</b>	2.691

Inch	D [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	H [mm]	H1 [mm]	H2 [mm]	M	z [mm]	z1 [mm]
3/8	50	123	87	73	36	25	42	45	79	28	8	6	85	42
1/2	50	122	87	73	36	25	42	45	79	28	8	6	77	38
3/4	58	141	108	86	43	25	50	58	88	32	8	6	92	46
1	68	161	108	99	50	25	50	58	94	36	8	6	105	53
1 1/4	84	187	141	120	60	45	66	75	113	45	9	8	126	63
1 1/2	97	213	141	137	69	45	66	75	119	51	9	8	143	72
2	124	261	165	179	89	45	78	87	141	65	9	8	185	92



## 3-Way ball valve type 543 PVC-U Vertical/L-port With solvent cement sockets ASTM

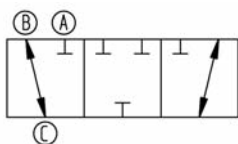
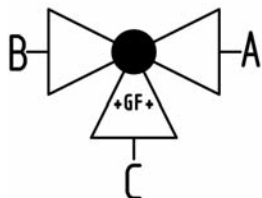


### Model:

- Vertical inlet solvent cement spigot metric
- Easy installation and removal using union on third outlet
- Ball seals PTFE
- Electric actuator available separately
- Angle of operation 360° without turn limiter
- Delivery status B-C opened, see flow scheme

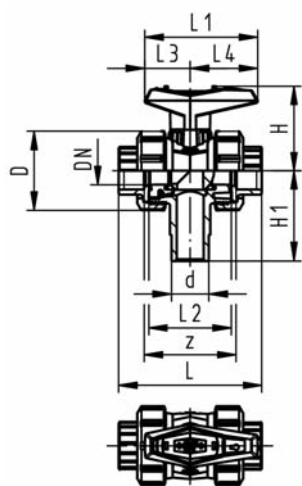
### Mode of action:

- For interconnection of two inputs



Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	GP	kg
3/8	10	10	49	<b>161 543 661</b>	<b>161 543 671</b>	10	0.162
1/2	15	10	77	<b>161 543 662</b>	<b>161 543 672</b>	10	0.166
3/4	20	10	146	<b>161 543 663</b>	<b>161 543 673</b>	10	0.255
1	25	10	260	<b>161 543 664</b>	<b>161 543 674</b>	6	0.372
1 1/4	32	10	437	<b>161 543 665</b>	<b>161 543 675</b>	6	0.622
1 1/2	40	10	667	<b>161 543 666</b>	<b>161 543 676</b>	4	0.886
2	50	10	1293	<b>161 543 667</b>	<b>161 543 677</b>	8	1.617

Inch	D [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	H [mm]	H1 [mm]	z [mm]
3/8	50	106	77	56	32	45	57	62	67
1/2	50	105	77	56	32	45	57	62	61
3/4	58	121	97	66	39	58	67	72	70
1	68	133	97	71	39	58	73	77	76
1 1/4	84	152	128	85	54	74	90	87	90
1 1/2	97	165	128	89	54	74	97	97	94
2	124	183	152	101	66	87	116	112	107







## 3-Way ball valve type 543 PVC-U Vertical/L-port With threaded sockets NPT

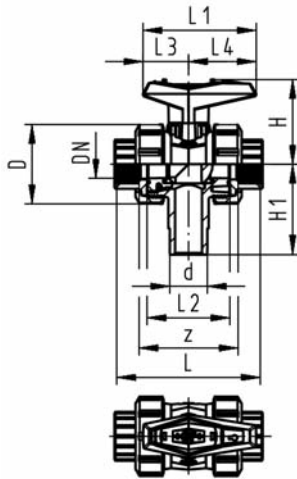
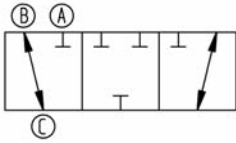
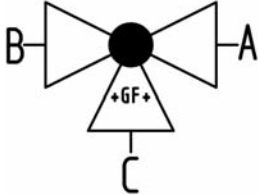


### Model:

- Vertical inlet solvent cement spigot metric
- Easy installation and removal using union on third outlet
- Ball seals PTFE
- Electric actuator available separately
- Angle of operation 360° without turn limiter
- Delivery status B-C opened, see flow scheme

### Mode of action:

- For interconnection of two inputs

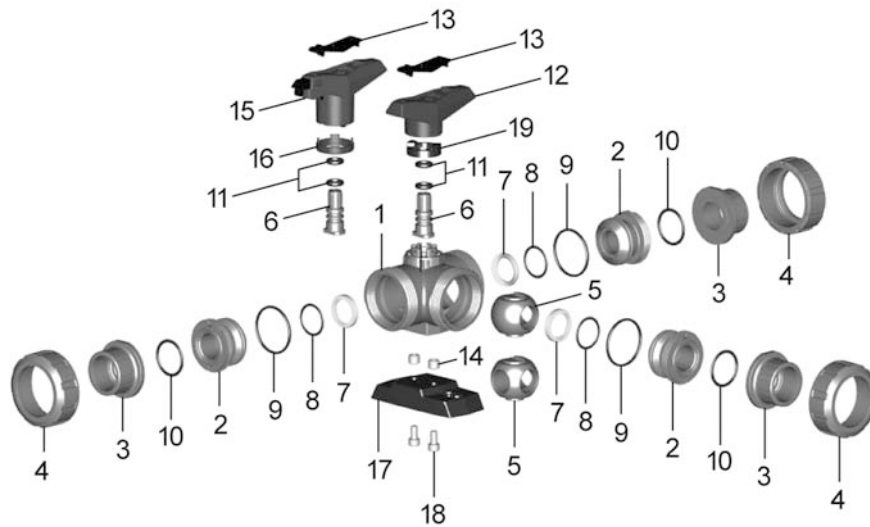


NPT [inch]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	GP	kg
3/8	10	10	49	161 543 681	161 543 691	10	0.162
1/2	15	10	77	161 543 682	161 543 692	10	0.166
3/4	20	10	146	161 543 683	161 543 693	10	0.255
1	25	10	260	161 543 684	161 543 694	6	0.372
1 1/4	32	10	437	161 543 685	161 543 695	6	0.622
1 1/2	40	10	667	161 543 686	161 543 696	4	0.886
2	50	10	1293	161 543 687	161 543 697	8	1.617

NPT [inch]	D [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	H [mm]	H1 [mm]	z [mm]
3/8	50	98	77	56	32	45	57	62	70
1/2	50	98	77	56	32	45	57	62	64
3/4	58	112	97	66	39	58	67	72	76
1	68	127	97	71	39	58	73	77	83
1 1/4	84	146	128	85	54	74	90	87	99
1 1/2	97	157	128	89	54	74	97	97	111
2	124	183	152	101	66	87	116	112	135

# Spare parts ball valve type 543

## Spare parts ball valve type 543 horizontal



### Central part L-port

**Model:**

- Every connecting pieces and union nuts are listed on product range industry valves
- Ball seals standard in PTFE
- Central part consisting of: body (1), union bush (2), ball (5), stem (6), ball-, backing-, body-, face- and stem seal (7-11), standard lever (12) and threaded inserts stainless steel (14)

d [mm]	Inch	DN [mm]	PVC-U EPDM Code	PVC-U FPM Code	kg
16	3/8	10	161 488 002	161 488 012	0.158
20	1/2	15	161 488 002	161 488 012	0.158
25	3/4	20	161 488 003	161 488 013	0.232
32	1	25	161 488 004	161 488 014	0.350
40	1 1/4	32	161 488 005	161 488 015	0.617
50	1 1/2	40	161 488 006	161 488 016	0.916
63	2	50	161 488 007	161 488 017	1.757



### Central part T-port

**Model:**

- Ball seals standard in PTFE
- Central part consisting of: body (1), union bush (2), ball (5), stem (6), ball-, backing-, body-, face- and stem seal (7-11), standard lever (12) and threaded inserts stainless steel (14)

d [mm]	Inch	DN [mm]	PVC-U EPDM Code	PVC-U FPM Code	kg
16	3/8	10	161 488 022	161 488 032	0.157
20	1/2	15	161 488 022	161 488 032	0.157
25	3/4	20	161 488 023	161 488 033	0.230
32	1	25	161 488 024	161 488 034	0.343
40	1 1/4	32	161 488 025	161 488 035	0.606
50	1 1/2	40	161 488 026	161 488 036	0.895
63	2	50	161 488 027	161 488 037	1.712



## Ball set L-port

### Model:

- Ball seals standard in PTFE
- Ball set consisting of: lever (12), ball (5), stem (6), ball-, backing-, body- and stem seal (7-9,11)

d [mm]	Inch	DN [mm]	PVC-U EPDM Code	PVC-U FPM Code	kg	
16	3/8	10	161 488 162	161 488 172	0.029	
20	1/2	15	161 488 162	161 488 172	0.029	
25	3/4	20	161 488 163	161 488 173	0.055	
32	1	25	161 488 164	161 488 174	0.076	
40	1 1/4	32	161 488 165	161 488 175	0.132	
50	1 1/2	40	161 488 166	161 488 176	0.200	
63	2	50	161 488 167	161 488 177	0.337	



## Ball set T-port

### Model:

- Ball seals standard in PTFE
- Ball set consisting of: lever (12), ball (5), stem (6), ball-, backing-, body- and stem seal (7-9,11)

d [mm]	Inch	DN [mm]	PVC-U EPDM Code	PVC-U FPM Code	kg	
16	3/8	10	161 488 182	161 488 192	0.028	
20	1/2	15	161 488 182	161 488 192	0.028	
25	3/4	20	161 488 183	161 488 193	0.053	
32	1	25	161 488 184	161 488 194	0.069	
40	1 1/4	32	161 488 185	161 488 195	0.121	
50	1 1/2	40	161 488 186	161 488 196	0.179	
63	2	50	161 488 187	161 488 197	0.292	



## Lever

d [mm]	Inch	DN [mm]	Standard lever L-port red Code	Standard lever L-port black Code	Standard lever T-port red Code	
16	3/8	10	167 484 488	167 484 376	167 484 588	
20	1/2	15	167 484 488	167 484 376	167 484 588	
25	3/4	20	167 484 489	167 484 377	167 484 589	
32	1	25	167 484 490	167 484 378	167 484 590	
40	1 1/4	32	167 484 491	167 484 379	167 484 591	
50	1 1/2	40	167 484 492	167 484 380	167 484 592	
63	2	50	167 484 493	167 484 381	167 484 593	

d [mm]	Inch	DN [mm]	Standard lever T-port black Code	Multifunctional-lever L-port red Code	Multifunctional-lever T-port red Code	kg	
16	3/8	10	167 484 576	167 484 442	167 484 542	0.026	
20	1/2	15	167 484 576	167 484 442	167 484 542	0.026	
25	3/4	20	167 484 577	167 484 443	167 484 543	0.045	
32	1	25	167 484 578	167 484 444	167 484 544	0.045	
40	1 1/4	32	167 484 579	167 484 445	167 484 545	0.082	
50	1 1/2	40	167 484 580	167 484 446	167 484 546	0.082	
63	2	50	167 484 581	167 484 447	167 484 547	0.104	



## Face seal

d [mm]	Inch	DN [mm]	EPDM Code	FPM Code	kg	
16	3/8	10	748 410 059	749 410 059	0.002	
20	1/2	15	748 410 059	749 410 059	0.002	
25	3/4	20	748 410 106	749 410 106	0.002	
32	1	25	748 410 151	749 410 151	0.002	
40	1 1/4	32	748 410 062	749 410 062	0.005	
50	1 1/2	40	748 410 003	749 410 003	0.007	
63	2	50	748 410 231	749 410 231	0.002	

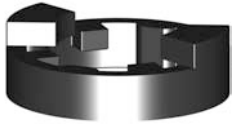


## Seal set

### Model:

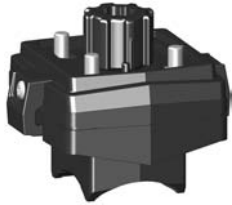
- Seal set consisting of: backing-, body-, face- and stem seal (8-11)

d [mm]	Inch	DN [mm]	EPDM Code	FPM Code	kg
16	3/8	10	<b>161 488 242</b>	<b>161 488 248</b>	0.011
20	1/2	15	<b>161 488 242</b>	<b>161 488 248</b>	0.011
25	3/4	20	<b>161 488 243</b>	<b>161 488 249</b>	0.011
32	1	25	<b>161 488 244</b>	<b>161 488 250</b>	0.014
40	1 1/4	32	<b>161 488 245</b>	<b>161 488 251</b>	0.014
50	1 1/2	40	<b>161 488 246</b>	<b>161 488 252</b>	0.026
63	2	50	<b>161 488 247</b>	<b>161 488 253</b>	0.032



## Turn limiter 90°

d [mm]	Inch	DN [mm]	Code	kg
16	3/8	10	<b>167 482 479</b>	0.001
20	1/2	15	<b>167 482 479</b>	0.001
25	3/4	20	<b>167 482 480</b>	0.002
32	1	25	<b>167 482 480</b>	0.002
40	1 1/4	32	<b>167 482 481</b>	0.004
50	1 1/2	40	<b>167 482 481</b>	0.004
63	2	50	<b>167 482 482</b>	0.004



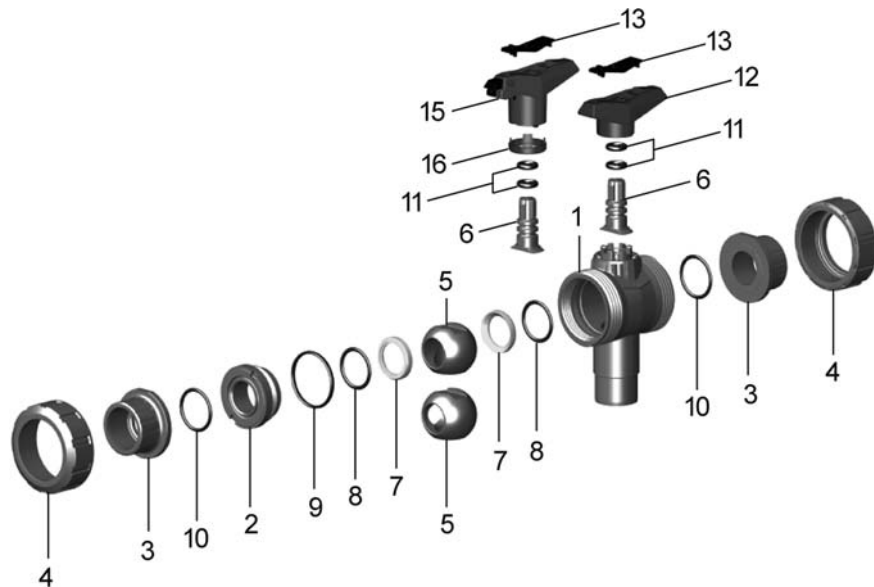
## Assembly kit

### Model:

- Intermediate element for ball valve type 543 horizontal and electric or pneumatic actuators EA21; PA11/21
- Including screws and position indicator for actuators

d [mm]	Inch [inch]	DN [mm]	Code	kg
16 - 20	3/8 - 1/2	10 - 15	<b>167 484 941</b>	0.156
25 - 32	3/4 - 1	20 - 25	<b>167 484 942</b>	0.181
40 - 50	1 1/4 - 1 1/2	32 - 40	<b>167 484 943</b>	0.197
63	2	50	<b>167 484 944</b>	0.236

## Spare parts ball valve type 543 vertical



### Central part L-port

#### Model:

- Every connecting pieces and union nuts are listed on product range industry valves
- Ball seals standard in PTFE
- Central part consisting of: body (1), union bush (2), ball (5), stem (6), ball-, backing-, body-, face- and stem seal (7-11) and standard lever (12)

d [mm]	Inch	DN [mm]	PVC-U EPDM Code	PVC-U FPM Code	kg
16	3/8	10	161 488 041	161 488 051	0.104
20	3/8	15	161 488 042	161 488 052	0.104
25	3/4	20	161 488 043	161 488 053	0.169
32	1	25	161 488 044	161 488 054	0.238
40	1 1/4	32	161 488 045	161 488 055	0.408
50	1 1/2	40	161 488 046	161 488 056	0.570
63	2	50	161 488 047	161 488 057	0.985



### Central part diverter ball

#### Model:

- Ball seals standard in PTFE
- Central part consisting of: body (1), union bush (2), ball (5), stem (6), ball-, backing-, body-, face- and stem seal (7-11) and standard lever (12)

d [mm]	Inch	DN [mm]	PVC-U EPDM Code	PVC-U FPM Code	kg
16	3/8	10	161 488 061	161 488 071	0.103
20	1/2	15	161 488 062	161 488 072	0.103
25	3/4	20	161 488 063	161 488 073	0.167
32	1	25	161 488 064	161 488 074	0.231
40	1 1/4	32	161 488 065	161 488 075	0.397
50	1 1/2	40	161 488 066	161 488 076	0.549
63	2	50	161 488 067	161 488 077	0.940

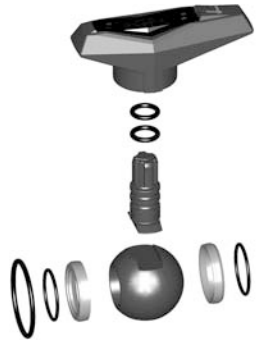


## Ball set L-port

### Model:

- Ball seals standard in PTFE
- Ball set consisting of: lever (12), ball (5), stem (6), ball-, backing-, body- and stem seal (7-9,11)

d [mm]	Inch	DN [mm]	PVC-U EPDM Code	PVC-U FPM Code	kg
16	3/8	10	161 488 202	161 488 212	0.030
20	1/2	15	161 488 202	161 488 212	0.030
25	3/4	20	161 488 203	161 488 213	0.055
32	1	25	161 488 204	161 488 214	0.073
40	1 1/4	32	161 488 205	161 488 215	0.137
50	1 1/2	40	161 488 206	161 488 216	0.198
63	2	50	161 488 207	161 488 217	0.348



## Ball set diverter ball

### Model:

- Ball seals standard in PTFE
- Ball set consisting of: lever (12), ball (5), stem (6), ball-, backing-, body- and stem seal (7-9,11)

d [mm]	Inch	DN [mm]	PVC-U EPDM Code	PVC-U FPM Code	kg
16	3/8	10	161 488 222	161 488 232	0.025
20	1/2	15	161 488 222	161 488 232	0.025
25	3/4	20	161 488 223	161 488 233	0.046
32	1	25	161 488 224	161 488 234	0.053
40	1 1/4	32	161 488 225	161 488 235	0.098
50	1 1/2	40	161 488 226	161 488 236	0.120
63	2	50	161 488 227	161 488 237	0.183



## Lever

d [mm]	Inch	DN [mm]	Standard lever L-port red Code	Standard lever diverter ball red Code	Multifunctional-lever L-port red Code
16	3/8	10	167 484 688	167 484 788	167 484 642
20	1/2	15	167 484 688	167 484 788	167 484 642
25	3/4	20	167 484 689	167 484 789	167 484 643
32	1	25	167 484 690	167 484 790	167 484 644
40	1 1/4	32	167 484 691	167 484 791	167 484 645
50	1 1/2	40	167 484 692	167 484 792	167 484 646
63	2	50	167 484 693	167 484 793	167 484 647

d [mm]	Inch	DN [mm]	Multifunctional-lever diverter ball red Code	kg
16	3/8	10	167 484 742	0.026
20	1/2	15	167 484 742	0.026
25	3/4	20	167 484 743	0.045
32	1	25	167 484 744	0.045
40	1 1/4	32	167 484 745	0.082
50	1 1/2	40	167 484 746	0.082
63	2	50	167 484 747	0.104



## Face seal

d [mm]	Inch	DN [mm]	EPDM Code	FPM Code	kg
16	3/8	10	748 410 059	749 410 059	0.002
20	1/2	15	748 410 059	749 410 059	0.002
25	3/4	20	748 410 106	749 410 106	0.002
32	1	25	748 410 151	749 410 151	0.002
40	1 1/4	32	748 410 062	749 410 062	0.005
50	1 1/2	40	748 410 003	749 410 003	0.007
63	2	50	748 410 231	749 410 231	0.002

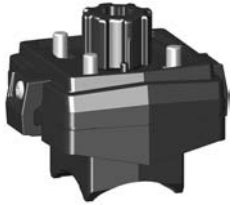


## Seal set

### Model:

- Seal set consisting of: backing-, body-, face- and stem seal (8-11)

d [mm]	Inch	DN [mm]	EPDM Code	FPM Code	kg
16	3/8	10	<b>161 486 400</b>	<b>161 486 410</b>	0.003
20	1/2	15	<b>161 486 400</b>	<b>161 486 410</b>	0.003
25	3/4	20	<b>161 486 401</b>	<b>161 486 411</b>	0.005
32	1	25	<b>161 486 402</b>	<b>161 486 412</b>	0.006
40	1 1/4	32	<b>161 486 403</b>	<b>161 486 413</b>	0.010
50	1 1/2	40	<b>161 486 404</b>	<b>161 486 414</b>	0.023
63	2	50	<b>161 486 405</b>	<b>161 486 415</b>	0.031



## Assembly kit

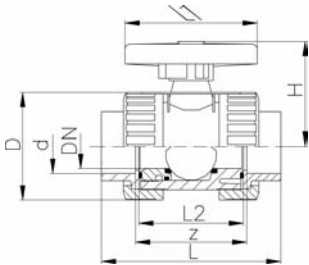
### Model:

- Intermediate element for ball valve type 543 vertical and electric or pneumatic actuators EA21; PA11/21
- Including screws and position indicator for actuators

d [mm]	Inch [inch]	DN [mm]	Code	kg
16 - 20	3/8 - 1/2	10 - 15	<b>167 484 945</b>	0.156
25 - 32	3/4 - 1	20 - 25	<b>167 484 946</b>	0.181
40 - 50	1 1/4 - 1 1/2	32 - 40	<b>167 484 947</b>	0.197
63	2	50	<b>167 484 948</b>	0.236

# Metering ball valve metric

## Metering ball valve type 323 PVC-U With solvent cement sockets metric

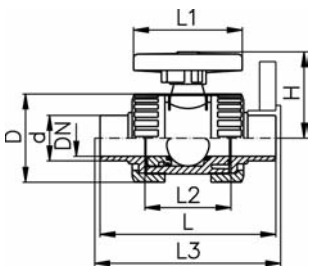


### Model:

- For easy installation and removal
- Ball seals PTFE
- Angle of operation 180° with scale

d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	GP	kg
16	10	10	11	161 323 401	161 323 411	10	0.160
20	15	10	20	161 323 402	161 323 412	10	0.161

d [mm]	closest inch	z [mm]	D [mm]	L [mm]	L1 [mm]	L2 [mm]	H [mm]
16	3/8	71	45	99	78	63	50
20	1/2	71	45	102	78	63	50



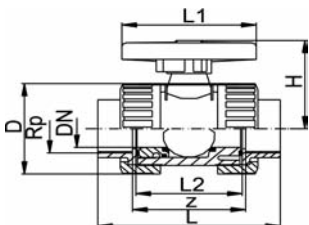
## Metering ball valve type 323 PVC-U With solvent cement spigots metric

### Model:

- For easy installation and removal
- Ball seals PTFE
- Angle of operation 180° with scale
- Overall length EN 558

d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	GP	kg
16	10	10	11	161 323 441	161 323 451	10	0.162
20	15	10	20	161 323 442	161 323 452	10	0.160

d [mm]	D [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	H [mm]	closest inch
16	45	114	78	63	120	50	3/8
20	45	124	78	63	130	50	1/2



## Metering ball valve type 323 PVC-U With threaded sockets Rp

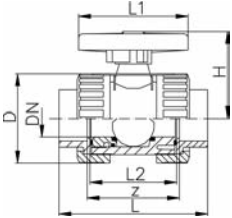
Rp [inch]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	GP	kg
3/8	10	10	11	161 323 421	161 323 431	10	0.162
1/2	15	10	20	161 323 422	161 323 432	10	0.161

Rp [inch]	D [mm]	L [mm]	L1 [mm]	L2 [mm]	H [mm]	z [mm]
3/8	45	99	78	63	50	67
1/2	45	102	78	63	50	67



# Metering ball valve Inch BS

## Metering ball valve type 323 PVC-U With solvent cement sockets BS Inch



**Model:**

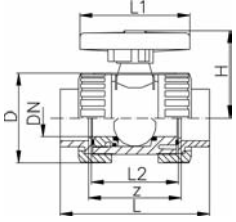
- For easy installation and removal
- Ball seals PTFE
- Angle of operation 180° with scale

Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	GP	kg	
3/8	10	10	11	<b>161 323 501</b>	<b>161 323 511</b>	10	0.100	
1/2	15	10	20	<b>161 323 502</b>	<b>161 323 512</b>	10	0.159	

Inch	z [mm]	D [mm]	L [mm]	L1 [mm]	L2 [mm]	H [mm]	
3/8	71	45	99	78	63	50	
1/2	71	45	102	78	63	50	

# Metering ball valve ASTM/ANSI

## Metering ball valve type 323 PVC-U With solvent cement sockets ASTM

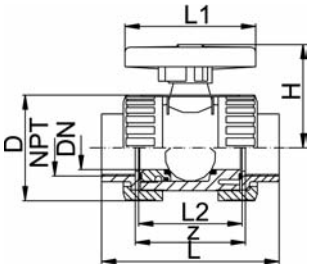


Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	GP	kg	
3/8	10	10	11	161 323 521	161 323 531	10	0.172	
1/2	15	10	20	161 323 522	161 323 532	10	0.161	

Inch	z [mm]	D [mm]	L [mm]	L1 [mm]	L2 [mm]	H [mm]	
3/8	74	45	112	78	63	50	
1/2	67	45	112	78	63	50	

## Metering ball valve type 323 PVC-U With threaded sockets NPT



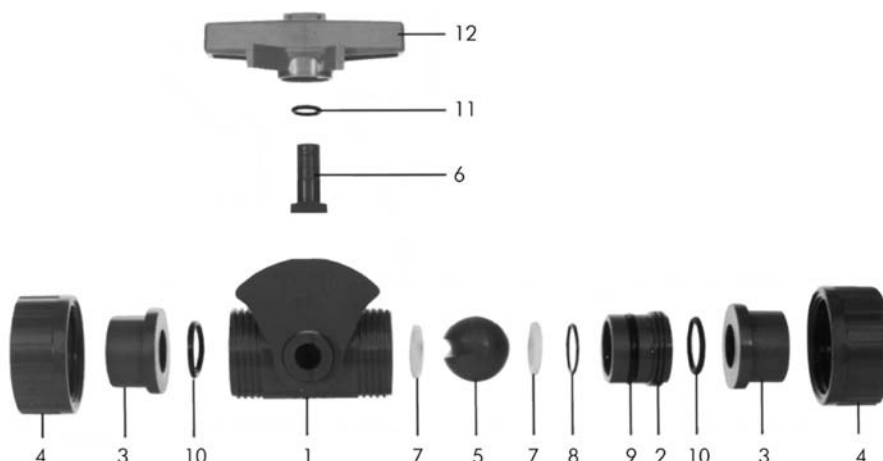
NPT [inch]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	GP	kg	
3/8	10	10	11	161 323 541	161 323 551	10	0.172	
1/2	15	10	20	161 323 542	161 323 552	10	0.166	

NPT [inch]	z [mm]	D [mm]	L [mm]	L1 [mm]	L2 [mm]	H [mm]	
3/8	78	45	112	78	63	50	
1/2	71	45	112	78	63	50	

# Spare parts metering ball valve type 323

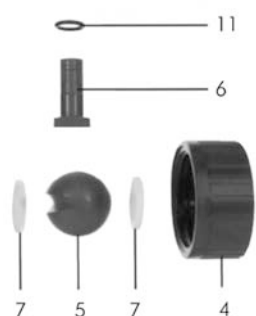
## Spare parts metering ball valve type 323



### Ball set

**Model:**

- Ball seals standard in PTFE
- Ball set consisting of: union nut (4), ball (5), stem (6), ball- and stem seal (7,11)



d [mm]	Inch	DN [mm]	PVC-U EPDM Code	PVC-U FPM Code	kg
16	3/8	10	161 482 986	161 482 989	0.044
20	1/2	15	161 482 987	161 482 990	0.043

### Lever



d [mm]	Inch	DN [mm]	PVC-U orange Code	ASA black Code	kg
16	3/8	10	161 480 724	160 480 130	0.020
20	1/2	15	161 480 724	160 480 130	0.020

### Face seal



d [mm]	Inch	DN [mm]	EPDM Code	FPM Code	kg
16	3/8	10	748 410 042	749 410 042	0.002
20	1/2	15	748 410 042	749 410 042	0.002

### Seal set

**Model:**

- Seal set consisting of: backing-, body-, face- and stem seal (8-11)



d [mm]	Inch	DN [mm]	EPDM Code	FPM Code	kg
16	3/8	10	161 482 883	161 482 892	0.007
20	1/2	15	161 482 883	161 482 892	0.007

### Union bush



d [mm]	Inch	DN [mm]	PVC-U Code	kg
16	3/8	10	161 482 339	0.012
20	1/2	15	161 482 339	0.012



## Union nut

d [mm]	Inch	DN [mm]	PVC-U Code	kg	
16	3/8	10	161 340 617	0.013	
20	1/2	15	161 340 617	0.013	



## Valve end with socket metric

d [mm]	Inch	DN [mm]	PVC-U Code	kg	
16	3/8	10	161 480 536	0.010	
20	1/2	15	161 480 537	0.010	



## Valve end with socket ANSI/JIS/BS

Inch	DN [mm]	PVC-U ANSI Code	PVC-U BS Code	kg	
3/8	10	161 482 377	161 480 543	0.009	
1/2	15	161 482 378	161 480 544	0.008	



## Valve end with spigot metric

d [mm]	Inch	DN [mm]	PVC-U Code	kg	
16	3/8	10	161 482 345	0.010	
20	1/2	15	161 482 346	0.012	



## Threaded bush Rp

Rp [inch]	DN [mm]	PVC-U Code	kg	
3/8	10	161 480 550	0.010	
1/2	15	161 480 551	0.010	



## Threaded bush Rc/NPT

Inch	DN [mm]	PVC-U Rc Code	PVC-U NPT Code	kg	
3/8	10		161 482 389	0.015	
1/2	15	161 484 610	161 482 390	0.012	

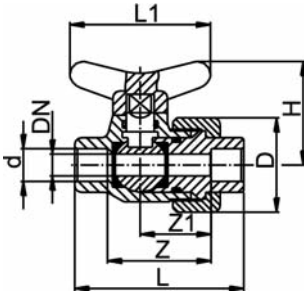
# Laboratory ball valve metric

## Laboratory ball valve type 322 PVC-U With solvent cement sockets metric



**Model:**

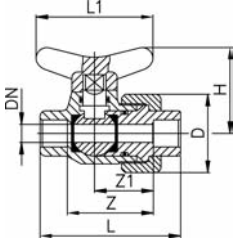
- Disconnection one end only
- Ball seals PTFE



d [mm]	DN [mm]	PN	EPDM Code	FPM Code	GP	kg	D [mm]	L [mm]	L1 [mm]	H [mm]	z [mm]	z1 [mm]	
10	6	10	<b>161 322 150</b>	<b>161 322 199</b>	40	0.043	34	52	45	38	26	15	
12	8	10	<b>161 322 200</b>	<b>161 322 249</b>	50	0.050	34	60	45	38	36	25	

# Laboratory ball valve Inch BS

## Laboratory ball valve type 322 PVC-U With solvent cement sockets Inch BS/ASTM



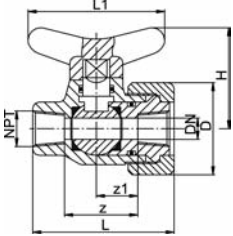
**Model:**

- Disconnection one end only
- Ball seals PTFE
- Angle of operation 90°

Inch	DN [mm]	PN	EPDM Code	FPM Code	GP	kg	z [mm]	z1 [mm]	D [mm]	L [mm]	L1 [mm]	H [mm]	
1/8	6	10	<b>161 324 150</b>	<b>161 324 199</b>	-	0.042	26	15	34	52	45	38	
1/4	8	10	<b>161 324 200</b>	<b>161 324 249</b>	40	0.045	36	25	34	60	45	38	

# Laboratory ball valve ASTM/ANSI

## Laboratory ball valve type 324 PVC-U With threaded sockets NPT



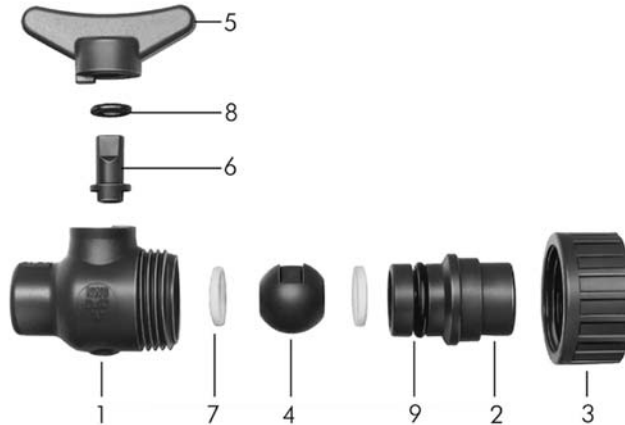
**Model:**

- Disconnection one end only
- Ball seals PTFE
- Angle of operation 90°

NPT [inch]	DN [mm]	PN	EPDM Code	GP	kg	z [mm]	z1 [mm]	D [mm]	L [mm]	L1 [mm]	H [mm]	
1/4	8	10	161 324 454	50	0.042	26	15	34	52	45	38	

# Spare parts laboratory ball valve type 322

## Spare parts laboratory ball valve type 322



### Ball set

#### Model:

- Ball seals standard in PTFE
- Ball set consisting of: ball (4), stem (6), ball- and stem seal (7-8)



d [mm]	Inch [inch]	DN [mm]	PVC-U EPDM Code	PVC-U FPM Code	kg
10	1/8	6	161 482 978	161 482 980	0.010
12	1/4	8	161 482 978	161 482 980	0.010

### Lever



d [mm]	Inch [inch]	DN [mm]	PVC-U Code	kg
10	1/8	6	161 322 205	0.005
12	1/4	8	161 322 205	0.005

### Seal set

#### Model:

- Seal set consisting of: stem- and body seal (8-9)



d [mm]	Inch [inch]	DN [mm]	EPDM Code	FPM Code	kg
10	1/8	6	161 482 982	161 482 984	0.006
12	1/4	8	161 482 982	161 482 984	0.006

### Union nut



d [mm]	Inch [inch]	DN [mm]	PVC-U Code	kg
10	1/8	6	161 322 203	0.010
12	1/4	8	161 322 203	0.010



## Valve end with socket metric

d [mm]	Inch [inch]	DN [mm]	PVC-U Code	kg	
10	1/8	6	<b>161 322 152</b>	0.006	
12	1/4	8	<b>161 322 202</b>	0.008	

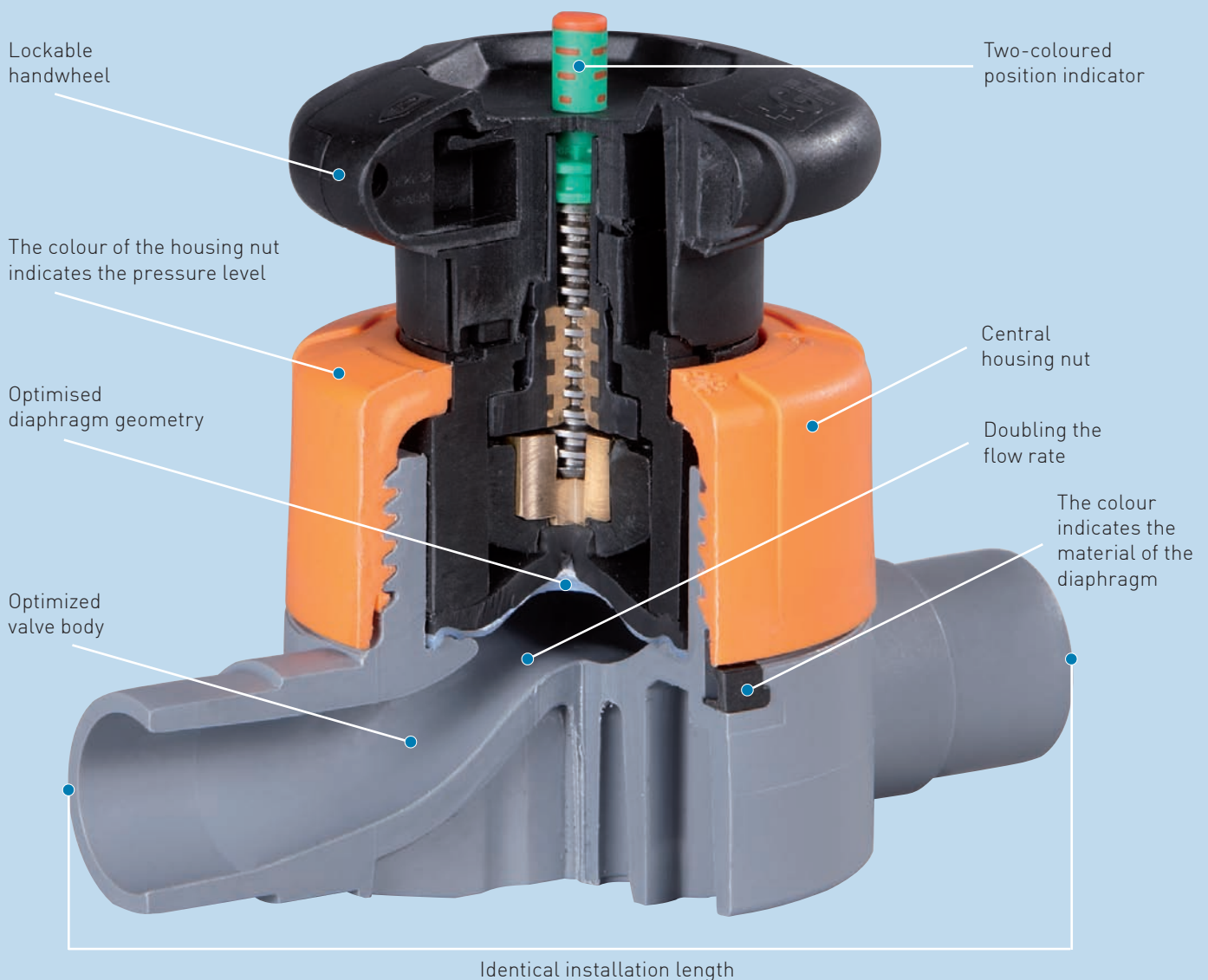
# Features

The sum of innovative developments guarantees the added value.

What is important and what isn't? GF Piping Systems asked about the requirements and that was the basis for developing the technical solutions. This way of proceeding is what makes the valve so extraordinary. In the new generation of diaphragm valves, there is something over and above

innovation in details that is crucial for success. The optimized valve body guarantees the sensational flow rate. The installation length is identical to the length in the previous model and this makes for problem-free backward-compatibility. The central housing nut holds everything together

with a new level of reliability. There are many other characteristics that make the new generation of diaphragm valves a globally successful product innovation.



Functions and configurations can differ from the illustration, depending on the type.

# Copiable Configurator +GF+ Diaphragm Valve

## Valve body type

- A20 Type 514 - True Union Design
- A21 Type 515 - Spigots
- A22 Type 517 - Flanges

## Material

- B01 PVC-U
- B02 PVC-C
- B03 ABS

## Dimension

- C05 DN 10 3/8"
- C06 DN 15 1/2"
- C07 DN 20 3/4"
- C08 DN 25 1"
- C09 DN 32 1 1/4"
- C10 DN 40 1 1/2"
- C11 DN 50 2"

## Version

- D11 standard
- D05 silicone free / oil free

## Diaphragm

- E01 EPDM
- E02 FPM
- E11 NBR
- E12 PTFE/EPDM
- E04 PTFE/FPM

## Connecting parts

- H01 PVC-U Cemented socket metric
- H02 PVC-U Cemented socket JIS
- H03 PVC-U Cemented socket ASTM
- H04 PVC-U Cemented socket Zoll BS
- H05 PVC-U Cemented spigot metric
- H06 PVC-U Threaded socket Rp (ISO)
- H08 PVC-U Threaded socket Rc (JIS)
- H09 PVC-U Threaded socket NPT (ASTM)
- H11 PVC-C Cemented socket metric
- H13 PVC-C Cemented socket Zoll ASTM
- H14 PVC-C Cemented spigot metric
- H20 ABS Cemented socket metric
- H21 ABS Cemented socket Zoll BS
- H24 ABS Cemented spigot metric
- H40 PE-80 Fusion socket metric
- H41 PE-100 Butt fusion spigot SDR11 metric
- H43 PE-100 Butt fusion spigot long SDR11 metric
- H62 Fixed flange PVC-U JIS
- H70 Backing flange PVC-U metric with PVC-U endings
- H71 Backing flange PVC-U Zoll ANSI with PVC-U endings
- H71 PVCC Backing flange PVC-U Zoll ANSI with PVC-C endings
- H72 PVCC Backing flange PP-steel metric with PVC-U endings
- H72 PVCC Backing flange PP-steel metric with PVC-C endings
- H72 ABS Backing flange PP-steel metric with ABS endings
- H73 PVCC Backing flange PP-steel Zoll ANSI with PVC-U endings
- H73 PVCC Backing flange PP-steel Zoll ANSI with PVC-C endings
- H73 ABS Backing flange PP-steel Zoll ANSI with ABS endings
- H74 PVCC Backing flange PP-V metric with PVC-U endings
- H74 PVCC Backing flange PP-V metric with PVC-C endings
- H74 ABS Backing flange PP-V metric with ABS endings
- H74 PVCC Backing flange PP-V metric with PVC-C endings
- H75 PVCC Backing flange PP-V ANSI with PVC-U endings
- H75 PVCC Backing flange PP-V ANSI with PVC-C endings
- H78 PVCC Backing flange PP-GF JIS with PVC-U endings
- H80 PVC-U valve end blank

## Electrical feedback

- I33 Electrical feedback with Ag, Ni limit switches
- I34 Electrical feedback with Au limit switches

## Manual actuated: pressure tight housing

- K30 Bonnet pressure tight
- K31 Bonnet not pressure tight

## Pressure range

- M01 PN10
- M02 PN16

## Pneumatic Actuator DIASTAR

- P40 DIASTAR Six FC fail safe to close
- P43 DIASTAR Ten FC fail safe to close
- P44 DIASTAR Sixteen FC fail safe to close
- P45 DIASTAR Sixteen FO fail safe to open
- P46 DIASTAR Sixteen DA double acting
- P47 DIASTAR Ten FO fail safe to open
- P48 DIASTAR Ten DA double acting



## Example:

Diaphragm valve with valve body type 515, PVC-U, EPDM diaphragm, DN25, cemented spigots metric, electrical feedback, pressure tight housing, PN10

**A21 B01 C08 D11 E01 H05 I33 K30 M01**

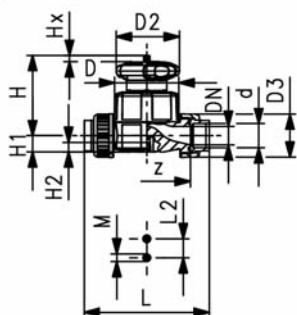
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# Diaphragm valves new generation metric

## Diaphragm valve type 514 PVC-U With solvent cement sockets metric



### Model:

- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Handwheel with built-in locking mechanism
- For easy installation and removal
- Short overall length

### Option:

- Individual configuration of the valve (see diagram)
- Self adjusting multifunctional module with integrated limit switches
- PN16 available as a configuration

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	NBR Code	EPDM Code	PTFE/EPDM Code
16	10	10	125	<b>161 514 001</b>	<b>161 514 011</b>	<b>161 514 031</b>
20	15	10	125	<b>161 514 002</b>	<b>161 514 012</b>	<b>161 514 032</b>
25	20	10	271	<b>161 514 003</b>	<b>161 514 013</b>	<b>161 514 033</b>
32	25	10	481	<b>161 514 004</b>	<b>161 514 014</b>	<b>161 514 034</b>
40	32	10	759	<b>161 514 005</b>	<b>161 514 015</b>	<b>161 514 035</b>
50	40	10	1263	<b>161 514 006</b>	<b>161 514 016</b>	<b>161 514 036</b>
63	50	10	1728	<b>161 514 007</b>	<b>161 514 017</b>	<b>161 514 037</b>

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code	GP	kg
16	10	10	125	<b>161 514 061</b>	-	3.984
20	15	10	125	<b>161 514 062</b>	-	3.984
25	20	10	271	<b>161 514 063</b>	-	5.268
32	25	10	481	<b>161 514 064</b>	-	1.161
40	32	10	759	<b>161 514 065</b>	-	1.427
50	40	10	1263	<b>161 514 066</b>	-	2.516
63	50	10	1728	<b>161 514 067</b>	-	3.385

d [mm]	D [mm]	D2 [mm]	D3 [mm]	L [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	M	z [mm]	Lift = Hx [mm]	closest inch
16	65	65	43	124	25	73	14	12	M6	96	7	3/8
20	65	65	43	128	25	73	14	12	M6	96	7	1/2
25	80	65	51	152	25	81	18	12	M6	114	10	3/4
32	88	87	58	166	25	107	22	12	M6	122	13	1
40	101	87	72	192	45	115	26	15	M8	140	15	1 1/4
50	117	135	83	222	45	148	32	15	M8	160	19	1 1/2
63	144	135	100	266	45	166	39	15	M8	190	25	2



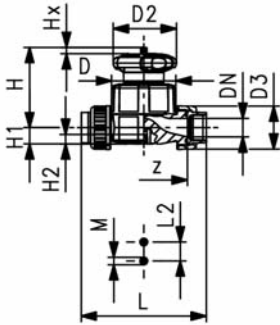
## Diaphragm valve type 514 PVC-U With threaded sockets Rp

### Model:

- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Handwheel with built-in locking mechanism
- For easy installation and removal
- Short overall length

### Option:

- Individual configuration of the valve (see diagram)
- Self adjusting multifunctional module with integrated limit switches
- PN16 available as a configuration



Rp [inch]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	NBR Code	EPDM Code	PTFE/EPDM Code
1/2	15	10	125	<b>161 514 402</b>	<b>161 514 412</b>	<b>161 514 432</b>
3/4	20	10	271	<b>161 514 403</b>	<b>161 514 413</b>	<b>161 514 433</b>
1	25	10	481	<b>161 514 404</b>	<b>161 514 414</b>	<b>161 514 434</b>
1 1/4	32	10	759	<b>161 514 405</b>	<b>161 514 415</b>	<b>161 514 435</b>
1 1/2	40	10	1263	<b>161 514 406</b>	<b>161 514 416</b>	<b>161 514 436</b>
2	50	10	1728	<b>161 514 407</b>	<b>161 514 417</b>	<b>161 514 437</b>

Rp [inch]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code	GP	kg
1/2	15	10	125	<b>161 514 462</b>	-	4.004
3/4	20	10	271	<b>161 514 463</b>	-	5.228
1	25	10	481	<b>161 514 464</b>	-	1.163
1 1/4	32	10	759	<b>161 514 465</b>	-	1.429
1 1/2	40	10	1263	<b>161 514 466</b>	-	2.528
2	50	10	1728	<b>161 514 467</b>	-	3.449

Rp [inch]	D [mm]	D2 [mm]	D3 [mm]	L [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	M	z [mm]	Lift = Hx [mm]
1/2	65	65	43	128	25	73	14	12	M6	96	7
3/4	80	65	51	152	25	81	18	12	M6	114	10
1	88	87	58	166	25	107	22	12	M6	122	13
1 1/4	101	87	72	192	45	115	26	15	M8	140	15
1 1/2	117	135	83	222	45	148	32	15	M8	160	19
2	144	135	100	266	45	166	39	15	M8	190	25



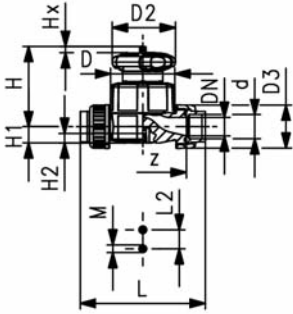
## Diaphragm valve type 514 PVC-U With fusion sockets PE80 metric

### Model:

- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Handwheel with built-in locking mechanism
- For easy installation and removal
- Short overall length

### Option:

- Individual configuration of the valve (see diagram)
- Self adjusting multifunctional module with integrated limit switches
- PN16 available as a configuration



d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	GP	kg
20	15	10	125	<b>161 514 212</b>	-	3.924
25	20	10	271	<b>161 514 213</b>	-	5.208
32	25	10	481	<b>161 514 214</b>	-	1.151
40	32	10	759	<b>161 514 215</b>	-	1.405
50	40	10	1263	<b>161 514 216</b>	-	2.492
63	50	10	1728	<b>161 514 217</b>	-	3.331

d [mm]	D [mm]	D2 [mm]	D3 [mm]	L [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	M	z [mm]	Lift = Hx [mm]	closest inch
20	65	65	43	128	25	73	14	12	M6	100	7	1/2
25	80	65	51	150	25	81	18	12	M6	118	10	3/4
32	88	87	58	162	25	107	22	12	M6	126	13	1
40	101	87	72	184	45	115	26	15	M8	144	15	1 1/4
50	117	135	83	210	45	148	32	15	M8	164	19	1 1/2
63	144	135	100	248	45	166	39	15	M8	194	25	2



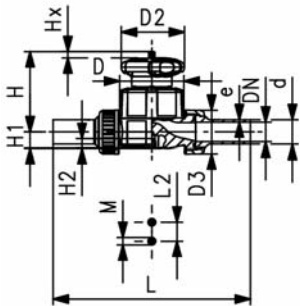
## Diaphragm valve type 514 PVC-U With butt and electro fusion ends PE100 SDR11 metric

### Model:

- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Handwheel with built-in locking mechanism
- For easy installation and removal
- Short overall length

### Option:

- Individual configuration of the valve (see diagram)
- Self adjusting multifunctional module with integrated limit switches
- PN16 available as a configuration



d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	GP	kg
20	15	10	125	<b>161 514 312</b>	-	4.024
25	20	10	271	<b>161 514 313</b>	-	5.328
32	25	10	481	<b>161 514 314</b>	-	1.175
40	32	10	759	<b>161 514 315</b>	-	1.443
50	40	10	1263	<b>161 514 316</b>	-	2.562
63	50	10	1728	<b>161 514 317</b>	-	3.441

d [mm]	D [mm]	D2 [mm]	D3 [mm]	L [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	M	Lift = Hx [mm]	e [mm]	closest inch
20	65	65	43	224	25	73	14	12	M6	7	1,9	1/2
25	80	65	51	250	25	81	18	12	M6	10	2,3	3/4
32	88	87	58	262	25	107	22	12	M6	13	2,9	1
40	101	87	72	296	45	115	26	15	M8	15	3,7	1 1/4
50	117	135	83	328	45	148	32	15	M8	19	4,6	1 1/2
63	144	135	100	370	45	166	39	15	M8	25	5,8	2



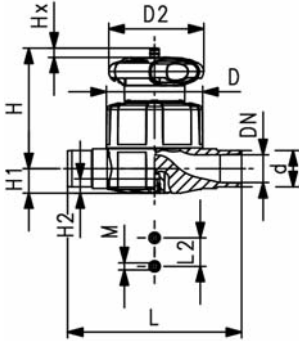
## Diaphragm valve type 515 PVC-U With solvent cement spigots metric

### Model:

- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Handwheel with built-in locking mechanism
- Overall length EN 558

### Option:

- Individual configuration of the valve (see diagram)
- Self adjusting multifunctional module with integrated limit switches
- PN16 available as a configuration



d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	NBR Code	EPDM Code	PTFE/EPDM Code
20	15	10	125	161 515 002	161 515 012	161 515 032
25	20	10	271	161 515 003	161 515 013	161 515 033
32	25	10	481	161 515 004	161 515 014	161 515 034
40	32	10	759	161 515 005	161 515 015	161 515 035
50	40	10	1263	161 515 006	161 515 016	161 515 036
63	50	10	1728	161 515 007	161 515 017	161 515 037

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code	GP	kg
20	15	10	125	161 515 062	-	3.354
25	20	10	271	161 515 063	-	4.448
32	25	10	481	161 515 064	-	1.032
40	32	10	759	161 515 065	-	1.237
50	40	10	1263	161 515 066	-	2.262
63	50	10	1728	161 515 067	-	2.963

d [mm]	D [mm]	D2 [mm]	L [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	M	Lift = Hx [mm]	closest inch
20	65	65	124	25	73	14	12	M6	7	1/2
25	80	65	144	25	81	18	12	M6	10	3/4
32	88	87	154	25	107	22	12	M6	13	1
40	101	87	174	45	115	26	15	M8	15	1 1/4
50	117	135	194	45	148	32	15	M8	19	1 1/2
63	144	135	224	45	166	39	15	M8	25	2



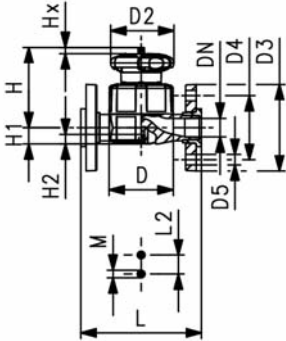
## Diaphragm valve type 517 PVC-U With backing flanges PVC-U metric/BS

### Model:

- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Handwheel with built-in locking mechanism
- Overall length EN 558
- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, BS 4504 PN 10
- Flat sealing faces

### Option:

- Individual configuration of the valve (see diagram)
- Self adjusting multifunctional module with integrated limit switches



d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	NBR Code	EPDM Code	PTFE/EPDM Code
20	15	10	125	<b>161 517 002</b>	<b>161 517 012</b>	<b>161 517 032</b>
25	20	10	271	<b>161 517 003</b>	<b>161 517 013</b>	<b>161 517 033</b>
32	25	10	481	<b>161 517 004</b>	<b>161 517 014</b>	<b>161 517 034</b>
40	32	10	759	<b>161 517 005</b>	<b>161 517 015</b>	<b>161 517 035</b>
50	40	10	1263	<b>161 517 006</b>	<b>161 517 016</b>	<b>161 517 036</b>
63	50	10	1728	<b>161 517 007</b>	<b>161 517 017</b>	<b>161 517 037</b>

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code	GP	kg
20	15	10	125	<b>161 517 062</b>	-	4.934
25	20	10	271	<b>161 517 063</b>	-	6.608
32	25	10	481	<b>161 517 064</b>	-	1.344
40	32	10	759	<b>161 517 065</b>	-	1.352
50	40	10	1263	<b>161 517 066</b>	-	2.868
63	50	10	1728	<b>161 517 067</b>	-	3.789

d [mm]	D [mm]	D2 [mm]	D3 [mm]	D4 [mm]	D5 [mm]	L [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	M	Lift = Hx [mm]	closest inch
20	65	65	95	65	14	130	25	73	14	12	M6	7	1/2
25	80	65	105	75	14	150	25	81	18	12	M6	10	3/4
32	88	87	115	85	14	160	25	107	22	12	M6	13	1
40	101	87	140	100	18	180	45	115	26	15	M8	15	1 1/4
50	117	135	150	110	18	200	45	148	32	15	M8	19	1 1/2
63	144	135	165	125	18	230	45	166	39	15	M8	25	2





## Diaphragm valve type 317 PVC-U With flanges PVC-U metric

### Model:

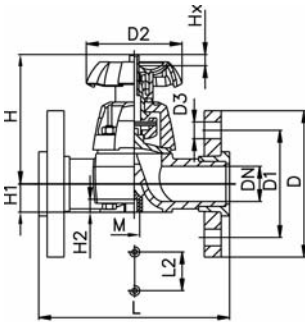
- Flat sealing faces
- DN 15-65 with backing flange
- DN 80-150 with fixed flange
- Overall length according to EN 558
- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, BS 4504 PN 10



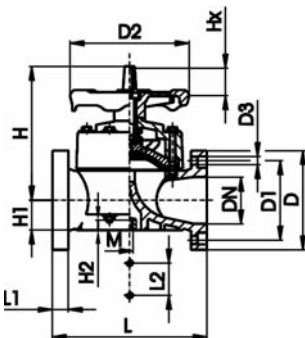
### Option:

- Handwheel lockable DN15-65 (basic version not lockable)

\* DN80 and DN150 fixed flanges metric and Inch ANSI B16.5



DN 15-65



DN 80-100

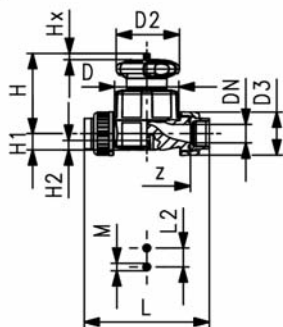
d [mm]	DN [mm]	Inch	PN	kv-value (Δp=1 bar) [l/min]	NBR Code	EPDM Code	CSM Code
75	65	2 ½	10	992	<b>161 317 508</b>	<b>161 317 523</b>	<b>161 317 553</b>
* 90	80	3	10	1700	<b>161 317 009</b>	<b>161 317 024</b>	<b>161 317 054</b>
110	100	4	10	2700	<b>161 317 010</b>	<b>161 317 025</b>	<b>161 317 055</b>
* 160	150	6	7	6033	<b>161 317 012</b>	<b>161 317 027</b>	<b>161 317 057</b>

d [mm]	DN [mm]	Inch	PN	kv-value (Δp=1 bar) [l/min]	PTFE with EPDM supp. diaphragm Code	FPM Code	GP	kg
75	65	2 ½	10	992	<b>161 317 538</b>	<b>161 317 568</b>	-	4.300
* 90	80	3	10	1700	<b>161 317 039</b>	<b>161 317 069</b>	-	9.700
110	100	4	10	2700	<b>161 317 040</b>	<b>161 317 070</b>	-	13.600
* 160	150	6	7	6033	<b>161 317 042</b>	<b>161 317 072</b>	-	27.000

d [mm]	D [mm]	D1 [mm]	D2 [mm]	D3 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	H [mm]	H1 [mm]	H2 [mm]	M	AL	Lift = Hx [mm]
75	185	145	152	18	290		70		201	46	15	M8	4	30
* 90	200	160	270	18	310	35	120		265	57	23	M12	8	40
110	225	180	270	18	350	35	120		304	69	23	M12	8	50
* 160	285	240	400	23	480	26	100	200	437	108	23	M12	8	70

# Diaphragm valves new generation Inch BS

## Diaphragm valve type 514 PVC-U With solvent cement sockets BS



### Model:

- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Handwheel with built-in locking mechanism
- For easy installation and removal
- Short overall length

### Option:

- Individual configuration of the valve (see diagram)
- Self adjusting multifunctional module with integrated limit switches
- PN16 available as a configuration

Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	NBR Code	EPDM Code	PTFE/EPDM Code
1/2	15	10	125	<b>161 514 502</b>	<b>161 514 512</b>	<b>161 514 532</b>
3/4	20	10	271	<b>161 514 503</b>	<b>161 514 513</b>	<b>161 514 533</b>
1	25	10	481	<b>161 514 504</b>	<b>161 514 514</b>	<b>161 514 534</b>
1 1/4	32	10	759	<b>161 514 505</b>	<b>161 514 515</b>	<b>161 514 535</b>
1 1/2	40	10	1263	<b>161 514 506</b>	<b>161 514 516</b>	<b>161 514 536</b>
2	50	10	1728	<b>161 514 507</b>	<b>161 514 517</b>	<b>161 514 537</b>

Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code	GP	kg
1/2	15	10	125	<b>161 514 562</b>	-	3.964
3/4	20	10	271	<b>161 514 563</b>	-	5.248
1	25	10	481	<b>161 514 564</b>	-	1.159
1 1/4	32	10	759	<b>161 514 565</b>	-	1.419
1 1/2	40	10	1263	<b>161 514 566</b>	-	2.528
2	50	10	1728	<b>161 514 567</b>	-	3.409

Inch	D [mm]	D2 [mm]	D3 [mm]	L [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	M	z [mm]	Lift = Hx [mm]
1/2	65	65	43	128	25	73	14	12	M6	96	7
3/4	80	65	51	152	25	81	18	12	M6	114	10
1	88	87	58	166	25	107	22	12	M6	122	13
1 1/4	101	87	72	192	45	115	26	15	M8	140	15
1 1/2	117	135	83	222	45	148	32	15	M8	160	19
2	144	135	100	266	45	166	39	15	M8	190	25

# Diaphragm valves new generation ASTM/ANSI



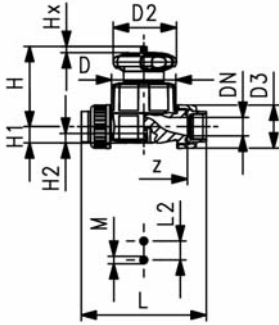
## Diaphragm valve type 514 PVC-U With solvent cement sockets ASTM

### Model:

- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Handwheel with built-in locking mechanism
- For easy installation and removal
- Short overall length

### Option:

- Individual configuration of the valve (see diagram)
- Self adjusting multifunctional module with integrated limit switches
- PN16 available as a configuration



Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	PTFE/EPDM Code	GP	kg
1/2	15	10	125	<b>161 514 612</b>	<b>161 514 632</b>	-	0.408
3/4	20	10	271	<b>161 514 613</b>	<b>161 514 633</b>	-	0.540
1	25	10	481	<b>161 514 614</b>	<b>161 514 634</b>	-	1.185
1 1/4	32	10	759	<b>161 514 615</b>	<b>161 514 635</b>	-	1.447
1 1/2	40	10	1263	<b>161 514 616</b>	<b>161 514 636</b>	-	2.572
2	50	10	1728	<b>161 514 617</b>	<b>161 514 637</b>	-	3.445

Inch	D [mm]	D2 [mm]	D3 [mm]	L [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	M	z [mm]	Lift = Hx [mm]
1/2	65	65	43	136	25	73	14	12	M6	96	7
3/4	80	65	51	160	25	81	18	12	M6	114	10
1	88	87	58	176	25	107	22	12	M6	122	13
1 1/4	101	87	72	198	45	115	26	15	M8	140	15
1 1/2	117	135	83	232	45	148	32	15	M8	160	19
2	144	135	100	268	45	166	39	15	M8	190	25



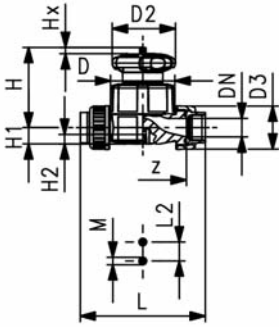
## Diaphragm valve type 514 PVC-U With threaded sockets NPT

### Model:

- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Handwheel with built-in locking mechanism
- For easy installation and removal
- Short overall length

### Option:

- Individual configuration of the valve (see diagram)
- Self adjusting multifunctional module with integrated limit switches
- PN16 available as a configuration



NPT [inch]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	PTFE/EPDM Code	GP	kg
1/2	15	10	125	<b>161 514 712</b>	<b>161 514 732</b>	-	0.406
3/4	20	10	271	<b>161 514 713</b>	<b>161 514 733</b>	-	0.540
1	25	10	481	<b>161 514 714</b>	<b>161 514 734</b>	-	1.185
1 1/4	32	10	759	<b>161 514 715</b>	<b>161 514 735</b>	-	1.453
1 1/2	40	10	1263	<b>161 514 716</b>	<b>161 514 736</b>	-	2.584
2	50	10	1728	<b>161 514 717</b>	<b>161 514 737</b>	-	3.525

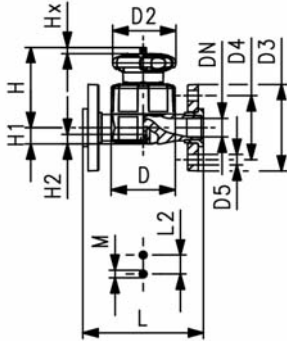
NPT [inch]	D [mm]	D2 [mm]	D3 [mm]	L [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	M	z [mm]	Lift = Hx [mm]
1/2	65	65	43	128	25	73	14	12	M6	96	7
3/4	80	65	51	152	25	81	18	12	M6	114	10
1	88	87	58	166	25	107	22	12	M6	122	13
1 1/4	101	87	72	192	45	115	26	15	M8	140	15
1 1/2	117	135	83	222	45	148	32	15	M8	160	19
2	144	135	100	266	45	166	39	15	M8	190	25



## Diaphragm valve type 517 PVC-U With backing flanges PVC-U Inch ANSI

### Model:

- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Handwheel with built-in locking mechanism
- Overall length EN 558
- Connecting dimension: ANSI/ASME B 16.5 class 150, ASTM D 4024, BS 1560, BS EN 1759
- Flat sealing faces



### Option:

- Individual configuration of the valve (see diagram)
- Self adjusting multifunctional module with integrated limit switches

Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	PTFE/EPDM Code	GP	kg
1/2	15	10	125	161 517 612	161 517 632	-	0.499
3/4	20	10	271	161 517 613	161 517 633	-	0.664
1	25	10	481	161 517 614	161 517 634	-	1.356
1 1/4	32	10	759	161 517 615	161 517 635	-	1.741
1 1/2	40	10	1263	161 517 616	161 517 636	-	2.892
2	50	10	1728	161 517 617	161 517 637	-	3.805

Inch	D [mm]	D2 [mm]	D3 [mm]	D4 [mm]	D5 [mm]	L [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	M	Lift = Hx [mm]
1/2	65	65	95	60	16	130	25	73	14	12	M6	7
3/4	80	65	105	70	16	150	25	81	18	12	M6	10
1	88	87	115	79	16	160	25	107	22	12	M6	13
1 1/4	101	87	140	89	16	180	45	115	26	15	M8	15
1 1/2	117	135	150	98	16	200	45	148	32	15	M8	19
2	144	135	165	121	19	230	45	166	39	15	M8	25



## Diaphragm valve type 317 PVC-U With flanges PVC-U Inch ANSI

### Model:

- Flat sealing faces
- DN 15-65 with backing flange
- DN 80-150 with fixed flange
- Overall length according to EN 558
- Connecting dimension: ANSI/ASME B 16.5 class 150, ASTM D 4024, BS 1560, BS EN 1759

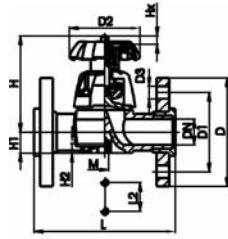
### Option:

- Handwheel lockable DN15-65 (basic version not lockable)

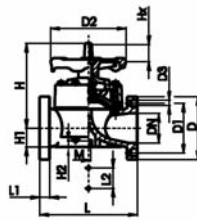
\* DN80 and DN150 fixed flanges metric and Inch ANSI B16.5

Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	NBR Code	EPDM Code	PTFE with EPDM supp. diaphragm Code	GP	kg
2 1/2	65	10	992	161 317 608	161 317 623	161 317 638	-	4.300
* 3	80	10	1700	161 317 009	161 317 024	161 317 039	1	9.600
4	100	10	2700	161 317 310	161 317 325	161 317 340	-	13.340
* 6	150	7	6033	161 317 012	161 317 027	161 317 042	-	29.250

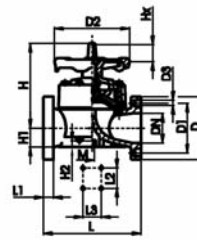
Inch	D [mm]	D1 [mm]	D2 [mm]	D3 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	H [mm]	H1 [mm]	H2 [mm]	M	AL	Lift = Hx [mm]
2 1/2	185	140	152	19	290		70		201	46	15	M8	4	30
* 3	200	160	270	18	310	35	120		265	57	23	M12	8	40
4	225	191	270	19	350	35	120		304	69	23	M12	8	50
* 6	285	240	400	23	480	26	100	200	437	108	23	M12	8	70



DN 15-65



DN 80-100



DN 150

# Spare parts diaphragm valves new generation

## Spare parts for hand-operated valves



### Bonnet complete



d [mm]	Inch	DN [mm]	Standard configuration PN10 Code	For pressure tight housing PN10 Code	Standard configuration PN16 Code
20	1/2	15	198 151 742	198 151 752	198 151 842
25	3/4	20	198 151 743	198 151 753	198 151 843
32	1	25	198 151 744	198 151 754	198 151 844
40	1 1/4	32	198 151 745	198 151 755	198 151 845
50	1 1/2	40	198 151 746	198 151 756	198 151 846
63	2	50	198 151 747	198 151 757	198 151 847

d [mm]	Inch	DN [mm]	For pressure tight housing PN16 Code	kg
20	1/2	15	198 151 852	0.000
25	3/4	20	198 151 853	0.000
32	1	25	198 151 854	0.000
40	1 1/4	32	198 151 855	0.000
50	1 1/2	40	198 151 856	0.000
63	2	50	198 151 857	0.000

### Hand wheel

#### Model:

- Without position indicator



DN [mm]	Code	kg
15 - 20	198 204 162	0.000
25 - 32	198 204 164	0.000
40 - 50	198 104 166	0.000



## Position indicator

d [mm]	Inch	DN [mm]	Code	kg
20	1/2	15	<b>167 484 992</b>	0.001
25	3/4	20	<b>167 484 993</b>	0.001
32	1	25	<b>167 484 994</b>	0.003
40	1 1/4	32	<b>167 484 995</b>	0.002
50	1 1/2	40	<b>167 484 996</b>	0.004
63	2	50	<b>167 484 997</b>	0.005



## Spindle assembly

### Model:

- Incl. position indicator and compressor

DN-DN [mm]	Code	kg
15 - 20	<b>198 204 327</b>	0.000
25 - 32	<b>198 204 328</b>	0.000
40 - 50	<b>198 204 329</b>	0.000



## Seal set

### Model:

- For manual valve - pressure tight housing
- Incl. position indicator

d [mm]	Inch	DN [mm]	EPDM Code	kg
20	1/2	15	<b>198 000 892</b>	0.000
25	3/4	20	<b>198 000 893</b>	0.000
32	1	25	<b>198 000 894</b>	0.000
40	1 1/4	32	<b>198 000 895</b>	0.000
50	1 1/2	40	<b>198 000 896</b>	0.000
63	2	50	<b>198 000 897</b>	0.000

## Spare parts diaphragm



d [mm]	Inch	DN [mm]	NBR Code	EPDM Code	FPM Code	PTFE/EPDM Code	PTFE/EPDM HP Code
20	1/2	15	<b>745 500 012</b>	<b>748 500 012</b>	<b>749 500 012</b>	<b>747 502 012</b>	<b>747 502 032</b>
25	3/4	20	<b>745 500 013</b>	<b>748 500 013</b>	<b>749 500 013</b>	<b>747 502 013</b>	<b>747 502 033</b>
32	1	25	<b>745 500 014</b>	<b>748 500 014</b>	<b>749 500 014</b>	<b>747 502 014</b>	<b>747 502 034</b>
40	1 1/4	32	<b>745 500 015</b>	<b>748 500 015</b>	<b>749 500 015</b>	<b>747 502 015</b>	<b>747 502 035</b>
50	1 1/2	40	<b>745 500 016</b>	<b>748 500 016</b>	<b>749 500 016</b>	<b>747 502 016</b>	<b>747 502 036</b>
63	2	50	<b>745 500 017</b>	<b>748 500 017</b>	<b>749 500 017</b>	<b>747 502 017</b>	<b>747 502 037</b>

d [mm]	Inch	DN [mm]	PTFE/FPM Code	kg
20	1/2	15	<b>747 503 012</b>	0.000
25	3/4	20	<b>747 503 013</b>	0.000
32	1	25	<b>747 503 014</b>	0.000
40	1 1/4	32	<b>747 503 015</b>	0.000
50	1 1/2	40	<b>747 503 016</b>	0.000
63	2	50	<b>747 503 017</b>	0.000



## Spare parts for valve body type 514

### Valve body with true union



#### Model:

- Without connection parts

d [mm]	Inch	DN [mm]	PVC-U Code	PVC-C Code	kg
20	½	15	<b>161 492 062</b>	<b>163 482 052</b>	0.122
25	¾	20	<b>161 492 063</b>	<b>163 482 053</b>	0.195
32	1	25	<b>161 492 064</b>	<b>163 482 054</b>	0.261
40	1 ¼	32	<b>161 492 065</b>	<b>163 482 055</b>	0.420
50	1 ½	40	<b>161 492 066</b>	<b>163 482 056</b>	0.623
63	2	50	<b>161 492 067</b>	<b>163 482 057</b>	1.127



### Union end

d [mm]	Inch	DN [mm]	PVC-U metric Code	PVC-U BS Code	PVC-U ASTM Code	kg
20	½	15	<b>721 600 106</b>	<b>721 601 106</b>	<b>721 602 006</b>	0.009
25	¾	20	<b>721 600 107</b>	<b>721 601 107</b>	<b>721 602 007</b>	0.016
32	1	25	<b>721 600 108</b>	<b>721 601 108</b>	<b>721 602 008</b>	0.022
40	1 ¼	32	<b>721 600 109</b>	<b>721 601 109</b>	<b>721 602 009</b>	0.037
50	1 ½	40	<b>721 600 110</b>	<b>721 601 110</b>	<b>721 602 010</b>	0.052
63	2	50	<b>721 600 111</b>	<b>721 601 111</b>	<b>721 602 011</b>	0.088



### Union nut

d [mm]	Inch	DN [mm]	PVC-U Code	kg
20	½	15	<b>721 690 006</b>	0.020
25	¾	20	<b>721 690 007</b>	0.022
32	1	25	<b>721 690 008</b>	0.031
40	1 ¼	32	<b>721 690 009</b>	0.050
50	1 ½	40	<b>721 690 010</b>	0.087
63	2	50	<b>721 690 011</b>	0.130



### O-ring

d [mm]	Inch	DN [mm]	EPDM Code	FPM Code	kg
20	½	15	<b>748 410 006</b>	<b>749 410 006</b>	0.002
25	¾	20	<b>748 410 007</b>	<b>749 410 007</b>	0.002
32	1	25	<b>748 410 008</b>	<b>749 410 008</b>	0.002
40	1 ¼	32	<b>748 410 009</b>	<b>749 410 009</b>	0.006
50	1 ½	40	<b>748 410 010</b>	<b>749 410 010</b>	0.007
63	2	50	<b>748 410 011</b>	<b>749 410 011</b>	0.010

## Spare parts for valve body type 515

### Valve body with spigot ends



d [mm]	Inch	DN [mm]	PVC-U solvent cement spigot Code	kg	
20	1/2	15	<b>161 492 072</b>	0.115	
25	3/4	20	<b>161 492 073</b>	0.183	
32	1	25	<b>161 492 074</b>	0.246	
40	1 1/4	32	<b>161 492 075</b>	0.379	
50	1 1/2	40	<b>161 492 076</b>	0.602	
63	2	50	<b>161 492 077</b>	1.054	

## Spare parts for valve body type 517

### Flange adaptor flat



d [mm]	Inch	DN [mm]	PVC-U metric Code	kg	
20	1/2	15	<b>721 800 106</b>	0.010	
25	3/4	20	<b>721 800 107</b>	0.016	
32	1	25	<b>721 800 108</b>	0.024	
40	1 1/4	32	<b>721 800 109</b>	0.038	
50	1 1/2	40	<b>721 800 110</b>	0.058	
63	2	50	<b>721 790 111</b>	0.103	

### Flange



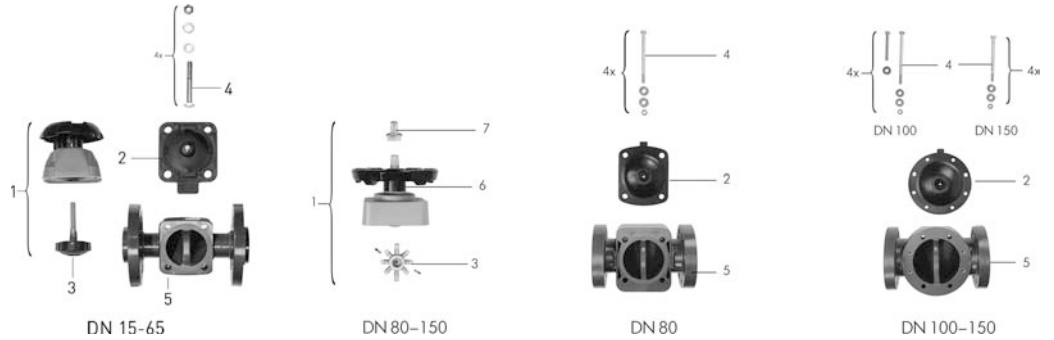
d [mm]	Inch	DN [mm]	PVC-U metric Code	PVC-U ASTM Code	kg	
20	1/2	15	<b>721 700 006</b>	<b>721 702 206</b>	0.067	
25	3/4	20	<b>721 700 007</b>	<b>721 702 207</b>	0.088	
32	1	25	<b>721 700 008</b>	<b>721 702 208</b>	0.128	
40	1 1/4	32	<b>721 700 009</b>	<b>721 702 209</b>	0.204	
50	1 1/2	40	<b>721 700 010</b>	<b>721 702 210</b>	0.253	
63	2	50	<b>721 700 011</b>	<b>721 702 211</b>	0.305	



## Flat gasket

d [mm]	Inch	DN [mm]	EPDM Code	FPM Code	kg
20	¾	15	748 400 006	749 400 006	0.003
25	¾	20	748 400 007	749 400 007	0.004
32	1	25	748 400 008	749 400 008	0.002
40	1 ¼	32	748 400 009	749 400 009	0.003
50	1 ½	40	748 400 010	749 400 010	0.004
63	2	50	748 400 011	749 400 011	0.006

## Spare parts diaphragm valve type 317



## Bonnet complete

### Model:

- Without diaphragm (1, 3)

d [mm]	Inch	DN [mm]	elastomer diaphragm Code	PTFE diaphragm Code	kg
75	2 ½	65	161 484 631	161 484 638	1.526
90	3	80	161 482 514	161 482 516	3.967
110	4	100	161 482 515	161 482 517	5.700
160	6	150	161 482 901	161 482 906	14.040



## Diaphragm (2)

d [mm]	Inch	DN [mm]	NBR Code	EPDM Code	FPM Code	PTFE/EPDM Code	PTFE/FPM Code
50	1 ½	40			161 481 096		
75	2 ½	65	161 480 231	161 481 028	161 481 098	161 480 240	161 481 932
90	3	80	161 480 232	161 481 029	161 481 099	161 480 241	-
110	4	100	161 480 233	161 481 030	161 481 100	161 480 242	-
160	6	150	161 482 751	161 482 754	161 481 102	161 482 760	-

d [mm]	Inch	DN [mm]	CSM Code	kg
50	1 ½	40		0.110
75	2 ½	65	161 480 237	0.230
90	3	80	161 480 238	0.300
110	4	100	161 480 239	0.450
160	6	150	161 482 757	2.500



## Pressure spindle (3)

d [mm]	Inch	DN [mm]	elastomer diaphragm Code	PTFE diaphragm Code	kg
75	2 ½	65	161 484 694	161 484 702	0.134
90	3	80	161 483 008	161 483 020	0.335
110	4	100	161 483 009	161 483 021	0.495
125	6	150	161 483 011	161 483 023	4.500



## Fastening set (4)

Model:

- \* with support plate

d [mm]	Inch	DN [mm]	for PVC-U PVC-C ABS Code	kg
75	2 ½	65	<b>161 483 032</b>	0.679
90	3	80	<b>161 483 033</b>	0.845
110	4	100	<b>161 483 034</b>	1.440
160	6	150	<b>161 483 037</b>	0.400



## Valve body with backing/flange (5)

Inch	d [mm]	DN [mm]	PVC-U metric Code	PVC-U BS Code	PVC-U ANSI B16.5 Code	kg
2 ½	75	65	<b>161 483 116</b>	<b>161 483 116</b>	<b>161 484 749</b>	2.619
3	90	80	<b>161 481 764</b>	<b>161 481 764</b>		4.370
4	110	100	<b>161 481 765</b>	<b>161 481 765</b>		6.395
6	160	150	<b>161 482 696</b>	<b>161 481 696</b>		11.380



## O-ring seal (6)

d [mm]	Inch	DN [mm]	EPDM Code	NBR Code	kg
90	3	80	-	<b>745 410 107</b>	0.007
110	4	100	-	<b>745 410 107</b>	0.007
160	6	150	<b>748 410 212</b>	-	

## Indicator cap (7)

d [mm]	Inch	DN [mm]	PVC-U SAN Code	kg
90	3	80	<b>161 481 759</b>	0.032
110	4	100	<b>161 481 760</b>	0.035
160	6	150	<b>161 482 744</b>	0.010



## Handwheel with built-in locking mechanism For diaphragm valve type 314 / 315 / 317 / 319

d-d [mm]	DN-DN [mm]	d-d [inch]	Code	GP	kg
63 - 75	50 - 65	2 - 2 ½	<b>167 481 946</b>	1	0.217

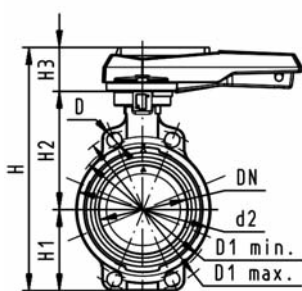
# Butterfly valves type 567 metric

## Butterfly valve type 567 PVC-U Hand lever with ratchet settings

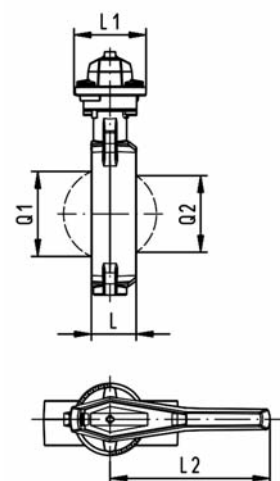


### Model:

- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, ANSI/ASME B 16.5 Class 150, BS 1560: 1989, BS 4504, JIS B 2220
- Up to DN 300: Overall length according to EN558 (DN 50-200: line 25, DN250, 300 line 16), ISO 5752
- We recommend for the dimensions DN250 and DN300 only 6 bar maximum system pressure for the hand lever version



d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	GP	kg
63	50	2	10	1470	<b>161 567 002</b>	<b>161 567 022</b>	1	1.044
75	65	2 1/2	10	2200	<b>161 567 003</b>	<b>161 567 023</b>	1	1.148
90	80	3	10	3000	<b>161 567 004</b>	<b>161 567 024</b>	1	1.315
110	100	4	10	6500	<b>161 567 005</b>	<b>161 567 025</b>	1	1.983
140	125	5	10	11500	<b>161 567 006</b>	<b>161 567 026</b>	1	2.554
160	150	6	10	16600	<b>161 567 007</b>	<b>161 567 027</b>	1	3.564
225	200	8	10	39600	<b>161 567 008</b>	<b>161 567 028</b>	1	5.541
280	250	10	10	55200	<b>161 567 009</b>	<b>161 567 029</b>	1	12.998
315	300	12	10	80000	<b>161 567 010</b>	<b>161 567 030</b>	1	16.757



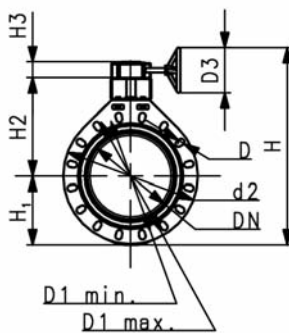
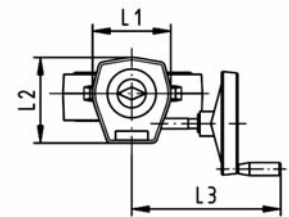
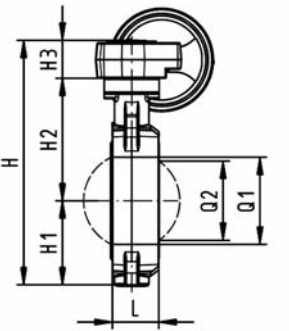
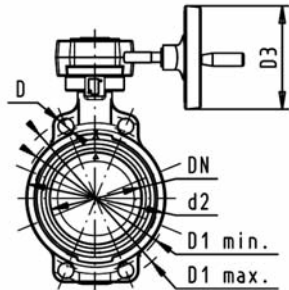
d [mm]	D [mm]	D1 min. [mm]	D1 max. [mm]	d2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	L [mm]	L1 [mm]	L2 [mm]	Q1 [mm]	Q2 [mm]
63	19	120.0	125.0	104	264	77	134	54	45	106	205	40	
75	19	139.7	145.0	115	277	83	140	54	46	106	205	54	35
90	19	150.0	160.0	131	289	89	146	54	49	106	205	67	50
110	19	175.0	190.5	161	325	104	167	55	56	106	255	88	74
140	23	210.0	215.9	187	352	117	181	55	64	106	255	113	97
160	24	241.3	241.3	215	373	130	189	55	72	106	255	139	123
225	23	290.0	295.0	267	435	158	210	67	73	140	408	178	169
280	25	353.0	362.0	329	554	205	264	85	113	149	408	210	207
315	25	400.0	432.0	379	598	228	285	85	113	149	408	256	253



# Butterfly valve type 567 PVC-U Reduction gear with handwheel

## Model:

- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, ANSI/ASME B 16.5 Class 150, BS 1560: 1989, BS 4504, JIS B 2220
- Up to DN 300: Overall length according to EN558 (DN 50-200: line 25, DN250, 300 line 16), ISO 5752



d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	GP	kg
63	50	2	10	1470	<b>161 567 042</b>	<b>161 567 062</b>	1	3.082
75	65	2 ½	10	2200	<b>161 567 043</b>	<b>161 567 063</b>	1	3.186
90	80	3	10	3000	<b>161 567 044</b>	<b>161 567 064</b>	1	3.353
110	100	4	10	6500	<b>161 567 045</b>	<b>161 567 065</b>	1	3.973
140	125	5	10	11500	<b>161 567 046</b>	<b>161 567 066</b>	-	4.544
160	150	6	10	16600	<b>161 567 047</b>	<b>161 567 067</b>	1	5.554
225	200	8	10	39600	<b>161 567 048</b>	<b>161 567 068</b>	1	6.994
280	250	10	8	51000	<b>161 567 049</b>	<b>161 567 069</b>	1	15.115
315	300	12	8	73000	<b>161 567 050</b>	<b>161 567 070</b>	1	19.637

d [mm]	D [mm]	D1 min. [mm]	D1 max. [mm]	d2 [mm]	D3 [mm]	H1 [mm]	H2 [mm]	H3 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	Q1 [mm]	Q2 [mm]
63	19	120	125	104	160	77	134	60	45	120	132	236	40	
75	19	140	145	115	160	83	140	60	46	120	132	236	54	35
90	19	150	160	131	160	89	146	60	49	120	132	236	67	50
110	19	175	191	160	160	104	167	60	56	120	132	236	88	74
140	23	210	216	187	160	117	181	60	64	120	132	236	113	97
160	24	241	241	215	160	130	189	60	72	120	132	236	139	123
225	23	290	295	267	160	158	210	60	73	120	132	236	178	169
280	25	353	362	329	160	205	264	60	113	134	151	261	210	207
315	25	400	432	379	160	228	285	60	113	134	151	261	256	253



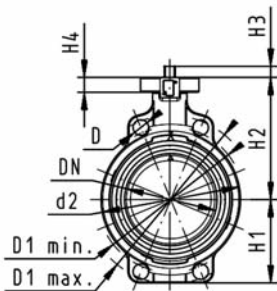
## Butterfly valve type 567 PVC-U Bare shaft

### Model:

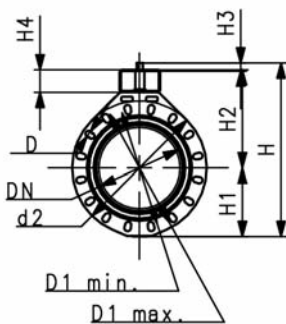
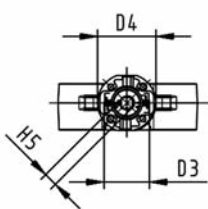
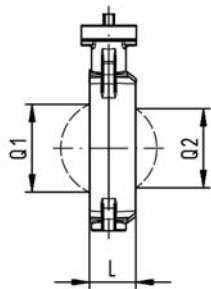
- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, ANSI/ASME B 16.5 Class 150, BS 1560: 1989, BS 4504, JIS B 2220
- Up to DN 300: Overall length according to EN558 (DN 50-200: line 25, DN250, 300 line 16), ISO 5752
- Interface F07 for the dimensions DN50-200 according to DIN/ISO 5211
- Interface F10 for the dimensions DN250-300 according to DIN/ISO 5211



d [mm]	DN [mm]	Inch	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	GP	kg
63	50	2	10	1470	161 567 802	161 567 822	1	0.822
75	65	2 ½	10	2200	161 567 803	161 567 823	1	0.926
90	80	3	10	3000	161 567 804	161 567 824	1	1.093
110	100	4	10	6500	161 567 805	161 567 825	1	1.713
140	125	5	10	11500	161 567 806	161 567 826	-	2.284
160	150	6	10	16600	161 567 807	161 567 827	1	3.294
225	200	8	10	39600	161 567 808	161 567 828	1	4.734
280	250	10	8	51000	161 567 809	161 567 829	-	11.735
315	300	12	8	73000	161 567 810	161 567 830	-	16.217



d [mm]	D [mm]	D1 min. [mm]	D1 max. [mm]	d2 [mm]	D3 [mm]	D4 [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	L [mm]	Q1 [mm]	Q2 [mm]
63	19	120	125	104	70	90	77	134	27	23	11	45	40	
75	19	140	145	115	70	90	83	140	27	23	11	46	54	35
90	19	150	160	131	70	90	89	146	27	23	11	49	67	50
110	19	175	191	161	70	90	104	167	16	23	14	56	88	74
140	23	210	216	187	70	90	117	181	16	23	14	64	113	97
160	24	241	241	215	70	90	130	189	19	23	17	72	139	123
225	23	290	295	267	70	90	158	210	19	23	17	73	178	169
280	25	353	362	329	102	125	205	264	40	23	22	113	210	207
315	25	400	432	379	102	125	228	285	40	23	22	113	256	253



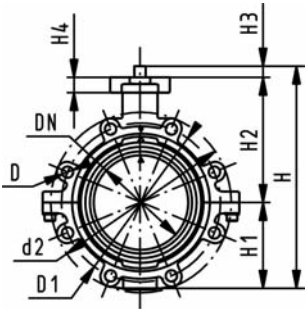
# Butterfly valves type 568 metric

## Lugstyle butterfly valve type 568 PVC-U Bare shaft



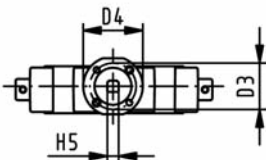
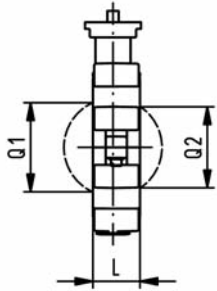
### Model:

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension: ISO 7005 PN10, EN 1092 PN10, DIN 2501 PN10
- Overall length according to EN 558, ISO 5752
- Interface F07 according to DIN/ISO 5211



d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	GP	kg
63	50	2	10	1470	<b>161 568 802</b>	<b>161 568 822</b>	-	2.908
75	65	2 ½	10	2200	<b>161 568 803</b>	<b>161 568 823</b>	-	3.262
90	80	3	10	3000	<b>161 568 804</b>	<b>161 568 824</b>	-	4.304
110	100	4	10	6500	<b>161 568 805</b>	<b>161 568 825</b>	-	5.797
140	125	5	10	11500	<b>161 568 806</b>	<b>161 568 826</b>	-	7.750
160	150	6	10	16600	<b>161 568 807</b>	<b>161 568 827</b>	-	9.754
225	200	8	10	39600	<b>161 568 808</b>	<b>161 568 828</b>	-	14.682

d [mm]	d2 [mm]	D	D1 [mm]	D3 [mm]	D4 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	L [mm]	Q1 [mm]	Q2 [mm]
63	150	M16	125	70	90	222	77	134	27	23	45	40	
75	170	M16	145	70	90	235	83	140	27	23	46	54	35
90	184	M16	160	70	90	247	89	146	27	23	49	67	50
110	216	M16	180	70	90	287	104	167	16	23	56	88	74
140	246	M16	210	70	90	313	117	181	16	23	64	113	97
160	273	M20	240	70	90	335	130	189	19	23	72	139	123
225	334	M20	295	70	90	387	158	210	19	23	73	178	169



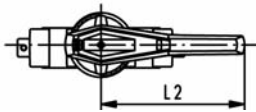
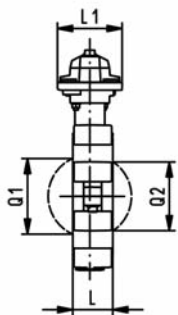
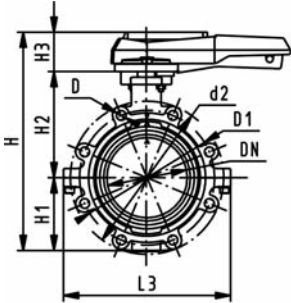




## Lugstyle butterfly valve type 568 PVC-U Hand lever with ratchet settings

### Model:

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension: ISO 7005 PN10, EN 1092 PN10, DIN 2501 PN10
- Overall length according to EN 558, ISO 5752



d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	GP	kg
63	50	2	10	1470	<b>161 568 002</b>	<b>161 568 022</b>	-	3.130
75	65	2 ½	10	2200	<b>161 568 003</b>	<b>161 568 023</b>	-	3.484
90	80	3	10	3000	<b>161 568 004</b>	<b>161 568 024</b>	-	4.526
110	100	4	10	6500	<b>161 568 005</b>	<b>161 568 025</b>	-	6.067
140	125	5	10	11500	<b>161 568 006</b>	<b>161 568 026</b>	-	8.020
160	150	6	10	16600	<b>161 568 007</b>	<b>161 568 027</b>	-	10.024
225	200	8	10	39600	<b>161 568 008</b>	<b>161 568 028</b>	-	15.489

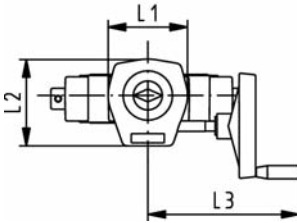
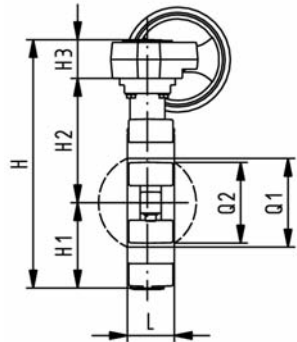
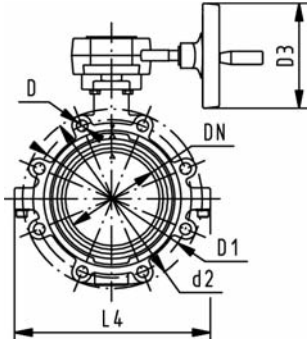
d [mm]	d2 [mm]	D	D1 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	Q1 [mm]	Q2 [mm]
63	150	M16	125	265	77	134	54	45	106	205	150	40	
75	170	M16	145	277	83	140	54	46	106	205	160	54	35
90	184	M16	160	289	89	146	54	49	106	205	205	67	50
110	216	M16	180	326	104	167	55	56	106	255	244	88	74
140	246	M16	210	353	117	181	55	64	106	255	272	113	97
160	273	M20	240	374	130	189	55	72	106	255	297	139	123
225	334	M20	295	435	158	210	67	73	140	408	360	178	169



## Lugstyle butterfly valve type 568 PVC-U Reduction gear with handwheel

### Model:

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension: ISO 7005 PN10, EN 1092 PN10, DIN 2501 PN10
- Overall length according to EN 558, ISO 5752



d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	GP	kg
63	50	2	10	1470	<b>161 568 042</b>	<b>161 568 062</b>	-	5.168
75	65	2 ½	10	2200	<b>161 568 043</b>	<b>161 568 063</b>	-	5.522
90	80	3	10	3000	<b>161 568 044</b>	<b>161 568 064</b>	-	6.564
110	100	4	10	6500	<b>161 568 045</b>	<b>161 568 065</b>	-	8.057
140	125	5	10	11500	<b>161 568 046</b>	<b>161 568 066</b>	-	10.010
160	150	6	10	16600	<b>161 568 047</b>	<b>161 568 067</b>	-	12.014
225	200	8	10	39600	<b>161 568 048</b>	<b>161 568 068</b>	-	16.942

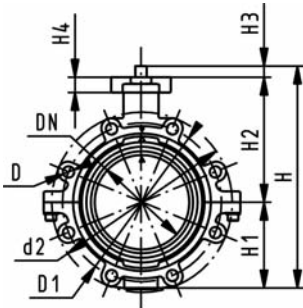
d [mm]	d2 [mm]	D	D1 [mm]	D3 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	Q1 [mm]	Q2 [mm]
63	150	M16	125	160	279	77	134	60	45	120	132	236	150	40	
75	170	M16	145	160	291	83	140	60	46	120	132	236	160	54	35
90	184	M16	160	160	303	89	146	60	49	120	132	236	205	67	50
110	216	M16	180	160	339	104	167	60	56	120	132	236	244	88	74
140	246	M16	210	160	366	117	181	60	64	120	132	236	272	113	97
160	273	M20	240	160	387	130	189	60	72	120	132	236	297	139	123
225	334	M20	295	160	436	158	210	60	73	120	132	236	360	178	169



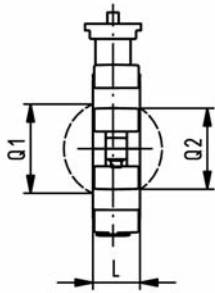
## Lugstyle butterfly valve type 568 PVC-U Bare shaft

### Model:

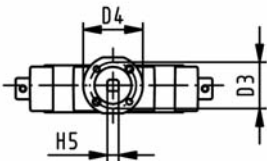
- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension ANSI/ASME B 16.5 Class 150, BS 4504 PN10
- Overall length according to EN 558, ISO 5752
- Interface F07 according to DIN/ISO 5211



Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	GP	kg
2	50	10	1470	<b>161 568 902</b>	<b>161 568 922</b>	-	2.908
2 ½	65	10	2200	<b>161 568 903</b>	<b>161 568 923</b>	-	3.262
3	80	10	3000	<b>161 568 904</b>	<b>161 568 924</b>	-	3.675
4	100	10	6500	<b>161 568 905</b>	<b>161 568 925</b>	-	5.797
5	125	10	11500	<b>161 568 906</b>	<b>161 568 926</b>	-	7.750
6	150	10	16600	<b>161 568 907</b>	<b>161 568 927</b>	-	9.754
8	200	10	39600	<b>161 568 908</b>	<b>161 568 928</b>	-	14.682



Inch	d2 [mm]	D	D1 [mm]	D3 [mm]	D4 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	L [mm]	Q1 [mm]	Q2 [mm]
2	150	UNC 5/8	121	70	90	222	77	134	27	23	45	40	
2 ½	170	UNC 5/8	138	70	90	235	83	140	27	23	46	54	35
3	177	UNC 5/8	152	70	90	247	89	146	27	23	49	67	50
4	216	UNC 5/8	191	70	90	287	104	167	16	23	56	88	74
5	246	UNC 3/4	216	70	90	313	117	181	16	23	64	113	97
6	273	UNC 3/4	241	70	90	335	130	189	19	23	72	139	123
8	334	UNC 3/4	298	70	90	387	158	210	19	23	73	178	169

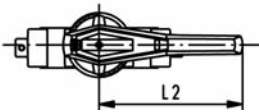
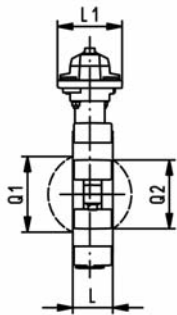
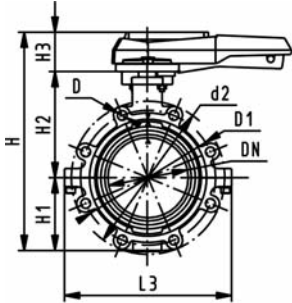




## Lugstyle butterfly valve type 568 PVC-U Hand lever with ratchet settings

### Model:

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension ANSI/ASME B 16.5 Class 150, BS 4504 PN10
- Overall length according to EN 558, ISO 5752



Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	GP	kg
2	50	10	1470	<b>161 568 102</b>	<b>161 568 122</b>	1	3.130
2 ½	65	10	2200	<b>161 568 103</b>	<b>161 568 123</b>	-	3.484
3	80	10	3000	<b>161 568 104</b>	<b>161 568 124</b>	-	3.897
4	100	10	6500	<b>161 568 105</b>	<b>161 568 125</b>	1	6.067
5	125	10	11500	<b>161 568 106</b>	<b>161 568 126</b>	-	8.020
6	150	10	16600	<b>161 568 107</b>	<b>161 568 127</b>	1	10.024
8	200	10	39600	<b>161 568 108</b>	<b>161 568 128</b>	1	15.489

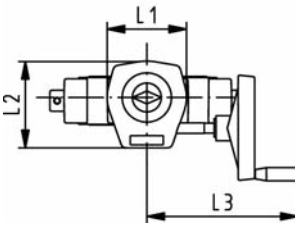
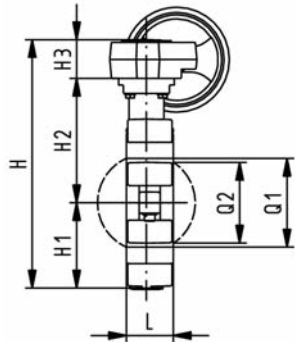
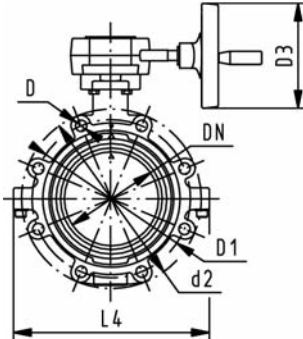
Inch	d2 [mm]	D	D1 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	Q1 [mm]	Q2 [mm]
2	150	UNC 5/8	121	265	77	134	54	45	106	205	150	40	
2 ½	170	UNC 5/8	138	277	83	140	54	46	106	205	160	54	35
3	177	UNC 5/8	152	289	89	146	54	49	106	205	175	67	50
4	216	UNC 5/8	191	326	104	167	55	56	106	255	244	88	74
5	246	UNC 3/4	216	353	117	181	55	64	106	255	272	113	97
6	273	UNC 3/4	241	374	130	189	55	72	106	255	297	139	123
8	334	UNC 3/4	298	435	158	210	67	73	140	408	360	178	169



## Lugstyle butterfly valve type 568 PVC-U Reduction gear with handwheel

### Model:

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension ANSI/ASME B 16.5 Class 150, BS 4504 PN10
- Overall length according to EN 558, ISO 5752



Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	GP	kg
2	50	10	1470	<b>161 568 142</b>	<b>161 568 162</b>	-	5.168
2 ½	65	10	2200	<b>161 568 143</b>	<b>161 568 163</b>	-	5.522
3	80	10	3000	<b>161 568 144</b>	<b>161 568 164</b>	-	5.935
4	100	10	6500	<b>161 568 145</b>	<b>161 568 165</b>	-	8.057
5	125	10	11500	<b>161 568 146</b>	<b>161 568 166</b>	-	10.010
6	150	10	16600	<b>161 568 147</b>	<b>161 568 167</b>	-	12.014
8	200	10	39600	<b>161 568 148</b>	<b>161 568 168</b>	-	16.942

Inch	d2 [mm]	D	D1 [mm]	D3 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	Q1 [mm]
2	150	UNC 5/8	121	160	279	77	134	60	45	120	132	236	150	40
2 ½	170	UNC 5/8	138	160	291	83	140	60	46	120	132	236	160	54
3	177	UNC 5/8	152	160	303	89	146	60	49	120	132	236	175	67
4	216	UNC 5/8	191	160	339	104	167	60	56	120	132	236	244	88
5	246	UNC 3/4	216	160	366	117	181	60	64	120	132	236	272	113
6	273	UNC 3/4	241	160	387	130	189	60	72	120	132	236	297	139
8	334	UNC 3/4	298	160	436	158	210	60	73	120	132	236	360	178

Inch	Q2 [mm]
2	
2 ½	35
3	50
4	74
5	97
6	123
8	169

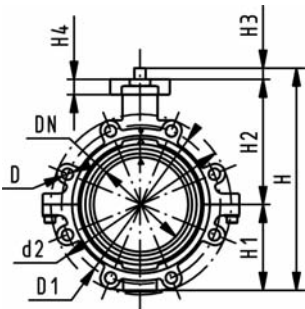
# Butterfly valves type 568 ASTM/ANSI

## Lugstyle butterfly valve type 568 PVC-U Bare shaft



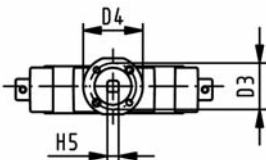
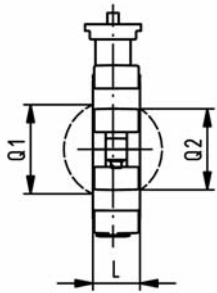
### Model:

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension ANSI/ASME B 16.5 Class 150, BS 4504 PN10
- Overall length according to EN 558, ISO 5752
- Interface F07 according to DIN/ISO 5211



Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	GP	kg
2	50	10	1470	<b>161 568 902</b>	<b>161 568 922</b>	-	2.908
2 ½	65	10	2200	<b>161 568 903</b>	<b>161 568 923</b>	-	3.262
3	80	10	3000	<b>161 568 904</b>	<b>161 568 924</b>	-	3.675
4	100	10	6500	<b>161 568 905</b>	<b>161 568 925</b>	-	5.797
5	125	10	11500	<b>161 568 906</b>	<b>161 568 926</b>	-	7.750
6	150	10	16600	<b>161 568 907</b>	<b>161 568 927</b>	-	9.754
8	200	10	39600	<b>161 568 908</b>	<b>161 568 928</b>	-	14.682

Inch	d2 [mm]	D	D1 [mm]	D3 [mm]	D4 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	L [mm]	Q1 [mm]	Q2 [mm]
2	150	UNC 5/8	121	70	90	222	77	134	27	23	45	40	
2 ½	170	UNC 5/8	138	70	90	235	83	140	27	23	46	54	35
3	177	UNC 5/8	152	70	90	247	89	146	27	23	49	67	50
4	216	UNC 5/8	191	70	90	287	104	167	16	23	56	88	74
5	246	UNC 3/4	216	70	90	313	117	181	16	23	64	113	97
6	273	UNC 3/4	241	70	90	335	130	189	19	23	72	139	123
8	334	UNC 3/4	298	70	90	387	158	210	19	23	73	178	169

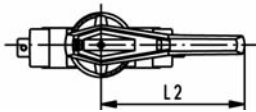
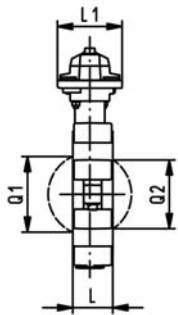
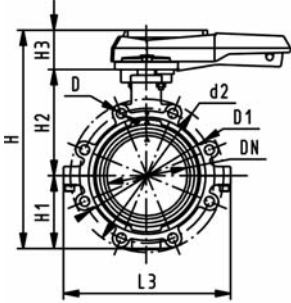




## Lugstyle butterfly valve type 568 PVC-U Hand lever with ratchet settings

### Model:

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension ANSI/ASME B 16.5 Class 150, BS 4504 PN10
- Overall length according to EN 558, ISO 5752



Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	GP	kg
2	50	10	1470	<b>161 568 102</b>	<b>161 568 122</b>	1	3.130
2 ½	65	10	2200	<b>161 568 103</b>	<b>161 568 123</b>	-	3.484
3	80	10	3000	<b>161 568 104</b>	<b>161 568 124</b>	-	3.897
4	100	10	6500	<b>161 568 105</b>	<b>161 568 125</b>	1	6.067
5	125	10	11500	<b>161 568 106</b>	<b>161 568 126</b>	-	8.020
6	150	10	16600	<b>161 568 107</b>	<b>161 568 127</b>	1	10.024
8	200	10	39600	<b>161 568 108</b>	<b>161 568 128</b>	1	15.489

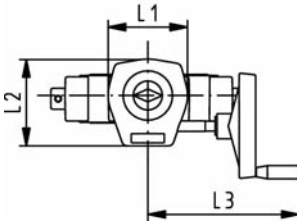
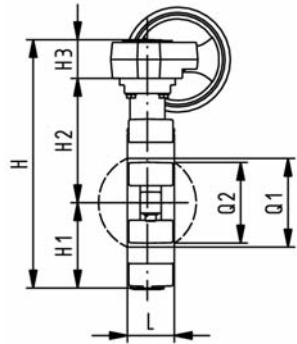
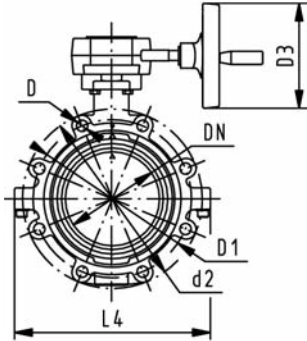
Inch	d2 [mm]	D	D1 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	Q1 [mm]	Q2 [mm]
2	150	UNC 5/8	121	265	77	134	54	45	106	205	150	40	
2 ½	170	UNC 5/8	138	277	83	140	54	46	106	205	160	54	35
3	177	UNC 5/8	152	289	89	146	54	49	106	205	175	67	50
4	216	UNC 5/8	191	326	104	167	55	56	106	255	244	88	74
5	246	UNC 3/4	216	353	117	181	55	64	106	255	272	113	97
6	273	UNC 3/4	241	374	130	189	55	72	106	255	297	139	123
8	334	UNC 3/4	298	435	158	210	67	73	140	408	360	178	169



## Lugstyle butterfly valve type 568 PVC-U Reduction gear with handwheel

### Model:

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension ANSI/ASME B 16.5 Class 150, BS 4504 PN10
- Overall length according to EN 558, ISO 5752



Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	GP	kg
2	50	10	1470	<b>161 568 142</b>	<b>161 568 162</b>	-	5.168
2 ½	65	10	2200	<b>161 568 143</b>	<b>161 568 163</b>	-	5.522
3	80	10	3000	<b>161 568 144</b>	<b>161 568 164</b>	-	5.935
4	100	10	6500	<b>161 568 145</b>	<b>161 568 165</b>	-	8.057
5	125	10	11500	<b>161 568 146</b>	<b>161 568 166</b>	-	10.010
6	150	10	16600	<b>161 568 147</b>	<b>161 568 167</b>	-	12.014
8	200	10	39600	<b>161 568 148</b>	<b>161 568 168</b>	-	16.942

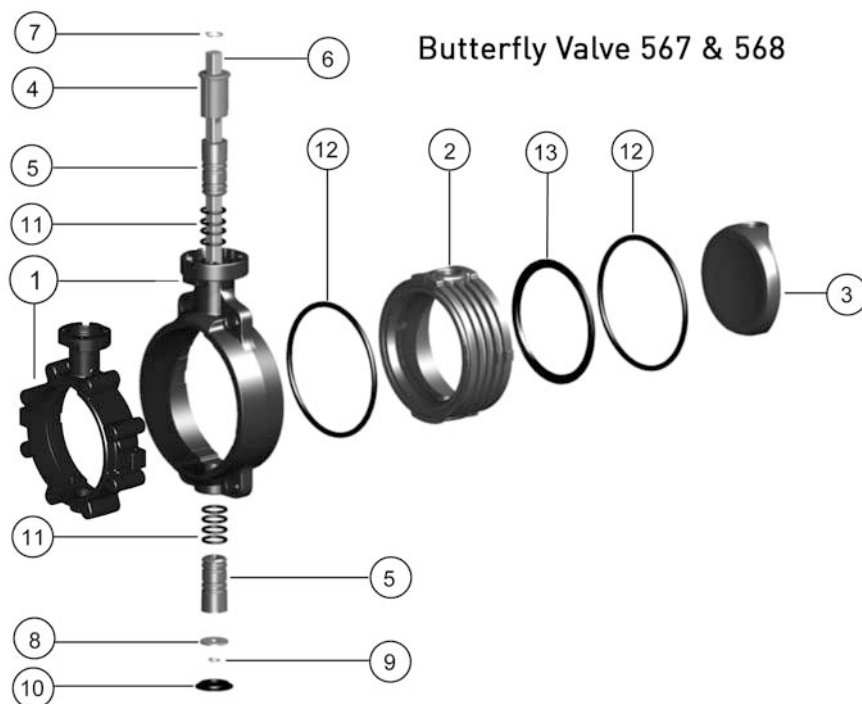
Inch	d2 [mm]	D	D1 [mm]	D3 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	Q1 [mm]
2	150	UNC 5/8	121	160	279	77	134	60	45	120	132	236	150	40
2 ½	170	UNC 5/8	138	160	291	83	140	60	46	120	132	236	160	54
3	177	UNC 5/8	152	160	303	89	146	60	49	120	132	236	175	67
4	216	UNC 5/8	191	160	339	104	167	60	56	120	132	236	244	88
5	246	UNC 3/4	216	160	366	117	181	60	64	120	132	236	272	113
6	273	UNC 3/4	241	160	387	130	189	60	72	120	132	236	297	139
8	334	UNC 3/4	298	160	436	158	210	60	73	120	132	236	360	178

Inch	Q2 [mm]
2	
2 ½	35
3	50
4	74
5	97
6	123
8	169



# Spare parts butterfly valves

## Spare parts butterfly valve type 567/568



### Inner body

#### Model:

- Inner body consisting of: inner body (2) and profile seal (13)



d [mm]	Inch	DN [mm]	PVC-U EPDM Code	PVC-U FPM Code	kg
63	2	50	161 486 861	161 486 873	0.150
75	2 ½	65	161 486 862	161 486 874	0.182
90	3	80	161 486 863	161 486 875	0.258
110	4	100	161 486 864	161 486 876	0.461
140	5	125	161 486 865	161 486 877	0.680
160	6	150	161 486 866	161 486 878	0.842
225	8	200	161 486 867	161 486 879	1.438
280	10	250	161 486 868	161 486 880	3.315
315	12	300	161 486 869	161 486 881	3.315

### Flange seal (12)

#### Model:

- included in delivery 1 pcs.



d [mm]	Inch	DN [mm]	EPDM Code	FPM Code	kg
63	2	50	161 486 959	161 486 979	0.012
75	2 ½	65	161 486 960	161 486 980	0.014
90	3	80	161 486 961	161 486 981	0.016
110	4	100	161 486 962	161 486 982	0.036
125	5	125	161 486 963	161 486 983	0.043
160	6	150	161 486 964	161 486 984	0.050
225	8	200	161 486 965	161 486 985	0.064
280	10	250	161 486 966	161 486 986	0.091
315	12	300	161 486 967	161 486 987	0.104
355	14	350	161 486 268	161 486 988	0.360
400	16	400	161 486 269	161 486 989	0.500
450	18	450	161 486 970	161 486 996	
500	20	500	161 486 971	161 486 997	
630	24	600	161 486 972	161 486 998	



### Disc (3)

d [mm]	Inch	DN [mm]	PVC-U Code	kg	
63	2	50	<b>161 490 889</b>	0.040	
75	2 ½	65	<b>161 490 890</b>	0.060	
90	3	80	<b>161 490 891</b>	0.100	
110	4	100	<b>161 490 892</b>	0.199	
140	5	125	<b>161 490 893</b>	0.356	
160	6	150	<b>161 490 894</b>	0.618	
225	8	200	<b>161 490 895</b>	1.162	
280	10	250	<b>161 490 896</b>	3.540	
315	12	300	<b>161 490 897</b>	6.393	
355	14	350	-		
400	16	400	-		
450	18	450	-		
500	20	500	-		
630	24	600	-		



### Bearing bush (5, 11)

**Model:**

- included in delivery 2 pcs.
- With O-ring
- Bearing bushes in PP-H are used in PP-H and ABS butterfly valves

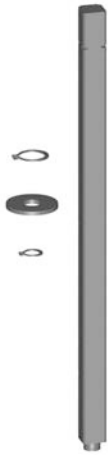


d [mm]	Inch	DN [mm]	PVC-U EPDM Code	PVC-U FPM Code	kg	
63	2	50	<b>161 486 886</b>	<b>161 486 892</b>	0.031	
75	2 ½	65	<b>161 486 886</b>	<b>161 486 892</b>	0.031	
90	3	80	<b>161 486 886</b>	<b>161 486 892</b>	0.031	
110	4	100	<b>161 486 887</b>	<b>161 486 893</b>	0.055	
140	5	125	<b>161 486 887</b>	<b>161 486 893</b>	0.055	
160	6	150	<b>161 486 888</b>	<b>161 486 894</b>	0.115	
225	8	200	<b>161 486 888</b>	<b>161 486 894</b>	0.115	
280	10	250	<b>161 486 889</b>	<b>161 486 895</b>	0.178	
315	12	300	<b>161 486 889</b>	<b>161 486 895</b>	0.178	



### End stop PP glasfiber reinforced (4)

d [mm]	Inch	DN [mm]	Code	kg	
63	2	50	<b>167 483 251</b>	0.023	
75	2 ½	65	<b>167 483 251</b>	0.023	
90	3	80	<b>167 483 251</b>	0.023	
110	4	100	<b>167 483 252</b>	0.033	
140	5	125	<b>167 483 252</b>	0.033	
160	6	150	<b>167 483 253</b>	0.049	
225	8	200	<b>167 483 253</b>	0.049	
280	10	250	<b>167 483 254</b>	0.096	
315	12	300	<b>167 483 254</b>	0.096	



## Shaft set

### Model:

- Shaft set consisting of: shaft chrom steel 1.4301 AISI 304 (6), retention ring (7, 9) and washer (8)

d [mm]	Inch	DN [mm]	Code	kg
63	2	50	<b>161 486 899</b>	0.225
75	2 ½	65	<b>161 486 900</b>	0.237
90	3	80	<b>161 486 901</b>	0.249
110	4	100	<b>161 486 902</b>	0.429
140	5	125	<b>161 486 903</b>	0.469
160	6	150	<b>161 486 904</b>	0.749
225	8	200	<b>161 486 905</b>	0.844
280	10	250	<b>161 486 906</b>	2.335
315	12	300	<b>161 486 907</b>	2.536
355	14	350	<b>161 486 908</b>	7.600
400	16	400	<b>161 486 909</b>	8.900
450	18	450	<b>161 486 926</b>	11.800
500	20	500	<b>161 486 927</b>	14.400
630	24	600	<b>161 486 928</b>	26.000



## Hand lever

d [mm]	Inch	DN [mm]	with index plate Code	with fine adjustment Code	kg
63	2	50	<b>161 486 690</b>	<b>161 486 325</b>	0.485
75	2 ½	65	<b>161 486 690</b>	<b>161 486 325</b>	0.485
90	3	80	<b>161 486 690</b>	<b>161 486 325</b>	0.485
110	4	100	<b>161 486 691</b>	<b>161 486 326</b>	0.540
140	5	125	<b>161 486 691</b>	<b>161 486 326</b>	0.540
160	6	150	<b>161 486 694</b>	<b>161 486 327</b>	0.537
225	8	200	<b>161 486 695</b>	<b>161 486 328</b>	1.375
280	10	250	<b>161 486 697</b>		0.330
315	12	300	<b>161 486 697</b>		0.330

## Intermediate element

### Gear operated with handwheel 567 / 568

d [mm]	DN [mm]	Code	kg
63	50	<b>198 000 621</b>	0.150
75	65	<b>198 000 621</b>	0.150
90	80	<b>198 000 621</b>	0.150
110	100	<b>198 000 622</b>	0.150
140	125	<b>198 000 622</b>	0.150
160	150	<b>198 000 599</b>	0.100
225	200	<b>198 000 599</b>	0.100
280	250	<b>198 000 732</b>	0.750
315	300	<b>198 000 732</b>	0.750

## Reduction gear with handwheel



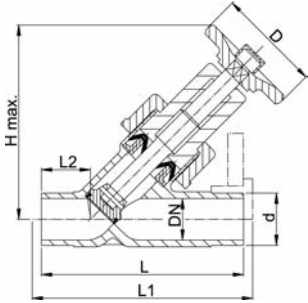
d [mm]	Inch	DN [mm]	Code	kg
75	2 ½	65	<b>161 482 408</b>	2.260
90	3	80	<b>161 482 408</b>	2.260
110	4	100	<b>161 482 408</b>	2.260
125	4 ½	125	<b>161 482 408</b>	2.260
160	6	150	<b>161 482 408</b>	2.260
225	8	200	<b>161 482 408</b>	2.260
280	10	250	<b>161 483 462</b>	2.840
315	12	300	<b>161 483 462</b>	2.840

# Angle seat valves metric

## Angle seat valve type 300 PVC-U With solvent cement spigots metric

Model:

- Overall length EN 558



d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	PE Code	PTFE Code	GP	kg
16	10	10	41	<b>161 300 250</b>	<b>161 300 299</b>	10	0.128
20	15	10	95	<b>161 300 300</b>	<b>161 300 349</b>	6	0.183
25	20	10	180	<b>161 300 350</b>	<b>161 300 399</b>	6	0.255
32	25	10	327	<b>161 300 400</b>	<b>161 300 449</b>	4	0.389
40	32	10	484	<b>161 300 450</b>	<b>161 300 499</b>	4	0.590
50	40	10	725	<b>161 300 500</b>	<b>161 300 549</b>	4	1.000
63	50	10	1130	<b>161 300 550</b>	<b>161 300 599</b>	4	1.540
75	65	10	1700	<b>161 300 600</b>	<b>161 300 649</b>	4	2.713
90	80	10	2500	<b>161 300 650</b>	<b>161 300 699</b>	-	4.097

d [mm]	D [mm]	L [mm]	L1 [mm]	L2 [mm]	H max. [mm]	closest inch
16	50	114	120	24	105	3/8
20	63	124	130	28	126	1/2
25	63	144	150	37	140	3/4
32	80	154	160	37	166	1
40	80	174	180	44	191	1 1/4
50	100	194	200	48	233	1 1/2
63	100	224	230	60	264	2
75	160	284	290	74	335	2 1/2
90	200	300	310	85	390	3



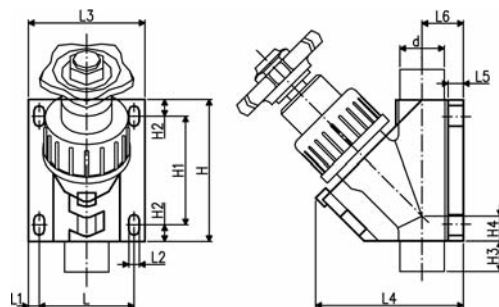
## Angle seat valve bracket type 123 PVC-U

Model:

- Can be fitted to existing installations without interrupting their operation
- Easily assembled without tools
- For Angle Seat Valves Type 300

d [mm]	DN [mm]	Code	GP	kg
16	10	<b>161 123 250</b>	40	0.114
20	15	<b>161 123 300</b>	10	0.146
25	20	<b>161 123 350</b>	10	0.230
32	25	<b>161 123 400</b>	-	0.289
40	32	<b>161 123 450</b>	5	0.374

d [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	closest inch
16	62	8	7	78	67	10	22	76	55	11	15	9	3/8
20	65	9	7	82	74	10	25	86	65	11	17	11	1/2
25	73	9	8	91	87	11	30	100	76	12	20	17	3/4
32	84	9	8	102	104	13	35	102	78	12	23	14	1
40	90	9	8	107	122	15	42	116	85	16	27	17	1 1/4

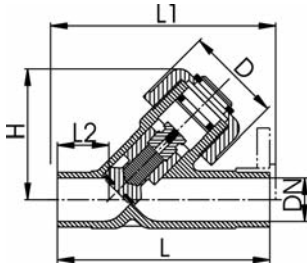




## Angle seat check valve type 303 PVC-U With solvent cement spigots metric

### Model:

- For horizontal or vertical installation
- Leakproof from: EPDM 2m, FPM 3m water column
- Specific gravity of piston approx. 2 kg/dm<sup>3</sup>
- Overall length EN 558



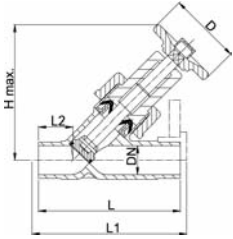
d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	GP	kg
16	10	10	41	161 303 005	161 303 030	10	0.094
20	15	10	95	161 303 006	161 303 031	10	0.132
25	20	10	180	161 303 007	161 303 032	10	0.200
32	25	10	327	161 303 008	161 303 033	6	0.323
40	32	10	484	161 303 009	161 303 034	6	0.498
50	40	10	725	161 303 010	161 303 035	4	0.860
63	50	10	1130	161 303 011	161 303 036	8	1.455
75	65	10	1700	161 303 012	161 303 037	4	2.499
90	80	10	2500	161 303 013	161 303 038	4	3.511

d [mm]	D [mm]	L [mm]	L1 [mm]	L2 [mm]	H [mm]	closest inch
16	39	114	120	24	58	$\frac{3}{8}$
20	43	124	130	28	65	$\frac{1}{2}$
25	47	144	150	37	75	$\frac{3}{4}$
32	56	154	160	37	90	1
40	64	174	180	44	102	1 $\frac{1}{4}$
50	82	194	200	48	123	1 $\frac{1}{2}$
63	95	224	230	60	144	2
75	92	284	290	74	186	2 $\frac{1}{2}$
90	104	300	310	85	204	3

# Angle seat valves ASTM/ANSI

## Angle seat valve type 301 PVC-U

### Transparent body with solvent cement spigots ASTM

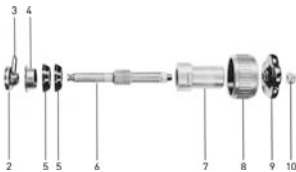
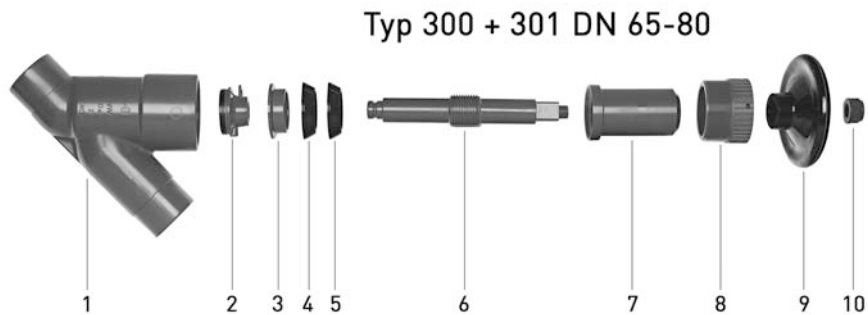
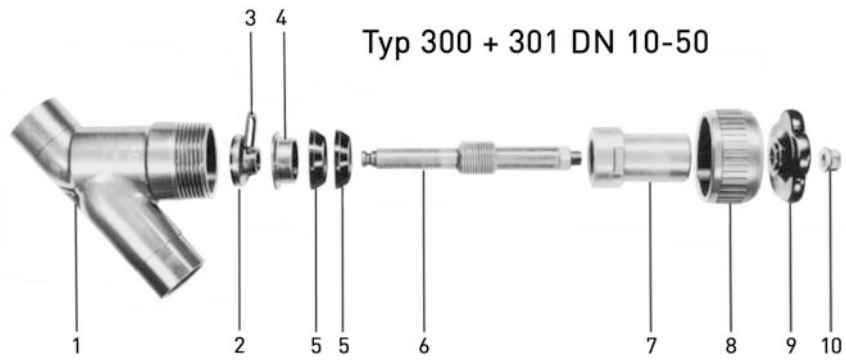


Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	PE Code	PTFE Code	GP	kg
1/2	15	10	95	<b>192 301 300</b>	<b>192 301 349</b>	4	0.180
3/4	20	10	180	<b>192 301 350</b>	<b>192 301 399</b>	12	0.250
1	25	10	327	<b>192 301 400</b>	<b>192 301 449</b>	6	0.385
1 1/4	32	10	484	<b>192 301 450</b>	<b>192 301 499</b>	-	0.605
1 1/2	40	10	725	<b>192 301 500</b>	<b>192 301 549</b>	4	0.970
2	50	10	1130	<b>192 301 550</b>	<b>192 301 599</b>	-	1.504
3	80	10	2500	<b>192 301 650</b>	<b>192 301 699</b>	-	4.110

Inch	D [mm]	L [mm]	L1 [mm]	L2 [mm]	H max. [mm]
1/2	63	143	149	37	126
3/4	63	160	166	45	140
1	80	174	180	47	166
1 1/4	80	188	194	53	191
1 1/2	100	205	211	54	233
2	100	225	231	63	264
3	200	311	321	90	390

# Spare parts angle seat valves

## Spare parts angle seat valve type 300/301



### Bonnet complete

**Model:**

- Bonnet complete consisting of: seal element PVC-U and seating PE, retaining pin, seal support ring, stem, threaded bush, union nut and handwheel nut in PVC-U, cup seal and handwheel in PE (2 -10)

d [mm]	Inch	DN [mm]	PVC-U/PE Code	kg
16	3/8	10	<b>161 482 250</b>	0.500
20	1/2	15	<b>161 482 251</b>	0.140
25	3/4	20	<b>161 482 252</b>	0.190
32	1	25	<b>161 482 253</b>	0.215
40	1 1/4	32	<b>161 482 254</b>	0.330
50	1 1/2	40	<b>161 482 255</b>	0.750
63	2	50	<b>161 482 256</b>	0.900
75	2 1/2	65	<b>161 482 257</b>	0.300
90	3	80	<b>161 482 258</b>	2.400



### Disc retaining pin set

**Model:**

- Disc retaining pin set consisting of: seal element and seating, retaining pin, screen support and cup seal (2-5)

d [mm]	Inch	DN [mm]	PE Code	PTFE Code	kg
16	3/8	10	<b>161 483 076</b>	<b>161 483 089</b>	0.012
20	1/2	15	<b>161 483 077</b>	<b>161 483 090</b>	0.015
25	3/4	20	<b>161 483 078</b>	<b>161 483 091</b>	0.022
32	1	25	<b>161 483 079</b>	<b>161 483 092</b>	0.031
40	1 1/4	32	<b>161 483 080</b>	<b>161 483 093</b>	0.053
50	1 1/2	40	<b>161 483 081</b>	<b>161 483 094</b>	0.091
63	2	50	<b>161 483 082</b>	<b>161 483 095</b>	0.144
75	2 1/2	65	<b>161 483 083</b>	<b>161 483 096</b>	0.500
90	3	80	<b>161 483 084</b>	<b>161 483 097</b>	0.273



## Stem set

### Model:

- Stem set consisting of: stem and threaded bush (6, 7)

d [mm]	Inch	DN [mm]	PVC-U Code	kg
16	3/8	10	<b>161 483 062</b>	0.026
20	1/2	15	<b>161 483 063</b>	0.039
25	3/4	20	<b>161 483 064</b>	0.054
32	1	25	<b>161 483 065</b>	0.075
40	1 1/4	32	<b>161 483 066</b>	0.144
50	1 1/2	40	<b>161 483 067</b>	0.241
63	2	50	<b>161 483 068</b>	0.379
75	2 1/2	65	<b>161 483 069</b>	0.585
90	3	80	<b>161 483 070</b>	0.903



## Body (1)

d [mm]	Inch	DN [mm]	PVC-U Code	PVC-U transparent Code	kg
16	3/8	10	<b>161 300 251</b>	<b>192 480 000</b>	0.112
20	1/2	15	<b>161 300 301</b>	<b>192 480 001</b>	0.066
25	3/4	20	<b>161 300 351</b>	<b>192 480 002</b>	0.095
32	1	25	<b>161 300 401</b>	<b>192 301 401</b>	0.185
40	1 1/4	32	<b>161 300 451</b>	<b>192 301 451</b>	0.256
50	1 1/2	40	<b>161 300 501</b>	<b>192 301 501</b>	0.401
63	2	50	<b>161 300 551</b>	<b>192 301 551</b>	0.657
75	2 1/2	65	<b>161 300 601</b>	<b>192 301 601</b>	1.327
90	3	80	<b>161 300 651</b>	<b>192 301 651</b>	1.920



## Union nut

### Model:

- DN10-DN50 (8)

d [mm]	Inch	DN [mm]	PVC-U Code	kg
16	3/8	10	<b>161 300 258</b>	0.028
20	1/2	15	<b>161 300 308</b>	0.033
25	3/4	20	<b>161 300 358</b>	0.024
32	1	25	<b>161 300 408</b>	0.039
40	1 1/4	32	<b>161 300 458</b>	0.047
50	1 1/2	40	<b>161 300 508</b>	0.085
63	2	50	<b>161 300 558</b>	0.132



## Handwheel nut (10)

d [mm]	Inch	DN [mm]	PVC-U Code	kg
16	3/8	10	<b>161 300 260</b>	0.002
20	1/2	15	<b>721 960 603</b>	0.013
25	3/4	20	<b>721 960 603</b>	0.013
32	1	25	<b>721 960 603</b>	0.013
40	1 1/4	32	<b>721 960 604</b>	0.024
50	1 1/2	40	<b>721 960 604</b>	0.024
63	2	50	<b>721 960 605</b>	0.005
75	2 1/2	65	<b>721 960 606</b>	0.018
90	3	80	<b>721 960 607</b>	0.024





## Handwheel (9)

d [mm]	Inch	DN [mm]	Code	kg	
16	3/8	10	<b>161 300 259</b>	0.030	
20	1/2	15	<b>161 300 309</b>	0.040	
25	3/4	20	<b>161 300 309</b>	0.040	
32	1	25	<b>161 300 409</b>	0.062	
40	1 1/4	32	<b>161 300 459</b>	0.750	
50	1 1/2	40	<b>161 300 509</b>	0.125	
63	2	50	<b>161 300 559</b>	0.120	
75	2 1/2	65	<b>161 300 609</b>	0.310	
90	3	80	<b>161 300 659</b>	0.630	



## Plug

**Model:**

- DN65-DN80 (8)

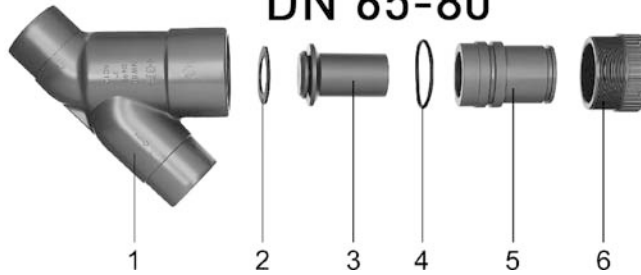
d [mm]	Inch	DN [mm]	PVC-U Code	kg	
75	2 1/2	65	<b>161 300 608</b>	0.202	
90	3	80	<b>161 300 658</b>	0.280	

## Spare parts angle seat valve type 303/304

### DN 10-50



### DN 65-80



### Body (1)

d [mm]	Inch	DN [mm]	PVC-U Code	PVC-U transparent Code	kg
16	3/8	10	161 480 699	192 480 000	0.112
20	1/2	15	161 480 700	192 480 001	0.066
25	3/4	20	161 480 701	192 480 002	0.095
32	1	25	161 300 401	192 301 401	0.185
40	1 1/4	32	161 300 451	192 301 451	0.256
50	1 1/2	40	161 300 501	192 301 501	0.401
63	2	50	161 300 551	192 301 551	0.657
75	2 1/2	65	161 300 601	192 301 601	1.327
90	3	80	161 300 651	192 301 651	1.920



### Flat gasket (2)

d [mm]	Inch	DN [mm]	EPDM Code	FPM Code	kg
16	3/8	10	161 480 664	161 480 673	0.004
20	1/2	15	161 480 665	161 480 674	0.004
25	3/4	20	161 480 666	161 480 675	0.005
32	1	25	161 480 667	161 480 676	0.005
40	1 1/4	32	161 480 668	161 480 677	0.004
50	1 1/2	40	161 480 669	161 480 678	0.006
63	2	50	161 480 670	161 480 679	0.009
75	2 1/2	65	161 480 671	161 480 680	0.015
90	3	80	161 480 672	161 480 681	0.020



### Piston (3)

d [mm]	Inch	DN [mm]	PVC-U Code	kg
16	3/8	10	161 480 682	0.009
20	1/2	15	161 480 683	0.015
25	3/4	20	161 480 684	0.028
32	1	25	161 480 685	0.061
40	1 1/4	32	161 480 686	0.097
50	1 1/2	40	161 480 687	0.079
63	2	50	161 480 688	0.352
75	2 1/2	65	161 480 689	0.140
90	3	80	161 480 690	0.735



## O-ring (4)

d [mm]	Inch	DN [mm]	EPDM Code	FPM Code	kg
16	3/8	10	<b>748 410 059</b>	<b>749 410 059</b>	0.002
20	1/2	15	<b>748 410 106</b>	<b>749 410 106</b>	0.002
25	3/4	20	<b>748 410 001</b>	<b>749 410 001</b>	0.002
32	1	25	<b>748 410 007</b>	<b>749 410 007</b>	0.002
40	1 1/4	32	<b>748 410 002</b>	<b>749 410 002</b>	0.003
50	1 1/2	40	<b>748 410 102</b>	<b>749 410 102</b>	0.004
63	2	50	<b>748 410 101</b>	<b>749 410 101</b>	0.004
75	2 1/2	65	<b>748 410 119</b>	<b>749 410 119</b>	0.010
90	3	80	<b>748 410 014</b>	<b>749 410 014</b>	0.012



## Union nut

**Model:**

- DN10-DN50 (6)

d [mm]	Inch	DN [mm]	PVC-U Code	kg
16	3/8	10	<b>161 300 258</b>	0.028
20	1/2	15	<b>161 300 308</b>	0.033
25	3/4	20	<b>161 300 358</b>	0.024
32	1	25	<b>161 300 408</b>	0.039
40	1 1/4	32	<b>161 300 458</b>	0.047
50	1 1/2	40	<b>161 300 508</b>	0.085
63	2	50	<b>161 300 558</b>	0.132



## Plug

**Model:**

- DN65-DN80 (6)

d [mm]	Inch	DN [mm]	PVC-U Code	kg
75	2 1/2	65	<b>161 305 604</b>	0.200
90	3	80	<b>161 305 654</b>	0.265



## Closure plug (5)

d [mm]	Inch	DN [mm]	PVC-U Code	kg
16	3/8	10	<b>161 480 648</b>	0.013
20	1/2	15	<b>161 480 649</b>	0.019
25	3/4	20	<b>161 480 650</b>	0.026
32	1	25	<b>161 480 651</b>	0.040
40	1 1/4	32	<b>161 480 652</b>	0.071
50	1 1/2	40	<b>161 480 653</b>	0.112
63	2	50	<b>161 480 654</b>	0.172
75	2 1/2	65	<b>161 490 412</b>	0.458
90	3	80	<b>161 490 413</b>	0.591

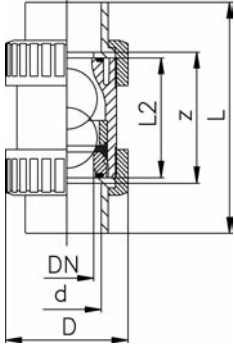


## Circlip (7)

d [mm]	Inch	DN [mm]	PVC-U Code	kg
16	3/8	10	<b>161 482 076</b>	0.001
20	1/2	15	<b>161 482 017</b>	0.003
25	3/4	20	<b>161 482 018</b>	0.003
32	1	25	<b>161 482 019</b>	0.005
40	1 1/4	32	<b>161 482 020</b>	0.003
50	1 1/2	40	<b>161 482 021</b>	0.003
63	2	50	<b>161 482 022</b>	0.004

# Ball check valves metric

## Ball check valve type 360 PVC-U With solvent cement sockets metric



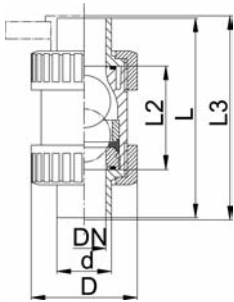
### Model:

- Union ends for easy installation and removal
- Ball is sealing at a minimum water column 2m
- Vibration free even at high flow velocity
- Installation position horizontal or vertical

d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	GP	kg
16	10	16	170	<b>161 360 401</b>	<b>161 360 411</b>	10	0.123
20	15	16	150	<b>161 360 402</b>	<b>161 360 412</b>	10	0.123
25	20	16	330	<b>161 360 403</b>	<b>161 360 413</b>	10	0.205
32	25	16	390	<b>161 360 404</b>	<b>161 360 414</b>	10	0.318
40	32	16	710	<b>161 360 405</b>	<b>161 360 415</b>	6	0.524
50	40	16	900	<b>161 360 406</b>	<b>161 360 416</b>	6	0.841
63	50	16	1390	<b>161 360 407</b>	<b>161 360 417</b>	4	1.495

d [mm]	z [mm]	D [mm]	L [mm]	L2 [mm]	closest inch
16	71	45	99	63	3/8
20	71	45	102	63	1/2
25	82	53	120	75	3/4
32	87	64	131	79	1
40	98	78	150	89	1 1/4
50	101	92	163	95	1 1/2
63	121	116	197	115	2

## Ball check valve type 360 PVC-U With solvent cement spigots metric



### Model:

- Union ends for easy installation and removal
- Ball is sealing at a minimum water column 2m
- Vibration free even at high flow velocity
- Installation position horizontal or vertical

\* without union ends for easy installation and removal

d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	GP	kg
16	10	16	170	<b>161 360 441</b>	<b>161 360 451</b>	10	0.123
20	15	16	150	<b>161 360 442</b>	<b>161 360 452</b>	10	0.128
25	20	16	330	<b>161 360 443</b>	<b>161 360 453</b>	10	0.211
32	25	16	390	<b>161 360 444</b>	<b>161 360 454</b>	10	0.331
40	32	16	710	<b>161 360 445</b>	<b>161 360 455</b>	6	0.540
50	40	16	900	<b>161 360 446</b>	<b>161 360 456</b>	6	0.870
63	50	16	1390	<b>161 360 447</b>	<b>161 360 457</b>	4	1.554
* 90	80	10	1200	<b>161 360 013</b>	<b>161 360 038</b>	-	4.330

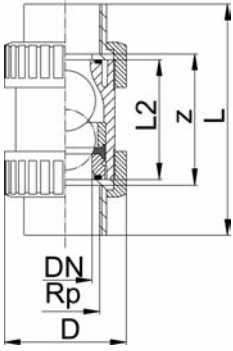
d [mm]	D [mm]	L [mm]	L2 [mm]	L3 [mm]	closest inch
16	45	114	63	120	3/8
20	45	124	63	130	1/2
25	53	144	75	150	3/4
32	64	154	79	160	1
40	78	174	89	180	1 1/4
50	92	194	95	200	1 1/2
63	116	224	115	230	2
* 90		300		310	2 1/2



## Ball check valve type 360 PVC-U With threaded sockets Rp

### Model:

- Union ends for easy installation and removal
- Ball is sealing at a minimum water column 2m
- Vibration free even at high flow velocity
- Installation position horizontal or vertical



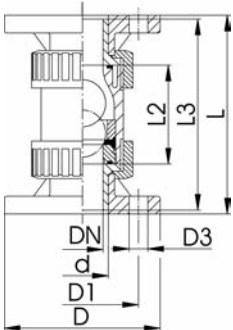
Rp [inch]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	GP	kg	z [mm]	D [mm]	L [mm]	L2 [mm]
3/8	10	10	170	161 360 421	161 360 431	10	0.123	67	45	99	63
1/2	15	10	150	161 360 422	161 360 432	10	0.123	67	45	102	63
3/4	20	10	330	161 360 423	161 360 433	10	0.204	79	53	120	75
1	25	10	390	161 360 424	161 360 434	10	0.316	83	64	131	79
1 1/4	32	10	710	161 360 425	161 360 435	6	0.520	96	78	150	89
1 1/2	40	10	900	161 360 426	161 360 436	6	0.855	109	92	163	95
2	50	10	1390	161 360 427	161 360 437	4	1.547	135	116	197	115



## Ball check valve type 360 PVC-U With fixed flanges serrated metric

### Model:

- Union ends for easy installation and removal
- Ball is sealing at a minimum water column 2m
- Vibration free even at high flow velocity
- Installation position horizontal or vertical
- Overall length EN 558
- Connecting Dimensions: metric 2501 PN 10



d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
20	15	1/2	16	150	161 360 502	161 360 512	0.327
25	20	3/4	16	330	161 360 503	161 360 513	0.456
32	25	1	16	390	161 360 504	161 360 514	0.694
40	32	1 1/4	16	710	161 360 505	161 360 515	0.500
50	40	1 1/2	16	900	161 360 506	161 360 516	1.605
63	50	2	16	1390	161 360 507	161 360 517	2.571

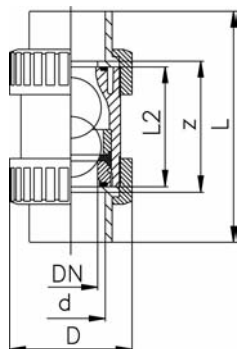
d [mm]	D [mm]	D1 [mm]	D3 [mm]	L [mm]	L2 [mm]	L3 [mm]
20	95	65	14	124	63	130
25	105	75	14	144	75	150
32	115	84	14	154	79	160
40	140	100	18	174	89	180
50	150	110	18	194	95	200
63	165	125	18	224	115	230



## Ball check valve type 360 PVC-U With fusion sockets PE80 metric

### Model:

- Union ends for easy installation and removal
- Ball is sealing at a minimum water column 2m
- Vibration free even at high flow velocity
- Installation position horizontal or vertical



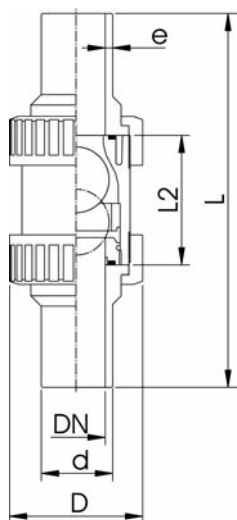
d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	kg	z [mm]	D [mm]	L [mm]	L2 [mm]	closest inch
16	10	10	170	<b>161 360 721</b>	0.120	72	45	98	63	3/8
20	15	10	150	<b>161 360 722</b>	0.115	73	45	101	63	1/2
25	20	10	330	<b>161 360 723</b>	0.195	82	53	119	75	3/4
32	25	10	390	<b>161 360 724</b>	0.300	94	64	130	79	1
40	32	10	710	<b>161 360 725</b>	0.495	109	78	149	89	1 1/4
50	40	10	900	<b>161 360 726</b>	0.800	118	92	162	95	1 1/2
63	50	10	1390	<b>161 360 727</b>	1.430	143	116	195	115	2



## Ball check valve type 360 PVC-U With butt fusion spigots long PE100 SDR11 metric

### Model:

- Union ends for easy installation and removal
- Ball is sealing at a minimum water column 2m
- Vibration free even at high flow velocity
- Installation position horizontal or vertical



d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	kg	D [mm]	L [mm]	L2 [mm]	e [mm]	closest inch
20	15	16	150	<b>161 360 742</b>	0.125	45	197	63	1,9	1/2
25	20	16	330	<b>161 360 743</b>	0.210	53	217	75	2,3	3/4
32	25	16	390	<b>161 360 744</b>	0.320	64	225	79	2,9	1
40	32	16	710	<b>161 360 745</b>	0.510	78	251	89	3,7	1 1/4
50	40	16	900	<b>161 360 746</b>	0.825	92	269	95	4,6	1 1/2
63	50	16	1390	<b>161 360 747</b>	1.460	116	301	115	5,8	2

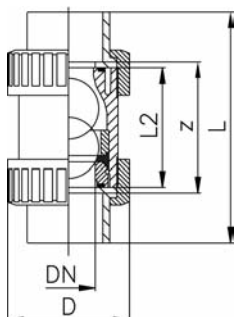
# Ball check valves Inch BS

## Ball check valve type 360 PVC-U With solvent cement sockets BS Inch



### Model:

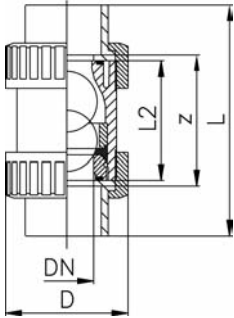
- For easy installation and removal
- Ball is sealing at a minimum water column 2m
- Vibration free even at high flow velocity



Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	GP	kg	z [mm]	D [mm]	L [mm]	L2 [mm]
3/8	10	16	170	<b>161 360 521</b>	<b>161 360 531</b>	10	0.123	71	45	99	63
1/2	15	16	150	<b>161 360 522</b>	<b>161 360 532</b>	10	0.123	71	45	102	63
3/4	20	16	330	<b>161 360 523</b>	<b>161 360 533</b>	10	0.204	82	53	120	75
1	25	16	390	<b>161 360 524</b>	<b>161 360 534</b>	10	0.316	87	64	131	79
1 1/4	32	16	710	<b>161 360 525</b>	<b>161 360 535</b>	6	0.520	98	78	150	89
1 1/2	40	16	900	<b>161 360 526</b>	<b>161 360 536</b>	6	0.855	101	92	163	95
2	50	16	1390	<b>161 360 527</b>	<b>161 360 537</b>	4	1.547	121	116	197	115

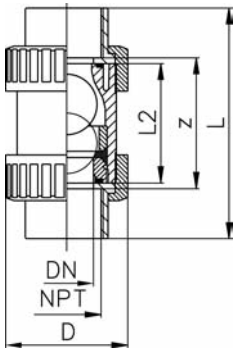
# Ball check valves ASTM/ANSI

## Ball check valve type 360 PVC-U With solvent cement sockets ASTM



Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	GP	kg	z [mm]	D [mm]	L [mm]	L2 [mm]
3/8	10	16	170	<b>161 360 561</b>	<b>161 360 571</b>	10	0.123	74	45	112	63
1/2	15	16	150	<b>161 360 562</b>	<b>161 360 572</b>	10	0.123	67	45	112	63
3/4	20	16	330	<b>161 360 563</b>	<b>161 360 573</b>	10	0.205	80	53	131	75
1	25	16	390	<b>161 360 564</b>	<b>161 360 574</b>	10	0.318	85	64	142	79
1 1/4	32	16	710	<b>161 360 565</b>	<b>161 360 575</b>	6	0.524	102	78	166	89
1 1/2	40	16	900	<b>161 360 566</b>	<b>161 360 576</b>	6	0.841	100	92	170	95
2	50	16	1390	<b>161 360 567</b>	<b>161 360 577</b>	4	1.495	124	116	201	115

## Ball check valve type 360 PVC-U With threaded sockets NPT



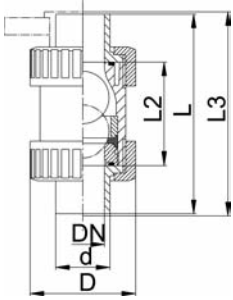
NPT [inch]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	GP	kg	z [mm]	D [mm]	L [mm]	L2 [mm]
3/8	10	10	170	<b>161 360 581</b>	<b>161 360 591</b>	10	0.123	78	45	112	63
1/2	15	10	150	<b>161 360 582</b>	<b>161 360 592</b>	10	0.123	71	45	112	63
3/4	20	10	330	<b>161 360 583</b>	<b>161 360 593</b>	10	0.204	83	53	131	75
1	25	10	390	<b>161 360 584</b>	<b>161 360 594</b>	10	0.316	92	64	142	79
1 1/4	32	10	710	<b>161 360 585</b>	<b>161 360 595</b>	6	0.520	113	78	166	89
1 1/2	40	10	900	<b>161 360 586</b>	<b>161 360 596</b>	6	0.855	112	92	170	95
2	50	10	1390	<b>161 360 587</b>	<b>161 360 597</b>	4	1.457	121	116	202	115



## Ball check valve type 360 PVC-U With solvent cement spigots ASTM

### Model:

- For easy installation and removal
- Ball is sealing at a minimum water column 2m
- Vibration free even at high flow velocity

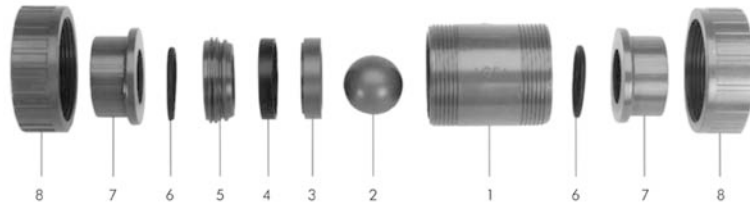


Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	GP	kg	D [mm]	L [mm]	L2 [mm]	L3 [mm]
3	80	10	1200	161 360 369	161 360 384	-	4.340	180	312		

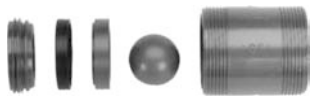
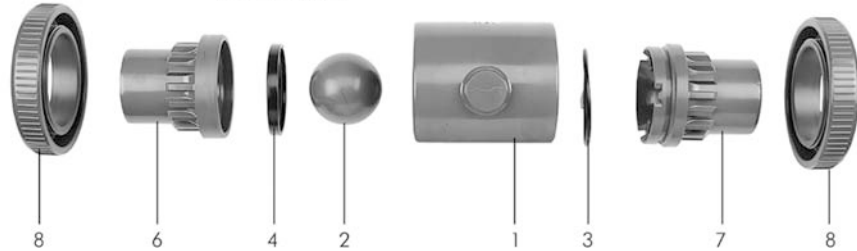
# Spare parts ball check valves

## Spare parts ball check valve type 360

DN 10-50



DN 80

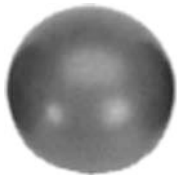


### Central part

#### Model:

- Central part consisting of: body (1), ball (2), support ring (3), sealing ring (4) and uni-on bush (5)

d [mm]	Inch	DN [mm]	PVC-U EPDM Code	PVC-U FPM Code	kg
16	3/8	10	161 483 851	161 483 861	0.064
20	1/2	15	161 483 852	161 483 862	0.064
25	3/4	20	161 483 853	161 483 863	0.106
32	1	25	161 483 854	161 483 864	0.171
40	1 1/4	32	161 483 855	161 483 865	0.280
50	1 1/2	40	161 483 856	161 483 866	0.424
63	2	50	161 483 857	161 483 867	0.802



### Ball (2)

d [mm]	Inch	DN [mm]	PVC-U Code	kg
16	3/8	10	161 330 304	0.005
20	1/2	15	161 330 304	0.005
25	3/4	20	161 330 354	0.010
32	1	25	161 330 404	0.020
40	1 1/4	32	161 330 454	0.038
50	1 1/2	40	161 330 504	0.073
63	2	50	161 330 554	0.143
90	3	80	161 330 654	0.475



### Sealing ring (4)

d [mm]	Inch	DN [mm]	EPDM Code	FPM Code	kg
16	3/8	10	161 483 259	161 483 265	0.004
20	1/2	15	161 483 259	161 483 265	0.004
25	3/4	20	161 483 260	161 483 266	0.006
32	1	25	161 483 261	161 483 267	0.003
40	1 1/4	32	161 483 262	161 483 268	0.015
50	1 1/2	40	161 483 263	161 483 269	0.025
63	2	50	161 483 264	161 483 270	0.050
90	3	80	161 480 141	161 480 149	0.080



## Face seal (6)

d [mm]	Inch	DN [mm]	EPDM Code	FPM Code	kg
16	3/8	10	748 410 042	749 410 042	0.002
20	1/2	15	748 410 042	749 410 042	0.002
25	3/4	20	748 410 116	749 410 116	0.030
32	1	25	748 410 103	749 410 103	0.002
40	1 1/4	32	748 410 027	749 410 027	0.003
50	1 1/2	40	748 410 010	749 410 010	0.007
63	2	50	748 410 011	749 410 011	0.010
90	3	80	748 410 099	749 410 099	0.015



## Union nut (8)

d [mm]	Inch	DN [mm]	PVC-U Code	kg
16	3/8	10	161 340 617	0.013
20	1/2	15	161 340 617	0.013
25	3/4	20	161 340 618	0.028
32	1	25	161 340 619	0.050
40	1 1/4	32	161 340 620	0.072
50	1 1/2	40	161 340 621	0.113
63	2	50	161 480 522	0.215
90	3	80	161 340 623	0.475



## Valve end with socket (7)

d [mm]	Inch	DN [mm]	PVC-U metric Code	PVC-U ANSI Code	kg
16	3/8	10	161 480 536	161 482 377	0.015
20	1/2	15	161 480 537	-	0.010
25	3/4	20	161 480 538	161 482 379	0.016
32	1	25	161 480 539	161 482 380	0.024
40	1 1/4	32	161 480 540	161 482 381	0.050
50	1 1/2	40	161 480 541	161 482 382	0.082
63	2	50	161 480 542	161 482 383	0.145



## Valve end with spigot (7)

d [mm]	Inch	DN [mm]	PVC-U metric Code	PVC-U metric inlet and outlet Code	kg
16	3/8	10	161 482 345		0.010
20	1/2	15	161 482 346		0.012
25	3/4	20	161 482 347		0.019
32	1	25	161 482 348		0.031
40	1 1/4	32	161 482 349		0.050
50	1 1/2	40	161 482 350		0.085
63	2	50	161 482 351		0.150
90	3	80		161 480 132	0.526
90	3	80		161 480 133	0.580



## Threaded bush (7)

Inch	DN [mm]	PVC-U Rp Code	PVC-U Rc Code	PVC-U NPT Code	kg
3/8	10	161 480 550	-	161 482 389	0.015
1/2	15	161 480 551	161 484 610	-	0.015
3/4	20	161 480 552	161 484 611	161 482 391	0.019
1	25	161 480 553	161 484 612	161 482 392	0.030
1 1/4	32	161 480 554	161 484 613	161 482 393	0.046
1 1/2	40	161 480 555	161 484 614	161 482 394	0.086
2	50	161 480 556		161 482 395	0.156



## Seal set (4, 6)

d [mm]	Inch	DN [mm]	EPDM Code	FPM Code	kg
16	3/8	10	<b>161 482 910</b>	<b>161 482 920</b>	0.003
20	1/2	15	<b>161 482 910</b>	<b>161 482 920</b>	0.003
25	3/4	20	<b>161 482 911</b>	<b>161 482 921</b>	0.007
32	1	25	<b>161 482 912</b>	<b>161 482 922</b>	0.011
40	1 1/4	32	<b>161 482 913</b>	<b>161 482 923</b>	0.016
50	1 1/2	40	<b>161 482 914</b>	<b>161 482 924</b>	0.032
63	2	50	<b>161 482 915</b>	<b>161 482 925</b>	0.065



## Body (1)

d [mm]	Inch	DN [mm]	PVC-U Code	kg
90	3	80	<b>161 480 158</b>	1.790



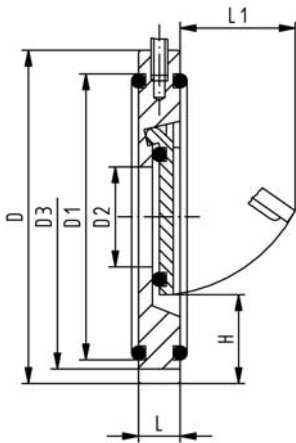
## Key PBTP black

- For assembly and disassembly of the union bush of ball valves type 323, 343, 346 and ball check valves 360

d-d [mm]	DN-DN [mm]	Inch	Code	GP	kg
16 - 63	10 - 50	3/8-2	<b>160 480 106</b>	-	0.038

# Wafer check valves metric

## Wafer check valve type 369 PVC-U Without spring



### Model:

- Supporting eyelets for simple fitting
- Suitable for vertical and horizontal mounting

### Installation instruction:

- Installation between ISO/DIN (all dimensions) and ANSI flange adaptors (all except DN32 and DN125)
- Installation with ANSI flange adaptor: for wafer check valves DN40 to DN80 you have to use ANSI flange adaptors with the next bigger dimension (example DN40 wafer check valve between DN50 ANSI flange adaptor)
- Centering by body diameter (ISO/DIN by D3, ANSI by D)
- Sealing with special flange gasket (except DN32, o-ring)
- A stabilizing zone of at least 5 times nominal diameter (DN) should be provided before and after the wafer check valve (10 times DN is recommended)
- No direct installation on pump flange or following bend allowed
- The using of PVC-U pipe PN16 is only possible up to d63
- Wafer check valves without reset spring are not recommended for pulsating flows (production of noise)

d [mm]	DN [mm]	Inch	PN	EPDM Code	FPM Code	GP	kg
40	32	1 ¼	6	161 369 002	161 369 022	-	0.130
50	40	1 ½	6	161 369 003	161 369 023	-	0.160
63	50	2	6	161 369 004	161 369 024	-	0.250
75	65	2 ½	6	161 369 005	161 369 025	-	0.320
90	80	3	6	161 369 006	161 369 026	-	0.390
110	100	4	6	161 369 007	161 369 027	-	0.550
140	125	5	6	161 369 009	161 369 029	-	0.750
160	150	6	6	161 369 010	161 369 030	-	1.100
225	200	8	6	161 369 011	161 369 031	-	2.100
280	250	10	6	161 369 012	161 369 032	-	3.500
315	300	12	6	161 369 013	161 369 033	-	5.300

d [mm]	D [mm]	D1 [mm]	D2 [mm]	D3 [mm]	L [mm]	L1 [mm]	H [mm]	Opening pressure vertical [mbar]	Opening pressure horizontal [mbar]	Minimum water column for sealing [m]
40	85	59	18	85	15	22	25	10	1	2.0
50	105	74	22	95	16	27	27	10	1	2.0
63	124	90	32	109	18	40	29	10	1	2.0
75	137	110	40	129	20	55	31	10	1	2.0
90	175	130	54	144	20	67	32	10	1	2.0
110	175	150	70	164	23	67	31	10	1	2.0
140	195	178	92	195	23	94	35	10	1	2.0
160	222	192	105	220	26	100	41	10	1	2.0
225	279	256	154	275	35	152	38	18	1	2.0
280	340	306	192	330	40	180	41	18	1	2.0
315	410	342	227	380	45	215	41	18	1	2.0

d [mm]	closest inch
40	1 ¼
50	1 ½
63	2
75	2 ½
90	3
110	4
140	5
160	6
225	8
280	10
315	12



## Wafer check valve type 369 PVC-U With V4A spring (stainless steel 316)

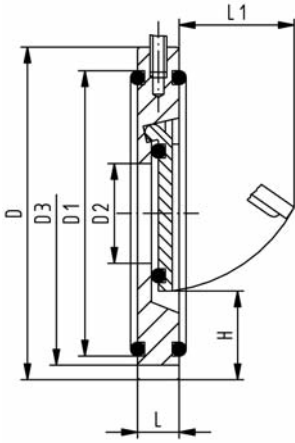


### Model:

- Supporting eyelets for simple fitting
- Suitable for vertical and horizontal mounting

### Installation instruction:

- Installation between ISO/DIN (all dimensions) and ANSI flange adaptors (all except DN32 and DN125)
- Installation with ANSI flange adaptor: for wafer check valves DN40 to DN80 you have to use ANSI flange adaptors with the next bigger dimension (example DN40 wafer check valve between DN50 ANSI flange adaptor)
- Centering by body diameter (ISO/DIN by D3, ANSI by D)
- Sealing with special flange gasket (except DN32, o-ring)
- A stabilizing zone of at least 5 times nominal diameter (DN) should be provided before and after the wafer check valve (10 times DN is recommended)
- No direct installation on pump flange or following bend allowed
- The using of PVC-U pipe PN16 is only possible up to d63



d [mm]	DN [mm]	Inch	PN	EPDM Code	FPM Code	GP	kg
40	32	1 ¼	6	161 369 042	161 369 062	-	0.130
50	40	1 ½	6	161 369 043	161 369 063	-	0.160
63	50	2	6	161 369 044	161 369 064	-	0.250
75	65	2 ½	6	161 369 045	161 369 065	-	0.320
90	80	3	6	161 369 046	161 369 066	-	0.390
110	100	4	6	161 369 047	161 369 067	-	0.550
140	125	5	6	161 369 049	161 369 069	-	0.750
160	150	6	6	161 369 050	161 369 070	-	1.100
225	200	8	6	161 369 051	161 369 071	-	2.100
280	250	10	6	161 369 052	161 369 072	-	3.500
315	300	12	6	161 369 053	161 369 073	-	5.300

d [mm]	D [mm]	D1 [mm]	D2 [mm]	D3 [mm]	L [mm]	L1 [mm]	H [mm]	Opening pressure vertical [mbar]	Opening pressure horizontal [mbar]	Minimum water column for sealing [m]
40	85	59	18	85	15	22	25	30	20	2.0
50	105	74	22	95	16	27	27	30	20	2.0
63	124	90	32	109	18	40	29	30	20	2.0
75	137	110	40	129	20	55	31	30	20	2.0
90	175	125	54	144	20	67	32	30	20	2.0
110	175	150	70	164	23	67	31	30	20	2.0
140	195	178	92	195	23	94	35	30	20	2.0
160	222	192	105	220	26	100	41	30	20	2.0
225	279	256	154	275	35	152	38	38	20	2.0
280	340	306	192	330	40	180	41	38	20	2.0
315	410	342	227	380	45	215	41	38	20	2.0

d [mm]	closest inch
40	1 ¼
50	1 ½
63	2
75	2 ½
90	3
110	4
140	5
160	6
225	8
280	10
315	12



## Wafer check valve type 369 PVC-U With Hastelloy C spring

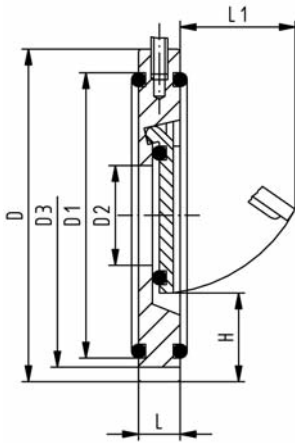


### Model:

- Supporting eyelets for simple fitting
- Suitable for vertical and horizontal mounting

### Installation instruction:

- Installation between ISO/DIN (all dimensions) and ANSI flange adaptors (all except DN32 and DN125)
- Installation with ANSI flange adaptor: for wafer check valves DN40 to DN80 you have to use ANSI flange adaptors with the next bigger dimension (example DN40 wafer check valve between DN50 ANSI flange adaptor)
- Centering by body diameter (ISO/DIN by D3, ANSI by D)
- Sealing with special flange gasket (except DN32, o-ring)
- A stabilizing zone of at least 5 times nominal diameter (DN) should be provided before and after the wafer check valve (10 times DN is recommended)
- No direct installation on pump flange or following bend allowed
- The using of PVC-U pipe PN16 is only possible up to d63



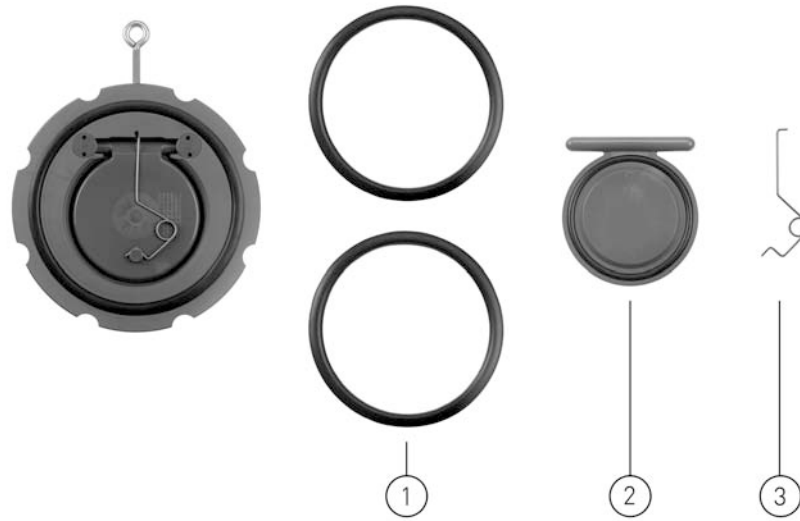
d [mm]	DN [mm]	Inch	PN	EPDM Code	FPM Code	GP	kg
40	32	1 ¼	6	161 369 082	161 369 102	-	0.130
50	40	1 ½	6	161 369 083	161 369 103	-	0.160
63	50	2	6	161 369 084	161 369 104	-	0.250
75	65	2 ½	6	161 369 085	161 369 105	-	0.320
90	80	3	6	161 369 086	161 369 106	-	0.390
110	100	4	6	161 369 087	161 369 107	-	0.550
140	125	5	6	161 369 089	161 369 109	-	0.750
160	150	6	6	161 369 090	161 369 110	-	1.100
225	200	8	6	161 369 091	161 369 111	-	2.100
280	250	10	6	161 369 092	161 369 112	-	3.500
315	300	12	6	161 369 093	161 369 113	-	5.300

d [mm]	D [mm]	D1 [mm]	D2 [mm]	D3 [mm]	L [mm]	L1 [mm]	H [mm]	Opening pressure vertical [mbar]	Opening pressure horizontal [mbar]	Minimum water column for sealing [m]
40	85	59	18	85	15	22	25	30	20	2.0
50	105	74	22	95	16	27	27	30	20	2.0
63	124	90	32	109	18	40	29	30	20	2.0
75	137	110	40	129	20	55	31	30	20	2.0
90	175	125	54	144	20	67	32	30	20	2.0
110	175	150	70	164	23	67	31	30	20	2.0
140	195	178	92	195	23	94	35	30	20	2.0
160	222	192	105	220	26	100	41	30	20	2.0
225	279	256	154	275	35	152	38	38	20	2.0
280	340	306	192	330	40	180	41	38	20	2.0
315	410	342	227	380	45	215	41	38	20	2.0

d [mm]	closest inch
40	1 ¼
50	1 ½
63	2
75	2 ½
90	3
110	4
140	5
160	6
225	8
280	10
315	12

# Spare parts wafer check valves

## Spare parts wafer check valve type 369



### Seal set (1)



d [mm]	Inch	DN [mm]	EPDM Code	FPM Code	kg
40	1 ¼	32	161 484 875	161 484 887	0.004
50	1 ½	40	161 486 959	161 486 979	0.012
63	2	50	161 486 960	161 486 980	0.014
75	2 ½	65	161 486 961	161 486 981	0.016
90	3	80	161 486 962	161 486 982	0.036
110	4	100	161 486 962	161 486 982	0.036
140	5	125	161 486 964	161 486 984	0.050
160	6	150	161 486 964	161 486 984	0.050
225	8	200	161 486 974	161 486 993	0.064
280	10	250	161 486 966	161 486 986	0.091
315	12	300	161 486 967	161 486 987	0.104

### Disc set (2)



d [mm]	Inch	DN [mm]	PVC-U EPDM Code	PVC-U FPM Code	kg
40	1 ¼	32	161 369 122	161 369 142	0.005
50	1 ½	40	161 369 123	161 369 143	0.009
63	2	50	161 369 124	161 369 144	0.018
75	2 ½	65	161 369 125	161 369 145	0.036
90	3	80	161 369 126	161 369 146	0.047
110	4	100	161 369 127	161 369 147	0.098
140	5	125	161 369 128	161 369 148	0.142
160	6	150	161 369 129	161 369 149	0.217
225	8	200	161 369 130	161 369 150	0.525
280	10	250	161 369 131	161 369 151	0.927
315	12	300	161 369 132	161 369 152	1.287

### Spring (3)



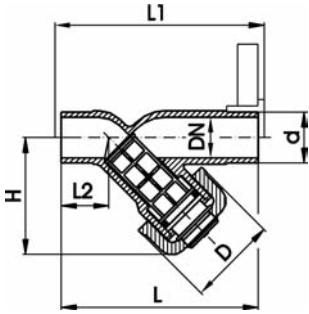
d [mm]	Inch	DN [mm]	V4A Code	Hastelloy C Code	kg
40	1 ¼	32	161 484 900	161 484 912	0.001
50	1 ½	40	161 484 901	161 484 913	0.001
63	2	50	161 484 902	161 484 914	0.001
75	2 ½	65	161 484 903	161 484 915	0.001
90	3	80	161 484 904	161 484 916	0.002
110	4	100	161 484 905	161 484 917	0.002

table continued next page



<b>d</b> [mm]	<b>Inch</b>	<b>DN</b> [mm]	<b>V4A</b> <b>Code</b>	<b>Hastelloy C</b> <b>Code</b>	<b>kg</b>	
140	5	125	<b>161 484 905</b>	<b>161 484 917</b>	0.002	
160	6	150	<b>161 484 907</b>	<b>161 484 919</b>	0.006	
225	8	200	<b>161 484 908</b>	<b>161 484 920</b>	0.019	
280	10	250	<b>161 484 909</b>	<b>161 484 921</b>	0.027	
315	12	300	<b>161 484 910</b>	<b>161 484 922</b>	0.043	

# Strainers



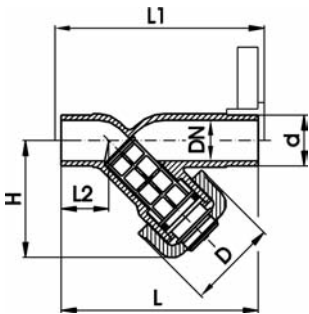
## Line strainer type 305 PVC-U With solvent cement spigots metric

### Model:

- Protects valves, pumps, etc. from becoming soiled
- Easy dismantling for cleaning the screens
- **Screen perforation need be ordered separately**
- Overall length according to EN 558
- supplied with 0.8mm screen in the UK

d [mm]	DN [mm]	PN	EPDM Code	FPM Code	GP	kg
20	15	10	<b>161 305 300</b>	<b>161 305 349</b>	10	0.134
25	20	10	<b>161 305 350</b>	<b>161 305 399</b>	10	0.215
32	25	10	<b>161 305 400</b>	<b>161 305 449</b>	6	0.257
40	32	10	<b>161 305 450</b>	<b>161 305 499</b>	6	0.386
50	40	10	<b>161 305 500</b>	<b>161 305 549</b>	4	0.632
63	50	10	<b>161 305 550</b>	<b>161 305 599</b>	8	1.045
75	65	10	<b>161 305 600</b>	<b>161 305 649</b>	4	1.871
90	80	10	<b>161 305 650</b>	<b>161 305 699</b>	4	2.585

d [mm]	D [mm]	L [mm]	L1 [mm]	L2 [mm]	H [mm]	closest inch
20	43	124	130	28	65	1/2
25	47	144	150	37	76	3/4
32	56	154	160	37	90	1
40	64	174	180	44	104	1 1/4
50	82	194	200	48	124	1 1/2
63	95	224	230	60	148	2
75	106	284	290	74	188	2 1/2
90	120	300	310	85	205	3



## Line strainer type 305 PVC-U Transparent body with solvent cement spigots metric

### Model:

- Protects valves, pumps, etc. from becoming soiled
- Easy dismantling for cleaning the screens
- **Screen perforation need be ordered separately**
- Overall length according to EN 558
- supplied with 0.8mm screen in the UK

d [mm]	DN [mm]	PN	EPDM Code	FPM Code	GP	kg
20	15	10	<b>192 305 300</b>	<b>192 305 349</b>	10	0.122
25	20	10	<b>192 305 350</b>	<b>192 305 399</b>	8	0.170
32	25	10	<b>192 305 400</b>	<b>192 305 449</b>	4	0.255
40	32	10	<b>192 305 450</b>	<b>192 305 499</b>	12	0.384
50	40	10	<b>192 305 500</b>	<b>192 305 549</b>	6	0.635
63	50	10	<b>192 305 550</b>	<b>192 305 599</b>	8	1.059
75	65	10	<b>192 305 600</b>	<b>192 305 649</b>	4	1.838
90	80	10	<b>192 305 650</b>	<b>192 305 699</b>	4	2.565

d [mm]	D [mm]	L [mm]	L1 [mm]	L2 [mm]	H [mm]	closest inch
20	43	124	130	28	65	1/2
25	47	144	150	37	76	3/4
32	56	154	160	37	90	1
40	64	174	180	44	104	1 1/4
50	82	194	200	48	124	1 1/2
63	95	224	230	60	148	2
75	106	284	290	74	188	2 1/2
90	120	300	310	85	205	3



## Cylindrical screen type 305 PVC-U Screen perforations 0.5 mm

- For line strainers Type 305

d [mm]	Inch	DN [mm]	kv-value ( $\Delta p=1$ bar) [l/min]	Code	GP	kg	D [mm]	L [mm]	
20	1/2	15	35	<b>161 305 339</b>	100	0.005	14	39	
25	3/4	20	65	<b>161 305 389</b>	100	0.007	18	48	
32	1	25	90	<b>161 305 439</b>	50	0.003	24	60	
40	1 1/4	32	155	<b>161 305 489</b>	20	0.004	30	71	
50	1 1/2	40	225	<b>161 305 539</b>	10	0.007	38	87	
63	2	50	370	<b>161 305 589</b>	20	0.010	48	106	
75	2 1/2	65	575	<b>161 305 639</b>	30	0.012	61	100	
90	3	80	955	<b>161 305 689</b>	12	0.017	73	118	



## Cylindrical screen type 305 PVC-U Screen perforations 0.8 mm

- For line strainers Type 305

d [mm]	DN [mm]	kv-value ( $\Delta p=1$ bar) [l/min]	Code	GP	kg	D [mm]	L [mm]	closest inch	
20	15	35	<b>161 305 338</b>	100	0.005	14	39	1/2	
25	20	65	<b>161 305 388</b>	140	0.007	18	48	3/4	
32	25	90	<b>161 305 438</b>	50	0.003	24	60	1	
40	32	155	<b>161 305 488</b>	-	0.004	30	71	1 1/4	
50	40	225	<b>161 305 538</b>	10	0.006	38	87	1 1/2	
63	50	370	<b>161 305 588</b>	20	0.009	48	106	2	
75	65	575	<b>161 305 638</b>	12	0.012	61	100	2 1/2	
90	80	955	<b>161 305 688</b>	12	0.010	73	118	3	



## Cylindrical screen type 305 PVC-U Screen perforations 1.4 mm

d [mm]	DN [mm]	kv-value ( $\Delta p=1$ bar) [l/min]	Code	GP	kg	D [mm]	L [mm]	closest inch	
20	15	35	<b>161 305 337</b>	100	0.005	14	39	1/2	
25	20	65	<b>161 305 387</b>	140	0.003	18	48	3/4	
32	25	90	<b>161 305 437</b>	50	0.003	24	60	1	
40	32	155	<b>161 305 487</b>	20	0.004	30	71	1 1/4	
50	40	225	<b>161 305 537</b>	10	0.006	38	87	1 1/2	
63	50	370	<b>161 305 587</b>	20	0.008	48	106	2	
75	65	575	<b>161 305 637</b>	30	0.011	61	100	2 1/2	
90	80	955	<b>161 305 687</b>	12	0.015	73	118	3	



## Cylindrical screen type 305 PVC-U Screen perforations 2.2 mm

d [mm]	DN [mm]	kv-value ( $\Delta p=1$ bar) [l/min]	Code	GP	kg	D [mm]	L [mm]	closest inch	
20	15	35	<b>161 305 336</b>	100	0.005	14	39	1/2	
25	20	65	<b>161 305 386</b>	100	0.003	18	48	3/4	
32	25	90	<b>161 305 436</b>	50	0.003	24	60	1	
40	32	155	<b>161 305 486</b>	20	0.003	30	71	1 1/4	
50	40	225	<b>161 305 536</b>	10	0.005	38	87	1 1/2	
63	50	370	<b>161 305 586</b>	20	0.008	48	106	2	
75	65	575	<b>161 305 636</b>	30	0.010	61	100	2 1/2	
90	80	955	<b>161 305 686</b>	-	0.013	73	118	3	



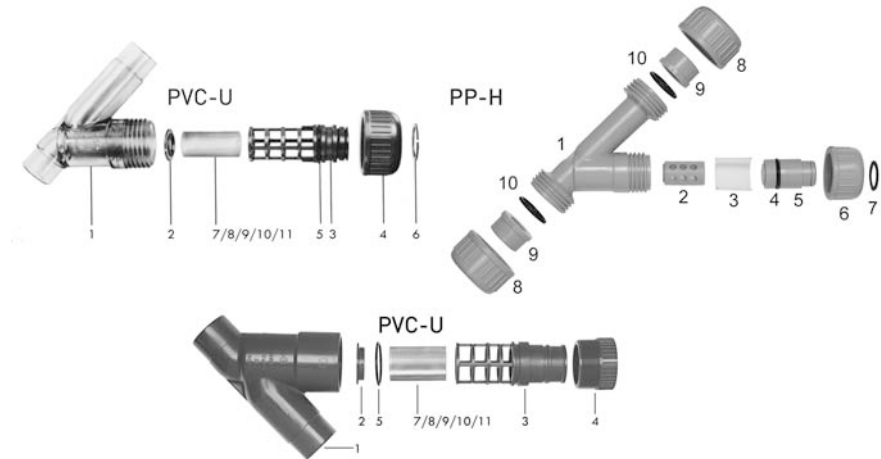
## Screen stainless steel Screen perforation 0.5 mm

- For line strainers Type 305

d [mm]	DN [mm]	kv-value ( $\Delta p=1$ bar) [l/min]	Code	GP	kg	D [mm]	L [mm]	closest inch
20	15	35	<b>161 486 100</b>	-	0.002	14	39	1/2
25	20	60	<b>161 486 101</b>	-	0.004	18	48	3/4
32	25	85	<b>161 486 102</b>	-	0.006	24	60	1
40	32	130	<b>161 486 103</b>	-	0.009	30	71	1 1/4
50	40	200	<b>161 486 104</b>	-	0.014	38	87	1 1/2
63	50	330	<b>161 486 105</b>	-	0.022	48	106	2
75	65	460	<b>161 486 106</b>	-	0.026	61	100	2 1/2
90	80	665	<b>161 486 107</b>	-	0.036	73	118	3

# Spare parts line strainer

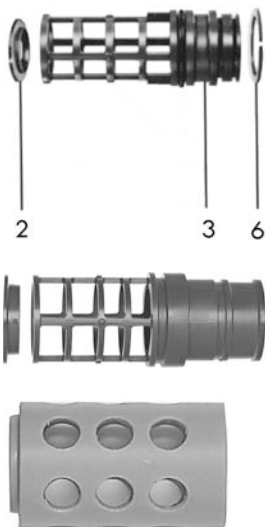
## Spare parts line strainer type 305/306



### Screen set

#### Model:

- Screen set PVC-U DN10-DN50 consisting of: screen (3), screen support ring (2) and circlip (6), PVC-U DN65-DN80: screen (3) and screen support ring (2). PP-H DN15-DN50: screen basket compl. without screen (2) and circlip (7)

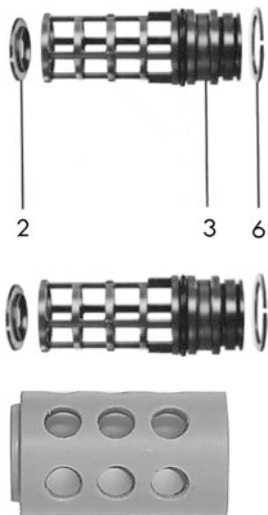


d [mm]	Inch	DN [mm]	PVC-U Code	kg
20	1/2	15	<b>161 483 126</b>	0.110
25	3/4	20	<b>161 483 127</b>	0.070
32	1	25	<b>161 483 128</b>	0.255
40	1 1/4	32	<b>161 483 129</b>	0.135
50	1 1/2	40	<b>161 483 130</b>	0.140
63	2	50	<b>161 483 131</b>	0.140
75	2 1/2	65	<b>161 483 132</b>	0.490
90	3	80	<b>161 483 133</b>	0.390

### Body (1)



d [mm]	Inch	DN [mm]	PVC-U transparent Code	PVC-U transparent ASTM Code	kg
20	1/2	15	<b>192 300 301</b>	<b>192 480 001</b>	0.066
25	3/4	20	<b>192 300 351</b>	<b>192 480 002</b>	0.095
32	1	25	<b>192 300 401</b>	<b>192 301 401</b>	0.185
40	1 1/4	32	<b>192 300 451</b>	<b>192 301 451</b>	0.256
50	1 1/2	40	<b>192 300 501</b>	<b>192 301 501</b>	0.401
63	2	50	<b>192 300 551</b>	<b>192 301 551</b>	0.657
75	2 1/2	65	<b>192 300 601</b>		1.305
90	3	80	<b>192 300 651</b>		1.920



## Screen cage

### Model:

- Screen cage in PVC-U (3) and PP-H (2)

d [mm]	Inch	DN [mm]	PVC-U Code	kg	
20	½	15	<b>161 305 303</b>	0.018	
25	¾	20	<b>161 305 353</b>	0.024	
32	1	25	<b>161 305 403</b>	0.035	
40	1 ¼	32	<b>161 305 453</b>	0.055	
50	1 ½	40	<b>161 305 503</b>	0.088	
63	2	50	<b>161 305 553</b>	0.132	
75	2 ½	65	<b>161 305 603</b>	0.309	
90	3	80	<b>161 305 653</b>	0.372	



## Valve nut

### Model:

- Union nut PVC-U DN10-DN50 (4), PP-H (6, 8)

d [mm]	Inch	DN [mm]	Cap nut PVC-U Code	kg	
20	½	15	<b>161 300 308</b>	0.033	
25	¾	20	<b>161 300 358</b>	0.024	
32	1	25	<b>161 300 408</b>	0.039	
40	1 ¼	32	<b>161 300 458</b>	0.047	
50	1 ½	40	<b>161 300 508</b>	0.085	
63	2	50	<b>161 300 558</b>	0.132	



## Body seal

### Model:

- Body seal vor PVC-U (5), PP-H (10)

d [mm]	Inch	DN [mm]	EPDM Code	FPM Code	kg	
20	½	15	<b>748 410 006</b>	<b>749 410 006</b>	0.002	
25	¾	20	<b>748 410 001</b>	<b>749 410 001</b>	0.002	
32	1	25	<b>748 410 007</b>	<b>749 410 007</b>	0.002	
40	1 ¼	32	<b>748 410 002</b>	<b>749 410 002</b>	0.003	
50	1 ½	40	<b>748 410 003</b>	<b>749 410 003</b>	0.007	
63	2	50	<b>748 410 012</b>	<b>749 410 012</b>	0.008	
75	2 ½	65	<b>748 410 013</b>	<b>749 410 013</b>	0.011	
90	3	80	<b>748 410 014</b>	<b>749 410 014</b>	0.012	



## Screen perforation

### Model:

- For PVC-U (7), PP-H (3)

d [mm]	Inch	DN [mm]	PVC-U 0.5mm Code	PVC-U 0.8mm Code	PVC-U 1.4mm Code	PVC-U 2.2mm Code	
20	½	15	<b>161 305 339</b>	<b>161 305 338</b>	<b>161 305 337</b>	<b>161 305 336</b>	
25	¾	20	<b>161 305 389</b>	<b>161 305 388</b>	<b>161 305 387</b>	<b>161 305 386</b>	
32	1	25	<b>161 305 439</b>	<b>161 305 438</b>	<b>161 305 437</b>	<b>161 305 436</b>	
40	1 ¼	32	<b>161 305 489</b>	<b>161 305 488</b>	<b>161 305 487</b>	<b>161 305 486</b>	
50	1 ½	40	<b>161 305 539</b>	<b>161 305 538</b>	<b>161 305 537</b>	<b>161 305 536</b>	
63	2	50	<b>161 305 589</b>	<b>161 305 588</b>	<b>161 305 587</b>	<b>161 305 586</b>	
75	2 ½	65	<b>161 305 639</b>	<b>161 305 638</b>	<b>161 305 637</b>	<b>161 305 636</b>	
90	3	80	<b>161 305 689</b>	<b>161 305 688</b>	<b>161 305 687</b>	<b>161 305 686</b>	

d [mm]	Inch	DN [mm]	stainless steel 0.5mm Code	kg	
20	1/2	15	<b>161 486 100</b>	0.002	
25	3/4	20	<b>161 486 101</b>	0.004	
32	1	25	<b>161 486 102</b>	0.006	
40	1 1/4	32	<b>161 486 103</b>	0.009	
50	1 1/2	40	<b>161 486 104</b>	0.014	
63	2	50	<b>161 486 105</b>	0.022	
75	2 1/2	65	<b>161 486 106</b>	0.026	
90	3	80	<b>161 486 107</b>	0.036	



## Plug (4)

### Model:

- Only for PVC-U DN65-DN80

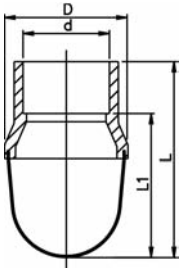
d [mm]	Inch	DN [mm]	PVC-U Code	kg	
75	2 1/2	65	<b>161 305 604</b>	0.200	
90	3	80	<b>161 305 654</b>	0.265	

# Screen assemblies and Inspection glass

## Screen assembly type 050 PVC-U With solvent cement sockets metric



DN 15 - 50



DN 15-50

d [mm]	DN [mm]	Inch	kv-value ( $\Delta p=1$ bar) [l/min]	Code	GP	kg	D [mm]	L [mm]	L1 [mm]	perforations $\phi$ [mm]
20	15	1/2	105	<b>161 050 026</b>	10	0.033	50	64	80	2
25	20	3/4	228	<b>161 050 027</b>	10	0.038	50	64	83	2
32	25	1	390	<b>161 050 028</b>	10	0.044	50	64	86	2
40	32	1 1/4	563	<b>161 050 029</b>	6	0.134	90	105	131	2
50	40	1 1/2	813	<b>161 050 030</b>	6	0.151	90	105	136	2
63	50	2	1590	<b>161 050 031</b>	6	0.190	90	105	143	2

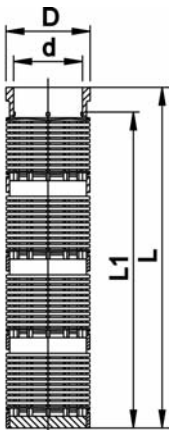
## Screen assembly type 050 PVC-U With solvent cement sockets metric

### Model:

- <sup>1</sup> Screen with 1 extension and end plate, solvent cemented
- <sup>2</sup> Screen with 2 extensions and end plate, solvent cemented
- <sup>3</sup> Screen with 3 extensions and end plate, solvent cemented



DN65-100



DN 65-100

d [mm]	DN [mm]	kv-value ( $\Delta p=1$ bar) [l/min]	Code	GP	kg	D [mm]	L [mm]	L1 [mm]	lamina width [mm]	closest inch
<sup>1</sup> 75	65	9640	<b>161 050 032</b>	4	0.805	110	260	216	2.5	2 1/2
<sup>2</sup> 90	80	14790	<b>161 050 033</b>	3	0.895	110	345	312	2.5	3
<sup>3</sup> 110	100	15213	<b>161 050 034</b>	6	1.290	125	490	460	2.5	4





DN65-100

## Screen assembly type 050 PVC-U With solvent cement sockets BS/ASTM

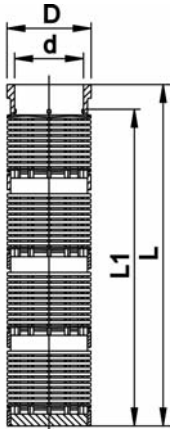
### Model:

- Modular extensions can be lengthened as required
- <sup>2</sup> Screen with 2 extensions and end plate, solvent cemented

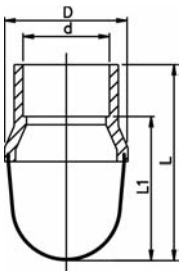
Inch	d [mm]	DN [mm]	kv-value ( $\Delta p=1$ bar) [l/min]	Code	GP	kg					
3	90	80	14790	<b>161 050 053</b>	-	0.930					

Inch	D [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	lamina width [mm]					
3	110	312	345	90	103	2.5					



DN 65-100



DN 15-50

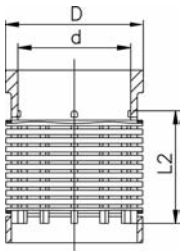
## Screen assembly type 050 PVC-U Complete with barrel nipple metric/ASTM

Inch	DN [mm]	kv-value ( $\Delta p=1$ bar) [l/min]	Code	GP	kg	D [mm]	L [mm]	L1 [mm]	perforations $\varnothing$ [mm]	
1/2	15	105	<b>161 050 186</b>	10	0.045	50	64	80	2	
3/4	20	228	<b>161 050 187</b>	10	0.054	50	64	83	2	
1	25	390	<b>161 050 188</b>	10	0.073	50	64	86	2	
1 1/4	32	563	<b>161 050 189</b>	6	0.180	90	105	131	2	
1 1/2	40	813	<b>161 050 190</b>	6	0.228	90	105	136	2	
2	50	1590	<b>161 050 191</b>	6	0.319	90	105	143	2	



## Screen type 050 PVC-U With solvent cement sockets metric

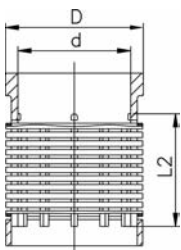
Inch	d [mm]	DN [mm]	Code	GP	kg	D [mm]	L2 [mm]	lamina width [mm]	
2 1/2	75	65	<b>161 090 024</b>	3	0.440	110	90		
3	90	80	<b>161 090 002</b>	-	0.300	110	90		3
4	110	100	<b>161 090 003</b>	-	0.457	125	135		3



## Screen type 050 PVC-U With solvent cement sockets BS/ASTM

- For Screen Assemblies Type 050, PVC-U, DN 65-100

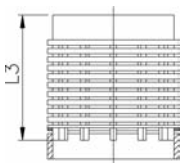
d [mm]	Inch	DN [mm]	Code	GP	kg	D [mm]	L2 [mm]	lamina width [mm]	
75	2 1/2	65	<b>161 090 024</b>	3	0.440	110	90	2.5	
90	3	80	<b>161 090 016</b>	-	0.300	110	90	2.5	
110	4	100	<b>161 090 017</b>	-	0.440	125	135	2.5	



## Extention type 050 PVC-U

- For Screen Assemblies Type 050, PVC-U, DN 65-100

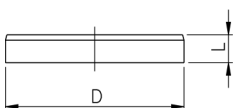
d-d [mm]	DN-DN [mm]	Inch	Code	GP	kg	L3 [mm]	
75 - 110	65 - 100	2 1/2 - 4	<b>161 090 019</b>	-	0.215	103	

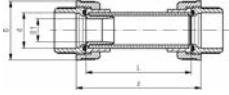


## Plate type 050 PVC-U

- For Screen Assemblies Type 050, PVC-U, DN 65-100

d-d [mm]	DN-DN [mm]	Inch	Code	GP	kg	D [mm]	L [mm]	
75 - 110	65 - 100	2 1/2 - 4	<b>161 090 018</b>	-	0.155	100	16	





## Inspection glass type 001 PVC-U

### Model:

- For visual inspection of the medium in the pipeline
- For horizontal or vertical installation

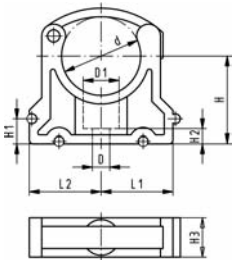
d [mm]	DN [mm]	PN	EPDM Code	GP	kg	z [mm]	D [mm]	D1 [mm]	L [mm]	closest inch
50	40	10	199 001 240	-	0.610	178	83	29	150	1 ½

# Pipe Clips metric

## KLIP-IT pipe clip type 061H PP metric

### Model:

- Material: Clip and safety clip PP black, UV resistant, bolts galvanized
- **Minimum order quantity: standard packagings SP**
- d16 - d63: height designed for Ball Valve Type 546 und 543
- \* d16 to d32 without bracket



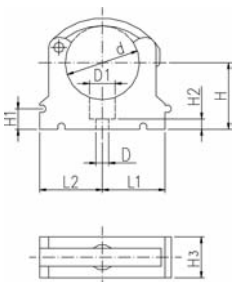
d [mm]	Code	SP	GP	kg
* 16	<b>167 061 035</b>	200	-	0.006
* 20	<b>167 061 036</b>	200	-	0.008
* 25	<b>167 061 037</b>	10	200	0.009
* 32	<b>167 061 038</b>	10	150	0.012
40	<b>167 061 039</b>	10	140	0.027
50	<b>167 061 040</b>	10	100	0.031
63	<b>167 061 041</b>	10	80	0.054

d [mm]	D [mm]	D1 [mm]	L1 [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	SC	closest inch
* 16	6	11	14	17	27	10	6	16	M5	3/8
* 20	6	11	17	19	27	10	6	16	M5	1/2
* 25	6	11	19	22	30	10	6	16	M5	3/4
* 32	6	11	24	27	36	10	6	16	M5	1
40	7	14	34	34	44	10	7	22	M6	1 1/4
50	7	14	37	37	51	10	7	22	M6	1 1/2
63	9	17	45	45	64	10	10	25	M8	2

## KLIP-IT Pipe Clips Type 061, PP metric

### Model:

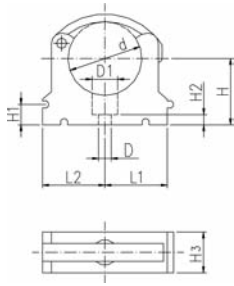
- Material: Clip and safety clip PP black, UV resistant, bolts galvanized
- d16 - d63: Height designed for Ball Valve Type 546 and 543
- **Minimum order quantity: standard packagings SP**



d [mm]	d [inch]	Code	SP	GP
* 10		<b>167 061 003</b>	10	500
* 12		<b>167 061 004</b>	10	500
* 16		<b>167 061 035</b>	200	-
* 20		<b>167 061 036</b>	200	-
* 25		<b>167 061 037</b>	10	200
* 32		<b>167 061 038</b>	10	150
40		<b>167 061 039</b>	10	140
50		<b>167 061 040</b>	10	100
63		<b>167 061 041</b>	10	80
75	2 1/2	<b>167 061 012</b>	10	60
90	3	<b>167 061 013</b>	10	80
110	4	<b>167 061 014</b>	10	40
125		<b>167 061 015</b>	10	30
140	5	<b>167 061 016</b>	10	20
160		<b>167 061 017</b>	10	20

d [mm]	D [mm]	D1 [mm]	L1 [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	SC	closest inch
* 10	5	8	11	14	20	10	6	12	M4	3/8
* 12	5	8	11	14	21	10	6	12	M5	1/4
* 16	6	11	14	17	27	10	6	16	M5	3/8
* 20	6	11	17	19	27	10	6	16	M5	1/2
* 25	6	11	19	22	30	10	6	16	M5	3/4
* 32	6	11	24	27	36	10	6	16	M5	1
40	7	14	34	34	44	10	7	22	M6	1 1/4
50	7	14	37	37	51	10	7	22	M6	1 1/2
63	9	17	45	45	64	10	10	25	M8	2
75	9	17	52	52	58	10	10	25	M8	2 1/2
90	9	17	65	65	65	10	10	28	M8	3

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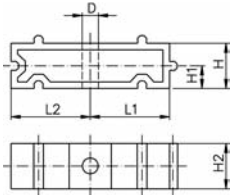
d [mm]	D [mm]	D1 [mm]	L1 [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	SC	closest inch
110	9	17	79	79	75	10	10	28	M8	4
125	9	17	88	88	90	10	10	32	M8	
140	9	17	98	98	110	10	10	32	M8	5
160	9	17	109	109	108	10	10	32	M8	6



## KLIP-IT spacer type 061 PP

### Model:

- For pipe clips Type 061/061H, PP black, UV resistant
- **Minimum order quantity: standard packaging SP**

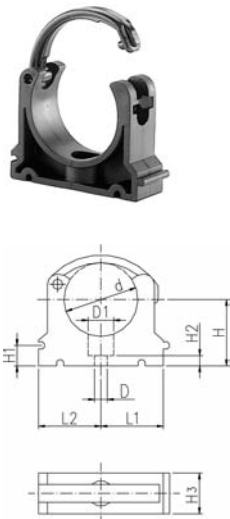


d [mm]	Inch [inch]	Code	SP	GP	kg	D [mm]	L1 [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	SC
10 - 12	1/8 - 1/4	<b>167 061 153</b>	10	500	0.003	5	11	14	20	10	12	M4
16	3/8	<b>167 061 155</b>	10	200	0.006	6	14	17	20	10	16	M5
20	1/2	<b>167 061 156</b>	10	200	0.006	6	17	19	20	10	16	M5
25	3/4	<b>167 061 157</b>	10	200	0.007	6	19	22	20	10	16	M5
32	1	<b>167 061 158</b>	10	200	0.008	6	24	27	20	10	16	M5
40	1 1/4	<b>167 061 159</b>	10	150	0.016	7	34	34	20	10	22	M6
50	1 1/2	<b>167 061 160</b>	10	140	0.017	7	37	37	20	10	22	M6
63	2	<b>167 061 161</b>	10	80	0.024	9	45	45	20	10	25	M8
75	2 1/2	<b>167 061 162</b>	10	60	0.027	9	52	52	20	10	25	M8
90	3	<b>167 061 163</b>	10	140	0.040	9	65	65	20	10	28	M8
110	4	<b>167 061 164</b>	10	100	0.048	9	79	79	20	10	28	M8
125	4 1/2	<b>167 061 165</b>	10	100	0.059	9	88	88	20	10	32	M8
140	5	<b>167 061 166</b>	10	80	0.065	9	98	98	20	10	32	M8
160	6	<b>167 061 167</b>	10	80	0.074	9	109	109	20	10	32	M8

## KLIP-IT pipe clip type 061 PE metric

### Model:

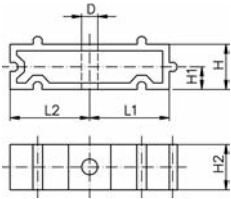
- Material: Clip PE and safety clip PP black, bolts galvanized
- **Minimum order quantity: standard packaging SP**
- Height not designed for ball valve 546 and 543. Please use spacer 73 06 11.



d [mm]	Code	SP	GP	kg	D [mm]	D1 [mm]	L1 [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	SC
* 10	<b>173 061 003</b>	10	500	0.003	5	8	11	14	20	10	6	12	M4
* 12	<b>173 061 004</b>	10	500	0.006	5	8	11	14	21	10	6	12	M5
* 16	<b>173 061 005</b>	10	200	0.007	6	11	14	17	23	10	6	16	M5
* 20	<b>173 061 006</b>	10	200	0.008	6	11	17	19	25	10	6	16	M5
* 25	<b>173 061 007</b>	10	200	0.009	6	11	19	22	28	10	6	16	M5
* 32	<b>173 061 008</b>	10	200	0.012	6	11	24	27	31	10	6	16	M5
40	<b>173 061 009</b>	10	150	0.022	7	14	34	34	35	10	7	22	M6
50	<b>173 061 010</b>	10	140	0.030	7	14	37	37	40	10	7	22	M6
63	<b>173 061 011</b>	10	80	0.044	9	17	45	45	52	10	10	25	M8
75	<b>173 061 012</b>	10	60	0.062	9	17	52	52	58	10	10	25	M8
90	<b>173 061 013</b>	10	80	0.090	9	17	65	65	65	10	10	28	M8
110	<b>173 061 014</b>	10	40	0.114	9	17	79	79	75	10	10	28	M8
125	<b>173 061 015</b>	10	30	0.174	9	17	88	88	90	10	10	32	M8
140	<b>173 061 016</b>	10	20	0.217	9	17	98	98	110	10	10	32	M8
160	<b>173 061 017</b>	10	20	0.237	9	17	109	109	108	10	10	32	M8

**KLIP-IT spacer type 061 PE****Model:**

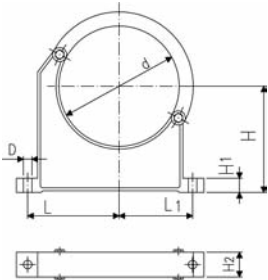
- For pipe clips Type 061, PE black, UV resistant
- **Minimum order quantity: standard packaging SP**



d [mm]	Inch	Code	SP	GP	kg	D [mm]	L1 [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	SC
16	1/8-1/4	<b>173 061 153</b>	10	500	0.003	5	11	14	20	10	12	M4
20	3/8	<b>173 061 155</b>	10	200	0.005	6	14	17	20	10	16	M5
25	1/2	<b>173 061 156</b>	10	200	0.006	6	17	19	20	10	16	M5
32	3/4	<b>173 061 157</b>	10	200	0.007	6	19	22	20	10	16	M5
40	1	<b>173 061 158</b>	10	200	0.008	6	24	27	20	10	16	M5
50	11/4	<b>173 061 159</b>	10	150	0.016	7	34	34	20	10	22	M6
63	11/2	<b>173 061 160</b>	10	140	0.017	7	37	37	20	10	22	M6
75	2	<b>173 061 161</b>	10	80	0.025	9	45	45	20	10	25	M8
90	21/2	<b>173 061 162</b>	10	60	0.027	9	52	52	20	10	25	M8
110	3	<b>173 061 163</b>	10	140	0.040	9	65	65	20	10	28	M8
125	4	<b>173 061 164</b>	10	100	0.048	9	79	79	20	10	28	M8
140	41/2	<b>173 061 165</b>	10	100	0.059	9	88	88	20	10	32	M8
160	5	<b>173 061 166</b>	10	80	0.065	9	98	98	20	10	32	M8
	6	<b>173 061 167</b>	10	80	0.074	9	109	109	20	10	32	M8

**Pipe clip type 060 PP metric****Model:**

- Material: Clip and safety clip PP black, UV resistant, bolts galvanized
- Accidental opening of the safety clip is not possible
- **Minimum order quantity: standard packaging SP or gross packaging GP**
- Clip and safety clip are not assembled in the packaging.
- Pipes with flanges can be installed directly



d [mm]	d [inch]	Code	SP	GP	kg	D [mm]	L [mm]	L1 [mm]	H [mm]	H1 [mm]	H2 [mm]	SC	closest inch
90	3	<b>167 060 038</b>	10	40	0.163	9	89	71	105	15	33	M 8	3
110		<b>167 060 039</b>	10	30	0.179	9	94	80	115	15	33	M 8	4
125		<b>167 060 040</b>	10	20	0.300	11	116	91	130	20	35	M10	
140	5	<b>167 060 041</b>	10	20	0.309	11	121	98	130	20	35	M10	5
160		<b>167 060 042</b>	10	20	0.348	11	131	107	148	20	35	M10	6
180		<b>167 060 043</b>	10	-	0.378	11	143	115	163	20	35	M10	7
200		<b>167 060 019</b>	5	-	0.582	13	152	120	175	25	39	M12	8
225		<b>167 060 020</b>	5	-	0.612	13	165	132	175	25	39	M12	8
250		<b>167 060 021</b>	5	-	0.698	13	183	143	200	25	39	M12	9
280		<b>167 060 022</b>	5	-	0.722	13	198	156	200	25	39	M12	10
315		<b>167 060 023</b>	5	-	0.842	13	219	172	225	25	39	M12	12
355		<b>167 060 024</b>	5	-	1.250	17	275	209	258	30	50	M16	14
400		<b>167 060 025</b>	5	-	1.450	17	300	228	288	30	50	M16	16

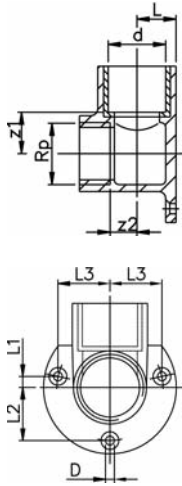
60 1002

## Wall Mounting Brackets, Brass/PVC-U



**Model:**

- Brass, with parallel female thread Rp and PVC-U solvent socket insert metric



d [mm]	Rp [inch]	PN	Code	SP	GP	kg	z1 [mm]	z2 [mm]	D [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]
16	3/8	16	<b>160 100 250</b>	10	90	0.252	21	9	5	14	6	19	18
20	1/2	16	<b>160 100 300</b>	5	50	0.278	22	9	5	16	6	19	18
25	3/4	16	<b>160 100 350</b>	5	50	0.258	25	11	5	17	5	24	23

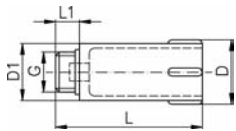
9 150 000

## Wall Inlet Plugs, PVC-U



**Model:**

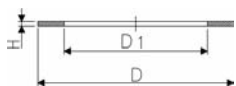
- Gasket: flat gasket Code No. 748 400 001, EPDM
- Use: for all fittings with parallel female thread in accordance with ISO 7
- The wall inlet plug has a parallel male thread G



G [inch]	Code	SP	GP	kg	D [mm]	D1 [mm]	L [mm]	L1 [mm]
1/2	<b>799 150 003</b>	10	100	0.042	39	32	87	11

48 40 00

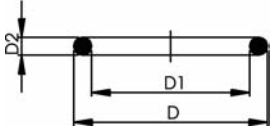
## Flat Gaskets



G [inch]	EPDM Code	SP	GP	kg	D [mm]	D1 [mm]	H [mm]
1/2	<b>748 400 001</b>	100	2000	0.002	28	22	3

# Seals

EPDM 48 41 00  
FPM 49 41 00



## O-Ring gasket

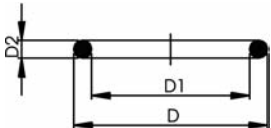
### Model:

- For unions and adaptor unions
- Hardness approx. 65° Shore
- EPDM minimum temperature -40°C
- FPM minimum temperature -15°C

\* for unions PVC-U, PVC-C and ABS: 21 51 01, 21 51 11, 21 53 03, 21 53 08, 21 55 04, 21 55 13, 21 55 18, 23 51 01 and 29 51 01 only

d [mm]	DN [mm]	EPDM Code	FPM Code	SP	GP	kg	D [mm]	D1 [mm]	D2 [mm]	closest inch
10 - 12	8	748 410 004	749 410 004	-	-	0.002	18	12	2.62	1/4
16	10	748 410 005	749 410 005	-	-	0.002	21	16	2.62	3/8
20	15	748 410 006	749 410 006	-	-	0.002	27	20	3.53	1/2
25	20	748 410 007	749 410 007	100	1400	0.002	35	28	3.53	3/4
32	25	748 410 008	749 410 008	100	-	0.002	40	33	3.53	1
40	32	748 410 009	749 410 009	-	-	0.006	51	41	5.34	1 1/4
50	40	748 410 010	749 410 010	-	-	0.007	58	47	5.34	1 1/2
63	50	748 410 011	749 410 011	100	3500	0.010	70	60	5.34	2
75	65	748 410 014	749 410 014	100	600	0.012	93	82	5.34	2 1/2
90	80	748 410 015	749 410 015	100	600	0.015	112	101	5.34	3
110	100	748 410 016	749 410 016	50	200	0.031	134	120	6.99	4

EPDM 48 41 00  
FPM 49 41 00



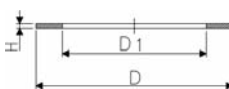
## O-Ring gasket

### Model:

- For Flange Adaptors
- Hardness approx. 65° Shore

d [mm]	DN [mm]	EPDM Code	FPM Code	SP	GP	kg	D [mm]	D1 [mm]	D2 [mm]	closest inch
16	10	748 410 000	749 410 000	-	-	0.002	26	19	3.53	3/8
20	15	748 410 001	749 410 001	100	-	0.002	31	23	3.53	1/2
25	20	748 410 007	749 410 007	100	1400	0.002	35	28	3.53	3/4
32	25	748 410 002	749 410 002	100	-	0.003	43	36	3.53	1
40	32	748 410 003	749 410 003	-	-	0.007	55	44	5.34	1 1/4
50	40	748 410 012	749 410 012	100	1000	0.008	64	53	5.34	1 1/2
63	50	748 410 013	749 410 013	100	600	0.011	80	69	5.34	2
75	65	748 410 014	749 410 014	100	600	0.012	93	82	5.34	2 1/2
90	80	748 410 015	749 410 015	100	600	0.015	112	101	5.34	3
110	100	748 410 016	749 410 016	50	200	0.031	134	120	6.99	4
125	100	748 410 017	749 410 017	200	-	0.036	150	136	6.99	
140	125	748 410 018	749 410 018	200	-	0.039	166	152	6.99	5
160	150	748 410 019	749 410 019	200	-	0.044	191	177	6.99	6
200	200	748 410 163	749 410 163	-	-	0.056	236	222	6.99	8
225	200	748 410 022	749 410 022	150	-	0.060	255	241	6.99	8
250	250	748 410 182	749 410 182	-	-	0.003	280	266	6.99	9
280	250	748 410 173	749 410 173	-	-	0.044	306	292	6.99	10
315	300	748 410 174	749 410 174	-	-	0.051	356	342	6.99	12

EPDM 48 40 00  
FPM 49 40 00

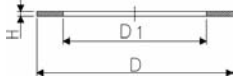


## Flat gasket

d [mm]	Inch	EPDM Code	FPM Code	kg	D [mm]	D1 [mm]	H [mm]
12	1/4	748 400 004	-	0.002	20	13	2
16	3/8	748 400 005	749 400 005	0.002	24	17	2
20	1/2	748 400 006	749 400 006	0.003	30	21	3
25	3/4	748 400 007	749 400 007	0.004	38	27	3
32	1	748 400 008	749 400 008	0.002	44	32	3
40	1 1/4	748 400 009	749 400 009	0.003	55	42	3
50	1 1/2	748 400 010	749 400 010	0.004	62	46	3
63	2	748 400 011	749 400 011	0.006	78	60	3
75	2 1/2	748 400 012	749 400 012	0.009	97	75	3
90	3	748 400 013	749 400 013	0.011	109	88	3



## EPDM 48 40 02



## Flat gasket

### Model:

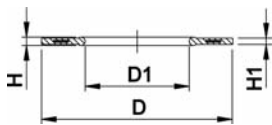
- Hardness approx. 65° Shore
- For tap connectors No. 21 55 03

### Attention:

- For tap connector d16 - 1/2": 748 400 030
- For tap connector d20 - 3/4": 748 400 005
- For tap connector d25 - 1": 748 400 006

EPDM Code	SP	GP	kg	D [mm]	D1 [mm]	H [mm]
748 400 030	-	-	0.003	18	14	2
748 400 005	1	-	0.001	24	17	2
748 400 006	1	-	0.003	30	21	3

## EPDM 48 44 07 FPM 49 44 07



## Profile flange gasket metric

### Model:

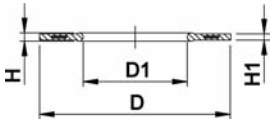
- For all metric GF Flange Adaptors
- Profile Gasket with steel insert (type G-ST-P/K)
- Hardness: 70° Shore **EPDM**, 75° Shore **FPM**
- Centering on the inner diameter of the screw crown
- material steel insert: carbon steel

di FA are the suitable inner diameters of flange adaptors

d [mm]	DN [mm]	PN	EPDM Code	FPM Code	kg
16	10	16	748 440 705	749 440 705	0.007
20	15	16	748 440 706	749 440 706	0.008
25	20	16	748 440 707	749 440 707	0.011
32	25	16	748 440 708	749 440 708	0.014
40	32	16	748 440 709	749 440 709	0.021
50	40	16	748 440 710	749 440 710	0.022
63	50	16	748 440 711	749 440 711	0.041
75	65	16	748 440 712	749 440 712	0.055
90	80	16	748 440 713	749 440 713	0.062
110	100	16	748 440 714	749 440 714	0.085
125	100	16	748 440 715	749 440 715	0.158
140	125	16	748 440 716	749 440 716	0.118
160 / 180	150	16	748 440 717	749 440 717	0.153
200	200	16	748 440 719	749 440 719	0.263
225	200	16	748 440 720	749 440 720	0.181
250	250	16	748 440 721	749 440 721	0.410
280	250	16	748 440 722	749 440 722	0.226
315	300	16	748 440 723	749 440 723	0.334
355	350	16	748 440 724	749 440 724	0.410
400	400	16	748 440 725	749 440 725	0.513
450	500	16	748 440 726	749 440 726	0.718
500	500	16	748 440 727	749 440 727	0.718
560	600	16	748 440 728	749 440 728	0.923
630	600	16	748 440 729	749 440 729	0.923

d [mm]	DN [mm]	D [mm]	D1 [mm]	H [mm]	H1 [mm]	di FA [mm]	Closest inch
16	10	46	16	4	3	6 - 16	
20	15	51	20	4	3	10 - 20	
25	20	61	22	4	3	12 - 22	
32	25	71	28	4	3	18 - 28	
40	32	82	40	4	3	30 - 40	
50	40	92	46	4	3	36 - 46	
63	50	107	58	5	4	48 - 58	
75	65	127	69	5	4	59 - 69	
90	80	142	84	5	4	73 - 84	
110	100	162	104	6	5	94 - 104	
125	100	162	123	6	5	113 - 123	
140	125	192	137	6	5	127 - 137	
160 / 180	150	218	160	8	6	150 - 160	6
200	200	273	203	8	6	192 - 203	
225	200	273	220	8	6	207 - 220	8 - 9
250	250	328	252	8	6	238 - 252	
280	250	328	274	8	6	264 - 274	

table continued next page



<b>d</b> [mm]	<b>DN</b> [mm]	<b>D</b> [mm]	<b>D1</b> [mm]	<b>H</b> [mm]	<b>H1</b> [mm]	<b>di FA</b> [mm]	<b>Closest inch</b>
315	300	378	306	8	6	296 - 306	
355	350	438	355	10	7	340 - 355	
400	400	489	400	10	7	385 - 400	
450	500	594	403	10	7	393 - 403	
500	500	594	447	10	7	437 - 447	
560	600	695	494	10	7	484 - 494	
630	600	695	555	10	7	545 - 555	

# Solvent Cements and Tools

99 29 80



## Tangit solvent cement for PVC-U

- Tin à 0.25 and 0.5 kg (Net)

Code	SP	GP	kg	Description
799 298 000	12	-	0.125	tube: 0.125 kg
799 298 001	12	-	0.250	tin: 0.25 kg
799 298 002	12	12	0.500	tin: 0.50 kg
799 298 003	6	6	1.000	tin: 1.00 kg

99 29 80



## Tangit Cleaner

**Model:**

- For PVC-U, PVC-C, ABS
- 1 litre tin

Code	GP	kg
799 298 010	-	0.900

99 29 80



## Dytex Special Solvent Cement for PVC-U

- Special solving cement, transparent
- For concentrated acids and strong oxidizing agents the use of Dytex is recommended
- 1.350 kg (net) tin

Code	SP	GP	kg	Description
799 298 012	6	-	1.465	tin: 1.35 kg



## Dytex Solvent/Cleaner for PVC-U

**Model:**

- 1 litre tin

Code	SP	GP	kg
799 298 013	1	6	1.380

99 29 80



## Cap for cement

- Cap prevents the evaporation of the solvent whilst using the Tangit cement

Code	kg
799 298 028	0.030

99 29 90



## Round brush

d-d [mm]		Code	kg	Closest inch
6 - 10	4 mm (for Fittings 6-10mm)	799 299 001	0.005	- 1/8
12 - 32	8 mm (for Fittings 12-32mm)	799 299 002	0.009	1/4 - 1

99 29 90

**Flat Brushes**

d-d [mm]		Code	kg	Closest inch	
40 - 63	25x3 mm (for Fittings 40-63mm)	<b>799 299 003</b>	0.015	1 ¼ - 2	
75 - 225	50x5 mm (for Fittings 75-225mm)	<b>799 299 004</b>	0.026	2 ½ - 8	
250 - 400	75x6 mm (for Fittings 250-400mm)	<b>799 299 005</b>	0.045	9 - 16	

90 10 90

**Replacement cutting wheels**

- for plastic pipe cutter



d-d [mm]	Article	Code	kg	
10 - 63	SR 63 max. s=7,2 mm	<b>790 109 011</b>	0.004	
50 - 110	SR 110/160 max. s=12,7 mm	<b>790 109 012</b>	0.015	
110 - 160	SR 160 max. s=19,0 mm	<b>790 109 013</b>	0.023	

**Chamfering Tool**

Size	d-d [mm]	Code	kg	Closest inch	
1	16 - 75	<b>799 495 145</b>	0.720	¾ - 2 ½	
2	32 - 200	<b>799 495 146</b>	0.992	1 - 8	

**Cutter for Chamfering Tool**

Size	d-d [mm]	Code	SP	GP	kg	
1+2	16 - 250	<b>708 402 217</b>	-	-	0.010	

# One system - many options

Georg Fischer presents the new 567/568 type series of butterfly valves with a comprehensive range of products and a multitude of interesting combination possibilities. We can offer you, for example, manual valves with hand lever or reduction gear. The program also includes pneumatically or electrically actuated valves from DN50 to DN200.

Our system's modular design principle allows you to exchange individual system components – fast, easily and at very little expense. You also have a choice of materials: PVC-U, PVC-C, ABS, or  $\beta$ -PP-H and PVDF. Our standard sealing materials are EPDM and FPM, but other materials are available on request.

All the customary installation pipe standards are supplied:

- metric: DIN, EN, ISO
- inch: BS, ASTM
- JIS (only wafer-type valves)

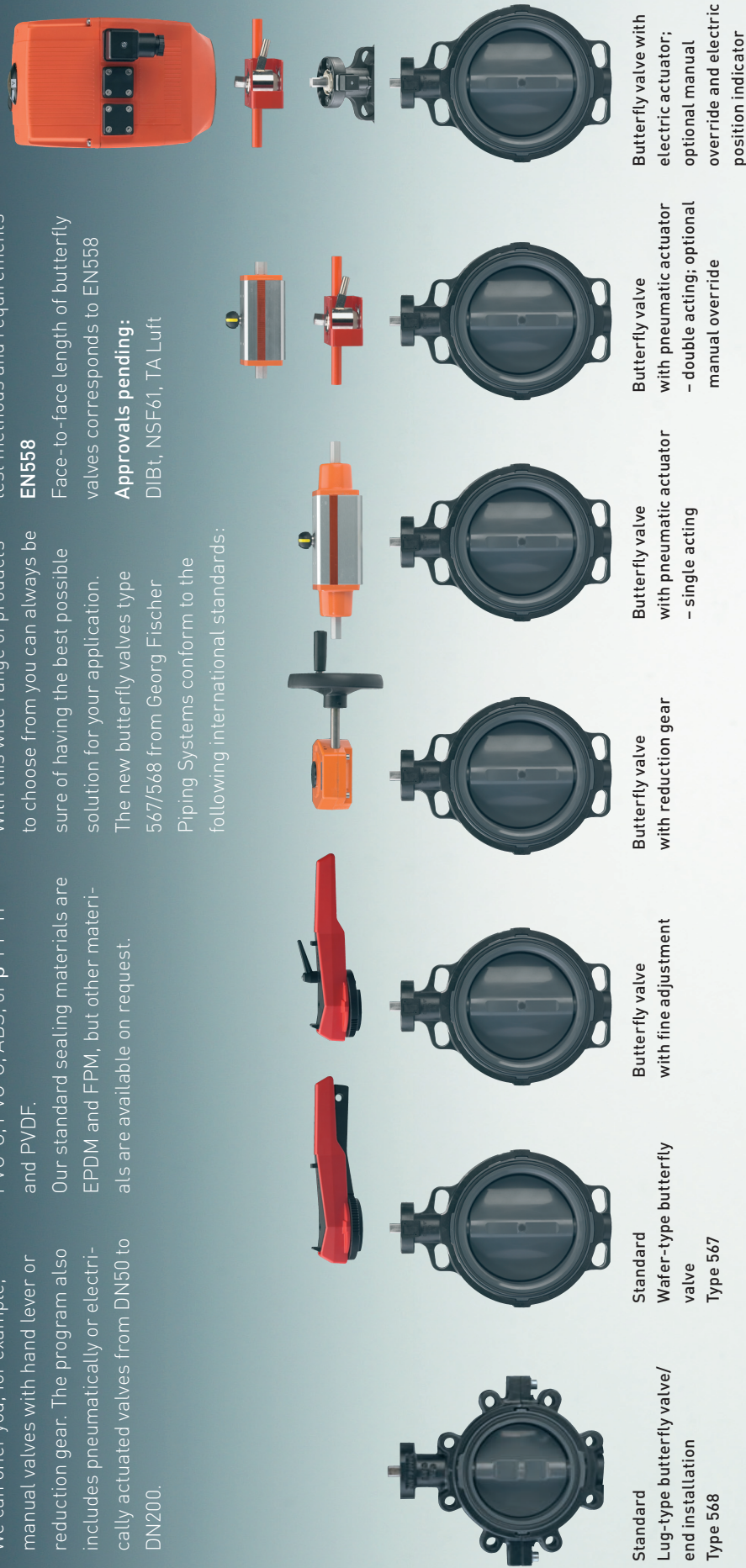
With this wide range of products to choose from you can always be sure of having the best possible solution for your application. The new butterfly valves type 567/568 from Georg Fischer Piping Systems conform to the following international standards:

**prEN ISO 16136**  
Industrial valves – butterfly valves in thermoplastic materials

**ISO 9393**  
Thermoplastic valves – pressure test methods and requirements

**EN 558**  
Face-to-face length of butterfly valves corresponds to EN 558

**Approvals pending:**  
DIBt, NSF61, TA Luft



Standard Lug-type butterfly valve/ end installation Type 568

Standard Wafer-type butterfly valve Type 567

Butterfly valve with fine adjustment

Butterfly valve with reduction gear

Butterfly valve with pneumatic actuator – single acting

Butterfly valve with pneumatic actuator – double acting; optional manual override

Butterfly valve with electric actuator; optional manual override and electric position indicator

# Ball valves electric metric

## Ball valve type 107 PVC-U 100-230V With manual emergency override With solvent cement sockets metric



DN10/15 - 50

### Model:

- Built on with electric actuator EA11
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Voltage 100-230 V, 50-60 Hz
- Control range 90°<
- Control time 5 s/90°<

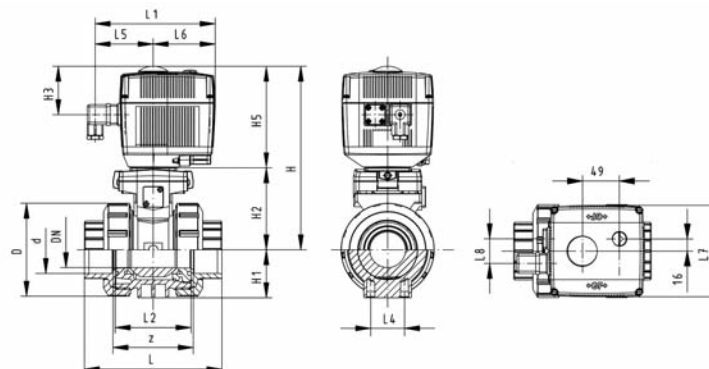
### Option:

- Individual configuration of the valve (see diagram)

d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	70	199 107 002	199 107 012	2.072
20	15	10	185	199 107 003	199 107 013	2.072
25	20	10	350	199 107 004	199 107 014	2.189
32	25	10	700	199 107 005	199 107 015	2.189
40	32	10	1000	199 107 006	199 107 016	2.592
50	40	10	1600	199 107 007	199 107 017	2.914
63	50	10	3100	199 107 008	199 107 018	2.914

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	L8 [mm]	z [mm]
16	50	200	27	64	64	137	92	161	56	25	77	83	122	33	64
20	50	200	27	64	64	137	95	161	56	25	77	83	122	33	64
25	58	209	30	73	64	137	110	161	65	25	77	83	122	33	72
32	68	209	36	73	64	137	123	161	71	25	77	83	122	33	79
40	84	220	44	84	64	137	146	161	85	45	77	83	122	33	94
50	97	220	51	84	64	137	157	161	89	45	77	83	122	33	95
63	124	243	64	106	64	137	183	161	101	45	77	83	122	33	107

d [mm]	closest inch
16	3/8
20	1/2
25	3/4
32	1
40	1 1/4
50	1 1/2
63	2





DN10/15 - 50

## Ball valve type 107 PVC-U 100-230V With manual emergency override With solvent cement spigots metric

### Model:

- Built on with electric actuator EA11
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Voltage 100-230 V, 50-60 Hz
- Control range 90°<
- Control time 5 s/90°<

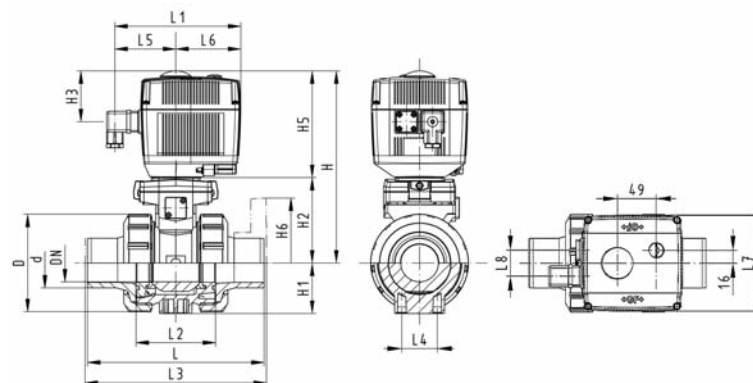
### Option:

- Individual configuration of the valve (see diagram)

d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	70	199 107 022	199 107 032	2.072
20	15	10	185	199 107 023	199 107 033	2.072
25	20	10	350	199 107 024	199 107 034	2.189
32	25	10	700	199 107 025	199 107 035	2.189
40	32	10	1000	199 107 026	199 107 036	2.592
50	40	10	1600	199 107 027	199 107 037	2.914
63	50	10	3100	199 107 028	199 107 038	3.772

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	L8 [mm]
16	50	200	27	64	64	137	114	161	56	130	25	77	83	122	33
20	50	200	27	64	64	137	124	161	56	130	25	77	83	122	33
25	58	209	30	73	64	137	144	161	65	150	25	77	83	122	33
32	68	209	36	73	64	137	154	161	71	160	25	77	83	122	33
40	84	220	44	84	64	137	174	161	85	180	45	77	83	122	33
50	97	220	51	84	64	137	194	161	89	200	45	77	83	122	33
63	124	243	64	106	64	137	224	161	101	230	45	77	83	122	33

d [mm]	closest inch
16	3/8
20	1/2
25	3/4
32	1
40	1 1/4
50	1 1/2
63	2





DN10/15 - 50

## Ball valve type 107 PVC-U 100-230V With manual emergency override With threaded sockets Rp

### Model:

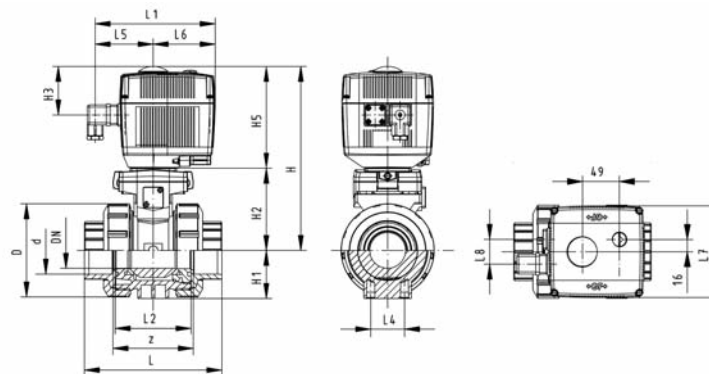
- Built on with electric actuator EA11
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Voltage 100-230 V, 50-60 Hz
- Control range 90°<
- Control time 5 s/90°<

### Option:

- Individual configuration of the valve (see diagram)

Rp [inch]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
3/8	10	10	70	<b>199 107 622</b>	<b>199 107 632</b>	2.100
1/2	15	10	185	<b>199 107 623</b>	<b>199 107 633</b>	2.100
3/4	20	10	350	<b>199 107 624</b>	<b>199 107 634</b>	2.200
1	25	10	700	<b>199 107 625</b>	<b>199 107 635</b>	2.300
1 1/4	32	10	1000	<b>199 107 626</b>	<b>199 107 636</b>	2.600
1 1/2	40	10	1600	<b>199 107 627</b>	<b>199 107 637</b>	3.000
2	50	10	3100	<b>199 107 628</b>	<b>199 107 638</b>	3.800

Rp [inch]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	L8 [mm]	z [mm]
3/8	50	200	27	64	64	137	92	161	56	25	77	83	122	33	64
1/2	50	200	27	64	64	137	95	161	56	25	77	83	122	33	64
3/4	58	209	30	73	64	137	110	161	65	25	77	83	122	33	72
1	68	209	36	73	64	137	123	161	71	25	77	83	122	33	79
1 1/4	84	220	44	84	64	137	146	161	85	45	77	83	122	33	94
1 1/2	97	220	51	84	64	137	157	161	89	45	77	83	122	33	95
2	124	243	64	106	64	137	183	161	101	45	77	83	122	33	107







DN10/15 - 50

## Ball valve type 107 PVC-U 100-230V With manual emergency override With fixed flanges serrated metric

### Model:

- Built on with electric actuator EA11
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Voltage 100-230 V, 50-60 Hz
- Control range 90°<
- Control time 5 s/90°<
- Overall length according to EN 558
- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504

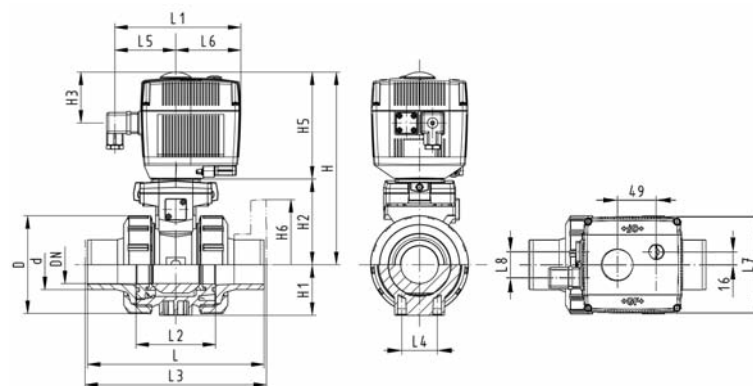
### Option:

- Individual configuration of the valve (see diagram)

d [mm]	DN [mm]	Inch	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
20	15	½	10	185	199 107 603	199 107 613	2.300
25	20	¾	10	350	199 107 604	199 107 614	2.500
32	25	1	10	700	199 107 605	199 107 615	2.700
40	32	1 ¼	10	1000	199 107 606	199 107 616	3.200
50	40	1 ½	10	1600	199 107 607	199 107 617	3.700
63	50	2	10	3100	199 107 608	199 107 618	4.776

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
20	50	201	27	64	65	138	48	124	160	56	130	25	77	83	122
25	58	210	30	73	65	138	53	144	160	65	150	25	77	83	122
32	68	210	36	73	65	138	58	154	160	71	160	25	77	83	122
40	84	221	44	84	65	138	70	174	160	85	180	45	77	83	122
50	97	221	51	84	65	138	75	194	160	89	200	45	77	83	122
63	124	244	64	106	65	138	83	224	160	101	230	45	77	83	122

d [mm]	L8 [mm]
20	33
25	33
32	33
40	33
50	33
63	33





DN10/15 - 50

## Ball valve type 107 PVC-U 24V With manual emergency override With solvent cement sockets metric

### Model:

- Built on with electric actuator EA11
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Voltage 24 V AC/DC
- Control range 90°<
- Control time 5 s/90°<

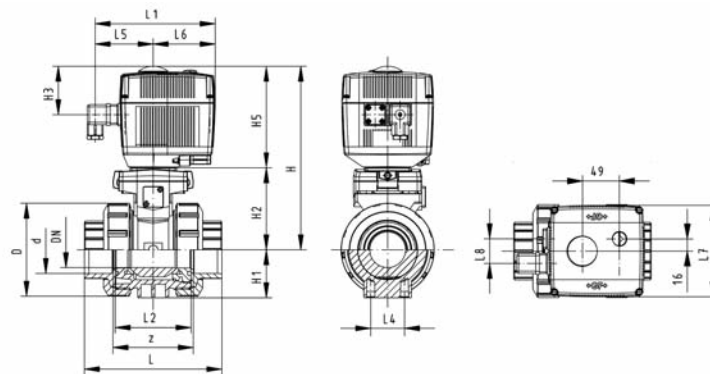
### Option:

- Individual configuration of the valve (see diagram)

d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	70	199 107 042	199 107 052	2.072
20	15	10	185	199 107 043	199 107 053	2.072
25	20	10	350	199 107 044	199 107 054	2.189
32	25	10	700	199 107 045	199 107 055	2.189
40	32	10	1000	199 107 046	199 107 056	2.592
50	40	10	1600	199 107 047	199 107 057	2.914
63	50	10	3100	199 107 048	199 107 058	3.772

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	L8 [mm]	z [mm]
16	50	200	27	64	64	137	92	161	56	25	77	83	122	33	64
20	50	200	27	64	64	137	95	161	56	25	77	83	122	33	64
25	58	209	30	73	64	137	110	161	65	25	77	83	122	33	72
32	68	209	36	73	64	137	123	161	71	25	77	83	122	33	79
40	84	220	44	84	64	137	146	161	85	45	77	83	122	33	94
50	97	220	51	84	64	137	157	161	89	45	77	83	122	33	95
63	124	243	64	106	64	137	183	161	101	45	77	83	122	33	107

d [mm]	closest inch
16	3/8
20	1/2
25	3/4
32	1
40	1 1/4
50	1 1/2
63	2





DN10/15 - 50

## Ball valve type 107 PVC-U 24V With manual emergency override With solvent cement spigots metric

### Model:

- Built on with electric actuator EA11
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Voltage 24 V AC/DC
- Control range 90°<
- Control time 5 s/90°<

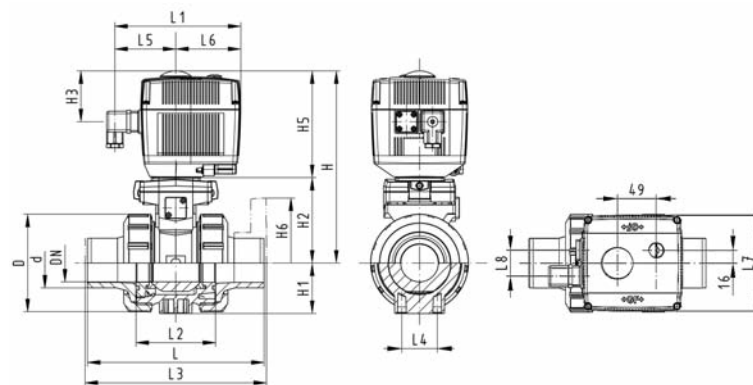
### Option:

- Individual configuration of the valve (see diagram)

d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	70	199 107 062	199 107 072	2.072
20	15	10	185	199 107 063	199 107 073	1.830
25	20	10	350	199 107 064	199 107 074	2.189
32	25	10	700	199 107 065	199 107 075	2.189
40	32	10	1000	199 107 066	199 107 076	2.592
50	40	10	1600	199 107 067	199 107 077	2.914
63	50	10	3100	199 107 068	199 107 078	3.772

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	L8 [mm]
16	50	200	27	64	64	137	114	161	56	130	25	77	83	122	33
20	50	200	27	64	64	137	124	161	56	130	25	77	83	122	33
25	58	209	30	73	64	137	144	161	65	150	25	77	83	122	33
32	68	209	36	73	64	137	154	161	71	160	25	77	83	122	33
40	84	220	44	84	64	137	174	161	85	180	45	77	83	122	33
50	97	220	51	84	64	137	194	161	89	200	45	77	83	122	33
63	124	243	64	106	64	137	224	161	101	230	45	77	83	122	33

d [mm]	closest inch
16	3/8
20	1/2
25	3/4
32	1
40	1 1/4
50	1 1/2
63	2





DN10/15 - 50

## Ball valve type 107 PVC-U 24V With manual emergency override With threaded sockets Rp

### Model:

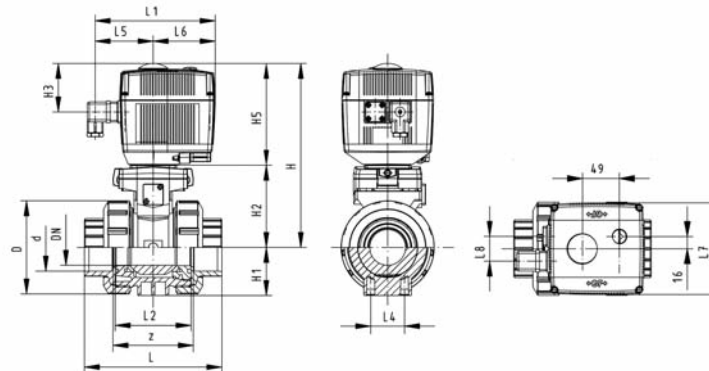
- Built on with electric actuator EA11
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Voltage 24 V AC/DC
- Control range 90°<
- Control time 5 s/90°<

### Option:

- Individual configuration of the valve (see diagram)

Rp [inch]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
3/8	10	10	70	199 107 662	199 107 672	2.100
1/2	15	10	185	199 107 663	199 107 673	2.100
3/4	20	10	350	199 107 664	199 107 674	2.200
1	25	10	700	199 107 665	199 107 675	2.300
1 1/4	32	10	1000	199 107 666	199 107 676	2.600
1 1/2	40	10	1600	199 107 667	199 107 677	3.000
2	50	10	3100	199 107 668	199 107 678	3.800

Rp [inch]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	L8 [mm]	z [mm]
3/8	50	200	27	64	64	137	92	161	56	25	77	83	122	33	64
1/2	50	200	27	64	64	137	95	161	56	25	77	83	122	33	64
3/4	58	209	30	73	64	137	110	161	65	25	77	83	122	33	72
1	68	209	36	73	64	137	123	161	71	25	77	83	122	33	79
1 1/4	84	220	44	84	64	137	146	161	85	45	77	83	122	33	94
1 1/2	97	220	51	84	64	137	157	161	89	45	77	83	122	33	95
2	124	243	64	106	64	137	183	161	101	45	77	83	122	33	107





DN10/15 - 50

## Ball valve type 107 PVC-U 24V With manual emergency override With fixed flanges serrated metric

### Model:

- Built on with electric actuator EA11
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Voltage 24 V AC/DC
- Control range 90°<
- Control time 5 s/90°<
- Overall length according to EN 558
- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504

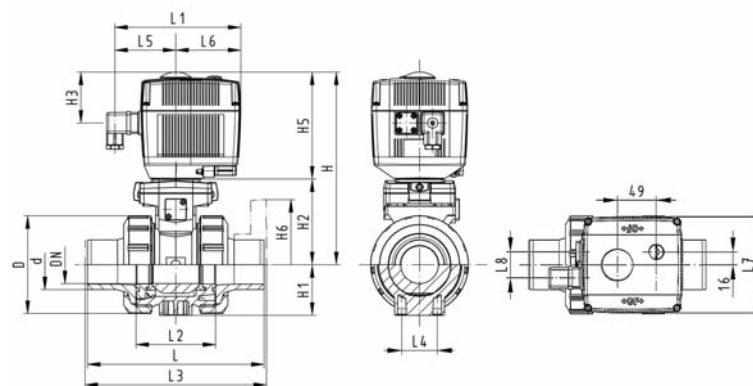
### Option:

- Individual configuration of the valve (see diagram)

d [mm]	DN [mm]	Inch	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
20	15	½	10	185	199 107 643	199 107 653	2.300
25	20	¾	10	350	199 107 644	199 107 654	2.500
32	25	1	10	700	199 107 645	199 107 655	2.700
40	32	1 ¼	10	1000	199 107 646	199 107 656	3.200
50	40	1 ½	10	1600	199 107 647	199 107 657	3.700
63	50	2	10	3100	199 107 648	199 107 658	4.800

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
20	50	201	27	64	65	138	48	124	160	56	130	25	77	83	122
25	58	210	30	73	65	138	53	144	160	65	150	25	77	83	122
32	68	210	36	73	65	138	58	154	160	71	160	25	77	83	122
40	84	221	44	84	65	138	70	174	160	85	180	45	77	83	122
50	97	221	51	84	65	138	75	194	160	89	200	45	77	83	122
63	124	244	64	106	65	138	83	224	160	101	230	45	77	83	122

d [mm]	L8 [mm]
20	33
25	33
32	33
40	33
50	33
63	33





DN10/15 - 50



## Ball valve type 130 PVC-U 100-230V With manual emergency override With solvent cement sockets metric

### Model:

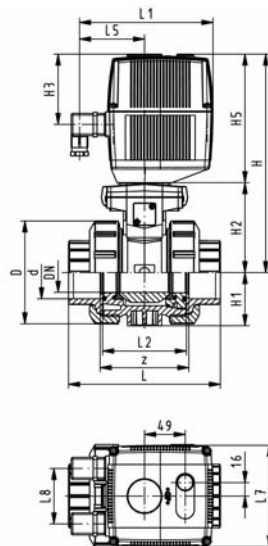
- Integrated stainless steel mounting inserts
- Voltage 100-230 V, 50-60 Hz
- Control range 90°<
- Assignment of actuators: EA21 (DN10/15-50), EA31 (DN65-100 if available)
- Control time: EA21: 5s/90°<, EA31: 15s/90°<

### Option:

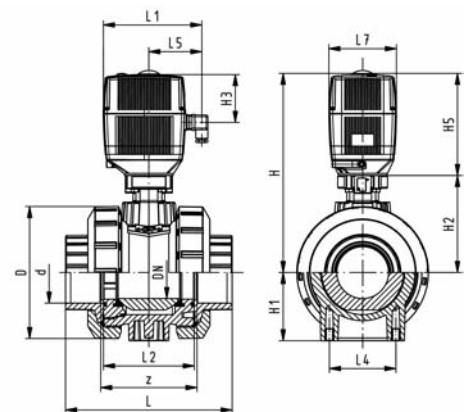
- Individual configuration of the valve (see diagram)

d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	70	199 130 002	199 130 012	2.100
20	15	10	185	199 130 003	199 130 013	2.100
25	20	10	350	199 130 004	199 130 014	2.200
32	25	10	700	199 130 005	199 130 015	2.300
40	32	10	1000	199 130 006	199 130 016	2.600
50	40	10	1600	199 130 007	199 130 017	3.000
63	50	10	3100	199 130 008	199 130 018	3.800
75	65	10	5000	199 130 009	199 130 019	7.400
90	80	10	7000	199 130 010	199 130 020	9.800
110	100	10	11000	199 130 011	199 130 021	14.100

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L7 [mm]	z [mm]	closest inch
16	50	231	27	64	94	167	92	180	56	25	97	122	64	3/8
20	50	231	27	64	94	167	95	180	56	25	97	122	64	1/2
25	58	240	30	73	94	167	110	180	65	25	97	122	72	3/4
32	68	240	36	73	94	167	123	180	71	25	97	122	79	1
40	84	251	44	84	94	167	146	180	85	45	97	122	94	1 1/4
50	97	251	51	84	94	167	157	180	89	45	97	122	95	1 1/2
63	124	273	64	106	94	167	183	180	101	45	97	122	107	2
75	166	346	85	156	94	190	233	180	136	70	98	122	144	2 1/2
90	200	358	105	168	94	190	254	180	141	70	98	122	151	3
110	238	365	123	175	94	190	301	180	164	120	98	122	174	4



DN10/15-50



DN65-100



DN10/15 - 50



## Ball valve type 130 PVC-U 100-230V With manual emergency override With threaded sockets Rp

### Model:

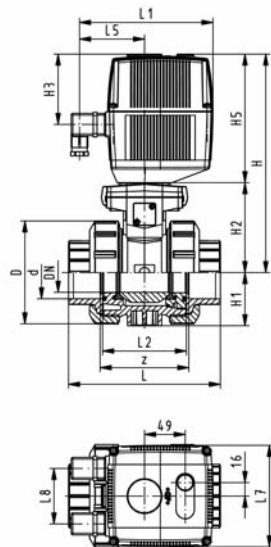
- Integrated stainless steel mounting inserts
- Voltage 100-230 V, 50-60 Hz
- Control range 90°<
- Assignment of actuators: EA21 (DN10/15-50), EA31 (DN65-100 if available)
- Control time: EA21: 5s/90°<, EA31: 15s/90°<

### Option:

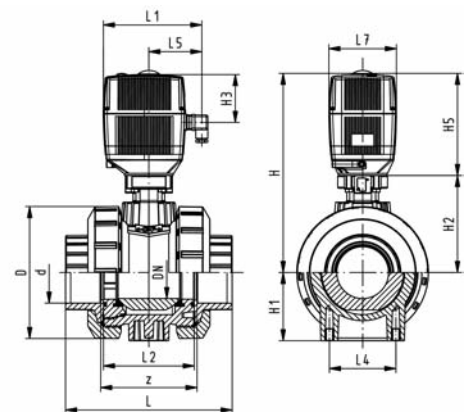
- Individual configuration of the valve (see diagram)

Rp [inch]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
3/8	10	10	70	199 130 122	199 130 132	2.100
1/2	15	10	185	199 130 123	199 130 133	2.100
3/4	20	10	350	199 130 124	199 130 134	2.200
1	25	10	700	199 130 125	199 130 135	2.300
1 1/4	32	10	1000	199 130 126	199 130 136	2.600
1 1/2	40	10	1600	199 130 127	199 130 137	3.000
2	50	10	3100	199 130 128	199 130 138	3.800
2 1/2	65	10	5000	199 130 129	199 130 139	7.400
3	80	10	7000	199 130 130	199 130 140	9.900
4	100	10	11000	199 130 131	199 130 141	14.100

Rp [inch]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L7 [mm]	z [mm]
3/8	50	231	27	64	94	167	92	180	56	25	97	122	64
1/2	50	231	27	64	94	167	95	180	56	25	97	122	64
3/4	58	240	30	73	94	167	110	180	65	25	97	122	72
1	68	240	36	73	94	167	123	180	71	25	97	122	79
1 1/4	84	251	44	84	94	167	146	180	85	45	97	122	94
1 1/2	97	251	51	84	94	167	157	180	89	45	97	122	95
2	124	273	64	106	94	167	183	180	101	45	97	122	107
2 1/2	166	346	85	156	94	190	233	180	136	70	98	122	144
3	200	358	105	168	94	190	254	180	141	70	98	122	151
4	238	365	123	175	94	190	301	180	164	120	98	122	174



DN10/15-50



DN65-100



DN10/15 - 50



## Ball valve type 130 PVC-U 100-230V With manual emergency override With solvent cement spigots metric

### Model:

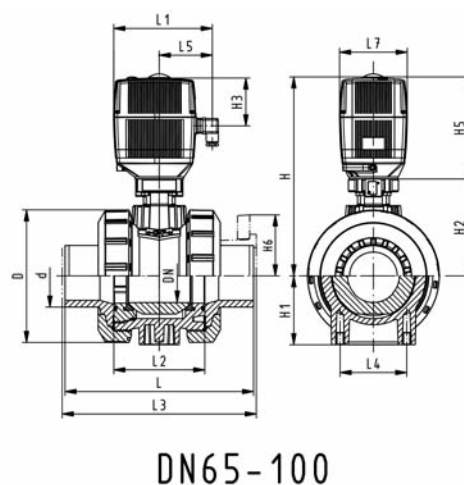
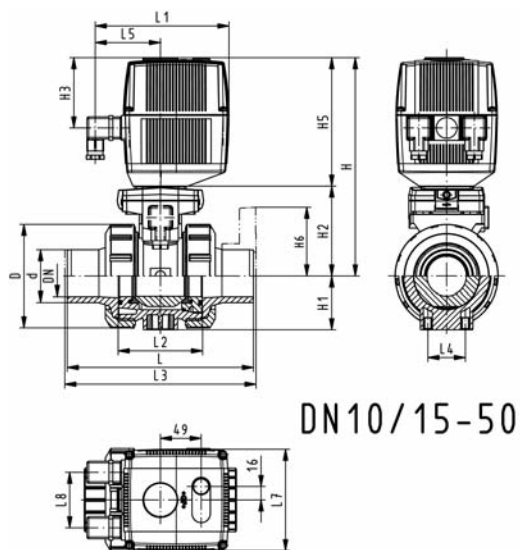
- Integrated stainless steel mounting inserts
- Voltage 100-230 V, 50-60 Hz
- Control range 90°<
- Assignment of actuators: EA21 (DN10/15-50), EA31 (DN65-100 if available)
- Control time: EA21: 5s/90°<, EA31: 15s/90°<

### Option:

- Individual configuration of the valve (see diagram)

d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	70	199 130 022	199 130 032	2.100
20	15	10	185	199 130 023	199 130 033	2.100
25	20	10	350	199 130 024	199 130 034	2.200
32	25	10	700	199 130 025	199 130 035	2.300
40	32	10	1000	199 130 026	199 130 036	2.600
50	40	10	1600	199 130 027	199 130 037	3.000
63	50	10	3100	199 130 028	199 130 038	3.800
75	65	10	5000	199 130 029	199 130 039	7.500
90	80	10	7000	199 130 030	199 130 040	10.000
110	100	10	11000	199 130 031	199 130 041	14.300

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L7 [mm]	closest inch
16	50	231	27	64	94	167	114	180	56	130	25	97	122	3/8
20	50	231	27	64	94	167	124	180	56	130	25	97	122	1/2
25	58	240	30	73	94	167	144	180	65	150	25	97	122	3/4
32	68	240	36	73	94	167	154	180	71	160	25	97	122	1
40	84	251	44	84	94	167	174	180	85	180	45	97	122	1 1/4
50	97	251	51	84	94	167	194	180	89	200	45	97	122	1 1/2
63	124	273	64	106	94	167	224	180	101	230	45	97	122	2
75	166	346	85	156	94	190	284	180	136	290	70	98	122	2 1/2
90	200	358	105	168	94	190	300	180	141	310	70	98	122	3
110	238	365	123	175	94	190	340	180	164	350	120	98	122	4







DN10/15 - 50

## Ball valve type 130 PVC-U 100-230V With manual emergency override With fixed flanges serrated metric

### Model:

- Integrated stainless steel mounting inserts
- Voltage 100-230 V, 50-60 Hz
- Control range 90°<
- Built on with electric actuator EA21
- Control time 5 s/90°<
- Overall length according to EN 558
- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504

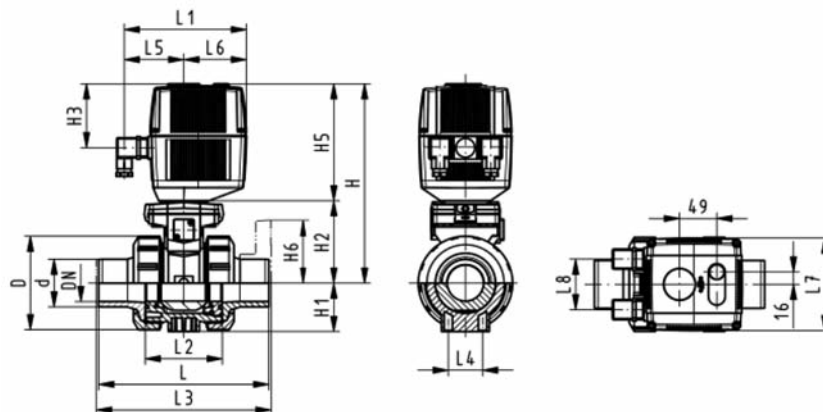
### Option:

- Individual configuration of the valve (see diagram)

d [mm]	DN [mm]	Inch	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
20	15	½	10	185	199 130 103	199 130 113	2.300
25	20	¾	10	350	199 130 104	199 130 114	2.500
32	25	1	10	700	199 130 105	199 130 115	2.700
40	32	1 ¼	10	1000	199 130 106	199 130 116	3.200
50	40	1 ½	10	1600	199 130 107	199 130 117	3.700
63	50	2	10	3100	199 130 108	199 130 118	4.800

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
20	50	231	27	64	94	167	48	124	180	56	130	25	98	83	122
25	58	240	30	73	94	167	53	144	180	65	150	25	97	83	122
32	68	240	36	73	94	167	58	154	180	71	160	25	97	83	122
40	84	251	44	84	94	167	70	174	180	85	180	45	97	83	122
50	97	251	51	84	94	167	75	194	180	89	200	45	98	83	122
63	124	273	64	106	94	167	83	224	180	101	230	45	97	83	122

d [mm]	L8 [mm]
20	66
25	66
32	66
40	66
50	66
63	66





## Ball valve type 130 PVC-U 100-230V With manual emergency override With backing flanges PP-st metric

### Model:

- Integrated stainless steel mounting inserts
- Voltage 100-230 V, 50-60 Hz
- Control range 90°<
- Assignment of actuators: EA21 (DN10/15-50), EA31 (DN65-100 if available)
- Control time: EA21: 5s/90°<, EA31: 15s/90°<
- Overall length according to EN 558
- Connecting dimension: ISO 7005, EN 1092, BS 4504, DIN 2501

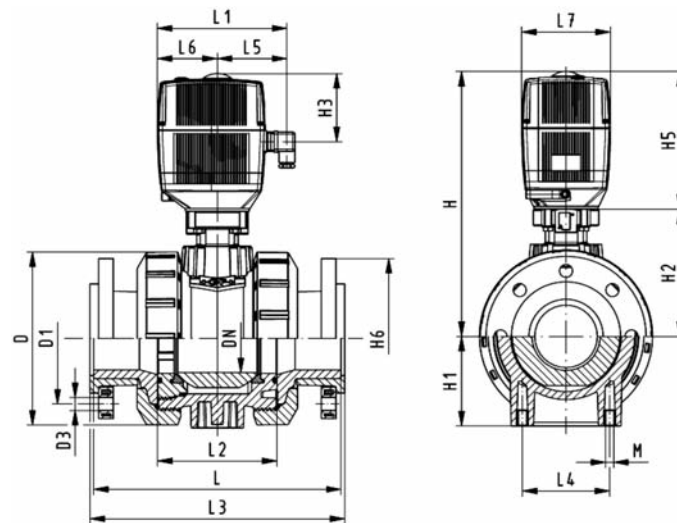
### Option:

- Individual configuration of the valve (see diagram)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
75	65	10	5000	<b>199 134 349</b>	<b>199 134 359</b>	11.500
90	80	10	7000	<b>199 134 350</b>	<b>199 134 360</b>	14.900
110	100	10	11000	<b>199 134 351</b>	<b>199 134 361</b>	20.900

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
75	166	346	85	156	94	190	93	284	180	136	290	70	98	83	122
90	200	358	105	168	94	190	100	300	180	141	310	70	98	83	122
110	238	365	123	175	94	190	110	340	180	164	350	120	98	83	122

d [mm]	L8 [mm]
75	66
90	66
110	66





DN10/15 - 50



## Ball valve type 130 PVC-U 24V With manual emergency override With solvent cement sockets metric

### Model:

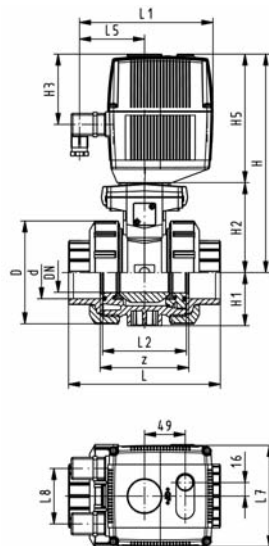
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Voltage 24 V AC/DC
- Control range 90°<
- Assignment of actuators: EA21 (DN10/15-50), EA31 (DN65-100 if available)
- Control time: EA21: 5s/90°<, EA31: 15s/90°<

### Option:

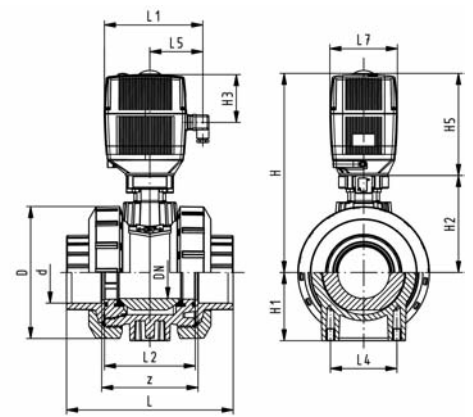
- Individual configuration of the valve (see diagram)

d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	70	199 130 042	199 130 052	2.100
20	15	10	185	199 130 043	199 130 053	2.100
25	20	10	350	199 130 044	199 130 054	2.200
32	25	10	700	199 130 045	199 130 055	2.300
40	32	10	1000	199 130 046	199 130 056	2.600
50	40	10	1600	199 130 047	199 130 057	3.000
63	50	10	3100	199 130 048	199 130 058	3.800
75	65	10	5000	199 130 049	199 130 059	7.400
90	80	10	7000	199 130 050	199 130 060	9.800
110	100	10	11000	199 130 051	199 130 061	14.100

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L7 [mm]	z [mm]	closest inch
16	50	231	27	64	94	167	92	180	56	25	97	122	64	3/8
20	50	231	27	64	94	167	95	180	56	25	97	122	64	1/2
25	58	240	30	73	94	167	110	180	65	25	97	122	72	3/4
32	68	240	36	73	94	167	123	180	71	25	97	122	79	1
40	84	251	44	84	94	167	146	180	85	45	97	122	94	1 1/4
50	97	251	51	84	94	167	157	180	89	45	97	122	95	1 1/2
63	124	273	64	106	94	167	183	180	101	45	97	122	107	2
75	166	347	85	156	94	190	233	180	136	70	98	122	144	2 1/2
90	200	358	105	168	94	190	254	180	141	70	98	122	151	3
110	238	365	123	175	94	190	301	180	164	120	98	122	174	4



DN10/15-50



DN65-100



DN10/15 - 50



## Ball valve type 130 PVC-U 24V With manual emergency override With threaded sockets Rp

### Model:

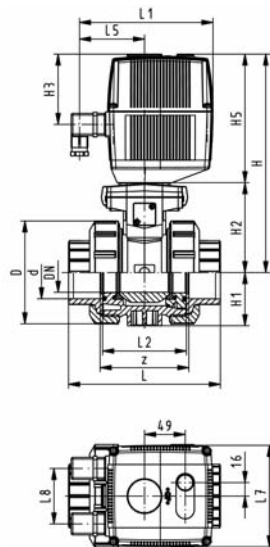
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Voltage 24 V AC/DC
- Control range 90°<
- Assignment of actuators: EA21 (DN10/15-50), EA31 (DN65-100 if available)
- Control time: EA21: 5s/90°<, EA31: 15s/90°<

### Option:

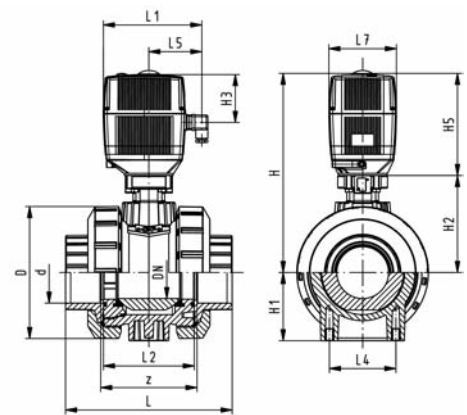
- Individual configuration of the valve (see diagram)

Rp [inch]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
3/8	10	10	70	<b>199 130 162</b>	<b>199 130 172</b>	2.100
1/2	15	10	185	<b>199 130 163</b>	<b>199 130 173</b>	2.100
3/4	20	10	350	<b>199 130 164</b>	<b>199 130 174</b>	2.200
1	25	10	700	<b>199 130 165</b>	<b>199 130 175</b>	2.300
1 1/4	32	10	1000	<b>199 130 166</b>	<b>199 130 176</b>	2.600
1 1/2	40	10	1600	<b>199 130 167</b>	<b>199 130 177</b>	3.000
2	50	10	3100	<b>199 130 168</b>	<b>199 130 178</b>	3.800
2 1/2	65	10	5000	<b>199 130 169</b>	<b>199 130 179</b>	7.400
3	80	10	7000	<b>199 130 170</b>	<b>199 130 180</b>	9.900
4	100	10	11000	<b>199 130 171</b>	<b>199 130 181</b>	14.100

Rp [inch]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L7 [mm]	z [mm]
3/8	50	231	27	64	94	167	92	180	56	25	97	122	64
1/2	50	231	27	64	94	167	95	180	56	25	97	122	64
3/4	58	240	30	73	94	167	110	180	65	25	97	122	72
1	68	240	36	73	94	167	123	180	71	25	97	122	79
1 1/4	84	251	44	84	94	167	146	180	85	45	97	122	94
1 1/2	97	251	51	84	94	167	157	180	89	45	97	122	95
2	124	273	64	106	94	167	183	180	101	45	97	122	107
2 1/2	166	346	85	156	94	190	233	180	136	70	98	122	144
3	200	358	105	168	94	190	254	180	141	70	98	122	151
4	238	365	123	175	94	190	301	180	164	120	98	122	174



DN10/15-50



DN65-100



DN10/15 - 50



## Ball valve type 130 PVC-U 24V With manual emergency override With solvent cement spigots metric

### Model:

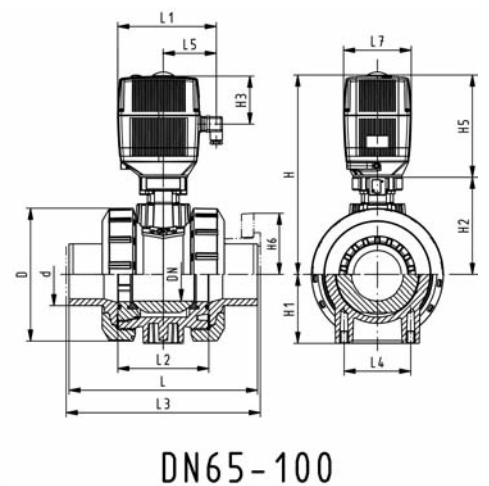
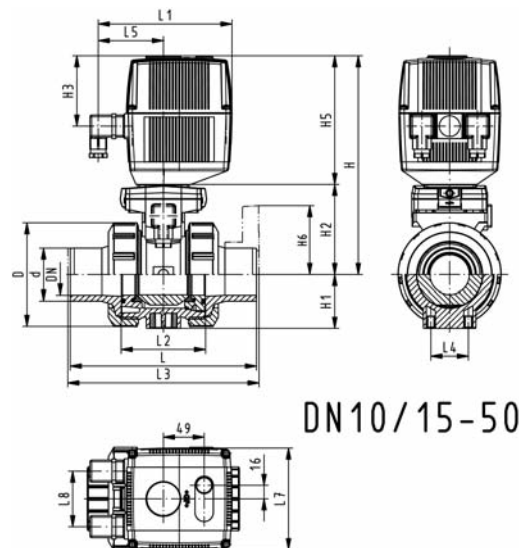
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Voltage 24 V AC/DC
- Control range 90°<
- Assignment of actuators: EA21 (DN10/15-50), EA31 (DN65-100 if available)
- Control time: EA21: 5s/90°<, EA31: 15s/90°<

### Option:

- Individual configuration of the valve (see diagram)

d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	70	199 130 062	199 130 072	2.100
20	15	10	185	199 130 063	199 130 073	2.100
25	20	10	350	199 130 064	199 130 074	2.200
32	25	10	700	199 130 065	199 130 075	2.300
40	32	10	1000	199 130 066	199 130 076	2.600
50	40	10	1600	199 130 067	199 130 077	3.000
63	50	10	3100	199 130 068	199 130 078	3.800
75	65	10	5000	199 130 069	199 130 079	7.500
90	80	10	7000	199 130 070	199 130 080	10.000
110	100	10	11000	199 130 071	199 130 081	14.300

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L7 [mm]	closest inch
16	50	231	27	64	94	167	114	180	56	130	25	97	122	3/8
20	50	231	27	64	94	167	124	180	56	130	25	97	122	1/2
25	58	240	30	73	94	167	144	180	65	150	25	97	122	3/4
32	68	240	36	73	94	167	154	180	71	160	25	97	122	1
40	84	251	44	84	94	167	174	180	85	180	45	97	122	1 1/4
50	97	251	51	84	94	167	194	180	89	200	45	97	122	1 1/2
63	124	273	64	106	94	167	224	180	101	230	45	97	122	2
75	166	346	85	156	94	190	284	180	136	290	70	98	122	2 1/2
90	200	358	105	168	94	190	300	180	141	310	70	98	122	3
110	238	365	123	175	94	190	340	180	164	350	120	98	122	4





DN10/15 - 50

## Ball valve type 130 PVC-U 24V With manual emergency override With fixed flanges serrated metric

### Model:

- For easy installation and removal
- Integrated stainless steel mounting inserts
- Voltage 24 V AC/DC
- Control range 90°<
- Built on with electric actuator EA21
- Control time 5 s/90°<
- Overall length according to EN 558
- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504

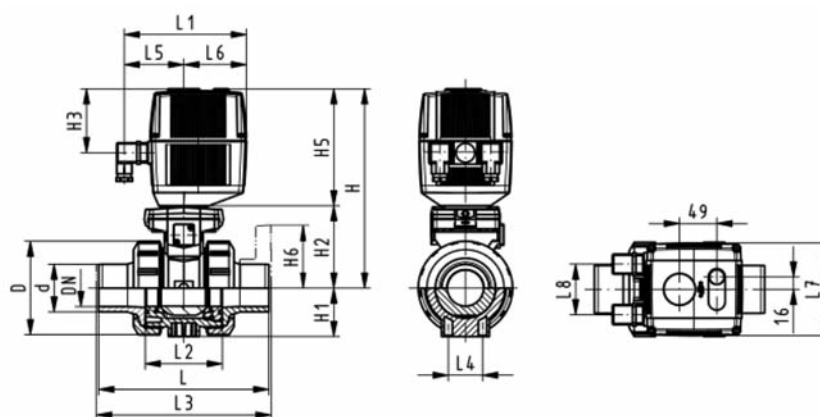
### Option:

- Individual configuration of the valve (see diagram)

d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
20	15	½	10	185	<b>199 130 143</b>	<b>199 130 153</b>	2.300
25	20	¾	10	350	<b>199 130 144</b>	<b>199 130 154</b>	2.500
32	25	1	10	700	<b>199 130 145</b>	<b>199 130 155</b>	2.700
40	32	1 ¼	10	1000	<b>199 130 146</b>	<b>199 130 156</b>	3.200
50	40	1 ½	10	1600	<b>199 130 147</b>	<b>199 130 157</b>	3.700
63	50	2	10	3100	<b>199 130 148</b>	<b>199 130 158</b>	4.800

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
20	50	231	27	64	94	167	48	124	180	56	130	25	97	83	122
25	58	240	30	73	94	167	53	144	180	65	150	25	97	83	122
32	68	240	36	73	94	167	58	154	180	71	160	25	97	83	122
40	84	251	44	84	94	167	70	174	180	85	180	45	97	83	122
50	97	251	51	84	94	167	75	194	180	89	200	45	97	83	122
63	124	273	64	106	94	167	83	224	180	101	230	45	97	83	122

d [mm]	L8 [mm]
20	66
25	66
32	66
40	66
50	66
63	66





## Ball valve type 130 PVC-U 24V With manual emergency override With backing flanges PP-st metric

### Model:

- For easy installation and removal
- Integrated stainless steel mounting inserts
- Voltage 24 V AC/DC
- Control range 90°<
- Assignment of actuators: EA21 (DN10/15-50), EA31 (DN65-100 if available)
- Control time: EA21: 5s/90°<, EA31: 15s/90°<
- Overall length according to EN 558
- Connecting dimension: ISO 7005, EN 1092, BS 4504, DIN 2501

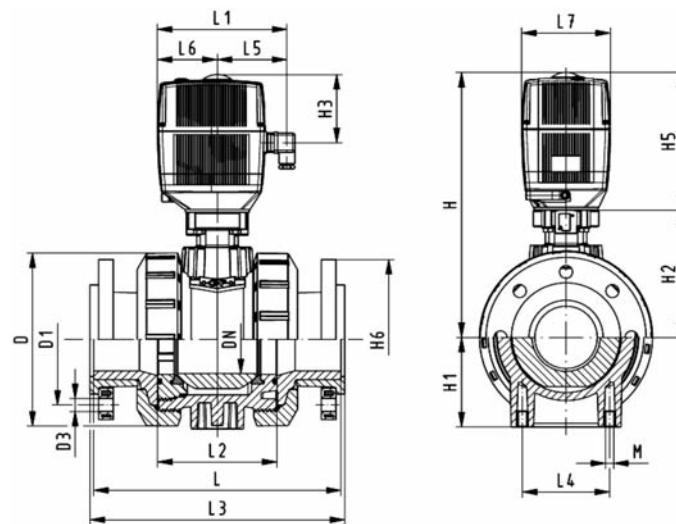
### Option:

- Individual configuration of the valve (see diagram)

d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
75	65	10	5000	<b>199 134 369</b>	<b>199 134 379</b>	11.500
90	80	10	7000	<b>199 134 370</b>	<b>199 134 380</b>	14.900
110	100	10	11000	<b>199 134 371</b>	<b>199 134 381</b>	20.900

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
75	166	346	85	156	94	190	93	284	180	136	290	70	98	83	122
90	200	358	105	168	94	190	100	300	180	141	310	70	98	83	122
110	238	365	123	175	94	190	110	340	180	164	350	120	98	83	122

d [mm]	L8 [mm]
75	66
90	66
110	66



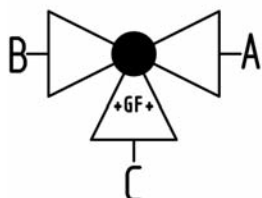


## 3-Way ball valve type 185 PVC-U Horizontal/L-port 100-230V With manual emergency override With solvent cement sockets metric



### Model:

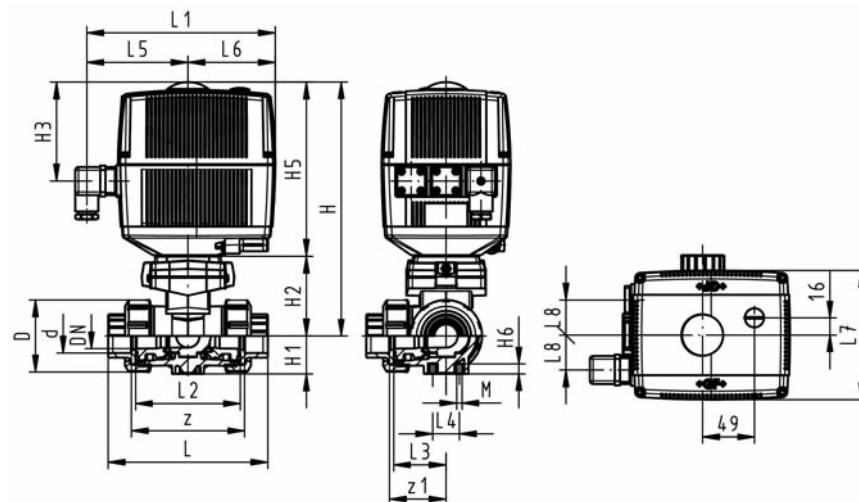
- Built on with electric actuator EA21
- Voltage 100-230 V, 50-60 Hz
- Control range 90°<
- Basic position A-C opened, activated position B-C opened, see flow scheme
- Other positions possible by adjusting the limit switches
- Control time 5 s/90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts



d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	50	199 185 022	199 185 032	2.122
20	15	10	75	199 185 023	199 185 033	2.128
25	20	10	150	199 185 024	199 185 034	2.256
32	25	10	280	199 185 025	199 185 035	2.446
40	32	10	480	199 185 026	199 185 036	2.870
50	40	10	620	199 185 027	199 185 037	3.322
63	50	10	1230	199 185 028	199 185 038	4.683

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
16	50	231	28	64	94	167	8	109	180	73	36	25	97	83	122
20	50	231	28	64	94	167	8	112	180	73	36	25	97	83	122
25	58	240	32	73	94	167	8	131	180	86	43	25	97	83	122
32	68	240	36	73	94	167	8	151	180	99	50	25	97	83	122
40	84	251	45	84	94	167	9	181	180	120	60	45	97	83	122
50	97	251	51	84	94	167	9	205	180	137	69	45	97	83	122
63	124	273	65	106	94	167	9	261	180	179	89	45	97	83	122

d [mm]	L8 [mm]	M	z [mm]	z1 [mm]	closest inch
16	33	6	81	40	3/8
20	33	6	81	40	1/2
25	33	6	94	47	3/4
32	33	6	107	54	1
40	33	8	130	65	1 1/4
50	33	8	143	72	1 1/2
63	33	8	185	92	2





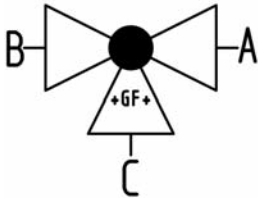


## 3-Way ball valve type 185 PVC-U Horizontal/L-port 100-230V With manual emergency override With solvent cement spigots metric



### Model:

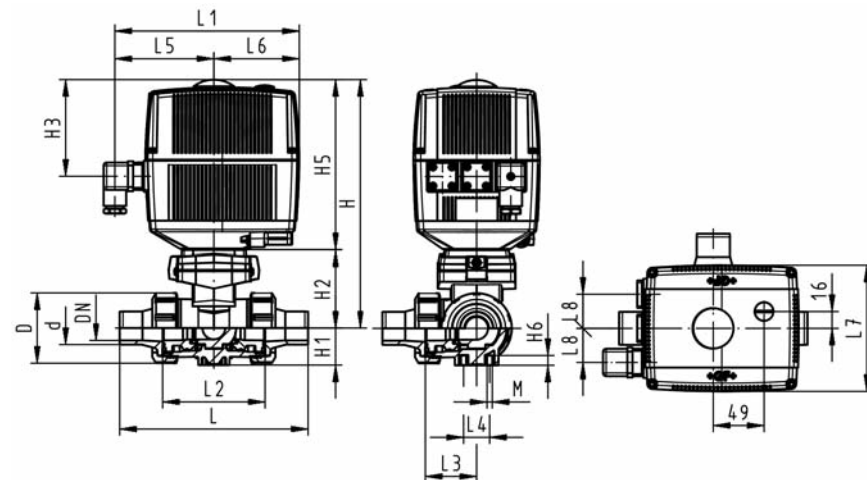
- Built on with electric actuator EA21
- Voltage 100-230 V, 50-60 Hz
- Control range 90°<
- Basic position A-C opened, activated position B-C opened, see flow scheme
- Other positions possible by adjusting the limit switches
- Control time 5 s/90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts



d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	50	199 185 002	199 185 012	2.128
20	15	10	75	199 185 003	199 185 013	2.137
25	20	10	150	199 185 004	199 185 014	2.271
32	25	10	280	199 185 005	199 185 015	2.470
40	32	10	480	199 185 006	199 185 016	2.891
50	40	10	620	199 185 007	199 185 017	3.385
63	50	10	1230	199 185 008	199 185 018	4.809

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
16	50	231	28	64	94	167	8	131	180	194	36	25	97	83	122
20	50	231	28	64	94	167	8	141	180	194	36	25	97	83	122
25	58	240	32	73	94	167	8	165	180	194	43	25	97	83	122
32	68	240	36	73	94	167	8	182	180	194	50	25	97	83	122
40	84	251	45	84	94	167	9	209	180	194	60	45	97	83	122
50	97	251	51	84	94	167	9	242	180	194	69	45	97	83	122
63	124	273	65	106	94	167	9	302	180	194	89	45	97	83	122

d [mm]	L8 [mm]	M	closest inch
16	33	6	3/8
20	33	6	1/2
25	33	6	3/4
32	33	6	1
40	33	8	1 1/4
50	33	8	1 1/2
63	33	8	2



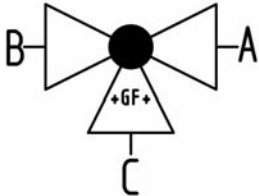


# 3-Way ball valve type 185 PVC-U Horizontal/L-port 24V With manual emergency override With solvent cement sockets metric



### Model:

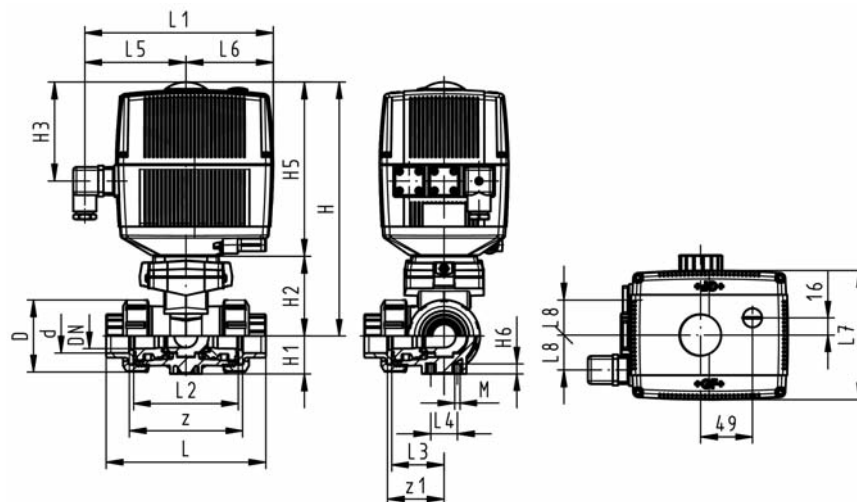
- Built on with electric actuator EA21
- Voltage 24 V AC/DC
- Control range 90°<
- Basic position A-C opened, activated position B-C opened, see flow scheme
- Other positions possible by adjusting the limit switches
- Control time 5 s/90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts



d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	50	199 185 202	199 185 212	2.122
20	15	10	75	199 185 203	199 185 213	2.128
25	20	10	150	199 185 204	199 185 214	2.256
32	25	10	280	199 185 205	199 185 215	2.446
40	32	10	480	199 185 206	199 185 216	2.870
50	40	10	620	199 185 207	199 185 217	3.322
63	50	10	1230	199 185 208	199 185 218	4.683

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
16	50	231	28	64	94	167	8	109	180	73	36	25	97	83	122
20	50	231	28	64	94	167	8	112	180	73	36	25	97	83	122
25	58	240	32	73	94	167	8	131	180	86	43	25	97	83	122
32	68	240	36	73	94	167	8	151	180	99	50	25	97	83	122
40	84	251	45	84	94	167	9	181	180	120	60	45	97	83	122
50	97	251	51	84	94	167	9	205	180	137	69	45	97	83	122
63	124	273	65	106	94	167	9	261	180	179	89	45	97	83	122

d [mm]	L8 [mm]	M	z [mm]	z1 [mm]	closest inch
16	33	6	81	40	3/8
20	33	6	81	40	1/2
25	33	6	94	47	3/4
32	33	6	107	54	1
40	33	8	130	65	1 1/4
50	33	8	143	72	1 1/2
63	33	8	185	92	2

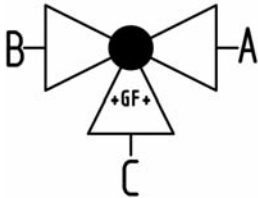




### 3-Way ball valve type 185 PVC-U Horizontal/L-port 24V With manual emergency override With solvent cement spigots metric

**Model:**

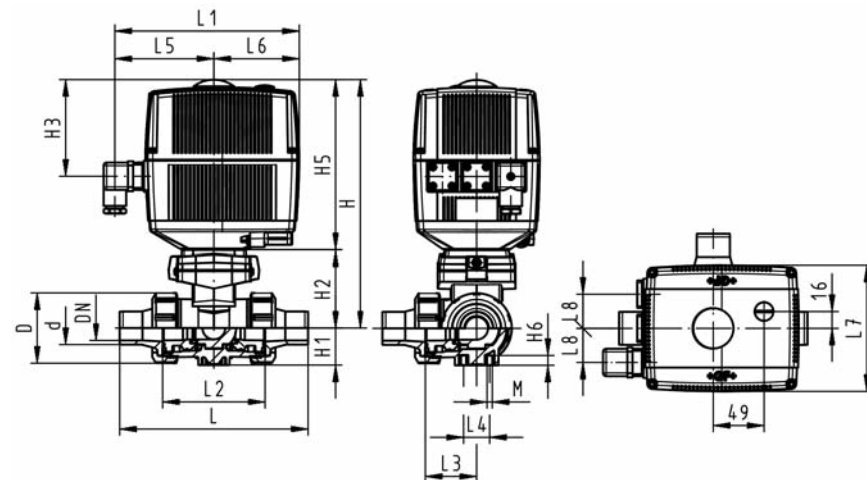
- Built on with electric actuator EA21
- Voltage 24 V AC/DC
- Control range 90°<
- Basic position A-C opened, activated position B-C opened, see flow scheme
- Other positions possible by adjusting the limit switches
- Control time 5 s/90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts



d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	50	199 185 182	199 185 192	2.128
20	15	10	75	199 185 183	199 185 193	2.137
25	20	10	150	199 185 184	199 185 194	2.271
32	25	10	280	199 185 185	199 185 195	2.470
40	32	10	480	199 185 186	199 185 196	2.891
50	40	10	620	199 185 187	199 185 197	3.385
63	50	10	1230	199 185 188	199 185 198	4.809

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
16	50	231	28	64	94	167	8	131	180	73	36	25	97	83	122
20	50	231	28	64	94	167	8	141	180	73	36	25	97	83	122
25	58	240	32	73	94	167	8	165	180	86	43	25	97	83	122
32	68	240	36	73	94	167	8	182	180	99	50	25	97	83	122
40	84	251	45	84	94	167	9	209	180	120	60	45	97	83	122
50	97	251	51	84	94	167	9	242	180	137	69	45	97	83	122
63	124	273	65	106	94	167	9	302	180	179	89	45	97	83	122

d [mm]	L8 [mm]	M	closest inch
16	33	6	3/8
20	33	6	1/2
25	33	6	3/4
32	33	6	1
40	33	8	1 1/4
50	33	8	1 1/2
63	33	8	2



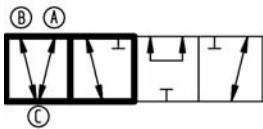
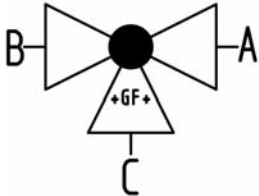


## 3-Way ball valve type 185 PVC-U Horizontal/T-port 100-230V With manual emergency override With solvent cement sockets metric



### Model:

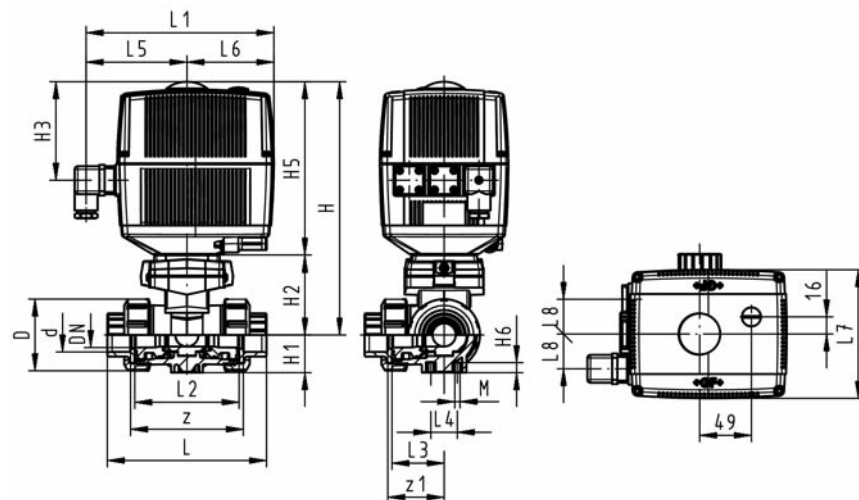
- Built on with electric actuator EA21
- Voltage 100-230 V, 50-60 Hz
- Control range 90°<
- Basic position A-B-C opened, activated position B-C opened, see flow scheme
- Other positions possible by adjusting the limit switches
- Control time 5 s/90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts



d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	140	199 185 062	199 185 072	2.121
20	15	10	200	199 185 063	199 185 073	2.127
25	20	10	470	199 185 064	199 185 074	2.254
32	25	10	793	199 185 065	199 185 075	2.439
40	32	10	1290	199 185 066	199 185 076	2.859
50	40	10	1910	199 185 067	199 185 077	3.301
63	50	10	3100	199 185 068	199 185 078	4.638

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
16	50	231	28	64	94	167	8	109	180	73	36	25	97	83	122
20	50	231	28	64	94	167	8	112	180	73	36	25	97	83	122
25	58	240	32	73	94	167	8	131	180	86	43	25	97	83	122
32	68	240	36	73	94	167	8	151	180	99	50	25	97	83	122
40	84	251	45	84	94	167	9	181	180	120	60	45	97	83	122
50	97	251	51	84	94	167	9	205	180	137	69	45	97	83	122
63	124	273	65	106	94	167	9	261	180	179	89	45	97	83	122

d [mm]	L8 [mm]	M	z [mm]	z1 [mm]	closest inch
16	33	6	81	40	3/8
20	33	6	81	40	1/2
25	33	6	94	47	3/4
32	33	6	107	54	1
40	33	8	130	65	1 1/4
50	33	8	143	72	1 1/2
63	33	8	185	92	2



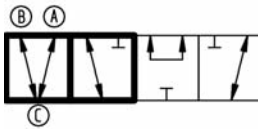
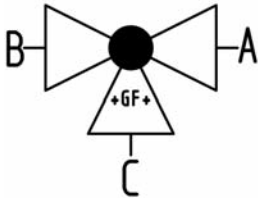


### 3-Way ball valve type 185 PVC-U Horizontal/T-port 100-230V With manual emergency override With solvent cement spigots metric



**Model:**

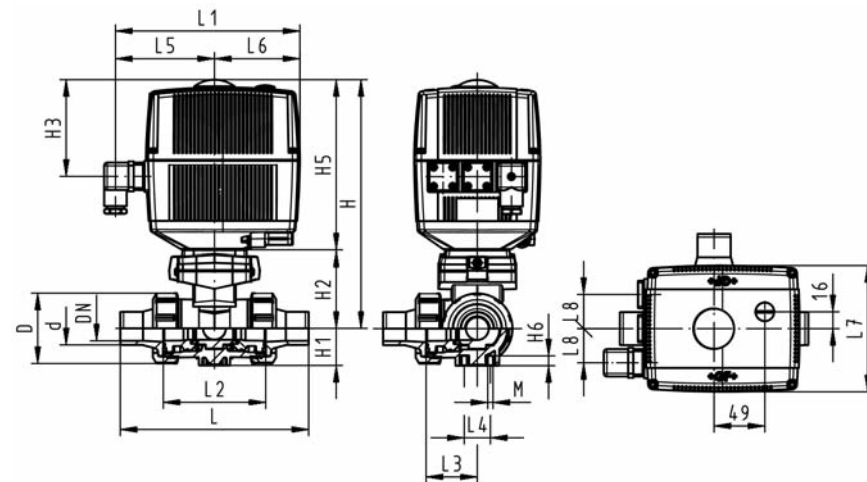
- Built on with electric actuator EA21
- Voltage 100-230 V, 50-60 Hz
- Control range 90°<
- Basic position A-B-C opened, activated position B-C opened, see flow scheme
- Other positions possible by adjusting the limit switches
- Control time 5 s/90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts



d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	140	199 185 042	199 185 052	2.127
20	15	10	200	199 185 043	199 185 053	2.136
25	20	10	470	199 185 044	199 185 054	2.269
32	25	10	793	199 185 045	199 185 055	2.463
40	32	10	1290	199 185 046	199 185 056	2.880
50	40	10	1910	199 185 047	199 185 057	3.364
63	50	10	3100	199 185 048	199 185 058	4.764

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
16	50	231	28	64	94	167	8	131	180	73	36	25	97	83	122
20	50	231	28	64	94	167	8	141	180	73	36	25	97	83	122
25	58	240	32	73	94	167	8	165	180	86	43	25	97	83	122
32	68	240	36	73	94	167	8	182	180	99	50	25	97	83	122
40	84	251	45	84	94	167	9	209	180	120	60	45	97	83	122
50	97	251	51	84	94	167	9	242	180	137	69	45	97	83	122
63	124	273	65	106	94	167	9	302	180	179	89	45	97	83	122

d [mm]	L8 [mm]	M	closest inch
16	33	6	3/8
20	33	6	1/2
25	33	6	3/4
32	33	6	1
40	33	8	1 1/4
50	33	8	1 1/2
63	33	8	2



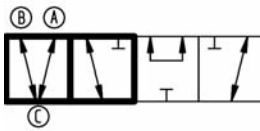
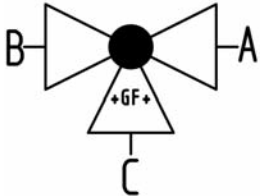


## 3-Way ball valve type 185 PVC-U Horizontal/T-port 24V With manual emergency override With solvent cement sockets metric



### Model:

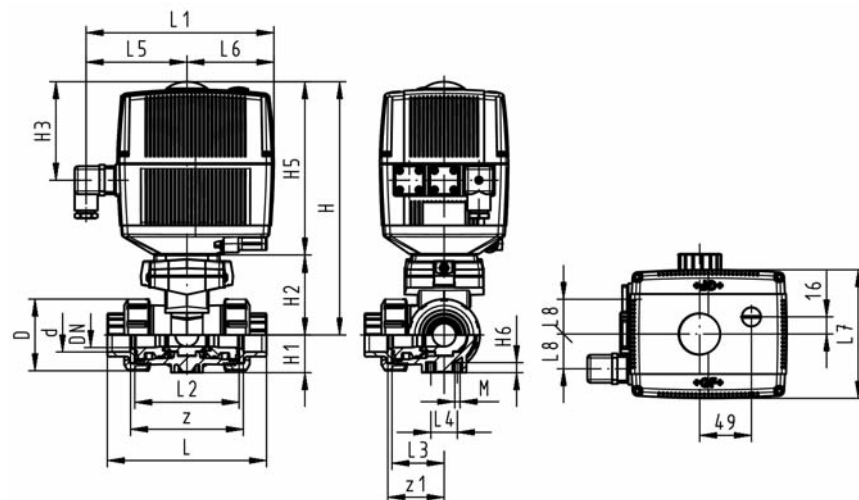
- Built on with electric actuator EA21
- Voltage 24 V AC/DC
- Control range 90°<
- Basic position A-B-C opened, activated position B-C opened, see flow scheme
- Other positions possible by adjusting the limit switches
- Control time 5 s/90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts



d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	140	199 185 242	199 185 252	2.121
20	15	10	200	199 185 243	199 185 253	2.127
25	20	10	470	199 185 244	199 185 254	2.254
32	25	10	793	199 185 245	199 185 255	2.439
40	32	10	1290	199 185 246	199 185 256	2.859
50	40	10	1910	199 185 247	199 185 257	3.301
63	50	10	3100	199 185 248	199 185 258	4.638

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
16	50	231	28	64	94	167	8	109	180	73	36	25	97	83	122
20	50	231	28	64	94	167	8	112	180	73	36	25	97	83	122
25	58	240	32	73	94	167	8	131	180	86	43	25	97	83	122
32	68	240	36	73	94	167	8	151	180	99	50	25	97	83	122
40	84	251	45	84	94	167	9	181	180	120	60	45	97	83	122
50	97	251	51	84	94	167	9	205	180	137	69	45	97	83	122
63	124	273	65	106	94	167	9	261	180	179	89	45	97	83	122

d [mm]	L8 [mm]	M	z [mm]	z1 [mm]	closest inch
16	33	6	81	40	3/8
20	33	6	81	40	1/2
25	33	6	94	47	3/4
32	33	6	107	54	1
40	33	8	130	65	1 1/4
50	33	8	143	72	1 1/2
63	33	8	185	92	2

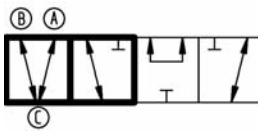
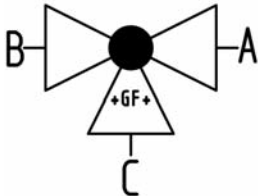




### 3-Way ball valve type 185 PVC-U Horizontal/T-port 24V With manual emergency override With solvent cement spigots metric

**Model:**

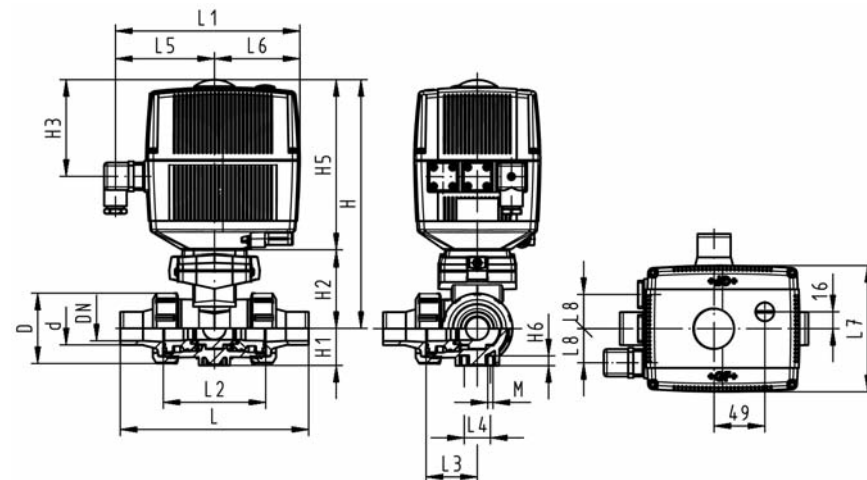
- Built on with electric actuator EA21
- Voltage 24 V AC/DC
- Control range 90°<
- Basic position A-B-C opened, activated position B-C opened, see flow scheme
- Other positions possible by adjusting the limit switches
- Control time 5 s/90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts



d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	140	199 185 222	199 185 232	2.127
20	15	10	200	199 185 223	199 185 233	2.136
25	20	10	470	199 185 224	199 185 234	2.269
32	25	10	793	199 185 225	199 185 235	2.463
40	32	10	1290	199 185 226	199 185 236	2.880
50	40	10	1910	199 185 227	199 185 237	3.364
63	50	10	3100	199 185 228	199 185 238	4.764

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
16	50	231	28	64	94	167	8	131	180	73	36	25	97	83	122
20	50	231	28	64	94	167	8	141	180	73	36	25	97	83	122
25	58	240	32	73	94	167	8	165	180	86	43	25	97	83	122
32	68	240	36	73	94	167	8	182	180	99	50	25	97	83	122
40	84	251	45	84	94	167	9	209	180	120	60	45	97	83	122
50	97	251	51	84	94	167	9	242	180	137	69	45	97	83	122
63	124	273	65	106	94	167	9	302	180	179	89	45	97	83	122

d [mm]	L8 [mm]	M	closest inch
16	33	6	3/8
20	33	6	1/2
25	33	6	3/4
32	33	6	1
40	33	8	1 1/4
50	33	8	1 1/2
63	33	8	2



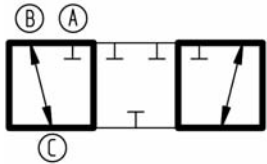
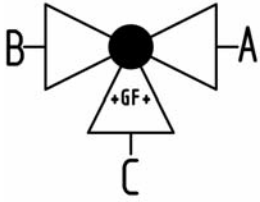


## 3-Way ball valve type 188 PVC-U Vertical/L-port 100-230V With manual emergency override With solvent cement sockets metric



### Model:

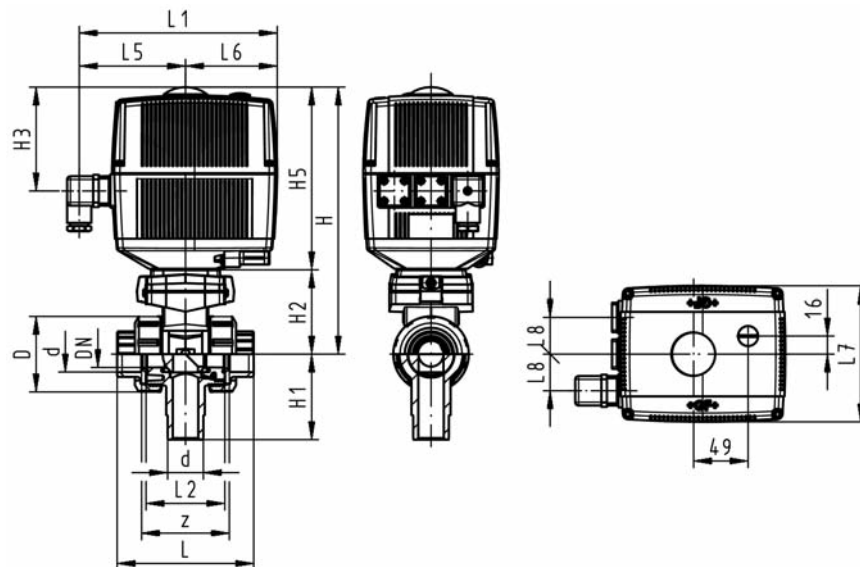
- Vertical inlet solvent cement spigot metric
- Built on with electric actuator EA21
- Voltage 100-230 V, 50-60 Hz
- Control range 180°<
- Basic position B-C opened, activated position A-C opened, see flow scheme
- Control time 10 s/180°<
- Easy installation and removal using union on third outlet



d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	49	<b>199 188 242</b>	<b>199 188 252</b>	2.039
20	15	10	77	<b>199 188 243</b>	<b>199 188 253</b>	2.043
25	20	10	146	<b>199 188 244</b>	<b>199 188 254</b>	2.150
32	25	10	260	<b>199 188 245</b>	<b>199 188 255</b>	2.267
40	32	10	437	<b>199 188 246</b>	<b>199 188 256</b>	2.554
50	40	10	667	<b>199 188 247</b>	<b>199 188 257</b>	2.818
63	50	10	1293	<b>199 188 248</b>	<b>199 188 258</b>	3.595

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	L8 [mm]	z [mm]
16	50	231	62	64	94	167	92	180	56	97	83	122	33	64
20	50	231	62	64	94	167	95	180	56	97	83	122	33	64
25	58	240	72	73	94	167	111	180	66	97	83	122	33	74
32	68	240	77	73	94	167	123	180	71	97	83	122	33	79
40	84	251	87	84	94	167	146	180	85	97	83	122	33	95
50	97	251	97	84	94	167	157	180	89	97	83	122	33	95
63	124	273	112	106	94	167	183	180	101	97	83	122	33	107

d [mm]	closest inch
16	3/8
20	1/2
25	3/4
32	1
40	1 1/4
50	1 1/2
63	2





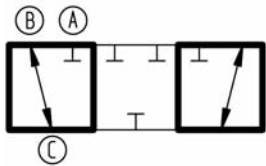
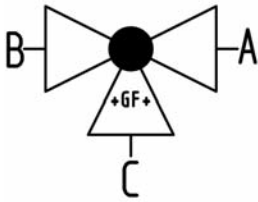


## 3-Way ball valve type 188 PVC-U Vertical/L-port 100-230V With manual emergency override With solvent cement spigots metric



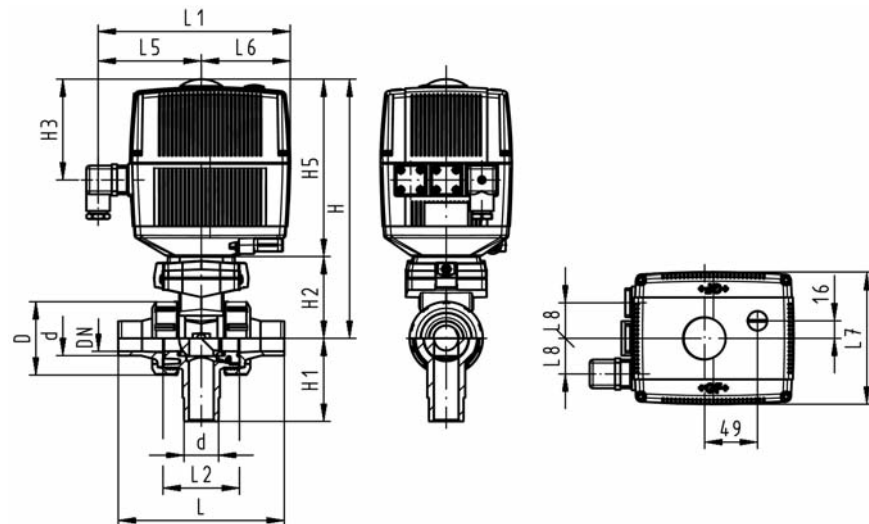
### Model:

- Vertical inlet solvent cement spigot metric
- Built on with electric actuator EA21
- Voltage 100-230 V, 50-60 Hz
- Control range 180°<
- Basic position B-C opened, activated position A-C opened, see flow scheme
- Control time 10 s/180°<
- Easy installation and removal using union on third outlet



d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	49	199 188 062	199 188 072	2.043
20	15	10	77	199 188 063	199 188 073	2.049
25	20	10	146	199 188 064	199 188 074	2.160
32	25	10	260	199 188 065	199 188 075	2.283
40	32	10	437	199 188 066	199 188 076	2.568
50	40	10	667	199 188 067	199 188 077	2.860
63	50	10	1293	199 188 068	199 188 078	3.679

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	L8 [mm]	closest inch
16	50	231	62	64	94	167	114	180	56	97	83	122	33	3/8
20	50	231	62	64	94	167	124	180	56	97	83	122	33	1/2
25	58	240	72	73	94	167	144	180	66	97	83	122	33	3/4
32	68	240	77	73	94	167	154	180	71	97	83	122	33	1
40	84	251	87	84	94	167	174	180	85	97	83	122	33	1 1/4
50	97	251	97	84	94	167	194	180	89	97	83	122	33	1 1/2
63	124	273	112	106	94	167	224	180	101	97	83	122	33	2



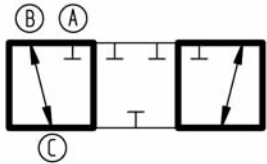
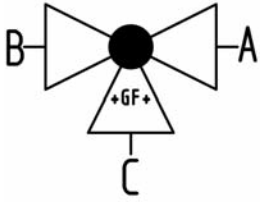


## 3-Way ball valve type 188 PVC-U Vertical/L-port 24V With manual emergency override With solvent cement sockets metric



### Model:

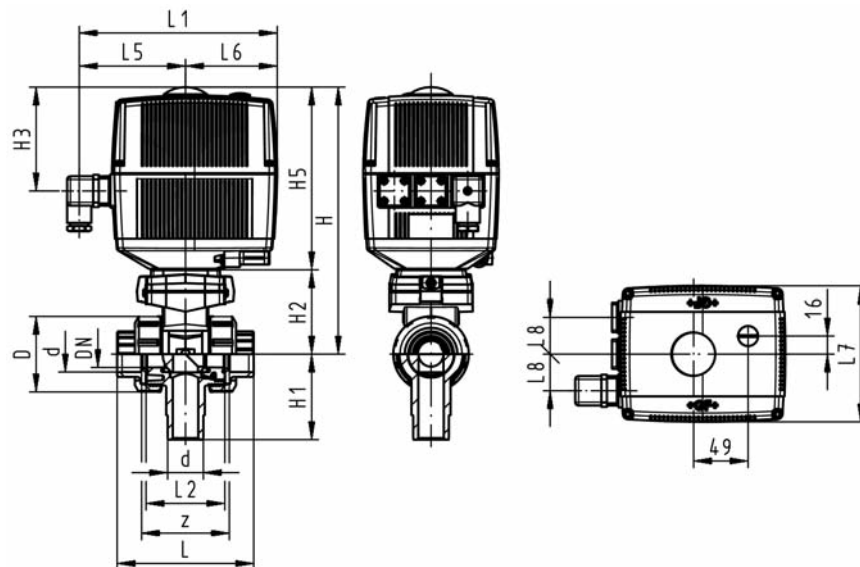
- Vertical inlet solvent cement spigot metric
- Built on with electric actuator EA21
- Voltage 24 V AC/DC
- Control range 180°<
- Basic position B-C opened, activated position A-C opened, see flow scheme
- Control time 10 s/180°<
- Easy installation and removal using union on third outlet



d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	49	<b>199 188 262</b>	<b>199 188 272</b>	2.039
20	15	10	77	<b>199 188 263</b>	<b>199 188 273</b>	2.043
25	20	10	146	<b>199 188 264</b>	<b>199 188 274</b>	2.150
32	25	10	260	<b>199 188 265</b>	<b>199 188 275</b>	2.267
40	32	10	437	<b>199 188 266</b>	<b>199 188 276</b>	2.554
50	40	10	667	<b>199 188 267</b>	<b>199 188 277</b>	2.818
63	50	10	1293	<b>199 188 268</b>	<b>199 188 278</b>	3.595

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	L8 [mm]	z [mm]
16	50	231	62	64	94	167	92	180	56	97	83	122	33	64
20	50	231	62	64	94	167	95	180	56	97	83	122	33	64
25	58	240	72	73	94	167	111	180	66	97	83	122	33	74
32	68	240	77	73	94	167	123	180	71	97	83	122	33	79
40	84	251	87	84	94	167	146	180	85	97	83	122	33	95
50	97	251	97	84	94	167	157	180	89	97	83	122	33	95
63	124	273	112	106	94	167	183	180	101	97	83	122	33	107

d [mm]	closest inch
16	3/8
20	1/2
25	3/4
32	1
40	1 1/4
50	1 1/2
63	2



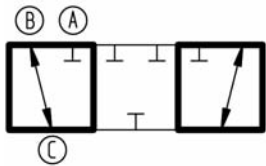
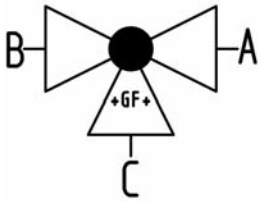


## 3-Way ball valve type 188 PVC-U Vertical/L-port 24V With manual emergency override With solvent cement spigots metric



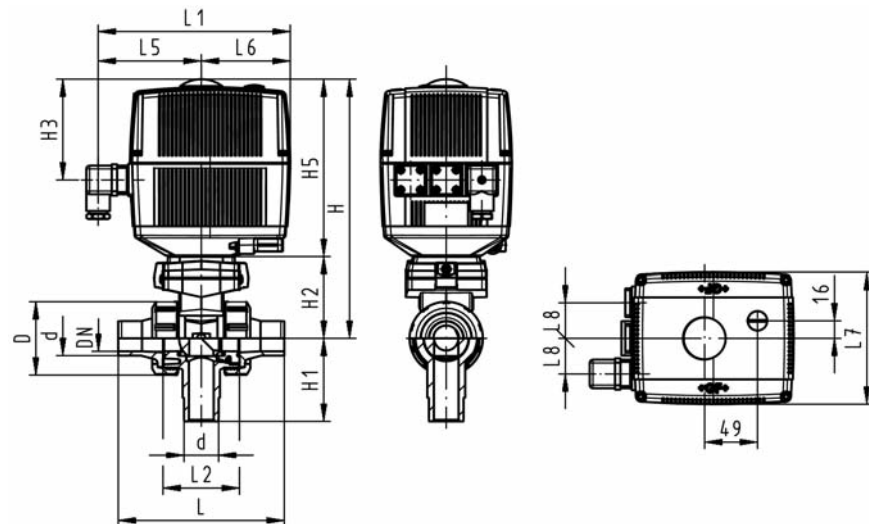
### Model:

- Vertical inlet solvent cement spigot metric
- Built on with electric actuator EA21
- Voltage 24 V AC/DC
- Control range 180°<
- Basic position B-C opened, activated position A-C opened, see flow scheme
- Control time 10 s/180°<
- Easy installation and removal using union on third outlet



d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	49	199 188 102	199 188 112	2.043
20	15	10	77	199 188 103	199 188 113	2.049
25	20	10	146	199 188 104	199 188 114	2.160
32	25	10	260	199 188 105	199 188 115	2.283
40	32	10	437	199 188 106	199 188 116	2.568
50	40	10	667	199 188 107	199 188 117	2.860
63	50	10	1293	199 188 108	199 188 118	3.679

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	L8 [mm]	closest inch
16	50	231	62	64	94	167	114	180	56	97	83	122	33	3/8
20	50	231	62	64	94	167	124	180	56	97	83	122	33	1/2
25	58	240	72	73	94	167	144	180	66	97	83	122	33	3/4
32	68	240	77	73	94	167	154	180	71	97	83	122	33	1
40	84	251	87	84	94	167	174	180	85	97	83	122	33	1 1/4
50	97	251	97	84	94	167	194	180	89	97	83	122	33	1 1/2
63	124	273	112	106	94	167	224	180	101	97	83	122	33	2



# Ball valves electric Inch BS

## Ball valve type 107 PVC-U 100-230V With manual emergency override With solvent cement sockets Inch BS



DN10/15 - 50

### Model:

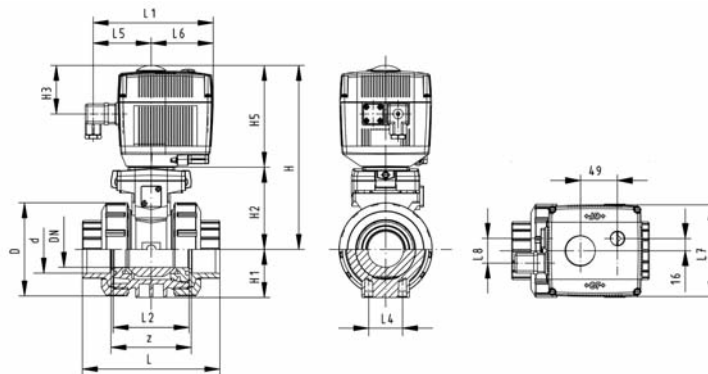
- Built on with electric actuator EA11
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Voltage 100-230 V, 50-60 Hz
- Control range 90°<
- Control time 5 s/90°<

### Option:

- Individual configuration of the valve (see diagram)

Inch	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
3/8	10	10	70	<b>199 107 402</b>	<b>199 107 412</b>	2.100
1/2	15	10	185	<b>199 107 403</b>	<b>199 107 413</b>	2.100
3/4	20	10	350	<b>199 107 404</b>	<b>199 107 414</b>	2.200
1	25	10	700	<b>199 107 405</b>	<b>199 107 415</b>	2.300
1 1/4	32	10	1000	<b>199 107 406</b>	<b>199 107 416</b>	2.600
1 1/2	40	10	1600	<b>199 107 407</b>	<b>199 107 417</b>	3.000
2	50	10	3100	<b>199 107 408</b>	<b>199 107 418</b>	3.800

Inch	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	L8 [mm]	z [mm]
3/8	50	200	27	64	64	137	92	161	56	25	79	1	122	67	60
1/2	50	200	27	64	64	137	95	161	56	25	79	83	122	67	60
3/4	58	209	30	73	64	137	110	161	65	25	79	83	122	67	69
1	68	209	36	73	64	137	123	161	71	25	79	83	122	67	75
1 1/4	84	220	44	84	64	137	146	161	85	45	79	83	122	67	89
1 1/2	97	220	51	84	64	137	157	161	89	45	79	83	122	67	97
2	124	243	64	106	64	137	183	161	101	45	79	83	122	67	110





DN10/15 - 50

## Ball valve type 107 PVC-U 24V With manual emergency override With solvent cement sockets Inch BS

### Model:

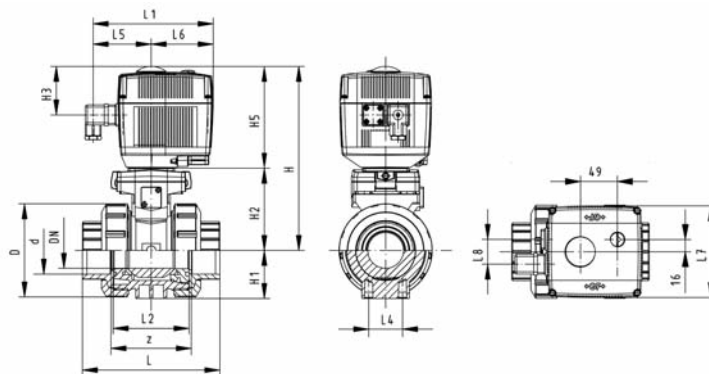
- Built on with electric actuator EA11
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Voltage 24 V AC/DC
- Control range 90°<
- Control time 5 s/90°<

### Option:

- Individual configuration of the valve (see diagram)

Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
3/8	10	10	70	199 107 442	199 107 452	2.100
1/2	15	10	185	199 107 443	199 107 453	2.100
3/4	20	10	350	199 107 444	199 107 454	2.200
1	25	10	700	199 107 445	199 107 455	2.300
1 1/4	32	10	1000	199 107 446	199 107 456	2.600
1 1/2	40	10	1600	199 107 447	199 107 457	3.000
2	50	10	3100	199 107 448	199 107 458	3.800

Inch	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	L8 [mm]	z [mm]
3/8	50	200	27	64	64	137	92	161	56	25	79	83	122	67	60
1/2	50	200	27	64	64	137	95	161	56	25	79	83	122	67	60
3/4	58	209	30	73	64	137	110	161	65	25	79	83	122	67	69
1	68	209	36	73	64	137	123	161	71	25	79	83	122	67	75
1 1/4	84	220	44	84	64	137	146	161	85	45	79	83	122	67	89
1 1/2	97	220	51	84	64	137	157	161	89	45	79	83	122	67	97
2	124	243	64	106	64	137	183	161	101	45	79	83	122	67	110





DN10/15 - 50



## Ball valve type 134 PVC-U 100-230V With manual emergency override With solvent cement sockets Inch BS

### Model:

- Assignment of actuators: EA21 (DN10/15-50), EA31 (DN65-100 if available)
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Voltage 100-230 V, 50-60 Hz
- Control range 90°<
- Control time: EA21: 5s/90°<, EA31: 15s/90°<

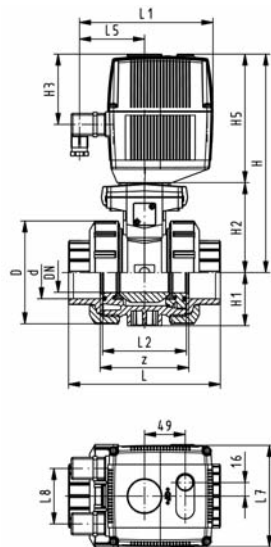
### Option:

- Individual configuration of the valve (see diagram)

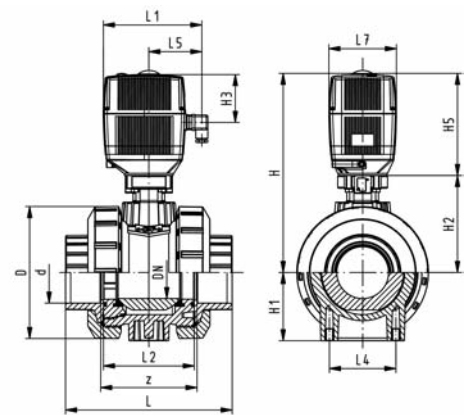
Inch	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg							
3/8	10	10	70	199 134 002	199 134 012	2.100							
1/2	15	10	185	199 134 003	199 134 013	2.100							
3/4	20	10	350	199 134 004	199 134 014	2.200							
1	25	10	700	199 134 005	199 134 015	2.300							
1 1/4	32	10	1000	199 134 006	199 134 016	2.600							
1 1/2	40	10	1600	199 134 007	199 134 017	3.000							
2	50	10	3100	199 134 008	199 134 018	3.800							
2 1/2	65	10	5000	199 134 009	199 134 019	7.400							
3	80	10	7000	199 134 010	199 134 020	9.800							
4	100	10	11000	199 134 011	199 134 021	13.900							

Inch	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L7 [mm]	z [mm]		
3/8	50	231	27	64	94	167	92	180	56	25	97	122	60		
1/2	50	231	27	64	94	167	95	180	56	25	97	122	60		
3/4	58	240	30	73	94	167	110	180	65	25	97	122	69		
1	68	240	36	73	94	167	123	180	71	25	97	122	75		
1 1/4	84	251	44	84	94	167	146	180	85	45	97	122	89		
1 1/2	97	251	51	84	94	167	157	180	89	45	97	122	97		
2	124	273	64	106	94	167	183	180	101	45	97	122	110		
2 1/2	166	347	85	156	94	190	233	180	136	70	98	122	144		
3	200	358	105	168	94	190	254	180	141	70	98	122	151		
4	238	365	123	175	94	190	301	180	164	70	98	122	174		



DN10/15-50



DN65-100



DN10/15 - 50



## Ball valve type 134 PVC-U 24V With manual emergency override With solvent cement sockets Inch BS

### Model:

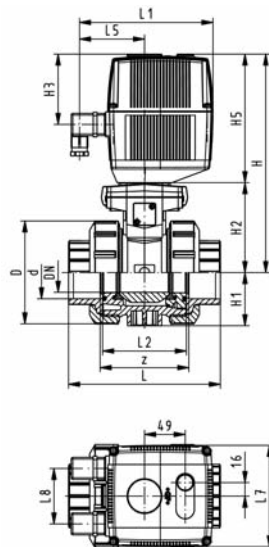
- Assignment of actuators: EA21 (DN10/15-50), EA31 (DN65-100 if available)
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Voltage 24 V AC/DC
- Control range 90°<
- Control time: EA21: 5s/90°<, EA31: 15s/90°<

### Option:

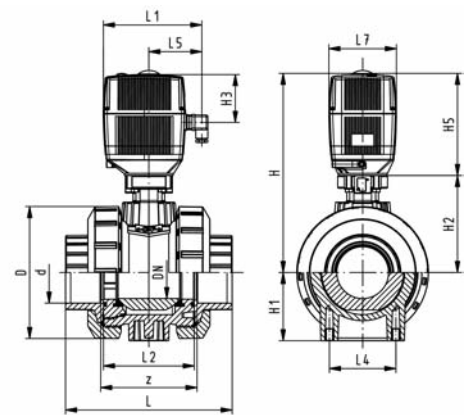
- Individual configuration of the valve (see diagram)

Inch	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
3/8	10	10	70	199 134 042	199 134 052	2.100
1/2	15	10	185	199 134 043	199 134 053	2.100
3/4	20	10	350	199 134 044	199 134 054	2.200
1	25	10	700	199 134 045	199 134 055	2.300
1 1/4	32	10	1000	199 134 046	199 134 056	2.600
1 1/2	40	10	1600	199 134 047	199 134 057	3.000
2	50	10	3100	199 134 048	199 134 058	3.800
2 1/2	65	10	5000	199 134 049	199 134 059	7.400
3	80	10	7000	199 134 050	199 134 060	9.800
4	100	10	11000	199 134 051	199 134 061	13.900

Inch	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L7 [mm]	z [mm]
3/8	50	231	27	64	94	167	92	180	56	25	97	122	60
1/2	50	231	27	64	94	167	95	180	56	25	97	122	60
3/4	58	240	30	73	94	167	110	180	65	25	97	122	69
1	68	240	36	73	94	167	123	180	71	25	97	122	75
1 1/4	84	251	44	84	94	167	146	180	85	45	97	122	89
1 1/2	97	251	51	84	94	167	157	180	89	45	97	122	97
2	124	273	64	106	94	167	183	180	101	45	97	122	110
2 1/2	166	346	85	156	94	190	233	180	136	70	98	122	144
3	200	358	105	168	94	190	254	180	141	70	98	122	151
4	238	365	123	175	94	190	301	180	164	120	98	122	174



DN10/15-50



DN65-100

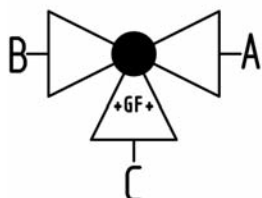


## 3-Way ball valve type 185 PVC-U Horizontal/L-port 100-230V With manual emergency override With solvent cement sockets BS



### Model:

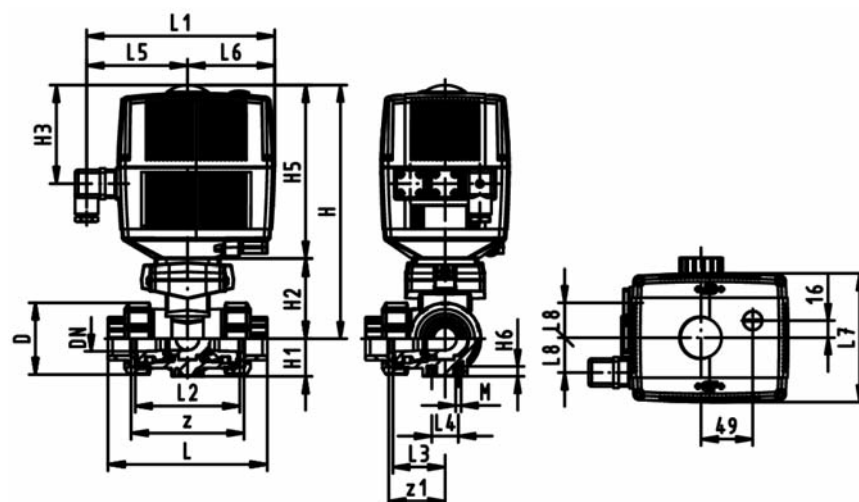
- Built on with electric actuator EA21
- Voltage 100-230 V, 50-60 Hz
- Control range 90°<
- Basic position A-C opened, activated position B-C opened, see flow scheme
- Other positions possible by adjusting the limit switches
- Control time 5 s/90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts



Inch	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
3/8	10	10	50	199 185 742	199 185 752	2.122
1/2	15	10	75	199 185 743	199 185 753	2.128
3/4	20	10	150	199 185 744	199 185 754	2.256
1	25	10	280	199 185 745	199 185 755	2.446
1 1/4	32	10	480	199 185 746	199 185 756	2.870
1 1/2	40	10	620	199 185 747	199 185 757	3.322
2	50	10	1230	199 185 748	199 185 758	4.683

Inch	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
3/8	50	231	28	64	94	167	8	109	180	73	36	25	97	83	122
1/2	50	231	28	64	94	167	8	112	180	73	36	25	97	83	122
3/4	58	240	32	73	94	167	8	131	180	86	43	25	97	83	122
1	68	240	36	73	94	167	8	151	180	99	50	25	97	83	122
1 1/4	84	251	45	84	94	167	9	181	180	120	60	45	97	83	122
1 1/2	97	251	51	84	94	167	9	205	180	137	69	45	97	83	122
2	124	273	65	106	94	167	9	261	180	179	89	45	97	83	122

Inch	L8 [mm]	M	z [mm]	z1 [mm]
3/8	33	6	77	38
1/2	33	6	77	38
3/4	33	6	90	45
1	33	6	103	52
1 1/4	33	8	124	62
1 1/2	33	8	145	73
2	33	8	189	94



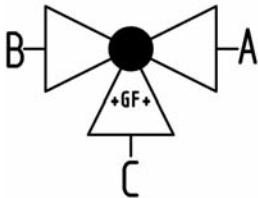




## 3-Way ball valve type 185 PVC-U Horizontal/L-port 24V With manual emergency override With solvent cement sockets BS

### Model:

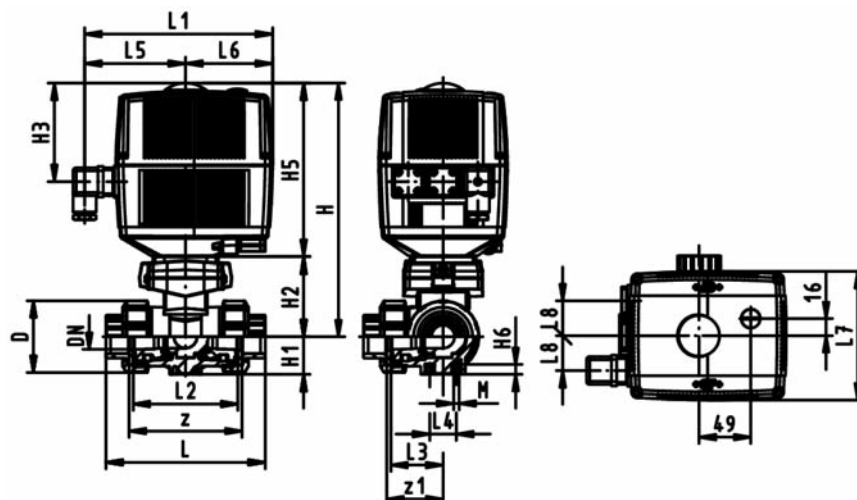
- Built on with electric actuator EA21
- Voltage 24 V AC/DC
- Control range 90°<
- Basic position A-C opened, activated position B-C opened, see flow scheme
- Other positions possible by adjusting the limit switches
- Control time 5 s/90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts



Inch	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
3/8	10	10	50	199 185 762	199 185 772	2.122
1/2	15	10	75	199 185 763	199 185 773	2.128
3/4	20	10	150	199 185 764	199 185 774	2.256
1	25	10	280	199 185 765	199 185 775	2.446
1 1/4	32	10	480	199 185 766	199 185 776	2.870
1 1/2	40	10	620	199 185 767	199 185 777	3.322
2	50	10	1230	199 185 768	199 185 778	4.683

Inch	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
3/8	50	231	28	64	94	167	8	109	180	73	36	25	97	83	122
1/2	50	231	28	64	94	167	8	112	180	73	36	25	97	83	122
3/4	58	240	32	73	94	167	8	131	180	86	43	25	97	83	122
1	68	240	36	73	94	167	8	151	180	99	50	25	97	83	122
1 1/4	84	251	45	84	94	167	9	181	180	120	60	45	97	83	122
1 1/2	97	251	51	84	94	167	9	205	180	137	69	45	97	83	122
2	124	273	65	106	94	167	9	261	180	179	89	45	97	83	122

Inch	L8 [mm]	M	z [mm]	z1 [mm]
3/8	33	6	77	38
1/2	33	6	77	38
3/4	33	6	90	45
1	33	6	103	52
1 1/4	33	8	124	62
1 1/2	33	8	145	73
2	33	8	189	94



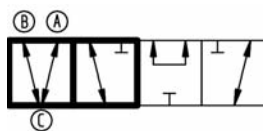
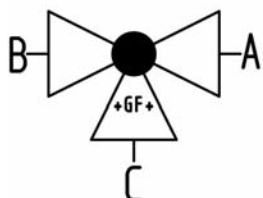


# 3-Way ball valve type 185 PVC-U Horizontal/T-port 100-230V With manual emergency override With solvent cement sockets BS



### Model:

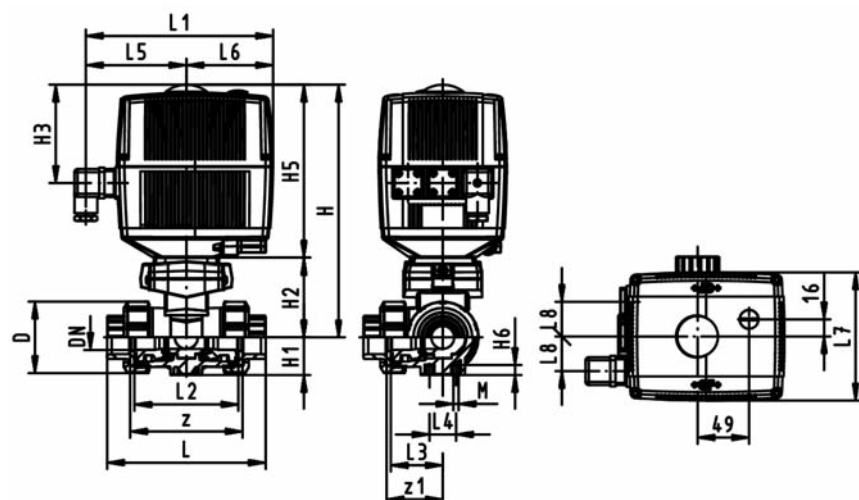
- Built on with electric actuator EA21
- Voltage 100-230 V, 50-60 Hz
- Control range 90°<
- Basic position A-B-C opened, activated position B-C opened, see flow scheme
- Other positions possible by adjusting the limit switches
- Control time 5 s/90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts



Inch	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
3/8	10	10	140	199 185 702	198 185 712	2.121
1/2	15	10	200	199 185 703	198 185 713	2.127
3/4	20	10	470	199 185 704	198 185 714	2.254
1	25	10	793	199 185 705	198 185 715	2.439
1 1/4	32	10	1290	199 185 706	198 185 716	2.859
1 1/2	40	10	1910	199 185 707	198 185 717	3.301
2	50	10	3100	199 185 708	198 185 718	4.638

Inch	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
3/8	50	231	28	64	94	167	8	109	180	73	36	25	97	83	122
1/2	50	231	28	64	94	167	8	112	180	73	36	25	97	83	122
3/4	58	240	32	73	94	167	8	131	180	86	43	25	97	83	122
1	68	240	36	73	94	167	8	151	180	99	50	25	97	83	122
1 1/4	84	251	45	84	94	167	9	181	180	120	60	45	97	83	122
1 1/2	97	251	51	84	94	167	9	205	180	137	69	45	97	83	122
2	124	273	65	106	94	167	9	261	180	179	89	45	97	83	122

Inch	L8 [mm]	M	z [mm]	z1 [mm]
3/8	33	6	77	38
1/2	33	6	77	38
3/4	33	6	90	45
1	33	6	103	52
1 1/4	33	8	124	62
1 1/2	33	8	145	73
2	33	8	189	94

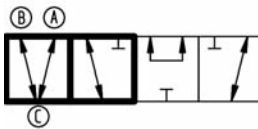
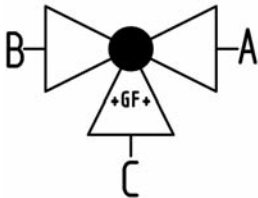




## 3-Way ball valve type 185 PVC-U Horizontal/T-port 24V With manual emergency override With solvent cement sockets BS

### Model:

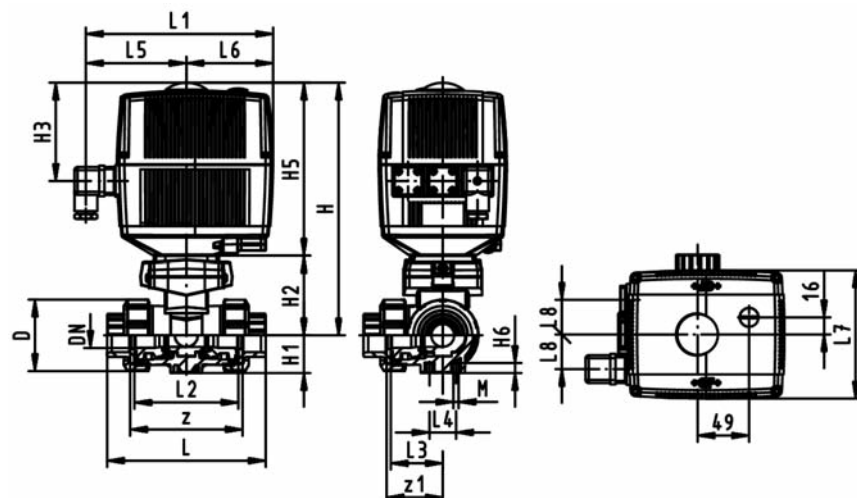
- Built on with electric actuator EA21
- Voltage 24 V AC/DC
- Control range 90°<
- Basic position A-B-C opened, activated position B-C opened, see flow scheme
- Other positions possible by adjusting the limit switches
- Control time 5 s/90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts



Inch	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
3/8	10	10	140	199 185 722	199 185 732	2.121
1/2	15	10	200	199 185 723	199 185 733	2.127
3/4	20	10	470	199 185 724	199 185 734	2.254
1	25	10	793	199 185 725	199 185 735	2.439
1 1/4	32	10	1290	199 185 726	199 185 736	2.859
1 1/2	40	10	1910	199 185 727	199 185 737	3.301
2	50	10	3100	199 185 728	199 185 738	4.638

Inch	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
3/8	50	231	28	64	94	167	8	109	180	73	36	25	97	83	122
1/2	50	231	28	64	94	167	8	112	180	73	36	25	97	83	122
3/4	58	240	32	73	94	167	8	131	180	86	43	25	97	83	122
1	68	240	36	73	94	167	8	151	180	99	50	25	97	83	122
1 1/4	84	251	45	84	94	167	9	181	180	120	60	45	97	83	122
1 1/2	97	251	51	84	94	167	9	205	180	137	69	45	97	83	122
2	124	273	65	106	94	167	9	261	180	179	89	45	97	83	122

Inch	L8 [mm]	M	z [mm]	z1 [mm]
3/8	33	6	77	38
1/2	33	6	77	38
3/4	33	6	90	45
1	33	6	103	52
1 1/4	33	8	124	62
1 1/2	33	8	145	73
2	33	8	189	94



# Ball valves electric ASTM/ANSI



DN10/15 - 50

## Ball valve type 107 PVC-U 100-230V With manual emergency override With solvent cement sockets Inch ASTM Inclusive 2 threaded valve ends NPT

### Model:

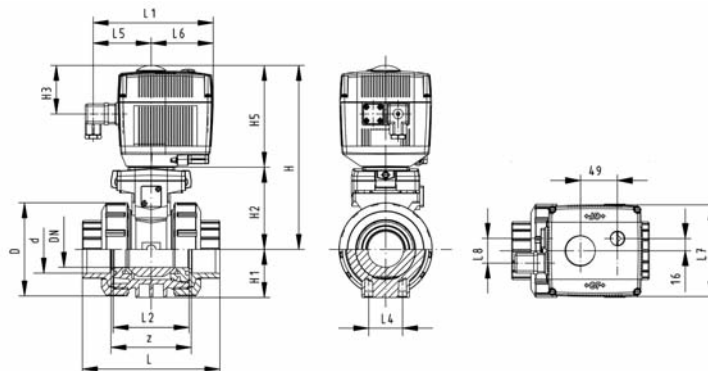
- Built on with electric actuator EA11
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Voltage 100-230 V, 50-60 Hz
- Control range 90°<
- Control time 5 s/90°<

### Option:

- Individual configuration of the valve (see diagram)

Inch	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
3/8	10	10	70	199 107 202	199 107 212	2.100
1/2	15	10	185	199 107 203	199 107 213	2.100
3/4	20	10	350	199 107 204	199 107 214	2.200
1	25	10	700	199 107 205	199 107 215	2.300
1 1/4	32	10	1000	199 107 206	199 107 216	2.600
1 1/2	40	10	1600	199 107 207	199 107 217	3.000
2	50	10	3100	199 107 208	199 107 218	3.800

Inch	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	L8 [mm]	z [mm]
3/8	50	200	27	64	64	137	105	161	56	25	77	83	122	33	67
1/2	50	200	27	64	64	137	105	161	56	25	77	83	122	33	61
3/4	58	209	30	73	64	137	121	161	65	25	77	83	122	33	70
1	68	209	36	73	64	137	133	161	71	25	77	83	122	33	76
1 1/4	84	220	44	84	64	137	154	161	85	45	77	83	122	33	90
1 1/2	97	220	51	84	64	137	164	161	89	45	77	83	122	33	94
2	124	243	64	106	64	137	183	161	101	45	77	83	122	33	107





DN10/15 - 50

**Ball valve type 133 PVC-U 100-230V**  
**With manual emergency override**  
**With solvent cement sockets Inch ASTM**  
**Inclusive 2 threaded valve ends NPT**

**Model:**

- For easy installation and removal
- Integrated stainless steel mounting inserts
- Voltage 100-230 V, 50-60 Hz
- Control range 90°<
- Assignment of actuators: EA21 (DN10/15-50), EA31 (DN65-100 if available)
- Control time: EA21: 5s/90°<, EA31: 15s/90°<
- Threaded valve ends are only enclosed for DN10/15-50

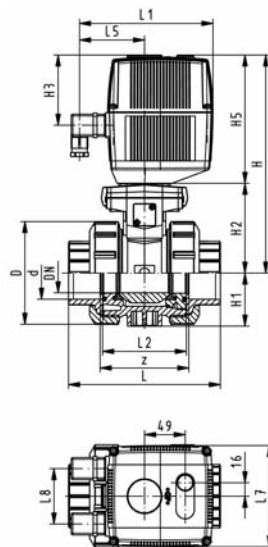
**Option:**

- Individual configuration of the valve (see diagram)

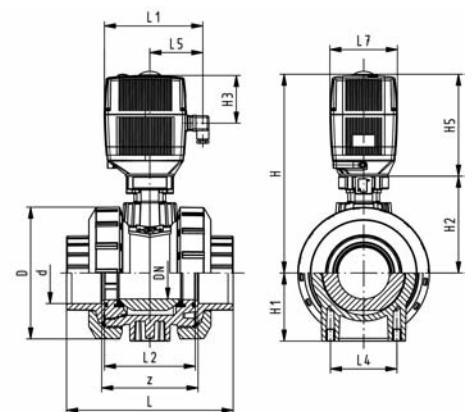


Inch	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
3/8	10	10	70	199 133 002	199 133 012	2.100
1/2	15	10	185	199 133 003	199 133 013	2.100
3/4	20	10	350	199 133 004	199 133 014	2.200
1	25	10	700	199 133 005	199 133 015	2.300
1 1/4	32	10	1000	199 133 006	199 133 016	2.600
1 1/2	40	10	1600	199 133 007	199 133 017	3.000
2	50	10	3100	199 133 008	199 133 018	3.800
2 1/2	65	10	5000	199 133 009	199 133 019	7.400
3	80	10	7000	199 133 010	199 133 020	9.800
4	100	10	11000	199 133 011	199 133 021	13.900

Inch	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L7 [mm]	z [mm]
3/8	50	231	27	64	94	167	105	180	56	25	97	122	67
1/2	50	231	27	64	94	167	105	180	56	25	97	122	61
3/4	58	240	30	73	94	167	121	180	65	25	97	122	70
1	68	240	36	73	94	167	133	180	71	25	97	122	76
1 1/4	84	251	44	84	94	167	154	180	85	45	97	122	90
1 1/2	97	251	51	84	94	167	164	180	89	45	97	122	94
2	124	273	64	106	94	167	183	180	101	45	97	122	107
2 1/2	166	346	85	156	94	190	233	180	136	70	98	122	144
3	200	358	105	168	94	190	254	180	141	70	98	122	151
4	238	365	123	175	94	190	301	180	164	120	98	122	174



DN10/15-50



DN65-100



DN10/15 - 50

**Ball valve type 133 PVC-U 24V**  
**With manual emergency override**  
**With solvent cement sockets Inch ASTM**  
**Inclusive 2 threaded valve ends NPT**

**Model:**

- For easy installation and removal
- Integrated stainless steel mounting inserts
- Voltage 24 V AC/DC
- Control range 90°<
- Threaded valve ends are only enclosed for DN10/15-50
- Assignment of actuators: EA21 (DN10/15-50), EA31 (DN65-100 if available)
- Control time: EA21: 5s/90°<, EA31: 15s/90°<

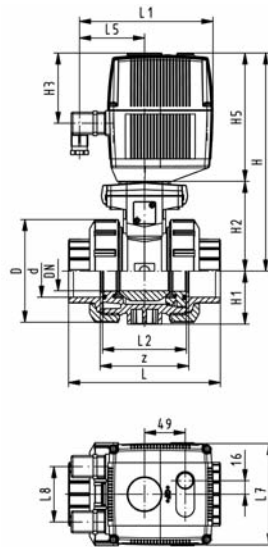
**Option:**

- Individual configuration of the valve (see diagram)

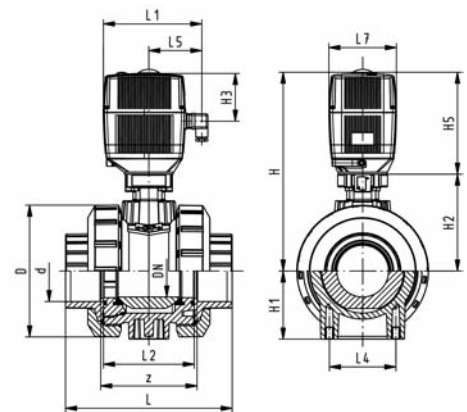


Inch	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
3/8	10	10	70	199 133 022	199 133 032	2.100
1/2	15	10	185	199 133 023	199 133 033	2.100
3/4	20	10	350	199 133 024	199 133 034	2.200
1	25	10	700	199 133 025	199 133 035	2.300
1 1/4	32	10	1000	199 133 026	199 133 036	2.600
1 1/2	40	10	1600	199 133 027	199 133 037	3.000
2	50	10	3100	199 133 028	199 133 038	3.800
2 1/2	65	10	5000	199 133 029	199 133 039	7.400
3	80	10	7000	199 133 030	199 133 040	9.800
4	100	10	11000	199 133 031	199 133 041	13.900

Inch	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L7 [mm]	z [mm]
3/8	50	231	27	64	94	167	105	180	56	25	97	122	67
1/2	50	231	27	64	94	167	105	180	56	25	97	122	61
3/4	58	240	30	73	94	167	121	180	65	25	97	122	70
1	68	240	36	73	94	167	133	180	71	25	97	122	76
1 1/4	84	251	44	84	94	167	154	180	85	45	97	122	90
1 1/2	97	251	51	84	94	167	164	180	89	45	97	122	94
2	124	273	64	106	94	167	183	180	101	45	97	122	107
2 1/2	166	347	85	156	94	190	233	180	136	70	98	122	144
3	200	358	105	168	94	190	254	180	141	70	98	122	151
4	238	365	123	175	94	190	301	180	164	120	98	122	174



DN10/15-50



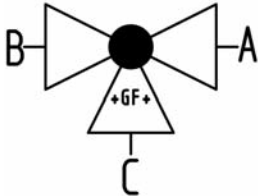
DN65-100



## 3-Way ball valve type 185 PVC-U Horizontal/L-port 100-230V With manual emergency override With solvent cement sockets ASTM

### Model:

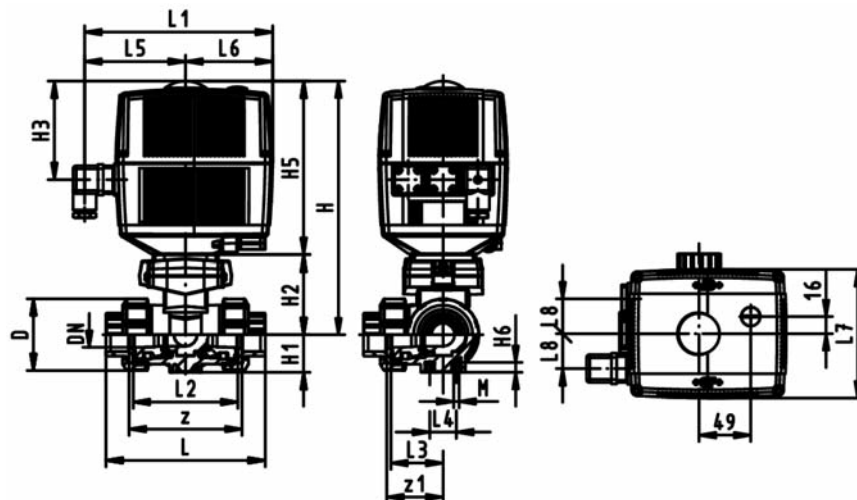
- Built on with electric actuator EA21
- Voltage 100-230 V, 50-60 Hz
- Control range 90°<
- Basic position A-C opened, activated position B-C opened, see flow scheme
- Other positions possible by adjusting the limit switches
- Control time 5 s/90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts



Inch	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
3/8	10	10	50	199 185 382	199 185 392	2.122
1/2	15	10	75	199 185 383	199 185 393	2.128
3/4	20	10	150	199 185 384	199 185 394	2.256
1	25	10	280	199 185 385	199 185 395	2.446
1 1/4	32	10	480	199 185 386	199 185 396	2.870
1 1/2	40	10	620	199 185 387	199 185 397	3.322
2	50	10	1230	199 185 388	199 185 398	4.683

Inch	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
3/8	50	231	28	64	94	167	8	123	180	73	36	25	97	83	122
1/2	50	231	28	64	94	167	8	122	180	73	36	25	97	83	122
3/4	58	240	32	73	94	167	8	141	180	86	43	25	97	83	122
1	68	240	36	73	94	167	8	161	180	99	50	25	97	83	122
1 1/4	84	251	45	84	94	167	9	187	180	120	60	45	97	83	122
1 1/2	97	251	51	84	94	167	9	213	180	137	69	45	97	83	122
2	124	273	65	106	94	167	9	261	180	179	89	45	97	83	122

Inch	L8 [mm]	M	z [mm]	z1 [mm]
3/8	33	6	85	42
1/2	33	6	77	38
3/4	33	6	92	46
1	33	6	105	53
1 1/4	33	8	126	63
1 1/2	33	8	143	72
2	33	8	185	92



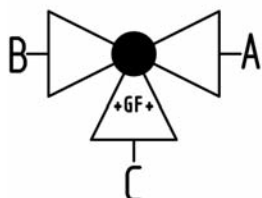


## 3-Way ball valve type 185 PVC-U Horizontal/L-port 100-230V With manual emergency override With threaded sockets NPT



### Model:

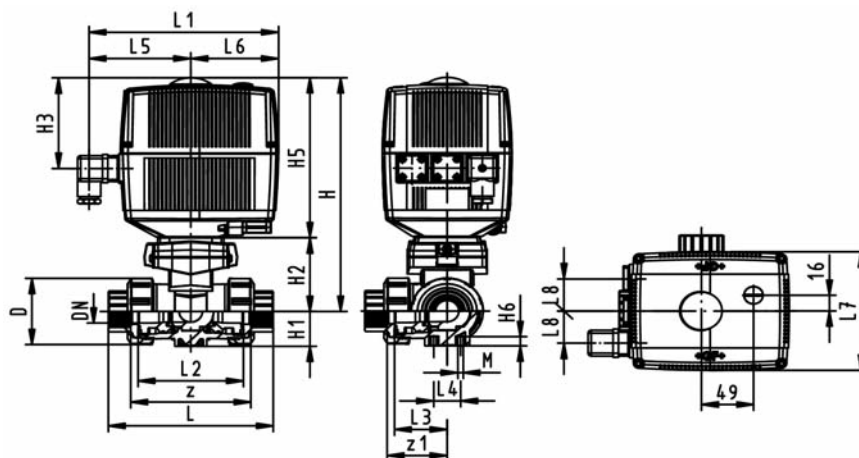
- Built on with electric actuator EA21
- Voltage 100-230 V, 50-60 Hz
- Control range 90°<
- Basic position A-C opened, activated position B-C opened, see flow scheme
- Other positions possible by adjusting the limit switches
- Control time 5 s/90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts



NPT [inch]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
3/8	10	10	50	199 185 362	199 185 372	2.122
1/2	15	10	75	199 185 363	199 185 373	2.128
3/4	20	10	150	199 185 364	199 185 374	2.256
1	25	10	280	199 185 365	199 185 375	2.446
1 1/4	32	10	480	199 185 366	199 185 376	2.870
1 1/2	40	10	620	199 185 367	199 185 377	3.322
2	50	10	1230	199 185 368	199 185 378	4.683

NPT [inch]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
3/8	50	231	28	64	94	167	8	115	180	73	36	25	97	83	122
1/2	50	231	28	64	94	167	8	114	180	73	36	25	97	83	122
3/4	58	240	32	73	94	167	8	131	180	86	43	25	97	83	122
1	68	240	36	73	94	167	8	155	180	99	50	25	97	83	122
1 1/4	84	251	45	84	94	167	9	181	180	120	60	45	97	83	122
1 1/2	97	251	51	84	94	167	9	205	180	137	69	45	97	83	122
2	124	273	65	106	94	167	9	261	180	179	89	45	97	83	122

NPT [inch]	L8 [mm]	M	z [mm]	z1 [mm]
3/8	33	6	87	43
1/2	33	6	81	40
3/4	33	6	96	48
1	33	6	111	56
1 1/4	33	8	134	67
1 1/2	33	8	159	80
2	33	8	213	106



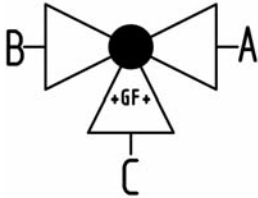




## 3-Way ball valve type 185 PVC-U Horizontal/L-port 24V With manual emergency override With solvent cement sockets ASTM

### Model:

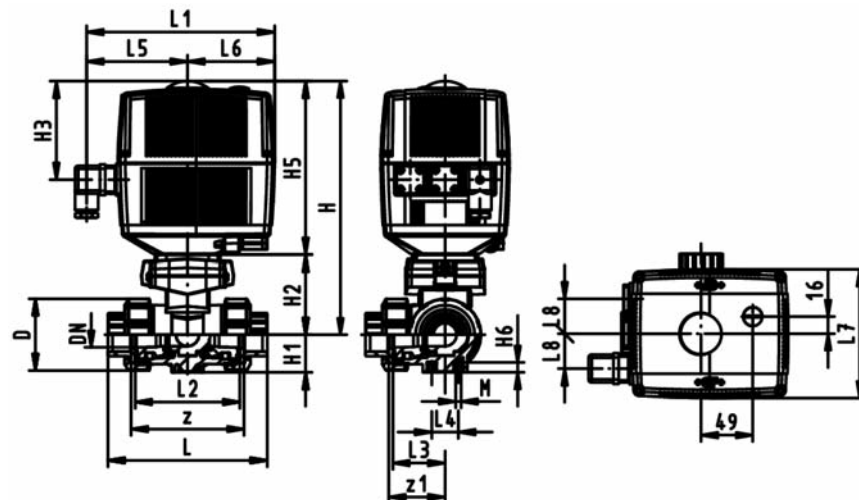
- Built on with electric actuator EA21
- Voltage 24 V AC/DC
- Control range 90°<
- Basic position A-C opened, activated position B-C opened, see flow scheme
- Other positions possible by adjusting the limit switches
- Control time 5 s/90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts



Inch	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
3/8	10	10	50	199 185 542	199 185 552	2.122
1/2	15	10	75	199 185 543	199 185 553	2.128
3/4	20	10	150	199 185 544	199 185 554	2.256
1	25	10	280	199 185 545	199 185 555	2.446
1 1/4	32	10	480	199 185 546	199 185 556	2.870
1 1/2	40	10	620	199 185 547	199 185 557	3.322
2	50	10	1230	199 185 548	199 185 558	4.683

Inch	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
3/8	50	231	28	64	94	167	8	123	180	73	36	25	97	83	122
1/2	50	231	28	64	94	167	8	122	180	73	36	25	97	83	122
3/4	58	240	32	73	94	167	8	141	180	86	43	25	97	83	122
1	68	240	36	73	94	167	8	161	180	99	50	25	97	83	122
1 1/4	84	251	45	84	94	167	9	187	180	120	60	45	97	83	122
1 1/2	97	251	51	84	94	167	9	213	180	137	69	45	97	83	122
2	124	273	65	106	94	167	9	261	180	179	89	45	97	83	122

Inch	L8 [mm]	M	z [mm]	z1 [mm]
3/8	33	6	85	42
1/2	33	6	77	38
3/4	33	6	92	46
1	33	6	105	53
1 1/4	33	8	126	63
1 1/2	33	8	143	72
2	33	8	185	92



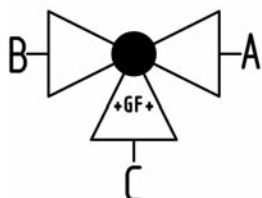


## 3-Way ball valve type 185 PVC-U Horizontal/L-port 24V With manual emergency override With threaded sockets NPT



### Model:

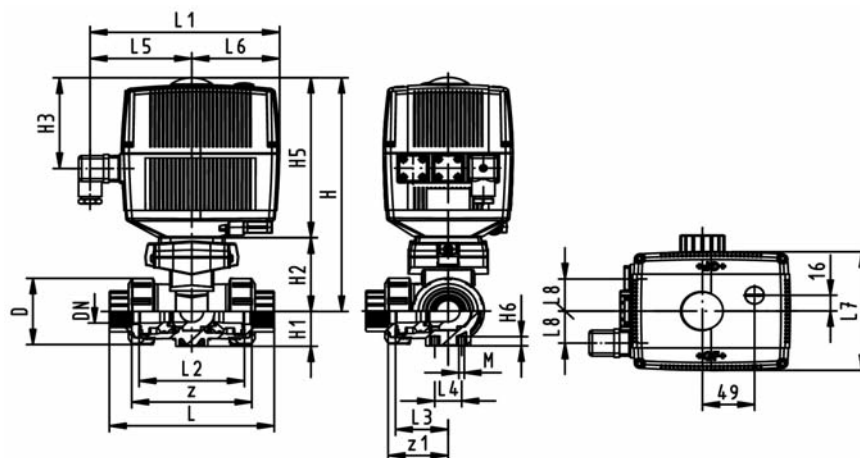
- Built on with electric actuator EA21
- Voltage 24 V AC/DC
- Control range 90°<
- Basic position A-C opened, activated position B-C opened, see flow scheme
- Other positions possible by adjusting the limit switches
- Control time 5 s/90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts



NPT [inch]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
3/8	10	10	50	199 185 522	199 185 532	2.122
1/2	15	10	75	199 185 523	199 185 533	2.128
3/4	20	10	150	199 185 524	199 185 534	2.256
1	25	10	280	199 185 525	199 185 535	2.446
1 1/4	32	10	480	199 185 526	199 185 536	2.870
1 1/2	40	10	620	199 185 527	199 185 537	3.322
2	50	10	1230	199 185 528	199 185 538	4.683

NPT [inch]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
3/8	50	231	28	64	94	167	8	115	180	73	36	25	97	83	122
1/2	50	231	28	64	94	167	8	114	180	73	36	25	97	83	122
3/4	58	240	32	73	94	167	8	131	180	86	43	25	97	83	122
1	68	240	36	73	94	167	8	155	180	99	50	25	97	83	122
1 1/4	84	251	45	84	94	167	9	181	180	120	60	45	97	83	122
1 1/2	97	251	51	84	94	167	9	205	180	137	69	45	97	83	122
2	124	273	65	106	94	167	9	261	180	179	89	45	97	83	122

NPT [inch]	L8 [mm]	M	z [mm]	z1 [mm]
3/8	33	6	87	43
1/2	33	6	81	40
3/4	33	6	96	48
1	33	6	111	56
1 1/4	33	8	134	67
1 1/2	33	8	159	80
2	33	8	213	106

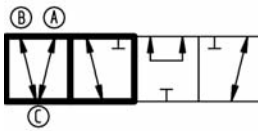
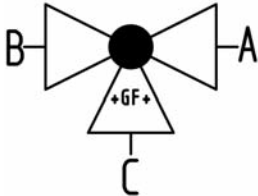




**3-Way ball valve type 185 PVC-U  
Horizontal/T-port 100-230V  
With manual emergency override  
With solvent cement sockets ASTM**

**Model:**

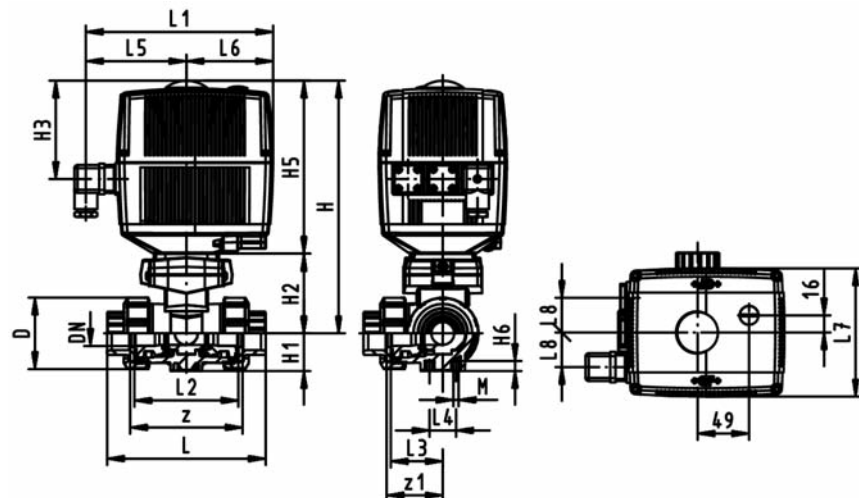
- Built on with electric actuator EA21
- Voltage 100-230 V, 50-60 Hz
- Control range 90°<
- Basic position A-B-C opened, activated position B-C opened, see flow scheme
- Other positions possible by adjusting the limit switches
- Control time 5 s/90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts



Inch	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
3/8	10	10	140	199 185 422	199 185 432	2.121
1/2	15	10	200	199 185 423	199 185 433	2.127
3/4	20	10	470	199 185 424	199 185 434	2.254
1	25	10	793	199 185 425	199 185 435	2.439
1 1/4	32	10	1290	199 185 426	199 185 436	2.859
1 1/2	40	10	1910	199 185 427	199 185 437	3.301
2	50	10	3100	199 185 428	199 185 438	4.638

Inch	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
3/8	50	231	28	64	94	167	8	123	180	73	36	25	97	83	122
1/2	50	231	28	64	94	167	8	122	180	73	36	25	97	83	122
3/4	58	240	32	73	94	167	8	141	180	86	43	25	97	83	122
1	68	240	36	73	94	167	8	161	180	99	50	25	97	83	122
1 1/4	84	251	45	84	94	167	9	187	180	120	60	45	97	83	122
1 1/2	97	251	51	84	94	167	9	213	180	137	69	45	97	83	122
2	124	273	65	106	94	167	9	261	180	179	89	45	97	83	122

Inch	L8 [mm]	M	z [mm]	z1 [mm]
3/8	33	6	85	42
1/2	33	6	77	38
3/4	33	6	92	46
1	33	6	105	53
1 1/4	33	8	126	63
1 1/2	33	8	143	72
2	33	8	185	92



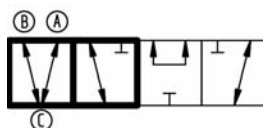
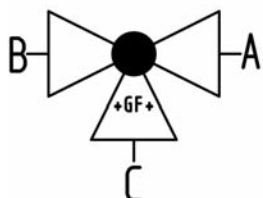


## 3-Way ball valve type 185 PVC-U Horizontal/T-port 100-230V With manual emergency override With threaded sockets NPT



### Model:

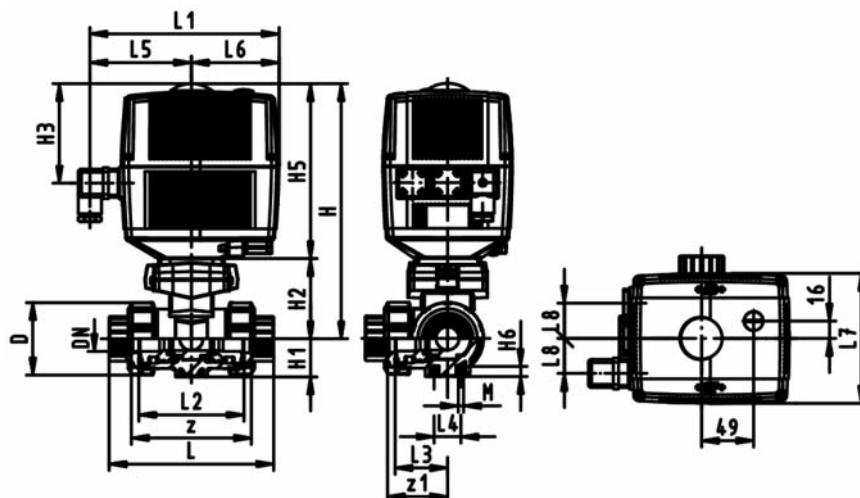
- Built on with electric actuator EA21
- Voltage 100-230 V, 50-60 Hz
- Control range 90°<
- Basic position A-B-C opened, activated position B-C opened, see flow scheme
- Other positions possible by adjusting the limit switches
- Control time 5 s/90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts



NPT [inch]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
3/8	10	10	140	199 185 402	199 185 412	2.121
1/2	15	10	200	199 185 403	199 185 413	2.127
3/4	20	10	470	199 185 404	199 185 414	2.254
1	25	10	793	199 185 405	199 185 415	2.439
1 1/4	32	10	1290	199 185 406	199 185 416	2.859
1 1/2	40	10	1910	199 185 407	199 185 417	3.301
2	50	10	3100	199 185 408	199 185 418	4.638

NPT [inch]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
3/8	50	231	28	64	94	167	8	115	180	73	36	25	97	83	122
1/2	50	231	28	64	94	167	8	114	180	73	36	25	97	83	122
3/4	58	240	32	73	94	167	8	131	180	86	43	25	97	83	122
1	68	240	36	73	94	167	8	155	180	99	50	25	97	83	122
1 1/4	84	251	45	84	94	167	9	181	180	120	60	45	97	83	122
1 1/2	97	251	51	84	94	167	9	205	180	137	69	45	97	83	122
2	124	273	65	106	94	167	9	261	180	179	89	45	97	83	122

NPT [inch]	L8 [mm]	M	z [mm]	z1 [mm]
3/8	33	6	87	43
1/2	33	6	81	40
3/4	33	6	96	48
1	33	6	111	56
1 1/4	33	8	134	67
1 1/2	33	8	159	80
2	33	8	213	106

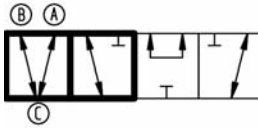
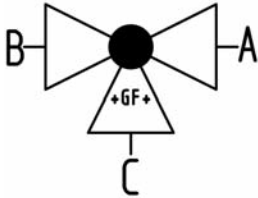




## 3-Way ball valve type 185 PVC-U Horizontal/T-port 24V With manual emergency override With solvent cement sockets ASTM

### Model:

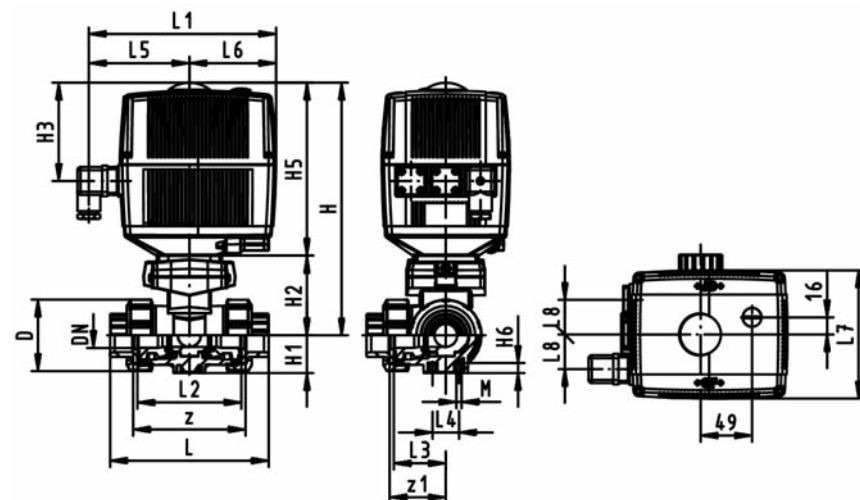
- Built on with electric actuator EA21
- Voltage 24 V AC/DC
- Control range 90°<
- Basic position A-B-C opened, activated position B-C opened, see flow scheme
- Other positions possible by adjusting the limit switches
- Control time 5 s/90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts



Inch	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
3/8	10	10	140	199 185 582	199 185 592	2.121
1/2	15	10	200	199 185 583	199 185 593	2.127
3/4	20	10	470	199 185 584	199 185 594	2.254
1	25	10	793	199 185 585	199 185 595	2.439
1 1/4	32	10	1290	199 185 586	199 185 596	2.859
1 1/2	40	10	1910	199 185 587	199 185 597	3.301
2	50	10	3100	199 185 588	199 185 598	4.638

Inch	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
3/8	50	231	28	64	94	167	8	123	180	73	36	25	97	83	122
1/2	50	231	28	64	94	167	8	122	180	73	36	25	97	83	122
3/4	58	240	32	73	94	167	8	141	180	86	43	25	97	83	122
1	68	240	36	73	94	167	8	161	180	99	50	25	97	83	122
1 1/4	84	251	45	84	94	167	9	187	180	120	60	45	97	83	122
1 1/2	97	251	51	84	94	167	9	213	180	137	69	45	97	83	122
2	124	273	65	106	94	167	9	261	180	179	89	45	97	83	122

Inch	L8 [mm]	M	z [mm]	z1 [mm]
3/8	33	6	85	42
1/2	33	6	77	38
3/4	33	6	92	46
1	33	6	105	53
1 1/4	33	8	126	63
1 1/2	33	8	143	72
2	33	8	185	92



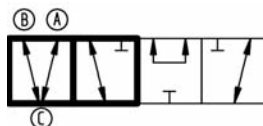
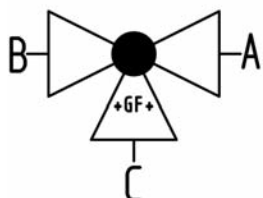


# 3-Way ball valve type 185 PVC-U Horizontal/T-port 24V With manual emergency override With threaded sockets NPT



### Model:

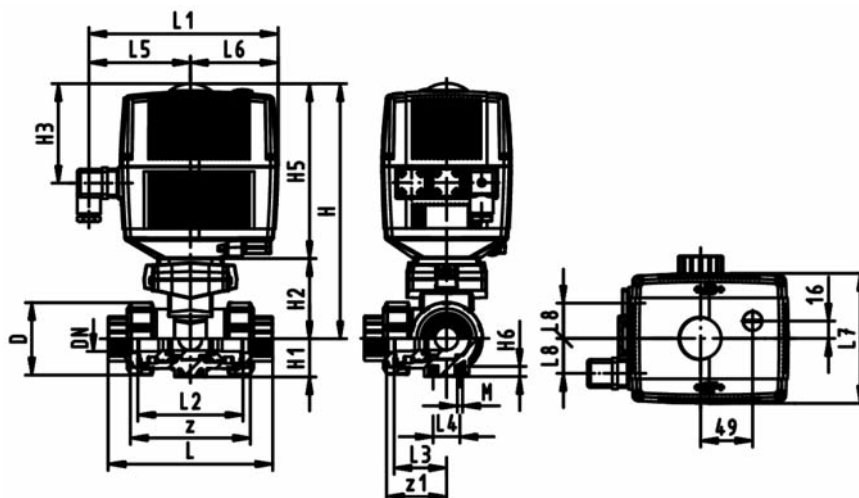
- Built on with electric actuator EA21
- Voltage 24 V AC/DC
- Control range 90°<
- Basic position A-B-C opened, activated position B-C opened, see flow scheme
- Other positions possible by adjusting the limit switches
- Control time 5 s/90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts



NPT [inch]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
3/8	10	10	140	199 185 562	199 185 572	2.121
1/2	15	10	200	199 185 563	199 185 573	2.127
3/4	20	10	470	199 185 564	199 185 574	2.254
1	25	10	793	199 185 565	199 185 575	2.439
1 1/4	32	10	1290	199 185 566	199 185 576	2.859
1 1/2	40	10	1910	199 185 567	199 185 577	3.301
2	50	10	3100	199 185 568	199 185 578	4.638

NPT [inch]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
3/8	50	231	28	64	94	167	8	115	180	73	36	25	97	83	122
1/2	50	231	28	64	94	167	8	114	180	73	36	25	97	83	122
3/4	58	240	32	73	94	167	8	131	180	86	43	25	97	83	122
1	68	240	36	73	94	167	8	155	180	99	50	25	97	83	122
1 1/4	84	251	45	84	94	167	9	181	180	120	60	45	97	83	122
1 1/2	97	251	51	84	94	167	9	205	180	137	69	45	97	83	122
2	124	273	65	106	94	167	9	261	180	179	89	45	97	83	122

NPT [inch]	L8 [mm]	M	z [mm]	z1 [mm]
3/8	33	6	87	43
1/2	33	6	81	40
3/4	33	6	96	48
1	33	6	111	56
1 1/4	33	8	134	67
1 1/2	33	8	159	80
2	33	8	213	106



# Ball valves pneumatic metric

## Ball valve type 230 PVC-U FC (Fail safe to close) With manual override With solvent cement sockets metric



DN10/15 - 50

### Model:

- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90°< 1-2 s

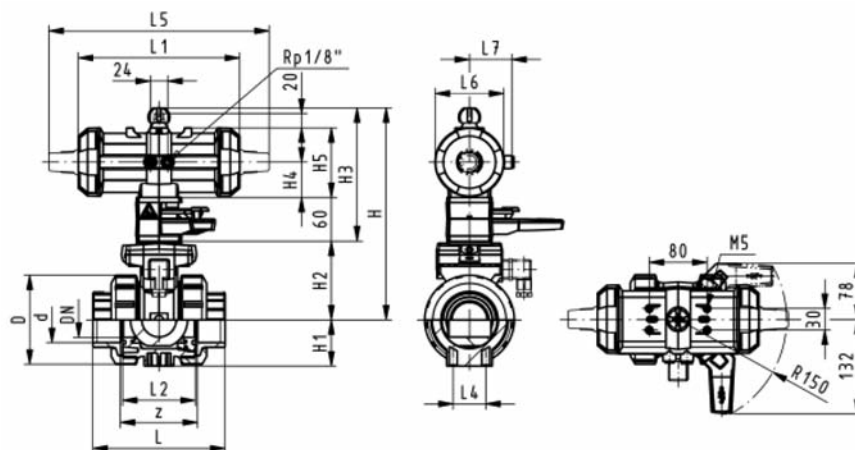
### Option:

- Individual configuration of the valve (see diagram)

d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	70	199 230 002	199 230 012	1.459
20	15	10	185	199 230 003	199 230 013	1.459
25	20	10	350	199 230 004	199 230 014	1.576
32	25	10	700	199 230 005	199 230 015	1.700
40	32	10	1000	199 230 006	199 230 016	2.751
50	40	10	1600	199 230 007	199 230 017	3.073
63	50	10	3100	199 230 008	199 230 018	3.931

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	z [mm]
16	50	159	27	62	168	40	77	92	194	56	25	261	76	48	64
20	50	159	27	62	168	40	77	95	194	56	25	261	76	48	64
25	58	168	30	71	168	40	77	110	194	65	25	261	76	48	72
32	68	168	36	71	168	40	77	123	194	71	25	261	76	48	79
40	84	202	44	84	187	51	99	146	224	85	45	305	95	59	94
50	97	202	51	84	187	51	99	157	224	89	45	305	95	59	95
63	124	225	64	106	187	51	99	183	224	101	45	305	95	59	107

d [mm]	closest inch
16	3/8
20	1/2
25	3/4
32	1
40	1 1/4
50	1 1/2
63	2





DN10/15 - 50

## Ball valve type 230 PVC-U FC (Fail safe to close) With manual override With solvent cement spigots metric

### Model:

- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90° < 1-2 s

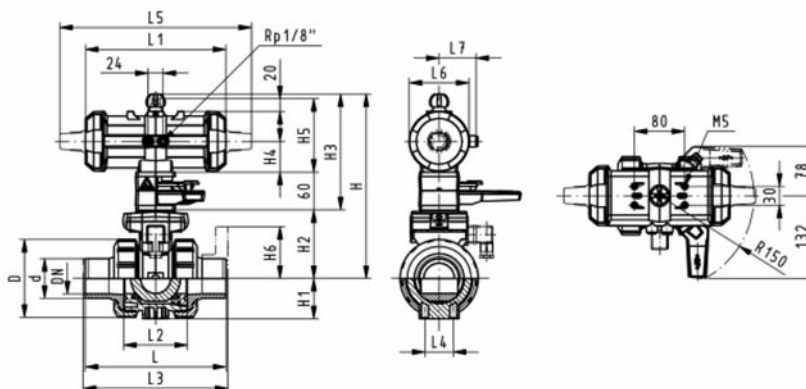
### Option:

- Individual configuration of the valve (see diagram)

d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	70	199 230 022	199 230 032	1.459
20	15	10	185	199 230 023	199 230 033	1.459
25	20	10	350	199 230 024	199 230 034	1.576
32	25	10	700	199 230 025	199 230 035	1.700
40	32	10	1000	199 230 026	199 230 036	2.751
50	40	10	1600	199 230 027	199 230 037	3.073
63	50	10	3100	199 230 028	199 230 038	3.931

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
16	50	159	27	62	168	40	77	114	194	56	130	25	261	76	48
20	50	159	27	62	168	40	77	124	194	56	130	25	261	76	48
25	58	168	30	71	168	40	77	144	194	65	150	25	261	76	48
32	68	168	36	71	168	40	77	154	194	71	160	25	261	76	48
40	84	202	44	84	187	51	99	174	224	85	180	45	305	95	59
50	97	202	51	84	187	51	99	194	224	89	200	45	305	95	59
63	124	225	64	106	187	51	99	224	224	101	230	45	305	95	59

d [mm]	closest inch
16	3/8
20	1/2
25	3/4
32	1
40	1 1/4
50	1 1/2
63	2







DN10/15 - 50

## Ball valve type 230 PVC-U FC (Fail safe to close) With manual override With threaded sockets Rp

### Model:

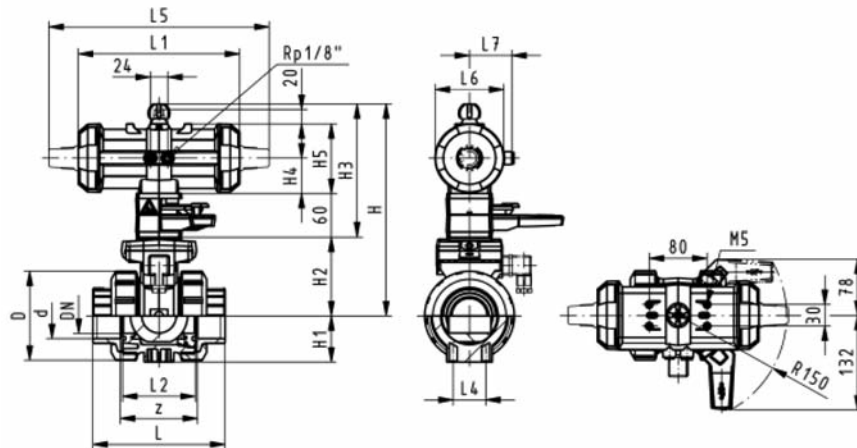
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90°< 1-2 s

### Option:

- Individual configuration of the valve (see diagram)

Rp [inch]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
3/8	10	10	70	199 230 362	199 230 372	1.500
1/2	15	10	185	199 230 363	199 230 373	1.500
3/4	20	10	350	199 230 364	199 230 374	1.600
1	25	10	700	199 230 365	199 230 375	1.700
1 1/4	32	10	1000	199 230 366	199 230 376	2.800
1 1/2	40	10	1600	199 230 367	199 230 377	3.100
2	50	10	3100	199 230 368	199 230 378	4.000

Rp [inch]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	z [mm]
3/8	50	159	27	62	168	40	77	92	194	56	25	261	76	48	64
1/2	50	159	27	62	168	40	77	95	194	56	25	261	76	48	64
3/4	58	168	30	71	168	40	77	110	194	65	25	261	76	48	72
1	68	168	36	71	168	40	77	123	194	71	25	261	76	48	79
1 1/4	84	202	44	84	187	51	99	146	224	85	45	305	95	59	94
1 1/2	97	202	51	84	187	51	99	157	224	89	45	305	95	59	95
2	124	225	64	106	187	51	99	183	224	101	45	305	95	59	107





DN10/15 - 50

## Ball valve type 230 PVC-U FC (Fail safe to close) With manual override With fixed flanges serrated metric

### Model:

- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time  $90^\circ <$  1-2 s
- Overall length according to EN 558
- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504

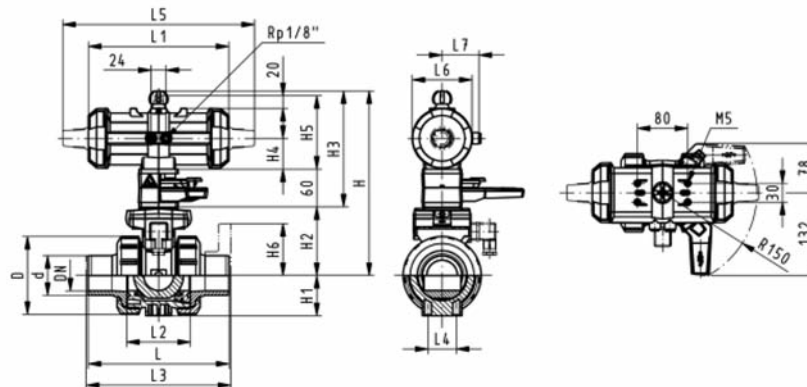
### Option:

- Individual configuration of the valve (see diagram)

d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
20	15	½	10	185	<b>199 230 243</b>	<b>199 230 253</b>	1.700
25	20	¾	10	350	<b>199 230 244</b>	<b>199 230 254</b>	1.900
32	25	1	10	700	<b>199 230 245</b>	<b>199 230 255</b>	2.100
40	32	1 ¼	10	1000	<b>199 230 246</b>	<b>199 230 256</b>	3.400
50	40	1 ½	10	1600	<b>199 230 247</b>	<b>199 230 257</b>	3.800
63	50	2	10	3100	<b>199 230 248</b>	<b>199 230 258</b>	4.900

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]
20	50	159	27	62	168	40	77	48	124	194	56	130	25	261	76
25	58	168	30	71	168	40	77	53	144	194	65	150	25	261	76
32	68	168	36	71	168	40	77	58	154	194	71	160	25	261	76
40	84	202	44	84	187	51	99	70	174	224	85	180	45	305	95
50	97	202	51	84	187	51	99	75	194	224	89	200	45	305	95
63	124	225	64	106	187	51	99	83	224	224	101	230	45	305	95

d [mm]	L7 [mm]
20	48
25	48
32	48
40	59
50	59
63	59





DN10/15 - 50

## Ball valve type 230 PVC-U FO (Fail safe to open) With manual override With solvent cement sockets metric

### Model:

- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90°< 1-2 s

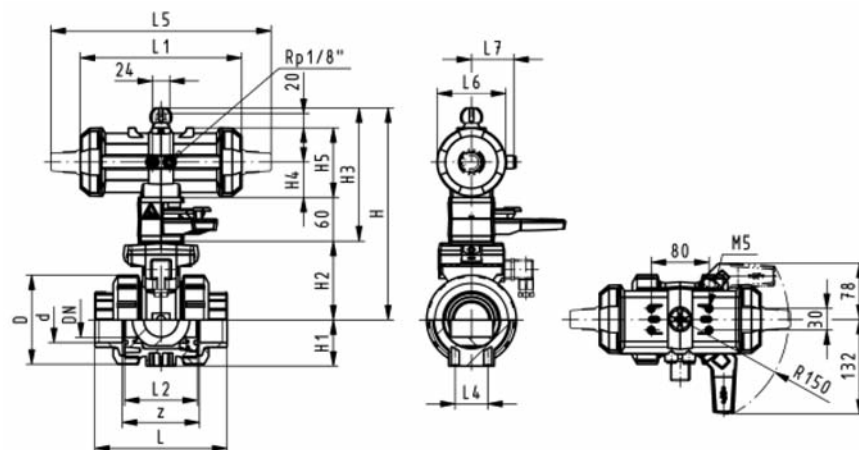
### Option:

- Individual configuration of the valve (see diagram)

d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	70	199 230 042	199 230 052	1.459
20	15	10	185	199 230 043	199 230 053	1.459
25	20	10	350	199 230 044	199 230 054	1.576
32	25	10	700	199 230 045	199 230 055	1.700
40	32	10	1000	199 230 046	199 230 056	2.751
50	40	10	1600	199 230 047	199 230 057	3.073
63	50	10	3100	199 230 048	199 230 058	3.931

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	z [mm]
16	50	159	27	62	168	40	77	92	194	56	25	261	76	48	64
20	50	159	27	62	168	40	77	95	194	56	25	261	76	48	64
25	58	168	30	71	168	40	77	110	194	65	25	261	76	48	72
32	68	168	36	71	168	40	77	123	194	71	25	261	76	48	79
40	84	202	44	84	187	51	99	146	224	85	45	305	95	59	94
50	97	202	51	84	187	51	99	157	224	89	45	305	95	59	95
63	124	225	64	106	187	51	99	183	224	101	45	305	95	59	107

d [mm]	closest inch
16	3/8
20	1/2
25	3/4
32	1
40	1 1/4
50	1 1/2
63	2





DN10/15 - 50

## Ball valve type 230 PVC-U FO (Fail safe to open) With manual override With solvent cement spigots metric

### Model:

- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90° < 1-2 s

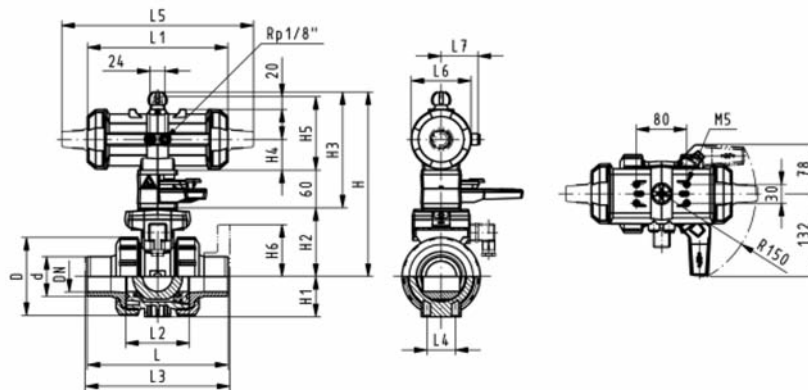
### Option:

- Individual configuration of the valve (see diagram)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	70	199 230 062	199 230 072	1.459
20	15	10	185	199 230 063	199 230 073	1.459
25	20	10	350	199 230 064	199 230 074	1.576
32	25	10	700	199 230 065	199 230 075	1.700
40	32	10	1000	199 230 066	199 230 076	2.751
50	40	10	1600	199 230 067	199 230 077	3.073
63	50	10	3100	199 230 068	199 230 078	3.931

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
16	50	159	27	62	168	40	77	114	194	56	130	25	261	76	48
20	50	159	27	62	168	40	77	124	194	56	130	25	261	76	48
25	58	168	30	71	168	40	77	144	194	65	150	25	261	76	48
32	68	168	36	71	168	40	77	154	194	71	160	25	261	76	48
40	84	202	44	84	187	51	99	174	224	85	180	45	305	95	59
50	97	202	51	84	187	51	99	194	224	89	200	45	305	95	59
63	124	225	64	106	187	51	99	224	224	101	230	45	305	95	59

d [mm]	closest inch
16	3/8
20	1/2
25	3/4
32	1
40	1 1/4
50	1 1/2
63	2





DN10/15 - 50

## Ball valve type 230 PVC-U FO (Fail safe to open) With manual override With threaded sockets Rp

### Model:

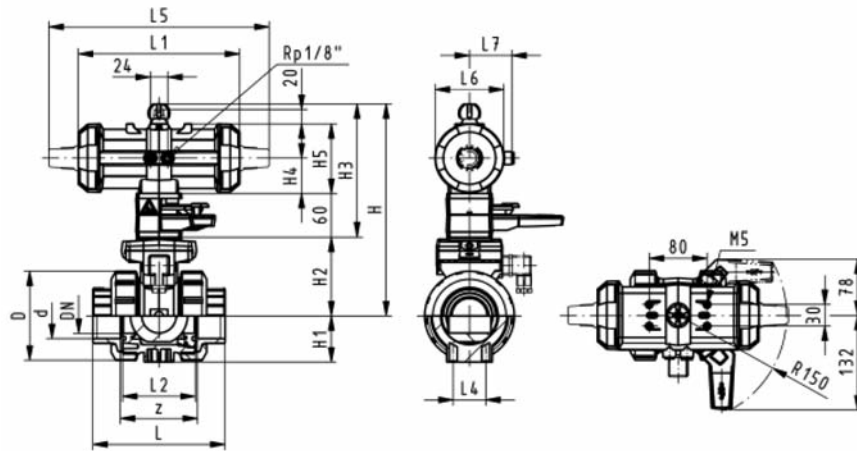
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time  $90^\circ <$  1-2 s

### Option:

- Individual configuration of the valve (see diagram)

Rp [inch]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
3/8	10	10	70	199 230 382	199 230 392	1.500
1/2	15	10	185	199 230 383	199 230 393	1.500
3/4	20	10	350	199 230 384	199 230 394	1.600
1	25	10	700	199 230 385	199 230 395	1.700
1 1/4	32	10	1000	199 230 386	199 230 396	2.800
1 1/2	40	10	1600	199 230 387	199 230 397	3.100
2	50	10	3100	199 230 388	199 230 398	4.000

Rp [inch]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	z [mm]
3/8	50	159	27	62	168	40	77	92	194	56	25	261	76	48	64
1/2	50	159	27	62	168	40	77	95	194	56	25	261	76	48	64
3/4	58	168	30	71	168	40	77	110	194	65	25	261	76	48	72
1	68	168	36	71	168	40	77	123	194	71	25	261	76	48	79
1 1/4	84	202	44	84	187	51	99	146	224	85	45	305	95	59	94
1 1/2	97	202	51	84	187	51	99	157	224	89	45	305	95	59	95
2	124	225	64	106	187	51	99	183	224	101	45	305	95	59	107





DN10/15 - 50

## Ball valve type 230 PVC-U FO (Fail safe to open) With manual override With fixed flanges serrated metric

### Model:

- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time  $90^\circ <$  1-2 s
- Overall length according to EN 558
- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504

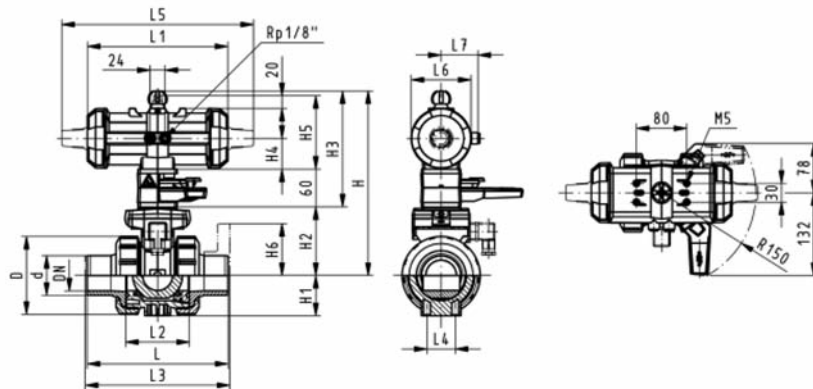
### Option:

- Individual configuration of the valve (see diagram)

d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
20	15	½	10	185	<b>199 230 263</b>	<b>199 230 273</b>	1.700
25	20	¾	10	350	<b>199 230 264</b>	<b>199 230 274</b>	1.900
32	25	1	10	700	<b>199 230 265</b>	<b>199 230 275</b>	2.100
40	32	1 ¼	10	1000	<b>199 230 266</b>	<b>199 230 276</b>	3.400
50	40	1 ½	10	1600	<b>199 230 267</b>	<b>199 230 277</b>	3.800
63	50	2	10	3100	<b>199 230 268</b>	<b>199 230 278</b>	4.900

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]
20	50	159	27	62	168	40	77	48	124	194	56	130	25	261	76
25	58	168	30	71	168	40	77	53	144	194	65	150	25	261	76
32	68	168	36	71	168	40	77	58	154	194	71	160	25	261	76
40	84	202	44	84	187	51	99	70	174	224	85	180	45	305	95
50	97	202	51	84	187	51	99	75	194	224	89	200	45	305	95
63	124	225	64	106	187	51	99	83	224	224	101	230	45	305	95

d [mm]	L7 [mm]
20	48
25	48
32	48
40	59
50	59
63	59





DN10/15 - 50

## Ball valve type 230 PVC-U DA (Double acting) With manual override With solvent cement sockets metric

### Model:

- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90°< 1-2 s

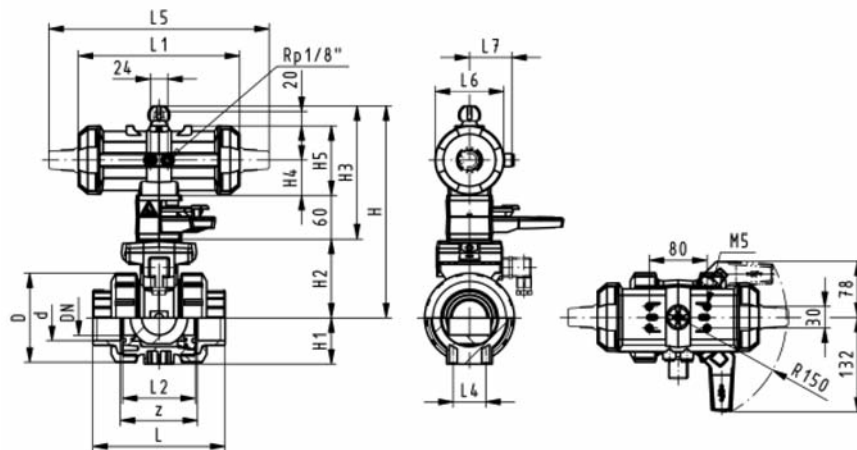
### Option:

- Individual configuration of the valve (see diagram)

d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	70	199 230 082	199 230 092	1.459
20	15	10	185	199 230 083	199 230 093	1.459
25	20	10	350	199 230 084	199 230 094	1.576
32	25	10	700	199 230 085	199 230 095	1.700
40	32	10	1000	199 230 086	199 230 096	2.751
50	40	10	1600	199 230 087	199 230 097	3.073
63	50	10	3100	199 230 088	199 230 098	3.931

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	z [mm]
16	50	159	27	62	168	40	77	92	194	56	25	261	76	48	64
20	50	159	27	62	168	40	77	95	194	56	25	261	76	48	64
25	58	168	30	71	168	40	77	110	194	65	25	261	76	48	72
32	68	168	36	71	168	40	77	123	194	71	25	261	76	48	79
40	84	202	44	84	187	51	99	146	224	85	45	305	95	59	94
50	97	202	51	84	187	51	99	157	224	89	45	305	95	59	95
63	124	225	64	106	187	51	99	183	224	101	45	305	95	59	107

d [mm]	closest inch
16	3/8
20	1/2
25	3/4
32	1
40	1 1/4
50	1 1/2
63	2





DN10/15 - 50

## Ball valve type 230 PVC-U DA (Double acting) With manual override With solvent cement spigots metric

### Model:

- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90° < 1-2 s

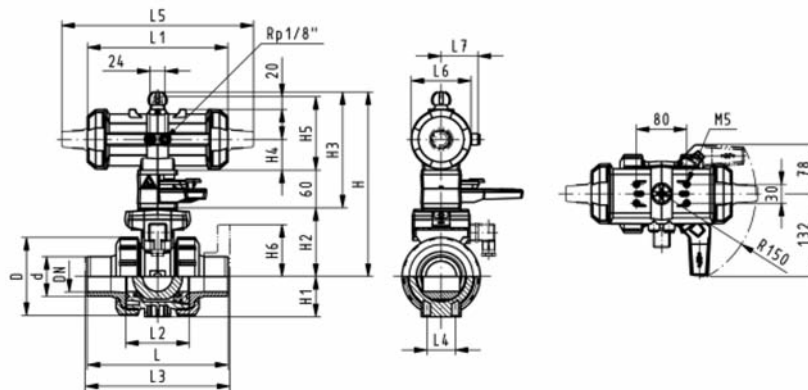
### Option:

- Individual configuration of the valve (see diagram)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	70	<b>199 230 102</b>	<b>199 230 112</b>	1.459
20	15	10	185	<b>199 230 103</b>	<b>199 230 113</b>	1.459
25	20	10	350	<b>199 230 104</b>	<b>199 230 114</b>	1.576
32	25	10	700	<b>199 230 105</b>	<b>199 230 115</b>	1.700
40	32	10	1000	<b>199 230 106</b>	<b>199 230 116</b>	2.751
50	40	10	1600	<b>199 230 107</b>	<b>199 230 117</b>	3.073
63	50	10	3100	<b>199 230 108</b>	<b>199 230 118</b>	3.931

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
16	50	159	27	62	168	40	77	114	194	56	130	25	261	76	48
20	50	159	27	62	168	40	77	124	194	56	130	25	261	76	48
25	58	168	30	71	168	40	77	144	194	65	150	25	261	76	48
32	68	168	36	71	168	40	77	154	194	71	160	25	261	76	48
40	84	202	44	84	187	51	99	174	224	85	180	45	305	95	59
50	97	202	51	84	187	51	99	194	224	89	200	45	305	95	59
63	124	225	64	106	187	51	99	224	224	101	230	45	305	95	59

d [mm]	closest inch
16	3/8
20	1/2
25	3/4
32	1
40	1 1/4
50	1 1/2
63	2







DN10/15 - 50

## Ball valve type 230 PVC-U DA (Double acting) With manual override With threaded sockets Rp

### Model:

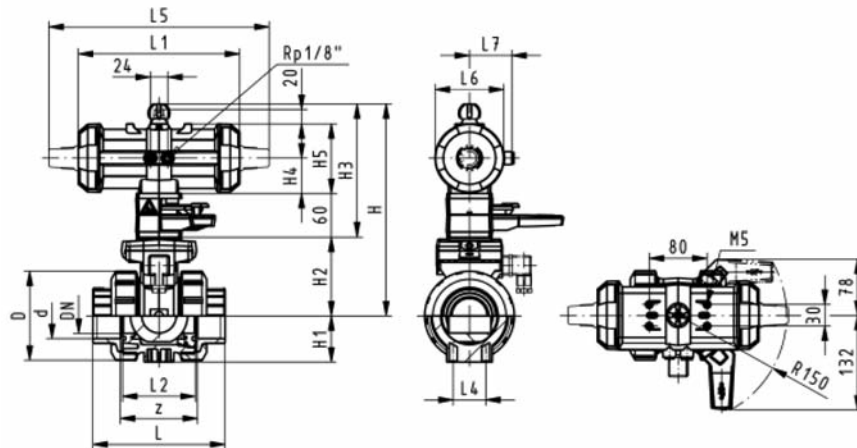
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time  $90^\circ <$  1-2 s

### Option:

- Individual configuration of the valve (see diagram)

Rp [inch]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
3/8	10	10	70	199 230 642	199 230 652	1.500
1/2	15	10	185	199 230 643	199 230 653	1.500
3/4	20	10	350	199 230 644	199 230 654	1.600
1	25	10	700	199 230 645	199 230 655	1.700
1 1/4	32	10	1000	199 230 646	199 230 656	2.800
1 1/2	40	10	1600	199 230 647	199 230 657	3.100
2	50	10	3100	199 230 648	199 230 658	4.000

Rp [inch]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	z [mm]
3/8	50	159	27	62	168	40	77	92	194	56	25	261	76	48	64
1/2	50	159	27	62	168	40	77	95	194	56	25	261	76	48	64
3/4	58	168	30	71	168	40	77	110	194	65	25	261	76	48	72
1	68	168	36	71	168	40	77	123	194	71	25	261	76	48	79
1 1/4	84	202	44	84	187	51	99	146	224	85	45	305	95	59	94
1 1/2	97	202	51	84	187	51	99	157	224	89	45	305	95	59	95
2	124	225	64	106	187	51	99	183	224	101	45	305	95	59	107





DN10/15 - 50

## Ball valve type 230 PVC-U DA (Double acting) With manual override With fixed flanges serrated metric

### Model:

- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time  $90^\circ <$  1-2 s
- Overall length according to EN 558
- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504

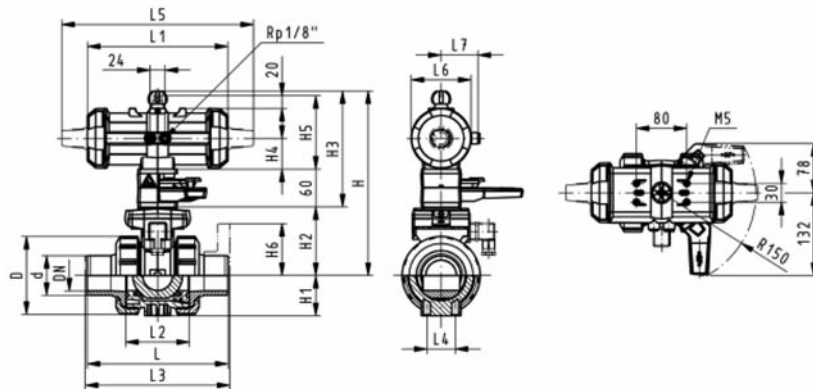
### Option:

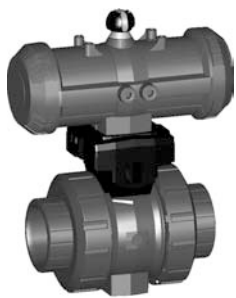
- Individual configuration of the valve (see diagram)

d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
20	15	½	10	185	<b>199 230 283</b>	<b>199 230 293</b>	1.700
25	20	¾	10	350	<b>199 230 284</b>	<b>199 230 294</b>	1.900
32	25	1	10	700	<b>199 230 285</b>	<b>199 230 295</b>	2.100
40	32	1 ¼	10	1000	<b>199 230 286</b>	<b>199 230 296</b>	3.400
50	40	1 ½	10	1600	<b>199 230 287</b>	<b>199 230 297</b>	3.800
63	50	2	10	3100	<b>199 230 288</b>	<b>199 230 298</b>	4.900

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]
20	50	159	27	62	168	40	77	48	124	194	56	130	25	261	76
25	58	168	30	71	168	40	77	53	144	194	65	150	25	261	76
32	68	168	36	71	168	40	77	58	154	194	71	160	25	261	76
40	84	202	44	84	187	51	99	70	174	224	85	180	45	305	95
50	97	202	51	84	187	51	99	75	194	224	89	200	45	305	95
63	124	225	64	106	187	51	99	83	224	224	101	230	45	305	95

d [mm]	L7 [mm]
20	48
25	48
32	48
40	59
50	59
63	59





DN10/15 - 50



## Ball valve type 230 PVC-U FC (Fail safe to close) Without manual override With solvent cement sockets metric

### Model:

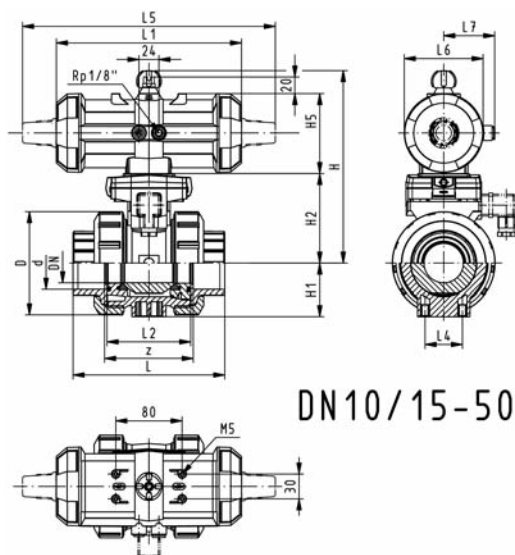
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90°< 1-2 s
- Assignment of actuators: PA11 (DN10/15-25), PA21 (DN32-50), PA30 (DN65), PA40 (DN80), PA40 (DN100)

### Option:

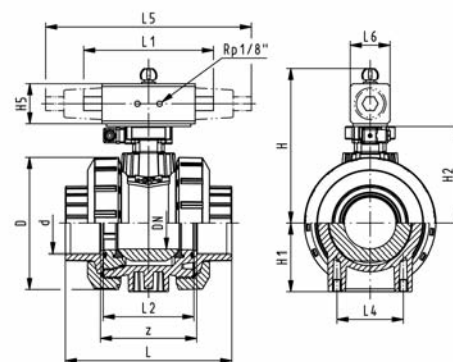
- Individual configuration of the valve (see diagram)

d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	70	199 230 122	199 230 132	1.159
20	15	10	185	199 230 123	199 230 133	1.159
25	20	10	350	199 230 124	199 230 134	1.276
32	25	10	700	199 230 125	199 230 135	1.400
40	32	10	1000	199 230 126	199 230 136	2.451
50	40	10	1600	199 230 127	199 230 137	2.773
63	50	10	3100	199 230 128	199 230 138	3.631
75	65	10	5000	199 230 129	199 230 139	7.800
90	80	10	7000	199 230 130	199 230 140	10.200
110	100	10	11000	199 230 131	199 230 141	15.500

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	z [mm]	closest inch
16	50	159	27	62	77	92	194	56	25	261	76	48	64	3/8
20	50	159	27	62	77	95	194	56	25	261	76	48	64	1/2
25	58	168	30	71	77	110	194	65	25	261	76	48	72	3/4
32	68	168	36	71	77	123	194	71	25	261	76	48	79	1
40	84	202	44	84	99	146	224	85	45	305	95	59	94	1 1/4
50	97	202	51	84	99	157	224	89	45	305	95	59	95	1 1/2
63	124	225	64	106	99	183	224	101	45	305	95	59	107	2
75	166	262	85	156	70	233		136	70	276	65		144	2 1/2
90	200	281	105	168	78	254		141	70	341	72		151	3
110	238	292	123	175	86	301		164	120	369	80		174	4



DN10/15-50



DN65-100



DN10/15 - 50

## Ball valve type 230 PVC-U FC (Fail safe to close) Without manual override With solvent cement spigots metric

### Model:

- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90° < 1-2 s
- Assignment of actuators: PA11 (DN10/15-25), PA21 (DN32-50), PA30 (DN65), PA40 (DN80), PA40 (DN100)

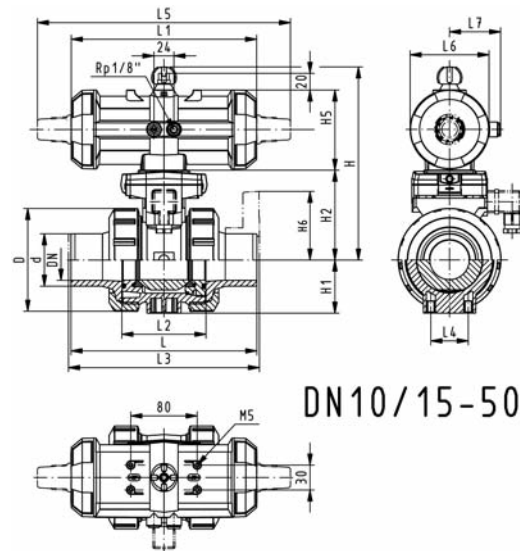
### Option:

- Individual configuration of the valve (see diagram)

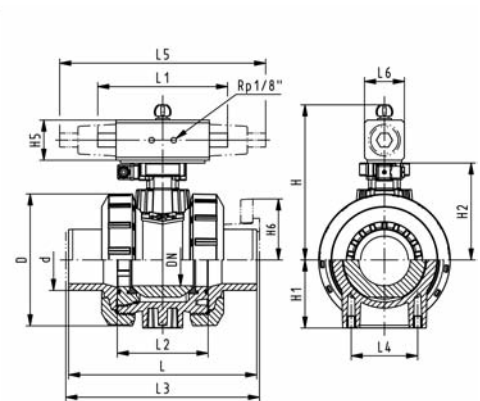


d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	70	199 230 142	199 230 152	1.159
20	15	10	185	199 230 143	199 230 153	1.159
25	20	10	350	199 230 144	199 230 154	1.276
32	25	10	700	199 230 145	199 230 155	1.400
40	32	10	1000	199 230 146	199 230 156	2.451
50	40	10	1600	199 230 147	199 230 157	2.773
63	50	10	3100	199 230 148	199 230 158	3.631
75	65	10	5000	199 230 149	199 230 159	7.900
90	80	10	7000	199 230 150	199 230 160	10.400
110	100	10	11000	199 230 151	199 230 161	15.700

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	closest inch
16	50	159	27	62	77	114	194	56	0	25	261	76	48	3/8
20	50	159	27	62	77	124	194	56	130	25	261	76	48	1/2
25	58	168	30	71	77	144	194	65	150	25	261	76	48	3/4
32	68	168	36	71	77	154	194	71	160	25	261	76	48	1
40	84	202	44	84	99	174	224	85	180	45	305	95	59	1 1/4
50	97	202	51	84	99	194	224	89	200	45	305	95	59	1 1/2
63	124	225	64	106	99	224	224	101	230	45	305	95	59	2
75	166	262	85	156	70	284		136	290	70	276	65		2 1/2
90	200	281	105	168	78	300		141	310	70	341	72		3
110	238	292	123	175	86	340		164	350	120	369	80		4



DN10/15-50



DN65-100



DN10/15 - 50



## Ball valve type 230 PVC-U FC (Fail safe to close) Without manual override With threaded sockets Rp

### Model:

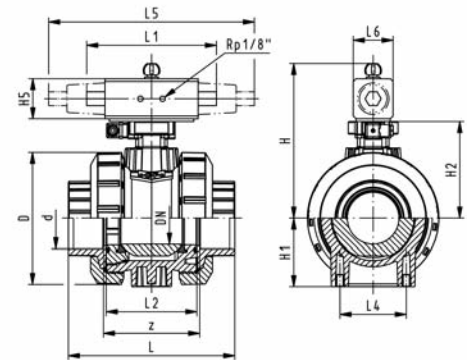
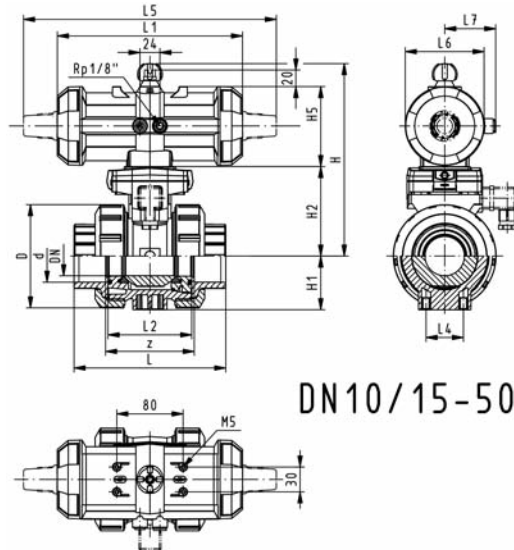
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90°< 1-2 s
- Assignment of actuators: PA11 (DN10/15-25), PA21 (DN32-50), PA30 (DN65), PA40 (DN80), PA40 (DN100)

### Option:

- Individual configuration of the valve (see diagram)

Rp [inch]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
3/8	10	10	70	199 230 662	199 230 672	1.200
1/2	15	10	185	199 230 663	199 230 673	1.200
3/4	20	10	350	199 230 664	199 230 674	1.300
1	25	10	700	199 230 665	199 230 675	1.400
1 1/4	32	10	1000	199 230 666	199 230 676	2.500
1 1/2	40	10	1600	199 230 667	199 230 677	2.800
2	50	10	3100	199 230 668	199 230 678	3.700
2 1/2	65	10	5000	199 230 669	199 230 679	7.800
3	80	10	7000	199 230 670	199 230 680	10.300
4	100	10	11000	199 230 671	199 230 681	15.500

Rp [inch]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	z [mm]
3/8	50	159	27	62	77	92	194	56	25	261	76	48	64
1/2	50	159	27	62	77	95	194	56	25	261	76	48	64
3/4	58	168	30	71	77	110	194	65	25	261	76	48	72
1	68	168	36	71	77	123	194	71	25	261	76	48	79
1 1/4	84	202	44	84	99	146	224	85	45	305	95	59	94
1 1/2	97	202	51	84	99	157	224	89	45	305	95	59	95
2	124	225	64	106	99	183	224	101	45	305	95	59	107
2 1/2	166	262	85	156	70	233		136	70	276	65		144
3	200	281	105	168	78	254		141	70	341	72		151
4	238	292	123	175	86	301		164	120	369	80		174





DN10/15 - 50

## Ball valve type 230 PVC-U FC (Fail safe to close) Without manual override With fixed flanges serrated metric

### Model:

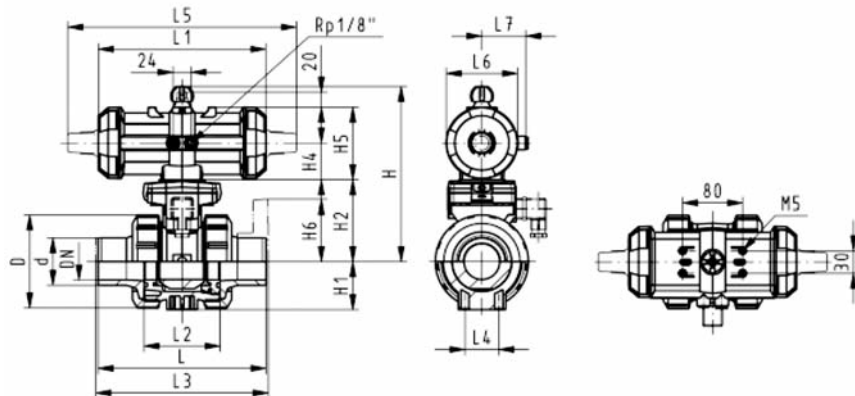
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90° < 1-2 s
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- Overall length according to EN 558
- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504

### Option:

- Individual configuration of the valve (see diagram)

d [mm]	DN [mm]	Inch	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
20	15	½	10	185	199 230 303	199 230 313	1.700
25	20	¾	10	350	199 230 304	199 230 314	1.900
32	25	1	10	700	199 230 305	199 230 315	2.100
40	32	1 ¼	10	1000	199 230 306	199 230 316	3.400
50	40	1 ½	10	1600	199 230 307	199 230 317	3.800
63	50	2	10	3100	199 230 308	199 230 318	4.900

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H4 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
20	50	159	27	62	40	77	48	124	194	56	130	25	261	76	48
25	58	168	30	71	40	77	53	144	194	65	150	25	261	76	48
32	68	168	36	71	40	77	58	154	194	71	160	25	261	76	48
40	84	202	44	84	51	99	70	174	224	85	180	45	305	95	59
50	97	202	51	84	51	99	75	194	224	89	200	45	305	95	59
63	124	225	64	106	51	99	83	224	224	101	230	45	305	95	59





## Ball valve type 230 PVC-U FC (Fail safe to close) Without manual override With backing flanges PP-st metric

### Model:

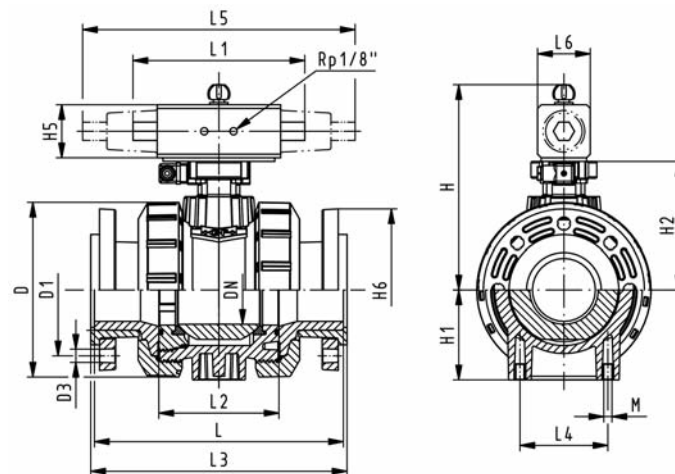
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90°< 1-2 s
- Assignment of actuators: PA11 (DN10/15-25), PA21 (DN32-50), PA30 (DN65), PA40 (DN80), PA40 (DN100)
- Overall length according to EN 558
- Connecting dimension: ISO 7005, EN 1092, BS 4504, DIN 2501

### Option:

- Individual configuration of the valve (see diagram)

d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg	
75	65	10	5000	199 234 469	199 234 479	11.900	
90	80	10	7000	199 234 470	199 234 480	15.300	
110	100	10	11000	199 234 471	199 234 481	22.300	

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H5 [mm]	H6 [mm]	L [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	
75	166	262	85	156	70	93	284	136	290	70	276	65	
90	200	281	105	168	78	100	300	141	310	70	341	72	
110	238	292	123	175	86	110	340	164	350	120	369	80	





DN10/15 - 50

## Ball valve type 230 PVC-U FO (Fail safe to open) Without manual override With solvent cement sockets metric

### Model:

- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time  $90^\circ <$  1-2 s
- Assignment of actuators: PA11 (DN10/15-25), PA21 (DN32-50), PA30 (DN65), PA40 (DN80), PA40 (DN100)

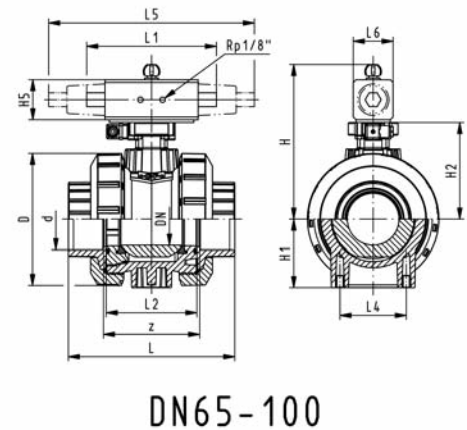
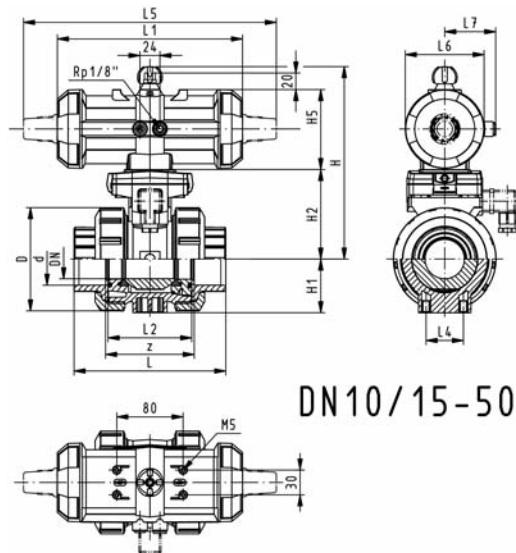
### Option:

- Individual configuration of the valve (see diagram)



d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	70	<b>199 230 162</b>	<b>199 230 172</b>	1.159
20	15	10	185	<b>199 230 163</b>	<b>199 230 173</b>	1.159
25	20	10	350	<b>199 230 164</b>	<b>199 230 174</b>	1.276
32	25	10	700	<b>199 230 165</b>	<b>199 230 175</b>	1.400
40	32	10	1000	<b>199 230 166</b>	<b>199 230 176</b>	2.451
50	40	10	1600	<b>199 230 167</b>	<b>199 230 177</b>	2.773
63	50	10	3100	<b>199 230 168</b>	<b>199 230 178</b>	3.631
75	65	10	5000	<b>199 230 169</b>	<b>199 230 179</b>	7.800
90	80	10	7000	<b>199 230 170</b>	<b>199 230 180</b>	10.200
110	100	10	11000	<b>199 230 171</b>	<b>199 230 181</b>	15.500

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	z [mm]	closest inch
16	50	159	27	62	77	92	194	56	25	261	76	48	64	$\frac{3}{8}$
20	50	159	27	62	77	95	194	56	25	261	76	48	64	$\frac{1}{2}$
25	58	168	30	71	77	110	194	65	25	261	76	48	72	$\frac{3}{4}$
32	68	168	36	71	77	123	194	71	25	261	76	48	79	1
40	84	202	44	84	99	146	224	85	45	305	95	59	94	$1 \frac{1}{4}$
50	97	202	51	84	99	157	224	89	45	305	95	59	95	$1 \frac{1}{2}$
63	124	225	64	106	99	183	224	101	45	305	95	59	107	2
75	166	262	85	156	70	233		136	70	276	65		144	$2 \frac{1}{2}$
90	200	281	105	168	78	254		141	70	341	72		151	3
110	238	292	123	175	86	301		164	120	369	80		174	4







DN10/15 - 50



## Ball valve type 230 PVC-U FO (Fail safe to open) Without manual override With solvent cement spigots metric

### Model:

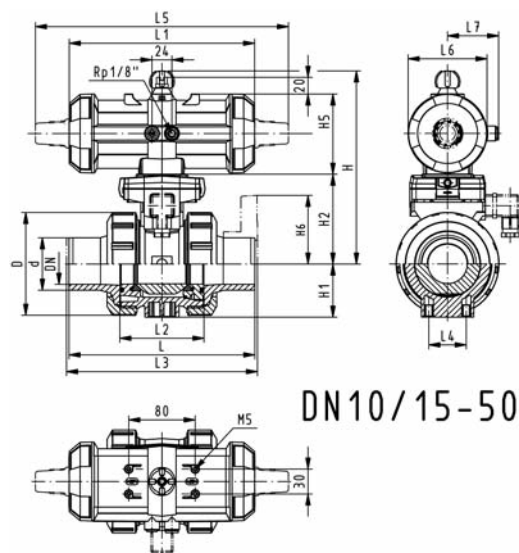
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90°< 1-2 s
- Assignment of actuators: PA11 (DN10/15-25), PA21 (DN32-50), PA30 (DN65), PA40 (DN80), PA40 (DN100)

### Option:

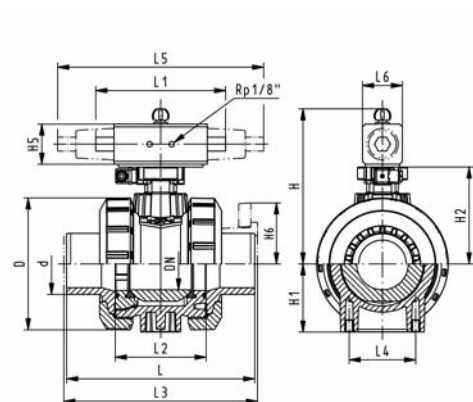
- Individual configuration of the valve (see diagram)

d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	70	199 230 182	199 230 192	1.159
20	15	10	185	199 230 183	199 230 193	1.159
25	20	10	350	199 230 184	199 230 194	1.276
32	25	10	700	199 230 185	199 230 195	1.400
40	32	10	1000	199 230 186	199 230 196	2.451
50	40	10	1600	199 230 187	199 230 197	2.773
63	50	10	3100	199 230 188	199 230 198	3.631
75	65	10	5000	199 230 189	199 230 199	7.900
90	80	10	7000	199 230 190	199 230 200	10.400
110	100	10	11000	199 230 191	199 230 201	15.700

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	closest inch
16	50	159	27	62	77	114	194	56	0	25	261	76	48	3/8
20	50	159	27	62	77	124	194	56	130	25	261	76	48	1/2
25	58	168	30	71	77	144	194	65	150	25	261	76	48	3/4
32	68	168	36	71	77	154	194	71	160	25	261	76	48	1
40	84	202	44	84	99	174	224	85	180	45	305	95	59	1 1/4
50	97	202	51	84	99	194	224	89	200	45	305	95	59	1 1/2
63	124	225	64	106	99	224	224	101	230	45	305	95	59	2
75	166	262	85	156	70	284		136	290	70	276	65		2 1/2
90	200	281	105	168	78	300		141	310	70	341	72		3
110	238	292	123	175	86	340		164	350	120	369	80		4



DN10/15-50



DN65-100



DN10/15 - 50

## Ball valve type 230 PVC-U FO (Fail safe to open) Without manual override With threaded sockets Rp

### Model:

- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time  $90^\circ <$  1-2 s
- Assignment of actuators: PA11 (DN10/15-25), PA21 (DN32-50), PA30 (DN65), PA40 (DN80), PA40 (DN100)

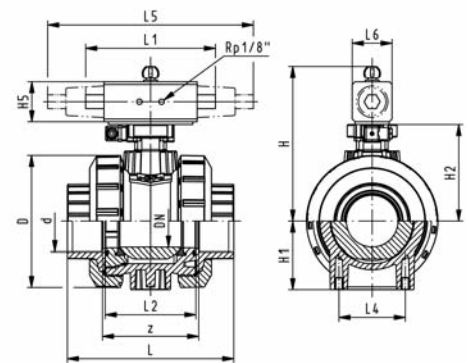
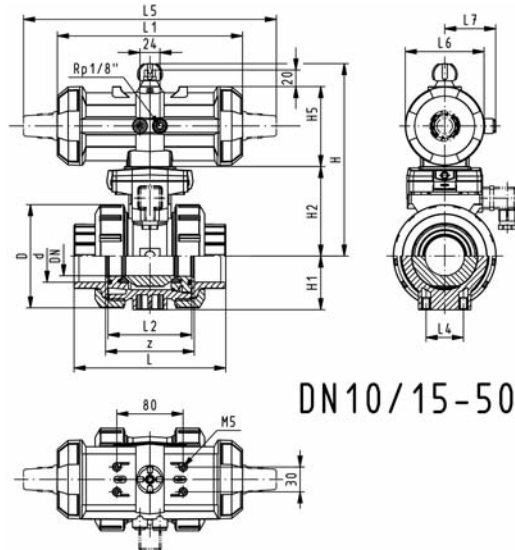
### Option:

- Individual configuration of the valve (see diagram)



Rp [inch]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
3/8	10	10	70	199 230 682	199 230 692	1.200
1/2	15	10	185	199 230 683	199 230 693	1.200
3/4	20	10	350	199 230 684	199 230 694	1.300
1	25	10	700	199 230 685	199 230 695	1.400
1 1/4	32	10	1000	199 230 686	199 230 696	2.500
1 1/2	40	10	1600	199 230 687	199 230 697	2.800
2	50	10	3100	199 230 688	199 230 698	3.700
2 1/2	65	10	5000	199 230 689	199 230 699	7.800
3	80	10	7000	199 230 690	199 230 700	10.300
4	100	10	11000	199 230 691	199 230 701	15.500

Rp [inch]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	z [mm]
3/8	50	159	27	62	77	92	194	56	25	261	76	48	64
1/2	50	159	27	62	77	95	194	56	25	261	76	48	64
3/4	58	168	30	71	77	110	194	65	25	261	76	48	72
1	68	168	36	71	77	123	194	71	25	261	76	48	79
1 1/4	84	202	44	84	99	146	224	85	45	305	95	59	94
1 1/2	97	202	51	84	99	157	224	89	45	305	95	59	95
2	124	225	64	106	99	183	224	101	45	305	95	59	107
2 1/2	166	262	85	156	70	233		136	70	276	65		144
3	200	281	105	168	78	254		141	70	341	72		151
4	238	292	123	175	86	301		164	120	369	80		174





DN10/15 - 50

## Ball valve type 230 PVC-U FO (Fail safe to open) Without manual override With fixed flanges serrated metric

### Model:

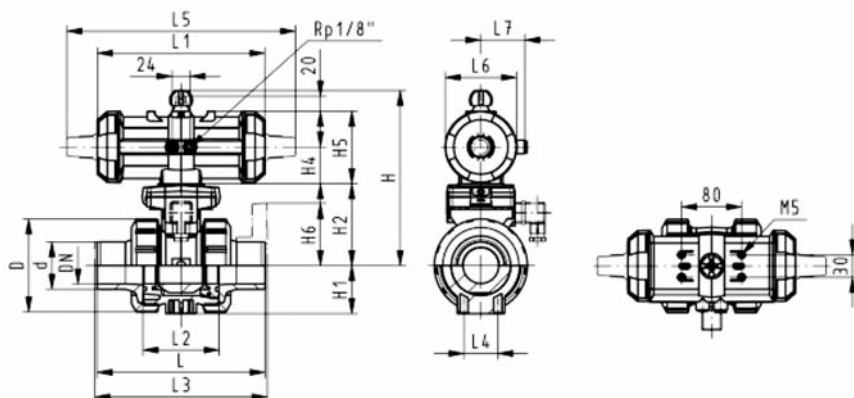
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90°< 1-2 s
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- Overall length according to EN 558
- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504

### Option:

- Individual configuration of the valve (see diagram)

d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
20	15	1/2	10	185	199 230 323	199 230 333	1.700
25	20	3/4	10	350	199 230 324	199 230 334	1.900
32	25	1	10	700	199 230 325	199 230 335	2.100
40	32	1 1/4	10	1000	199 230 326	199 230 336	3.400
50	40	1 1/2	10	1600	199 230 327	199 230 337	3.800
63	50	2	10	3100	199 230 328	199 230 338	4.900

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H4 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
20	50	159	27	62	40	77	48	124	194	56	130	25	261	76	48
25	58	168	30	71	40	77	53	144	194	65	150	25	261	76	48
32	68	168	36	71	40	77	58	154	194	71	160	25	261	76	48
40	84	202	44	84	51	99	70	174	224	85	180	45	305	95	59
50	97	202	51	84	51	99	75	194	224	89	200	45	305	95	59
63	124	225	64	106	51	99	83	224	224	101	230	45	305	95	59





## Ball valve type 230 PVC-U FO (Fail safe to open) Without manual override With backing flanges PP-st metric

### Model:

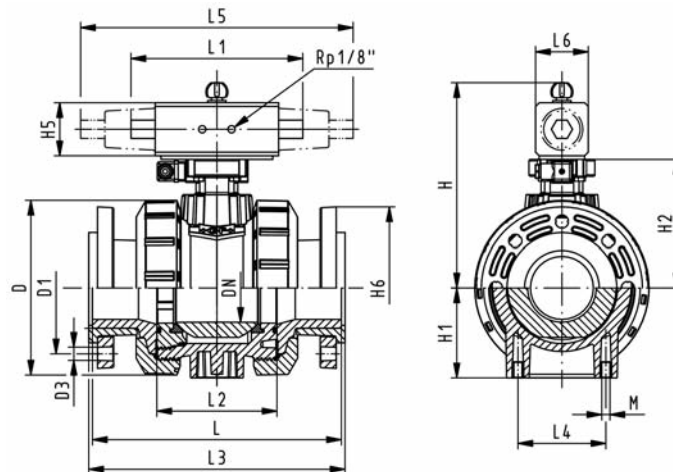
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90°< 1-2 s
- Assignment of actuators: PA11 (DN10/15-25), PA21 (DN32-50), PA30 (DN65), PA40 (DN80), PA40 (DN100)
- Overall length according to EN 558
- Connecting dimension: ISO 7005, EN 1092, BS 4504, DIN 2501

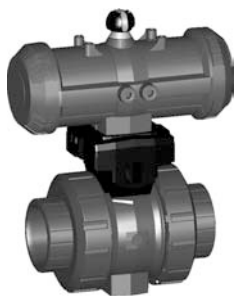
### Option:

- Individual configuration of the valve (see diagram)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
75	65	10	5000	<b>199 234 489</b>	<b>199 234 499</b>	11.900
90	80	10	7000	<b>199 234 490</b>	<b>199 234 500</b>	15.300
110	100	10	11000	<b>199 234 491</b>	<b>199 234 501</b>	22.300

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H5 [mm]	H6 [mm]	L [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]
75	166	262	85	156	70	93	284	136	290	70	276	65
90	200	281	105	168	78	100	300	141	310	70	341	72
110	238	292	123	175	86	110	340	164	350	120	369	80





DN10/15 - 50

## Ball valve type 230 PVC-U DA (Double acting) Without manual override With solvent cement sockets metric

### Model:

- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90°< 1-2 s
- Assignment of actuators: PA11 (DN10/15-25), PA21 (DN32-50), PA35 (DN65), PA40 (DN80), PA45 (DN100)

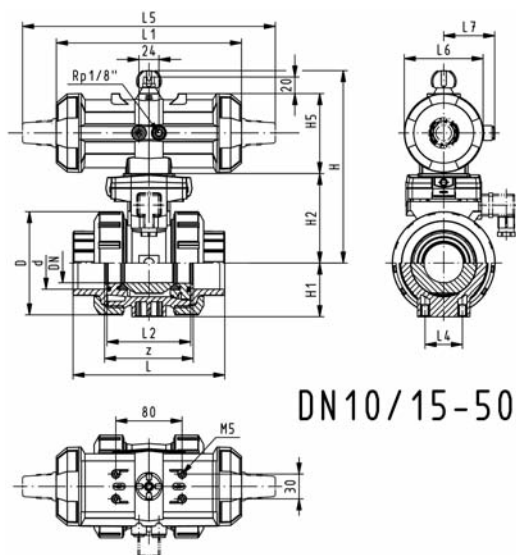
### Option:

- Individual configuration of the valve (see diagram)

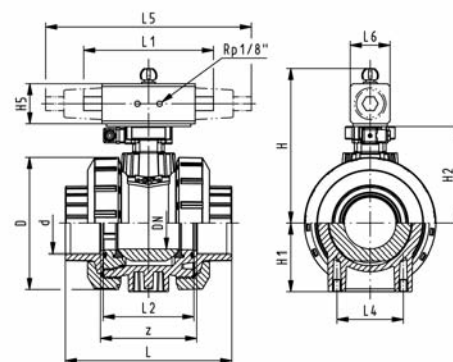


d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	70	199 230 202	199 230 212	1.159
20	15	10	185	199 230 203	199 230 213	1.159
25	20	10	350	199 230 204	199 230 214	1.276
32	25	10	700	199 230 205	199 230 215	1.400
40	32	10	1000	199 230 206	199 230 216	2.451
50	40	10	1600	199 230 207	199 230 217	2.773
63	50	10	3100	199 230 208	199 230 218	3.631
75	65	10	5000	199 230 209	199 230 219	6.600
90	80	10	7000	199 230 210	199 230 220	9.500
110	100	10	11000	199 230 211	199 230 221	13.700

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	z [mm]	closest inch
16	50	159	27	62	77	92	194	56	25	261	76	48	64	3/8
20	50	159	27	62	77	95	194	56	25	261	76	48	64	1/2
25	58	168	30	71	77	110	194	65	25	261	76	48	72	3/4
32	68	168	36	71	77	123	194	71	25	261	76	48	79	1
40	84	202	44	84	99	146	224	85	45	305	95	59	94	1 1/4
50	97	202	51	84	99	157	224	89	45	305	95	59	95	1 1/2
63	124	225	64	106	99	183	224	101	45	305	95	59	107	2
75	166	257	85	156	66	233	144	136	70		60		144	2 1/2
90	200	274	105	168	70	254	152	141	70		65		151	3
110	238	273	123	175	78	301	169	164	120		72		174	4



DN10/15-50



DN65-100



DN10/15 - 50

## Ball valve type 230 PVC-U DA (Double acting) Without manual override With solvent cement spigots metric

### Model:

- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90° < 1-2 s
- Assignment of actuators: PA11 (DN10/15-25), PA21 (DN32-50), PA35 (DN65), PA40 (DN80), PA45 (DN100)

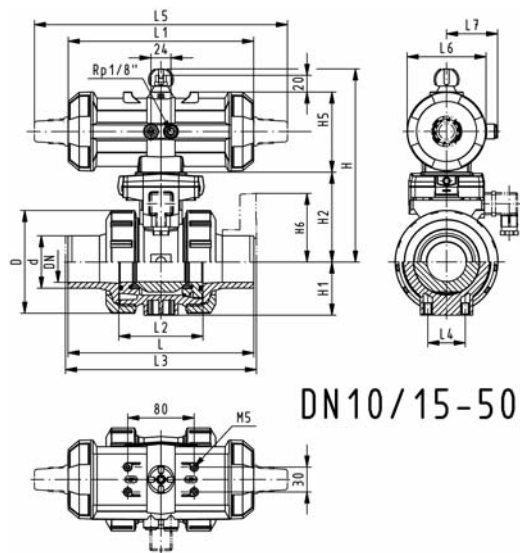
### Option:

- Individual configuration of the valve (see diagram)

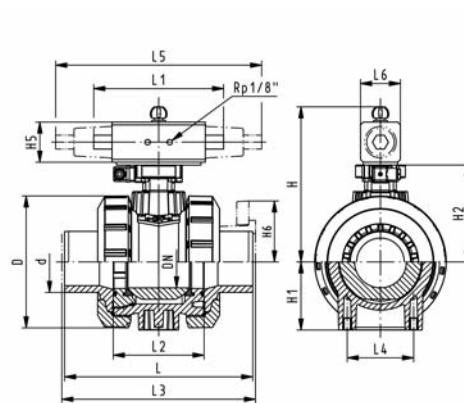


d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	70	199 230 222	199 230 232	1.159
20	15	10	185	199 230 223	199 230 233	1.159
25	20	10	350	199 230 224	199 230 234	1.276
32	25	10	700	199 230 225	199 230 235	1.400
40	32	10	1000	199 230 226	199 230 236	2.451
50	40	10	1600	199 230 227	199 230 237	2.773
63	50	10	3100	199 230 228	199 230 238	3.631
75	65	10	5000	199 230 229	199 230 239	6.800
90	80	10	7000	199 230 230	199 230 240	9.700
110	100	10	11000	199 230 231	199 230 241	13.900

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	closest inch
16	50	159	27	62	77	114	194	56	0	25	261	76	48	3/8
20	50	159	27	62	77	124	194	56	130	25	261	76	48	1/2
25	58	168	30	71	77	144	194	65	150	25	261	76	48	3/4
32	68	168	36	71	77	154	194	71	160	25	261	76	48	1
40	84	202	44	84	99	174	224	85	180	45	305	95	59	1 1/4
50	97	202	51	84	99	194	224	89	200	45	305	95	59	1 1/2
63	124	225	64	106	99	224	224	101	230	45	305	95	59	2
75	166	257	85	156	66	284	144	136	290	70		60		2 1/2
90	200	274	105	168	70	300	152	141	310	70		65		3
110	238	273	123	175	78	340	169	164	350	120		72		4



DN10/15-50



DN65-100



DN10/15 - 50

## Ball valve type 230 PVC-U DA (Double acting) Without manual override With threaded sockets Rp

### Model:

- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90°< 1-2 s
- Assignment of actuators: PA11 (DN10/15-25), PA21 (DN32-50), PA35 (DN65), PA40 (DN80), PA45 (DN100)

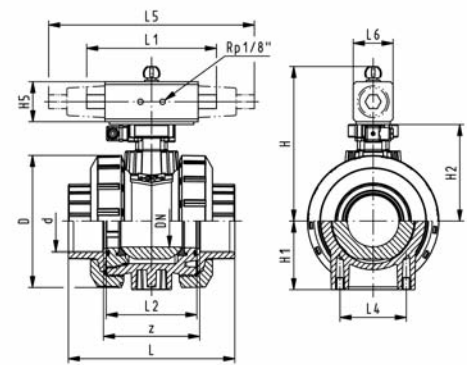
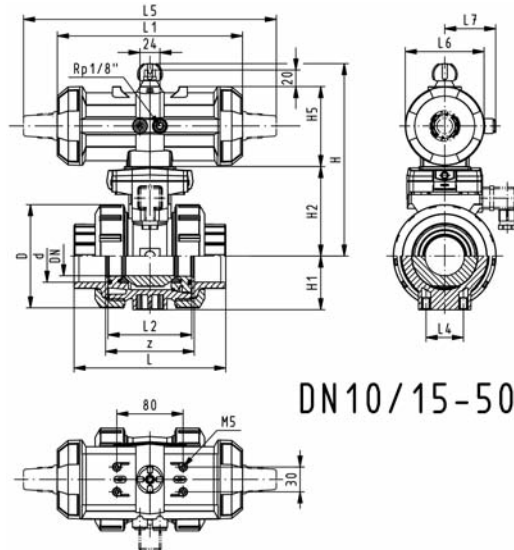
### Option:

- Individual configuration of the valve (see diagram)



Rp [inch]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
3/8	10	10	70	199 230 712	199 230 732	1.200
1/2	15	10	185	199 230 713	199 230 733	1.200
3/4	20	10	350	199 230 714	199 230 734	1.300
1	25	10	700	199 230 715	199 230 735	1.400
1 1/4	32	10	1000	199 230 716	199 230 736	2.500
1 1/2	40	10	1600	199 230 717	199 230 737	2.800
2	50	10	3100	199 230 718	199 230 738	3.700
2 1/2	65	10	5000	199 230 719	199 230 739	6.700
3	80	10	7000	199 230 720	199 230 740	9.700
4	100	10	11000	199 230 721	199 230 741	13.700

Rp [inch]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	z [mm]
3/8	50	159	27	62	77	92	194	56	25	261	76	48	64
1/2	50	159	27	62	77	95	194	56	25	261	76	48	64
3/4	58	168	30	71	77	110	194	65	25	261	76	48	72
1	68	168	36	71	77	123	194	71	25	261	76	48	79
1 1/4	84	202	44	84	99	146	224	85	45	305	95	59	94
1 1/2	97	202	51	84	99	157	224	89	45	305	95	59	95
2	124	225	64	106	99	183	224	101	45	305	95	59	107
2 1/2	166	257	85	156	66	233	144	136	70	60	60	59	144
3	200	274	105	168	70	254	152	141	70	65	65	59	151
4	238	273	123	175	78	301	169	164	120	72	72	59	174





DN10/15 - 50

## Ball valve type 230 PVC-U DA (Double acting) Without manual override With fixed flanges metric

### Model:

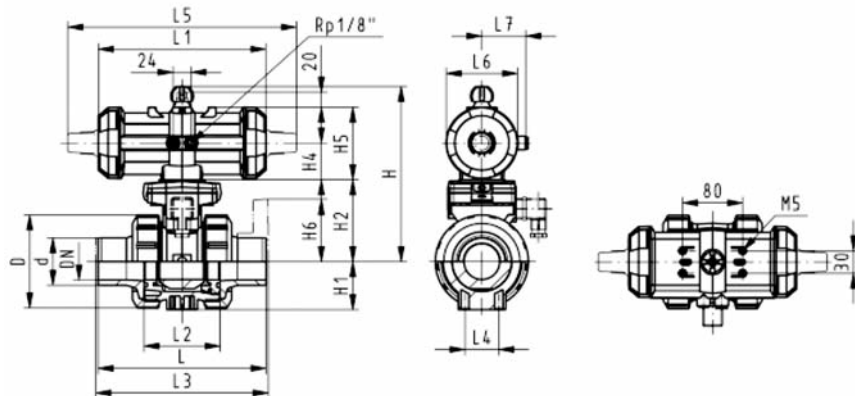
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90°< 1-2 s
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- Overall length according to EN 558
- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504

### Option:

- Individual configuration of the valve (see diagram)

d [mm]	DN [mm]	Inch	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
20	15	½	10	185	199 230 343	199 230 353	1.700
25	20	¾	10	350	199 230 344	199 230 354	1.900
32	25	1	10	700	199 230 345	199 230 355	2.100
40	32	1 ¼	10	1000	199 230 346	199 230 356	3.400
50	40	1 ½	10	1600	199 230 347	199 230 357	3.800
63	50	2	10	3100	199 230 348	199 230 358	4.900

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H4 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
20	50	159	27	62	40	77	48	124	194	56	130	25	261	76	48
25	58	168	30	71	40	77	53	144	194	65	150	25	261	76	48
32	68	168	36	71	40	77	58	154	194	71	160	25	261	76	48
40	84	202	44	84	51	99	70	174	224	85	180	45	305	95	59
50	97	202	51	84	51	99	75	194	224	89	200	45	305	95	59
63	124	225	64	106	51	99	83	224	224	101	230	45	305	95	59







## Ball valve type 230 PVC-U DA (Double acting) Without manual override With backing flanges PP-st metric

### Model:

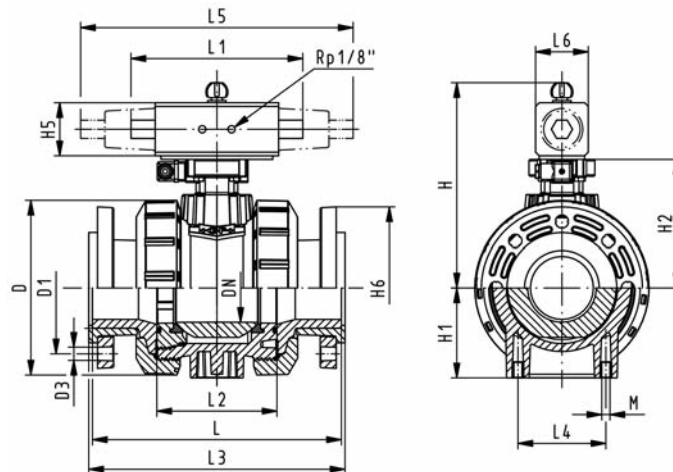
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90°< 1-2 s
- Assignment of actuators: PA11 (DN10/15-25), PA21 (DN32-50), PA35 (DN65), PA40 (DN80), PA45 (DN100)
- Overall length according to EN 558
- Connecting dimension: ISO 7005, EN 1092, BS 4504, DIN 2501

### Option:

- Individual configuration of the valve (see diagram)

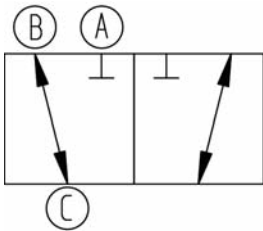
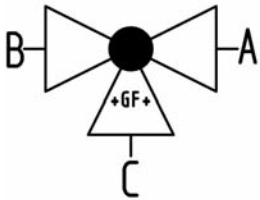
d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg	
75	65	10	5000	199 234 509	199 234 519	10.800	
90	80	10	7000	199 234 510	199 234 520	14.600	
110	100	10	11000	199 234 511	199 234 521	20.600	

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L6 [mm]	
75	166	257	85	156	66	93	284	144	136	290	70	60	
90	200	274	105	168	70	100	300	152	141	310	70	65	
110	238	273	123	175	78	110	340	169	164	350	120	72	





## 3-Way ball valve type 285 PVC-U Horizontal/L-port Without manual override With solvent cement sockets metric



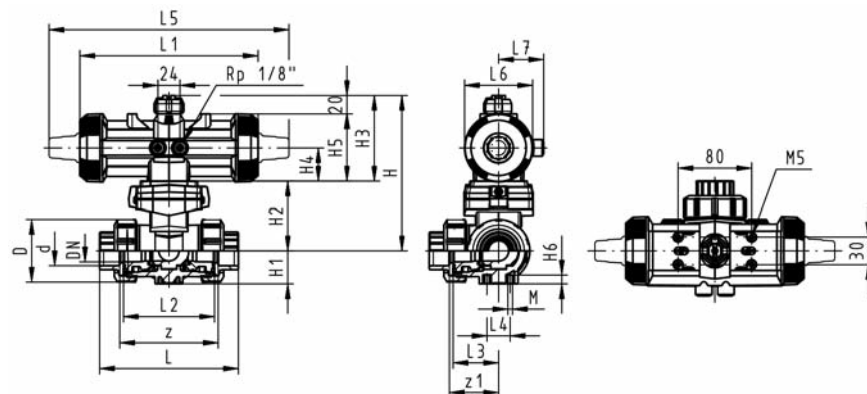
### Model:

- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- Actuator fails safe to the closed position FC
- Basic position B-C opened, activated position A-C opened, see flow scheme
- Control time  $90^\circ <$  1-3 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	50	199 285 022	199 285 032	1.115
20	15	10	75	199 285 023	199 285 033	1.121
25	20	10	150	199 285 024	199 285 034	1.249
32	25	10	280	199 285 025	199 285 035	1.439
40	32	10	480	199 285 026	199 285 036	2.539
50	40	10	620	199 285 027	199 285 037	2.991
63	50	10	1230	199 285 028	199 285 038	4.352

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]
16	50	159	28	62	97	40	77	8	109	194	73	36	25	261	76
20	50	159	28	62	97	40	77	8	112	194	73	36	25	261	76
25	58	168	32	71	97	40	77	8	131	194	86	43	25	261	76
32	68	168	36	71	97	40	77	8	151	194	99	50	25	261	76
40	84	203	45	84	119	51	99	9	181	224	120	60	45	305	95
50	97	203	51	84	119	51	99	9	205	224	137	69	45	305	95
63	124	225	65	106	119	51	99	9	261	224	179	89	45	305	95

d [mm]	L7 [mm]	M	z [mm]	z1 [mm]	closest inch
16	48	6	81	40	$\frac{3}{8}$
20	48	6	81	40	$\frac{1}{2}$
25	48	6	94	47	$\frac{3}{4}$
32	48	6	107	54	1
40	59	8	130	65	$1 \frac{1}{4}$
50	59	8	143	72	$1 \frac{1}{2}$
63	59	8	185	92	2

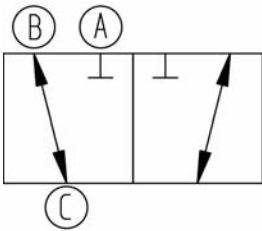
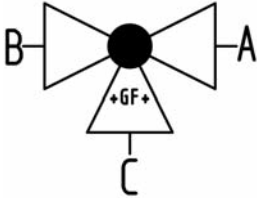




## 3-Way ball valve type 285 PVC-U Horizontal/L-port Without manual override With solvent cement spigots metric

### Model:

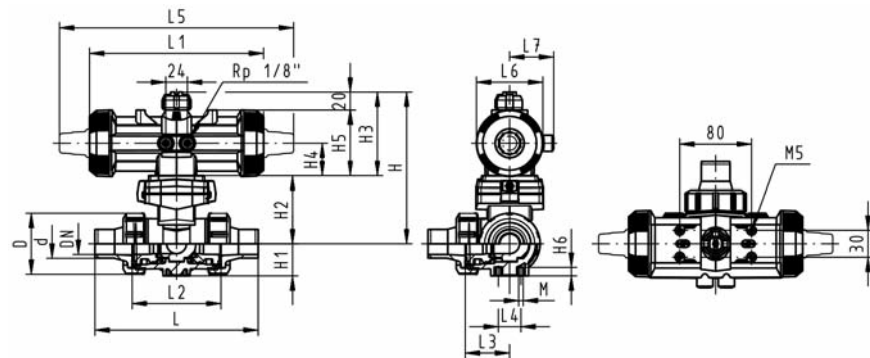
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- Actuator fails safe to the closed position FC
- Basic position B-C opened, activated position A-C opened, see flow scheme
- Control time  $90^\circ <$  1-3 s
- For easy installation and removal
- Integrated stainless steel mounting inserts



d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	50	199 285 002	199 285 012	1.121
20	15	10	75	199 285 003	199 285 013	1.130
25	20	10	150	199 285 004	199 285 014	1.264
32	25	10	280	199 285 005	199 285 015	1.463
40	32	10	480	199 285 006	199 285 016	2.560
50	40	10	620	199 285 007	199 285 017	3.054
63	50	10	1230	199 285 008	199 285 018	4.478

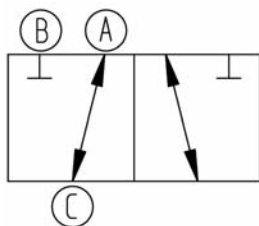
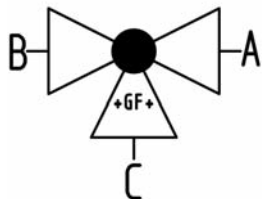
d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]
16	50	159	28	62	97	40	77	8	131	194	73	36	25	261	76
20	50	159	28	62	97	40	77	8	141	194	73	36	25	261	76
25	58	168	32	71	97	40	77	8	165	194	86	43	25	261	76
32	68	168	36	71	97	40	77	8	182	194	99	50	25	261	76
40	84	203	45	84	119	51	99	9	209	224	120	60	45	305	95
50	97	203	51	84	119	51	99	9	242	224	137	69	45	305	95
63	124	225	65	106	119	51	99	9	302	224	179	89	45	305	95

d [mm]	L7 [mm]	M	closest inch
16	48	6	$\frac{3}{8}$
20	48	6	$\frac{1}{2}$
25	48	6	$\frac{3}{4}$
32	48	6	1
40	59	8	$1 \frac{1}{4}$
50	59	8	$1 \frac{1}{2}$
63	59	8	2





## 3-Way ball valve type 285 PVC-U Horizontal/L-port DA (Double acting) Without manual override With solvent cement spigots metric



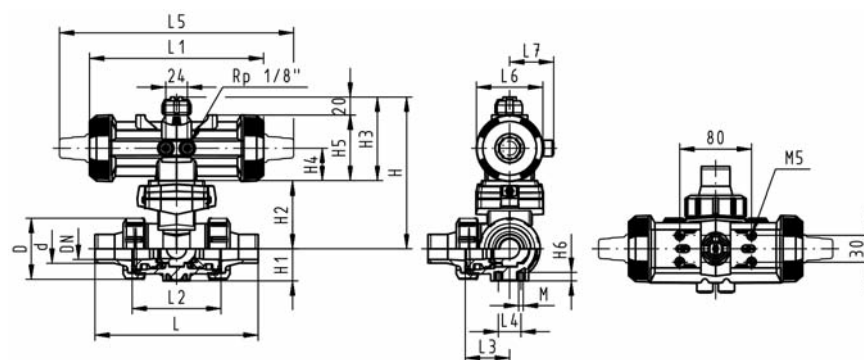
### Model:

- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- Basic position A-C opened, activated position B-C opened, see flow scheme
- Control time 90°<) 1-3 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	50	199 285 182	199 285 192	0.931
20	15	10	75	199 285 183	199 285 193	0.940
25	20	10	150	199 285 184	199 285 194	1.074
32	25	10	280	199 285 185	199 285 195	1.273
40	32	10	480	199 285 186	199 285 196	2.136
50	40	10	620	199 285 187	199 285 197	2.630
63	50	10	1230	199 285 188	199 285 198	4.054

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]
16	50	159	28	62	97	40	77	8	131	194	73	36	25	261	76
20	50	159	28	62	97	40	77	8	141	194	73	36	25	261	76
25	58	168	32	71	97	40	77	8	165	194	86	43	25	261	76
32	68	168	36	71	97	40	77	8	182	194	99	50	25	261	76
40	84	203	45	84	119	51	99	9	209	224	120	60	45	305	95
50	97	203	51	84	119	51	99	9	242	224	137	69	45	305	95
63	124	225	65	106	119	51	99	9	302	224	179	89	45	305	95

d [mm]	L7 [mm]	M	closest inch
16	48	6	3/8
20	48	6	1/2
25	48	6	3/4
32	48	6	1
40	59	8	1 1/4
50	59	8	1 1/2
63	59	8	2

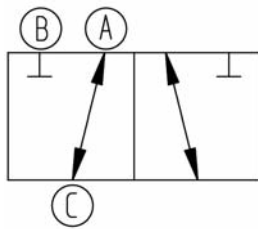
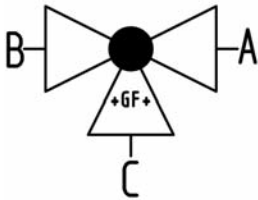




### 3-Way ball valve type 285 PVC-U Horizontal/L-port DA (Double acting) Without manual override With solvent cement sockets metric

#### Model:

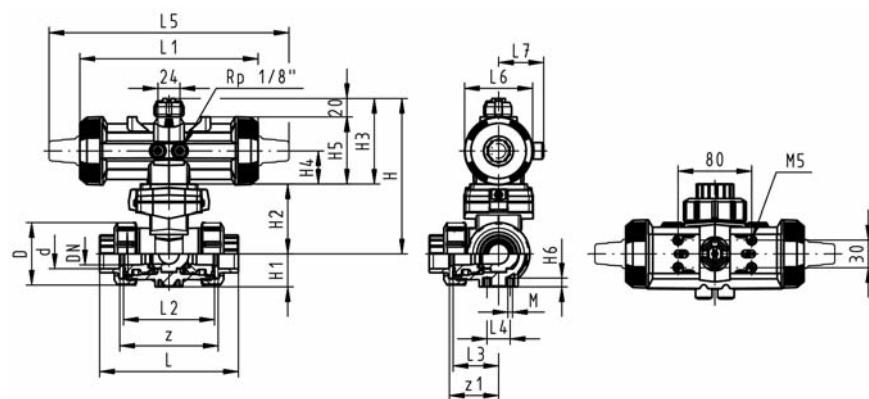
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- Basic position A-C opened, activated position B-C opened, see flow scheme
- Control time 90° < 1-3 s
- For easy installation and removal
- Integrated stainless steel mounting inserts



d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	50	199 285 202	199 285 212	0.925
20	15	10	75	199 285 203	199 285 213	0.931
25	20	10	150	199 285 204	199 285 214	1.059
32	25	10	280	199 285 205	199 285 215	1.249
40	32	10	480	199 285 206	199 285 216	2.115
50	40	10	620	199 285 207	199 285 217	2.567
63	50	10	1230	199 285 208	199 285 218	3.928

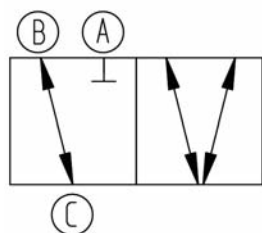
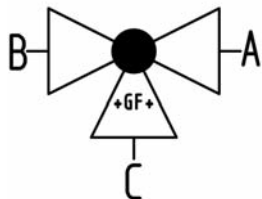
d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]
16	50	159	28	62	97	40	77	8	109	194	73	36	25	261	76
20	50	159	28	62	97	40	77	8	112	194	73	36	25	261	76
25	58	168	32	71	97	40	77	8	131	194	86	43	25	261	76
32	68	168	36	71	97	40	77	8	151	194	99	50	25	261	76
40	84	203	45	84	119	51	99	9	181	224	120	60	45	305	95
50	97	203	51	84	119	51	99	9	205	224	137	69	45	305	95
63	124	225	65	106	119	51	99	9	261	224	179	89	45	305	95

d [mm]	L7 [mm]	M	z [mm]	z1 [mm]	closest inch
16	48	6	81	40	3/8
20	48	6	81	40	1/2
25	48	6	94	47	3/4
32	48	6	107	54	1
40	59	8	130	65	1 1/4
50	59	8	143	72	1 1/2
63	59	8	185	92	2





## 3-Way ball valve type 285 PVC-U Horizontal/T-port Without manual override With solvent cement sockets metric



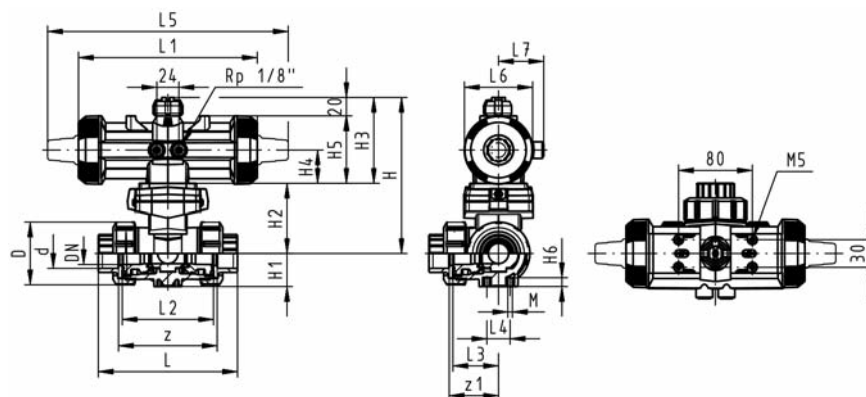
### Model:

- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- Actuator fails safe to the closed position FC
- Basic position B-C opened, activated position A-B-C opened, see flow scheme
- Control time  $90^\circ <$  1-3 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	140	<b>199 285 062</b>	<b>199 285 072</b>	1.114
20	15	10	200	<b>199 285 063</b>	<b>199 285 073</b>	1.120
25	20	10	470	<b>199 285 064</b>	<b>199 285 074</b>	1.247
32	25	10	793	<b>199 285 065</b>	<b>199 285 075</b>	1.432
40	32	10	1290	<b>199 285 066</b>	<b>199 285 076</b>	2.528
50	40	10	1910	<b>199 285 067</b>	<b>199 285 077</b>	2.970
63	50	10	3100	<b>199 285 068</b>	<b>199 285 078</b>	4.307

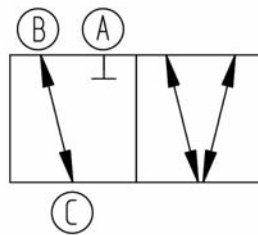
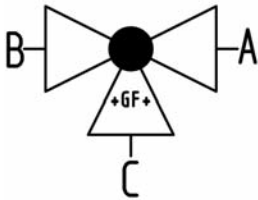
d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]
16	50	159	28	62	97	40	77	8	109	194	73	36	25	261	76
20	50	159	28	62	97	40	77	8	112	194	73	36	25	261	76
25	58	168	32	71	97	40	77	8	131	194	86	43	25	261	76
32	68	168	36	71	97	40	77	8	151	194	99	50	25	261	76
40	84	203	45	84	119	51	99	9	181	224	120	60	45	305	95
50	97	203	51	84	119	51	99	9	205	224	137	69	45	305	95
63	124	225	65	106	119	51	99	9	261	224	179	89	45	305	95

d [mm]	L7 [mm]	M	z [mm]	z1 [mm]	closest inch
16	48	6	81	40	$\frac{3}{8}$
20	48	6	81	40	$\frac{1}{2}$
25	48	6	94	47	$\frac{3}{4}$
32	48	6	107	54	1
40	59	8	130	65	$1 \frac{1}{4}$
50	59	8	143	72	$1 \frac{1}{2}$
63	59	8	185	92	2





### 3-Way ball valve type 285 PVC-U Horizontal/T-port Without manual override With solvent cement spigots metric



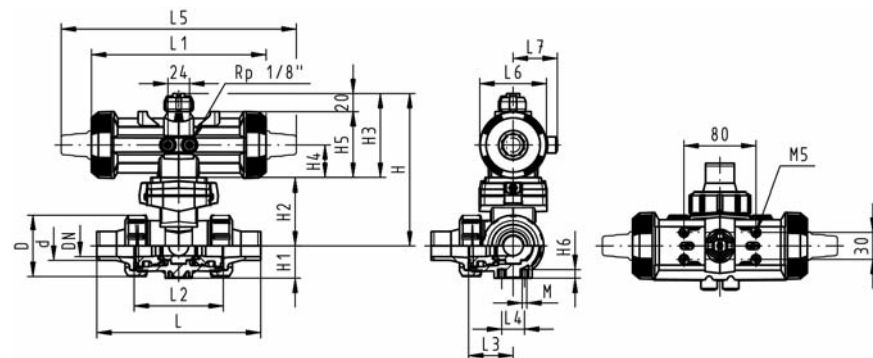
#### Model:

- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- Actuator fails safe to the closed position FC
- Basic position B-C opened, activated position A-B-C opened, see flow scheme
- Control time  $90^\circ <$  1-3 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	140	199 285 042	199 285 052	1.120
20	15	10	200	199 285 043	199 285 053	1.129
25	20	10	470	199 285 044	199 285 054	1.262
32	25	10	793	199 285 045	199 285 055	1.456
40	32	10	1290	199 285 046	199 285 056	2.549
50	40	10	1910	199 285 047	199 285 057	3.033
63	50	10	3100	199 285 048	199 285 058	4.433

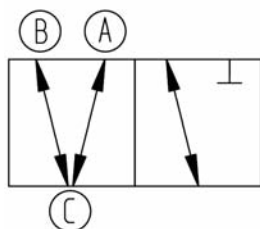
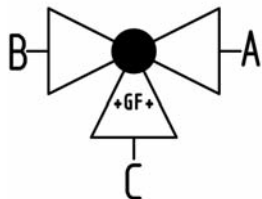
d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]
16	50	159	28	62	97	40	77	8	131	194	73	36	25	261	76
20	50	159	28	62	97	40	77	8	141	194	73	36	25	261	76
25	58	168	32	71	97	40	77	8	165	194	86	43	25	261	76
32	68	168	36	71	97	40	77	8	182	194	99	50	25	261	76
40	84	203	45	84	119	51	99	9	209	224	120	60	45	305	95
50	97	203	51	84	119	51	99	9	242	224	137	69	45	305	95
63	124	225	65	106	119	51	99	9	302	224	179	89	45	305	95

d [mm]	L7 [mm]	M	closest inch
16	48	6	$\frac{3}{8}$
20	48	6	$\frac{1}{2}$
25	48	6	$\frac{3}{4}$
32	48	6	1
40	59	8	$1 \frac{1}{4}$
50	59	8	$1 \frac{1}{2}$
63	59	8	2





# 3-Way ball valve type 285 PVC-U Horizontal/T-port DA (Double acting) Without manual override With solvent cement sockets metric



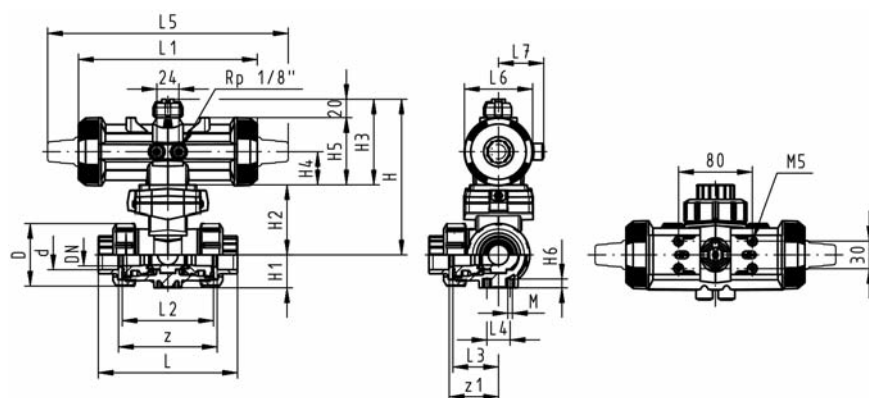
### Model:

- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- Basic position A-B-C opened, activated position B-C opened, see flow scheme
- Control time 90°< 1-3 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	140	199 285 242	199 285 252	0.924
20	15	10	200	199 285 243	199 285 253	0.930
25	20	10	470	199 285 244	199 285 254	1.057
32	25	10	793	199 285 245	199 285 255	1.242
40	32	10	1290	199 285 246	199 285 256	2.104
50	40	10	1910	199 285 247	199 285 257	2.546
63	50	10	3100	199 285 248	199 285 258	3.883

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]
16	50	159	28	62	97	40	77	8	109	194	73	36	25	261	76
20	50	159	28	62	97	40	77	8	112	194	73	36	25	261	76
25	58	168	32	71	97	40	77	8	131	194	86	43	25	261	76
32	68	168	36	71	97	40	77	8	151	194	99	50	25	261	76
40	84	203	45	84	119	51	99	9	181	224	120	60	45	305	95
50	97	203	51	84	119	51	99	9	205	224	137	69	45	305	95
63	124	225	65	106	119	51	99	9	261	224	179	89	45	305	95

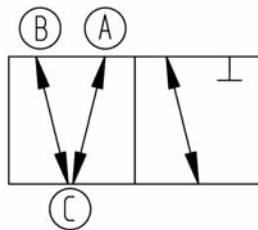
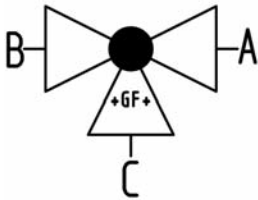
d [mm]	L7 [mm]	M	z [mm]	z1 [mm]	closest inch
16	48	6	81	40	3/8
20	48	6	81	40	1/2
25	48	6	94	47	3/4
32	48	6	107	54	1
40	59	8	130	65	1 1/4
50	59	8	143	72	1 1/2
63	59	8	185	92	2







### 3-Way ball valve type 285 PVC-U Horizontal/T-port DA (Double acting) Without manual override With solvent cement spigots metric



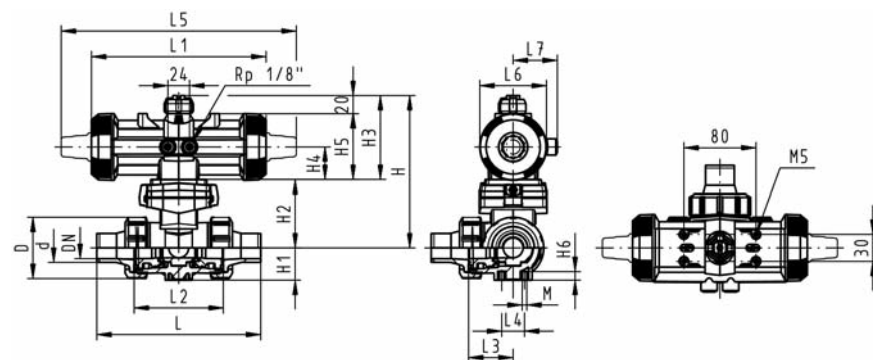
#### Model:

- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- Basic position A-B-C opened, activated position B-C opened, see flow scheme
- Control time  $90^\circ <$  1-3 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	140	199 285 222	199 285 232	0.930
20	15	10	200	199 285 223	199 285 233	0.939
25	20	10	470	199 285 224	199 285 234	1.072
32	25	10	793	199 285 225	199 285 235	1.266
40	32	10	1290	199 285 226	199 285 236	2.125
50	40	10	1910	199 285 227	199 285 237	2.609
63	50	10	3100	199 285 228	199 285 238	4.009

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]
16	50	159	28	62	97	40	77	8	131	194	73	36	25	261	76
20	50	159	28	62	97	40	77	8	141	194	73	36	25	261	76
25	58	168	32	71	97	40	77	8	165	194	86	43	25	261	76
32	68	168	36	71	97	40	77	8	182	194	99	50	25	261	76
40	84	203	45	84	119	51	99	9	209	224	120	60	45	305	95
50	97	203	51	84	119	51	99	9	242	224	137	69	45	305	95
63	124	225	65	106	119	51	99	9	302	224	179	89	45	305	95

d [mm]	L7 [mm]	M	closest inch
16	48	6	$\frac{3}{8}$
20	48	6	$\frac{1}{2}$
25	48	6	$\frac{3}{4}$
32	48	6	1
40	59	8	$1 \frac{1}{4}$
50	59	8	$1 \frac{1}{2}$
63	59	8	2



# Ball valves pneumatic Inch BS

## Ball valve type 234 PVC-U FC (Fail safe to close) With manual override With solvent cement sockets Inch BS



DN10/15 - 50

### Model:

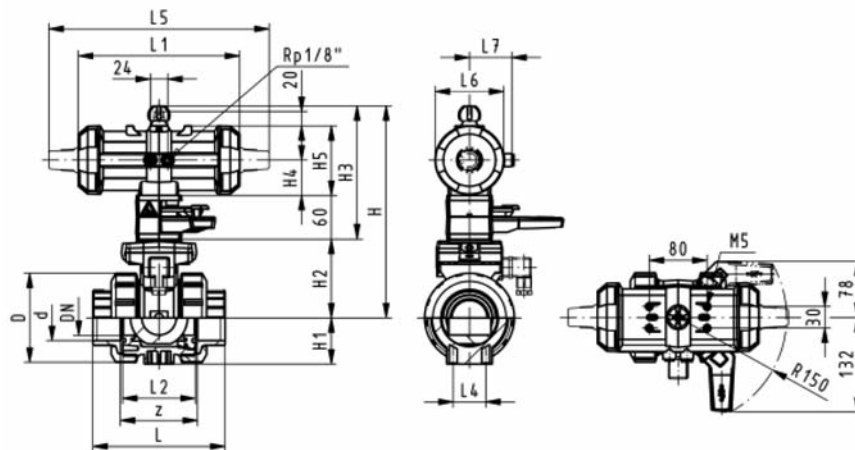
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- Control time 90°< 1-2 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

### Option:

- Individual configuration of the valve (see diagram)

Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
3/8	10	10	70	199 234 002	199 234 012	1.500
1/2	15	10	185	199 234 003	199 234 013	1.500
3/4	20	10	350	199 234 004	199 234 014	1.600
1	25	10	700	199 234 005	199 234 015	1.700
1 1/4	32	10	1000	199 234 006	199 234 016	2.800
1 1/2	40	10	1600	199 234 007	199 234 017	3.100
2	50	10	3100	199 234 008	199 234 018	4.000

Inch	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	z [mm]
3/8	50	159	27	62	168	40	77	92	194	56	25	261	76	48	60
1/2	50	159	27	62	168	40	77	95	194	56	25	261	76	48	60
3/4	58	168	30	71	168	40	77	110	194	65	25	261	76	48	69
1	68	168	36	71	168	40	77	123	194	71	25	261	76	48	75
1 1/4	84	202	44	84	187	51	99	146	224	85	45	305	95	59	89
1 1/2	97	202	51	84	187	51	99	157	224	89	45	305	95	59	97
2	124	225	64	106	187	51	99	183	224	101	45	305	95	59	110





DN10/15 - 50

## Ball valve type 234 PVC-U FO (Fail safe to open) With manual override With solvent cement sockets Inch BS

### Model:

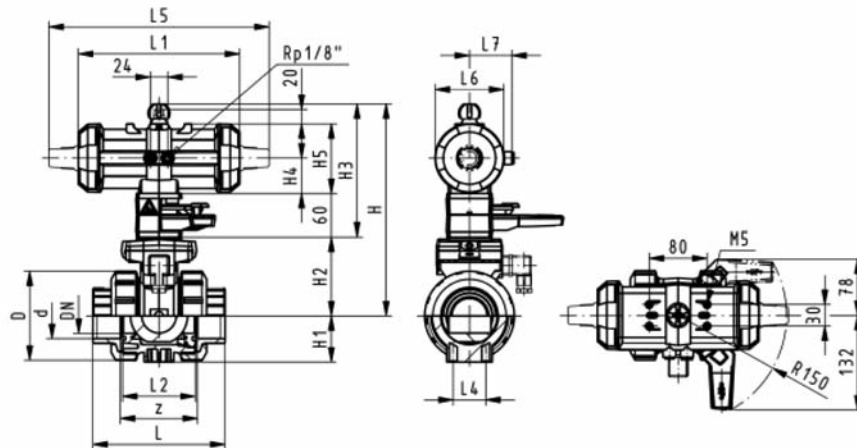
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- Control time 90°< 1-2 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

### Option:

- Individual configuration of the valve (see diagram)

Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
3/8	10	10	70	<b>199 234 042</b>	<b>199 234 052</b>	1.500
1/2	15	10	185	<b>199 234 043</b>	<b>199 234 053</b>	1.500
3/4	20	10	350	<b>199 234 044</b>	<b>199 234 054</b>	1.600
1	25	10	700	<b>199 234 045</b>	<b>199 234 055</b>	1.700
1 1/4	32	10	1000	<b>199 234 046</b>	<b>199 234 056</b>	2.800
1 1/2	40	10	1600	<b>199 234 047</b>	<b>199 234 057</b>	3.100
2	50	10	3100	<b>199 234 048</b>	<b>199 234 058</b>	4.000

Inch	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	z [mm]
3/8	50	159	27	62	168	40	77	92	194	56	25	261	76	48	60
1/2	50	159	27	62	168	40	77	95	194	56	25	261	76	48	60
3/4	58	168	30	71	168	40	77	110	194	65	25	261	76	48	69
1	68	168	36	71	168	40	77	123	194	71	25	261	76	48	75
1 1/4	84	202	44	84	187	51	99	146	224	85	45	305	95	59	89
1 1/2	97	202	51	84	187	51	99	157	224	89	45	305	95	59	97
2	124	225	64	106	187	51	99	183	224	101	45	305	95	59	110





DN10/15 - 50

## Ball valve type 234 PVC-U DA (Double acting) With manual override With solvent cement sockets Inch BS

### Model:

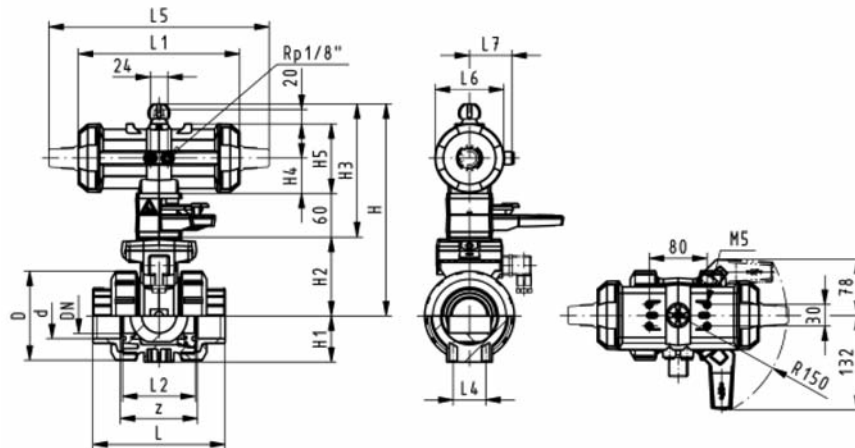
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- Control time  $90^\circ <$  1-2 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

### Option:

- Individual configuration of the valve (see diagram)

Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
3/8	10	10	70	199 234 082	199 234 092	1.500
1/2	15	10	185	199 234 083	199 234 093	1.500
3/4	20	10	350	199 234 084	199 234 094	1.600
1	25	10	700	199 234 085	199 234 095	1.700
1 1/4	32	10	1000	199 234 086	199 234 096	2.800
1 1/2	40	10	1600	199 234 087	199 234 097	3.100
2	50	10	3100	199 234 088	199 234 098	4.000

Inch	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	z [mm]
3/8	50	159	27	62	168	40	77	92	194	56	25	261	76	48	60
1/2	50	159	27	62	168	40	77	95	194	56	25	261	76	48	60
3/4	58	168	30	71	168	40	77	110	194	65	25	261	76	48	69
1	68	168	36	71	168	40	77	123	194	71	25	261	76	48	75
1 1/4	84	202	44	84	187	51	99	146	224	85	45	305	95	59	89
1 1/2	97	202	51	84	187	51	99	157	224	89	45	305	95	59	97
2	124	225	64	106	187	51	99	183	224	101	45	305	95	59	110





DN10/15 - 50



## Ball valve type 234 PVC-U FC (Fail safe to close) Without manual override With solvent cement sockets Inch BS

### Model:

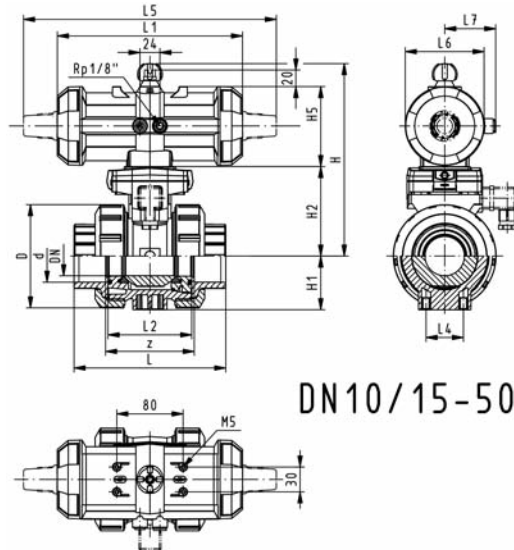
- Assignment of actuators: PA11 (DN10/15-25), PA21 (DN32-50), PA30 (DN65), PA40 (DN80), PA40 (DN100)
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90°< 1-2 s

### Option:

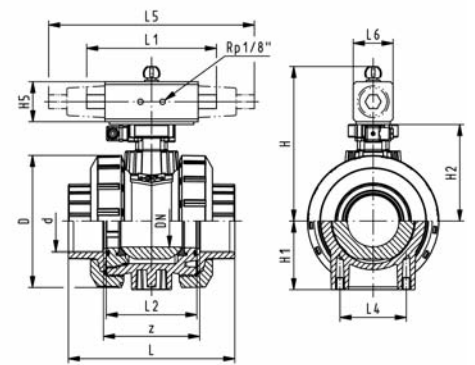
- Individual configuration of the valve (see diagram)

Inch	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
3/8	10	10	70	199 234 122	199 234 132	1.200
1/2	15	10	185	199 234 123	199 234 133	1.200
3/4	20	10	350	199 234 124	199 234 134	1.300
1	25	10	700	199 234 125	199 234 135	1.400
1 1/4	32	10	1000	199 234 126	199 234 136	2.500
1 1/2	40	10	1600	199 234 127	199 234 137	2.800
2	50	10	3100	199 234 128	199 234 138	3.700
2 1/2	65	10	5000	199 234 129	199 234 139	7.800
3	80	10	7000	199 234 130	199 234 140	10.200
4	100	10	11000	199 234 131	199 234 141	15.300

Inch	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	z [mm]
3/8	50	159	27	62	77	92	194	56	25	261	76	48	60
1/2	50	159	27	62	77	95	194	56	25	261	76	48	60
3/4	58	168	30	71	77	110	194	65	25	261	76	48	69
1	68	168	36	71	77	123	194	71	25	261	76	48	75
1 1/4	84	202	44	84	99	146	224	85	45	305	95	59	89
1 1/2	97	202	51	84	99	157	224	89	45	305	95	59	97
2	124	225	64	106	99	183	224	101	45	305	95	59	110
2 1/2	166	262	85	156	70	233		136	70	276	65		144
3	200	281	105	168	78	254		141	70	341	72		151
4	238	292	123	175	86	301		164	120	369	80		174



DN10/15-50



DN65-100



DN10/15 - 50

## Ball valve type 234 PVC-U FO (Fail safe to open) Without manual override With solvent cement sockets Inch BS

### Model:

- Assignment of actuators: PA11 (DN10/15-25), PA21 (DN32-50), PA30 (DN65), PA40 (DN80), PA40 (DN100)
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90° < 1-2 s

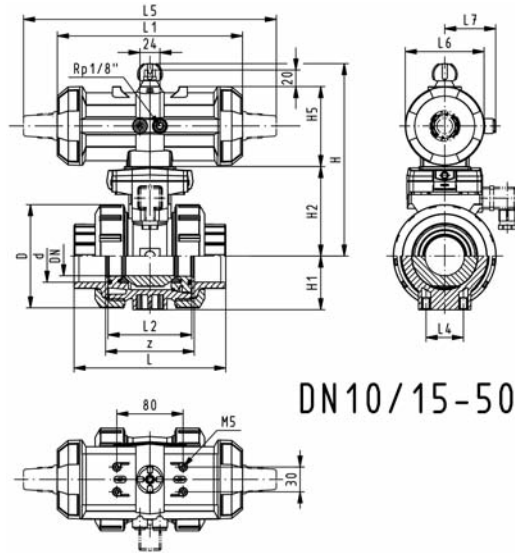
### Option:

- Individual configuration of the valve (see diagram)

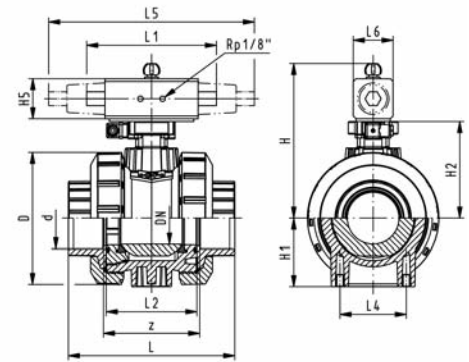


Inch	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
3/8	10	10	70	199 234 162	199 234 172	1.200
1/2	15	10	185	199 234 163	199 234 173	1.200
3/4	20	10	350	199 234 164	199 234 174	1.300
1	25	10	700	199 234 165	199 234 175	1.400
1 1/4	32	10	1000	199 234 166	199 234 176	2.500
1 1/2	40	10	1600	199 234 167	199 234 177	2.800
2	50	10	3100	199 234 168	199 234 178	3.700
2 1/2	65	10	5000	199 234 169	199 234 179	7.800
3	80	10	7000	199 234 170	199 234 180	10.200
4	100	10	11000	199 234 171	199 234 181	15.300

Inch	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	z [mm]
3/8	50	159	27	62	77	92	194	56	25	261	76	48	60
1/2	50	159	27	62	77	95	194	56	25	261	76	48	60
3/4	58	168	30	71	77	110	194	65	25	261	76	48	69
1	68	168	36	71	77	123	194	71	25	261	76	48	75
1 1/4	84	202	44	84	99	146	224	85	45	305	95	59	89
1 1/2	97	202	51	84	99	157	224	89	45	305	95	59	97
2	124	225	64	106	99	183	224	101	45	305	95	59	110
2 1/2	166	262	85	156	70	233		136	70	276	65		144
3	200	281	105	168	78	254		141	70	341	72		151
4	238	292	123	175	86	301		164	120	369	80		174



DN10/15-50



DN65-100



DN10/15 - 50

## Ball valve type 234 PVC-U DA (Double acting) Without manual override With solvent cement sockets Inch BS

### Model:

- Assignment of actuators: PA11 (DN10/15-25), PA21 (DN32-50), PA35 (DN65), PA40 (DN80), PA45 (DN100)
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90°< 1-2 s

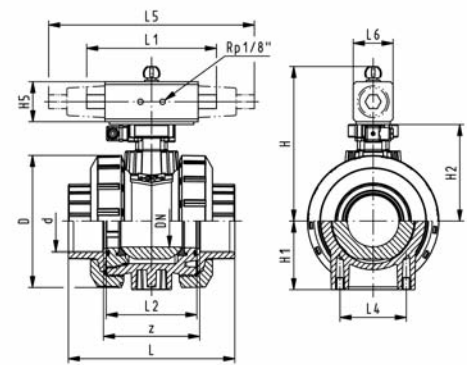
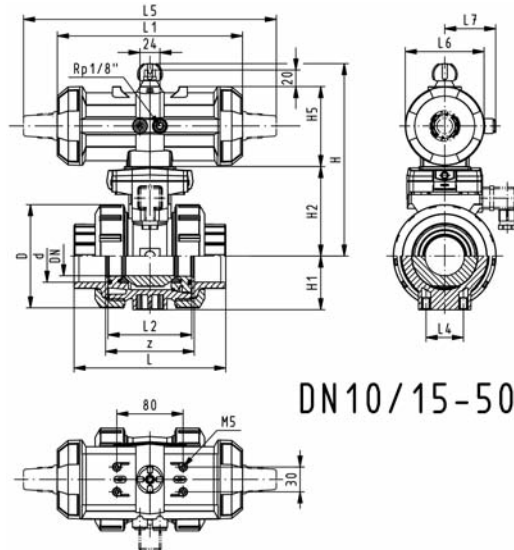
### Option:

- Individual configuration of the valve (see diagram)



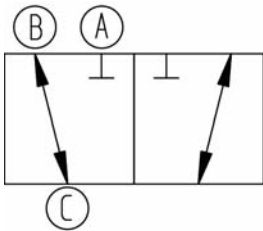
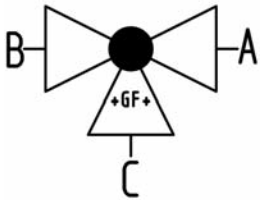
Inch	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
3/8	10	10	70	199 234 202	199 234 212	1.200
1/2	15	10	185	199 234 203	199 234 213	1.200
3/4	20	10	350	199 234 204	199 234 214	1.300
1	25	10	700	199 234 205	199 234 215	1.400
1 1/4	32	10	1000	199 234 206	199 234 216	2.500
1 1/2	40	10	1600	199 234 207	199 234 217	2.800
2	50	10	3100	199 234 208	199 234 218	3.700
2 1/2	65	10	5000	199 234 209	199 234 219	6.600
3	80	10	7000	199 234 210	199 234 220	9.600
4	100	10	11000	199 234 211	199 234 221	13.600

Inch	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	z [mm]
3/8	50	159	27	62	77	92	194	56	25	261	76	48	60
1/2	50	159	27	62	77	95	194	56	25	261	76	48	60
3/4	58	168	30	71	77	110	194	65	25	261	76	48	69
1	68	168	36	71	77	123	194	71	25	261	76	48	75
1 1/4	84	202	44	84	99	146	224	85	45	305	95	59	89
1 1/2	97	202	51	84	99	157	224	89	45	305	95	59	97
2	124	225	64	106	99	183	224	101	45	305	95	59	110
2 1/2	166	257	85	156	66	233	144	136	70		60		144
3	200	274	105	168	70	254	152	141	70		65		151
4	238	273	123	175	78	301	169	164	120		72		174





## 3-Way ball valve type 285 PVC-U Horizontal/L-port Without manual override With solvent cement sockets BS



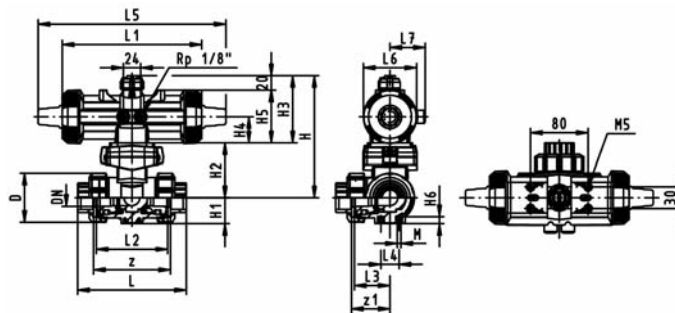
### Model:

- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- Actuator fails safe to the closed position FC
- Basic position B-C opened, activated position A-C opened, see flow scheme
- Control time 90° < 1-3 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

Inch	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
3/8	10	10	50	199 285 742	199 285 752	1.115
1/2	15	10	75	199 285 743	199 285 753	1.121
3/4	20	10	150	199 285 744	199 285 754	1.249
1	25	10	280	199 285 745	199 285 755	1.439
1 1/4	32	10	480	199 285 746	199 285 756	2.539
1 1/2	40	10	620	199 285 747	199 285 757	2.991
2	50	10	1230	199 285 748	199 285 758	4.352

Inch	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]
3/8	50	159	28	62	97	40	77	8	109	194	73	36	25	261	76
1/2	50	159	28	62	97	40	77	8	112	194	73	36	25	261	76
3/4	58	168	32	71	97	40	77	8	131	194	86	43	25	261	76
1	68	168	36	71	97	40	77	8	151	194	99	50	25	261	76
1 1/4	84	203	45	84	119	51	99	9	181	224	120	60	45	305	95
1 1/2	97	203	51	84	119	51	99	9	205	224	137	69	45	305	95
2	124	225	65	106	119	51	99	9	261	224	179	89	45	305	95

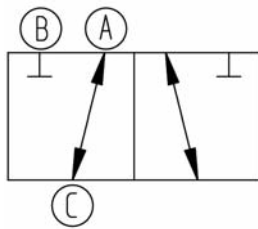
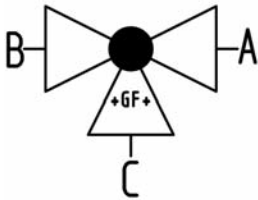
Inch	L7 [mm]	M	z [mm]	z1 [mm]
3/8	48	6	77	38
1/2	48	6	77	38
3/4	48	6	90	45
1	48	6	103	52
1 1/4	59	8	124	62
1 1/2	59	8	145	73
2	59	8	189	94







## 3-Way ball valve type 285 PVC-U Horizontal/L-port DA (Double acting) Without manual override With solvent cement sockets BS



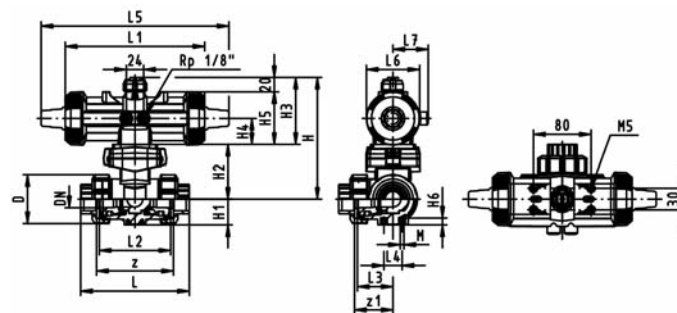
### Model:

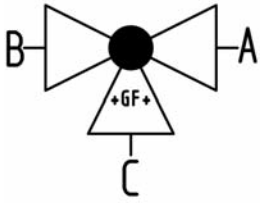
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- Basic position A-C opened, activated position B-C opened, see flow scheme
- Control time  $90^\circ <$  1-3 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
3/8	10	10	50	199 285 762	199 285 772	0.925
1/2	15	10	75	199 285 763	199 285 773	0.931
3/4	20	10	150	199 285 764	199 285 774	1.059
1	25	10	280	199 285 765	199 285 775	1.249
1 1/4	32	10	480	199 285 766	199 285 776	2.115
1 1/2	40	10	620	199 285 767	199 285 777	2.567
2	50	10	1230	199 285 768	199 285 778	3.928

Inch	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]
3/8	50	159	28	62	97	40	77	8	109	194	73	36	25	261	76
1/2	50	159	28	62	97	40	77	8	112	194	73	36	25	261	76
3/4	58	168	32	71	97	40	77	8	131	194	86	43	25	261	76
1	68	168	36	71	97	40	77	8	151	194	99	50	25	261	76
1 1/4	84	203	45	84	119	51	99	9	181	224	120	60	45	305	95
1 1/2	97	203	51	84	119	51	99	9	205	224	137	69	45	305	95
2	124	225	65	106	119	51	99	9	261	224	179	89	45	305	95

Inch	L7 [mm]	M	z [mm]	z1 [mm]
3/8	48	6	77	38
1/2	48	6	77	38
3/4	48	6	90	45
1	48	6	103	52
1 1/4	59	8	124	62
1 1/2	59	8	145	73
2	59	8	189	94



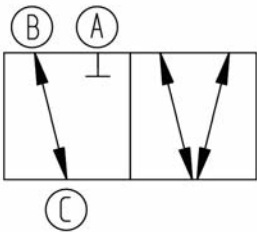
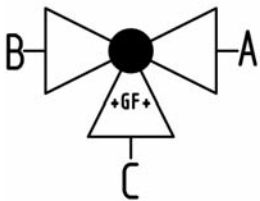
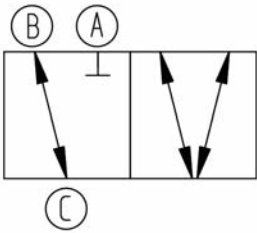


## 3-Way ball valve type 285 PVC-U Horizontal/T-port Without manual override With solvent cement sockets BS



### Model:

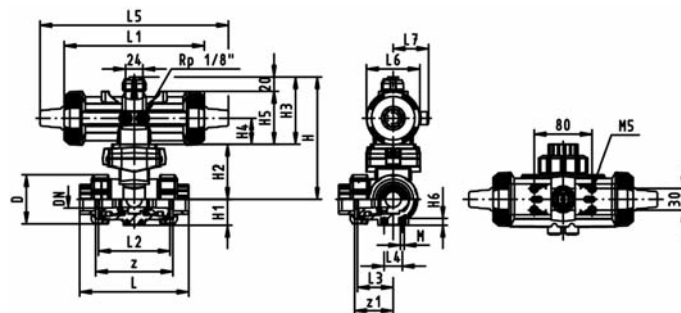
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- Actuator fails safe to the closed position FC
- Basic position B-C opened, activated position A-B-C opened, see flow scheme
- Control time 90° < 1-3 s
- For easy installation and removal
- Integrated stainless steel mounting inserts



Inch	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
3/8	10	10	140	<b>199 285 702</b>	<b>199 285 712</b>	1.114
1/2	15	10	200	<b>199 285 703</b>	<b>199 285 713</b>	1.120
3/4	20	10	470	<b>199 285 704</b>	<b>199 285 714</b>	1.247
1	25	10	793	<b>199 285 705</b>	<b>199 285 715</b>	1.432
1 1/4	32	10	1290	<b>199 285 706</b>	<b>199 285 716</b>	2.528
1 1/2	40	10	1910	<b>199 285 707</b>	<b>199 285 717</b>	2.970
2	50	10	3100	<b>199 285 708</b>	<b>199 285 718</b>	4.307

Inch	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]
3/8	50	159	28	62	97	40	77	8	109	194	73	36	25	261	76
1/2	50	159	28	62	97	40	77	8	112	194	73	36	25	261	76
3/4	58	168	32	71	97	40	77	8	131	194	86	43	25	261	76
1	68	168	36	71	97	40	77	8	151	194	99	50	25	261	76
1 1/4	84	203	45	84	119	51	99	9	181	224	120	60	45	305	95
1 1/2	97	203	51	84	119	51	99	9	205	224	137	69	45	305	95
2	124	225	65	106	119	51	99	9	261	224	179	89	45	305	95

Inch	L7 [mm]	M	z [mm]	z1 [mm]
3/8	48	6	77	38
1/2	48	6	77	38
3/4	48	6	90	45
1	48	6	103	52
1 1/4	59	8	124	62
1 1/2	59	8	145	73
2	59	8	189	94

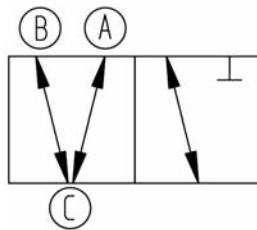
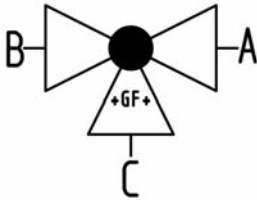




## 3-Way ball valve type 285 PVC-U Horizontal/T-port DA (Double acting) Without manual override With solvent cement sockets BS

### Model:

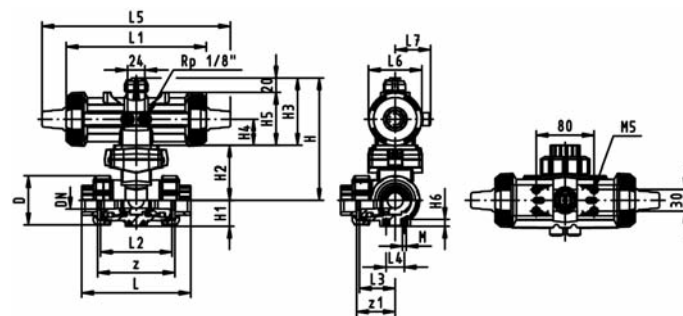
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- Basic position A-B-C opened, activated position B-C opened, see flow scheme
- Control time  $90^\circ <$  1-3 s
- For easy installation and removal
- Integrated stainless steel mounting inserts



Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
3/8	10	10	140	199 285 722	199 285 732	0.924
1/2	15	10	200	199 285 723	199 285 733	0.930
3/4	20	10	470	199 285 724	199 285 734	1.057
1	25	10	793	199 285 725	199 285 735	1.242
1 1/4	32	10	1290	199 285 726	199 285 736	2.104
1 1/2	40	10	1910	199 285 727	199 285 737	2.546
2	50	10	3100	199 285 728	199 285 738	3.883

Inch	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]
3/8	50	159	28	62	97	40	77	8	109	194	73	36	25	261	76
1/2	50	159	28	62	97	40	77	8	112	194	73	36	25	261	76
3/4	58	168	32	71	97	40	77	8	131	194	86	43	25	261	76
1	68	168	36	71	97	40	77	8	151	194	99	50	25	261	76
1 1/4	84	203	45	84	119	51	99	9	181	224	120	60	45	305	95
1 1/2	97	203	51	84	119	51	99	9	205	224	137	69	45	305	95
2	124	225	65	106	119	51	99	9	261	224	179	89	45	305	95

Inch	L7 [mm]	M	z [mm]	z1 [mm]
3/8	48	6	77	38
1/2	48	6	77	38
3/4	48	6	90	45
1	48	6	103	52
1 1/4	59	8	124	62
1 1/2	59	8	145	73
2	59	8	189	94



# Ball valves pneumatic ASTM/ANSI



DN10/15 - 50

**Ball valve type 230 PVC-U FC (Fail safe to close)  
With manual override  
With solvent cement sockets Inch ASTM  
Inclusive 2 threaded valve ends NPT**

**Model:**

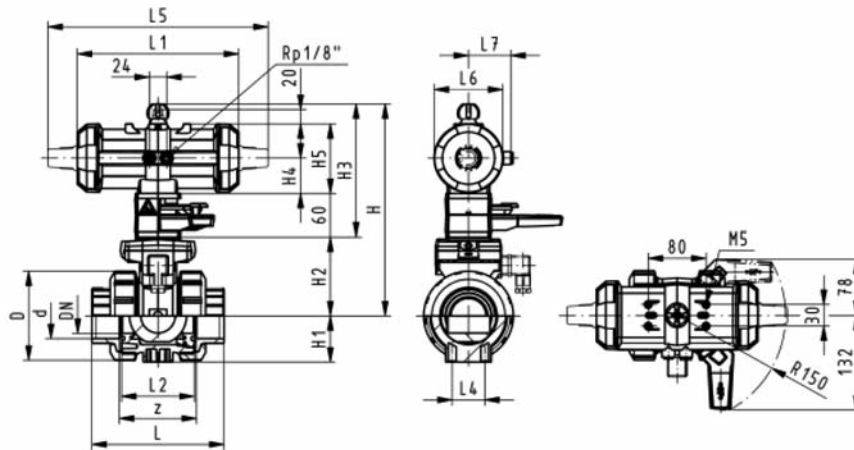
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90°<) 1-2 s

**Option:**

- Individual configuration of the valve (see diagram)

Inch	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
3/8	10	10	70	199 233 002	199 233 012	1.500
1/2	15	10	185	199 233 003	199 233 013	1.500
3/4	20	10	350	199 233 004	199 233 014	1.600
1	25	10	700	199 233 005	199 233 015	1.700
1 1/4	32	10	1000	199 233 006	199 233 016	2.800
1 1/2	40	10	1600	199 233 007	199 233 017	3.100
2	50	10	3100	199 233 008	199 233 018	4.000

Inch	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	z [mm]
3/8	50	159	27	62	168	40	77	105	194	56	25	261	76	48	67
1/2	50	159	27	62	168	40	77	105	194	56	25	261	76	48	61
3/4	58	168	30	71	168	40	77	121	194	65	25	261	76	48	70
1	68	168	36	71	168	40	77	133	194	71	25	261	76	48	76
1 1/4	84	202	44	84	187	51	99	154	224	85	45	305	95	59	90
1 1/2	97	202	51	84	187	51	99	164	224	89	45	305	95	59	94
2	124	225	64	106	187	51	99	183	224	101	45	305	95	59	107





DN10/15 - 50

**Ball valve type 230 PVC-U FO (Fail safe to open)  
With manual override  
With solvent cement sockets Inch ASTM  
Inclusive 2 threaded valve ends NPT**

**Model:**

- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90°< 1-2 s

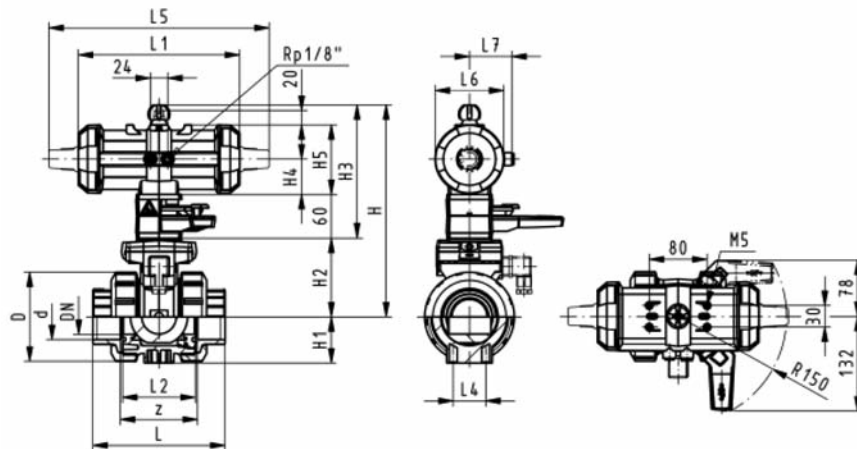
**Option:**

- Individual configuration of the valve (see diagram)

Inch	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg										
3/8	10	10	70	199 233 022	199 233 032	1.500										
1/2	15	10	185	199 233 023	199 233 033	1.500										
3/4	20	10	350	199 233 024	199 233 034	1.600										
1	25	10	700	199 233 025	199 233 035	1.700										
1 1/4	32	10	1000	199 233 026	199 233 036	2.800										
1 1/2	40	10	1600	199 233 027	199 233 037	3.100										
2	50	10	3100	199 233 028	199 233 038	4.000										

Inch	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	z [mm]
3/8	50	159	27	62	168	40	77	105	194	56	25	261	76	48	67
1/2	50	159	27	62	168	40	77	105	194	56	25	261	76	48	61
3/4	58	168	30	71	168	40	77	121	194	65	25	261	76	48	70
1	68	168	36	71	168	40	77	133	194	71	25	261	76	48	76
1 1/4	84	202	44	84	187	51	99	154	224	85	45	305	95	59	90
1 1/2	97	202	51	84	187	51	99	164	224	89	45	305	95	59	94
2	124	225	64	106	187	51	99	183	224	101	45	305	95	59	107





DN10/15 - 50

**Ball valve type 230 PVC-U DA (Double acting)  
With manual override  
With solvent cement sockets Inch ASTM  
Inclusive 2 threaded valve ends NPT**

**Model:**

- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90°< 1-2 s

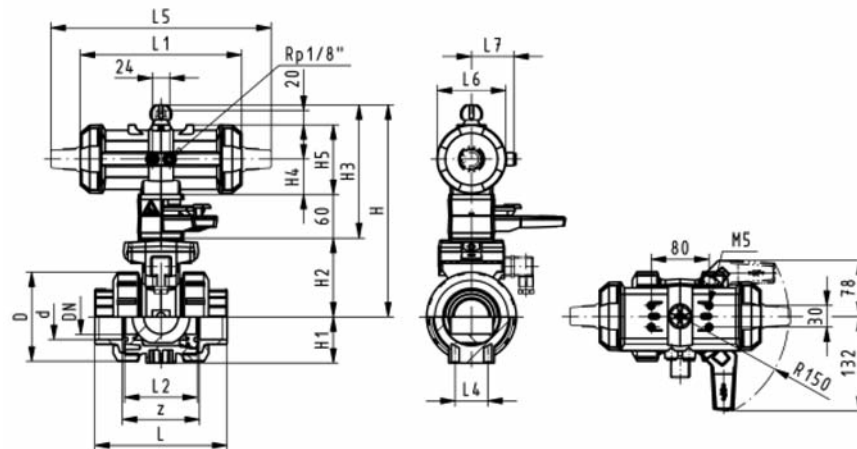
**Option:**

- Individual configuration of the valve (see diagram)

Inch	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg										
3/8	10	10	70	199 233 042	199 233 052	1.500										
1/2	15	10	185	199 233 043	199 233 053	1.500										
3/4	20	10	350	199 233 044	199 233 054	1.600										
1	25	10	700	199 233 045	199 233 055	1.700										
1 1/4	32	10	1000	199 233 046	199 233 056	2.800										
1 1/2	40	10	1600	199 233 047	199 233 057	3.100										
2	50	10	3100	199 233 048	199 233 058	4.000										

Inch	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	z [mm]
3/8	50	159	27	62	168	40	77	105	194	56	25	261	76	48	67
1/2	50	159	27	62	168	40	77	105	194	56	25	261	76	48	61
3/4	58	168	30	71	168	40	77	121	194	65	25	261	76	48	70
1	68	168	36	71	168	40	77	133	194	71	25	261	76	48	76
1 1/4	84	202	44	84	187	51	99	154	224	85	45	305	95	59	90
1 1/2	97	202	51	84	187	51	99	164	224	89	45	305	95	59	94
2	124	225	64	106	187	51	99	183	224	101	45	305	95	59	107





DN10/15 - 50



**Ball valve type 230 PVC-U FC (Fail safe to close)  
Without manual override  
With solvent cement sockets Inch ASTM  
Inclusive 2 threaded valve ends NPT**

**Model:**

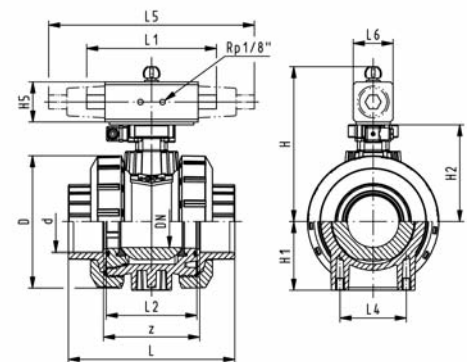
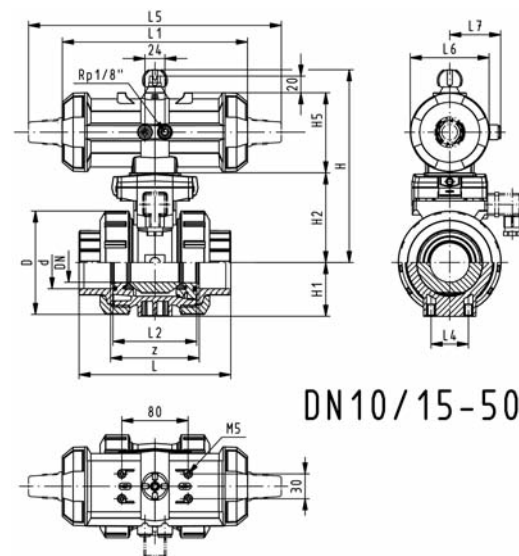
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90°<) 1-2 s
- Assignment of actuators: PA11 (DN10/15-25), PA21 (DN32-50), PA30 (DN65), PA40 (DN80), PA40 (DN100)
- Threaded valve ends are only enclosed for DN10/15-50

**Option:**

- Individual configuration of the valve (see diagram)

Inch	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
3/8	10	10	70	<b>199 233 062</b>	<b>199 233 072</b>	1.200
1/2	15	10	185	<b>199 233 063</b>	<b>199 233 073</b>	1.200
3/4	20	10	350	<b>199 233 064</b>	<b>199 233 074</b>	1.300
1	25	10	700	<b>199 233 065</b>	<b>199 233 075</b>	1.400
1 1/4	32	10	1000	<b>199 233 066</b>	<b>199 233 076</b>	2.500
1 1/2	40	10	1600	<b>199 233 067</b>	<b>199 233 077</b>	2.800
2	50	10	3100	<b>199 233 068</b>	<b>199 233 078</b>	3.700
2 1/2	65	10	5000	<b>199 233 069</b>	<b>199 233 079</b>	7.800
3	80	10	7000	<b>199 233 070</b>	<b>199 233 080</b>	10.200
4	100	10	11000	<b>199 233 071</b>	<b>199 233 081</b>	15.300

Inch	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	z [mm]
3/8	50	159	27	62	77	105	194	56	25	261	76	48	67
1/2	50	159	27	62	77	105	194	56	25	261	76	48	61
3/4	58	168	30	71	77	121	194	65	25	261	76	48	70
1	68	168	36	71	77	133	194	71	25	261	76	48	76
1 1/4	84	202	44	84	99	154	224	85	45	305	95	59	90
1 1/2	97	202	51	84	99	164	224	89	45	305	95	59	94
2	124	225	64	106	99	183	224	101	45	305	95	59	107
2 1/2	166	262	85	156	70	233		136	70	276	65		144
3	200	281	105	168	78	254		141	70	341	72		151
4	238	292	123	175	86	301		164	120	369	80		174





DN10/15 - 50



**Ball valve type 230 PVC-U FO (Fail safe to open)**  
**Without manual override**  
**With solvent cement sockets Inch ASTM**  
**Inclusive 2 threaded valve ends NPT**

**Model:**

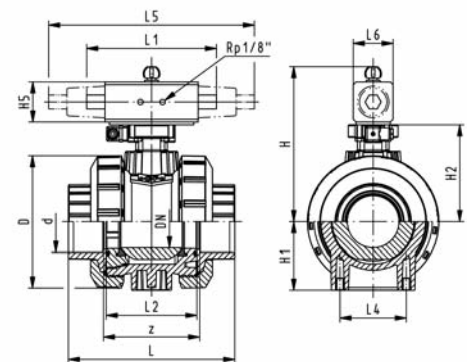
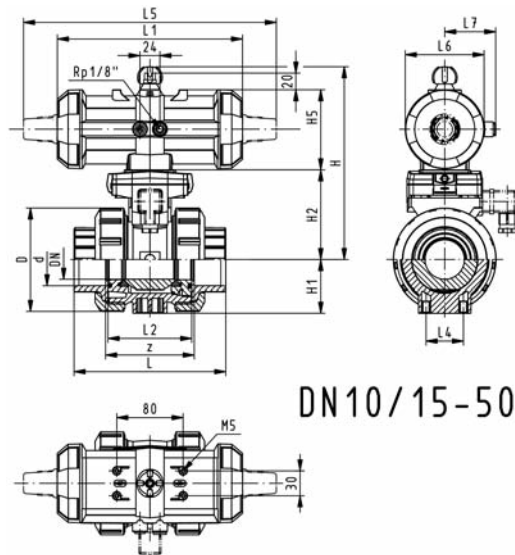
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90° < 1-2 s
- Assignment of actuators: PA11 (DN10/15-25), PA21 (DN32-50), PA30 (DN65), PA40 (DN80), PA40 (DN100)
- Threaded valve ends are only enclosed for DN10/15-50

**Option:**

- Individual configuration of the valve (see diagram)

Inch	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
3/8	10	10	70	199 233 082	199 233 092	1.200
1/2	15	10	185	199 233 083	199 233 093	1.200
3/4	20	10	350	199 233 084	199 233 094	1.300
1	25	10	700	199 233 085	199 233 095	1.400
1 1/4	32	10	1000	199 233 086	199 233 096	2.500
1 1/2	40	10	1600	199 233 087	199 233 097	2.800
2	50	10	3100	199 233 088	199 233 098	3.700
2 1/2	65	10	5000	199 233 089	199 233 099	7.800
3	80	10	7000	199 233 090	199 233 100	10.200
4	100	10	11000	199 233 091	199 233 101	15.300

Inch	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	z [mm]
3/8	50	159	27	62	77	105	194	56	25	261	76	48	67
1/2	50	159	27	62	77	105	194	56	25	261	76	48	61
3/4	58	168	30	71	77	121	194	65	25	261	76	48	70
1	68	168	36	71	77	133	194	71	25	261	76	48	76
1 1/4	84	202	44	84	99	154	224	85	45	305	95	59	90
1 1/2	97	202	51	84	99	164	224	89	45	305	95	59	94
2	124	225	64	106	99	183	224	101	45	305	95	59	107
2 1/2	166	262	85	156	70	233		136	70	276	65		144
3	200	281	105	168	78	254		141	70	341	72		151
4	238	292	123	175	86	301		164	120	369	80		174







DN10/15 - 50



## Ball valve type 230 PVC-U DA (Double acting) Without manual override With solvent cement sockets Inch ASTM Inclusive 2 threaded valve ends NPT

### Model:

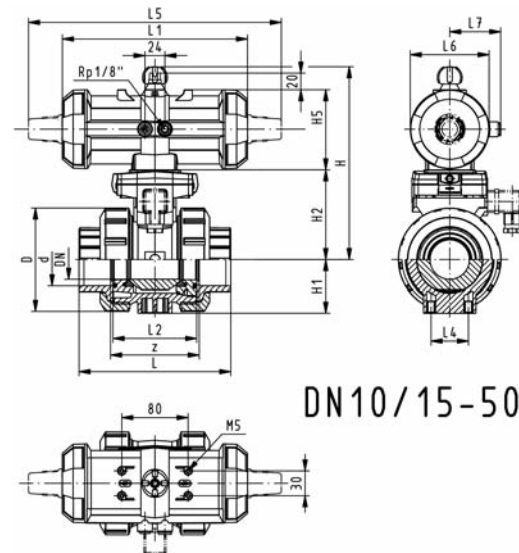
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90°<) 1-2 s
- Assignment of actuators: PA11 (DN10/15-25), PA21 (DN32-50), PA35 (DN65), PA40 (DN80), PA45 (DN100)
- Threaded valve ends are only enclosed for DN10/15-50

### Option:

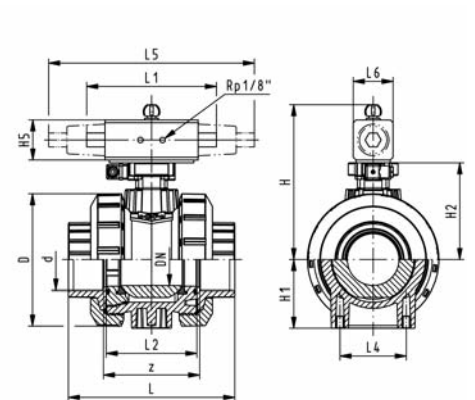
- Individual configuration of the valve (see diagram)

Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
3/8	10	10	70	<b>199 233 102</b>	<b>199 233 112</b>	1.200
1/2	15	10	185	<b>199 233 103</b>	<b>199 233 113</b>	1.200
3/4	20	10	350	<b>199 233 104</b>	<b>199 233 114</b>	1.300
1	25	10	700	<b>199 233 105</b>	<b>199 233 115</b>	1.400
1 1/4	32	10	1000	<b>199 233 106</b>	<b>199 233 116</b>	2.500
1 1/2	40	10	1600	<b>199 233 107</b>	<b>199 233 117</b>	2.800
2	50	10	3100	<b>199 233 108</b>	<b>199 233 118</b>	3.700
2 1/2	65	10	5000	<b>199 233 109</b>	<b>199 233 119</b>	6.600
3	80	10	7000	<b>199 233 110</b>	<b>199 233 120</b>	9.600
4	100	10	11000	<b>199 233 111</b>	<b>199 233 121</b>	13.600

Inch	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	z [mm]
3/8	50	159	27	62	77	105	194	56	25	261	76	48	67
1/2	50	159	27	62	77	105	194	56	25	261	76	48	61
3/4	58	168	30	71	77	121	194	65	25	261	76	48	70
1	68	168	36	71	77	133	194	71	25	261	76	48	76
1 1/4	84	202	44	84	99	154	224	85	45	305	95	59	90
1 1/2	97	202	51	84	99	164	224	89	45	305	95	59	94
2	124	225	64	106	99	183	224	101	45	305	95	59	107
2 1/2	166	257	85	156	66	233	144	136	70		60		144
3	200	274	105	168	70	254	152	141	70		65		151
4	238	273	123	175	78	301	169	164	120		72		174



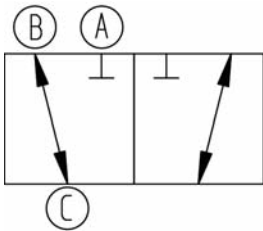
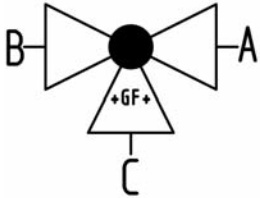
DN10/15-50



DN65-100



## 3-Way ball valve type 285 PVC-U Horizontal/L-port Without manual override With solvent cement sockets ASTM



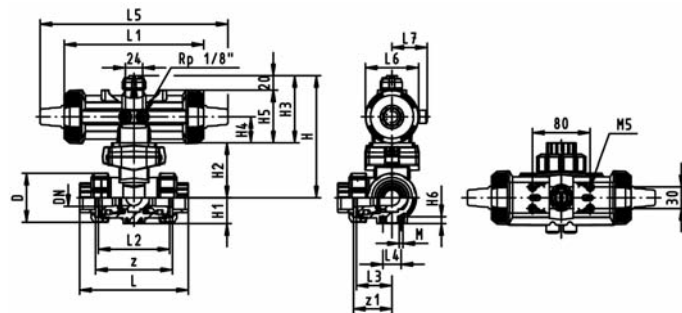
### Model:

- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- Actuator fails safe to the closed position FC
- Basic position B-C opened, activated position A-C opened, see flow scheme
- Control time  $90^\circ <$  1-3 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
3/8	10	10	50	199 285 382	199 285 392	1.115
1/2	15	10	75	199 285 383	199 285 393	1.121
3/4	20	10	150	199 285 384	199 285 394	1.249
1	25	10	280	199 285 385	199 285 395	1.439
1 1/4	32	10	480	199 285 386	199 285 396	2.539
1 1/2	40	10	620	199 285 387	199 285 397	2.991
2	50	10	1230	199 285 388	199 285 398	4.352

Inch	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]
3/8	50	159	28	62	97	40	77	8	123	194	73	36	25	261	76
1/2	50	159	28	62	97	40	77	8	122	194	73	36	25	261	76
3/4	58	168	32	71	97	40	77	8	141	194	86	43	25	261	76
1	68	168	36	71	97	40	77	8	161	194	99	50	25	261	76
1 1/4	84	203	45	84	119	51	99	9	187	224	120	60	45	305	95
1 1/2	97	203	51	84	119	51	99	9	213	224	137	69	45	305	95
2	124	225	65	106	119	51	99	9	261	224	179	89	45	305	95

Inch	L7 [mm]	M	z [mm]	z1 [mm]
3/8	48	6	85	42
1/2	48	6	77	38
3/4	48	6	92	46
1	48	6	105	53
1 1/4	59	8	126	63
1 1/2	59	8	143	72
2	59	8	185	92

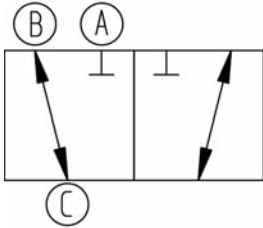
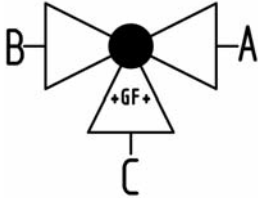




## 3-Way ball valve type 285 PVC-U Horizontal/L-port Without manual override With threaded sockets NPT

### Model:

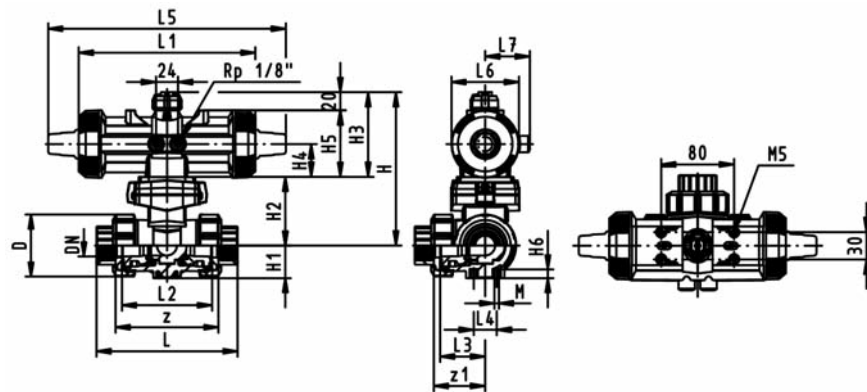
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- Actuator fails safe to the closed position FC
- Basic position B-C opened, activated position A-C opened, see flow scheme
- Control time  $90^\circ \leq$  1-3 s
- For easy installation and removal
- Integrated stainless steel mounting inserts



NPT [inch]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
3/8	10	10	50	199 285 362	199 285 372	1.115
1/2	15	10	75	199 285 363	199 285 373	1.121
3/4	20	10	150	199 285 364	199 285 374	1.249
1	25	10	280	199 285 365	199 285 375	1.439
1 1/4	32	10	480	199 285 366	199 285 376	2.539
1 1/2	40	10	620	199 285 367	199 285 377	2.991
2	50	10	1230	199 285 368	199 285 378	4.352

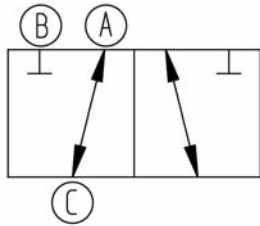
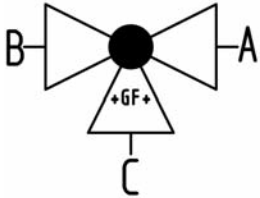
NPT [inch]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]
3/8	50	159	28	62	97	40	77	8	115	194	73	36	25	261	76
1/2	50	159	28	62	97	40	77	8	114	194	73	36	25	261	76
3/4	58	168	32	71	97	40	77	8	131	194	86	43	25	261	76
1	68	168	36	71	97	40	77	8	155	194	99	50	25	261	76
1 1/4	84	203	45	84	119	51	99	9	181	224	120	60	45	305	95
1 1/2	97	203	51	84	119	51	99	9	205	224	137	69	45	305	95
2	124	225	65	106	119	51	99	9	261	224	179	89	45	305	95

NPT [inch]	L7 [mm]	M	z [mm]	z1 [mm]
3/8	48	6	87	43
1/2	48	6	81	40
3/4	48	6	96	48
1	48	6	111	56
1 1/4	59	8	134	67
1 1/2	59	8	159	80
2	59	8	213	106





## 3-Way ball valve type 285 PVC-U Horizontal/L-port DA (Double acting) Without manual override With solvent cement sockets ASTM



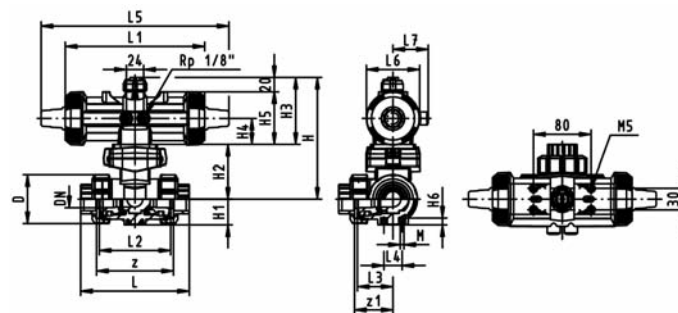
### Model:

- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- Basic position A-C opened, activated position B-C opened, see flow scheme
- Control time 90°< 1-3 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

Inch	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
3/8	10	10	50	<b>199 285 542</b>	<b>199 285 552</b>	0.925
1/2	15	10	75	<b>199 285 543</b>	<b>199 285 553</b>	0.931
3/4	20	10	150	<b>199 285 544</b>	<b>199 285 554</b>	1.059
1	25	10	280	<b>199 285 545</b>	<b>199 285 555</b>	1.249
1 1/4	32	10	480	<b>199 285 546</b>	<b>199 285 556</b>	2.115
1 1/2	40	10	620	<b>199 285 547</b>	<b>199 285 557</b>	2.567
2	50	10	1230	<b>199 285 548</b>	<b>199 285 558</b>	3.928

Inch	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]
3/8	50	159	28	62	97	40	77	8	123	194	73	36	25	261	76
1/2	50	159	28	62	97	40	77	8	122	194	73	36	25	261	76
3/4	58	168	32	71	97	40	77	8	141	194	86	43	25	261	76
1	68	168	36	71	97	40	77	8	161	194	99	50	25	261	76
1 1/4	84	203	45	84	119	51	99	9	187	224	120	60	45	305	95
1 1/2	97	203	51	84	119	51	99	9	213	224	137	69	45	305	95
2	124	225	65	106	119	51	99	9	261	224	179	89	45	305	95

Inch	L7 [mm]	M	z [mm]	z1 [mm]
3/8	48	6	85	42
1/2	48	6	77	38
3/4	48	6	92	46
1	48	6	105	53
1 1/4	59	8	126	63
1 1/2	59	8	143	72
2	59	8	185	92

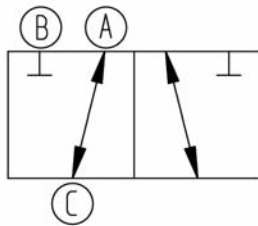
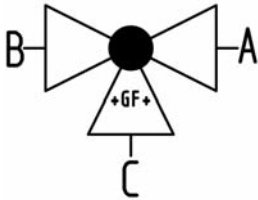




## 3-Way ball valve type 285 PVC-U Horizontal/L-port DA (Double acting) Without manual override With threaded sockets NPT

### Model:

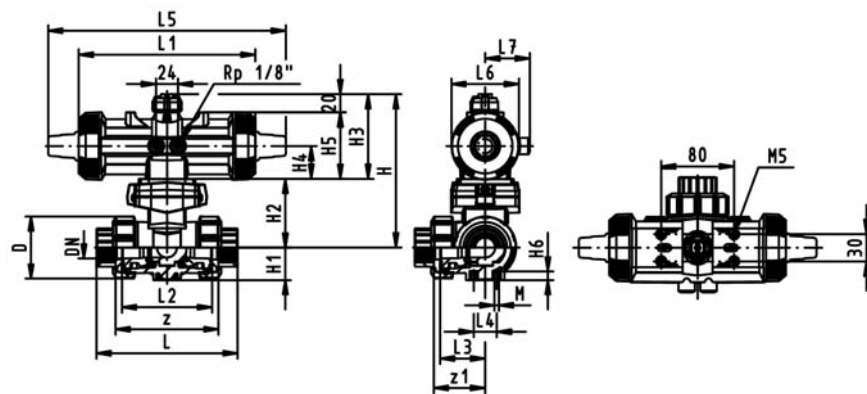
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- Basic position A-C opened, activated position B-C opened, see flow scheme
- Control time  $90^\circ <$  1-3 s
- For easy installation and removal
- Integrated stainless steel mounting inserts



NPT [inch]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
3/8	10	10	50	199 285 522	199 285 532	0.925
1/2	15	10	75	199 285 523	199 285 533	0.931
3/4	20	10	150	199 285 524	199 285 534	1.059
1	25	10	280	199 285 525	199 285 535	1.249
1 1/4	32	10	480	199 285 526	199 285 536	2.115
1 1/2	40	10	620	199 285 527	199 285 537	2.567
2	50	10	1230	199 285 528	199 285 538	3.928

NPT [inch]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]
3/8	50	159	28	62	97	40	77	8	115	194	73	36	25	261	76
1/2	50	159	28	62	97	40	77	8	114	194	73	36	25	261	76
3/4	58	168	32	71	97	40	77	8	131	194	86	43	25	261	76
1	68	168	36	71	97	40	77	8	155	194	99	50	25	261	76
1 1/4	84	203	45	84	119	51	99	9	181	224	120	60	45	305	95
1 1/2	97	203	51	84	119	51	99	9	205	224	137	69	45	305	95
2	124	225	65	106	119	51	99	9	261	224	179	89	45	305	95

NPT [inch]	L7 [mm]	M	z [mm]	z1 [mm]
3/8	48	6	87	43
1/2	48	6	81	40
3/4	48	6	96	48
1	48	6	111	56
1 1/4	59	8	134	67
1 1/2	59	8	159	80
2	59	8	213	106



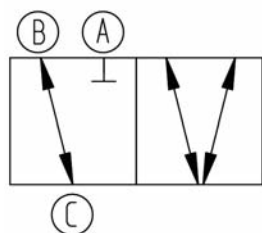
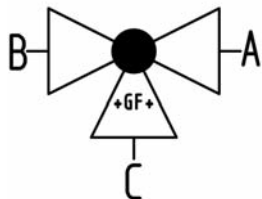


# 3-Way ball valve type 285 PVC-U

## Horizontal/T-port

### Without manual override

### With solvent cement sockets ASTM



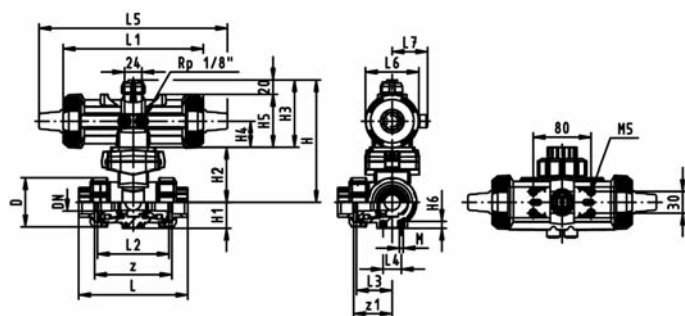
#### Model:

- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- Actuator fails safe to the closed position FC
- Basic position B-C opened, activated position A-B-C opened, see flow scheme
- Control time 90°<) 1-3 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

Inch	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
3/8	10	10	140	<b>199 285 422</b>	<b>199 285 432</b>	1.114
1/2	15	10	200	<b>199 285 423</b>	<b>199 285 433</b>	1.120
3/4	20	10	470	<b>199 285 424</b>	<b>199 285 434</b>	1.247
1	25	10	793	<b>199 285 425</b>	<b>199 285 435</b>	1.432
1 1/4	32	10	1290	<b>199 285 426</b>	<b>199 285 436</b>	2.528
1 1/2	40	10	1910	<b>199 285 427</b>	<b>199 285 437</b>	2.970
2	50	10	3100	<b>199 285 428</b>	<b>199 285 438</b>	4.307

Inch	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]
3/8	50	159	28	62	97	40	77	8	123	194	73	36	25	261	76
1/2	50	159	28	62	97	40	77	8	122	194	73	36	25	261	76
3/4	58	168	32	71	97	40	77	8	141	194	86	43	25	261	76
1	68	168	36	71	97	40	77	8	161	194	99	50	25	261	76
1 1/4	84	203	45	84	119	51	99	9	187	224	120	60	45	305	95
1 1/2	97	203	51	84	119	51	99	9	213	224	137	69	45	305	95
2	124	225	65	106	119	51	99	9	261	224	179	89	45	305	95

Inch	L7 [mm]	M	z [mm]	z1 [mm]
3/8	48	6	85	42
1/2	48	6	77	38
3/4	48	6	92	46
1	48	6	105	53
1 1/4	59	8	126	63
1 1/2	59	8	143	72
2	59	8	185	92

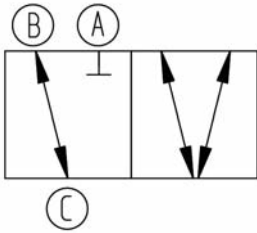
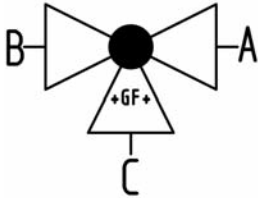




### 3-Way ball valve type 285 PVC-U Horizontal/T-port Without manual override With threaded sockets NPT

#### Model:

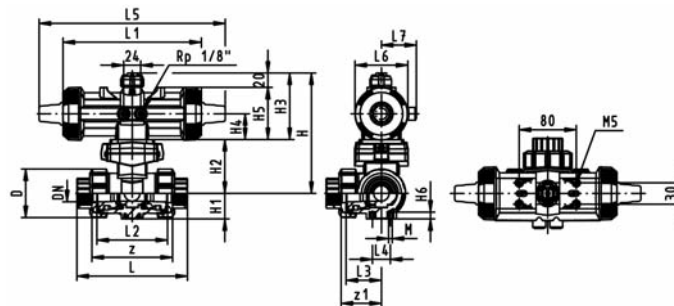
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- Actuator fails safe to the closed position FC
- Basic position B-C opened, activated position A-B-C opened, see flow scheme
- Control time  $90^\circ <$  1-3 s
- For easy installation and removal
- Integrated stainless steel mounting inserts



NPT [inch]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
3/8	10	10	140	<b>199 285 402</b>	<b>199 285 412</b>	1.114
1/2	15	10	200	<b>199 285 403</b>	<b>199 285 413</b>	1.120
3/4	20	10	470	<b>199 285 404</b>	<b>199 285 414</b>	1.247
1	25	10	793	<b>199 285 405</b>	<b>199 285 415</b>	1.432
1 1/4	32	10	1290	<b>199 285 406</b>	<b>199 285 416</b>	2.528
1 1/2	40	10	1910	<b>199 285 407</b>	<b>199 285 417</b>	2.970
2	50	10	3100	<b>199 285 408</b>	<b>199 285 418</b>	4.307

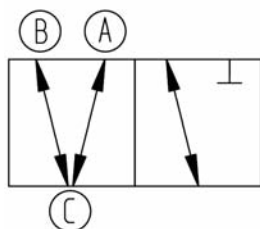
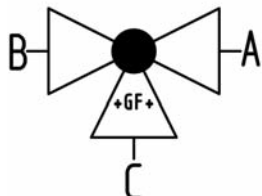
NPT [inch]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]
3/8	50	159	28	62	97	40	77	8	115	194	73	36	25	261	76
1/2	50	159	28	62	97	40	77	8	114	194	73	36	25	261	76
3/4	58	168	32	71	97	40	77	8	131	194	86	43	25	261	76
1	68	168	36	71	97	40	77	8	155	194	99	50	25	261	76
1 1/4	84	203	45	84	119	51	99	9	181	224	120	60	45	305	95
1 1/2	97	203	51	84	119	51	99	9	205	224	137	69	45	305	95
2	124	225	65	106	119	51	99	9	261	224	179	89	45	305	95

NPT [inch]	L7 [mm]	M	z [mm]	z1 [mm]
3/8	48	6	87	43
1/2	48	6	81	40
3/4	48	6	96	48
1	48	6	111	56
1 1/4	59	8	134	67
1 1/2	59	8	159	80
2	59	8	213	106





## 3-Way ball valve type 285 PVC-U Horizontal/T-port DA (Double acting) Without manual override With solvent cement sockets ASTM



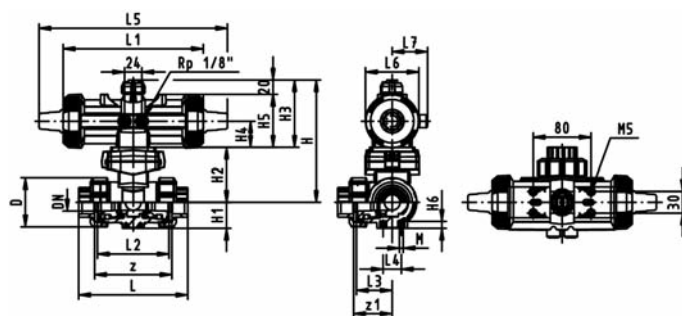
### Model:

- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- Basic position A-B-C opened, activated position B-C opened, see flow scheme
- Control time 90°< 1-3 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

Inch	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
3/8	10	10	140	<b>199 285 582</b>	<b>199 285 592</b>	0.924
1/2	15	10	200	<b>199 285 583</b>	<b>199 285 593</b>	0.930
3/4	20	10	470	<b>199 285 584</b>	<b>199 285 594</b>	1.057
1	25	10	793	<b>199 285 585</b>	<b>199 285 595</b>	1.242
1 1/4	32	10	1290	<b>199 285 586</b>	<b>199 285 596</b>	2.104
1 1/2	40	10	1910	<b>199 285 587</b>	<b>199 285 597</b>	2.546
2	50	10	3100	<b>199 285 588</b>	<b>199 285 598</b>	3.883

Inch	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]
3/8	50	159	28	62	97	40	77	8	123	194	73	36	25	261	76
1/2	50	159	28	62	97	40	77	8	122	194	73	36	25	261	76
3/4	58	168	32	71	97	40	77	8	141	194	86	43	25	261	76
1	68	168	36	71	97	40	77	8	161	194	99	50	25	261	76
1 1/4	84	203	45	84	119	51	99	9	187	224	120	60	45	305	95
1 1/2	97	203	51	84	119	51	99	9	213	224	137	69	45	305	95
2	124	225	65	106	119	51	99	9	261	224	179	89	45	305	95

Inch	L7 [mm]	M	z [mm]	z1 [mm]
3/8	48	6	85	42
1/2	48	6	77	38
3/4	48	6	92	46
1	48	6	105	53
1 1/4	59	8	126	63
1 1/2	59	8	143	72
2	59	8	185	92



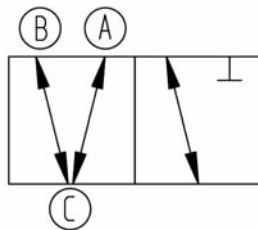
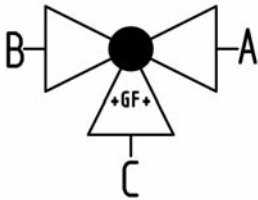




## 3-Way ball valve type 285 PVC-U Horizontal/T-port DA (Double acting) Without manual override With threaded sockets NPT

### Model:

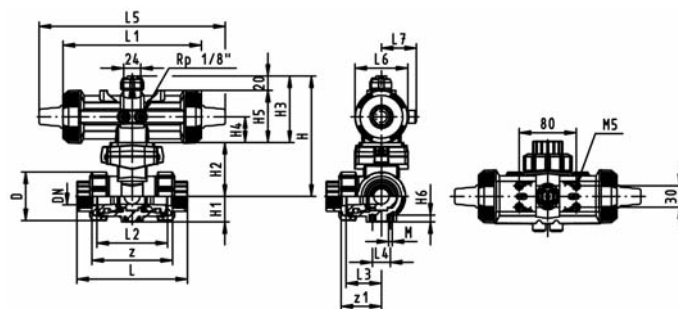
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- Basic position A-B-C opened, activated position B-C opened, see flow scheme
- Control time 90° < 1-3 s
- For easy installation and removal
- Integrated stainless steel mounting inserts



NPT [inch]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
3/8	10	10	140	<b>199 285 562</b>	<b>199 285 572</b>	0.924
1/2	15	10	200	<b>199 285 563</b>	<b>199 285 573</b>	0.930
3/4	20	10	470	<b>199 285 564</b>	<b>199 285 574</b>	1.057
1	25	10	793	<b>199 285 565</b>	<b>199 285 575</b>	1.242
1 1/4	32	10	1290	<b>199 285 566</b>	<b>199 285 576</b>	2.104
1 1/2	40	10	1910	<b>199 285 567</b>	<b>199 285 577</b>	2.546
2	50	10	3100	<b>199 285 568</b>	<b>199 285 578</b>	3.883

NPT [inch]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]
3/8	50	159	28	62	97	40	77	8	115	194	73	36	25	261	76
1/2	50	159	28	62	97	40	77	8	114	194	73	36	25	261	76
3/4	58	168	32	71	97	40	77	8	131	194	86	43	25	261	76
1	68	168	36	71	97	40	77	8	155	194	99	50	25	261	76
1 1/4	84	203	45	84	119	51	99	9	181	224	120	60	45	305	95
1 1/2	97	203	51	84	119	51	99	9	205	224	137	69	45	305	95
2	124	225	65	106	119	51	99	9	261	224	179	89	45	305	95

NPT [inch]	L7 [mm]	M	z [mm]	z1 [mm]
3/8	48	6	87	43
1/2	48	6	81	40
3/4	48	6	96	48
1	48	6	111	56
1 1/4	59	8	134	67
1 1/2	59	8	159	80
2	59	8	213	106



# Copiable Configurator +GF+ Diaphragm Valve

## Valve body type

- A20 Type 514 - True Union Design
- A21 Type 515 - Spigots
- A22 Type 517 - Flanges
- A23 Type 519 - Branched type

## Material

- B05 PP-H
- B06 PP-n
- B15 PVDF
- B16 PVDF HP



## Example:

Diastar Sixteen FC with PP-H valve body type 514 and PE butt fusion spigots, FPM diaphragm, DN25

## Dimension - 2/2 valve (type 514...517)

- C06 DN 15 1/2"
- C07 DN 20 3/4"
- C08 DN 25 1"
- C09 DN 32 1 1/4"
- C10 DN 40 1 1/2"
- C11 DN 50 2"

## Dimension - branched type (type 519)

- C50 DN15-15
- C51 DN20-15
- C52 DN20-20
- C53 DN25-15
- C54 DN25-20
- C55 DN25-25
- C56 DN32-15
- C57 DN32-20
- C58 DN32-25
- C59 DN32-32
- C60 DN40-15
- C61 DN40-20
- C62 DN40-25
- C63 DN40-32
- C64 DN40-40
- C65 DN50-15
- C66 DN50-20
- C67 DN50-25
- C68 DN50-32
- C69 DN50-40
- C70 DN50-50
- C71 DN65-32
- C72 DN65-40
- C73 DN65-50
- C74 DN80-15
- C75 DN80-20
- C76 DN80-25
- C77 DN80-40
- C78 DN80-50
- C79 DN100-15
- C80 DN100-20
- C81 DN100-25
- C82 DN100-40
- C83 DN100-50

## Version

- D11 standard
- D05 silicone free / oil free

## Diaphragm

- E01 EPDM
- E02 FPM
- E11 NBR
- E12 PTFE/EPDM
- E04 PTFE/FPM

## Connecting parts

- H30 PP-H Fusion socket metric
- H32 PP-H Socket fusion spigot metric
- H35 PP-H Butt fusion spigot SDR11 metric IR-PLUS
- H40 PE-80 Fusion socket metric
- H41 PE-100 Butt fusion spigot SDR11 metric
- H43 PE-100 Butt fusion spigot long SDR11 metric
- H46 PP-n Butt fusion spigot SDR11 metric
- H50 PVDF Fusion socket metric
- H51 PVDF Socket fusion spigot metric
- H52 PVDF Butt fusion spigot SDR11 metric IR-PLUS
- H64 Fixed flange PVDF metric
- H65 Fixed flange PP-H JIS
- H66 Fixed flange PVDF JIS
- H72 PPH Backing flange PP-steel metric with PP-H endings
- H72 PVDF Backing flange PP-steel metric with PVDF endings
- H73 PPH Backing flange PP-steel Zoll ANSI with PP-H endings
- H73 PVDF Backing flange PP-steel Zoll ANSI with PVDF endings
- H74 PPH Backing flange PP-V metric with PP-H endings
- H74 PVDF Backing flange PP-V metric with PVDF endings
- H75 PPH Backing flange PP-V ANSI with PP-H endings
- H75 PVDF Backing flange PP-V ANSI with PVDF endings
- H76 Backing flange PP-GF JIS with PVDF endings
- H77 Backing flange PP-GF JIS with PP-H endings
- H85 PVDF valve end blank
- H86 PVDF-HP sterilisation port

## Electrical feedback

- I33 Electrical feedback with Ag, Ni limit switches
- I34 Electrical feedback with Au limit switches

## Manual actuated: pressure tight housing

- K30 Bonnet pressure tight
- K31 Bonnet not pressure tight

## Pressure range

- M01 PN10
- M02 PN16

## Pneumatic actuator DIASTAR

- P40 DIASTAR Six FC fail safe to close
- P43 DIASTAR Ten FC fail safe to close
- P44 DIASTAR Sixteen FC fail safe to close
- P45 DIASTAR Sixteen FO fail safe to open
- P46 DIASTAR Sixteen DA double acting
- P47 DIASTAR Ten FO fail safe to open
- P48 DIASTAR Ten DA double acting

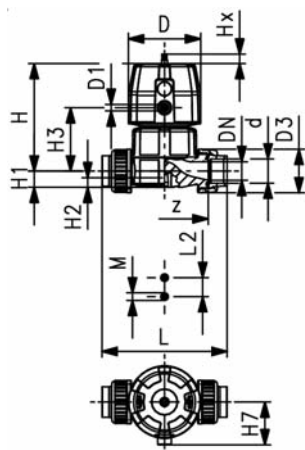
A20 B05 C08 D11 E02

H43 I K M P44 =



# Diaphragm valves pneumatic New generation metric

## Diaphragm valve DIASTAR Six PVC-U FC (Fail safe to close) Unions with solvent cement sockets metric



### Model:

- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Rotating air connection at 90° intervals
- For easy installation and removal
- Short overall length

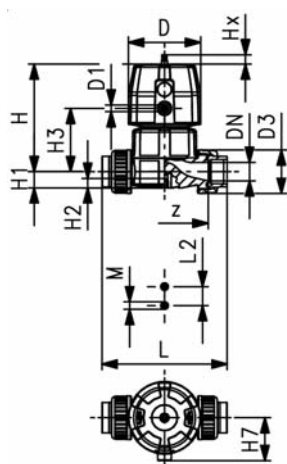
### Option:

- Individual configuration of the valve (see diagram)
- PN16 available as a configuration

d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	kg
16	10	6	125	161 614 011	5.664
20	15	6	125	161 614 012	5.664
25	20	6	271	161 614 013	1.046
32	25	6	481	161 614 014	1.275
40	32	6	759	161 614 015	2.066
50	40	6	1263	161 614 016	2.666
63	50	6	1728	161 614 017	3.762

d [mm]	D [mm]	D1_G [inch]	L [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H7 [mm]	M	z [mm]	Lift = Hx [mm]	closest inch
16	68	1/8	124	25	101	14	12	60	43	M6	96	7	3/8
20	68	1/8	128	25	101	14	12	60	43	M6	96	7	1/2
25	96	1/8	152	25	132	18	12	73	57	M6	114	10	3/4
32	96	1/8	166	25	143	22	12	84	57	M6	122	13	1
40	120	1/8	192	45	173	26	15	99	69	M8	140	14	1 1/4
50	120	1/8	222	45	193	32	15	119	69	M8	160	16	1 1/2
63	120	1/8	266	45	205	39	15	132	69	M8	190	16	2

## Diaphragm valve DIASTAR Six PVC-U FC (Fail safe to close) Unions with threaded sockets Rp



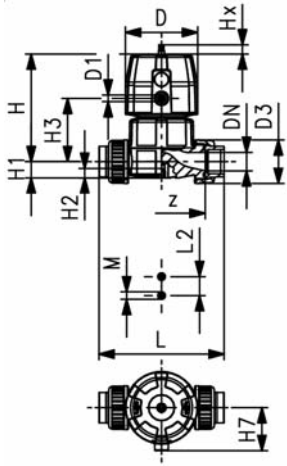
### Model:

- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Rotating air connection at 90° intervals
- For easy installation and removal
- Short overall length

### Option:

- Individual configuration of the valve (see diagram)
- PN16 available as a configuration

Rp [inch]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	kg
1/2	15	6	125	161 614 412	5.684
3/4	20	6	271	161 614 413	1.042
1	25	6	481	161 614 414	1.277
1 1/4	32	6	759	161 614 415	2.068
1 1/2	40	6	1263	161 614 416	2.678
2	50	6	1728	161 614 417	3.826



Rp [inch]	D [mm]	D1_G [inch]	L [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H7 [mm]	M	z [mm]	Lift = Hx [mm]
1/2	68	1/8	128	25	101	14	12	60	43	M6	96	7
3/4	96	1/8	152	25	132	18	12	73	57	M6	114	10
1	96	1/8	166	25	143	22	12	84	57	M6	122	13
1 1/4	120	1/8	192	45	173	26	15	99	69	M8	140	14
1 1/2	120	1/8	222	45	193	32	15	119	69	M8	160	16
2	120	1/8	266	45	205	39	15	132	69	M8	190	16



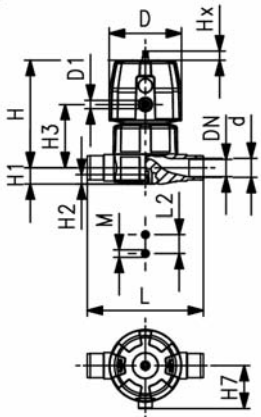
**Diaphragm valve DIASTAR Six PVC-U  
FC (Fail safe to close)  
With solvent cement spigots metric**

**Model:**

- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Rotating air connection at 90° intervals
- Overall length EN 558

**Option:**

- Individual configuration of the valve (see diagram)
- PN16 available as a configuration



d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	kg
20	15	6	125	<b>161 615 012</b>	5.034
25	20	6	271	<b>161 615 013</b>	9.638
32	25	6	481	<b>161 615 014</b>	1.146
40	32	6	759	<b>161 615 015</b>	1.876
50	40	6	1263	<b>161 615 016</b>	2.412
63	50	6	1728	<b>161 615 017</b>	3.340

d [mm]	D [mm]	D1_G [inch]	L [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H7 [mm]	M	Lift = Hx [mm]	closest inch
20	68	1/8	124	25	101	14	12	60	43	M6	7	1/2
25	96	1/8	144	25	132	18	12	73	57	M6	10	3/4
32	96	1/8	154	25	143	22	12	84	57	M6	13	1
40	120	1/8	174	45	173	26	15	99	69	M8	14	1 1/4
50	120	1/8	194	45	193	32	15	119	69	M8	16	1 1/2
63	120	1/8	224	45	205	39	15	132	69	M8	16	2



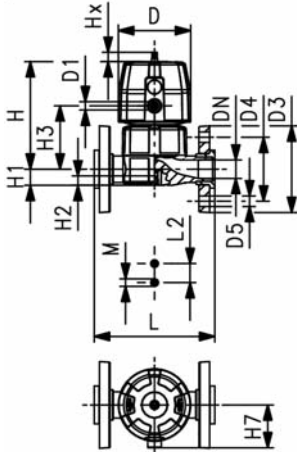
## Diaphragm valve DIASTAR Six PVC-U FC (Fail safe to close) With backing flanges PVC-U metric/BS

### Model:

- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Rotating air connection at 90° intervals
- Flat sealing faces
- Overall length EN 558
- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, BS 4504 PN 10

### Option:

- Individual configuration of the valve (see diagram)



d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	kg
20	15	6	125	<b>161 617 012</b>	6.614
25	20	6	271	<b>161 617 013</b>	1.180
32	25	6	481	<b>161 617 014</b>	1.458
40	32	6	759	<b>161 617 015</b>	1.991
50	40	6	1263	<b>161 617 016</b>	3.018
63	50	6	1728	<b>161 617 017</b>	4.166

d [mm]	D [mm]	D1_G [inch]	D3 [mm]	D4 [mm]	D5 [mm]	L [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H7 [mm]	M	Lift = Hx [mm]
20	68	1/8	95	65	14	130	25	101	14	12	60	43	M6	7
25	96	1/8	105	75	14	150	25	132	18	12	73	57	M6	10
32	96	1/8	115	85	14	160	25	143	22	12	84	57	M6	13
40	120	1/8	140	100	18	180	45	173	26	15	99	69	M8	14
50	120	1/8	150	110	18	200	45	193	32	15	119	69	M8	16
63	120	1/8	165	125	18	230	45	205	39	15	132	69	M8	16

d [mm]	closest inch
20	1/2
25	3/4
32	1
40	1 1/4
50	1 1/2
63	2



## Diaphragm valve DIASTAR Ten PVC-U FC (Fail safe to close) Unions with solvent cement sockets metric

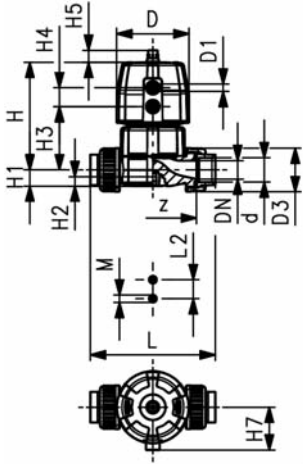
### Model:

- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Rotating air connection at 90° intervals
- For easy installation and removal
- Short overall length

### Option:

- Individual configuration of the valve (see diagram)
- Comprehensive range of accessories available
- PN16 available as a configuration

\* PN: PTFE/EPDM



d [mm]	DN [mm]	PN [bar]	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	PTFE/EPDM Code	kg
16	10	10	125	161 624 011	161 624 031	0.602
20	15	10	125	161 624 012	161 624 032	0.602
25	20	10	271	161 624 013	161 624 033	1.132
32	25	10	481	161 624 014	161 624 034	1.367
40	32	10	759	161 624 015	161 624 035	2.236
50	40	10	1263	161 624 016	161 624 036	3.834
63	50	10/6*	1728	161 624 017	161 624 037	4.711

d [mm]	D [mm]	D1 [inch]	G	L [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H7 [mm]	M	z [mm]	Lift = Hx [mm]
16	68	3/8		124	25	101	14	12	60	24	16	43	M6	96	7
20	68	3/8		128	25	101	14	12	60	24	16	43	M6	96	7
25	96	3/8		152	25	132	18	12	73	25	16	57	M6	114	10
32	96	3/8		166	25	143	22	12	84	25	16	57	M6	122	13
40	120	3/8		192	45	173	26	15	99	26	26	69	M8	140	15
50	150	1/4		222	45	214	32	15	119	36	26	88	M8	160	19
63	150	1/4		266	45	226	39	15	132	36	26	88	M8	190	23

d [mm]	closest inch
16	3/8
20	1/2
25	3/4
32	1
40	1 1/4
50	1 1/2
63	2



## Diaphragm valve DIASTAR Ten PVC-U FC (Fail safe to close) With solvent cement spigots metric

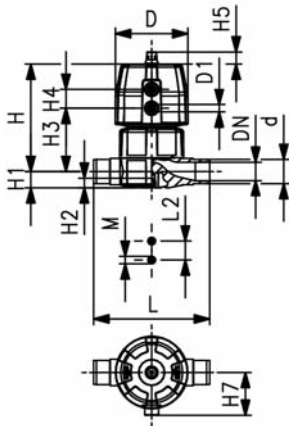
### Model:

- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Rotating air connection at 90° intervals
- Overall length EN 558

### Option:

- Individual configuration of the valve (see diagram)
- Comprehensive range of accessories available
- PN16 available as a configuration

\* PN: PTFE/EPDM



d [mm]	DN [mm]	PN [bar]	kv-value (Δp=1 bar) [l/min]	EPDM Code	PTFE/EPDM Code	kg
20	15	10	125	<b>161 625 012</b>	<b>161 625 032</b>	0.539
25	20	10	271	<b>161 625 013</b>	<b>161 625 033</b>	1.050
32	25	10	481	<b>161 625 014</b>	<b>161 625 034</b>	1.238
40	32	10	759	<b>161 625 015</b>	<b>161 625 035</b>	2.046
50	40	10	1263	<b>161 625 016</b>	<b>161 625 036</b>	3.580
63	50	10/6*	1728	<b>161 625 017</b>	<b>161 625 037</b>	4.289

d [mm]	D [mm]	D1_G [inch]	L [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H7 [mm]	M	Lift = Hx [mm]	closest inch
20	68	1/8	124	25	101	14	12	60	24	16	43	M6	7	1/2
25	96	1/8	144	25	132	18	12	73	25	16	57	M6	10	3/4
32	96	1/8	154	25	143	22	12	84	25	16	57	M6	13	1
40	120	1/8	174	45	173	26	15	99	26	26	69	M8	15	1 1/4
50	150	1/4	194	45	214	32	15	119	36	26	88	M8	19	1 1/2
63	150	1/4	224	45	226	39	15	132	36	26	88	M8	23	2



## Diaphragm valve DIASTAR Ten PVC-U FC (Fail safe to close) With backing flanges PVC-U metric/BS

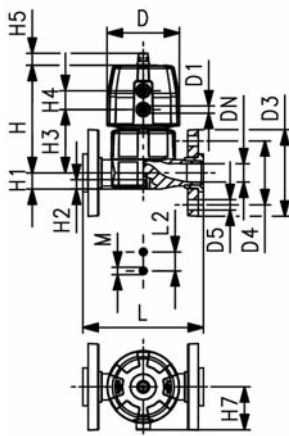
### Model:

- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Rotating air connection at 90° intervals
- Flat sealing faces
- Overall length EN 558
- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, BS 4504 PN 10

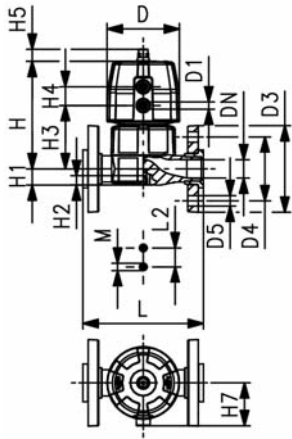
### Option:

- Individual configuration of the valve (see diagram)
- Comprehensive range of accessories available

\* PN: PTFE/EPDM



d [mm]	DN [mm]	PN [bar]	kv-value (Δp=1 bar) [l/min]	EPDM Code	PTFE/EPDM Code	kg
20	15	10	125	<b>161 627 012</b>	<b>161 627 032</b>	0.697
25	20	10	271	<b>161 627 013</b>	<b>161 627 033</b>	1.266
32	25	10	481	<b>161 627 014</b>	<b>161 627 034</b>	1.550
40	32	10	759	<b>161 627 015</b>	<b>161 627 035</b>	2.161
50	40	10	1263	<b>161 627 016</b>	<b>161 627 036</b>	4.186
63	50	10/6*	1728	<b>161 627 017</b>	<b>161 627 037</b>	5.115



d [mm]	D [mm]	D1_G [inch]	D3 [mm]	D4 [mm]	D5 [mm]	L [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H7 [mm]	M
20	68	1/8	95	65	14	130	25	101	14	12	60	24	16	43	M6
25	96	1/8	105	75	14	150	25	132	18	12	73	25	16	57	M6
32	96	1/8	115	85	14	160	25	143	22	12	84	25	16	57	M6
40	120	1/8	140	100	18	180	45	173	26	15	99	26	26	69	M8
50	150	1/4	150	110	18	200	45	193	32	15	119	36	26	88	M8
63	150	1/4	165	125	18	230	45	205	39	15	132	36	26	88	M8

d [mm]	Lift = Hx [mm]	closest inch
20	7	1/2
25	10	3/4
32	13	1
40	15	1 1/4
50	19	1 1/2
63	23	2



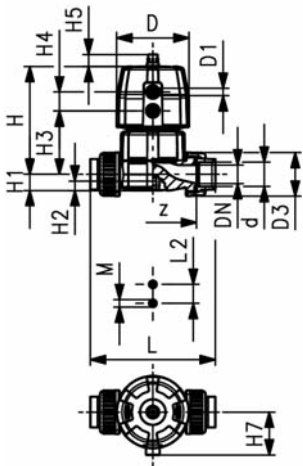
## Diaphragm valve DIASTAR Ten PVC-U FO (Fail safe to open) Unions with solvent cement sockets metric

### Model:

- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Rotating air connection at 90° intervals
- For easy installation and removal
- Short overall length

### Option:

- Individual configuration of the valve (see diagram)
- Comprehensive range of accessories available
- PN16 available as a configuration



d [mm]	DN [mm]	PN [bar]	kv-value (Δp=1 bar) [l/min]	EPDM Code	PTFE/EPDM Code	kg
16	10	10	125	161 644 011	161 644 031	0.552
20	15	10	125	161 644 012	161 644 032	0.552
25	20	10	271	161 644 013	161 644 033	0.958
32	25	10	481	161 644 014	161 644 034	1.187
40	32	10	759	161 644 015	161 644 035	1.876
50	40	10	1263	161 644 016	161 644 036	3.744
63	50	10	1728	161 644 017	161 644 037	4.621

d [mm]	D [mm]	D1_G [inch]	L [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H7 [mm]	M	z [mm]	Lift = Hx [mm]
16	68	1/8	124	25	101	14	12	60	24	16	43	M6	96	7
20	68	1/8	128	25	101	14	12	60	24	16	43	M6	96	7
25	96	1/8	152	25	132	18	12	73	25	16	57	M6	114	10
32	96	1/8	166	25	143	22	12	84	25	16	57	M6	122	13
40	120	1/8	192	45	173	26	15	99	26	26	69	M8	140	15
50	150	1/4	222	45	214	32	15	119	36	26	88	M8	160	19
63	150	1/4	266	45	226	39	15	132	36	26	88	M8	190	23

d [mm]	closest inch
16	3/8
20	1/2
25	3/4
32	1
40	1 1/4
50	1 1/2
63	2





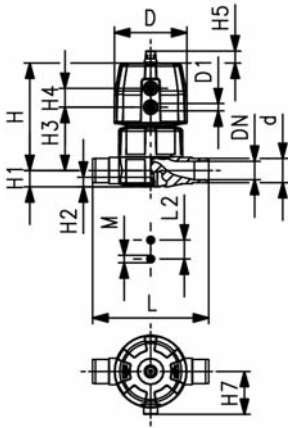
## Diaphragm valve DIASTAR Ten PVC-U FO (Fail safe to open) With solvent cement spigots metric

### Model:

- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Rotating air connection at 90° intervals
- Overall length EN 558

### Option:

- Individual configuration of the valve (see diagram)
- Comprehensive range of accessories available
- PN16 available as a configuration



d [mm]	DN [mm]	PN [bar]	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	PTFE/EPDM Code	kg
20	15	10	125	161 645 012	161 645 032	0.489
25	20	10	271	161 645 013	161 645 033	0.876
32	25	10	481	161 645 014	161 645 034	1.058
40	32	10	759	161 645 015	161 645 035	1.686
50	40	10	1263	161 645 016	161 645 036	3.490
63	50	10	1728	161 645 017	161 645 037	4.199

d [mm]	D [mm]	D1_G [inch]	L [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H7 [mm]	M	Lift = Hx [mm]	closest inch
20	68	1/8	124	25	101	14	12	60	24	16	43	M6	7	1/2
25	96	1/8	144	25	132	18	12	73	25	16	57	M6	10	3/4
32	96	1/8	154	25	143	22	12	84	25	16	57	M6	13	1
40	120	1/8	174	45	173	26	15	99	26	26	69	M8	15	1 1/4
50	150	1/4	194	45	214	32	15	119	36	26	88	M8	19	1 1/2
63	150	1/4	224	45	226	39	15	132	36	26	88	M8	23	2



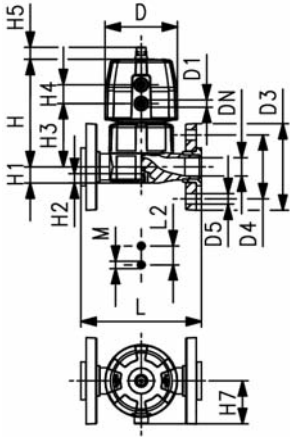
## Diaphragm valve DIASTAR Ten PVC-U FO (Fail safe to open) With backing flanges PVC-U metric/BS

### Model:

- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Rotating air connection at 90° intervals
- Flat sealing faces
- Overall length EN 558
- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, BS 4504 PN 10

### Option:

- Individual configuration of the valve (see diagram)
- Comprehensive range of accessories available



d [mm]	DN [mm]	PN [bar]	kv-value (Δp=1 bar) [l/min]	EPDM Code	PTFE/EPDM Code	kg
20	15	10/10*	125	161 647 012	161 647 032	0.647
25	20	10/10*	271	161 647 013	161 647 033	1.092
32	25	10/10*	481	161 647 014	161 647 034	1.370
40	32	10/10*	759	161 647 015	161 647 035	1.801
50	40	10/10*	1263	161 647 016	161 647 036	4.096
63	50	10/10*	1728	161 647 017	161 647 037	5.025

d [mm]	D [mm]	D1_G [inch]	D3 [mm]	D4 [mm]	D5 [mm]	L [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H7 [mm]	M
20	68	1/8	95	65	14	130	25	101	14	12	60	24	16	43	M6
25	96	1/8	105	75	14	150	25	132	18	12	73	25	16	57	M6
32	96	1/8	115	85	14	160	25	143	22	12	84	25	16	57	M6
40	120	1/8	140	100	18	180	45	173	26	15	99	26	26	69	M8
50	150	1/4	150	110	18	200	45	214	32	15	119	36	26	88	M8
63	150	1/4	165	125	18	230	45	226	39	15	132	36	26	88	M8

d [mm]	Lift = Hx [mm]	closest inch
20	7	1/2
25	10	3/4
32	13	1
40	15	1 1/4
50	19	1 1/2
63	23	2



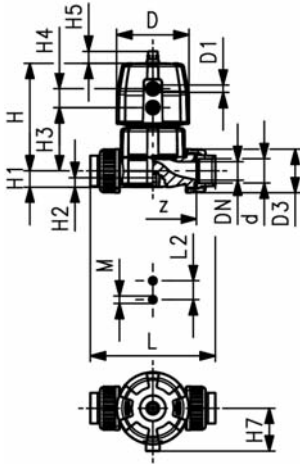
## Diaphragm valve DIASTAR Ten PVC-U DA (Double acting) Unions with solvent cement sockets metric

### Model:

- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Rotating air connection at 90° intervals
- For easy installation and removal
- Short overall length

### Option:

- Individual configuration of the valve (see diagram)
- Comprehensive range of accessories available
- PN16 available as a configuration



d [mm]	DN [mm]	PN [bar]	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	PTFE/EPDM Code	kg
16	10	10	125	161 654 011	161 654 031	0.536
20	15	10	125	161 654 012	161 654 032	0.536
25	20	10	271	161 654 013	161 654 033	0.922
32	25	10	481	161 654 014	161 654 034	1.157
40	32	10	759	161 654 015	161 654 035	1.816
50	40	10	1263	161 654 016	161 654 036	2.994
63	50	10	1728	161 654 017	161 654 037	3.871

d [mm]	D [mm]	D1 G [inch]	L [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H7 [mm]	M	z [mm]	Lift = Hx [mm]
16	68	3/8	124	25	101	14	12	60	24	16	43	M6	96	7
20	68	1/2	128	25	101	14	12	60	24	16	43	M6	96	7
25	96	3/4	152	25	132	18	12	73	25	16	57	M6	114	10
32	96	1	166	25	143	22	12	84	25	16	57	M6	122	13
40	120	1 1/4	192	45	173	26	15	99	26	26	69	M8	140	15
50	150	1 3/4	222	45	214	32	15	119	36	26	88	M8	160	19
63	150	2	266	45	226	39	15	132	36	26	88	M8	190	23

d [mm]	closest inch
16	3/8
20	1/2
25	3/4
32	1
40	1 1/4
50	1 1/2
63	2



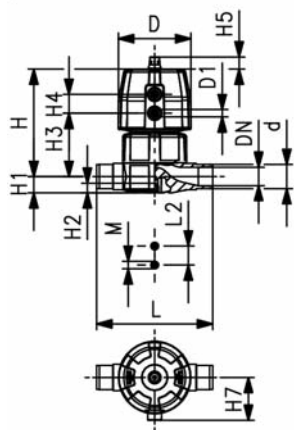
## Diaphragm valve DIASTAR Ten PVC-U DA (Double acting) With solvent cement spigots metric

### Model:

- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Rotating air connection at 90° intervals
- Overall length EN 558

### Option:

- Individual configuration of the valve (see diagram)
- Comprehensive range of accessories available
- PN16 available as a configuration



d [mm]	DN [mm]	PN [bar]	kv-value (Δp=1 bar) [l/min]	EPDM Code	PTFE/EPDM Code	kg
20	15	10	125	161 655 012	161 655 032	0.473
25	20	10	271	161 655 013	161 655 033	0.840
32	25	10	481	161 655 014	161 655 034	1.028
40	32	10	759	161 655 015	161 655 035	1.626
50	40	10	1263	161 655 016	161 655 036	2.740
63	50	10	1728	161 655 017	161 655 037	3.449

d [mm]	D [mm]	D1_G [inch]	L [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H7 [mm]	M	Lift = Hx [mm]	closest inch
20	68	1/8	124	25	101	14	12	60	24	16	43	M6	7	1/2
25	96	1/8	144	25	132	18	12	73	25	16	57	M6	10	3/4
32	96	1/8	154	25	143	22	12	84	25	16	57	M6	13	1
40	120	1/8	174	45	173	26	15	99	26	26	69	M8	15	1 1/4
50	150	1/4	194	45	214	32	15	119	36	26	88	M8	19	1 1/2
63	150	1/4	224	45	226	39	15	132	36	26	88	M8	23	2



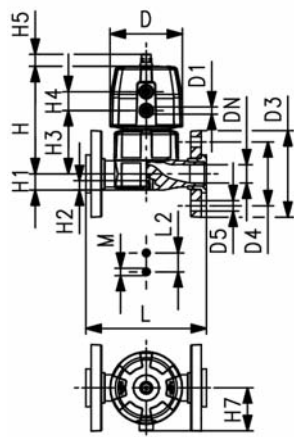
## Diaphragm valve DIASTAR Ten PVC-U DA (Double acting) With backing flanges PVC-U metric/BS

### Model:

- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Rotating air connection at 90° intervals
- Flat sealing faces
- Overall length EN 558
- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, BS 4504 PN 10

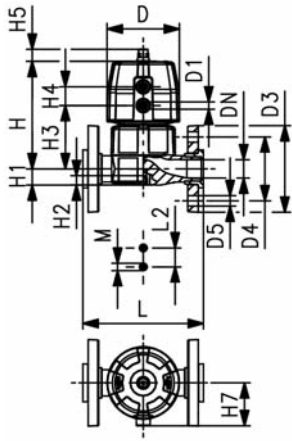
### Option:

- Individual configuration of the valve (see diagram)
- Comprehensive range of accessories available



d [mm]	DN [mm]	PN [bar]	kv-value (Δp=1 bar) [l/min]	EPDM Code	PTFE/EPDM Code	kg
20	15	10	125	161 657 012	161 657 032	0.631
25	20	10	271	161 657 013	161 657 033	1.056
32	25	10	481	161 657 014	161 657 034	1.340
40	32	10	759	161 657 015	161 657 035	1.741
50	40	10	1263	161 657 016	161 657 036	3.346
63	50	10	1728	161 657 017	161 657 037	4.275

d [mm]	D [mm]	D1_G [inch]	D3 [mm]	D4 [mm]	D5 [mm]	L [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H7 [mm]	M
20	68	1/8	95	65	14	130	25	101	14	12	60	24	16	43	M6
25	96	1/8	105	75	14	150	25	132	18	12	73	25	16	57	M6
32	96	1/8	115	85	14	160	25	143	22	12	84	25	16	57	M6
40	120	1/8	140	100	18	180	45	173	26	15	99	26	26	69	M8
50	150	1/4	150	110	18	200	45	214	32	15	119	36	26	88	M8
63	150	1/4	165	125	18	230	45	226	39	15	132	36	26	88	M8



d [mm]	Lift = Hx [mm]	closest inch
20	7	1/2
25	10	3/4
32	13	1
40	15	1 1/4
50	19	1 1/2
63	23	2



## Diaphragm valve DIASTAR Sixteen PVC-U FC (Fail safe to close) Unions with solvent cement sockets metric

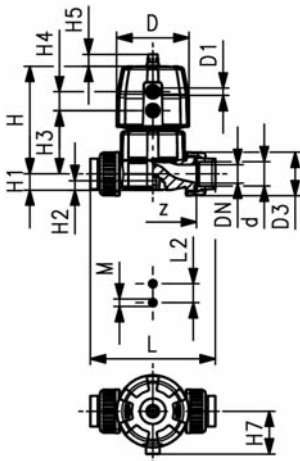
### Model:

- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Rotating air connection at 90° intervals
- For easy installation and removal
- Short overall length

### Option:

- Individual configuration of the valve (see diagram)
- Comprehensive range of accessories available
- PN16 available as a configuration

\* PN: PTFE/EPDM



d [mm]	DN [mm]	PN [bar]	kv-value (Δp=1 bar) [l/min]	EPDM Code	PTFE/EPDM Code	kg
16	10	16/16*	125	161 634 011	161 634 031	1.002
20	15	16/16*	125	161 634 012	161 634 032	1.002
25	20	16/16*	271	161 634 013	161 634 033	1.132
32	25	16/16*	481	161 634 014	161 634 034	1.961
40	32	16/16*	759	161 634 015	161 634 035	3.306
50	40	16/16*	1263	161 634 016	161 634 036	5.242
63	50	16/10*	1728	161 634 017	161 634 037	6.118

d [mm]	D [mm]	D1_G [inch]	L [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H7 [mm]	M	z [mm]	Lift = Hx [mm]
16	96	1/8	124	25	127	14	12	68	25	16	57	M6	96	7
20	96	1/8	128	25	127	14	12	68	25	16	57	M6	96	7
25	96	1/8	152	25	132	18	12	73	25	16	57	M6	114	10
32	120	1/8	166	25	167	22	12	93	26	26	69	M6	122	13
40	150	1/4	192	45	196	26	15	101	36	26	88	M8	140	15
50	180	1/4	222	45	239	32	15	124	37	26	103	M8	160	19
63	180	1/4	266	45	251	39	15	137	37	26	103	M8	190	23

d [mm]	closest inch
16	3/8
20	1/2
25	3/4
32	1
40	1 1/4
50	1 1/2
63	2



## Diaphragm valve DIASTAR Sixteen PVC-U FC (Fail safe to close) With solvent cement spigots metric

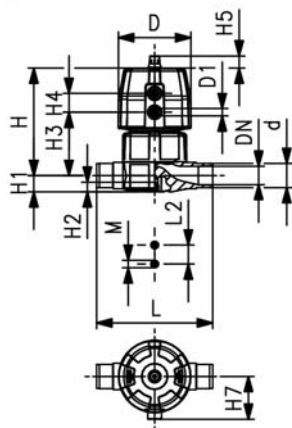
### Model:

- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Rotating air connection at 90° intervals
- Overall length EN 558

### Option:

- Individual configuration of the valve (see diagram)
- Comprehensive range of accessories available
- PN16 available as a configuration

\* PN: PTFE/EPDM



d [mm]	DN [mm]	PN [bar]	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	PTFE/EPDM Code	kg
20	15	16/16*	125	161 635 012	161 635 032	0.939
25	20	16/16*	271	161 635 013	161 635 033	1.050
32	25	16/16*	481	161 635 014	161 635 034	1.832
40	32	16/16*	759	161 635 015	161 635 035	3.116
50	40	16/16*	1263	161 635 016	161 635 036	4.988
63	50	16/10*	1728	161 635 017	161 635 037	5.696

d [mm]	D [mm]	D1_G [inch]	L [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H7 [mm]	M	Lift = Hx [mm]	closest inch
20	96	1/8	124	25	127	14	12	68	25	16	57	M6	7	1/2
25	96	1/8	144	25	132	18	12	73	25	16	57	M6	10	3/4
32	120	1/8	154	25	167	22	12	93	26	26	69	M6	13	1
40	150	1/4	174	45	196	26	15	101	36	26	88	M8	15	1 1/4
50	180	1/4	194	45	239	32	15	124	37	26	103	M8	19	1 1/2
63	180	1/4	224	45	251	39	15	137	37	26	103	M8	23	2

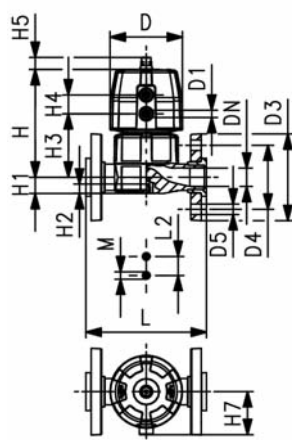
## Diaphragm valve DIASTAR Sixteen PVC-U FC (Fail safe to close) With backing flanges PVC-U metric/BS

### Model:

- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Rotating air connection at 90° intervals
- Flat sealing faces
- Overall length EN 558
- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, BS 4504 PN 10

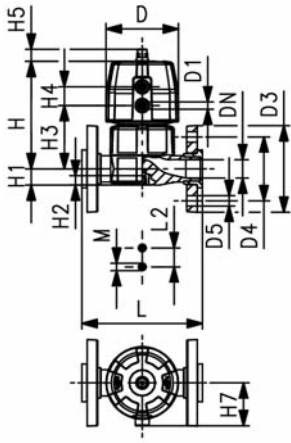
### Option:

- Individual configuration of the valve (see diagram)
- Comprehensive range of accessories available



d [mm]	DN [mm]	PN [bar]	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	PTFE/EPDM Code	kg
20	15	10	125	161 637 012	161 637 032	1.097
25	20	10	271	161 637 013	161 637 033	1.266
32	25	10	481	161 637 014	161 637 034	2.144
40	32	10	759	161 637 015	161 637 035	3.231
50	40	10	1263	161 637 016	161 637 036	5.594
63	50	10	1728	161 637 017	161 637 037	6.522

d [mm]	D [mm]	D1_G [inch]	D3 [mm]	D4 [mm]	D5 [mm]	L [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H7 [mm]	M
20	96	1/8	95	65	14	130	25	127	14	12	68	25	16	57	M6
25	96	1/8	105	75	14	150	25	132	18	12	73	25	16	57	M6
32	120	1/8	115	85	14	160	25	167	22	12	93	26	26	69	M6
40	150	1/4	140	100	18	180	45	196	26	15	101	36	26	88	M8
50	180	1/4	150	110	18	200	45	239	32	15	124	37	26	103	M8
63	180	1/4	165	125	18	230	45	251	39	15	137	37	26	103	M8



d [mm]	Lift = Hx [mm]	closest inch
20	7	1/2
25	10	3/4
32	13	1
40	15	1 1/4
50	19	1 1/2
63	23	2



## Diaphragm valve type DIASTAR PVC-U Series 025 FC (Fail safe to close) With fixed flanges PVC-U metric

### Model:

- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504
- With position indicator / Working pressure: **one side**

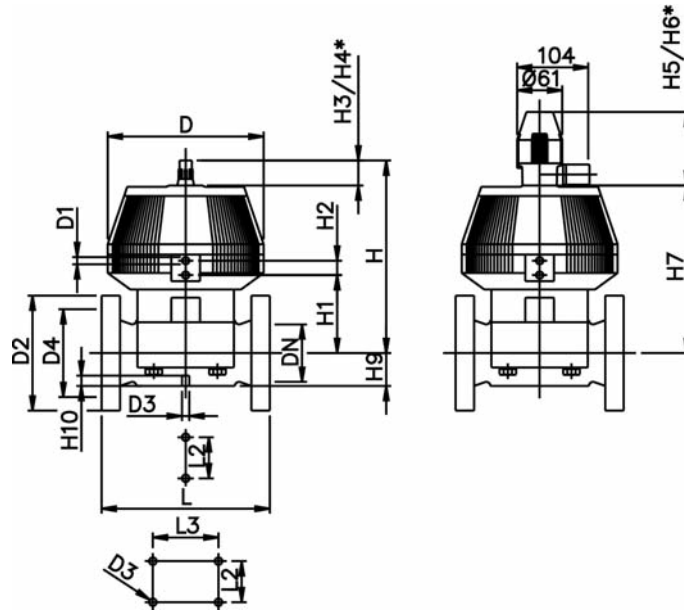
\* with backing flanges PVC-U metric

\*\* Connecting dimensions DN80 and DN150 metric and Inch ANSI B16.5

d [mm]	DN [mm]	Inch	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	PTFE/EPDM Code	kg
* 75	65	2 1/2	10	992	<b>199 025 127</b>	<b>199 025 157</b>	13.600
** 90	80	3	10	1700	<b>199 025 128</b>	<b>199 025 158</b>	17.400
110	100	4	6	2700	<b>199 025 129</b>	<b>199 025 159</b>	24.700
** 160	150	6	6	6033	<b>199 025 130</b>	-	35.000

d [mm]	D [mm]	D1_G [inch]	D2 [mm]	D3[M] [mm]	D4 [mm]	L [mm]	L2 [mm]	L3 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]
* 75	280	1/4	185	8	145	290	70		344	148	24	46	100	129
** 90	280	1/4	200	12	160	310	120		348	150	24	46	100	129
110	335	1/4	225	12	180	350	120		395	176	24	46	100	129
** 160	335	1/4	285	12	240	480	100	200	455	237	24	46	100	129

d [mm]	H6 [mm]	H7 [mm]	H9 [mm]	H10 [mm]
* 75	195	298	46	15
** 90	195	302	57	15
110	195	349	69	20
** 160	195	409	108	20



## Diaphragm valve type DIASTAR PVC-U Series 025 FO (Fail safe to open) With fixed flanges PVC-U metric

### Model:

- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504
- With position indicator / Working pressure: **one side**

\* with backing flanges PVC-U metric

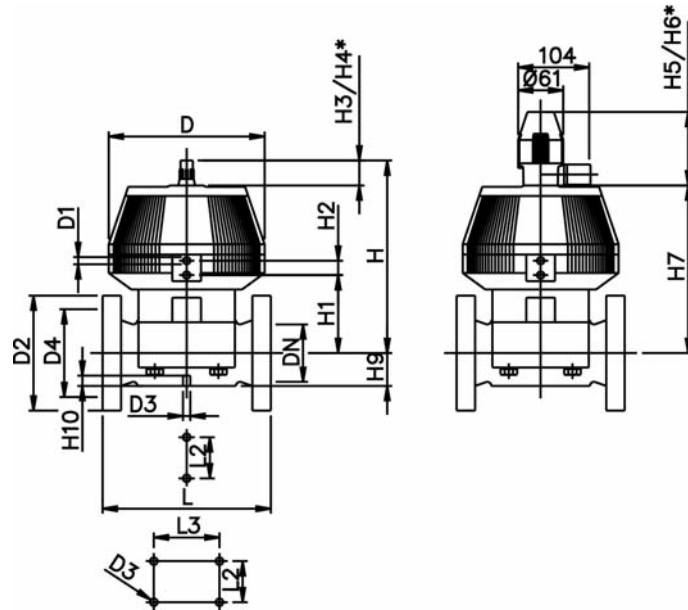
\*\* Connecting dimensions DN80 and DN150 metric and Inch ANSI B16.5

d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	PTFE/EPDM Code	kg
* 75	65	2 ½	10	992	<b>199 025 137</b>	<b>199 025 167</b>	13.600
** 90	80	3	10	1700	<b>199 025 138</b>	<b>199 025 168</b>	17.400
110	100	4	6	2700	<b>199 025 139</b>	<b>199 025 169</b>	24.700
** 160	150	6	6	6033	<b>199 025 140</b>	<b>199 025 170</b>	35.000

d [mm]	D [mm]	D1_G [inch]	D2 [mm]	D3[M] [mm]	D4 [mm]	L [mm]	L2 [mm]	L3 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]
* 75	280	¼	185	8	145	290	70		344	148	24	46	100	129
** 90	280	¼	200	12	160	310	120		348	150	24	46	100	129
110	335	¼	225	12	180	350	120		395	176	24	46	100	129
** 160	335	¼	285	12	240	480	100	200	455	237	24	46	100	129



d [mm]	H6 [mm]	H7 [mm]	H9 [mm]	H10 [mm]
* 75	195	298	46	15
** 90	195	302	57	15
110	195	349	69	20
** 160	195	409	108	20



## Diaphragm valve type DIASTAR PVC-U Series 025 DA (Double acting) With fixed flanges PVC-U metric

### Model:

- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504
- With position indicator / Working pressure: **one side**

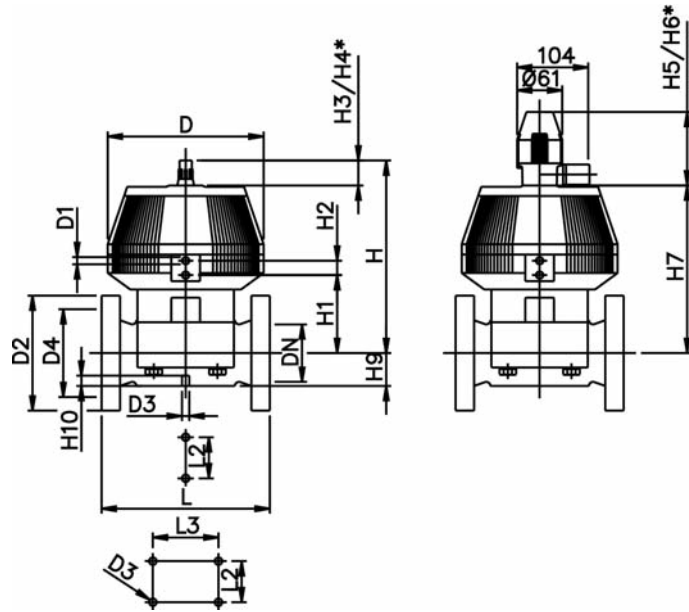
\* with backing flanges PVC-U metric

\*\* Connecting dimensions DN80 and DN150 metric and Inch ANSI B16.5

d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	PTFE/EPDM Code	kg
* 75	65	2 ½	10	992	<b>199 025 147</b>	<b>199 025 177</b>	12.000
** 90	80	3	10	1700	<b>199 025 148</b>	<b>199 025 178</b>	17.400
110	100	4	6	2700	<b>199 025 149</b>	<b>199 025 179</b>	24.700
** 160	150	6	6	6033	<b>199 025 150</b>	<b>199 025 180</b>	35.000

d [mm]	D [mm]	D1_G [inch]	D2 [mm]	D3[M] [mm]	D4 [mm]	L [mm]	L2 [mm]	L3 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]
* 75	280	¼	185	8	145	290	70		344	148	24	46	100	129
** 90	280	¼	200	12	160	310	120		348	150	24	46	100	129
110	335	¼	225	12	180	350	120		395	176	24	46	100	129
** 160	335	¼	285	12	240	480	100	200	455	237	24	46	100	129

d [mm]	H6 [mm]	H7 [mm]	H9 [mm]	H10 [mm]	
* 75	195	298	46	15	
** 90	195	302	57	15	
110	195	349	69	20	
** 160	195	409	108	20	



# Diaphragm valves pneumatic New generation Inch BS

## Diaphragm valve DIASTAR Six PVC-U FC (Fail safe to close) Unions with solvent cement sockets BS

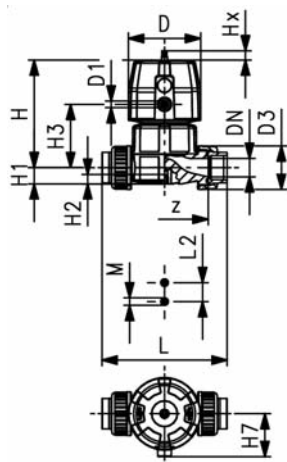


### Model:

- Double flow rate compared to predecessor
- One housing nut replaces four screws
- For easy installation and removal
- Short overall length
- Rotating air connection at 90° intervals

### Option:

- Individual configuration of the valve (see diagram)
- PN16 available as a configuration



Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	kg
1/2	15	6	125	161 614 512	5.644
3/4	20	6	271	161 614 513	1.044
1	25	6	481	161 614 514	1.273
1 1/4	32	6	759	161 614 515	2.058
1 1/2	40	6	1263	161 614 516	2.678
2	50	6	1728	161 614 517	3.786

Inch	D [mm]	D1_G [inch]	L [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H7 [mm]	M	z [mm]	Lift = Hx [mm]
1/2	68	1/8	128	25	101	14	12	60	43	M6	96	7
3/4	96	1/8	152	25	132	18	12	73	57	M6	114	10
1	96	1/8	166	25	143	22	12	84	57	M6	122	13
1 1/4	120	1/8	192	45	173	26	15	99	69	M8	140	14
1 1/2	120	1/8	222	45	193	32	15	119	69	M8	160	16
2	120	1/8	266	45	205	39	15	132	69	M8	190	16

## Diaphragm valve DIASTAR Ten PVC-U FC (Fail safe to close) Unions with solvent cement sockets BS



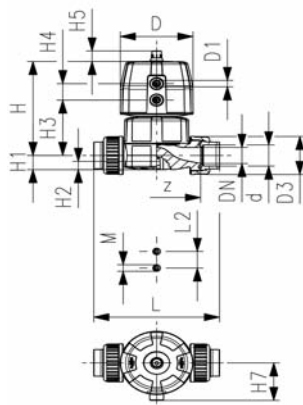
### Model:

- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Rotating air connection at 90° intervals
- For easy installation and removal
- Short overall length

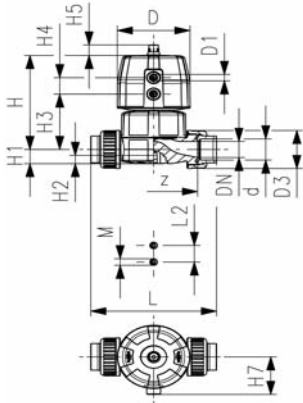
### Option:

- Individual configuration of the valve (see diagram)
- Comprehensive range of accessories available
- PN16 available as a configuration

\* PN: PTFE/EPDM



Inch	DN [mm]	PN [bar]	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	PTFE/EPDM Code	kg
1/2	15	10/10*	125	161 624 512	161 624 532	0.600
3/4	20	10/10*	271	161 624 513	161 624 533	1.130
1	25	10/10*	481	161 624 514	161 624 534	1.365
1 1/4	32	10/10*	759	161 624 515	161 624 535	2.228
1 1/2	40	10/10*	1263	161 624 516	161 624 536	3.846
2	50	10/6*	1728	161 624 517	161 624 537	4.735



Inch	D [mm]	D1_G [inch]	L [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H7 [mm]	M	z [mm]	Lift = Hx [mm]
1/2	68	1/8	128	25	101	14	12	60	24	16	43	M6	96	7
3/4	96	1/8	152	25	132	18	12	73	25	16	57	M6	114	10
1	96	1/8	166	25	143	22	12	84	25	16	57	M6	122	13
1 1/4	120	1/8	192	45	173	26	15	99	26	26	69	M8	140	15
1 1/2	150	1/4	222	45	214	32	15	119	36	26	88	M8	160	19
2	150	1/4	266	45	226	39	15	132	36	26	88	M8	190	23



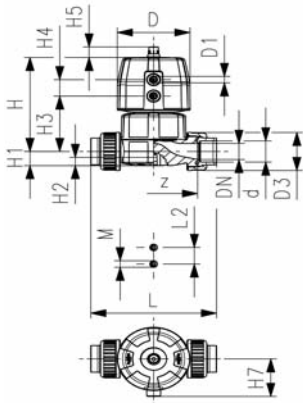
## Diaphragm valve DIASTAR Ten PVC-U FO (Fail safe to open) Unions with solvent cement sockets BS

### Model:

- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Rotating air connection at 90° intervals
- For easy installation and removal
- Short overall length

### Option:

- Individual configuration of the valve (see diagram)
- Comprehensive range of accessories available
- PN16 available as a configuration



Inch	DN [mm]	PN [bar]	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	PTFE/EPDM Code	kg
1/2	15	10	125	<b>161 644 512</b>	<b>161 644 532</b>	0.550
3/4	20	10	271	<b>161 644 513</b>	<b>161 644 533</b>	0.956
1	25	10	481	<b>161 644 514</b>	<b>161 644 534</b>	1.185
1 1/4	32	10	759	<b>161 644 515</b>	<b>161 644 535</b>	1.868
1 1/2	40	10	1263	<b>161 644 516</b>	<b>161 644 536</b>	3.756
2	50	10	1728	<b>161 644 517</b>	<b>161 644 537</b>	4.645

Inch	D [mm]	D1_G [inch]	L [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H7 [mm]	M	z [mm]	Lift = Hx [mm]
1/2	68	1/8	128	25	101	14	12	60	24	16	43	M6	96	7
3/4	96	1/8	152	25	132	18	12	73	25	16	57	M6	114	10
1	96	1/8	166	25	143	22	12	84	25	16	57	M6	122	13
1 1/4	120	1/8	192	45	173	26	15	99	26	26	69	M8	140	15
1 1/2	150	1/4	222	45	214	32	15	119	36	26	88	M8	160	19
2	150	1/4	266	45	226	39	15	132	36	26	88	M8	190	23



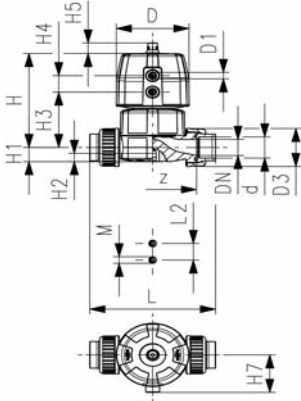
## Diaphragm valve DIASTAR Ten PVC-U DA (Double acting) Unions with solvent cement sockets BS

### Model:

- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Rotating air connection at 90° intervals
- For easy installation and removal
- Short overall length

### Option:

- Individual configuration of the valve (see diagram)
- Comprehensive range of accessories available
- PN16 available as a configuration



Inch	DN [mm]	PN [bar]	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	PTFE/EPDM Code	kg								
1/2	15	10	125	<b>161 654 512</b>	<b>161 654 532</b>	0.534								
3/4	20	10	271	<b>161 654 513</b>	<b>161 654 533</b>	0.920								
1	25	10	481	<b>161 654 514</b>	<b>161 654 534</b>	1.155								
1 1/4	32	10	759	<b>161 654 515</b>	<b>161 654 535</b>	1.808								
1 1/2	40	10	1263	<b>161 654 516</b>	<b>161 654 536</b>	3.006								
2	50	10	1728	<b>161 654 517</b>	<b>161 654 537</b>	3.895								

Inch	D [mm]	D1_G [inch]	L [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H7 [mm]	M	z [mm]	Lift = Hx [mm]
1/2	68	1/8	128	25	101	14	12	60	24	16	43	M6	96	7
3/4	96	1/8	152	25	132	18	12	73	25	16	57	M6	114	10
1	96	1/8	166	25	143	22	12	84	25	16	57	M6	122	13
1 1/4	120	1/8	192	45	173	26	15	99	26	26	69	M8	140	15
1 1/2	150	1/4	222	45	214	32	15	119	36	26	88	M8	160	19
2	150	1/4	266	45	226	39	15	132	36	26	88	M8	190	23



## Diaphragm valve DIASTAR Sixteen PVC-U FC (Fail safe to close) Unions with solvent cement sockets BS

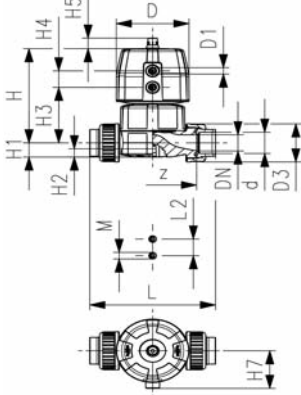
### Model:

- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Rotating air connection at 90° intervals
- For easy installation and removal
- Short overall length

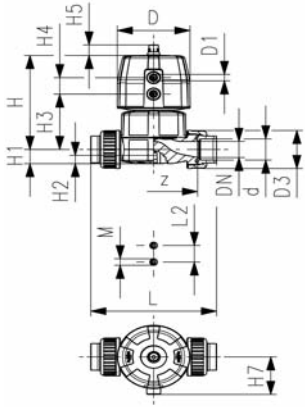
### Option:

- Individual configuration of the valve (see diagram)
- Comprehensive range of accessories available
- PN16 available as a configuration

\* PN: PTFE/EPDM



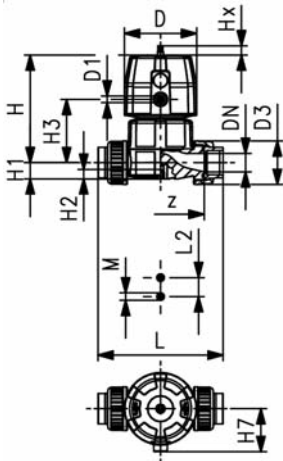
Inch	DN [mm]	PN [bar]	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	PTFE/EPDM Code	kg								
1/2	15	16/16*	125	<b>161 634 512</b>	<b>161 634 532</b>	1.000								
3/4	20	16/16*	271	<b>161 634 513</b>	<b>161 634 533</b>	1.130								
1	25	16/16*	481	<b>161 634 514</b>	<b>161 634 534</b>	1.959								
1 1/4	32	16/16*	759	<b>161 634 515</b>	<b>161 634 535</b>	3.298								
1 1/2	40	16/16*	1263	<b>161 634 516</b>	<b>161 634 536</b>	5.254								
2	50	16/10*	1728	<b>161 634 517</b>	<b>161 634 537</b>	6.142								



Inch	D [mm]	D1_G [inch]	L [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H7 [mm]	M	z [mm]	Lift = Hx [mm]
1/2	96	1/8	128	25	127	14	12	68	25	16	57	M6	96	7
3/4	96	1/8	152	25	132	18	12	73	25	16	57	M6	114	10
1	120	1/8	166	25	167	22	12	93	26	26	69	M6	122	13
1 1/4	150	1/4	192	45	196	26	15	101	36	26	88	M8	140	15
1 1/2	180	1/4	222	45	239	32	15	124	37	26	103	M8	160	19
2	180	1/4	266	45	251	39	15	137	37	26	103	M8	190	23

# Diaphragm valves pneumatic New generation ASTM/ANSI

## Diaphragm valve DIASTAR Six PVC-U FC (Fail safe to close) Unions with solvent cement sockets ASTM



### Model:

- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Rotating air connection at 90° intervals
- For easy installation and removal
- Short overall length

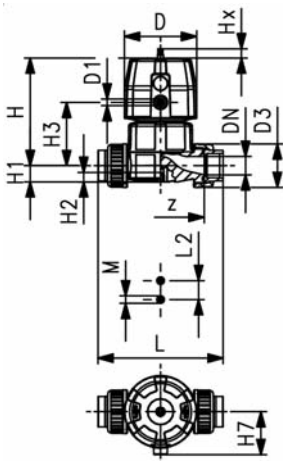
### Option:

- Individual configuration of the valve (see diagram)
- PN16 available as a configuration

Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	kg
1/2	15	6	125	<b>161 614 612</b>	5.664
3/4	20	6	271	<b>161 614 613</b>	1.048
1	25	6	481	<b>161 614 614</b>	1.279
1 1/4	32	6	759	<b>161 614 615</b>	2.066
1 1/2	40	6	1263	<b>161 614 616</b>	2.692
2	50	6	1728	<b>161 614 617</b>	3.794

Inch	D [mm]	D1_G [inch]	L [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H7 [mm]	M	z [mm]	Lift = Hx [mm]
1/2	68	1/8	136	25	101	14	12	60	43	M6	96	7
3/4	96	1/8	160	25	132	18	12	73	57	M6	114	10
1	96	1/8	176	25	143	22	12	84	57	M6	122	13
1 1/4	120	1/8	198	45	173	26	15	99	69	M8	140	14
1 1/2	120	1/8	232	45	193	32	15	119	69	M8	160	16
2	120	1/8	268	45	205	39	15	132	69	M8	190	16

## Diaphragm valve DIASTAR Six PVC-U FC (Fail safe to close) Unions with threaded sockets NPT



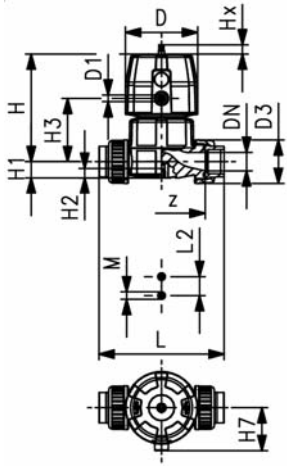
### Model:

- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Rotating air connection at 90° intervals
- For easy installation and removal
- Short overall length

### Option:

- Individual configuration of the valve (see diagram)
- PN16 available as a configuration

NPT [inch]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	kg
1/2	15	6	125	<b>161 614 712</b>	5.644
3/4	20	6	271	<b>161 614 713</b>	1.048
1	25	6	481	<b>161 614 714</b>	1.279
1 1/4	32	6	759	<b>161 614 715</b>	2.072
1 1/2	40	6	1263	<b>161 614 716</b>	2.704
2	50	6	1728	<b>161 614 717</b>	3.874



NPT [inch]	D [mm]	D1_G [inch]	L [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H7 [mm]	M	z [mm]	Lift = Hx [mm]
1/2	68	1/8	128	25	101	14	12	60	43	M6	96	7
3/4	96	1/8	152	25	132	18	12	73	57	M6	114	10
1	96	1/8	166	25	143	22	12	84	57	M6	122	13
1 1/4	120	1/8	192	45	173	26	15	99	69	M8	140	14
1 1/2	120	1/8	222	45	193	32	15	119	69	M8	160	16
2	120	1/8	266	45	205	39	15	132	69	M8	190	16



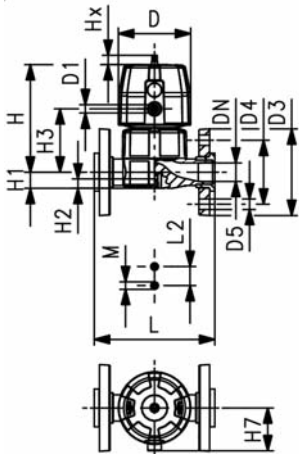
## Diaphragm valve DIASTAR Six PVC-U FC (Fail safe to close) With backing flanges PVC-U Inch ANSI

### Model:

- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Rotating air connection at 90° intervals
- Flat sealing faces
- Overall length EN 558
- Connecting dimension: ANSI/ASME B 16.5 class 150, ASTM D 4024, BS 1560, BS EN 1759

### Option:

- Individual configuration of the valve (see diagram)



Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	kg
1/2	15	6	125	<b>161 617 612</b>	6.574
3/4	20	6	271	<b>161 617 613</b>	1.172
1	25	6	481	<b>161 617 614</b>	1.450
1 1/4	32	6	759	<b>161 617 615</b>	2.360
1 1/2	40	6	1263	<b>161 617 616</b>	3.012
2	50	6	1728	<b>161 617 617</b>	4.154

Inch	D [mm]	D1_G [inch]	D3 [mm]	D4 [mm]	D5 [mm]	L [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H7 [mm]	M	Lift = Hx [mm]
1/2	68	1/8	95	60	16	130	25	101	14	12	60	43	M6	7
3/4	96	1/8	105	70	16	150	25	132	18	12	73	57	M6	10
1	96	1/8	115	79	16	160	25	143	22	12	84	57	M6	13
1 1/4	120	1/8	140	89	16	180	45	173	26	15	99	69	M8	14
1 1/2	120	1/8	150	98	16	200	45	193	32	15	119	69	M8	16
2	120	1/8	165	121	19	230	45	205	39	15	132	69	M8	16





## Diaphragm valve DIASTAR Ten PVC-U FC (Fail safe to close) Unions with solvent cement sockets ASTM

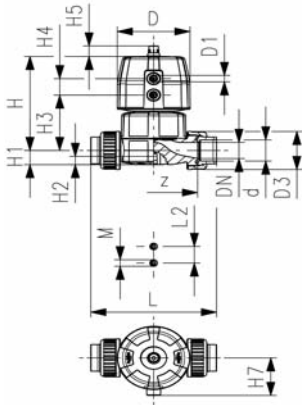
### Model:

- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Rotating air connection at 90° intervals
- For easy installation and removal
- Short overall length

### Option:

- Individual configuration of the valve (see diagram)
- Comprehensive range of accessories available
- PN16 available as a configuration

\* PN: PTFE/EPDM



Inch	DN [mm]	PN [bar]	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	PTFE/EPDM Code	kg
1/2	15	10/10*	125	<b>161 624 612</b>	<b>161 624 632</b>	0.602
3/4	20	10/10*	271	<b>161 624 613</b>	<b>161 624 633</b>	1.134
1	25	10/10*	481	<b>161 624 614</b>	<b>161 624 634</b>	1.371
1 1/4	32	10/10*	759	<b>161 624 615</b>	<b>161 624 635</b>	2.236
1 1/2	40	10/10*	1263	<b>161 624 616</b>	<b>161 624 636</b>	3.860
2	50	10/6*	1728	<b>161 624 617</b>	<b>161 624 637</b>	4.743

Inch	D [mm]	D1_G [inch]	L [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H7 [mm]	M	z [mm]	Lift = Hx [mm]
1/2	68	1/8	136	25	101	14	12	60	24	16	43	M6	96	7
3/4	96	1/8	160	25	132	18	12	73	25	16	57	M6	114	10
1	96	1/8	176	25	143	22	12	84	25	16	57	M6	122	13
1 1/4	120	1/8	198	45	173	26	15	99	26	26	69	M8	140	15
1 1/2	150	1/4	232	45	214	32	15	119	36	26	88	M8	160	19
2	150	1/4	268	45	226	39	15	132	36	26	88	M8	190	23



## Diaphragm valve DIASTAR Ten PVC-U FC (Fail safe to close) Unions with threaded sockets NPT

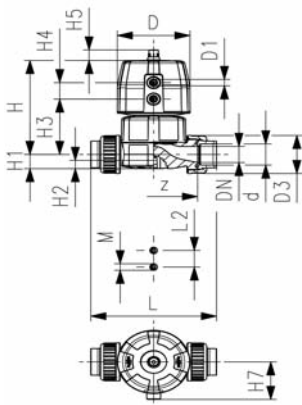
### Model:

- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Rotating air connection at 90° intervals
- For easy installation and removal
- Short overall length

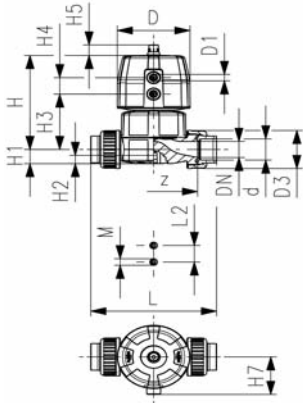
### Option:

- Individual configuration of the valve (see diagram)
- Comprehensive range of accessories available
- PN16 available as a configuration

\* PN: PTFE/EPDM



NPT [inch]	DN [mm]	PN [bar]	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	PTFE/EPDM Code	kg
1/2	15	10/10*	125	<b>161 624 712</b>	<b>161 624 732</b>	0.600
3/4	20	10/10*	271	<b>161 624 713</b>	<b>161 624 733</b>	1.134
1	25	10/10*	481	<b>161 624 714</b>	<b>161 624 734</b>	1.371
1 1/4	32	10/10*	759	<b>161 624 715</b>	<b>161 624 735</b>	2.242
1 1/2	40	10/10*	1263	<b>161 624 716</b>	<b>161 624 736</b>	3.872
2	50	10/6*	1728	<b>161 624 717</b>	<b>161 624 737</b>	4.823



NPT [inch]	D [mm]	D1_G [inch]	L [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H7 [mm]	M	z [mm]	Lift = Hx [mm]
1/2	68	1/8	128	25	101	14	12	60	24	16	43	M6	96	7
3/4	96	1/8	152	25	132	18	12	73	25	16	57	M6	114	10
1	96	1/8	166	25	143	22	12	84	25	16	57	M6	122	13
1 1/4	120	1/8	192	45	173	26	15	99	26	26	69	M8	140	15
1 1/2	120	1/4	222	45	214	32	15	119	36	26	88	M8	160	19
2	120	1/4	266	45	226	39	15	132	36	26	88	M8	190	23



## Diaphragm valve DIASTAR Ten PVC-U FC (Fail safe to close) With backing flanges PVC-U Inch ANSI

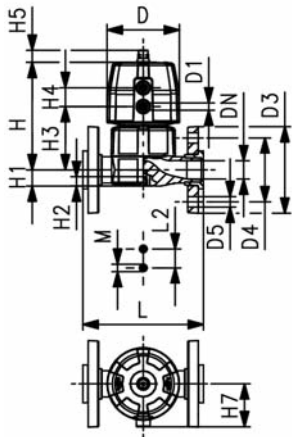
### Model:

- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Rotating air connection at 90° intervals
- Flat sealing faces
- Overall length EN 558
- Connecting dimension: ANSI/ASME B 16.5 class 150, ASTM D 4024, BS 1560, BS EN 1759

### Option:

- Individual configuration of the valve (see diagram)
- Comprehensive range of accessories available

\* PN: PTFE/EPDM



Inch	DN [mm]	PN [bar]	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	PTFE/EPDM Code	kg
1/2	15	10/10*	125	<b>161 627 612</b>	<b>161 627 632</b>	0.693
3/4	20	10/10*	271	<b>161 627 613</b>	<b>161 627 633</b>	1.258
1	25	10/10*	481	<b>161 627 614</b>	<b>161 627 634</b>	1.542
1 1/4	32	10/10*	759	<b>161 627 615</b>	<b>161 627 635</b>	2.530
1 1/2	40	10/10*	1263	<b>161 627 616</b>	<b>161 627 636</b>	4.180
2	50	10/6*	1728	<b>161 627 617</b>	<b>161 627 637</b>	5.103

Inch	D [mm]	D1_G [inch]	D3 [mm]	D4 [mm]	D5 [mm]	L [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H7 [mm]	M
1/2	68	1/8	95	60	16	130	25	101	14	12	60	24	16	43	M6
3/4	96	1/8	105	70	16	150	25	132	18	12	73	25	16	57	M6
1	96	1/8	115	79	16	160	25	143	22	12	84	25	16	57	M6
1 1/4	120	1/8	140	89	16	180	45	173	26	15	99	26	26	69	M8
1 1/2	150	1/4	150	98	16	200	45	193	32	15	119	36	26	88	M8
2	150	1/4	165	121	19	230	45	205	39	15	132	36	26	88	M8

Inch	Lift = Hx [mm]
1/2	7
3/4	10
1	13
1 1/4	15
1 1/2	19
2	23



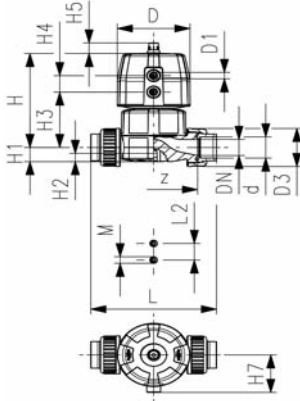
## Diaphragm valve DIASTAR Ten PVC-U FO (Fail safe to open) Unions with solvent cement sockets ASTM

### Model:

- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Rotating air connection at 90° intervals
- For easy installation and removal
- Short overall length

### Option:

- Individual configuration of the valve (see diagram)
- Comprehensive range of accessories available
- PN16 available as a configuration



Inch	DN [mm]	PN [bar]	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	PTFE/EPDM Code	kg								
1/2	15	10	125	<b>161 644 612</b>	<b>161 644 632</b>	0.552								
3/4	20	10	271	<b>161 644 613</b>	<b>161 644 633</b>	0.960								
1	25	10	481	<b>161 644 614</b>	<b>161 644 634</b>	1.191								
1 1/4	32	10	759	<b>161 644 615</b>	<b>161 644 635</b>	1.876								
1 1/2	40	10	1263	<b>161 644 616</b>	<b>161 644 636</b>	3.770								
2	50	10	1728	<b>161 644 617</b>	<b>161 644 637</b>	4.653								

Inch	D [mm]	D1_G [inch]	L [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H7 [mm]	M	z [mm]	Lift = Hx [mm]
1/2	68	3/8	136	25	101	14	12	60	24	16	43	M6	96	7
3/4	96	3/8	160	25	132	18	12	73	25	16	57	M6	114	10
1	96	3/8	176	25	143	22	12	84	25	16	57	M6	122	13
1 1/4	120	3/8	198	45	173	26	15	99	26	26	69	M8	140	15
1 1/2	150	1/4	232	45	214	32	15	119	36	26	88	M8	160	19
2	150	1/4	268	45	226	39	15	132	36	26	88	M8	190	23



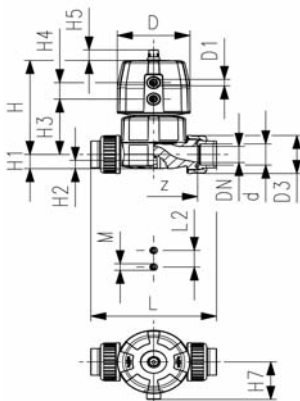
## Diaphragm valve DIASTAR Ten PVC-U FO (Fail safe to open) Unions with threaded sockets NPT

### Model:

- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Rotating air connection at 90° intervals
- For easy installation and removal
- Short overall length

### Option:

- Individual configuration of the valve (see diagram)
- Comprehensive range of accessories available
- PN16 available as a configuration



NPT [inch]	DN [mm]	PN [bar]	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	PTFE/EPDM Code	kg								
1/2	15	10	125	<b>161 644 712</b>	<b>161 644 732</b>	0.550								
3/4	20	10	271	<b>161 644 713</b>	<b>161 644 733</b>	0.960								
1	25	10	481	<b>161 644 714</b>	<b>161 644 734</b>	1.191								
1 1/4	32	10	759	<b>161 644 715</b>	<b>161 644 735</b>	1.882								
1 1/2	40	10	1263	<b>161 644 716</b>	<b>161 644 736</b>	3.782								
2	50	10	1728	<b>161 644 717</b>	<b>161 644 737</b>	4.733								

NPT [inch]	D [mm]	D1_G [inch]	L [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H7 [mm]	M	z [mm]	Lift = Hx [mm]
1/2	68	3/8	128	25	101	14	12	60	24	16	43	M6	96	7
3/4	96	3/8	152	25	132	18	12	73	25	16	57	M6	114	10
1	96	3/8	166	25	143	22	12	84	25	16	57	M6	122	13
1 1/4	120	3/8	192	45	173	26	15	99	26	26	69	M8	140	15
1 1/2	150	1/4	222	45	214	32	15	119	36	26	69	M8	160	19
2	150	1/4	266	45	226	39	15	132	36	26	69	M8	190	23



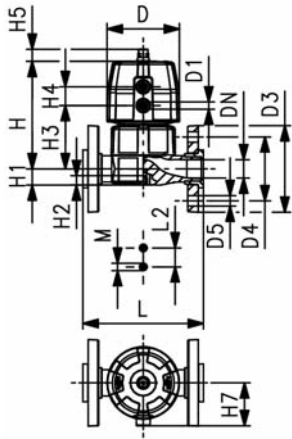
# Diaphragm valve DIASTAR Ten PVC-U FO (Fail safe to open) With backing flanges PVC-U Inch ANSI

## Model:

- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Rotating air connection at 90° intervals
- Flat sealing faces
- Overall length EN 558
- Connecting dimension: ANSI/ASME B 16.5 class 150, ASTM D 4024, BS 1560, BS EN 1759

## Option:

- Individual configuration of the valve (see diagram)
- Comprehensive range of accessories available



Inch	DN [mm]	PN [bar]	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	PTFE/EPDM Code	kg
1/2	15	10	125	<b>161 647 612</b>	<b>161 647 632</b>	0.643
3/4	20	10	271	<b>161 647 613</b>	<b>161 647 633</b>	1.084
1	25	10	481	<b>161 647 614</b>	<b>161 647 634</b>	1.362
1 1/4	32	10	759	<b>161 647 615</b>	<b>161 647 635</b>	2.170
1 1/2	40	10	1263	<b>161 647 616</b>	<b>161 647 636</b>	4.090
2	50	10	1728	<b>161 647 617</b>	<b>161 647 637</b>	5.013

Inch	D [mm]	D1_G [inch]	D3 [mm]	D4 [mm]	D5 [mm]	L [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H7 [mm]	M
1/2	68	1/8	95	60	16	130	25	101	14	12	60	24	16	43	M6
3/4	96	1/8	105	70	16	150	25	132	18	12	73	25	16	57	M6
1	96	1/8	115	79	16	160	25	143	22	12	84	25	16	57	M6
1 1/4	120	1/8	140	89	16	180	45	173	26	15	99	26	26	69	M8
1 1/2	150	1/4	150	98	16	200	45	214	32	15	119	36	26	88	M8
2	150	1/4	165	121	19	230	45	226	39	15	132	36	26	88	M8

Inch	Lift = Hx [mm]
1/2	7
3/4	10
1	13
1 1/4	15
1 1/2	19
2	23



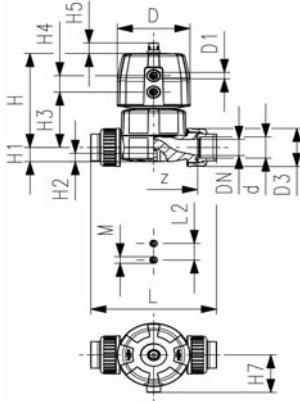
## Diaphragm valve DIASTAR Ten PVC-U DA (Double acting) Unions with solvent cement sockets ASTM

### Model:

- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Rotating air connection at 90° intervals
- For easy installation and removal
- Short overall length

### Option:

- Individual configuration of the valve (see diagram)
- Comprehensive range of accessories available
- PN16 available as a configuration



Inch	DN [mm]	PN [bar]	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	PTFE/EPDM Code	kg								
1/2	15	10	125	<b>161 654 612</b>	<b>161 654 632</b>	0.536								
3/4	20	10	271	<b>161 654 613</b>	<b>161 654 633</b>	0.924								
1	25	10	481	<b>161 654 614</b>	<b>161 654 634</b>	1.161								
1 1/4	32	10	759	<b>161 654 615</b>	<b>161 654 635</b>	1.816								
1 1/2	40	10	1263	<b>161 654 616</b>	<b>161 654 636</b>	3.020								
2	50	10	1728	<b>161 654 617</b>	<b>161 654 637</b>	3.903								

Inch	D [mm]	D1_G [inch]	L [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H7 [mm]	M	z [mm]	Lift = Hx [mm]
1/2	68	3/8	136	25	101	14	12	60	24	16	43	M6	96	7
3/4	96	3/8	160	25	132	18	12	73	25	16	57	M6	114	10
1	96	3/8	176	25	143	22	12	84	25	16	57	M6	122	13
1 1/4	120	3/8	198	45	173	26	15	99	26	26	69	M8	140	15
1 1/2	150	1/4	232	45	214	32	15	119	36	26	88	M8	160	19
2	150	1/4	268	45	226	39	15	132	36	26	88	M8	190	23



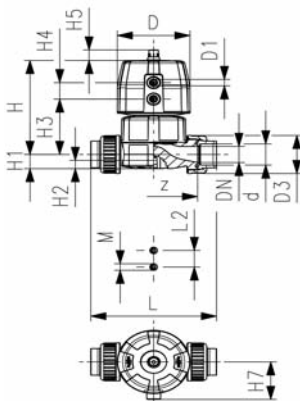
## Diaphragm valve DIASTAR Ten PVC-U DA (Double acting) Unions with threaded sockets NPT

### Model:

- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Rotating air connection at 90° intervals
- For easy installation and removal
- Short overall length

### Option:

- Individual configuration of the valve (see diagram)
- Comprehensive range of accessories available
- PN16 available as a configuration



NPT [inch]	DN [mm]	PN [bar]	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	PTFE/EPDM Code	kg								
1/2	15	10	125	<b>161 654 712</b>	<b>161 654 732</b>	0.534								
3/4	20	10	271	<b>161 654 713</b>	<b>161 654 733</b>	0.924								
1	25	10	481	<b>161 654 714</b>	<b>161 654 734</b>	1.161								
1 1/4	32	10	759	<b>161 654 715</b>	<b>161 654 735</b>	1.822								
1 1/2	40	10	1263	<b>161 654 716</b>	<b>161 654 736</b>	3.032								
2	50	10	1728	<b>161 654 717</b>	<b>161 654 737</b>	3.983								

NPT [inch]	D [mm]	D1_G [inch]	L [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H7 [mm]	M	z [mm]	Lift = Hx [mm]
1/2	68	3/8	128	25	101	14	12	60	45	16	43	M6	96	7
3/4	96	3/8	152	25	132	18	12	73	25	16	57	M6	114	10
1	96	3/8	166	25	143	22	12	84	25	16	57	M6	122	13
1 1/4	120	3/8	192	45	173	26	15	99	26	26	69	M8	140	15
1 1/2	150	1/4	222	45	214	32	15	119	36	26	69	M8	160	19
2	150	1/4	266	45	226	39	15	132	36	26	69	M8	190	23



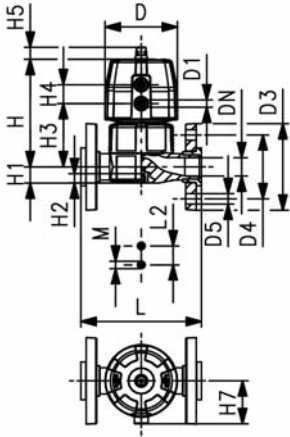
## Diaphragm valve DIASTAR Ten PVC-U DA (Double acting) With backing flanges PVC-U Inch ANSI

### Model:

- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Rotating air connection at 90° intervals
- Flat sealing faces
- Overall length EN 558
- Connecting dimension: ANSI/ASME B 16.5 class 150, ASTM D 4024, BS 1560, BS EN 1759

### Option:

- Individual configuration of the valve (see diagram)
- Comprehensive range of accessories available



Inch	DN [mm]	PN [bar]	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	PTFE/EPDM Code	kg
1/2	15	10	125	<b>161 657 612</b>	<b>161 657 632</b>	0.627
3/4	20	10	271	<b>161 657 613</b>	<b>161 657 633</b>	1.048
1	25	10	481	<b>161 657 614</b>	<b>161 657 634</b>	1.332
1 1/4	32	10	759	<b>161 657 615</b>	<b>161 657 635</b>	2.110
1 1/2	40	10	1263	<b>161 657 616</b>	<b>161 657 636</b>	3.340
2	50	10	1728	<b>161 657 617</b>	<b>161 657 637</b>	4.263

Inch	D [mm]	D1_G [inch]	D3 [mm]	D4 [mm]	D5 [mm]	L [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H7 [mm]	M
1/2	68	1/8	95	60	16	130	25	101	14	12	60	24	16	43	M6
3/4	96	1/8	105	70	16	150	25	132	18	12	73	25	16	57	M6
1	96	1/8	115	79	16	160	25	143	22	12	84	25	16	57	M6
1 1/4	120	1/8	140	89	16	180	45	173	26	15	99	26	26	69	M8
1 1/2	150	1/4	150	98	16	200	45	214	32	15	119	36	26	88	M8
2	150	1/4	165	121	19	230	45	226	39	15	132	36	26	88	M8

Inch	Lift = Hx [mm]
1/2	7
3/4	10
1	13
1 1/4	15
1 1/2	19
2	23



## Diaphragm valve DIASTAR Sixteen PVC-U FC (Fail safe to close) Unions with solvent cement sockets ASTM

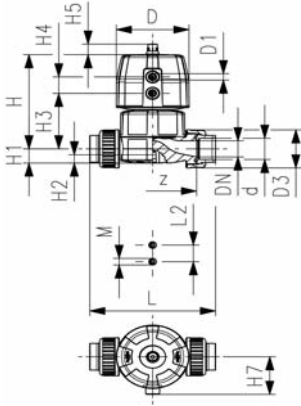
### Model:

- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Rotating air connection at 90° intervals
- For easy installation and removal
- Short overall length

### Option:

- Individual configuration of the valve (see diagram)
- Comprehensive range of accessories available
- PN16 available as a configuration

\* PN: PTFE/EPDM



Inch	DN [mm]	PN [bar]	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	PTFE/EPDM Code	kg
1/2	15	16/16*	125	<b>161 634 612</b>	<b>161 634 632</b>	1.002
3/4	20	16/16*	271	<b>161 634 613</b>	<b>161 634 633</b>	1.134
1	25	16/16*	481	<b>161 634 614</b>	<b>161 634 634</b>	1.965
1 1/4	32	16/16*	759	<b>161 634 615</b>	<b>161 634 635</b>	3.306
1 1/2	40	16/16*	1263	<b>161 634 616</b>	<b>161 634 636</b>	5.268
2	50	16/10*	1728	<b>161 634 617</b>	<b>161 634 637</b>	6.150

Inch	D [mm]	D1_G [inch]	L [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H7 [mm]	M	z [mm]	Lift = Hx [mm]
1/2	96	1/8	141	25	127	14	12	68	25	16	57	M6	96	7
3/4	96	1/8	165	25	132	18	12	73	25	16	57	M6	114	10
1	120	1/8	180	25	167	22	12	93	26	26	69	M6	122	13
1 1/4	150	1/4	204	45	196	26	15	101	36	26	88	M8	140	15
1 1/2	180	1/4	230	45	239	32	15	124	37	26	103	M8	160	19
2	180	1/4	267	45	251	39	15	137	37	26	103	M8	190	23



## Diaphragm valve DIASTAR Sixteen PVC-U FC (Fail safe to close) Unions with threaded sockets NPT

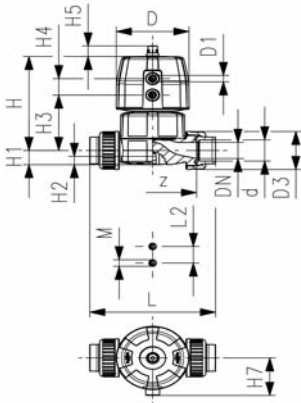
### Model:

- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Rotating air connection at 90° intervals
- For easy installation and removal
- Short overall length

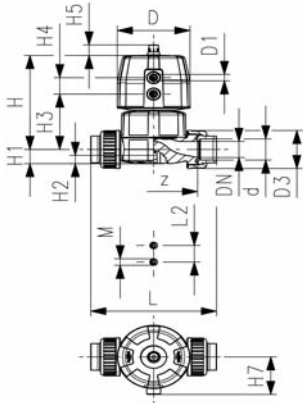
### Option:

- Individual configuration of the valve (see diagram)
- Comprehensive range of accessories available
- PN16 available as a configuration

\* PN: PTFE/EPDM



NPT [inch]	DN [mm]	PN [bar]	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	PTFE/EPDM Code	kg
1/2	15	16/16*	125	<b>161 634 712</b>	<b>161 634 732</b>	1.000
3/4	20	16/16*	271	<b>161 634 713</b>	<b>161 634 733</b>	1.134
1	25	16/16*	481	<b>161 634 714</b>	<b>161 634 734</b>	1.965
1 1/4	32	16/16*	759	<b>161 634 715</b>	<b>161 634 735</b>	3.312
1 1/2	40	16/16*	1263	<b>161 634 716</b>	<b>161 634 736</b>	5.280
2	50	16/10*	1728	<b>161 634 717</b>	<b>161 634 737</b>	6.230



NPT [inch]	D [mm]	D1_G [inch]	L [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H7 [mm]	M	z [mm]	Lift = Hx [mm]
1/2	96	1/8	128	25	127	14	12	68	25	16	57	M6	96	7
3/4	96	1/8	152	25	132	18	12	73	25	16	57	M6	114	10
1	120	1/8	166	25	167	22	12	93	26	26	69	M6	122	13
1 1/4	150	1/4	192	45	196	26	15	101	36	26	88	M8	140	15
1 1/2	180	1/4	222	45	239	32	15	124	37	26	103	M8	160	19
2	180	1/4	266	45	251	39	15	137	37	26	103	M8	190	23

## Diaphragm valve DIASTAR Sixteen PVC-U FC (Fail safe to close) With backing flanges PVC-U Inch ANSI



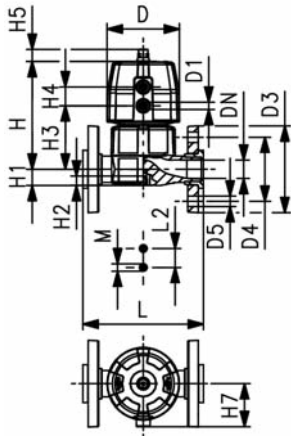
### Model:

- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Rotating air connection at 90° intervals
- Flat sealing faces
- Overall length EN 558
- Connecting dimension: ANSI/ASME B 16.5 class 150, ASTM D 4024, BS 1560, BS EN 1759

### Option:

- Individual configuration of the valve (see diagram)
- Comprehensive range of accessories available

\* PN: PTFE/EPDM



Inch	DN [mm]	PN [bar]	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	PTFE/EPDM Code	kg
1/2	15	10/10*	125	<b>161 637 612</b>	<b>161 637 632</b>	1.093
3/4	20	10/10*	271	<b>161 637 613</b>	<b>161 637 633</b>	1.258
1	25	10/10*	481	<b>161 637 614</b>	<b>161 637 634</b>	2.136
1 1/4	32	10/10*	759	<b>161 637 615</b>	<b>161 637 635</b>	3.600
1 1/2	40	10/10*	1263	<b>161 637 616</b>	<b>161 637 636</b>	5.588
2	50	10/10*	1728	<b>161 637 617</b>	<b>161 637 637</b>	6.510

Inch	D [mm]	D1_G [inch]	D3 [mm]	D4 [mm]	D5 [mm]	L [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H7 [mm]	M
1/2	96	1/8	95	60	16	130	25	127	14	12	68	25	16	57	M6
3/4	96	1/8	105	70	16	150	25	132	18	12	73	25	16	57	M6
1	120	1/8	115	79	16	160	25	167	22	12	93	26	26	69	M6
1 1/4	150	1/4	140	89	16	180	45	196	26	15	101	36	26	88	M8
1 1/2	180	1/4	150	98	16	200	45	239	32	15	124	37	26	103	M8
2	180	1/4	165	121	19	230	45	251	39	15	137	37	26	103	M8

Inch	Lift = Hx [mm]
1/2	7
3/4	10
1	13
1 1/4	15
1 1/2	19
2	23





## Diaphragm valve type DIASTAR PVC-U Series 025 FC (Fail safe to close) With fixed flanges Inch ANSI

### Model:

- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504
- With position indicator / Working pressure: **one side**

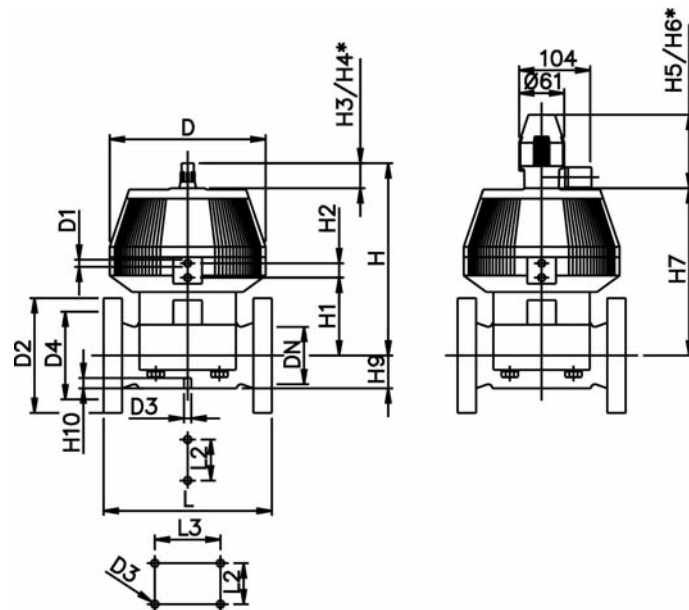
\* with backing flanges PVC-U metric

\*\* Connecting dimensions DN80 and DN150 metric and Inch ANSI B16.5

Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	PTFE/EPDM Code	kg
* 2 1/2	65	10	992	<b>199 025 007</b>	<b>199 025 037</b>	13.600
** 3	80	10	1700	<b>199 025 128</b>	<b>199 025 158</b>	17.400
4	100	6	2700	<b>199 025 009</b>	<b>199 025 039</b>	24.700
** 6	150	6	6033	<b>199 025 130</b>		35.000

Inch	D [mm]	D1 G [inch]	D2 [mm]	D3[M] [mm]	D4 [mm]	L [mm]	L2 [mm]	L3 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]
* 2 1/2	280	1/4	185	8	145	290	70		344	148	24	46	100	129
** 3	280	1/4	200	12	160	310	120		348	150	24	46	100	129
4	335	1/4	225	12	180	350	120		395	176	24	46	100	129
** 6	335	1/4	285	12	240	480	100	200	455	237	24	46	100	129

Inch	H6 [mm]	H7 [mm]	H9 [mm]	H10 [mm]
* 2 1/2	195	298	46	15
** 3	195	302	57	15
4	195	349	69	20
** 6	195	409	108	20





## Diaphragm valve type DIASTAR PVC-U Series 025 FO (Fail safe to open) With fixed flanges Inch ANSI

### Model:

- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504
- With position indicator / Working pressure: **one side**

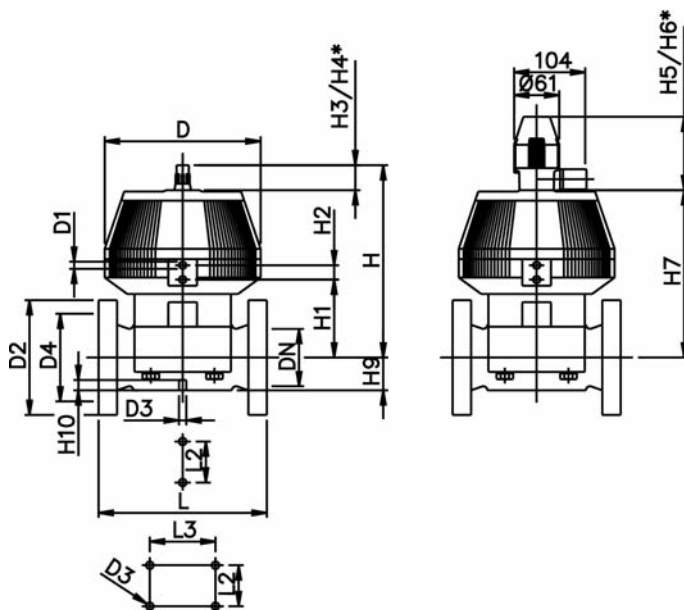
\* with backing flanges PVC-U metric

\*\* Connecting dimensions DN80 and DN150 metric and Inch ANSI B16.5

Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	PTFE/EPDM Code	kg
* 2 1/2	65	10	992	<b>199 025 017</b>	<b>199 025 047</b>	11.200
** 3	80	10	1700	<b>199 025 138</b>	<b>199 025 168</b>	17.400
4	100	6	2700	<b>199 025 019</b>	<b>199 025 049</b>	24.400
** 6	150	6	6033	<b>199 025 140</b>	<b>199 025 170</b>	35.000

Inch	D [mm]	D1 G [inch]	D2 [mm]	D3[M] [mm]	D4 [mm]	L [mm]	L2 [mm]	L3 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]
* 2 1/2	280	1/4	185	8	145	290	70		344	148	24	46	100	129
** 3	280	1/4	200	12	160	310	120		348	150	24	46	100	129
4	335	1/4	225	12	180	350	120		395	176	24	46	100	129
** 6	335	1/4	285	12	240	480	100	200	455	237	24	46	100	129

Inch	H6 [mm]	H7 [mm]	H9 [mm]	H10 [mm]
* 2 1/2	195	298	46	15
** 3	195	302	57	15
4	195	349	69	20
** 6	195	409	108	20





## Diaphragm valve type DIASTAR PVC-U Series 025 DA (Double acting) With fixed flanges Inch ANSI

### Model:

- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504
- With position indicator / Working pressure: **one side**

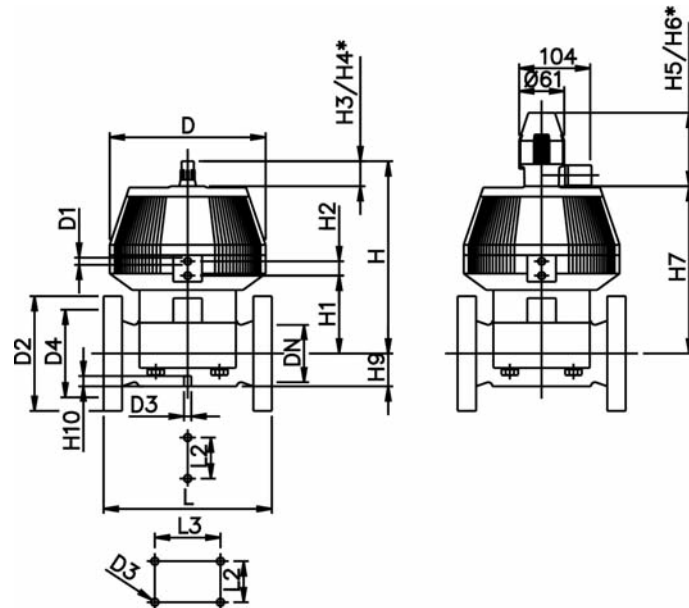
\* with backing flanges PVC-U metric

\*\* Connecting dimensions DN80 and DN150 metric and Inch ANSI B16.5

Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	PTFE/EPDM Code	kg
* 2 1/2	65	10	992	<b>199 025 027</b>	<b>199 025 057</b>	12.000
** 3	80	10	1700	<b>199 025 148</b>	<b>199 025 178</b>	17.400
4	100	6	2700	<b>199 025 029</b>	<b>199 025 059</b>	22.400
** 6	150	6	6033	<b>199 025 150</b>	<b>199 025 180</b>	35.000

Inch	D [mm]	D1 G [inch]	D2 [mm]	D3[M] [mm]	D4 [mm]	L [mm]	L2 [mm]	L3 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]
* 2 1/2	280	1/4	185	8	145	290	70		344	148	24	46	100	129
** 3	280	1/4	200	12	160	310	120		348	150	24	46	100	129
4	335	1/4	225	12	180	350	120		395	176	24	46	100	129
** 6	335	1/4	285	12	240	480	100	200	455	237	24	46	100	129

Inch	H6 [mm]	H7 [mm]	H9 [mm]	H10 [mm]
* 2 1/2	195	298	46	15
** 3	195	302	57	15
4	195	349	69	20
** 6	195	409	108	20



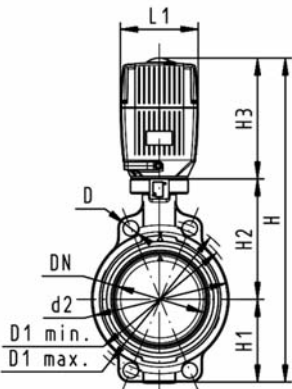
# Butterfly valves electric metric

## Butterfly valve type 140 PVC-U 100-230V Without manual override



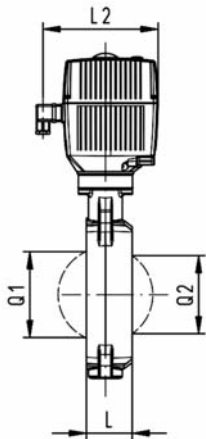
### Model:

- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, ANSI/ASME B 16.5 Class 150, BS 1560: 1989, BS 4504, JIS B 2220
- Voltage 100-230 V, 50-60 Hz
- Control time 15 s/90°<) EA31
- Control time 25s/90°<) EA42
- Control range 90°<)
- Actuator with integrated emergency manual override standard
- Up to DN 300: Overall length according to EN558 (DN 50-200: line 25, DN250, 300 line 16), ISO 5752



d [mm]	DN [mm]	Inch	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
63	50	2	10	1470	<b>199 140 042</b>	<b>199 140 062</b>	4.182
75	65	2 ½	10	2200	<b>199 140 043</b>	<b>199 140 063</b>	4.286
90	80	3	10	3000	<b>199 140 044</b>	<b>199 140 064</b>	4.453
110	100	4	10	6500	<b>199 140 045</b>	<b>199 140 065</b>	5.073
140	125	5	10	11500	<b>199 140 046</b>	<b>199 140 066</b>	5.644
160	150	6	10	16600	<b>199 140 047</b>	<b>199 140 067</b>	6.654
225	200	8	10	39600	<b>199 140 048</b>	<b>199 140 068</b>	12.634
280	250	10	6	55200	<b>199 140 049</b>	<b>199 140 069</b>	14.481
315	300	12	4	80000	<b>199 140 050</b>	<b>199 140 070</b>	19.546

d [mm]	Actuator unit type	D [mm]	D1 min. [mm]	D1 max. [mm]	d2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	L [mm]	L1 [mm]	L2 [mm]	Q1 [mm]
63	EA-31	19	120.0	125.0	104	400	77	134	188	45	122	180	40
75	EA-31	19	139.7	145.0	115	413	83	140	188	46	122	180	54
90	EA-31	19	150.0	160.0	131	428	89	146	188	49	122	180	67
110	EA-31	19	175.0	190.5	161	460	104	167	188	56	122	180	88
140	EA-31	23	210.0	215.9	187	487	117	181	188	64	122	180	113
160	EA-31	24	241.3	241.3	215	508	130	189	188	72	122	180	139
225	EA-42	23	290.0	295.0	267	575	158	210	208	73	122	180	178
280	EA-42	25	353.0	362.0	329	677	205	264	208	113	122	180	210
315	EA-42	25	400.0	432.0	379	721	228	285	208	113	122	180	256



d [mm]	Q2 [mm]
63	
75	35
90	50
110	74
140	97
160	123
225	169
280	207
315	253

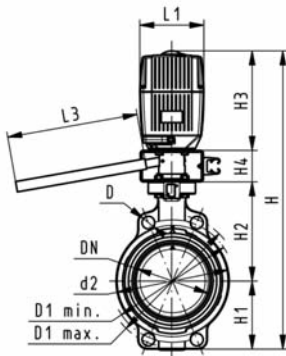


## Butterfly valve type 140 PVC-U 100-230V With manual override

### Model:

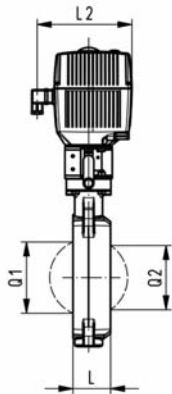
- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, ANSI/ASME B 16.5 Class 150, BS 1560: 1989, BS 4504, JIS B 2220
- Voltage 100-230 V, 50-60 Hz
- Control time 15 s/90°<) EA31
- Control time 25s/90°<) EA42
- Control range 90°<)
- Actuator with integrated emergency manual override standard
- Overall length according to EN 558, ISO 5752

d [mm]	DN [mm]	Inch	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
63	50	2	10	1470	199 140 002	199 140 022	5.682
75	65	2 ½	10	2200	199 140 003	199 140 023	5.786
90	80	3	10	3000	199 140 004	199 140 024	5.953
110	100	4	10	6500	199 140 005	199 140 025	6.573
140	125	5	10	11500	199 140 006	199 140 026	7.144
160	150	6	10	16600	199 140 007	199 140 027	8.154
225	200	8	10	39600	199 140 008	199 140 028	14.134



d [mm]	Actuator unit type	D [mm]	D1 min. [mm]	D1 max. [mm]	d2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	L [mm]	L1 [mm]	L2 [mm]
63	EA-31	19	120.0	125.0	104	460	77	134	188	60	45	122	180
75	EA-31	19	139.7	145.0	115	473	83	140	188	60	46	122	180
90	EA-31	19	150.0	160.0	131	488	89	146	188	60	49	122	180
110	EA-31	19	175.0	190.5	161	520	104	167	188	60	56	122	180
140	EA-31	23	210.0	215.9	187	547	117	181	188	60	64	122	180
160	EA-31	24	241.3	241.3	215	568	130	189	188	60	72	122	180
225	EA-42	23	290.0	295.0	267	635	158	210	208	60	73	122	180

d [mm]	L3 [mm]	Q1 [mm]	Q2 [mm]
63	250	40	
75	250	54	35
90	250	67	50
110	250	88	74
140	250	113	97
160	250	139	123
225	250	178	169



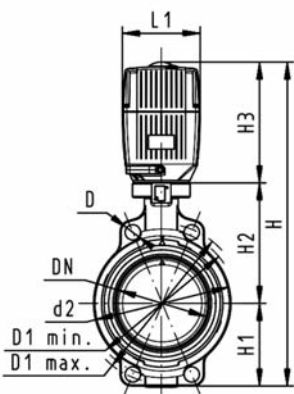


## Butterfly valve type 140 PVC-U 24V Without manual override

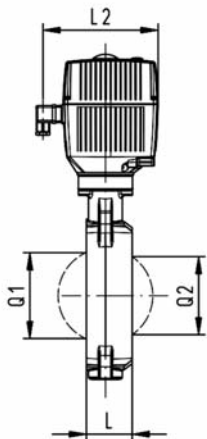
### Model:

- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, ANSI/ASME B 16.5 Class 150, BS 1560: 1989, BS 4504, JIS B 2220
- Overall length according to EN 558, ISO 5752
- Voltage 24 V AC/DC
- Control time 15 s/90°<) EA31
- Control time 25s/90°<) EA42
- Control range 90°<)
- Actuator with integrated emergency manual override standard
- The dimension DN300 on request

d [mm]	DN [mm]	Inch	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
63	50	2	10	1470	<b>199 140 122</b>	<b>199 140 142</b>	4.182
75	65	2 ½	10	2200	<b>199 140 123</b>	<b>199 140 143</b>	4.286
90	80	3	10	3000	<b>199 140 124</b>	<b>199 140 144</b>	4.453
110	100	4	10	6500	<b>199 140 125</b>	<b>199 140 145</b>	5.073
140	125	5	10	11500	<b>199 140 126</b>	<b>199 140 146</b>	5.644
160	150	6	10	16600	<b>199 140 127</b>	<b>199 140 147</b>	6.654
225	200	8	10	39600	<b>199 140 128</b>	<b>199 140 148</b>	12.634
280	250	10	6	55200	<b>199 140 129</b>	<b>199 140 149</b>	14.334
315	300	12	4	80000	<b>199 140 130</b>	<b>199 140 150</b>	19.546



d [mm]	Actuator unit type	D [mm]	D1 min. [mm]	D1 max. [mm]	d2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	L [mm]	L1 [mm]	L2 [mm]	Q1 [mm]
63	EA-31	19	120.0	125.0	104	400	77	134	188	45	122	180	40
75	EA-31	19	139.7	145.0	115	413	83	140	188	46	122	180	54
90	EA-31	19	150.0	160.0	131	428	89	146	188	49	122	180	67
110	EA-31	19	175.0	190.5	161	460	104	167	188	56	122	180	88
140	EA-31	23	210.0	215.9	187	487	117	181	188	64	122	180	113
160	EA-31	24	241.3	241.3	215	508	130	189	188	72	122	180	139
225	EA-42	23	290.0	295.0	267	575	158	210	208	73	122	180	178
280	EA-42	25	353.0	362.0	329	677	205	264	208	113	122	180	210
315	EA-42	25	400.0	432.0	379	721	228	285	208	113	122	180	256



d [mm]	Q2 [mm]
63	
75	35
90	50
110	74
140	97
160	123
225	169
280	207
315	253

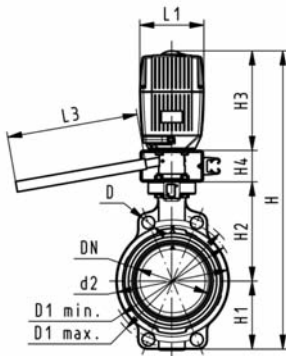


## Butterfly valve type 140 PVC-U 24V With manual override

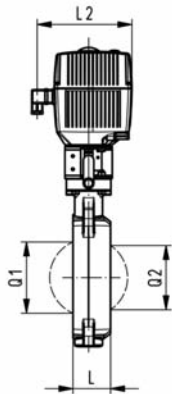
### Model:

- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, ANSI/ASME B 16.5 Class 150, BS 1560: 1989, BS 4504, JIS B 2220
- Overall length according to EN 558, ISO 5752
- Voltage 24 V AC/DC
- Control time 15 s/90°<) EA31
- Control time 25s/90°<) EA42
- Control range 90°<)
- Actuator with integrated emergency manual override standard

d [mm]	DN [mm]	Inch	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
63	50	2	10	1470	<b>199 140 082</b>	<b>199 140 102</b>	5.682
75	65	2 ½	10	2200	<b>199 140 083</b>	<b>199 140 103</b>	5.786
90	80	3	10	3000	<b>199 140 084</b>	<b>199 140 104</b>	5.953
110	100	4	10	6500	<b>199 140 085</b>	<b>199 140 105</b>	6.573
140	125	5	10	11500	<b>199 140 086</b>	<b>199 140 106</b>	7.144
160	150	6	10	16600	<b>199 140 087</b>	<b>199 140 107</b>	8.154
225	200	8	10	39600	<b>199 140 088</b>	<b>199 140 108</b>	14.134



d [mm]	Actuator unit type	D [mm]	D1 min. [mm]	D1 max. [mm]	d2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	L [mm]	L1 [mm]	L2 [mm]
63	EA-31	19	120.0	125.0	104	460	77	134	188	60	45	122	180
75	EA-31	19	139.7	145.0	115	473	83	140	188	60	46	122	180
90	EA-31	19	150.0	160.0	131	488	89	146	188	60	49	122	180
110	EA-31	19	175.0	190.5	161	520	104	167	188	60	56	122	180
140	EA-31	23	210.0	215.9	187	547	117	181	188	60	64	122	180
160	EA-31	24	241.3	241.3	215	568	130	189	188	60	72	122	180
225	EA-42	23	290.0	295.0	267	635	158	210	208	60	73	122	180



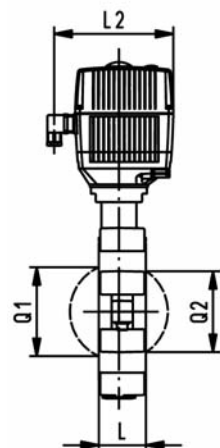
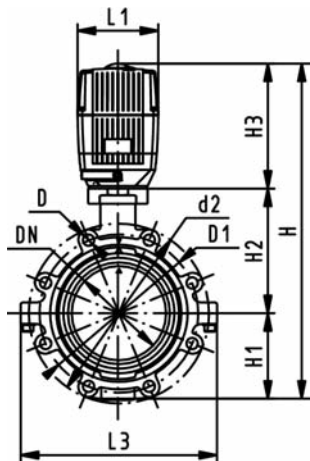
d [mm]	L3 [mm]	Q1 [mm]	Q2 [mm]
63	250	40	
75	250	54	35
90	250	67	50
110	250	88	74
140	250	113	97
160	250	139	123
225	250	178	169



## Lugstyle butterfly valve type 141 PVC-U 100-230V Without manual override

### Model:

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension: ISO 7005 PN10, EN 1092 PN10, DIN 2501 PN10
- Overall length according to EN 558, ISO 5752
- Voltage 100-230 V, 50-60 Hz
- Control time 15 s/90°<) EA31
- Control time 25s/90°<) EA42
- Control range 90°<)
- Actuator with integrated emergency manual override standard



d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
63	50	2	10	1470	<b>199 141 042</b>	<b>199 141 062</b>	6.268
75	65	2 ½	10	2200	<b>199 141 043</b>	<b>199 141 063</b>	6.622
90	80	3	10	3000	<b>199 141 044</b>	<b>199 141 064</b>	7.664
110	100	4	10	6500	<b>199 141 045</b>	<b>199 141 065</b>	9.157
140	125	5	10	11500	<b>199 141 046</b>	<b>199 141 066</b>	11.110
160	150	6	10	16600	<b>199 141 047</b>	<b>199 141 067</b>	13.114
225	200	8	10	39600	<b>199 141 048</b>	<b>199 141 068</b>	22.582

d [mm]	Actuator unit type	D	D1 [mm]	d2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	Q1 [mm]
63	EA-31	M16	125	150	399	77	134	188	45	122	180	150	40
75	EA-31	M16	145	170	411	83	140	188	46	122	180	160	54
90	EA-31	M16	160	184	423	89	146	188	49	122	180	205	67
110	EA-31	M16	180	216	459	104	167	188	56	122	180	244	88
140	EA-31	M16	210	246	486	117	181	188	64	122	180	272	113
160	EA-31	M20	240	273	507	130	189	188	72	122	180	297	139
225	EA-42	M20	295	334	576	158	210	208	73	122	180	360	178

d [mm]	Q2 [mm]
63	
75	35
90	50
110	74
140	97
160	123
225	169

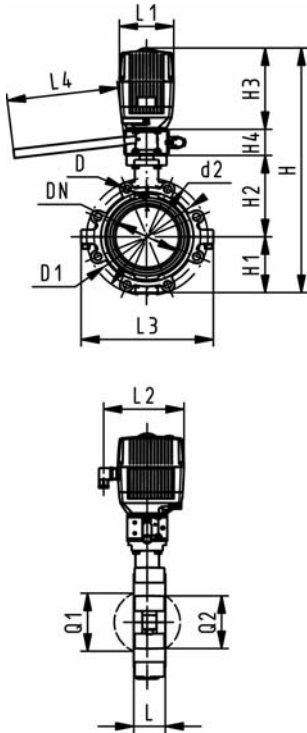


# Lugstyle butterfly valve type 141 PVC-U 100-230V With manual override



### Model:

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension: ISO 7005 PN10, EN 1092 PN10, DIN 2501 PN10
- Overall length according to EN 558, ISO 5752
- Voltage 100-230 V, 50-60 Hz
- Control time 15 s/90°<) EA31
- Control time 25s/90°<) EA42
- Control range 90°<)
- Actuator with integrated emergency manual override standard



d [mm]	DN [mm]	Inch	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
63	50	2	10	1470	199 141 002	199 141 022	7.768
75	65	2 ½	10	2200	199 141 003	199 141 023	8.122
90	80	3	10	3000	199 141 004	199 141 024	9.164
110	100	4	10	6500	199 141 005	199 141 025	10.657
140	125	5	10	11500	199 141 006	199 141 026	12.610
160	150	6	10	16600	199 141 007	199 141 027	14.614
225	200	8	10	39600	199 141 008	199 141 028	24.082

d [mm]	Actuator unit type	D	D1 [mm]	d2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]
63	EA-31	M16	125	150	459	77	134	188	60	45	122	180	150
75	EA-31	M16	145	170	471	83	140	188	60	46	122	180	160
90	EA-31	M16	160	184	483	89	146	188	60	49	122	180	205
110	EA-31	M16	180	216	519	104	167	188	60	56	122	180	244
140	EA-31	M16	210	246	546	117	181	188	60	64	122	180	272
160	EA-31	M20	240	273	567	130	189	188	60	72	122	180	297
225	EA-42	M20	295	334	636	158	210	208	60	73	122	180	360

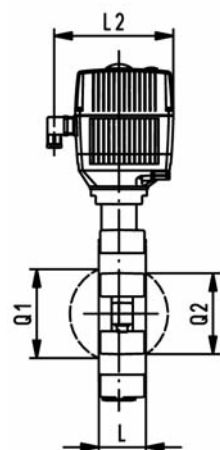
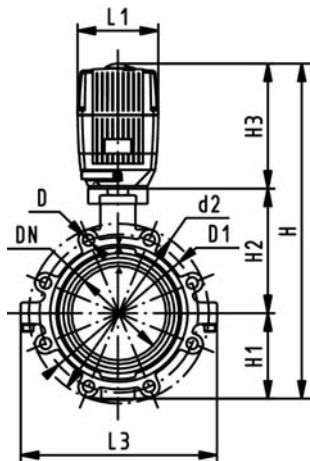
d [mm]	L4 [mm]	Q1 [mm]	Q2 [mm]
63	200	40	
75	200	54	35
90	200	67	50
110	250	88	74
140	250	113	97
160	250	139	123
225	250	178	169



## Lugstyle butterfly valve type 141 PVC-U 24V Without manual override

### Model:

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension: ISO 7005 PN10, EN 1092 PN10, DIN 2501 PN10
- Overall length according to EN 558, ISO 5752
- Voltage 24 V AC/DC
- Control time 15 s/90°<) EA31
- Control time 25s/90°<) EA42
- Control range 90°<)
- Actuator with integrated emergency manual override standard



d [mm]	DN [mm]	Inch	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
63	50	2	10	1470	<b>199 141 122</b>	<b>199 141 142</b>	6.268
75	65	2 ½	10	2200	<b>199 141 123</b>	<b>199 141 143</b>	6.622
90	80	3	10	3000	<b>199 141 124</b>	<b>199 141 144</b>	7.664
110	100	4	10	6500	<b>199 141 125</b>	<b>199 141 145</b>	9.157
140	125	5	10	11500	<b>199 141 126</b>	<b>199 141 146</b>	11.110
160	150	6	10	16600	<b>199 141 127</b>	<b>199 141 147</b>	13.114
225	200	8	10	39600	<b>199 141 128</b>	<b>199 141 148</b>	22.582

d [mm]	Actuator unit type	D	D1 [mm]	d2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	Q1 [mm]
63	EA-31	M16	125	150	399	77	134	188	45	122	180	150	40
75	EA-31	M16	145	170	411	83	140	188	46	122	180	160	54
90	EA-31	M16	160	184	423	89	146	188	49	122	180	205	67
110	EA-31	M16	180	216	459	104	167	188	56	122	180	244	88
140	EA-31	M16	210	246	486	117	181	188	64	122	180	272	113
160	EA-31	M20	240	273	507	130	189	188	72	122	180	297	139
225	EA-42	M20	295	334	576	158	210	208	73	122	180	360	178

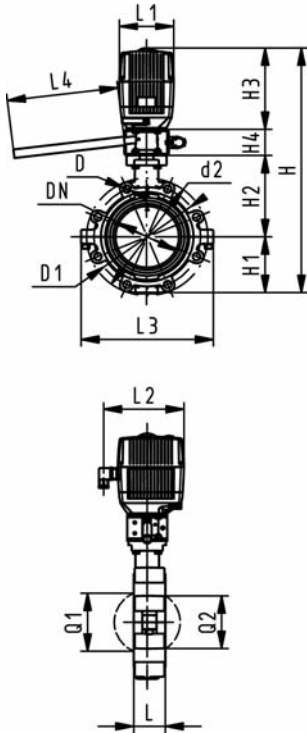
d [mm]	Q2 [mm]
63	
75	35
90	50
110	74
140	97
160	123
225	169

## Lugstyle butterfly valve type 141 PVC-U 24V With manual override



### Model:

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension: ISO 7005 PN10, EN 1092 PN10, DIN 2501 PN10
- Overall length according to EN 558, ISO 5752
- Voltage 24 V AC/DC
- Control time 15 s/90°<) EA31
- Control time 25s/90°<) EA42
- Control range 90°<)
- Actuator with integrated emergency manual override standard



d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
63	50	2	10	1470	199 141 082	199 141 102	7.768
75	65	2 ½	10	2200	199 141 083	199 141 103	8.122
90	80	3	10	3000	199 141 084	199 141 104	9.164
110	100	4	10	6500	199 141 085	199 141 105	10.657
140	125	5	10	11500	199 141 086	199 141 106	12.610
160	150	6	10	16600	199 141 087	199 141 107	14.614
225	200	8	10	39600	199 141 088	199 141 108	24.082

d [mm]	Actuator unit type	D	D1 [mm]	d2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]
63	EA-31	M16	125	150	459	77	134	188	60	45	122	180	150
75	EA-31	M16	145	170	471	83	140	188	60	46	122	180	160
90	EA-31	M16	160	184	483	89	146	188	60	49	122	180	205
110	EA-31	M16	180	216	519	104	167	188	60	56	122	180	244
140	EA-31	M16	210	246	546	117	181	188	60	64	122	180	272
160	EA-31	M20	240	273	567	130	189	188	60	72	122	180	297
225	EA-42	M20	295	334	636	158	210	208	60	73	122	180	360

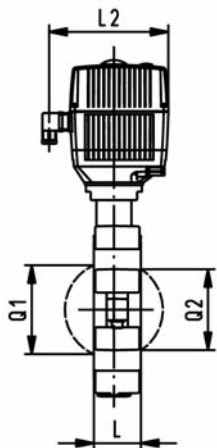
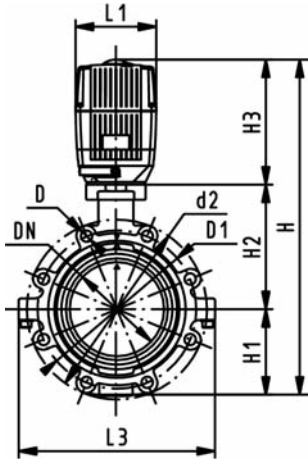
d [mm]	L4 [mm]	Q1 [mm]	Q2 [mm]
63	200	40	
75	200	54	35
90	200	67	50
110	250	88	74
140	250	113	97
160	250	139	123
225	250	178	169



## Lugstyle butterfly valve type 142 PVC-U 100-230V Without manual override

### Model:

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension ANSI/ASME B 16.5 Class 150, BS 4504 PN10
- Overall length according to EN 558, ISO 5752
- Voltage 100-230 V, 50-60 Hz
- Control time 15 s/90°<) EA31
- Control time 25s/90°<) EA42
- Control range 90°<)
- Actuator with integrated emergency manual override standard



Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
2	50	10	1470	<b>199 142 042</b>	<b>199 142 062</b>	6.268
2 ½	65	10	2200	<b>199 142 043</b>	<b>199 142 063</b>	6.622
3	80	10	3000	<b>199 142 044</b>	<b>199 142 064</b>	7.035
4	100	10	6500	<b>199 142 045</b>	<b>199 142 065</b>	9.157
5	125	10	11500	<b>199 142 046</b>	<b>199 142 066</b>	11.110
6	150	10	16600	<b>199 142 047</b>	<b>199 142 067</b>	13.114
8	200	10	39600	<b>199 142 048</b>	<b>199 142 068</b>	22.582

Inch	Actuator unit type	D	D1 [mm]	d2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]
2	EA-31	UNC 5/8	121	150	399	77	134	188	45	122	180	150
2 ½	EA-31	UNC 5/8	140	170	411	83	140	188	46	122	180	160
3	EA-31	UNC 5/8	153	177	423	89	146	188	49	122	180	175
4	EA-31	UNC 5/8	191	216	459	104	167	188	56	122	180	244
5	EA-31	UNC 3/4	216	246	486	117	181	188	64	122	180	272
6	EA-31	UNC 3/4	242	273	507	130	189	188	72	122	180	297
8	EA-42	UNC 3/4	299	334	576	158	210	208	73	122	180	360

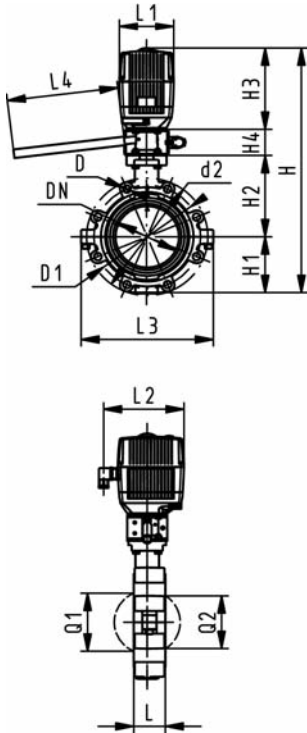
Inch	Q1 [mm]	Q2 [mm]
2	40	
2 ½	54	35
3	67	50
4	88	74
5	113	97
6	139	123
8	178	169



## Lugstyle butterfly valve type 142 PVC-U 100-230V With manual override

### Model:

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension ANSI/ASME B 16.5 Class 150, BS 4504 PN10
- Overall length according to EN 558, ISO 5752
- Voltage 100-230 V, 50-60 Hz
- Control time 15 s/90°<) EA31
- Control time 25s/90°<) EA42
- Control range 90°<)
- Actuator with integrated emergency manual override standard



Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
2	50	10	1470	199 142 002	199 142 022	7.768
2 ½	65	10	2200	199 142 003	199 142 023	8.122
3	80	10	3000	199 142 004	199 142 024	8.535
4	100	10	6500	199 142 005	199 142 025	10.657
5	125	10	11500	199 142 006	199 142 026	12.610
6	150	10	16600	199 142 007	199 142 027	14.614
8	200	10	39600	199 142 008	199 142 028	24.082

Inch	Actuator unit type	D	D1 [mm]	d2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]
2	EA-31	UNC 5/8	121	150	459	77	134	188	60	45	122	180	150
2 ½	EA-31	UNC 5/8	140	170	471	83	140	188	60	46	122	180	160
3	EA-31	UNC 5/8	153	177	483	89	146	188	60	49	122	180	175
4	EA-31	UNC 5/8	191	216	519	104	167	188	60	56	122	180	244
5	EA-31	UNC 3/4	216	246	546	117	181	188	60	64	122	180	272
6	EA-31	UNC 3/4	242	273	567	130	189	188	60	72	122	180	297
8	EA-42	UNC 3/4	299	334	636	158	210	208	60	73	122	180	360

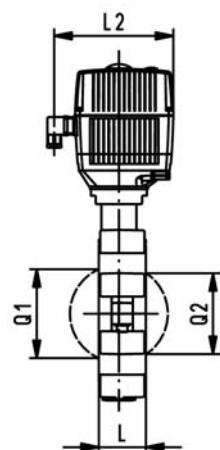
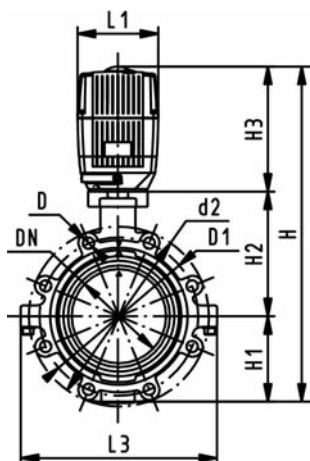
Inch	L4 [mm]	Q1 [mm]	Q2 [mm]
2	200	40	
2 ½	200	54	35
3	200	67	50
4	250	88	74
5	250	113	97
6	250	139	123
8	250	178	169



## Lugstyle butterfly valve type 142 PVC-U 24V Without manual override

### Model:

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension ANSI/ASME B 16.5 Class 150, BS 4504 PN10
- Overall length according to EN 558, ISO 5752
- Voltage 24 V AC/DC
- Control time 15 s/90°<) EA31
- Control time 25s/90°<) EA42
- Control range 90°<)
- Actuator with integrated emergency manual override standard



Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
2	50	10	1470	<b>199 142 122</b>	<b>199 142 142</b>	6.268
2 ½	65	10	2200	<b>199 142 123</b>	<b>199 142 143</b>	6.622
3	80	10	3000	<b>199 142 124</b>	<b>199 142 144</b>	7.035
4	100	10	6500	<b>199 142 125</b>	<b>199 142 145</b>	9.157
5	125	10	11500	<b>199 142 126</b>	<b>199 142 146</b>	11.110
6	150	10	16600	<b>199 142 127</b>	<b>199 142 147</b>	13.114
8	200	10	39600	<b>199 142 128</b>	<b>199 142 148</b>	22.582

Inch	Actuator unit type	D	D1 [mm]	d2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]
2	EA-31	UNC 5/8	121	150	399	77	134	188	45	122	180	150
2 ½	EA-31	UNC 5/8	140	170	411	83	140	188	46	122	180	160
3	EA-31	UNC 5/8	153	177	423	89	146	188	49	122	180	175
4	EA-31	UNC 5/8	191	216	459	104	167	188	56	122	180	244
5	EA-31	UNC 3/4	216	246	486	117	181	188	64	122	180	272
6	EA-31	UNC 3/4	242	273	507	130	189	188	72	122	180	297
8	EA-42	UNC 3/4	299	334	576	158	210	208	73	122	180	360

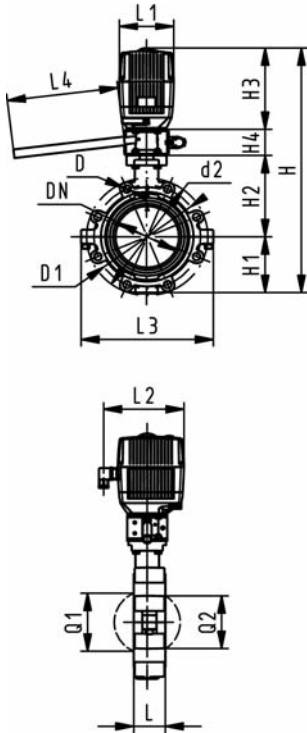
Inch	Q1 [mm]	Q2 [mm]
2	40	
2 ½	54	35
3	67	50
4	88	74
5	113	97
6	139	123
8	178	169



## Lugstyle butterfly valve type 142 PVC-U 24V With manual override

### Model:

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension ANSI/ASME B 16.5 Class 150, BS 4504 PN10
- Overall length according to EN 558, ISO 5752
- Voltage 24 V AC/DC
- Control time 15 s/90°<) EA31
- Control time 25s/90°<) EA42
- Control range 90°<)
- Actuator with integrated emergency manual override standard



Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
2	50	10	1470	<b>199 142 082</b>	<b>199 142 102</b>	7.768
2 ½	65	10	2200	<b>199 142 083</b>	<b>199 142 103</b>	8.122
3	80	10	3000	<b>199 142 084</b>	<b>199 142 104</b>	8.535
4	100	10	6500	<b>199 142 085</b>	<b>199 142 105</b>	10.657
5	125	10	11500	<b>199 142 086</b>	<b>199 142 106</b>	12.610
6	150	10	16600	<b>199 142 087</b>	<b>199 142 107</b>	14.614
8	200	10	39600	<b>199 142 088</b>	<b>199 142 108</b>	24.082

Inch	Actuator unit type	D	D1 [mm]	d2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]
2	EA-31	UNC 5/8	121	150	459	77	134	188	60	45	122	180	150
2 ½	EA-31	UNC 5/8	140	170	471	83	140	188	60	46	122	180	160
3	EA-31	UNC 5/8	153	177	483	89	146	188	60	49	122	180	175
4	EA-31	UNC 5/8	191	216	519	104	167	188	60	56	122	180	244
5	EA-31	UNC 3/4	216	246	546	117	181	188	60	64	122	180	272
6	EA-31	UNC 3/4	242	273	567	130	189	188	60	72	122	180	297
8	EA-42	UNC 3/4	299	334	636	158	210	208	60	73	122	180	360

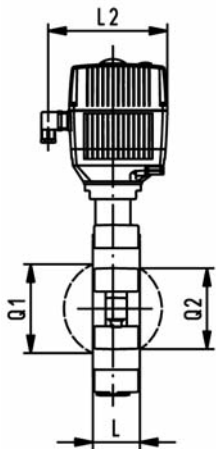
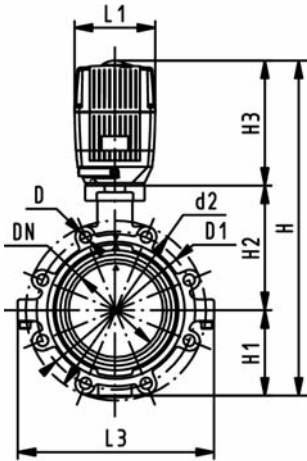
Inch	L4 [mm]	Q1 [mm]	Q2 [mm]
2	200	40	
2 ½	200	54	35
3	200	67	50
4	250	88	74
5	250	113	97
6	250	139	123
8	250	178	169

# Butterfly valves electric ASTM/ANSI

## Lugstyle butterfly valve type 142 PVC-U 100-230V Without manual override

### Model:

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension ANSI/ASME B 16.5 Class 150, BS 4504 PN10
- Overall length according to EN 558, ISO 5752
- Voltage 100-230 V, 50-60 Hz
- Control time 15 s/90°<) EA31
- Control time 25s/90°<) EA42
- Control range 90°<)
- Actuator with integrated emergency manual override standard



Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
2	50	10	1470	<b>199 142 042</b>	<b>199 142 062</b>	6.268
2 ½	65	10	2200	<b>199 142 043</b>	<b>199 142 063</b>	6.622
3	80	10	3000	<b>199 142 044</b>	<b>199 142 064</b>	7.035
4	100	10	6500	<b>199 142 045</b>	<b>199 142 065</b>	9.157
5	125	10	11500	<b>199 142 046</b>	<b>199 142 066</b>	11.110
6	150	10	16600	<b>199 142 047</b>	<b>199 142 067</b>	13.114
8	200	10	39600	<b>199 142 048</b>	<b>199 142 068</b>	22.582

Inch	Actuator unit type	D	D1 [mm]	d2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]
2	EA-31	UNC 5/8	121	150	399	77	134	188	45	122	180	150
2 ½	EA-31	UNC 5/8	140	170	411	83	140	188	46	122	180	160
3	EA-31	UNC 5/8	153	177	423	89	146	188	49	122	180	175
4	EA-31	UNC 5/8	191	216	459	104	167	188	56	122	180	244
5	EA-31	UNC 3/4	216	246	486	117	181	188	64	122	180	272
6	EA-31	UNC 3/4	242	273	507	130	189	188	72	122	180	297
8	EA-42	UNC 3/4	299	334	576	158	210	208	73	122	180	360

Inch	Q1 [mm]	Q2 [mm]
2	40	
2 ½	54	35
3	67	50
4	88	74
5	113	97
6	139	123
8	178	169

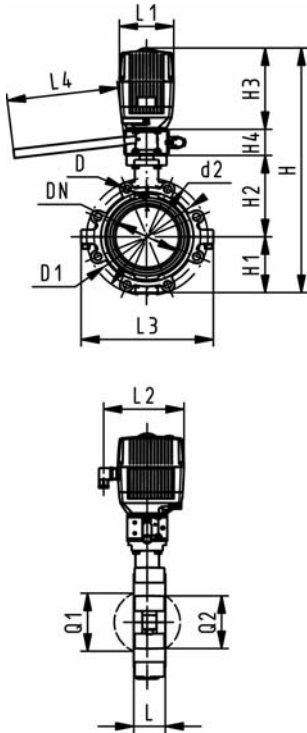


## Lugstyle butterfly valve type 142 PVC-U 100-230V With manual override



### Model:

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension ANSI/ASME B 16.5 Class 150, BS 4504 PN10
- Overall length according to EN 558, ISO 5752
- Voltage 100-230 V, 50-60 Hz
- Control time 15 s/90°<) EA31
- Control time 25s/90°<) EA42
- Control range 90°<)
- Actuator with integrated emergency manual override standard



Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
2	50	10	1470	199 142 002	199 142 022	7.768
2 ½	65	10	2200	199 142 003	199 142 023	8.122
3	80	10	3000	199 142 004	199 142 024	8.535
4	100	10	6500	199 142 005	199 142 025	10.657
5	125	10	11500	199 142 006	199 142 026	12.610
6	150	10	16600	199 142 007	199 142 027	14.614
8	200	10	39600	199 142 008	199 142 028	24.082

Inch	Actuator unit type	D	D1 [mm]	d2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]
2	EA-31	UNC 5/8	121	150	459	77	134	188	60	45	122	180	150
2 ½	EA-31	UNC 5/8	140	170	471	83	140	188	60	46	122	180	160
3	EA-31	UNC 5/8	153	177	483	89	146	188	60	49	122	180	175
4	EA-31	UNC 5/8	191	216	519	104	167	188	60	56	122	180	244
5	EA-31	UNC 3/4	216	246	546	117	181	188	60	64	122	180	272
6	EA-31	UNC 3/4	242	273	567	130	189	188	60	72	122	180	297
8	EA-42	UNC 3/4	299	334	636	158	210	208	60	73	122	180	360

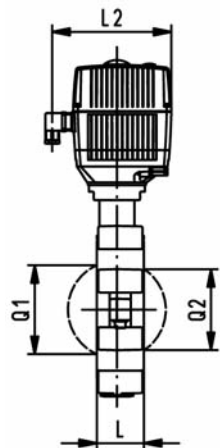
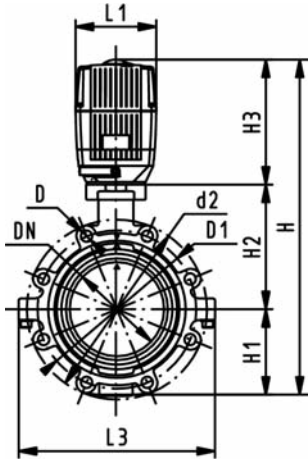
Inch	L4 [mm]	Q1 [mm]	Q2 [mm]
2	200	40	
2 ½	200	54	35
3	200	67	50
4	250	88	74
5	250	113	97
6	250	139	123
8	250	178	169



## Lugstyle butterfly valve type 142 PVC-U 24V Without manual override

### Model:

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension ANSI/ASME B 16.5 Class 150, BS 4504 PN10
- Overall length according to EN 558, ISO 5752
- Voltage 24 V AC/DC
- Control time 15 s/90°<) EA31
- Control time 25s/90°<) EA42
- Control range 90°<)
- Actuator with integrated emergency manual override standard



Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
2	50	10	1470	<b>199 142 122</b>	<b>199 142 142</b>	6.268
2 ½	65	10	2200	<b>199 142 123</b>	<b>199 142 143</b>	6.622
3	80	10	3000	<b>199 142 124</b>	<b>199 142 144</b>	7.035
4	100	10	6500	<b>199 142 125</b>	<b>199 142 145</b>	9.157
5	125	10	11500	<b>199 142 126</b>	<b>199 142 146</b>	11.110
6	150	10	16600	<b>199 142 127</b>	<b>199 142 147</b>	13.114
8	200	10	39600	<b>199 142 128</b>	<b>199 142 148</b>	22.582

Inch	Actuator unit type	D	D1 [mm]	d2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]
2	EA-31	UNC 5/8	121	150	399	77	134	188	45	122	180	150
2 ½	EA-31	UNC 5/8	140	170	411	83	140	188	46	122	180	160
3	EA-31	UNC 5/8	153	177	423	89	146	188	49	122	180	175
4	EA-31	UNC 5/8	191	216	459	104	167	188	56	122	180	244
5	EA-31	UNC 3/4	216	246	486	117	181	188	64	122	180	272
6	EA-31	UNC 3/4	242	273	507	130	189	188	72	122	180	297
8	EA-42	UNC 3/4	299	334	576	158	210	208	73	122	180	360

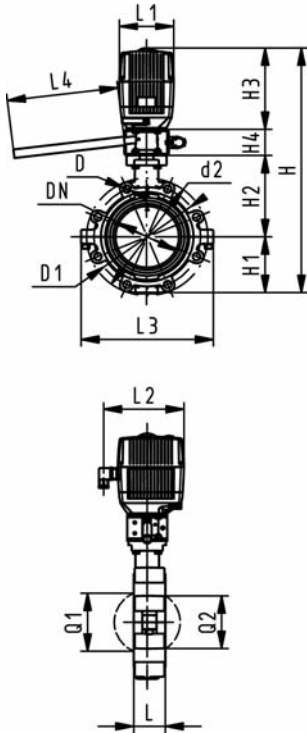
Inch	Q1 [mm]	Q2 [mm]
2	40	
2 ½	54	35
3	67	50
4	88	74
5	113	97
6	139	123
8	178	169



## Lugstyle butterfly valve type 142 PVC-U 24V With manual override

### Model:

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension ANSI/ASME B 16.5 Class 150, BS 4504 PN10
- Overall length according to EN 558, ISO 5752
- Voltage 24 V AC/DC
- Control time 15 s/90°<) EA31
- Control time 25s/90°<) EA42
- Control range 90°<)
- Actuator with integrated emergency manual override standard



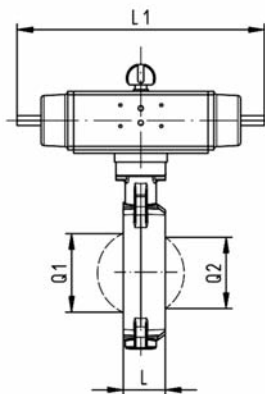
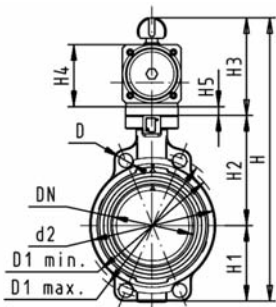
Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
2	50	10	1470	<b>199 142 082</b>	<b>199 142 102</b>	7.768
2 ½	65	10	2200	<b>199 142 083</b>	<b>199 142 103</b>	8.122
3	80	10	3000	<b>199 142 084</b>	<b>199 142 104</b>	8.535
4	100	10	6500	<b>199 142 085</b>	<b>199 142 105</b>	10.657
5	125	10	11500	<b>199 142 086</b>	<b>199 142 106</b>	12.610
6	150	10	16600	<b>199 142 087</b>	<b>199 142 107</b>	14.614
8	200	10	39600	<b>199 142 088</b>	<b>199 142 108</b>	24.082

Inch	Actuator unit type	D	D1 [mm]	d2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]
2	EA-31	UNC 5/8	121	150	459	77	134	188	60	45	122	180	150
2 ½	EA-31	UNC 5/8	140	170	471	83	140	188	60	46	122	180	160
3	EA-31	UNC 5/8	153	177	483	89	146	188	60	49	122	180	175
4	EA-31	UNC 5/8	191	216	519	104	167	188	60	56	122	180	244
5	EA-31	UNC 3/4	216	246	546	117	181	188	60	64	122	180	272
6	EA-31	UNC 3/4	242	273	567	130	189	188	60	72	122	180	297
8	EA-42	UNC 3/4	299	334	636	158	210	208	60	73	122	180	360

Inch	L4 [mm]	Q1 [mm]	Q2 [mm]
2	200	40	
2 ½	200	54	35
3	200	67	50
4	250	88	74
5	250	113	97
6	250	139	123
8	250	178	169

# Butterfly valves pneumatic metric

## Butterfly valve type 240 PVC-U FC (Fail safe to close) Without manual override



### Model:

- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, ANSI/ASME B 16.5 Class 150, BS 1560: 1989, BS 4504, JIS B 2220
- Overall length according to EN 558, ISO 5752
- Control range 90°<

d [mm]	DN [mm]	Inch	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
63	50	2	10	1470	<b>199 240 002</b>	<b>199 240 022</b>	3.222
75	65	2 ½	10	2200	<b>199 240 003</b>	<b>199 240 023</b>	3.326
90	80	3	10	3000	<b>199 240 004</b>	<b>199 240 024</b>	3.493
110	100	4	10	6500	<b>199 240 005</b>	<b>199 240 025</b>	5.311
140	125	5	10	11500	<b>199 240 006</b>	<b>199 240 026</b>	6.884
160	150	6	10	16600	<b>199 240 007</b>	<b>199 240 027</b>	10.215
225	200	8	10	39600	<b>199 240 008</b>	<b>199 240 028</b>	14.134
280	250	10	10	55200	<b>199 240 009</b>	<b>199 240 029</b>	28.000
315	300	12	10	80000	<b>199 240 010</b>	<b>199 240 030</b>	36.400

d [mm]	Actuator unit type	D [mm]	D1 min. [mm]	D1 max. [mm]	d2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]
63	PA-30 FC	19	120.0	125.0	104	327	77	134	117	70	15	45	276
75	PA-30 FC	19	139.7	145.0	115	340	83	140	117	70	15	46	276
90	PA-35 FC	19	150.0	160.0	131	361	89	146	126	78	15	49	326
110	PA-40 FC	19	175.0	190.5	161	400	104	167	129	86		56	370
140	PA-45 FC	23	210.0	215.9	187	436	117	181	139	96		64	411
160	PA-50 FC	24	241.3	241.3	215	468	130	189	149	106		72	423
225	PA-55 FC	23	290.0	295.0	267	529	158	210	161	118		73	452
280	PA-65 FC	25	353.0	362.0	329	808	205	264	191	148		113	648
315	PA-70 FC	25	400.0	432.0	379	866	228	285	196	157		113	663

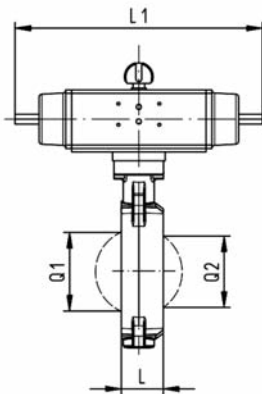
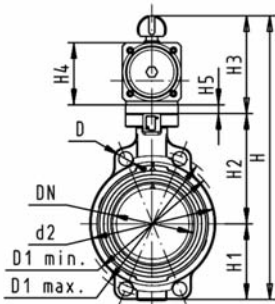
d [mm]	L2 [mm]	Q1 [mm]	Q2 [mm]
63	65	40	
75	65	54	35
90	72	67	50
110	80	88	74
140	90	113	97
160	100	139	123
225	112	178	169
280	137	210	207
315	145	256	253



## Butterfly valve type 240 PVC-U FO (Fail safe to open) Without manual override

### Model:

- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, ANSI/ASME B 16.5 Class 150, BS 1560: 1989, BS 4504, JIS B 2220
- Overall length according to EN 558, ISO 5752
- Control range 90°<



d [mm]	DN [mm]	Inch	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
63	50	2	10	1470	199 240 042	199 240 062	3.222
75	65	2 ½	10	2200	199 240 043	199 240 063	3.326
90	80	3	10	3000	199 240 044	199 240 064	3.493
110	100	4	10	6500	199 240 045	199 240 065	5.311
140	125	5	10	11500	199 240 046	199 240 066	6.884
160	150	6	10	16600	199 240 047	199 240 067	10.215
225	200	8	10	39600	199 240 048	199 240 068	14.134
280	250	10	10	55200	199 240 049	199 240 069	31.600
315	300	12	10	80000	199 240 050	199 240 070	36.400

d [mm]	Actuator unit type	D [mm]	D1 min. [mm]	D1 max. [mm]	d2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]
63	PA-30 FO	19	120.0	125.0	104	327	77	134	117	70	15	45	276
75	PA-30 FO	19	139.7	145.0	115	340	83	140	117	70	15	46	276
90	PA-35 FO	19	150.0	160.0	131	361	89	146	126	78	15	49	326
110	PA-40 FO	19	175.0	190.5	161	400	104	167	129	86		56	370
140	PA-45 FO	23	210.0	215.9	187	436	117	181	139	96		64	411
160	PA-50 FO	24	241.3	241.3	215	468	130	189	149	106		72	423
225	PA-55 FO	23	290.0	295.0	267	529	158	210	161	118		73	452
280	PA-70 FO	25	353.0	362.0	329	808	205	264	191	148		113	648
315	PA-70 FO	25	400.0	432.0	379	866	228	285	196	157		113	663

d [mm]	L2 [mm]	Q1 [mm]	Q2 [mm]
63	65	40	
75	65	54	35
90	72	67	50
110	80	88	74
140	90	113	97
160	100	139	123
225	112	178	169
280	137	210	207
315	145	256	253

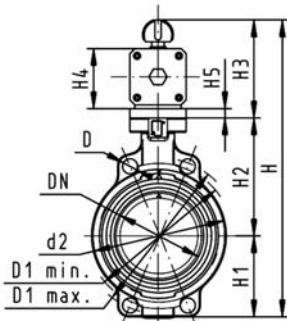


## Butterfly valve type 240 PVC-U DA (Double acting) Without manual override

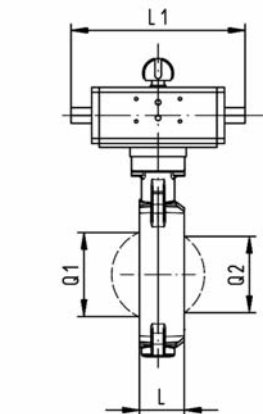
### Model:

- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, ANSI/ASME B 16.5 Class 150, BS 1560: 1989, BS 4504, JIS B 2220
- Up to DN 300: Overall length according to EN558 (DN 50-200: line 25, DN250, 300 line 16), ISO 5752
- Control range 90°<

d [mm]	DN [mm]	Inch	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
63	50	2	10	1470	<b>199 240 082</b>	<b>199 240 102</b>	2.072
75	65	2 ½	10	2200	<b>199 240 083</b>	<b>199 240 103</b>	2.176
90	80	3	10	3000	<b>199 240 084</b>	<b>199 240 104</b>	2.824
110	100	4	10	6500	<b>199 240 085</b>	<b>199 240 105</b>	3.563
140	125	5	10	11500	<b>199 240 086</b>	<b>199 240 106</b>	4.134
160	150	6	10	16600	<b>199 240 087</b>	<b>199 240 107</b>	6.694
225	200	8	10	39600	<b>199 240 088</b>	<b>199 240 108</b>	8.134
280	250	10	10	55200	<b>199 240 089</b>	<b>199 240 109</b>	19.100
315	300	12	10	80000	<b>199 240 090</b>	<b>199 240 110</b>	27.000



d [mm]	Actuator unit type	D [mm]	D1 min. [mm]	D1 max. [mm]	d2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]
63	PA-35 DA	19	120.0	125.0	104	317	77	134	107	60	15	45	177
75	PA-35 DA	19	139.7	145.0	115	330	83	140	107	60	15	46	177
90	PA-40 DA	19	150.0	160.0	131	348	89	146	113	66	15	49	190
110	PA-45 DA	19	175.0	190.5	161	372	104	167	102	71		56	235
140	PA-45 DA	23	210.0	215.9	187	408	117	181	111	78		64	235
160	PA-55 DA	24	241.3	241.3	215	448	130	189	129	86		72	279
225	PA-55 DA	23	290.0	295.0	267	507	158	210	139	96		73	279
280	PA-65 DA	25	353.0	362.0	329	748	205	264	161	118		113	350
315	PA-70 DA	25	400.0	432.0	379	816	228	285	173	130		113	381



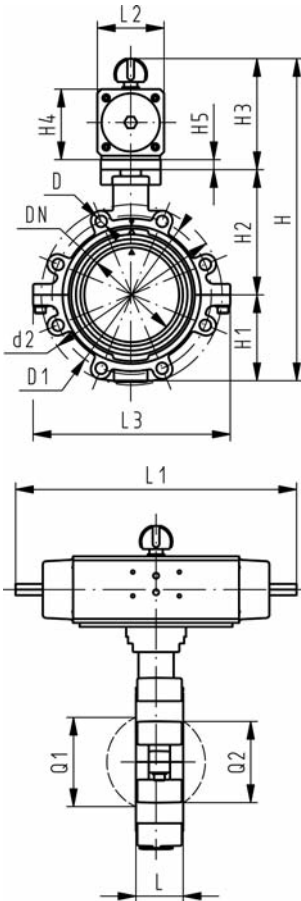
d [mm]	Q1 [mm]	Q2 [mm]
63	40	
75	54	35
90	67	50
110	88	74
140	113	97
160	139	123
225	178	169
280	210	207
315	256	253



## Lugstyle butterfly valve type 241 PVC-U FC (Fail safe to close) Without manual override

### Model:

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension: ISO 7005 PN10, EN 1092 PN10, DIN 2501 PN10
- Overall length according to EN 558, ISO 5752
- Control range 90°<



d [mm]	DN [mm]	Inch	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
63	50	2	10	1470	199 241 002	199 241 022	5.308
75	65	2 ½	10	2200	199 241 003	199 241 023	5.662
90	80	3	10	3000	199 241 004	199 241 024	6.704
110	100	4	10	6500	199 241 005	199 241 025	9.395
140	125	5	10	11500	199 241 006	199 241 026	12.350
160	150	6	10	16600	199 241 007	199 241 027	16.675
225	200	8	10	39600	199 241 008	199 241 028	24.082

d [mm]	Actuator unit type	D	D1 [mm]	d2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]
63	PA-30 FC	M16	125	150	328	77	134	117	70	15	45	276	65
75	PA-30 FC	M16	145	170	340	83	140	117	70	15	46	276	65
90	PA-35 FC	M16	160	184	361	89	146	126	78	15	49	326	72
110	PA-40 FC	M16	180	216	400	104	167	129	86		56	370	80
140	PA-45 FC	M16	210	246	437	117	181	139	96		64	411	90
160	PA-50 FC	M20	240	273	468	130	189	149	106		72	423	100
225	PA-55 FC	M20	295	334	529	158	210	161	118		73	452	112

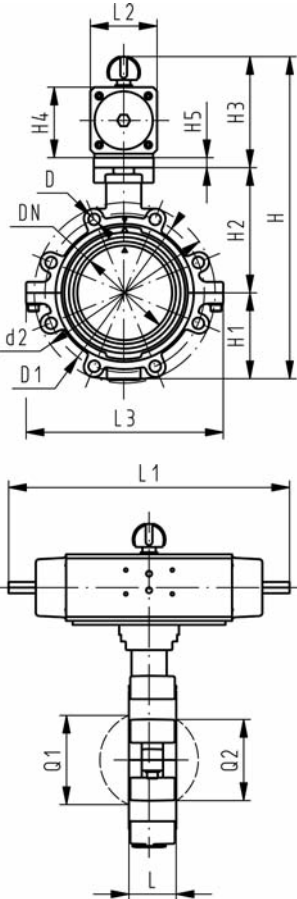
d [mm]	L3 [mm]	Q1 [mm]	Q2 [mm]
63	150	40	
75	160	54	35
90	205	67	50
110	244	88	74
140	272	113	97
160	297	139	123
225	360	178	169



# Lugstyle butterfly valve type 241 PVC-U FO (Fail safe to open) Without manual override

## Model:

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension: ISO 7005 PN10, EN 1092 PN10, DIN 2501 PN10
- Overall length according to EN 558, ISO 5752
- Control range 90°<



d [mm]	DN [mm]	Inch	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
63	50	2	10	1470	<b>199 241 042</b>	<b>199 241 062</b>	5.308
75	65	2 ½	10	2200	<b>199 241 043</b>	<b>199 241 063</b>	5.662
90	80	3	10	3000	<b>199 241 044</b>	<b>199 241 064</b>	6.704
110	100	4	10	6500	<b>199 241 045</b>	<b>199 241 065</b>	9.395
140	125	5	10	11500	<b>199 241 046</b>	<b>199 241 066</b>	12.350
160	150	6	10	16600	<b>199 241 047</b>	<b>199 241 067</b>	16.675
225	200	8	10	39600	<b>199 241 048</b>	<b>199 241 068</b>	24.082

d [mm]	Actuator unit type	D	D1 [mm]	d2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]
63	PA-30 FO	M16	125	150	328	77	134	117	70	15	45	276	65
75	PA-30 FO	M16	145	170	340	83	140	117	70	15	46	276	65
90	PA-35 FO	M16	160	184	361	89	146	126	78	15	49	326	72
110	PA-40 FO	M16	180	216	400	104	167	129	86		56	370	80
140	PA-45 FO	M16	210	246	437	117	181	139	96		64	411	90
160	PA-50 FO	M20	240	273	468	130	189	149	106		72	423	100
225	PA-55 FO	M20	295	334	529	158	210	161	118		73	452	112

d [mm]	L3 [mm]	Q1 [mm]	Q2 [mm]
63	150	40	
75	160	54	35
90	205	67	50
110	244	88	74
140	272	113	97
160	297	139	123
225	360	178	169

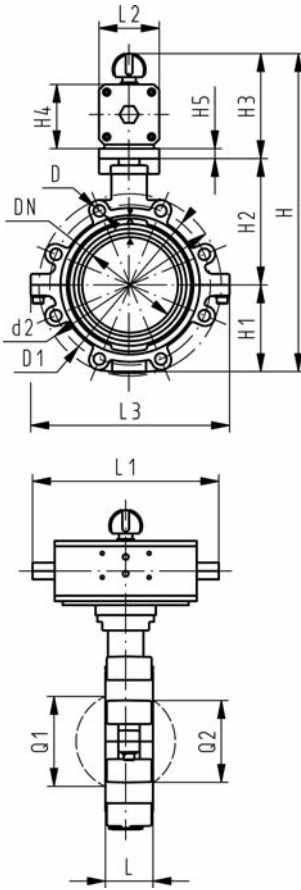




## Lugstyle butterfly valve type 241 PVC-U DA (Double acting) Without manual override

### Model:

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension: ISO 7005 PN10, EN 1092 PN10, DIN 2501 PN10
- Overall length according to EN 558, ISO 5752
- Control range 90°<



d [mm]	DN [mm]	Inch	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
63	50	2	10	1470	199 241 082	199 241 102	4.158
75	65	2 ½	10	2200	199 241 083	199 241 103	4.512
90	80	3	10	3000	199 241 084	199 241 104	6.035
110	100	4	10	6500	199 241 085	199 241 105	7.647
140	125	5	10	11500	199 241 086	199 241 106	9.600
160	150	6	10	16600	199 241 087	199 241 107	13.154
225	200	8	10	39600	199 241 088	199 241 108	18.082

d [mm]	Actuator unit type	D	D1 [mm]	d2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]
63	PA-35 DA	M16	125	150	318	77	134	107	60	15	45	177	55
75	PA-35 DA	M16	145	170	330	83	140	107	60	15	46	177	55
90	PA-40 DA	M16	160	184	348	89	146	113	66	15	49	190	60
110	PA-45 DA	M16	180	216	373	104	167	102	71		56	235	65
140	PA-45 DA	M16	210	246	409	117	181	111	78		64	235	72
160	PA-55 DA	M20	240	273	448	130	189	129	86		72	279	80
225	PA-55 DA	M20	295	334	507	158	210	139	96		73	279	90

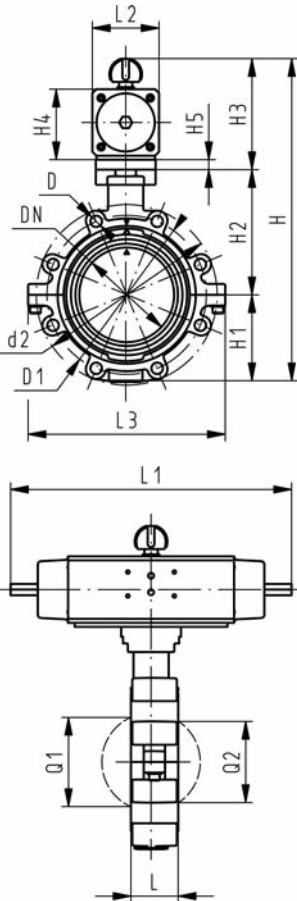
d [mm]	L3 [mm]	Q1 [mm]	Q2 [mm]
63	150	40	
75	160	54	35
90	205	67	50
110	244	88	74
140	272	113	97
160	297	139	123
225	360	178	169



## Lugstyle butterfly valve type 242 PVC-U FC (Fail safe to close) Without manual override

### Model:

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension ANSI/ASME B 16.5 Class 150, BS 4504 PN10
- Overall length according to EN 558, ISO 5752
- Control range 90°<



Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
2	50	10	1470	<b>199 242 002</b>	<b>199 242 022</b>	5.308
2 ½	65	10	2200	<b>199 242 003</b>	<b>199 242 023</b>	5.662
3	80	10	3000	<b>199 242 004</b>	<b>199 242 024</b>	6.075
4	100	10	6500	<b>199 242 005</b>	<b>199 242 025</b>	9.395
5	125	10	11500	<b>199 242 006</b>	<b>199 242 026</b>	12.350
6	150	10	16600	<b>199 242 007</b>	<b>199 242 027</b>	16.675
8	200	10	39600	<b>199 242 008</b>	<b>199 242 028</b>	24.082

Inch	Actuator unit type	D	D1 [mm]	d2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]
2	PA-30 FC	UNC 5/8	121	150	328	77	134	117	70	15	45	276	65
2 ½	PA-30 FC	UNC 5/8	140	170	340	83	140	117	70	15	46	276	65
3	PA-35 FC	UNC 5/8	153	177	361	89	146	126	78	15	49	326	72
4	PA-40 FC	UNC 5/8	191	216	400	104	167	129	86		56	370	80
5	PA-45 FC	UNC 3/4	216	246	437	117	181	139	96		64	411	90
6	PA-50 FC	UNC 3/4	242	273	468	130	189	149	106		72	423	100
8	PA-55 FC	UNC 3/4	299	334	529	158	210	161	118		73	452	112

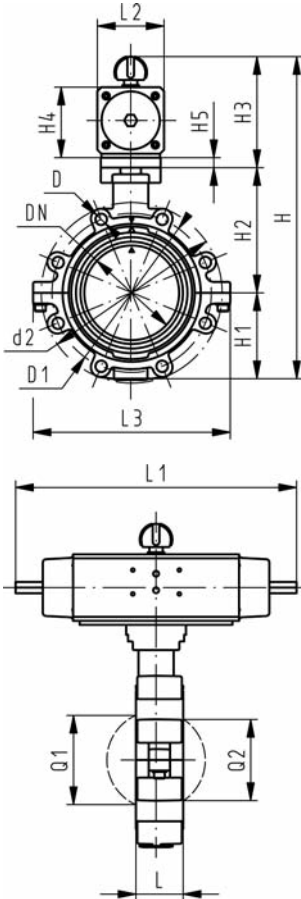
Inch	L3 [mm]	Q1 [mm]	Q2 [mm]
2	150	40	
2 ½	160	54	35
3	175	67	50
4	244	88	74
5	272	113	97
6	297	139	123
8	360	178	169



## Lugstyle butterfly valve type 242 PVC-U FO (Fail safe to open) Without manual override

### Model:

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension ANSI/ASME B 16.5 Class 150, BS 4504 PN10
- Overall length according to EN 558, ISO 5752
- Control range 90°<



Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
2	50	10	1470	199 242 042	199 242 062	5.308
2 1/2	65	10	2200	199 242 043	199 242 063	5.662
3	80	10	3000	199 242 044	199 242 064	6.075
4	100	10	6500	199 242 045	199 242 065	9.395
5	125	10	11500	199 242 046	199 242 066	12.350
6	150	10	16600	199 242 047	199 242 067	16.675
8	200	10	39600	199 242 048	199 242 068	24.082

Inch	Actuator unit type	D	D1 [mm]	d2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]
2	PA-30 FO	UNC 5/8	121	150	328	77	134	117	70	15	45	276	65
2 1/2	PA-30 FO	UNC 5/8	140	170	340	83	140	117	70	15	46	276	65
3	PA-35 FO	UNC 5/8	153	177	361	89	146	126	78	15	49	326	72
4	PA-40 FO	UNC 5/8	191	216	400	104	167	129	86		56	370	80
5	PA-45 FO	UNC 3/4	216	246	437	117	181	139	96		64	411	90
6	PA-50 FO	UNC 3/4	242	273	468	130	189	149	106		72	423	100
8	PA-55 FO	UNC 3/4	299	334	529	158	210	161	118		73	452	112

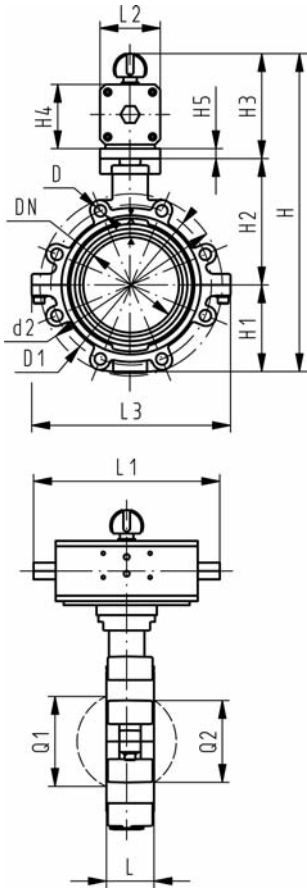
Inch	L3 [mm]	Q1 [mm]	Q2 [mm]
2	150	40	
2 1/2	160	54	35
3	175	67	50
4	244	88	74
5	272	113	97
6	297	139	123
8	360	178	169



# Lugstyle butterfly valve type 242 PVC-U DA (Double acting) Without manual override

## Model:

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension ANSI/ASME B 16.5 Class 150, BS 4504 PN10
- Overall length according to EN 558, ISO 5752
- Control range 90°<



Inch	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
2	50	10	1470	<b>199 242 082</b>	<b>199 242 102</b>	4.158
2 ½	65	10	2200	<b>199 242 083</b>	<b>199 242 103</b>	4.512
3	80	10	3000	<b>199 242 084</b>	<b>199 242 104</b>	5.406
4	100	10	6500	<b>199 242 085</b>	<b>199 242 105</b>	7.647
5	125	10	11500	<b>199 242 086</b>	<b>199 242 106</b>	9.600
6	150	10	16600	<b>199 242 087</b>	<b>199 242 107</b>	13.154
8	200	10	39600	<b>199 242 088</b>	<b>199 242 108</b>	18.082

Inch	Actuator unit type	D	D1 [mm]	d2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]
2	PA-35 DA	UNC 5/8	121	150	318	77	134	107	60	15	45	177	55
2 ½	PA-35 DA	UNC 5/8	140	170	330	83	140	107	60	15	46	177	55
3	PA-40 DA	UNC 5/8	153	177	348	89	146	113	66	15	49	190	60
4	PA-45 DA	UNC 5/8	191	216	373	104	167	102	71		56	235	65
5	PA-45 DA	UNC 3/4	216	246	409	117	181	111	78		64	235	72
6	PA-55 DA	UNC 3/4	242	273	448	130	189	129	86		72	279	80
8	PA-55 DA	UNC 3/4	299	334	507	158	210	139	96		73	279	90

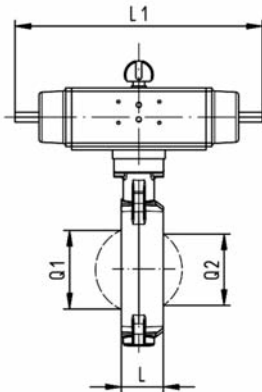
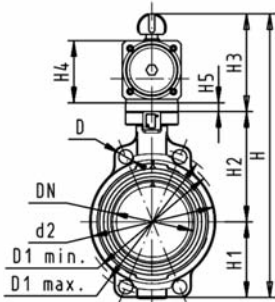
Inch	L3 [mm]	Q1 [mm]	Q2 [mm]
2	150	40	
2 ½	160	54	35
3	175	67	50
4	244	88	74
5	272	113	97
6	297	139	123
8	360	178	169



## Butterfly valve type 563 PVC-U FC (Fail safe to close) Without manual override

### Model:

- Only useable for system pressure of max. 4 bar
- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, ANSI/ASME B 16.5 Class 150, BS 1560: 1989, BS 4504, JIS B 2220
- Overall length according to EN 558, ISO 5752
- Control range 90°<



d [mm]	DN [mm]	Inch	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
63	50	2	4	1470	<b>161 563 142</b>	<b>161 563 162</b>	3.222
75	65	2 ½	4	2200	<b>161 563 143</b>	<b>161 563 163</b>	3.326
90	80	3	4	3000	<b>161 563 144</b>	<b>161 563 164</b>	3.493
110	100	4	4	6500	<b>161 563 145</b>	<b>161 563 165</b>	5.311
140	125	5	4	11500	<b>161 563 146</b>	<b>161 563 166</b>	6.884
160	150	6	4	16600	<b>161 563 147</b>	<b>161 563 167</b>	10.215
225	200	8	4	39600	<b>161 563 148</b>	<b>161 563 168</b>	14.134
280	250	10	4	55200	<b>161 563 149</b>	<b>161 563 169</b>	28.000
315	300	12	4	80000	<b>161 563 150</b>	<b>161 563 170</b>	36.400

d [mm]	Actuator unit type	D [mm]	D1 min. [mm]	D1 max. [mm]	d2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]
63	PA-21 FC	19	120.0	125.0	104	345	77	134	119	99	15	45	224
75	PA-21 FC	19	139.7	145.0	115	363	83	140	119	99	15	46	224
90	PA-21 FC	19	150.0	160.0	131	369	89	146	119	99	15	49	224
110	PA-35 FC	19	175.0	190.5	161	382	104	167	111	78		56	342
140	PA-40 FC	23	210.0	215.9	187	427	117	181	129	87		64	370
160	PA-45 FC	24	241.3	241.3	215	458	130	189	139	96		72	409
225	PA-50 FC	23	290.0	295.0	267	517	158	210	149	107		73	424
280	PA-65 FC	25	353.0	362.0	329	660	205	264	191	148		113	621
315	PA-65 FC	25	400.0	432.0	379	704	228	285	191	148		113	621

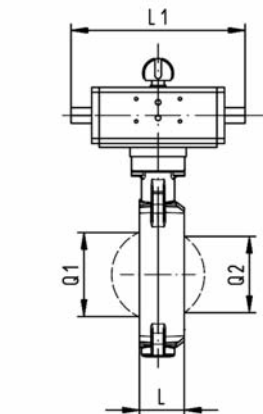
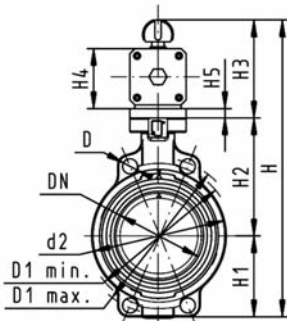
d [mm]	L2 [mm]	Q1 [mm]	Q2 [mm]
63	65	40	
75	65	54	35
90	72	67	50
110	80	88	74
140	90	113	97
160	100	139	123
225	112	178	169
280	137	210	207
315	145	256	253



# Butterfly valve type 563 PVC-U DA (Double acting) Without manual override

## Model:

- Only useable for system pressure of max. 4 bar
- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, ANSI/ASME B 16.5 Class 150, BS 1560: 1989, BS 4504, JIS B 2220
- Overall length according to EN 558, ISO 5752
- Control range 90°<



d [mm]	DN [mm]	Inch	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
63	50	2	4	1470	<b>161 563 102</b>	<b>161 563 122</b>	2.072
75	65	2 ½	4	2200	<b>161 563 103</b>	<b>161 563 123</b>	2.176
90	80	3	4	3000	<b>161 563 104</b>	<b>161 563 124</b>	2.824
110	100	4	4	6500	<b>161 563 105</b>	<b>161 563 125</b>	3.563
140	125	5	4	11500	<b>161 563 106</b>	<b>161 563 126</b>	4.134
160	150	6	4	16600	<b>161 563 107</b>	<b>161 563 127</b>	6.694
225	200	8	4	39600	<b>161 563 108</b>	<b>161 563 128</b>	8.134
280	250	10	4	55200	<b>161 563 109</b>	<b>161 563 129</b>	19.100
315	300	12	4	80000	<b>161 563 110</b>	<b>161 563 130</b>	27.000

d [mm]	Actuator unit type	D [mm]	D1 min. [mm]	D1 max. [mm]	d2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]
63	PA-21 DA	19	120.0	125.0	104	345	77	134	134	99	15	45	224
75	PA-21 DA	19	139.7	145.0	115	357	83	140	134	99	15	46	224
90	PA-21 DA	19	150.0	160.0	131	369	89	146	134	99	15	49	224
110	PA-45 DA	19	175.0	190.5	161	382	104	167	111	78		56	235
140	PA-45 DA	23	210.0	215.9	187	409	117	181	111	78		64	235
160	PA-55 DA	24	241.3	241.3	215	458	130	189	139	96		72	279
225	PA-55 DA	23	290.0	295.0	267	507	158	210	139	96		73	279
280	PA-65 DA	25	353.0	362.0	329	630	205	264	161	118		113	350
315	PA-65 DA	25	400.0	432.0	379	674	228	285	161	118		113	350

d [mm]	L2 [mm]	Q1 [mm]	Q2 [mm]
63	55	40	
75	55	54	35
90	60	67	50
110	65	88	74
140	72	113	97
160	80	139	123
225	90	178	169
280	112	210	207
315	125	256	253

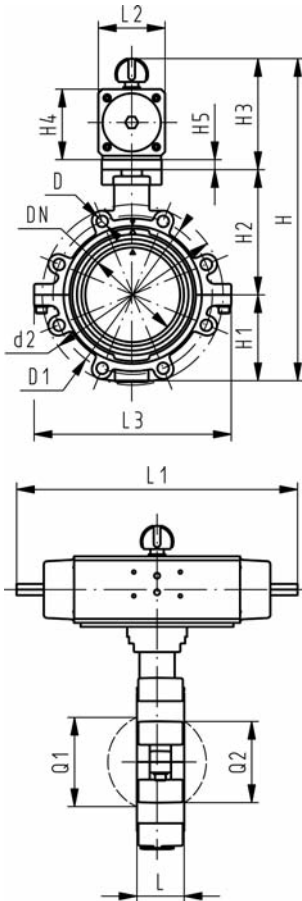
# Butterfly valves pneumatic ASTM/ANSI

## Lugstyle butterfly valve type 242 PVC-U FC (Fail safe to close) Without manual override



### Model:

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension ANSI/ASME B 16.5 Class 150, BS 4504 PN10
- Overall length according to EN 558, ISO 5752
- Control range 90°<



Inch	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
2	50	10	1470	199 242 002	199 242 022	5.308
2 ½	65	10	2200	199 242 003	199 242 023	5.662
3	80	10	3000	199 242 004	199 242 024	6.075
4	100	10	6500	199 242 005	199 242 025	9.395
5	125	10	11500	199 242 006	199 242 026	12.350
6	150	10	16600	199 242 007	199 242 027	16.675
8	200	10	39600	199 242 008	199 242 028	24.082

Inch	Actuator unit type	D	D1 [mm]	d2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]
2	PA-30 FC	UNC 5/8	121	150	328	77	134	117	70	15	45	276	65
2 ½	PA-30 FC	UNC 5/8	140	170	340	83	140	117	70	15	46	276	65
3	PA-35 FC	UNC 5/8	153	177	361	89	146	126	78	15	49	326	72
4	PA-40 FC	UNC 5/8	191	216	400	104	167	129	86		56	370	80
5	PA-45 FC	UNC 3/4	216	246	437	117	181	139	96		64	411	90
6	PA-50 FC	UNC 3/4	242	273	468	130	189	149	106		72	423	100
8	PA-55 FC	UNC 3/4	299	334	529	158	210	161	118		73	452	112

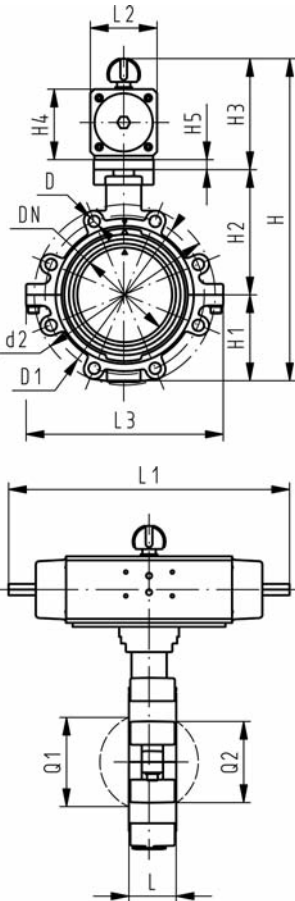
Inch	L3 [mm]	Q1 [mm]	Q2 [mm]
2	150	40	
2 ½	160	54	35
3	175	67	50
4	244	88	74
5	272	113	97
6	297	139	123
8	360	178	169



## Lugstyle butterfly valve type 242 PVC-U FO (Fail safe to open) Without manual override

### Model:

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension ANSI/ASME B 16.5 Class 150, BS 4504 PN10
- Overall length according to EN 558, ISO 5752
- Control range 90°<



Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
2	50	10	1470	<b>199 242 042</b>	<b>199 242 062</b>	5.308
2 ½	65	10	2200	<b>199 242 043</b>	<b>199 242 063</b>	5.662
3	80	10	3000	<b>199 242 044</b>	<b>199 242 064</b>	6.075
4	100	10	6500	<b>199 242 045</b>	<b>199 242 065</b>	9.395
5	125	10	11500	<b>199 242 046</b>	<b>199 242 066</b>	12.350
6	150	10	16600	<b>199 242 047</b>	<b>199 242 067</b>	16.675
8	200	10	39600	<b>199 242 048</b>	<b>199 242 068</b>	24.082

Inch	Actuator unit type	D	D1 [mm]	d2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]
2	PA-30 FO	UNC 5/8	121	150	328	77	134	117	70	15	45	276	65
2 ½	PA-30 FO	UNC 5/8	140	170	340	83	140	117	70	15	46	276	65
3	PA-35 FO	UNC 5/8	153	177	361	89	146	126	78	15	49	326	72
4	PA-40 FO	UNC 5/8	191	216	400	104	167	129	86		56	370	80
5	PA-45 FO	UNC 3/4	216	246	437	117	181	139	96		64	411	90
6	PA-50 FO	UNC 3/4	242	273	468	130	189	149	106		72	423	100
8	PA-55 FO	UNC 3/4	299	334	529	158	210	161	118		73	452	112

Inch	L3 [mm]	Q1 [mm]	Q2 [mm]
2	150	40	
2 ½	160	54	35
3	175	67	50
4	244	88	74
5	272	113	97
6	297	139	123
8	360	178	169

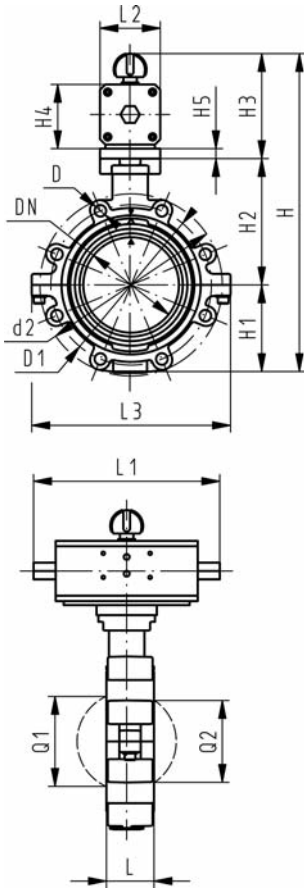




## Lugstyle butterfly valve type 242 PVC-U DA (Double acting) Without manual override

### Model:

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension ANSI/ASME B 16.5 Class 150, BS 4504 PN10
- Overall length according to EN 558, ISO 5752
- Control range 90°<



Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
2	50	10	1470	199 242 082	199 242 102	4.158
2 1/2	65	10	2200	199 242 083	199 242 103	4.512
3	80	10	3000	199 242 084	199 242 104	5.406
4	100	10	6500	199 242 085	199 242 105	7.647
5	125	10	11500	199 242 086	199 242 106	9.600
6	150	10	16600	199 242 087	199 242 107	13.154
8	200	10	39600	199 242 088	199 242 108	18.082

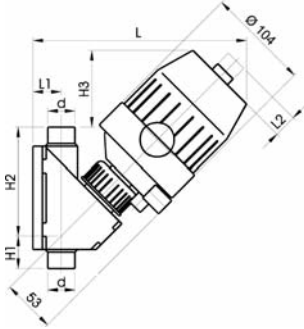
Inch	Actuator unit type	D	D1 [mm]	d2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]
2	PA-35 DA	UNC 5/8	121	150	318	77	134	107	60	15	45	177	55
2 1/2	PA-35 DA	UNC 5/8	140	170	330	83	140	107	60	15	46	177	55
3	PA-40 DA	UNC 5/8	153	177	348	89	146	113	66	15	49	190	60
4	PA-45 DA	UNC 5/8	191	216	373	104	167	102	71		56	235	65
5	PA-45 DA	UNC 3/4	216	246	409	117	181	111	78		64	235	72
6	PA-55 DA	UNC 3/4	242	273	448	130	189	129	86		72	279	80
8	PA-55 DA	UNC 3/4	299	334	507	158	210	139	96		73	279	90

Inch	L3 [mm]	Q1 [mm]	Q2 [mm]
2	150	40	
2 1/2	160	54	35
3	175	67	50
4	244	88	74
5	272	113	97
6	297	139	123
8	360	178	169

# Angle seat valves pneumatic

## Angle seat valve type 211 PVC-U FC (Fail safe to close)

With solvent cement spigots metric

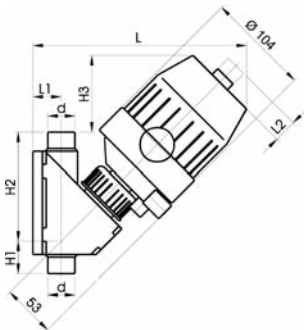


d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	6	41	<b>199 211 305</b>	<b>199 211 355</b>	1.000
20	15	6	94	<b>199 211 306</b>	<b>199 211 356</b>	1.200
25	20	6	175	<b>199 211 307</b>	<b>199 211 357</b>	1.400
32	25	6	296	<b>199 211 308</b>	<b>199 211 358</b>	1.600
40	32	6	416	<b>199 211 309</b>	<b>199 211 359</b>	2.100
50	40	3	512	<b>199 211 310</b>	<b>199 211 360</b>	2.900
63	50	2	620	<b>199 211 311</b>	<b>199 211 361</b>	4.900

d [mm]	L [mm]	L1 [mm]	L2 [mm]	H1 [mm]	H2 [mm]	H3 [mm]
16	198	22	14	24	90	74
20	207	25	17	28	96	73
25	221	30	22	37	107	71
32	240	35	22	37	117	72
40	270	42	22	44	130	80
50			22	48	146	82
63			22	60	164	82

## Angle seat valve type 211 PVC-U FO (Fail safe to open)

With solvent cement spigots metric

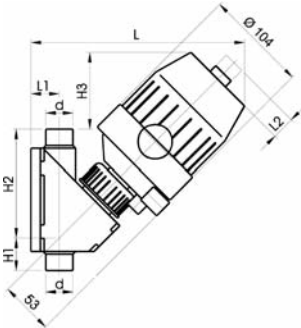


d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	41	<b>199 211 705</b>	<b>199 211 755</b>	1.000
20	15	10	94	<b>199 211 706</b>	<b>199 211 756</b>	1.200
25	20	10	175	<b>199 211 707</b>	<b>199 211 757</b>	1.400
32	25	10	296	<b>199 211 708</b>	<b>199 211 758</b>	1.600
40	32	10	416	<b>199 211 709</b>	<b>199 211 759</b>	2.100
50	40	6	512	<b>199 211 710</b>	<b>199 211 760</b>	2.900
63	50	4	620	<b>199 211 711</b>	<b>199 211 761</b>	4.900

d [mm]	L [mm]	L1 [mm]	L2 [mm]	H1 [mm]	H2 [mm]	H3 [mm]
16	198	22	14	24	90	74
20	207	25	17	28	96	73
25	221	30	22	37	107	71
32	240	35	22	37	117	72
40	270	42	22	44	130	80
50			22	48	146	82
63			22	60	164	82



## Angle seat valve type 211 PVC-U DA (Double acting) With solvent cement spigots metric



d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	41	<b>199 211 105</b>	<b>199 211 155</b>	1.000
20	15	10	94	<b>199 211 106</b>	<b>199 211 156</b>	1.200
25	20	10	175	<b>199 211 107</b>	<b>199 211 157</b>	1.400
32	25	10	296	<b>199 211 108</b>	<b>199 211 158</b>	1.600
40	32	10	416	<b>199 211 109</b>	<b>199 211 159</b>	2.100
50	40	10	512	<b>199 211 110</b>	<b>199 211 160</b>	2.900
63	50	6	620	<b>199 211 111</b>	<b>199 211 161</b>	4.900

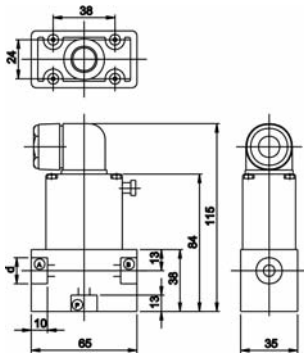
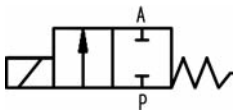
d [mm]	L [mm]	L1 [mm]	L2 [mm]	H1 [mm]	H2 [mm]	H3 [mm]
16	198	22	14	24	90	74
20	207	25	17	28	96	73
25	221	30	22	37	107	71
32	240	35	22	37	117	72
40	270	42	22	44	130	80
50			22	48	146	82
63			22	60	164	82

# Solenoid valves



**Solenoid valve type 157 PVC-U**  
**Nominal voltage 230V 50Hz ±10%**  
**Function A straight-through valve 2/2 ways**  
**With threaded sockets parallel female thread Rp**

- With manual override
- Electrical connection: cable plug
- Protection class IP 65

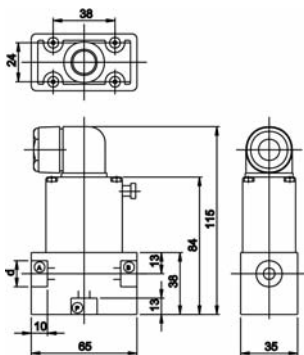
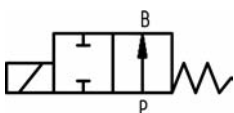


DN [mm]	Inch	PN [bar]	EPDM Code	FPM Code	kg
4	G3/8	0.0 - 4.0	199 157 007	199 157 002	0.320
6	G3/8	0.0 - 2.0	199 157 008	199 157 003	0.320
8	G3/8	0.0 - 1.0	199 157 009	199 157 004	0.320



**Solenoid valve type 157 PVC-U**  
**Nominal voltage 230V 50Hz ±10%**  
**Function B straight-through valve 2/2 ways**  
**With threaded sockets parallel female thread Rp**

- With manual override
- Electrical connection: cable plug
- Protection class IP 65

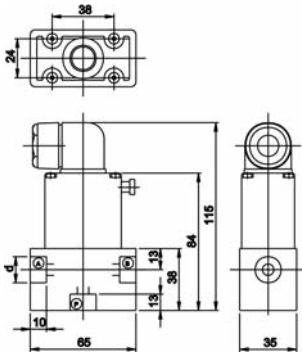
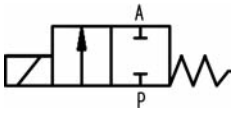


DN [mm]	Inch	PN [bar]	EPDM Code	FPM Code	kg
4	G3/8	0.0 - 4.0	199 157 027	199 157 022	0.320
6	G3/8	0.0 - 2.0	199 157 028	199 157 023	0.320
8	G3/8	0.0 - 1.0	199 157 029	199 157 024	0.320



**Solenoid valve type 157 PVC-U**  
**Nominal voltage 24V DC \*24V AC/DC**  
**Function A straight-through valve 2/2 ways**  
**With threaded sockets parallel female thread Rp**

- With manual override
- Electrical connection: cable plug
- Protection class IP 65

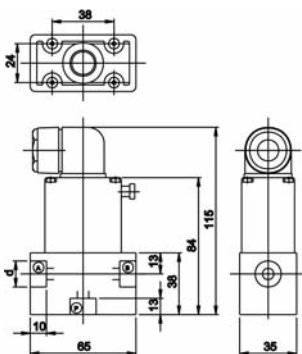
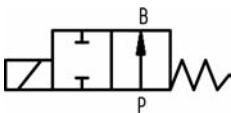


DN [mm]	Inch	PN [bar]	EPDM Code	FPM Code	kg
4	G3/8	0.0 - 4.0	<b>199 157 627</b>	<b>199 157 622</b>	0.320
6	G3/8	0.0 - 2.0	<b>199 157 628</b>	<b>199 157 623</b>	0.320
* 8	G3/8	0.0 - 1.0	<b>199 157 629</b>	<b>199 157 624</b>	0.320



**Solenoid valve type 157 PVC-U**  
**Nominal voltage 24V DC \*24V AC/DC**  
**Function B straight-through valve 2/2 ways**  
**With threaded sockets parallel female thread Rp**

- With manual override
- Electrical connection: cable plug
- Protection class IP 65

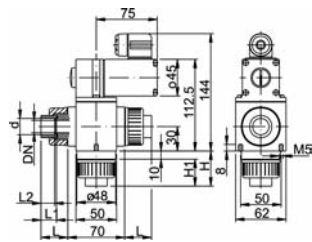
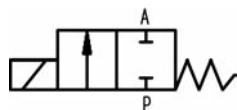


DN [mm]	Inch	PN [bar]	EPDM Code	FPM Code	kg
4	G3/8	0.0 - 4.0	<b>199 157 647</b>	<b>199 157 642</b>	0.320
6	G3/8	0.0 - 2.0	<b>199 157 648</b>	<b>199 157 643</b>	0.320
* 8	G3/8	0.0 - 1.0	<b>199 157 649</b>	<b>199 157 644</b>	0.250



**Solenoid valve type 160 PVC-U**  
**Nominal voltage 230V 50Hz ± 10%**  
**Function A straight through valve 2/2 ways**  
**With solvent cement sockets metric**

- With manual override
- Electric connection with cable plug
- Protection class IP 65
- Voltages: 24, 115, 230 V on request

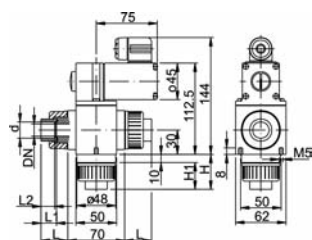
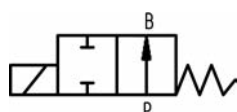


DN [mm]	d [mm]	PN [bar]	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg	L [mm]	L1 [mm]	L2 [mm]
10	16	0.0 - 3.0	33	<b>199 160 010</b>	<b>199 160 005</b>	1.200	30	17	14
10	20	0.0 - 3.0	33	<b>199 160 011</b>	<b>199 160 006</b>	1.050	30	17	14
15	20	0.0 - 1.0	75	<b>199 160 012</b>	<b>199 160 007</b>	1.050	33	19	16
15	25	0.0 - 1.0	75	<b>199 160 013</b>	<b>199 160 008</b>	1.050	33	19	16
20	25	0.0 - 0.5	100	<b>199 160 014</b>	<b>199 160 009</b>	1.050	37	22	19



**Solenoid valve type 160 PVC-U**  
**Nominal voltage 230V 50Hz ± 10%**  
**Function B straight through valve 2/2 ways**  
**With solvent cement sockets metric**

- With manual override
- Electric connection with cable plug
- Protection class IP 65
- Voltages: 24, 115, 230 V on request

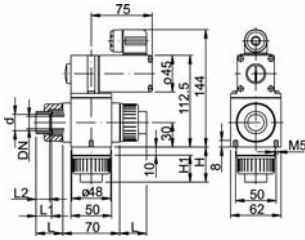
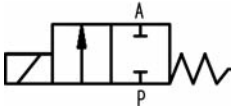


DN [mm]	d [mm]	PN [bar]	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg	L [mm]	L1 [mm]	L2 [mm]
10	16	0.0 - 2.0	33	<b>199 160 025</b>	<b>199 160 020</b>	1.200	30	17	14
10	20	0.0 - 2.0	33	<b>199 160 026</b>	<b>199 160 021</b>	1.200	30	17	14
15	20	0.0 - 1.0	75	<b>199 160 027</b>	<b>199 160 022</b>	1.200	33	19	16
15	25	0.0 - 1.0	75	<b>199 160 028</b>	<b>199 160 023</b>	1.050	33	19	16
20	25	0.0 - 0.5	100	<b>199 160 029</b>	<b>199 160 024</b>	1.200	37	22	19



**Solenoid valve type 160 PVC-U**  
**Nominal voltage 24V AC/DC**  
**Function A straight through valve 2/2 ways**  
**With solvent cement sockets metric**

- With manual override
- Electric connection with cable plug
- Protection class IP 65
- Voltages: 24, 115, 230 V on request

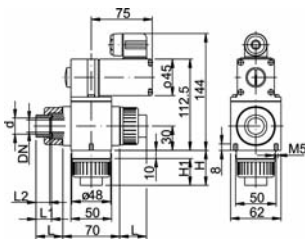
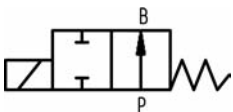


DN [mm]	d [mm]	PN [bar]	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg	L [mm]	L1 [mm]	L2 [mm]
10	16	0.0 - 3.0	33	<b>199 160 370</b>	<b>199 160 365</b>	1.050	30	17	14
10	20	0.0 - 3.0	33	<b>199 160 371</b>	<b>199 160 366</b>	1.050	30	17	14
15	20	0.0 - 1.0	75	<b>199 160 372</b>	<b>199 160 367</b>	1.050	33	19	16
15	25	0.0 - 1.0	75	<b>199 160 373</b>	<b>199 160 368</b>	1.200	33	19	16
20	25	0.0 - 0.5	100	<b>199 160 374</b>	<b>199 160 369</b>	1.050	37	22	19



**Solenoid valve type 160 PVC-U**  
**Nominal voltage 24V AC/DC**  
**Function B straight-through valve 2/2 ways**  
**With solvent cement sockets metric**

- With manual override
- Electric connection with cable plug
- Protection class IP 65
- Voltages: 24, 115, 230 V on request

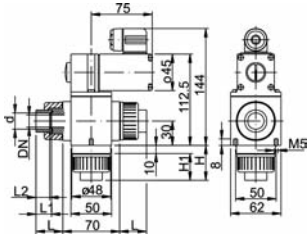


DN [mm]	d [mm]	PN [bar]	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg	L [mm]	L1 [mm]	L2 [mm]
10	16	0.0 - 2.0	33	<b>199 160 385</b>	<b>199 160 380</b>	0.975	30	17	14
10	20	0.0 - 2.0	33	<b>199 160 386</b>	<b>199 160 381</b>	1.200	30	17	14
15	20	0.0 - 1.0	75	<b>199 160 387</b>	<b>199 160 382</b>	1.200	33	19	16
15	25	0.0 - 1.0	75	<b>199 160 388</b>	<b>199 160 383</b>	1.200	33	19	16
20	25	0.0 - 0.5	100	<b>199 160 389</b>	<b>199 160 384</b>	1.050	37	22	19



**Solenoid valve type 161 PVC-U**  
**Nominal voltage 230V 50Hz ± 10%**  
**Function E mixing valve 3/2 ways**  
**With solvent cement sockets metric**

- With manual override
- Electrical connection: cable plug
- Protection class IP 65



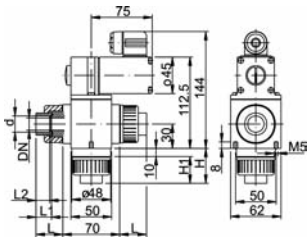
DN [mm]	d [mm]	PN [bar]	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
10	16	0.0 - 0.6	33	<b>199 161 040</b>	<b>199 161 035</b>	1.200
10	20	0.0 - 0.6	33	<b>199 161 041</b>	<b>199 161 036</b>	1.200
15	20	0.0 - 0.3	67	<b>199 161 042</b>	<b>199 161 037</b>	1.200
15	25	0.0 - 0.3	67	<b>199 161 043</b>	<b>199 161 038</b>	1.200
20	25	0.0 - 0.2	83	<b>199 161 044</b>	<b>199 161 039</b>	1.200

DN [mm]	L [mm]	L1 [mm]	L2 [mm]	H [mm]	H1 [mm]
10	30	17	14	40	30
10	30	17	14	40	30
15	33	19	16	43	33
15	33	19	16	43	33
20	37	22	19	47	37



**Solenoid valve type 161 PVC-U**  
**Nominal voltage 24V AC/DC**  
**Function E mixing valve 3/2 ways**  
**With solvent cement sockets metric**

- With manual override
- Electrical connection: cable plug
- Protection class IP 65



DN [mm]	d [mm]	PN [bar]	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
10	16	0.0 - 0.6	33	<b>199 161 430</b>	<b>199 161 425</b>	0.000
10	20	0.0 - 0.6	33	<b>199 161 431</b>	<b>199 161 426</b>	0.000
15	20	0.0 - 0.3	67	<b>199 161 432</b>	<b>199 161 427</b>	0.000
15	25	0.0 - 0.3	67	<b>199 161 433</b>	<b>199 161 428</b>	0.000
20	25	0.0 - 0.2	83	<b>199 161 434</b>	<b>199 161 429</b>	0.000

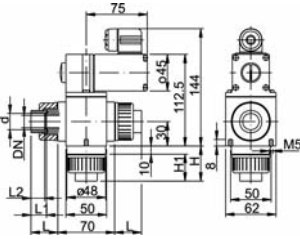
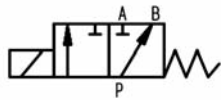
DN [mm]	L [mm]	L1 [mm]	L2 [mm]	H [mm]	H1 [mm]
10	30	17	14	40	30
10	30	17	14	40	30
15	33	19	16	43	33
15	33	19	16	43	33
20	37	22	19	47	37





**Solenoid valve type 161 PVC-U**  
**Nominal voltage 230V 50Hz ± 10%**  
**Function F distribution valve 3/2 ways**  
**With solvent cement sockets metric**

- With manual override
- Electrical connection: cable plug
- Protection class IP 65



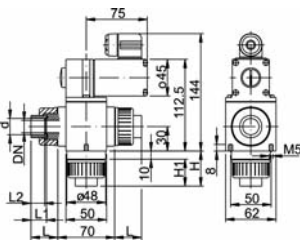
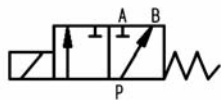
DN [mm]	d [mm]	PN [bar]	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
10	16	0 - 1.00	33	<b>199 161 055</b>	<b>199 161 050</b>	1.200
10	20	0 - 1.00	33	<b>199 161 056</b>	<b>199 161 051</b>	1.200
15	20	0 - 0.50	67	<b>199 161 057</b>	<b>199 161 052</b>	1.200
15	25	0 - 0.50	67	<b>199 161 058</b>	<b>199 161 053</b>	1.200
20	25	0 - 0.25	83	<b>199 161 059</b>	<b>199 161 054</b>	1.200

DN [mm]	L [mm]	L1 [mm]	L2 [mm]	H [mm]	H1 [mm]
10	30	17	14	40	30
10	30	17	14	40	30
15	33	19	16	43	33
15	33	19	16	43	33
20	37	22	19	47	37



**Solenoid valve type 161 PVC-U**  
**Nominal voltage 24V AC/DC**  
**Function F distribution valve 3/2 ways**  
**With solvent cement sockets metric**

- With manual override
- Electrical connection: cable plug
- Protection class IP 65



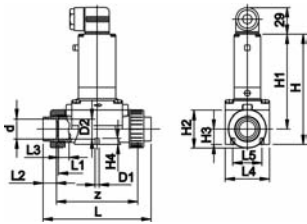
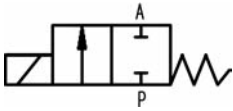
DN [mm]	d [mm]	kv-value ( $\Delta p=1$ bar) [l/min]	PN [bar]	EPDM Code	FPM Code	kg	
10	16		33	0 - 1.00	<b>199 161 445</b>	<b>199 161 440</b>	0.025
10	20		33	0 - 1.00	<b>199 161 446</b>	<b>199 161 441</b>	0.000
15	20		67	0 - 0.50	<b>199 161 447</b>	<b>199 161 442</b>	1.200
15	25		67	0 - 0.50	<b>199 161 448</b>	<b>199 161 443</b>	0.000
20	25		83	0 - 0.25	<b>199 161 449</b>	<b>199 161 444</b>	1.600

DN [mm]	d [mm]	L [mm]	L1 [mm]	L2 [mm]	H [mm]	H1 [mm]
10	16	30	17	14	40	30
10	20	30	17	14	40	30
15	20	33	19	16	43	33
15	25	33	19	16	43	33
20	25	37	22	19	47	37



**Solenoid valve type 165 PVC-U**  
**Standard voltage 230V 50Hz**  
**Function A straight-through valve 2/2 ways**  
**With solvent cement sockets metric**

- With manual override
- Electrical connection: cable plug
- Protection class IP 65



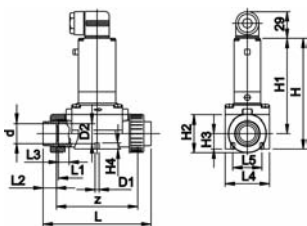
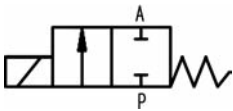
DN [mm]	d [mm]	PN [bar]	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
15	20	0.5 - 6.0	83	<b>199 165 012</b>	<b>199 165 002</b>	0.650
20	25	0.5 - 6.0	100	<b>199 165 013</b>	<b>199 165 003</b>	0.650
25	32	0.5 - 6.0	233	<b>199 165 014</b>	<b>199 165 004</b>	1.200
32	40	0.5 - 6.0	267	<b>199 165 015</b>	<b>199 165 005</b>	1.200
40	50	0.5 - 6.0	500	<b>199 165 016</b>	<b>199 165 006</b>	2.200
50	63	0.5 - 6.0	600	<b>199 165 017</b>	<b>199 165 007</b>	2.200

DN [mm]	D2 [mm]	z [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]
15		116	148	110	16		63	40	148	122	53	22	8
20	25	116	154	110	19	18	62	40	148	122	53	22	8
25		147	190	141	22		85	45	175	137	76	31	15
32	40	147	198	141	26	23	85	45	175	137	76	31	15
40		198	254	192	31		115	45	212	160	105	42	15
50	63	198	268	192	38	33	115	45	212	160	105	42	15



**Solenoid valve type 165 PVC-U**  
**Standard voltage 115V 50Hz**  
**Function A straight-through valve 2/2 ways**  
**With solvent cement sockets metric**

- With manual override
- Electrical connection: cable plug
- Protection class IP 65



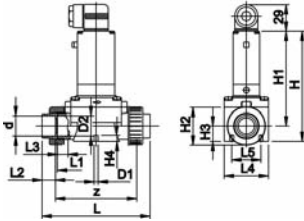
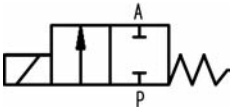
DN [mm]	d [mm]	PN [bar]	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
15	20	0.5 - 6.0	83	<b>199 165 042</b>	<b>199 165 032</b>	0.700
20	25	0.5 - 6.0	100	<b>199 165 043</b>	<b>199 165 033</b>	0.700
25	32	0.5 - 6.0	233	<b>199 165 044</b>	<b>199 165 034</b>	1.200
32	40	0.5 - 6.0	267	<b>199 165 045</b>	<b>199 165 035</b>	1.200
40	50	0.5 - 6.0	500	<b>199 165 046</b>	<b>199 165 036</b>	2.200
50	63	0.5 - 6.0	600	<b>199 165 047</b>	<b>199 165 037</b>	2.200

DN [mm]	D2 [mm]	z [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]
15		116	148	110	16		63	40	148	122	53	22	8
20	25	116	154	110	19	18	62	40	148	122	53	22	8
25		147	190	141	22		85	45	175	137	76	31	15
32	40	147	198	141	26	23	85	45	175	137	76	31	15
40		198	254	192	31		115	45	212	160	105	42	15
50	63	198	268	192	38	33	115	45	212	160	105	42	15



**Solenoid valve type 165 PVC-U**  
**Standard voltage 24V DC**  
**Function A straight-through valve 2/2 ways**  
**With solvent cement sockets metric**

- With manual override
- Electrical connection: cable plug
- Protection class IP 65

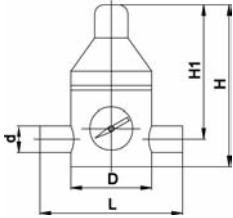


DN [mm]	d [mm]	PN [bar]	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
15	20	0.5 - 6.0	83	<b>199 165 022</b>	<b>199 165 072</b>	0.650
20	25	0.5 - 6.0	100	<b>199 165 023</b>	<b>199 165 073</b>	0.650
25	32	0.5 - 6.0	233	<b>199 165 024</b>	<b>199 165 074</b>	1.200
32	40	0.5 - 6.0	267	<b>199 165 025</b>	<b>199 165 075</b>	1.200
40	50	0.5 - 6.0	500	<b>199 165 026</b>	<b>199 165 076</b>	2.200
50	63	0.5 - 6.0	600	<b>199 165 027</b>	<b>199 165 077</b>	2.200

DN [mm]	D2 [mm]	z [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]
15		116	148	110	16		63	40	148	122	53	22	8
20	25	116	154	110	19	18	62	40	148	122	53	22	8
25		147	190	141	22		85	45	175	137	76	31	15
32	40	147	198	141	26	23	85	45	175	137	76	31	15
40		198	254	192	31		115	45	212	160	105	42	15
50	63	198	268	192	38	33	115	45	212	160	105	42	15

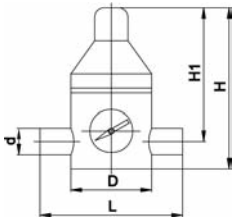
# Process control valves

## Pressure reducing valve type V 182 PVC-U With solvent cement spigots metric



d [mm]	DN [mm]	Pressure range [bar]	EPDM Code	FPM Code	kg	D [mm]	L [mm]	H [mm]	H1 [mm]	closest inch
16	10	0.5 - 10	199 041 600	199 041 611	0.680	70	134	130	100	3/8
20	15	0.5 - 10	199 041 601	199 041 612	0.680	70	134	130	100	1/2
25	20	0.5 - 10	199 041 602	199 041 613	1.350	100	174	180	134	3/4
32	25	0.5 - 10	199 041 603	199 041 614	1.350	100	174	180	134	1
40	32	0.5 - 10	199 041 604	199 041 615	2.950	130	224	230	175	1 1/4
50	40	0.5 - 10	199 041 605	199 041 616	2.950	130	224	230	175	1 1/2

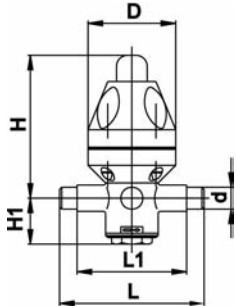
## Pressure reducing valve type V82 PVC-U With solvent cement spigots metric



d [mm]	DN [mm]	Pressure range [bar]	EPDM Code	PTFE Code	kg
16	10	0.5 - 10	199 041 012	199 041 022	0.680
20	15	0.5 - 10	199 041 013	199 041 023	0.680
25	20	0.5 - 10	199 041 014	199 041 024	1.350
32	25	0.5 - 10	199 041 015	199 041 025	1.630
40	32	0.5 - 10	199 041 016	199 041 026	2.960
50	40	0.5 - 10	199 041 017	199 041 027	2.960
63	50	0.5 - 10	199 041 018	199 041 028	5.180
75	65	0.5 - 6	199 041 019	199 041 029	10.430
90	80	0.5 - 6	199 041 020	199 041 030	19.630
110	100	0.5 - 4	199 041 021	199 041 031	31.640

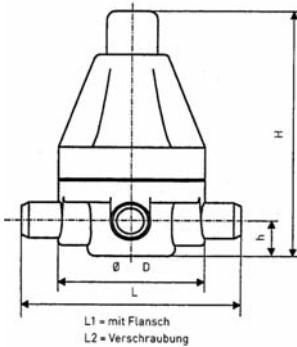
d [mm]	D [mm]	L [mm]	H [mm]	H1 [mm]	closest inch
16	70	134	130	100	3/8
20	70	134	130	100	1/2
25	100	174	180	134	3/4
32	100	174	180	134	1
40	130	224	230	175	1 1/4
50	130	224	230	175	1 1/2
63	150	244	285	210	2
75	200	300	350	250	2 1/2
90	250	360	425	305	3
110	300	420	495	345	4



## Pressure reducing valve type V782 PVC-U With solvent cement spigots metric

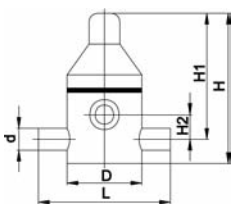
d [mm]	DN [mm]	Pressure range [bar]	EPDM Code	PTFE Code	kg
16	10	0.5 - 10	199 041 060	199 041 066	0.620
20	15	0.5 - 10	199 041 061	199 041 067	0.620
25	20	0.5 - 10	199 041 062	199 041 068	1.700
32	25	0.5 - 10	199 041 063	199 041 069	1.700
40	32	0.5 - 10	199 041 064	199 041 070	4.840
50	40	0.5 - 10	199 041 065	199 041 071	4.840

d [mm]	D [mm]	L [mm]	L1 [mm]	H [mm]	H1 [mm]	closest inch
16	83	134	102	138	48	3/8
20	83	134	102	138	48	1/2
25	113	154	110	205	65	3/4
32	113	154	110	205	65	1
40	165	224	162	248	95	1 1/4
50	165	224	162	248	95	1 1/2



## Pressure relief valve type V185 PVC-U With solvent cement spigots metric

d [mm]	DN [mm]	Pressure range [bar]	EPDM Code	PTFE Code	kg	D [mm]	L [mm]	H [mm]	H1 [mm]	closest inch
16	10	0.5 - 10	199 041 360	199 041 330	0.400	83	134	137	20	3/8
20	15	0.5 - 10	199 041 361	199 041 331	0.400	83	134	137	20	1/2
25	20	0.5 - 10	199 041 362	199 041 332	0.400	83	134	137	20	3/4
32	25	0.5 - 10	199 041 363	199 041 333	1.200	112	174	199	27	1
40	32	0.5 - 10	199 041 364	199 041 334	1.200	112	174	199	43	1 1/4
50	40	0.5 - 10	199 041 365	199 041 335	6.400	165	224	290	43	1 1/2
63	50	0.5 - 10	199 041 366	199 041 336	6.500	165	244	290	43	2



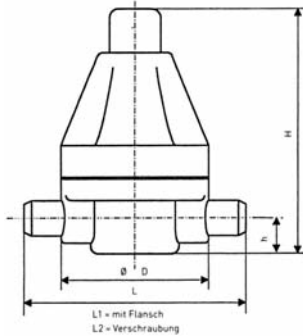
## Pressure relief valve type V85 PVC-U With solvent cement spigots metric

d [mm]	DN [mm]	Pressure range [bar]	EPDM Code	PTFE Code	kg
75	65	1.0 - 6	199 041 919	199 041 984	8.200
90	80	1.0 - 6	199 041 940	199 041 985	12.800
110	100	1.0 - 4	199 041 914	199 041 986	22.700

d [mm]	D [mm]	L [mm]	H [mm]	H1 [mm]	H2 [mm]	closest inch
75	180	284	295	250	70	2 1/2
90	200	300	400	340	95	3
110	250	380	475	405	110	4



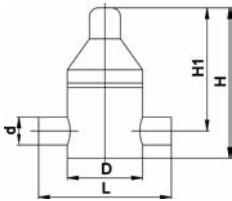
## Pressure retaining valve type V186 PVC-U With solvent cement spigots metric



d [mm]	DN [mm]	Pressure range [bar]	EPDM Code	PTFE Code	kg	D [mm]	L [mm]	H [mm]	H1 [mm]	closest inch
16	10	0.5 - 10	199 041 379	199 041 309	0.400	83	134	137	20	3/8
20	15	0.5 - 10	199 041 380	199 041 310	0.400	83	134	137	20	1/2
25	20	0.5 - 10	199 041 381	199 041 311	0.400	83	134	137	20	3/4
32	25	0.5 - 10	199 041 382	199 041 312	1.200	112	174	199	27	1
40	32	0.5 - 10	199 041 383	199 041 313	1.200	112	174	199	43	1 1/4
50	40	0.5 - 10	199 041 384	199 041 314	6.400	165	224	290	43	1 1/2
63	50	0.5 - 10	199 041 385	199 041 315	6.500	165	244	290	43	2



## Pressure retaining valve type V86 PVC-U With solvent cement spigots metric



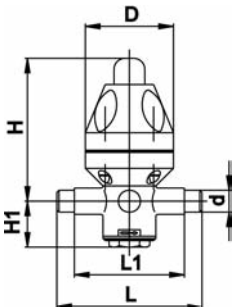
d [mm]	DN [mm]	Pressure range [bar]	EPDM Code	PTFE Code	kg
75	65	0.2 - 4	199 041 922	199 041 989	7.700
75	65	1.0 - 6	199 041 950	199 041 990	7.700
90	80	0.2 - 4	199 041 987	199 041 944	17.700
90	80	1.0 - 6	199 041 988	199 041 991	17.700
110	100	1.0 - 4	199 041 953	199 041 945	19.600

d [mm]	D [mm]	L [mm]	H [mm]	H1 [mm]	closest inch
75	180	284	275	230	2 1/2
75	180	284	275	230	2 1/2
90	250	360	410	320	3
90	250	360	410	320	3
110	250	380	485	415	4



## Pressure retaining valve type V786 PVC-U With solvent cement spigots metric



d [mm]	DN [mm]	Pressure range [bar]	EPDM Code	PTFE Code	kg
16	10	0.5 - 10	199 041 090	199 041 096	0.620
20	15	0.5 - 10	199 041 091	199 041 097	0.620
25	20	0.5 - 10	199 041 092	199 041 098	1.700
32	25	0.5 - 10	199 041 093	199 041 099	1.700
40	32	0.5 - 4	199 041 094	199 041 100	4.840
50	40	0.5 - 4	199 041 095	199 041 101	4.840

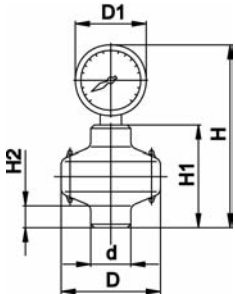
  

d [mm]	D [mm]	L [mm]	L1 [mm]	H [mm]	H1 [mm]	closest inch
16	83	134	102	138	38	3/8
20	83	134	102	138	38	1/2
25	112	154	110	205	55	3/4
32	112	154	110	205	55	1
40	165	224	162	248	85	1 1/4
50	165	224	162	248	85	1 1/2



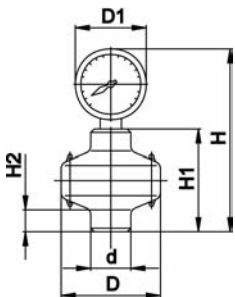
### Gauge guard type Z700 PVC-U With manometer 0-10 bar

d [mm]	PTFE Code	kg	G_R	D [mm]	D1 [mm]	H [mm]	H1 [mm]	H2 [mm]	closest inch
25	199 041 000	0.300	¼	72	63	129	71	15	¾
32	199 041 001	0.600	½	100	100	210	90	22	1



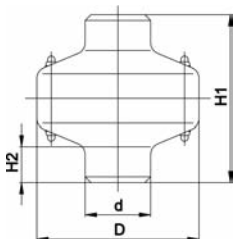
### Gauge guard type Z700 PVC-U With manometer 0-6 bar

d [mm]	PTFE Code	kg	G_R	D [mm]	D1 [mm]	H [mm]	H1 [mm]	H2 [mm]	closest inch
25	199 041 292	0.300	¼	72	63	129	71	15	¾
32	199 041 293	0.600	½	100	100	210	90	22	1



### Gauge guard type Z701 PVC-U Without manometer

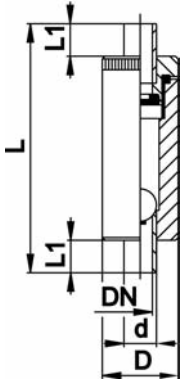
d [mm]	PTFE Code	kg	G_R	D [mm]	H1 [mm]	H2 [mm]	closest inch
25	199 041 006	0.140	¼	72	71	15	¾
32	199 041 007	0.250	½	100	90	22	1





## Ventilating and bleed valve type V91 PVC-U With solvent cement spigots metric

d [mm]	DN [mm]	PN	FPM Code	kg	D [mm]	L [mm]	L1 [mm]	closest inch
16	10	10	<b>199 041 238</b>	0.100	35	114	14	3/8
20	15	10	<b>199 041 239</b>	0.140	40	124	16	1/2
25	20	10	<b>199 041 240</b>	0.190	45	144	19	3/4
32	25	10	<b>199 041 241</b>	0.280	55	154	22	1
40	32	10	<b>199 041 242</b>	0.550	70	174	26	1 1/4
50	40	10	<b>199 041 243</b>	0.710	80	194	31	1 1/2
63	50	10	<b>199 041 244</b>	1.280	95	224	38	2
75	65	10	<b>199 041 245</b>	1.900	115	284	44	2 1/2
90	80	10	<b>199 041 246</b>	3.230	150	300	51	3

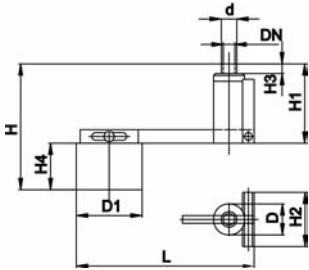


## Float valve type V140 PVC-U With solvent cement spigots metric

- Lever 1:10



d [mm]	DN [mm]	PN	EPDM Code	FPM Code	kg
16	10	6	<b>199 041 147</b>	<b>199 041 156</b>	0.300
20	15	6	<b>199 041 148</b>	<b>199 041 157</b>	0.300
25	20	6	<b>199 041 149</b>	<b>199 041 158</b>	0.300
32	25	6	<b>199 041 150</b>	<b>199 041 159</b>	0.400
40	32	6	<b>199 041 151</b>	<b>199 041 160</b>	4.000
50	40	6	<b>199 041 152</b>	<b>199 041 161</b>	6.200
63	50	6	<b>199 041 153</b>	<b>199 041 162</b>	8.100
75	65	6	<b>199 041 154</b>	<b>199 041 163</b>	10.400
90	80	6	<b>199 041 155</b>	<b>199 041 164</b>	11.400



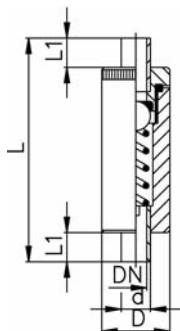
d [mm]	D [mm]	D1 [mm]	L [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	closest inch
16	45	125	380	270	120	80	14	130	3/8
20	45	125	380	270	120	80	16	130	1/2
25	65	200	530	340	160	110	19	170	3/4
32	65	200	530	345	165	110	22	170	1
40	90	225	720	440	210	130	26	210	1 1/4
50	90	225	720	445	215	130	31	210	1 1/2
63	130	315	975	595	255	160	38	290	2
75	130	315	975	600	260	160	44	290	2 1/2
90	150	355	1140	640	290	180	51	340	3





## Ventilating valve type V95 PVC-U With solvent cement spigots metric

d [mm]	DN [mm]	PN	FPM Code	kg	D [mm]	L [mm]	L1 [mm]	closest inch
16	10	10	<b>199 041 265</b>	0.100	35	114	14	3/8
20	15	10	<b>199 041 266</b>	0.140	40	124	16	1/2
25	20	10	<b>199 041 267</b>	0.190	45	144	19	3/4
32	25	10	<b>199 041 268</b>	0.280	55	154	22	1
40	32	10	<b>199 041 269</b>	0.550	70	174	26	1 1/4
50	40	10	<b>199 041 270</b>	0.710	80	194	31	1 1/2
63	50	10	<b>199 041 271</b>	1.280	95	224	38	2
75	65	10	<b>199 041 272</b>	1.900	115	284	44	2 1/2
90	80	10	<b>199 041 273</b>	3.230	150	300	51	3



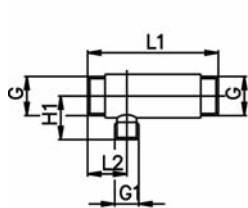
## Water jet suction pump type P20 PVC-U

- DN 10-20: BSP parallel female thread
- DN 25-50: Solvent cement socket metric
- DN 65-80: Solvent cement spigot metric

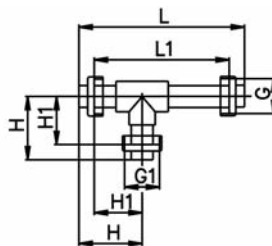


d [mm]	DN [mm]	PN	EPDM Code	kg
16	10	10	<b>199 041 120</b>	0.140
20	15	10	<b>199 041 121</b>	0.220
25	20	10	<b>199 041 122</b>	0.400
32	25	10	<b>199 041 123</b>	0.480
40	32	10	<b>199 041 124</b>	0.870
50	40	10	<b>199 041 125</b>	1.380
63	50	10	<b>199 041 126</b>	2.450
75	65	10	<b>199 041 127</b>	2.350
90	80	10	<b>199 041 128</b>	4.090

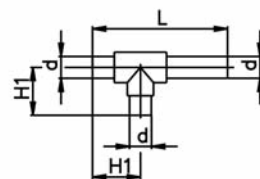
d [mm]	G [inch]	G1 [inch]	L [mm]	L1 [mm]	L2 [mm]	H [mm]	H1 [mm]	closest inch
16	R 3/4	R 3/4		110	40		35	3/8
20	R 1	R 3/4		125	40		35	1/2
25	R 1 1/4	R 3/4		145	45		45	3/4
32	R 1 1/2	R 1 1/2	245	195		96	71	1
40	R 2	R 2	297	239		116	87	1 1/4
50	R 2 1/4	R 2 1/4	369	301		139	105	1 1/2
63	R 2 3/4	R 2 3/4	433	351		169	128	2
75			388				115	2 1/2
90			465				149	3



DN 10 - 20

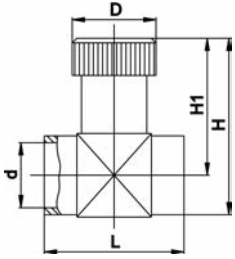


DN 25 - 50



DN 65 - 80

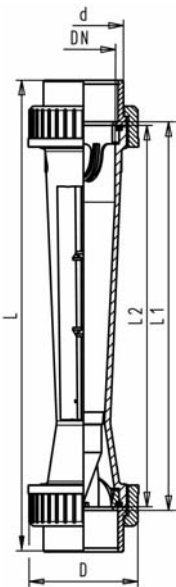
## Throttle valve type V251 PVC-U With solvent cement sockets metric



d [mm]	DN [mm]	PN	EPDM Code	FPM Code	kg	D [mm]	L [mm]	H [mm]	H1 [mm]	closest inch
16	10	10	<b>199 041 203</b>	<b>199 041 210</b>	0.048	29	47	57	45	3/8
20	15	10	<b>199 041 204</b>	<b>199 041 211</b>	0.072	35	55	66	51	1/2
25	20	10	<b>199 041 205</b>	<b>199 041 212</b>	0.123	40	66	80	63	3/4
32	25	10	<b>199 041 206</b>	<b>199 041 213</b>	0.219	47	80	96	75	1
40	32	10	<b>199 041 207</b>	<b>199 041 214</b>	0.329	56	100	111	86	1 1/4
50	40	10	<b>199 041 208</b>	<b>199 041 215</b>	0.662	70	120	133	101	1 1/2
63	50	10	<b>199 041 209</b>	<b>199 041 216</b>	1.213	88	146	158	118	2

# Variable area flow meters

## Variable area flow meter type 335 Float in PVDF without magnet With solvent cement sockets PVC-U metric



Scale range [l/h]	d [mm]	DN [mm]	Taper tube in PVC-U transp. O-rings in EPDM Code	Taper tube in Polyamid O-rings in EPDM Code
50 - 500	32	25	<b>198 335 000</b>	<b>198 335 020</b>
100 - 1000	32	25	<b>198 335 001</b>	<b>198 335 021</b>
150 - 1500	40	32	<b>198 335 002</b>	<b>198 335 022</b>
250 - 2500	40	32	<b>198 335 003</b>	<b>198 335 023</b>
200 - 2000	50	40	<b>198 335 004</b>	<b>198 335 024</b>
300 - 3000	50	40	<b>198 335 005</b>	<b>198 335 025</b>
600 - 6000	50	40	<b>198 335 006</b>	<b>198 335 026</b>
600 - 6000	63	50	<b>198 335 007</b>	<b>198 335 027</b>
1000 - 10000	63	50	<b>198 335 008</b>	<b>198 335 028</b>
1500 - 15000	63	50	<b>198 335 009</b>	<b>198 335 029</b>
2000 - 20000	75	65	<b>198 335 010</b>	<b>198 335 030</b>
3000 - 30000	75	65	<b>198 335 011</b>	<b>198 335 031</b>
8000 - 60000	75	65	<b>198 335 012</b>	<b>198 335 032</b>

Scale range [l/h]	d [mm]	DN [mm]	Taper tube in Polysulfone O-rings in EPDM Code	kg
50 - 500	32	25	<b>198 335 040</b>	0.440
100 - 1000	32	25	<b>198 335 041</b>	0.440
150 - 1500	40	32	<b>198 335 042</b>	0.620
250 - 2500	40	32	<b>198 335 043</b>	0.620
200 - 2000	50	40	<b>198 335 044</b>	0.900
300 - 3000	50	40	<b>198 335 045</b>	0.900
600 - 6000	50	40	<b>198 335 046</b>	0.900
600 - 6000	63	50	<b>198 335 047</b>	1.225
1000 - 10000	63	50	<b>198 335 048</b>	1.225
1500 - 15000	63	50	<b>198 335 049</b>	1.225
2000 - 20000	75	65	<b>198 335 050</b>	2.150
3000 - 30000	75	65	<b>198 335 051</b>	2.150
8000 - 60000	75	65	<b>198 335 052</b>	2.150

Scale range [l/h]	D [mm]	L [mm]	L1 [mm]	L2 [mm]	G [inch]
50 - 500	58	385	341	335	1 ½
100 - 1000	58	385	341	335	1 ½
150 - 1500	72	393	341	335	2
250 - 2500	72	393	341	335	2
200 - 2000	83	403	341	335	2 ¼
300 - 3000	83	403	341	335	2 ¼
600 - 6000	83	403	341	335	2 ¼
600 - 6000	101	417	341	335	2 ¾
1000 - 10000	101	417	341	335	2 ¾
1500 - 15000	101	417	341	335	2 ¾
2000 - 20000	135	429	341	335	3 ½
3000 - 30000	135	429	341	335	3 ½
8000 - 60000	135	429	341	335	3 ½

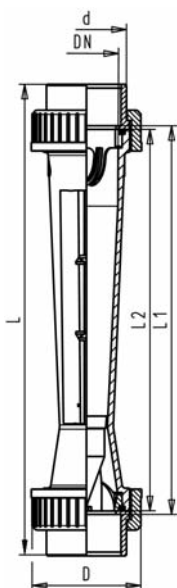


## Variable area flow meter type 335 Float in PVDF with magnet With solvent cement sockets PVC-U metric



### Model:

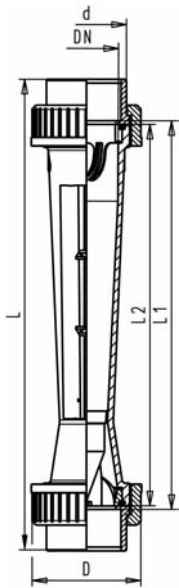
- Suitable limit switches see accessories for variable area flow meters



Scale range [l/h]	d [mm]	DN [mm]	Taper tube in PVC-U transp. O- Rings in EPDM Code	Taper tube in Polyamid O-rings in EPDM Code
50 - 500	32	25	<b>198 335 100</b>	<b>198 335 120</b>
100 - 1000	32	25	<b>198 335 101</b>	<b>198 335 121</b>
150 - 1500	40	32	<b>198 335 102</b>	<b>198 335 122</b>
250 - 2500	40	32	<b>198 335 103</b>	<b>198 335 123</b>
200 - 2000	50	40	<b>198 335 104</b>	<b>198 335 124</b>
300 - 3000	50	40	<b>198 335 105</b>	<b>198 335 125</b>
600 - 6000	50	40	<b>198 335 106</b>	<b>198 335 126</b>
600 - 6000	63	50	<b>198 335 107</b>	<b>198 335 127</b>
1000 - 10000	63	50	<b>198 335 108</b>	<b>198 335 128</b>
1500 - 15000	63	50	<b>198 335 109</b>	<b>198 335 129</b>
2000 - 20000	75	65	<b>198 335 110</b>	<b>198 335 130</b>
3000 - 30000	75	65	<b>198 335 111</b>	<b>198 335 131</b>
8000 - 60000	75	65	<b>198 335 112</b>	<b>198 335 132</b>

Scale range [l/h]	d [mm]	DN [mm]	Taper tube in Polysulfone O- rings in EPDM Code	kg
50 - 500	32	25	<b>198 335 140</b>	0.440
100 - 1000	32	25	<b>198 335 141</b>	0.440
150 - 1500	40	32	<b>198 335 142</b>	0.620
250 - 2500	40	32	<b>198 335 143</b>	0.620
200 - 2000	50	40	<b>198 335 144</b>	0.900
300 - 3000	50	40	<b>198 335 145</b>	0.900
600 - 6000	50	40	<b>198 335 146</b>	0.900
600 - 6000	63	50	<b>198 335 147</b>	1.225
1000 - 10000	63	50	<b>198 335 148</b>	1.225
1500 - 15000	63	50	<b>198 335 149</b>	1.225
2000 - 20000	75	65	<b>198 335 150</b>	2.150
3000 - 30000	75	65	<b>198 335 151</b>	2.150
8000 - 60000	75	65	<b>198 335 152</b>	2.150

Scale range [l/h]	D [mm]	L [mm]	L1 [mm]	L2 [mm]	G [inch]
50 - 500	58	385	341	335	1 ½
100 - 1000	58	385	341	335	1 ½
150 - 1500	72	393	341	335	2
250 - 2500	72	393	341	335	2
200 - 2000	83	403	341	335	2 ¼
300 - 3000	83	403	341	335	2 ¼
600 - 6000	83	403	341	335	2 ¼
600 - 6000	101	417	341	335	2 ¾
1000 - 10000	101	417	341	335	2 ¾
1500 - 15000	101	417	341	335	2 ¾
2000 - 20000	135	429	341	335	3 ½
3000 - 30000	135	429	341	335	3 ½
8000 - 60000	135	429	341	335	3 ½



**Variable area flow meter type 350**  
**Float in PVDF without magnet**  
**With solvent cement sockets PVC-U**  
**metric**



Scale range [l/h]	d [mm]	DN [mm]	Taper tube in PVC-U transp. O-rings in EPDM Code	Taper tube in Polyamid O-rings in EPDM Code
50 - 500	32	25	<b>198 350 000</b>	<b>198 350 020</b>
100 - 1000	32	25	<b>198 350 001</b>	<b>198 350 021</b>
150 - 1500	40	32	<b>198 350 002</b>	<b>198 350 022</b>
250 - 2500	40	32	<b>198 350 003</b>	<b>198 350 023</b>
200 - 2000	50	40	<b>198 350 004</b>	<b>198 350 024</b>
300 - 3000	50	40	<b>198 350 005</b>	<b>198 350 025</b>
600 - 6000	50	40	<b>198 350 006</b>	<b>198 350 026</b>
600 - 6000	63	50	<b>198 350 007</b>	<b>198 350 027</b>
1000 - 10000	63	50	<b>198 350 008</b>	<b>198 350 028</b>
1500 - 15000	63	50	<b>198 350 009</b>	<b>198 350 029</b>
2000 - 20000	75	65	<b>198 350 010</b>	<b>198 350 030</b>
3000 - 30000	75	65	<b>198 350 011</b>	<b>198 350 031</b>
8000 - 60000	75	65	<b>198 350 012</b>	<b>198 350 032</b>

Scale range [l/h]	d [mm]	DN [mm]	Taper tube in Polysulfone O-rings in EPDM Code	kg
50 - 500	32	25	<b>198 350 040</b>	0.440
100 - 1000	32	25	<b>198 350 041</b>	0.440
150 - 1500	40	32	<b>198 350 042</b>	0.620
250 - 2500	40	32	<b>198 350 043</b>	0.620
200 - 2000	50	40	<b>198 350 044</b>	0.900
300 - 3000	50	40	<b>198 350 045</b>	0.900
600 - 6000	50	40	<b>198 350 046</b>	0.900
600 - 6000	63	50	<b>198 350 047</b>	1.320
1000 - 10000	63	50	<b>198 350 048</b>	1.320
1500 - 15000	63	50	<b>198 350 049</b>	1.320
2000 - 20000	75	65	<b>198 350 050</b>	2.150
3000 - 30000	75	65	<b>198 350 051</b>	2.150
8000 - 60000	75	65	<b>198 350 052</b>	2.150

Scale range [l/h]	D [mm]	L [mm]	L1 [mm]	L2 [mm]	G [inch]
50 - 500	58	400	356	350	1 ½
100 - 1000	58	400	356	350	1 ½
150 - 1500	72	408	356	350	2
250 - 2500	72	408	356	350	2
200 - 2000	83	418	356	350	2 ¼
300 - 3000	83	418	356	350	2 ¼
600 - 6000	83	418	356	350	2 ¼
600 - 6000	101	432	356	350	2 ¾
1000 - 10000	101	432	356	350	2 ¾
1500 - 15000	101	432	356	350	2 ¾
2000 - 20000	135	444	356	350	3 ½
3000 - 30000	135	444	356	350	3 ½
8000 - 60000	135	444	356	350	3 ½



# Variable area flow meter type 350

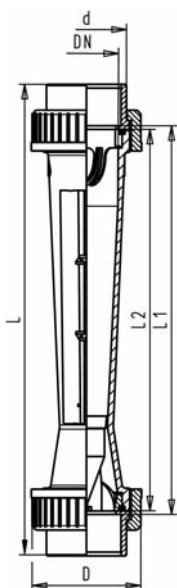
## Float in PVDF with magnet

### With solvent cement sockets PVC-U metric



#### Model:

- Suitable limit switches see accessories for variable area flow meters



Scale range [l/h]	d [mm]	DN [mm]	Taper tube in PVC-U transp. O-Rings in EPDM Code	Taper tube in Polyamid O-rings in EPDM Code
50 - 500	32	25	<b>198 350 100</b>	<b>198 350 120</b>
100 - 1000	32	25	<b>198 350 101</b>	<b>198 350 121</b>
150 - 1500	40	32	<b>198 350 102</b>	<b>198 350 122</b>
250 - 2500	40	32	<b>198 350 103</b>	<b>198 350 123</b>
200 - 2000	50	40	<b>198 350 104</b>	<b>198 350 124</b>
300 - 3000	50	40	<b>198 350 105</b>	<b>198 350 125</b>
600 - 6000	50	40	<b>198 350 106</b>	<b>198 350 126</b>
600 - 6000	63	50	<b>198 350 107</b>	<b>198 350 127</b>
1000 - 10000	63	50	<b>198 350 108</b>	<b>198 350 128</b>
1500 - 15000	63	50	<b>198 350 109</b>	<b>198 350 129</b>
2000 - 20000	75	65	<b>198 350 110</b>	<b>198 350 130</b>
3000 - 30000	75	65	<b>198 350 111</b>	<b>198 350 131</b>
8000 - 60000	75	65	<b>198 350 112</b>	<b>198 350 132</b>

Scale range [l/h]	d [mm]	DN [mm]	Taper tube in Polysulfone O-rings in EPDM Code	kg
50 - 500	32	25	<b>198 350 140</b>	0.440
100 - 1000	32	25	<b>198 350 141</b>	0.440
150 - 1500	40	32	<b>198 350 142</b>	0.620
250 - 2500	40	32	<b>198 350 143</b>	0.620
200 - 2000	50	40	<b>198 350 144</b>	0.900
300 - 3000	50	40	<b>198 350 145</b>	0.900
600 - 6000	50	40	<b>198 350 146</b>	0.900
600 - 6000	63	50	<b>198 350 147</b>	1.320
1000 - 10000	63	50	<b>198 350 148</b>	1.320
1500 - 15000	63	50	<b>198 350 149</b>	1.320
2000 - 20000	75	65	<b>198 350 150</b>	2.150
3000 - 30000	75	65	<b>198 350 151</b>	2.150
8000 - 60000	75	65	<b>198 350 152</b>	2.150

Scale range [l/h]	D [mm]	L [mm]	L1 [mm]	L2 [mm]	G [inch]
50 - 500	58	400	356	350	1 ½
100 - 1000	58	400	356	350	1 ½
150 - 1500	72	408	356	350	2
250 - 2500	72	408	356	350	2
200 - 2000	83	418	356	350	2 ¼
300 - 3000	83	418	356	350	2 ¼
600 - 6000	83	418	356	350	2 ¼
600 - 6000	101	432	356	350	2 ¾
1000 - 10000	101	432	356	350	2 ¾
1500 - 15000	101	432	356	350	2 ¾
2000 - 20000	135	444	356	350	3 ½
3000 - 30000	135	444	356	350	3 ½
8000 - 60000	135	444	356	350	3 ½

## Special scale for type 335/350 % for H2O

d [mm]	DN [mm]	Scale range	Corresponds to water scale [l/h]	Code	kg
32	25	10-100 %	50-500	<b>198 335 084</b>	0.050
32	25	10-100 %	100-1000	<b>198 335 083</b>	0.050
40	32	10-100 %	150-1500	<b>198 335 069</b>	0.050
40	32	10-100 %	250-2500	<b>198 335 068</b>	0.050
50	40	10-100 %	200-2000	<b>198 335 054</b>	0.050
50	40	10-100 %	300-3000	<b>198 335 053</b>	0.050
50	40	10-100 %	600-6000	<b>198 335 039</b>	0.050
63	50	10-100 %	600-6000	<b>198 335 038</b>	0.050
63	50	10-100 %	1000-10000	<b>198 335 037</b>	0.050
63	50	10-100 %	1500-15000	<b>198 335 036</b>	0.050
75	65	10-100 %	2000-20000	<b>198 335 035</b>	0.050
75	65	10-100 %	3000-30000	<b>198 335 034</b>	0.050
75	65	13.3-100 %	8000-60000	<b>198 335 033</b>	0.050

## Special scale for type 335/350 m<sup>3</sup>/h

d [mm]	DN [mm]	Scale range [m <sup>3</sup> /h]	Corresponds to water scale [l/h]	Code	kg
32	25	0.05 - 0.5	50 - 500	<b>198 335 655</b>	0.050
32	25	0.1 - 1	100 - 1000	<b>198 335 656</b>	0.050
40	32	0.15 - 1.5	150 - 1500	<b>198 335 657</b>	0.050
40	32	0.25 - 2.5	250 - 2500	<b>198 335 658</b>	0.050
50	40	0.2 - 2.0	200 - 2000	<b>198 335 659</b>	0.050
50	40	0.3 - 3	300 - 3000	<b>198 335 660</b>	0.050
50	40	0.6 - 6	600 - 6000	<b>198 335 661</b>	0.050
63	50	0.6 - 6	600 - 6000	<b>198 335 662</b>	0.050
63	50	1 - 10	1000 - 10000	<b>198 335 663</b>	0.050
63	50	1.5 - 15	1500 - 15000	<b>198 335 664</b>	0.050
75	65	2 - 20	2000 - 20000	<b>198 335 665</b>	0.050
75	65	3 - 30	3000 - 30000	<b>198 335 666</b>	0.050
75	65	8 - 60	8000 - 60000	<b>198 335 667</b>	0.050

## Special scale for type 335/350 Imp. GPM

d [mm]	DN [mm]	Scale range [gal/min]	Corresponds to water scale [l/h]	Code	kg
32	25	0,183 - 1,83	50-500	<b>198 335 670</b>	0.050
32	25	0,366 - 3,66	100-1000	<b>198 335 671</b>	0.050
40	32	0,55 - 5,5	150-1500	<b>198 335 672</b>	0.050
40	32	0,916 - 9,16	250-2500	<b>198 335 673</b>	0.050
50	40	0,733 - 7,33	200-2000	<b>198 335 674</b>	0.050
50	40	1,09 - 10,9	300-3000	<b>198 335 675</b>	0.050
50	40	2,19 - 21,9	600-6000	<b>198 335 676</b>	0.050
63	50	2,2 - 22	600-6000	<b>198 335 677</b>	0.050
63	50	3,66 - 36,6	1000-10000	<b>198 335 678</b>	0.050
63	50	5,49 - 54,9	1500-15000	<b>198 335 679</b>	0.050
75	65	7,32 - 73,2	2000-20000	<b>198 335 680</b>	0.050
75	65	10,98 - 109,8	3000-30000	<b>198 335 681</b>	0.050
75	65	29,28 - 219,6	8000-60000	<b>198 335 682</b>	0.050

## Special scale for type 335/350 US GPM

d [mm]	DN [mm]	Scale range [gal/min]	Corresponds to water scale [l/h]	Code	kg
32	25	0.22 - 2.2	50 - 500	<b>198 335 685</b>	0.050
32	25	0.44 - 4.4	100 - 1000	<b>198 335 686</b>	0.050
40	32	0.66 - 6.6	150 - 1500	<b>198 335 687</b>	0.050
40	32	1.1 - 11	250 - 2500	<b>198 335 688</b>	0.050
50	40	0.66 - 6.6	200 - 2000	<b>198 335 689</b>	0.050
50	40	1.32 - 13.2	300 - 3000	<b>198 335 690</b>	0.050
50	40	2.64 - 26.4	600 - 6000	<b>198 335 691</b>	0.050

table continued next page

d [mm]	DN [mm]	Scale range [gal/min]	Corresponds to water scale [l/h]	Code	kg
63	50	2.64 - 26.4	600 - 6000	<b>198 335 692</b>	0.050
63	50	4.40 - 44.02	1000 - 10000	<b>198 335 693</b>	0.050
63	50	6.60 - 66.04	1500 - 15000	<b>198 335 694</b>	0.050
75	65	8.80 - 88	2000 - 20000	<b>198 335 695</b>	0.050
75	65	13.20 - 132	3000 - 30000	<b>198 335 696</b>	0.050
75	65	35.2 - 264	8000 - 60000	<b>198 335 697</b>	0.050

### Special scale for type 335/350 Air/0bar/Nm<sup>3</sup>/h

d [mm]	DN [mm]	Scale range [m <sup>3</sup> /h]	Corresponds to water scale [l/h]	Code	kg
32	25	1.5 - 14	50 - 500	<b>198 350 655</b>	0.050
32	25	2.5 - 29	100 - 1000	<b>198 350 656</b>	0.050
40	32	4 - 45	150 - 1500	<b>198 350 657</b>	0.050
40	32	7 - 79	250 - 2500	<b>198 350 658</b>	0.050
50	40	6 - 58	200 - 2000	<b>198 350 659</b>	0.050
50	40	9 - 108	300 - 3000	<b>198 350 660</b>	0.050
50	40	17 - 174	600 - 6000	<b>198 350 661</b>	0.050
63	50	17 - 175	600 - 6000	<b>198 350 662</b>	0.050
63	50	29 - 301	1000 - 10000	<b>198 350 663</b>	0.050
63	50	53 - 405	1500 - 15000	<b>198 350 664</b>	0.050
75	65	55 - 545	2000 - 20000	<b>198 350 665</b>	0.050
75	65	80 - 758	3000 - 30000	<b>198 350 666</b>	0.050
75	65	-	8000 - 60000	<b>198 350 667</b>	0.050

### Special scale for type 335/350 HCl 30-33% l/h

d [mm]	DN [mm]	Scale range [l/h]	Corresponds to water scale [l/h]	Code	kg
32	25	20 - 405	50-500	<b>198 350 670</b>	0.050
32	25	55 - 866	100-1000	<b>198 350 671</b>	0.050
40	32	90 - 1340	150-1500	<b>198 350 672</b>	0.050
40	32	165 - 2310	250-2500	<b>198 350 673</b>	0.050
50	40	115 - 1660	200-2000	<b>198 350 674</b>	0.050
50	40	190 - 3050	300-3000	<b>198 350 675</b>	0.050
50	40	420 - 4900	600-6000	<b>198 350 676</b>	0.050
63	50	430 - 5090	600-6000	<b>198 350 677</b>	0.050
63	50	750 - 9460	1000-10000	<b>198 350 678</b>	0.050
63	50	1415 - 11570	1500-15000	<b>198 350 679</b>	0.050
75	65	1500 - 17300	2000-20000	<b>198 350 680</b>	0.050
75	65	2175 - 24120	3000-30000	<b>198 350 681</b>	0.050
75	65	-	8000-60000	<b>198 350 682</b>	0.050

### Special scale for type 335/350 NaOH 30% l/h

d [mm]	DN [mm]	Scale range [l/h]	Corresponds to water scale [l/h]	Code	kg
32	25	4 - 226	50-500	<b>198 350 685</b>	0.050
32	25	15 - 600	100-1000	<b>198 350 686</b>	0.050
40	32	30 - 970	150-1500	<b>198 350 687</b>	0.050
40	32	70 - 1800	250-2500	<b>198 350 688</b>	0.050
50	40	35 - 1240	200-2000	<b>198 350 689</b>	0.050
50	40	75 - 2370	300-3000	<b>198 350 690</b>	0.050
50	40	230 - 4000	600-6000	<b>198 350 691</b>	0.050
63	50	240 - 4700	600-6000	<b>198 350 692</b>	0.050
63	50	475 - 7340	1000-10000	<b>198 350 693</b>	0.050
63	50	1030 - 10330	1500-15000	<b>198 350 694</b>	0.050
75	65	915 - 11720	2000-20000	<b>198 350 695</b>	0.050
75	65	1195 - 16040	3000-30000	<b>198 350 696</b>	0.050
75	65	-	8000-60000	<b>198 350 697</b>	0.050

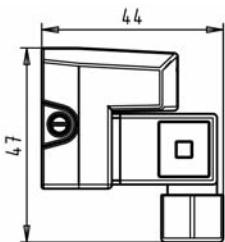
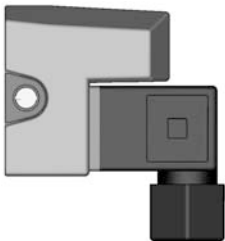


## Special scale for type 335/350 NaOH 50% l/h

d [mm]	DN [mm]	Scale range [l/h]	Corresponds to water scale [l/h]	Code	kg
32	25	1 - 55	50-500	<b>198 350 755</b>	0.050
32	25	3 - 192	100-1000	<b>198 350 756</b>	0.050
40	32	6 - 365	150-1500	<b>198 350 757</b>	0.050
40	32	15 - 770	250-2500	<b>198 350 758</b>	0.050
50	40	8 - 520	200-2000	<b>198 350 759</b>	0.050
50	40	15 - 1170	300-3000	<b>198 350 760</b>	0.050
50	40	50 - 2270	600-6000	<b>198 350 761</b>	0.050
63	50	55 - 2300	600-6000	<b>198 350 762</b>	0.050
63	50	140 - 4340	1000-10000	<b>198 350 763</b>	0.050
63	50	420 - 5820	1500-15000	<b>198 350 764</b>	0.050
75	65	245 - 7590	2000-20000	<b>198 350 765</b>	0.050
75	65	400 - 11120	3000-30000	<b>198 350 766</b>	0.050
75	65	-	8000-60000	<b>198 350 767</b>	0.050

## Accessories 4-20 mA sensor For type 335 and type 350

Type	d [mm]	DN [mm]	Corresponds to water scale [l/h]	Code	kg
GK 15	32	25	50-500	<b>198 335 962</b>	0.150
GK 15	32	25	100-1000	<b>198 335 963</b>	0.150
GK 15	40	32	150-1500	<b>198 335 964</b>	0.150
GK 15	40	32	250-2500	<b>198 335 965</b>	0.150
GK 15	50	40	200-2000	<b>198 335 966</b>	0.150
GK 15	50	40	300-3000	<b>198 335 967</b>	0.150
GK 15	50	40	600-6000	<b>198 335 968</b>	0.150
GK 15	63	50	600-6000	<b>198 335 969</b>	0.150
GK 15	63	50	1000-10000	<b>198 335 991</b>	0.150
GK 15	63	50	1500-15000	<b>198 335 992</b>	0.150
GK 15	75	65	2000-20000	<b>198 335 993</b>	0.150
GK 15	75	65	3000-30000	<b>198 335 994</b>	0.150
GK 15	75	65	8000-60000	<b>198 335 995</b>	0.150



## Accessories Limit contacts GK10/GK11 For type 335 and type 350

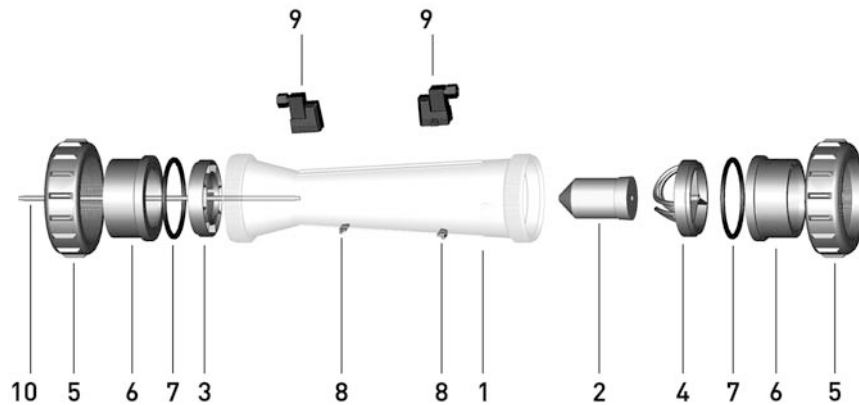
### Model:

- For all dimensions type 335/350

Type	Code	kg
GK10 (min.)	<b>198 335 960</b>	0.033
GK11 (max.)	<b>198 335 961</b>	0.033

# Spare parts variable area flow meters

## Variable area flow meter type 350



### Taper tube with water scale (1)

- \* PVC-U transparent >DN40 available from Sept. 2009



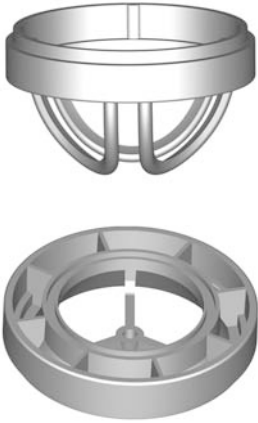
Scale range [l/h]	d [mm]	Inch	DN [mm]	PVC-U transparent Code	Polyamid Code	Polysulfon Code	kg
50 - 500	32	1	25	198 350 055	198 350 070	198 350 085	0.214
100 - 1000	32	1	25	198 350 056	198 350 071	198 350 086	0.214
150 - 1500	40	1 ¼	32	198 350 057	198 350 072	198 350 087	0.290
250 - 2500	40	1 ¼	32	198 350 058	198 350 073	198 350 088	0.290
200 - 2000	50	1 ½	40	198 350 059	198 350 074	198 350 089	0.350
300 - 3000	50	1 ½	40	198 350 060	198 350 075	198 350 090	0.350
600 - 6000	50	1 ½	40	198 350 061	198 350 076	198 350 091	0.350
600 - 6000	63	2	50	198350062*	198 350 077	198 350 092	0.453
1000 - 10000	63	2	50	198350063*	198 350 078	198 350 093	0.453
1500 - 15000	63	2	50	198350064*	198 350 079	198 350 094	0.453
2000 - 20000	75	2 ½	65	198350065*	198 350 080	198 350 095	0.622
3000 - 30000	75	2 ½	65	198350066*	198 350 081	198 350 096	0.622
8000 - 60000	75	2 ½	65	198350067*	198 350 082	198 350 097	0.622

### Taper tube without scale (1)

- \* PVC-U transparent >DN40 available from Sept. 2009



Scale range [l/h]	d [mm]	Inch	DN [mm]	PVC-U transparent Code	Polyamid Code	Polysulfon Code	kg
50 - 500	32	1	25	198 350 255	198 350 270	198 350 285	0.214
100 - 1000	32	1	25	198 350 256	198 350 271	198 350 286	0.214
150 - 1500	40	1 ¼	32	198 350 257	198 350 272	198 350 287	0.290
250 - 2500	40	1 ¼	32	198 350 258	198 350 273	198 350 288	0.290
200 - 2000	50	1 ½	40	198 350 259	198 350 274	198 350 289	0.350
300 - 3000	50	1 ½	40	198 350 260	198 350 275	198 350 290	0.350
600 - 6000	50	1 ½	40	198 350 261	198 350 276	198 350 291	0.350
600 - 6000	63	2	50	198350262*	198 350 277	198 350 292	0.453
1000 - 10000	63	2	50	198350263*	198 350 278	198 350 293	0.453
1500 - 15000	63	2	50	198350264*	198 350 279	198 350 294	0.453
2000 - 20000	75	2 ½	65	198350265*	198 350 280	198 350 295	0.622
3000 - 30000	75	2 ½	65	198350266*	198 350 281	198 350 296	0.622
8000 - 60000	75	2 ½	65	198350267*	198 350 282	198 350 297	0.622



## Insert PVDF (3,4)

Scale range [l/h]	d [mm]	Inch	DN [mm]	top (4) Code	bottom (3) Code	kg
50 - 500	32	1	25	<b>198 335 970</b>	<b>198 335 977</b>	0.012
100 - 1000	32	1	25	<b>198 335 970</b>	<b>198 335 977</b>	0.012
150 - 1500	40	1 ¼	32	<b>198 335 971</b>	<b>198 335 978</b>	0.019
250 - 2500	40	1 ¼	32	<b>198 335 971</b>	<b>198 335 978</b>	0.019
200 - 2000	50	1 ½	40	<b>198 335 972</b>	<b>198 335 979</b>	0.024
300 - 3000	50	1 ½	40	<b>198 335 972</b>	<b>198 335 979</b>	0.024
600 - 6000	50	1 ½	40	<b>198 335 972</b>	<b>198 335 979</b>	0.024
600 - 6000	63	2	50	<b>198 335 973</b>	<b>198 335 980</b>	0.042
1000 - 10000	63	2	50	<b>198 335 973</b>	<b>198 335 980</b>	0.042
1500 - 15000	63	2	50	<b>198 335 974</b>	<b>198 335 982</b>	0.042
2000 - 20000	75	2 ½	65	<b>198 335 975</b>	<b>198 335 981</b>	0.059
3000 - 30000	75	2 ½	65	<b>198 335 975</b>	<b>198 335 981</b>	0.059
8000 - 60000	75	2 ½	65	<b>198 335 975</b>	<b>198 335 981</b>	0.059



## Float PVDF (2)

Scale range [l/h]	d [mm]	Inch	DN [mm]	Without magnet Code	With magnet Code	kg
50 - 500	32	1	25	<b>198 335 455</b>	<b>198 335 470</b>	0.150
100 - 1000	32	1	25	<b>198 335 455</b>	<b>198 335 470</b>	0.150
150 - 1500	40	1 ¼	32	<b>198 335 455</b>	<b>198 335 470</b>	0.150
250 - 2500	40	1 ¼	32	<b>198 335 455</b>	<b>198 335 470</b>	0.150
200 - 2000	50	1 ½	40	<b>198 335 456</b>	<b>198 335 471</b>	0.328
300 - 3000	50	1 ½	40	<b>198 335 457</b>	<b>198 335 471</b>	0.328
600 - 6000	50	1 ½	40	<b>198 335 457</b>	<b>198 335 471</b>	0.328
600 - 6000	63	2	50	<b>198 335 457</b>	<b>198 335 471</b>	0.328
1000 - 10000	63	2	50	<b>198 335 457</b>	<b>198 335 471</b>	0.328
1500 - 15000	63	2	50	<b>198 335 458</b>	<b>198 335 472</b>	0.328
2000 - 20000	75	2 ½	65	<b>198 335 459</b>	<b>198 335 473</b>	0.920
3000 - 30000	75	2 ½	65	<b>198 335 459</b>	<b>198 335 473</b>	0.920
8000 - 60000	75	2 ½	65	<b>198 335 460</b>	<b>198 335 474</b>	0.746



## Guiding rod PEEK (10)

### Model:

- Only for DN50 (1'500 - 15'000 l/h) and DN65 (all metering ranges)

Scale range [l/h]	d [mm]	Inch	DN [mm]	Guiding rod Code	kg
1500 - 15000	63	2	50	<b>198 350 980</b>	0.015
2000 - 20000	75	2 ½	65	<b>198 350 980</b>	0.015
3000 - 30000	75	2 ½	65	<b>198 350 980</b>	0.015
8000 - 60000	75	2 ½	65	<b>198 350 980</b>	0.015

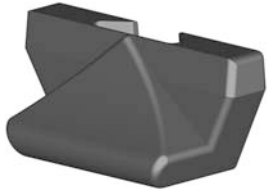


## Insert guiding rod PVDF (for 10)

### Model:

- Only for DN50 (1'500 - 15'000 l/h) and DN65 (all metering ranges)

Scale range [l/h]	d [mm]	Inch	DN [mm]	Insert guiding rod Code	kg
1500 - 15000	63	2	50	<b>198 335 986</b>	0.020
2000 - 20000	75	2 ½	65	<b>198 335 987</b>	0.020
3000 - 30000	75	2 ½	65	<b>198 335 987</b>	0.020
8000 - 60000	75	2 ½	65	<b>198 335 987</b>	0.020

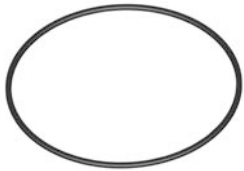


## Flow value indicator PS (8)

### Model:

- For all dimensions type 335/350

d [mm]	Inch	DN [mm]	Flow value indicator Code	kg
32	1	25	<b>198 335 990</b>	0.001
40	1 ¼	32	<b>198 335 990</b>	0.001
50	1 ½	40	<b>198 335 990</b>	0.001
63	2	50	<b>198 335 990</b>	0.001
75	2 ½	65	<b>198 335 990</b>	0.001



## O-rings (7)

d [mm]	Inch	DN [mm]	EPDM Code	FPM Code	kg
32	1	25	<b>748 410 008</b>	<b>749 410 008</b>	0.002
40	1 ¼	32	<b>748 410 009</b>	<b>749 410 009</b>	0.006
50	1 ½	40	<b>748 410 010</b>	<b>749 410 010</b>	0.007
63	2	50	<b>748 410 011</b>	<b>749 410 011</b>	0.010
75	2 ½	65	<b>748 410 014</b>	<b>749 410 014</b>	0.012



## Union nut (5)

PVDF union nut not useable for the special version with taper tube in PVDF

d [mm]	Inch	DN [mm]	PVC-U Code	PVC-C Code	ABS Code	PP-H Code
32	1	25	<b>721 690 008</b>	<b>723 690 008</b>	<b>729 690 408</b>	<b>727 690 408</b>
40	1 ¼	32	<b>721 690 009</b>	<b>723 690 009</b>	<b>729 690 409</b>	<b>727 690 409</b>
50	1 ½	40	<b>721 690 010</b>	<b>723 690 010</b>	<b>729 690 410</b>	<b>727 690 410</b>
63	2	50	<b>721 690 011</b>	<b>723 690 011</b>	<b>729 690 411</b>	<b>727 690 411</b>
75	2 ½	65	<b>198 806 423</b>	-	-	<b>198 806 421</b>

d [mm]	Inch	DN [mm]	PVDF Code	kg
32	1	25	<b>735 690 408</b>	0.048
40	1 ¼	32	<b>735 690 409</b>	0.097
50	1 ½	40	<b>735 690 410</b>	0.146
63	2	50	<b>735 690 411</b>	0.145
75	2 ½	65	<b>198 806 422</b>	0.295

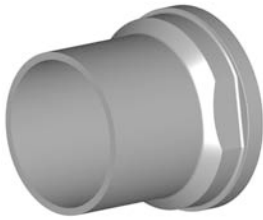


## Union end / Socket (6)

For DN65 PVDF only spigot

d [mm]	Inch	DN [mm]	PVC-U Code	PVC-C Code	ABS Code	PP-H Code
32	1	25	<b>721 600 108</b>	<b>723 600 108</b>	<b>729 600 108</b>	<b>727 600 108</b>
40	1 ¼	32	<b>721 600 109</b>	<b>723 600 109</b>	<b>729 600 109</b>	<b>727 600 109</b>
50	1 ½	40	<b>721 600 110</b>	<b>723 600 110</b>	<b>729 600 110</b>	<b>727 600 110</b>
63	2	50	<b>721 600 111</b>	<b>723 600 111</b>	<b>729 600 111</b>	<b>727 600 111</b>
75	2 ½	65	<b>721 600 112</b>	<b>700 253 867</b>	<b>700 246 112</b>	<b>700 253 866</b>

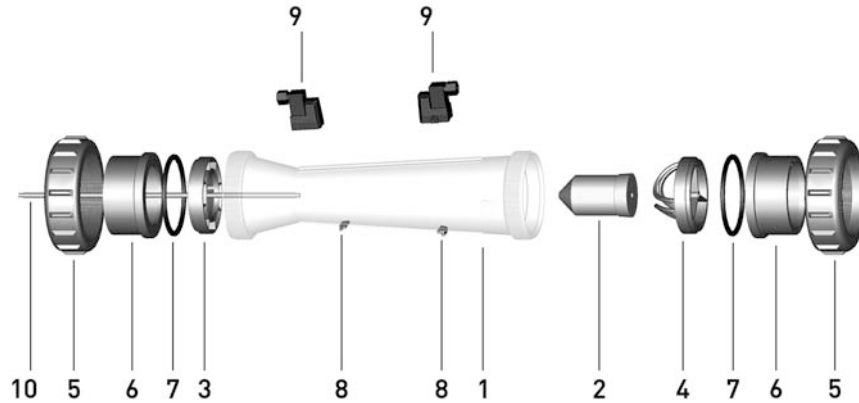
d [mm]	Inch	DN [mm]	PVDF Code	kg
32	1	25	<b>735 600 108</b>	0.026
40	1 ¼	32	<b>735 600 109</b>	0.046
50	1 ½	40	<b>735 600 110</b>	0.054
63	2	50	<b>735 600 111</b>	0.079
75	2 ½	65	-	0.155



## Union end / Spigot (6)

d [mm]	Inch	DN [mm]	PP-H Code	PVDF Code	kg
32	1	25	727 608 508	735 608 608	0.044
40	1 ¼	32	727 608 509	735 608 609	0.072
50	1 ½	40	727 608 510	735 608 610	0.086
63	2	50	727 608 511	735 608 611	0.138
75	2 ½	65	700 256 401	175 483 013	0.225

## Variable area flow meter type 335



## Taper tube with water scale (1)

- \* PVC-U transparent >DN40 available from Sept. 2009



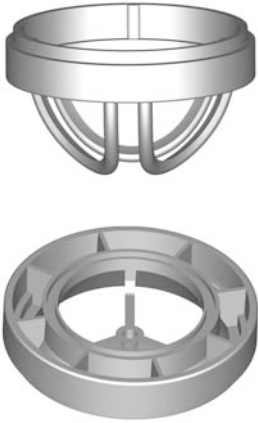
Scale range [l/h]	d [mm]	Inch	DN [mm]	PVC-U transparent Code	Polyamid Code	Polysulfon Code	kg
50 - 500	32	1	25	198 335 055	198 335 070	198 335 085	0.214
100 - 1000	32	1	25	198 335 056	198 335 071	198 335 086	0.214
150 - 1500	40	1 ¼	32	198 335 057	198 335 072	198 335 087	0.290
250 - 2500	40	1 ¼	32	198 335 058	198 335 073	198 335 088	0.290
200 - 2000	50	1 ½	40	198 335 059	198 335 074	198 335 089	0.350
300 - 3000	50	1 ½	40	198 335 060	198 335 075	198 335 090	0.350
600 - 6000	50	1 ½	40	198 335 061	198 335 076	198 335 091	0.350
600 - 6000	63	2	50	198335062*	198 335 077	198 335 092	0.453
1000 - 10000	63	2	50	198335063*	198 335 078	198 335 093	0.453
1500 - 15000	63	2	50	198335064*	198 335 079	198 335 094	0.453
2000 - 20000	75	2 ½	65	198335065*	198 335 080	198 335 095	0.622
3000 - 30000	75	2 ½	65	198335066*	198 335 081	198 335 096	0.622
8000 - 60000	75	2 ½	65	198335067*	198 335 082	198 335 097	0.622

## Taper tube without scale (1)

- \* PVC-U transparent >DN40 available from Sept. 2009



Scale range [l/h]	d [mm]	Inch	DN [mm]	PVC-U transparent Code	Polyamid Code	Polysulfon Code	kg
50 - 500	32	1	25	198 335 255	198 335 270	198 335 285	0.214
100 - 1000	32	1	25	198 335 256	198 335 271	198 335 286	0.214
150 - 1500	40	1 ¼	32	198 335 257	198 335 272	198 335 287	0.290
250 - 2500	40	1 ¼	32	198 335 258	198 335 273	198 335 288	0.290
200 - 2000	50	1 ½	40	198 335 259	198 335 274	198 335 289	0.350
300 - 3000	50	1 ½	40	198 335 260	198 335 275	198 335 290	0.350
600 - 6000	50	1 ½	40	198 335 261	198 335 276	198 335 291	0.350
600 - 6000	63	2	50	198335262*	198 335 277	198 335 292	0.453
1000 - 10000	63	2	50	198335263*	198 335 278	198 335 293	0.453
1500 - 15000	63	2	50	198335264*	198 335 279	198 335 294	0.453
2000 - 20000	75	2 ½	65	198335265*	198 335 280	198 335 295	0.622
3000 - 30000	75	2 ½	65	198335266*	198 335 281	198 335 296	0.622
8000 - 60000	75	2 ½	65	198335267*	198 335 282	198 335 297	0.622



## Insert PVDF (3,4)

Scale range [l/h]	d [mm]	Inch	DN [mm]	top (4) Code	bottom (3) Code	kg
50 - 500	32	1	25	<b>198 335 970</b>	<b>198 335 977</b>	0.012
100 - 1000	32	1	25	<b>198 335 970</b>	<b>198 335 977</b>	0.012
150 - 1500	40	1 ¼	32	<b>198 335 971</b>	<b>198 335 978</b>	0.019
250 - 2500	40	1 ¼	32	<b>198 335 971</b>	<b>198 335 978</b>	0.019
200 - 2000	50	1 ½	40	<b>198 335 972</b>	<b>198 335 979</b>	0.024
300 - 3000	50	1 ½	40	<b>198 335 972</b>	<b>198 335 979</b>	0.024
600 - 6000	50	1 ½	40	<b>198 335 972</b>	<b>198 335 979</b>	0.024
600 - 6000	63	2	50	<b>198 335 973</b>	<b>198 335 980</b>	0.042
1000 - 10000	63	2	50	<b>198 335 973</b>	<b>198 335 980</b>	0.042
1500 - 15000	63	2	50	<b>198 335 974</b>	<b>198 335 982</b>	0.042
2000 - 20000	75	2 ½	65	<b>198 335 975</b>	<b>198 335 981</b>	0.059
3000 - 30000	75	2 ½	65	<b>198 335 975</b>	<b>198 335 981</b>	0.059
8000 - 60000	75	2 ½	65	<b>198 335 975</b>	<b>198 335 981</b>	0.059



## Float PVDF (2)

Scale range [l/h]	d [mm]	Inch	DN [mm]	Without magnet Code	With magnet (bistabil) Code	kg
50 - 500	32	1	25	<b>198 335 455</b>	<b>198 335 470</b>	0.150
100 - 1000	32	1	25	<b>198 335 455</b>	<b>198 335 470</b>	0.150
150 - 1500	40	1 ¼	32	<b>198 335 455</b>	<b>198 335 470</b>	0.150
250 - 2500	40	1 ¼	32	<b>198 335 455</b>	<b>198 335 470</b>	0.150
200 - 2000	50	1 ½	40	<b>198 335 456</b>	<b>198 335 471</b>	0.328
300 - 3000	50	1 ½	40	<b>198 335 457</b>	<b>198 335 471</b>	0.328
600 - 6000	50	1 ½	40	<b>198 335 457</b>	<b>198 335 471</b>	0.328
600 - 6000	63	2	50	<b>198 335 457</b>	<b>198 335 471</b>	0.328
1000 - 10000	63	2	50	<b>198 335 457</b>	<b>198 335 471</b>	0.328
1500 - 15000	63	2	50	<b>198 335 458</b>	<b>198 335 472</b>	0.328
2000 - 20000	75	2 ½	65	<b>198 335 459</b>	<b>198 335 473</b>	0.920
3000 - 30000	75	2 ½	65	<b>198 335 459</b>	<b>198 335 473</b>	0.920
8000 - 60000	75	2 ½	65	<b>198 335 460</b>	<b>198 335 474</b>	0.746



## Guiding rod PEEK (10)

### Model:

- Only for DN50 (1'500 - 15'000 l/h) and DN65 (all metering ranges)

Scale range [l/h]	d [mm]	Inch	DN [mm]	Guiding rod Code	kg
1500 - 15000	63	2	50	<b>198 335 985</b>	0.013
2000 - 20000	75	2 ½	65	<b>198 335 985</b>	0.013
3000 - 30000	75	2 ½	65	<b>198 335 985</b>	0.013
8000 - 80000	75	2 ½	65	<b>198 335 985</b>	0.013

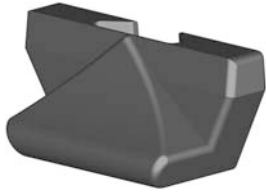


## Insert guiding rod PVDF (for 10)

### Model:

- Only for DN50 (1'500 - 15'000 l/h) and DN65 (all metering ranges)

Scale range [l/h]	d [mm]	Inch	DN [mm]	Insert guiding rod Code	kg
1500 - 15000	63	2	50	<b>198 335 986</b>	0.020
2000 - 20000	75	2 ½	65	<b>198 335 987</b>	0.020
3000 - 30000	75	2 ½	65	<b>198 335 987</b>	0.020
8000 - 80000	75	2 ½	65	<b>198 335 987</b>	0.020

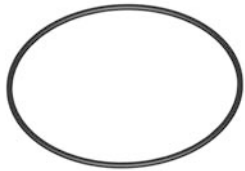


## Flow value indicator PS (8)

### Model:

- For all dimensions type 335/350

d [mm]	Inch	DN [mm]	Flow value indicator Code	kg
32	1	25	<b>198 335 990</b>	0.001
40	1 ¼	32	<b>198 335 990</b>	0.001
50	1 ½	40	<b>198 335 990</b>	0.001
63	2	50	<b>198 335 990</b>	0.001
75	2 ½	65	<b>198 335 990</b>	0.001



## O-rings (7)

d [mm]	Inch	DN [mm]	EPDM Code	FPM Code	kg
32	1	25	<b>748 410 008</b>	<b>749 410 008</b>	0.002
40	1 ¼	32	<b>748 410 009</b>	<b>749 410 009</b>	0.006
50	1 ½	40	<b>748 410 010</b>	<b>749 410 010</b>	0.007
63	2	50	<b>748 410 011</b>	<b>749 410 011</b>	0.010
75	2 ½	65	<b>748 410 014</b>	<b>749 410 014</b>	0.012



## Union nut (5)

PVDF union nut not useable for the special version with taper tube in PVDF

d [mm]	Inch	DN [mm]	PVC-U Code	PVC-C Code	ABS Code	PP-H Code
32	1	25	<b>721 690 008</b>	<b>723 690 008</b>	<b>729 690 408</b>	<b>727 690 408</b>
40	1 ¼	32	<b>721 690 009</b>	<b>723 690 009</b>	<b>729 690 409</b>	<b>727 690 409</b>
50	1 ½	40	<b>721 690 010</b>	<b>723 690 010</b>	<b>729 690 410</b>	<b>727 690 410</b>
63	2	50	<b>721 690 011</b>	<b>723 690 011</b>	<b>729 690 411</b>	<b>727 690 411</b>
75	2 ½	65	<b>198 806 423</b>	-	-	<b>198 806 421</b>

d [mm]	Inch	DN [mm]	PVDF Code	kg
32	1	25	<b>735 690 408</b>	0.048
40	1 ¼	32	<b>735 690 409</b>	0.097
50	1 ½	40	<b>735 690 410</b>	0.146
63	2	50	<b>735 690 411</b>	0.145
75	2 ½	65	<b>198 806 422</b>	0.295

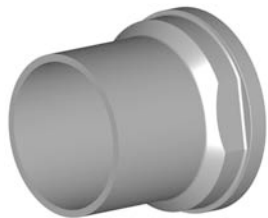


## Union end / Socket (6)

For DN65 PVDF only spigot

d [mm]	Inch	DN [mm]	PVC-U Code	PVC-C Code	ABS Code	PP-H Code
32	1	25	<b>721 600 108</b>	<b>723 600 108</b>	<b>729 600 108</b>	<b>727 600 108</b>
40	1 ¼	32	<b>721 600 109</b>	<b>723 600 109</b>	<b>729 600 109</b>	<b>727 600 109</b>
50	1 ½	40	<b>721 600 110</b>	<b>723 600 110</b>	<b>729 600 110</b>	<b>727 600 110</b>
63	2	50	<b>721 600 111</b>	<b>723 600 111</b>	<b>729 600 111</b>	<b>727 600 111</b>
75	2 ½	65	<b>721 600 112</b>	<b>700 253 867</b>	<b>700 246 112</b>	<b>700 253 866</b>

d [mm]	Inch	DN [mm]	PVDF Code	kg
32	1	25	<b>735 600 108</b>	0.026
40	1 ¼	32	<b>735 600 109</b>	0.046
50	1 ½	40	<b>735 600 110</b>	0.054
63	2	50	<b>735 600 111</b>	0.079
75	2 ½	65	-	0.155



## Union end / Spigot (6)

d [mm]	Inch	DN [mm]	PP-H Code	PVDF Code	kg	
32	1	25	<b>727 608 508</b>	<b>735 608 608</b>	0.044	
40	1 ¼	32	<b>727 608 509</b>	<b>735 608 609</b>	0.072	
50	1 ½	40	<b>727 608 510</b>	<b>735 608 610</b>	0.086	
63	2	50	<b>727 608 511</b>	<b>735 608 611</b>	0.138	
75	2 ½	65	<b>700 256 401</b>	<b>175 483 013</b>	0.225	



# General information

## PVC-U Piping systems for surface finish and varnishing technology

### Silicon free / paint compatible

Growing environmental awareness, continually increasing requirements and regulations covering the emission of toxic substances have led to the development of water soluble varnishes and paints.

The use of new varnishing techniques can reduce emissions by up to 90%.

**For the production, transport and processing of water soluble paints and varnishes only pipe components can be used which are free from substances causing varnish wetting faults, such as silicones, certain greases, oils and waxes.**

### GF Piping Systems – an experienced partner

GF Piping Systems has collaborated closely from the very beginning with manufacturers, plant constructors and operators in this special field of surface finish and varnishing technology. We have successfully supplied plant constructors and users of varnishing processes, e. g. the automobile industry, for many years.

Maximum demands are made of our production:

- Silicon free separating agents in the moulding shop
- Absolute care during cleaning, installation and packing
- Uncompromising quality control
- Quality assurance system certified to ISO 9001



### Fittings

The composition of the raw material (granulate) is silicon free. All standard fittings are produced with silicon free separating agents. The fittings are packed in a cardboard box after injection moulding in standard quantities (SP) protected by a plastic bag.

GF Piping Systems recommends the selection of standard packs when ordering fittings, in order to prevent contamination on the way to the final consumer.

### Hand operated valves and unions

The individual parts of the valves and unions are cleaned with distilled water (14 megaohms) in a special cleaning process. They are assembled in a special working area wearing silicon free protective gloves. Sliding parts are smeared lightly in accordance with requirements with special lubricants suitable for varnishing, e. g. Synthese PRO AA4. Every valve and union is designated with the following sticker:

SILICON FREE

Valves and unions are packed individually in a sealed bag.

### Seals

Seals are subjected to the same production, cleaning and packing process as hand operated valves and unions.

### Maintenance

For safety reasons we recommend changing the entire valve body when dismantling the valves.

# PVC-U Silicon Free

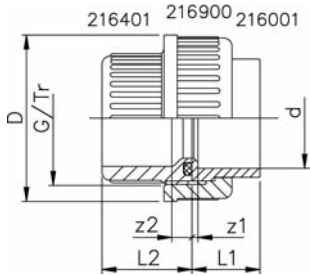
21 51 01



## Union for solvent cement jointing PVC-U Silicone free metric

### Model:

- Silicone free / paint-compatible
- Union End: solvent socket metric
- Union Bush: Solvent socket metric
- With O-ring gasket



d [mm]	PN	EPDM Code	FPM Code	kg	z1 [mm]	z2 [mm]	D [mm]	L1 [mm]	L2 [mm]	G/Tr
10	16	721 510 178	721 510 153	0.020	3	10	31	15	22	5/8
12	16	721 510 179	721 510 154	0.019	3	10	31	15	22	5/8
16	16	721 510 180	721 510 155	0.031	3	10	35	17	24	3/4
20	16	721 510 181	721 510 156	0.040	3	10	43	19	26	1
25	16	721 510 182	721 510 157	0.066	3	10	51	22	29	1 1/4
32	16	721 510 183	721 510 158	0.090	3	10	58	25	33	1 1/2
40	16	721 510 184	721 510 159	0.175	3	12	72	29	39	2
50	16	721 510 185	721 510 160	0.215	3	14	83	34	46	2 1/4
63	16	721 510 186	721 510 161	0.380	3	18	100	41	58	2 3/4
75	10	721 510 187	721 510 162	0.615	3	18	135	47	62	Tr 108x5
90	10	721 510 188	721 510 163	0.925	5	18	158	56	69	Tr 128x5
110	10	721 510 189	721 510 164	1.425	5	11	188	66	72	Tr 154x6



DN10/15 - 50



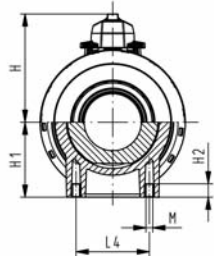
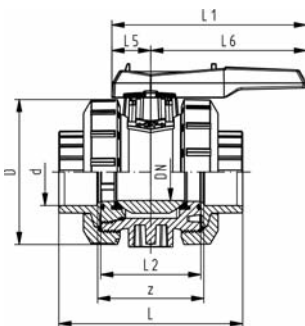
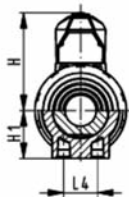
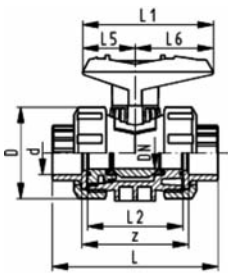
## Ball valve type 546 PVC-U SF With solvent cement sockets metric

### Model:

- Silicone free / paint-compatible
- For easy installation and removal
- z-dimension, valve end and union nut are **not compatible** with type 346 (DN10/15-50) resp. type 370 (DN65-100)
- With PVDF ball seal
- Without mounting inserts

### Option:

- Individual configuration of the valve (see diagram)
- Multifunctional module with integrated limit switches



d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
16	10	16	71	161 546 601	161 546 611	0.150
20	15	16	185	161 546 602	161 546 612	0.150
25	20	16	350	161 546 603	161 546 613	0.230
32	25	16	700	161 546 604	161 546 614	0.330
40	32	16	1000	161 546 605	161 546 615	0.600
50	40	16	1600	161 546 606	161 546 616	0.800
63	50	16	3100	161 546 607	161 546 617	1.460
75	65	16	5000	161 546 608	161 546 618	4.900
90	80	16	7000	161 546 609	161 546 619	7.400
110	100	16	11000	161 546 610	161 546 620	11.600

d [mm]	D [mm]	H [mm]	H1 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	z [mm]	closest inch
16	50	57	27	92	77	56	25	32	45	64	3/8
20	50	57	27	95	77	56	25	32	45	64	1/2
25	58	67	30	110	97	65	25	39	58	72	3/4
32	68	73	36	123	97	71	25	39	58	79	1
40	84	90	44	146	128	85	45	54	74	94	1 1/4
50	97	97	51	157	128	89	45	54	74	95	1 1/2
63	124	116	64	183	152	101	45	66	87	107	2
75	166	149	85	233	270	136	70	64	206	144	2 1/2
90	200	161	105	254	270	141	70	64	206	151	3
110	238	178	123	301	320	164	120	64	256	174	4



DN10/15 - 50



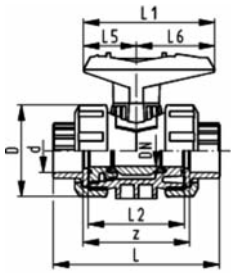
## Ball valve type 546 PVC-U SF With mounting inserts With solvent cement sockets metric

### Model:

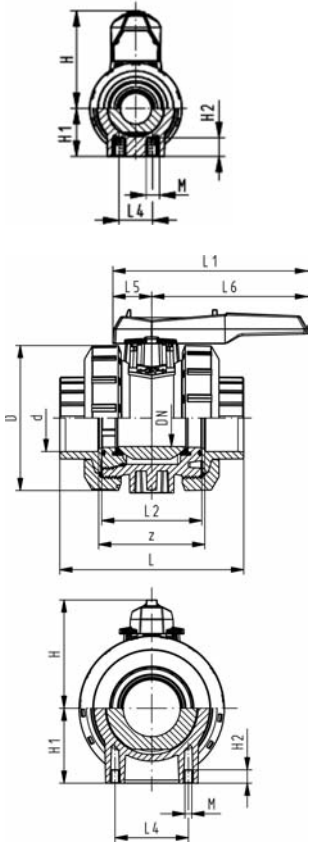
- Silicone free / paint-compatible
- For easy installation and removal
- z-dimension, valve end and union nut are **not compatible** with type 346 (DN10/15-50) resp. type 370 (DN65-100)
- With PVDF ball seal
- Integrated stainless steel mounting inserts

### Option:

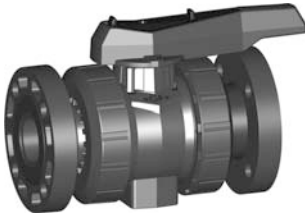
- Individual configuration of the valve (see diagram)
- Multifunctional module with integrated limit switches



d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
16	10	16	71	800 000 601	800 000 611	0.150
20	15	16	185	800 000 602	800 000 612	0.150
25	20	16	350	800 000 603	800 000 613	0.230
32	25	16	700	800 000 604	800 000 614	0.330
40	32	16	1000	800 000 605	800 000 615	0.600
50	40	16	1600	800 000 606	800 000 616	0.800
63	50	16	3100	800 000 607	800 000 617	1.460
75	65	16	5000	800 000 608	800 000 618	4.900
90	80	16	7000	800 000 609	800 000 619	7.400
110	100	16	11000	800 000 610	800 000 620	11.600



d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	M	z [mm]	closest inch
16	50	57	27	12	92	77	56	25	32	45	M6	64	3/8
20	50	57	27	12	95	77	56	25	32	45	M6	64	1/2
25	58	67	30	12	110	97	65	25	39	58	M6	72	3/4
32	68	73	36	12	123	97	71	25	39	58	M6	79	1
40	84	90	44	15	146	128	85	45	54	74	M8	94	1 1/4
50	97	97	51	15	157	128	89	45	54	74	M8	95	1 1/2
63	124	116	64	15	183	152	101	45	66	87	M8	107	2
75	166	149	85	15	233	270	136	70	64	206	M8	144	2 1/2
90	200	161	105	15	254	270	141	70	64	206	M8	151	3
110	238	178	123	22	301	320	164	120	64	256	M12	174	4



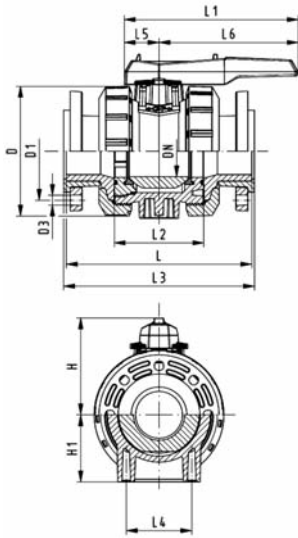
## Ball valve type 546 PVC-U SF With mounting inserts With backing flanges PVC-U metric

### Model:

- Silicone free / paint-compatible
- For easy installation and removal
- z-dimension, valve end and union nut are **not compatible** with type 346 (DN10/15-50) resp. type 370 (DN65-100)
- With PVDF ball seal
- Integrated stainless steel mounting inserts
- Overall length according to EN 558
- Connecting dimension: ISO 7005 PN10, EN 1092 PN10, DIN 2501 PN10

### Option:

- Individual configuration of the valve (see diagram)
- Multifunctional module with integrated limit switches



d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg								
75	65	10	5000	<b>161 546 128</b>	<b>161 546 138</b>	7.200								
90	80	10	7000	<b>161 546 129</b>	<b>161 546 139</b>	10.600								
110	100	10	11000	<b>161 546 130</b>	<b>161 546 140</b>	16.500								

d [mm]	D [mm]	D1 [mm]	D3 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	H [mm]	H1 [mm]	M	closest inch
75	166	145	18	284	270	136	290	70	64	206	149	85	8	2 ½
90	200	160	18	300	270	141	310	70	64	206	161	105	8	3
110	238	180	18	340	320	164	350	120	64	256	178	123	12	4

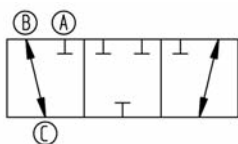
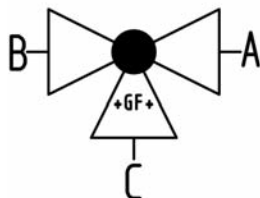


## 3-Way ball valve type 543 PVC-U SF Vertical/L-port With solvent cement sockets metric



### Model:

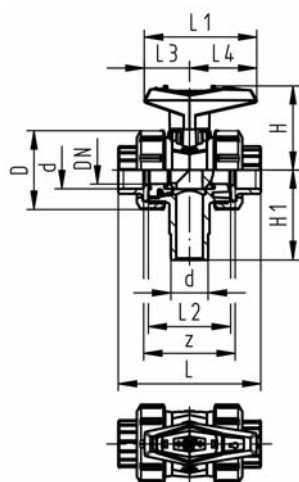
- Vertical inlet solvent cement spigot metric
- Easy installation and removal using union on third outlet
- Ball seals PVDF
- Electric actuator available separately
- Angle of operation 360° without turn limiter
- Silicone free / paint-compatible
- Delivery status B-C opened, see flow scheme



### Mode of action:

- For interconnection of two inputs

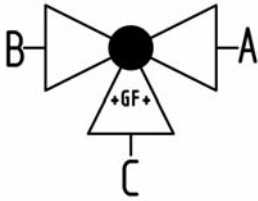
d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	49	<b>161 543 781</b>	<b>161 543 791</b>	0.162
20	15	10	77	<b>161 543 782</b>	<b>161 543 792</b>	0.166
25	20	10	146	<b>161 543 783</b>	<b>161 543 793</b>	0.255
32	25	10	260	<b>161 543 784</b>	<b>161 543 794</b>	0.372
40	32	10	437	<b>161 543 785</b>	<b>161 543 795</b>	0.622
50	40	10	667	<b>161 543 786</b>	<b>161 543 796</b>	0.886
63	50	10	1293	<b>161 543 787</b>	<b>161 543 797</b>	1.617



d [mm]	D [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	H [mm]	H1 [mm]	z [mm]	closest inch
16	50	92	77	56	32	45	57	62	64	$\frac{3}{8}$
20	50	95	77	56	32	45	57	62	64	$\frac{1}{2}$
25	58	111	97	66	39	58	67	72	74	$\frac{3}{4}$
32	68	123	97	71	39	58	73	77	79	1
40	84	146	128	85	54	74	90	87	95	$1 \frac{1}{4}$
50	97	157	128	89	54	74	97	97	95	$1 \frac{1}{2}$
63	124	183	152	101	66	87	116	112	107	2

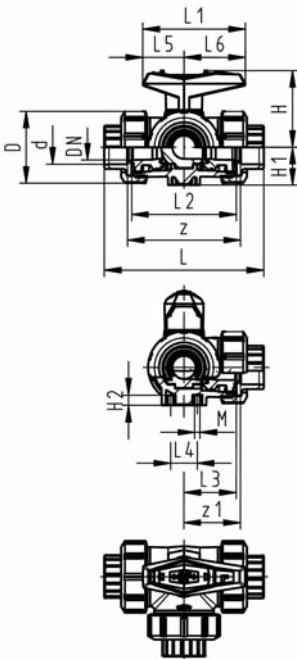


### 3-Way ball valve type 543 PVC-U SF Horizontal/L-port With solvent cement sockets metric



**Model:**

- For easy installation and removal (valve end and union nut are compatible with type 546)
- Ball seals PVDF
- Pneumatic or electric actuator available separately
- Angle of operation 360° without turn limiter
- Turn limiter 90° enclosed, in different positions usable as a clip-on ring
- Integrated stainless steel mounting inserts
- Silicone free / paint-compatible
- Delivery status A-C opened, see flow scheme

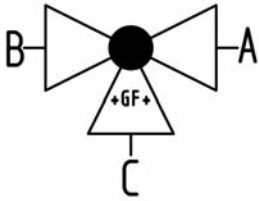


d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	50	161 543 141	161 543 151	0.245
20	15	10	75	161 543 142	161 543 152	0.251
25	20	10	150	161 543 143	161 543 153	0.361
32	25	10	280	161 543 144	161 543 154	0.551
40	32	10	480	161 543 145	161 543 155	0.938
50	40	10	620	161 543 146	161 543 156	1.390
63	50	10	1230	161 543 147	161 543 157	2.705

d [mm]	D [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	H [mm]	H1 [mm]	H2 [mm]	M	z [mm]	z1 [mm]	closest inch
16	50	109	77	73	36	25	32	45	57	28	8	6	81	40	3/8
20	50	112	77	73	36	25	32	45	57	28	8	6	81	40	1/2
25	58	131	97	86	43	25	39	58	67	32	8	6	94	47	3/4
32	68	151	97	99	50	25	39	58	73	36	8	6	107	54	1
40	84	181	128	120	60	45	54	74	90	45	9	8	130	65	1 1/4
50	97	205	128	137	69	45	54	74	97	51	9	8	143	72	1 1/2
63	124	261	152	179	89	45	66	87	116	65	9	8	185	92	2

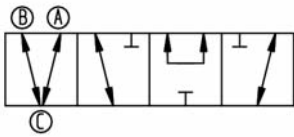


## 3-Way ball valve type 543 PVC-U SF Horizontal/T-port With solvent cement sockets metric

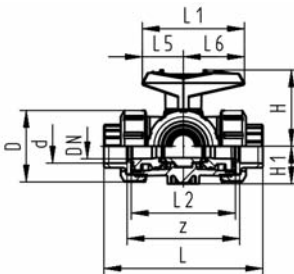


### Model:

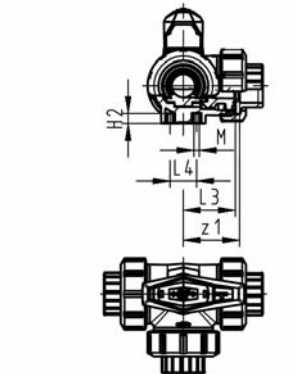
- For easy installation and removal (valve end and union nut are compatible with type 546)
- Ball seals PVDF
- Pneumatic or electric actuator available separately
- Angle of operation 360° without turn limiter
- Turn limiter 90° enclosed, in different positions usable as a clip-on ring
- Integrated stainless steel mounting inserts
- Silicone free / paint-compatible
- Delivery status A-B-C opened, see flow scheme



d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	140	161 543 341	161 543 351	0.244
20	15	10	200	161 543 342	161 543 352	0.250
25	20	10	470	161 543 343	161 543 353	0.359
32	25	10	793	161 543 344	161 543 354	0.544
40	32	10	1290	161 543 345	161 543 355	0.927
50	40	10	1910	161 543 346	161 543 356	1.369
63	50	10	3100	161 543 347	161 543 357	2.660



d [mm]	D [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	H [mm]	H1 [mm]	H2 [mm]	M [mm]	z [mm]	z1 [mm]	closest inch
16	50	109	77	73	36	25	32	45	57	28	8	6	81	40	3/8
20	50	112	77	73	36	25	32	45	57	28	8	6	81	40	1/2
25	58	131	97	86	43	25	39	58	67	32	8	6	94	47	3/4
32	68	151	97	99	50	25	39	58	73	36	8	6	107	54	1
40	84	181	128	120	60	45	54	74	90	45	9	8	130	65	1 1/4
50	97	205	128	137	69	45	54	74	97	51	9	8	143	72	1 1/2
63	124	261	152	179	89	45	66	87	116	65	9	8	185	92	2

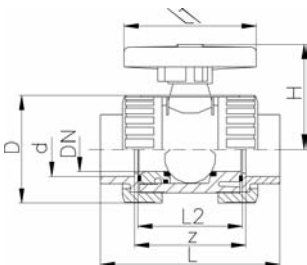


## Metering ball valve type 323 PVC-U SF With solvent cement sockets metric



### Model:

- Silicone free / paint-compatible
- For easy installation and removal
- Ball seals PVDF
- Angle of operation 180° with scale



d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	11	161 323 001	161 323 011	0.158
20	15	10	20	161 323 002	161 323 012	0.169

d [mm]	z [mm]	D [mm]	L [mm]	L1 [mm]	L2 [mm]	H [mm]	closest inch
16	71	45	99	78	63	50	3/8
20	71	45	102	78	63	50	1/2

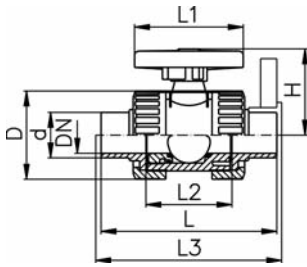




## Metering ball valve type 323 PVC-U SF With solvent cement spigots metric

### Model:

- Silicone free / paint-compatible
- For easy installation and removal
- Ball seals PVDF
- Angle of operation 180° with scale
- Overall length EN 558



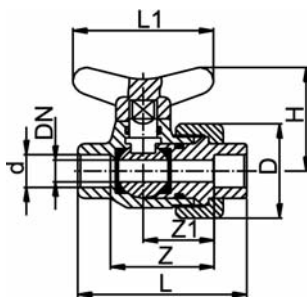
d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	11	161 323 041	161 323 051	0.158
20	15	10	20	161 323 042	161 323 052	0.169

d [mm]	D [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	H [mm]	closest inch
16	43	114	78	63	120	50	$\frac{3}{8}$
20	43	124	78	63	130	50	$\frac{1}{2}$



## Laboratory ball valve type 322 PVC-U SF With solvent cement sockets metric

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
10	6	10	11	161 322 251	161 322 256	0.042
12	8	10	20	161 322 252	161 322 257	0.045



d [mm]	z [mm]	z1 [mm]	D [mm]	L [mm]	L1 [mm]	H [mm]
10	26	15	34	52	45	38
12	36	25	34	60	45	38



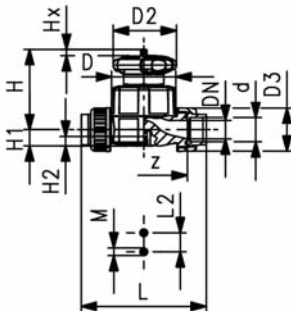
## Diaphragm valve type 514 PVC-U SF With solvent cement sockets metric

### Model:

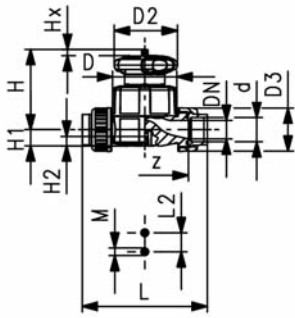
- Silicone free / paint-compatible
- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Handwheel with built-in locking mechanism
- For easy installation and removal
- Short overall length

### Option:

- Individual configuration of the valve (see diagram)
- Self adjusting multifunctional module with integrated limit switches
- PN16 available as a configuration



d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	PTFE/EPDM Code	kg
16	10	10	125	161 514 021	161 514 071	0.408
20	15	10	125	161 514 022	161 514 072	0.408
25	20	10	271	161 514 023	161 514 073	0.538
32	25	10	481	161 514 024	161 514 074	1.181
40	32	10	759	161 514 025	161 514 075	1.447
50	40	10	1263	161 514 026	161 514 076	2.546
63	50	10	1728	161 514 027	161 514 077	3.413



d [mm]	D [mm]	D2 [mm]	D3 [mm]	L [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	M	z [mm]	Lift = Hx [mm]	closest inch
16	65	65	43	124	25	73	14	12	M6	96	7	3/8
20	65	65	43	128	25	73	14	12	M6	96	7	1/2
25	80	65	51	152	25	81	18	12	M6	114	10	3/4
32	88	87	58	166	25	107	22	12	M6	122	13	1
40	101	87	72	192	45	115	26	15	M8	140	15	1 1/4
50	117	135	83	222	45	148	32	15	M8	160	19	1 1/2
63	144	135	100	266	45	166	39	15	M8	190	25	2



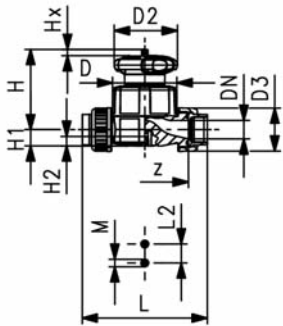
## Diaphragm valve type 514 PVC-U SF With threaded sockets Rp

### Model:

- Silicone free / paint-compatible
- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Handwheel with built-in locking mechanism
- For easy installation and removal
- Short overall length

### Option:

- Individual configuration of the valve (see diagram)
- Self adjusting multifunctional module with integrated limit switches
- PN16 available as a configuration



Rp [inch]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	PTFE/EPDM Code	kg
1/2	15	10	125	<b>161 514 422</b>	<b>161 514 472</b>	0.410
3/4	20	10	271	<b>161 514 423</b>	<b>161 514 473</b>	0.534
1	25	10	481	<b>161 514 424</b>	<b>161 514 474</b>	1.183
1 1/4	32	10	759	<b>161 514 425</b>	<b>161 514 475</b>	1.449
1 1/2	40	10	1263	<b>161 514 426</b>	<b>161 514 476</b>	2.558
2	50	10	1728	<b>161 514 427</b>	<b>161 514 477</b>	3.477

Rp [inch]	D [mm]	D2 [mm]	D3 [mm]	L [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	M	z [mm]	Lift = Hx [mm]
1/2	65	65	43	128	25	73	14	12	M6	96	7
3/4	80	65	51	152	25	81	18	12	M6	114	10
1	88	87	58	166	25	107	22	12	M6	122	13
1 1/4	101	87	72	192	45	115	26	15	M8	140	15
1 1/2	117	135	83	222	45	148	32	15	M8	160	19
2	144	135	100	266	45	166	39	15	M8	190	25



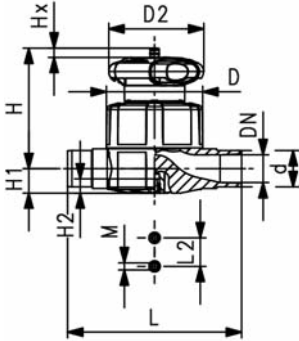
## Diaphragm valve type 515 PVC-U SF With solvent cement spigots metric

### Model:

- Silicone free / paint-compatible
- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Handwheel with built-in locking mechanism
- Overall length EN 558

### Option:

- Individual configuration of the valve (see diagram)
- Self adjusting multifunctional module with integrated limit switches
- PN16 available as a configuration



d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	PTFE/EPDM Code	kg
20	15	10	125	161 515 022	161 515 072	0.345
25	20	10	271	161 515 023	161 515 073	0.456
32	25	10	481	161 515 024	161 515 074	1.052
40	32	10	759	161 515 025	161 515 075	1.257
50	40	10	1263	161 515 026	161 515 076	2.292
63	50	10	1728	161 515 027	161 515 077	2.991

d [mm]	D [mm]	D2 [mm]	L [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	M	Lift = Hx [mm]	closest inch
20	65	65	124	25	73	14	12	M6	7	1/2
25	80	65	144	25	81	18	12	M6	10	3/4
32	88	87	154	25	107	22	12	M6	13	1
40	101	87	174	45	115	26	15	M8	15	1 1/4
50	117	135	194	45	148	32	15	M8	19	1 1/2
63	144	135	224	45	166	39	15	M8	25	2



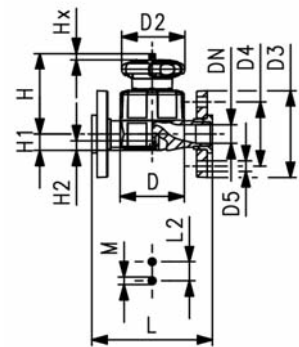
## Diaphragm valve type 517 PVC-U SF With backing flanges PVC-U metric

### Model:

- Silicone free / paint-compatible
- Double flow rate compared to predecessor
- One housing nut replaces four screws
- Handwheel with built-in locking mechanism
- Overall length EN 558
- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, BS 4504 PN 10
- Flat sealing faces

### Option:

- Individual configuration of the valve (see diagram)
- Self adjusting multifunctional module with integrated limit switches



d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	PTFE/EPDM Code	kg
20	15	10	125	161 517 022	161 517 072	0.503
25	20	10	271	161 517 023	161 517 073	0.672
32	25	10	481	161 517 024	161 517 074	1.364
40	32	10	759	161 517 025	161 517 075	1.372
50	40	10	1263	161 517 026	161 517 076	2.898
63	50	10	1728	161 517 027	161 517 077	3.817

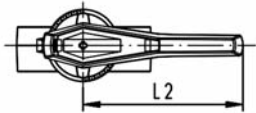
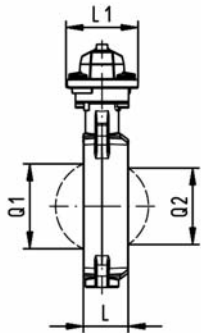
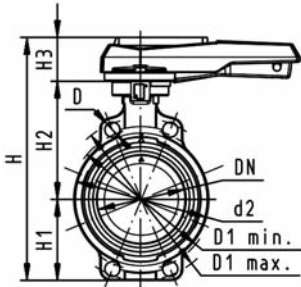
d [mm]	D [mm]	D2 [mm]	D3 [mm]	D4 [mm]	D5 [mm]	L [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	M	Lift = Hx [mm]	closest inch
20	65	65	95	65	14	130	25	73	14	12	M6	7	1/2
25	80	65	105	75	14	150	25	81	18	12	M6	10	3/4
32	88	87	115	85	14	160	25	107	22	12	M6	13	1
40	101	87	140	100	18	180	45	115	26	15	M8	15	1 1/4
50	117	135	150	110	18	200	45	148	32	15	M8	19	1 1/2
63	144	135	165	125	18	230	45	166	39	15	M8	25	2



## Butterfly valve type 567 PVC-U SF Hand lever with ratchet settings

### Model:

- Silicone free / paint-compatible
- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, ANSI/ASME B 16.5 Class 150, BS 1560: 1989, BS 4504, JIS B 2220
- Overall length according to EN 558, ISO 5752



d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
63	50	2	10	1470	<b>161 567 402</b>	<b>161 567 422</b>	1.044
75	65	2 ½	10	2200	<b>161 567 403</b>	<b>161 567 423</b>	1.148
90	80	3	10	3000	<b>161 567 404</b>	<b>161 567 424</b>	1.315
110	100	4	10	6500	<b>161 567 405</b>	<b>161 567 425</b>	1.983
140	125	5	10	11500	<b>161 567 406</b>	<b>161 567 426</b>	2.554
160	150	6	10	16600	<b>161 567 407</b>	<b>161 567 427</b>	3.564
225	200	8	10	39600	<b>161 567 408</b>	<b>161 567 428</b>	5.541

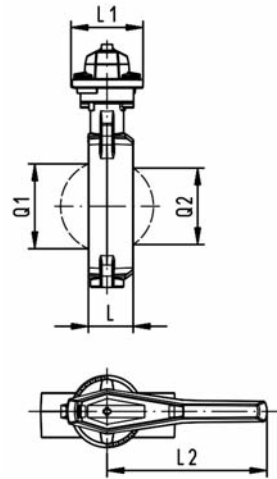
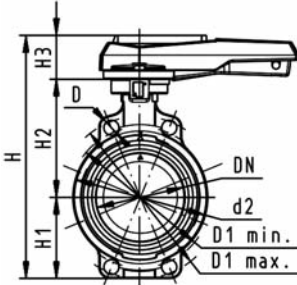
d [mm]	D [mm]	D1 min. [mm]	D1 max. [mm]	d2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	L [mm]	L1 [mm]	L2 [mm]	Q1 [mm]	Q2 [mm]
63	19	120.0	125.0	104	264	77	134	54	45	106	205	40	
75	19	139.7	145.0	115	277	83	140	54	46	106	205	54	35
90	19	150.0	160.0	131	289	89	146	54	49	106	205	67	50
110	19	175.0	190.5	161	325	104	167	55	56	106	255	88	74
140	23	210.0	215.9	187	352	117	181	55	64	106	255	113	97
160	24	241.3	241.3	215	373	130	189	55	72	106	255	139	123
225	23	290.0	295.0	267	435	158	210	67	73	140	408	178	169



## Butterfly valve type 567 PVC-U OF Hand lever with ratchet settings

### Model:

- Oil free
- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, ANSI/ASME B 16.5 Class 150, BS 1560: 1989, BS 4504, JIS B 2220
- Overall length according to EN 558, ISO 5752



d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	kg
63	50	2	10	1470	<b>161 567 502</b>	1.040
75	65	2 ½	10	2200	<b>161 567 503</b>	1.143
90	80	3	10	3000	<b>161 567 504</b>	1.308
110	100	4	10	6500	<b>161 567 505</b>	1.969
140	125	5	10	11500	<b>161 567 506</b>	2.536
160	150	6	10	16600	<b>161 567 507</b>	3.541
225	200	8	10	39600	<b>161 567 508</b>	5.513

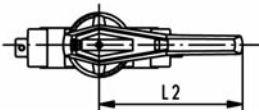
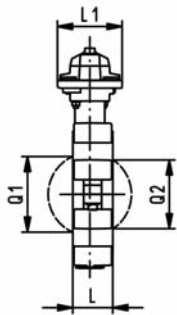
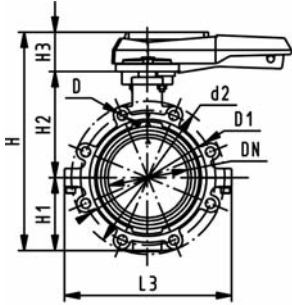
d [mm]	D [mm]	D1 min. [mm]	D1 max. [mm]	d2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	L [mm]	L1 [mm]	L2 [mm]	Q1 [mm]	Q2 [mm]
63	19	120.0	125.0	104	264	77	134	54	45	106	205	40	
75	19	139.7	145.0	115	277	83	140	54	46	106	205	54	35
90	19	150.0	160.0	131	289	89	146	54	49	106	205	67	50
110	19	175.0	190.5	161	325	104	167	55	56	106	255	88	74
140	23	210.0	215.9	187	352	117	181	55	64	106	255	113	97
160	24	241.3	241.3	215	373	130	189	55	72	106	255	139	123
225	23	290.0	295.0	267	435	158	210	67	73	140	408	178	169



## Lugstyle butterfly valve type 568 PVC-U SF Hand lever with ratchet settings

### Model:

- Silicone free / paint-compatible
- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension: ISO 7005 PN10, EN 1092 PN10, DIN 2501 PN10
- Overall length according to EN 558, ISO 5752



d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
63	50	2	10	1470	<b>161 568 402</b>	<b>161 568 422</b>	3.130
75	65	2 ½	10	2200	<b>161 568 403</b>	<b>161 568 423</b>	3.484
90	80	3	10	3000	<b>161 568 404</b>	<b>161 568 424</b>	4.526
110	100	4	10	6500	<b>161 568 405</b>	<b>161 568 425</b>	6.067
140	125	5	10	11500	<b>161 568 406</b>	<b>161 568 426</b>	8.020
160	150	6	10	16600	<b>161 568 407</b>	<b>161 568 427</b>	10.024
225	200	8	10	39600	<b>161 568 408</b>	<b>161 568 428</b>	15.489

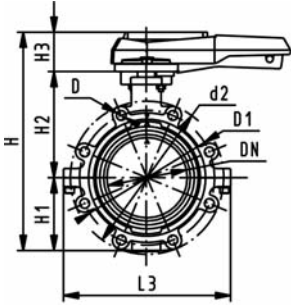
d [mm]	d2 [mm]	D	D1 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	Q1 [mm]	Q2 [mm]
63	150	M16	125	265	77	134	54	45	106	205	150	40	
75	170	M16	145	277	83	140	54	46	106	205	160	54	35
90	184	M16	160	289	89	146	54	49	106	205	205	67	50
110	216	M16	180	326	104	167	55	56	106	255	244	88	74
140	246	M16	210	353	117	181	55	64	106	255	272	113	97
160	273	M20	240	374	130	189	55	72	106	255	297	139	123
225	334	M20	295	435	158	210	57	73	140	408	360	178	169



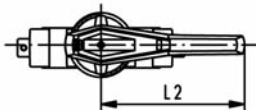
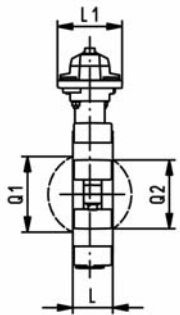
## Lugstyle butterfly valve type 568 PVC-U SF Hand lever with ratchet settings

### Model:

- Silicone free / paint-compatible
- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension ANSI/ASME B 16.5 Class 150, BS 4504 PN10
- Overall length according to EN 558, ISO 5752



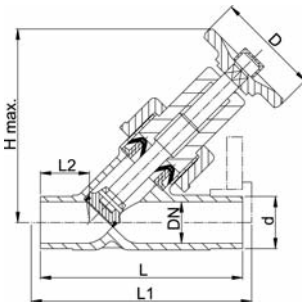
Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
2	50	10	1470	<b>161 568 502</b>	<b>161 568 522</b>	3.130
2 ½	65	10	2200	<b>161 568 503</b>	<b>161 568 523</b>	3.484
3	80	10	3000	<b>161 568 504</b>	<b>161 568 524</b>	3.897
4	100	10	6500	<b>161 568 505</b>	<b>161 568 525</b>	6.067
5	125	10	11500	<b>161 568 506</b>	<b>161 568 526</b>	8.020
6	150	10	16600	<b>161 568 507</b>	<b>161 568 527</b>	10.024
8	200	10	39600	<b>161 568 508</b>	<b>161 568 528</b>	15.489



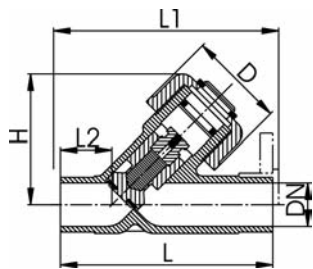
Inch	d2 [mm]	D	D1 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	Q1 [mm]	Q2 [mm]
2	150	UNC 5/8	121	265	77	134	54	45	106	205	150	40	
2 ½	170	UNC 5/8	138	277	83	140	54	46	106	205	160	54	35
3	177	UNC 5/8	152	289	89	146	54	49	106	205	175	67	50
4	216	UNC 5/8	191	326	104	167	55	56	106	255	244	88	74
5	246	UNC 3/4	216	353	117	181	55	64	106	255	272	113	97
6	273	UNC 3/4	241	374	130	189	55	72	106	255	297	139	123
8	334	UNC 3/4	298	435	158	210	67	73	140	408	360	178	169



## Angle seat valve type 300 PVC-U SF With solvent cement spigots metric



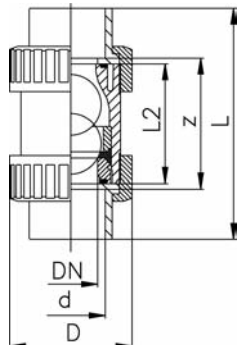
d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	PE Code	kg	D [mm]	L [mm]	L1 [mm]	L2 [mm]	H max. [mm]	closest inch
16	10	10	41	<b>161 300 800</b>	0.125	50	114	120	24	105	3/8
20	15	10	95	<b>161 300 801</b>	0.180	63	124	130	28	126	1/2
25	20	10	180	<b>161 300 802</b>	0.250	63	144	150	37	140	3/4
32	25	10	327	<b>161 300 803</b>	2.600	80	154	160	37	166	1
40	32	10	484	<b>161 300 804</b>	0.580	80	174	180	44	191	1 ¼
50	40	10	725	<b>161 300 805</b>	1.005	100	194	200	48	233	1 ½
63	50	10	1130	<b>161 300 806</b>	0.944	100	224	230	60	264	2
75	65	10	1700	<b>161 300 807</b>	2.610	160	284	290	74	335	2 ½
90	80	10	2500	<b>161 300 808</b>	3.945	200	300	310	85	390	3



## Angle seat check valve type 303 PVC-U SF With solvent cement spigots metric

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	41	161 303 015	161 303 040	0.094
20	15	10	95	161 303 016	161 303 041	0.132
25	20	10	180	161 303 017	161 303 042	0.200
32	25	10	327	161 303 018	161 303 043	0.323
40	32	10	484	161 303 019	161 303 044	0.498
50	40	10	725	161 303 020	161 303 045	0.860
63	50	10	1130	161 303 021	161 303 046	1.455
75	65	10	1700	161 303 022	161 303 047	2.450
90	80	10	2500	161 303 023	161 303 048	3.511

d [mm]	D [mm]	L [mm]	L1 [mm]	L2 [mm]	H [mm]	closest inch
16	39	114	120	24	58	3/8
20	43	124	130	28	65	1/2
25	47	144	150	37	75	3/4
32	56	154	160	37	90	1
40	64	174	180	44	102	1 1/4
50	82	194	200	48	123	1 1/2
63	95	224	230	60	144	2
75	92	284	290	74	186	2 1/2
90	104	300	310	85	204	3



## Ball check valve type 360 PVC-U SF With solvent cement sockets metric

### Model:

- Silicone free / paint-compatible
- For easy installation and removal
- Ball is sealing at a minimum water column 2m
- Vibration free even at high flow velocity
- Installation position horizontal or vertical

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	16	170	161 360 601	161 360 611	0.123
20	15	16	150	161 360 602	161 360 612	0.115
25	20	16	330	161 360 603	161 360 613	0.195
32	25	16	390	161 360 604	161 360 614	0.318
40	32	16	710	161 360 605	161 360 615	0.500
50	40	16	900	161 360 606	161 360 616	0.841
63	50	16	1390	161 360 607	161 360 617	1.495

d [mm]	z [mm]	D [mm]	L [mm]	L2 [mm]	closest inch
16	71	45	99	63	3/8
20	71	45	102	63	1/2
25	82	53	120	75	3/4
32	87	64	131	79	1
40	98	78	150	89	1 1/4
50	101	92	163	95	1 1/2
63	121	116	197	115	2

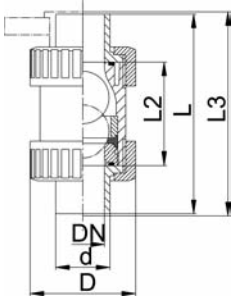




## Ball check valve type 360 PVC-U SF With solvent cement spigots metric

### Model:

- Silicone free / paint-compatible
- For easy installation and removal
- Ball is sealing at a minimum water column 2m
- Vibration free even at high flow velocity
- Installation position horizontal or vertical
- Overall length EN 558

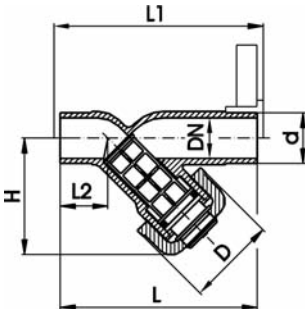


d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	16	170	161 360 621	161 360 631	0.123
20	15	16	150	161 360 622	161 360 632	0.128
25	20	16	330	161 360 623	161 360 633	0.211
32	25	16	390	161 360 624	161 360 634	0.331
40	32	16	710	161 360 625	161 360 635	0.500
50	40	16	900	161 360 626	161 360 636	0.870
63	50	16	1390	161 360 627	161 360 637	1.340
90	80	10	1200	161 360 023	161 360 048	4.330

d [mm]	D [mm]	L [mm]	L2 [mm]	L3 [mm]	closest inch
16	43	114	63	120	3/8
20	43	124	63	130	1/2
25	53	144	75	150	3/4
32	64	154	79	160	1
40	78	174	89	180	1 1/4
50	92	194	95	200	1 1/2
63	116	224	115	230	2
90		300		310	2 1/2



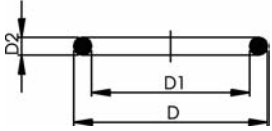
## Line strainer type 305 PVC-U SF Transparent body with solvent cement spigots metric



d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
20	15	10	35	192 305 821	192 305 831	0.114
25	20	10	63	192 305 822	192 305 832	0.170
32	25	10	85	192 305 823	192 305 833	0.255
40	32	10	150	192 305 824	192 305 834	0.386
50	40	10	225	192 305 825	192 305 835	0.643
63	50	10	346	192 305 826	192 305 836	1.033
75	65	10	535	192 305 827	192 305 837	1.835
90	80	10	750	192 305 828	192 305 838	2.565

d [mm]	D [mm]	L [mm]	L1 [mm]	L2 [mm]	H [mm]	closest inch
20	43	124	130	28	65	1/2
25	47	144	150	37	76	3/4
32	56	154	160	37	90	1
40	64	174	180	44	104	1 1/4
50	82	194	200	48	124	1 1/2
63	95	224	230	60	148	2
75	106	284	290	74	188	2 1/2
90	120	300	310	85	205	3

EPDM 48 41 30  
FPM 49 41 30



## O-Ring gasket silicone free

### Model:

- Silicone free / paint-compatible
- Fulfill chloroform contact test
- Hardness approx. 65° Shore
- For flange adaptors, jointing face with O-ring groove
- **Only standard packagings SP are delivered**

d [mm]	DN [mm]	EPDM Code	FPM Code	kg	D [mm]	D1 [mm]	D2 [mm]
20	15	748 413 001	749 413 001	0.002	30	23	3.53
25	20	748 413 007	749 413 007	0.002	35	28	3.53
32	25	748 413 002	749 413 002	0.003	43	36	3.53
40	32	748 413 003	749 413 003	0.007	55	44	5.34
50	40	748 413 012	749 413 012	0.008	64	53	5.34
63	50	748 413 013	749 413 013	0.011	80	69	5.34
75	65	748 413 014	749 413 014	0.012	93	82	5.34
90	80	748 413 015	749 413 015	0.015	112	101	5.34
110	100	748 413 016	749 413 016	0.031	134	120	6.99
125	100	748 413 017	749 413 017	0.036	149	136	6.99
140	125	748 413 018	749 413 018	0.039	166	152	6.99
160	150	748 413 019	749 413 019	0.047	191	177	6.99
200	200	748 413 163	749 413 163	0.056	136	222	6.99
225	200	748 413 022	749 413 022	0.060	255	241	6.99
250	250	748 413 182	749 413 182	0.100	280	266	6.99
280	250	748 413 173	749 413 173	0.144	305	292	6.99

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# General Condition of Supply of Georg Fischer Piping Systems Limited, Schaffhausen

## 1 General

- 1.1 These General Conditions shall apply to all Products supplied by Georg Fischer to the Purchaser. They shall also apply to all future business even when no express reference is made to them.
- 1.2 Any deviating or supplementary conditions especially Purchaser's general conditions of purchase and verbal agreements shall only be applicable if accepted in writing by Georg Fischer.
- 1.3 The written form shall be deemed to be fulfilled by all forms of transmission, evidenced in the form of text, such as telefax, e-mail, etc.

## 2 Tenders

- Tenders shall only be binding if they contain a specifically stated period for acceptance.

## 3 Scope of Delivery

- 3.1 Georg Fischer's product range is subject to change.
- 3.2 The confirmation of order shall govern the scope and execution of the contract.

## 4 Data and Documents

- 4.1 Technical documents such as drawings, descriptions, illustrations and data on dimensions, performance and weight as well as the reference to standards are for information purposes only. They are not warranted characteristics and are subject to change.
- 4.2 All technical documents shall remain the exclusive property of Georg Fischer and may only be used for the agreed purposes or as Georg Fischer may consent.

## 5 Confidentiality, Protection of Personal Data

- 5.1 Each party shall keep in strict confidence all commercial or technical information relating to the business of the other party, of which it has gained knowledge in the course of its dealing with the other party. Such information shall neither be disclosed to third parties nor used for other purposes than those for which the information has been supplied.
- 5.2 In the context of the contractual relation with the Purchaser personal data may be processed. The Purchaser agrees to the disclosure of said data to third parties such as foreign subcontractors and suppliers etc.

## 6 Local Laws and Regulations, Export Controls

- 6.1 The Purchaser shall bring to the attention of Georg Fischer all local laws and regulations at the place of destination which bear connection with the execution of the contract and the adherence to relevant safety regulations and approval procedures.
- 6.2 In case of re-exports, Purchaser shall be responsible for compliance with pertinent export control regulations.

## 7 Price

- 7.1 Unless agreed otherwise, the prices shall be deemed quoted net ex works (according to Incoterms of the ICC, latest version) including standard packing. All supplementary costs such as the cost of carriage, insurance, export-, transit- and importlicences etc. shall be borne by the Purchaser. The Purchaser shall also bear the costs of all taxes, fees, duties etc. connected with the contract.
- 7.2 If the costs of packing, carriage, insurance, fees and other supplementary costs are included in the tender price or contract price or are referred to specifically in the tender or confirmation of order, Georg Fischer reserve the right to revise their prices accordingly should any change occur in the relevant tariffs.

## 8 Terms of Payment

- 8.1 The Purchaser shall make payment in the manner agreed by the parties without any deductions such as discounts, costs, taxes or dues.
- 8.2 The Purchaser may only withhold or off-set payments due against counter claims which are either expressly acknowledged by Georg Fischer or finally awarded to the Purchaser. In particular, payment shall still be made when unessential items are still out-standing provided that the Products already delivered are not rendered unusable as a result.

## 9 Retention of Title

- 9.1 The Products shall remain the property of Georg Fischer until the Purchaser shall have settled all claims, present and future, which Georg Fischer may have against him.
- 9.2 Should the Purchaser resell Products to which title is reserved, in the ordinary course of business, he shall hereby be deemed to have tacitly assigned to Georg Fischer the proceeds deriving from their sale together with all collateral rights, securities and reservations of title until all claims held by Georg Fischer shall have been settled. Until revoked by Georg Fischer, this assignment shall not preclude Purchaser's right to collect the assigned receivables.
- 9.3 To the extent the value of the Products to which title is reserved together with collateral securities exceeds Georg Fischer's claims against the Purchaser by more than 20%, Georg Fischer shall re-assign the above proceeds to Purchaser at his request.

## 10 Delivery

- 10.1 The term of delivery shall commence as soon as the contract has been entered into, all official formalities such as import and payment permits have been obtained and all essential technical issues have been settled. The term of delivery shall be deemed duly observed when, upon its expiry, the Products are ready for despatch.
- 10.2 Delivery is subject to the following conditions, i.e. the term of delivery shall be reasonably extended:
  - a) if Georg Fischer are not supplied in time with the information necessary for the execution of the contract or if subsequent changes causing delays are made by the Purchaser.
  - b) if Georg Fischer are prevented from performing the contract by force majeure. Force majeure shall equally be deemed to be any unforeseeable event beyond Georg Fischer's control which renders Georg Fischer's performance commercially unpractical or impossible, such as delayed or defective supplies from sub contractors labour disputes, governmental orders or regulations, shortages in materials or energy, serious disturbances in Georg Fischer's works, such as the total or partial destruction of plant and equipment or the breakdown of essential facilities, serious disruptions in transport facilities, e.g. impassable roads.  
Should the effect of force majeure exceed a period of six months, either party may cancel the contract forthwith.  
Georg Fischer shall not be liable for any damage or loss of any kind whatsoever resulting therefrom, any suspension or cancellation being without prejudice to Georg Fischer's right to recover all sums due in respect of consignments delivered and costs incurred to date.
  - c) if the Purchaser is in delay with the fulfilment of his obligations under the contract, in particular, if he does not adhere to the agreed conditions of payment or if he has failed to timely provide the agreed securities.
- 10.3 If for reasons attributable to Georg Fischer the agreed term of delivery or a reasonable extension thereof is exceeded, Georg Fischer shall not be deemed in default until the Purchaser has granted to Georg Fischer in writing a reasonable extension thereof of not less than one month which equally is not met.  
The Purchaser shall then be entitled to the remedies provided at law, it being however understood that, subject to limitations of Art. 16, damage claims shall be limited to max. 10% of the price of the delayed delivery.
- 10.4 Part shipments shall be allowed and Georg Fischer shall be entitled to invoice for such partial deliveries.
- 10.5 If the Purchaser fails to take delivery within a reasonable time of Products notified as ready for despatch, Georg Fischer shall be entitled to store the Products at the Purchaser's expense and risk and to invoice them as delivered. If Purchaser fails to effect payment, Georg Fischer shall be entitled to dispose of the Products.
- 10.6 Should Purchaser cancel an order without justification and should Georg Fischer not insist on the performance of the contract, Georg Fischer shall be entitled to liquidated damages in the amount of 10% of the contract price. Georg Fischer's right to prove and claim higher damages remaining reserved. Purchaser shall be entitled to prove, that Georg Fischer has suffered no or a considerably lower damage.

## 11 Packing

- If the Products are provided with additional packing over and above the standard packing, such packing shall be charged additionally.

## 12 Passing of Risk

- 12.1 The risk in the Products shall pass to the Purchaser as soon as they have left Georg Fischer's works (EX WORKS, Incoterms ICC, latest version), even if delivery is made carriage-paid, under similar clauses or including installation or when carriage is organized and managed by Georg Fischer.
- 12.2 If delivery is delayed for reasons beyond Georg Fischer's control, the risk shall pass to the Purchaser when he is notified that the Products are ready for despatch.

## 13 Carriage and Insurance

- 13.1 Unless agreed otherwise, the Purchaser shall bear the cost of carriage.
- 13.2 The Purchaser shall be responsible for transport insurance against damage of whatever kind. Even when such insurance is arranged by Georg Fischer it shall be deemed taken out by the order of and for the account of the Purchaser and at his risk.
- 13.3 Special requests regarding carriage and insurance shall be communicated to Georg Fischer in due time. Otherwise carriage shall be arranged by Georg Fischer at their discretion, but without responsibility, by the quickest and cheapest method possible.  
In case of carriage-paid delivery transport arrangements shall be made by Georg Fischer. If the Purchaser specifies particular requirements, any extra costs involved shall be borne by him.
- 13.4 In the event of damage or loss of the Products during carriage the Purchaser shall mark the delivery documents accordingly and immediately have the damage ascertained by the carrier. Not readily ascertainable damages sustained during carriage shall be notified to the carrier within six days after receipt of the Products.

## 14 Inspection, Notification of Defects and Damages

- 14.1 The Products will be subject to normal inspection by Georg Fischer during manufacture. Additional tests required by the Purchaser shall be agreed upon in writing and shall be charged to the Purchaser.
- 14.2 It shall be a condition of Georg Fischer's obligation under the warranties stated hereinafter that Georg Fischer be notified in writing by the Purchaser of any purported defect immediately upon discovery. Notice concerning weight, numbers or apparent defects is to be given latest within 30 days from receipt of the Products, notice of other defects immediately latest within 7 working days after discovery, in any event within the agreed warranty period.
- 14.3 Purchaser shall not dispose of allegedly defective Products until all warranty and/or damage claims are finally settled. At its request, defective Products are to be placed at Georg Fischer's disposal.
- 14.4 At its request, Georg Fischer shall be given the opportunity to inspect the defect and/or damage, prior to commencement of remedial work, either itself or by third party experts.

## 15 Warranty

- 15.1 At the written request of the Purchaser, Georg Fischer undertake to repair or replace at their discretion, as quickly as possible and free of charge all Products supplied which demonstrably suffer from faulty design, materials or workman-ship or from faulty operating or installation instructions.  
In order to protect employees from toxic or radioactive substances which may have been transported through defective parts returned to Georg Fischer's sales organisation, said parts must be accompanied by a Material Safety Disclosure Form. The form may be obtained from Georg Fischer's local sales company or via [www.piping.georgfischer.com](http://www.piping.georgfischer.com).  
Replaced parts shall become property of Georg Fischer.
- 15.2 For Products which are manufactured to specifications, drawings or patterns supplied by the Purchaser, Georg Fischer's warranty shall be restricted to proper materials and workmanship.
- 15.3 The Purchaser shall be entitled to cancel the contract or to demand a reduction in the contract price if also a second attempt to repair or replace the Products has failed.
- 15.4 For Products or essential components manufactured by a third party and supplied by Georg Fischer under this contract, Georg Fischer's warranty is limited to the warranty provided by said third party.
- 15.5 This warranty shall not apply to damage resulting from normal wear and tear, improper storage and maintenance, failure to observe the operating instructions, oversteering or overloading, unsuitable operating media, unsuitable construction work or unsuitable building ground, improper repairs or alterations by the Purchaser or third parties, the use of other than original spare parts and other reasons beyond Georg Fischer's control.
- 15.6 No action or claim may be brought by the Purchaser on account of any alleged breach of warranty or any other obligation of Georg Fischer after the expiration of twelve (12) months from receipt of the Products by the end user or at the latest within eighteen (18) months of the Products being despatched by Georg Fischer.
- 15.7 In case of Products for use in domestic installations or in utilities
  - Georg Fischer will assume the costs of dismantling the defective Product and restoring the damaged object as well as, in case of negligence, all other direct damages caused by the defective Product (damage to property and injury to or death of persons) up to CHF 1000 000 per occurrence.
  - the statute of limitations for warranty or damage claims - contrary to Section 15.6 - will be 5 years from the date of installation.

## 16 Limitation of Liability

- All cases of breach of contract and the relevant consequences as well as all rights and claims on the part of the customer, irrespective on what ground they are based, are exhaustively covered by these general conditions of supply. In particular, any claims not expressly mentioned for damages, reduction of price, termination of or withdrawal from the contract are excluded. In no case whatsoever shall the customer be entitled to claim damages other than compensation for costs of remedying defects in the supplies. This in particular refers, but shall not be limited, to loss of production, loss of use, loss of orders, loss of profit and other direct or indirect or consequential damage. This exclusion of liability, however, does not apply to unlawful intent or gross negligence on the part of Georg Fischer and in case of strict liability under applicable product liability statutes, but does apply to unlawful intent or gross negligence of persons employed or appointed by Georg Fischer to perform any of its obligations.

## 17 Severability

- Should any term or clause of these General Conditions in whole or in part be found to be unenforceable or void, all other provisions shall remain in full force and effect and the unenforceable or void provision shall be replaced by a valid provision, which comes closest to the original intention of the unenforceable or invalid provision.

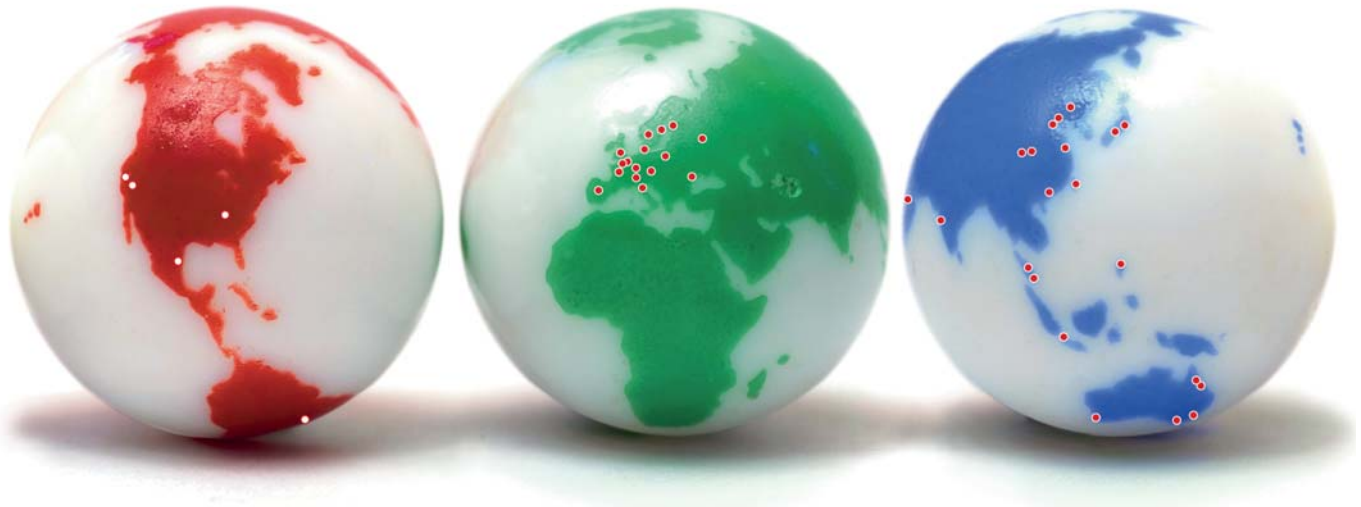
## 18 Place of Performance and Jurisdiction

- 18.1 Place of performance for the Products shall be the Georg Fischer works from which the Products are despatched.
- 18.2 Any civil action based upon any alleged breach of this contract shall be filed and prosecuted exclusively in the courts of Schaffhausen, Switzerland.  
Georg Fischer however reserves the right to file actions in any court having jurisdiction over controversies arising out of or in connection with the present contract.
- 18.3 The contract shall be governed by Swiss law without regard to conflict of law provisions that would require the application of another law.

# GF Piping Systems → worldwide at home

Our sales companies and representatives ensure local customer support in over 100 countries.

[www.piping.georgfischer.com](http://www.piping.georgfischer.com)



The technical data is not binding. They neither constitute expressly warranted characteristics nor guaranteed properties nor a guaranteed durability. They are subject to modification. Our General Terms of Sale apply.

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## GEORG FISCHER PIPING SYSTEMS