



Product Range
Export
April 2006

PVC-U
piping systems for
industrial application

Pipe, Fittings,
Valves and Accessories

40 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



MAIRIE DE PARIS

kiwa

Shipbuilding approvals



Germanischer Lloyd



DET NORSKE VERITAS

Lloyd's Register

Quality Products with Advantages



Advantage of Wide Product Ranges

Fittings

Hand Operated Valves

Pipes

Jointing 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



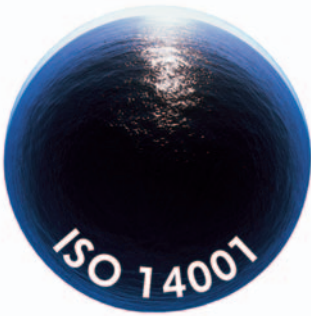
Advantage of Quality

Compound

Our own compound and strict quality controls for each raw material delivery form the basis for George Fischer's high quality products.

Production Know-How

Due to know-how gathered over 40 years we are able to produce our products to exceptionally high tolerances.

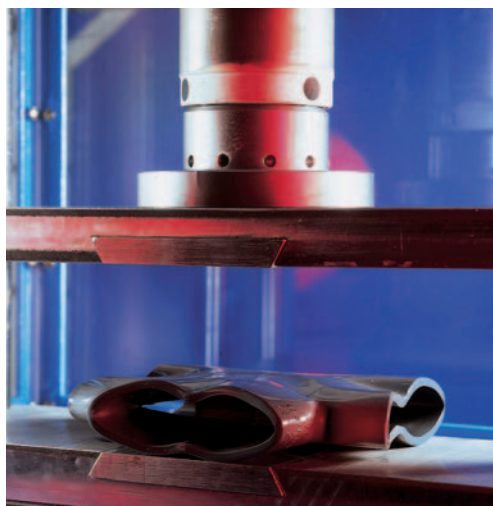


Energy required for 100 m pressurised pipe

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

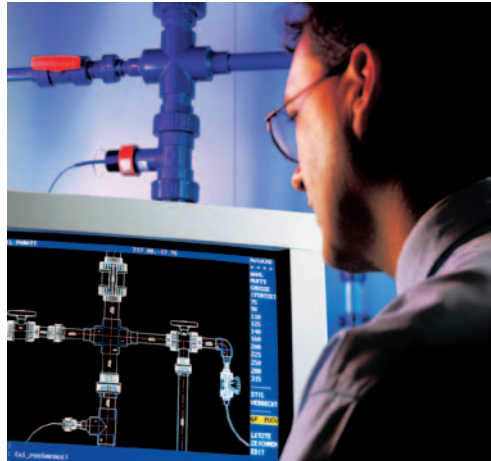
Advantage in Planning

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 Georg Fischer's 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

George Fischer 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 George Fischer can supply you with complete technical advice, punctual distribution and fast service in almost every corner of the world.



George Fischer quality is no coincidence!

More than 40 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"

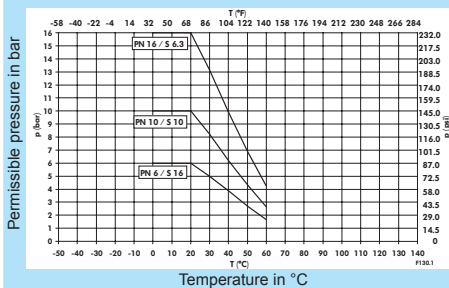
Resistant to:
Alkalis, weak acids, and salts

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

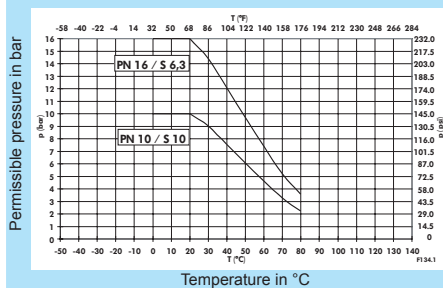
Application Limits for Pipes and Fittings in PVC-U

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



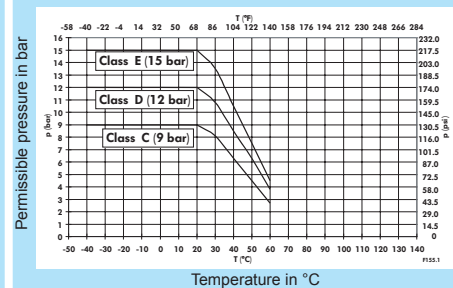
Application Limits for Pipes and Fittings in PVC-C

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



Plastic Piping Systems PVC-U

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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		

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 George Fischer 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 George Fischer 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 George Fischer are marked as follows:

- +GF+
- pipe thread size
- Material

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

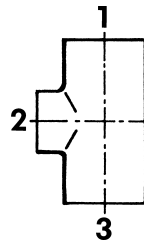


Fig. 1

Angle Marking

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

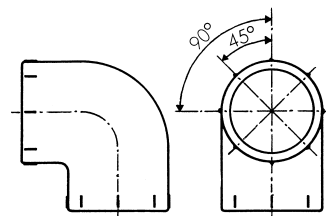


Fig. 2

Dimensions

All dimensions are given in mm.

Information Service

For detailed information see our Catalogue "Plastic Piping Systems".

Quality Mark

The George Fischer 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

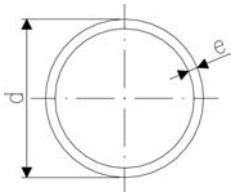
Orders

Always quote the George Fischer code number when placing orders.

Ordering example

90° bend 721 000 111

Pipes

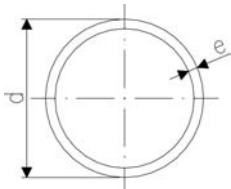


Pipes PVC-U, grey Series S 10, SDR 21, nominal pressure PN 10

Model:

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

d [mm]	PN	Code	kg/m	e [mm]
25	10	161 017 082	0.174	1.5
32	10	161 017 083	0.264	1.8
40	10	161 017 084	0.350	1.9
50	10	161 017 085	0.552	2.4
63	10	161 017 086	0.854	3.0
75	10	161 017 087	1.220	3.6
90	10	161 017 088	1.750	4.3
110	10	161 017 089	2.610	5.3
125	10	161 017 090	3.340	6.0
140	10	161 017 091	4.180	6.7
160	10	161 017 092	5.470	7.7
180	10	161 017 093	6.880	8.6
200	10	161 017 094	8.510	9.6
225	10	161 017 095	10.800	10.8
250	10	161 017 096	13.200	11.9
280	10	161 017 097	16.000	13.4
315	10	161 017 098	20.900	15.0

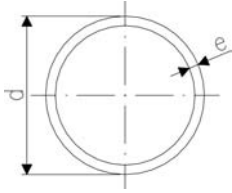


Pipes PVC-U, grey Series S 6.3, SDR 13.6, nominal pressure PN 16

Model:

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

d [mm]	d [inch]	PN	Code	kg/m	e [mm]
12		16	161 017 104	0.055	1.0
16		16	161 017 105	0.090	1.2
20		16	161 017 106	0.137	1.5
25		16	161 017 107	0.212	1.9
32		16	161 017 108	0.342	2.4
40		16	161 017 109	0.525	3.0
50		16	161 017 110	0.809	3.7
63		16	161 017 111	1.290	4.7
75	2 ½	16	161 017 112	1.820	5.6
90		16	161 017 113	2.610	6.7
110		16	161 017 114	3.900	8.1
125		16	161 017 115	5.010	9.2
140	5	16	161 017 116	6.270	10.3
160		16	161 017 117	8.170	11.8

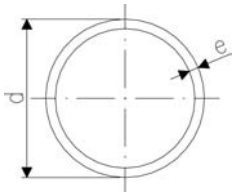


Pipes PVC-U, grey Series S 4, SDR 9, nominal pressure PN 16

Model:

- Material: PVC-U, Polyvinylchloride unplasticized 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

d [mm]	PN	Code	kg/m	e [mm]
6	16	161 017 126	0.025	1.0
8	16	161 017 127	0.035	1.0
10	16	161 017 128	0.053	1.2
12	16	161 017 129	0.073	1.4
16	16	161 017 130	0.123	1.8
20	16	161 017 131	0.196	2.3
25	16	161 017 132	0.294	2.8
32	16	161 017 133	0.482	3.6
40	16	161 017 134	0.750	4.5
50	16	161 017 135	1.160	5.6
63	16	161 017 136	1.820	7.0
75	16	161 017 137	2.600	8.4
90	16	161 017 138	3.700	10.0
110	16	161 017 139	5.560	12.3

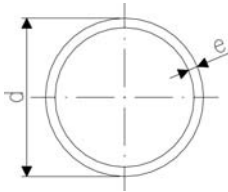


Pipes PVC-U, transparent Series S 25, SDR 51, nominal pressure PN 4

Model:

- Material: PVC-U, Polyvinylchloride unplasticized 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

d [mm]	PN	Code	kg/m	e [mm]
63	4	192 017 036	0.532	1.8
75	4	192 017 037	0.642	1.8
90	4	192 017 038	0.774	1.8
110	4	192 017 039	1.160	2.2
125	4	192 017 040	1.480	2.5
140	4	192 017 041	1.840	2.8
160	4	192 017 042	2.410	3.2
200	4	192 017 044	3.700	4.0
225	4	192 017 045	5.650	4.5
250	4	192 017 046	5.650	4.9
280	4	192 017 047	7.600	5.5

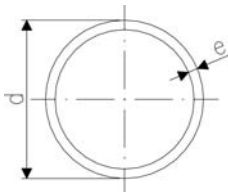


Pipes PVC-U, transparent Series S 16.7, SDR 34.3, nominal pressure PN 6

Model:

- Material: PVC-U, Polyvinylchloride unplasticized 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

d [mm]	PN	Code	kg/m	e [mm]
50	6	192 017 060	0.422	1.8
160	6	192 017 080	3.440	4.7

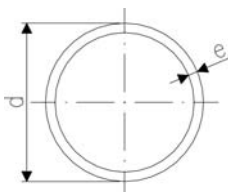


Pipes PVC-U, transparent Series S 10, SDR 21, nominal pressure PN 10

Model:

- Material: PVC-U, Polyvinylchloride unplasticized DIN 8061
- Colour: transparent
- Dimension: DIN EN ISO 15493, DIN 8062
- Pipe length: 5m, with plain ends

d [mm]	PN	Code	kg/m	e [mm]
25	10	192 017 082	0.174	1.5
32	10	192 017 083	0.264	1.8
40	10	192 017 084	0.366	2.0
50	10	192 017 085	0.552	2.4
63	10	192 017 086	0.854	3.0
75	10	192 017 087	1.220	3.6
90	10	192 017 088	1.750	4.3
110	10	192 017 089	2.610	5.3



Pipes PVC-U, transparent Series S 6.25, SDR 13.5, nominal pressure PN 16

Model:

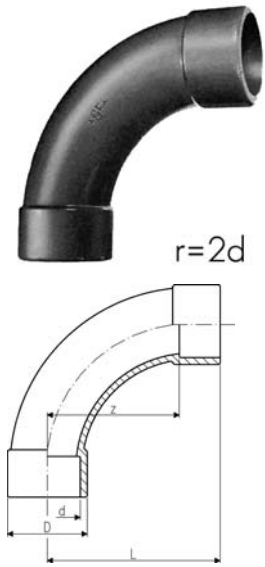
- Material: PVC-U, Polyvinylchloride unplasticized DIN 8061
- Colour: transparent
- Dimension: DIN EN ISO 15493, DIN 8062
- Pipe length: 5m, with plain ends
- The material used fullfills the requirements of DIN 8061 in all aspects except longterm pressure test

d [mm]	PN	Code	kg/m	e [mm]
12	16	192 017 104	0.055	1.0
16	16	192 017 105	0.090	1.2
20	16	192 017 106	0.137	1.5
25	16	192 017 107	0.212	1.9
32	16	192 017 108	0.342	2.4
40	16	192 017 109	0.525	3.0
50	16	192 017 110	0.809	3.7
63	16	192 017 111	1.290	4.7

Fittings

21 00 01

Bends 90°, PVC-U metric



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	0.154	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

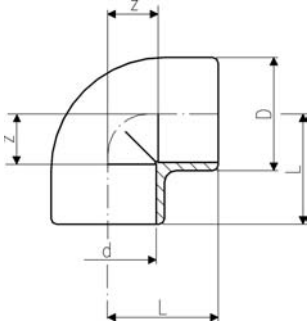
Bends 90° short pattern, PVC-U metric



d [mm]	PN	Code	SP	GP	kg	z [mm]	D [mm]	L [mm]
225	10	721 010 120	-	1	7.400	168	256	287
280	10	721 010 122	-	1	16.100	210	318	357
315	10	721 010 123	-	1	21.200	237	356	402
400	6	721 010 125	-	-	37.000	300	442	521

21 10 01

Elbows 90°, PVC-U metric



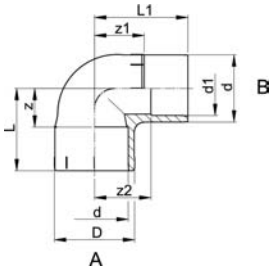
d [mm]	d [inch]	PN	Code	SP	GP	kg	z [mm]	D [mm]	L [mm]
6		16	721 100 101	10	700	0.004	4	11	16
8		16	721 100 102	10	550	0.004	5	13	17
10		16	721 100 103	10	500	0.004	6	14	18
12		16	721 100 104	10	150	0.006	7	17	19
16		16	721 100 105	10	100	0.009	9	21	23
20		16	721 100 106	10	100	0.013	11	25	27
25		16	721 100 107	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	0.061	23	47	49
50		16	721 100 110	10	100	0.105	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	1.215	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	721 100 119	-	1	4.700	101	225	207
225		10	721 100 120	-	1	6.950	114	252	233
250		10	721 100 121	-	1	9.500	131	282	263

21 10 03

PRO-FIT Elbows 90°, PVC-U metric

Model:

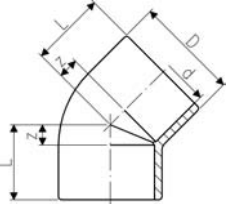
- Outlet: A = Solvent cemented socket metric
- Outlet: B = Solvent cemented spigot in combination with reducing socket metric
- Direct connection from fitting to fitting allowing shortest possible overall length



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 01

**Elbows 45°, PVC-U
metric**



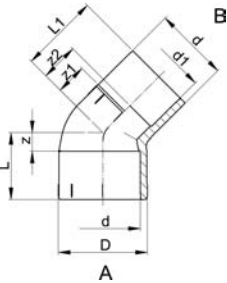
d [mm]	d [inch]	PN	Code	SP	GP	kg	z [mm]	D [mm]	L [mm]
16		16	721 150 105	10	100	0.008	5	21	19
20		16	721 150 106	10	100	0.011	5	25	21
25		16	721 150 107	10	100	0.018	6	31	25
32		16	721 150 108	10	100	0.029	8	38	30
40		16	721 150 109	10	50	0.049	10	47	36
50		16	721 150 110	5	50	0.089	12	59	43
63	2 ½	16	721 150 111	5	50	0.161	14	73	52
75		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

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**PRO-FIT Elbows 45°, PVC-U
metric**

Model:

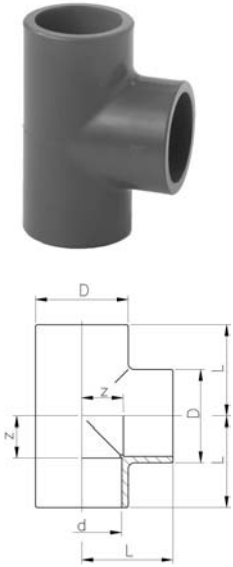
- Outlet: A = Solvent cemented socket metric
- Outlet: B = Solvent cemented spigot in combination with reducing socket metric
- Direct connection from fitting to fitting allowing shortest possible overall length



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

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Tees 90° equal, PVC-U metric



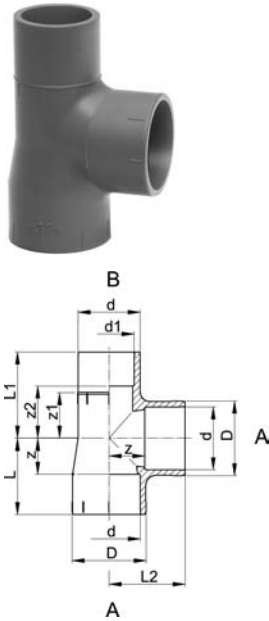
d [mm]	d [inch]	PN	Code	SP	GP	kg	z [mm]	D [mm]	L [mm]
6		16	721 200 101	10	550	0.004	4	11	16
8		16	721 200 102	10	500	0.008	5	13	17
10		16	721 200 103	10	350	0.008	6	16	18
12		16	721 200 104	10	280	0.016	7	19	19
16		16	721 200 105	10	100	0.012	9	21	23
20		16	721 200 106	10	100	0.017	11	25	27
25		16	721 200 107	10	100	0.029	14	31	33
32		16	721 200 108	10	100	0.055	17	38	39
40		16	721 200 109	10	50	0.100	23	48	49
50		16	721 200 110	-	10	0.153	26	58	57
63		16	721 200 111	-	10	0.334	33	73	71
75	2 ½	16	721 200 112	-	5	0.473	39	87	83
90		16	721 200 113	-	5	0.822	46	105	97
110		16	721 200 114	-	6	1.392	55	127	116
125		16	721 200 115	-	2	2.400	66	151	135
140	5	16	721 200 116	-	1	3.333	71	169	147
160		16	721 200 117	-	1	4.963	81	193	167
200		10	721 200 119	-	1	5.763	101	225	207
225		10	721 200 120	-	1	9.067	114	256	233
250		10	721 200 121	-	-	12.500	132	282	263
280		10	721 200 122	-	1	17.480	152	318	298
315		10	721 200 123	-	1	24.350	168	356	332
400		6	721 200 125	-	-	39.500	214	442	420

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PRO-FIT Tees 90° equal, PVC-U metric

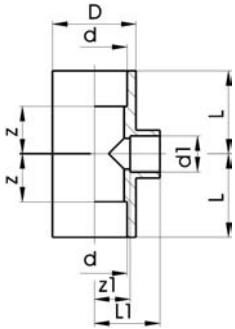
Model:

- 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]	L2 [mm]
20	16	16	721 200 306	10	100	0.017	11	17	19	25	27	33	27
25	20	16	721 200 307	10	100	0.028	14	19	22	31	33	38	33
32	25	16	721 200 308	10	100	0.052	17	24	27	38	39	46	39
40	32	16	721 200 309	10	50	0.098	23	30	34	47	47	56	49
50	40	16	721 200 310	-	10	0.173	26	36	41	58	57	67	57
63	50	16	721 200 311	-	10	0.329	33	45	52	73	71	83	71

Tees 90° reducing, PVC-U metric



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

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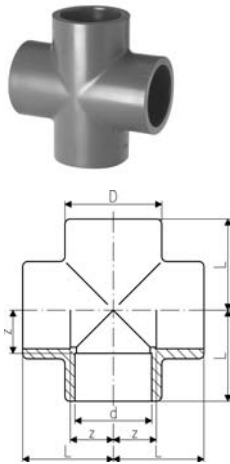
**Tees 45°, PVC-U
metric**



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	-	-	11.650	265	48	232	527	372
225		6	721 250 120	-	-	15.800	296	54	260	590	416
250		6	721 250 121	-	-	20.350	330	60	286	654	462

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**Crosses, PVC-U
metric**

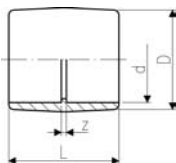


d [mm]	d [inch]	PN	Code	SP	GP	kg	z [mm]	D [mm]	L [mm]
10		16	721 300 103	-	100	0.009	7	16	19
12		16	721 300 104	-	100	0.011	8	18	20
16		16	721 300 105	-	100	0.020	10	23	24
20		16	721 300 106	10	100	0.037	11	29	27
25		16	721 300 107	10	100	0.058	14	35	33
32		16	721 300 108	10	50	0.092	17	43	39
40		16	721 300 109	5	50	0.155	23	52	49
50		16	721 300 110	5	30	0.265	28	63	59
63		16	721 300 111	-	5	0.480	34	79	72
75	2 ½	10	721 300 112	-	3	0.660	40	92	83
90		10	721 300 113	-	4	0.960	48	106	97
110		10	721 300 114	-	4	1.600	58	128	117

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Sockets equal, PVC-U metric

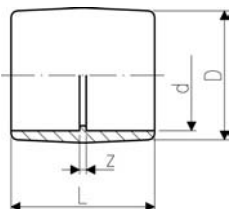
* Socket d355 and d400 made from pipe



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	-	-	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	-	1	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
*355		6	721 910 124	-	-	8.000	68	377	454
*400		6	721 910 125	-	-	8.300	73	425	505

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Sockets equal, PVC-U transparent metric



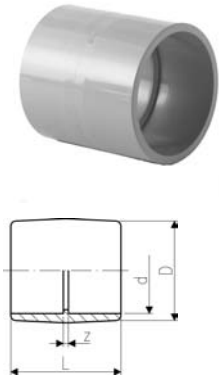
d [mm]	PN	Code	SP	GP	kg	z [mm]	D [mm]	L [mm]
16	16	752 910 105	10	350	0.009	3	23	31
20	16	752 910 106	10	240	0.012	3	27	35
25	16	752 910 107	10	150	0.021	3	32	41
32	16	752 910 108	10	80	0.028	3	40	47
40	16	752 910 109	10	100	0.057	3	52	55
50	16	752 910 110	10	60	0.069	3	60	65
63	16	752 910 111	5	10	0.138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

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Adaptor Socket, PVC-U metric - (inch BS)

Model:

- With solvent cement socket metric and inch (BS)



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

21 90 09

Barrel Nipples, PVC-U metric

Model:

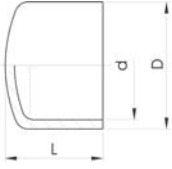
- With solvent cement spigots on both sides
- For the shortest possible distance between fittings
- Overall length L = 2 x socket length



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

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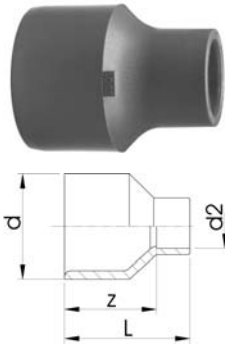
Caps, PVC-U metric



d [mm]	d [inch]	PN	Code	SP	GP	kg	D [mm]	L [mm]	
12		16	721 960 104	10	500	0.004	19	15	
16		16	721 960 105	10	100	0.006	23	21	
20		16	721 960 106	10	100	0.009	27	24	
25		16	721 960 107	10	100	0.014	33	28	
32		16	721 960 108	10	100	0.021	40	32	
40		16	721 960 109	10	100	0.031	47	38	
50		16	721 960 110	10	100	0.052	59	45	
63		16	721 960 111	5	50	0.092	74	56	
75	2 ½	16	721 960 112	-	50	0.152	87	65	
90		16	721 960 113	-	5	0.270	105	77	
110		16	721 960 114	-	5	0.460	128	94	
140	5	10	721 960 116	-	10	0.880	164	92	
160		10	721 960 117	-	2	1.490	188	130	

21 91 03

Reducing Bushes, PVC-U metric



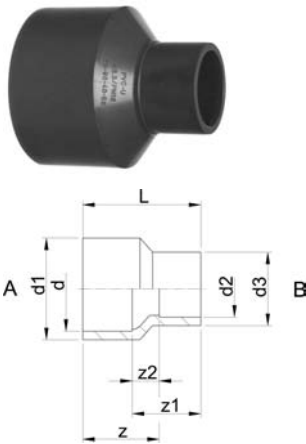
Model:

- With spigot and solvent cement socket

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	0.823	111	172

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PRO-FIT Reducing Bushes, PVC-U metric



Model:

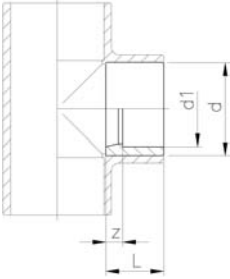
- Outlet: A and B = Solvent cemented spigot in combination with reducing socket metric

d [mm]	d1 [mm]	d2 [mm]	d3 [mm]	PN	Code	SP	GP	kg	z [mm]	z1 [mm]	z2 [mm]	L [mm]
8	12	10		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	10	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

Reducing Bushes short, PVC-U metric

Model:

- With spigot and solvent cement socket

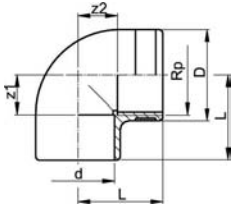


d [mm]	d1 [mm]	PN	Code	SP	GP	kg	z [mm]	L [mm]	
*12	8	16	721 900 329	10	1200	0.002	2	14	
*16	12	16	721 900 331	10	1000	0.002	2	14	
*20	16	16	721 900 334	10	500	0.003	2	16	
*25	20	16	721 900 337	10	450	0.005	3	19	
*32	20	16	721 900 342	10	100	0.014	6	22	
*32	25	16	721 900 341	10	100	0.009	3	22	
40	20	16	721 900 348	10	100	0.021	10	26	
40	25	16	721 900 347	10	100	0.021	7	26	
*40	32	16	721 900 346	10	100	0.016	4	26	
50	20	16	721 900 355	10	100	0.033	15	31	
50	25	16	721 900 354	10	100	0.034	12	31	
50	32	16	721 900 353	10	100	0.037	9	31	
*50	40	16	721 900 352	-	100	0.030	5	31	
63	32	16	721 900 360	10	100	0.061	16	38	
63	40	16	721 900 359	10	100	0.068	12	38	
*63	50	16	721 900 358	10	100	0.058	7	38	
75	50	16	721 900 365	10	50	0.106	13	44	
*75	63	16	721 900 364	10	50	0.077	6	44	
90	50	16	721 900 372	-	10	0.179	20	51	
90	63	16	721 900 371	-	10	0.183	13	51	
*90	75	16	721 900 370	-	10	0.136	7	51	
110	50	16	721 900 379	-	5	0.309	30	61	
110	63	16	721 900 378	-	5	0.313	23	61	
110	75	16	721 900 377	-	-	0.255	17	61	
*110	90	16	721 900 376	-	5	0.259	10	61	
125	90	16	721 900 381	-	5	0.484	18	69	
*125	110	16	721 900 380	-	5	0.266	8	69	
140	90	16	721 900 386	-	5	0.560	25	76	
*140	110	16	721 900 385	-	5	0.599	15	76	
*140	125	16	721 900 384	-	5	0.480	7	76	
160	90	16	721 900 391	-	5	0.750	35	86	
160	110	16	721 900 390	-	5	0.868	25	86	
*160	140	16	721 900 388	-	5	0.547	10	86	
200	110	10	721 900 393	-	-	1.900	45	106	
200	125	10	721 900 325	-	-	1.940	37	106	
200	140	10	721 900 394	-	-	1.850	30	106	
200	160	10	721 900 392	-	2	1.070	20	106	
225	110	10	721 900 397	-	4	2.450	58	119	
225	125	10	721 900 399	-	-	2.500	50	119	
225	140	10	721 900 398	-	4	2.500	43	119	
225	160	10	721 900 396	-	2	2.200	33	119	
*225	200	10	721 900 181	-	4	1.400	13	119	
250	125	10	721 900 326	-	-	3.150	62	131	
250	140	10	721 900 300	-	4	3.200	55	131	
250	160	10	721 900 301	-	4	3.080	45	131	
*250	200	10	721 900 302	-	4	3.150	25	131	
*250	225	10	721 900 303	-	4	1.700	12	131	
280	140	10	721 900 307	-	-	4.000	69	148	
280	160	10	721 900 308	-	1	4.100	59	148	
280	200	10	721 900 304	-	-	4.250	40	146	
*280	225	10	721 900 305	-	1	4.300	27	146	
*280	250	10	721 900 306	-	1	2.500	15	146	
315	160	10	721 900 313	-	1	2.050	77	166	
315	200	10	721 900 309	-	1	5.300	57	166	
315	225	10	721 900 310	-	-	5.500	45	164	
*315	250	10	721 900 311	-	1	6.300	33	164	
*315	280	10	721 900 312	-	1	3.550	17	164	
355	315	6	721 900 315	-	-	5.300	20	184	
400	250	6	721 900 319	-	-	9.000	75	206	
400	280	6	721 900 320	-	-	9.200	60	206	
400	315	6	721 900 321	-	-	13.100	42	206	
*400	355	6	721 900 322	-	-	7.600	22	206	

Adaptor Fittings

21 10 02

Elbows 90°, PVC-U metric - Rp



Model:

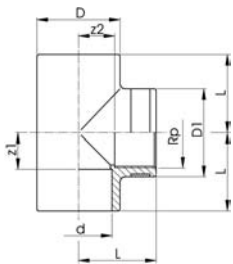
- With solvent cement socket metric and parallel female thread Rp
- Reinforcing ring stainless (A2)
- Connection to plastic or metal
- Do not use thread sealing pastes that are harmful to PVC-U
- Install with low mechanical stress and avoid large cyclic temperature changes

* without reinforcement, connection only for plastic threads

d [mm]	Rp [inch]	PN	Code	SP	GP	kg	z1 [mm]	z2 [mm]	D [mm]	L [mm]
12	¼	16	721 100 204	10	100	0.011	7	7	20	19
16	⅜	16	721 100 205	10	100	0.015	9	9	25	23
20	½	16	721 100 206	10	100	0.025	13	11	30	27
25	¾	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 ¼	16	721 100 209	10	100	0.123	23	27	55	50
50	1 ½	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 ½	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

Tees 90°, PVC-U metric - Rp



Model:

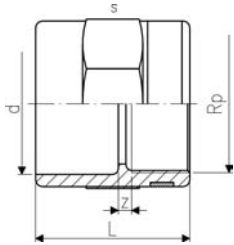
- With solvent cement socket metric, branch with parallel female thread Rp
- Leaving with cylindrical pipe internal thread Rp
- Reinforcing ring stainless (A2)
- Connection to plastic or metal
- Do not use thread sealing pastes that are harmful to PVC-U
- Install with low mechanical stress and avoid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

* without reinforcement, connection only for plastic threads

d [mm]	Rp [inch]	PN	Code	SP	GP	kg	z1 [mm]	z2 [mm]	D [mm]	D1 [mm]	L [mm]
12	¼	16	721 200 204	10	280	0.015	7	7	17	20.00	19
16	⅜	16	721 200 205	10	100	0.027	9	9	21	25.00	23
20	½	16	721 200 206	10	100	0.025	11	13	26	30.00	29
25	¾	16	721 200 207	10	100	0.039	14	15	32	35.00	33
32	1	16	721 200 208	10	30	0.071	17	19	40	45.00	39
40	1 ¼	16	721 200 209	10	50	0.188	23	26	47	55.00	49
50	1 ½	16	721 200 210	5	10	0.190	27	36	59	59.00	59
63	2	16	721 200 211	-	5	0.360	33	46	74	75.00	71
*75	2 ½	10	721 200 212	-	5	0.609	40	56	92	91.50	84
*90	3	10	721 200 213	-	5	1.076	48	68	110	109.50	99
*110	4	10	721 200 214	-	1	1.686	58	82	133	132.50	119

21 91 02

Adaptor Sockets, PVC-U metric - Rp



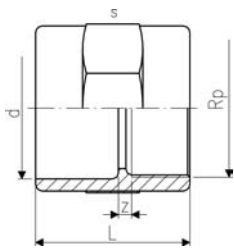
Model:

- With solvent cement socket metric and parallel female thread Rp
- Reinforcing ring stainless (A2)
- Connection to plastic or metal
- 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	¼	16	721 910 204	10	100	0.010	4	27	22
16	⅜	16	721 910 205	10	100	0.017	5	31	27
20	½	16	721 910 206	10	100	0.025	5	36	32
25	¾	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 ¼	16	721 910 209	10	50	0.085	5	51	55
50	1 ½	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 Sockets, PVC-U metric - Rp



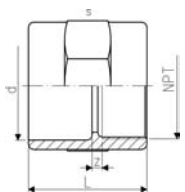
Model:

- With solvent cement socket metric and parallel female thread Rp
- Connection to plastic thread 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	721 916 012	-	10	0.223	7	82	90
90	3	10	721 916 013	-	5	0.374	9	94	110
110	4	10	721 916 014	-	5	0.542	9	110	130

21 91 42

Adaptor Sockets, PVC-U metric - NPT



Model:

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

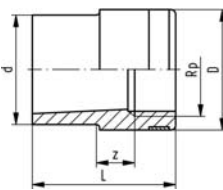
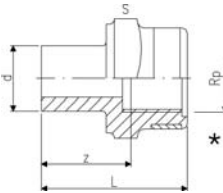
d [mm]	NPT [inch]	PN	Code	SP	GP	kg	z [mm]	L [mm]	s [mm]
20	½	10	721 914 206	10	100	0.022	5	35	32
25	¾	10	721 914 207	10	100	0.027	6	40	36
32	1	10	721 914 208	10	100	0.050	6	45	46
40	1 ¼	10	721 914 209	10	100	0.075	6	51	55
50	1 ½	10	721 914 210	10	50	0.109	10	59	65
63	2	10	721 914 211	5	50	0.176	10	69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

21 91 04

Reducing Bushes, PVC-U metric - Rp

Model:

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



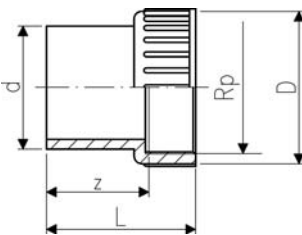
d [mm]	Rp [inch]	PN	Code	SP	GP	kg	z [mm]	D [mm]	L [mm]	s [mm]
*12	1/4	16	721 910 404	10	100	0.007	17	20	27	22
20	3/8	16	721 910 434	10	100	0.014	24	25	35	15
25	1/2	16	721 910 437	10	100	0.021	27	30	41	21
32	3/4	16	721 910 441	10	100	0.032	32	35	48	33
40	1	16	721 910 446	10	100	0.060	38	45	56	60
50	1 1/4	16	721 910 452	10	60	0.097	46	55	66	99
63	1 1/2	16	721 910 458	5	45	0.148	57	62	77	150

21 90 04

Adaptor Bushes equal, PVC-U metric - Rp

Model:

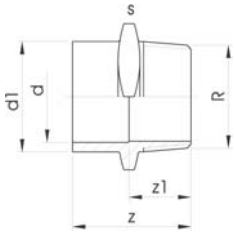
- With solvent cement spigot metric and parallel female thread Rp
- Connection to plastic thread only
- Do not use thread sealing pastes that are harmful to PVC-U
- Install with low mechanical stress and avoid large cyclic temperature changes



d [mm]	Rp [inch]	PN	Code	SP	GP	kg	z [mm]	D [mm]	L [mm]
20	1/2	10	721 900 406	-	-	0.019	22	28	37
25	3/4	10	721 900 407	-	-	0.028	25	34	41
32	1	10	721 900 408	10	100	0.041	29	42	48
40	1 1/4	10	721 900 409	10	-	0.065	34	52	56
50	1 1/2	10	721 900 410	-	-	0.103	40	62	61
63	2	10	721 900 411	5	50	0.170	49	77	74

21 91 05

Adaptor Socket-Nipple, PVC-U metric - R



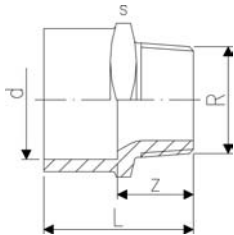
Model:

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

21 91 07

Adaptor Bushes equal, PVC-U metric - R



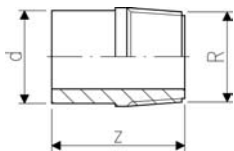
Model:

- With solvent cement socket metric and taper male thread R
- Connection to plastic thread 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]	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 Nipples, PVC-U metric - R



Model:

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

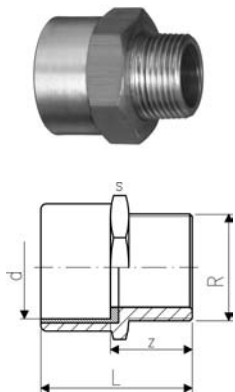
d [mm]	R [inch]	PN	Code	SP	GP	kg	z [mm]
16	3/8	10	721 913 505	10	100	0.006	31
20	1/2	10	721 913 506	10	100	0.010	35
25	3/4	10	721 913 507	10	100	0.015	40
32	1	10	721 913 508	10	100	0.029	46

20 91 07

Adaptor Sockets, 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



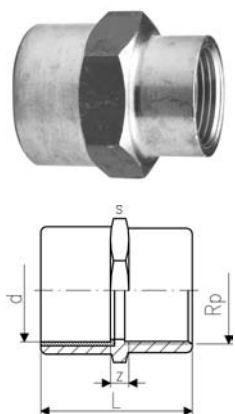
d [mm]	R [inch]	PN	Code	SP	GP	kg	z [mm]	L [mm]	s [mm]
16	3/8	16	720 910 705	-	-	0.128	24	40	32
20	1/2	16	720 910 706	-	-	0.159	27	45	36
25	3/4	16	720 910 707	-	-	0.193	28	49	40
32	1	16	720 910 708	-	-	0.305	33	57	48
40	1 1/4	16	720 910 709	-	-	0.306	36	64	58
50	1 1/2	16	720 910 710	-	-	0.680	38	72	70
63	2	16	720 910 711	-	-	0.960	43	84	85

20 91 02

Adaptor Sockets, 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



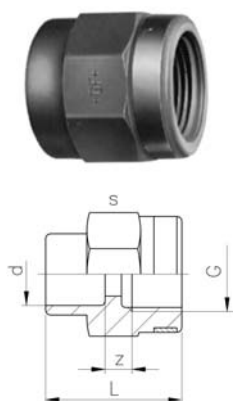
d [mm]	Rp [inch]	PN	Code	SP	GP	kg	z [mm]	L [mm]	s [mm]
16	3/8	16	720 910 205	-	-	0.132	14	40	32
20	1/2	16	720 910 206	-	-	0.162	14	46	36
25	3/4	16	720 910 207	-	-	0.204	14	50	40
32	1	16	720 910 208	-	-	0.323	16	58	48
40	1 1/4	16	720 910 209	-	-	0.489	17	66	58
50	1 1/2	16	720 910 210	-	-	0.767	19	74	70
63	2	16	720 910 211	-	-	1.102	19	86	83

21 91 62

Manometer Adaptor Sockets, PVC-U metric - G

Model:

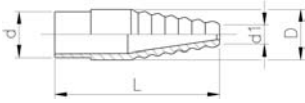
- With solvent cement socket metric and female thread G
- Reinforcing ring stainless (A2)
- Connection to plastic or metal
- Do not use thread sealing pastes that are harmful to PVC-U
- Install with low mechanical stress and avoid large cyclic temperature changes



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

21 96 03

Hose Connectors, PVC-U metric



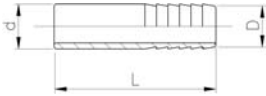
Model:

- With solvent cement spigot metric and tapered hose connection

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

21 96 04

Hose Connectors, PVC-U metric



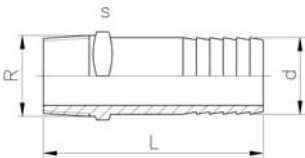
Model:

- With solvent cement spigot metric and parallel hose connection

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

21 96 07

Hose Connectors, PVC-U R



Model:

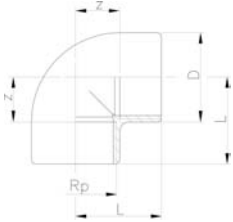
- With taper male thread R
- Connection to plastic thread only
- Do not use thread sealing pastes that are harmful to PVC-U

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

Threaded Fittings

21 10 16

Elbows 90°, PVC-U Rp



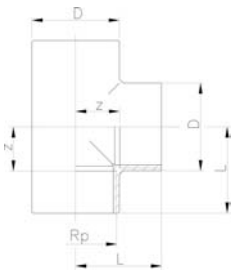
Model:

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

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	1.233	82	132	119

21 20 16

Tees 90° equal, PVC-U Rp

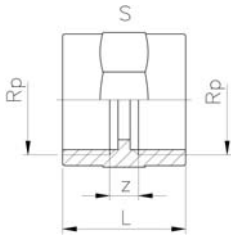


Model:

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

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	-	-	1.662	82	133	119

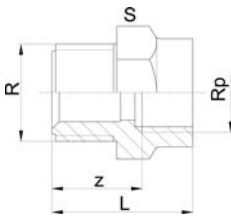
21 91 06

Sockets, PVC-U**Rp****Model:**

- With parallel female thread Rp
- Connection to plastic thread 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]
¼	10	721 910 604	10	300	0.010	7	27	22
⅜	10	721 910 605	10	280	0.015	7	29	27
½	10	721 910 606	10	150	0.025	9	35	32
¾	10	721 910 607	10	100	0.030	9	39	36
1	10	721 910 608	10	80	0.055	11	45	46
1 ¼	10	721 910 609	10	100	0.076	11	49	55
1 ½	10	721 910 610	10	60	0.106	11	49	65
2	10	721 910 611	5	75	0.181	11	57	80

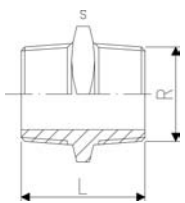
21 91 08

Reducing Bushes, PVC-U**R - Rp****Model:**

- With taper male thread R and parallel female thread Rp
- Connection to plastic thread 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]
½	⅜	10	721 910 834	10	100	0.015	25	36	27
¾	½	10	721 910 837	10	100	0.021	25	39	32
1	½	10	721 910 842	10	100	0.028	31	45	32
1	¾	10	721 910 841	10	100	0.030	29	45	36
1 ¼	1	10	721 910 846	10	100	0.051	32	50	46
1 ½	1 ¼	10	721 910 852	10	50	0.071	35	55	55
2	1 ½	10	721 910 858	5	50	0.126	45	65	65

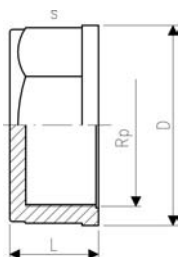
21 91 19

Hexagon Nipples, PVC-U**R****Model:**

- With taper male thread R
- Connection to plastic thread 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]
⅜	10	721 911 905	10	100	0.007	37	19
½	10	721 911 906	10	100	0.012	45	22
¾	10	721 911 907	10	100	0.019	49	27
1	10	721 911 908	10	50	0.035	57	36
1 ¼	10	721 911 909	10	50	0.053	62	46
1 ½	10	721 911 910	10	50	0.071	67	50
2	10	721 911 911	5	50	0.124	76	65

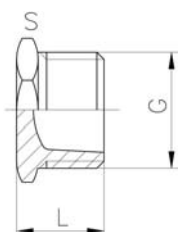
21 96 06

Caps, PVC-U**Rp****Model:**

- With parallel female thread Rp
- Connection to plastic thread 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	0.012	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

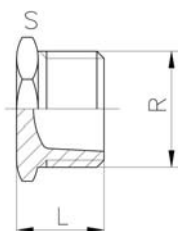
21 96 09

Plugs, PVC-U**G****Model:**

- With parallel male thread G
- Connection to plastic thread 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	721 960 905	10	450	0.006	21	22
1/2	10	721 960 906	10	320	0.010	25	27
3/4	10	721 960 907	10	100	0.019	29	36
1	10	721 960 908	10	100	0.030	32	41
1 1/4	10	721 960 909	10	100	0.048	36	50
1 1/2	10	721 960 910	10	100	0.069	37	60
2	10	721 960 911	5	50	0.120	42	75

21 96 19

Plugs, PVC-U**R****Model:**

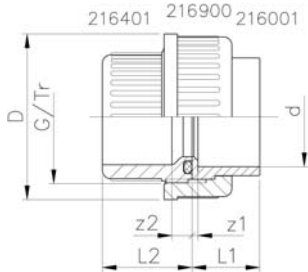
- With taper male thread R
- Connection to plastic thread only
- Do not use thread sealing pastes that are harmful to PVC-U
- Install with low mechanical stress and avoid large cyclic temperature changes

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

Unions

21 51 01

Unions for solvent cement jointing, PVC-U metric



Model:

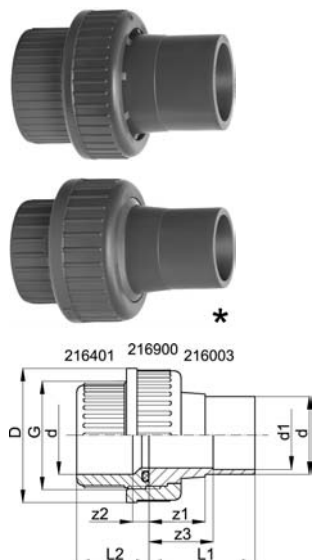
- Union End: solvent socket metric
- Union Bush: Solvent socket metric
- Jointing face: with O-ring groove
- Gasket: O-Ring EPDM No. 48 41 00, FPM No. 49 41 00

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 ½	10	721 510 112	721 510 137	-	2	0.615
90		10	721 510 113	721 510 138	-	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	32	1 1/2
40	3	12	72	29	38	2
50	3	14	83	34	45	2 1/4
63	3	18	100	41	56	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	63	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	¾
*20	24	10	26	43	40	26	1
*25	25	10	28	51	44	29	1 ¼
*32	27	10	30	58	49	32	1 ½
40	31	12	35	74	57	38	2
50	35	14	40	83	66	45	2 ¼
63	39	18	46	100	77	56	2 ¾

21 51 31

Unions for solvent cement jointing, PVC-U metric - BS



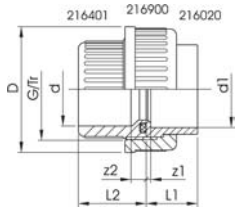
Model:

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

d [mm]	d1 [mm]	PN	Code	SP	GP	kg	z1 [mm]	z2 [mm]	D [mm]	L1 [mm]	L2 [mm]	G [inch]
16	¾	16	721 513 105	100	-	0.025	3	8	35	17	24	¾
20	½	16	721 513 106	10	100	0.040	3	9	43	19	26	1
25	¾	16	721 513 107	50	-	0.065	3	9	51	22	29	1 ¼
32	1	16	721 513 108	35	-	0.090	3	9	58	25	32	1 ½
40	1 ¼	16	721 513 109	20	-	0.155	3	10	72	29	38	2
50	1 ½	16	721 513 110	15	-	0.200	3	10	83	34	40	2 ¼
63	2	16	721 513 111	-	10	0.355	3	10	100	41	46	2 ¾

21 51 41

Unions for solvent cement jointing, PVC-U metric - ASTM



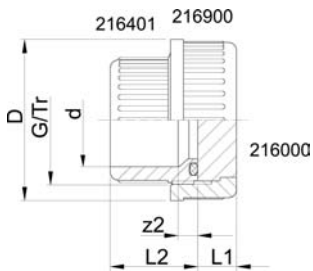
Model:

- 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	PN	Code	kg	z1 [mm]	z2 [mm]	D [mm]	L1 [mm]	L2 [mm]	G [inch]
16	3/8	16	721 514 105	0.022	3	10	35	22	24	3/4
20	1/2	16	721 514 106	0.047	3	10	43	25	26	1
25	3/4	16	721 514 107	0.065	3	10	51	28	29	1 1/4
32	1	16	721 514 108	0.103	3	10	58	32	32	1 1/2
40	1 1/4	16	721 514 109	0.174	3	12	72	35	38	2
50	1 1/2	16	721 514 110	0.239	3	14	83	38	45	2 1/4
63	2	16	721 514 111	0.435	3	18	100	41	56	2 3/4

21 51 00

Unions with Union Ends Blank, PVC-U metric



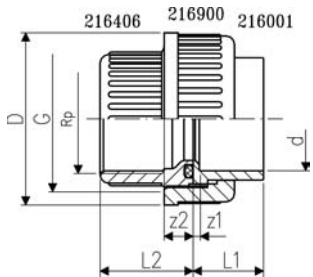
Model:

- Union Bush: Solvent socket metric
- Jointing face: with O-ring groove

d [mm]	PN	EPDM Code	FPM Code	SP	GP	kg	z2 [mm]	D [mm]	L1 [mm]	L2 [mm]	G/Tr
10	16	721 510 003	721 510 028	10	100	0.020	9	31	10	22	5/8
12	16	721 510 004	721 510 029	10	100	0.020	9	31	15	22	5/8
16	16	721 510 005	721 510 030	10	100	0.026	10	35	10	24	3/4
20	16	721 510 006	721 510 031	10	80	0.041	10	43	11	26	1
25	16	721 510 007	721 510 032	10	100	0.068	10	51	11	29	1 1/4
32	16	721 510 008	721 510 033	10	60	0.095	10	58	12	32	1 1/2
40	16	721 510 009	721 510 034	10	30	0.159	12	72	13	38	2
50	16	721 510 010	721 510 035	5	50	0.227	14	83	16	45	2 1/4
63	16	721 510 011	721 510 036	-	10	0.405	18	100	18	56	2 3/4
75	10	721 510 012	721 510 037	-	2	0.693	18	135	22	62	Tr108x5
90	10	721 510 013	721 510 038	-	2	1.022	18	158	24	69	Tr128x5
110	10	721 510 014	721 510 039	-	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 thread only
- Do not use thread sealing pastes that are harmful to PVC-U

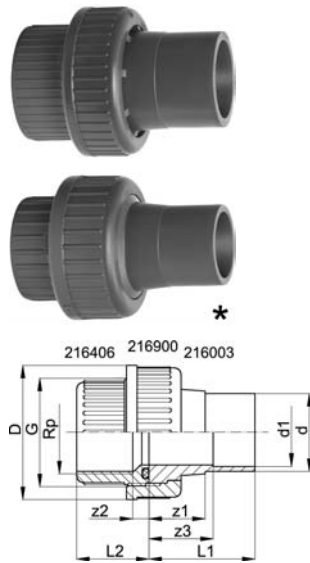
d [mm]	Rp [inch]	PN	Code	SP	GP	kg	z1 [mm]	z2 [mm]	D [mm]	L1 [mm]	L2 [mm]	G [inch]
12	1/4	10	721 510 204	10	220	0.021	3	12	31	15	22	5/8
16	3/8	10	721 510 205	10	140	0.028	3	13	35	17	24	3/4
20	1/2	10	721 510 206	10	80	0.042	3	13	43	19	26	1
25	3/4	10	721 510 207	10	100	0.072	3	14	51	22	29	1 1/4
32	1	10	721 510 208	10	60	0.101	3	15	58	25	32	1 1/2
40	1 1/4	10	721 510 209	10	30	0.174	3	19	72	29	38	2
50	1 1/2	10	721 510 210	2	60	0.255	3	26	83	34	45	2 1/4
63	2	10	721 510 211	2	32	0.414	3	33	100	41	56	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 thread 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
*16	12	3/8	10	721 510 405	10	-	0.032
*20	16	1/2	10	721 510 406	10	-	0.046
*25	20	3/4	10	721 510 407	10	-	0.079
*32	25	1	10	721 510 408	10	-	0.116
40	32	1 1/4	10	721 510 409	10	-	0.192
50	40	1 1/2	10	721 510 410	-	10	0.301
63	50	2	10	721 510 411	2	32	0.496

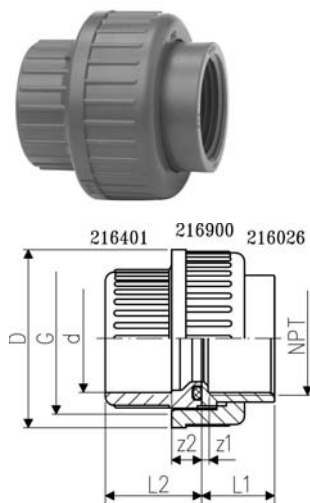
d [mm]	z1 [mm]	z2 [mm]	z3 [mm]	D [mm]	L1 [mm]	L2 [mm]	G [inch]
*16	22	13	24	35	36	24	3/4
*20	24	13	26	43	40	26	1
*25	25	14	28	51	44	29	1 1/4
*32	27	15	30	58	49	32	1 1/2
40	31	19	35	74	57	38	2
50	35	26	40	83	66	45	2 1/4
63	39	33	46	100	77	56	2 3/4

21 51 42

Adaptor Unions, PVC-U metric - NPT

Model:

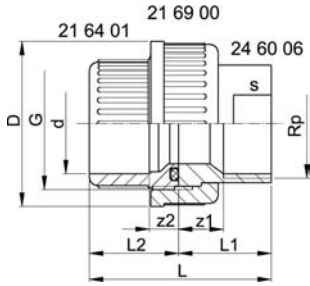
- Union End: Taper female thread NPT (ASTM)
- Union Bush: Solvent socket metric
- Gasket: O-ring EPDM No. 48 41 00
- Can be supplied with FPM O-Ring No. 49 41 00
- Connection to plastic thread only
- Do not use thread sealing pastes that are harmful to PVC-U



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	32	1 1/2
40	1 1/4	10	721 514 209	0.163	6	12	72	29	38	2
50	1 1/2	10	721 514 210	0.221	11	14	83	34	40	2 1/4
63	2	10	721 514 211	0.395	17	18	100	41	46	2 3/4

21 54 02

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



Model:

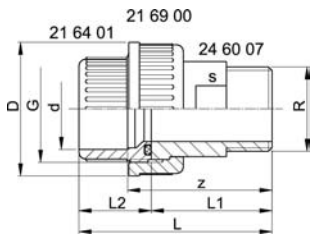
- Union End: Stainless steel 1.4404 (316L), parallel female thread Rp
- Union Bush: Solvent cement socket PVC-U metric
- Union nut: PVC-U
- Gasket: O-Ring EPDM No. 48 41 00, FPM No. 49 41 00

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	32	1 1/2	36
40	14	12	72	71	33	38	2	45
50	15	14	83	79	34	45	2 1/4	54
63	15	18	100	95	39	56	2 3/4	63

21 54 07

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



Model:

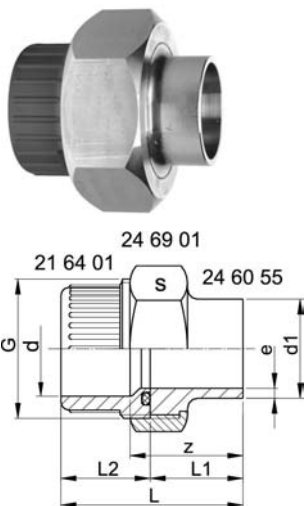
- Union End: Stainless steel 1.4404 (316L), taper male thread R
- Union Bush: Solvent cement socket PVC-U metric
- Union nut: PVC-U
- Gasket: O-Ring EPDM No. 48 41 00, FPM No. 49 41 00

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	32	1 1/2	37
40	58	72	84	46	38	2	48
50	62	83	93	48	45	2 1/4	54
63	73	100	111	55	56	2 3/4	69

21 54 55

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



Model:

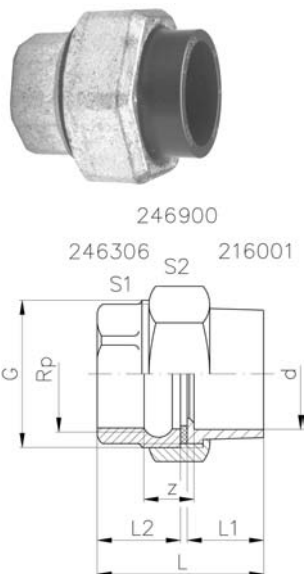
- Union End: Stainless steel 1.4404 (316L) with welding end
- Union Bush: Solvent cement socket PVC-U metric
- Union Nut: stainless steel WN 1.4404 (316L)
- Gasket: O-Ring EPDM No. 48 41 00, FPM No. 49 41 00

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	¾	32
20	32	48	22	26	2.0	1	41
25	33	52	23	29	2.0	1 ¼	46
32	36	58	26	32	2.0	1 ½	55
40	38	64	26	38	2.0	2	68
50	42	73	28	45	2.0	2 ¼	74
63	50	88	32	56	2.6	2 ¾	88

21 53 02

Adaptor Unions, PVC-U / malleable iron metric - Rp



Model:

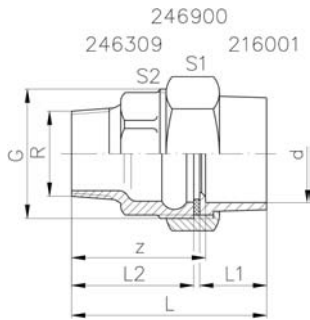
- Union End: Solvent cement socket PVC-U metric
- Union Bush: malleable iron galvanized, parallel female thread Rp
- Union Nut: malleable iron galvanized
- Gasket: flat gasket EPDM No. 48 40 00

d [mm]	d [inch]	Rp [inch]	PN	d [inch]	Code	SP	GP	kg
20		½	16		721 530 206	10	70	0.127
25		¾	16		721 530 207	5	50	0.205
32		1	16		721 530 208	2	36	0.266
40		1 ¼	16		721 530 209	2	16	0.420
50		1 ½	16		721 530 210	2	14	0.545
63		2	16		721 530 211	2	10	0.840
75	2 ½	2 ½	16		721 530 212	-	2	1.460
90		3	16		721 530 213	-	2	1.797

d [mm]	z [mm]	L [mm]	L1 [mm]	L2 [mm]	G [inch]	S1 [mm]	S2 [mm]
20	18	47	19	25	1	25	38
25	19	53	22	28	1 ¼	31	47
32	20	59	25	31	1 ½	38	53
40	20	65	29	33	2	47	66
50	23	73	34	36	2 ¼	53	72
63	24	86	41	42	2 ¾	66	89
75	25	96	47	46	3 ½	82	109
90	30	111	56	52	4	96	123

21 53 07

Adaptor Unions, PVC-U / malleable iron metric - R



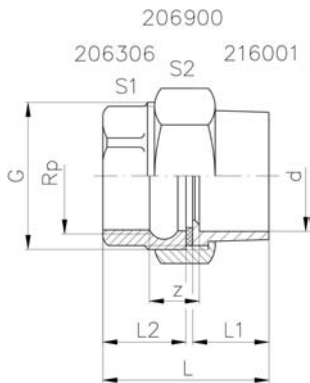
Model:

- Union End: Solvent cement socket PVC-U metric
- Union Bush: malleable iron galvanized, taper male thread R
- Union Nut: malleable iron galvanized
- Gasket: flat gasket EPDM No. 48 40 00

d [mm]	d [inch]	R [inch]	PN	Code	kg	z [mm]	L [mm]	L1 [mm]	L2 [mm]	G [inch]	S1 [mm]	S2 [mm]
20		½	16	721 530 706	0.156	49	65	19	43	1	38	25
25		¾	16	721 530 707	0.253	55	74	22	49	1 ¼	47	31
32		1	16	721 530 708	0.352	59	81	25	53	1 ½	53	38
40		1 ¼	16	721 530 709	0.569	64	90	29	58	2	66	47
50		1 ½	16	721 530 710	0.697	68	99	34	62	2 ¼	72	53
63		2	16	721 530 711	1.050	77	115	41	71	2 ¾	89	66
75	2 ½	2 ½	16	721 530 712	1.775	84	128	47	78	3 ½	109	82
90		3	16	721 530 713	2.286	95	146	56	87	4	123	96

21 55 02

Adaptor Unions, PVC-U / Brass metric - Rp



Model:

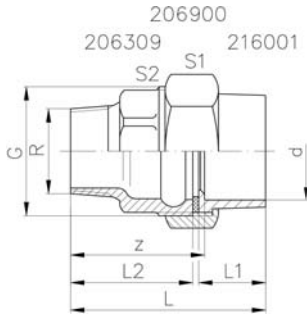
- Union End: Solvent cement socket PVC-U metric
- Union Bush: brass, parallel female thread Rp
- Union Nut: brass
- Gasket: flat gasket EPDM No. 48 40 00

d [mm]	d [inch]	Rp [inch]	PN	d [inch]	Code	SP	GP	kg
16		¾	16		721 550 205	10	180	0.093
20		½	16		721 550 206	10	100	0.139
25		¾	16		721 550 207	5	60	0.235
32		1	16		721 550 208	2	36	0.290
40		1 ¼	16		721 550 209	2	22	0.484
50		1 ½	16		721 550 210	2	18	0.536
63		2	16		721 550 211	2	12	0.856
75	2 ½	2 ½	16		721 550 212	-	2	1.578
90		3	16		721 550 213	-	2	1.687

d [mm]	z [mm]	L [mm]	L1 [mm]	L2 [mm]	G [inch]	S1 [mm]	S2 [mm]
16	12	36	17	17	¾	30	27
20	13	42	19	20	1	38	27
25	14	48	22	23	1 ¼	47	32
32	15	55	25	27	1 ½	52	38
40	15	60	29	28	2	66	47
50	16	66	34	29	2 ¼	72	53
63	17	78	41	34	2 ¾	87	65
75	17	88	47	38	3 ½	110	82
90	21	102	56	43	4	120	95

21 55 07

Adaptor Unions, PVC-U / Brass metric - R



Model:

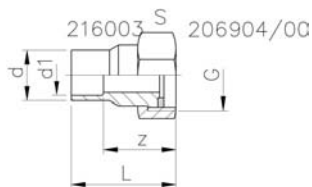
- Union End: Solvent cement socket PVC-U metric
- Union Bush: brass, taper male thread R
- Union Nut: brass
- Gasket: flat gasket EPDM No. 48 40 00

d	d	R	PN	Code	SP	GP	kg
[mm]	[inch]	[inch]					
16		3/8	16	721 550 705	10	120	0.117
20		1/2	16	721 550 706	10	60	0.148
25		3/4	16	721 550 707	5	40	0.289
32		1	16	721 550 708	5	30	0.358
40		1 1/4	16	721 550 709	2	20	0.560
50		1 1/2	16	721 550 710	2	14	0.739
63		2	16	721 550 711	-	5	1.142
75	2 1/2	2 1/2	16	721 550 712	-	2	2.087
90		3	16	721 550 713	-	2	2.293

d	z	L	L1	L2	G	S1	S2
[mm]	[mm]	[mm]	[mm]	[mm]	[inch]	[mm]	[mm]
16	34	48	17	29	3/4	30	27
20	38	54	19	32	1	38	26
25	55	74	22	49	1 1/4	47	32
32	59	81	25	53	1 1/2	52	38
40	60	86	29	54	2	66	60
50	67	98	34	61	2 1/4	72	66
63	75	113	41	69	2 3/4	87	83
75	82	126	47	76	3 1/2	110	80
90	91	142	56	83	4	120	80

21 55 03

Tap Connectors, PVC-U / Brass metric - G

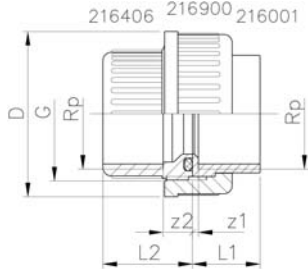


Model:

- 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	d1	G	PN	Code	SP	GP	kg	z	L	s
[mm]	[mm]	[inch]						[mm]	[mm]	[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

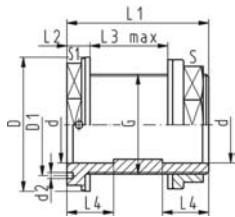
Thread Unions, PVC-U Rp-Rp



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 thread 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]
¼	10	721 510 604	10	220	0.019	3	12	31	22	15	⅝
⅜	10	721 510 605	10	140	0.027	3	13	35	24	17	¾
½	10	721 510 606	10	80	0.042	3	13	43	26	19	1
¾	10	721 510 607	10	110	0.065	3	14	51	29	22	1 ¼
1	10	721 510 608	10	60	0.093	3	15	58	32	25	1 ½
1 ¼	10	721 510 609	10	30	0.160	3	19	72	38	29	2
1 ½	10	721 510 610	2	60	0.243	3	26	83	45	34	2 ¼
2	10	721 510 611	2	32	0.446	3	33	100	56	41	2 ¾



Tank Adaptors Type 050 Compact, PVC-U metric

Model:

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

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

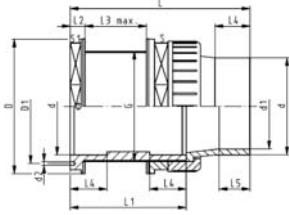
d [mm]	d2 [mm]	D [mm]	D1 [mm]	L1 [mm]	L2 [mm]	L3 max [mm]	L4 [mm]	G [inch]	S [mm]	S1 [mm]	Diameter of bore in tank side [mm]
16	5	44	29.00	58	11	28	14	¾	32	40	28
20	5	54	35.00	61	12	28	16	1	40	50	35
25	5	60	42.00	65	13	28	19	1 ¼	50	55	43
32	5	69	49.00	67	13	28	22	1 ½	56	65	49
40	5	84	59.00	72	13	29	26	2	69	80	61
50	5	92	70.00	76	15	30	31	2 ¼	76	85	67
63	5	108	82.00	84	15	35	38	2 ¾	95	100	83



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

Model:

- End connection: union with union end spigot/socket reducing, metric
- Gasket: flat gasket EPDM
- Washer: PP



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

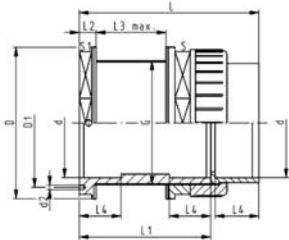
d [mm]	d2 [mm]	D [mm]	D1 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 max [mm]	L4 [mm]	L5 [mm]	G [inch]	S [mm]	S1 [mm]	Diameter of bore in tank side [mm]
16	5	44	29.00	96	58	11	19	14	12	¾	32	40	28
20	5	54	35.00	104	61	12	17	16	14	1	40	50	35
25	5	60	42.00	112	65	13	18	19	16	1 ¼	50	55	43
32	5	69	49.00	119	67	13	19	22	19	1 ½	56	65	49
40	5	84	59.00	132	72	13	16	26	22	2	69	80	61
50	5	92	70.00	145	76	15	16	31	26	2 ¼	76	85	67
63	5	108	82.00	163	84	15	19	38	31	2 ¾	95	100	83



Tank Adaptors with union, PVC-U metric

Model:

- End connection: union with solvent cement socket, metric
- Gasket: flat gasket EPDM
- Washer: PP



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

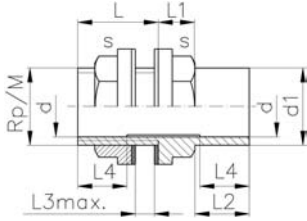
d [mm]	d2 [mm]	D [mm]	D1 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 max [mm]	L4 [mm]	G [inch]	S [mm]	S1 [mm]	Diameter of bore in tank side [mm]
16	5	44	29.00	77	58	11	19	14	¾	32	40	28
20	5	54	35.00	83	61	12	17	16	1	40	50	35
25	5	60	42.00	90	65	13	18	19	1 ¼	50	55	43
32	5	69	49.00	95	67	13	19	22	1 ½	56	65	49
40	5	84	59.00	104	72	13	16	26	2	69	80	61
50	5	92	70.00	113	76	15	16	31	2 ¼	76	85	67
63	5	108	82.00	128	84	15	19	38	2 ¾	95	100	83



Tank Adaptors, 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	161 050 206	-	-	0.040
25	32	161 050 207	-	-	0.070
32	40	161 050 208	-	-	0.100
40	50	161 050 209	-	-	0.190
50	63	161 050 210	-	-	0.240
63	75	161 050 211	-	-	0.350
75	90	161 050 212	-	-	0.530
90	110	161 050 213	-	-	1.050
110	125	161 050 214	-	-	1.350

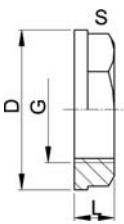
d [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 max [mm]	L4 [mm]	Rp [inch]	M	s [mm]	Diameter of bore in tank side [mm]
20	42	13	19	23	16	¾		32	28
25	45	15	22	23	19	1		40	35
32	27	17	26	24	22	1 ¼		50	43
40	48	19	31	21	26	1 ¾		60	55
50	52	21	38	21	31	2		69	61
63	53	23	44	23	38	2 ½		85	77
75	56	26	51	20	44	3		100	89
90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

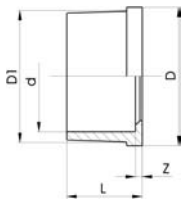
- With G thread ISO 228/1
- For Tank Adaptor Type 050



G [inch]	Code	SP	GP	kg	D [mm]	L [mm]	s [mm]
¾	161 490 630	-	400	0.007	39	13	32
1	161 490 632	-	200	0.012	48	15	40
1 ¼	161 490 634	-	100	0.020	58	17	50
1 ½	161 490 635	-	100	0.025	65	18	56
1 ¾	161 490 636	-	75	0.036	72	19	64
2	161 490 637	-	50	0.044	79	21	69
2 ¼	161 490 638	-	50	0.053	86	21	76
2 ½	161 490 639	-	25	0.063	94	23	85
2 ¾	161 490 640	-	-	0.080	106	25	95
3	161 490 641	-	20	0.101	112	26	100
4	161 490 644	-	10	0.164	160	36	147

21 60 01

Union Ends, PVC-U metric



Model:

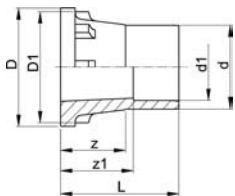
- Solvent cement socket metric
- Suitable for unions, tank connectors and diaphragm valves Type 314

* for Adaptor Unions 21 53 02, 21 53 07, 21 55 02, 21 55 07

d [mm]	PN	Code	SP	GP	kg	z [mm]	D [mm]	D1 [mm]	L [mm]
10	16	721 600 103	-	-	0.004	3	20	18.50	15
12	16	721 600 104	-	-	0.004	3	20	18.50	15
16	16	721 600 105	-	-	0.006	3	24	22.00	17
20	16	721 600 106	-	-	0.009	3	30	27.50	19
25	16	721 600 107	-	-	0.015	3	39	36.00	22
32	16	721 600 108	-	-	0.020	3	45	41.50	25
40	16	721 600 109	-	-	0.038	3	57	53.00	29
50	16	721 600 110	-	-	0.039	3	63	59.00	34
63	16	721 600 111	-	-	0.072	3	78	74.00	41
75	10	721 600 162	-	-	0.140	3	101	90.50	47
90	10	721 600 163	-	-	0.242	5	121	108.00	56
110	10	721 600 164	-	-	0.390	5	146	131.00	66
*75	10	721 600 112	-	110	0.155	3	97	90.50	47
*90	10	721 600 113	-	-	0.184	5	110	105.00	56

21 60 04

Union Ends with Spigot, PVC-U metric



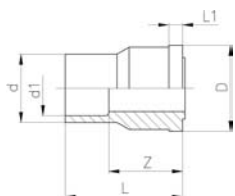
Model:

- Cemented 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	721 600 405	-	1800	0.010	22	24	24	22.00	36
*20	16	16	721 600 406	-	2100	0.013	24	26	30	27.50	40
*25	20	16	721 600 407	-	1200	0.022	25	28	39	36.00	44
*32	25	16	721 600 408	-	740	0.035	27	30	45	41.50	49
40	32	16	721 600 409	-	260	0.057	31	35	57	53.00	57
50	40	16	721 600 410	-	190	0.086	35	40	63	59.00	66
63	50	16	721 600 411	-	110	0.153	39	46	79	74.00	77

21 60 03

Union Ends, PVC-U metric



Model:

- For tap connector No. 21 55 03

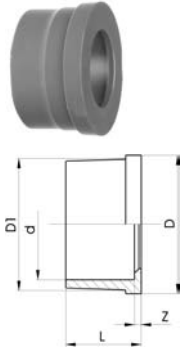
d [mm]	d1 [mm]	PN	Code	SP	GP	kg	z [mm]	D [mm]	L [mm]	L1 [mm]
16	12	16	721 600 305	-	-	0.005	22	19	34	3
20	16	16	721 600 306	-	-	0.009	24	24	38	5
25	20	16	721 600 307	-	-	0.016	27	30	43	5

21 60 20

Union Ends, PVC-U ASTM

Model:

- Solvent cement socket ASTM



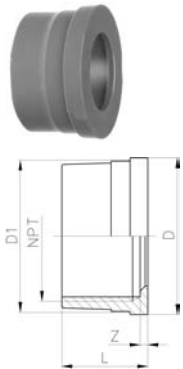
d [inch]	PN	Code	SP	GP	kg	z [mm]	D [mm]	D1 [mm]	L [mm]
3/8	16	721 602 005	-	-	0.006	3	24	22.00	22
1/2	16	721 602 006	-	-	0.009	3	30	27.50	25
3/4	16	721 602 007	-	-	0.016	3	39	36.00	28
1	16	721 602 008	-	-	0.022	3	45	41.50	32
1 1/4	16	721 602 009	-	-	0.037	3	57	53.00	35
1 1/2	16	721 602 010	-	-	0.052	3	63	59.00	38
2	16	721 602 011	-	-	0.088	3	78	74.00	41
2 1/2	10	721 602 012	-	-	0.140	3	101	90.50	47
3	10	721 602 013	-	-	0.255	5	121	108.00	56
3 1/2	10	721 602 014	-	-	0.390	5	146	131.00	66

21 60 26

Union Ends, PVC-U NPT (ASTM)

Model:

- Taper female thread NPT (ASTM)



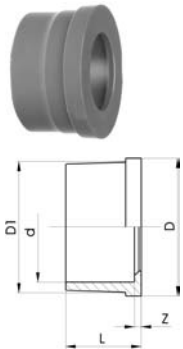
NPT [inch]	PN	Code	SP	GP	kg	z [mm]	D [mm]	D1 [mm]	L [mm]
3/8	10	721 602 655	-	-	0.005	4	24	22.00	17
1/2	10	721 602 656	-	-	0.008	2	30	27.50	19
3/4	10	721 602 657	-	-	0.016	4	39	36.00	22
1	10	721 602 658	-	-	0.022	3	45	41.50	25
1 1/4	10	721 602 659	-	-	0.040	6	57	53.00	29
1 1/2	10	721 602 660	-	-	0.058	11	63	59.00	34
2	10	721 602 661	-	-	0.128	17	78	74.00	41

21 60 11

Union Ends, PVC-U BS Inch

Model:

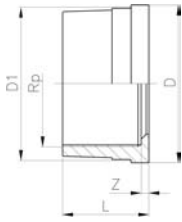
- Solvent cement socket BS



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	22.00	19
1/2	15	721 601 106	-	-	0.008	3	30	27.00	21
3/4	15	721 601 107	-	-	0.014	3	38	36.00	24
1	15	721 601 108	-	-	0.019	3	44	41.00	27
1 1/4	15	721 601 109	1	-	0.033	3	56	53.00	32
1 1/2	15	721 601 110	-	-	0.043	3	62	59.00	33
2	15	721 601 111	-	-	0.082	3	78	74.00	40

21 60 06

Union Ends, PVC-U Rp



Model:

- Parallel female thread Rp

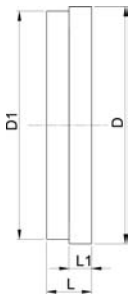
Rp [inch]	PN	Code	SP	GP	kg	z [mm]	D [mm]	D1 [mm]	L [mm]
¼	10	721 600 654	-	-	0.004	5	20	18.50	15
⅜	10	721 600 655	-	-	0.005	6	24	22.00	17
½	10	721 600 656	-	1430	0.010	6	30	27.50	19
¾	10	721 600 657	-	-	0.013	7	39	36.00	22
1	10	721 600 658	-	-	0.021	8	45	41.50	25
1 ¼	10	721 600 659	-	-	0.038	10	57	53.00	29
1 ½	10	721 600 660	-	-	0.045	11	63	59.00	34
2	10	721 600 661	-	-	0.110	18	78	74.00	41

21 60 00

Union Ends Blank, PVC-U

Model:

- For Unions, Tank Adaptor, Ball Valve Type 370 and Diaphragm Valve Type 314
- Jointing face flat



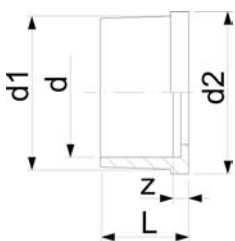
d [mm]	DN [mm]	Inch	PN	Code	SP	GP	kg	D [mm]	D1 [mm]	L [mm]	L1 [mm]
10	6	1/8	16	721 600 004	-	-	0.004	20	18.50	9	4
16	10	3/8	16	721 600 005	-	-	0.006	24	22.00	10	5
20	15	1/2	16	721 600 006	-	-	0.010	30	27.50	11	5
25	20	3/4	16	721 600 007	-	-	0.017	39	36.00	11	6
32	25	1	16	721 600 008	-	-	0.025	45	41.50	12	6
40	32	1 1/4	16	721 600 009	-	-	0.043	57	53.00	13	7
50	40	1 1/2	16	721 600 010	-	-	0.062	63	59.00	16	7
63	50	2	16	721 600 011	-	-	0.110	78	74.00	18	8
75	65	2 1/2	10	721 600 012	-	-	0.218	101	90.50	22	10
90	80	3	10	721 600 013	-	-	0.339	121	108.00	24	11
110	100	4	10	721 600 014	-	-	0.538	146	131.00	26	12

34 60 01

Union Ends, PE80

Model:

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



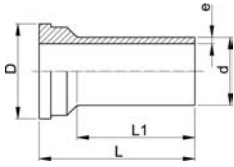
d [mm]	PN	Code	kg	d1 [mm]	d2 [mm]	L [mm]	L1 [mm]	z [mm]
20	6	734 600 106	0.006	28	30	19	5	5
25	6	734 600 107	0.012	36	39	21	5	5
32	6	734 600 108	0.015	42	45	23	6	5
40	6	734 600 109	0.026	53	57	25	6	5
50	6	734 600 110	0.027	59	63	28	7	5
63	6	734 600 111	0.045	74	79	32	8	5



Union Ends long, PE100

Model:

- For butt-, (IR Plus®) and electro fusion
- Suitable for unions, tank connectors and diaphragm valves Type 314



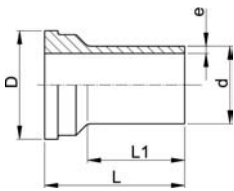
d [mm]	PN	FM	Code	kg	D [mm]	L [mm]	L1 [mm]	e [mm]
20	16	IR	753 608 616	0.011	30	67	52	1,9
25	16	IR	753 608 617	0.018	39	71	53	2,3
32	16	IR	753 608 618	0.027	45	73	55	2,9
40	16	IR	753 608 619	0.045	57	81	60	3,7
50	16	IR	753 608 620	0.062	63	87	66	4,6
63	16	IR	753 608 621	0.100	78	93	70	5,8

53 60 86

Union Ends, PE100 SDR11

Model:

- Suitable for unions, tank connectors and diaphragm valves Type 314
- 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**



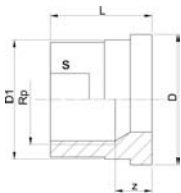
d [mm]	PN	FM	Code	kg	D [mm]	L [mm]	L1 [mm]	e [mm]
20	16	IR	753 608 606	0.011	30	54	38	1,9
25	16	IR	753 608 607	0.018	39	57	42	2,3
32	16	IR	753 608 608	0.027	45	60	41	2,9
40	16	IR	753 608 609	0.045	57	63	42	3,7
50	16	IR	753 608 610	0.062	63	66	44	4,6
63	16	IR	753 608 611	0.100	78	69	45	5,8
75	10	IR	753 608 612	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:

- 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	22.00	19	19
1/2	16	724 600 656	-	-	0.060	11	30	27.50	24	24
3/4	16	724 600 657	-	-	0.100	11	39	36.00	26	29
1	16	724 600 658	-	-	0.140	12	45	41.50	29	36
1 1/4	16	724 600 659	-	-	0.230	14	57	53.00	33	45
1 1/2	16	724 600 660	-	-	0.320	15	63	59.00	34	54
2	16	724 600 661	-	-	0.450	15	78	74.00	39	63

24 60 07

Union Ends, Stainless Steel 1.4404 (316L) R

**Model:**

- 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	22.00	30	19
1/2	16	724 600 706	-	-	0.090	30	27.50	34	24
3/4	16	724 600 707	-	-	0.120	39	36.00	36	32
1	16	724 600 708	-	-	0.190	45	41.50	40	37
1 1/4	16	724 600 709	-	-	0.350	57	53.00	46	48
1 1/2	16	724 600 710	-	-	0.400	63	59.00	48	54
2	16	724 600 711	-	-	0.660	78	74.00	55	69

24 60 55

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



d [mm]	d1 [mm]	PN	Code	SP	GP	kg	D [mm]	D1 [mm]	L [mm]	e [mm]
16	17	16	724 605 505	-	-	0.030	24	22.00	18	1.6
20	21	16	724 605 506	-	-	0.050	30	27.50	22	2.0
25	26	16	724 605 507	-	-	0.080	39	36.00	23	2.0
32	33	16	724 605 508	-	-	0.110	45	41.50	26	2.0
40	42	16	724 605 509	-	-	0.190	57	53.00	26	2.0
50	48	16	724 605 510	-	-	0.220	63	59.00	28	2.0
63	60	16	724 605 511	-	-	0.370	78	74.00	32	2.6

21 64 01

Union Bushes, PVC-U metric

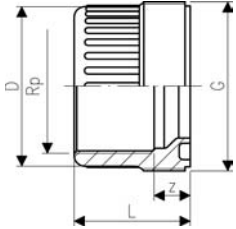
**Model:**

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

d [mm]	PN	Code	SP	GP	kg	z [mm]	D [mm]	L [mm]	G/Tr
10	16	721 640 103	-	-	0.007	10	20	22	5/8
12	16	721 640 104	-	-	0.007	10	20	22	5/8
16	16	721 640 105	-	-	0.009	10	24	24	3/4
20	16	721 640 106	-	-	0.014	10	29	26	1
25	16	721 640 107	-	-	0.023	10	34	29	1 1/4
32	16	721 640 108	-	-	0.032	10	42	32	1 1/2
40	16	721 640 109	-	-	0.058	12	52	38	2
50	16	721 640 110	-	-	0.039	14	62	45	2 1/4
63	16	721 640 111	-	-	0.132	18	78	56	2 3/4
75	10	721 640 112	-	-	0.210	18	93	62	Tr108x5
90	10	721 640 113	-	-	0.315	18	110	69	Tr128x5
110	10	721 640 114	-	-	0.445	11	133	72	Tr154x6

21 64 06

Union Bushes, PVC-U Rp



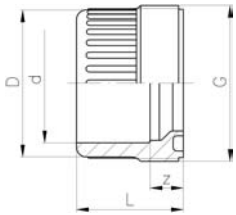
Model:

- 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 thread 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]
¼	10	721 640 604	-	-	0.006	12	20	22	⅝
⅜	10	721 640 605	-	-	0.008	13	24	24	¾
½	10	721 640 606	-	-	0.013	13	29	26	1
¾	10	721 640 607	-	-	0.021	14	34	29	1 ¼
1	10	721 640 608	-	-	0.032	15	42	32	1 ½
1 ¼	10	721 640 609	-	-	0.057	19	53	38	2
1 ½	10	721 640 610	-	-	0.086	26	63	45	2 ¼
2	10	721 640 611	-	-	0.160	33	78	56	2 ¾

21 64 11

Union Bushes, PVC-U BS Inch



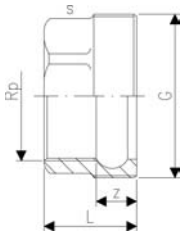
Model:

- Solvent cement socket BS
- 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]
⅜	16	721 641 105	-	-	0.008	8	24	24	3/4"
½	16	721 641 106	-	-	0.012	9	29	26	1"
¾	16	721 641 107	-	-	0.021	9	34	29	1 1/4"
1	16	721 641 108	-	-	0.029	9	42	32	1 1/2"
1 ¼	16	721 641 109	-	-	0.052	10	52	38	2"
1 ½	16	721 641 110	-	-	0.068	10	62	40	2 1/4"
2	16	721 641 111	-	-	0.137	10	78	46	2 3/4"

24 63 06

Union Bushes, Malleable Iron Galvanized Rp



Model:

- Parallel female thread Rp

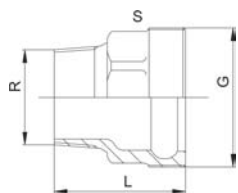
d [mm]	Rp [inch]	PN	Code	kg	z [mm]	L [mm]	G [inch]	s [mm]
20	¾	16	724 630 606	0.058	12	25	1	25
25	1	16	724 630 607	0.096	13	28	1 ¼	31
32	1 ¼	16	724 630 608	0.127	14	31	1 ½	28
40	1 ½	16	724 630 609	0.204	14	33	2	47
50	2	16	724 630 610	0.268	17	36	2 ¼	53
63	2 ½	16	724 630 611	0.550	18	42	2 ¾	66
75	3	16	724 630 612	0.737	19	46	3 ½	82
90	3 ½	16	724 630 613	0.913	22	52	4	96

24 63 09

Union Bushes, Malleable Iron Galvanized R

Model:

- Taper male thread R



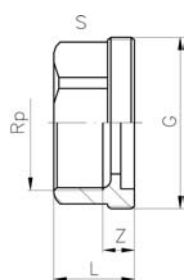
d [mm]	R [inch]	PN	Code	kg	L [mm]	G [inch]	s [mm]
20	½	16	724 630 906	0.085	43	1	25
25	¾	16	724 630 907	0.147	49	1 ¼	31
32	1	16	724 630 908	0.210	53	1 ½	38
40	1 ¼	16	724 630 909	0.315	58	2	47
50	1 ½	16	724 630 910	0.411	62	2 ¼	53
63	2	16	724 630 911	0.665	71	2 ¾	66
75	2 ½	16	724 630 912	0.897	78	3 ¼	82
90	3	16	724 630 913	1.300	87	4	96

20 63 06

Union Bushes, Brass Rp

Model:

- Parallel female thread Rp



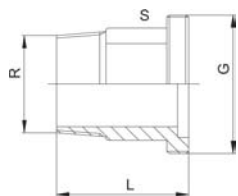
d [mm]	Rp [inch]	PN	Code	kg	z [mm]	L [mm]	G [inch]	s [mm]
16	¾	16	720 630 605	0.053	7	17	¾	27
20	½	16	720 630 606	0.070	7	20	1	27
25	¾	16	720 630 607	0.111	8	23	1 ¼	32
32	1	16	720 630 608	0.140	9	26	1 ½	38
40	1 ¼	16	720 630 609	0.234	9	28	2	47
50	1 ½	16	720 630 610	0.279	10	29	2 ¼	53
63	2	16	720 630 611	0.437	11	34	2 ¾	65
75	2 ½	16	720 630 612	0.722	11	38	3 ½	82
90	3	16	720 630 613	0.954	13	43	4	95

20 63 09

Union Bushes, Brass R

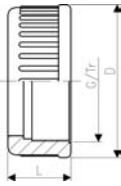
Model:

- Taper male thread R



d [mm]	R [inch]	PN	Code	kg	L [mm]	G [inch]	s [mm]
16	¾	16	720 630 905	0.068	29	¾	27
20	½	16	720 630 906	0.078	32	1	26
25	¾	16	720 630 907	0.172	49	1 ¼	32
32	1	16	720 630 908	0.223	53	1 ½	38
40	1 ¼	16	720 630 909	0.376	54	2	60
50	1 ½	16	720 630 910	0.481	61	2 ¼	66
63	2	16	720 630 911	1.078	69	2 ¾	83
75	2 ½	16	720 630 912	1.217	76	3 ½	79
90	3	16	720 630 913	1.525	83	4	80

21 69 00

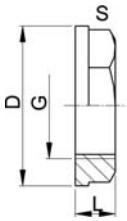
Union Nuts, PVC-U

d [mm]	PN	Code	SP	GP	kg	D [mm]	L [mm]	G [inch]	Tr
10-12	16	721 690 004	-	-	0.009	31	19	5/8	
16	16	721 690 005	-	-	0.013	35	21	3/4	
20	16	721 690 006	-	-	0.020	43	23	1	
25	16	721 690 007	-	-	0.022	51	24	1 1/4	
32	16	721 690 008	-	-	0.031	58	26	1 1/2	
40	16	721 690 009	-	-	0.051	72	29	2	
50	16	721 690 010	-	-	0.087	83	34	2 1/4	
63	16	721 690 011	-	-	0.130	100	38	2 3/4	
75	10	721 690 012	-	-	0.130	135	40		Tr 108x5
90	10	721 690 013	-	-	0.355	158	43		Tr 128x5
110	10	721 690 014	-	-	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

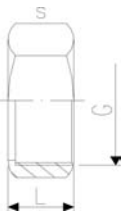


G [inch]	Code	SP	GP	kg	D [mm]	L [mm]	s [mm]
3/4	161 490 630	-	400	0.007	39	13	32
1	161 490 632	-	200	0.012	48	15	40
1 1/4	161 490 634	-	100	0.020	58	17	50
1 1/2	161 490 635	-	100	0.025	65	18	56
1 3/4	161 490 636	-	75	0.036	72	19	64
2	161 490 637	-	50	0.044	79	21	69
2 1/4	161 490 638	-	50	0.053	86	21	76
2 1/2	161 490 639	-	25	0.063	94	23	85
2 3/4	161 490 640	-	-	0.080	106	25	95
3	161 490 641	-	20	0.101	112	26	100
4	161 490 644	-	10	0.164	160	36	147

24 69 01

Union nut stainless steel 1.4404 (316L)

* Octagon union nut

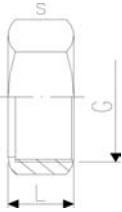


d [mm]	PN	Code	SP	GP	kg	L [mm]	G [inch]	s [mm]
16	16	724 690 105	-	-	0.060	19	3/4	32
20	16	724 690 106	-	-	0.110	21	1	41
25	16	724 690 107	-	-	0.100	23	1 1/4	46
32	16	724 690 108	-	-	0.170	24	1 1/2	55
*40	16	724 690 109	-	-	0.240	27	2	68
*50	16	724 690 110	-	-	0.300	31	2 1/4	74
*63	16	724 690 111	-	-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

246900

Union nut malleable iron galvanized**Model:**

- Malleable iron galvanized



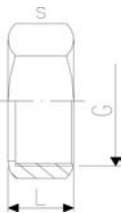
d [mm]	Rp [inch]	PN	Code	kg	L [mm]	G [inch]	s [mm]
20	1/2	16	724 690 006	0.061	18	1	39
25	3/4	16	724 690 007	0.096	20	1 1/4	48
32	1	16	724 690 008	0.125	22	1 1/2	55
40	1 1/4	16	724 690 009	0.300	24	2	67
50	1 1/2	16	724 690 010	0.245	25	2 1/4	74
63	2	16	724 690 011	0.500	27	2 3/4	90
75	2 1/2	16	724 690 012	0.700	30	3 1/2	111
90	3	16	724 690 013	0.695	31	4	131

20 69 00

20 69 04

Union nut brass

- For tap connector No. 21 55 03 and for adaptor unions brass/PVC



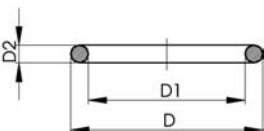
d [mm]	Rp [inch]	G [inch]	PN	Code	SP	GP	kg	L [mm]	s [mm]
12		1/2	16	720 690 405	-	-	0.026	16	24
16	3/4	3/4	16	720 690 005	-	-	0.042	17	30
20	1/2	1	16	720 690 006	-	-	0.060	19	38
25	3/4	1 1/4	16	720 690 007	-	-	0.108	20	47
32	1	1 1/2	16	720 690 008	-	-	0.105	22	52
40	1 1/4	2	16	720 690 009	-	-	0.199	25	66
50	1 1/2	2 1/4	16	720 690 010	-	-	0.268	25	72
63	2	2 3/4	16	720 690 011	-	-	0.280	27	87
75	2 1/2	3 1/2	16	720 690 012	-	-	0.675	34	110
110	3	4	16	720 690 013	-	-	0.582	36	120

EPDM 48 41 00

FPM 49 41 00

O-Ring Gaskets**Model:**

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



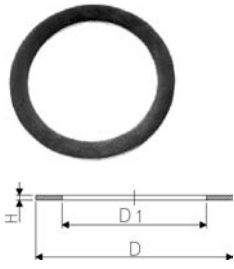
d [mm]	DN [mm]	EPDM Code	FPM Code	SP	GP	kg	D [mm]	D1 [mm]	D2 [mm]
10-12	8	748 410 004	749 410 004	-	-	0.002	18	12.40	2.60
16	10	748 410 005	749 410 005	-	-	0.002	21	15.50	2.60
20	15	748 410 006	749 410 006	-	-	0.002	27	20.20	3.50
25	20	748 410 007	749 410 007	100	1400	0.002	35	28.20	3.50
32	25	748 410 008	749 410 008	100	-	0.002	40	32.90	3.50
40	32	748 410 009	749 410 009	-	-	0.006	51	40.60	5.30
50	40	748 410 010	749 410 010	-	-	0.007	58	47.00	5.30
63	50	748 410 011	749 410 011	100	3500	0.010	70	59.70	5.30
75	65	748 410 014	749 410 014	100	600	0.012	93	81.90	5.30
90	80	748 410 015	749 410 015	100	600	0.015	112	101.00	5.30
110	100	748 410 016	749 410 016	50	200	0.031	134	120.00	7.00

EPDM 48 40 00
FPM 49 40 00

Flat Gaskets

Model:

- Hardness approx. 65° Shore
- For adaptor unions



d [mm]	Inch	EPDM Code	FPM Code	kg	D [mm]	D1 [mm]	H [mm]
12	1/4	748 400 004	-	0.002	20	13.00	2
16	3/8	748 400 005	749 400 005	0.002	24	17.00	2
20	1/2	748 400 006	749 400 006	0.003	30	21.00	3
25	3/4	748 400 007	749 400 007	0.004	38	27.00	3
32	1	748 400 008	749 400 008	0.002	44	32.00	3
40	1 1/4	748 400 009	749 400 009	0.003	55	42.00	3
50	1 1/2	748 400 010	749 400 010	0.004	62	46.00	3
63	2	748 400 011	749 400 011	0.006	78	60.00	3
75	2 1/2	748 400 012	749 400 012	0.009	97	75.00	3
90	3	748 400 013	749 400 013	0.011	109	88.00	3

EPDM 48 40 02

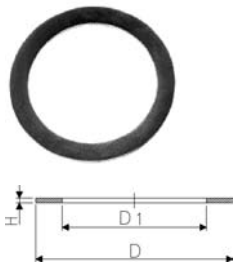
Flat Gaskets

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

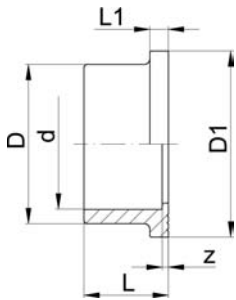


EPDM Code	SP	GP	kg	D [mm]	D1 [mm]	H [mm]
748 400 030	-	-	0.003	18	14.00	2
748 400 005	-	-	0.001	24	17.00	2
748 400 006	-	-	0.003	30	21.00	3

Flange Adaptors and Flanges

21 79 01

Flange Adaptors, PVC-U Jointing face serrated, metric



Model:

- Solvent cement socket metric
- Counterpart: Flange Adaptor serrated No. 21 79 01 or combined Flange Adaptor No. 21 79 01 for O-ring or Flat Gasket or Flange Adaptor with O-ring groove No. 21 81 01 for O-ring
- Gasket: Flange Gasket EPDM No. 48 44 01, FPM No. 49 44 01 or Flat Gasket EPDM No. 48 40 01, FPM No. 49 40 01 or O-ring EPDM No. 48 41 01, FPM 49 41 01
- Flange: PVC-U No. 21 70 00, PP with steel ring, Backing Flange PP-V for socket systems metric No. 27 70 04

* Combinend Flange Adaptor (jointing face serrated and flat)

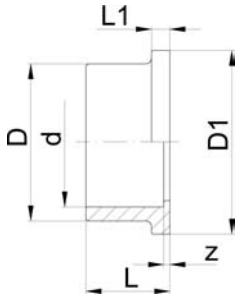
d [mm]	d [inch]	DN [mm]	PN	Code	SP	GP	kg	z [mm]	D [mm]	D1 [mm]	L [mm]	L1 [mm]
63		50	16	721 790 111	10	50	0.103	3	77	90.00	41	9
75	2 ½	65	16	721 790 112	-	10	0.155	3	91	106.00	47	10
90		80	16	721 790 113	-	10	0.254	5	108	125.00	56	11
110		100	16	721 790 114	-	10	0.418	5	131	150.00	66	12
125		100	16	721 790 115	-	2	0.548	5	148	170.00	74	13
140		125	16	721 790 116	-	6	0.740	5	165	188.00	81	14
*160		150	16	721 790 117	-	2	1.077	5	188	213.00	91	16
*200		200	10	721 790 119	-	2	1.476	6	224	250.00	112	24
*225		200	10	721 790 120	-	2	1.758	6	248	274.00	125	25
250		250	10	721 790 121	-	-	2.150	9	274	303.00	140	23
*280		250	10	721 790 122	-	1	2.895	5	308	329.00	151	23
*315		300	6	721 790 123	-	1	4.450	8	346	379.00	172	27
355		350	6	721 790 124	-	-	5.800	10	384	430.00	194	32
400		400	6	721 790 125	-	-	8.900	10	438	482.00	216	34

21 80 01

Flange Adaptors PVC-U Jointing face flat, metric

Model :

- Solvent cement socket metric
- Counterpart: Flange Adaptor with groove No. 21 81 01 for O-ring
Flange Adaptor flat No. 21 80 01 for Flange Gasket
* Combined Flange Adaptor No. 21 79 01 for O-ring or Flat Gasket
- Gasket: O-ring EPDM No. 48 41 01, FPM No. 49 41 01
Flange Gasket EPDM No. 48 44 01, FPM No. 49 44 01
* Flat Gasket EPDM No. 48 40 01, FPM No. 49 40 01
- Flange: PVC-U No. 21 70 00, PP with steel ring,
Backing Flange PP-V for socket systems metric
No. 27 70 04



d [mm]	d [inch]	DN [mm]	PN	Code	SP	GP	kg	z [mm]	D [mm]	D1 [mm]	L [mm]	L1 [mm]
16		10	16	721 800 105	10	100	0.008	3	22	29.00	17	6
20		15	16	721 800 106	10	100	0.011	3	27	34.00	19	6
25		20	16	721 800 107	10	100	0.016	3	33	41.00	22	7
32		25	16	721 800 108	10	100	0.024	3	41	50.00	25	7
40		32	16	721 800 109	10	100	0.039	3	50	61.00	29	8
50		40	16	721 800 110	10	50	0.056	3	61	73.00	34	8
63		50	16	721 800 111	10	50	0.103	3	77	90.00	41	9
75	2 ½	65	16	721 800 112	-	10	0.155	3	91	106.00	47	10
90		80	16	721 800 113	-	10	0.156	5	108	125.00	56	11
110		100	16	721 800 114	-	10	0.417	5	131	150.00	66	12
125		100	16	721 800 115	-	2	0.549	5	148	170.00	74	13
140	5	125	16	721 800 116	-	6	0.618	5	165	188.00	81	14
250		250	10	721 800 121	-	-	2.150	9	274	303.00	140	23

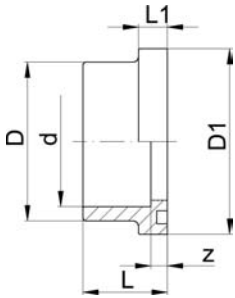
21 81 01

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



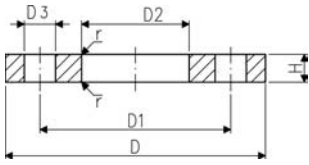
Model:

- 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-V for socket systems metric No. 27 70 04



d [mm]	DN [mm]	PN	Code	SP	GP	kg	z [mm]	D [mm]	D1 [mm]	L [mm]	L1 [mm]
16	10	16	721 810 105	10	100	0.008	6	22	29.00	20	9
20	15	16	721 810 106	-	100	0.011	6	27	34.00	22	9
25	20	16	721 810 107	10	100	0.018	6	33	41.00	25	10
32	25	16	721 810 108	10	100	0.027	6	41	50.00	28	10
40	32	16	721 810 109	10	100	0.045	8	50	61.00	34	13
50	40	16	721 810 110	10	50	0.068	8	61	73.00	39	13
63	50	16	721 810 111	10	50	0.120	8	77	90.00	46	14
75	65	16	721 810 112	-	10	0.182	8	91	106.00	52	15
90	80	16	721 810 113	-	10	0.291	10	108	125.00	61	16
110	100	16	721 810 114	-	10	0.468	11	131	150.00	72	18
125	100	16	721 810 115	-	5	0.753	11	148	170.00	80	19
140	125	16	721 810 116	-	6	0.830	11	165	188.00	87	20
160	150	16	721 810 117	-	2	1.180	11	188	213.00	97	22
200	200	10	721 810 119	-	2	1.593	12	224	250.00	118	30
225	200	10	721 810 120	-	2	1.895	12	248	274.00	131	31
250	250	10	721 810 121	-	-	2.150	9	274	303.00	140	23
280	250	10	721 810 122	-	1	3.100	13	308	329.00	158	30
315	300	6	721 810 123	-	1	4.830	17	346	379.00	180	35

Backing Flanges, PVC-U metric



Model:

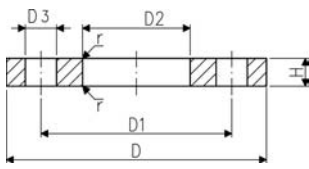
- For socket systems
- Connecting dimension: ISO 7005 PN10, EN 1092 PN 10, DIN 2501 PN10

* Connecting dimension: ISO 2536

d [mm]	DN [mm]	Inch	PN	Code	GP	kg	kg/m
16	10	3/8	10	721 700 005	100	0.055	0.055
20	15	1/2	10	721 700 006	90	0.069	0.069
25	20	3/4	10	721 700 007	50	0.092	0.092
32	25	1	10	721 700 008	40	0.132	0.132
40	32	1 1/4	10	721 700 009	25	0.194	0.194
50	40	1 1/2	10	721 700 010	20	0.245	0.245
63	50	2	10	721 700 011	30	0.311	0.311
75	65	2 1/2	10	721 700 012	27	0.375	0.375
90	80	3	10	721 700 013	20	0.471	0.471
110	100	4	10	721 700 014	30	0.554	0.554
125	125	4 1/2	10	721 700 015	12	0.995	0.995
140	125	5	10	721 700 016	12	0.746	0.746
160	150	6	10	721 700 017	9	1.016	1.016
200	200	7	10	721 700 019	8	1.658	1.658
225	200	8	10	721 700 020	8	1.380	1.380
250	250	9	6	721 700 021	-	1.700	1.700
*250	225	9	6	721 700 136	-	1.700	1.700
280	250	10	6	721 700 137	-	1.730	1.730
315	300	12	6	721 700 138	-	2.350	2.350
355	350	14	6	721 700 139	-	3.400	3.400
400	400	16	6	721 700 140	-	4.500	4.500

d [mm]	D [mm]	D1 [mm]	D2 [mm]	D3 [mm]	H [mm]	r [mm]	AL	SC
16	90	60.00	23.00	14.0	10	1	4	M12
20	95	65.00	28.00	14.0	11	1	4	M12
25	105	75.00	34.00	14.0	12	2	4	M12
32	115	85.00	42.00	14.0	14	2	4	M12
40	140	100.00	51.00	18.0	15	2	4	M16
50	150	110.00	62.00	18.0	16	2	4	M16
63	165	125.00	78.00	18.0	18	3	4	M16
75	185	145.00	92.00	18.0	19	3	4	M16
90	200	160.00	110.00	18.0	20	3	8	M16
110	220	180.00	133.00	18.0	22	3	8	M16
125	250	210.00	150.00	18.0	26	5	8	M16
140	250	210.00	167.00	18.0	26	4	8	M16
160	285	240.00	190.00	22.0	28	4	8	M20
200	340	295.00	226.00	22.0	32	4	8	M20
225	340	295.00	250.00	22.0	32	4	8	M20
250	395	350.00	277.00	22.0	36	4	12	M20
*250	370	325.00	277.00	22.0	36	4	8	M20
280	395	350.00	310.00	22.0	36	4	12	M20
315	445	400.00	348.00	22.0	36	4	12	M20
355	505	460.00	388.00	22.0	38	5	16	M20
400	565	515.00	442.00	26.0	42	5	16	M24

Backing Flanges, PVC-U Inch ASTM / ANSI



Model:

- For socket systems
- For Flange Adaptors BS (ANSI)
- Connecting dimension: ANSI B 16.5 class 150 (ASTM D 4024), BS EN 1759

* Only for use with metric flange adaptors

d [mm]	DN [mm]	Inch	PN	Code	SP	GP	kg	kg/m
	15	1/2	10	721 702 206	-	90	0.067	0.067
	20	3/4	10	721 702 207	-	50	0.088	0.088
	25	1	10	721 702 208	-	40	0.128	0.128
	32	1 1/4	10	721 702 209	-	25	0.208	0.208
	40	1 1/2	10	721 702 210	-	20	0.253	0.253
	50	2	10	721 702 211	-	30	0.305	0.305
	65	2 1/2	10	721 702 212	-	27	0.382	0.382
	80	3	10	721 702 213	20	-	0.498	0.498
	100	4	10	721 702 214	-	-	0.515	0.515
*110	100	4	10	161 483 180	-	30	0.563	0.563
	125	5	10	721 702 216	-	12	0.727	0.727
	150	6	10	721 702 217	9	-	1.910	1.910
*160	150	6	10	161 483 181	-	9	1.013	1.013
	200	8	10	721 702 220	-	8	1.349	1.349

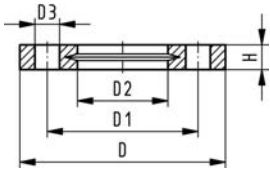
d [mm]	DN [mm]	Inch	D [mm]	D1 [mm]	D2 [mm]	D3 [mm]	H [mm]	r [mm]	AL
	15	1/2	95	60.00	28.00	16.0	11	1	4
	20	3/4	105	70.00	34.00	16.0	12	2	4
	25	1	115	79.00	42.00	16.0	14	2	4
	32	1 1/4	140	89.00	51.00	16.0	15	2	4
	40	1 1/2	150	98.00	62.00	16.0	16	2	4
	50	2	165	121.00	78.00	19.0	18	3	4
	65	2 1/2	185	140.00	92.00	19.0	19	3	4
	80	3	200	152.00	110.00	19.0	20	3	4
	100	4	220	190.00	138.00	19.0	22	3	8
*110	100	4	220	190.00	133.00	19.0	22	3	8
	125	5	250	216.00	167.00	22.0	26	4	8
	150	6	285	241.00	200.00	22.0	28	4	8
*160	150	6	285	241.00	190.00	22.0	28	4	8
	200	8	340	298.00	250.00	22.0	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
- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10



¹⁾ Suitable for socket- and butt fusion systems (no pictograph on flange)

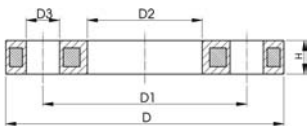
d [mm]	DN [mm]	PN	Code	D [mm]	D1 [mm]	D2 [mm]	D3 [mm]	H [mm]	AL	SC
20	15	16	727 700 406	95	65.00	28.00	14.0	16	4	M12
25	20	16	727 700 407	105	75.00	34.00	14.0	17	4	M12
32	25	16	727 700 408	115	85.00	42.00	14.0	18	4	M12
40	32	16	727 700 409	140	100.00	51.00	18.0	20	4	M16
50	40	16	727 700 410	150	110.00	62.00	18.0	22	4	M16
63	50	16	727 700 411	165	125.00	78.00	18.0	24	4	M16
75	65	16	727 700 412	185	145.00	92.00	18.0	26	4	M16
90	80	16	727 700 413	200	160.00	110.00	18.0	27	8	M16
110	100	16	727 700 414	220	180.00	133.00	18.0	28	8	M16
140	125	16	727 700 416	250	210.00	167.00	18.0	30	8	M16
160	150	16	727 700 417	285	241.00	190.00	22.0	32	8	M20
200	200	16	727 700 419	340	296.50	226.00	22.0	34	8	M20
225	200	16	727 700 420	340	295.00	250.00	22.0	34	8	M20
250	250	16	727 700 421	395	350.00	277.00	22.0	38	12	M20
280	250	16	727 700 422	395	350.00	310.00	22.0	38	12	M20
315	300	16	727 700 423	445	400.00	348.00	22.0	42	12	M20

27 70 02

Backing Flanges, PP/Steel for Socket Systems metric

Model:

- PP-GF (30% glass-fibre reinforced) with steel ring
- Connecting dimensions: ISO 7005, EN 1092, DIN 2501; bolt circle PN 10



* Connecting dimension: ISO 2536

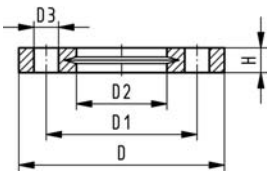
d [mm]	DN [mm]	PN	Code	D [mm]	D1 [mm]	D2 [mm]	D3 [mm]	H [mm]	AL	SC
20	15	16	727 700 206	95	65	28	14	12	4	M12
25	20	16	727 700 207	105	75	34	14	12	4	M12
32	25	16	727 700 208	115	85	42	14	16	4	M12
40	32	16	727 700 209	140	100	51	18	16	4	M16
50	40	16	727 700 210	150	110	62	18	18	4	M16
63	50	16	727 700 211	165	125	78	18	18	4	M16
75	65	16	727 700 212	185	145	92	18	18	4	M16
90	80	16	727 700 213	200	160	110	18	20	8	M16
110	100	16	727 700 214	220	180	133	18	20	8	M16
125	100	16	727 700 215	250	210	150	18	24	8	M16
140	125	16	727 700 216	250	210	167	18	24	8	M16
160	150	16	727 700 217	285	240	190	22	24	8	M20
200	200	16	727 700 219	340	295	226	22	27	8	M20
225	200	16	727 700 220	340	295	250	22	27	8	M20
*250	250	16	727 700 221	395	325	277	22	30	8	M20
280	250	16	727 700 222	395	350	310	22	30	12	M20
315	300	16	727 700 223	445	400	348	22	34	12	M20
355	350	16	727 700 224	515	460	388	23	40	16	M20
400	400	16	727 700 225	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
- Connection dimensions according to ANSI B 16.5, ASTM D 4024; bolt circle class 150

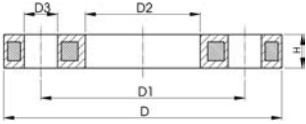


¹⁾ Suitable for socket- and butt fusion systems (no pictograph on flange)

Inch	d [mm]	DN [mm]	PN	Code	kg	kg/m
1/2		15	16	727 701 406	0.080	0.080
3/4		20	16	727 701 407	0.100	0.100
1		25	16	727 701 408	0.140	0.140
1 1/4		32	16	727 701 409	0.220	0.220
1 1/2		40	16	727 701 410	0.210	0.210
2		50	16	727 701 411	0.380	0.380
2 1/2		65	16	727 701 412	0.480	0.480
3		80	16	727 701 413	0.520	0.520
4	110	100	16	727 701 414	0.680	0.680
	160	150	16	727 700 417	1.200	1.200
10		250	16	727 701 422	1.700	1.700
12		300	16	727 701 423	2.400	2.400

Inch	D [mm]	D1 [mm]	D2 [mm]	D3 [mm]	H [mm]	AL	SC
1/2	95	60.00	28.00	16.0	16	4	M12
3/4	105	70.00	34.00	16.0	17	4	M12
1	115	79.00	42.00	16.0	18	4	M12
1 1/4	140	89.00	51.00	16.0	20	4	M16
1 1/2	150	98.00	62.00	16.0	22	4	M16
2	165	121.00	78.00	19.0	24	4	M16
2 1/2	185	140.00	92.00	19.0	26	4	M16
3	200	152.00	110.00	19.0	27	4	M16
4	229	190.00	133.00	19.0	28	8	M16
	285	241.00	190.00	22.0	32	8	M20
10	406	362.00	310.00	26.0	38	12	M20
12	483	432.00	348.00	26.0	42	12	M20

Backing Flanges, PP/Steel for Socket Systems Inch/ANSI



Model:

- For socket systems
- For Flange Adaptors BS (ANSI)
- Material: PP (30 % glass-fibre reinforced) with steel ring
- Connecting dimension ANSI B 16.5 / ASTM D 4024
- DN100 and DN150: only for use with original metric flange adaptors

d [mm]	DN [mm]	Inch	PN	Code	GP	kg	kg/m
20	15	1/2	16	727 701 206	72	0.210	0.210
25	20	3/4	16	727 701 207	45	0.250	0.250
32	25	1	16	727 701 208	34	0.420	0.420
40	32	1 1/4	16	727 701 209	20	0.670	0.670
50	40	1 1/2	16	727 701 210	17	0.860	0.860
63	50	2	16	727 701 211	15	0.930	0.930
75	65	2 1/2	16	727 701 212	11	1.340	1.340
90	80	3	16	727 701 213	9	1.550	1.550
110	100	4	16	727 701 214	13	1.810	1.810
200	150	6	16	727 701 217	-	3.390	3.390
225	200	8	16	727 701 220	-	4.410	4.410

d [mm]	DN [mm]	D [mm]	D1 [mm]	D2 [mm]	D3 [mm]	H [mm]	AL
20	15	95	60.00	28.00	16.0	12	4
25	20	105	70.00	34.00	16.0	12	4
32	25	115	79.00	42.00	16.0	16	4
40	32	140	89.00	51.00	16.0	16	4
50	40	150	98.00	62.00	16.0	18	4
63	50	165	121.00	78.00	19.0	18	4
75	65	185	140.00	92.00	19.0	18	4
90	80	200	152.00	110.00	19.0	20	4
110	100	229	190.00	133.00	19.0	20	8
200	150	285	241.00	190.00	22.0	24	8
225	200	340	298.00	250.00	22.0	27	8

Fixed Flanges, PVC-U Joining face flat, metric

Model:

- Solvent cement socket metric
- Connecting dimension: ISO 7005 PN10, EN 1092 PN 10, DIN 2501 PN10

* Combined Flange, connecting dimensions DIN 2501 PN 10 and ANSI B 16.5



d [mm]	DN [mm]	Inch	PN	Code	GP	kg	kg/m
20	15	½	16	721 730 206	-	0.105	0.105
25	20	¾	16	721 730 207	-	0.130	0.130
32	25	1	16	721 730 208	-	0.183	0.183
40	32	1 ¼	16	721 730 209	-	0.305	0.305
50	40	1 ½	16	721 730 210	-	0.365	0.365
63	50	2	16	721 730 211	-	0.510	0.510
*75	65	2 ½	10	721 730 212	10	0.520	0.520
*90	80	3	10	721 730 213	16	0.720	0.720
*110	100	4	10	721 730 214	12	0.920	0.920
*140	125	5	10	721 730 216	-	1.380	1.380
*160	150	6	10	721 730 217	-	2.020	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

Fixed Flanges, PVC-U Jointing face serrated, metric

Model:

- Solvent cement socket metric
- Connecting dimension: ISO 7005 PN10, EN 1092 PN 10, DIN 2501 PN10

* Combined Flange, connecting dimensions DIN 2501 PN 10 and ANSI B 16.5



d [mm]	DN [mm]	Inch	PN	Code	GP	kg	kg/m
20	15	1/2	16	721 740 106	-	0.100	0.100
25	20	3/4	16	721 740 107	-	0.130	0.130
32	25	1	16	721 740 108	-	0.185	0.185
40	32	1 1/4	16	721 740 109	-	0.305	0.305
50	40	1 1/2	16	721 740 110	-	0.368	0.368
63	50	2	16	721 740 111	-	0.510	0.510
*75	65	2 1/2	10	721 740 112	10	0.520	0.520
*90	80	3	10	721 740 113	16	0.720	0.720
*110	100	4	10	721 740 114	12	0.920	0.920
*140	125	5	10	721 740 116	-	1.380	1.380
*160	150	6	10	721 740 117	-	2.020	2.020

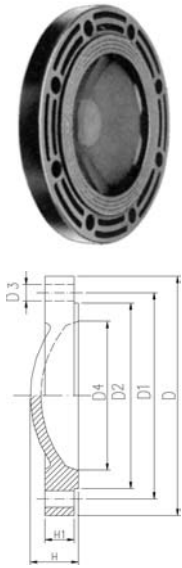
d [mm]	z [mm]	D [mm]	D1 [mm]	D2 [mm]	D3 [mm]	H [mm]	H1 [mm]	AL	SC
20	3	95	65.00	27.00	14.0	12	19	4	M12
25	3	105	75.00	33.00	14.0	13	22	4	M12
32	3	115	85.00	41.00	14.0	14	25	4	M12
40	3	140	100.00	51.00	18.0	17	29	4	M16
50	3	150	110.00	62.00	18.0	17	34	4	M16
63	3	165	125.00	77.00	18.0	20	41	4	M16
*75	3	185	142.00	91.00	22.0	21	47	4	M20
*90	5	200	156.00	108.00	22.0	22	56	8	M20
*110	5	220	186.00	131.00	24.0	24	66	8	M20
*140	5	250	215.00	165.00	23.0	28	91	8	M20
*160	5	285	240.00	188.00	23.0	30	91	8	M20

Blanking Flanges, PVC-U Jointing face serrated, metric

Model:

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

* Combined Flange, connecting dimensions DIN 2501 PN 10 and ANSI B 16.5



d [mm]	DN [mm]	Inch	PN	Code	GP	kg	kg/m
*20	15	1/2	10	721 700 506	75	0.075	0.075
*25	20	3/4	10	721 700 507	50	0.097	0.097
*32	25	1	10	721 700 508	30	0.145	0.145
*40	32	1 1/4	10	721 700 509	20	0.225	0.225
*50	40	1 1/2	10	721 700 510	18	0.280	0.280
*63	50	2	10	721 700 511	15	0.380	0.380
*75	65	2 1/2	10	721 700 512	10	0.535	0.535
*90	80	3	10	721 700 513	20	0.670	0.670
*110	100	4	10	721 700 514	10	0.875	0.875
*140	125	5	10	721 700 516	-	1.315	1.315
*160	150	6	10	721 700 517	-	1.730	1.730
225	200	8	10	721 700 520	-	2.600	2.600
250	250	10	10	721 700 521	-	3.300	3.300
280	250	10	10	721 700 522	-	4.650	4.650
315	300	12	6	721 700 523	-	5.750	5.750
355	350	14	6	721 700 524	-	6.800	6.800
400	400	16	6	721 700 525	-	9.000	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	34.00	16.0	15.0	15	12	4
*25	105		70.0	73.0	41.00	16.0	20.0	16	13	4
*32	115		79.0	83.0	50.00	16.0	25.0	19	15	4
*40	140		91.0	100.0	61.00	18.0	34.0	20	16	4
*50	150		101.0	110.0	74.00	18.0	44.0	22	17	4
*63	165		121.0	124.0	91.00	19.0	57.0	25	20	4
*75	185		140.0	145.0	106.00	22.0	69.0	29	21	4
*90	200		152.0	160.0	125.00	22.0	82.0	32	22	8
*110	220		180.0	191.0	150.00	24.0	102.0	36	24	8
*140	250	215.00			184.00	23.0	120.0	41	28	8
*160	285	240.00			212.00	23.0	152.0	45	30	8
225	340	295.00			273.00	22.0	213.0	63	36	8
250	370	325.00			303.00	22.0	238.0	63	36	8
280	395	350.00			328.00	22.0	266.0	65	36	12
315	445	400.00			378.00	22.0	299.0	65	36	12
355	505	460.00			430.00	22.0	341.0	67	38	16
400	565	515.00			482.00	26.0	384.0	71	42	16

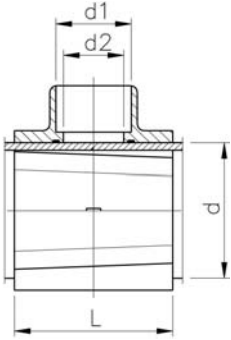
Branch and Tapping Saddles

21 111

Branch Saddle



- For PVC pipes
- 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



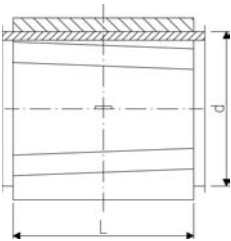
d [mm]	Code	SP	GP	kg	d1 [mm]	d2 [mm]	L [mm]
63	161 111 035	1	4	0.699	40	22	105
63	161 111 036	1	4	0.730	50	22	105
75	161 111 046	1	4	0.797	50	31	105
90	161 111 055	1	12	0.826	40	31	105
90	161 111 056	1	12	0.856	50	31	105
110	161 111 065	1	12	0.935	40	31	105
110	161 111 066	1	12	0.949	50	40	105
110	161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

21 110 200

Repair Saddle

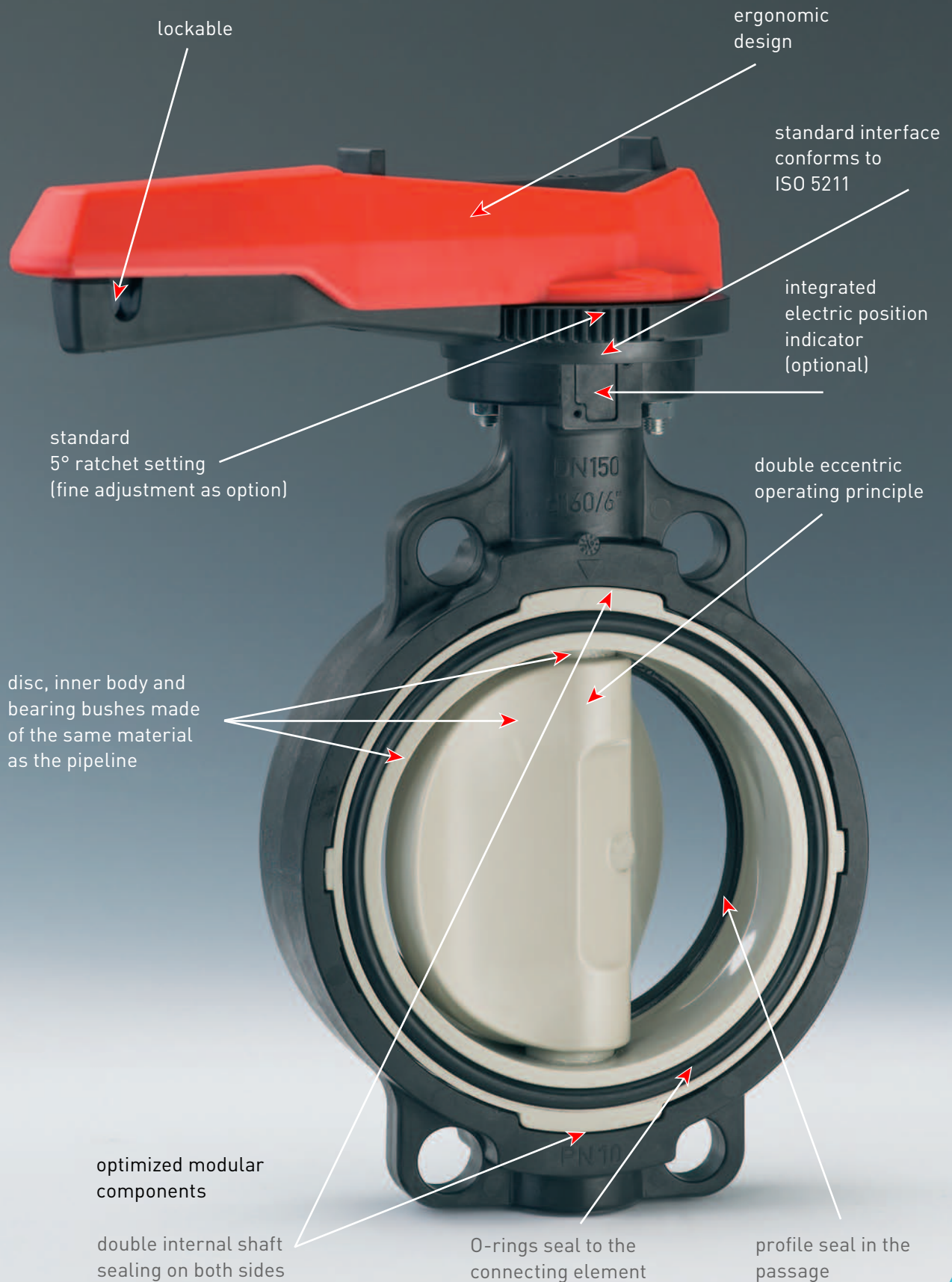


- For PVC pipes
- For operating pressure up to 10 bar water
- For repair of damaged pipes
- Saddle valves can be solvent cemented
- Cementing only possible on dry mains without pressure



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

➤ A winner in every detail



Hand-Operated Valves

General Information

Material

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

Standards

All the main dimensions, 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	
ISO 727 DIN 3441 PrEN ISO 16135...16199 NF T54-028 PrEN ISO 21787	on request ANSI JIS BSI

Thread joint	Flange joint	
ISO 7-1 DIN 2999-9	DIN 2501/8063	on request ANSI JIS BSI

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

Jointing

Solvent cement jointing:
Pipes with outside diameter tolerances in accordance with ISO 11922-3 can be readily jointed with George Fischer Valves.

Threaded joint:
BSP parallel female threads are in accordance with ISO 7/1 or DIN 2999. Threaded plastic Valves should be jointed to plastics pipe or to other plastics parts. Jointing to metal pipe 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

see column PN

Marking

George Fischer valves are marked as follows:

- +GF+
- pipe o.d.
- pipe nominal bore
- material
- pressure rating: PN ...

Overall length

When used with flange adaptors or union ends from George Fischer, the lengths of valves correspond to EN 558-1. ISO 5752

Dimensions

All dimensions are given in mm.

Information Service

For detailed information see our Catalogue "Plastic Piping Systems".

Quality control conforming to DIN 3441, Part 1

The function and tightness of every valve are factory-tested. Testing is carried out with air under water.

Orders

Always quote the George Fischer code number when placing orders.

Ordering example

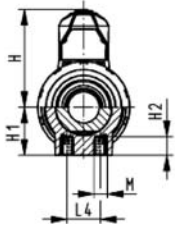
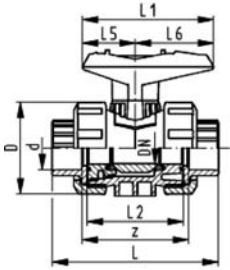
8 ball valves 161 546 005

Ball valves

Ball valve type 546 PVC-U

With mounting inserts

With solvent cement sockets metric



Model:

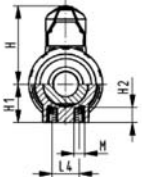
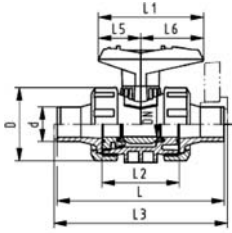
- For easy installation and removal
- z-dimension, valve end and valve nut are **not compatible** with type 346
- Ball seals PTFE
- Integrated stainless steel mounting inserts

Option:

- Individual configuration of the valve (see form)
- 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	161 546 061	161 546 071	0.150	
20	15	16	185	161 546 062	161 546 072	0.150	
25	20	16	350	161 546 063	161 546 073	0.230	
32	25	16	700	161 546 064	161 546 074	0.330	
40	32	16	1000	161 546 065	161 546 075	0.600	
50	40	16	1600	161 546 066	161 546 076	0.800	
63	50	16	3100	161 546 067	161 546 077	1.460	

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]	
16	50	57	27	12	92	77	56	25	32	45	M6	64	
20	50	57	27	12	95	77	56	25	32	45	M6	64	
25	58	67	30	12	110	97	65	25	39	58	M6	72	
32	68	73	36	12	123	97	71	25	39	58	M6	79	
40	84	90	44	15	146	128	85	45	54	74	M8	94	
50	97	97	51	15	157	128	89	45	54	74	M8	95	
63	124	116	64	15	183	152	101	45	66	87	M8	107	



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

Model:

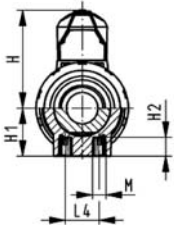
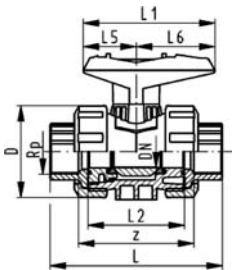
- For easy installation and removal
- z-dimension, valve end and valve nut are **not compatible** with type 346
- Ball seals PTFE
- Integrated stainless steel mounting inserts

Option:

- Individual configuration of the valve (see form)
- 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	161 546 721	161 546 731	0.157
20	15	16	185	161 546 722	161 546 732	0.157
25	20	16	350	161 546 723	161 546 733	0.242
32	25	16	700	161 546 724	161 546 734	0.347
40	32	16	1000	161 546 725	161 546 735	0.620
50	40	16	1600	161 546 726	161 546 736	0.845
63	50	16	3100	161 546 727	161 546 737	1.550

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
16	50	57	27	12	114	77	56	130	25	32	45	M6
20	50	57	27	12	124	77	56	130	25	32	45	M6
25	58	67	30	12	144	97	65	150	25	39	58	M6
32	68	73	36	12	154	97	71	160	25	39	58	M6
40	84	90	44	15	174	128	85	180	45	54	74	M8
50	97	97	51	15	194	128	89	200	45	54	74	M8
63	124	116	64	15	224	152	101	230	45	66	87	M8



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

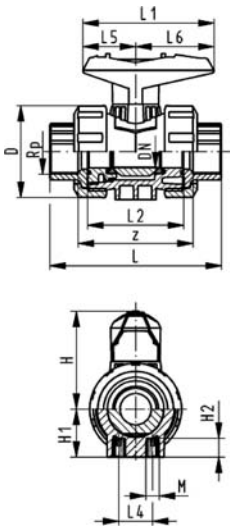
Model:

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

Option:

- Individual configuration of the valve (see form)
- 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	kg
3/8	10	10	71	161 546 741	161 546 751	0.152
1/2	15	10	185	161 546 742	161 546 752	0.152
3/4	20	10	350	161 546 743	161 546 753	0.232
1	25	10	700	161 546 744	161 546 754	0.332
1 1/4	32	10	1000	161 546 745	161 546 755	0.605
1 1/2	40	10	1600	161 546 746	161 546 756	0.805
2	50	10	3100	161 546 747	161 546 757	1.465



Rp	D	H	H1	H2	L	L1	L2	L4	L5	L6	M	z
[inch]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]		[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



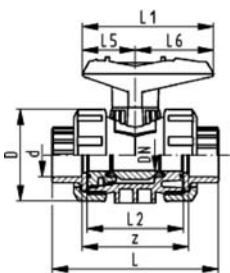
Ball valve type 546 PVC-U With mounting inserts With fusion sockets PE 100 metric

Model:

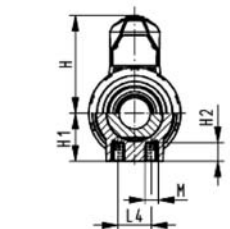
- For easy installation and removal
- z-dimension, valve end and valve nut are **not compatible** with type 346
- Ball seals PTFE
- Integrated stainless steel mounting inserts

Option:

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



d	DN	PN	kv-value (Δp=1 bar)	EPDM Code	FPM Code	kg
[mm]	[mm]		[l/min]			
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	D	H	H1	H2	L	L1	L2	L4	L5	L6	M	z
[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]		[mm]
16	50	57	27	12	93	77	56	25	32	45	M6	67
20	50	57	27	12	95	77	56	25	32	45	M6	66
25	58	67	30	12	108	97	65	25	39	58	M6	77
32	68	73	36	12	119	97	71	25	39	58	M6	83
40	84	90	44	15	137	128	85	45	54	74	M8	99
50	97	97	51	15	147	128	89	45	54	74	M8	105
63	124	116	64	15	168	152	101	45	66	87	M8	113



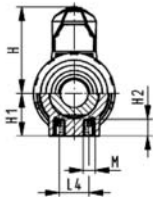
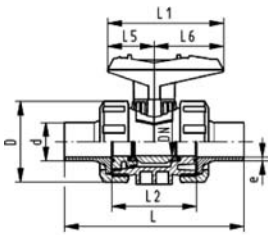
Ball valve type 546 PVC-U With mounting inserts With butt fusion spigots PE 100 SDR11 metric

Model:

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

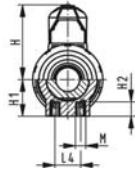
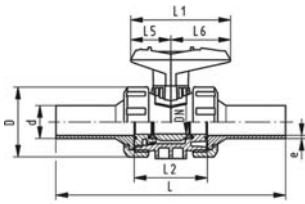
Option:

- Individual configuration of the valve (see form)
- 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]
20	50	57	27	12	130	77	56	25	32	45	M6	1,9
25	58	67	30	12	134	97	65	25	39	58	M6	2,3
32	68	73	36	12	150	97	71	25	39	58	M6	3
40	84	90	44	15	171	128	85	45	54	74	M8	3,7
50	97	97	51	15	191	128	89	45	54	74	M8	4,6
63	124	116	64	15	220	152	101	45	66	87	M8	5,8



Ball valve type 546 PVC-U With mounting inserts With butt fusion spigots long PE 100 SDR11 metric

Model:

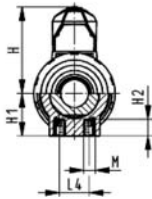
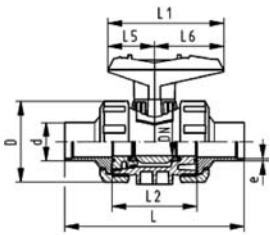
- For easy installation and removal
- z-dimension, valve end and valve nut are **not compatible** with type 346
- Ball seals PTFE
- Integrated stainless steel mounting inserts

Option:

- Individual configuration of the valve (see form)
- 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	161 546 822	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	

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]	
20	50	57	27	12	193	77	56	25	32	45	M6	2,3	
25	58	67	30	12	216	97	65	25	39	58	M6	2,3	
32	68	73	36	12	223	97	71	25	39	58	M6	3	
40	84	90	44	15	249	128	85	45	54	74	M8	3,7	
50	97	97	51	15	271	128	89	45	54	74	M8	4,6	
63	124	116	64	15	321	152	101	45	66	87	M8	5,8	



Ball valve type 546 PVC-U With mounting inserts With butt fusion spigots PE 100 SDR17.6 metric

Model:

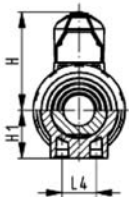
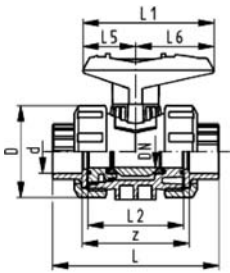
- For easy installation and removal
- z-dimension, valve end and valve nut are **not compatible** with type 346
- Ball seals PTFE
- Integrated stainless steel mounting inserts

Option:

- Individual configuration of the valve (see form)
- 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	161 546 805	161 546 815	0.550						
50	40	10	1600	161 546 806	161 546 816	0.750						
63	50	10	3100	161 546 807	161 546 817	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]		
40	84	90	44	15	171	128	85	45	54	74	M8	2,3		
50	97	97	51	15	191	128	89	45	54	74	M8	2,9		
63	124	116	64	15	220	152	101	45	66	87	M8	3,6		



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

Model:

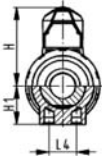
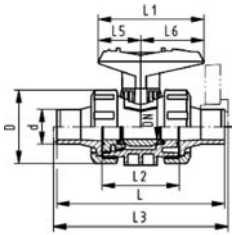
- For easy installation and removal
- z-dimension, valve end and valve nut are **not compatible** with type 346
- Ball seals PTFE
- Without mounting inserts

Option:

- Individual configuration of the valve (see form)
- 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	161 546 001	161 546 011	0.150	
20	15	16	185	161 546 002	161 546 012	0.150	
25	20	16	350	161 546 003	161 546 013	0.230	
32	25	16	700	161 546 004	161 546 014	0.330	
40	32	16	1000	161 546 005	161 546 015	0.600	
50	40	16	1600	161 546 006	161 546 016	0.800	
63	50	16	3100	161 546 007	161 546 017	1.460	

d [mm]	D [mm]	H [mm]	H1 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	z [mm]	
16	50	57	27	92	77	56	25	32	45	64	
20	50	57	27	95	77	56	25	32	45	64	
25	58	67	30	110	97	65	25	39	58	72	
32	68	73	36	123	97	71	25	39	58	79	
40	84	90	44	146	128	85	45	54	74	94	
50	97	97	51	157	128	89	45	54	74	95	
63	124	116	64	183	152	101	45	66	87	107	



Ball valve type 546 PVC-U without mounting inserts (Copy) With solvent cement spigots metric

Model:

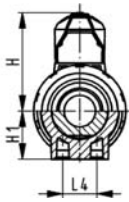
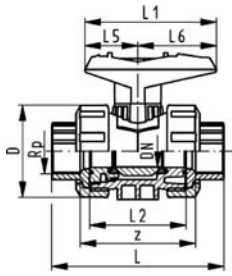
- For easy installation and removal
- z-dimension, valve end and valve nut are **not compatible** with type 346
- Ball seals PTFE
- Without mounting inserts

Option:

- Individual configuration of the valve (see form)
- 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	161 546 041	161 546 051	0.155
20	15	16	185	161 546 042	161 546 052	0.155
25	20	16	350	161 546 043	161 546 053	0.240
32	25	16	700	161 546 044	161 546 054	0.345
40	32	16	1000	161 546 045	161 546 055	0.615
50	40	16	1600	161 546 046	161 546 056	0.840
63	50	16	3100	161 546 047	161 546 057	1.545

d [mm]	D [mm]	H [mm]	H1 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]
16	50	57	27	114	77	56		25	32	45
20	50	57	27	124	77	56	130	25	32	45
25	58	67	30	144	97	65	150	25	39	58
32	68	73	36	154	97	71	160	25	39	58
40	84	90	44	174	128	85	180	45	54	74
50	97	97	51	194	128	89	200	45	54	74
63	124	116	64	224	152	101	230	45	66	87



Ball valve type 546 PVC-U without mounting inserts (Copy) With threaded sockets Rp

Model:

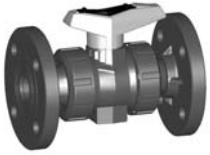
- For easy installation and removal
- z-dimension, valve end and valve nut are **not compatible** with type 346
- Ball seals PTFE
- Without mounting inserts

Option:

- Individual configuration of the valve (see form)
- 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	kg
3/8	10	10	71	161 546 021	161 546 031	0.150
1/2	15	10	185	161 546 022	161 546 032	0.150
3/4	20	10	350	161 546 023	161 546 033	0.230
1	25	10	700	161 546 024	161 546 034	0.330
1 1/4	32	10	1000	161 546 025	161 546 035	0.600
1 1/2	40	10	1600	161 546 026	161 546 036	0.800
2	50	10	3100	161 546 027	161 546 037	1.460

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



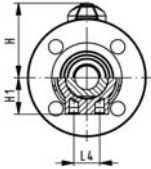
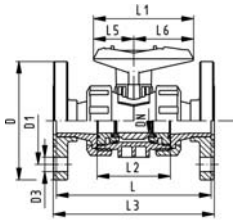
Ball valve type 546 PVC-U without mounting inserts With PVC-U fixed flanges serrated metric

Model:

- For easy installation and removal
- z-dimension, valve end and valve nut are **not compatible** with type 346
- Ball seals PTFE
- Without mounting inserts
- Overall length according to EN 558-1
- Connecting dimension: ISO 7005 PN10, EN 1092 PN 10, DIN 2501 PN10

Option:

- Individual configuration of the valve (see form)
- 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	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]
20	95	65.00	14.0	57	27	124	77	56	130	25	32	45
25	105	75.00	14.0	67	30	144	97	65	150	25	39	58
32	115	85.00	14.0	73	36	154	97	71	160	25	39	58
40	140	100.00	18.0	90	44	174	128	85	180	45	54	74
50	150	110.00	18.0	97	51	194	128	89	200	45	54	74
63	165	125.00	18.0	116	64	224	152	101	230	45	66	87

Component Parts for Flange Assembly of Ball Valves Type 546

21 80 01

Flange Adaptors PVC-U Jointing face flat, metric

d	DN	PN	Code	kg
20	15	16	721 800 106	0,010
25	20	16	721 800 107	0,015
32	25	16	721 800 108	0,024
40	32	16	721 800 109	0,038
50	40	16	721 800 110	0,055
63	50	16	721 800 111	0,104

EPDM 48 40 01
FPM 49 40 01

Flat Gaskets

d	DN	inch	EPDM Code	FPM Code	kg
20	15	1/2	748 400 015	749 400 015	0,003
25	20	3/4	748 400 016	749 400 016	0,003
32	25	1	748 400 017	749 400 017	0,004
40	32	1 1/4	748 400 018	749 400 018	0,008
50	40	1 1/2	748 400 019	749 400 019	0,012
63	50	2	748 400 020	749 400 020	0,017

EPDM 48 44 01
FPM 49 44 01

Flange Gaskets metric

d	EPDM Code	FPM Code	kg
20	748 440 101	749 440 101	0,008
25	748 440 102	749 440 102	0,011
32	748 440 103	749 440 103	0,014
40	748 440 104	749 440 104	0,020
50	748 440 105	749 440 105	0,021
63	748 440 106	749 440 106	0,040

21 70 00

Backing Flanges, PVC-U metric

d	DN	inch	PN	Code	kg
20	15	1/2	10	721 700 006	0,067
25	20	3/4	10	721 700 007	0,091
32	25	1	10	721 700 008	0,131
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

Backing Flanges, PP-V for Socket Systems metric

d	DN	inch	PN	Code	SP	kg
20	15		16	727 700 406	-	0,080
25	20		16	727 700 407	-	0,100
32	25		16	727 700 408	-	0,140
40	32		16	727 700 409	-	0,220
50	40		16	727 700 410	-	0,210
63	50		16	727 700 411	-	0,380

27 70 02

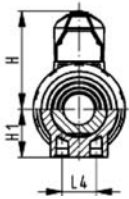
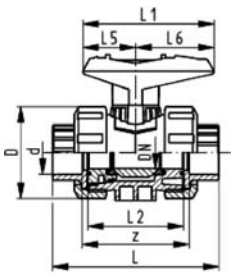
Backing Flanges, PP with steel ring metric for Socket Systems metric

d	DN	PN	Code	kg
20	15	16	727 700 206	0,220
25	20	16	727 700 207	0,260
32	25	16	727 700 208	0,430
40	32	16	727 700 209	0,650
50	40	16	727 700 210	0,820
63	50	16	727 700 211	0,940

21 74 01

Fixed Flanges, PVC-U Jointing face serrated, metric

d	DN	inch	PN	Code	kg
20	15	1/2	16	721 740 106	0,100
25	20	3/4	16	721 740 107	0,130
32	25	1	16	721 740 108	0,185
40	32	1 1/4	16	721 740 109	0,305
50	40	1 1/2	16	721 740 110	0,368
63	50	2	16	721 740 111	0,510



Ball valve type 546 PVC-U without mounting inserts With fusion sockets PE 100 metric

Model:

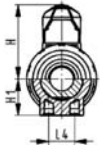
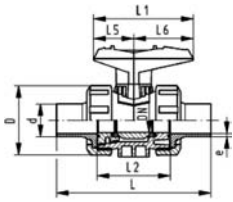
- For easy installation and removal
- z-dimension, valve end and valve nut are **not compatible** with type 346
- Ball seals PTFE
- Without mounting inserts

Option:

- Individual configuration of the valve (see form)
- 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	800 000 101	800 000 111	0.170	
20	15	16	185	800 000 102	800 000 112	0.170	
25	20	16	350	800 000 103	800 000 113	0.240	
32	25	16	700	800 000 104	800 000 114	0.340	
40	32	16	1000	800 000 105	800 000 115	0.610	
50	40	16	1600	800 000 106	800 000 116	0.850	
63	50	16	3100	800 000 107	800 000 117	1.550	

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



Ball valve type 546 PVC-U without mounting inserts With butt fusion spigots PE 100 SDR11 metric

Model:

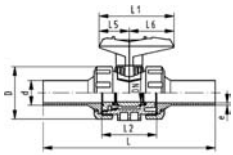
- For easy installation and removal
- z-dimension, valve end and valve nut are **not compatible** with type 346
- Ball seals PTFE
- Without mounting inserts

Option:

- Individual configuration of the valve (see form)
- 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	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]
20	50	57	27	130	77	56	25	32	45	1,9
25	58	67	30	134	97	65	25	39	58	2,3
32	68	73	36	150	97	71	25	39	58	3
40	84	90	44	171	128	85	45	54	74	3,7
50	97	97	51	191	128	89	45	54	74	4,6
63	124	116	64	220	152	101	45	66	87	5,8



Ball valve type 546 PVC-U without mounting inserts With butt fusion spigots long PE 100 SDR11 metric

Model:

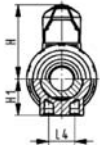
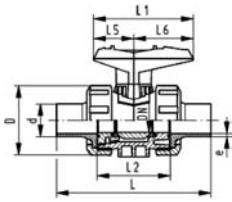
- For easy installation and removal
- z-dimension, valve end and valve nut are **not compatible** with type 346
- Ball seals PTFE
- Without mounting inserts

Option:

- Individual configuration of the valve (see form)
- 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	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	

d [mm]	D [mm]	H [mm]	H1 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	e [mm]	
20	50	57	27	193	77	56	25	32	45	2,25	
25	58	67	30	216	97	65	25	39	58	2,3	
32	68	73	36	223	97	71	25	39	58	3	
40	84	90	44	249	128	85	45	54	74	3,7	
50	97	97	51	271	128	89	45	54	74	4,6	
63	124	116	64	321	152	101	45	66	87	5,8	



Ball valve type 546 PVC-U without mounting inserts With butt fusion spigots PE 100 SDR17.6 metric

Model:

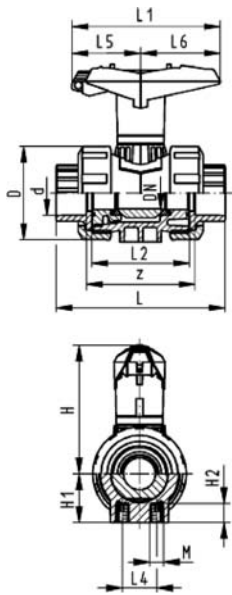
- For easy installation and removal
- z-dimension, valve end and valve nut are **not compatible** with type 346
- Ball seals PTFE
- Without mounting inserts

Option:

- Individual configuration of the valve (see form)
- 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	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]	
40	84	90	44	171	128	85	45	54	74	2,3	
50	97	97	51	191	128	89	45	54	74	2,9	
63	124	116	64	220	152	101	45	66	87	3,6	



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

Model:

- For easy installation and removal
- z-dimension, valve end and valve nut are **not compatible** with type 346
- Ball seals PTFE
- Integrated stainless steel mounting inserts
- Lockable hand lever with ratchet settings

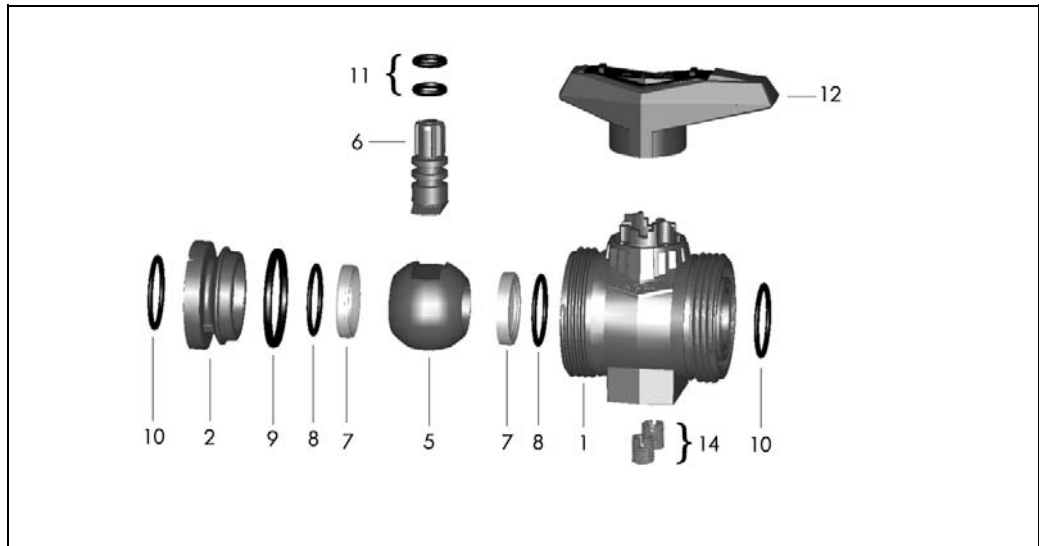
Option:

- Individual configuration of the valve (see form)
- 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	161 546 081	161 546 091	0.165	
20	15	16	185	161 546 082	161 546 092	0.165	
25	20	16	350	161 546 083	161 546 093	0.255	
32	25	16	700	161 546 084	161 546 094	0.355	
40	32	16	1000	161 546 085	161 546 095	0.640	
50	40	16	1600	161 546 086	161 546 096	0.840	
63	50	16	3100	161 546 087	161 546 097	1.500	

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]	
16	50	79	27	12	92	87	56	25	42	45	M6	64	
20	50	79	27	12	95	87	56	25	42	45	M6	64	
25	58	88	30	12	110	108	65	25	50	58	M6	72	
32	68	94	36	12	123	108	71	25	50	58	M6	79	
40	84	113	44	15	146	140	85	45	66	75	M8	94	
50	97	119	51	15	157	140	89	45	66	75	M8	95	
63	124	141	64	15	183	165	101	45	78	87	M8	107	

Spare Parts Ball Valves Type 546, PVC-U



No.	Article/ Material	Pieces	d16 DN 10	d20 DN 15	d25 DN 20	d32 DN 25	d40 DN 32	d50 DN 40	d63 DN 50
1	Central Part Body PVC-U	1	161 486 151	161 486 151	161 486 152	161 486 153	161 486 154	161 486 155	161 486 156
2	Union bush PVC-U	1							
5	Ball PVC-U	1							
6	Stem PVC-U	1							
7	Ball seals PTFE	2							
8	Backing seals EPDM	2							
9	Body seal EPDM	1							
10	Face seal EPDM	2							
11	Stem seals EPDM	2							
12	Lever PP red	1							
14	Threaded bush Stainless steel	2							
1	Central Part Body PVC-U	1	161 486 163	161 486 163	161 486 164	161 486 165	161 486 166	161 486 167	161 486 168
2	Union bush PVC-U	1							
5	Ball PVC-U	1							
6	Stem PVC-U	1							
7	Ball seals PTFE	2							
8	Backing seals FPM	2							
9	Body seal FPM	1							
10	Face seal FPM	2							
11	Stem seals FPM	2							
12	Lever PP red	1							
14	Threaded bush Stainless steel	2							
5	Ball Set Ball PVC-U	1	161 486 375	161 486 375	161 486 376	161 486 377	161 486 378	161 486 379	161 486 380
6	Stem EPDM	1							
7	Ball seals PTFE	2							
8	Backing seals EPDM	2							
9	Body seal EPDM	1							
11	Stem seals EPDM	2							
5	Ball Set Ball PVC-U	1	161 486 385	161 486 385	161 486 386	161 486 387	161 486 388	161 486 389	161 486 390
6	Stem FPM	1							
7	Ball seals PTFE	2							
8	Backing seals FPM	2							
9	Body seal FPM	1							
11	Stem seals FPM	2							

No.	Article/ Material	Pieces	d16 DN 10	d20 DN 15	d25 DN 20	d32 DN 25	d40 DN 32	d50 DN 40	d63 DN50
8	Seal - Set Backing seals EPDM	2	161 486 400	161 486 400	161 486 401	161 486 402	161 486 403	161 486 404	161 486 405
9	Body seal EPDM	1							
10	Face seal EPDM	2							
11	Stem seals EPDM	2							
8	Seal - Set Backing seals FPM	2	161 486 410	161 486 410	161 486 411	161 486 412	161 486 413	161 486 414	161 486 415
9	Body seal FPM	1							
10	Face seal FPM	2							
11	Stem seals FPM	2							

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

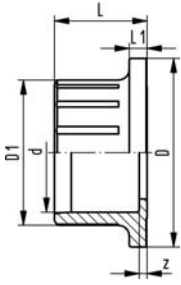
Ball valve										
A01 Ball valve 546										
A02 Linear Ball Valve 110										
Material										
B01 PVC-U										
Dimension										
C05 DN 10 3/8"										
C06 DN 15 1/2"										
C07 DN 20 3/4"										
C08 DN 25 1"										
C09 DN 32 1 1/4"										
C10 DN 40 1 1/2"										
C11 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 FFFM (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-funktional module										
I02 Empty multi-funktional 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-funktional handle red										
Mounting plate										
L01 without mounting plate										
L02 with mounting plate										
A01	B01	C	D	E	F	G	G	I	K	L
						left	right			

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.



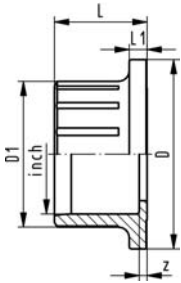
Valve end 546 PVC-U (G01) With solvent cement socket metric



d [mm]	PN	Code	kg	D [mm]	D1 [mm]	L [mm]	L1 [mm]	z [mm]
16	16	161 490 666	0.009	38	23.20	18	4	4
20	16	161 490 667	0.011	38	27.20	20	4	4
25	16	161 490 668	0.016	44	33.20	23	5	4
32	16	161 490 669	0.025	53	41.00	26	5	4
40	16	161 490 670	0.043	65	51.00	31	5	5
50	16	161 490 671	0.064	77	62.00	34	6	3
63	16	161 490 672	0.119	99	77.00	41	7	3



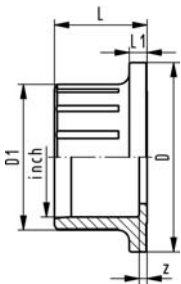
Valve end 546 PVC-U (G03) With solvent cement socket Inch ASTM



Inch	PN	Code	kg	D [mm]	D1 [mm]	L [mm]	L1 [mm]	z [mm]
3/8	16	161 490 712	0.012	38	24.30	25	4	6
1/2	16	161 490 713	0.014	38	29.50	25	4	2
3/4	16	161 490 714	0.020	44	35.30	28	5	3
1	16	161 490 715	0.031	53	43.30	31	5	3
1 1/4	16	161 490 716	0.046	65	52.80	34	5	3
1 1/2	16	161 490 717	0.067	77	59.60	38	6	3
2	16	161 490 718	0.118	99	72.70	41	7	3



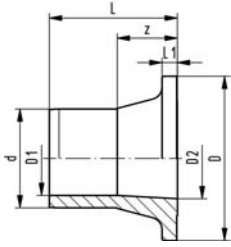
Valve end 546 PVC-U (G04) With solvent cement socket Inch BS



Inch	PN	Code	kg	D [mm]	D1 [mm]	L [mm]	L1 [mm]	z [mm]
3/8	16	161 490 734	0.009	38	23.20	18	4	2
1/2	16	161 490 735	0.009	38	27.20	20	4	2
3/4	16	161 490 736	0.013	44	33.20	23	5	2
1	16	161 490 737	0.022	53	41.00	26	5	2
1 1/4	16	161 490 738	0.036	65	51.00	31	5	2
1 1/2	16	161 490 739	0.071	77	62.00	34	6	4
2	16	161 490 740	0.135	99	77.00	41	7	5



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



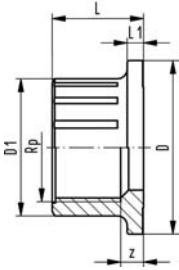
d [mm]	PN	Code	kg	D [mm]	D1 [mm]	D2 [mm]	L [mm]	L1 [mm]	z [mm]
16	16	161 490 701	0.011	38	10.00	15.50	29	4	15
20	16	161 490 702	0.014	38	14.00	15.50	34	4	18
25	16	161 490 703	0.021	44	19.00	20.50	39	5	20
32	16	161 490 704	0.033	53	24.00	26.10	42	5	20
40	16	161 490 705	0.050	65	31.00	32.80	45	5	19
50	16	161 490 706	0.085	77	39.00	41.30	53	6	22
63	16	161 490 707	0.161	99	49.00	51.20	62	7	24



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

Model:

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



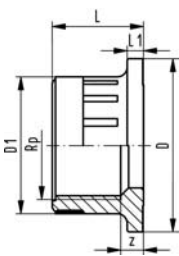
Rp [inch]	PN	Code	kg	D [mm]	D1 [mm]	L [mm]	L1 [mm]	z [mm]
3/8	10	161 490 690	0.011	38	24.00	20	4	7
1/2	10	161 490 691	0.013	38	28.00	22	4	6
3/4	10	161 490 692	0.019	44	33.80	25	5	7
1	10	161 490 693	0.031	53	42.00	28	5	7
1 1/4	10	161 490 694	0.047	65	52.00	30	5	7
1 1/2	10	161 490 695	0.081	77	63.00	32	6	9
2	10	161 490 696	0.150	99	77.50	38	7	10



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

Model:

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



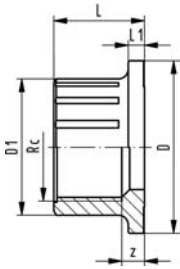
Rp [inch]	PN	Code	kg	D [mm]	D1 [mm]	L [mm]	L1 [mm]	z [mm]
3/8	16	161 490 825	0.013	38	24.00	20	4	7
1/2	16	161 490 826	0.016	38	28.00	22	4	6
3/4	16	161 490 827	0.023	44	33.80	25	5	7
1	16	161 490 828	0.040	53	42.00	28	5	7
1 1/4	16	161 490 829	0.058	65	52.00	30	5	7
1 1/2	16	161 490 830	0.097	77	63.00	32	6	9
2	16	161 490 831	0.166	99	77.50	38	7	10



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

Model:

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



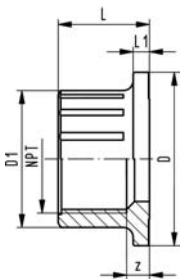
Rc [inch]	PN	Code	kg	D [mm]	D1 [mm]	L [mm]	L1 [mm]	z [mm]
1/2	10	161 490 755	0.013	38	28.00	22	4	5
3/4	10	161 490 756	0.019	44	33.80	25	5	7
1	10	161 490 757	0.033	53	42.00	28	5	7
1 1/4	10	161 490 758	0.047	65	52.00	30	5	6
1 1/2	10	161 490 759	0.081	77	63.00	32	6	8
2	10	161 490 760	0.150	99	77.50	38	7	9



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

Model:

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



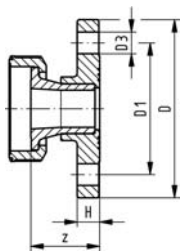
NPT [inch]	PN	Code	kg	D [mm]	D1 [mm]	L [mm]	L1 [mm]	z [mm]
3/8	10	161 490 723	0.014	38	26.20	21	4	7
1/2	10	161 490 724	0.019	38	33.30	21	4	4
3/4	10	161 490 725	0.026	44	38.90	23	5	5
1	10	161 490 726	0.043	53	47.00	28	5	6
1 1/4	10	161 490 727	0.064	65	56.90	31	5	7
1 1/2	10	161 490 728	0.093	77	64.70	34	6	11
2	10	161 490 729	0.157	99	77.40	41	7	17



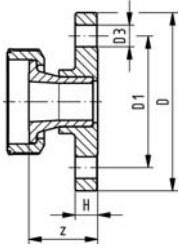
Valve end 546 PVC-U (G60) Assembly with fixed flange serrated PVC-U metric

Model:

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



d [mm]	DN [mm]	PN	Code	kg	D [mm]	D1 [mm]	D3 [mm]	H [mm]	z [mm]
20	15	16	161 486 360	0.131	95	65.00	14.0	12	37
25	20	16	161 486 361	0.175	105	75.00	14.0	13	42
32	25	16	161 486 362	0.256	115	85.00	14.0	15	45
40	32	16	161 486 363	0.417	140	100.00	18.0	17	48
50	40	16	161 486 364	0.544	150	110.00	18.0	18	56
63	50	16	161 486 365	0.861	165	125.00	18.0	20	65

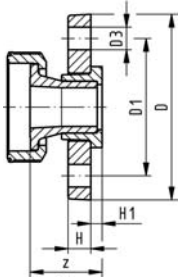


Valve end 546 PVC-U (G61) Assembly with fixed flange flat PVC-U metric

Model:

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

d [mm]	DN [mm]	PN	Code	kg	D [mm]	D1 [mm]	D3 [mm]	H [mm]	z [mm]
20	15	16	161 486 295	0.136	95	65.00	14.0	12	37
25	20	16	161 486 296	0.175	105	75.00	14.0	13	42
32	25	16	161 486 297	0.254	115	85.00	14.0	15	45
40	32	16	161 486 298	0.417	140	100.00	18.0	17	48
50	40	16	161 486 299	0.541	150	110.00	18.0	18	56
63	50	16	161 486 300	0.861	165	125.00	18.0	20	65

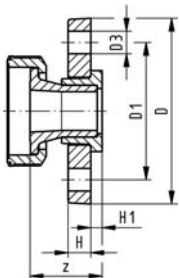


Valve end 546 PVC-U (G70) Assembly with backing flange PVC-U metric

Model:

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

d [mm]	DN [mm]	PN	Code	kg	D [mm]	D1 [mm]	D3 [mm]	H [mm]	H1 [mm]	z [mm]
20	15	16	161 486 265	0.110	95	65.00	14.0	11	6	37
25	20	16	161 486 266	0.155	105	75.00	14.0	12	7	42
32	25	16	161 486 267	0.230	115	85.00	14.0	14	7	45
40	32	16	161 486 268	0.360	140	100.00	18.0	15	8	48
50	40	16	161 486 269	0.500	150	110.00	18.0	16	8	56
63	50	16	161 486 270	0.770	165	125.00	18.0	18	9	65



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 B 16.5, ASTM D 4024, BS 1560 (bolt circle 150 lbs)

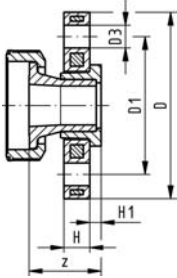
Inch	DN [mm]	PN	Code	kg	D [mm]	D1 [mm]	D3 [mm]	H [mm]	H1 [mm]	z [mm]
½	15	16	161 486 275	0.110	95	60.00	14.0	11	6	37
¾	20	16	161 486 276	0.150	105	70.00	14.0	12	7	42
1	25	16	161 486 277	0.225	115	79.00	14.0	14	7	45
1 ¼	32	16	161 486 278	0.375	140	89.00	18.0	15	8	48
1 ½	40	16	161 486 279	0.495	150	98.00	18.0	16	8	56
2	50	16	161 486 280	0.760	165	121.00	18.0	18	9	65



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



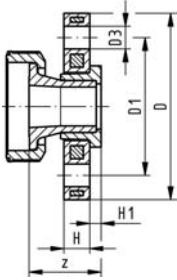
d [mm]	DN [mm]	PN	Code	kg	D [mm]	D1 [mm]	D3 [mm]	H [mm]	H1 [mm]	z [mm]
20	15	16	161 486 285	0.265	95	65.00	14.0	12	6	37
25	20	16	161 486 286	0.325	105	75.00	14.0	12	7	42
32	25	16	161 486 287	0.530	115	85.00	14.0	16	7	45
40	32	16	161 486 288	0.815	140	100.00	18.0	16	8	48
50	40	16	161 486 289	1.070	150	110.00	18.0	18	8	56
63	50	16	161 486 290	1.395	165	125.00	18.0	18	9	65



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

Model:

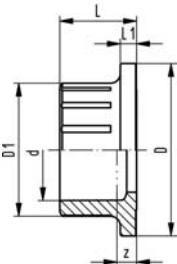
- Joint made with special adhesive Tangit for PVC-U
- Connecting dimensions: ANSI B 16.5, ASTM D 4024, BS 1560 (bolt circle 150 lbs)



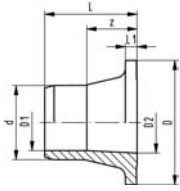
Inch	DN [mm]	PN	Code	kg	D [mm]	D1 [mm]	D3 [mm]	H [mm]	H1 [mm]	z [mm]
½	15	16	161 486 425	0.250	95	60.00	16.0	12	6	37
¾	20	16	161 486 426	0.310	105	70.00	16.0	12	7	42
1	25	16	161 486 427	0.520	115	79.00	16.0	16	7	45
1 ¼	32	16	161 486 428	0.835	140	89.00	16.0	16	8	48
1 ½	40	16	161 486 429	1.110	150	98.00	16.0	18	8	56
2	50	16	161 486 430	1.385	165	121.00	19.0	18	9	65



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

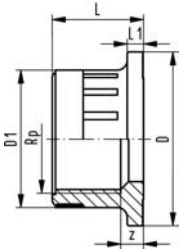


d [mm]	PN	Code	kg	D [mm]	D1 [mm]	L [mm]	L1 [mm]	z [mm]
16	10	167 482 900	0.006	38	23.20	19	4	5
20	10	167 482 901	0.007	38	27.20	20	4	5
25	10	167 482 902	0.011	44	33.20	22	5	6
32	10	167 482 903	0.017	53	41.00	24	5	6
40	10	167 482 904	0.027	65	51.00	26	5	7
50	10	167 482 905	0.040	77	62.00	29	6	8
63	10	167 482 906	0.070	99	77.00	34	7	6



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

d [mm]	PN	Code	kg	D [mm]	D1 [mm]	D2 [mm]	L [mm]	L1 [mm]	L2 [mm]	z [mm]
16	10	167 482 922	0.007	38	10.00	15.50	27	4	13	14
20	10	167 482 923	0.009	38	14.00	15.50	32	4	14	18
25	10	167 482 924	0.013	44	19.00	20.50	37	5	16	21
32	10	167 482 925	0.021	53	24.00	26.10	40	5	18	22
40	10	167 482 926	0.032	65	31.00	32.80	43	5	20	23
50	10	167 482 927	0.055	77	39.00	41.30	51	6	23	28
63	10	167 482 928	0.103	99	49.00	51.20	60	7	27	33

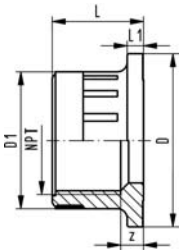


Valve end 546 PP-H (G33) With threaded socket Rp reinforced

Model:

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

Rp [inch]	PN	Code	kg	D [mm]	D1 [mm]	L [mm]	L1 [mm]	z [mm]
3/8	16	167 482 911	0.008	38	24.00	20	4	7
1/2	16	167 482 912	0.009	38	28.00	21	4	6
3/4	16	167 482 913	0.012	44	33.80	23	5	7
1	16	167 482 914	0.024	53	42.00	28	5	7
1 1/4	16	167 482 915	0.037	65	52.00	31	5	7
1 1/2	16	167 482 916	0.052	77	63.00	34	6	9
2	16	167 482 917	0.091	99	77.50	41	7	10



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

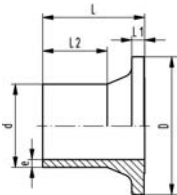
Model:

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

NPT [inch]	PN	Code	kg	D [mm]	D1 [mm]	L [mm]	L1 [mm]	z [mm]
3/8	16	167 482 966	0.008	38	26.20	20	4	7
1/2	16	167 482 967	0.009	38	33.30	21	4	4
3/4	16	167 482 968	0.012	44	38.90	23	5	5
1	16	167 482 969	0.024	53	47.00	28	5	6
1 1/4	16	167 482 970	0.037	65	56.90	31	5	7
1 1/2	16	167 482 971	0.052	77	64.70	34	6	11
2	16	167 482 972	0.091	99	77.40	41	7	17



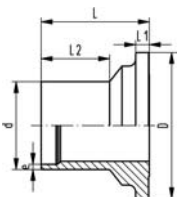
Valve end 546 PP-H (G35) With butt fusion spigot IR-Plus® SDR11 metric



d [mm]	FM	PN	Code	kg	D [mm]	e [mm]	L [mm]	L1 [mm]	L2 [mm]
20	IR	10	167 482 945	0.007	38	1,9	37	4	25
25	IR	10	167 482 946	0.011	44	2,3	39	5	25
32	IR	10	167 482 947	0.017	53	3	40	5	25
40	IR	10	167 482 948	0.028	65	3,7	43	5	25
50	IR	10	167 482 949	0.045	77	4,6	51	6	25
63	IR	10	167 482 950	0.096	99	5,8	60	7	28



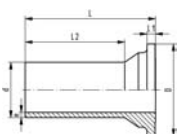
Valve end 546 PP-H (G36) With butt fusion spigot SDR17,6 metric



d [mm]	PN	Code	kg	D [mm]	e [mm]	L [mm]	L1 [mm]	L2 [mm]
40	6	167 482 937	0.032	65	2,3	43	5	25
50	6	167 482 938	0.053	77	2,9	51	6	25
63	6	167 482 939	0.099	99	3,6	60	7	28



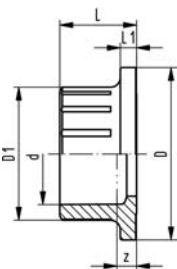
Valve end 546 PP-H (G37) With butt fusion spigot long SDR11 metric



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



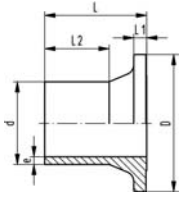
Valve end 546 PE 100 (G40) With fusion socket metric



d [mm]	PN	Code	kg	D [mm]	D1 [mm]	L [mm]	L1 [mm]	z [mm]
16	16	193 480 175	0.007	38	23.20	19	4	5
20	16	193 480 176	0.008	38	27.20	20	4	5
25	16	193 480 177	0.012	44	33.20	22	5	6
32	16	193 480 178	0.019	53	41.00	24	5	6
40	16	193 480 179	0.033	65	51.00	26	5	7
50	16	193 480 180	0.050	77	62.00	29	6	8
63	16	193 480 181	0.095	99	77.00	34	7	8



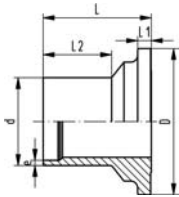
Valve end 546 PE 100 (G41) With butt fusion spigot SDR11 metric



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



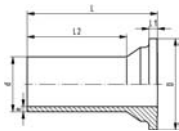
Valve end 546 PE 100 (G42) With butt fusion spigot SDR17,6 metric



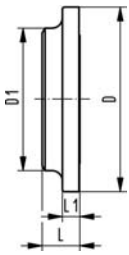
d [mm]	FM	PN	Code	kg	D [mm]	e [mm]	L [mm]	L1 [mm]	L2 [mm]
40	IR	10	193 480 086	0.028	65	2,3	43	5	25
50	IR	10	193 480 087	0.045	77	2,9	51	6	25
63	IR	10	193 480 088	0.096	99	3,6	60	7	28



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



d [mm]	PN	Code	kg	D [mm]	e [mm]	L [mm]	L1 [mm]	L2 [mm]
20	16	193 480 152	0.012	38	2,25	69	4	53
25	16	193 480 153	0.019	44	2,3	76	5	58
32	16	193 480 154	0.029	53	3	76	5	58
40	16	193 480 155	0.048	65	3,7	82	5	61
50	16	193 480 156	0.082	77	4,6	91	6	63
63	16	193 480 157	0.157	99	5,8	110	7	77

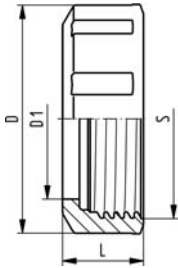


Valve end blank 546 PVC-U (G80)

Model:

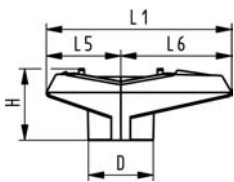
- Jointing face flat

d [mm]	DN [mm]	Inch	PN	Code	kg	D [mm]	D1 [mm]	L [mm]	L1 [mm]
20	15	½	16	161 490 837	0.009	38	23.00	8	4
25	20	¾	16	161 490 838	0.013	44	33.00	10	5
32	25	1	16	161 490 839	0.021	53	41.00	11	5
40	32	1 ¼	16	161 490 840	0.034	65	51.00	11	5
50	40	1 ½	16	161 490 841	0.057	77	62.00	14	6
63	50	2	16	161 490 842	0.113	99	77.00	17	7



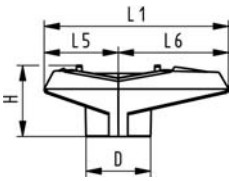
Union nut 546 PVC-U

d [mm]	DN [mm]	Code	kg	D [mm]	D1 [mm]	L [mm]	S [mm]
16-20	10-15	161 490 538	0.019	50	33.70	19	42
25	20	161 490 539	0.026	58	39.30	20	48
32	25	161 490 540	0.041	68	47.40	24	58
40	32	161 490 541	0.077	84	57.40	27	71
50	40	161 490 542	0.111	97	65.20	30	84
63	50	161 490 543	0.191	124	79.00	36	106



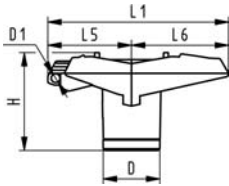
Standard handle 546 red (K01)

d [mm]	DN [mm]	Code	kg	L1 [mm]	L5 [mm]	L6 [mm]	H [mm]	D [mm]
16-20	10-15	167 484 088	0.012	77	32	45	31	26
25	20	167 484 089	0.022	97	39	58	37	34
32	25	167 484 090	0.022	97	39	58	37	34
40	32	167 484 091	0.042	128	54	74	46	40
50	40	167 484 092	0.042	128	54	74	46	40
63	50	167 484 093	0.059	152	66	87	54	44



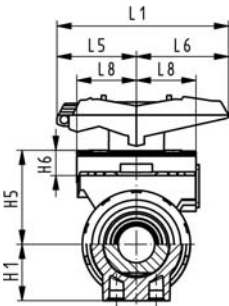
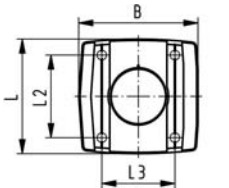
Standard handle 546 black (K02)

d [mm]	DN [mm]	Code	kg	L1 [mm]	L5 [mm]	L6 [mm]	H [mm]	D [mm]
16-20	10-15	167 484 076	0.012	77	32	45	31	26
25	20	167 484 077	0.022	97	39	58	37	34
32	25	167 484 078	0.022	97	39	58	37	34
40	32	167 484 079	0.042	128	54	74	46	40
50	40	167 484 080	0.042	128	54	74	46	40
63	50	167 484 081	0.059	152	66	87	54	44



Multifunctional handle 546 red (K11) With ratchet settings lockable

d [mm]	DN [mm]	Code	kg	D [mm]	D1 [mm]	H [mm]	L1 [mm]	L5 [mm]	L6 [mm]
16-20	10-15	167 484 100	0.026	26	5.30	53	87	42	45
25	20	167 484 101	0.045	34	5.30	59	108	50	58
32	25	167 484 102	0.045	34	5.30	59	108	50	58
40	32	167 484 103	0.082	40	5.30	69	140	66	75
50	40	167 484 104	0.082	40	5.30	69	140	66	75
63	50	167 484 105	0.104	44	5.30	80	165	78	87



Multifunctional module (I02) PP-GF Module empty

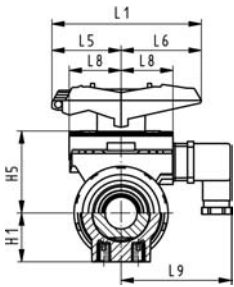
Model:

- Accessory to Ball Valve Type 546
- Multifunctional module acts as an intermediate element for actuators

- Including screws

d-d [mm]	DN-DN [mm]	Code	kg
16 - 20	10 - 15	167 482 680	0.055
25 - 32	20 - 25	167 482 681	0.070
40 - 50	32 - 40	167 482 682	0.080
- 63	- 50	167 482 683	0.120

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

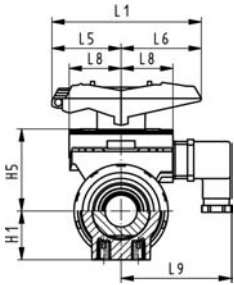


Multifunctional module (I03) PP-GF With mechanical limit switches Ag Ni

Model:

- Accessory to Ball Valve Type 546
 - Multifunctional module acts as an intermediate element for actuators
 - Including Plug 3P+E / Protection: IP65
- Including screws

d-d [mm]	DN-DN [mm]	Code	kg	H1 [mm]	H5 [mm]	L1 [mm]	L5 [mm]	L6 [mm]	L8 [mm]	L9 [mm]
16 - 20	10 - 15	167 482 626	0.110	27	50	87	42	45	34	73
25 - 32	20 - 25	167 482 627	0.120	30	53	108	50	58	38	77
40 - 50	32 - 40	167 482 628	0.135	44	72	140	66	75	41	80
- 63	- 50	167 482 629	0.175	64	94	165	78	87	46	85

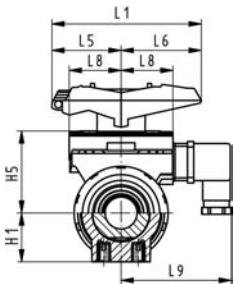


Multifunctional module (I04) PP-GF With mechanical limit switches Au

Model:

- Accessory to Ball Valve Type 546
 - Multifunctional module acts as an intermediate element for actuators
 - Including Plug 3P+E / Protection: IP65
- Including screws

d-d [mm]	DN-DN [mm]	Code	kg	H1 [mm]	H5 [mm]	L1 [mm]	L5 [mm]	L6 [mm]	L8 [mm]	L9 [mm]
16 - 20	10 - 15	167 482 635	0.110	27	50	87	42	45	34	73
25 - 32	20 - 25	167 482 636	0.120	30	53	108	50	58	38	77
40 - 50	32 - 40	167 482 637	0.135	44	72	140	66	75	41	80
- 63	- 50	167 482 638	0.175	64	94	165	78	87	46	85



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

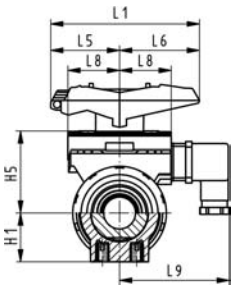
d-d [mm]	DN-DN [mm]	Code	kg	H1 [mm]	H5 [mm]	L1 [mm]	L5 [mm]	L6 [mm]	L8 [mm]	L9 [mm]
16 - 20	10 - 15	167 482 671	0.110	27	50	87	42	45	34	73
25 - 32	20 - 25	167 482 672	0.120	30	53	108	50	58	38	77
40 - 50	32 - 40	167 482 673	0.135	44	72	140	66	75	41	80
- 63	- 50	167 482 674	0.175	64	94	165	78	87	46	85



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



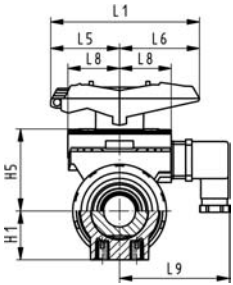
d-d [mm]	DN-DN [mm]	Code	kg	H1 [mm]	H5 [mm]	L1 [mm]	L5 [mm]	L6 [mm]	L8 [mm]	L9 [mm]
16 - 20	10 - 15	167 482 662	0.110	27	50	87	42	45	34	73
25 - 32	20 - 25	167 482 663	0.120	30	53	108	50	58	38	77
40 - 50	32 - 40	167 482 664	0.135	44	72	140	66	75	41	80
- 63	- 50	167 482 665	0.175	64	94	165	78	87	46	85



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

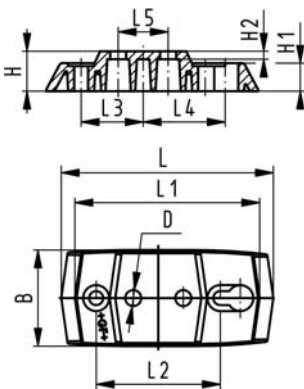


d-d [mm]	DN-DN [mm]	Code	kg	H1 [mm]	H5 [mm]	L1 [mm]	L5 [mm]	L6 [mm]	L8 [mm]	L9 [mm]
16 - 20	10 - 15	167 482 653	0.110	27	50	87	42	45	34	73
25 - 32	20 - 25	167 482 654	0.120	30	53	108	50	58	38	77
40 - 50	32 - 40	167 482 655	0.135	44	72	140	66	75	41	80
- 63	- 50	167 482 656	0.175	64	94	165	78	87	46	85



Mounting plate 546 PP-GF (L02)

- 2 mounting screws inclusive



d-d [mm]	DN-DN [mm]	Code	kg
16 - 32	10 - 25	167 484 110	0.055
40 - 63	32 - 50	167 484 111	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

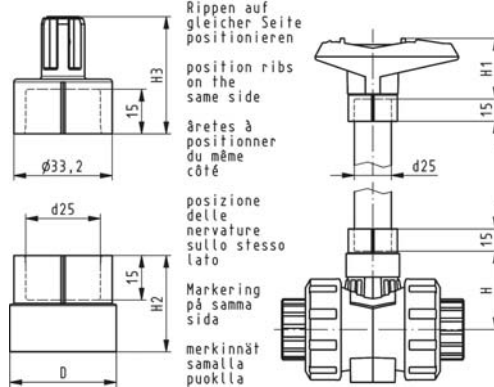


Handle extension 546 PVC-U metric

Model:

- For Ball Valve Type 546
- Composed of adapter sockets for handle connection and stem connection
- PVC-U pipe in suitable length has to be obtained on site

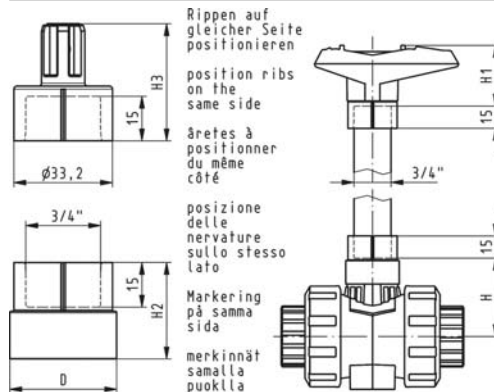
d-d [mm]	DN-DN [mm]	Code	kg	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	D [mm]
16 - 20	10 - 15	161 486 435	0.032	41	52	29	36	26
25 - 32	20 - 25	161 486 436	0.037	50	62	32	39	36
40 - 50	32 - 40	161 486 437	0.047	65	76	34	44	40
- 63	- 50	161 486 438	0.058	84	87	37	48	44



Handle extension 546 PVC-U inch BS/ASTM

- For Ball Valve Type 546

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





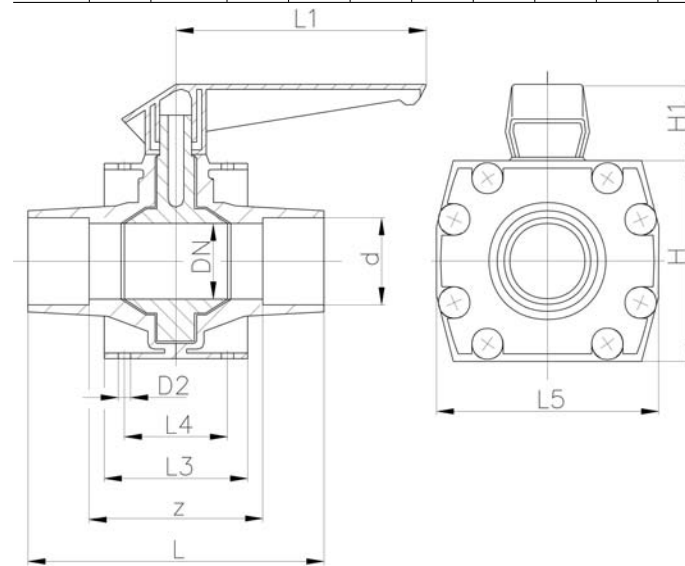
Ball valve type 370 PVC-U With solvent cement sockets metric

Model:

- Ball seals PTFE
- Pneumatic or electric actuator available separately

d [mm]	DN [mm]	Inch	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
75	65	2 ½	10	5000	161 370 212	161 370 237	2.700
90	80		10	7000	161 370 213	161 370 238	3.800
110	100		10	11000	161 370 214	161 370 239	7.300

d [mm]	z [mm]	D2 [mm]	L [mm]	L1 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	H [mm]	H1 [mm]
75	124	10.00	208	205	102	84	160	148	74
90	146	10.00	244	205	120	102	188	176	74
110	158	12.00	274	250	152	122	225	223	78





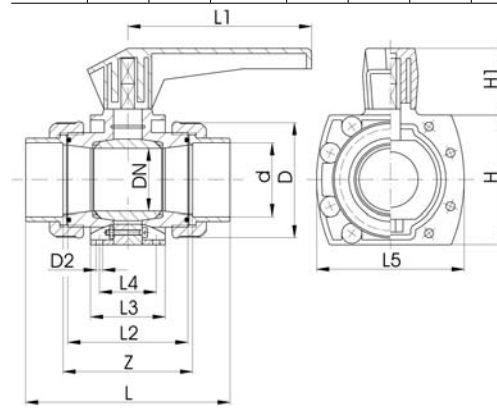
Ball valve type 370 PVC-U Unions with solvent cement sockets metric

Model:

- Ball seals PTFE
- Pneumatic or electric actuator available separately
- For easy installation and removal

d [mm]	DN [mm]	Inch	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
75	65	2 1/2	10	5000	161 370 508	161 370 523	3.440
90	80		10	7000	161 370 509	161 370 524	4.830
110	100		10	11000	161 370 510	161 370 525	8.670

d [mm]	z [mm]	D [mm]	D2 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	H [mm]	H1 [mm]
75	145	135	10.00	233	205	139	90	72	160	148	74
90	165	158	10.00	267	205	155	104	88	188	176	74
110	196	188	12.00	318	250	186	128	104	225	223	78





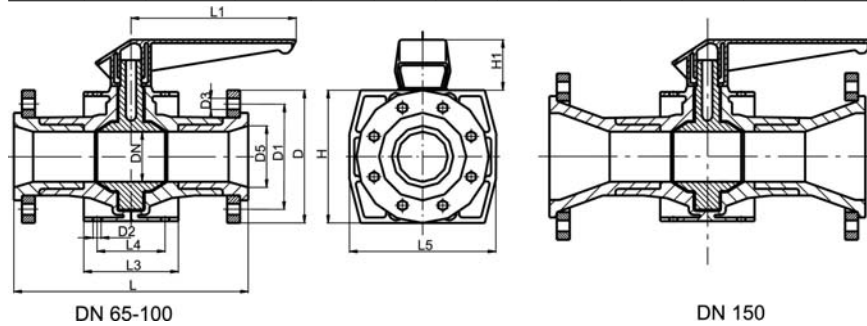
Ball valve type 370 PVC-U With PP-V flanges metric

Model:

- Ball seals PTFE
- Pneumatic or electric actuator available separately
- For easy installation and removal
- Jointing face flat
- Overall length EN 558-1
- 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
75	65	2 ½	10	5000	161 370 112	161 370 137	4.800
90	80	3	10	7000	161 370 113	161 370 138	6.400
110	100	4	10	11000	161 370 114	161 370 139	10.500
160	100	6	10	16000	161 370 116	161 370 141	12.200

d [mm]	D [mm]	D1 [mm]	D2 [mm]	D3 [mm]	D5 [mm]	L [mm]	L1 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	H [mm]	H1 [mm]
75	185	145.00	10.00	18.0	68	290	205	102	84	160	148	74
90	200	160.00	10.00	18.0	82	310	205	120	102	188	176	74
110	220	180.00	12.00	18.0	102	350	250	152	122	225	223	78
160	285	240.00	12.00	22.0	156	480	250	152	122	225	223	78





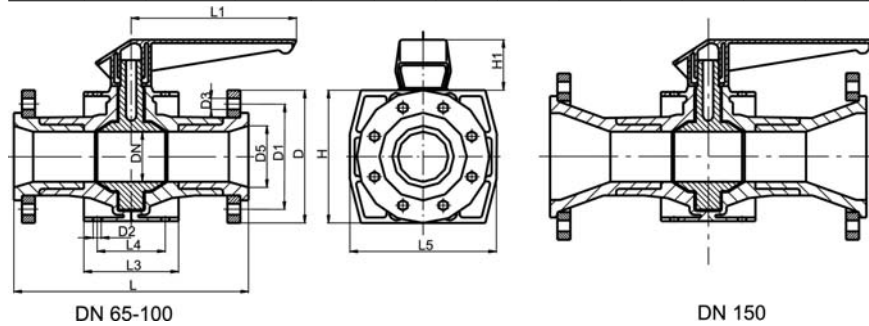
Ball valve type 370 PVC-U With backing flanges PVC-U metric

Model:

- Ball seals PTFE
- Pneumatic or electric actuator available separately
- For easy installation and removal
- Jointing face flat
- Overall length EN 558-1
- 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
75	65	2 ½	10	5000	161 370 012	161 370 037	4.000
90	80	3	10	7000	161 370 013	161 370 038	5.500
110	100	4	10	11000	161 370 014	161 370 039	9.700
160	100	6	10	16000	161 370 016	161 370 041	12.100

d [mm]	D [mm]	D1 [mm]	D2 [mm]	D3 [mm]	D5 [mm]	L [mm]	L1 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	H [mm]	H1 [mm]
75	185	145.00	10.00	18.0	68	290	205	102	84	160	148	74
90	200	160.00	10.00	18.0	82	310	205	120	102	188	176	74
110	220	180.00	12.00	18.0	102	350	250	152	122	225	223	78
160	285	240.00	12.00	22.0	156	480	250	152	122	225	223	78



Component Parts for Flange Assembly of Ball Valves Type 370

21 81 01

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



d	DN	PN	Code	kg	
75	65	16	721 810 112	0,182	
90	80	16	721 810 113	0,291	
110	100	16	721 810 114	0,468	
160	150	16	721 810 117	1,180	

21 80 01

Flange Adaptors PVC-U
Jointing face flat, metric

d	DN	PN	Code	kg	
75	65	16	721 800 112	0,155	
90	80	16	721 800 113	0,156	
110	100	16	721 800 114	0,417	
160	150	16	721 790 117	1,077	

EPDM 48 41 01
FPM 49 41 01

O-Ring Gasket

d	DN	inch	EPDM Code	FPM Code	kg	
75	65	2½	748 410 014	749 410 014	0,012	
90	80	3	748 410 015	749 410 015	0,015	
110	100	4	748 410 016	749 410 016	0,031	
160	150	6	748 410 019	749 410 019	0,044	

EPDM 48 44 01
FPM 49 44 01

Flange Gaskets
metric

d	EPDM Code	FPM Code	kg	
75	748 440 107	749 440 107	0,054	
90	748 440 108	749 440 108	0,060	
110	748 440 109	749 440 109	0,083	
160	748 440 112	749 440 112	0,149	

21 70 00

Backing Flanges, PVC-U
metric

d	DN	inch	PN	Code	kg	
75	65	2½	10	721 700 012	0,375	
90	80	3	10	721 700 013	0,471	
110	100	4	10	721 700 014	0,554	
160	150	6	10	721 700 017	1,012	

Backing Flanges, PP-V for Socket Systems metric

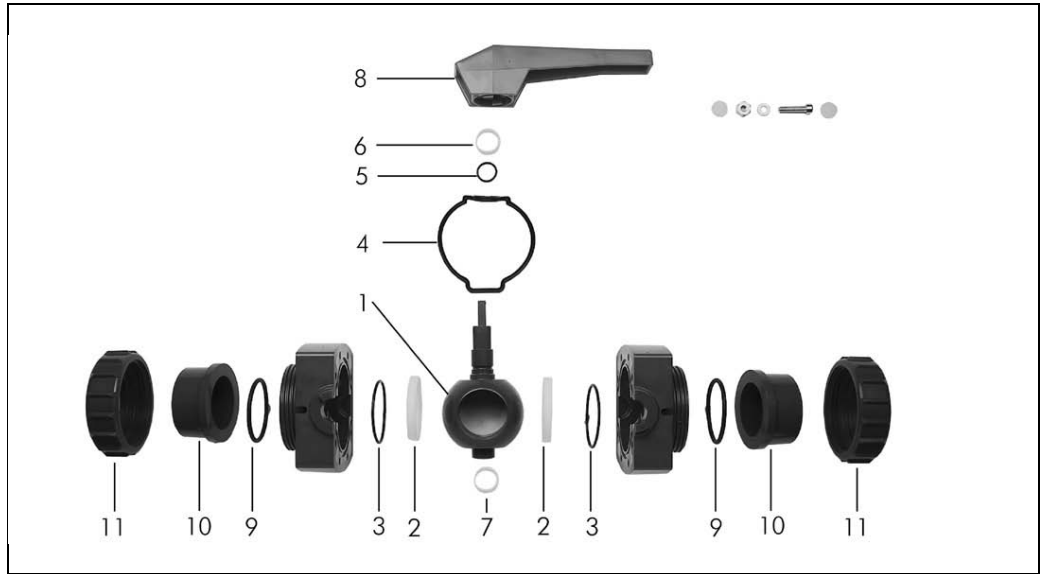
d	DN	inch	PN	Code	SP	kg
75	65		16	727 700 412	-	0,480
90	80		16	727 700 413	-	0,520
110	100		16	727 700 414	-	0,680
140	125		16	727 700 416	-	0,800
160	150	6	16	727 700 417	-	1,200

27 70 02

Backing Flanges, PP with steel ring metric for Socket Systems metric

d	DN	PN	Code	kg
75	65	16	727 700 212	1,300
90	80	16	727 700 213	1,400
110	100	16	727 700 214	1,560
160	150	16	727 700 217	3,390

Spare Parts Ball Valves Type 370, PVC-U



No.	Article/ Material	Pieces	d75 DN 65	d90 DN 80	d110 DN 100	d160 DN 150
	Ball Sets		161 482 958 no bush, No. 7	161 482 959 no bush, No. 7	161 482 960	161 482 960
1	Ball PVC-U	1				
2	Ball seals PTFE	2				
6	Bush PTFE	1				
5	Stem seals EPDM	1				
7	Bush PTFE	1				
	Ball Sets		161 482 963 no bush, No. 7	161 482 964 no bush, No. 7	161 482 965	161 482 965
1	Ball PVC-U	1				
2	Ball seals PTFE	2				
6	Bush PTFE	1				
5	Stem seals FPM	1				
7	Bush PTFE	1				
	Seal Sets		161 482 968	161 482 969	161 482 970	161 482 970
4	Body seal EPDM	1				
3	Backing seals EPDM	2				
5	Stem seals EPDM	1				
	Seal Sets		161 482 974	161 482 975	161 482 976	161 482 976
4	Body seal FPM	1				
3	Backing seals FPM	2				
5	Stem seals FPM	1				
9	O-Ring Gaskets, EPDM	1	748 410 119	748 410 112	748 410 099	-
9	O-Ring Gaskets, FPM	1	749 410 119	749 410 112	749 410 099	-
10	Union Ends with Socket, PVC-U metric	1	721 600 162	721 600 163	721 600 164	
10	Union Ends Blank, PVC-U	1	721 600 012	721 600 013	721 600 014	
11	Union Nuts, PVC-U	1	721 690 012	721 690 013	721 690 014	
8	Lever, PVC-U	1	161 480 763	161 480 764	161 480 420	161 480 420



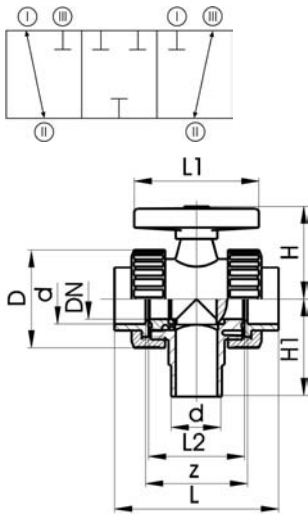
3-Way ball valve type 343 PVC-U vertical With solvent cement sockets metric

Model:

- L-port ball
- Easy installation and removal using union on third outlet
- Ball seals PTFE
- Electric actuator available separately
- Angle of operation 180°, without turn limiter

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	161 343 401	161 343 411	0.166
20	15	10	77	161 343 402	161 343 412	0.169
25	20	10	146	161 343 403	161 343 413	0.281
32	25	10	260	161 343 404	161 343 414	0.399
40	32	10	437	161 343 405	161 343 415	0.652
50	40	10	667	161 343 406	161 343 416	1.015
63	50	10	1293	161 343 407	161 343 417	1.804

d [mm]	z [mm]	D [mm]	L [mm]	L1 [mm]	L2 [mm]	H [mm]	H1 [mm]
16	71	45	99	78	63	50	57
20	71	45	102	78	63	50	62
25	82	53	120	92	75	60	72
32	87	64	131	100	79	70	77
40	98	78	150	110	89	80	87
50	101	92	163	120	95	92	97
63	121	116	197	146	115	110	112



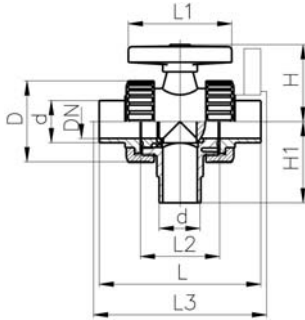
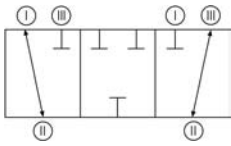
3-Way ball valve type 343 PVC-U vertical With solvent cement spigots metric

Model:

- L-port ball
- Easy installation and removal using union on third outlet
- Ball seals PTFE
- Electric actuator available separately
- Angle of operation 180°, without turn limiter

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	161 343 441	161 343 451	0.165	
20	15	10	77	161 343 442	161 343 452	0.172	
25	20	10	146	161 343 443	161 343 453	0.286	
32	25	10	260	161 343 444	161 343 454	0.411	
40	32	10	437	161 343 445	161 343 455	0.670	
50	40	10	667	161 343 446	161 343 456	1.060	
63	50	10	1293	161 343 447	161 343 457	1.850	

d [mm]	D [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	H [mm]	H1 [mm]	
16	43	114	78	63	120	50	57	
20	43	124	78	63	130	50	62	
25	53	144	92	75	150	60	72	
32	64	154	100	79	160	70	77	
40	78	174	110	89	180	80	87	
50	92	194	120	95	200	92	97	
63	116	224	146	115	230	110	112	



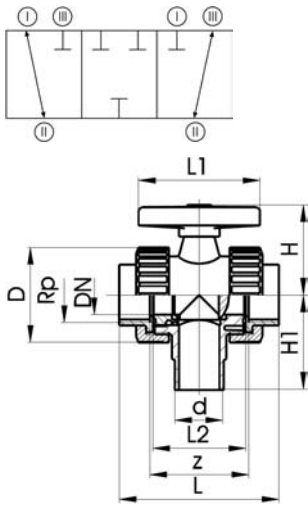
3-Way ball valve type 343 PVC-U vertical With threaded sockets Rp

Model:

- L-port ball
- Easy installation and removal using union on third outlet
- Ball seals PTFE
- Electric actuator available separately
- Angle of operation 180°, without turn limiter

mode of action:

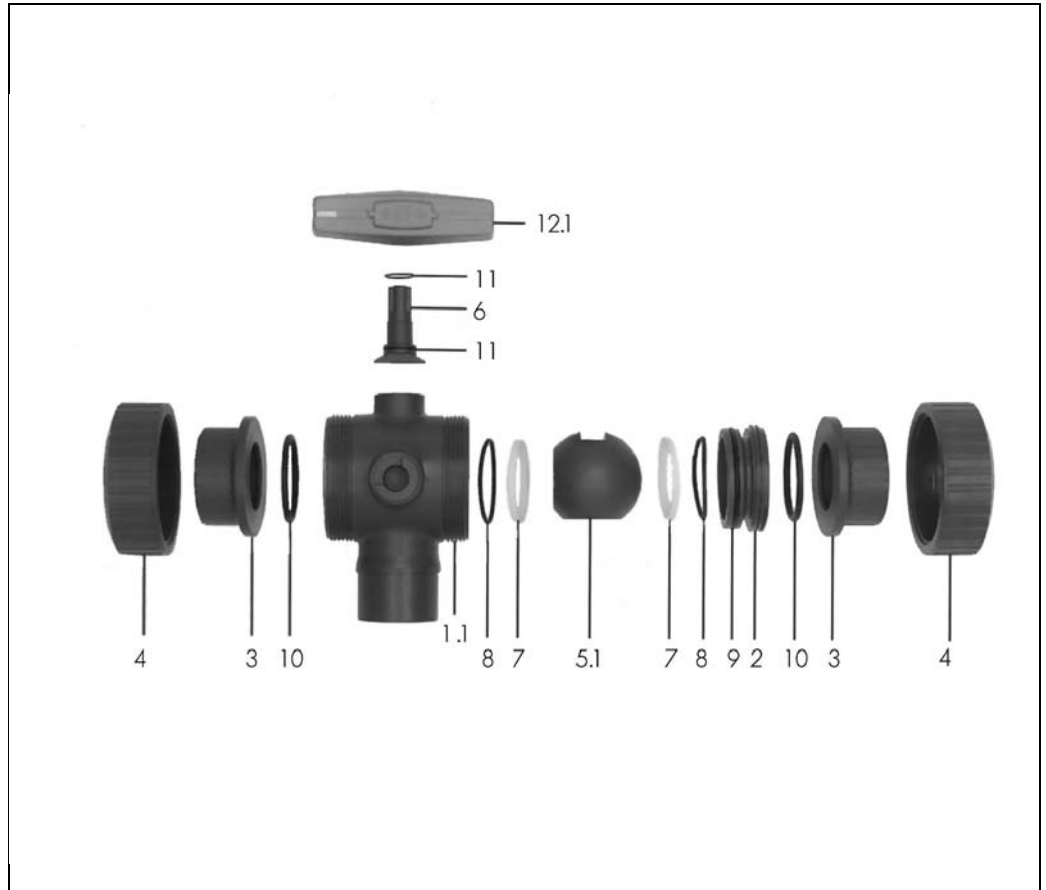
- For interconnection of two inputs



Rp [inch]	DN [mm]	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg	
3/8	10	10	49	161 343 421	161 343 431	0.164	
1/2	15	10	77	161 343 422	161 343 432	0.168	
3/4	20	10	146	161 343 423	161 343 433	0.286	
1	25	10	260	161 343 424	161 343 434	0.398	
1 1/4	32	10	437	161 343 425	161 343 435	0.688	
1 1/2	40	10	667	161 343 426	161 343 436	1.410	
2	50	10	1293	161 343 427	161 343 437	2.000	

Rp [inch]	z [mm]	D [mm]	L [mm]	L1 [mm]	L2 [mm]	H [mm]	H1 [mm]
3/8	67	45	99	78	63	50	57
1/2	67	45	102	78	63	50	62
3/4	79	53	120	92	75	60	72
1	83	64	131	100	79	70	77
1 1/4	96	78	150	110	89	80	87
1 1/2	109	92	163	120	95	92	97
2	135	116	197	146	115	110	112

Spare Parts Ball Valves Type 343, PVC-U



No.	Article/ Material	Pieces	d16 DN 10	d20 DN 15	d25 DN 20	d32 DN 25	d40 DN 32	d50 DN 40	d63 DN 50
	Ball Sets vertical		161 483 343 No. 11, 1 piece	161 483 343 No. 11, 1 piece	161 483 344	161 483 345	161 483 346	161 483 347	161 483 348
5.1	L-port ball PVC-U	1							
7	Ball seals PTFE	2							
6	Stem PVC-U	1							
11	Stem seals EPDM	2							
12.1	Lever PVC-U	1							
	Ball Sets vertical		161 483 351 No. 11, 1 piece	161 483 351 No. 11, 1 piece	161 483 352	161 483 353	161 483 354	161 483 355	161 483 356
5.1	L-port ball PVC-U	1							
7	Ball seals PTFE	2							
6	Stem PVC-U	1							
11	Stem seals FPM	2							
12.1	Lever PVC-U	1							
	Seal Sets		161 482 883 No. 11, 1 piece	161 482 883 No. 11, 1 piece	161 482 884	161 482 885	161 482 886	161 482 887	161 482 888
8	Backing seals EPDM	2							
9	Body seal EPDM	1							
10	Face seal EPDM	2							
11	Stem seals EPDM	2							
	Seal Sets		161 482 892 No. 11, 1 piece	161 482 892 No. 11, 1 piece	161 482 893	161 482 894	161 482 895	161 482 896	161 482 897
8	Backing seals FPM	2							
9	Body seal FPM	1							
10	Face seal FPM	2							
11	Stem seals FPM	2							
2	Union Bushes, PVC-U	1	161 482 339	161 482 339	161 482 340	161 482 341	161 482 342	161 482 343	161 482 344
10	Union seals, EPDM	1	748 410 042	748 410 042	748 410 116	748 410 103	748 410 027	748 410 010	748 410 011

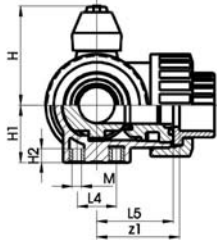
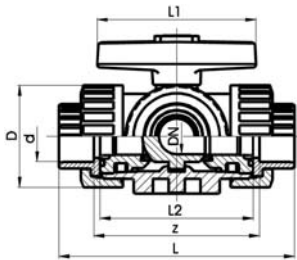
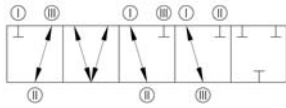
No.	Article/ Material	Pieces	d16 DN 10	d20 DN 15	d25 DN 20	d32 DN 25	d40 DN 32	d50 DN 40	d63 DN50
10	Union seals, FPM	1	749 410 042	749 410 042	749 410 116	749 410 103	749 410 027	749 410 010	749 410 011
3	Valve Ends with Socket, PVC-U metric	1	161 480 536	161 480 537	161 480 538	161 480 539	161 480 540	161 480 541	161 480 542
3	Valve Ends with Spigot, PVC-U metric	1	161 482 345	161 482 346	161 482 347	161 482 348	161 482 349	161 482 350	161 482 351
3	Valve Ends, PVC-U Rp	1	161 480 550	161 480 551	161 480 552	161 480 553	161 480 554	161 480 555	161 480 556
3	Valve Ends with Fusion Socket, PE 80	1	173 480 000	173 480 001	173 480 002	173 480 003	173 480 004	173 480 005	173 480 006
3	Butt- and Electro Fusion Spigots, PE100 SDR11	1	-	193 480 127	193 480 128	193 480 129	193 480 130	193 480 131	193 480 132
4	Union Nuts, PVC-U	1	161 340 617	161 340 617	161 340 618	161 340 619	161 340 620	161 482 119	161 482 613
12,1	Lever, PVC-U vertical	1	161 480 715	161 480 715	161 480 716	161 480 717	161 480 718	161 482 146	161 482 147



3-Way ball valve type 343 PVC-U Horizontal/ L-port With solvent cement sockets metric

Model:

- L-port ball
- For easy installation and removal
- Ball seals PTFE
- Pneumatic or electric actuator available separately
- Angle of operation 45°, without turn limiter



d [mm]	DN [mm]	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM without turn limiter Code	FPM without turn limiter Code	EPDM with turn limiter 90° Code	FPM with turn limiter 90° Code	kg
16	10	10	50	161 343 001	161 343 011	161 343 701	161 343 711	0.202
20	15	10	75	161 343 002	161 343 012	161 343 702	161 343 712	0.202
25	20	10	150	161 343 003	161 343 013	161 343 703	161 343 713	0.375
32	25	10	280	161 343 004	161 343 014	161 343 704	161 343 714	0.512
40	32	10	480	161 343 005	161 343 015	161 343 705	161 343 715	0.848
50	40	10	620	161 343 006	161 343 016	161 343 706	161 343 716	1.371
63	50	10	1230	161 343 007	161 343 017	161 343 707	161 343 717	2.636

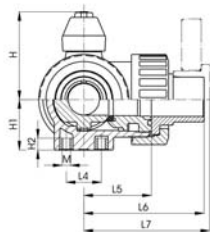
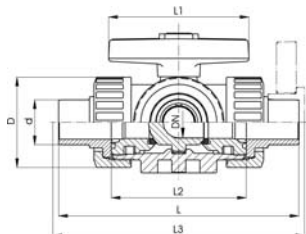
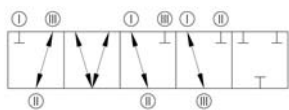
d [mm]	z [mm]	z1 [mm]	D [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	H [mm]	H1 [mm]	H2 [mm]	M
16	80	40	45	108	78	72	25	36	50	27	8	6
20	80	40	45	111	78	72	25	36	50	27	8	6
25	94	47	53	131	92	86	25	43	60	33	8	6
32	104	52	65	148	100	96	25	48	68	36	8	6
40	126	63	78	176	110	116	45	58	79	44	9	8
50	144	72	92	206	120	137	45	69	90	49	9	8
63	186	93	116	262	146	179	45	90	109	61	9	8



3-Way ball valve type 343 PVC-U Horizontal/ L-port With solvent cement spigots metric

Model:

- L-port ball
- For easy installation and removal
- Ball seals PTFE
- Pneumatic or electric actuator available separately
- Angle of operation 45°, without turn limiter



d [mm]	DN [mm]	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM without turn limiter Code	FPM without turn limiter Code	EPDM with turn limiter 90° Code
16	10	10	50	161 343 021	161 343 031	161 343 721
20	15	10	75	161 343 022	161 343 032	161 343 722
25	20	10	150	161 343 023	161 343 033	161 343 723
32	25	10	280	161 343 024	161 343 034	161 343 724
40	32	10	480	161 343 025	161 343 035	161 343 725
50	40	10	620	161 343 026	161 343 036	161 343 726
63	50	10	1230	161 343 027	161 343 037	161 343 727

d [mm]	DN [mm]	PN	kv-value ($\Delta p=1$ bar) [l/min]	FPM with turn limiter Code	kg
16	10	10	50	161 343 731	0.202
20	15	10	75	161 343 732	0.202
25	20	10	150	161 343 733	0.375
32	25	10	280	161 343 734	0.512
40	32	10	480	161 343 735	0.848
50	40	10	620	161 343 736	1.371
63	50	10	1230	161 343 737	2.636

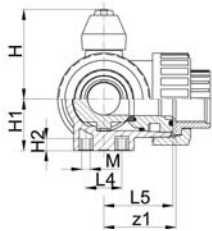
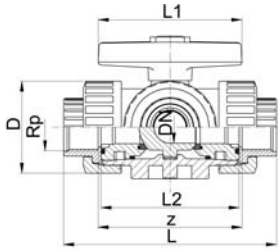
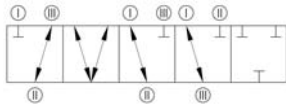
d [mm]	D [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	H [mm]	H1 [mm]	H2 [mm]	M
16	45	124	78	72	129	25	36	62	65	50	27	8	6
20	45	134	78	72	139	25	36	67	70	50	27	8	6
25	53	156	92	86	161	25	43	78	81	60	33	8	6
32	65	172	100	96	177	25	48	86	89	68	36	8	6
40	78	202	110	116	207	45	58	101	104	79	44	9	8
50	92	238	120	137	242	45	69	119	121	90	49	9	8
63	116	290	146	179	294	45	90	145	147	109	61	9	8



3-Way ball valve type 343 PVC-U Horizontal/ L-port With threaded sockets Rp

Model:

- L-port ball
- For easy installation and removal
- Ball seals PTFE
- Pneumatic or electric actuator available separately
- Angle of operation 45°, without turn limiter



Rp [inch]	DN [mm]	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
3/8	10	10	50	161 343 041	161 343 051	0.199
1/2	15	10	75	161 343 042	161 343 052	0.199
3/4	20	10	150	161 343 043	161 343 053	0.370
1	25	10	280	161 343 044	161 343 054	0.504
1 1/4	32	10	480	161 343 045	161 343 055	0.838
1 1/2	40	10	620	161 343 046	161 343 056	1.359
2	50	10	1230	161 343 047	161 343 057	2.622

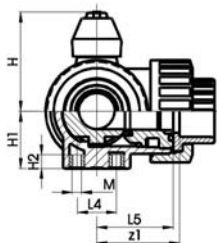
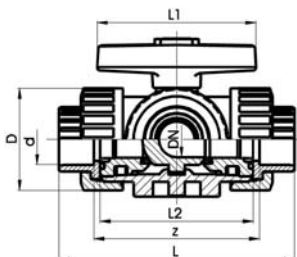
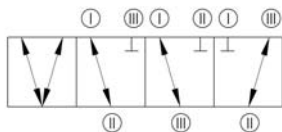
Rp [inch]	z [mm]	z1 [mm]	D [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	H [mm]	H1 [mm]	H2 [mm]	M
3/8	76	38	45	108	78	72	25	36	50	27	8	6
1/2	76	38	45	111	78	72	25	36	50	27	8	6
3/4	90	45	53	131	92	86	25	43	60	33	8	6
1	100	50	65	148	100	96	25	48	68	36	8	6
1 1/4	122	61	78	176	110	116	45	58	79	44	9	8
1 1/2	152	76	92	206	120	137	45	69	90	49	9	8
2	200	100	116	262	146	179	45	90	109	61	9	8



3-Way ball valve type 343 PVC-U Horizontal/ T-port With solvent cement sockets metric

Model:

- T-port ball
- Ball seal PTFE
- For easy installation and removal
- Pneumatic or electric actuator available separately
- Angle of operation 90°, without turn limiter



d [mm]	DN [mm]	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	140	161 343 201	161 343 211	0.199
20	15	10	200	161 343 202	161 343 212	0.199
25	20	10	470	161 343 203	161 343 213	0.370
32	25	10	793	161 343 204	161 343 214	0.504
40	32	10	1290	161 343 205	161 343 215	0.838
50	40	10	1910	161 343 206	161 343 216	1.359
63	50	10	3100	161 343 207	161 343 217	2.622

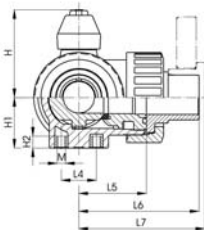
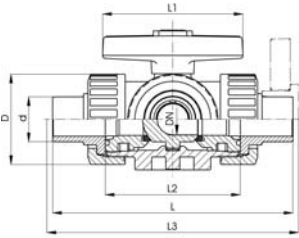
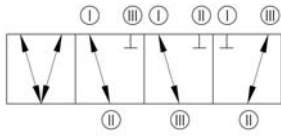
d [mm]	z [mm]	z1 [mm]	D [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	H [mm]	H1 [mm]	H2 [mm]	M
16	80	40	45	108	78	72	25	36	50	27	8	6
20	80	40	45	111	78	72	25	36	50	27	8	6
25	94	47	53	131	92	86	25	43	60	33	8	6
32	104	52	65	148	100	96	25	48	68	36	8	6
40	126	63	78	176	110	116	45	58	79	44	9	8
50	144	72	92	206	120	137	45	69	90	49	9	8
63	186	93	116	262	146	179	45	90	109	61	9	8



3-Way ball valve type 343 PVC-U Horizontal/ T-port With solvent cement spigots metric

Model:

- T-port ball
- Ball seal PTFE
- For easy installation and removal
- Pneumatic or electric actuator available separately
- Angle of operation 90°, without turn limiter



d [mm]	DN [mm]	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	140	161 343 221	161 343 231	0.199
20	15	10	200	161 343 222	161 343 232	0.199
25	20	10	470	161 343 223	161 343 233	0.370
32	25	10	793	161 343 224	161 343 234	0.504
40	32	10	1290	161 343 225	161 343 235	0.838
50	40	10	1910	161 343 226	161 343 236	1.359
63	50	10	3100	161 343 227	161 343 237	2.622

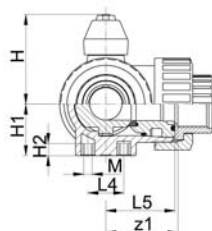
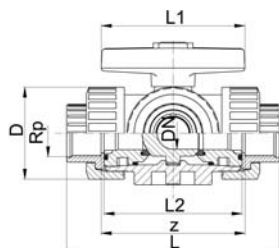
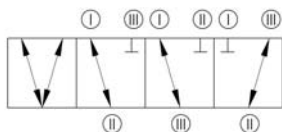
d [mm]	D [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	H [mm]	H1 [mm]	H2 [mm]	M
16	45	124	78	72	129	25	36	62	65	50	27	8	6
20	45	134	78	72	139	25	36	67	70	50	27	8	6
25	53	156	92	86	161	25	43	78	81	60	33	8	6
32	65	172	100	96	177	25	48	86	89	68	36	8	6
40	78	202	110	116	207	45	58	101	104	79	44	9	8
50	92	238	120	137	242	45	69	119	121	90	49	9	8
63	116	290	146	179	294	45	90	145	147	109	61	9	8



3-Way ball valve type 343 PVC-U Horizontal/ T-port With threaded sockets Rp

Model:

- T-port ball
- Ball seal PTFE
- For easy installation and removal
- Pneumatic or electric actuator available separately
- Angle of operation 90°, without turn limiter



Rp [inch]	DN [mm]	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
3/8	10	10	140	161 343 241	161 343 251	0.199
1/2	15	10	200	161 343 242	161 343 252	0.199
3/4	20	10	470	161 343 243	161 343 253	0.370
1	25	10	793	161 343 244	161 343 254	0.504
1 1/4	32	10	1290	161 343 245	161 343 255	0.838
1 1/2	40	10	1910	161 343 246	161 343 256	1.359
2	50	10	3100	161 343 247	161 343 257	2.622

Rp [inch]	z [mm]	z1 [mm]	D [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	H [mm]	H1 [mm]	H2 [mm]	M
3/8	76	38	45	108	78	72	25	36	50	27	8	6
1/2	76	38	45	111	78	72	25	36	50	27	8	6
3/4	90	45	53	131	92	86	25	43	60	33	8	6
1	100	50	65	148	100	96	25	48	68	36	8	6
1 1/4	122	61	78	176	110	116	45	58	79	44	9	8
1 1/2	152	76	92	206	120	137	45	69	90	49	9	8
2	200	100	116	262	146	179	45	90	109	61	9	8



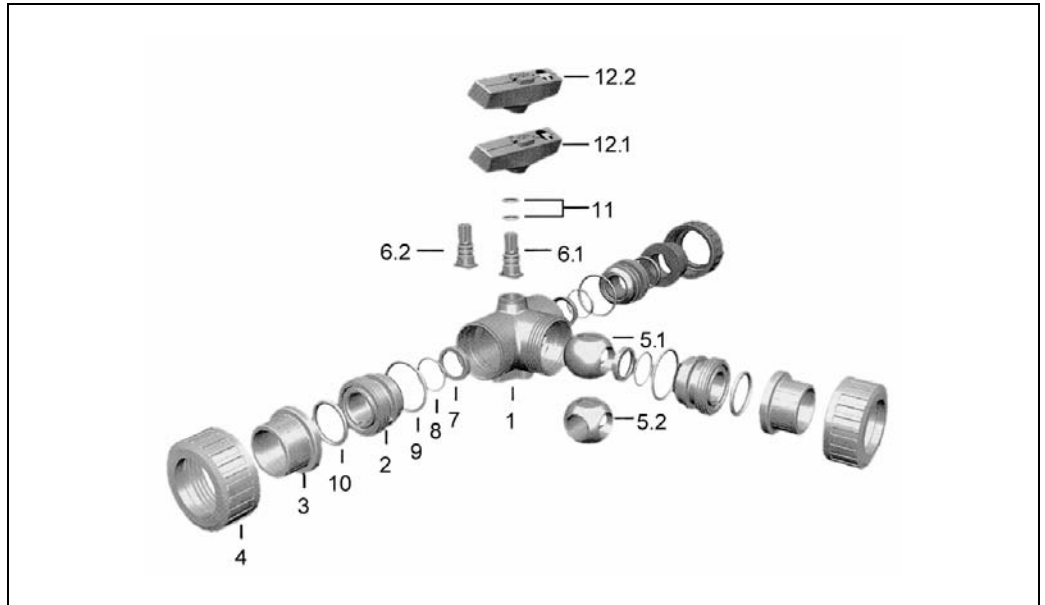
Turn limiter PVC-U

- For Type 343 horizontal, L-port
- add-on kit is affixable

d [mm]	DN [mm]	Inch	Code	kg
16-20	10-15	3/8-1/2	161 490 775	0.003
25	20	3/4	161 490 776	0.005
32	25	1	161 490 777	0.007
40	32	1 1/4	161 490 778	0.015
50	40	1 1/2	161 490 779	0.015
63	50	2	161 490 780	0.020

Spare Parts Ball Valves Type 343

PVC-U



No.	Article/ Material	Pieces	d16 DN 10	d20 DN 15	d25 DN 20	d32 DN 25	d40 DN 32	d50 DN 40	d63 DN 50
8	Seal sets		161 484 941	161 484 941	161 484 942	161 484 943	161 484 944	161 484 945	161 484 946
	Backing seals EPDM	3							
9	Body seal EPDM	3							
10	Face seal EPDM	3							
11	Stem seals EPDM	2							
8	Seal sets		161 484 951	161 484 951	161 484 952	161 484 953	161 484 954	161 484 955	161 484 956
	Backing seals FPM	3							
9	Body seal FPM	3							
10	Face seal FPM	3							
11	Stem seals FPM	2							
5.1	Ball set, L-port		161 486 015	161 486 015	161 486 016	161 486 017	161 486 018	161 486 019	161 486 020
	L-port ball PVC-U	1							
7	Ball seals PTFE	3							
6.1	Stem PVC-U	1							
11	Stem seals EPDM	2							
12.1	Lever PVC-U	1							
5.1	Ball set, L-port		161 486 027	161 486 027	161 486 028	161 486 029	161 486 030	161 486 031	161 486 032
	L-port ball PVC-U	1							
7	Ball seals PTFE	3							
6.1	Stem PVC-U	1							
11	Stem seals FPM	2							
12.1	Lever PVC-U	1							
5.2	Ball set, T-port		161 486 039	161 486 039	161 486 040	161 486 041	161 486 042	161 486 043	161 486 044
	T-port ball PVC-U	1							
7	Ball seals PTFE	3							
6.2	Stem PVC-U	1							
11	Stem seals EPDM	2							
12.2	Lever PVC-U	1							
5.2	Ball set, T-port		161 486 051	161 486 051	161 486 052	161 486 053	161 486 054	161 486 055	161 486 056
	T-port ball PVC-U	1							
7	Ball seals PTFE	3							
6.2	Stem PVC-U	1							
11	Stem seals FPM	2							
12.2	Lever PVC-U	1							

No.	Article/ Material	Pieces	d16 DN 10	d20 DN 15	d25 DN 20	d32 DN 25	d40 DN 32	d50 DN 40	d63 DN 50
1	Central parts, L-port Body PVC-U	1	161 490 439	161 490 439	161 490 440	161 490 441	161 490 442	161 490 443	161 490 444
5.1	L-port ball PVC-U	1							
7	Ball seals PTFE	3							
8	Backing seals EPDM	3							
9	Body seal EPDM	3							
2	Union bush PVC-U	3							
6.1	Stem PVC-U	1							
11	Stem seals EPDM	2							
12.1	Lever PVC-U	1							
1	Central parts, L-port Body PVC-U	1	161 490 450	161 490 450	161 490 451	161 490 452	161 490 453	161 490 454	161 490 455
5.1	L-port ball PVC-U	1							
7	Ball seals PTFE	3							
8	Backing seals FPM	3							
9	Body seal FPM	3							
2	Union bush PVC-U	3							
6.1	Stem PVC-U	1							
11	Stem seals FPM	2							
12.1	Lever PVC-U	1							
1	central part, T-port Body PVC-U	1	161 490 461	161 490 461	161 490 462	161 490 463	161 490 464	161 490 465	161 490 466
5.2	T-port ball PVC-U	1							
7	Ball seals PTFE	3							
8	Backing seals EPDM	3							
9	Body seal EPDM	3							
2	Union bush PVC-U	3							
6.2	Stem PVC-U	1							
11	Stem seals EPDM	2							
12.2	Lever PVC-U	1							
1	central part, T-port Body PVC-U	1	161 490 472	161 490 472	161 490 473	161 490 474	161 490 475	161 490 476	161 490 477
5.2	T-port ball PVC-U	1							
7	Ball seals PTFE	3							
8	Backing seals FPM	3							
9	Body seal FPM	3							
2	Union bush PVC-U	3							
6.2	Stem PVC-U	1							
11	Stem seals FPM	2							
12.2	Lever PVC-U	1							
3	Valve Ends with Socket, PVC-U metric	1	161 480 536	161 480 537	161 480 538	161 480 539	161 480 540	161 480 541	161 480 542
3	Valve Ends with Spigot, PVC-U metric	1	161 482 345	161 482 346	161 482 347	161 482 348	161 482 349	161 482 350	161 482 351
3	Valve Ends, PVC-U Rp	1	161 480 550	161 480 551	161 480 552	161 480 553	161 480 554	161 480 555	161 480 556
3	Valve Ends with Fusion Socket, PE80	1	173 480 000	173 480 001	173 480 002	173 480 003	173 480 004	173 480 005	173 480 006
3	Butt and Electro Fusion Spigots, PE100 SDR11	1	-	193 480 127	193 480 128	193 480 129	193 480 130	193 480 131	193 480 132
4	Union Nuts, PVC-U	1	161 340 617	161 340 617	161 340 618	161 340 619	161 340 620	161 340 621	161 480 522
12,1	Lever, PVC-U L-port	1	161 482 151	161 482 151	161 482 152	161 482 153	161 482 154	161 482 155	161 482 156
12,2	Lever, PVC-U T-port	1	161 486 175	161 486 175	161 486 176	161 486 177	161 486 178	161 486 179	161 486 180



Key PBTP black

- For assembly and disassembly of the union bush of ball valves type 323, 343, 346 and ball check valves 360

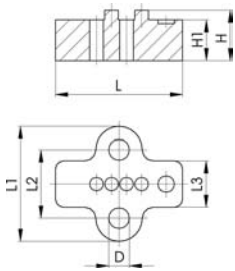
d-d [mm]	DN-DN [mm]	Inch	Code	kg	
16 - 63	10 - 50	3/8-2	160 480 106	0.038	



Mounting block PP

- For diaphragm valve to be compatible with pipe clips type 061 and one spacer type 061
- For 3-way ball valve type 343 to be compatible with pipe clips type 061 and one spacer type 061
- For dimensions DN 10-15, the two mounting blocks (No 2+6) have to be ordered separately. They are to be assembled together.

d-d [mm]	DN-DN [mm]	Inch	Block no.	Code	kg	
16 - 20	10 - 15	3/8-1/2	2	167 480 423	0.003	
25 - 32	20 - 25	3/4-1	6	167 482 238	0.017	
40 - 63	32 - 50	1 1/4-2	7	167 482 239	0.030	



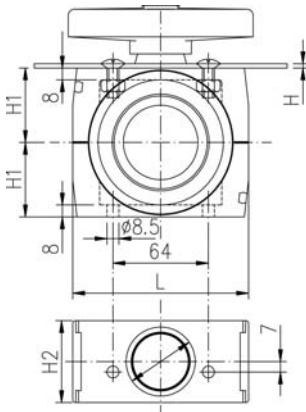
d-d [mm]	D [mm]	H [mm]	H1 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	
16 - 20	8	7	4	47	42	25	17	
25 - 32	8	15	15	47	42	25	17	
40 - 63	10	11	11	80	67	45	22	



Ball valve bracket type 126 PVC-U

Model:

- Can be fitted to existing installations without interrupting their operation
- Easily assembled without tools
- Enable Georg Fischer plastic valves to be mounted in control panels
- For Ball Valves Type 343 (only vertical model up to size DN25)



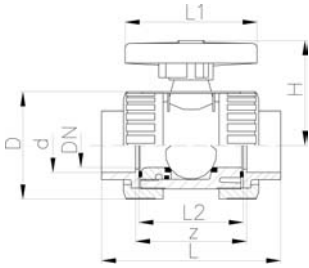
d [mm]	DN [mm]	Inch	Code	kg	D [mm]	L [mm]	H [mm]	H1 [mm]	H2 [mm]	
25	20	3/4	161 126 007	0.239	30	118	2	29	55	
32	25	1	161 126 008	0.275	30	118	2	34	55	
40	32	1 1/4	161 126 009	0.300	30	118	2	43	55	
50	40	1 1/2	161 126 010	0.313	36	118	3	50	55	
63	50	2	161 126 011	0.361	42	130	4	61	55	



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 ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg	
16	10	10	11	161 323 401	161 323 411	0.160	
20	15	10	20	161 323 402	161 323 412	0.161	

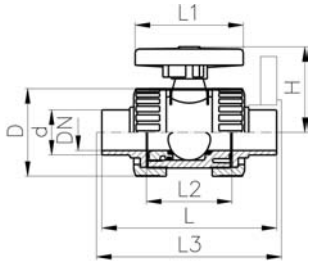
d [mm]	z [mm]	D [mm]	L [mm]	L1 [mm]	L2 [mm]	H [mm]	
16	71	45	99	78	63	50	
20	71	45	102	78	63	50	



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 558-1



d [mm]	DN [mm]	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg	
16	10	10	11	161 323 441	161 323 451	0.162	
20	15	10	20	161 323 442	161 323 452	0.160	

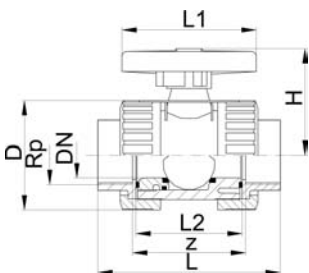
d [mm]	D [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	H [mm]	
16	45	114	78	63	120	50	
20	45	124	78	63	130	50	



Metering ball valve type 323 PVC-U With threaded sockets Rp

Model:

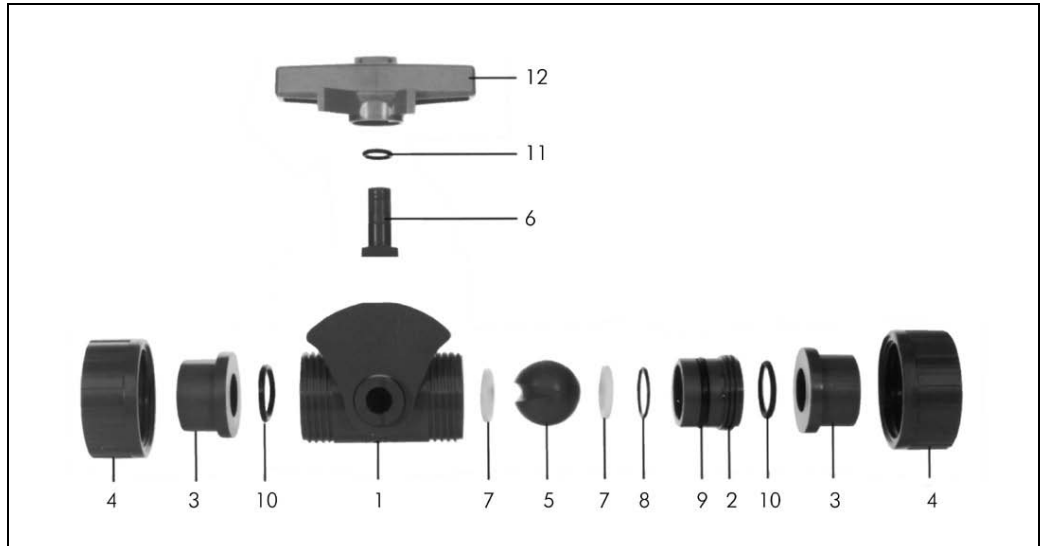
- For easy installation and removal
- Ball seals PTFE
- Angle of operation 180° with scale



Rp [inch]	DN [mm]	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg	
3/8	10	10	11	161 323 421	161 323 431	0.162	
1/2	15	10	20	161 323 422	161 323 432	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	

Spare Parts Metering Ball Valves Type 323, PVC-U



No.	Article/ Material	Pieces	d16 DN 10	d20 DN 15
5	Ball Sets Ball PVC-U	1	161 482 986	161 482 987
7	Ball seals PTFE	2		
6	Stem PVC-U	1		
11	Stem seals EPDM	1		
12	Lever PVC-U	1		
5	Ball Sets Ball PVC-U	1	161 482 989	161 482 990
7	Ball seals PTFE	2		
6	Stem PVC-U	1		
11	Stem seals FPM	1		
12	Lever PVC-U	1		
8	Seal Sets Backing seals EPDM	1	161 482 883 No. 11, 1 piece	161 482 883 No. 11, 1 piece
9	Body seal EPDM	1		
10	Face seal EPDM	2		
11	Stem seals EPDM	1		
8	Seal Sets Backing seals FPM	1	161 482 892 No. 11, 1 piece	161 482 892 No. 11, 1 piece
9	Body seal FPM	1		
10	Face seal FPM	2		
11	Stem seals FPM	1		
2	Union Bushes, PVC-U	1	161 482 339	161 482 339
10	Union seals, EPDM	1	748 410 042	748 410 042
10	Union seals, FPM	1	749 410 042	749 410 042
3	Valve Ends with Socket, PVC-U metric	1	161 480 536	161 480 537
3	Valve Ends with Spigot, PVC-U metric	1	161 482 345	161 482 346
3	Valve Ends, PVC-U Rp	1	161 480 550	161 480 551
3	Butt and Electro Fusion Spigots, PE100 SDR11	1	-	193 480 127
4	Union Nuts, PVC-U	1	161 340 617	161 340 617
12	Lever, PVC-U	1	161 480 724	161 480 724



Key PBTP black

- For assembly and disassembly of the union bush of ball valves type 323, 343, 346 and ball check valves 360

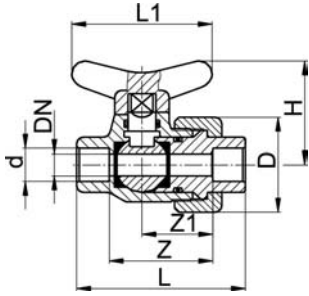
d-d [mm]	DN-DN [mm]	Inch	Code	kg
16 - 63	10 - 50	3/8-2	160 480 106	0.038



Laboratory ball cock type 322 PVC-U With solvent cement sockets metric

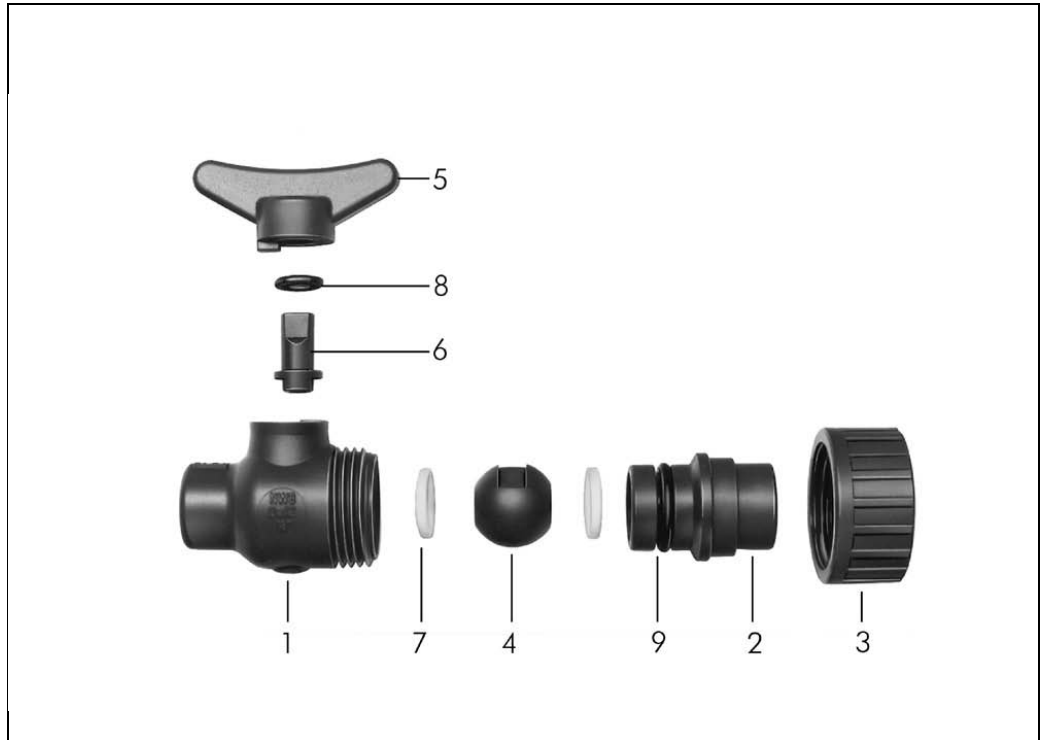
Model:

- Disconnection one end only
- Ball seals PTFE



d [mm]	DN [mm]	PN	EPDM Code	FPM Code	kg	D [mm]	L [mm]	L1 [mm]	H [mm]	z [mm]	z1 [mm]
10	6	10	161 322 150	161 322 199	0.043	34	52	45	38	26	15
12	8	10	161 322 200	161 322 249	0.050	34	60	45	38	36	25

Spare Parts Laboratory Ball Cocks Type 322, PVC-U

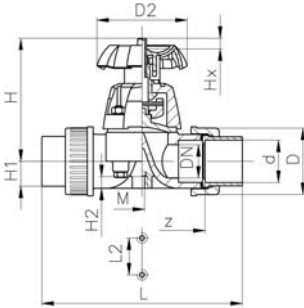


No.	Article/ Material	Pieces
4	Ball Sets Ball PVC-U	1
7	Ball seals PTFE	2
6	Stem PVC-U	1
8	Stem seals EPDM	1
4	Ball Sets Ball PVC-U	1
7	Ball seals PTFE	2
6	Stem PVC-U	1
8	Stem seals FPM	1
8	Stem seals EPDM	1
9	Body seal EPDM	1
8	Stem seals FPM	1
9	Body seal FPM	1
2	Valve Ends, PVC-U	1
3	Union Nuts, PVC-U	1
5	Levers, PVC-U	1

d10 DN 6	d12 DN 8
161 482 978	161 482 978
161 482 980	161 482 980
161 482 982	161 482 982
161 482 984	161 482 984
161 322 152	161 322 202
161 322 203	161 322 203
161 322 205	161 322 205

Diaphragm valves

Diaphragm valve type 314 PVC-U With solvent cement sockets metric



Model:

- For easy installation and removal
- Short overall length

Option:

- Handwheel with built-in locking mechanism (standard version is nonlockable)

d [mm]	DN [mm]	PN	kv-value ($\Delta p=1$ bar) [l/min]	NBR Code	EPDM Code	CSM Code	PTFE with EPDM supp. diaphragm Code
16	10	10	72	161 314 401	161 314 416	161 314 446	161 314 431
20	15	10	72	161 314 402	161 314 417	161 314 447	161 314 432
25	20	10	137	161 314 403	161 314 418	161 314 448	161 314 433
32	25	10	207	161 314 404	161 314 419	161 314 449	161 314 434
40	32	10	354	161 314 405	161 314 420	161 314 450	161 314 435
50	40	10	517	161 314 406	161 314 421	161 314 451	161 314 436
63	50	10	713	161 314 407	161 314 422	161 314 452	161 314 437

d [mm]	DN [mm]	PN	kv-value ($\Delta p=1$ bar) [l/min]	FPM Code	kg
16	10	10	72	161 314 461	0.360
20	15	10	72	161 314 462	0.354
25	20	10	137	161 314 463	0.542
32	25	10	207	161 314 464	0.870
40	32	10	354	161 314 465	1.125
50	40	10	517	161 314 466	1.515
63	50	10	713	161 314 467	2.765

d [mm]	z [mm]	D [mm]	D2 [mm]	L [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	M	Lift = Hx [mm]
16	96	43	80.00	124	25	90	14	12	M6	8
20	96	43	80.00	128	25	90	14	12	M6	8
25	114	51	80.00	152	25	102	18	12	M6	11
32	122	58	94.00	166	25	119	21	12	M6	13
40	140	72	117.00	192	45	126	26	15	M8	16
50	160	83	117.00	222	45	139	33	15	M8	21
63	190	100	152.00	266	45	172	39	15	M8	28



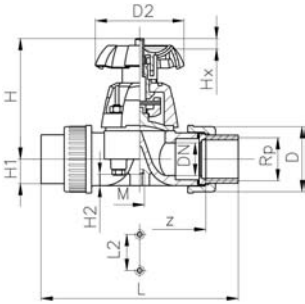
Diaphragm valve type 314 PVC-U With threaded sockets Rp

Model:

- For easy installation and removal
- Short overall length

Option:

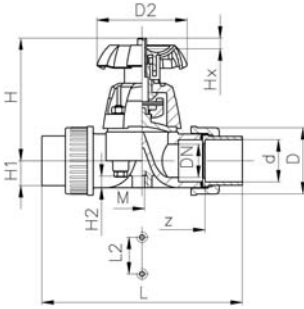
- Handwheel with built-in locking mechanism (standard version is nonlockable)



Rp [inch]	DN [mm]	PN	kv-value ($\Delta p=1$ bar) [l/min]	NBR Code	EPDM Code	CSM Code	PTFE with EPDM supp. diaphragm Code
1/2	15	10	72	161 314 502	161 314 517	161 314 547	161 314 532
3/4	20	10	137	161 314 503	161 314 518	161 314 548	161 314 533
1	25	10	207	161 314 504	161 314 519	161 314 549	161 314 534
1 1/4	32	10	354	161 314 505	161 314 520	161 314 550	161 314 535
1 1/2	40	10	517	161 314 506	161 314 521	161 314 551	161 314 536
2	50	10	713	161 314 507	161 314 522	161 314 552	161 314 537

Rp [inch]	DN [mm]	PN	kv-value ($\Delta p=1$ bar) [l/min]	FPM Code	kg
1/2	15	10	72	161 314 562	0.354
3/4	20	10	137	161 314 563	0.542
1	25	10	207	161 314 564	0.870
1 1/4	32	10	354	161 314 565	1.125
1 1/2	40	10	517	161 314 566	1.515
2	50	10	713	161 314 567	2.765

Rp [inch]	z [mm]	D [mm]	D2 [mm]	L [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	M	Lift = Hx [mm]
1/2	102	43	80.00	128	25	90	14	12	M6	8
3/4	122	51	80.00	152	25	102	18	12	M6	11
1	132	58	94.00	166	25	119	21	12	M6	13
1 1/4	154	72	117.00	192	45	126	26	15	M8	16
1 1/2	184	83	117.00	222	45	139	33	15	M8	21
2	220	100	152.00	266	45	172	39	15	M8	28



Diaphragm valve type 314 PVC-U With fusion sockets PE 80

Model:

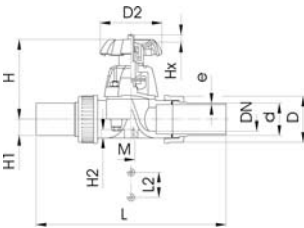
- For easy installation and removal
- Short overall length

Option:

- Handwheel with built-in locking mechanism (standard version is nonlockable)

d [mm]	DN [mm]	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	kg
20	15	10	72	161 314 477	0.355
25	20	10	137	161 314 478	0.540
32	25	10	207	161 314 479	0.870
40	32	10	354	161 314 480	1.115
50	40	10	517	161 314 481	1.510
63	50	10	713	161 314 482	2.740

d [mm]	z [mm]	D [mm]	D2 [mm]	L [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	M	Lift = Hx [mm]
20	100	43	80.00	128	25	90	14	12	M6	8
25	118	51	80.00	150	25	102	18	12	M6	11
32	126	58	94.00	162	25	119	21	12	M6	13
40	144	72	117.00	184	45	126	26	15	M8	16
50	164	83	117.00	210	45	139	33	15	M8	21
63	194	100	152.00	248	45	172	39	15	M8	28



Diaphragm valve type 314 PVC-U With butt and electro fusion ends PE 100 ISO S5/SDR 11

Model:

- For easy installation and removal
- Short overall length

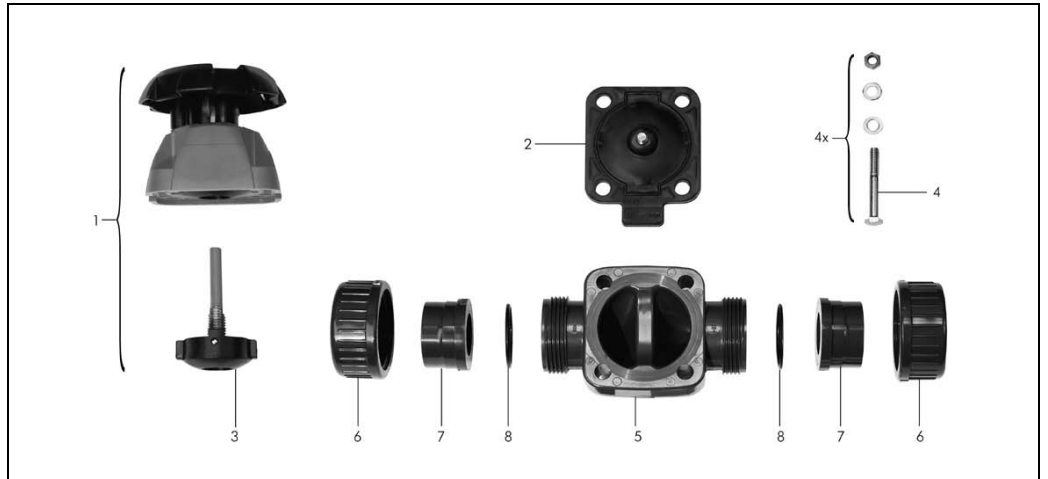
Option:

- Handwheel with built-in locking mechanism (standard version is nonlockable)

d [mm]	DN [mm]	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	kg
20	15	10	72	161 314 577	0.360
25	20	10	137	161 314 578	0.545
32	25	10	207	161 314 579	0.875
40	32	10	354	161 314 580	1.130
50	40	10	517	161 314 581	1.545
63	50	10	713	161 314 582	2.780

d [mm]	D [mm]	D2 [mm]	L [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	M	Lift = Hx [mm]	e [mm]
20	43	80.00	224	25	90	14	12	M6	8	1,9
25	51	80.00	250	25	102	18	12	M6	11	2,3
32	58	94.00	262	25	119	21	12	M6	13	3
40	72	117.00	296	45	126	26	15	M8	16	3,7
50	83	117.00	328	45	139	33	15	M8	21	4,6
63	100	152.00	370	45	172	39	15	M8	28	5,8

Spare Parts Diaphragm Valves Type 314, PVC-U



No.	Article/ Material	Pieces	d20 DN 15	d25 DN 20	d32 DN 25	d40 DN 32	d50 DN 40	d63 DN50
1	Bonnets complete (without diaphragm), Elastomer diaphragms	1	161 484 625	161 484 626	161 484 627	161 484 628	161 484 629	161 484 630
1	Bonnets complete (without diaphragm), PTFE diaphragms	1	161 484 632	161 484 633	161 484 634	161 484 635	161 484 636	161 484 637
2	Diaphragms, NBR	1	161 311 710	161 311 711	161 311 712	161 311 713	161 311 714	161 311 715
2	Diaphragms, EPDM	1	161 481 022	161 481 023	161 481 024	161 481 025	161 481 026	161 481 027
2	Diaphragms, FPM	1	161 484 152	161 484 153	161 484 154	161 484 155	161 484 156	161 484 157
2	Diaphragms, PTFE/EPDM	1	161 311 698	161 311 699	161 311 700	161 311 701	161 311 702	161 311 703
2	Diaphragms, PTFE/FPM	1	161 481 926	161 481 927	161 481 928	161 481 929	161 481 930	161 481 931
2	Diaphragms, CSM	1	161 311 728	161 311 729	161 311 730	161 311 731	161 311 732	161 311 733
3	Pressure Spindles, Elastomer diaphragms	1	161 484 688	161 484 689	161 484 690	161 484 691	161 484 692	161 484 693
3	Pressure Spindles, PTFE diaphragms	1	161 484 696	161 484 697	161 484 698	161 484 699	161 484 700	161 484 701
4	Fastening Sets, Stainless steel	1	161 484 704	161 484 705	161 484 706	161 484 707	161 484 708	161 484 709
5	Valve Bodies, PVC-U	1	161 481 218	161 481 219	161 481 220	161 481 221	161 481 222	161 481 223
6	Union Nuts, PVC-U	1	721 690 006	721 690 007	721 690 008	721 690 009	721 690 010	721 690 011
7	Union Ends with Socket, PVC-U metric	1	721 600 106	721 600 107	721 600 108	721 600 109	721 600 110	721 600 111
7	Union Ends with Spigot, PVC-U metric	1	721 600 406	721 600 407	721 600 408	721 600 409	721 600 410	721 600 411
7	Union Ends, PVC-U Rp	1	721 600 656	721 600 657	721 600 658	721 600 659	721 600 660	721 600 661
7	Union Ends Blank, PVC-U	1	721 600 006	721 600 007	721 600 008	721 600 009	721 600 010	721 600 011
7	Union Ends, PE80	1	734 600 106	734 600 107	734 600 108	734 600 109	734 600 110	734 600 111
7	Union Ends Long, PE100 for butt- and electro fusion	1	753 608 616	753 608 617	753 608 618	753 608 619	753 608 620	753 608 621
8	O-Ring Gaskets, Union end seal for elastomer diaphragm, EPDM	1	748 410 038	748 410 044	748 410 195	748 410 052	748 410 134	748 410 135
8	O-Ring Gaskets, Union end seal for PTFE diaphragm, FPM	1	749 410 038	749 410 044	749 410 195	749 410 052	749 410 134	749 410 135



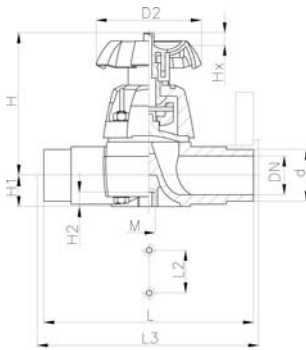
Diaphragm valve type 315 PVC-U With solvent cement spigots metric

Model:

- Overall length EN 558-1

Option:

- Handwheel with built-in locking mechanism (standard version is nonlockable)

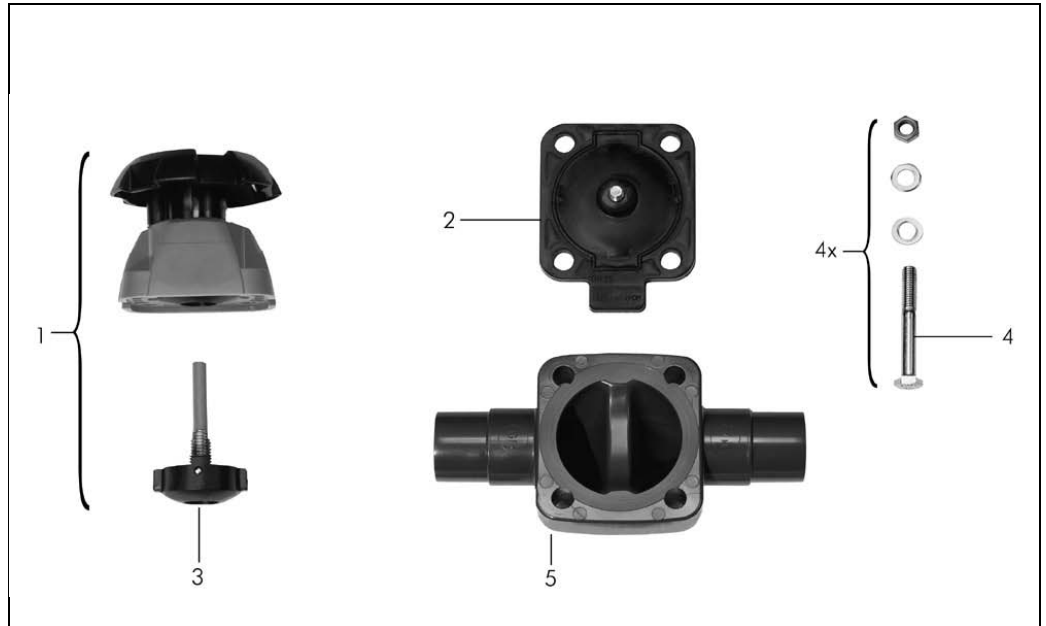


d [mm]	DN [mm]	PN	kv-value ($\Delta p=1$ bar) [l/min]	NBR Code	EPDM Code	CSM Code	PTFE with EPDM supp. diaphragm Code
20	15	10	72	161 315 402	161 315 417	161 315 447	161 315 432
25	20	10	137	161 315 403	161 315 418	161 315 448	161 315 433
32	25	10	207	161 315 404	161 315 419	161 315 449	161 315 434
40	32	10	354	161 315 405	161 315 420	161 315 450	161 315 435
50	40	10	517	161 315 406	161 315 421	161 315 451	161 315 436
63	50	10	713	161 315 407	161 315 422	161 315 452	161 315 437

d [mm]	DN [mm]	PN	kv-value ($\Delta p=1$ bar) [l/min]	FPM Code	kg
20	15	10	72	161 315 462	0.300
25	20	10	137	161 315 463	0.430
32	25	10	207	161 315 464	0.740
40	32	10	354	161 315 465	0.929
50	40	10	517	161 315 466	1.255
63	50	10	713	161 315 467	2.367

d [mm]	D2 [mm]	L [mm]	L2 [mm]	L3 [mm]	H [mm]	H1 [mm]	H2 [mm]	M	Lift = Hx [mm]
20	80.00	124	25	130	90	14	12	M6	8
25	80.00	144	25	150	102	18	12	M6	11
32	94.00	154	25	160	119	21	12	M6	13
40	117.00	174	45	180	126	26	15	M8	16
50	117.00	194	45	200	139	33	15	M8	21
63	152.00	224	45	230	172	39	15	M8	28

Spare Parts Diaphragm Valves Type 315, PVC-U



No.	Article/ Material	Pieces	d20 DN 15	d25 DN 20	d32 DN 25	d40 DN 32	d50 DN 40	d63 DN50
1	Bonnets complete (without diaphragm), Elastomer diaphragms	1	161 484 625	161 484 626	161 484 627	161 484 628	161 484 629	161 484 630
1	Bonnets complete (without diaphragm), PTFE diaphragms	1	161 484 632	161 484 633	161 484 634	161 484 635	161 484 636	161 484 637
2	Diaphragms, NBR	1	161 311 710	161 311 711	161 311 712	161 311 713	161 311 714	161 311 715
2	Diaphragms, EPDM	1	161 481 022	161 481 023	161 481 024	161 481 025	161 481 026	161 481 027
2	Diaphragms, FPM	1	161 484 152	161 484 153	161 484 154	161 484 155	161 484 156	161 484 157
2	Diaphragms, PTFE/ EPDM	1	161 311 698	161 311 699	161 311 700	161 311 701	161 311 702	161 311 703
2	Diaphragms, PTFE/ FPM	1	161 481 926	161 481 927	161 481 928	161 481 929	161 481 930	161 481 931
2	Diaphragms, CSM	1	161 311 728	161 311 729	161 311 730	161 311 731	161 311 732	161 311 733
3	Pressure Spindles, Elastomer diaphragms	1	161 484 688	161 484 689	161 484 690	161 484 691	161 484 692	161 484 693
3	Pressure Spindles, PTFE diaphragms	1	161 484 696	161 484 697	161 484 698	161 484 699	161 484 700	161 484 701
4	Fastening Sets, Stainless steel	1	161 484 704	161 484 705	161 484 706	161 484 707	161 484 708	161 484 709
5	Valve Bodies, PVC- U	1	161 481 274	161 481 275	161 481 276	161 481 277	161 481 278	161 481 279



Diaphragm valve type 317 PVC-U With PVC-U flanges metric

Model:

- Jointing face flat
- With backing flanges DN 15-65
- With fixed flanges DN 80-150
- Overall length EN 558-1
- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10
- DN 80 and DN 100 additional to ANSI B16.5

Option:

- Handwheel lockable DN15-65 (basic version not lockable)

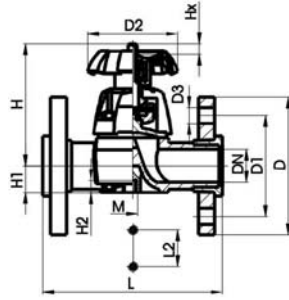
* with PVC-U fixed flanges, d90 DN80 with combined metric- and ANSI-screw-hole circle

d [mm]	DN [mm]	Inch	PN	kv-value ($\Delta p=1$ bar) [l/min]	NBR Code	EPDM Code	CSM Code	PTFE with EPDM supp. diaphragm Code
20	15	½	10	72	161 317 502	161 317 517	161 317 547	161 317 532
25	20	¾	10	137	161 317 503	161 317 518	161 317 548	161 317 533
32	25	1	10	207	161 317 504	161 317 519	161 317 549	161 317 534
40	32	1 ¼	10	354	161 317 505	161 317 520	161 317 550	161 317 535
50	40	1 ½	10	517	161 317 506	161 317 521	161 317 551	161 317 536
63	50	2	10	713	161 317 507	161 317 522	161 317 552	161 317 537
75	65	2 ½	10	992	161 317 508	161 317 523	161 317 553	161 317 538
*90	80	3	10	1700	161 317 009	161 317 024	161 317 054	161 317 039
*110	100	4	10	2700	161 317 010	161 317 025	161 317 055	161 317 040
*160	150	6	7	6033	161 317 012	161 317 027	161 317 057	161 317 042

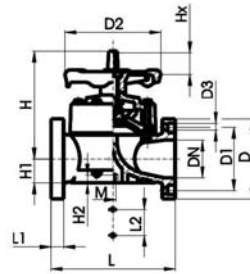
d [mm]	DN [mm]	Inch	PN	kv-value ($\Delta p=1$ bar) [l/min]	FPM Code	kg
20	15	½	10	72	161 317 562	0.448
25	20	¾	10	137	161 317 563	0.650
32	25	1	10	207	161 317 564	1.040
40	32	1 ¼	10	354	161 317 565	1.350
50	40	1 ½	10	517	161 317 566	1.835
63	50	2	10	713	161 317 567	3.120
75	65	2 ½	10	992	161 317 568	4.300
*90	80	3	10	1700	161 317 069	9.700
*110	100	4	10	2700	161 317 070	13.600
*160	150	6	7	6033	161 317 072	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
20	95	65.00	80.00	14.0	130		25		90	14	12	M6	4
25	105	75.00	80.00	14.0	150		25		102	18	12	M6	4
32	115	85.00	94.00	14.0	160		25		119	21	12	M6	4
40	140	100.00	117.00	18.0	180		45		126	26	15	M8	4
50	150	110.00	117.00	18.0	200		45		139	33	15	M8	4
63	165	125.00	152.00	18.0	230		45		172	39	15	M8	4
75	185	145.00	152.00	18.0	290		70		201	46	15	M8	4
*90	200	160.00	270.00	18.0	310	35	120		265	57	23	M12	8
*110	225	180.00	270.00	18.0	350	35	120		304	69	23	M12	8
*160	285	240.00	400.00	23.0	480	26	100	200	437	108	23	M12	8

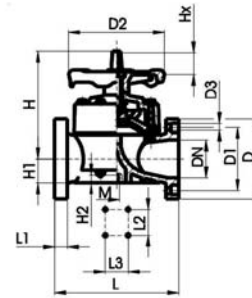
d [mm]	Lift = Hx [mm]
20	8
25	11
32	13
40	16
50	21
63	28
75	30
*90	40
*110	50
*160	70



DN 15-65



DN 80-100



DN 150

Component Parts for Flange Assembly of Diaphragm Valves Type 317

21 81 01

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



d	DN	PN	Code	kg	
20	15	16	721 810 106	0,011	
25	20	16	721 810 107	0,018	
32	25	16	721 810 108	0,027	
40	32	16	721 810 109	0,045	
50	40	16	721 810 110	0,067	
63	50	16	721 810 111	0,122	
75	65	16	721 810 112	0,182	
90	80	16	721 810 113	0,291	
110	100	16	721 810 114	0,468	
160	150	16	721 810 117	1,180	

21 80 01

Flange Adaptors PVC-U
Jointing face flat, metric

d	DN	PN	Code	kg	
20	15	16	721 800 106	0,010	
25	20	16	721 800 107	0,015	
32	25	16	721 800 108	0,024	
40	32	16	721 800 109	0,038	
50	40	16	721 800 110	0,055	
63	50	16	721 800 111	0,104	
75	65	16	721 800 112	0,155	
90	80	16	721 800 113	0,156	
110	100	16	721 800 114	0,417	
160	150	16	721 790 117	1,077	

EPDM 48 41 01
FPM 49 41 01

O-Ring Gaskets

d	DN	inch	EPDM Code	FPM Code	kg	
20	15	1/2	748 410 001	749 410 001	0,002	
25	20	3/4	748 410 007	749 410 007	0,002	
32	25	1	748 410 002	749 410 002	0,003	
40	32	1 1/4	748 410 003	749 410 003	0,007	
50	40	1 1/2	748 410 012	749 410 012	0,008	
63	50	2	748 410 013	749 410 013	0,011	
75	65	2 1/2	748 410 014	749 410 014	0,012	
90	80	3	748 410 015	749 410 015	0,015	
110	100	4	748 410 016	749 410 016	0,031	
160	150	6	748 410 019	749 410 019	0,044	

EPDM 48 44 01
FPM 49 44 01

Flange Gaskets

d	EPDM Code	FPM Code	kg
20	748 440 101	749 440 101	0,008
25	748 440 102	749 440 102	0,011
32	748 440 103	749 440 103	0,014
40	748 440 104	749 440 104	0,020
50	748 440 105	749 440 105	0,021
63	748 440 106	749 440 106	0,040
75	748 440 107	749 440 107	0,054
90	748 440 108	749 440 108	0,060
110	748 440 109	749 440 109	0,083
160	748 440 112	749 440 112	0,149

21 70 00

Backing Flanges, PVC-U metric

d	DN	inch	PN	Code	kg
20	15	1/2	10	721 700 006	0,067
25	20	3/4	10	721 700 007	0,091
32	25	1	10	721 700 008	0,131
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
160	150	6	10	721 700 017	1,012

Backing Flanges, PP-V for Socket Systems metric

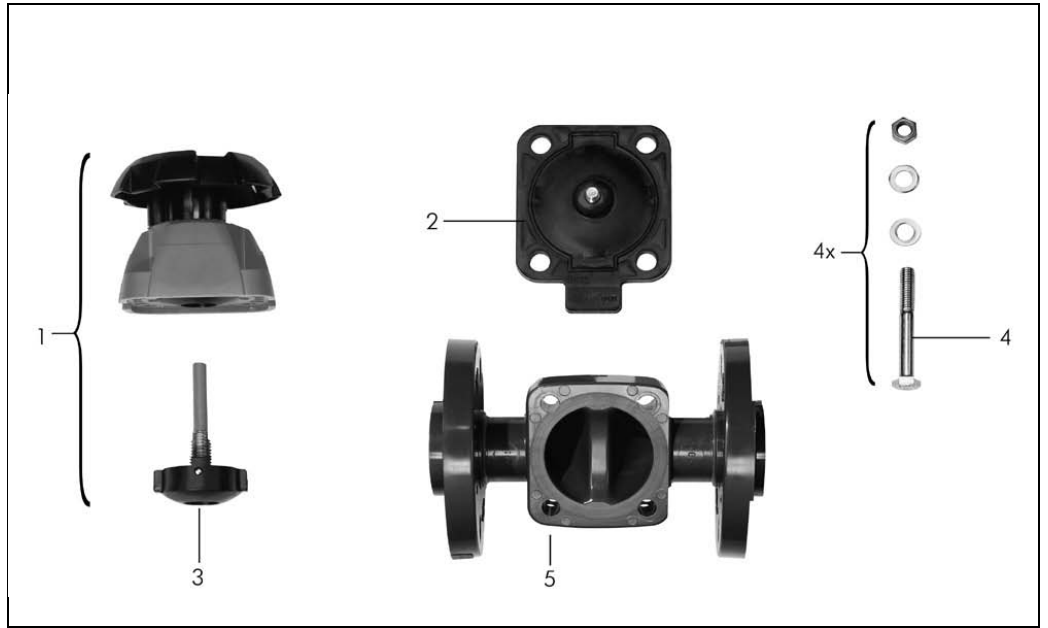
d	DN	inch	PN	Code	SP	kg
20	15		16	727 700 406	-	0,080
25	20		16	727 700 407	-	0,100
32	25		16	727 700 408	-	0,140
40	32		16	727 700 409	-	0,220
50	40		16	727 700 410	-	0,210
63	50		16	727 700 411	-	0,380
75	65		16	727 700 412	-	0,480
90	80		16	727 700 413	-	0,520
110	100		16	727 700 414	-	0,680
140	125		16	727 700 416	-	0,800
160	150	6	16	727 700 417	-	1,200

27 70 02

**Backing Flanges, PP with steel ring
metric
for Socket Systems metric**

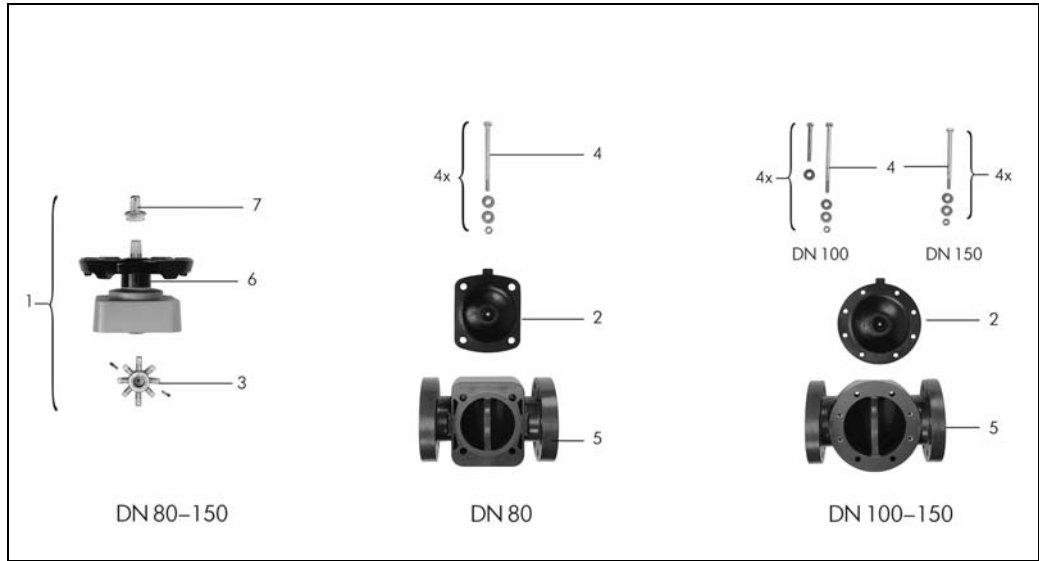
d	DN	PN	Code	kg	
20	15	16	727 700 206	0,220	
25	20	16	727 700 207	0,260	
32	25	16	727 700 208	0,430	
40	32	16	727 700 209	0,650	
50	40	16	727 700 210	0,820	
63	50	16	727 700 211	0,940	
75	65	16	727 700 212	1,300	
90	80	16	727 700 213	1,400	
110	100	16	727 700 214	1,560	
160	150	16	727 700 217	3,390	

Spare Parts Diaphragm Valves Type 317 (DN15-65), PVC-U



No.	Article/ Material	Pieces	d20 DN 15	d25 DN 20	d32 DN 25	d40 DN 32	d50 DN 40	d63 DN50	d75 DN 65
1	Bonnets complete (without diaphragm), Elastomer diaphragms	1	161 484 625	161 484 626	161 484 627	161 484 628	161 484 629	161 484 630	161 484 631
1	Bonnets complete (without diaphragm), PTFE diaphragms	1	161 484 632	161 484 633	161 484 634	161 484 635	161 484 636	161 484 637	161 484 638
2	Diaphragms, NBR	1	161 311 710	161 311 711	161 311 712	161 311 713	161 311 714	161 311 715	161 480 231
2	Diaphragms, EPDM	1	161 481 022	161 481 023	161 481 024	161 481 025	161 481 026	161 481 027	161 481 028
2	Diaphragms, FPM	1	161 484 152	161 484 153	161 484 154	161 484 155	161 484 156	161 484 157	161 484 158
2	Diaphragms, PTFE/EPDM	1	161 311 698	161 311 699	161 311 700	161 311 701	161 311 702	161 311 703	161 480 240
2	Diaphragms, PTFE/FPM	1	161 481 926	161 481 927	161 481 928	161 481 929	161 481 930	161 481 931	161 481 932
2	Diaphragms, CSM	1	161 311 728	161 311 729	161 311 730	161 311 731	161 311 732	161 311 733	161 480 237
3	Pressure Spindles, Elastomer diaphragms	1	161 484 688	161 484 689	161 484 690	161 484 691	161 484 692	161 484 693	161 484 694
3	Pressure Spindles, PTFE diaphragms	1	161 484 696	161 484 697	161 484 698	161 484 699	161 484 700	161 484 701	161 484 702
4	Fastening Sets, Stainless steel	1	161 484 704	161 484 705	161 484 706	161 484 707	161 484 708	161 484 709	161 483 032
5	Valve Bodies with PVC-U Backing Flanges	1	161 483 110	161 483 111	161 483 112	161 483 113	161 483 114	161 483 115	161 483 116

Spare Parts Diaphragm Valves Type 317 (DN80-150), PVC-U



No.	Article/ Material	Pieces	d90 DN 80	d110 DN 100	d160 DN 150
1	Bonnets complete (without diaphragm), Elastomer diaphragms	1	161 482 514	161 482 515	161 482 901
1	Bonnets complete (without diaphragm), PTFE diaphragms	1	161 482 516	161 482 517	161 482 906
2	Diaphragms, NBR	1	161 480 232	161 480 233	161 482 751
2	Diaphragms, EPDM	1	161 481 029	161 481 030	161 482 754
2	Diaphragms, FPM	1	161 484 159	161 484 160	161 484 226
2	Diaphragms, PTFE/EPDM	1	161 480 241	161 480 242	161 482 760
2	Diaphragms, CSM	1	161 480 238	161 480 239	161 482 757
3	Pressure Spindles, Elastomer diaphragms	1	161 483 008	161 483 009	161 483 011
3	Pressure Spindles, PTFE diaphragms	1	161 483 020	161 483 021	161 483 023
4	Fastening Sets, Stainless steel	1	161 483 033	161 483 034	161 483 037
5	Valve Bodies with PVC-U Fixed Flanges	1	161 481 764	161 481 765	161 482 696
6	O-Ring Gaskets, NBR	1	745 410 107	745 410 107	-
6	O-Ring Gaskets, EPDM	1	-	-	748 410 212
7	Caps, PVC-U SAN	1	161 481 759	161 481 759	161 482 744

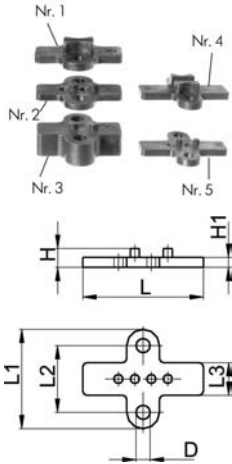


Handwheel with built-in locking mechanism For diaphragm valve type 314 / 315 / 317 / 319

d [mm]	DN [mm]	d-d [inch]	Code	kg
20 - 25	15 - 20	1/2 - 3/4	167 481 943	0.032
32	25	1 -	167 481 944	0.043
40 - 50	32 - 40	1 1/4 - 1 1/2	167 481 945	0.071
63 - 75	50 - 65	2 - 2 1/2	167 481 946	0.217

Mounting block PP

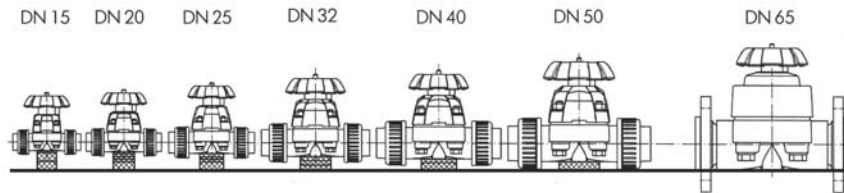
- For Diaphragm Valves 314, 315 and 317 (DN 15-50)



d-d [mm]	DN-DN [mm]	Inch	Block no.	Code	kg
20 - 32	15 - 20	1/2 - 1	1	167 480 422	0.005
16 - 20	10 - 15	3/8 - 1/2	2	167 480 423	0.003
-	-	-	3	167 480 424	0.012
40 - 63	32 - 50	1 1/4 - 2 1/2	4	167 480 425	0.017
-	-	-	5	167 480 426	0.015

d-d [mm]	D [mm]	H [mm]	H1 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]
20 - 32	8	11	5	47	42	25	17
16 - 20	8	7	4	47	42	25	17
-	8	17	14	47	42	25	17
40 - 63	10	18	7	81	67	45	22
-	10	13	7	81	67	45	22

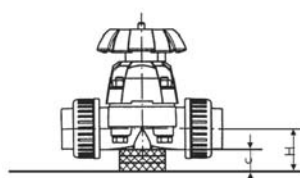
Equalizing the Assembly Height over all Sizes



Quantity required x block number

... to DN	d 20 DN 15	d 25 DN 20	d 32 DN 25	d 40 DN 32	d 50 DN 40	d 63 DN 50	d 75 DN 65
15		1 x 2	2 x 2	1 x 1 + 2 x 2	1 x 1 + 1 x 3	1 x 1 + 2 x 2 + 1 x 3	1 x 1 + 2 x 3
20			1 x 2	1 x 1 + 1 x 2	1 x 1 + 3 x 2	1 x 1 + 1 x 2 + 1 x 3	1 x 1 + 3 x 2 + 1 x 3
25				1 x 1	1 x 1 + 2 x 2	1 x 1 + 1 x 3	1 x 1 + 2 x 2 + 1 x 3
32					1 x 4	1 x 4 + 1 x 5	1 x 4 + 2 x 5
40						1 x 4	1 x 4 + 1 x 5
50							1 x 4

Equalizing the Union Height for Type 314



DN mm	Quantity required x block number	C mm	H mm
15			22.5
20	1 x 1 + 2 x 2	11.5	29
25			32.5
32			39
40	1 x 4 + 1 x 5	13.5	46
50			52.5

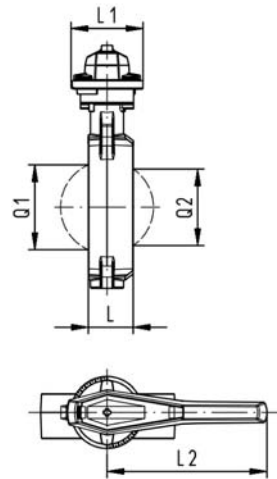
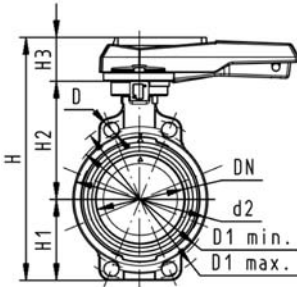
Butterfly valves

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 B 16.5 Class 150, BS 1560: 1958, JIS B 2220
- Overall length according to EN 558-1, 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	161 567 002	161 567 022	1.044
75	65	2 ½	10	2200	161 567 003	161 567 023	1.148
90	80	3	10	3000	161 567 004	161 567 024	1.315
110	100	4	10	6500	161 567 005	161 567 025	1.983
140	125	5	10	11500	161 567 006	161 567 026	2.554
160	150	6	10	16600	161 567 007	161 567 027	3.564
225	200	8	10	39600	161 567 008	161 567 028	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	35.74	
75	19	139.7	145.0	115	277	83	140	54	46	106	205	50.93	30.62
90	19	150.0	160.0	131	289	89	146	54	49	106	205	64.01	46.24
110	19	175.0	190.5	161	325	104	167	55	56	106	255	84.46	69.96
140	23	210.0	215.9	187	352	117	181	55	64	106	255	110.71	94.50
160	24	241.3	241.3	215	373	130	189	55	72	106	255	136.08	121.54
225	23	290.0	295.0	267	435	158	210	67	73	140	408	175.62	166.23

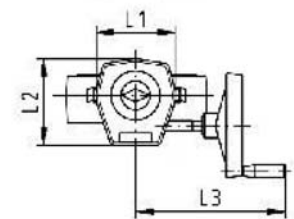
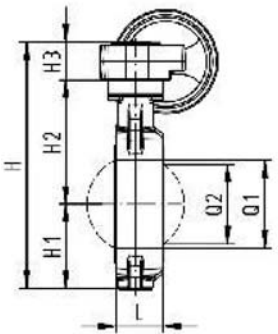
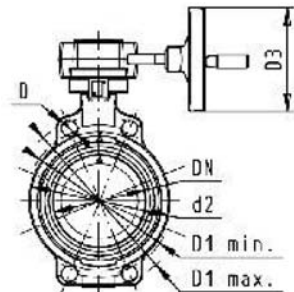


Butterfly valve type 567 PVC-U Reduction gear with handwheel



Model:

- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, ANSI B 16.5 Class 150, BS 1560: 1958, JIS B 2220
- Overall length according to EN 558-1, 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	161 567 042	161 567 062	3.082
75	65	2 ½	10	2200	161 567 043	161 567 063	3.186
90	80	3	10	3000	161 567 044	161 567 064	3.353
110	100	4	10	6500	161 567 045	161 567 065	3.973
140	125	5	10	11500	161 567 046	161 567 066	4.544
160	150	6	10	16600	161 567 047	161 567 067	5.554
225	200	8	10	39600	161 567 048	161 567 068	6.994

d [mm]	D [mm]	D1 min. [mm]	D1 max. [mm]	d2 [mm]	D3 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]
63	19	120.0	125.0	104	160.0	278	77	134	68	45	120	132	236
75	19	139.7	145.0	115	160.0	291	83	140	68	46	120	132	236
90	19	150.0	160.0	131	160.0	303	89	146	68	49	120	132	236
110	19	175.0	190.5	160	160.0	339	104	167	68	56	120	132	236
140	23	210.0	215.9	187	160.0	365	117	181	68	64	120	132	236
160	24	241.3	241.3	215	160.0	387	130	189	68	72	120	132	236
225	23	290.0	295.0	267	160.0	436	158	210	68	73	120	132	236

d [mm]	Q1 [mm]	Q2 [mm]
63	35.74	
75	50.93	30.62
90	64.01	46.24
110	84.46	69.96
140	110.71	94.50
160	136.08	121.54
225	175.62	166.23

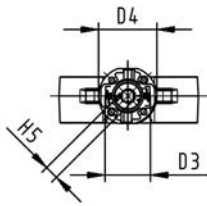
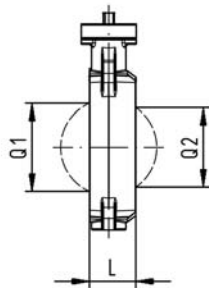
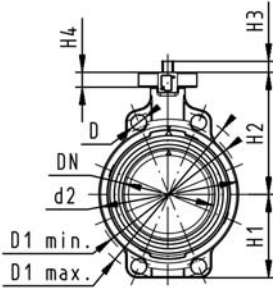


Butterfly valve type 567 PVC-U Bare shaft



Model:

- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, ANSI B 16.5 Class 150, BS 1560: 1958, JIS B 2220
- Overall length according to EN 558-1, 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	kg
63	50	2	10	1470	161 567 802	161 567 822	0.822
75	65	2 1/2	10	2200	161 567 803	161 567 823	0.926
90	80	3	10	3000	161 567 804	161 567 824	1.093
110	100	4	10	6500	161 567 805	161 567 825	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	3.294
225	200	8	10	39600	161 567 808	161 567 828	4.734

d [mm]	D [mm]	D1 min. [mm]	D1 max. [mm]	d2 [mm]	D3 [mm]	D4 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	L [mm]	Q1 [mm]
63	19	120.0	125.0	104	85	90	222	77	134	26	23	11	45	35.74
75	19	139.7	145.0	115	85	90	235	83	140	26	23	11	46	50.93
90	19	150.0	160.0	131	85	90	247	89	146	26	23	11	49	64.01
110	19	175.0	190.5	161	85	90	287	104	167	15	23	14	56	84.46
140	23	210.0	215.9	187	85	90	313	117	181	15	23	14	64	110.71
160	24	241.3	241.3	215	85	90	335	130	189	15	23	17	72	136.08
225	23	290.0	295.0	267	85	90	387	158	210	18	23	17	73	175.62

d [mm]	Q2 [mm]
63	
75	30.62
90	46.24
110	69.96
140	94.50
160	121.54
225	166.23

Component Parts for Flange Assembly of Butterfly Valves Type 367 and 567

21 81 01

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



d	DN	PN	Code	kg	
75	65	16	721 810 112	0,182	
90	80	16	721 810 113	0,291	
110	100	16	721 810 114	0,468	
140	125	16	721 810 116	0,824	
160	150	16	721 810 117	1,180	
225	200	10	721 810 120	1,895	
280	250	10	721 810 122	3,100	
315	300	6	721 810 123	4,830	

21 80 01

Flange Adaptors PVC-U
Jointing face flat, metric

d	DN	PN	Code	kg	
75	65	16	721 800 112	0,155	
90	80	16	721 800 113	0,156	
110	100	16	721 800 114	0,417	
140	125	16	721 800 116	0,748	
160	150	16	721 790 117	1,077	
225	200	10	721 790 120	1,758	
280	250	10	721 790 122	2,895	
315	300	6	721 790 123	4,450	

EPDM 48 41 01
FPM 49 41 01

O-Ring Gaskets

d	DN	inch	EPDM Code	FPM Code	kg	
75	65	2 1/2	748 410 014	749 410 014	0,012	
90	80	3	748 410 015	749 410 015	0,015	
110	100	4	748 410 016	749 410 016	0,031	
140	125	5	748 410 018	749 410 018	0,039	
160	150	6	748 410 019	749 410 019	0,044	
225	200	8	748 410 022	749 410 022	0,060	
280	250	10	748 410 173	749 410 173	0,044	
315	300	12	748 410 174	749 410 174	0,051	

EPDM 48 44 01
FPM 49 44 01

Flange Gaskets

d	EPDM Code	FPM Code	kg	
75	748 440 107	749 440 107	0,054	
90	748 440 108	749 440 108	0,060	
110	748 440 109	749 440 109	0,083	
140	748 440 111	749 440 111	0,115	
160	748 440 112	749 440 112	0,149	
225	748 440 115	749 440 115	0,177	
280	748 440 117	749 440 117	0,220	
315	748 440 118	749 440 118	0,326	

21 70 00**Backing Flanges, PVC-U
metric**

d	DN	inch	PN	Code	kg
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
140	125	5	10	721 700 016	0,746
160	150	6	10	721 700 017	1,012
225	200	8	10	721 700 020	1,360
280	250	10	6	721 700 137	1,730
315	300	12	6	721 700 138	2,350

**Backing Flanges, PP-V
for Socket Systems metric**

d	DN	inch	PN	Code	SP	kg
75	65		16	727 700 412	-	0,480
90	80		16	727 700 413	-	0,520
110	100		16	727 700 414	-	0,680
140	125		16	727 700 416	-	0,800
160	150	6	16	727 700 417	-	1,200
225	200	8	16	727 700 420	-	1,400
280	250		16	727 700 422	-	1,700
315	300		16	727 700 423	-	2,400

27 70 02**Backing Flanges, PP with steel ring
metric
for Socket Systems metric**

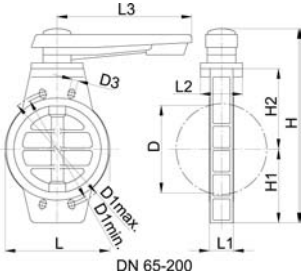
d	DN	PN	Code	kg
75	65	16	727 700 212	1,300
90	80	16	727 700 213	1,400
110	100	16	727 700 214	1,560
140	125	16	727 700 216	2,120
160	150	16	727 700 217	3,390
225	200	16	727 700 220	4,410
280	250	16	727 700 222	5,520
315	300	16	727 700 223	7,600



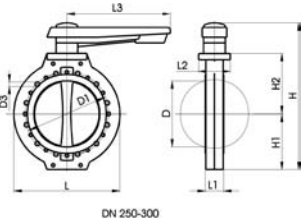
DN 65 - 200



DN 250 - 300



DN 65-200



DN 250-300

Butterfly valve type 367 PVC-U Lever handle with ratchet settings

Model:

- Jointing face flat
- Overall length ISO 7508
- Overall length EN 558-1
- Connecting dimension: ISO 7005 PN10, EN 1092 PN 10, DIN 2501 PN10

Phase out product will be replaced with type 567 for Dimension DN65-200

The PTFE coat of the disc seal only serves to optimise frictional behaviour (dry lubrication) and does not result in improved chemical stability.

d [mm]	DN [mm]	Inch	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	FPM with PTFE coating Code	kg
75	65	2 ½	10	2200	161 367 605	161 367 615	161 367 515	1.300
90	80	3	10	3000	161 367 606	161 367 616	161 367 516	1.800
110	100	4	10	6500	161 367 607	161 367 617	161 367 517	2.500
140	125	5	10	11500	161 367 608	161 367 618	161 367 518	3.600
160	150	6	6	16600	161 367 609	161 367 619	161 367 519	4.900
225	200	8	6	39600	161 367 610	161 367 620	161 367 520	7.000
280	250	10	6	55200	161 367 011	161 367 031	161 367 521	13.000
315	300	12	4	80000	161 367 012	161 367 032	161 367 522	18.800

d [mm]	D [mm]	D1 [mm]	D1 min. [mm]	D1 max. [mm]	D3 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	H [mm]	H1 [mm]	H2 [mm]
75	49		140.0	145.0	19.0	112	46	74	230	267	80	110
90	66		150.0	160.0	19.0	132	49	77	230	290	92	120
110	85		175.0	190.5	19.0	160	56	92	230	328	108	138
140	110		210.0	216.0	23.0	190	64	108	355	381	120	156
160	135		240.0	241.0	23.0	216	70	116	355	415	140	170
225	189		290.0	298.0	23.0	272	71	128	355	495	175	215
280	238	350.00			22.0	420	76	152	410	557	220	248
315	286	400.00			22.0	508	83	152	410	645	266	290

d [mm]	Connecting dimension
75	ISO, EN, DIN, BS, ANSI
90	ISO, EN, DIN, BS, ANSI
110	ISO, EN, DIN, BS, ANSI
140	ISO, EN, DIN, BS, ANSI
160	ISO, EN, DIN, BS, ANSI
225	ISO, EN, DIN, BS, ANSI
280	ISO, EN, DIN
315	ISO, EN, DIN



DN 65 - 200

Butterfly valve type 367 PVC-U Reduction gear with handwheel

Model:

- Jointing face flat
- Overall length ISO 7508
- Overall length EN 558-1
- Connecting dimension: ISO 7005 PN10, EN 1092 PN 10, DIN 2501 PN10



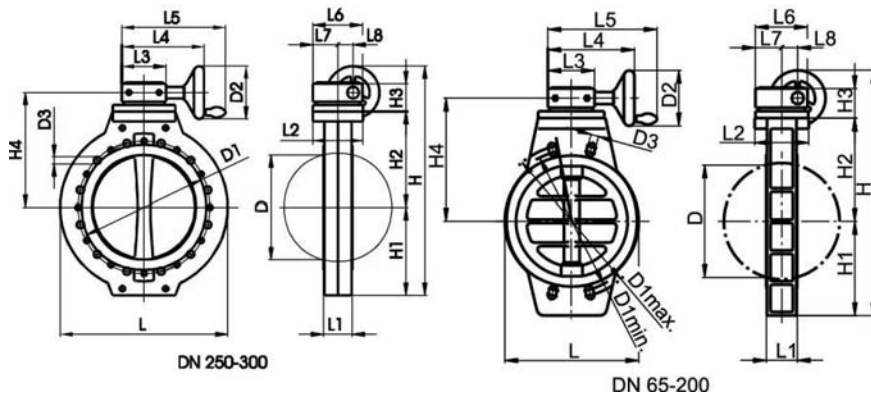
DN 250 - 300

Phase out product will be replaced with type 567 for Dimension DN65-200

d [mm]	DN [mm]	Inch	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	FPM with PTFE- coating Code	kg
75	65	2 ½	10	2200	161 367 645	161 367 655	161 367 555	3.420
90	80	3	10	3000	161 367 646	161 367 656	161 367 556	3.840
110	100	4	10	6500	161 367 647	161 367 657	161 367 557	4.600
140	125	5	10	11500	161 367 648	161 367 658	161 367 558	6.700
160	150	6	6	16600	161 367 649	161 367 659	161 367 559	6.900
225	200	8	6	39600	161 367 650	161 367 660	161 367 560	9.100

d [mm]	D [mm]	D1 [mm]	D1 min. [mm]	D1 max. [mm]	D2 [mm]	D3 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
75	49		140.0	145.0	160.00	19.0	112	46	74	120	221	296	132	55
90	66		150.0	160.0	160.00	19.0	132	49	77	120	221	296	132	55
110	85		175.0	190.5	160.00	19.0	160	56	92	120	221	296	132	55
140	110		210.0	216.0	160.00	23.0	190	64	108	120	221	296	132	55
160	135		240.0	241.0	160.00	23.0	216	70	116	120	221	296	132	55
225	189		290.0	298.0	160.00	23.0	272	71	128	120	221	296	132	55

d [mm]	L8 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	Connecting dimension
75	46	307	80	110	68	147	ISO, EN, DIN, BS, ANSI
90	46	329	92	120	68	157	ISO, EN, DIN, BS, ANSI
110	46	363	108	138	68	175	ISO, EN, DIN, BS, ANSI
140	46	393	120	156	68	193	ISO, EN, DIN, BS, ANSI
160	46	427	140	170	68	207	ISO, EN, DIN, BS, ANSI
225	46	507	175	215	68	252	ISO, EN, DIN, BS, ANSI

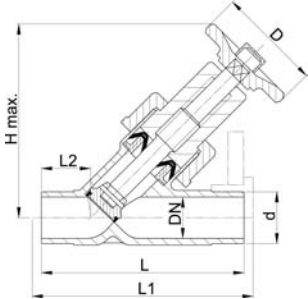


Angle seat valves

Angle seat valve type 300 PVC-U With solvent cement spigots metric

Model:

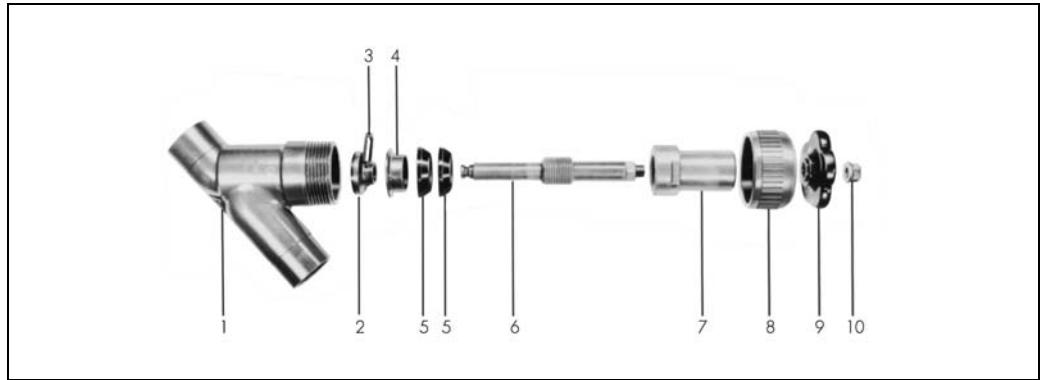
- Overall length EN 558-1



d [mm]	DN [mm]	Inch	PN	kv-value ($\Delta p=1$ bar) [l/min]	PE Code	PTFE Code	kg
16	10	3/8	10	41	161 300 250	161 300 299	0.128
20	15	1/2	10	95	161 300 300	161 300 349	0.183
25	20	3/4	10	180	161 300 350	161 300 399	0.255
32	25	1	10	327	161 300 400	161 300 449	0.389
40	32	1 1/4	10	484	161 300 450	161 300 499	0.590
50	40	1 1/2	10	725	161 300 500	161 300 549	1.000
63	50	2	10	1130	161 300 550	161 300 599	1.540
75	65	2 1/2	10	1700	161 300 600	161 300 649	2.713
90	80	3	10	2500	161 300 650	161 300 699	4.097

d [mm]	D [mm]	L [mm]	L1 [mm]	L2 [mm]	H max. [mm]
16	50	114	120	24	105
20	63	124	130	28	126
25	63	144	150	37	140
32	80	154	160	37	166
40	80	174	180	44	191
50	100	194	200	48	233
63	100	224	230	60	264
75	160	284	290	74	335
90	200	300	310	85	390

Spare Parts Angle Seat Valves Type 300, PVC-U



No.	Article/ Material	Pieces	d16 DN 10	d20 DN 15	d25 DN 20	d32 DN 25	d40 DN 32	d50 DN 40	d63 DN50	d75 DN 65	d90 DN 80
2	Disc / Retaining Sets		161 483 076	161 483 077	161 483 078	161 483 079	161 483 080	161 483 081	161 483 082	161 483 083	161 483 084
2	Disc and seating PE	1									
3	Retaining pin PVC-U	1									
4	Seal support ring PVC-U	1									
5	Cup seals PE	2									
2	Disc / Retaining Sets		161 483 089	161 483 090	161 483 091	161 483 092	161 483 093	161 483 094	161 483 095	161 483 096	161 483 097
2	Disc and seating PTFE	1									
3	Retaining pin PVC-U	1									
4	Seal support ring PVC-U	1									
5	Cup seals PTFE	2									
6	Stem Sets		161 483 062	161 483 063	161 483 064	161 483 065	161 483 066	161 483 067	161 483 068	161 483 069	161 483 070
6	Stem PVC-U	1									
7	Threaded bush PVC-U	1									
2	Top Parts complete		161 482 250	161 482 251	161 482 252	161 482 253	161 482 254	161 482 255	161 482 256	161 482 257	161 482 258
2	Disc and seating PVC-U	1									
3	Retaining pin PVC-U	1									
4	Seal support ring PVC-U	1									
5	Cup seals PE	2									
6	Stem PVC-U	1									
7	Threaded bush PVC-U	1									
8	Valve nut PVC-U	1									
9	Handwheel PE	1									
10	Handwheel Nut PVC-U	1									
1	Bodies, PVC-U	1	161 300 251	161 300 301	161 300 351	161 300 401	161 300 451	161 300 501	161 300 551	161 300 601	161 300 651
8	Valve Nuts, PVC-U	1	161 300 258	161 300 308	161 300 358	161 300 408	161 300 458	161 300 508	161 300 558	-	-
8	Plugs, PVC-U	1	-	-	-	-	-	-	-	161 300 608	161 300 658
9	Handwheels	1	161 300 259	161 300 309	161 300 309	161 300 409	161 300 459	161 300 509	161 300 559	161 300 609	161 300 659
10	Handwheel Nuts, PVC-U	1	161 300 260	721 960 603	721 960 603	721 960 603	721 960 604	721 960 604	721 960 605	721 960 606	721 960 607



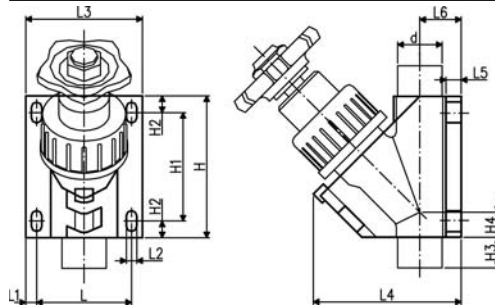
Angle seat valve bracket type 123 PVC-U

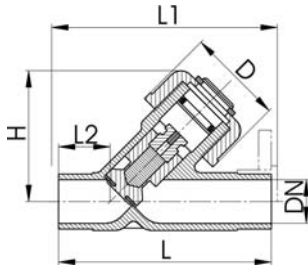
Model:

- Can be fitted to existing installations without interrupting their operation
- Easily assembled without tools
- For Angle Seat Valves Type 300

d [mm]	DN [mm]	Inch	Code	kg
16	10	3/8	161 123 250	0.114
20	15	1/2	161 123 300	0.146
25	20	3/4	161 123 350	0.230
32	25	1	161 123 400	0.289
40	32	1 1/2	161 123 450	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]
16	62	8	7	78	67	10	22	76	55	11	15	9
20	65	9	7	82	74	10	25	86	65	11	17	11
25	73	9	8	91	87	11	30	100	76	12	20	17
32	84	9	8	102	104	13	35	102	78	12	23	14
40	90	9	8	107	122	15	42	116	85	16	27	17





Angle seat check valve type 303 PVC-U With solvent cement spigots metric

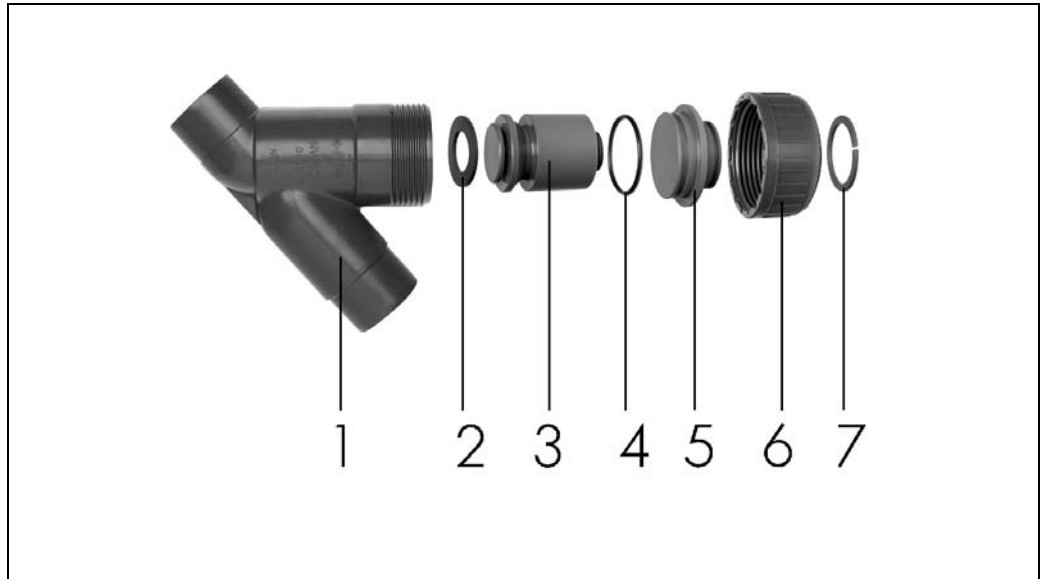
Model:

- For horizontal or vertical installation
- Leakproof from: EPDM 2m, FPM 3m water column
- Specific gravity of piston approx. 2 kg/dm³
- Overall length EN 558-1

d [mm]	DN [mm]	Inch	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	3/8	10	41	161 303 005	161 303 030	0.094
20	15	1/2	10	95	161 303 006	161 303 031	0.132
25	20	3/4	10	180	161 303 007	161 303 032	0.200
32	25	1	10	327	161 303 008	161 303 033	0.323
40	32	1 1/4	10	484	161 303 009	161 303 034	0.498
50	40	1 1/2	10	725	161 303 010	161 303 035	0.860
63	50	1 3/4	10	1130	161 303 011	161 303 036	1.455
75	65	2 1/2	10	1700	161 303 012	161 303 037	2.499
90	80	3	10	2500	161 303 013	161 303 038	3.511

d [mm]	D [mm]	L [mm]	L1 [mm]	L2 [mm]	H [mm]
16	39	114	120	24	58
20	43	124	130	28	65
25	47	144	150	37	75
32	56	154	160	37	90
40	64	174	180	44	102
50	82	194	200	48	123
63	95	224	230	60	144
75	92	284	290	74	186
90	104	300	310	85	204

Spare Parts Angle Seat Check Valves Type 303, PVC-U

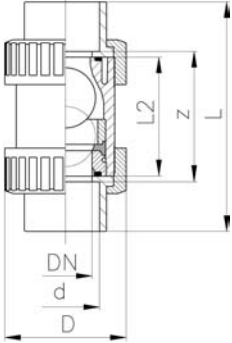


No.	Article/ Material	Pieces
1	Bodies, PVC-U	1
2	Flat Gaskets, EPDM	1
2	Flat Gaskets, FPM	1
3	Pistons, PVC-U	1
4	O-Ring Gaskets, EPDM	1
4	O-Ring Gaskets, FPM	1
5	Valve Plugs, PVC-U	1
6	Valve Nuts, PVC-U	1
6	Plugs, PVC-U	1
7	Circlip, PVC-U	1

d16 DN 10	d20 DN 15	d25 DN 20	d32 DN 25	d40 DN 32	d50 DN 40	d63 DN 50	d75 DN 65	d90 DN 80
161 480 699	161 480 700	161 480 701	161 300 401	161 300 451	161 300 501	161 300 551	161 300 601	161 300 651
161 480 664	161 480 665	161 480 666	161 480 667	161 480 668	161 480 669	161 480 670	161 480 671	161 480 672
161 480 673	161 480 674	161 480 675	161 480 676	161 480 677	161 480 678	161 480 679	161 480 680	161 480 681
161 480 682	161 480 683	161 480 684	161 480 685	161 480 686	161 480 687	161 480 688	161 480 689	161 480 690
748 410 059	748 410 106	748 410 001	748 410 007	748 410 002	748 410 102	748 410 101	748 410 119	748 410 014
749 410 059	749 410 106	749 410 001	749 410 007	749 410 002	749 410 102	749 410 101	749 410 119	749 410 014
161 480 648	161 480 649	161 480 650	161 480 651	161 480 652	161 480 653	161 480 654	161 490 412	161 490 413
161 300 258	161 300 308	161 300 358	161 300 408	161 300 458	161 300 508	161 300 558	-	-
-	-	-	-	-	-	-	161 305 604	161 305 654
161 482 076	161 482 017	161 482 018	161 482 019	161 482 020	161 482 021	161 482 022	-	-

Ball check valves

Ball check valve type 360 PVC-U With solvent cement sockets metric

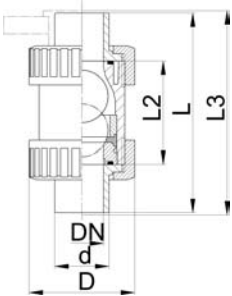


Model:

- Union ends for easy installation and removal
- Ball is sealing at a minimum water column 1m
- Vibration free even at high flow velocity
- Installation position vertical, flow direction from down upward

d [mm]	DN [mm]	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg	z [mm]	D [mm]	L [mm]	L2 [mm]
16	10	16	170	161 360 401	161 360 411	0.123	71	45	99	63
20	15	16	150	161 360 402	161 360 412	0.123	71	45	102	63
25	20	16	330	161 360 403	161 360 413	0.205	82	53	120	75
32	25	16	390	161 360 404	161 360 414	0.318	87	64	131	79
40	32	16	710	161 360 405	161 360 415	0.524	98	78	150	89
50	40	16	900	161 360 406	161 360 416	0.841	101	92	163	95
63	50	16	1390	161 360 407	161 360 417	1.495	121	116	197	115

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 1m
- Vibration free even at high flow velocity
- Installation position vertical, flow direction from down upward
- Overall length EN 558-1

* without union ends for easy installation and removal

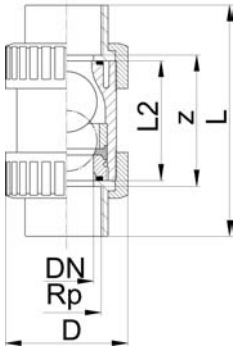
d [mm]	DN [mm]	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg	D [mm]	L [mm]	L2 [mm]	L3 [mm]
16	10	16	170	161 360 441	161 360 451	0.123	45	114	63	120
20	15	16	150	161 360 442	161 360 452	0.128	45	124	63	130
25	20	16	330	161 360 443	161 360 453	0.211	53	144	75	150
32	25	16	390	161 360 444	161 360 454	0.331	64	154	79	160
40	32	16	710	161 360 445	161 360 455	0.540	78	174	89	180
50	40	16	900	161 360 446	161 360 456	0.870	92	194	95	200
63	50	16	1390	161 360 447	161 360 457	1.554	116	224	115	230
*90	80	10	1200	161 360 013	161 360 038	4.330	300	300		310



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 1m
- Vibration free even at high flow velocity
- Installation position vertical, flow direction from down upward



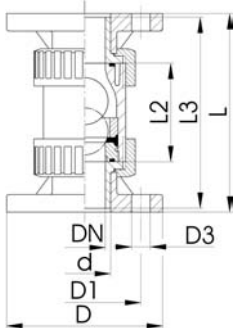
Rp [inch]	DN [mm]	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg	z [mm]	D [mm]	L [mm]	L2 [mm]
3/8	10	10	170	161 360 421	161 360 431	0.123	67	45	99	63
1/2	15	10	150	161 360 422	161 360 432	0.123	67	45	102	63
3/4	20	10	330	161 360 423	161 360 433	0.204	79	53	120	75
1	25	10	390	161 360 424	161 360 434	0.316	83	64	131	79
1 1/4	32	10	710	161 360 425	161 360 435	0.520	96	78	150	89
1 1/2	40	10	900	161 360 426	161 360 436	0.855	109	92	163	95
2	50	10	1390	161 360 427	161 360 437	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 1m
- Vibration free even at high flow velocity
- Installation position vertical, flow direction from down upward
- Overall length EN 558-1
- 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	65.00	14.0	124	63	130
25	105	75.00	14.0	144	75	150
32	115	84.00	14.0	154	79	160
40	140	100.00	18.0	174	89	180
50	150	110.00	18.0	194	95	200
63	165	125.00	18.0	224	115	230

Component Parts for Flange Assembly of Ball Check Valves Type 360

21 80 01



Flange Adaptors PVC-U
Jointing face flat, metric

d	DN	PN	Code	kg
20	15	16	721 800 106	0,010
25	20	16	721 800 107	0,015
32	25	16	721 800 108	0,024
40	32	16	721 800 109	0,038
50	40	16	721 800 110	0,055
63	50	16	721 800 111	0,104

EPDM 48 40 01
FPM 49 40 01

Flat Gaskets

d	DN	inch	EPDM Code	FPM Code	kg
20	15	1/2	748 400 015	749 400 015	0,003
25	20	3/4	748 400 016	749 400 016	0,003
32	25	1	748 400 017	749 400 017	0,004
40	32	1 1/4	748 400 018	749 400 018	0,008
50	40	1 1/2	748 400 019	749 400 019	0,012
63	50	2	748 400 020	749 400 020	0,017

EPDM 48 44 01
FPM 49 44 01

Flange Gaskets

d	EPDM Code	FPM Code	kg
20	748 440 101	749 440 101	0,008
25	748 440 102	749 440 102	0,011
32	748 440 103	749 440 103	0,014
40	748 440 104	749 440 104	0,020
50	748 440 105	749 440 105	0,021
63	748 440 106	749 440 106	0,040

21 70 00

Backing Flanges, PVC-U
metric

d	DN	inch	PN	Code	kg
20	15	1/2	10	721 700 006	0,067
25	20	3/4	10	721 700 007	0,091
32	25	1	10	721 700 008	0,131
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

Backing Flanges, PP-V for Socket Systems metric

d	DN	inch	PN	Code	SP	kg
20	15		16	727 700 406	-	0,080
25	20		16	727 700 407	-	0,100
32	25		16	727 700 408	-	0,140
40	32		16	727 700 409	-	0,220
50	40		16	727 700 410	-	0,210
63	50		16	727 700 411	-	0,380

27 70 02

Backing Flanges, PP with steel ring metric for Socket Systems metric

d	DN	PN	Code	kg
20	15	16	727 700 206	0,220
25	20	16	727 700 207	0,260
32	25	16	727 700 208	0,430
40	32	16	727 700 209	0,650
50	40	16	727 700 210	0,820
63	50	16	727 700 211	0,940

21 74 01

Fixed Flanges, PVC-U Jointing face serrated, metric

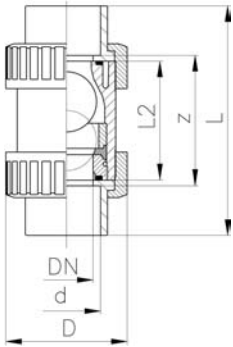
d	DN	inch	PN	Code	kg
20	15	1/2	16	721 740 106	0,100
25	20	3/4	16	721 740 107	0,130
32	25	1	16	721 740 108	0,185
40	32	1 1/4	16	721 740 109	0,305
50	40	1 1/2	16	721 740 110	0,368
63	50	2	16	721 740 111	0,510



Ball check valve type 360 PVC-U With fusion sockets PE 80 metric

Model:

- Union ends for easy installation and removal
- Ball is sealing at a minimum water column 1m
- Vibration free even at high flow velocity
- Installation position vertical, flow direction from down upward



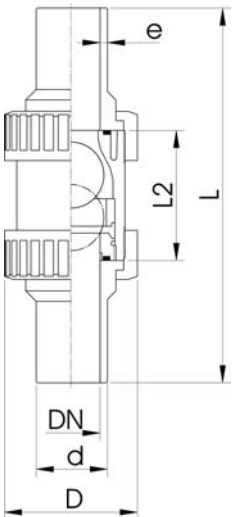
d [mm]	DN [mm]	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	kg	z [mm]	D [mm]	L [mm]	L2 [mm]
16	10	10	170	161 360 721	0.120	72	45	98	63
20	15	10	150	161 360 722	0.115	73	45	101	63
25	20	10	330	161 360 723	0.195	82	53	119	75
32	25	10	390	161 360 724	0.300	94	64	130	79
40	32	10	710	161 360 725	0.495	109	78	149	89
50	40	10	900	161 360 726	0.800	118	92	162	95
63	50	10	1390	161 360 727	1.430	143	116	195	115



Ball check valve type 360 PVC-U With butt and electro fusion ends PE 100 ISO S5/SDR11 metric

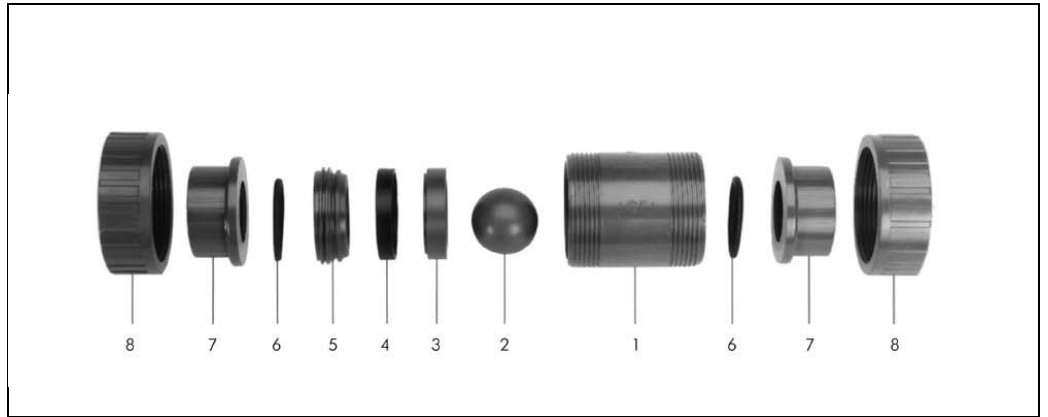
Model:

- Union ends for easy installation and removal
- Ball is sealing at a minimum water column 1m
- Vibration free even at high flow velocity
- Installation position vertical, flow direction from down upward



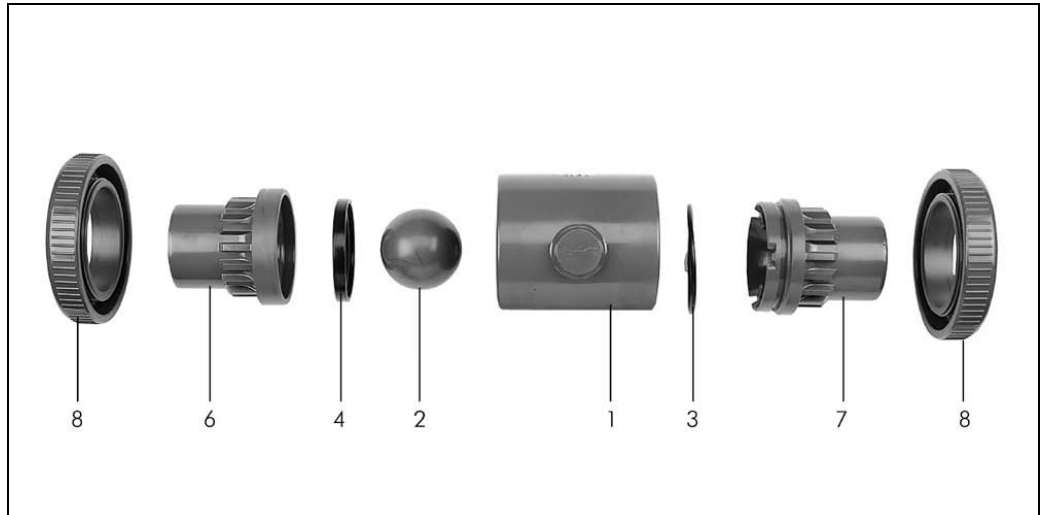
d [mm]	DN [mm]	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	kg	D [mm]	L [mm]	L2 [mm]	e [mm]
20	15	16	150	161 360 742	0.125	45	197	63	1,9
25	20	16	330	161 360 743	0.210	53	217	75	2,3
32	25	16	390	161 360 744	0.320	64	225	79	3
40	32	16	710	161 360 745	0.510	78	251	89	3,7
50	40	16	900	161 360 746	0.825	92	269	95	4,6
63	50	16	1390	161 360 747	1.460	116	301	115	5,8

Spare Parts Ball Check Valves Type 360 (DN 10 - 50), PVC-U



No.	Article/ Material	Pieces	d16 DN 10	d20 DN 15	d25 DN 20	d32 DN 25	d40 DN 32	d50 DN 40	d63 DN50
1	Central Parts Body PVC-U	1	161 483 851	161 483 852	161 483 853	161 483 854	161 483 855	161 483 856	161 483 857
2	Ball PVC-U	1							
3	Support ring PVC-U	1							
4	Sealing ring EPDM	1							
5	Union bush PVC-U	1							
1	Central Parts Body PVC-U	1	161 483 861	161 483 862	161 483 863	161 483 864	161 483 865	161 483 866	161 483 867
2	Ball PVC-U	1							
3	Support ring PVC-U	1							
4	Sealing ring FPM	1							
5	Union bush PVC-U	1							
2	Balls, PVC-U	1	161 330 304	161 330 304	161 330 354	161 330 404	161 330 454	161 330 504	161 330 554
4	Sealing Rings, EPDM	1	161 483 259	161 483 259	161 483 260	161 483 261	161 483 262	161 483 263	161 483 264
4	Sealing Rings, FPM	1	161 483 265	161 483 265	161 483 266	161 483 267	161 483 268	161 483 269	161 483 270
6	Face seals, EPDM	1	748 410 042	748 410 042	748 410 116	748 410 103	748 410 027	748 410 010	748 410 011
6	Face seals, FPM	1	749 410 042	749 410 042	749 410 116	749 410 103	749 410 027	749 410 010	749 410 011
7	Valve Ends with Socket, PVC-U metric	1	161 480 536	161 480 537	161 480 538	161 480 539	161 480 540	161 480 541	161 480 542
7	Valve Ends with Spigot, PVC-U metric	1	161 482 345	161 482 346	161 482 347	161 482 348	161 482 349	161 482 350	161 482 351
7	Valve Ends, PVC-U Rp	1	161 480 550	161 480 551	161 480 552	161 480 553	161 480 554	161 480 555	161 480 556
7	Valve Ends with Fusion Socket, PE80	1	173 480 000	173 480 001	173 480 002	173 480 003	173 480 004	173 480 005	173 480 006
7	Butt and Electro Fusion Spigots, PE100 SDR11	1	-	193 480 127	193 480 128	193 480 129	193 480 130	193 480 131	193 480 132
8	Valve Nuts, PVC-U	1	161 340 617	161 340 617	161 340 618	161 340 619	161 340 620	161 340 621	161 480 522

Spare Parts Ball Check Valves Type 360 (DN 80), PVC-U



No.	Article/ Material	Pieces
1	Body, PVC-U	1
2	Balls, PVC-U	1
3	Body seals, EPDM	1
3	Body seals, FPM	1
4	Sealing Rings, EPDM	1
4	Sealing Rings, FPM	1
6	Valve Ends Inlet Side, PVC-U metric	1
7	Valve Ends Outlet Side, PVC-U metric	1
8	Valve Nuts, PVC-U	1

d90 DN 80

161 480 158

161 330 654

748 410 099

749 410 099

161 480 141

161 480 149

161 480 132

161 480 133

161 340 623



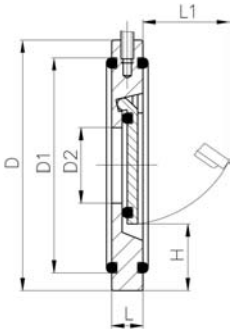
Key PBTP black

- 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	kg	
16 - 63	10 - 50	3/8-2	160 480 106	0.038	

Wafer check valves

Wafer check valve type 369 PVC-U Without spring metric



Model:

- Supporting eyelets for simple fitting
- Suitable for vertical and horizontal mounting

Installation instruction:

- Installation between ISO/DIN flange adaptors with flat jointing face.
- Centering by body diameter
- Sealing with O-rings
- 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
- Wafer check valves without reset spring are not recommended for pulsating flows (production of noise)

d [mm]	DN [mm]	PN	EPDM Code	FPM Code	kg
40	32	6	161 369 002	161 369 022	0.130
50	40	6	161 369 003	161 369 023	0.160
63	50	6	161 369 004	161 369 024	0.250
75	65	6	161 369 005	161 369 025	0.320
90	80	6	161 369 006	161 369 026	0.390
110	100	6	161 369 007	161 369 027	0.550
140	125	6	161 369 009	161 369 029	0.750
160	150	6	161 369 010	161 369 030	1.100
225	200	6	161 369 011	161 369 031	2.100
280	250	6	161 369 012	161 369 032	3.500
315	300	6	161 369 013	161 369 033	5.300

d [mm]	D [mm]	D1 [mm]	D2 [mm]	L [mm]	L1 [mm]	H [mm]	Opening pressure vertical [mbar]	Opening pressure horizontal [mbar]	Minimum water column for sealing in [m]	
40	85	59.00	18.00	15	22	25		10	1	2.0
50	95	72.00	22.00	16	25	28		10	1	2.0
63	109	86.00	32.00	18	37	29		10	1	2.0
75	129	105.00	40.00	20	50	31		10	1	2.0
90	144	119.00	54.00	20	61	32		10	1	2.0
110	164	146.00	70.00	23	67	31		10	1	2.0
140	195	173.00	92.00	23	94	35		10	1	2.0
160	220	197.00	105.00	26	100	41		10	1	2.0
225	275	255.00	154.00	35	152	38		18	1	2.0
280	330	312.00	192.00	40	180	41		18	1	2.0
315	380	363.00	227.00	45	215	41		18	1	2.0

d [mm]	Number of screws with washer	Torque [Nm]	Number of nut rotations after tightening by hand
40	4 x M16/90	10	1
50	4 x M16/95	12	1
63	4 x M16/110	15	1
75	4 x M16/140	18	1
90	8 x M16/150	20	1
110	8 x M16/160	22	1
140	8 x M16/180	25	1
160	8 x M20/200	30	1
225	8 x M20/220	60	1
280	12 x M20/240	60	1
315	12 x M20/260	60	1



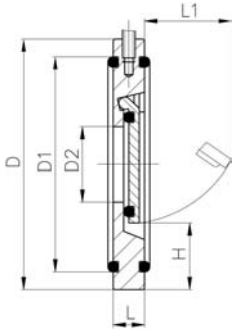
Wafer check valve type 369 PVC-U With V4A spring (stainless steel 316)

Model:

- Supporting eyelets for simple fitting
- Suitable for vertical and horizontal mounting

Installation instruction:

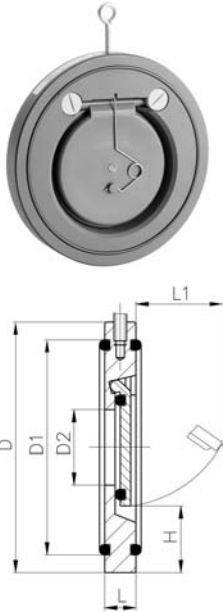
- Installation between ISO/DIN flange adaptors with flat jointing face.
- Centering by body diameter
- Sealing with O-rings
- A stabilizing zone of at least 5 times nominal diameter (DN) should be provided before and after the wafer check valve (10 times DN is recommended)
- No direct installation on pump flange or following bend allowed
- Wafer check valves without reset spring are not recommended for pulsating flows (production of noise)



d [mm]	DN [mm]	PN	EPDM Code	FPM Code	kg
40	32	6	161 369 042	161 369 062	0.130
50	40	6	161 369 043	161 369 063	0.160
63	50	6	161 369 044	161 369 064	0.250
75	65	6	161 369 045	161 369 065	0.320
90	80	6	161 369 046	161 369 066	0.390
110	100	6	161 369 047	161 369 067	0.550
140	125	6	161 369 049	161 369 069	0.750
160	150	6	161 369 050	161 369 070	1.100
225	200	6	161 369 051	161 369 071	2.100
280	250	6	161 369 052	161 369 072	3.500
315	300	6	161 369 053	161 369 073	5.300

d [mm]	D [mm]	D1 [mm]	D2 [mm]	L [mm]	L1 [mm]	H [mm]	Opening pressure vertical [mbar]	Opening pressure horizontal [mbar]	Minimum water column for sealing in [m]
40	85	59.00	18.00	15	22	25	30	20	2.0
50	95	72.00	22.00	16	25	28	30	20	2.0
63	109	86.00	32.00	18	37	29	30	20	2.0
75	129	105.00	40.00	20	50	31	30	20	2.0
90	144	119.00	54.00	20	61	32	30	20	2.0
110	164	146.00	70.00	33	67	31	30	20	2.0
140	195	173.00	92.00	23	94	35	30	20	2.0
160	220	197.00	105.00	26	100	41	30	20	2.0
225	275	255.00	154.00	35	152	38	38	20	2.0
280	330	312.00	192.00	40	180	41	38	20	2.0
315	380	363.00	227.00	45	215	41	38	20	2.0

d [mm]	Number of screws with washer	Torque [Nm]	Number of nut rotations after tightening by hand
40	4xM16/90	10	1
50	4xM16/95	12	1
63	4xM16/110	15	1
75	4xM16/140	18	1
90	8xM16/150	20	1
110	8xM16/160	22	1
140	8xM16/180	25	1
160	8xM20/200	30	1
225	8xM20/220	60	1
280	12xM20/240	60	1
315	12xM20/260	60	1



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 flange adaptors with flat jointing face.
- Centering by body diameter
- Sealing with O-rings
- 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
- Wafer check valves without reset spring are not recommended for pulsating flows (production of noise)

d [mm]	DN [mm]	PN	EPDM Code	FPM Code	kg
40	32	6	161 369 082	161 369 102	0.130
50	40	6	161 369 083	161 369 103	0.160
63	50	6	161 369 084	161 369 104	0.250
75	65	6	161 369 085	161 369 105	0.320
90	80	6	161 369 086	161 369 106	0.390
110	100	6	161 369 087	161 369 107	0.550
140	125	6	161 369 089	161 369 109	0.750
160	150	6	161 369 090	161 369 110	1.100
225	200	6	161 369 091	161 369 111	2.100
280	250	6	161 369 092	161 369 112	3.500
315	300	6	161 369 093	161 369 113	5.300

d [mm]	D [mm]	D1 [mm]	D2 [mm]	L [mm]	L1 [mm]	H [mm]	Opening pressure vertical [mbar]	Opening pressure horizontal [mbar]	Minimum water column for sealing in [m]
40	85	59.00	18.00	15	22	25	30	20	2.0
50	95	72.00	22.00	16	25	28	30	20	2.0
63	109	86.00	32.00	18	37	29	30	20	2.0
75	129	105.00	40.00	20	50	31	30	20	2.0
90	144	119.00	54.00	20	61	32	30	20	2.0
110	164	146.00	70.00	33	67	31	30	20	2.0
140	195	173.00	92.00	23	94	35	30	20	2.0
160	220	197.00	105.00	26	100	41	30	20	2.0
225	275	255.00	154.00	35	152	38	38	20	2.0
280	330	312.00	192.00	40	180	41	38	20	2.0
315	380	363.00	227.00	45	215	41	38	20	2.0

d [mm]	Number of screws with washer	Torque [Nm]	Number of nut rotations after tightening by hand
40	4xM16/90	10	1
50	4xM16/95	12	1
63	4xM16/110	15	1
75	4xM16/140	18	1
90	8xM16/150	20	1
110	8xM16/160	22	1
140	8xM16/180	25	1
160	8xM20/200	30	1
225	8xM20/220	60	1
280	12xM20/240	60	1
315	12xM20/260	60	1

Component Parts for Flange Assembly of Wafer Check Valves Type 369

21 80 01

Flange Adaptors PVC-U
Jointing face flat, metric



d	DN	PN	Code	kg	
40	32	16	721 800 109	0,038	
50	40	16	721 800 110	0,055	
63	50	16	721 800 111	0,104	
75	65	16	721 800 112	0,155	
90	80	16	721 800 113	0,156	
110	100	16	721 800 114	0,417	
140	125	16	721 800 116	0,748	
160	150	16	721 790 117	1,077	
225	200	10	721 790 120	1,758	
280	250	10	721 790 122	2,895	
315	300	6	721 790 123	4,450	

21 70 00

Backing Flanges, PVC-U
metric

d	DN	inch	PN	Code	kg	
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	
140	125	5	10	721 700 016	0,746	
160	150	6	10	721 700 017	1,012	
225	200	8	10	721 700 020	1,360	
280	250	10	6	721 700 137	1,730	
315	300	12	6	721 700 138	2,350	

Backing Flanges, PP-V
for Socket Systems metric

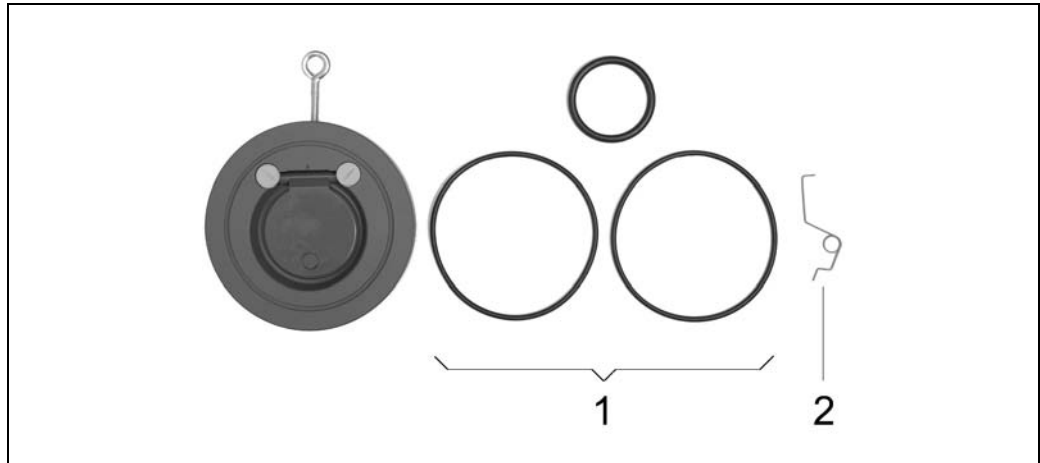
d	DN	inch	PN	Code	SP	kg	
40	32		16	727 700 409	-	0,220	
50	40		16	727 700 410	-	0,210	
63	50		16	727 700 411	-	0,380	
75	65		16	727 700 412	-	0,480	
90	80		16	727 700 413	-	0,520	
110	100		16	727 700 414	-	0,680	
140	125		16	727 700 416	-	0,800	
160	150	6	16	727 700 417	-	1,200	
225	200	8	16	727 700 420	-	1,400	
280	250		16	727 700 422	-	1,700	
315	300		16	727 700 423	-	2,400	

27 70 02

**Backing Flanges, PP with steel ring
metric
for Socket Systems metric**

d	DN	PN	Code	kg	
40	32	16	727 700 209	0,650	
50	40	16	727 700 210	0,820	
63	50	16	727 700 211	0,940	
75	65	16	727 700 212	1,300	
90	80	16	727 700 213	1,400	
110	100	16	727 700 214	1,560	
140	125	16	727 700 216	2,120	
160	150	16	727 700 217	3,390	
225	200	16	727 700 220	4,410	
280	250	16	727 700 222	5,520	
315	300	16	727 700 223	7,600	

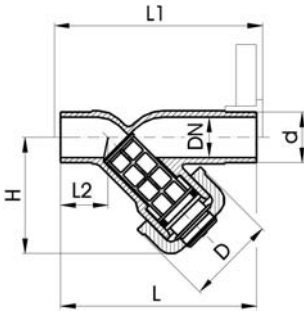
Spare Parts Wafer Check Valves Type 369, PVC-U



No.	Article/ Material	Pieces	d40 DN 32	d50 DN 40	d63 DN50	d75 DN 65	d90 DN 80	d110 DN 100	d140 DN 125	d160 DN 150	d225 DN 200	d280 DN 250	d315 DN 300
	Seal Sets		161 484 875	161 484 876	161 484 877	161 484 878	161 484 879	161 484 880	161 484 881	161 484 882	161 484 883	161 484 884	161 484 885
1	Body seal EPDM	2											
1	Seal EPDM	1											
	Seal Sets		161 484 887	161 484 888	161 484 889	161 484 890	161 484 891	161 484 892	161 484 893	161 484 894	161 484 895	161 484 896	161 484 897
1	Body seal FPM	2											
1	Seal FPM	1											
2	Springs, Hastelloy C	1	161 484 912	161 484 913	161 484 914	161 484 915	161 484 916	161 484 917	161 484 917	161 484 919	161 484 920	161 484 921	161 484 922
2	Springs, V4A	1	161 484 900	161 484 901	161 484 902	161 484 903	161 484 904	161 484 905	161 484 905	161 484 907	161 484 908	161 484 909	161 484 910

Strainers

Line strainer type 305 PVC-U Transparent body with solvent cement spigots metric

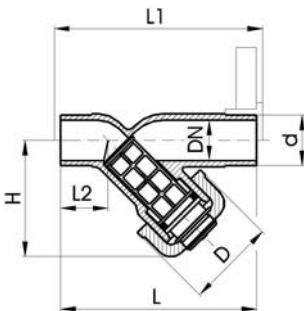


Model:

- Protects valves, pumps, etc. from becoming soiled
- Easy dismantling for cleaning the screens
- **Screen perforation need be ordered separately**
- Overall length according to EN 558-1

d [mm]	DN [mm]	Inch	PN	EPDM Code	FPM Code	kg	D [mm]	L [mm]	L1 [mm]	L2 [mm]	H [mm]
20	15	½	10	192 305 300	192 305 349	0.122	43	124	130	28	65
25	20	¾	10	192 305 350	192 305 399	0.170	47	144	150	37	76
32	25	1	10	192 305 400	192 305 449	0.255	56	154	160	37	90
40	32	1 ¼	10	192 305 450	192 305 499	0.384	64	174	180	44	104
50	40	1 ½	10	192 305 500	192 305 549	0.635	82	194	200	48	124
63	50	2	10	192 305 550	192 305 599	1.059	95	224	230	60	148
75	65	2 ½	10	192 305 600	192 305 649	1.838	106	284	290	74	188
90	80	3	10	192 305 650	192 305 699	2.565	120	300	310	85	205

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 558-1

d [mm]	DN [mm]	Inch	PN	EPDM Code	FPM Code	kg	D [mm]	L [mm]	L1 [mm]	L2 [mm]	H [mm]
20	15	½	10	161 305 300	161 305 349	0.134	43	124	130	28	65
25	20	¾	10	161 305 350	161 305 399	0.215	47	144	150	37	76
32	25	1	10	161 305 400	161 305 449	0.257	56	154	160	37	90
40	32	1 ¼	10	161 305 450	161 305 499	0.386	64	174	180	44	104
50	40	1 ½	10	161 305 500	161 305 549	0.632	82	194	200	48	124
63	50	2	10	161 305 550	161 305 599	1.045	95	224	230	60	148
75	65	2 ½	10	161 305 600	161 305 649	1.871	106	284	290	74	188
90	80	3	10	161 305 650	161 305 699	2.585	120	300	310	85	205

Cylindrical screen type 305 PVC-U Screen perforations 0.5 mm



- For line strainers Type 305

d [mm]	DN [mm]	Inch	kv-value ($\Delta p=1$ bar) [l/min]	Code	kg	D [mm]	L [mm]
20	15	½	35	161 305 339	0.005	14	39
25	20	¾	65	161 305 389	0.007	18	48
32	25	1	90	161 305 439	0.003	24	60
40	32	1 ¼	155	161 305 489	0.004	30	71
50	40	1 ½	225	161 305 539	0.007	38	87
63	50	2	370	161 305 589	0.010	48	106
75	65	2 ½	575	161 305 639	0.012	61	100
90	80	3	955	161 305 689	0.017	73	118



Cylindrical screen type 305 PVC-U Screen perforations 0.8 mm

- For line strainers Type 305

d [mm]	DN [mm]	Inch	kv-value ($\Delta p=1$ bar) [l/min]	Code	kg	D [mm]	L [mm]
20	15	½	35	161 305 338	0.005	14	39
25	20	¾	65	161 305 388	0.007	18	48
32	25	1	90	161 305 438	0.003	24	60
40	32	1 ¼	155	161 305 488	0.004	30	71
50	40	1 ½	225	161 305 538	0.006	38	87
63	50	2	370	161 305 588	0.009	48	106
75	65	2 ½	575	161 305 638	0.012	61	100
90	80	3	955	161 305 688	0.010	73	118



Cylindrical screen type 305 PVC-U Screen perforations 1.4 mm

- For line strainers Type 305

d [mm]	DN [mm]	Inch	kv-value ($\Delta p=1$ bar) [l/min]	Code	kg	D [mm]	L [mm]
20	15	½	35	161 305 337	0.005	14	39
25	20	¾	65	161 305 387	0.003	18	48
32	25	1	90	161 305 437	0.003	24	60
40	32	1 ¼	155	161 305 487	0.004	30	71
50	40	1 ½	225	161 305 537	0.006	38	87
63	50	2	370	161 305 587	0.008	48	106
75	65	2 ½	575	161 305 637	0.011	61	100
90	80	3	955	161 305 687	0.015	73	118



Cylindrical screen type 305 PVC-U Screen perforations 2.2 mm

- For line strainers Type 305

d [mm]	DN [mm]	Inch	kv-value ($\Delta p=1$ bar) [l/min]	Code	kg	D [mm]	L [mm]
20	15	½	35	161 305 336	0.005	14	39
25	20	¾	65	161 305 386	0.003	18	48
32	25	1	90	161 305 436	0.003	24	60
40	32	1 ¼	155	161 305 486	0.003	30	71
50	40	1 ½	225	161 305 536	0.005	38	87
63	50	2	370	161 305 586	0.008	48	106
75	65	2 ½	575	161 305 636	0.010	61	100
90	80	3	955	161 305 686	0.013	73	118

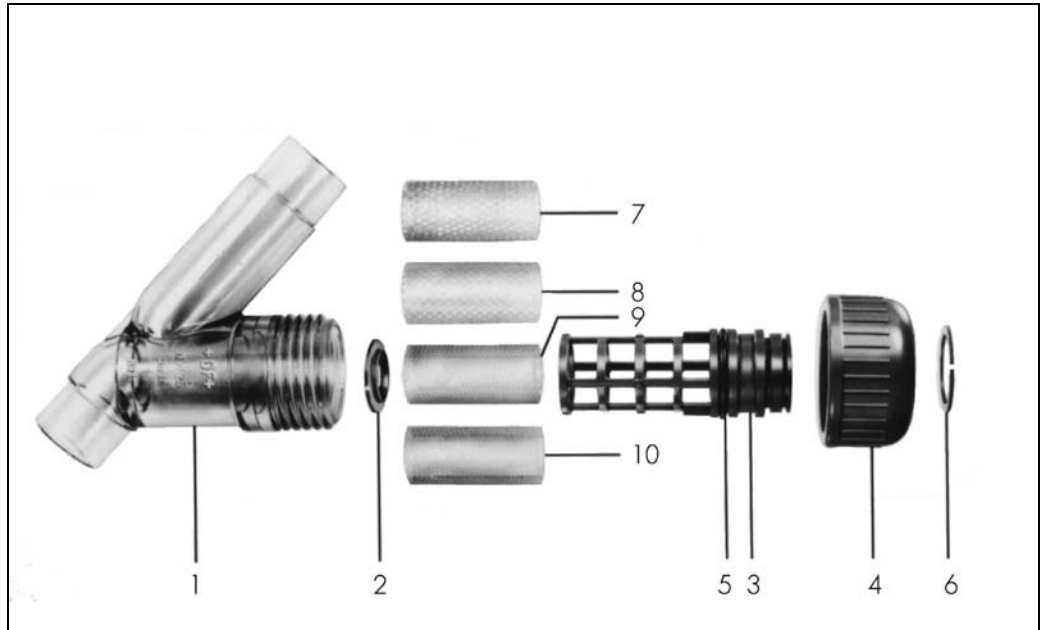


Screen stainless steel Screen perforation 0.5 mm

- For line strainers Type 305

d [mm]	DN [mm]	Inch	kv-value ($\Delta p=1$ bar) [l/min]	Code	kg	D [mm]	L [mm]
20	15	½	35	161 486 100	0.002	14	39
25	20	¾	60	161 486 101	0.004	18	48
32	40	1	85	161 486 102	0.006	24	60
40	32	1 ¼	130	161 486 103	0.009	30	71
50	40	1 ½	200	161 486 104	0.014	38	87
63	50	2	330	161 486 105	0.022	48	106
75	65	2 ½	460	161 486 106	0.026	61	100
90	80	3	665	161 486 107	0.036	73	118

Spare Parts Line Strainers Type 305, PVC-U



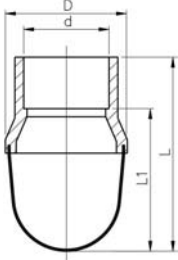
No.	Article/ Material	Pieces	d20 DN 15	d25 DN 20	d32 DN 25	d40 DN 32	d50 DN 40	d63 DN 50	d75 DN 65	d90 DN 80
3	Screen Sets		161 483 126	161 483 127	161 483 128	161 483 129	161 483 130	161 483 131	161 483 132	161 483 133
2	Screen support ring PVC-U	1								
6	Circlip PVC-U	1								
1	Bodies, PVC-U transparent	1	192 300 301	192 300 351	192 300 401	192 300 451	192 300 501	192 300 551	192 300 601	192 300 651
3	Screens, PVC-U	1	161 305 303	161 305 353	161 305 403	161 305 453	161 305 503	161 305 553	161 305 603	161 305 653
4	Valve Nuts, PVC-U	1	161 300 308	161 300 358	161 300 408	161 300 458	161 300 508	161 300 558	-	-
4	Plugs, PVC-U	1	-	-	-	-	-	-	161 305 604	161 305 654
5	Body Seals, EPDM	1	748 410 006	748 410 001	748 410 007	748 410 002	748 410 003	748 410 012	748 410 013	748 410 014
5	Body Seals, FPM	1	749 410 006	749 410 001	749 410 007	749 410 002	749 410 003	749 410 012	749 410 013	749 410 014

Screen assemblies and Inspection glass

Screen assembly type 050 PVC-U With solvent cement sockets metric



DN 15 - 50



DN 15-50

Inch	d [mm]	DN [mm]	kv-value ($\Delta p=1$ bar) [l/min]	Code	kg	D [mm]	L [mm]	L1 [mm]	perforations ϕ [mm]
1/2	20	15	105	161 050 026	0.033	50	64	80	2
3/4	25	20	228	161 050 027	0.038	50	64	83	2
1	32	25	390	161 050 028	0.044	50	64	86	2
1 1/4	40	32	563	161 050 029	0.134	90	105	131	2
1 1/2	50	40	813	161 050 030	0.151	90	105	136	2
2	63	50	1590	161 050 031	0.190	90	105	143	2

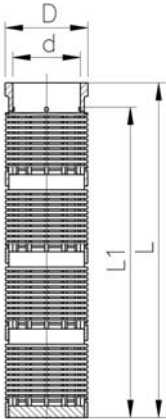
Screen assembly type 050 PVC-U With solvent cement sockets metric

Model:

- ¹ Screen with 1 extension and end plate, solvent cemented
- ² Screen with 2 extensions and end plate, solvent cemented
- ³ Screen with 3 extensions and end plate, solvent cemented



DN65-100

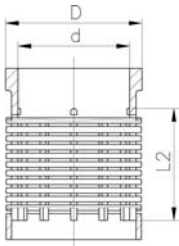


DN 65-100

d [mm]	DN [mm]	kv-value ($\Delta p=1$ bar) [l/min]	Code	kg	D [mm]	L [mm]	L1 [mm]	lamina width [mm]
¹ 75	65	9640	161 050 032	0.805	110	260	216	2.5
² 90	80	14790	161 050 033	0.895	110	345	312	2.5
³ 110	100	15213	161 050 034	1.290	125	490	460	2.5

Screen type 050 PVC-U With solvent cement sockets metric

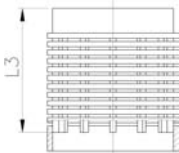
- For Screen Assemblies Type 050, PVC-U, DN 65-100



Inch	d [mm]	DN [mm]	Code	kg	D [mm]	L2 [mm]	lamina width [mm]
2 1/2	75	65	161 090 024	0.440	110	90	
3	90	80	161 090 002	0.300	110	90	3
4	110	100	161 090 003	0.457	125	135	3

Extention type 050 PVC-U

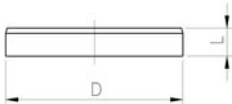
- For Screen Assemblies Type 050, PVC-U, DN 65-100



d-d [mm]	DN-DN [mm]	Inch	Code	kg	L3 [mm]
75 - 110	65 - 100	2 1/2 - 4	161 090 019	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	kg	D [mm]	L [mm]
75 - 110	65 - 100	2 1/2 - 4	161 090 018	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
- Equipped with turbulence section to facilitate visual check on flow
- Arrow indicates flow direction

d [mm]	DN [mm]	PN	EPDM Code	kg	z [mm]	D [mm]	D1 [mm]	L [mm]	
50	40	10	199 001 240	0.610	178	83	29.00	150	

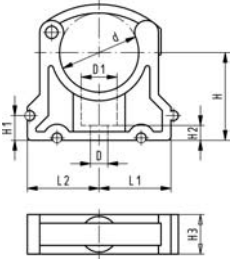
Pipe Clips metric

KLIP-IT Pipe Clips Type 061H, PP metric

Model:

- For mm-pipes d16-d63
- Material: PP black, UV resistant
- **Minimum order quantity: standard packagings SP**

- Height designed for Ball Valve Type 546
- * d16 to d32 without bracket

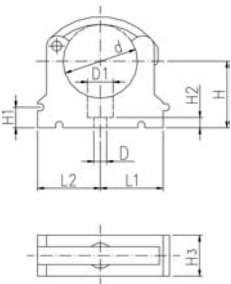


d [mm]	Code	SP	GP	kg	D [mm]	D1 [mm]	L1 [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	SC
*16	167 061 035	10	-	0.006	6	11	14	17	27	10	6	16	M5
*20	167 061 036	10	-	0.008	6	11	17	19	27	10	6	16	M5
*25	167 061 037	10	200	0.009	6	11	19	22	30	10	6	16	M5
*32	167 061 038	10	-	0.012	6	11	24	27	36	10	6	16	M5
40	167 061 039	10	140	0.027	7	14	34	34	44	10	7	22	M6
50	167 061 040	10	100	0.031	7	14	37	37	51	10	7	22	M6
63	167 061 041	10	80	0.054	9	17	45	45	64	10	10	25	M8

KLIP-IT Pipe Clips Type 061, PP metric

Model:

- For mm pipes
- Material: Clip and safety clip PP black, UV resistant
- **Minimum order quantity: standard packagings SP**



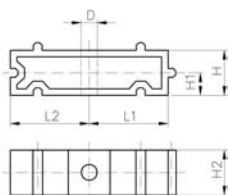
d [mm]	d [inch]	Code	SP	GP	D [mm]	D1 [mm]	L1 [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	SC
*10		167 061 003	10	500	5	8	11	14	20	10	6	12	M4
*12		167 061 004	10	500	5	8	11	14	21	10	6	12	M5
*16		167 061 035	10	-	6	11	14	17	27	10	6	16	M5
*20		167 061 036	10	-	6	11	17	19	27	10	6	16	M5
*25		167 061 037	10	200	6	11	19	22	30	10	6	16	M5
*32		167 061 038	10	-	6	11	24	27	36	10	6	16	M5
40		167 061 039	10	140	7	14	34	34	44	10	7	22	M6
50		167 061 040	10	100	7	14	37	37	51	10	7	22	M6
63		167 061 041	10	80	9	17	45	45	64	10	10	25	M8
75	2 ½	167 061 012	10	60	9	17	52	52	58	10	10	25	M8
90	3	167 061 013	10	80	9	17	65	65	65	10	10	28	M8
110	4	167 061 014	10	40	9	17	79	79	75	10	10	28	M8
125		167 061 015	10	30	9	17	88	88	90	10	10	32	M8
140	5	167 061 016	10	20	9	17	98	98	110	10	10	32	M8
160		167 061 017	10	20	9	17	109	109	108	10	10	32	M8



KLIP-IT Spacer Type 061, PP

Model:

- For pipe clips Type 061/061H, PP black, UV resistant
- **Minimum order quantity: standard packaging SP**



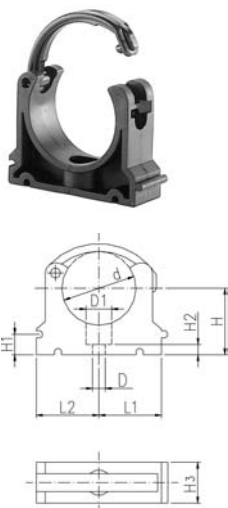
d	Inch	Code	SP	GP	kg	D	L1	L2	H	H1	H2	SC
[mm]						[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	
10-12	1/8-1/4	167 061 153	10	500	0.003	5	11	14	20	10	12	M4
16	3/8	167 061 155	10	200	0.006	6	14	17	20	10	16	M5
20	1/2	167 061 156	10	200	0.006	6	17	19	20	10	16	M5
25	3/4	167 061 157	10	200	0.007	6	19	22	20	10	16	M5
32	1	167 061 158	10	200	0.008	6	24	27	20	10	16	M5
40	1 1/4	167 061 159	10	150	0.016	7	34	34	20	10	22	M6
50	1 1/2	167 061 160	10	140	0.017	7	37	37	20	10	22	M6
63	2	167 061 161	10	80	0.024	9	45	45	20	10	25	M8
75	2 1/2	167 061 162	10	60	0.027	9	52	52	20	10	25	M8
90	3	167 061 163	10	140	0.040	9	65	65	20	10	28	M8
110	4	167 061 164	10	100	0.048	9	79	79	20	10	28	M8
125	4 1/2	167 061 165	10	100	0.059	9	88	88	20	10	32	M8
140	5	167 061 166	10	80	0.065	9	98	98	20	10	32	M8
160	6	167 061 167	10	80	0.074	9	109	109	20	10	32	M8



KLIP-IT Pipe Clips Type 061, PE metric

Model:

- For mm pipes
- Material: Clip PE and safety clip PP black
- **Minimum order quantity: standard packaging SP**



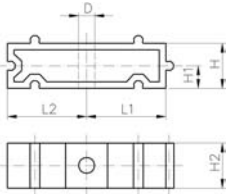
d	Code	SP	GP	kg	D	D1	L1	L2	H	H1	H2	H3	SC
[mm]					[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	
*10	173 061 003	10	500	0.003	5	8	11	14	20	10	6	12	M4
*12	173 061 004	10	500	0.006	5	8	11	14	21	10	6	12	M5
*16	173 061 005	10	200	0.007	6	11	14	17	23	10	6	16	M5
*20	173 061 006	10	200	0.008	6	11	17	19	25	10	6	16	M5
*25	173 061 007	10	200	0.009	6	11	19	22	28	10	6	16	M5
*32	173 061 008	10	200	0.012	6	11	24	27	31	10	6	16	M5
40	173 061 009	10	150	0.022	7	14	34	34	35	10	7	22	M6
50	173 061 010	10	140	0.030	7	14	37	37	40	10	7	22	M6
63	173 061 011	10	80	0.044	9	17	45	45	52	10	10	25	M8
75	173 061 012	10	60	0.062	9	17	52	52	58	10	10	25	M8
90	173 061 013	10	80	0.090	9	17	65	65	65	10	10	28	M8
110	173 061 014	10	40	0.114	9	17	79	79	75	10	10	28	M8
125	173 061 015	10	30	0.174	9	17	88	88	90	10	10	32	M8
140	173 061 016	10	20	0.217	9	17	98	98	110	10	10	32	M8
160	173 061 017	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**

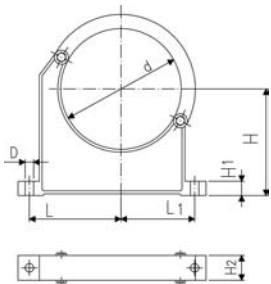


d	Inch	Code	SP	GP	kg	D	L1	L2	H	H1	H2	SC
[mm]						[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	
16	1/8-1/4	173 061 153	10	500	0.003	5	11	14	20	10	12	M4
16	3/8	173 061 155	10	200	0.005	6	14	17	20	10	16	M5
20	1/2	173 061 156	10	200	0.006	6	17	19	20	10	16	M5
25	3/4	173 061 157	10	200	0.007	6	19	22	20	10	16	M5
32	1	173 061 158	10	200	0.008	6	24	27	20	10	16	M5
40	1 1/4	173 061 159	10	150	0.016	7	34	34	20	10	22	M6
50	1 1/2	173 061 160	10	140	0.017	7	37	37	20	10	22	M6
63	2	173 061 161	10	80	0.025	9	45	45	20	10	25	M8
75	2 1/2	173 061 162	10	60	0.027	9	52	52	20	10	25	M8
90	3	173 061 163	10	140	0.040	9	65	65	20	10	28	M8
110	4	173 061 164	10	100	0.048	9	79	79	20	10	28	M8
125	4 1/2	173 061 165	10	100	0.059	9	88	88	20	10	32	M8
140	5	173 061 166	10	80	0.065	9	98	98	20	10	32	M8
160	6	173 061 167	10	80	0.074	9	109	109	20	10	32	M8

Pipe Clips Type 060, PP metric

Model:

- For mm pipes d90-400
- Material: Clip and safety clip PP black, UV resistant
- 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



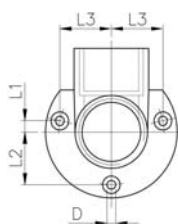
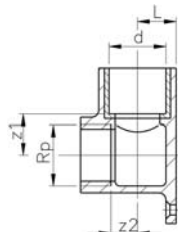
d	d	Code	SP	GP	kg	D	L	L1	H	H1	H2	SC
[mm]	[inch]					[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	
90	3	167 060 038	10	40	0.163	9	89	71	105	15	33	M 8
110		167 060 039	10	30	0.179	9	94	80	115	15	33	M 8
125		167 060 040	10	20	0.300	11	116	91	130	20	35	M10
140	5	167 060 041	10	20	0.309	11	121	98	130	20	35	M10
160		167 060 042	10	20	0.348	11	131	107	148	20	35	M10
180		167 060 043	-	10	0.378	11	143	115	163	20	35	M10
200		167 060 019	-	5	0.582	13	152	120	175	25	39	M12
225		167 060 020	-	5	0.612	13	165	132	175	25	39	M12
250		167 060 021	-	5	0.698	13	183	143	200	25	39	M12
280		167 060 022	-	5	0.722	13	198	156	200	25	39	M12
315		167 060 023	-	5	0.842	13	219	172	225	25	39	M12
355		167 060 024	-	5	1.250	17	275	209	258	30	50	M16
400		167 060 025	-	5	1.450	17	300	228	288	30	50	M16

20 100

Wall Mounting Brackets, Brass/PVC-U

Model:

- Brass, with parallel female thread Rp and PVC-U solvent socket insert metric



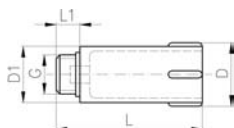
d [mm]	Rp [inch]	PN	Code	SP	GP	kg	z1 [mm]	z2 [mm]	D [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]
16	3/8	16	160 100 250	10	90	0.252	21	9	5	14	6	19	18
20	1/2	16	160 100 300	5	50	0.278	22	9	5	16	6	19	18
25	3/4	16	160 100 350	5	50	0.258	25	11	5	17	5	24	23

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



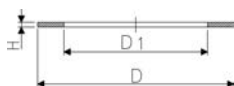
G [inch]	Code	SP	GP	kg	D [mm]	D1 [mm]	L [mm]	L1 [mm]
1/2	799 150 003	10	100	0.042	39	32.50	87	11

48 40 00

Flat Gaskets

Model:

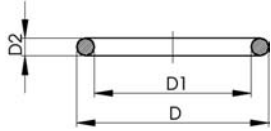
- Hardness : EPDM ca. 70° Shore
- For Wall Inlet Plugs



G [inch]	EPDM Code	SP	GP	kg	D [mm]	D1 [mm]	H [mm]
1/2	748 400 001	100	2000	0.002	28	21.50	3

Seals

EPDM 48 41 00
FPM 49 41 00



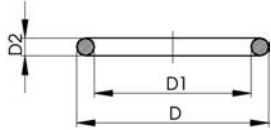
O-Ring Gaskets

Model:

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

d [mm]	DN [mm]	EPDM Code	FPM Code	SP	GP	kg	D [mm]	D1 [mm]	D2 [mm]
10-12	8	748 410 004	749 410 004	-	-	0.002	18	12.40	2.60
16	10	748 410 005	749 410 005	-	-	0.002	21	15.50	2.60
20	15	748 410 006	749 410 006	-	-	0.002	27	20.20	3.50
25	20	748 410 007	749 410 007	100	1400	0.002	35	28.20	3.50
32	25	748 410 008	749 410 008	100	-	0.002	40	32.90	3.50
40	32	748 410 009	749 410 009	-	-	0.006	51	40.60	5.30
50	40	748 410 010	749 410 010	-	-	0.007	58	47.00	5.30
63	50	748 410 011	749 410 011	100	3500	0.010	70	59.70	5.30
75	65	748 410 014	749 410 014	100	600	0.012	93	81.90	5.30
90	80	748 410 015	749 410 015	100	600	0.015	112	101.00	5.30
110	100	748 410 016	749 410 016	50	200	0.031	134	120.00	7.00

EPDM 48 41 01
FPM 49 41 01



O-Ring Gaskets

Model:

- For Flange Adaptors
- Hardness approx. 65° Shore

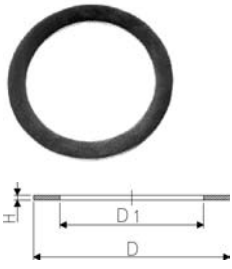
d [mm]	DN [mm]	EPDM Code	FPM Code	SP	GP	kg	D [mm]	D1 [mm]	D2 [mm]
16	10	748 410 000	749 410 000	-	-	0.002	26	18.60	3.50
20	15	748 410 001	749 410 001	100	-	0.002	31	23.40	3.50
25	20	748 410 007	749 410 007	100	1400	0.002	35	28.20	3.50
32	25	748 410 002	749 410 002	100	-	0.003	43	36.10	3.50
40	32	748 410 003	749 410 003	-	-	0.007	55	43.80	5.30
50	40	748 410 012	749 410 012	100	1000	0.008	64	53.30	5.30
63	50	748 410 013	749 410 013	100	600	0.011	80	69.00	5.30
75	65	748 410 014	749 410 014	100	600	0.012	93	81.90	5.30
90	80	748 410 015	749 410 015	100	600	0.015	112	101.00	5.30
110	100	748 410 016	749 410 016	50	200	0.031	134	120.00	7.00
125	100	748 410 017	749 410 017	200	-	0.036	150	135.90	7.00
140	125	748 410 018	749 410 018	200	-	0.039	166	151.80	7.00
160	150	748 410 019	749 410 019	200	-	0.047	191	177.20	7.00
200	200	748 410 163	749 410 163	-	-	0.056	236	221.60	7.00
225	200	748 410 022	749 410 022	150	-	0.060	255	241.00	7.00
250	250	748 410 182	749 410 182	-	-	0.003	280	266.10	7.00
280	250	748 410 173	749 410 173	-	-	0.044	306	291.50	7.00
315	300	748 410 174	749 410 174	-	-	0.051	356	342.30	7.00

EPDM 48 40 00
FPM 49 40 00

Flat Gaskets

Model:

- For Flange Adaptors 21 79 01/21 80 01
- Hardness: 70° Shore **EPDM**, 75° Shore **FPM**



d [mm]	DN [mm]	Inch	PN	EPDM Code	FPM Code	SP	GP	kg	D [mm]	D1 [mm]	H [mm]
16	10	3/8	10	748 400 014	-	-	-	0.002	27	16.00	2
20	15	1/2	10	748 400 015	749 400 015	100	-	0.003	32	20.00	2
25	20	3/4	10	748 400 016	749 400 016	100	-	0.003	39	25.00	2
32	25	1	10	748 400 017	749 400 017	100	-	0.004	48	32.00	2
40	32	1 1/4	10	748 400 018	749 400 018	100	-	0.008	59	40.00	3
50	40	1 1/2	10	748 400 019	749 400 019	100	-	0.012	71	50.00	3
63	50	2	10	748 400 020	749 400 020	-	-	0.017	88	63.00	3
75	65	2 1/2	10	748 400 021	749 400 021	50	-	0.024	104	75.00	3
90	80	3	10	748 400 022	749 400 022	50	-	0.032	123	90.00	3
110	100	4	10	748 400 023	749 400 023	-	-	0.062	148	110.00	4
125	100	4	10	748 400 024	749 400 024	-	-	0.058	168	125.00	4
140	125	5	10	748 400 025	749 400 025	-	-	0.058	186	140.00	4
160	150	6	10	748 400 026	749 400 026	-	-	0.063	211	160.00	4
200	200	6	6	748 400 031	-	50	-	0.090	248	195.00	5
225	200	8	6	748 400 027	749 400 027	-	-	0.103	272	220.00	5
280	250	10	6	748 400 032	-	-	-	0.138	328	273.00	5
315	300	12	6	748 400 033	-	-	-	0.207	378	305.00	5

EPDM 48 40 00
FPM 49 40 00

Flat Gaskets

Model:

- Hardness approx. 65° Shore
- For adaptor unions



d [mm]	Inch	EPDM Code	FPM Code	kg	D [mm]	D1 [mm]	H [mm]
12	1/4	748 400 004	-	0.002	20	13.00	2
16	3/8	748 400 005	749 400 005	0.002	24	17.00	2
20	1/2	748 400 006	749 400 006	0.003	30	21.00	3
25	3/4	748 400 007	749 400 007	0.004	38	27.00	3
32	1	748 400 008	749 400 008	0.002	44	32.00	3
40	1 1/4	748 400 009	749 400 009	0.003	55	42.00	3
50	1 1/2	748 400 010	749 400 010	0.004	62	46.00	3
63	2	748 400 011	749 400 011	0.006	78	60.00	3
75	2 1/2	748 400 012	749 400 012	0.009	97	75.00	3
90	3	748 400 013	749 400 013	0.011	109	88.00	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



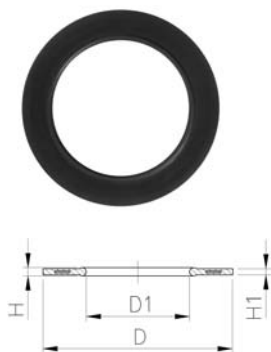
EPDM Code	SP	GP	kg	D [mm]	D1 [mm]	H [mm]
748 400 030	-	-	0.003	18	14.00	2
748 400 005	-	-	0.001	24	17.00	2
748 400 006	-	-	0.003	30	21.00	3

EPDM 48 44 01
FPM 49 44 01

Flange Gaskets metric

Model:

- G-ST-P/K Profil
- Hardness: 70° Shore **EPDM**, 75° Shore **FPM**
- For flange adaptors only in combination with butterfly valves



d [mm]	EPDM Code	FPM Code	kg	D [mm]	D1 [mm]	H [mm]	H1 [mm]
16	748 440 100	749 440 100	0.007	46	16	4	3
20	748 440 101	749 440 101	0.008	51	20	4	3
25	748 440 102	749 440 102	0.011	61	25	4	3
32	748 440 103	749 440 103	0.014	71	32	4	3
40	748 440 104	749 440 104	0.020	82	40	4	3
50	748 440 105	749 440 105	0.021	92	50	4	3
63	748 440 106	749 440 106	0.040	107	63	5	4
75	748 440 107	749 440 107	0.054	127	75	5	4
90	748 440 108	749 440 108	0.060	142	90	5	4
110	748 440 109	749 440 109	0.083	162	110	6	5
125	748 440 110	749 440 110	0.154	192	125	6	5
140	748 440 111	749 440 111	0.115	192	140	6	5
160	748 440 112	749 440 112	0.149	218	160	8	6
200	748 440 114	749 440 114	0.257	273	200	8	6
225	748 440 115	749 440 115	0.177	273	225	8	6
280	748 440 117	749 440 117	0.220	328	280	8	6
315	748 440 118	749 440 118	0.326	378	315	8	6
355	748 440 119	-	0.400	438	355	10	7
400	748 440 120	-	0.500	489	400	10	7

Solvent Cements and Tools



Tangit Solvent Cement for PVC-U

- Special solvent cement, transparent. The use of "DYTEX" is recommended for systems carrying strong oxidizing acids. See "Design Fundamental PVC-U" for instructions.
- Tin à 0.250, 0.500 und 1.000 kg (Net)
- Solvent cement **without brush**

Code	SP	GP	kg
799 298 000	-	30	0.142
799 298 001	24	-	0.330
799 298 002	-	12	0.625
799 298 003	8	-	1.180



Tangit Cleaner

Model:

- For PVC-U, PVC-C, ABS
- 1 litre tin

Code	GP	kg
799 298 010	12	0.900



Dytex Special Solvent Cement

- 1.350 kg (net) tin

Code	SP	GP	kg
799 298 012	-	-	1.465



Dytex Solvent/Cleaner

Model:

- 1 litre tin

Code	SP	GP	kg
799 298 013	-	-	1.380



Cap for cement

- Cap prevents the evaporation of the solvent whilst using the Tangit cement

Code	kg
799 298 028	0.030



Round Brushes

d-d [mm]		Code	kg	
6 - 10	4 mm (for Fittings 6-10mm)	799 299 001	0.005	
12 - 32	8 mm (for Fittings 12-32mm)	799 299 002	0.009	



Flat Brushes

d-d [mm]		Code	kg	
40 - 63	25x3 mm (for Fittings 40-63mm)	799 299 003	0.015	
75 - 225	50x5 mm (for Fittings 75-225mm)	799 299 004	0.026	
250 - 400	75x6 mm (for Fittings 250-400mm)	799 299 005	0.045	



KRA Plastic Pipe Cutter

- For cutting plastic pipes d10 - d160

d-d [mm]	Article	Code	SP	GP	kg	
10 - 63	PPC 63, s max. = 7,2mm	790 109 001	-	-	0.710	
50 - 110	PPC 110, s max. = 12,7mm	790 109 002	-	-	1.400	
110 - 160	PPC 160, s max. = 19,0mm	790 109 003	-	-	1.880	



Replacement cutting wheels

- for plastic pipe cutter

d-d [mm]	Article	Code	SP	GP	kg	
10 - 63	SR 63 max. s=7,2 mm	790 109 011	-	-	0.004	
50 - 110	SR 110/160 max. s=12,7 mm	790 109 012	-	-	0.015	
110 - 160	SR 160 max. s=19,0 mm	790 109 013	-	-	0.023	

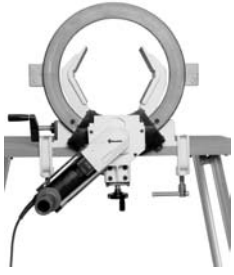


Chamfering Tool

Size	d-d [mm]	Code	SP	GP	kg	
1	16 - 75	799 495 145	-	-	0.720	
2	32 - 200	799 495 146	-	-	0.992	

Cutter for Chamfering Tool

Size	d-d [mm]	Code	SP	GP	kg	
1+2	16 - 250	708 402 217	-	-	0.010	



PPC 250 Plastic pipe cutter

- For size range from d 110 - 250 mm
- Composed of:
 - Divisible guide ring
 - Carriage with motor and gear unit
 - Light metal clamping device for size range from d 160 - 250 mm
 - Screws for fastening to workbench or tilted floor stand
 - Adapter jaws d 110 - 160 mm
 - "2 material specific saw blades

* Different version for other countries.

* as long as on stock

d-d [mm]	Performance	Code	SP	GP	kg
110 - 250	230 V/50 Hz	790 201 001	-	-	35.000
*110 - 250	120 V/60 Hz	790 201 002	-	-	33.000
*110 - 250	110 V/50 Hz	790 201 003	-	-	33.000

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 β -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)

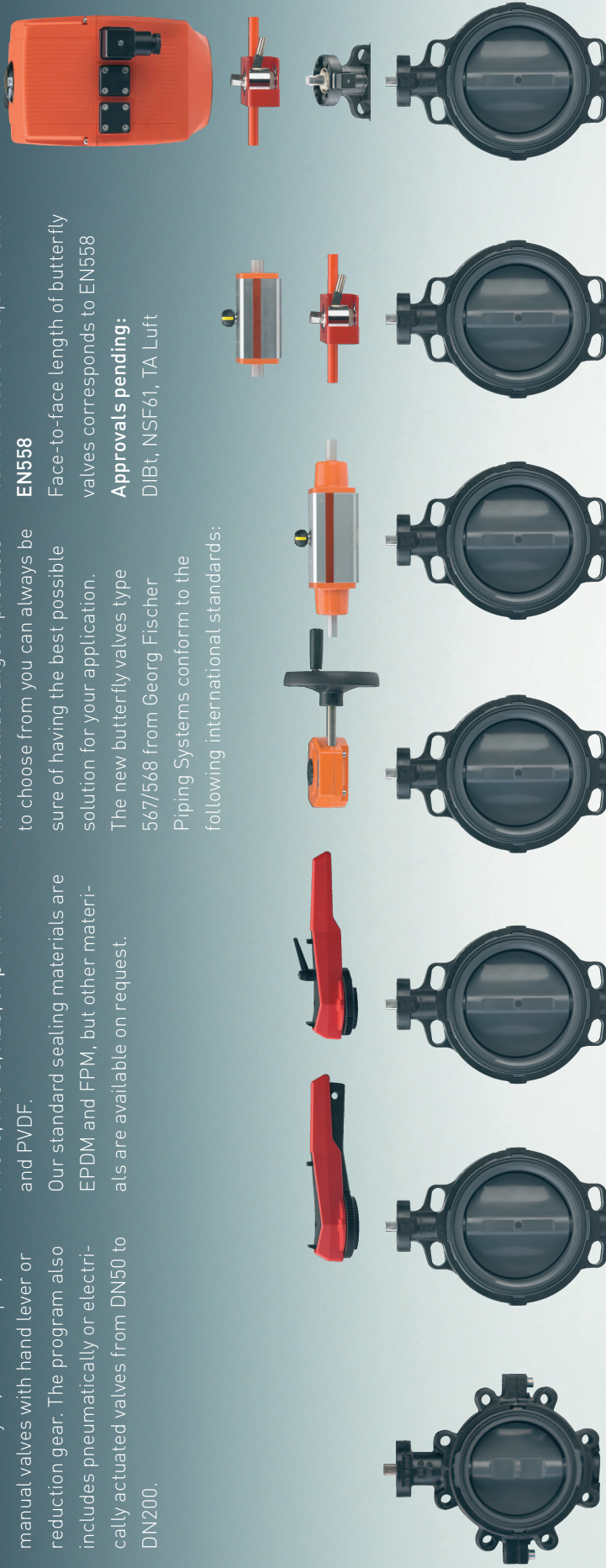
With this wide range of products to choose from you can always be sure of having the best possible solution for your application. The new butterfly valves type 567/568 from Georg Fischer Piping Systems conform to the following international standards:

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

Ball valve type 107 PVC-U 100-230V With manual emergency override With solvent cement sockets metric



Model:

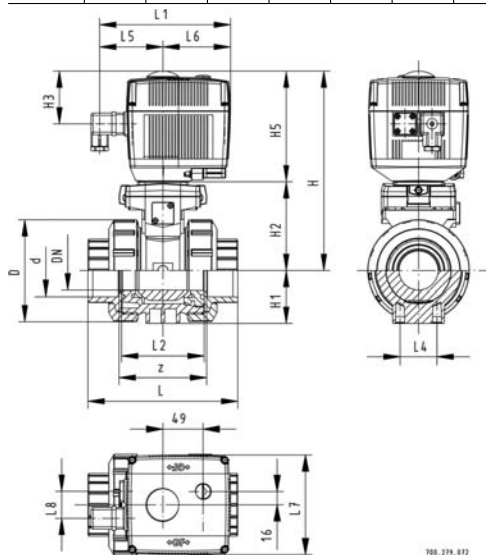
- Built on with electric actuator EA11
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Voltage 100-230 V, 50-60 Hz
- Control range 90°<
- Control time 5 s/90°<

Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ($\Delta p=1$ 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



100_179_872



Ball valve type 107 PVC-U 100-230V With manual emergency override With solvent cement spigots metric

Model:

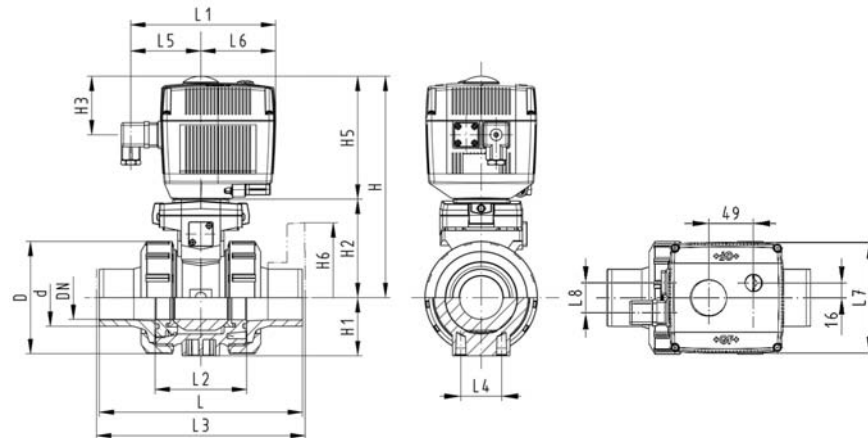
- Built on with electric actuator EA11
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Voltage 100-230 V, 50-60 Hz
- Control range 90° <
- Control time 5 s/90° <

Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ($\Delta p=1$ 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





Ball valve type 107 PVC-U 100-230V With manual emergency override With threaded sockets Rp

Model:

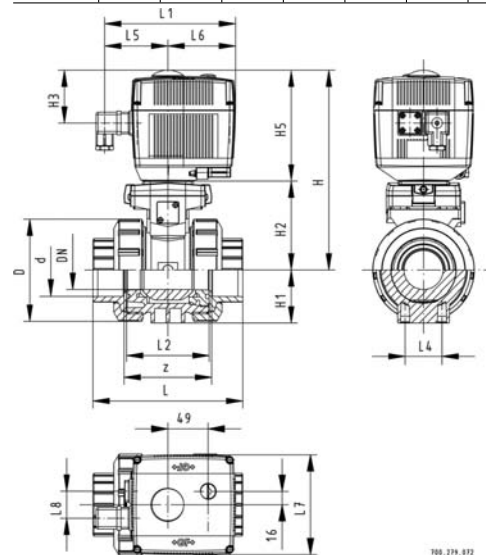
- Built on with electric actuator EA11
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Voltage 100-230 V, 50-60 Hz
- Control range 90° <
- Control time 5 s/90° <

Option:

- Individual configuration of the valve (see form)

Rp [inch]	DN [mm]	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
3/8	10	10	70	199 107 622	199 107 632	2.100
1/2	15	10	185	199 107 623	199 107 633	2.100
3/4	20	10	350	199 107 624	199 107 634	2.200
1	25	10	700	199 107 625	199 107 635	2.300
1 1/4	32	10	1000	199 107 626	199 107 636	2.600
1 1/2	40	10	1600	199 107 627	199 107 637	3.000
2	50	10	3100	199 107 628	199 107 638	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



100_279_072



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 558-1
- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10

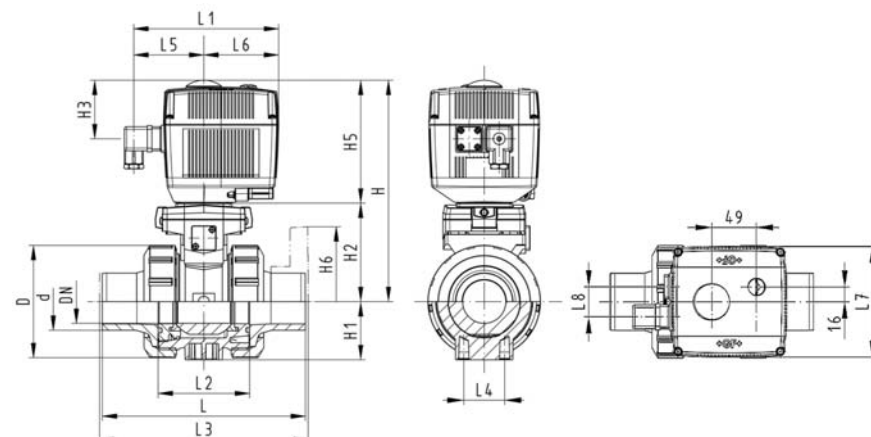
Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	Inch	PN	kv-value ($\Delta p=1$ 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





Ball valve type 107 PVC-U 24V With manual emergency override With solvent cement sockets metric

Model:

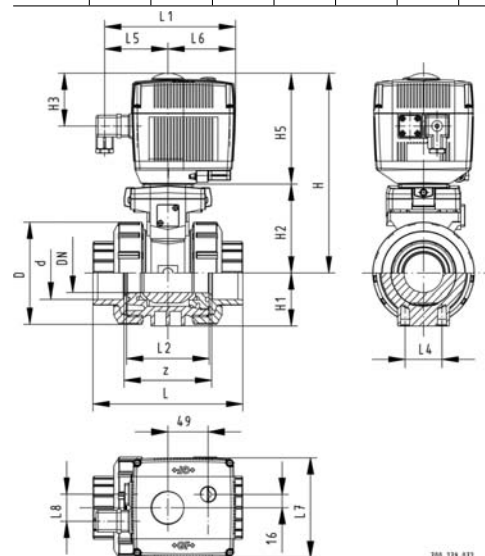
- Built on with electric actuator EA11
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Voltage 24 V AC/DC
- Control range 90° <
- Control time 5 s/90° <

Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ($\Delta p=1$ 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





Ball valve type 107 PVC-U 24V With manual emergency override With solvent cement spigots metric

Model:

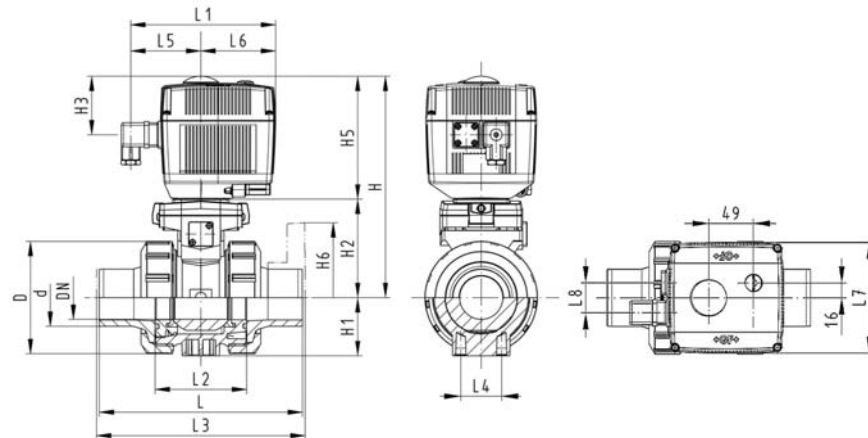
- Built on with electric actuator EA11
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Voltage 24 V AC/DC
- Control range 90° <
- Control time 5 s/90° <

Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ($\Delta p=1$ 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





Ball valve type 107 PVC-U 24V With manual emergency override With threaded sockets Rp

Model:

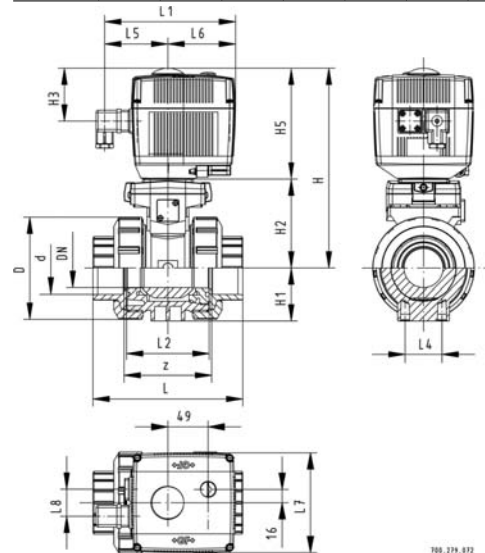
- Built on with electric actuator EA11
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Voltage 24 V AC/DC
- Control range 90° <
- Control time 5 s/90° <

Option:

- Individual configuration of the valve (see form)

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



788_279_872



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 558-1
- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10

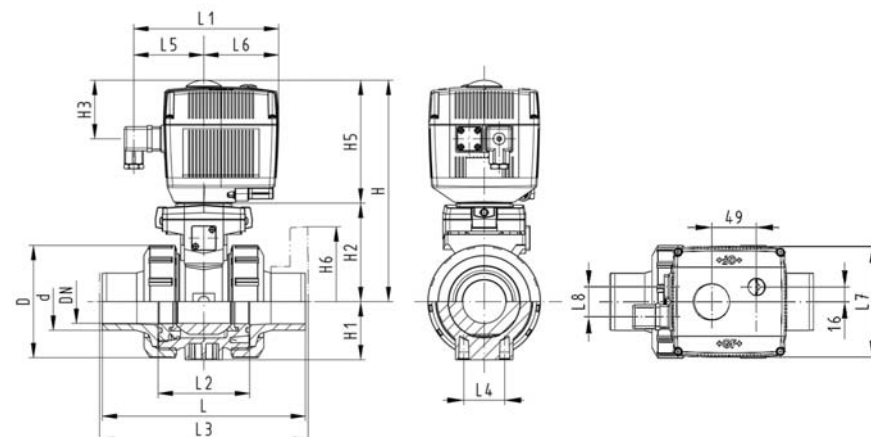
Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	Inch	PN	kv-value ($\Delta p=1$ 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





Ball valve type 130 PVC-U 100-230V With manual emergency override With solvent cement sockets metric

Model:

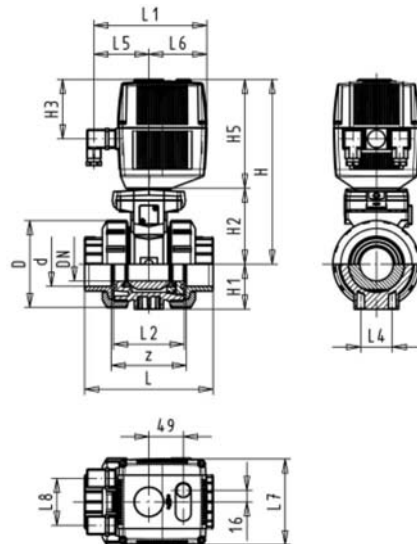
- Built on with electric actuator EA21
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Voltage 100-230 V, 50-60 Hz
- Control range 90° <
- Control time 5 s/90° <

Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ($\Delta p=1$ 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	

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	231	27	64	94	167	92	180	56	25	97	83	122	66	64
20	50	231	27	64	94	167	95	180	56	25	97	83	122	66	64
25	58	240	30	73	94	167	110	180	65	25	97	83	122	66	72
32	68	240	36	73	94	167	123	180	71	25	97	83	122	66	79
40	84	251	44	84	94	167	146	180	85	45	97	83	122	66	94
50	97	251	51	84	94	167	157	180	89	45	97	83	122	66	95
63	124	273	64	106	94	167	183	180	101	45	97	83	122	66	107





Ball valve type 130 PVC-U 100-230V With manual emergency override With solvent cement spigots metric

Model:

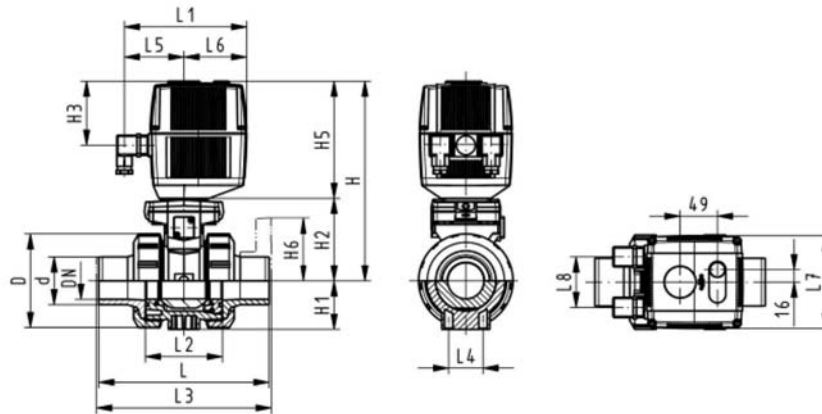
- Built on with electric actuator EA21
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Voltage 100-230 V, 50-60 Hz
- Control range 90° <
- Control time 5 s/90° <

Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ($\Delta p=1$ 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

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	231	27	64	94	167	114	180	56	130	25	97	83	122	66
20	50	231	27	64	94	167	124	180	56	130	25	97	83	122	66
25	58	240	30	73	94	167	144	180	65	150	25	97	83	122	66
32	68	240	36	73	94	167	154	180	71	160	25	97	83	122	66
40	84	251	44	84	94	167	174	180	85	180	45	97	83	122	66
50	97	251	51	84	94	167	194	180	89	200	45	97	83	122	66
63	124	273	64	106	94	167	224	180	101	230	45	97	83	122	66





Ball valve type 130 PVC-U 100-230V With manual emergency override With threaded sockets Rp

Model:

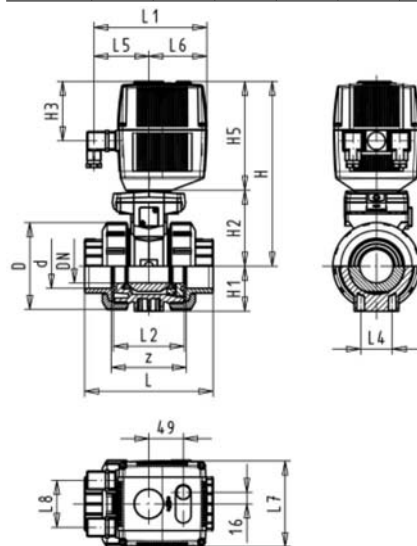
- Built on with electric actuator EA21
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Voltage 100-230 V, 50-60 Hz
- Control range 90° <
- Control time 5 s/90° <

Option:

- Individual configuration of the valve (see form)

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

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	231	27	64	94	167	92	180	56	25	97	83	122	66	64
1/2	50	231	27	64	94	167	95	180	56	25	97	83	122	66	64
3/4	58	240	30	73	94	167	110	180	65	25	97	83	122	66	72
1	68	240	36	73	94	167	123	180	71	25	97	83	122	66	79
1 1/4	84	251	44	84	94	167	146	180	85	45	97	83	122	66	94
1 1/2	97	251	51	84	94	167	157	180	89	45	97	83	122	66	95
2	124	273	64	106	94	167	183	180	101	45	97	83	122	66	107





Ball valve type 130 PVC-U 100-230V With manual emergency override With fixed flanges serrated metric

Model:

- Built on with electric actuator EA21
- 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 558-1
- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10

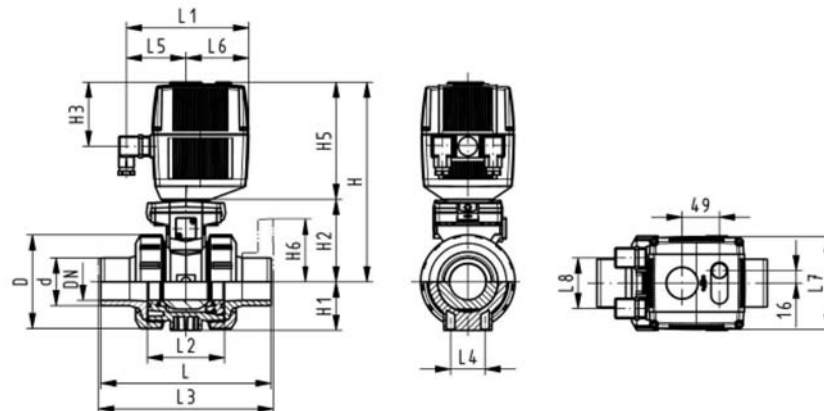
Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	Inch	PN	kv-value ($\Delta p=1$ 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 24V With manual emergency override With solvent cement sockets metric

Model:

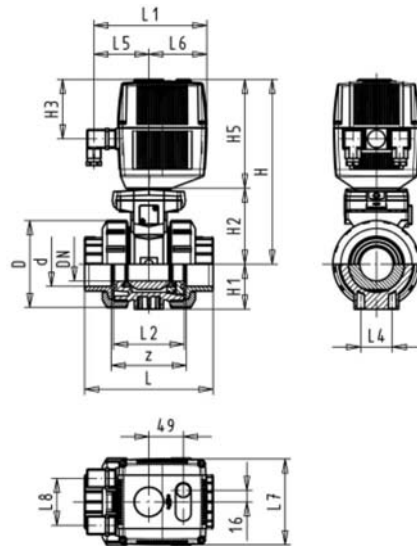
- Built on with electric actuator EA21
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Voltage 24 V AC/DC
- Control range 90° <
- Control time 5 s/90° <

Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ($\Delta p=1$ 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	

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	231	27	64	94	167	92	180	56	25	97	83	122	66	64
20	50	231	27	64	94	167	95	180	56	25	97	83	122	66	64
25	58	240	30	73	94	167	110	180	65	25	97	83	122	66	72
32	68	240	36	73	94	167	123	180	71	25	97	83	122	66	79
40	84	251	44	84	94	167	146	180	85	45	97	83	122	66	94
50	97	251	51	84	94	167	157	180	89	45	97	83	122	66	95
63	124	273	64	106	94	167	183	180	101	45	97	83	122	66	107





Ball valve type 130 PVC-U 24V With manual emergency override With solvent cement spigots metric

Model:

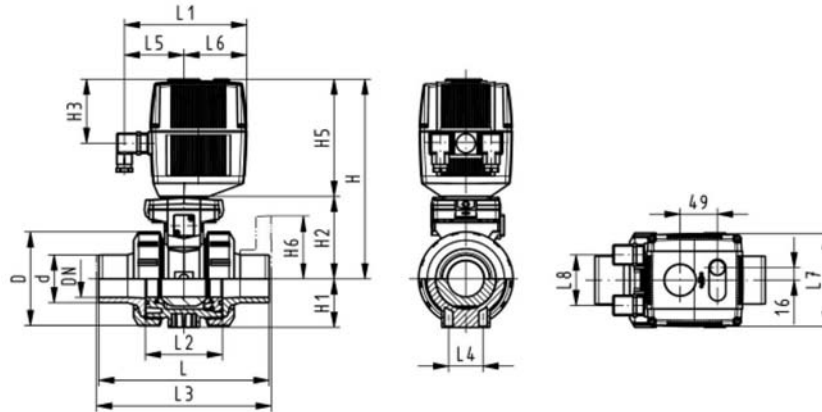
- Built on with electric actuator EA21
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Voltage 24 V AC/DC
- Control range 90° <
- Control time 5 s/90° <

Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ($\Delta p=1$ 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

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	231	27	64	94	167	114	180	56	130	25	97	83	122	66
20	50	231	27	64	94	167	124	180	56	130	25	97	83	122	66
25	58	240	30	73	94	167	144	180	65	150	25	97	83	122	66
32	68	240	36	73	94	167	154	180	71	160	25	97	83	122	66
40	84	251	44	84	94	167	174	180	85	180	45	97	83	122	66
50	97	251	51	84	94	167	194	180	89	200	45	97	83	122	66
63	124	273	64	106	94	167	224	180	101	230	45	97	83	122	66





Ball valve type 130 PVC-U 24V With manual emergency override With threaded sockets Rp

Model:

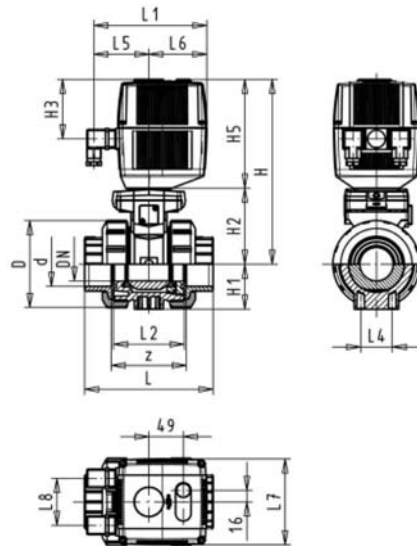
- Built on with electric actuator EA21
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Voltage 24 V AC/DC
- Control range 90° <
- Control time 5 s/90° <

Option:

- Individual configuration of the valve (see form)

Rp [inch]	DN [mm]	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
3/8	10	10	70	199 130 162	199 130 172	2.100
1/2	15	10	185	199 130 163	199 130 173	2.100
3/4	20	10	350	199 130 164	199 130 174	2.200
1	25	10	700	199 130 165	199 130 175	2.300
1 1/4	32	10	1000	199 130 166	199 130 176	2.600
1 1/2	40	10	1600	199 130 167	199 130 177	3.000
2	50	10	3100	199 130 168	199 130 178	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	231	27	64	94	167	92	180	56	25	97	83	122	66	64
1/2	50	231	27	64	94	167	95	180	56	25	97	83	122	66	64
3/4	58	240	30	73	94	167	110	180	65	25	97	83	122	66	72
1	68	240	36	73	94	167	123	180	71	25	97	83	122	66	79
1 1/4	84	251	44	84	94	167	146	180	85	45	97	83	122	66	94
1 1/2	97	251	51	84	94	167	157	180	89	45	97	83	122	66	95
2	124	273	64	106	94	167	183	180	101	45	97	83	122	66	107





Ball valve type 130 PVC-U 24V With manual emergency override With fixed flanges serrated metric

Model:

- Built on with electric actuator EA21
- 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 558-1
- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10

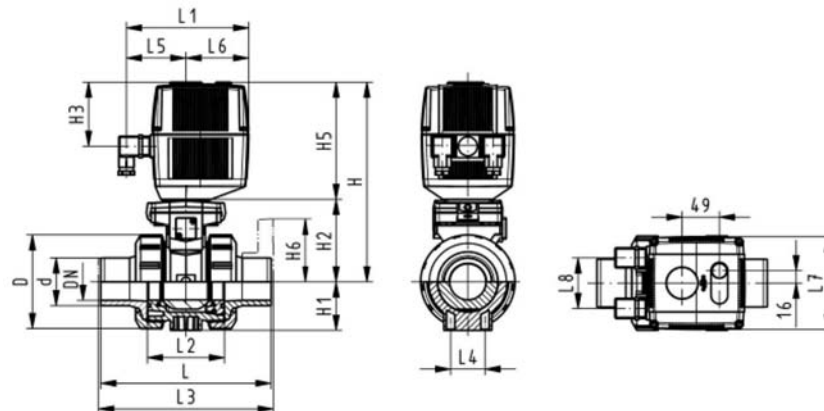
Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	Inch	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
20	15	½	10	185	199 130 143	199 130 153	2.300
25	20	¾	10	350	199 130 144	199 130 154	2.500
32	25	1	10	700	199 130 145	199 130 155	2.700
40	32	1 ¼	10	1000	199 130 146	199 130 156	3.200
50	40	1 ½	10	1600	199 130 147	199 130 157	3.700
63	50	2	10	3100	199 130 148	199 130 158	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





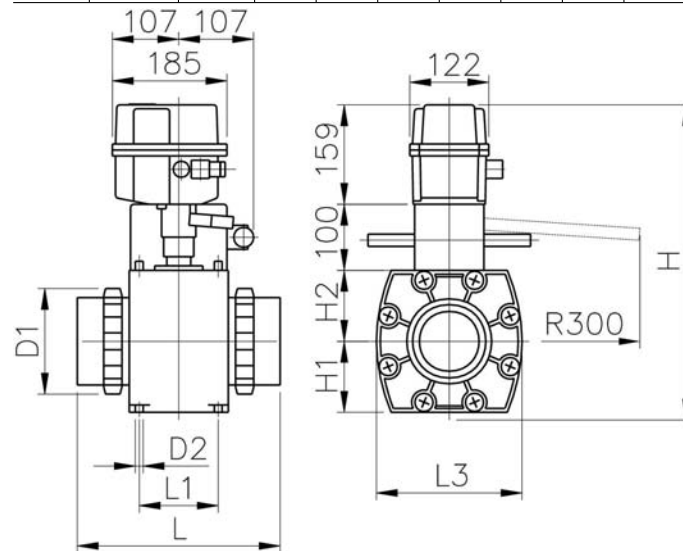
Ball valve type 108 PVC-U 115/230V With manual override Unions with solvent cement sockets metric

Model:

- Adjustable voltages for 115/230 V, 50-60 Hz
- For easy installation and removal
- Control range 90°<
- Control time 8 s/90°<

d [mm]	DN [mm]	PN	Type	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg	
75	65	10	EA30	5000	199 108 000	199 108 003	7.900	
90	80	10	EA30	7000	199 108 001	199 108 004	9.400	
110	100	6	EA30	11000	199 108 002	199 108 005	12.900	

d [mm]	D1 [mm]	D2 [mm]	L [mm]	L1 [mm]	L3 [mm]	H [mm]	H1 [mm]	H2 [mm]	
75	135.00	10.00	233	72	160	407	75	73	
90	158.00	10.00	267	88	188	435	88	88	
110	188.00	12.00	318	104	225	482	110	113	





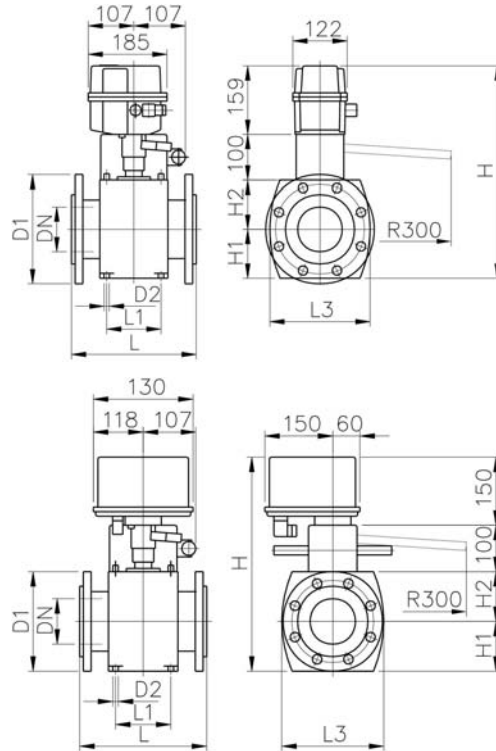
Ball valve type 108 PVC-U 115/230V With manual override With flanges PVC-U metric

Model:

- Adjustable voltages for 115/230 V, 50-60 Hz
- For easy installation and removal
- Control range 90°<
- Control time 8 s/90°<
- Overall length according to EN 558-1

d [mm]	DN [mm]	Inch	PN	Type	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
75	65	2 ½	10	EA30	5000	199 108 506	199 108 516	9.600
90	80	3	10	EA30	7000	199 108 507	199 108 517	11.100
110	100	4	10	EA41	11000	199 108 503	199 108 513	19.200
160	150	6	10	EA41	16000	199 108 505	199 108 515	25.300

d [mm]	D1 [mm]	D2 [mm]	L [mm]	L1 [mm]	L3 [mm]	H [mm]	H1 [mm]	H2 [mm]
75	185.00	10.00	290	84	160	407	75	73
90	200.00	10.00	310	102	188	435	88	88
110	220.00	12.00	350	122	225	473	110	113
160	285.00	12.00	480	122	225	473	110	113





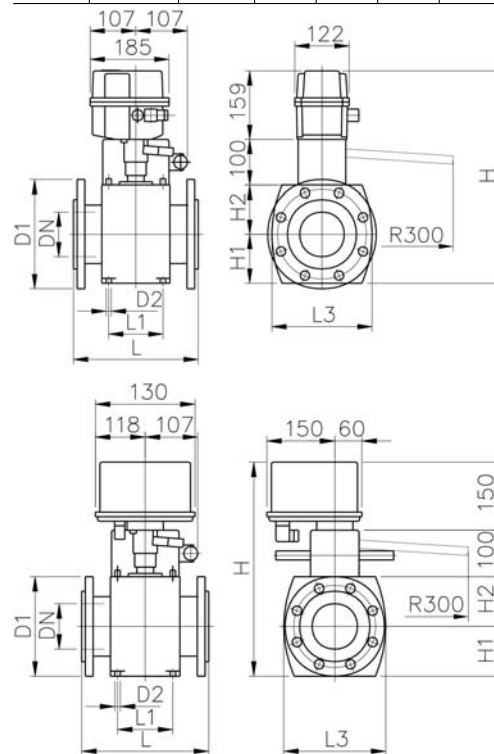
Ball valve type 108 PVC-U 115/230V With manual override With flanges PP-V metric

Model:

- Adjustable voltages for 115/230 V, 50-60 Hz
- For easy installation and removal
- Control range 90° <
- Control time 8 s/90° <
- Overall length according to EN 558-1

d [mm]	DN [mm]	Inch	PN	Type	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg	
75	65	2 ½	10	EA30	5000	199 108 826	199 108 836	9.600	
90	80	3	10	EA30	7000	199 108 827	199 108 837	11.100	
110	100	4	10	EA41	11000	199 108 823	199 108 833	19.200	
160	150	6	10	EA41	16000	199 108 825	199 108 835	21.600	

d [mm]	D1 [mm]	D2 [mm]	L [mm]	L1 [mm]	L3 [mm]	H [mm]	H1 [mm]	H2 [mm]	
75	185.00	10.00	290	84	160	407	75	73	
90	200.00	10.00	310	102	188	435	88	88	
110	220.00	12.00	350	122	225	473	110	113	
160	285.00	12.00	480	122	225	473	110	113	





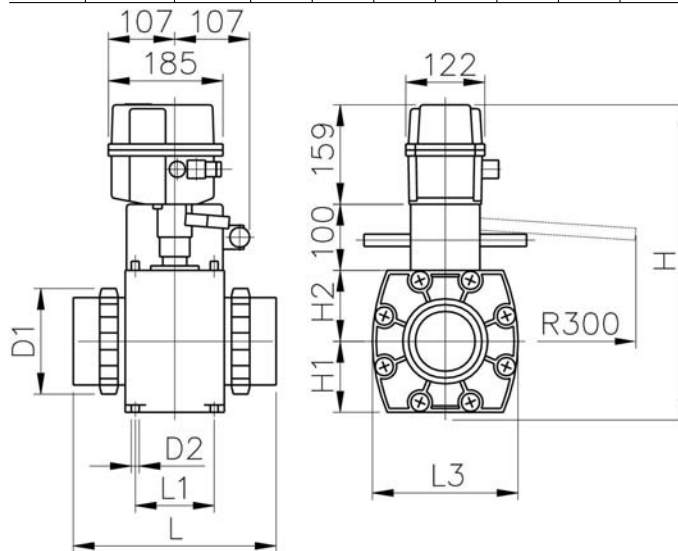
Ball valve type 108 PVC-U 24V With manual override Unions with solvent cement sockets metric

Model:

- Voltage 24 V AC/DC
- Control range 90°<
- Control time 8 s/90°<
- For easy installation and removal

d [mm]	DN [mm]	PN	Type	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg	
75	65	10	EA30	5000	199 108 006	199 108 009	7.900	
90	80	10	EA30	7000	199 108 007	199 108 010	9.400	
110	100	6	EA30	11000	199 108 008	199 108 011	12.900	

d [mm]	D1 [mm]	D2 [mm]	L [mm]	L1 [mm]	L3 [mm]	H [mm]	H1 [mm]	H2 [mm]	
75	135.00	10.00	233	72	160	407	75	73	
90	158.00	10.00	267	88	188	435	88	88	
110	188.00	12.00	318	104	225	482	110	113	





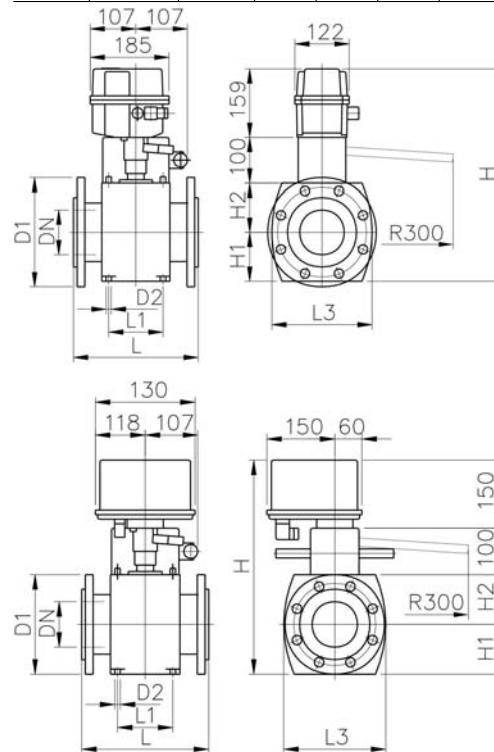
Ball valve type 108 PVC-U 24V With manual override With flanges PVC-U metric

Model:

- Voltage 24 V AC/DC
- Control range 90°<
- Control time 8 s/90°<
- For easy installation and removal
- Overall length according to EN 558-1

d [mm]	DN [mm]	Inch	PN	Type	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
75	65	2 ½	10	EA30	5000	199 108 546	199 108 556	9.600
90	80	3	10	EA30	7000	199 108 547	199 108 557	11.100
110	100	4	10	EA41	11000	199 108 543	199 108 553	19.200
160	150	6	10	EA41	16000	199 108 545	199 108 555	21.600

d [mm]	D1 [mm]	D2 [mm]	L [mm]	L1 [mm]	L3 [mm]	H [mm]	H1 [mm]	H2 [mm]
75	185.00	10.00	290	84	160	407	75	73
90	200.00	10.00	310	102	188	435	88	88
110	220.00	12.00	350	122	225	473	110	113
160	285.00	12.00	480	122	225	473	110	113





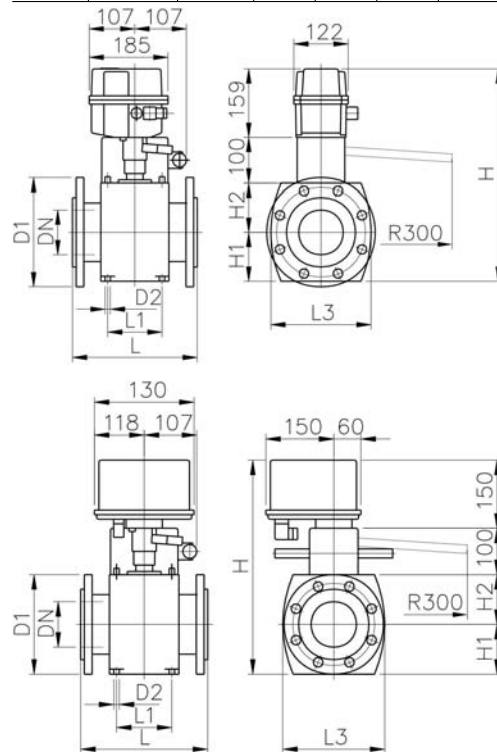
Ball valve type 108 PVC-U 24V With manual override With flanges PP-V metric

Model:

- Voltage 24 V AC/DC
- Control range 90°<
- Control time 8 s/90°<
- For easy installation and removal
- Overall length according to EN 558-1

d [mm]	DN [mm]	Inch	PN	Type	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
75	65	2 ½	10	EA30	5000	199 108 866	199 108 876	9.600
90	80	3	10	EA30	7000	199 108 867	199 108 877	11.100
110	100	4	10	EA41	11000	199 108 863	199 108 873	19.200
160	150	6	10	EA41	16000	199 108 865	199 108 875	21.600

d [mm]	D1 [mm]	D2 [mm]	L [mm]	L1 [mm]	L3 [mm]	H [mm]	H1 [mm]	H2 [mm]
75	185.00	10.00	290	84	160	407	75	73
90	200.00	10.00	310	102	188	435	88	88
110	220.00	12.00	350	122	225	473	110	113
160	285.00	12.00	480	122	225	473	110	113





3-Way ball valve type 178 PVC-U Vertical/L-port 100-230V With manual emergency override With solvent cement sockets metric

Model:

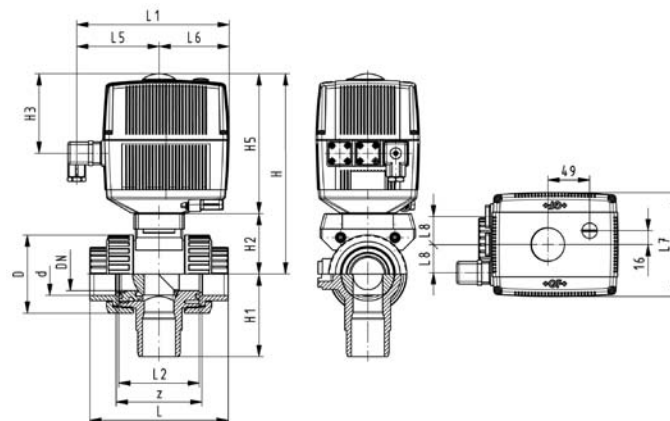
- Built on with electric actuator EA21
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Voltage 100-230 V, 50-60 Hz
- Control range 90°<
- Control time 5 s/90°<

Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	50	199 178 242	199 178 252	2.317
20	15	10	75	199 178 243	199 178 253	2.317
25	20	10	150	199 178 244	199 178 254	2.449
32	25	10	280	199 178 245	199 178 255	2.579
40	32	10	480	199 178 246	199 178 256	2.857
50	40	10	620	199 178 247	199 178 257	3.060
63	50	10	1230	199 178 248	199 178 258	3.900

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	45	206	57	40	93	166	99	182	63	99	83	122	33	71
20	45	206	62	40	93	166	102	182	63	99	83	122	33	71
25	53	211	72	45	93	166	120	182	75	99	83	122	33	82
32	64	216	77	50	93	166	131	182	79	99	83	122	33	87
40	78	224	87	58	93	166	150	182	89	99	83	122	33	98
50	92	235	97	69	93	166	163	182	95	99	83	122	33	101
63	116	247	112	81	93	166	197	182	115	99	83	122	33	121





3-Way ball valve type 178 PVC-U Vertical/L-port 100-230V With manual emergency override With solvent cement spigots metric

Model:

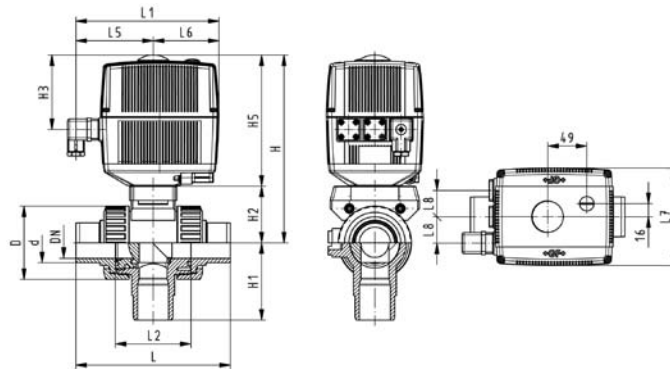
- Built on with electric actuator EA21
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Voltage 100-230 V, 50-60 Hz
- Control range 90°<
- Control time 5 s/90°<

Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	50	199 178 062	199 178 072	2.320
20	15	10	75	199 178 063	199 178 073	2.320
25	20	10	150	199 178 064	199 178 074	2.454
32	25	10	280	199 178 065	199 178 075	2.591
40	32	10	480	199 178 066	199 178 076	2.875
50	40	10	620	199 178 067	199 178 077	3.105
63	50	10	1230	199 178 068	199 178 078	3.946

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]
16	43	206	57	40	93	166	99	182	63	99	83	122	33
20	43	206	62	40	93	166	102	182	63	99	83	122	33
25	53	211	72	45	93	166	120	182	75	99	83	122	33
32	64	216	77	50	93	166	131	182	79	99	83	122	33
40	78	224	87	58	93	166	150	182	89	99	83	122	33
50	92	235	97	69	93	166	163	182	95	99	83	122	33
63	116	247	112	81	93	166	197	182	115	99	83	122	33





3-Way ball valve type 178 PVC-U Vertical/L-port 24V With manual emergency override With solvent cement sockets metric

Model:

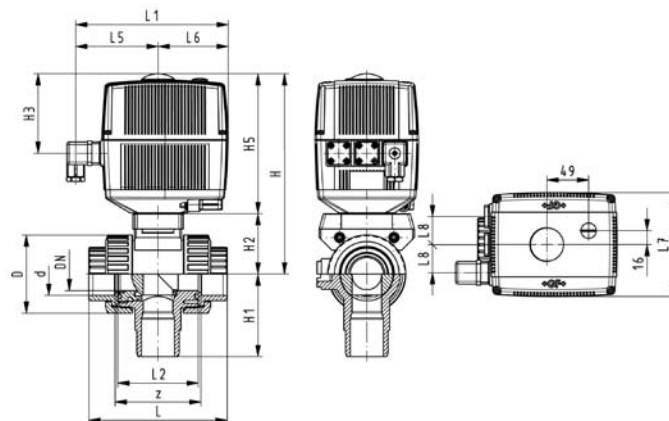
- Built on with electric actuator EA21
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Voltage 24 V AC/DC
- Control range 90°<
- Control time 5 s/90°<

Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	50	199 178 262	199 178 272	2.317
20	15	10	75	199 178 263	199 178 273	2.317
25	20	10	150	199 178 264	199 178 274	2.449
32	25	10	280	199 178 265	199 178 275	2.579
40	32	10	480	199 178 266	199 178 276	2.857
50	40	10	620	199 178 267	199 178 277	3.060
63	50	10	1230	199 178 268	199 178 278	3.900

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	45	206	57	40	93	166	99	182	63	99	83	122	33	71
20	45	206	62	40	93	166	102	182	63	99	83	122	33	71
25	53	211	72	45	93	166	120	182	75	99	83	122	33	82
32	64	216	77	50	93	166	131	182	79	99	83	122	33	87
40	78	224	87	58	93	166	150	182	89	99	83	122	33	98
50	92	235	97	69	93	166	163	182	95	99	83	122	33	101
63	116	247	112	81	93	166	197	182	115	99	83	122	33	121





3-Way ball valve type 178 PVC-U
Vertical/L-port 24V
With manual emergency override
With solvent cement spigots metric

Model:

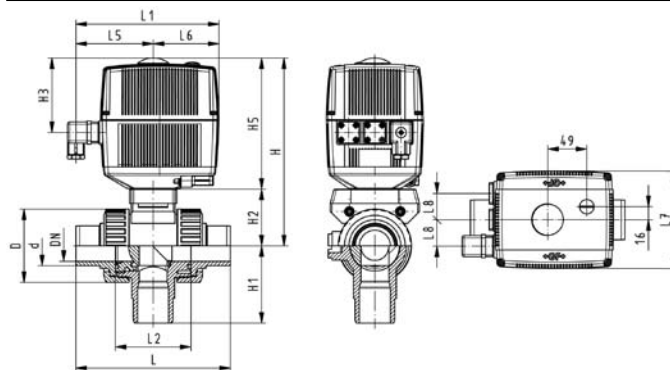
- Built on with electric actuator EA21
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Voltage 24 V AC/DC
- Control range 90°<
- Control time 5 s/90°<

Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	50	199 178 102	199 178 112	2.320
20	15	10	75	199 178 103	199 178 113	2.320
25	20	10	150	199 178 104	199 178 114	2.454
32	25	10	280	199 178 105	199 178 115	2.591
40	32	10	480	199 178 106	199 178 116	2.875
50	40	10	620	199 178 107	199 178 117	3.105
63	50	10	1230	199 178 108	199 178 118	3.946

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]
16	43	206	57	40	93	166	99	182	63	99	83	122	33
20	43	206	62	40	93	166	102	182	63	99	83	122	33
25	53	211	72	45	93	166	120	182	75	99	83	122	33
32	64	216	77	50	93	166	131	182	79	99	83	122	33
40	78	224	87	58	93	166	150	182	89	99	83	122	33
50	92	235	97	69	93	166	163	182	95	99	83	122	33
63	116	247	112	81	93	166	197	182	115	99	83	122	33



3-Way ball valve type 175 PVC-U
Horizontal/L-port 100-230V
With manual emergency override
With solvent cement sockets metric

Model:

- Built on with electric actuator EA21
- 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°<

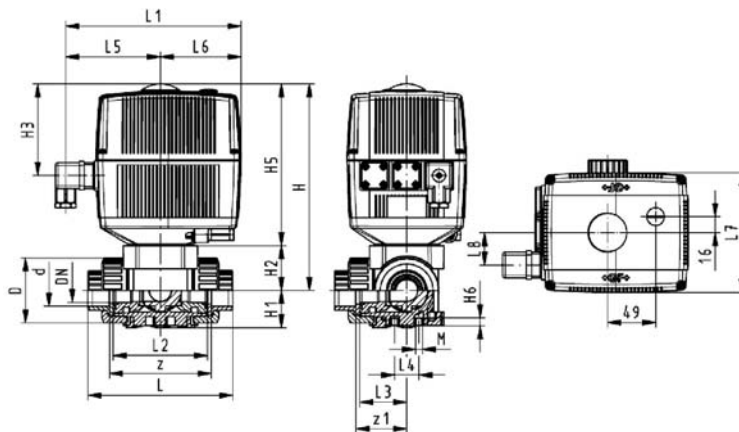
Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	50	199 175 022	199 175 032	2.121
20	15	10	75	199 175 023	199 175 033	2.121
25	20	10	150	199 175 024	199 175 034	2.303
32	25	10	280	199 175 025	199 175 035	2.474
40	32	10	480	199 175 026	199 175 036	2.815
50	40	10	620	199 175 027	199 175 037	3.359
63	50	10	1230	199 175 028	199 175 038	4.728

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	45	197	29	31	93	166	8	108	182	72	36	25	99	83	122
20	45	197	29	31	93	166	8	111	182	72	36	25	99	83	122
25	53	205	33	39	93	166	8	131	182	86	43	25	99	83	122
32	65	210	38	44	93	166	8	148	182	96	48	25	99	83	122
40	78	216	44	50	93	166	9	176	182	116	58	45	99	83	122
50	92	229	50	63	93	166	9	206	182	137	69	45	99	83	122
63	116	242	61	76	93	166	9	262	182	179	90	45	99	83	122

d [mm]	L8 [mm]	M	z [mm]	z1 [mm]
16	33	6	80	40
20	33	6	80	40
25	33	6	94	47
32	33	6	104	52
40	33	8	126	63
50	33	8	144	72
63	33	8	186	93



3-Way ball valve type 175 PVC-U Horizontal/L-port 100-230V With manual emergency override With solvent cement spigots metric

Model:

- Built on with electric actuator EA21
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Voltage 100-230 V, 50-60 Hz
- Control range $90^\circ <$
- Control time 5 s/ $90^\circ <$

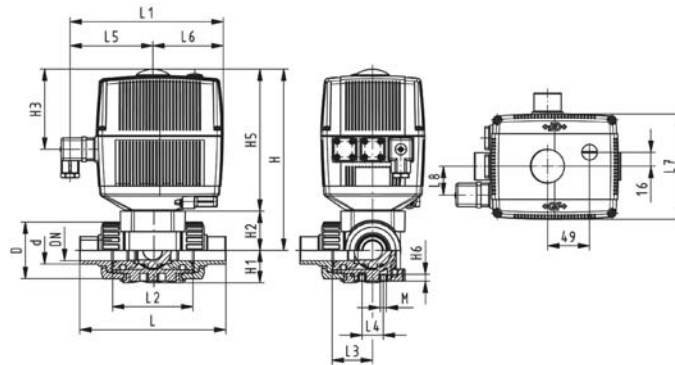
Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	50	199 175 002	199 175 012	2.121
20	15	10	75	199 175 003	199 175 013	2.121
25	20	10	150	199 175 004	199 175 014	2.303
32	25	10	280	199 175 005	199 175 015	2.474
40	32	10	480	199 175 006	199 175 016	2.815
50	40	10	620	199 175 007	199 175 017	3.359
63	50	10	1230	199 175 008	199 175 018	4.728

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	45	197	29	31	93	166	8	124	182	72	36	25	99	83	122
20	45	197	29	31	93	166	8	134	182	72	36	25	99	83	122
25	53	205	33	39	93	166	8	156	182	86	43	25	99	83	122
32	65	210	38	44	93	166	8	172	182	96	48	25	99	83	122
40	78	216	44	50	93	166	9	202	182	116	58	45	99	83	122
50	92	229	50	63	93	166	9	238	182	137	69	45	99	83	122
63	116	242	61	76	93	166	9	290	182	179	90	45	99	83	122

d [mm]	L8 [mm]	M
16	33	6
20	33	6
25	33	6
32	33	6
40	33	8
50	33	8
63	33	8



3-Way ball valve type 175 PVC-U Horizontal/T-port 100-230V With manual emergency override With solvent cement sockets metric

Model:

- Built on with electric actuator EA21
- 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°<

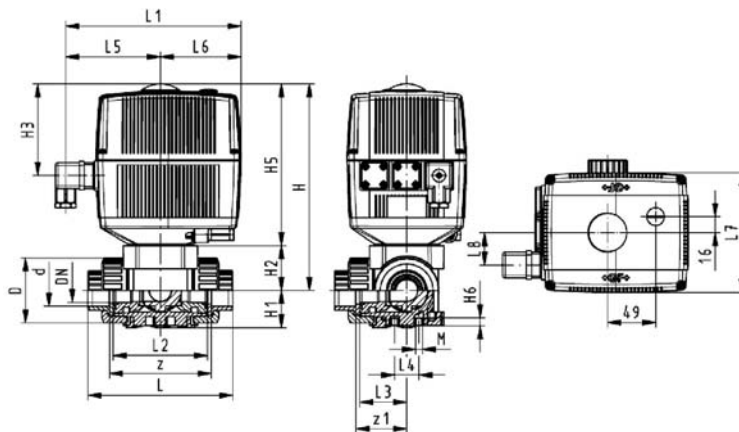
Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	140	199 175 062	199 175 072	2.121
20	15	10	200	199 175 063	199 175 073	2.121
25	20	10	470	199 175 064	199 175 074	2.303
32	25	10	793	199 175 065	199 175 075	2.474
40	32	10	1290	199 175 066	199 175 076	2.815
50	40	10	1910	199 175 067	199 175 077	3.359
63	50	10	3100	199 175 068	199 175 078	4.728

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	45	197	29	31	93	166	8	108	182	72	36	25	99	83	122
20	45	197	29	31	93	166	8	111	182	72	36	25	99	83	122
25	53	205	33	39	93	166	8	131	182	86	43	25	99	83	122
32	65	210	38	44	93	166	8	148	182	96	48	25	99	83	122
40	78	216	44	50	93	166	9	176	182	116	58	45	99	83	122
50	92	229	50	63	93	166	9	206	182	137	69	45	99	83	122
63	116	242	61	76	93	166	9	262	182	179	90	45	99	83	122

d [mm]	L8 [mm]	M	z [mm]	z1 [mm]
16	33	6	80	40
20	33	6	80	40
25	33	6	94	47
32	33	6	104	52
40	33	8	126	63
50	33	8	144	72
63	33	8	186	93



**3-Way ball valve type 175 PVC-U
Horizontal/T-port 100-230V
With manual emergency override
With solvent cement spigots metric**

Model:

- Built on with electric actuator EA21
- 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°<

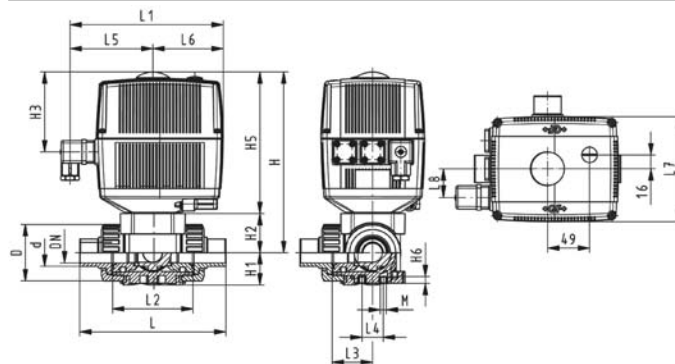
Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	EPDM Code	FPM Code
16	10	10	199 175 042	199 175 052
20	15	10	199 175 043	199 175 053
25	20	10	199 175 044	199 175 054
32	25	10	199 175 045	199 175 055
40	32	10	199 175 046	199 175 056
50	40	10	199 175 047	199 175 057
63	50	10	199 175 048	199 175 058

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	45	197	29	31	93	166	8	124	182	72	36	25	99	83	122
20	45	197	29	31	93	166	8	134	182	72	36	25	99	83	122
25	53	205	33	39	93	166	8	156	182	86	43	25	99	83	122
32	65	210	38	44	93	166	8	172	182	96	48	25	99	83	122
40	78	216	44	50	93	166	9	202	182	116	58	45	99	83	122
50	92	229	50	63	93	166	9	238	182	137	69	45	99	83	122
63	116	242	61	76	93	166	9	290	182	179	90	45	99	83	122

d [mm]	L8 [mm]	M
16	33	6
20	33	6
25	33	6
32	33	6
40	33	8
50	33	8
63	33	8



**3-Way ball valve type 175 PVC-U
Horizontal/L-port 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°<

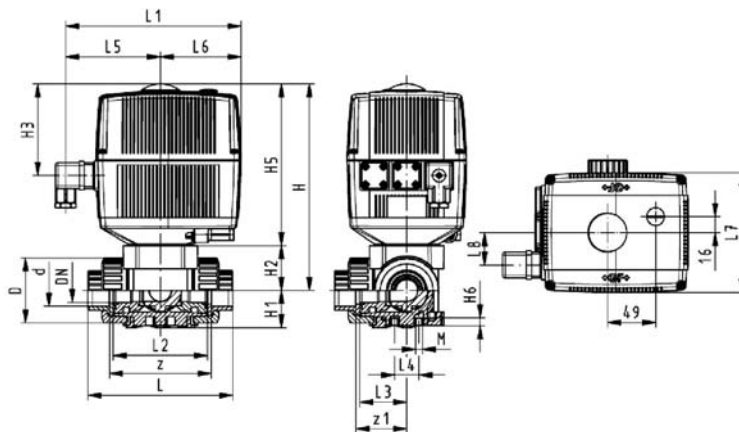
Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	50	199 175 202	199 175 212	2.121
20	15	10	75	199 175 203	199 175 213	2.121
25	20	10	150	199 175 204	199 175 214	2.303
32	25	10	280	199 175 205	199 175 215	2.474
40	32	10	480	199 175 206	199 175 216	2.815
50	40	10	620	199 175 207	199 175 217	3.359
63	50	10	1230	199 175 208	199 175 218	4.728

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	45	197	29	31	93	166	8	108	182	72	36	25	99	83	122
20	45	197	29	31	93	166	8	111	182	72	36	25	99	83	122
25	53	205	33	39	93	166	8	131	182	86	43	25	99	83	122
32	65	210	38	44	93	166	8	148	182	96	48	25	99	83	122
40	78	216	44	50	93	166	9	176	182	116	58	45	99	83	122
50	92	229	50	63	93	166	9	206	182	137	69	45	99	83	122
63	116	242	61	76	93	166	9	262	182	179	90	45	99	83	122

d [mm]	L8 [mm]	M	z [mm]	z1 [mm]
16	33	6	80	40
20	33	6	80	40
25	33	6	94	47
32	33	6	104	52
40	33	8	126	63
50	33	8	144	72
63	33	8	186	93



3-Way ball valve type 175 PVC-U Horizontal/L-port 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°<

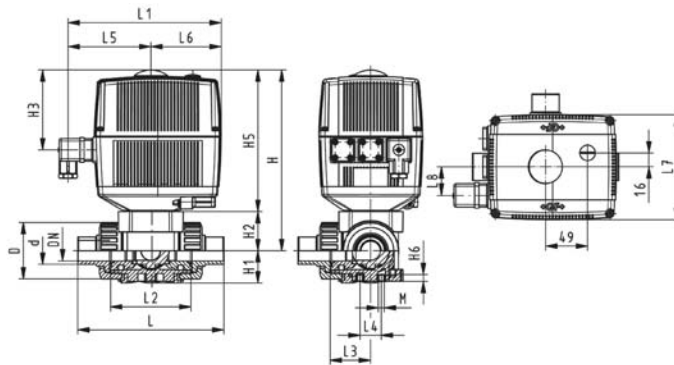
Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	EPDM Code	FPM Code
16	10	10	199 175 182	199 175 192
20	15	10	199 175 183	199 175 193
25	20	10	199 175 184	199 175 194
32	25	10	199 175 185	199 175 195
40	32	10	199 175 186	199 175 196
50	40	10	199 175 187	199 175 197
63	50	10	199 175 188	199 175 198

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	45	197	29	31	93	166	8	124	182	72	36	25	99	83	122
20	45	197	29	31	93	166	8	134	182	72	36	25	99	83	122
25	53	205	33	39	93	166	8	156	182	86	43	25	99	83	122
32	65	210	38	44	93	166	8	172	182	96	48	25	99	83	122
40	78	216	44	50	93	166	9	202	182	116	58	45	99	83	122
50	92	229	50	63	93	166	9	238	182	137	69	45	99	83	122
63	116	242	61	76	93	166	9	290	182	179	90	45	99	83	122

d [mm]	L8 [mm]	M
16	33	6
20	33	6
25	33	6
32	33	6
40	33	8
50	33	8
63	33	8



3-Way ball valve type 175 PVC-U Horizontal/T-port 24V With manual emergency override With solvent cement sockets metric

Model:

- Built on with electric actuator EA21
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Voltage 24 V AC/DC
- Control range 90°<
- Control time 5 s/90°<

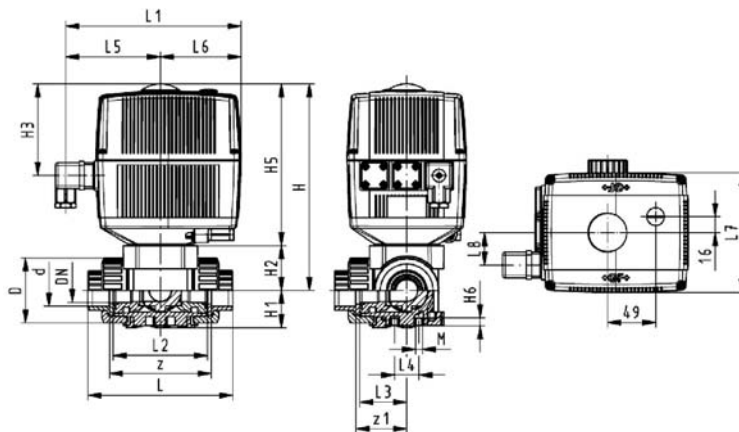
Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	50	199 175 242	199 175 252	2.121
20	15	10	75	199 175 243	199 175 253	2.121
25	20	10	150	199 175 244	199 175 254	2.303
32	25	10	280	199 175 245	199 175 255	2.474
40	32	10	480	199 175 246	199 175 256	2.815
50	40	10	620	199 175 247	199 175 257	3.359
63	50	10	1230	199 175 248	199 175 258	4.728

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	45	197	29	31	93	166	8	108	182	72	36	25	99	83	122
20	45	197	29	31	93	166	8	111	182	72	36	25	99	83	122
25	53	205	33	39	93	166	8	131	182	86	43	25	99	83	122
32	65	210	38	44	93	166	8	148	182	96	48	25	99	83	122
40	78	216	44	50	93	166	9	176	182	116	58	45	99	83	122
50	92	229	50	63	93	166	9	206	182	137	69	45	99	83	122
63	116	242	61	76	93	166	9	262	182	179	90	45	99	83	122

d [mm]	L8 [mm]	M	z [mm]	z1 [mm]
16	33	6	80	40
20	33	6	80	40
25	33	6	94	47
32	33	6	104	52
40	33	8	126	63
50	33	8	144	72
63	33	8	186	93



3-Way ball valve type 175 PVC-U Horizontal/T-port 24V With manual emergency override With solvent cement spigots metric

Model:

- Built on with electric actuator EA21
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Voltage 24 V AC/DC
- Control range 90°<
- Control time 5 s/90°<

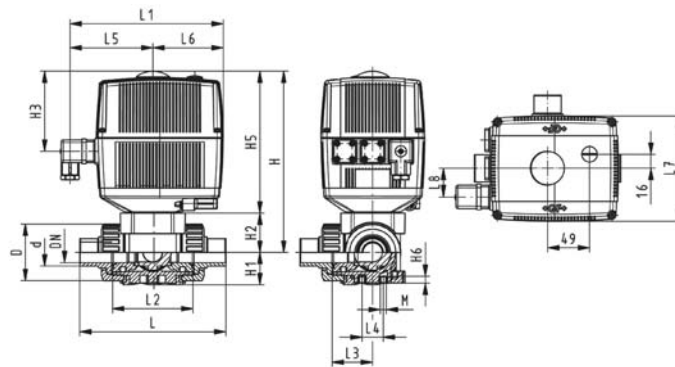
Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	50	199 175 222	199 175 232	2.121
20	15	10	75	199 175 223	199 175 233	2.121
25	20	10	150	199 175 224	199 175 234	2.303
32	25	10	280	199 175 225	199 175 235	2.474
40	32	10	480	199 175 226	199 175 236	2.815
50	40	10	620	199 175 227	199 175 237	3.359
63	50	10	1230	199 175 228	199 175 238	4.728

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	45	197	29	31	93	166	8	124	182	72	36	25	99	83	122
20	45	197	29	31	93	166	8	134	182	72	36	25	99	83	122
25	53	205	33	39	93	166	8	156	182	86	43	25	99	83	122
32	65	210	38	44	93	166	8	172	182	96	48	25	99	83	122
40	78	216	44	50	93	166	9	202	182	116	58	45	99	83	122
50	92	229	50	63	93	166	9	238	182	137	69	45	99	83	122
63	116	242	61	76	93	166	9	290	182	179	90	45	99	83	122

d [mm]	L8 [mm]	M
16	33	6
20	33	6
25	33	6
32	33	6
40	33	8
50	33	8
63	33	8



Ball valves pneumatic

Ball valve type 230 PVC-U FC (Fail safe to close) With manual override With solvent cement sockets metric



Model:

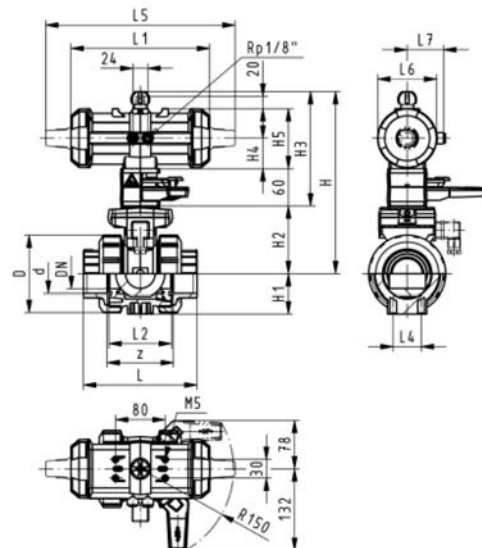
- Built on with pneumatic actuator PA11/21
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time $90^\circ <$ 1-2 s

Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ($\Delta p=1$ 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	230	27	62	168	40	97	92	194	56	25	261	76	48	64
20	50	230	27	62	168	40	97	95	194	56	25	261	76	48	64
25	58	239	30	71	168	40	97	110	194	65	25	261	76	48	72
32	68	239	36	71	168	40	97	123	194	71	25	261	76	48	79
40	84	271	44	84	187	51	115	146	224	85	45	305	95	59	94
50	97	271	51	84	187	51	115	157	224	89	45	305	95	59	95
63	124	293	64	106	187	51	115	183	224	101	45	305	95	59	107





Ball valve type 230 PVC-U FC (Fail safe to close) With manual override With solvent cement spigots metric

Model:

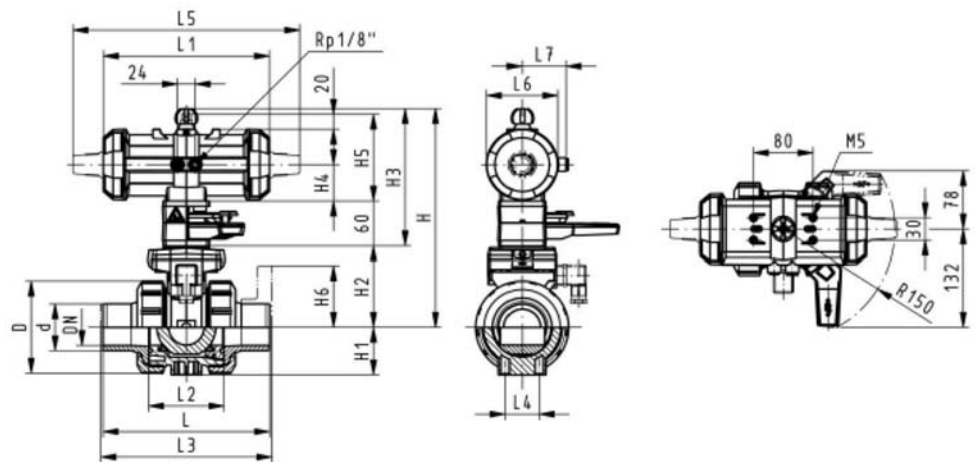
- Built on with pneumatic actuator PA11/21
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time $90^\circ <$ 1-2 s

Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ($\Delta p=1$ 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	230	27	62	168	40	97	114	194	56	130	25	261	76	48
20	50	230	27	62	168	40	97	124	194	56	130	25	261	76	48
25	58	239	30	71	168	40	97	144	194	65	150	25	261	76	48
32	68	239	36	71	168	40	97	154	194	71	160	25	261	76	48
40	84	271	44	84	187	51	115	174	224	85	180	45	305	95	59
50	97	271	51	84	187	51	115	194	224	89	200	45	305	95	59
63	124	293	64	106	187	51	115	224	224	101	230	45	305	95	59





Ball valve type 230 PVC-U FC (Fail safe to close) With manual override With threaded sockets Rp

Model:

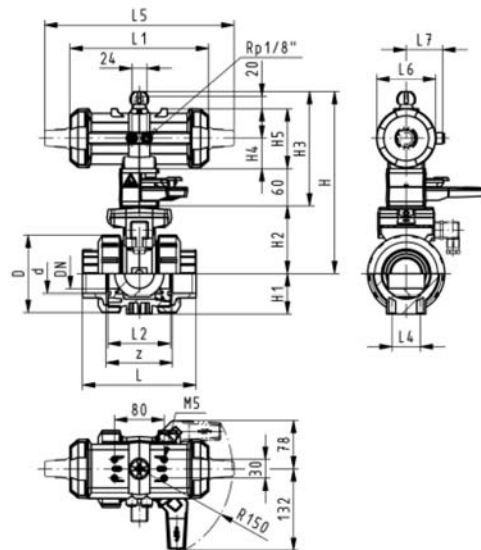
- Built on with pneumatic actuator PA11/21
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time $90^\circ <$ 1-2 s

Option:

- Individual configuration of the valve (see form)

Rp [inch]	DN [mm]	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
$\frac{3}{8}$	10	10	70	199 230 362	199 230 372	1.500
$\frac{1}{2}$	15	10	185	199 230 363	199 230 373	1.500
$\frac{3}{4}$	20	10	350	199 230 364	199 230 374	1.600
1	25	10	700	199 230 365	199 230 375	1.700
1 $\frac{1}{4}$	32	10	1000	199 230 366	199 230 376	2.800
1 $\frac{1}{2}$	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]
$\frac{3}{8}$	50	230	27	62	168	40	97	92	194	56	25	261	76	48	64
$\frac{1}{2}$	50	230	27	62	168	40	97	95	194	56	25	261	76	48	64
$\frac{3}{4}$	58	239	30	71	168	40	97	110	194	65	25	261	76	48	72
1	68	239	36	71	168	40	97	123	194	71	25	261	76	48	79
1 $\frac{1}{4}$	84	271	44	84	187	51	115	146	224	85	45	305	95	59	94
1 $\frac{1}{2}$	97	271	51	84	187	51	115	157	224	89	45	305	95	59	95
2	124	293	64	106	187	51	115	183	224	101	45	305	95	59	107





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 PA11/21
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time $90^\circ <$ 1-2 s
- Overall length according to EN 558-1
- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10

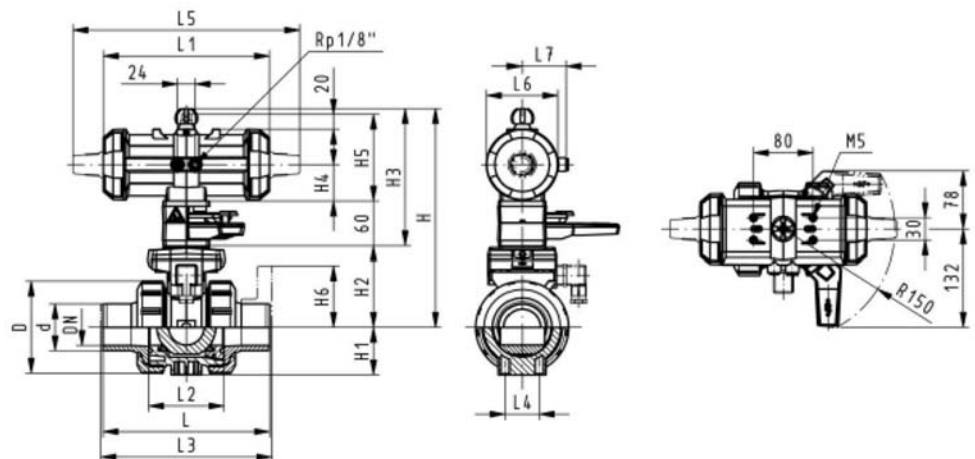
Option:

- Individual configuration of the valve (see form)

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	199 230 243	199 230 253	1.700
25	20	3/4	10	350	199 230 244	199 230 254	1.900
32	25	1	10	700	199 230 245	199 230 255	2.100
40	32	1 1/4	10	1000	199 230 246	199 230 256	3.400
50	40	1 1/2	10	1600	199 230 247	199 230 257	3.800
63	50	2	10	3100	199 230 248	199 230 258	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	230	27	62	168	40	97	48	124	194	56	130	25	261	76
25	58	239	30	71	168	40	97	53	144	194	65	150	25	261	76
32	68	239	36	71	168	40	97	58	154	194	71	160	25	261	76
40	84	271	44	84	187	51	115	70	174	224	85	180	45	305	95
50	97	271	51	84	187	51	115	75	194	224	89	200	45	305	95
63	124	293	64	106	187	51	115	83	224	224	101	230	45	305	95

d [mm]	L7 [mm]
20	48
25	48
32	48
40	59
50	59
63	59





Ball valve type 230 PVC-U FO (Fail safe to open) With manual override With solvent cement sockets metric

Model:

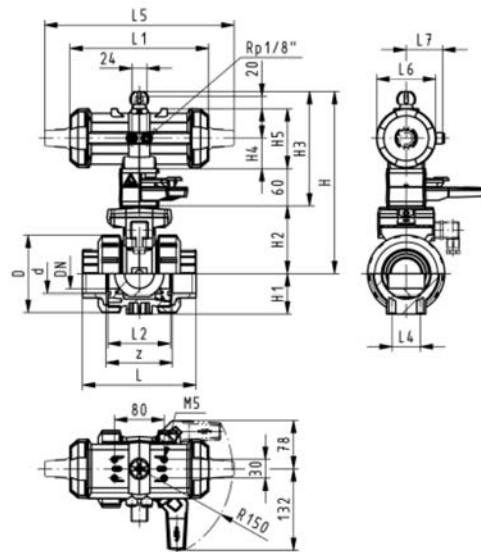
- Built on with pneumatic actuator PA11/21
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time $90^\circ <$ 1-2 s

Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ($\Delta p=1$ 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	230	27	62	168	40	97	92	194	56	25	261	76	48	64
20	50	230	27	62	168	40	97	95	194	56	25	261	76	48	64
25	58	239	30	71	168	40	97	110	194	65	25	261	76	48	72
32	68	239	36	71	168	40	97	123	194	71	25	261	76	48	79
40	84	271	44	84	187	51	115	146	224	85	45	305	95	59	94
50	97	271	51	84	187	51	115	157	224	89	45	305	95	59	95
63	124	293	64	106	187	51	115	183	224	101	45	305	95	59	107





Ball valve type 230 PVC-U FO (Fail safe to open) With manual override With solvent cement spigots metric

Model:

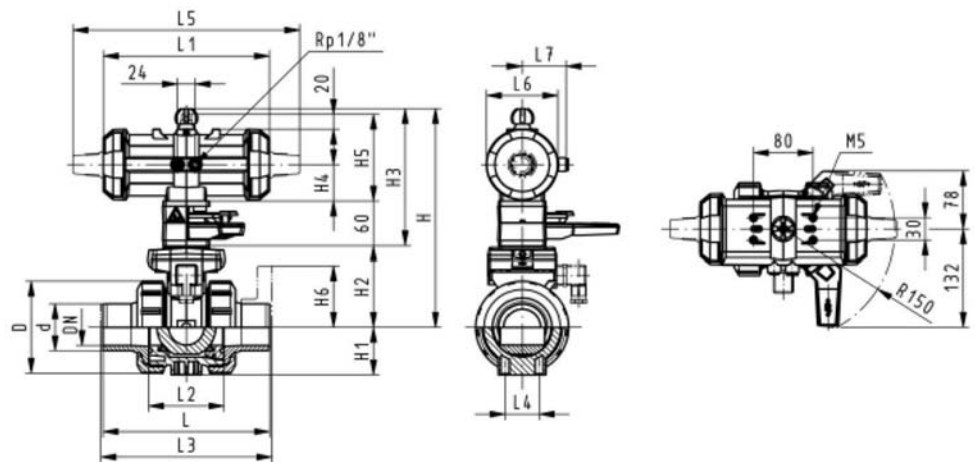
- Built on with pneumatic actuator PA11/21
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time $90^\circ <$ 1-2 s

Option:

- Individual configuration of the valve (see form)

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	230	27	62	168	40	97	114	194	56	130	25	261	76	48
20	50	230	27	62	168	40	97	124	194	56	130	25	261	76	48
25	58	239	30	71	168	40	97	144	194	65	150	25	261	76	48
32	68	239	36	71	168	40	97	154	194	71	160	25	261	76	48
40	84	271	44	84	187	51	115	174	224	85	180	45	305	95	59
50	97	271	51	84	187	51	115	194	224	89	200	45	305	95	59
63	124	293	64	106	187	51	115	224	224	101	230	45	305	95	59





Ball valve type 230 PVC-U FO (Fail safe to open) With manual override With threaded sockets Rp

Model:

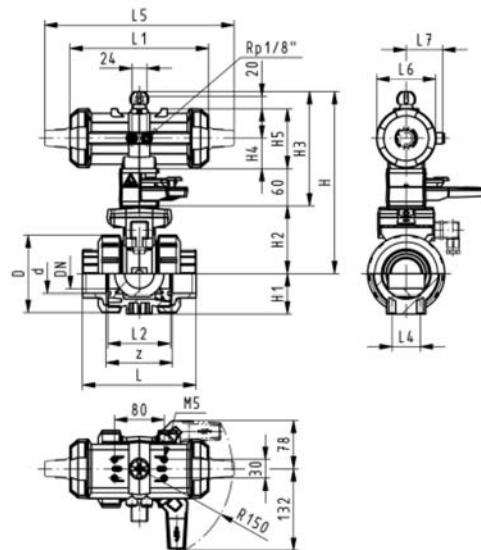
- Built on with pneumatic actuator PA11/21
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time $90^\circ <$ 1-2 s

Option:

- Individual configuration of the valve (see form)

Rp [inch]	DN [mm]	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
$\frac{3}{8}$	10	10	70	199 230 382	199 230 392	1.500
$\frac{1}{2}$	15	10	185	199 230 383	199 230 393	1.500
$\frac{3}{4}$	20	10	350	199 230 384	199 230 394	1.600
1	25	10	700	199 230 385	199 230 395	1.700
1 $\frac{1}{4}$	32	10	1000	199 230 386	199 230 396	2.800
1 $\frac{1}{2}$	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]
$\frac{3}{8}$	50	230	27	62	168	40	97	92	194	56	25	261	76	48	64
$\frac{1}{2}$	50	230	27	62	168	40	97	95	194	56	25	261	76	48	64
$\frac{3}{4}$	58	239	30	71	168	40	97	110	194	65	25	261	76	48	72
1	68	239	36	71	168	40	97	123	194	71	25	261	76	48	79
1 $\frac{1}{4}$	84	271	44	84	187	51	115	146	224	85	45	305	95	59	94
1 $\frac{1}{2}$	97	271	51	84	187	51	115	157	224	89	45	305	95	59	95
2	124	293	64	106	187	51	115	183	224	101	45	305	95	59	107





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 PA11/21
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time $90^\circ <$ 1-2 s
- Overall length according to EN 558-1
- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10

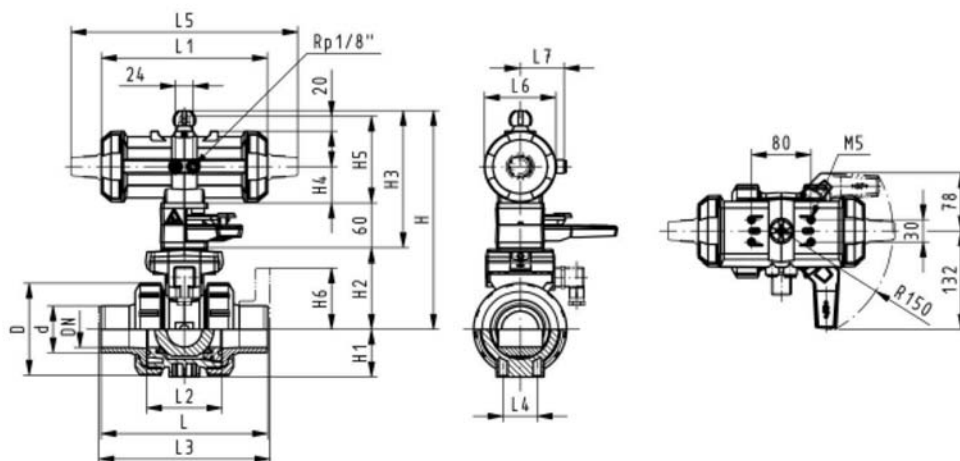
Option:

- Individual configuration of the valve (see form)

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	199 230 263	199 230 273	1.700
25	20	3/4	10	350	199 230 264	199 230 274	1.900
32	25	1	10	700	199 230 265	199 230 275	2.100
40	32	1 1/4	10	1000	199 230 266	199 230 276	3.400
50	40	1 1/2	10	1600	199 230 267	199 230 277	3.800
63	50	2	10	3100	199 230 268	199 230 278	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	230	27	62	168	40	97	48	124	194	56	130	25	261	76
25	58	239	30	71	168	40	97	53	144	194	65	150	25	261	76
32	68	239	36	71	168	40	97	58	154	194	71	160	25	261	76
40	84	271	44	84	187	51	115	70	174	224	85	180	45	305	95
50	97	271	51	84	187	51	115	75	194	224	89	200	45	305	95
63	124	293	64	106	187	51	115	83	224	224	101	230	45	305	95

d [mm]	L7 [mm]
20	48
25	48
32	48
40	59
50	59
63	59





Ball valve type 230 PVC-U DA (Double acting) With manual override With solvent cement sockets metric

Model:

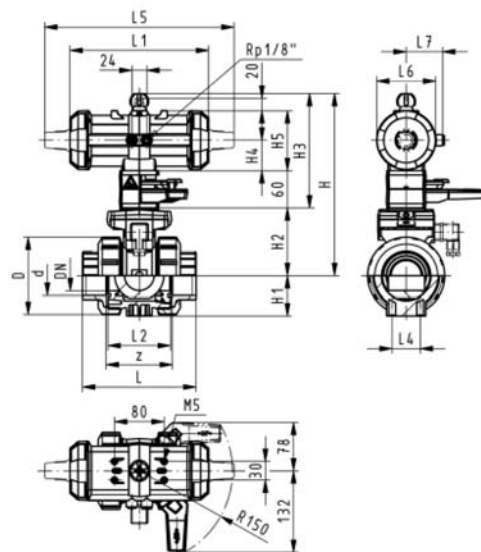
- Built on with pneumatic actuator PA11/21
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time $90^\circ <$ 1-2 s

Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ($\Delta p=1$ 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	230	27	62	168	40	97	92	194	56	25	261	76	48	64
20	50	230	27	62	168	40	97	95	194	56	25	261	76	48	64
25	58	239	30	71	168	40	97	110	194	65	25	261	76	48	72
32	68	239	36	71	168	40	97	123	194	71	25	261	76	48	79
40	84	271	44	84	187	51	115	146	224	85	45	305	95	59	94
50	97	271	51	84	187	51	115	157	224	89	45	305	95	59	95
63	124	293	64	106	187	51	115	183	224	101	45	305	95	59	107





Ball valve type 230 PVC-U DA (Double acting) With manual override With solvent cement spigots metric

Model:

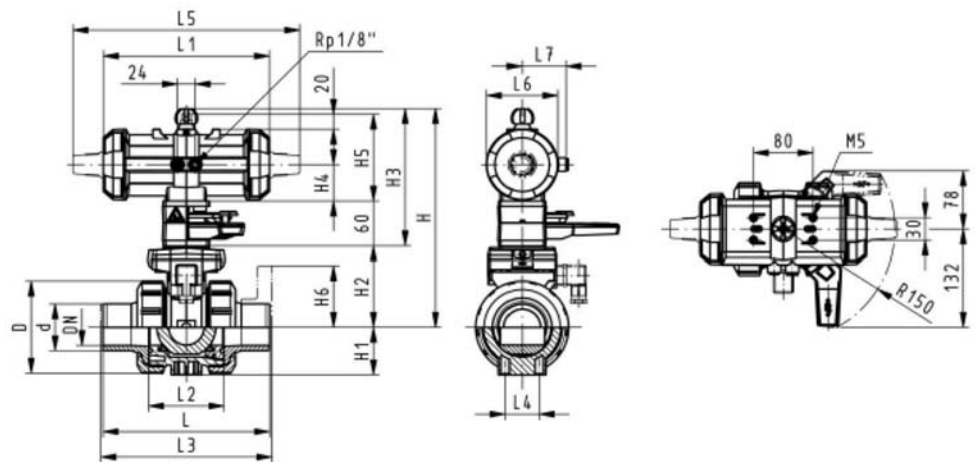
- Built on with pneumatic actuator PA11/21
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time $90^\circ <$ 1-2 s

Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	70	199 230 102	199 230 112	1.459
20	15	10	185	199 230 103	199 230 113	1.459
25	20	10	350	199 230 104	199 230 114	1.576
32	25	10	700	199 230 105	199 230 115	1.700
40	32	10	1000	199 230 106	199 230 116	2.751
50	40	10	1600	199 230 107	199 230 117	3.073
63	50	10	3100	199 230 108	199 230 118	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	230	27	62	168	40	97	114	194	56	130	25	261	76	48
20	50	230	27	62	168	40	97	124	194	56	130	25	261	76	48
25	58	239	30	71	168	40	97	144	194	65	150	25	261	76	48
32	68	239	36	71	168	40	97	154	194	71	160	25	261	76	48
40	84	271	44	84	187	51	115	174	224	85	180	45	305	95	59
50	97	271	51	84	187	51	115	194	224	89	200	45	305	95	59
63	124	293	64	106	187	51	115	224	224	101	230	45	305	95	59





Ball valve type 230 PVC-U DA (Double acting) With manual override With threaded sockets Rp

Model:

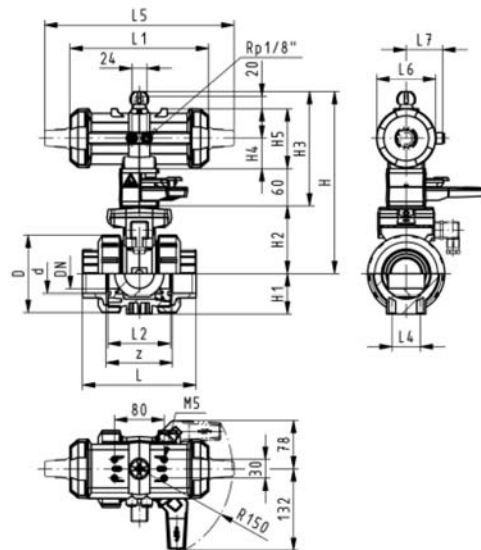
- Built on with pneumatic actuator PA11/21
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time $90^\circ <$ 1-2 s

Option:

- Individual configuration of the valve (see form)

Rp [inch]	DN [mm]	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
$\frac{3}{8}$	10	10	70	199 230 642	199 230 652	1.500
$\frac{1}{2}$	15	10	185	199 230 643	199 230 653	1.500
$\frac{3}{4}$	20	10	350	199 230 644	199 230 654	1.600
1	25	10	700	199 230 645	199 230 655	1.700
1 $\frac{1}{4}$	32	10	1000	199 230 646	199 230 656	2.800
1 $\frac{1}{2}$	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]
$\frac{3}{8}$	50	230	27	62	168	40	97	92	194	56	25	261	76	48	64
$\frac{1}{2}$	50	230	27	62	168	40	97	95	194	56	25	261	76	48	64
$\frac{3}{4}$	58	239	30	71	168	40	97	110	194	65	25	261	76	48	72
1	68	239	36	71	168	40	97	123	194	71	25	261	76	48	79
1 $\frac{1}{4}$	84	271	44	84	187	51	115	146	224	85	45	305	95	59	94
1 $\frac{1}{2}$	97	271	51	84	187	51	115	157	224	89	45	305	95	59	95
2	124	293	64	106	187	51	115	183	224	101	45	305	95	59	107





Ball valve type 230 PVC-U DA (Double acting) With manual override With fixed flanges serrated metric

Model:

- Built on with pneumatic actuator PA11/21
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time $90^\circ <$ 1-2 s
- Overall length according to EN 558-1
- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10

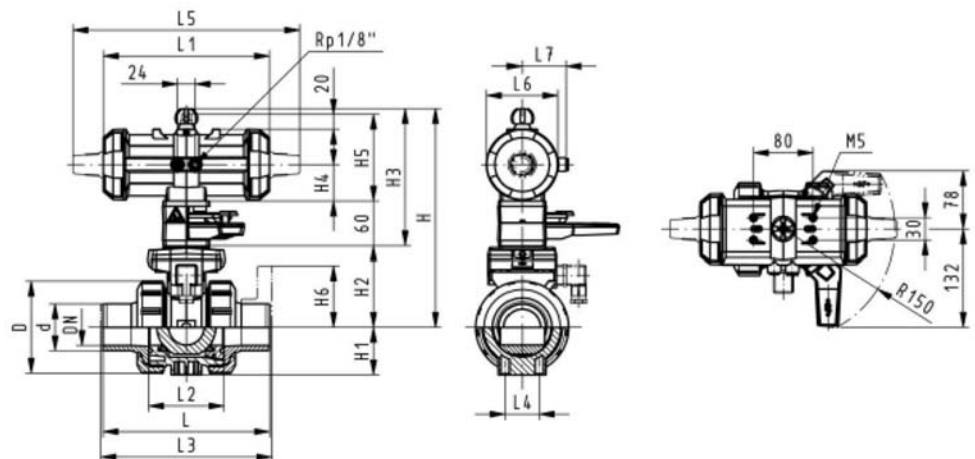
Option:

- Individual configuration of the valve (see form)

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	199 230 283	199 230 293	1.700
25	20	3/4	10	350	199 230 284	199 230 294	1.900
32	25	1	10	700	199 230 285	199 230 295	2.100
40	32	1 1/4	10	1000	199 230 286	199 230 296	3.400
50	40	1 1/2	10	1600	199 230 287	199 230 297	3.800
63	50	2	10	3100	199 230 288	199 230 298	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	230	27	62	168	40	97	48	124	194	56	130	25	261	76
25	58	239	30	71	168	40	97	53	144	194	65	150	25	261	76
32	68	239	36	71	168	40	97	58	154	194	71	160	25	261	76
40	84	271	44	84	187	51	115	70	174	224	85	180	45	305	95
50	97	271	51	84	187	51	115	75	194	224	89	200	45	305	95
63	124	293	64	106	187	51	115	83	224	224	101	230	45	305	95

d [mm]	L7 [mm]
20	48
25	48
32	48
40	59
50	59
63	59





Ball valve type 230 PVC-U FC (Fail safe to close) Without manual override With solvent cement sockets metric

Model:

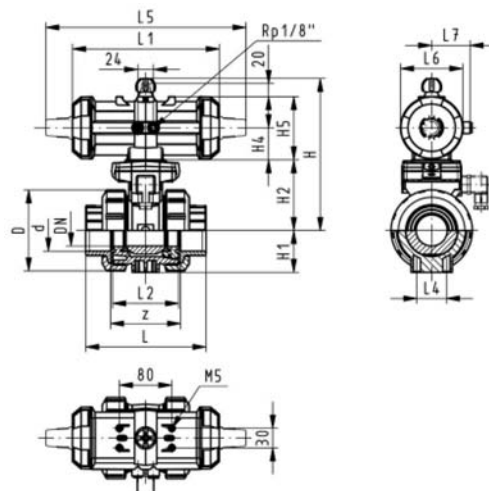
- Built on with pneumatic actuator PA11/21
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time $90^\circ <$ 1-2 s

Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ($\Delta p=1$ 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

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	z [mm]
16	50	167	27	62	40	97	92	194	56	25	261	76	48	64
20	50	167	27	62	40	97	95	194	56	25	261	76	48	64
25	58	176	30	71	40	97	110	194	65	25	261	76	48	72
32	68	176	36	71	40	97	123	194	71	25	261	76	48	79
40	84	210	44	84	51	115	146	224	85	45	305	95	59	94
50	97	210	51	84	51	115	157	224	89	45	305	95	59	95
63	124	232	64	106	51	115	183	224	101	45	305	95	59	107





Ball valve type 230 PVC-U FC (Fail safe to close) Without manual override With solvent cement spigots metric

Model:

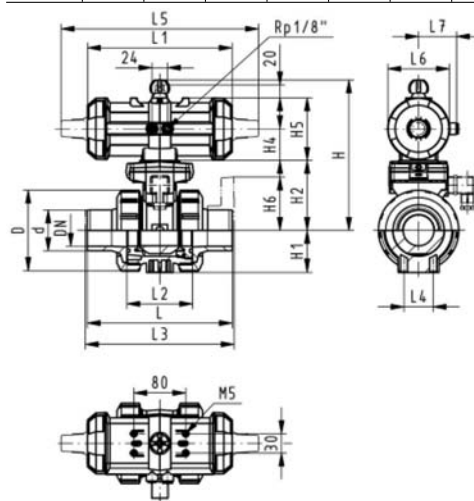
- Built on with pneumatic actuator PA11/21
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time $90^\circ <$ 1-2 s

Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ($\Delta p=1$ 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

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
16	50	167	27	62	40	97	114	194	56	0	25	261	76	48
20	50	167	27	62	40	97	124	194	56	130	25	261	76	48
25	58	176	30	71	40	97	144	194	65	150	25	261	76	48
32	68	176	36	71	40	97	154	194	71	160	25	261	76	48
40	84	210	44	84	51	115	174	224	85	180	45	305	95	59
50	97	210	51	84	51	115	194	224	89	200	45	305	95	59
63	124	232	64	106	51	115	224	224	101	230	45	305	95	59





Ball valve type 230 PVC-U FC (Fail safe to close) Without manual override With threaded sockets Rp

Model:

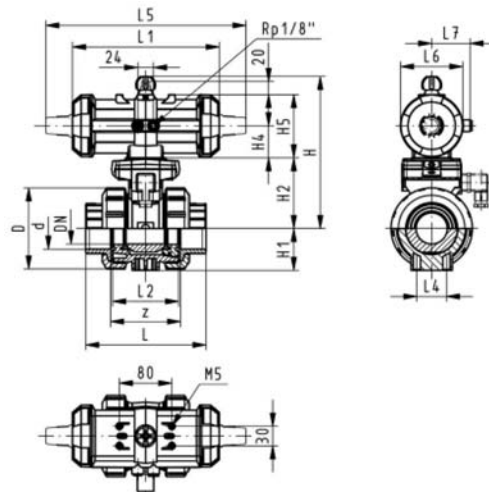
- Built on with pneumatic actuator PA11/21
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time $90^\circ <$ 1-2 s

Option:

- Individual configuration of the valve (see form)

Rp [inch]	DN [mm]	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
$\frac{3}{8}$	10	10	70	199 230 662	199 230 672	1.200
$\frac{1}{2}$	15	10	185	199 230 663	199 230 673	1.200
$\frac{3}{4}$	20	10	350	199 230 664	199 230 674	1.300
1	25	10	700	199 230 665	199 230 675	1.400
1 $\frac{1}{4}$	32	10	1000	199 230 666	199 230 676	2.500
1 $\frac{1}{2}$	40	10	1600	199 230 667	199 230 677	2.800
2	50	10	3100	199 230 668	199 230 678	3.700

Rp [inch]	H1 [mm]	H2 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	z [mm]
$\frac{3}{8}$	27	62	40	97	92	194	56	25	261	76	48	64
$\frac{1}{2}$	27	62	40	97	95	194	56	25	261	76	48	64
$\frac{3}{4}$	30	71	40	97	110	194	65	25	261	76	48	72
1	36	71	40	97	123	194	71	25	261	76	48	79
1 $\frac{1}{4}$	44	84	51	115	146	224	85	45	305	95	59	94
1 $\frac{1}{2}$	51	84	51	115	157	224	89	45	305	95	59	95
2	64	106	51	115	183	224	101	45	305	95	59	107





Ball valve type 230 PVC-U FC (Fail safe to close) Without manual override With fixed flanges serrated metric

Model:

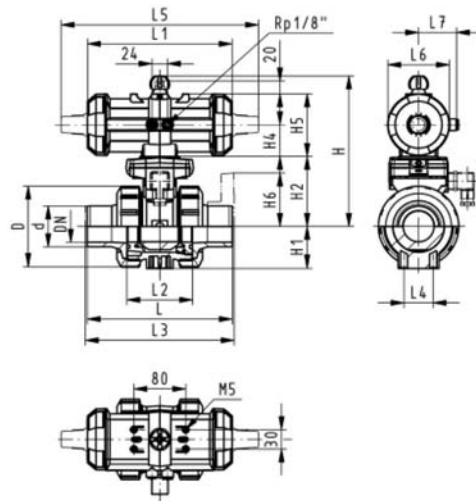
- Built on with pneumatic actuator PA11/21
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time $90^\circ <$ 1-2 s
- Overall length according to EN 558-1
- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10

Option:

- Individual configuration of the valve (see form)

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	199 230 303	199 230 313	1.700
25	20	3/4	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 1/4	10	1000	199 230 306	199 230 316	3.400
50	40	1 1/2	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	167	27	62	40	97	48	124	194	56	130	25	261	76	48
25	58	176	30	71	40	97	53	144	194	65	150	25	261	76	48
32	68	176	36	71	40	97	58	154	194	71	160	25	261	76	48
40	84	210	44	84	51	115	70	174	224	85	180	45	305	95	59
50	97	210	51	84	51	115	75	194	224	89	200	45	305	95	59
63	124	232	64	106	51	115	83	224	224	101	230	45	305	95	59





Ball valve type 230 PVC-U FO (Fail safe to open) Without manual override With solvent cement sockets metric

Model:

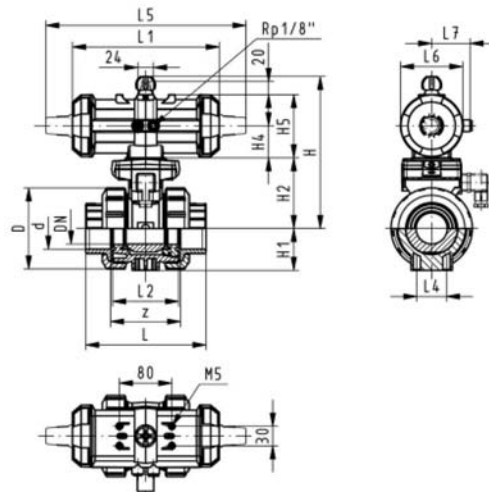
- Built on with pneumatic actuator PA11/21
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time $90^\circ <$ 1-2 s

Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	70	199 230 162	199 230 172	1.159
20	15	10	185	199 230 163	199 230 173	1.159
25	20	10	350	199 230 164	199 230 174	1.276
32	25	10	700	199 230 165	199 230 175	1.400
40	32	10	1000	199 230 166	199 230 176	2.451
50	40	10	1600	199 230 167	199 230 177	2.773
63	50	10	3100	199 230 168	199 230 178	3.631

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	z [mm]
16	50	167	27	62	40	97	92	194	56	25	261	76	48	64
20	50	167	27	62	40	97	95	194	56	25	261	76	48	64
25	58	176	30	71	40	97	110	194	65	25	261	76	48	72
32	68	176	36	71	40	97	123	194	71	25	261	76	48	79
40	84	210	44	84	51	115	146	224	85	45	305	95	59	94
50	97	210	51	84	51	115	157	224	89	45	305	95	59	95
63	124	232	64	106	51	115	183	224	101	45	305	95	59	107





Ball valve type 230 PVC-U FO (Fail safe to open) Without manual override With solvent cement spigots metric

Model:

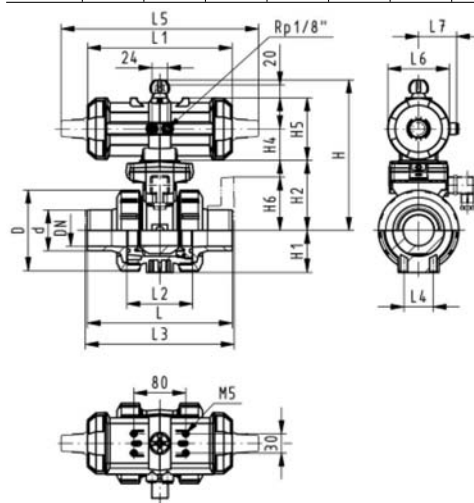
- Built on with pneumatic actuator PA11/21
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time $90^\circ <$ 1-2 s

Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ($\Delta p=1$ 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	

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	
16	50	167	27	62	40	97	114	194	56	0	25	261	76	48	
20	50	167	27	62	40	97	124	194	56	130	25	261	76	48	
25	58	176	30	71	40	97	144	194	65	150	25	261	76	48	
32	68	176	36	71	40	97	154	194	71	160	25	261	76	48	
40	84	210	44	84	51	115	174	224	85	180	45	305	95	59	
50	97	210	51	84	51	115	194	224	89	200	45	305	95	59	
63	124	232	64	106	51	115	224	224	101	230	45	305	95	59	





Ball valve type 230 PVC-U FO (Fail safe to open) Without manual override With threaded sockets Rp

Model:

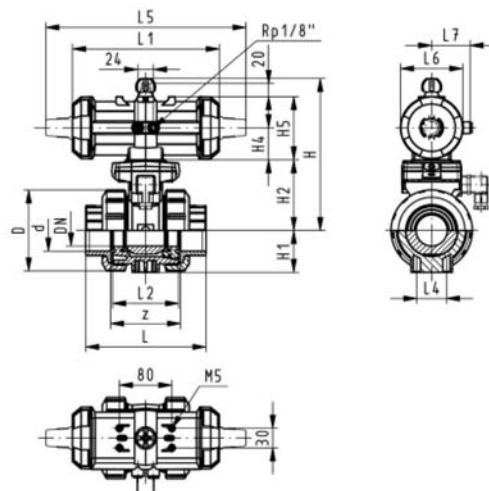
- Built on with pneumatic actuator PA11/21
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time $90^\circ <$ 1-2 s

Option:

- Individual configuration of the valve (see form)

Rp [inch]	DN [mm]	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
$\frac{3}{8}$	10	10	70	199 230 682	199 230 692	1.200
$\frac{1}{2}$	15	10	185	199 230 683	199 230 693	1.200
$\frac{3}{4}$	20	10	350	199 230 684	199 230 694	1.300
1	25	10	700	199 230 685	199 230 695	1.400
1 $\frac{1}{4}$	32	10	1000	199 230 686	199 230 696	2.500
1 $\frac{1}{2}$	40	10	1600	199 230 687	199 230 697	2.800
2	50	10	3100	199 230 688	199 230 698	3.700

Rp [inch]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	z [mm]
$\frac{3}{8}$	50	167	27	62	40	97	92	194	56	25	261	76	48	64
$\frac{1}{2}$	50	167	27	62	40	97	95	194	56	25	261	76	48	64
$\frac{3}{4}$	58	176	30	71	40	97	110	194	65	25	261	76	48	72
1	68	176	36	71	40	97	123	194	71	25	261	76	48	79
1 $\frac{1}{4}$	84	210	44	84	51	115	146	224	85	45	305	95	59	94
1 $\frac{1}{2}$	97	210	51	84	51	115	157	224	89	45	305	95	59	95
2	124	232	64	106	51	115	183	224	101	45	305	95	59	107





Ball valve type 230 PVC-U FO (Fail safe to open) Without manual override With fixed flanges serrated metric

Model:

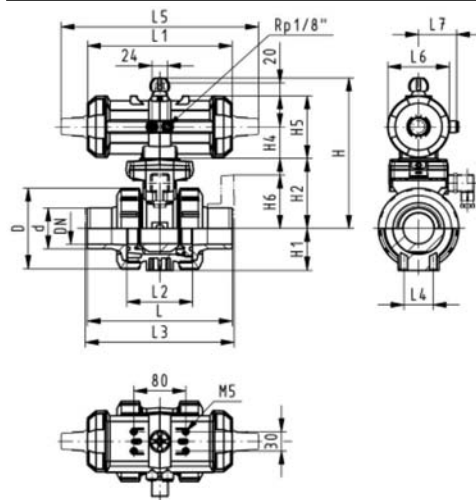
- Built on with pneumatic actuator PA11/21
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time $90^\circ <$ 1-2 s
- Overall length according to EN 558-1
- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10

Option:

- Individual configuration of the valve (see form)

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	167	27	62	40	97	48	124	194	56	130	25	261	76	48
25	58	176	30	71	40	97	53	144	194	65	150	25	261	76	48
32	68	176	36	71	40	97	58	154	194	71	160	25	261	76	48
40	84	210	44	84	51	115	70	174	224	85	180	45	305	95	59
50	97	210	51	84	51	115	75	194	224	89	200	45	305	95	59
63	124	232	64	106	51	115	83	224	224	101	230	45	305	95	59





Ball valve type 230 PVC-U DA (Double acting) Without manual override With solvent cement sockets metric

Model:

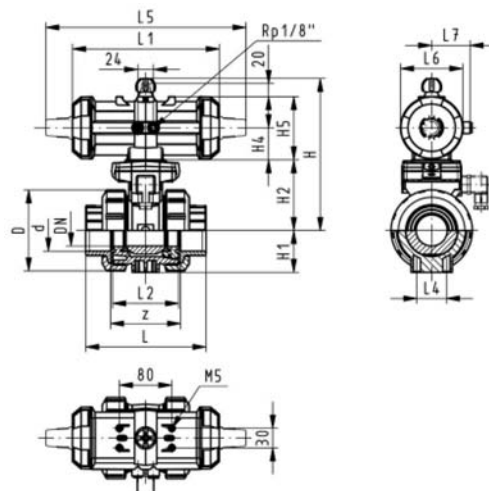
- Built on with pneumatic actuator PA11/21
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time $90^\circ <$ 1-2 s

Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ($\Delta p=1$ 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

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	z [mm]
16	50	167	27	62	40	97	92	194	56	25	261	76	48	64
20	50	167	27	62	40	97	95	194	56	25	261	76	48	64
25	58	176	30	71	40	97	110	194	65	25	261	76	48	72
32	68	176	36	71	40	97	123	194	71	25	261	76	48	79
40	84	210	44	84	51	115	146	224	85	45	305	95	59	94
50	97	210	51	84	51	115	157	224	89	45	305	95	59	95
63	124	232	64	106	51	115	183	224	101	45	305	95	59	107





Ball valve type 230 PVC-U DA (Double acting) Without manual override With solvent cement spigots metric

Model:

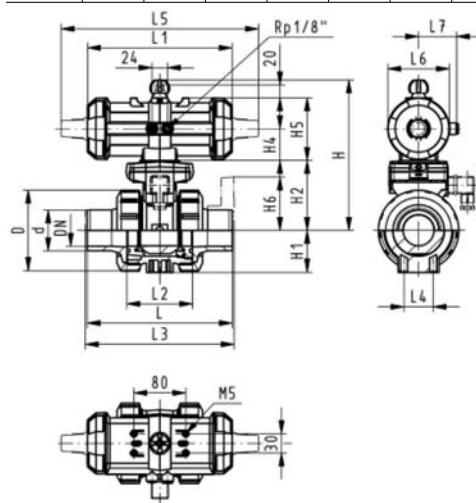
- Built on with pneumatic actuator PA11/21
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time $90^\circ <$ 1-2 s

Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ($\Delta p=1$ 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	

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	
16	50	167	27	62	40	97	114	194	56	0	25	261	76	48	
20	50	167	27	62	40	97	124	194	56	130	25	261	76	48	
25	58	176	30	71	40	97	144	194	65	150	25	261	76	48	
32	68	176	36	71	40	97	154	194	71	160	25	261	76	48	
40	84	210	44	84	51	115	174	224	85	180	45	305	95	59	
50	97	210	51	84	51	115	194	224	89	200	45	305	95	59	
63	124	232	64	106	51	115	224	224	101	230	45	305	95	59	





Ball valve type 230 PVC-U DA (Double acting) Without manual override With threaded sockets Rp

Model:

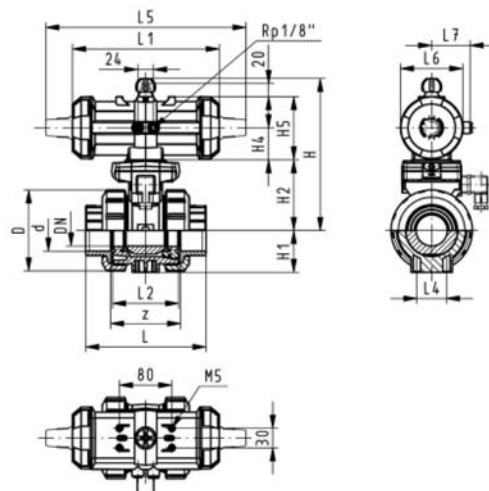
- Built on with pneumatic actuator PA11/21
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time $90^\circ <$ 1-2 s

Option:

- Individual configuration of the valve (see form)

Rp [inch]	DN [mm]	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
$\frac{3}{8}$	10	10	70	199 230 712	199 230 732	1.200
$\frac{1}{2}$	15	10	185	199 230 713	199 230 733	1.200
$\frac{3}{4}$	20	10	350	199 230 714	199 230 734	1.300
1	25	10	700	199 230 715	199 230 735	1.400
1 $\frac{1}{4}$	32	10	1000	199 230 716	199 230 736	2.500
1 $\frac{1}{2}$	40	10	1600	199 230 717	199 230 737	2.800
2	50	10	3100	199 230 718	199 230 738	3.700

Rp [inch]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	z [mm]
$\frac{3}{8}$	50	167	27	62	40	97	92	194	56	25	261	76	48	64
$\frac{1}{2}$	50	167	27	62	40	97	95	194	56	25	261	76	48	64
$\frac{3}{4}$	58	176	30	71	40	97	110	194	65	25	261	76	48	72
1	68	176	36	71	40	97	123	194	71	25	261	76	48	79
1 $\frac{1}{4}$	84	210	44	84	51	115	146	224	85	45	305	95	59	94
1 $\frac{1}{2}$	97	210	51	84	51	115	157	224	89	45	305	95	59	95
2	124	232	64	106	51	115	183	224	101	45	305	95	59	107





Ball valve type 230 PVC-U DA (Double acting) Without manual override With fixed flanges metric

Model:

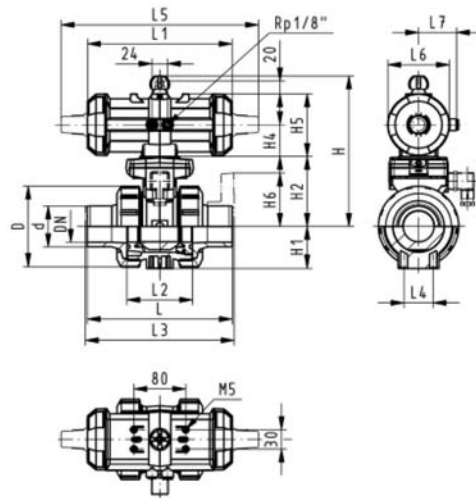
- Built on with pneumatic actuator PA11/21
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time $90^\circ <$ 1-2 s
- Overall length according to EN 558-1
- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10

Option:

- Individual configuration of the valve (see form)

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	199 230 343	199 230 353	1.700
25	20	3/4	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 1/4	10	1000	199 230 346	199 230 356	3.400
50	40	1 1/2	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	167	27	62	40	97	48	124	194	56	130	25	261	76	48
25	58	176	30	71	40	97	53	144	194	65	150	25	261	76	48
32	68	176	36	71	40	97	58	154	194	71	160	25	261	76	48
40	84	210	44	84	51	115	70	174	224	85	180	45	305	95	59
50	97	210	51	84	51	115	75	194	224	89	200	45	305	95	59
63	124	232	64	106	51	115	83	224	224	101	230	45	305	95	59





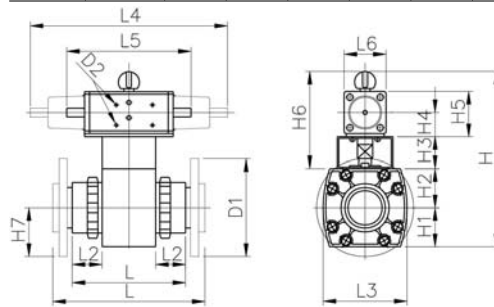
Ball valve type 208 PVC-U FC (Fail safe to close) Without manual override Unions with solvent cement sockets metric

Model:

- Control time 90° \leq 0,5-2 s
- For easy installation and removal

d [mm]	DN [mm]	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
75	65	10	5000	199 208 210	199 208 213	8.500
90	80	10	7000	199 208 211	199 208 214	13.500
110	100	10	11000	199 208 212	199 208 215	18.000

d [mm]	D2_G [inch]	L [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L6 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]
75	3/4	233	72	160	376	80	337	75	73	60	46	86	189
90	3/4	267	82	188	439	100	395	88	88	70	56	106	219
110	3/4	318	95	225	439	100	451	110	113	80	56	106	229





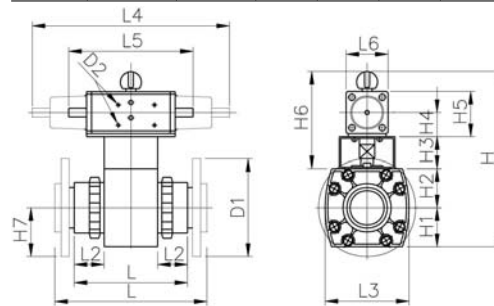
Ball valve type 208 PVC-U FC (Fail safe to close) Without manual override With flanges PVC-U metric

Model:

- Control time 90° < 0,5-2 s
- For easy installation and removal
- Overall length according to EN 558-1

d [mm]	DN [mm]	Inch	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
75	65	2 ½	10	5000	199 208 270	199 208 285	9.300
90	80	3	10	7000	199 208 271	199 208 286	14.400
110	100	4	10	11000	199 208 272	199 208 287	19.200
160	150	6	10	16000	199 208 273	199 208 288	21.600

d [mm]	D1 [mm]	D2_G [inch]	L [mm]	L3 [mm]	L4 [mm]	L6 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]	H7 [mm]
75	185.00	¾	290	160	376	80	337	75	73	60	46	86	189	93
90	200.00	¾	310	188	439	100	395	88	88	70	56	106	219	100
110	220.00	¾	350	225	439	100	451	110	113	80	56	106	229	110
160	285.00	¾	480	225	439	100	451	110	113	80	56	106	229	143





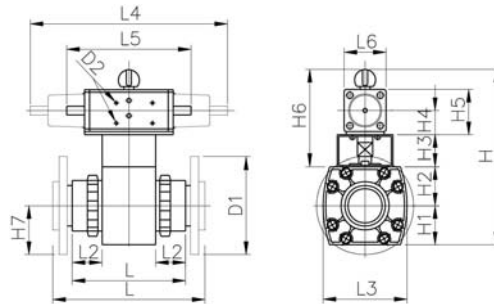
Ball valve type 208 PVC-U FC (Fail safe to close) Without manual override With flanges PP-V metric

Model:

- Control time 90° <) 0,5-2 s
- For easy installation and removal
- Overall length according to EN 558-1

d [mm]	DN [mm]	Inch	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
75	65	2 ½	10	5000	199 208 360	199 208 375	10.100
90	80	3	10	7000	199 208 361	199 208 376	15.300
110	100	4	10	11000	199 208 362	199 208 377	20.000
160	150	6	10	16000	199 208 363	199 208 378	21.700

d [mm]	D1 [mm]	D2_G [inch]	L [mm]	L3 [mm]	L4 [mm]	L6 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]	H7 [mm]
75	185.00	⅜	290	160	376	80	337	75	73	60	46	86	189	93
90	200.00	⅜	310	188	439	100	395	88	88	70	56	106	219	100
110	220.00	⅜	350	225	439	100	451	110	113	80	56	106	229	110
160	285.00	⅜	480	225	439	100	451	110	113	80	56	106	229	143





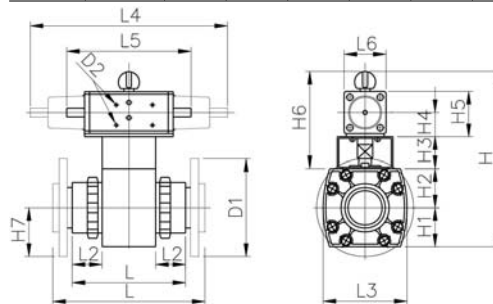
Ball valve type 208 PVC-U FO (Fail safe to open) Without manual override Unions with solvent cement sockets metric

Model:

- Control time 90° <) 0,5-2 s
- For easy installation and removal

d [mm]	DN [mm]	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg	
75	65	10	5000	199 208 220	199 208 223	8.500	
90	80	10	7000	199 208 221	199 208 224	13.500	
110	110	10	11000	199 208 222	199 208 225	18.000	

d [mm]	D2_G [inch]	L [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L6 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]	
75	1/8	233	72	160	376	80	337	75	73	60	46	86	189	
90	1/8	267	82	188	439	100	395	88	88	70	56	106	219	
110	1/8	318	95	225	439	100	451	110	113	80	56	106	229	





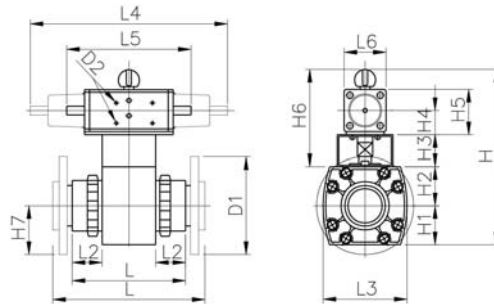
Ball valve type 208 PVC-U FO (Fail safe to open) Without manual override With flanges PVC-U metric

Model:

- Control time 90° <) 0,5-2 s
- For easy installation and removal
- Overall length according to EN 558-1

d [mm]	DN [mm]	Inch	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
75	65	2 ½	10	5000	199 208 300	199 208 315	9.300
90	80	3	10	7000	199 208 301	199 208 316	14.400
110	100	4	10	11000	199 208 302	199 208 317	19.200
160	150	6	10	16000	199 208 303	199 208 318	21.600

d [mm]	D1 [mm]	D2_G [inch]	L [mm]	L3 [mm]	L4 [mm]	L6 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]	H7 [mm]
75	185.00	¾	290	160	376	80	337	75	73	60	46	86	189	93
90	200.00	¾	310	188	439	100	395	88	88	70	56	106	219	100
110	220.00	¾	350	225	439	100	451	110	113	80	56	106	229	110
160	285.00	¾	480	225	439	100	451	110	113	80	56	106	229	143





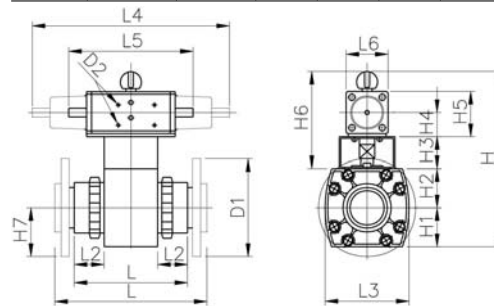
Ball valve type 208 PVC-U FO (Fail safe to open) Without manual override With flanges PP-V metric

Model:

- Control time 90° < 0,5-2 s
- For easy installation and removal
- Overall length according to EN 558-1

d [mm]	DN [mm]	Inch	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
75	65	2 ½	10	5000	199 208 390	199 208 405	10.100
90	80	3	10	7000	199 208 391	199 208 406	15.300
110	100	4	10	11000	199 208 392	199 208 407	20.000
160	150	6	10	16000	199 208 393	199 208 408	21.700

d [mm]	D1 [mm]	D2_G [inch]	L [mm]	L3 [mm]	L4 [mm]	L6 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]	H7 [mm]
75	185.00	¾	290	160	376	80	337	75	73	60	46	86	189	93
90	200.00	¾	310	188	439	100	395	88	88	70	56	106	219	100
110	220.00	¾	350	225	439	100	451	110	113	80	56	106	229	110
160	285.00	¾	480	225	439	100	451	110	113	80	56	106	229	143





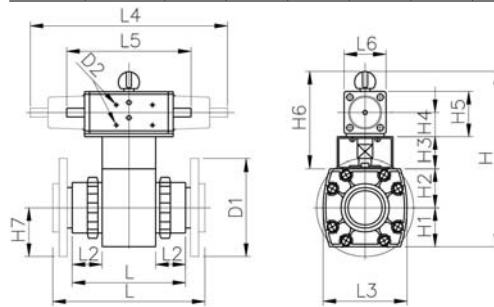
Ball valve type 208 PVC-U DA (Double acting) Without manual override Unions with solvent cement sockets metric

Model:

- Control time 90° <) 0,5-2 s
- For easy installation and removal

d [mm]	DN [mm]	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
75	65	10	5000	199 208 230	199 208 233	5.600
90	80	10	7000	199 208 231	199 208 234	8.800
110	100	10	11000	199 208 232	199 208 235	13.200

d [mm]	D2_G [inch]	L [mm]	L2 [mm]	L3 [mm]	L5 [mm]	L6 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]
75	3/4	233	72	160	228	65	321	75	73	60	38	71	173
90	3/4	267	82	188	258	80	375	88	88	70	46	86	199
110	3/4	318	95	225	258	80	431	110	113	80	46	86	209





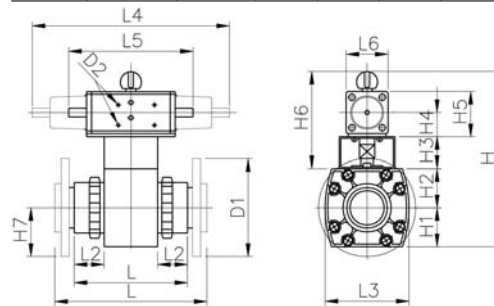
Ball valve type 208 PVC-U DA (Double acting) Without manual override With flanges PVC-U metric

Model:

- Control time 90° <) 0,5-2 s
- For easy installation and removal
- Overall length according to EN 558-1

d [mm]	DN [mm]	Inch	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
75	65	2 ½	10	5000	199 208 330	199 208 345	6.400
90	80	3	10	7000	199 208 331	199 208 346	9.700
110	100	4	10	11000	199 208 332	199 208 347	14.500
160	150	6	10	16000	199 208 333	199 208 348	16.900

d [mm]	D1 [mm]	D2_G [inch]	L [mm]	L3 [mm]	L5 [mm]	L6 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]	H7 [mm]
75	185.00	¾	290	160	228	65	321	75	73	60	38	71	173	93
90	200.00	¾	310	188	258	80	375	88	88	70	46	86	199	100
110	220.00	¾	350	225	258	80	431	110	113	80	46	86	209	110
160	285.00	¾	480	225	258	80	431	110	113	80	46	86	209	143





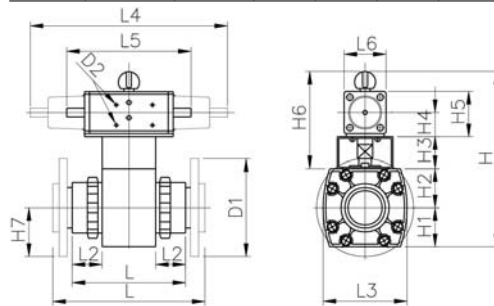
Ball valve type 208 PVC-U DA (Double acting) Without manual override With flanges PP-V metric

Model:

- Control time 90° <) 0,5-2 s
- For easy installation and removal
- Overall length according to EN 558-1

d [mm]	DN [mm]	Inch	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
75	65	2 ½	10	5000	199 208 420	199 208 435	7.200
90	80	3	10	7000	199 208 421	199 208 436	10.600
110	100	4	10	11000	199 208 422	199 208 437	15.300
160	150	6	10	16000	199 208 423	199 208 438	17.000

d [mm]	D1 [mm]	D2_G [inch]	L [mm]	L3 [mm]	L5 [mm]	L6 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]	H7 [mm]
75	185.00	¾	290	160	228	65	321	75	73	60	38	71	173	93
90	200.00	¾	310	188	258	80	375	88	88	70	46	86	199	100
110	220.00	¾	350	225	258	80	431	110	113	80	46	86	209	110
160	285.00	¾	480	225	258	80	431	110	113	80	46	86	209	143





3-Way ball valve type 275 PVC-U Horizontal/L-port FC (Fail safe to close) Without manual override With solvent cement sockets metric

Model:

- Built on with pneumatic actuator PA11/21
- Control time $90^\circ <$ 1-3 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

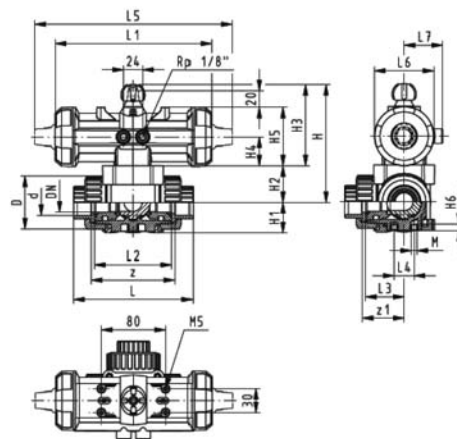
Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg	
16	10	10	50	199 275 022	199 275 032	1.114	
20	15	10	75	199 275 023	199 275 033	1.114	
25	20	10	150	199 275 024	199 275 034	1.296	
32	25	10	280	199 275 025	199 275 035	1.467	
40	32	10	480	199 275 026	199 275 036	2.484	
50	40	10	620	199 275 027	199 275 037	3.028	
63	50	10	1230	199 275 028	199 275 038	4.397	

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	45	136	29	31	105	40	77	8	108	194	72	36	25	261	73
20	45	136	29	31	105	40	77	8	111	194	72	36	25	261	73
25	53	144	33	39	105	40	77	8	131	194	86	43	25	261	73
32	65	149	38	44	105	40	77	8	148	194	96	48	25	261	73
40	78	177	44	50	127	51	99	9	176	224	116	58	45	305	94
50	92	190	50	63	127	51	99	9	206	224	137	69	45	305	94
63	116	203	61	76	127	51	99	9	262	224	179	90	45	305	94

d [mm]	L7 [mm]	M	z [mm]	z1 [mm]
16	48	6	80	40
20	48	6	80	40
25	48	6	94	47
32	48	6	104	52
40	59	8	126	63
50	59	8	144	72
63	59	8	186	93





3-Way ball valve type 275 PVC-U Horizontal/L-port FC (Fail safe to close) Without manual override With solvent cement spigots metric

Model:

- Built on with pneumatic actuator PA11/21
- Control time $90^\circ <$ 1-3 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

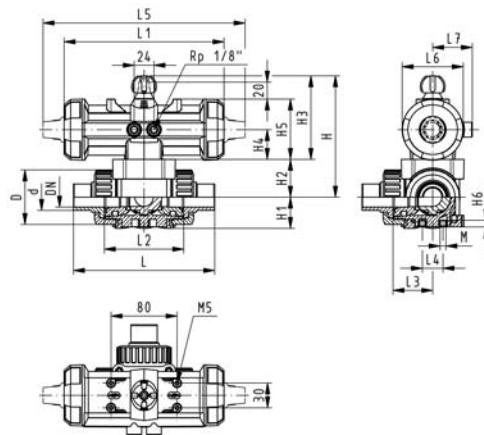
Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	50	199 275 002	199 275 012	1.114
20	15	10	75	199 275 003	199 275 013	1.114
25	20	10	150	199 275 004	199 275 014	1.296
32	25	10	280	199 275 005	199 275 015	1.467
40	32	10	480	199 275 006	199 275 016	2.484
50	40	10	620	199 275 007	199 275 017	3.028
63	50	10	1230	199 275 008	199 275 018	4.397

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	45	136	29	31	105	40	77	8	124	194	72	36	25	261	73
20	45	136	29	31	105	40	77	8	134	194	72	36	25	261	73
25	53	144	33	39	105	40	77	8	156	194	86	43	25	261	73
32	65	149	38	44	105	40	77	8	172	194	96	48	25	261	73
40	78	177	44	50	127	51	99	9	202	224	116	58	45	305	94
50	92	190	50	63	127	51	99	9	238	224	137	69	45	305	94
63	116	203	61	76	127	51	99	9	290	224	179	90	45	305	94

d [mm]	L7 [mm]	M
16	48	6
20	48	6
25	48	6
32	48	6
40	59	8
50	59	8
63	59	8





3-Way ball valve type 275 PVC-U Horizontal/L-port DA (Double acting) Without manual override With solvent cement sockets metric

Model:

- Built on with pneumatic actuator PA11/21
- Control time $90^\circ <$ 1-3 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

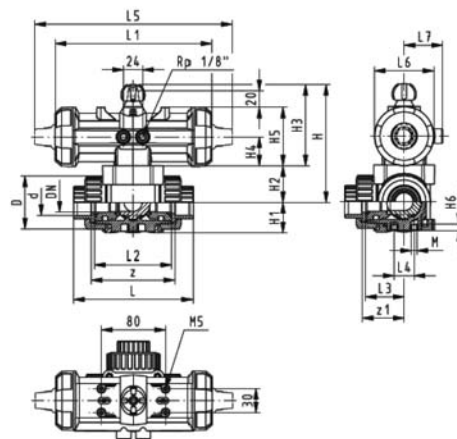
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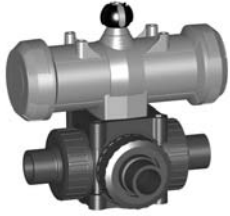
- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg	
16	10	10	50	199 275 202	199 275 212	0.924	
20	15	10	75	199 275 203	199 275 213	0.924	
25	20	10	150	199 275 204	199 275 214	1.106	
32	25	10	280	199 275 205	199 275 215	1.277	
40	32	10	480	199 275 206	199 275 216	2.060	
50	40	10	620	199 275 207	199 275 217	2.604	
63	50	10	1230	199 275 208	199 275 218	3.973	

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	45	136	29	31	105	40	77	8	108	194	72	36	25	261	73
20	45	136	29	31	105	40	77	8	111	194	72	36	25	261	73
25	53	144	33	39	105	40	77	8	131	194	86	43	25	261	73
32	65	149	38	44	105	40	77	8	148	194	96	48	25	261	73
40	78	177	44	50	127	51	99	9	176	224	116	58	45	305	94
50	92	190	50	63	127	51	99	9	206	224	137	69	45	305	94
63	116	203	61	76	127	51	99	9	262	224	179	90	45	305	94

d [mm]	L7 [mm]	M	z [mm]	z1 [mm]
16	48	6	80	40
20	48	6	80	40
25	48	6	94	47
32	48	6	104	52
40	59	8	126	63
50	59	8	144	72
63	59	8	186	93





3-Way ball valve type 275 PVC-U Horizontal/L-port DA (Double acting) Without manual override With solvent cement spigots metric

Model:

- Built on with pneumatic actuator PA11/21
- Control time $90^\circ <$ 1-3 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

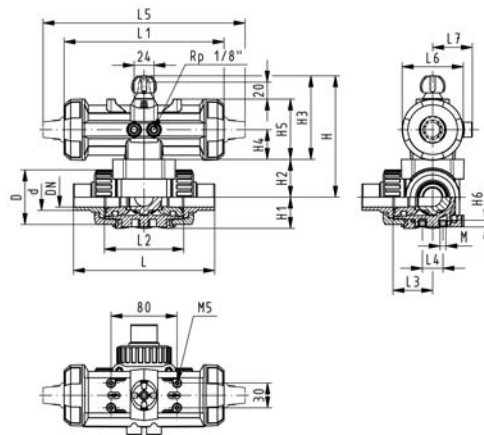
Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	50	199 275 182	199 275 192	0.924
20	15	10	75	199 275 183	199 275 193	0.924
25	20	10	150	199 275 184	199 275 194	1.106
32	25	10	280	199 275 185	199 275 195	1.277
40	32	10	480	199 275 186	199 275 196	2.060
50	40	10	620	199 275 187	199 275 197	2.604
63	50	10	1230	199 275 188	199 275 198	3.973

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	45	136	29	31	105	40	77	8	124	194	72	36	25	261	73
20	45	136	29	31	105	40	77	8	134	194	72	36	25	261	73
25	53	144	33	39	105	40	77	8	156	194	86	43	25	261	73
32	65	149	38	44	105	40	77	8	172	194	96	48	25	261	73
40	78	177	44	50	127	51	99	9	202	224	116	58	45	305	94
50	92	190	50	63	127	51	99	9	238	224	137	69	45	305	94
63	116	203	61	76	127	51	99	9	290	224	179	90	45	305	94

d [mm]	L7 [mm]	M
16	48	6
20	48	6
25	48	6
32	48	6
40	59	8
50	59	8
63	59	8





3-Way ball valve type 275 PVC-U Horizontal/T-port FC (Fail safe to close) Without manual override With solvent cement sockets metric

Model:

- Built on with pneumatic actuator PA11/21
- For easy installation and removal
- Control time $90^\circ <$ 1-3 s
- Integrated stainless steel mounting inserts

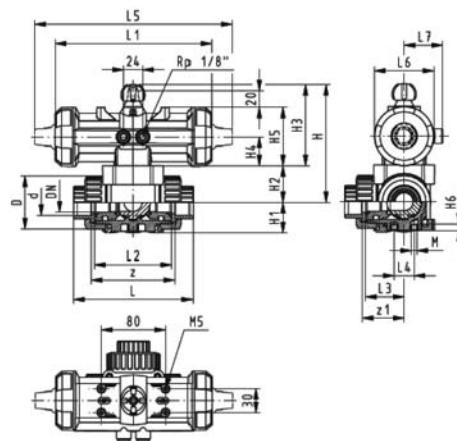
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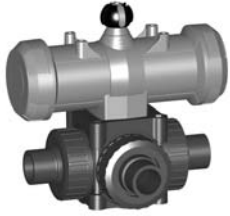
- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg	
16	10	10	140	199 275 062	199 275 072	1.114	
20	15	10	200	199 275 063	199 275 073	1.114	
25	20	10	470	199 275 064	199 275 074	1.296	
32	25	10	793	199 275 065	199 275 075	1.467	
40	32	10	1290	199 275 066	199 275 076	2.484	
50	40	10	1910	199 275 067	199 275 077	3.028	
63	50	10	3100	199 275 068	199 275 078	4.397	

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	45	136	29	31	105	40	77	8	108	194	72	36	25	261	73
20	45	136	29	31	105	40	77	8	111	194	72	36	25	261	73
25	53	144	33	39	105	40	77	8	131	194	86	43	25	261	73
32	65	149	38	44	105	40	77	8	148	194	96	48	25	261	73
40	78	177	44	50	127	51	99	9	176	224	116	58	45	305	94
50	92	190	50	63	127	51	99	9	206	224	137	69	45	305	94
63	116	203	61	76	127	51	99	9	262	224	179	90	45	305	94

d [mm]	L7 [mm]	M	z [mm]	z1 [mm]
16	48	6	80	40
20	48	6	80	40
25	48	6	94	47
32	48	6	104	52
40	59	8	126	63
50	59	8	144	72
63	59	8	186	93





3-Way ball valve type 275 PVC-U Horizontal/T-port FC (Fail safe to close) Without manual override With solvent cement spigots metric

Model:

- Built on with pneumatic actuator PA11/21
- For easy installation and removal
- Control time $90^\circ <$ 1-3 s
- Integrated stainless steel mounting inserts

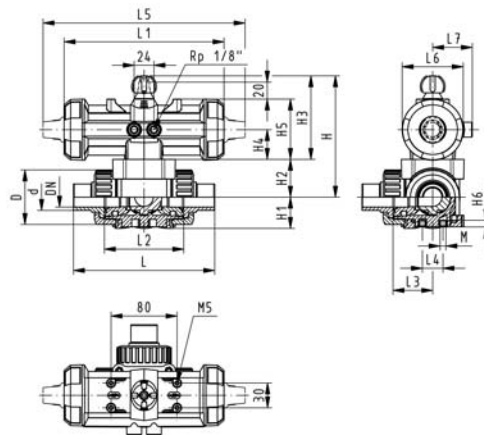
Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	140	199 275 042	199 275 052	1.114
20	15	10	200	199 275 043	199 275 053	1.114
25	20	10	470	199 275 044	199 275 054	1.296
32	25	10	793	199 275 045	199 275 055	1.467
40	32	10	1290	199 275 046	199 275 056	2.484
50	40	10	1910	199 275 047	199 275 057	3.028
63	50	10	3100	199 275 048	199 275 058	4.397

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	45	136	29	31	105	40	77	8	124	194	72	36	25	261	73
20	45	136	29	31	105	40	77	8	134	194	72	36	25	261	73
25	53	144	33	39	105	40	77	8	156	194	86	43	25	261	73
32	65	149	38	44	105	40	77	8	172	194	96	48	25	261	73
40	78	177	44	50	127	51	99	9	202	224	116	58	45	305	94
50	92	190	50	63	127	51	99	9	238	224	137	69	45	305	94
63	116	203	61	76	127	51	99	9	290	224	179	90	45	305	94

d [mm]	L7 [mm]	M
16	48	6
20	48	6
25	48	6
32	48	6
40	59	8
50	59	8
63	59	8





3-Way ball valve type 275 PVC-U Horizontal/T-port DA (Double acting) Without manual override With solvent cement sockets metric

Model:

- Built on with pneumatic actuator PA11/21
- Control time $90^\circ <$ 1-3 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

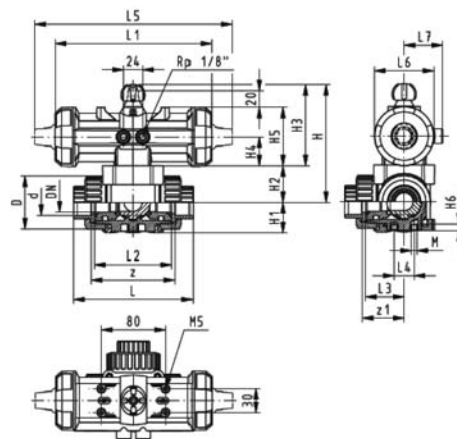
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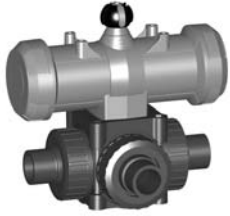
- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	140	199 275 242	199 275 252	0.924
20	15	10	200	199 275 243	199 275 253	0.924
25	20	10	470	199 275 244	199 275 254	1.106
32	25	10	793	199 275 245	199 275 255	1.277
40	32	10	1290	199 275 246	199 275 256	2.060
50	40	10	1910	199 275 247	199 275 257	2.604
63	50	10	3100	199 275 248	199 275 258	3.973

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	45	136	29	31	105	40	77	8	108	194	72	36	25	261	73
20	45	136	29	31	105	40	77	8	111	194	72	36	25	261	73
25	53	144	33	39	105	40	77	8	131	194	86	43	25	261	73
32	65	149	38	44	105	40	77	8	148	194	96	48	25	261	73
40	78	177	44	50	127	51	99	9	176	224	116	58	45	305	94
50	92	190	50	63	127	51	99	9	206	224	137	69	45	305	94
63	116	203	61	76	127	51	99	9	262	224	179	90	45	305	94

d [mm]	L7 [mm]	M	z [mm]	z1 [mm]
16	48	6	80	40
20	48	6	80	40
25	48	6	94	47
32	48	6	104	52
40	59	8	126	63
50	59	8	144	72
63	59	8	186	93





3-Way ball valve type 275 PVC-U Horizontal/T-port DA (Double acting) Without manual override With solvent cement spigots metric

Model:

- Built on with pneumatic actuator PA11/21
- Control time $90^\circ <$ 1-3 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

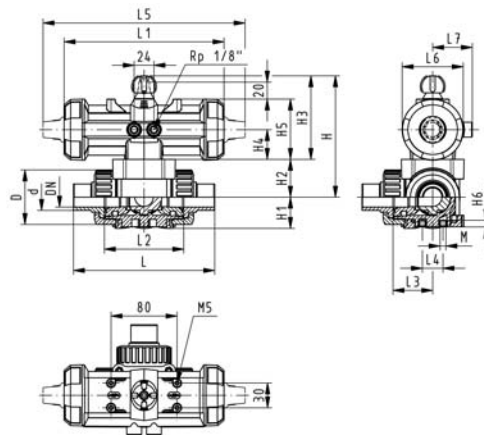
Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	140	199 275 222	199 275 232	0.924
20	15	10	200	199 275 223	199 275 233	0.924
25	20	10	470	199 275 224	199 275 234	1.106
32	25	10	793	199 275 225	199 275 235	1.277
40	32	10	1290	199 275 226	199 275 236	2.060
50	40	10	1910	199 275 227	199 275 237	2.604
63	50	10	3100	199 275 228	199 275 238	3.973

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	45	136	29	31	105	40	77	8	124	194	72	36	25	261	73
20	45	136	29	31	105	40	77	8	134	194	72	36	25	261	73
25	53	144	33	39	105	40	77	8	156	194	86	43	25	261	73
32	65	149	38	44	105	40	77	8	172	194	96	48	25	261	73
40	78	177	44	50	127	51	99	9	202	224	116	58	45	305	94
50	92	190	50	63	127	51	99	9	238	224	137	69	45	305	94
63	116	203	61	76	127	51	99	9	290	224	179	90	45	305	94

d [mm]	L7 [mm]	M
16	48	6
20	48	6
25	48	6
32	48	6
40	59	8
50	59	8
63	59	8



Diaphragm valves pneumatic

Diaphragm valve type DIASTAR PVC-U Series 025 FC (Fail safe to close)

Unions with solvent cement sockets metric

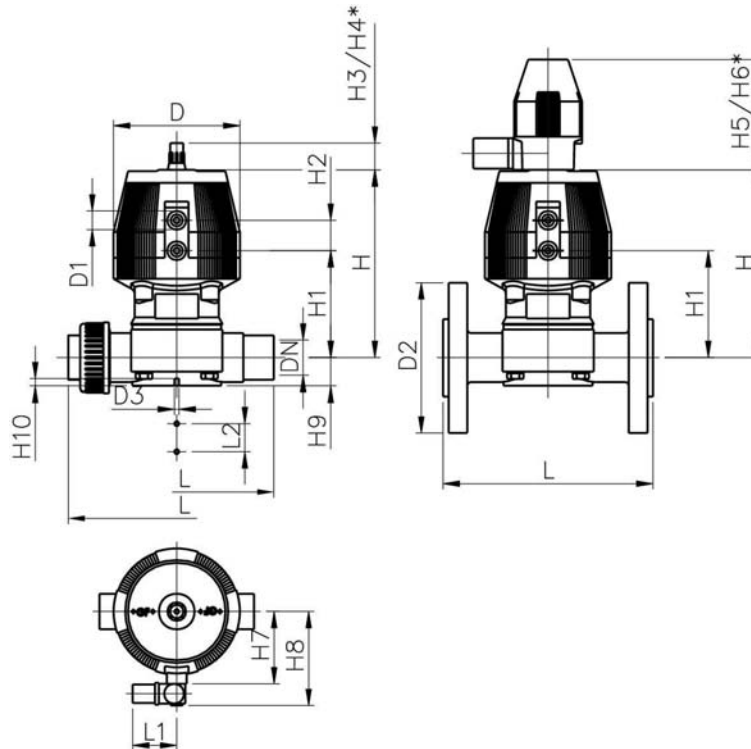
- With position indicator / Working pressure: both sides



d [mm]	DN [mm]	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	PTFE/EPDM Code	kg
20	15	10	72	199 025 061	199 025 091	0.800
25	20	10	120	199 025 062	199 025 092	1.000
32	25	10	238	199 025 063	199 025 093	1.700
40	32	10	341	199 025 064	199 025 094	3.100
50	40	10	460	199 025 065	199 025 095	4.700
63	50	10	685	199 025 066	199 025 096	5.800

d [mm]	D [mm]	D1_G [inch]	D3[M] [mm]	L [mm]	L1 [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]	H7 [mm]
20	96	1/8	6	128	60	25	128	69	25	23	44	100	155	56
25	96	1/8	6	152	60	25	130	71	25	23	44	100	155	56
32	120	1/8	6	166	60	25	166	93	26	36	64	100	155	68
40	150	1/4	8	192	60	45	201	106	36	36	64	100	160	85
50	180	1/4	8	222	60	45	233	119	37	36	64	100	170	101
63	180	1/4	8	266	60	45	247	133	37	36	64	100	170	101

d [mm]	H8 [mm]	H9 [mm]	H10 [mm]	Lift = Hx [mm]
20	86	14	12	8
25	88	18	12	10
32	100	21	12	12
40	117	26	15	14
50	133	33	15	18
63	133	39	15	22





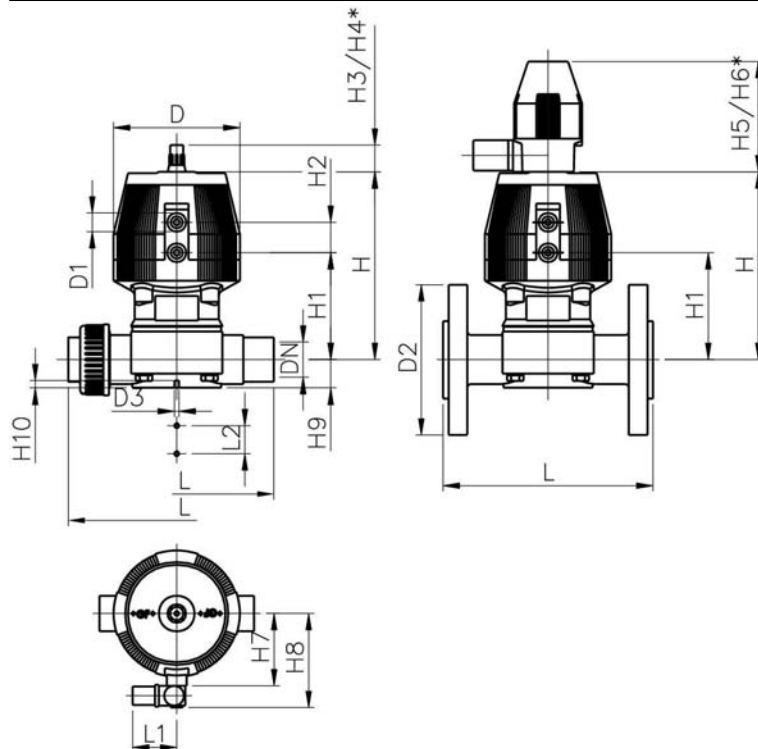
Diaphragm valve type DIASTAR PVC-U Series 025 FC (Fail safe to close) With solvent cement spigots metric

- With position indicator / Working pressure: both sides

d [mm]	DN [mm]	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	PTFE/EPDM Code	kg
20	15	10	72	199 025 001	199 025 031	1.200
25	20	10	120	199 025 002	199 025 032	0.891
32	25	10	238	199 025 003	199 025 033	2.200
40	32	10	341	199 025 004	199 025 034	2.766
50	40	10	460	199 025 005	199 025 035	4.456
63	50	10	685	199 025 006	199 025 036	6.100

d [mm]	D [mm]	D1_G [inch]	D3[M] [mm]	L [mm]	L1 [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]	H7 [mm]
20	96	3/8	6	124	60	25	128	69	25	23	44	100	155	56
25	96	3/8	6	144	60	25	130	71	25	23	44	100	155	56
32	120	1/2	6	154	60	25	166	93	26	36	64	100	155	68
40	150	1/2	8	174	60	45	201	106	36	36	64	100	160	85
50	180	3/4	8	194	60	45	233	119	37	36	64	100	170	101
63	180	3/4	8	224	60	45	247	133	37	36	64	100	170	101

d [mm]	H8 [mm]	H9 [mm]	H10 [mm]	Lift = Hx [mm]
20	86	14	12	8
25	88	18	12	10
32	100	21	12	12
40	117	26	15	14
50	133	33	15	18
63	133	39	15	22





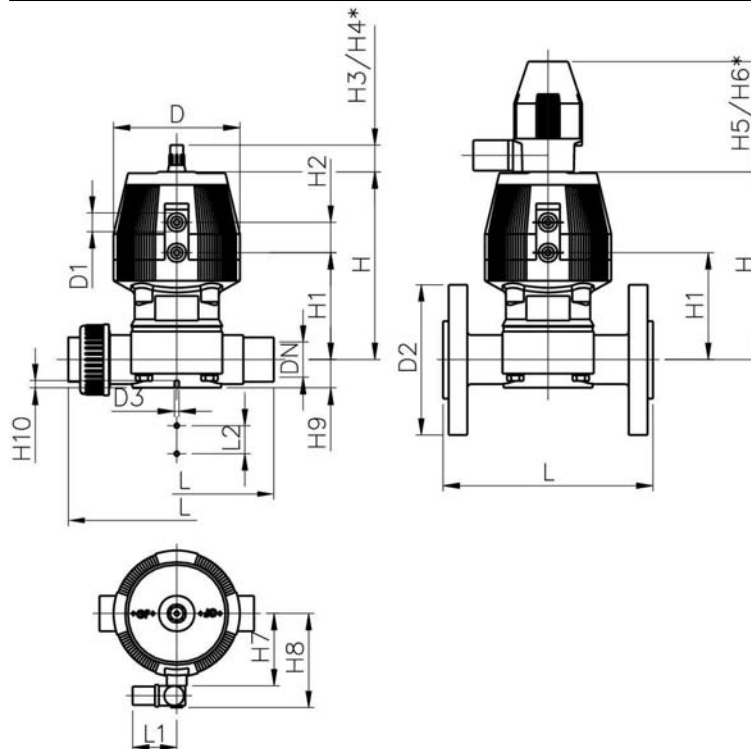
Diaphragm valve type DIASTAR PVC-U Series 025 FC (Fail safe to close) With backing flanges PVC-U metric

- With position indicator / Working pressure: both sides

d [mm]	DN [mm]	Inch	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	PTFE/EPDM Code	kg
20	15	½	10	72	199 025 121	199 025 151	0.810
25	20	¾	10	120	199 025 122	199 025 152	0.891
32	25	1	10	238	199 025 123	199 025 153	1.632
40	32	1 ¼	10	341	199 025 124	199 025 154	2.766
50	40	1 ½	10	460	199 025 125	199 025 155	4.456
63	50	2	10	685	199 025 126	199 025 156	5.031

d [mm]	D [mm]	D1_G [inch]	D2 [mm]	D3[M] [mm]	L [mm]	L1 [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]
20	96	⅝	95.00	6	130	60	25	128	69	25	23	44	100	155
25	96	⅝	105.00	6	150	60	25	130	71	25	23	44	100	155
32	120	⅝	115.00	6	160	60	25	166	93	26	36	64	100	155
40	150	¾	140.00	8	180	60	45	201	106	36	36	64	100	160
50	180	¾	150.00	8	200	60	45	233	119	37	36	64	100	170
63	180	¾	165.00	8	230	60	45	247	133	37	36	64	100	170

d [mm]	H7 [mm]	H8 [mm]	H9 [mm]	H10 [mm]	Lift = Hx [mm]
20	56	86	14	12	8
25	56	88	18	12	10
32	68	100	21	12	12
40	85	117	26	15	14
50	101	133	33	15	18
63	101	133	39	15	22





Diaphragm valve type DIASTAR PVC-U Series 025 FC (Fail safe to close) With fixed flanges PVC-U metric

- With position indicator / Working pressure: **one side**

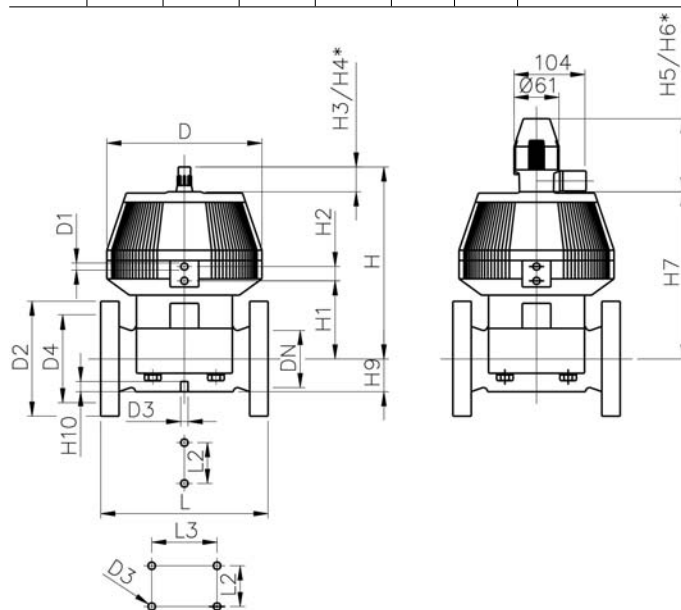
* with backing flanges PVC-U metric

** with fixed flanges PVC-U metric and Inch ANSI

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	199 025 127	199 025 157	13.600
**90	80	3	10	1700	199 025 128	199 025 158	17.400
110	100	4	8	2700	199 025 129	199 025 159	24.700
160	150	6	6	6033	199 025 130	-	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]
*75	280	¼	185.00	8	145.0	290	70		344	148	24	46
**90	280	¼	200.00	12	160.0	310	120		348	150	24	46
110	335	¼	225.00	12	180.0	350	120		395	176	24	46
160	335	¼	285.00	12	240.0	480	100	200	455	237	24	46

d [mm]	H4 [mm]	H5 [mm]	H6 [mm]	H7 [mm]	H9 [mm]	H10 [mm]
*75	100	129	195	298	46	15
**90	100	129	195	302	57	15
110	100	129	195	349	69	20
160	100	129	195	409	108	20





Diaphragm valve type DIASTAR PVC-U Series 028 FC (Fail safe to close) Unions with solvent cement sockets metric

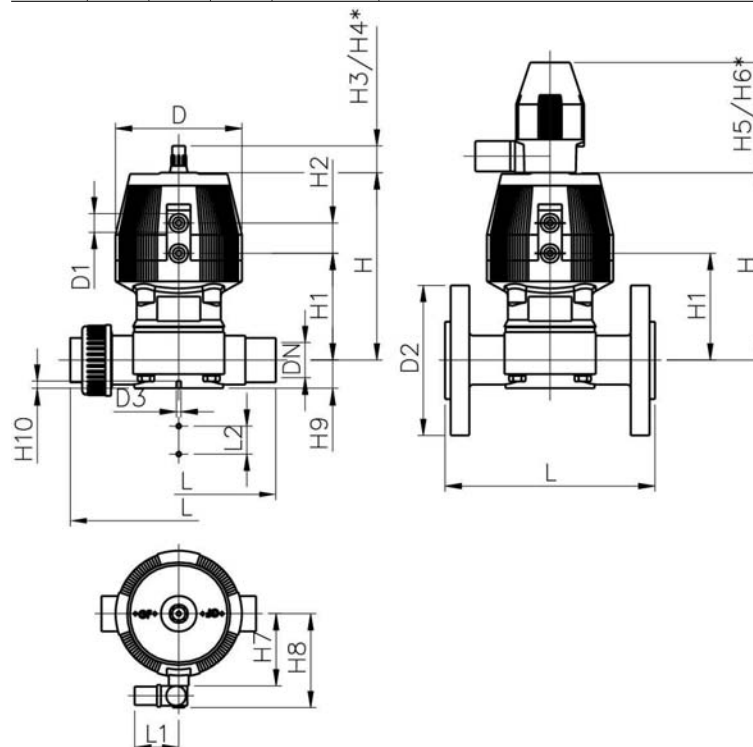
- With position indicator / Working pressure: **one side**

*PN: EPDM/PTFE

d [mm]	DN [mm]	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	PTFE/EPDM Code	kg
20	15	10/5*	72	199 028 061	199 028 091	0.530
25	20	10/7*	120	199 028 062	199 028 092	1.000
32	25	10/7*	238	199 028 063	199 028 093	1.390
40	32	10/7*	341	199 028 064	199 028 094	1.870
50	40	10/7*	460	199 028 065	199 028 095	4.100
63	50	10/7*	685	199 028 066	199 028 096	3.880

d [mm]	D [mm]	D1_G [inch]	D3[M] [mm]	L [mm]	L1 [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]	H7 [mm]
20	68	1/8	6	128	60	25	99	59	24	23	44	100	155	44
25	96	1/8	6	152	60	25	130	71	25	23	44	100	155	56
32	96	1/8	6	166	60	25	143	85	25	23	44	100	155	56
40	120	1/8	8	192	60	45	170	97	26	36	64	100	160	68
50	150	1/4	8	222	60	45	203	108	36	36	64	100	170	85
63	150	1/4	8	266	60	45	220	126	36	36	64	100	170	85

d [mm]	H8 [mm]	H9 [mm]	H10 [mm]	Lift = Hx [mm]
20	76	14	12	8
25	88	18	12	10
32	88	21	12	12
40	100	26	15	14
50	117	33	15	18
63	117	39	15	22





Diaphragm valve type DIASTAR PVC-U Series 028 FC (Fail safe to close) With solvent cement spigots metric

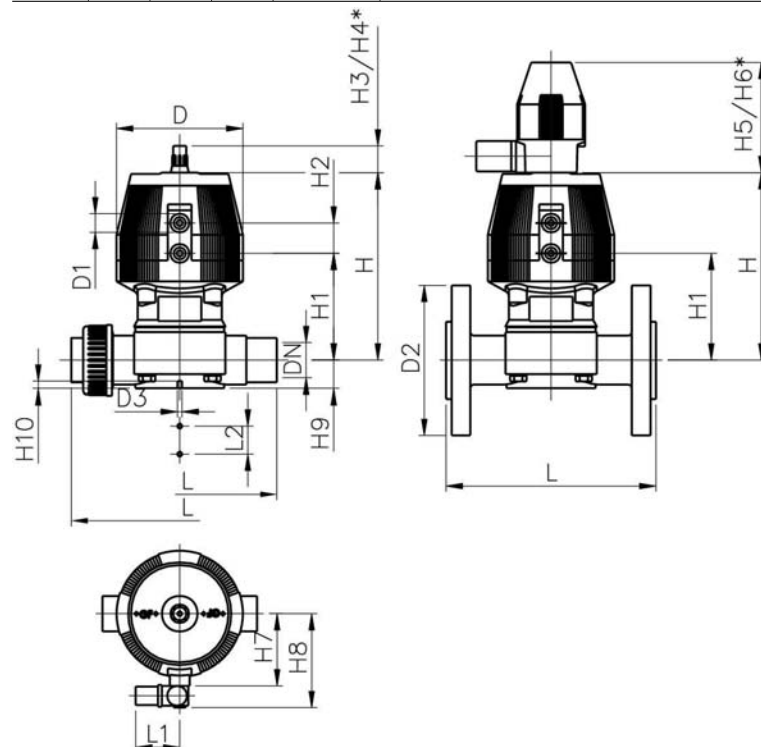
- With position indicator / Working pressure: **one side**

*PN: EPDM/PTFE

d [mm]	DN [mm]	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	PTFE/EPDM Code	kg
20	15	10/5*	72	199 028 001	199 028 031	0.470
25	20	10/7*	120	199 028 002	199 028 032	0.900
32	25	10/7*	238	199 028 003	199 028 033	1.190
40	32	10/7*	341	199 028 004	199 028 034	1.650
50	40	10/7*	460	199 028 005	199 028 035	3.050
63	50	10/7*	685	199 028 006	199 028 036	5.200

d [mm]	D [mm]	D1_G [inch]	D3[M] [mm]	L [mm]	L1 [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]	H7 [mm]
20	68	1/8	6	124	60	25	99	59	24	23	44	100	155	44
25	96	1/8	6	144	60	25	130	71	25	23	44	100	155	56
32	96	1/8	6	154	60	25	143	85	25	23	44	100	155	56
40	120	1/8	8	174	60	45	170	97	26	36	64	100	160	68
50	150	1/4	8	194	60	45	203	108	36	36	64	100	170	85
63	150	1/4	8	224	60	45	220	126	36	36	64	100	170	85

d [mm]	H8 [mm]	H9 [mm]	H10 [mm]	Lift = Hx [mm]
20	76	14	12	8
25	88	18	12	10
32	88	21	12	12
40	100	26	15	14
50	117	33	15	18
63	117	39	15	22





Diaphragm valve type DIASTAR PVC-U Series 028 FC (Fail safe to close) With backing flanges PVC-U metric

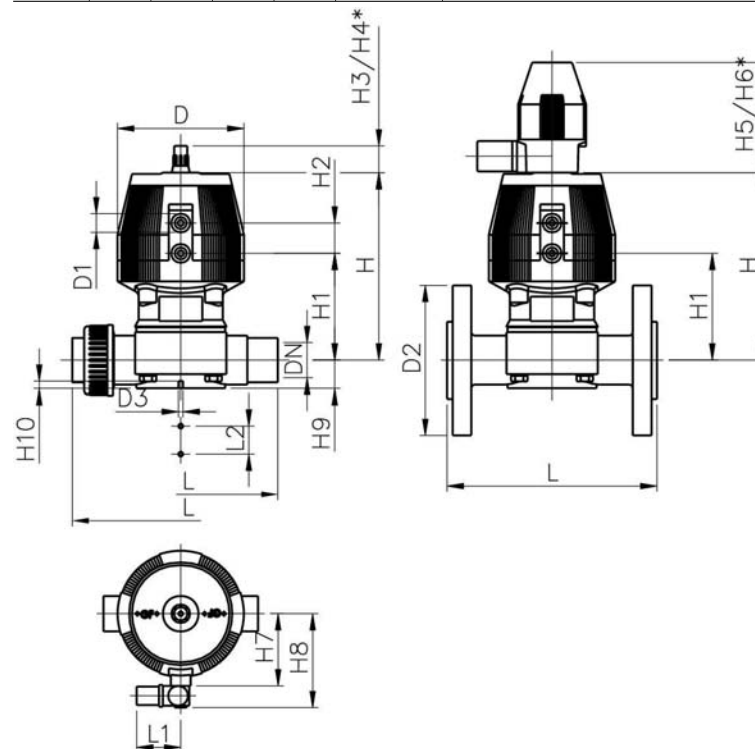
- With position indicator / Working pressure: **one side**

*PN: EPDM/PTFE

d [mm]	DN [mm]	Inch	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	PTFE/EPDM Code	kg
20	15	½	10/5*	72	199 028 121	199 028 151	0.690
25	20	¾	10/7*	120	199 028 122	199 028 152	1.100
32	25	1	10/7*	238	199 028 123	199 028 153	1.470
40	32	1 ¼	10/7*	341	199 028 124	199 028 154	2.170
50	40	1 ½	10/7*	460	199 028 125	199 028 155	3.050
63	50	2	10/7*	685	199 028 126	199 028 156	4.600

d [mm]	D [mm]	D1_G [inch]	D2 [mm]	D3[M] [mm]	L [mm]	L1 [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]
20	68	⅝	95.00	6	130	60	25	99	59	24	23	44	100	155
25	96	⅞	105.00	6	150	60	25	130	71	25	23	44	100	155
32	96	⅞	115.00	6	160	60	25	143	85	25	23	44	100	155
40	120	⅞	140.00	8	180	60	45	170	97	26	36	64	100	160
50	150	¾	150.00	8	200	60	45	203	108	36	36	64	100	170
63	150	¾	165.00	8	230	60	45	220	126	36	36	64	100	170

d [mm]	H7 [mm]	H8 [mm]	H9 [mm]	H10 [mm]	Lift = Hx [mm]
20	44	76	14	12	8
25	56	88	18	12	10
32	56	88	21	12	12
40	68	100	26	15	14
50	85	117	33	15	18
63	85	117	39	15	22





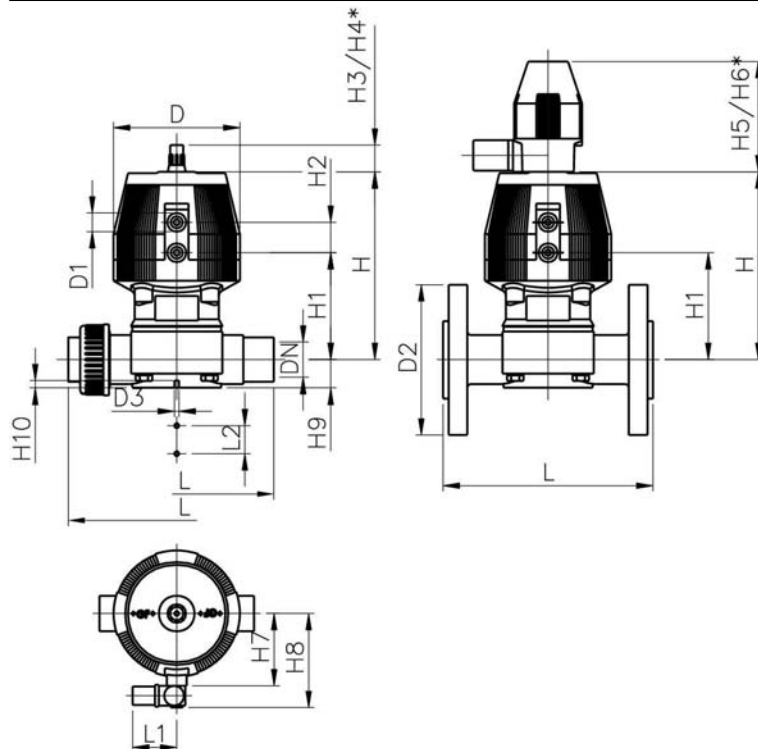
Diaphragm valve type DIASTAR PVC-U Series 025 FO (Fail safe to open) Unions with solvent cement sockets metric

- With position indicator / Working pressure: both sides

d [mm]	DN [mm]	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	PTFE/EPDM Code	kg
20	15	10	72	199 025 071	199 025 101	0.464
25	20	10	120	199 025 072	199 025 102	0.790
32	25	10	238	199 025 073	199 025 103	1.180
40	32	10	341	199 025 074	199 025 104	1.450
50	40	10	460	199 025 075	199 025 105	2.190
63	50	10	685	199 025 076	199 025 106	3.040

d [mm]	D [mm]	D1_G [inch]	D3[M] [mm]	L [mm]	L1 [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]	H7 [mm]
20	68	1/8	6	128	60	25	99	59	24	23	44	100	155	44
25	96	1/8	6	152	60	25	130	71	25	23	44	100	155	56
32	96	1/8	6	166	60	25	143	85	25	23	44	100	155	56
40	120	1/8	8	192	60	45	170	97	26	36	64	100	160	68
50	150	1/4	8	222	60	45	203	108	36	36	64	100	170	85
63	150	1/4	8	266	60	45	220	126	36	36	64	100	170	85

d [mm]	H8 [mm]	H9 [mm]	H10 [mm]	Lift = Hx [mm]
20	76	14	12	8
25	88	18	12	10
32	88	21	12	12
40	100	26	15	14
50	117	33	15	18
63	117	39	15	22





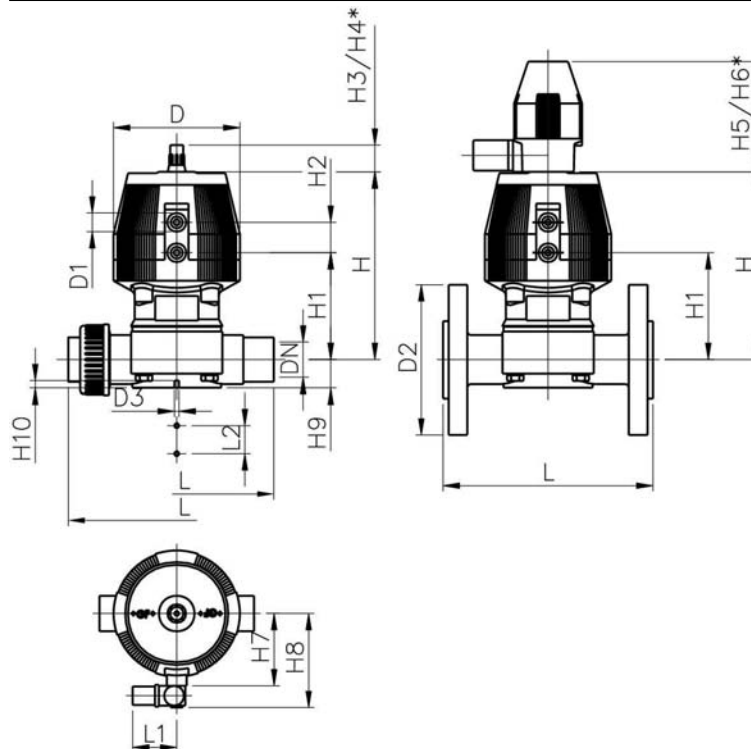
Diaphragm valve type DIASTAR PVC-U Series 025 FO (Fail safe to open) With solvent cement spigots metric

- With position indicator / Working pressure: both sides

d [mm]	DN [mm]	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	PTFE/EPDM Code	kg
20	15	10	72	199 025 011	199 025 041	0.600
25	20	10	120	199 025 012	199 025 042	0.800
32	25	10	238	199 025 013	199 025 043	1.400
40	32	10	341	199 025 014	199 025 044	2.900
50	40	10	460	199 025 015	199 025 045	4.500
63	50	10	685	199 025 016	199 025 046	5.000

d [mm]	D [mm]	D1_G [inch]	D3[M] [mm]	L [mm]	L1 [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]	H7 [mm]
20	68	1/8	6	124	60	25	99	59	24	23	44	100	155	44
25	96	1/8	6	144	60	25	130	71	25	23	44	100	155	56
32	96	1/8	6	154	60	25	143	85	25	23	44	100	155	56
40	120	1/8	8	174	60	45	170	97	26	36	64	100	160	68
50	150	1/4	8	194	60	45	203	108	36	36	64	100	170	85
63	150	1/4	8	224	60	45	220	126	36	36	64	100	170	85

d [mm]	H8 [mm]	H9 [mm]	H10 [mm]	Lift = Hx [mm]
20	76	14	12	8
25	88	18	12	10
32	88	21	12	12
40	100	26	15	14
50	117	33	15	18
63	117	39	15	22





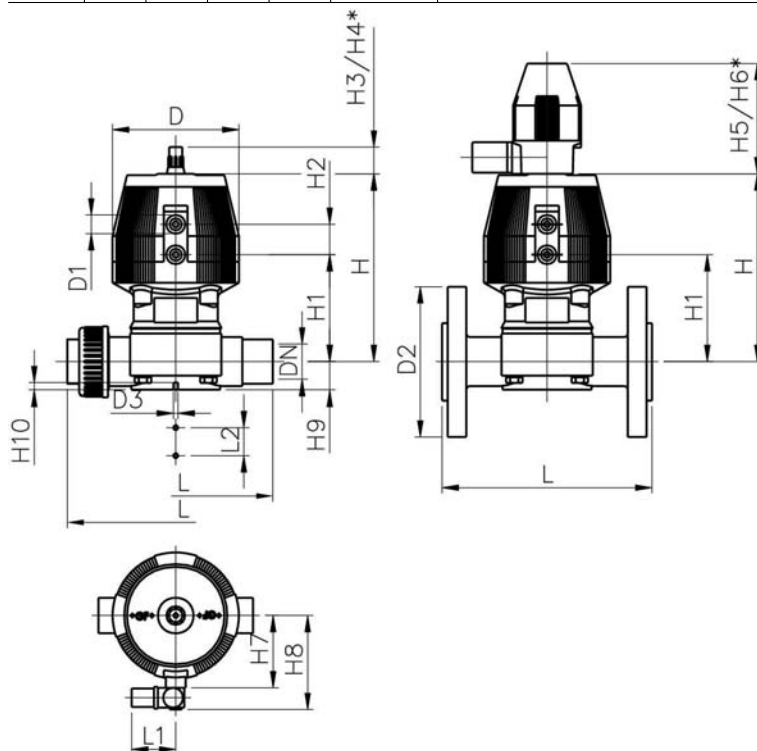
Diaphragm valve type DIASTAR PVC-U Series 025 FO (Fail safe to open) With backing flanges PVC-U metric

- With position indicator / Working pressure: both sides

d [mm]	DN [mm]	Inch	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	PTFE/EPDM Code	kg
20	15	1/2	10	72	199 025 131	199 025 161	0.597
25	20	3/4	10	120	199 025 132	199 025 162	0.890
32	25	1	10	238	199 025 133	199 025 163	1.262
40	32	1 1/4	10	341	199 025 134	199 025 164	1.750
50	40	1 1/2	10	460	199 025 135	199 025 165	2.210
63	50	2	10	685	199 025 136	199 025 166	3.760

d [mm]	D [mm]	D1_G [inch]	D2 [mm]	D3[M] [mm]	L [mm]	L1 [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]
20	68	1/8	95.00	6	130	60	25	99	59	24	23	44	100	155
25	96	1/8	105.00	6	150	60	25	130	71	25	23	44	100	155
32	96	1/8	115.00	6	160	60	25	143	85	25	23	44	100	155
40	120	1/4	140.00	8	180	60	45	170	97	26	36	64	100	160
50	150	1/4	150.00	8	200	60	45	203	108	36	36	64	100	170
63	150	1/4	165.00	8	230	60	45	220	126	36	36	64	100	170

d [mm]	H7 [mm]	H8 [mm]	H9 [mm]	H10 [mm]	Lift = Hx [mm]
20	44	76	14	12	8
25	56	88	18	12	10
32	56	88	21	12	12
40	68	100	26	15	14
50	85	117	33	15	18
63	85	117	39	15	22





Diaphragm valve type DIASTAR PVC-U Series 025 FO (Fail safe to open) With fixed flanges PVC-U metric

- With position indicator / Working pressure: **one side**

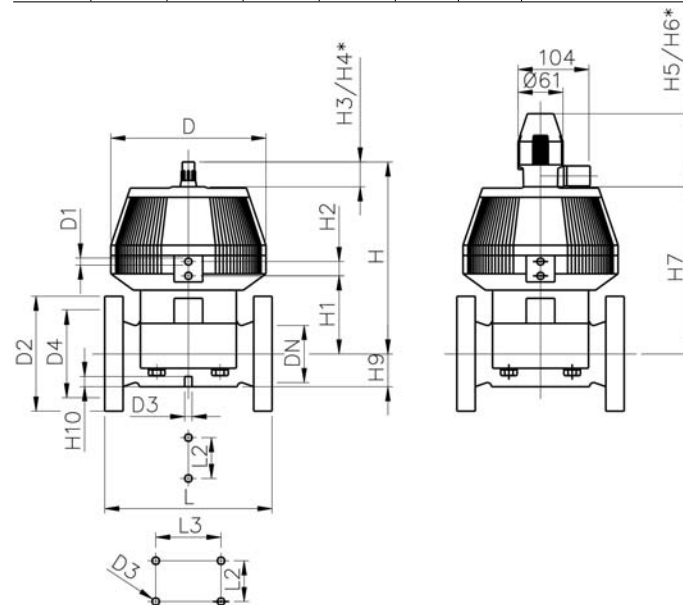
* with backing flanges PVC-U metric

** with fixed flanges PVC-U metric and Inch ANSI

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	199 025 137	199 025 167	13.600
**90	80	3	10	1700	199 025 138	199 025 168	17.400
110	100	4	8	2700	199 025 139	199 025 169	24.700
160	150	6	6	6033	199 025 140	199 025 170	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]
*75	280	¼	185.00	8	145.0	290	70		344	148	24	46
**90	280	¼	200.00	12	160.0	310	120		348	150	24	46
110	335	¼	225.00	12	180.0	350	120		395	176	24	46
160	335	¼	285.00	12	240.0	480	100	200	455	237	24	46

d [mm]	H4 [mm]	H5 [mm]	H6 [mm]	H7 [mm]	H9 [mm]	H10 [mm]
*75	100	129	195	298	46	15
**90	100	129	195	302	57	15
110	100	129	195	349	69	20
160	100	129	195	409	108	20



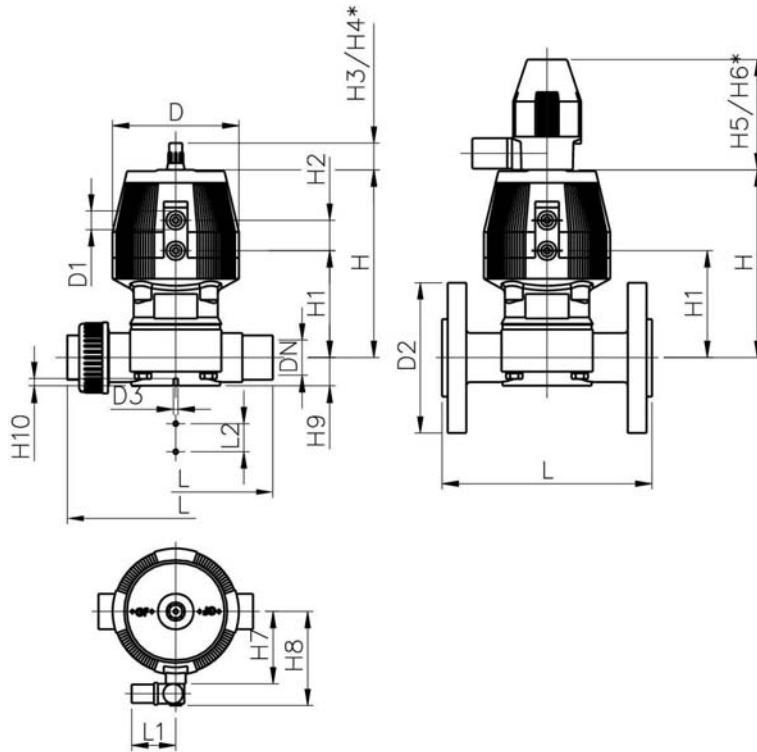
Diaphragm valve type DIASTAR PVC-U Series 025 DA (Double acting) Unions with solvent cement sockets metric

- With position indicator / Working pressure: **both sides**

d [mm]	DN [mm]	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	PTFE/EPDM Code	kg
20	15	10	72	199 025 081	199 025 111	0.464
25	20	10	120	199 025 082	199 025 112	0.790
32	25	10	238	199 025 083	199 025 113	1.180
40	32	10	341	199 025 084	199 025 114	1.450
50	40	10	460	199 025 085	199 025 115	2.190
63	50	10	685	199 025 086	199 025 116	3.040

d [mm]	D [mm]	D1_G [inch]	D3[M] [mm]	L [mm]	L1 [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]	H7 [mm]
20	68	1/8	6	128	60	25	99	59	24	23	44	100	155	44
25	96	1/8	6	152	60	25	130	71	25	23	44	100	155	56
32	96	1/8	6	166	60	25	143	85	25	23	44	100	155	56
40	120	1/8	8	192	60	45	170	97	26	36	64	100	160	68
50	150	1/4	8	222	60	45	203	108	36	36	64	100	170	85
63	150	1/4	8	266	60	45	220	126	36	36	64	100	170	85

d [mm]	H8 [mm]	H9 [mm]	H10 [mm]	Lift = Hx [mm]
20	76	14	12	8
25	88	18	12	10
32	88	21	12	12
40	100	26	15	14
50	117	33	15	18
63	117	39	15	22





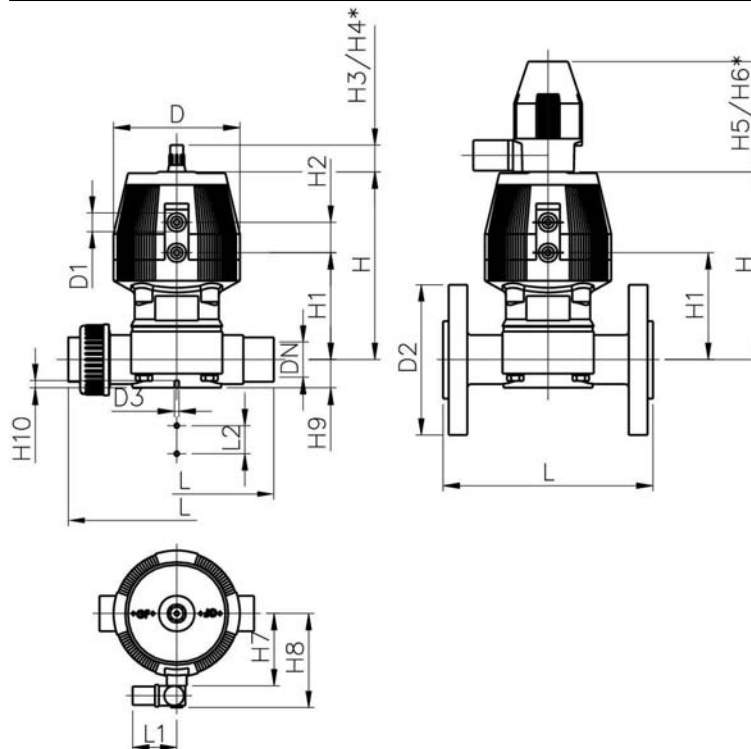
Diaphragm valve type DIASTAR PVC-U Series 025 DA (Double acting) With solvent cement spigots metric

- With position indicator / Working pressure: both sides

d [mm]	DN [mm]	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	PTFE/EPDM Code	kg
20	15	10	72	199 025 021	199 025 051	0.404
25	20	10	120	199 025 022	199 025 052	0.690
32	25	10	238	199 025 023	199 025 053	0.980
40	32	10	341	199 025 024	199 025 054	1.230
50	40	10	460	199 025 025	199 025 055	2.210
63	50	10	685	199 025 026	199 025 056	4.360

d [mm]	D [mm]	D1_G [inch]	D3[M] [mm]	L [mm]	L1 [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]	H7 [mm]
20	68	1/8	6	124	60	25	99	59	24	23	44	100	155	44
25	96	1/8	6	144	60	25	130	71	25	23	44	100	155	56
32	96	1/8	6	154	60	25	143	85	25	23	44	100	155	56
40	120	1/8	8	174	60	45	170	97	26	36	64	100	160	68
50	150	1/4	8	194	60	45	203	108	36	36	64	100	170	85
63	150	1/4	8	224	60	45	220	126	36	36	64	100	170	85

d [mm]	H8 [mm]	H9 [mm]	H10 [mm]	Lift = Hx [mm]
20	76	14	12	8
25	88	18	12	10
32	88	21	12	12
40	100	26	15	14
50	117	33	15	18
63	117	39	15	22





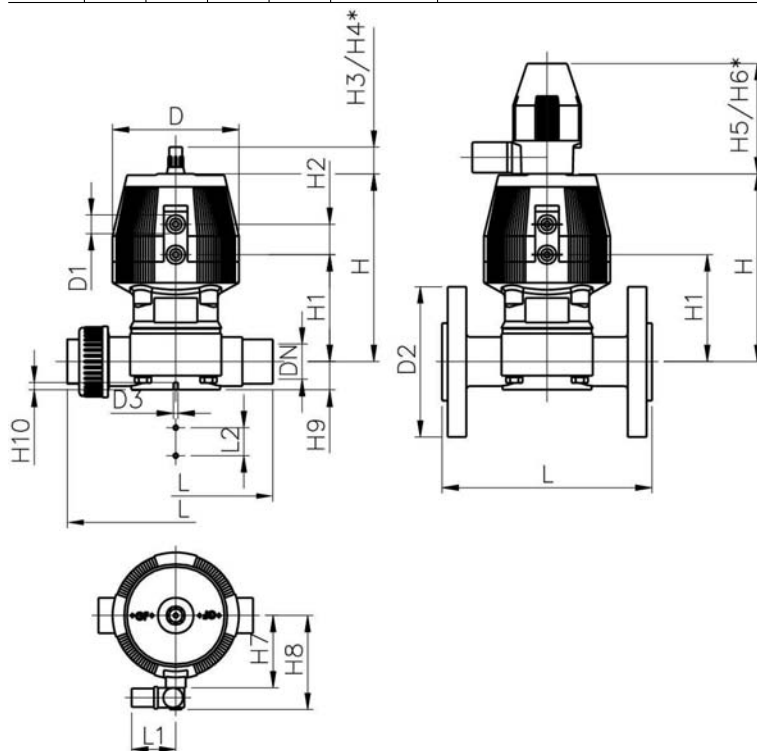
Diaphragm valve type DIASTAR PVC-U Series 025 DA (Double acting) With backing flanges PVC-U metric

- With position indicator / Working pressure: both sides

d [mm]	DN [mm]	Inch	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	PTFE/EPDM Code	kg
20	15	½	10	72	199 025 141	199 025 171	0.624
25	20	¾	10	120	199 025 142	199 025 172	0.890
32	25	1	10	238	199 025 143	199 025 173	1.260
40	32	1 ¼	10	341	199 025 144	199 025 174	1.750
50	40	1 ½	10	460	199 025 145	199 025 175	2.210
63	50	2	10	685	199 025 146	199 025 176	3.760

d [mm]	D [mm]	D1_G [inch]	D2 [mm]	D3[M] [mm]	L [mm]	L1 [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]
20	68	¾	95.00	6	130	60	25	99	59	24	23	44	100	155
25	96	¾	105.00	6	150	60	25	130	71	25	23	44	100	155
32	96	¾	115.00	6	160	60	25	143	85	25	23	44	100	155
40	120	¾	140.00	8	180	60	45	170	97	26	36	64	100	160
50	150	¾	150.00	8	200	60	45	203	108	36	36	64	100	170
63	150	¾	165.00	8	230	60	45	220	126	36	36	64	100	170

d [mm]	H7 [mm]	H8 [mm]	H9 [mm]	H10 [mm]	Lift = Hx [mm]
20	44	76	14	12	8
25	56	88	18	12	10
32	56	88	21	12	12
40	68	100	26	15	14
50	85	117	33	15	18
63	85	117	39	15	22





Diaphragm valve type DIASTAR PVC-U Series 025 DA (Double acting) With fixed flanges PVC-U metric

- With position indicator / Working pressure: **one side**

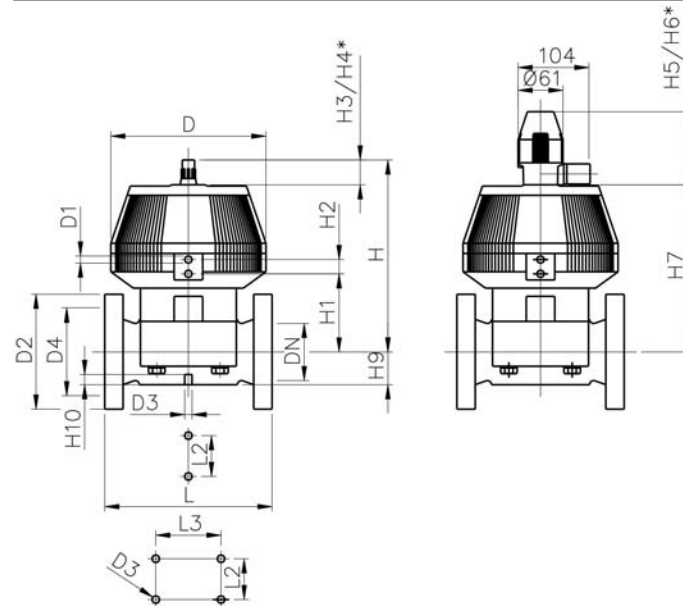
* with backing flanges PVC-U metric

** with fixed flanges PVC-U metric and Inch ANSI

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	199 025 147	199 025 177	12.000
**90	80	3	10	1700	199 025 148	199 025 178	17.400
110	100	4	8	2700	199 025 149	199 025 179	24.700
160	150	6	6	6033	199 025 150	199 025 180	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]
*75	280	¼	185.00	8	145.0	290	70		344	148	24	46
**90	280	¼	200.00	12	160.0	310	120		348	150	24	46
110	335	¼	225.00	12	180.0	350	120		395	176	24	46
160	335	¼	285.00	12	240.0	480	100	200	455	237	24	46

d [mm]	H4 [mm]	H5 [mm]	H6 [mm]	H7 [mm]	H9 [mm]	H10 [mm]
*75	100	129	195	298	46	15
**90	100	129	195	302	57	15
110	100	129	195	349	69	20
160	100	129	195	409	108	20



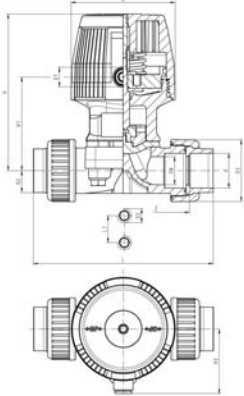


Diaphragm valve DIASTAR Eco PVC-U FC (Fail safe to close) Unions with solvent cement socket metric



Model:

- Working pressure 6 bar one side



d [mm]	DN [mm]	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	kg
20	15	6	72	199 024 031	0.580
25	20	6	120	199 024 032	1.127
32	25	6	238	199 024 033	1.381
40	32	6	341	199 024 034	1.873
50	40	6	460	199 024 035	2.687
63	50	6	685	199 024 036	3.465

d [mm]	D [mm]	D1_G [inch]	D2 (M)	D3 [mm]	L [mm]	L1 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	Lift = Hx [mm]	z [mm]
20	68	1/8	M6	43.0	128	25	99	59	14	44	8	96
25	96	1/8	M6	51.0	152	25	130	71	18	56	10	114
32	96	1/8	M6	58.0	166	25	143	85	21	56	12	122
40	120	1/8	M8	72.0	192	45	170	97	26	68	14	140
50	120	1/8	M8	83.0	222	45	182	109	33	68	16	160
63	120	1/8	M8	100.0	266	45	199	126	39	68	16	190

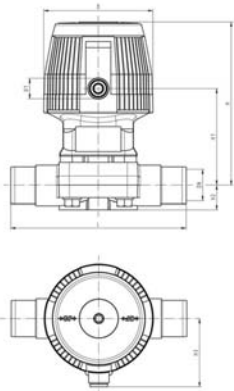


Diaphragm valve DIASTAR Eco PVC-U FC (Fail safe to close) With solvent cement spigots metric



Model:

- Working pressure 6 bar one side



d [mm]	DN [mm]	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	kg
20	15	6	72	199 024 001	0.513
25	20	6	120	199 024 002	1.035
32	25	6	238	199 024 003	1.271
40	32	6	341	199 024 004	1.900
50	40	6	460	199 024 005	2.469
63	50	6	685	199 024 006	3.102

d [mm]	D [mm]	D1_G [inch]	D2 (M)	L [mm]	L1 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	Lift = Hx [mm]
20	68	1/8	M6	124	25	99	59	14	44	8
25	96	1/8	M6	144	25	130	71	18	56	10
32	96	1/8	M6	154	25	143	85	21	56	12
40	120	1/8	M8	174	45	170	97	26	68	14
50	120	1/8	M8	194	45	182	109	33	68	16
63	120	1/8	M8	224	45	199	126	39	68	16

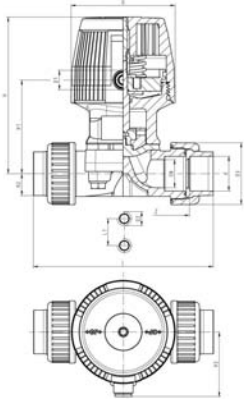


Diaphragm valve DIASTAR Eco PVC-U FC (Fail safe to close) Unions with threaded sockets Rp



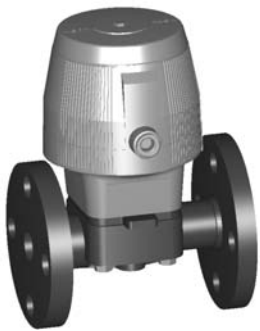
Model:

- Working pressure 6 bar one side



Rp [inch]	DN [mm]	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	kg
1/2	15	6	72	199 024 061	0.582
3/4	20	6	120	199 024 062	1.123
1	25	6	238	199 024 063	1.383
1 1/4	32	6	341	199 024 064	1.873
1 1/2	40	6	460	199 024 065	2.699
2	50	6	685	199 024 066	3.541

Rp [inch]	D [mm]	D1_G [inch]	D2 (M)	D3 [mm]	L [mm]	L1 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	Lift = Hx [mm]	z [mm]
1/2	68	1/8	M6	43.0	128	25	99	59	14	44	8	102
3/4	96	1/8	M6	51.0	152	25	130	71	18	56	10	122
1	96	1/8	M6	58.0	166	25	143	85	21	56	12	132
1 1/4	120	1/8	M8	72.0	192	45	170	97	26	68	14	154
1 1/2	120	1/8	M8	83.0	222	45	182	109	33	68	16	184
2	120	1/8	M8	100.0	266	45	199	126	39	68	16	220

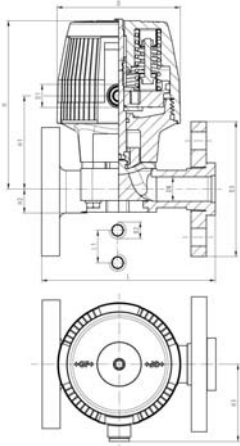


Diaphragm valve DIASTAR Eco PVC-U FC (Fail safe to close) With backing flanges PVC-U metric



Model:

- Working pressure 6 bar one side



d [mm]	DN [mm]	Inch	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	kg
20	15	1/2	6	72	199 024 091	0.553
25	20	3/4	6	120	199 024 092	1.130
32	25	1	6	238	199 024 093	1.414
40	32	1 1/4	6	341	199 024 094	2.125
50	40	1 1/2	6	460	199 024 095	3.063
63	50	2	6	685	199 024 096	3.870

d [mm]	D [mm]	D1_G [inch]	D2 (M)	D3 [mm]	L [mm]	L1 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	Lift = Hx [mm]
20	68	1/8	M6	95.0	130	25	99	59	14	44	8
25	96	1/8	M6	105.0	150	25	130	71	18	56	10
32	96	1/8	M6	115.0	160	25	143	85	21	56	12
40	120	1/8	M8	140.0	180	45	170	97	26	68	14
50	120	1/8	M8	150.0	200	45	182	109	33	68	16
63	120	1/8	M8	165.0	230	45	199	126	39	68	16

Butterfly valves electric

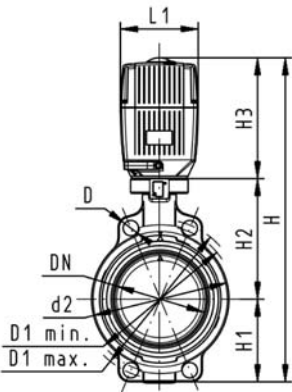
Butterfly valve type 140 PVC-U 100-230V Without manual override



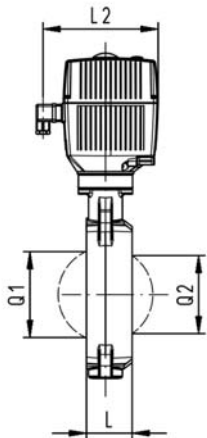
Model:

- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, ANSI B 16.5 Class 150, BS 1560: 1958, JIS B 2220
- Overall length according to EN 558-1, ISO 5752
- Voltage 100-230 V, 50-60 Hz
- Control time 15 s/90° (<) EA31
- Control time 8s/90° (<) EA41
- 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	199 140 042	199 140 062	4.182
75	65	2 ½	10	2200	199 140 043	199 140 063	4.286
90	80	3	10	3000	199 140 044	199 140 064	4.453
110	100	4	10	6500	199 140 045	199 140 065	5.073
140	125	5	10	11500	199 140 046	199 140 066	5.644
160	150	6	10	16600	199 140 047	199 140 067	6.654
225	200	8	10	39600	199 140 048	199 140 068	12.634



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]
63	EA-31	19	120.0	125.0	104	400	77	134	188	45	122	180
75	EA-31	19	139.7	145.0	115	413	83	140	188	46	122	180
90	EA-31	19	150.0	160.0	131	428	89	146	188	49	122	180
110	EA-31	19	175.0	190.5	161	460	104	167	188	56	122	180
140	EA-31	23	210.0	215.9	187	487	117	181	188	64	122	180
160	EA-31	24	241.3	241.3	215	508	130	189	188	72	122	180
225	EA-41	23	290.0	295.0	267	575	158	210	208	73	125	180



d [mm]	Q1 [mm]	Q2 [mm]
63	35.74	
75	50.93	30.62
90	64.01	46.24
110	84.46	69.96
140	110.71	94.50
160	136.08	121.54
225	175.62	166.23

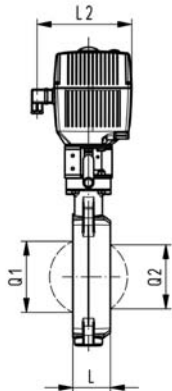
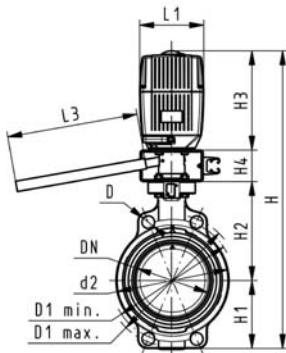


Butterfly valve type 140 PVC-U 100-230V With manual override



Model:

- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, ANSI B 16.5 Class 150, BS 1560: 1958, JIS B 2220
- Overall length according to EN 558-1, ISO 5752
- Voltage 100-230 V, 50-60 Hz
- Control time 15 s/90°<) EA31
- Control time 8s/90°<) EA41
- 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	199 140 002	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-41	23	290.0	295.0	267	635	158	210	208	60	73	125	180

d [mm]	L3 [mm]	Q1 [mm]	Q2 [mm]
63	200	35.74	
75	200	50.93	30.62
90	200	64.01	46.24
110	250	84.46	69.96
140	250	110.71	94.50
160	250	136.08	121.54
225	250	175.62	166.23



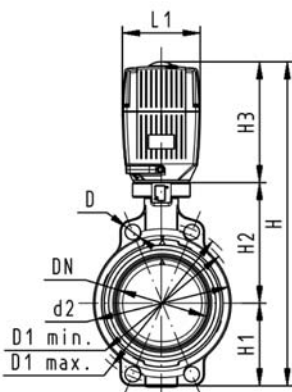
Butterfly valve type 140 PVC-U 24V Without manual override



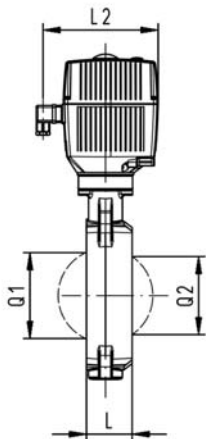
Model:

- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, ANSI B 16.5 Class 150, BS 1560: 1958, JIS B 2220
- Overall length according to EN 558-1, ISO 5752
- Voltage 24 V AC/DC
- Control time 15 s/90°<) EA31
- Control time 8s/90°<) EA41
- 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	199 140 122	199 140 142	4.182
75	65	2 ½	10	2200	199 140 123	199 140 143	4.286
90	80	3	10	3000	199 140 124	199 140 144	4.453
110	100	4	10	6500	199 140 125	199 140 145	5.073
140	125	5	10	11500	199 140 126	199 140 146	5.644
160	150	6	10	16600	199 140 127	199 140 147	6.654
225	200	8	10	39600	199 140 128	199 140 148	12.634



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]
63	EA-31	19	120.0	125.0	104	400	77	134	188	45	122	180
75	EA-31	19	139.7	145.0	115	413	83	140	188	46	122	180
90	EA-31	19	150.0	160.0	131	428	89	146	188	49	122	180
110	EA-31	19	175.0	190.5	161	460	104	167	188	56	122	180
140	EA-31	23	210.0	215.9	187	487	117	181	188	64	122	180
160	EA-31	24	241.3	241.3	215	508	130	189	188	72	122	180
225	EA-41	23	290.0	295.0	267	575	158	210	208	73	125	180



d [mm]	Q1 [mm]	Q2 [mm]
63	35.74	
75	50.93	30.62
90	64.01	46.24
110	84.46	69.96
140	110.71	94.50
160	136.08	121.54
225	175.62	166.23

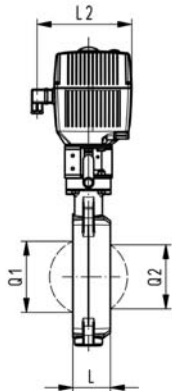
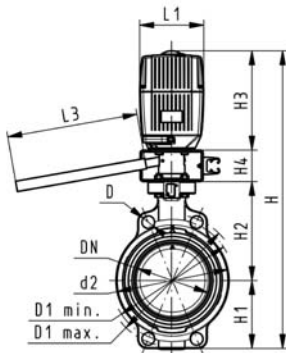


Butterfly valve type 140 PVC-U 24V With manual override



Model:

- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, ANSI B 16.5 Class 150, BS 1560: 1958, JIS B 2220
- Overall length according to EN 558-1, ISO 5752
- Voltage 24 V AC/DC
- Control time 15 s/90°<) EA31
- Control time 8s/90°<) EA41
- 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	199 140 082	199 140 102	5.682
75	65	2 ½	10	2200	199 140 083	199 140 103	5.786
90	80	3	10	3000	199 140 084	199 140 104	5.953
110	100	4	10	6500	199 140 085	199 140 105	6.573
140	125	5	10	11500	199 140 086	199 140 106	7.144
160	150	6	10	16600	199 140 087	199 140 107	8.154
225	200	8	10	39600	199 140 088	199 140 108	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-41	23	290.0	295.0	267	635	158	210	208	60	73	125	180

d [mm]	L3 [mm]	Q1 [mm]	Q2 [mm]
63	200	35.74	
75	200	50.93	30.62
90	200	64.01	46.24
110	250	84.46	69.96
140	250	110.71	94.50
160	250	136.08	121.54
225	250	175.62	166.23

Butterfly valve type 035 PVC-U 115/230V Without manual override

Model:

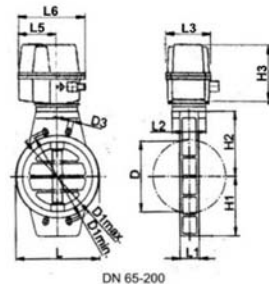
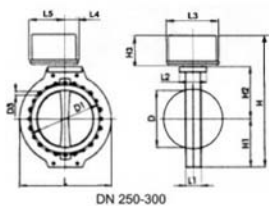
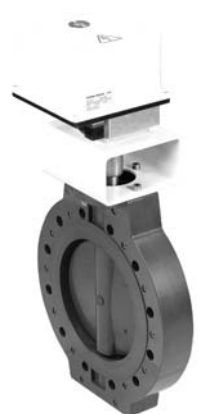
- Adjustable voltages for 115/230 V, 50-60 Hz
- Control range 90°<
- Control time 8 s/90°<

Phase out product will be replaced with type 140

d [mm]	DN [mm]	Inch	PN	kv-value ($\Delta p=1$ bar) [l/min]	Type	EPDM Code	FPM Code
75	65	2 ½	10	2200	EA 30	199 035 708	199 035 718
90	80	3	10	3000	EA 30	199 035 709	199 035 719
110	100	4	10	6500	EA 41	199 035 703	199 035 713
140	125	5	10	11500	EA 41	199 035 704	199 035 714
160	150	6	6	16600	EA 41	199 035 705	199 035 715
225	200	8	6	39600	EA 41	199 035 706	199 035 716
280	250	10	6	55000	EA 50	199 035 707	199 035 717

d [mm]	D [mm]	D1 [mm]	D1 min. [mm]	D1 max. [mm]	D3 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	H [mm]	H1 [mm]
75	49		140.0	145.0	19.0	112	46	74	112	74	107	181	357	80
90	66		150.0	160.0	19.0	132	49	77	132	74	107	181	379	92
110	85		175.0	190.5	19.0	160	56	92	160	60	150	210	404	108
140	110		210.0	216.0	23.0	190	64	108	190	60	150	210	434	120
160	135		240.0	241.0	23.0	216	70	116	216	60	150	210	468	140
225	189		290.0	298.0	23.0	272	71	128	272	60	150	210	548	175
280	238	350.00			22.0	420	76	152	420	98	112	210	733	220

d [mm]	H2 [mm]	H3 [mm]	Connecting dimension
75	110	163	ISO, EN, BS, ANSI
90	120	163	ISO, EN, BS, ANSI
110	138	148	ISO, EN, BS, ANSI
140	156	148	ISO, EN, BS, ANSI
160	170	148	ISO, EN, BS, ANSI
225	215	148	ISO, EN, BS, ANSI
280	248	197	ISO, EN, BS, ANSI



Butterfly valve type 035 PVC-U 115/230V With manual override

Model:

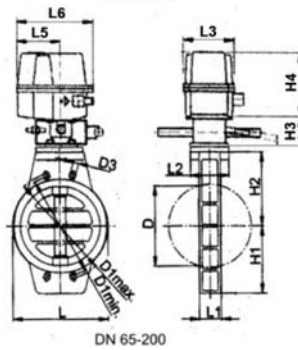
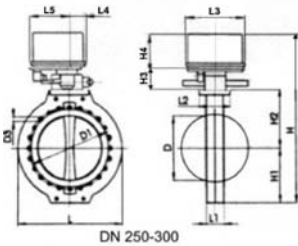
- Adjustable voltages for 115/230 V, 50-60 Hz
- Control range 90° <
- Control time 8 s/90° <

Phase out product will be replaced with type 140

d [mm]	DN [mm]	Inch	PN	kv-value ($\Delta p=1$ bar) [l/min]	Type	EPDM Code	FPM Code	kg
75	65	2 ½	10	2200	EA 30	199 035 508	199 035 518	5.500
90	80	3	10	3000	EA 30	199 035 509	199 035 519	6.300
110	100	4	10	6500	EA 41	199 035 503	199 035 513	10.700
140	125	5	10	11500	EA 41	199 035 504	199 035 514	12.300
160	150	6	6	16600	EA 41	199 035 505	199 035 515	14.400
225	200	8	6	39600	EA 41	199 035 506	199 035 516	17.400

d [mm]	D [mm]	D1 min. [mm]	D1 max. [mm]	D3 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L5 [mm]	L6 [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]
75	49	140.0	145.0	19.0	112	46	74	112	107	181	80	110	60	163
90	66	150.0	160.0	19.0	132	49	77	132	107	181	92	120	60	163
110	85	175.0	190.5	19.0	160	56	92	160	150	210	108	138	60	148
140	110	210.0	216.0	23.0	190	64	108	190	150	210	120	156	60	148
160	135	240.0	241.0	23.0	216	70	116	216	150	210	140	170	60	148
225	189	290.0	298.0	23.0	272	71	128	272	150	210	175	215	60	148

d [mm]	Connecting dimension
75	ISO, EN, DIN, BS, ANSI
90	ISO, EN, DIN, BS, ANSI
110	ISO, EN, DIN, BS, ANSI
140	ISO, EN, DIN, BS, ANSI
160	ISO, EN, DIN, BS, ANSI
225	ISO, EN, DIN, BS, ANSI



Butterfly valve type 035 PVC-U 24V Without manual override

Model:

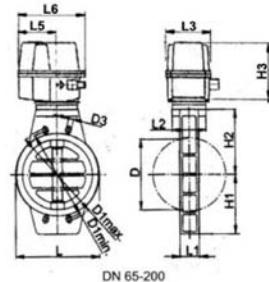
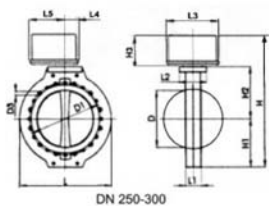
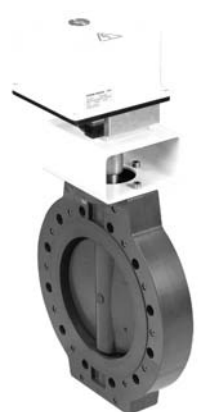
- Voltage 24 V AC/DC
- Control range 90°<
- Control time 8 s/90°<

Phase out product will be replaced with type 140

d [mm]	DN [mm]	Inch	PN	kv-value ($\Delta p=1$ bar) [l/min]	Type	EPDM Code	FPM Code
75	65	2 ½	10	2200	EA 30	199 035 748	199 035 758
90	80	3	10	3000	EA 30	199 035 749	199 035 759
110	100	4	10	6500	EA 41	199 035 743	199 035 753
140	125	5	10	11500	EA 41	199 035 744	199 035 754
160	150	6	6	16600	EA 41	199 035 745	199 035 755
225	200	8	6	39600	EA 41	199 035 746	199 035 756
280	250	10	6	55000	EA 50	199 035 747	199 035 757

d [mm]	D [mm]	D1 [mm]	D1 min. [mm]	D1 max. [mm]	D3 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	H [mm]	H1 [mm]
75	49		140.0	145.0	19.0	112	46	74	112	74	107	181	357	80
90	66		150.0	160.0	19.0	132	49	77	132	74	107	181	379	92
110	85		175.0	190.5	19.0	160	56	92	160	60	150	210	404	108
140	110		210.0	216.0	23.0	190	64	108	190	60	150	210	434	120
160	135		240.0	241.0	23.0	216	70	116	216	60	150	210	468	140
225	189		290.0	298.0	23.0	272	71	128	272	60	150	210	548	175
280	238	350.00			22.0	420	76	152	420	98	112	210	733	220

d [mm]	H2 [mm]	H3 [mm]	Connecting dimension
75	110	163	ISO, EN, BS, ANSI
90	120	163	ISO, EN, BS, ANSI
110	138	148	ISO, EN, BS, ANSI
140	156	148	ISO, EN, BS, ANSI
160	170	148	ISO, EN, BS, ANSI
225	215	148	ISO, EN, BS, ANSI
280	248	197	ISO, EN, BS, ANSI



Butterfly valve type 035 PVC-U 24V With manual override

Model:

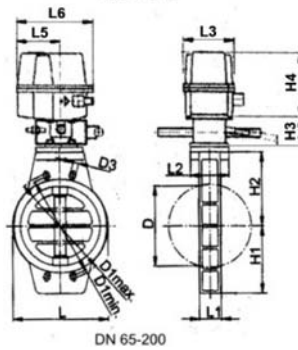
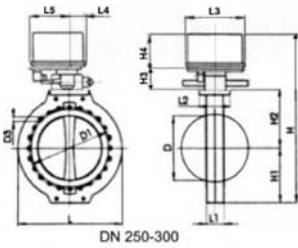
- Voltage 24 V AC/DC
- Control range 90° <
- Control time 8 s/90° <

Phase out product will be replaced with type 140

d [mm]	DN [mm]	Inch	PN	kv-value ($\Delta p=1$ bar) [l/min]	Type	EPDM Code	FPM Code	kg
75	65	2 ½	10	2200	EA 30	199 035 548	199 035 558	5.500
90	80	3	10	3000	EA 30	199 035 549	199 035 559	6.300
110	100	4	10	6500	EA 41	199 035 543	199 035 553	10.700
140	125	5	10	11500	EA 41	199 035 544	199 035 554	12.300
160	150	6	6	16600	EA 41	199 035 545	199 035 555	14.400
225	200	8	6	39600	EA 41	199 035 546	199 035 556	17.400

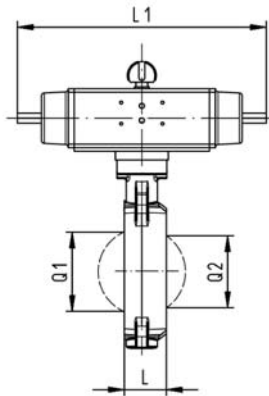
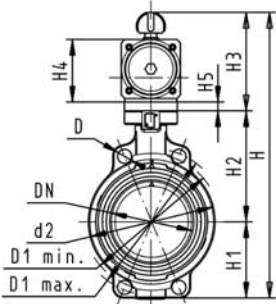
d [mm]	D [mm]	D1 min. [mm]	D1 max. [mm]	D3 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L5 [mm]	L6 [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]
75	49	140.0	145.0	19.0	112	46	74	112	107	181	80	110	60	163
90	66	150.0	160.0	19.0	132	49	77	132	107	181	92	120	60	163
110	85	175.0	190.5	19.0	160	56	92	160	150	210	108	138	60	148
140	110	210.0	216.0	23.0	190	64	108	190	150	210	120	156	60	148
160	135	240.0	241.0	23.0	216	70	116	216	150	210	140	170	60	148
225	189	290.0	298.0	23.0	272	71	128	272	150	210	175	215	60	148

d [mm]	Connecting dimension
75	ISO, EN DIN, BS, ANSI
90	ISO, EN DIN, BS, ANSI
110	ISO, EN DIN, BS, ANSI
140	ISO, EN DIN, BS, ANSI
160	ISO, EN DIN, BS, ANSI
225	ISO, EN DIN, BS, ANSI



Butterfly valves pneumatic

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 B 16.5 Class 150, BS 1560: 1958, JIS B 2220
- Overall length according to EN 558-1, ISO 5752
- Control range 90° <

d [mm]	DN [mm]	Inch	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
63	50	2	10	1470	199 240 002	199 240 022	3.222
75	65	2 1/2	10	2200	199 240 003	199 240 023	3.326
90	80	3	10	3000	199 240 004	199 240 024	3.493
110	100	4	10	6500	199 240 005	199 240 025	5.311
140	125	5	10	11500	199 240 006	199 240 026	6.884
160	150	6	10	16600	199 240 007	199 240 027	10.215
225	200	8	10	39600	199 240 008	199 240 028	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]	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

d [mm]	L2 [mm]	Q1 [mm]	Q2 [mm]
63	65	35.74	
75	65	50.93	30.62
90	72	64.01	46.24
110	80	84.46	69.96
140	90	110.71	94.50
160	100	136.08	121.54
225	112	175.62	166.23

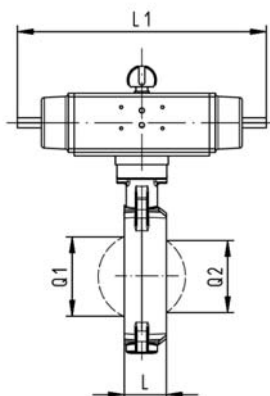
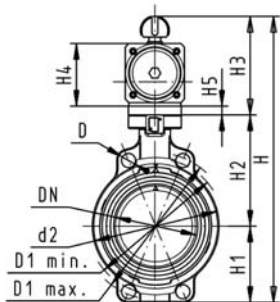


Butterfly valve type 240 PVC-U FO (Fail safe to open) Without manual override



Model:

- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, ANSI B 16.5 Class 150, BS 1560: 1958, JIS B 2220
- Overall length according to EN 558-1, ISO 5752
- Control range 90°<



d [mm]	DN [mm]	Inch	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
63	50	2	10	1470	199 240 042	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

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

d [mm]	L2 [mm]	Q1 [mm]	Q2 [mm]
63	65	35.74	
75	65	50.93	30.62
90	72	64.01	46.24
110	80	84.46	69.96
140	90	110.71	94.50
160	100	136.08	121.54
225	112	175.62	166.23

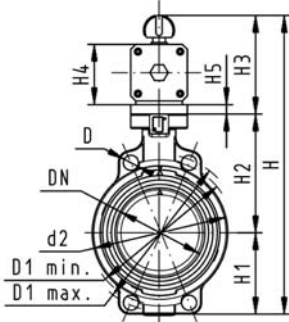


Butterfly valve type 240 PVC-U DA (Double acting) Without manual override



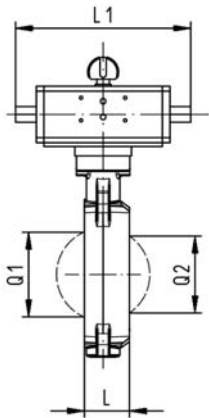
Model:

- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, ANSI B 16.5 Class 150, BS 1560: 1958, JIS B 2220
- Overall length according to EN 558-1, ISO 5752
- Control range 90°<

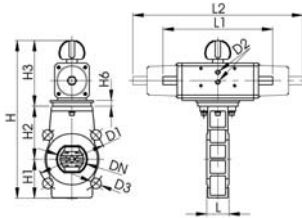


d [mm]	DN [mm]	Inch	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
63	50	2	10	1470	199 240 082	199 240 102	2.072
75	65	2 ½	10	2200	199 240 083	199 240 103	2.176
90	80	3	10	3000	199 240 084	199 240 104	2.824
110	100	4	10	6500	199 240 085	199 240 105	3.563
140	125	5	10	11500	199 240 086	199 240 106	4.134
160	150	6	10	16600	199 240 087	199 240 107	6.694
225	200	8	10	39600	199 240 088	199 240 108	8.134

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]	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	198
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	250
225	PA-55 DA	23	290.0	295.0	267	507	158	210	139	96		73	279



d [mm]	L2 [mm]	Q1 [mm]	Q2 [mm]
63	55	35.74	
75	55	50.93	30.62
90	60	64.01	46.24
110	65	84.46	69.96
140	72	110.71	94.50
160	80	136.08	121.54
225	90	175.62	166.23



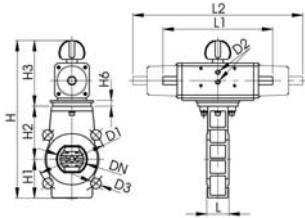
Butterfly valve type 036 PVC-U FC (Fail safe to close) Without manual override

Phase out product will be replaced with type 240 for Dimension DN65-200

d [mm]	DN [mm]	Inch	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
75	65	2 1/2	10	2200	199 036 720	199 036 730	5.950
90	80	3	10	3000	199 036 721	199 036 731	6.520
110	100	4	10	6500	199 036 722	199 036 732	10.750
140	125	5	10	11500	199 036 723	199 036 733	12.150
160	150	6	6	16600	199 036 724	199 036 734	18.480
225	200	8	6	39600	199 036 725	199 036 735	21.120
280	250	10	6	55000	199 036 726	199 036 736	39.000
315	300	12	4	80000	199 036 727	199 036 737	43.000

d [mm]	D [mm]	D1 [mm]	D1 min. [mm]	D1 max. [mm]	D2 [inch]	D3 [mm]	L [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H6 [mm]
75	49		140.0	145.0	1/8	19.0	46	326	361	80	110	133	12
90	66		150.0	160.0	1/8	19.0	49	370	401	92	120	141	12
110	85		175.0	190.5	1/8	19.0	56	411	445	108	138	148	9
140	110		210.0	216.0	1/8	23.0	64	423	485	120	156	162	13
160	135		240.0	241.0	1/8	23.0	70	452	551	140	170	169	8
225	189		290.0	298.0	1/8	23.0	71	503	643	175	215	181	8
280	238	350.00			1/4	22.0	76	648	739	220	248	245	54
315	286	400.00			1/4	22.0	83	663	832	266	290	276	54

d [mm]	Connecting dimension
75	ISO, EN, DIN, BS, ANSI
90	ISO, EN, DIN, BS, ANSI
110	ISO, EN, DIN, BS, ANSI
140	ISO, EN, DIN, BS, ANSI
160	ISO, EN, DIN, BS, ANSI
225	ISO, EN, DIN, BS, ANSI
280	ISO, EN, DIN
315	ISO, EN, DIN



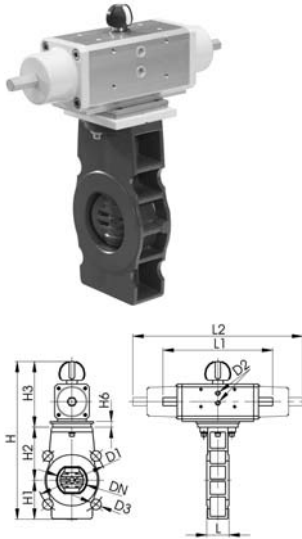
Butterfly valve type 036 PVC-U FO (Fail safe to open) Without manual override

Phase out product will be replaced with type 240 for Dimension DN65-200

d [mm]	DN [mm]	Inch	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
75	65	2 1/2	10	2200	199 036 740	199 036 750	5.950
90	80	3	10	3000	199 036 741	199 036 751	6.520
110	100	4	10	6500	199 036 742	199 036 752	10.750
140	125	5	10	11500	199 036 743	199 036 753	12.150
160	150	6	6	16600	199 036 744	199 036 754	18.480
225	200	8	6	39600	199 036 745	199 036 755	21.120
280	250	10	6	55000	199 036 746	199 036 756	39.000
315	300	12	4	80000	199 036 747	199 036 757	43.000

d [mm]	D [mm]	D1 [mm]	D1 min. [mm]	D1 max. [mm]	D2 [inch]	D3 [mm]	L [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H6 [mm]
75	49		140.0	145.0	1/8	22.0	46	326	323	80	110	133	12
90	66		150.0	160.0	1/8	18.0	49	370	343	92	120	141	12
110	85		175.0	190.5	1/8	24.0	56	411	394	108	138	148	9
140	110		210.0	216.0	1/8	23.0	64	423	438	120	156	162	13
160	135		240.0	241.0	1/8	24.0	70	452	479	140	170	169	8
225	189		290.0	298.0	1/8	24.0	71	503	571	175	215	181	8
280	238	350.00			1/8	22.0	76	648	713	220	248	245	54
315	286	400.00			1/4	22.0	83	663	832	266	290	276	54

d [mm]	Connecting dimension
75	ISO, EN, DIN, BS, ANSI
90	ISO, EN, DIN, BS, ANSI
110	ISO, EN, DIN, BS, ANSI
140	ISO, EN, DIN, BS, ANSI
160	ISO, EN, DIN, BS, ANSI
225	ISO, EN, DIN, BS, ANSI
280	ISO, EN, DIN
315	ISO, EN, DIN



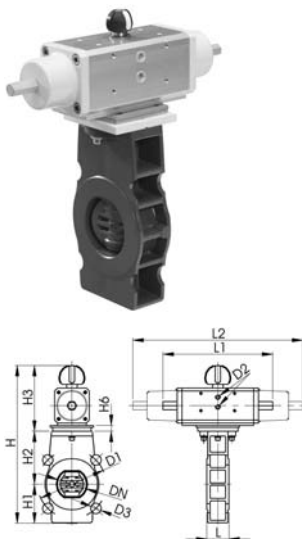
Butterfly valve type 036 PVC-U DA (Double acting) Without manual override

Phase out product will be replaced with type 240 for Dimension DN65-200

d [mm]	DN [mm]	Inch	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
75	65	2 ¼	10	2200	199 036 760	199 036 770	3.050
90	80	3	10	3000	199 036 761	199 036 771	3.620
110	100	4	10	6500	199 036 762	199 036 772	5.980
140	125	5	10	11500	199 036 763	199 036 773	7.860
160	150	6	6	16600	199 036 764	199 036 774	11.100
225	200	8	6	39600	199 036 765	199 036 775	14.740
280	250	10	6	55000	199 036 766	199 036 776	27.000
315	300	12	4	80000	199 036 767	199 036 777	34.000

d [mm]	D [mm]	D1 min. [mm]	D1 max. [mm]	D2 [inch]	D3 [mm]	L [mm]	L1 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H6 [mm]
75	49	140.0	145.0	⅜	22.0	46	190	309	80	110	119	16
90	66	150.0	160.0	⅜	18.0	49	198	327	92	120	125	12
110	85	175.0	190.5	⅜	24.0	56	235	369	108	138	123	12
140	110	210.0	216.0	⅜	23.0	64	250	421	120	156	145	16
160	135	240.0	241.0	⅜	24.0	70	279	462	140	170	152	13
225	189	290.0	298.0	⅜	24.0	71	341	552	175	215	162	13
280	238			⅜	22.0	76	350	683	220	248	215	54
315	286			⅜	22.0	83	381	809	266	290	253	54

d [mm]	Connecting dimension
75	ISO, EN, DIN, BS, ANSI
90	ISO, EN, DIN, BS, ANSI
110	ISO, EN, DIN, BS, ANSI
140	ISO, EN, DIN, BS, ANSI
160	ISO, EN, DIN, BS, ANSI
225	ISO, EN, DIN, BS, ANSI
280	ISO, EN, DIN
315	ISO, EN, DIN



Butterfly valve type 036.1 PVC-U FC (Fail safe to close) Without manual override

- Attention: provided with "smaller" actuator and suitable for PN5

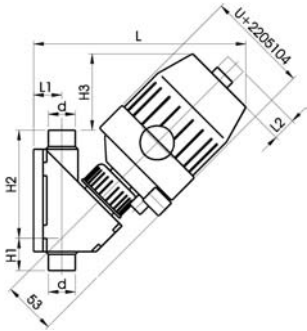
Phase out product will be replaced with type 240

d [mm]	DN [mm]	Inch	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
75	65	2 ½	5	2200	199 036 600	199 036 606	3.614
90	80	3	5	3000	199 036 601	199 036 607	5.272
110	100	4	5	6500	199 036 602	199 036 608	6.096
140	125	5	5	11500	199 036 603	199 036 609	8.941
160	150	6	5	16600	199 036 604	199 036 610	11.466
225	200	8	5	39600	199 036 605	199 036 611	14.408

d [mm]	D1 [mm]	D2 [inch]	D3 [mm]	L [mm]	L2 [mm]	L3 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H6 [mm]
75	142.00	⅜	22.0	46	276	112	319	80	110	129	16
90	160.00	⅜	18.0	49	370	132	353	92	120	141	12
110	186.00	⅜	24.0	56	370	160	387	108	138	141	12
140	215.00	⅜	23.0	64	408	190	428	120	156	152	13
160	240.00	⅜	24.0	70	423	216	472	140	170	162	13
225	297.00	⅜	24.0	71	423	272	552	175	215	162	13

Angle seat valves pneumatic

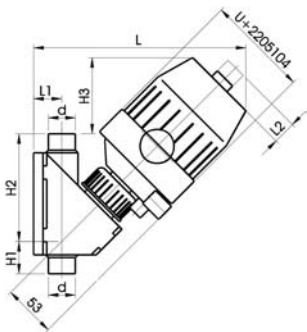
Angle seat valve type 211 PVC-U FC (Fail safe to close) With solvent cement spigots metric



d [mm]	DN [mm]	Inch	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	3/8	6	41	199 211 305	199 211 355	1.000
20	15	1/2	6	94	199 211 306	199 211 356	1.200
25	20	3/4	6	175	199 211 307	199 211 357	1.400
32	25	1	6	296	199 211 308	199 211 358	1.600
40	32	1 1/4	6	416	199 211 309	199 211 359	2.100
50	40	1 1/2	3	512	199 211 310	199 211 360	2.900
63	50	1 3/4	2	620	199 211 311	199 211 361	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

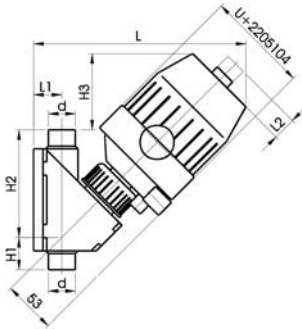
Angle seat valve type 211 PVC-U FO (Fail safe to open) With solvent cement spigots metric



d [mm]	DN [mm]	Inch	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	3/8	10	41	199 211 705	199 211 755	1.000
20	15	1/2	10	94	199 211 706	199 211 756	1.200
25	20	3/4	10	175	199 211 707	199 211 757	1.400
32	25	1	10	296	199 211 708	199 211 758	1.600
40	32	1 1/4	10	416	199 211 709	199 211 759	2.100
50	40	1 1/2	6	512	199 211 710	199 211 760	2.900
63	50	2	4	620	199 211 711	199 211 761	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

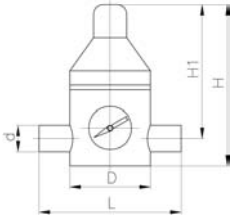


d [mm]	DN [mm]	Inch	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	3/8	10	41	199 211 105	199 211 155	1.000
20	15	1/2	10	94	199 211 106	199 211 156	1.200
25	20	3/4	10	175	199 211 107	199 211 157	1.400
32	25	3/4	10	296	199 211 108	199 211 158	1.600
40	32	1 1/4	10	416	199 211 109	199 211 159	2.100
50	40	1 1/2	10	512	199 211 110	199 211 160	2.900
63	50	2	6	620	199 211 111	199 211 161	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

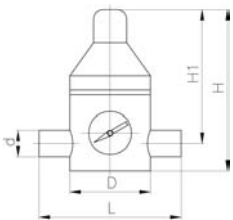
Process control valves

Pressure reducing valve type V 182 PVC-U With solvent cement spigots metric



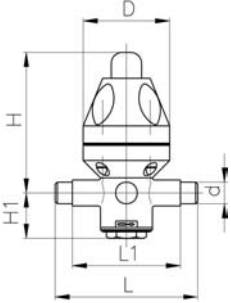
d [mm]	DN [mm]	Pressure range [bar]	EPDM Code	FPM Code	kg	D [mm]	L [mm]	H [mm]	H1 [mm]
16	10	0,5 - 10	199 041 600	199 041 611	0.680	70	134	130	100
20	15	0,5 - 10	199 041 601	199 041 612	0.680	70	134	130	100
25	20	0,5 - 10	199 041 602	199 041 613	1.350	100	174	180	134
32	25	0,5 - 10	199 041 603	199 041 614	1.350	100	174	180	134
40	32	0,5 - 10	199 041 604	199 041 615	2.950	130	224	230	175
50	40	0,5 - 10	199 041 605	199 041 616	2.950	130	224	230	175

Pressure reducing valve type V 82 PVC-U With solvent cement spigots metric



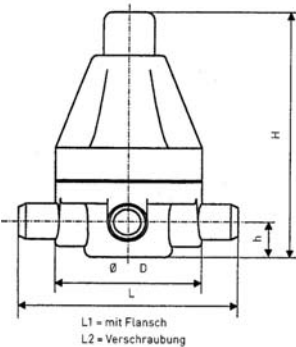
d [mm]	DN [mm]	Pressure range [bar]	EPDM Code	PTFE Code	kg	D [mm]	L [mm]	H [mm]	H1 [mm]
63	50	0,5 - 10	199 041 018	199 041 028	5.180	150	244	285	210
75	65	0,5 - 6	199 041 019	199 041 029	10.430	200	300	350	250
90	80	0,5 - 6	199 041 020	199 041 030	19.630	250	360	425	305
110	100	0,5 - 4	199 041 021	199 041 031	31.640	300	420	495	345

Pressure reducing valve type V 782 PVC-U With solvent cement spigots metric



d [mm]	DN [mm]	Pressure range [bar]	EPDM Code	PTFE Code	kg	D [mm]	L [mm]	L1 [mm]	H [mm]	H1 [mm]
16	10	0,5 - 10	199 041 060	199 041 066	0.620	83	134	102	138	48
20	15	0,5 - 10	199 041 061	199 041 067	0.620	83	134	102	138	48
25	20	0,5 - 10	199 041 062	199 041 068	1.700	113	154	110	205	65
32	25	0,5 - 10	199 041 063	199 041 069	1.700	113	154	110	205	65
40	32	0,5 - 10	199 041 064	199 041 070	4.840	165	224	162	248	95
50	40	0,5 - 10	199 041 065	199 041 071	4.840	165	224	162	248	95

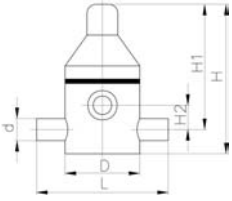
Pressure relief valve type V 185 PVC-U With solvent cement spigots metric



d [mm]	DN [mm]	Pressure range [bar]	EPDM Code	PTFE Code	kg	D [mm]	L [mm]	H [mm]	H1 [mm]
16	10	0,5 - 10	199 041 360	199 041 330	0.400	83	134	137	20
20	15	0,5 - 10	199 041 361	199 041 331	0.400	83	134	137	20
25	20	0,5 - 10	199 041 362	199 041 332	0.400	83	134	137	20
32	25	0,5 - 10	199 041 363	199 041 333	1.200	112	174	199	27
40	32	0,5 - 10	199 041 364	199 041 334	1.200	112	174	199	43
50	40	0,5 - 10	199 041 365	199 041 335	6.400	165	224	290	43
63	50	0,5 - 10	199 041 366	199 041 336	6.500	165	244	290	43



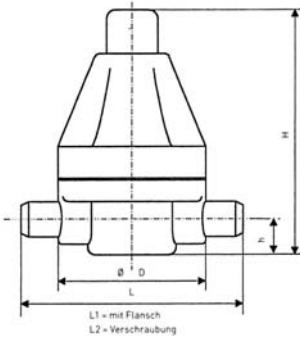
Pressure relief valve type V 85 PVC-U With solvent cement spigots metric



d [mm]	DN [mm]	Pressure range [bar]	EPDM Code	PTFE Code	kg	D [mm]	L [mm]	H [mm]	H1 [mm]	H2 [mm]
75	65	1 - 6	199 041 919	199 041 984	8.200	180	284	295	250	70
90	80	1 - 6	199 041 940	199 041 985	12.800	200	300	400	340	95
110	100	1 - 4	199 041 914	199 041 986	22.700	250	380	475	405	110



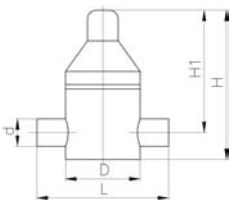
Pressure retaining valve type V 186 PVC-U With solvent cement spigots metric



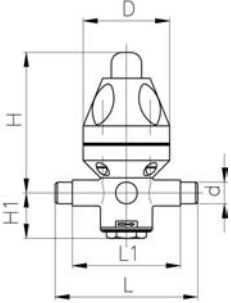
d [mm]	DN [mm]	Pressure range [bar]	EPDM Code	PTFE Code	kg	D [mm]	L [mm]	H [mm]	H1 [mm]
16	10	0,5 - 10	199 041 379	199 041 309	0.400	83	134	137	20
20	15	0,5 - 10	199 041 380	199 041 310	0.400	83	134	137	20
25	20	0,5 - 10	199 041 381	199 041 311	0.400	83	134	137	20
32	25	0,5 - 10	199 041 382	199 041 312	1.200	112	174	199	27
40	32	0,5 - 10	199 041 383	199 041 313	1.200	112	174	199	43
50	40	0,5 - 10	199 041 384	199 041 314	6.400	165	224	290	43
63	50	0,5 - 10	199 041 385	199 041 315	6.500	165	244	290	43



Pressure retaining valve type V 86 PVC-U With solvent cement spigots metric

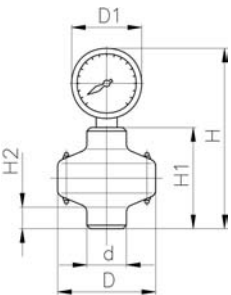


d [mm]	DN [mm]	Pressure range [bar]	EPDM Code	PTFE Code	kg	D [mm]	L [mm]	H [mm]	H1 [mm]
75	65	0,2 - 4	199 041 922	199 041 989	7.700	180	284	275	230
75	65	1 - 6	199 041 950	199 041 990	7.700	180	284	275	230
90	80	0,2 - 4	199 041 987	199 041 944	17.700	250	360	410	320
90	80	1 - 6	199 041 988	199 041 991	17.700	250	360	410	320
110	100	1 - 4	199 041 953	199 041 945	19.600	250	380	485	415



Pressure retaining valve type V 786 PVC-U With solvent cement spigots metric

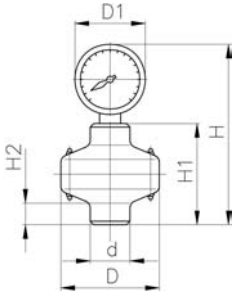
d [mm]	DN [mm]	Pressure range [bar]	EPDM Code	PTFE Code	kg	D [mm]	L [mm]	L1 [mm]	H [mm]	H1 [mm]
16	10	0,5 - 10	199 041 090	199 041 096	0.620	83	134	102	138	38
20	15	0,5 - 10	199 041 091	199 041 097	0.620	83	134	102	138	38
25	20	0,5 - 10	199 041 092	199 041 098	1.700	112	154	110	205	55
32	25	0,5 - 10	199 041 093	199 041 099	1.700	112	154	110	205	55
40	32	0,5 - 4	199 041 094	199 041 100	4.840	165	224	162	248	85
50	40	0,5 - 4	199 041 095	199 041 101	4.840	165	224	162	248	85



Gauge guard type Z 700 PVC-U With manometer 0-10 bar

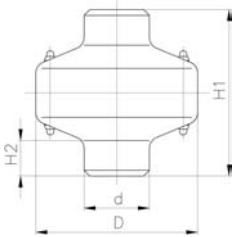
d [mm]	PTFE Code	kg	G_R	D [mm]	D1 [mm]	H [mm]	H1 [mm]	H2 [mm]
25	199 041 000	0.300	¼	72	63.00	129	71	15
32	199 041 001	0.600	½	100	100.00	210	90	22

Gauge guard type Z 700 PVC-U With manometer 0-6 bar



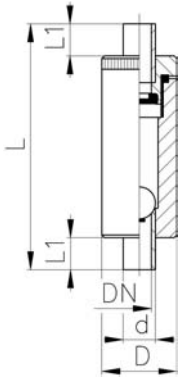
d [mm]	PTFE Code	kg	G_R	D [mm]	D1 [mm]	H [mm]	H1 [mm]	H2 [mm]
25	199 041 292	0.300	¼	72	63.00	129	71	15
32	199 041 293	0.600	½	100	100.00	210	90	22

Gauge guard type Z 701 PVC-U Without manometer



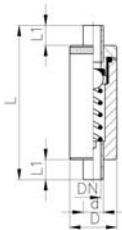
d [mm]	PTFE Code	kg	G_R	D [mm]	H1 [mm]	H2 [mm]
25	199 041 006	0.140	½	72	71	15
32	199 041 007	0.250	¼	100	90	22

Ventilating and bleed valve type V 91 PVC-U With solvent cement spigots metric



d [mm]	DN [mm]	PN	FPM Code	kg	D [mm]	L [mm]	L1 [mm]
16	10	10	199 041 238	0.100	35	114	14
20	15	10	199 041 239	0.140	40	124	16
25	20	10	199 041 240	0.190	45	144	19
32	25	10	199 041 241	0.280	55	154	22
40	32	10	199 041 242	0.550	70	174	26
50	40	10	199 041 243	0.710	80	194	31
63	50	10	199 041 244	1.280	95	224	38
75	65	10	199 041 245	1.900	115	284	44
90	80	10	199 041 246	3.230	150	300	51

Ventilating valve type V 95 PVC-U With solvent cement spigots metric



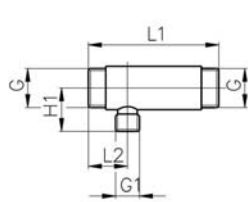
d [mm]	DN [mm]	PN	FPM Code	kg	D [mm]	L [mm]	L1 [mm]
16	10	10	199 041 265	0.100	35	114	14
20	15	10	199 041 266	0.140	40	124	16
25	20	10	199 041 267	0.190	45	144	19
32	25	10	199 041 268	0.280	55	154	22
40	32	10	199 041 269	0.550	70	174	26
50	40	10	199 041 270	0.710	80	194	31
63	50	10	199 041 271	1.280	95	224	38
75	65	10	199 041 272	1.900	115	284	44
90	80	10	199 041 273	3.230	150	300	51



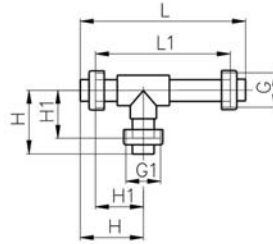
Water jet pump type P 20 PVC-U

- DN 10-20: BSP parallel female thread
- DN 25-50: Solvent cement socket metric
- DN 65-80: Solvent cement spigot metric

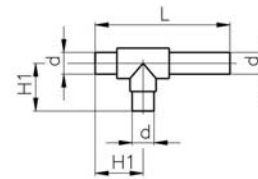
d [mm]	DN [mm]	PN	EPDM Code	kg	G [inch]	G1 [inch]	L [mm]	L1 [mm]	L2 [mm]	H [mm]	H1 [mm]
16	10	10	199 041 120	0.140	R 3/4	R 3/4		110	40		35
20	15	10	199 041 121	0.220	R 1	R 3/4		125	40		35
25	20	10	199 041 122	0.400	R 1 1/4	R 3/4		145	45		45
32	25	10	199 041 123	0.480	R 1 1/2	R 1 1/2	245	195		96	71
40	32	10	199 041 124	0.870	R 2	R 2	297	239		116	87
50	40	10	199 041 125	1.380	R 2 1/4	R 2 1/4	369	301		139	105
63	50	10	199 041 126	2.450	R 2 3/4	R 2 3/4	433	351		169	128
75	65	10	199 041 127	2.350			388				115
90	80	10	199 041 128	4.090			465				149



DN 10 - 20



DN 25 - 50

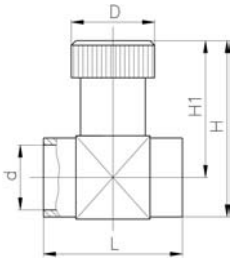


DN 65 - 80



Throttle valve type V 251 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]
16	10	10	199 041 203	199 041 210	0.048	29	47	57	45
20	15	10	199 041 204	199 041 211	0.120	35	55	66	51
25	20	10	199 041 205	199 041 212	0.124	40	66	80	63
32	25	10	199 041 206	199 041 213	0.219	47	80	96	75
40	32	10	199 041 207	199 041 214	0.150	56	100	111	86
50	40	10	199 041 208	199 041 215	0.662	70	120	133	101
63	50	10	199 041 209	199 041 216	1.240	88	146	158	118

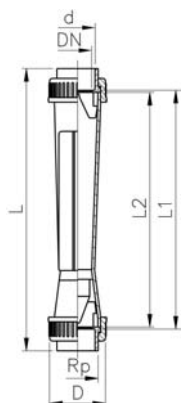


Variable area flow meters

Standard version

Float in PVDF without magnet

With solvent cement socket PVC-U metric



Type	d [mm]	DN [mm]	Scale range [l/h]	Taper tube in Polyamid O-rings in EPDM Code	Taper tube in Polysulfone O-rings in EPDM Code
SK 10	32	25	50 - 500	198 801 900	198 801 901
SK 11	32	25	100 - 1000	198 801 902	198 801 903
SK 12	32	25	150 - 1500	198 803 734	198 803 735
SK 18	50	40	200 - 2000	198 803 738	198 803 739
SK 19	50	40	250 - 2500	198 803 741	198 803 742
SK 20	50	40	300 - 3000	198 801 904	198 801 905
SK 21	50	40	600 - 6000	198 801 906	198 801 907
SK 29	63	50	600 - 6000	198 803 744	198 803 745
SK 30	63	50	1000 - 10000	198 801 908	198 801 909
SK 31	63	50	1500 - 15000	198 801 910	198 801 911
SK 40	75	65	2000 - 20000	198 801 330	198 801 331
SK 41	75	65	3000 - 30000	198 801 332	198 801 333

Type	d [mm]	DN [mm]	Scale range [l/h]	Taper tube in PVC-U transp. O-rings in EPDM Code	SP	GP	kg	kg/m
SK 10	32	25	50 - 500	198 803 290	-	-	0.410	0.410
SK 11	32	25	100 - 1000	198 803 291	-	-	0.410	0.410
SK 12	32	25	150 - 1500	198 803 736	-	-	0.410	0.410
SK 18	50	40	200 - 2000	198 803 740	-	-	1.020	1.020
SK 19	50	40	250 - 2500	198 803 743	-	-	1.020	1.020
SK 20	50	40	300 - 3000	198 803 292	-	-	1.020	1.020
SK 21	50	40	600 - 6000	198 803 293	-	-	1.020	1.020
SK 29	63	50	600 - 6000	198 803 746	-	-	1.380	1.380
SK 30	63	50	1000 - 10000	198 803 294	-	-	1.380	1.380
SK 31	63	50	1500 - 15000	198 803 295	-	-	1.380	1.380
SK 40	75	65	2000 - 20000	198 803 296	-	-	2.150	2.150
SK 41	75	65	3000 - 30000	198 803 297	-	-	2.150	2.150

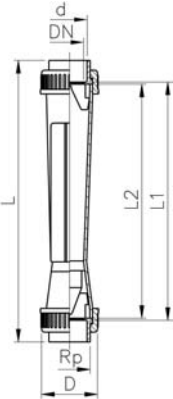
Type	D [mm]	L [mm]	L1 [mm]	L2 [mm]	Rp [inch]
SK 10	60	385	341	335	1
SK 11	60	385	341	335	1
SK 12	60	385	341	335	1
SK 18	83	403	341	335	1 ½
SK 19	83	403	341	335	1 ½
SK 20	83	403	341	335	1 ½
SK 21	83	403	341	335	1 ½
SK 29	103	417	341	335	2
SK 30	103	417	341	335	2
SK 31	103	417	341	335	2
SK 40	122	457	342	335	2 ½
SK 41	122	457	342	335	2 ½



Standard version Float in PVDF with magnet With solvent cement socket PVC-U metric

Model:

- Suitable limit switches see accessories for variable area flow meters

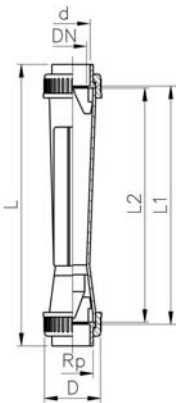
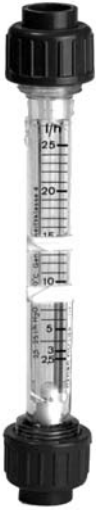


Type	d [mm]	DN [mm]	Scale range [l/h]	Taper tube in Polyamid O-rings in EPDM Code	Taper tube in Polysulfone O-rings in EPDM Code
SK 100	32	25	50 - 500	198 801 912	198 801 913
SK 110	32	25	100 - 1000	198 801 914	198 801 915
SK 120	32	25	150 - 1500	198 803 747	198 803 748
SK 180	50	40	200 - 2000	198 803 750	198 803 751
SK 190	50	40	250 - 2500	198 803 753	198 803 754
SK 200	50	40	300 - 3000	198 801 916	198 801 917
SK 210	50	40	600 - 6000	198 801 918	198 801 919
SK 290	63	50	600 - 6000	198 803 756	198 803 757
SK 300	63	50	1000 - 10000	198 801 920	198 801 921
SK 310	63	50	1500 - 15000	198 801 922	198 801 923
SK 400	75	65	2000 - 20000	198 801 334	198 801 335
SK 410	75	65	3000 - 30000	198 801 336	198 801 337

Type	d [mm]	DN [mm]	Scale range [l/h]	Taper tube in PVC-U transp. O-Rings in EPDM Code	SP	GP	kg	kg/m
SK 100	32	25	50 - 500	198 803 300	-	-	0.410	0.410
SK 110	32	25	100 - 1000	198 803 301	-	-	0.410	0.410
SK 120	32	25	150 - 1500	198 803 749	-	-	0.410	0.410
SK 180	50	40	200 - 2000	198 803 752	-	-	1.020	1.020
SK 190	50	40	250 - 2500	198 803 755	-	-	1.020	1.020
SK 200	50	40	300 - 3000	198 803 302	-	-	1.020	1.020
SK 210	50	40	600 - 6000	198 803 303	-	-	1.020	1.020
SK 290	63	50	600 - 6000	198 803 758	-	-	1.380	1.380
SK 300	63	50	1000 - 10000	198 803 304	-	-	1.380	1.380
SK 310	63	50	1500 - 15000	198 803 305	-	-	1.380	1.380
SK 400	75	65	2000 - 20000	198 803 306	-	-	2.150	2.150
SK 410	75	65	3000 - 30000	198 803 307	-	-	2.150	2.150

Type	D [mm]	L [mm]	L1 [mm]	L2 [mm]	Rp [inch]
SK 100	60	385	341	335	1
SK 110	60	385	341	335	1
SK 120	60	385	341	335	1
SK 180	83	403	341	335	1 ½
SK 190	83	403	341	335	1 ½
SK 200	83	403	341	335	1 ½
SK 210	83	403	341	335	1 ½
SK 290	103	417	341	335	2
SK 300	103	417	341	335	2
SK 310	103	417	341	335	2
SK 400	122	457	342	335	2 ½
SK 410	122	457	342	335	2 ½

Short version
Float in PVDF without magnet
With solvent cement socket PVC-U metric



Type	d [mm]	DN [mm]	Scale range [l/h]	Taper tube in Polysulfone O-rings in EPDM Code	Taper tube in PVC-U transp. O-rings in EPDM Code	SP	GP	kg	kg/m
SK 50	16	10	2.5 - 25	198 801 880	198 803 310	-	-	0.080	0.080
SK 51	16	10	5 - 50	198 801 881	198 803 311	-	-	0.080	0.080
SK 52	16	10	10 - 100	198 801 882	198 803 312	-	-	0.080	0.080
SK 60	20	15	8 - 80	198 801 883	198 803 313	-	-	0.130	0.130
SK 61	20	15	15 - 150	198 801 884	198 803 314	-	-	0.130	0.130
SK 62	20	15	20 - 200	198 801 885	198 803 315	-	-	0.130	0.130
SK 70	32	25	15 - 150	198 801 886	198 803 316	-	-	0.240	0.240
SK 71	32	25	30 - 300	198 801 887	198 803 317	-	-	0.240	0.240
SK 72	32	25	50 - 500	198 801 888	198 803 318	-	-	0.240	0.240
SK 73	32	25	100 - 1000	198 801 889	198 803 319	-	-	0.240	0.240

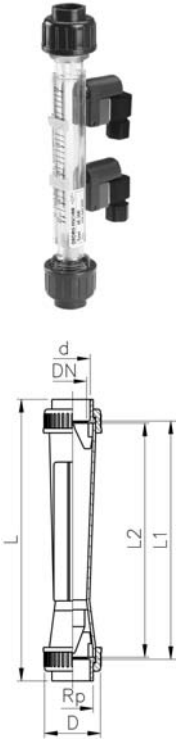
Type	D [mm]	L [mm]	L1 [mm]	L2 [mm]	Rp [inch]
SK 50	35	199	171	165	3/8
SK 51	35	199	171	165	3/8
SK 52	35	199	171	165	3/8
SK 60	43	223	191	185	1/2
SK 61	43	223	191	185	1/2
SK 62	43	223	191	185	1/2
SK 70	60	250	206	200	1
SK 71	60	250	206	200	1
SK 72	60	250	206	200	1
SK 73	60	250	206	200	1

Short version Float in PVDF with magnet With solvent cement socket PVC-U metric

Model:

- Suitable limit switches see accessories for variable area flow meters

Type	d [mm]	DN [mm]	Scale range [l/h]	Taper tube in Polysulfone O-rings in EPDM Code	Taper tube in PVC-U transp. O-rings in EPDM Code	SP	GP	kg	kg/m
SK 500	16	10	2.5 - 25	198 801 890	198 803 320	-	-	0.080	0.080
SK 510	16	10	5 - 50	198 801 891	198 803 321	-	-	0.080	0.080
SK 520	16	10	10 - 100	198 801 892	198 803 322	-	-	0.080	0.080
SK 600	20	15	8 - 80	198 801 893	198 803 323	-	-	0.130	0.130
SK 610	20	15	15 - 150	198 801 894	198 803 324	-	-	0.130	0.130
SK 620	20	15	20 - 200	198 801 895	198 803 325	-	-	0.130	0.130
SK 700	32	25	15 - 150	198 801 896	198 803 326	-	-	0.240	0.240
SK 710	32	25	30 - 300	198 801 897	198 803 327	-	-	0.240	0.240
SK 720	32	25	50 - 500	198 801 898	198 803 328	-	-	0.240	0.240
SK 730	32	25	100 - 1000	198 801 899	198 803 329	-	-	0.240	0.240



Type	D [mm]	L [mm]	L1 [mm]	L2 [mm]	Rp [inch]
SK 500	35	199	171	165	3/8
SK 510	35	199	171	165	3/8
SK 520	35	199	171	165	3/8
SK 600	43	223	191	185	1/2
SK 610	43	223	191	185	1/2
SK 620	43	223	191	185	1/2
SK 700	60	250	206	200	1
SK 710	60	250	206	200	1
SK 720	60	250	206	200	1
SK 730	60	250	206	200	1

Accessories Limit switch control bistable for standard version



Type	GK 01 Code	SP	GP	kg	kg/m
SK100-120 / 190-210 / 300-410	198 801 936	-	-	0.050	0.050
SK 180 / SK 290	198 801 841	-	-	0.050	0.050

Accessories Limit contact (min/max.) For short version



Type	top Code	bottom Code	SP	GP	kg	kg/m
SK500-730 GK 03	198 801 878	-	-	-	0.080	0.080
SK500-730 GK 04	-	198 801 879	-	-	0.024	0.024



Accessories

4-20 mA sensor

- Kit GK 05:
- 1 x sensor 4-20 mA
- 1 x float PVDF with magnet (monostable)
- Basic unit is standard version (without magnet)

Type	d [mm]	DN [mm]		Code	SP	GP	kg	kg/m
GK 05	32	25	SK 10 / 11	199 190 334	-	-	0.286	0.286
GK 05	50	40	SK 20 / 21	199 190 335	-	-	0.420	0.420
GK 05	63	50	SK 30 / 31	199 190 336	-	-	0.610	0.610
GK 05	75	65	SK 40	199 190 337	-	-	0.610	0.610
GK 05	75	65	SK 41	199 190 338	-	-	0.610	0.610

Special scale for standard version

Water l/h

Type	Scale range [l/h]	Code	SP	GP	kg	kg/m
SK 10 / 100	50 - 500	198 801 955	-	-	0.001	0.001
SK 11 / 110	100 - 1000	198 801 956	-	-	0.001	0.001
SK 12 / 120	150 - 1500	198 803 800	-	-	0.001	0.001
SK 18 / 180	200 - 2000	198 803 801	-	-	0.001	0.001
SK 19 / 190	250 - 2500	198 803 802	-	-	0.001	0.001
SK 20 / 200	300 - 3000	198 801 957	-	-	0.001	0.001
SK 21 / 210	600 - 6000	198 801 958	-	-	0.001	0.001
SK 29 / 290	600 - 6000	198 803 803	-	-	0.001	0.001
SK 30 / 300	1000 - 10000	198 801 959	-	-	0.001	0.001
SK 31 / 310	1500 - 15000	198 801 960	-	-	0.001	0.001
SK 40 / 400	2000 - 20000	198 801 876	-	-	0.001	0.001
SK 41 / 410	3000 - 30000	198 801 877	-	-	0.001	0.001

Special scale for standard version

Water in %

Type	measure- ment range [%]	Code	SP	GP	kg	kg/m
SK 10 / 110	10 - 100	198 802 076	-	-	0.001	0.001
SK 11 / 110	10 - 100	198 802 077	-	-	0.001	0.001
SK 12 / 120	10 - 100	198 803 804	-	-	0.001	0.001
SK 18 / 180	10 - 100	198 803 805	-	-	0.001	0.001
SK 19 / 190	10 - 100	198 803 806	-	-	0.001	0.001
SK 20 / 200	10 - 100	198 802 078	-	-	0.001	0.001
SK 21 / 210	10 - 100	198 802 079	-	-	0.001	0.001
SK 29 / 290	10 - 100	198 803 807	-	-	0.001	0.001
SK 30 / 300	10 - 100	198 802 080	-	-	0.001	0.001
SK 31 / 310	10 - 100	198 802 081	-	-	0.001	0.001
SK 40 / 410	10 - 100	198 802 082	-	-	0.001	0.001
SK 41 / 410	10 - 100	198 802 083	-	-	0.001	0.001

Special scale for standard version m³/h

Type	Scale range [m ³ /h]	Code	SP	GP	kg	kg/m
SK 10 / 100	0,05 - 0,5	198 801 937	-	-	0.001	0.001
SK 11 / 110	0,1 - 1	198 801 938	-	-	0.001	0.001
SK 12 / 120	0,15 - 1,5	198 803 808	-	-	0.002	0.002
SK 18 / 180	0,2 - 2	198 803 809	-	-	0.001	0.001
SK 19 / 190	0,25 - 2,5	198 803 810	-	-	0.002	0.002
SK 20 / 200	0,3 - 3	198 801 939	-	-	0.001	0.001
SK 21 / 210	0,6 - 6	198 801 940	-	-	0.001	0.001
SK 29 / 290	0,6 - 6	198 803 811	-	-	0.001	0.001
SK 30 / 300	1 - 10	198 801 941	-	-	0.001	0.001
SK 31 / 310	1,5 - 15	198 801 942	-	-	0.001	0.001
SK 40 / 400	2 - 20	198 801 318	-	-	0.001	0.001
SK 41 / 410	3 - 30	198 801 319	-	-	0.001	0.001

Special scale for standard version Imp. GPM

Type	Scale range [gal/min]	Code	SP	GP	kg	kg/m
SK 10 / 100	0,183 - 1,83	198 801 943	-	-	0.001	0.001
SK 11 / 110	0,366 - 3,66	198 801 944	-	-	0.001	0.001
SK 12 / 120	0,55 - 5,5	198 803 812	-	-	0.001	0.001
SK 18 / 180	0,733 - 7,33	198 803 813	-	-	0.001	0.001
SK 19 / 190	0,916 - 9,16	198 803 814	-	-	0.001	0.001
SK 20 / 200	1,09 - 10,9	198 801 945	-	-	0.001	0.001
SK 21 / 210	2,19 - 21,9	198 801 946	-	-	0.001	0.001
SK 29 / 290	2,2 - 22	198 803 815	-	-	0.001	0.001
SK 30 / 300	3,66 - 36,6	198 801 947	-	-	0.001	0.001
SK 31 / 310	5,49 - 54,9	198 801 948	-	-	0.010	0.010

Special scale for standard version US GPM

Type	Scale range [gal/min]	Code	SP	GP	kg	kg/m
SK 10 / 100	0,22 - 2,2	198 801 949	-	-	0.001	0.001
SK 11 / 110	0,44 - 4,4	198 801 950	-	-	0.001	0.001
SK 12 / 120	0,66 - 6,6	198 803 816	-	-	0.002	0.002
SK 18 / 180	0,66 - 6,6	198 803 817	-	-	0.002	0.002
SK 19 / 190	1,1 - 11	198 803 818	-	-	0.001	0.001
SK 20 / 200	1,32 - 13,2	198 801 951	-	-	0.001	0.001
SK 21 / 210	2,64 - 26,4	198 801 952	-	-	0.001	0.001
SK 29 / 290	2,64 - 26,4	198 803 819	-	-	0.001	0.001
SK 30 / 300	4,40 - 44,02	198 801 953	-	-	0.001	0.001
SK 31 / 310	6,60 - 66,04	198 801 954	-	-	0.001	0.001
SK 40 / 400	8,80 - 88	198 801 320	-	-	0.001	0.001
SK 41 / 410	13,20 - 132	198 801 321	-	-	0.001	0.001

Special scale for standard version Air / 0 bar / N m³/h

Type	Scale range [m ³ /h]	Code	SP	GP	kg	kg/m
SK 10 / 100	2,1 - 16	198 801 284	-	-	0.001	0.001
SK 11 / 110	4,2 - 32	198 801 285	-	-	0.001	0.001
SK 18 / 180	10 - 70	198 803 821	-	-	0.002	0.002
SK 20 / 200	12,1 - 90	198 801 286	-	-	0.001	0.001
SK 21 / 210	21,1 - 177	198 801 287	-	-	0.001	0.001
SK 29 / 290	22 - 190	198 803 823	-	-	0.002	0.002
SK 30 / 300	34,2 - 276	198 801 288	-	-	0.001	0.001
SK 31 / 310	49,6 - 414	198 801 289	-	-	0.001	0.001
SK 40 / 400	60 - 580	198 801 322	-	-	0.001	0.001
SK 41 / 410	100 - 860	198 801 323	-	-	0.001	0.001

Special scale for standard version HCl 30-33% l/h

Type	Scale range [l/h]	Code	SP	GP	kg	kg/m
SK 10 / 100	50 - 450	198 801 290	-	-	0.001	0.001
SK 11 / 110	150 - 900	198 801 291	-	-	0.002	0.002
SK 18 / 180	200 - 1900	198 803 825	-	-	0.002	0.002
SK 20 / 200	500 - 2500	198 801 292	-	-	0.001	0.001
SK 21 / 210	700 - 5000	198 801 293	-	-	0.001	0.001
SK 29 / 290	800 - 5600	198 803 827	-	-	0.001	0.001
SK 30 / 300	700 - 8500	198 801 294	-	-	0.001	0.001
SK 31 / 310	1000 - 12000	198 801 295	-	-	0.001	0.001
SK 40 / 400	2000 - 18000	198 801 324	-	-	0.001	0.001
SK 41 / 410	3600 - 25000	198 801 325	-	-	0.001	0.001

Special scale for standard version NaOH 30% l/h

Type	Scale range [l/h]	Code	SP	GP	kg	kg/m
SK 10 / 100	15 - 240	198 801 296	-	-	0.001	0.001
SK 11 / 110	50 - 600	198 801 297	-	-	0.001	0.001
SK 18 / 180	100 - 1400	198 803 829	-	-	0.001	0.001
SK 20 / 200	200 - 2000	198 801 298	-	-	0.001	0.001
SK 21 / 210	500 - 4500	198 801 299	-	-	0.001	0.001
SK 29 / 290	400 - 4600	198 803 831	-	-	0.001	0.001
SK 30 / 300	500 - 7500	198 801 300	-	-	0.001	0.001
SK 31 / 310	800 - 11000	198 801 301	-	-	0.001	0.001
SK 40 / 400	1400 - 15000	198 801 326	-	-	0.001	0.001
SK 41 / 410	2000 - 20000	198 801 327	-	-	0.001	0.001

Special scale for standard version NaOH 50% l/h

Type	Scale range [l/h]	Code	SP	GP	kg	kg/m
SK 10 / 100	2 - 60	198 801 302	-	-	0.001	0.001
SK 11 / 110	10 - 190	198 801 303	-	-	0.001	0.001
SK 18 / 180	20 - 600	198 803 833	-	-	0.001	0.001
SK 20 / 200	50 - 1000	198 801 304	-	-	0.001	0.001
SK 21 / 210	100 - 2500	198 801 305	-	-	0.001	0.001
SK 29 / 290	200 - 3400	198 803 835	-	-	0.001	0.001
SK 30 / 300	100 - 4750	198 801 306	-	-	0.001	0.001
SK 31 / 310	300 - 7000	198 801 307	-	-	0.001	0.001
SK 40 / 400	500 - 11000	198 801 328	-	-	0.001	0.001
SK 41 / 410	1000 - 14000	198 801 329	-	-	0.001	0.001

Special scale for short version Water m³/h

Type	Scale range [m ³ /h]	Code	SP	GP	kg	kg/m
SK 50 / 500	2,5 - 25	198 801 386	-	-	0.001	0.001
SK 51 / 510	5 - 50	198 801 387	-	-	0.001	0.001
SK 52 / 520	10 - 100	198 801 388	-	-	0.001	0.001
SK 60 / 600	8 - 80	198 801 389	-	-	0.001	0.001
SK 61 / 610	15 - 150	198 801 390	-	-	0.001	0.001
SK 62 / 620	20 - 200	198 801 391	-	-	0.001	0.001
SK 70 / 700	15 - 150	198 801 392	-	-	0.001	0.001
SK 71 / 710	30 - 300	198 801 393	-	-	0.001	0.001
SK 72 / 720	50 - 500	198 801 394	-	-	0.001	0.001
SK 73 / 730	100 - 1000	198 801 395	-	-	0.001	0.001

Special scale for short version US GPM

Type	Scale range [gal/min]	Code	SP	GP	kg	kg/m
SK 50 / 500	0,01 - 0,11	198 801 961	-	-	0.001	0.001
SK 51 / 510	0,02 - 0,22	198 801 962	-	-	0.001	0.001
SK 52 / 520	0,04 - 0,44	198 801 963	-	-	0.001	0.001
SK 60 / 600	0,03 - 0,35	198 801 964	-	-	0.001	0.001
SK 61 / 610	0,06 - 0,66	198 801 965	-	-	0.001	0.001
SK 62 / 620	0,08 - 0,88	198 801 966	-	-	0.001	0.001
SK 70 / 700	0,06 - 0,66	198 801 967	-	-	0.001	0.001
SK 71 / 710	0,13 - 1,32	198 801 968	-	-	0.001	0.001
SK 72 / 720	0,22 - 2,20	198 801 969	-	-	0.001	0.001
SK 73 / 730	0,44 - 4,40	198 801 970	-	-	0.001	0.001

Special scale for short version
Air / 0 bar / N m³/h

Type	Scale range [m ³ /h]	Code	SP	GP	kg	kg/m
SK 50 / 500	0,5 - 0,95	198 801 308	-	-	0.001	0.001
SK 51 / 510	0,5 - 1,9	198 801 309	-	-	0.001	0.001
SK 52 / 520	0,8 - 3,0	198 801 310	-	-	0.001	0.001
SK 60 / 600	0,6 - 2,8	198 801 311	-	-	0.001	0.001
SK 61 / 610	1,4 - 5,6	198 801 312	-	-	0.001	0.001
SK 62 / 620	1,5 - 7,0	198 801 313	-	-	0.001	0.001
SK 70 / 700	1,0 - 6,5	198 801 314	-	-	0.001	0.001
SK 71 / 710	1,5 - 11,0	198 801 315	-	-	0.001	0.001
SK 72 / 720	3,0 - 18,0	198 801 316	-	-	0.001	0.001
SK 73 / 730	6,0 - 30,0	198 801 317	-	-	0.001	0.001

Special scale for short version
HCl 30 - 33% l/h

Type	Scale range [l/h]	Code	SP	GP	kg	kg/m
SK 50 / 500	2,5 - 20	198 806 511	-	-	0.001	0.001
SK 51 / 510	5 - 40	198 806 512	-	-	0.001	0.001
SK 52 / 520	10 - 85	198 806 513	-	-	0.001	0.001
SK 60 / 600	8 - 70	198 806 514	-	-	0.001	0.001
SK 61 / 610	15 - 125	198 806 515	-	-	0.001	0.001
SK 62 / 620	20 - 170	198 806 516	-	-	0.001	0.001
SK 70 / 700	5 - 125	198 806 517	-	-	0.001	0.001
SK 71 / 710	30 - 260	198 806 518	-	-	0.001	0.001
SK 72 / 720	50 - 425	198 806 519	-	-	0.001	0.001
SK 73 / 730	100 - 850	198 806 520	-	-	0.001	0.001

Special scale for short version
NaOH 30% l/h

Type	Scale range [l/h]	Code	SP	GP	kg	kg/m
SK 50 / 500	0.2 - 5	198 806 521	-	-	0.001	0.001
SK 51 / 510	1 - 14	198 806 522	-	-	0.001	0.001
SK 52 / 520	3 - 35	198 806 523	-	-	0.001	0.001
SK 60 / 600	2 - 23	198 806 524	-	-	0.002	0.002
SK 61 / 610	3 - 55	198 806 525	-	-	0.001	0.001
SK 62 / 620	5 - 80	198 806 526	-	-	0.001	0.001
SK 70 / 700	3 - 55	198 806 527	-	-	0.001	0.001
SK 71 / 710	6 - 130	198 806 528	-	-	0.001	0.001
SK 72 / 720	10 - 250	198 806 529	-	-	0.001	0.001
SK 73 / 730	40 - 590	198 806 530	-	-	0.001	0.001

Special scale for short version NaOH 50% I/h

Type	Scale range [l/h]	Code	SP	GP	kg	kg/m
SK 60 / 600	0,2 - 3,5	198 806 531	-	-	0.001	0.001
SK 61 / 610	0,5 - 10	198 806 532	-	-	0.001	0.001
SK 62 / 620	0,5 - 16	198 806 533	-	-	0.001	0.001
SK 70 / 700	0,5 - 11	198 806 534	-	-	0.001	0.001
SK 71 / 710	1 - 33	198 806 535	-	-	0.001	0.001
SK 72 / 720	2 - 80	198 806 536	-	-	0.001	0.001
SK 73 / 730	10 - 220	198 806 537	-	-	0.001	0.001

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.

George Fischer – an experienced partner

George Fischer 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.

George Fischer 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:



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.

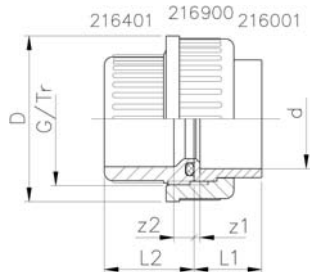
Plastic Piping Systems PVC-U Silicon Free

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Unions Silicon Free

21 51 01

Unions for solvent cement jointing, PVC-U 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	SP	GP	kg
10	16	721 510 178	721 510 153	-	-	0.020
12	16	721 510 179	721 510 154	-	-	0.019
16	16	721 510 180	721 510 155	-	-	0.031
20	16	721 510 181	721 510 156	-	-	0.040
25	16	721 510 182	721 510 157	-	-	0.066
32	16	721 510 183	721 510 158	1	40	0.090
40	16	721 510 184	721 510 159	-	-	0.175
50	16	721 510 185	721 510 160	1	14	0.215
63	16	721 510 186	721 510 161	1	8	0.380
75	10	721 510 187	721 510 162	-	2	0.615
90	10	721 510 188	721 510 163	-	2	0.925
110	10	721 510 189	721 510 164	-	1	1.425

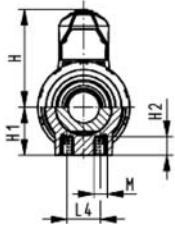
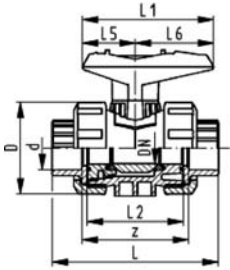
d [mm]	z1 [mm]	z2 [mm]	D [mm]	L [mm]	L1 [mm]	G/Tr
10	3	10	31	22	15	5/8
12	3	10	31	22	15	5/8
16	3	10	35	24	17	3/4
20	3	10	43	26	19	1
25	3	10	51	29	22	1 1/4
32	3	10	58	32	25	1 1/2
40	3	12	72	38	29	2
50	3	14	83	45	34	2 1/4
63	3	18	100	56	41	2 3/4
75	3	18	135	62	47	Tr 108x5
90	5	18	158	69	56	Tr 128x5
110	5	11	188	72	66	Tr 154x6

Ball valves

Ball valve type 546 PVC-U SF

With mounting inserts

With solvent cement sockets metric



Model:

- With PVDF ball seal
- Silicone-free / paint-compatible
- For easy installation and removal
- z-dimension, valve end and valve nut are **not compatible** with type 346
- Integrated stainless steel mounting inserts

Option:

- Individual configuration of the valve (see form)
- Multifunctional module with integrated limit switches

d [mm]	DN [mm]	PN	kv-value ($\Delta p=1$ 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	

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]	
16	50	57	27	12	92	77	56	25	32	45	M6	64	
20	50	57	27	12	95	77	56	25	32	45	M6	64	
25	58	67	30	12	110	97	65	25	39	58	M6	72	
32	68	73	36	12	123	97	71	25	39	58	M6	79	
40	84	90	44	15	146	128	85	45	54	74	M8	94	
50	97	97	51	15	157	128	89	45	54	74	M8	95	
63	124	116	64	15	183	152	101	45	66	87	M8	107	

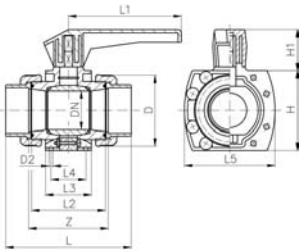


Ball valve type 370 PVC-U SF

Unions with solvent cement sockets metric

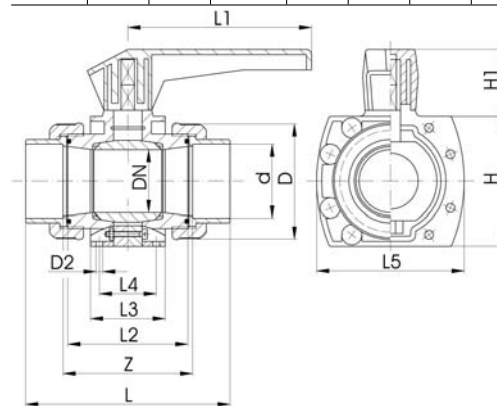
Model:

- Silicone-free / paint-compatible
- For easy installation and removal
- Ball seals PVDF



d [mm]	DN [mm]	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg	
75	65	10	5000	161 370 778	161 370 793	3.100	
90	80	10	7000	161 370 779	161 370 794	4.300	
110	100	10	11000	161 370 780	161 370 795	8.700	

d [mm]	z [mm]	D [mm]	D2 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	H [mm]	H1 [mm]	
75	145	135	10.00	233	205	139	90	72	160	148	74	
90	165	158	10.00	267	205	155	104	88	188	176	74	
110	196	188	12.00	318	250	186	128	104	225	223	78	





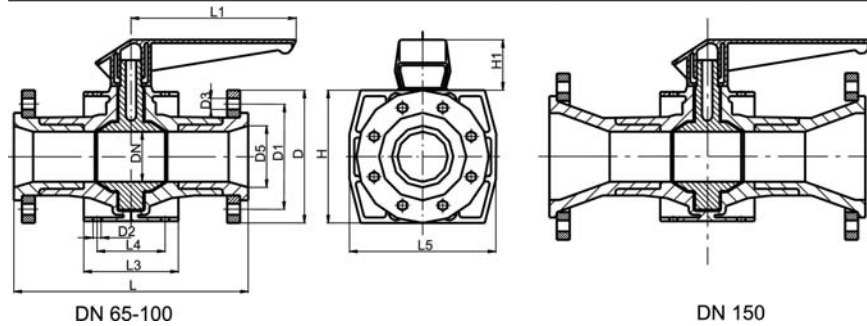
Ball valve type 370 PVC-U SF With backing flanges PVC-U metric

Model:

- Silicone-free / paint-compatible
- For easy installation and removal
- Ball seals PVDF
- Jointing face flat
- Overall length EN 558-1
- Connecting dimension: ISO 2501 PN 10

d [mm]	DN [mm]	Inch	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
75	65	2 ½	10	5000	161 370 002	161 370 027	4.000
90	80	3	10	7000	161 370 003	161 370 028	5.500
110	100	4	10	11000	161 370 004	161 370 029	9.700
160	100	6	10	16000	161 370 006	161 370 031	12.100

d [mm]	D [mm]	D1 [mm]	D2 [mm]	D3 [mm]	D5 [mm]	L [mm]	L1 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	H [mm]	H1 [mm]
75	185	145.00	10.00	18.0	68	290	205	120	84	160	148	74
90	200	160.00	10.00	18.0	82	310	205	120	102	188	176	74
110	220	180.00	12.00	18.0	102	350	250	152	122	225	223	78
160	285	240.00	12.00	22.0	156	480	250	152	122	225	223	78

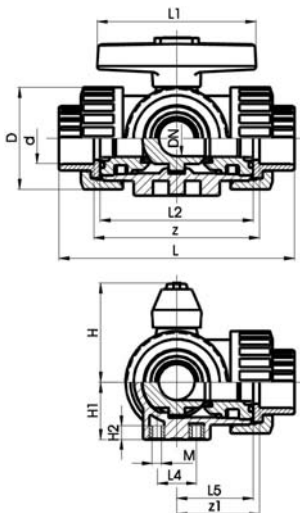




3-Way ball valve type 343 PVC-U SF Horizontal/ L-port With solvent cement sockets metric

Model:

- L-port ball
- Silicone-free / paint-compatible
- Union ends for easy installation and removal
- Pneumatic or electric actuator available separately
- Angle of operation 45°, without turn limiter



d [mm]	DN [mm]	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	50	161 343 141	161 343 151	0.199
20	15	10	75	161 343 142	161 343 152	0.199
25	20	10	150	161 343 143	161 343 153	0.370
32	25	10	280	161 343 144	161 343 154	0.504
40	32	10	480	161 343 145	161 343 155	0.838
50	40	10	620	161 343 146	161 343 156	1.359
63	50	10	1230	161 343 147	161 343 157	2.622

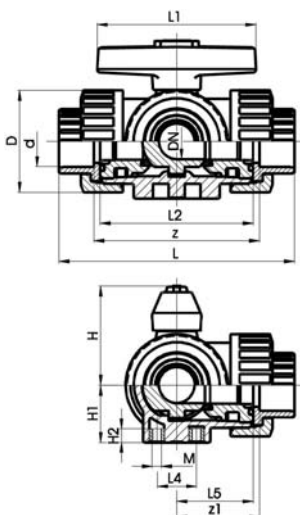
d [mm]	z [mm]	z1 [mm]	D [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	H [mm]	H1 [mm]	H2 [mm]	M
16	80	40	45	108	78	72	25	36	50	27	8	6
20	80	40	45	111	78	72	25	36	50	27	8	6
25	94	47	53	131	92	86	25	43	60	33	8	6
32	104	52	65	148	100	96	25	48	68	36	8	6
40	126	63	78	176	110	116	45	58	79	44	9	8
50	144	72	92	206	120	137	45	69	90	49	9	8
63	186	93	116	262	146	179	45	90	109	61	9	8



3-Way ball valve type 343 PVC-U SF Horizontal/ T-port With solvent cement sockets metric

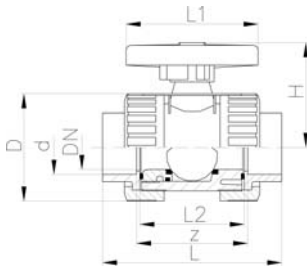
Model:

- T-port ball
- Silicone-free / paint-compatible
- Union ends for easy installation and removal
- Pneumatic or electric actuator available separately
- Angle of operation 90°, without turn limiter



d [mm]	DN [mm]	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	140	161 343 341	161 343 351	0.199
20	15	10	200	161 343 342	161 343 352	0.199
25	20	10	470	161 343 343	161 343 353	0.370
32	25	10	793	161 343 344	161 343 354	0.504
40	32	10	1290	161 343 345	161 343 355	0.838
50	40	10	1910	161 343 346	161 343 356	1.359
63	50	10	3100	161 343 347	161 343 357	2.622

d [mm]	z [mm]	z1 [mm]	D [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	H [mm]	H1 [mm]	H2 [mm]	M
16	80	40	45	108	78	72	25	36	50	27	8	6
20	80	40	45	111	78	72	25	36	50	27	8	6
25	94	47	53	131	92	86	25	43	60	33	8	6
32	104	52	65	148	100	96	25	48	68	36	8	6
40	126	63	78	176	110	116	45	58	79	44	9	8
50	144	72	92	206	120	137	45	69	90	49	9	8
63	186	93	116	262	146	179	45	90	109	61	9	8



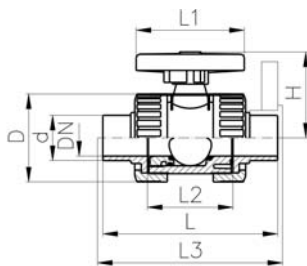
Metering ball valve type 323 PVC-U SF With solvent cement sockets metric

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 ($\Delta p=1$ 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]	
16	71	45	99	78	63	50	
20	71	45	102	78	63	50	



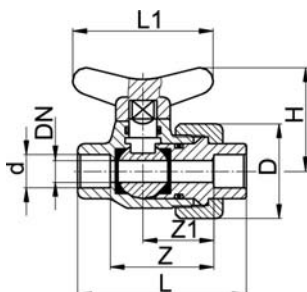
Metering ball valve type 323 PVC-U SF With solvent cement spigots metric

Model:

- Silicone-free / paint-compatible
- For easy installation and removal
- Ball seals PVDF
- Angle of operation 180° with scale
- Overall length EN 558-1

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]	
16	43	114	78	63	120	50	
20	43	124	78	63	130	50	



Laboratory ball cock type 322 PVC-U SF With solvent cement sockets metric

Model:

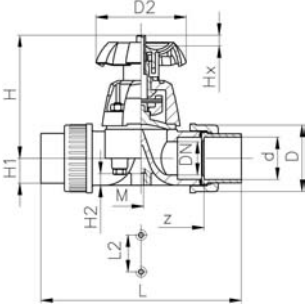
- Silicone-free / paint-compatible
- Disconnection one end only
- Ball seals PVDF

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 valves

Diaphragm valve type 314 PVC-U SF With solvent cement sockets metric



Model:

- Silicone-free / paint-compatible
- For easy installation and removal
- Short overall length

Option:

- Handwheel with built-in locking mechanism (standard version is nonlockable)

d [mm]	DN [mm]	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	PTFE with EPDM supp. diaphragm Code	kg
20	15	10	72	161 314 717	161 314 732	0.400
25	20	10	137	161 314 718	161 314 733	0.630
32	25	10	207	161 314 719	161 314 734	0.880
40	32	10	354	161 314 720	161 314 735	1.140
50	40	10	517	161 314 721	161 314 736	1.540
63	50	10	713	161 314 722	161 314 737	2.805

d [mm]	z [mm]	D [mm]	L [mm]	L1 [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	M	Lift = Hx [mm]
20	96	43	128	80	25	90	14	12	M6	8
25	114	51	152	80	25	102	18	12	M6	11
32	122	58	166	94	25	119	21	12	M6	13
40	140	72	192	117	45	126	26	15	M8	16
50	160	83	222	117	45	139	33	15	M8	21
63	190	100	266	152	45	172	39	15	M8	28



Diaphragm valve type 317 PVC-U SF With PVC-U flanges metric

Model:

- Silicone-free / paint-compatible
- Jointing face flat
- With backing flanges DN 15-65, fixed flanges DN 80-150
- Overall length EN 558-1
- Connecting dimension: ISO 2501 PN 10

Option:

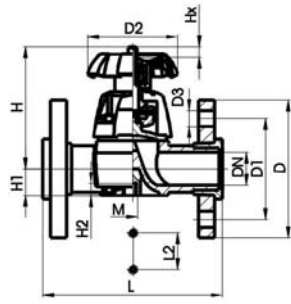
- Handwheel lockable DN15-65 (basic version not lockable)

* with fixed flanges

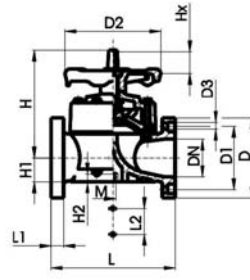
d [mm]	DN [mm]	Inch	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	PTFE with EPDM supp. diaphragm Code	kg
20	15	1/2	10	72	161 317 717	161 317 732	0.400
25	20	3/4	10	137	161 317 718	161 317 733	0.630
32	25	1	10	207	161 317 719	161 317 734	0.880
40	32	1 1/4	10	354	161 317 720	161 317 735	1.140
50	40	1 1/2	10	517	161 317 721	161 317 736	1.540
63	50	2	10	713	161 317 722	161 317 737	2.805
75	65	2 1/2	10	992	161 317 723	161 317 738	4.420
*90	80	3	10	1700	161 317 424	161 317 439	9.600
*110	100	4	10	2700	161 317 425	161 317 440	13.360
*160	150	6	7	6033	161 317 427	161 317 442	29.250

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
20	95	65.00	80.00	14.0	130		25		90	14	12	M6	4
25	105	75.00	80.00	14.0	150		25		102	18	12	M6	4
32	115	85.00	94.00	14.0	160		25		119	21	12	M6	4
40	140	100.00	117.00	18.0	180		45		126	26	15	M8	4
50	150	110.00	117.00	18.0	200		45		139	33	15	M8	4
63	165	125.00	152.00	18.0	230		45		172	39	15	M8	4
75	185	145.00	152.00	18.0	290		70		201	46	15	M8	4
*90	200	160.00	270.00	18.0	310	35	120		265	57	23	M12	8
*110	225	180.00	270.00	18.0	350	35	120		304	69	23	M12	8
*160	285	240.00	400.00	23.0	480	26	100	200	437	108	23	M12	8

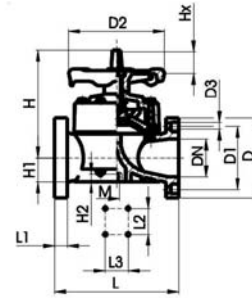
d [mm]	Lift = Hx [mm]
20	8
25	11
32	13
40	16
50	21
63	28
75	30
*90	40
*110	50
*160	70



DN 15-65



DN 80-100



DN 150

Butterfly valves

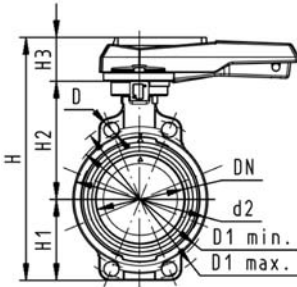
Butterfly valve type 567 PVC-U SF Hand lever with ratchet settings



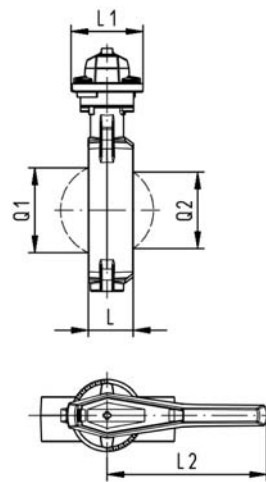
Model:

- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, ANSI B 16.5 Class 150, BS 1560: 1958, JIS B 2220
- Overall length according to EN 558-1, ISO 5752

Available from second quarter 2006



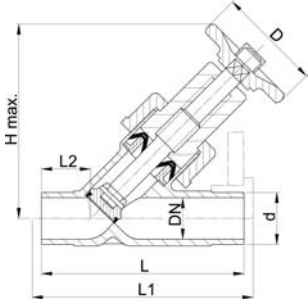
d [mm]	DN [mm]	Inch	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	
63	50	2	10	1470	161 567 402	161 567 422	
75	65	2 ½	10	2200	161 567 403	161 567 423	
90	80	3	10	3000	161 567 404	161 567 424	
110	100	4	10	6500	161 567 405	161 567 425	
140	125	5	10	11500	161 567 406	161 567 426	
160	150	6	10	16600	161 567 407	161 567 427	
225	200	8	10	39600	161 567 408	161 567 428	



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	35.74	
75	19	139.7	145.0	115	277	83	140	54	46	106	205	50.93	30.62
90	19	150.0	160.0	131	289	89	146	54	49	106	205	64.01	46.24
110	19	175.0	190.5	161	325	104	167	55	56	106	255	84.46	69.96
140	23	210.0	215.9	187	352	117	181	55	64	106	255	110.71	94.50
160	24	241.3	241.3	215	373	130	189	55	72	106	255	136.08	121.54
225	23	290.0	295.0	267	435	158	210	67	73	140	408	175.62	166.23

Angle seat valves, angle seat check valves and line strainers

Angle seat valve type 300 PVC-U SF With solvent cement spigots metric

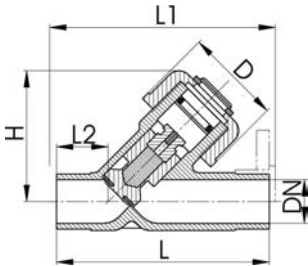


Model:

- Silicone-free / paint-compatible
- For horizontal or vertical installation
- Overall length EN 558-1

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]
16	10	10	41	161 300 800	0.125	50	114	120	24	105
20	15	10	95	161 300 801	0.180	63	124	130	28	126
25	20	10	180	161 300 802	0.250	63	144	150	37	140
32	25	10	327	161 300 803	2.600	80	154	160	37	166
40	32	10	484	161 300 804	0.580	80	174	180	44	191
50	40	10	725	161 300 805	1.005	100	194	200	48	233
63	50	10	1130	161 300 806	0.944	100	224	230	60	264
75	65	10	1700	161 300 807	2.610	160	284	290	74	335
90	80	10	2500	161 300 808	3.945	200	300	310	85	390

Angle seat check valve type 303 PVC-U SF With solvent cement spigots metric



Model:

- Silicone-free / paint-compatible
- For horizontal or vertical installation
- Leakproof even at minimum pressure
- Overall length EN 558-1

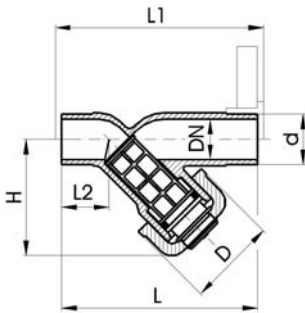
d [mm]	DN [mm]	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg	D [mm]	L [mm]	L1 [mm]	L2 [mm]	H [mm]
16	10	10	41	161 303 015	161 303 040	0.094	39	114	120	24	58
20	15	10	95	161 303 016	161 303 041	0.132	43	124	130	28	65
25	20	10	180	161 303 017	161 303 042	0.200	47	144	150	37	75
32	25	10	327	161 303 018	161 303 043	0.323	56	154	160	37	90
40	32	10	484	161 303 019	161 303 044	0.498	64	174	180	44	102
50	40	10	725	161 303 020	161 303 045	0.860	82	194	200	48	123
63	50	10	1130	161 303 021	161 303 046	1.455	95	224	230	60	144
75	65	10	1700	161 303 022	161 303 047	2.450	92	284	290	74	186
90	80	10	2500	161 303 023	161 303 048	3.511	104	300	310	85	204



Line strainer type 305 PVC-U SF Transparent body with solvent cement spigots metric

Model:

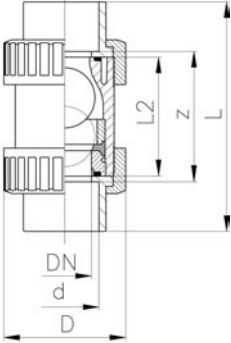
- Silicone-free / paint-compatible
- With screen PVC-U, perforation \varnothing 0.8 mm
- Overall length EN 558-1



d [mm]	DN [mm]	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg	D [mm]	L [mm]	L1 [mm]	L2 [mm]	H [mm]
20	15	10	35	192 305 821	192 305 831	0.114	43	124	130	28	65
25	20	10	63	192 305 822	192 305 832	0.170	47	144	150	37	76
32	25	10	85	192 305 823	192 305 833	0.255	56	154	160	37	90
40	32	10	150	192 305 824	192 305 834	0.386	64	174	180	44	104
50	40	10	225	192 305 825	192 305 835	0.643	82	194	200	48	124
63	50	10	346	192 305 826	192 305 836	1.033	95	224	230	60	148
75	65	10	535	192 305 827	192 305 837	1.835	106	284	290	74	188
90	80	10	750	192 305 828	192 305 838	2.565	120	300	310	85	205

Ball check valves

Ball check valve type 360 PVC-U SF With solvent cement sockets metric

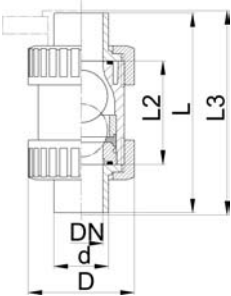


Model:

- Silicone-free / paint-compatible
- For easy installation and removal
- Ball is sealing at a minimum water column 1m
- Vibration free even at high flow velocity
- Installation position vertical, flow direction from down upward

d [mm]	DN [mm]	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg	z [mm]	D [mm]	L [mm]	L2 [mm]
16	10	16	170	161 360 601	161 360 611	0.123	71	45	99	63
20	15	16	150	161 360 602	161 360 612	0.115	71	45	102	63
25	20	16	330	161 360 603	161 360 613	0.195	82	53	120	75
32	25	16	390	161 360 604	161 360 614	0.318	87	64	131	79
40	32	16	710	161 360 605	161 360 615	0.500	98	78	150	89
50	40	16	900	161 360 606	161 360 616	0.841	101	92	163	95
63	50	16	1390	161 360 607	161 360 617	1.495	121	116	197	115

Ball check valve type 360 PVC-U SF With solvent cement spigots metric



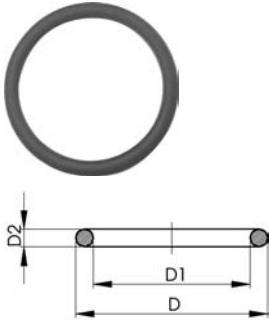
Model:

- Silicone-free / paint-compatible
- For easy installation and removal
- Ball is sealing at a minimum water column 1m
- Vibration free even at high flow velocity
- Installation position vertical, flow direction from down upward
- Overall length EN 558-1

d [mm]	DN [mm]	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg	D [mm]	L [mm]	L2 [mm]	L3 [mm]
16	10	16	170	161 360 621	161 360 631	0.123	43	114	63	120
20	15	16	150	161 360 622	161 360 632	0.128	43	124	63	130
25	20	16	330	161 360 623	161 360 633	0.211	53	144	75	150
32	25	16	390	161 360 624	161 360 634	0.331	64	154	79	160
40	32	16	710	161 360 625	161 360 635	0.500	78	174	89	180
50	40	16	900	161 360 626	161 360 636	0.870	92	194	95	200
63	50	16	1390	161 360 627	161 360 637	1.340	116	224	115	230
90	80	10	1200	161 360 023	161 360 048	4.330		300		310

O-Ring Gaskets

EPDM 48 41 30
FPM 49 41 30



O-Ring Gaskets

Model:

- Silicone-free / paint-compatible
- Fulfills 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	SP	kg	D [mm]	D1 [mm]	D2 [mm]	
20	15	748 413 001	749 413 001	2	0.002	30	23	4	
25	20	748 413 007	749 413 007	2	0.002	35	28	4	
32	25	748 413 002	749 413 002	2	0.003	43	36	4	
40	32	748 413 003	749 413 003	2	0.007	55	44	5	
50	40	748 413 012	749 413 012	2	0.008	64	53	5	
63	50	748 413 013	749 413 013	2	0.011	80	69	5	
75	65	748 413 014	749 413 014	2	0.012	93	82	5	
90	80	748 413 015	749 413 015	2	0.015	112	101	5	
110	100	748 413 016	749 413 016	2	0.031	134	120	7	
125	100	748 413 017	749 413 017	2	0.036	149	136	7	
140	125	748 413 018	749 413 018	2	0.039	166	152	7	
160	150	748 413 019	749 413 019	2	0.047	191	177	7	
200	200	748 413 163	749 413 163	2	0.056	136	222	7	
225	200	748 413 022	749 413 022	2	0.060	255	241	7	
250	250	748 413 182	749 413 182	2	0.100	280	266	7	
280	250	748 413 173	749 413 173	2	0.144	305	292	7	

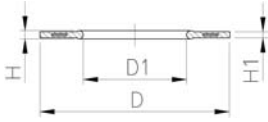
Flange Gaskets

EPDM 48 44 11
FPM 49 44 11

Flange Gaskets

Model:

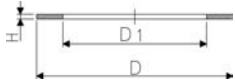
- Silicone-free / paint-compatible
- Fulfills chloroform contact test
- Hardness: 70° Shore **EPDM**, 75° Shore **FPM**
- For flange adaptors, jointing face flat/serrated
- For flange adaptors only in combination with butterfly valves
- **Only standard packagings SP are delivered**



d [mm]	EPDM Code	FPM Code	SP	GP	kg	D [mm]	D1 [mm]	H [mm]	H1 [mm]
20	748 441 101	749 441 101	2	-	0.008	51	20	4	3
25	748 441 102	749 441 102	2	-	0.011	61	25	4	3
32	748 441 103	749 441 103	2	-	0.014	71	32	4	3
40	748 441 104	749 441 104	2	-	0.020	82	40	4	3
50	748 441 105	749 441 105	2	-	0.021	92	50	4	3
63	748 441 106	749 441 106	2	-	0.040	107	63	5	4
75	748 441 107	749 441 107	2	-	0.054	127	75	5	4
90	748 441 108	749 441 108	2	-	0.060	142	90	5	4
110	748 441 109	749 441 109	2	-	0.083	162	110	6	5
125	748 441 110	749 441 110	2	-	0.154	192	125	6	5
140	748 441 111	749 441 111	2	-	0.115	192	140	6	5
160	748 441 112	749 441 112	2	-	0.149	218	160	8	6
200	748 441 114	749 441 114	2	-	0.257	273	200	8	6
225	748 441 115	749 441 115	2	-	0.177	273	225	8	6
250	748 441 116	749 441 116	2	-	0.400	303	250	8	6
280	748 441 117	749 441 117	2	-	0.220	328	280	8	6

Flat Gaskets

FPM 49 40 13



Flat Gaskets

Model:

- Silicone-free / paint-compatible
- Fulfills chloroform contact test
- Hardness approx. 65° Shore
- For flange adaptors, jointing face serrated
- **Only standard packagings SP are delivered**

d [mm]	DN [mm]	FPM Code	SP	GP	kg	D [mm]	D1 [mm]	H [mm]	
16	10	-				27	16.00	2	
20	15	749 401 315	2	-	0.003	32	20.00	2	
25	20	749 401 316	2	-	0.003	39	25.00	2	
32	25	749 401 317	2	-	0.004	48	32.00	2	
40	32	749 401 318	2	-	0.008	59	40.00	3	
50	40	749 401 319	2	-	0.012	71	50.00	3	
63	50	749 401 320	2	-	0.017	88	63.00	3	
75	65	749 401 321	2	-	0.024	104	75.00	3	
90	80	749 401 322	2	-	0.032	123	90.00	3	
110	100	749 401 323	2	-	0.062	148	110.00	4	
125	100	749 401 324	2	-	0.058	168	125.00	4	
140	125	749 401 325	2	-	0.058	186	140.00	4	
160	150	749 401 326	2	-	0.063	211	160.00	4	
225	200	749 401 327	2	-	0.103	272	220.00	5	

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

- 2.1 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 import duties 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

- 11.1 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 (EXWORKS, 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.
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, overstressing 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 1 000 000 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 of 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

- 17.1 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.

Adhesive Jointed Plastic Piping Systems from George Fischer



ABS
Metric
Inch BS



PVC-U
Metric
Inch BS
Inch ASTM
JIS



PVC-C
Metric
Inch ASTM

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