



Product Range
Export
1.11.2005

PVC-C
piping systems for
industrial application

Pipe, Fittings,
Valves and Accessories

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	g	Weight in grams
ISO	International Standardization Organisation	SP	Standard pack. The figure given indicates the quantity of fittings contained in a standard pack
ABS	Acrylnitril Butadien Styrene	GP	Gross pack. The figure given indicates the quantity of fittings contained in a gross pack
PVC-U	Polyvinyl Chloride	G	Pipe thread, not pressure tight in the thread to ISO 228/1
PVC-C	Polyvinyl Chloride chlorinated	NPT	Taper male thread pressure tight in the thread to ANSI B 1.20.1
PP	Polypropylene, heat stabilised	R	Taper male thread, pressure tight in the thread to ISO 7/DIN 2999/1
PE	Polyethylene	Rc	Taper female thread, pressure tight in the thread to ISO 7/1
PVDF	Polyvinylidene fluoride	Rp	Parallel female thread, pressure tight in the thread to ISO 7/DIN 2999/1
EPDM	Ethylene Propylene Rubber	Tr	Trapezoid thread
FPM	Fluorine Rubber, e.g. Viton®	SC	Size of hexagon bolts
NBR	Nitrile Rubber	s	A/F
IIR	Butyl Rubber	e	Wall thickness
CSM	Chlore Sulphonyl Polythene, e.g. Hypalon®	AL	Number of bolt holes
CR	Chloroprene Rubber, e.g. Neoprene®	®	Registered trade-mark
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		

PVC-C metric

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Ball valves electric

74



Ball valves pneumatic

92



Diaphragm valves pneumatic

117



Butterfly valves electric

130



Butterfly valves pneumatic

138

Installation

General

Thermoplastics are subject to greater thermal expansion than metals, this change in length should be taken into account to avoid unnecessary stresses.

There are two standard methods to accommodate length changes

- a. flexible sections
- b. compensators

For more comprehensive design recommendations and general information, please consult the George Fischer Plastics for Industry General Catalogue.

Calculation of length changes

Length changes which occur in PVC-C pipelines can be calculated in the usual manner, taking into consideration the coefficient of linear expansion δ for PVC-C as given in the following formula:

$$\Delta L = L \cdot \Delta T \cdot \delta$$

(mm) (m) (°C) (mm/m °C)

ΔL = difference in length in millimetres.
 L = original length in metres of pipe or pipe section where length change is to be calculated.

ΔT = difference between installation temperature and max. or min. working temperature in °C.

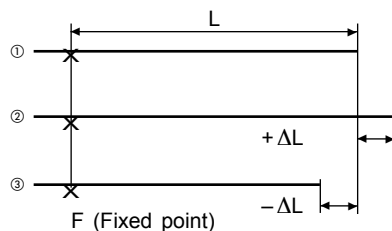
δ = coefficient of linear expansion of the pipe material in millimetres per metre per °C.

$$\delta \text{ PVC-C} = 0.07 \text{ mm/m } ^\circ\text{C}$$

Important: If the working temperature is higher than the installation temperature the pipe expands.

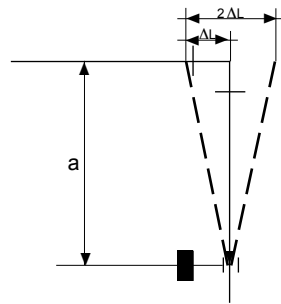
If, on the other hand, the working temperature is lower, the pipe contracts.

For this reason: both max. and min. working temperatures must be taken into account.



- ① Installation temperature
- ② Working temperature > installation temperature
- ③ Working temperature < installation temperature

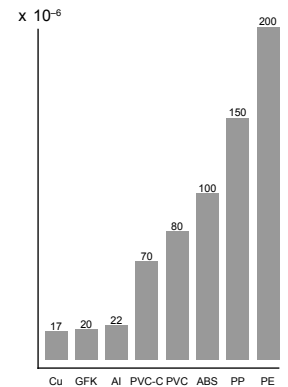
Calculation of flexible section length



Values needed to calculate a are $\pm \Delta L$ (contraction or expansion value) and the pipe outside diameter d. The formula used is:

$$a = 35 \cdot \sqrt{d \cdot \Delta L}$$

See graph on the following page for quick reading of a.



Coefficient of linear expansion δ of various materials.

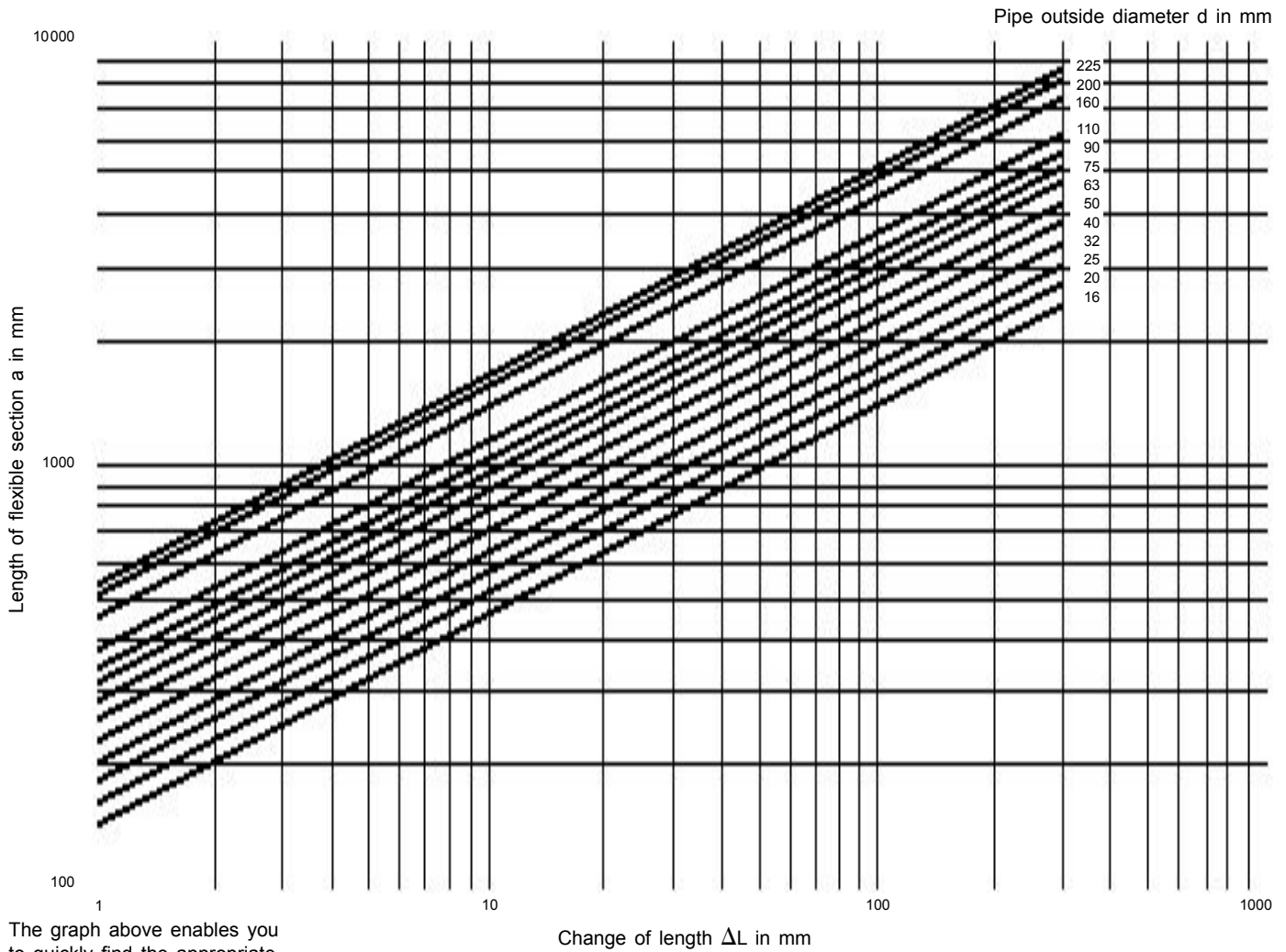
Joining Techniques

Solvent cement jointing

Jointing using a solvent based cement, capable of filling gaps, is the most commonly used method of jointing PVC-C. The cements used for PVC-C should not be confused with standard PVC-U solvent cements. Please consult the instructions issued by the solvent cement manufacturer and safety sheets provided before jointing. We recommend, wherever possible, participation on a brief training course from your local George Fischer representative.

Mechanical joints

We recommend wherever possible that joints are made using the solvent cementing technique, however this is not always possible, particularly for instance when a transition is required from one material to another. Please refer to the George Fischer plastics information brochure for recommendations on mechanical joint making or ask your local George Fischer representative.



Distance Between Pipe Brackets

PVC-C pipelines need to be supported at specific intervals, depending upon the average pipe wall temperature, the density of the flow medium and the diameter and wall thickness of the pipe. The inner diameter of the bracket must

exceed the outside diameter of the pipe to allow the pipe to contract or expand. The pipe bracket spacing given in the following table is calculated on the basis of a permissible deflection of the pipe of max. 2.5 mm between two brackets.

Pipe bracket spacing for PVC-C pipelines conveying fluids with density 1 g/cm³ and gases

		average pipe wall temperature							Correction factors for other pipe classes
Pipe size d	Inch	20°C	30°C	40°C	50°C	60°C	70°C	80°C	
16	3/8	1.00	0.95	0.90	0.85	0.75	0.67	0.60	The bracket spacings shown in the table are for PN 16 and PN 10 pipe and are given in metres.
20	1/2	1.15	1.10	1.00	0.95	0.87	0.77	0.70	
25	3/4	1.20	1.15	1.10	1.00	0.90	0.80	0.70	
32	1	1.35	1.25	1.20	1.10	1.00	0.90	0.80	
40	1 1/4	1.50	1.40	1.30	1.25	1.15	1.05	0.90	
50	1 1/2	1.65	1.60	1.50	1.40	1.30	1.20	1.10	
63	2	1.85	1.75	1.65	1.60	1.50	1.35	1.25	
75	2 1/2	2.05	1.95	1.85	1.75	1.65	1.50	1.35	
90	3	2.25	2.10	2.00	1.90	1.80	1.65	1.50	
110	4	2.50	2.35	2.20	2.10	1.95	1.80	1.65	
160	6	3.00	2.85	2.70	2.55	2.40	2.20	2.00	
225	8	3.55	3.35	3.20	3.00	2.80	2.60	2.35	
Bracket spacing in metres for PN 16 and PN 10 piping systems									

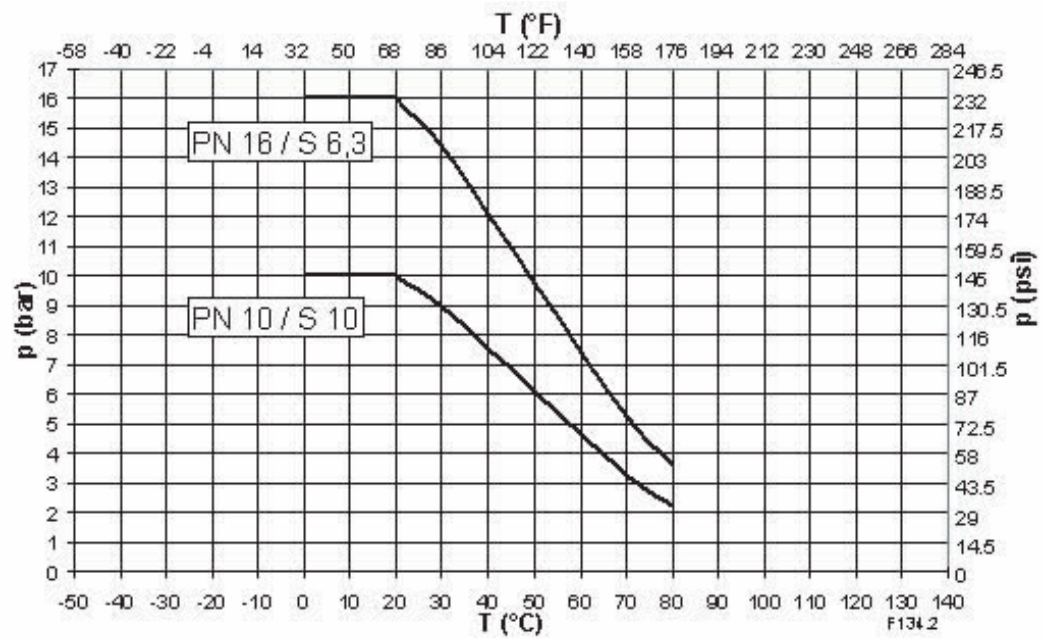
In the case of a vertical pipe run the pipe bracket spacing given in the table may be increased by 30%, i.e. multiply the values given by 1.3.

Pipe bracket spacing in the case of fluids with density >1 g/cm³

When fluids with a density exceeding 1 g/cm³ are to be conveyed, the pipe bracket spacing given in the preceding table must be multiplied by the factors given in the second column of the following table, resulting in shorter distances between the supports.

Density of medium in g/cm ³	Factors for pipe bracket spacing
1.25	0.9
1.5	0.83
1.75	0.77
2.0	0.70

Pressure-Temperature Curve for Pipe and fittings in PVC-C PN 16 and PN 10 with design factor incorporated



T Temperature in °C / °F
p permissible pressure in bar / psi

Instructions for Solvent Cement Jointing of PVC-C Fittings from George Fischer

1. Solvent cement jointing calls for adequate technical knowledge, which can be acquired in the appropriate training courses. We will gladly provide information about training possibilities.

The dimensions of George Fischer fittings and pipe conform generally to the various national standards as well as to ISO 727 and DIN 8079. DSV 2204 Teil 5

2. Tools and equipment

Pipe cutter (fig. 1).
 Pipe chamfering tool (as recommended by us) or coarse file (fig. 2).
 Code numbers:

Tangit Cleaner
 799 298 010 (1 litre can)

Tangit-PVC-C Solvent Cement
 799 298 027 (700 g can)

Scraper, pencil, brush cover, white absorbent paper (fig. 3).

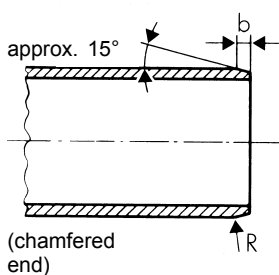
Brush sizes

Pipe outside diameter mm	Brush	Code
6– 10	round dia. 4 mm	799 299 001
12– 32	round dia. 8 mm	799 299 002
40– 63	flat 25 x 3 mm	799 299 003
75–225	flat 50 x 5 mm	799 299 004

3. Preparations

The pipe must be cut off at right angles. Remove the inside edges and chamfer the outside ones as illustrated in the sketch.

Pipe outside diameter	b
16–50 mm	2–4 mm
o 63 mm	4–6 mm



Important: Well-chamfered pipe ends prevent the layer of cement from being removed as the pipe is inserted into the fitting.

Note: If necessary mark the desired position of the fitting on both the pipe and the fitting before cementing. Marking the jointing length on the pipe end makes it possible to check afterwards whether the pipe has been inserted to the full extent of the socket.

If the outside diameter of the pipe and the inside diameter of the socket are at opposite extremes of their tolerances, then the pipe cannot be inserted dry into the fitting socket. This will only become possible once the cement has been applied.



Fig. 1: Cutting the pipe to length



Fig. 2: Chamfering the pipe



Fig. 3: Solvent cementing equipment



Fig. 5: Cleaning the pipe and socket



Fig. 6: Applying the cement



Fig. 7: Applying the cement (sizes d 110 mm and above)

Tangit-PVC-C Cement is supplied ready for use. **Stir thoroughly** before using! Cement of the correct consistency will run evenly from a wooden spatula held at a slant (see fig. 4). Cement which no longer runs smoothly is unusable. The cement must not be thinned. Cement and cleaner should be stored in a cool, dry place!

4. Cementing

4.1 Wipe the pipe end and the socket with a clean cloth to remove obvious dirt.

4.2 Clean the outside of the pipe end and the inside of the socket thoroughly with Tangit Cleaner and absorbent

Outside diameter of pipe – Nominal inside diameter of socket d (mm)	Minimum socket length L (mm)
12	12.0
16	14.0
20	16.0
25	18.5
32	22.0
40	26.0
50	31.0
63	37.5
75	43.5
90	51.0
110	61.0
125	68.5
140	76.0
160	86.0
200	106.0
225	118.5



Fig. 4: Checking the cement

paper. Use a fresh piece of paper each time. Cleaned areas must be dry before the cement is applied. Remove any condensation which may have formed on the parts (fig. 5).

Note: The pipe end and fitting socket must be dry and free from grease and dirt.

The PVC-C Cleaner should soften the outside of the pipe. Special attention should be paid that the PVC-C has softened. If this is not the case, to aid the softening, emery cloth or medium glasspaper, grade k 80, can be used to roughen the joint surfaces, repeat the cleaning process after roughening.

Special protective measures must be taken at temperatures below +5°C (see point 6).

At temperatures near freezing point pipe ends and fittings should be warmed to bring them to hand temperature. Next, remove any condensation or ice. Cement and cleaner should be stored at room temperature. Completed joints must be left at 20–30°C for approximately 10 minutes to condition.

Avoid overheating when cementing at summer temperatures by protecting the jointing area from direct sunlight. If necessary, cool the pipe end with water before commencing the cementing procedure.

The quick curing time of the cement necessitates that the joint is made within 1 minute after application of the cement has started. This is known as the



Fig. 8: Close the cement tin during work breaks

opening time of the cement and varies with temperature and the thickness of the cement applied.

4.3 Begin by applying a normal layer of cement to the fitting socket and then a thicker one to the pipe end with firm brush pressure. **Work in well.** The brush strokes should always be in an axial direction.

To ensure that both jointing surfaces are completely covered with a smooth, even layer of cement, the brush should be generously loaded with cement.

Clean the brush with dry absorbent paper after use. Brushes must be dry before being re-used.

Replace the lid of the cement tin after use to prevent the solvent evaporating. The special conical lid available from Henkel makes it possible to leave the brush in the cement tin during pauses (see fig. 8).

The joints can be made single handed for pipes with diameters up to 90 mm. For 110 mm and larger pipes, two people are needed to apply the cement to the pipe end and fitting socket simultaneously in order to avoid exceeding the maximum handling time of 3 minutes (figs. 6 and 7).

4.4 Push the pipe and the fitting together immediately without twisting and bring them into correct alignment. Hold them briefly together to allow the cement to set.

Note: Insert the pipe to the full depth of the socket and ensure that the outlet of the fitting is in the correct position.

4.5 Remove any surplus cement immediately, using absorbent paper.

Note: Both solvent cement and cleaner dissolve PVC-C. Pipes and fittings must not therefore be laid on or allowed to come into contact with spilled cement or paper containing cement residues (fig. 9).

5. Drying period and pressure testing

5.1 Drying period

The length of drying period before the joint may be subjected to testing or

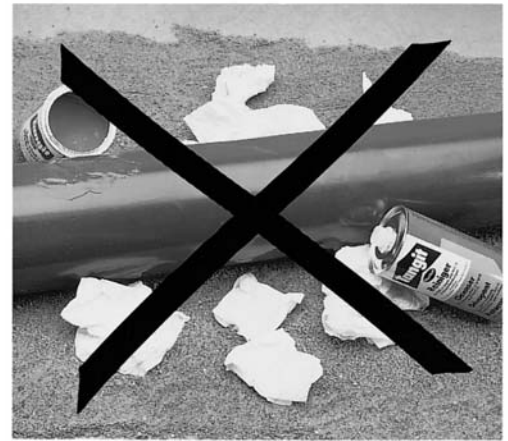
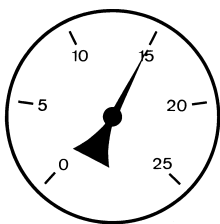


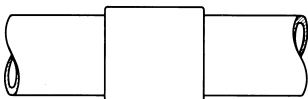
Fig. 9: The pipe trench is not a rubbish tip

operating pressure depends on the ambient temperature and the tolerances.

As a general rule, for temperatures not exceeding ambient, allow at least 15 hours if the test pressure is 15 bar between completing the last joint and carrying out the pressure test. If the piping is to be tested only at operating pressure, e.g. after modifications or repairs, then a simple rule to apply is: 1 hour's waiting time for each bar of operating pressure.



Test pressure	Waiting time
for PN 10: 15 bar	15 h



Waiting time at operating pressure (20°C): at least 1 hour per bar

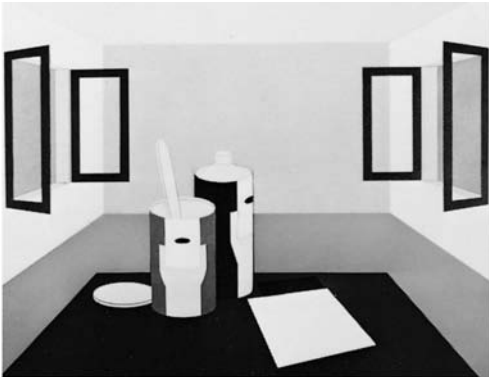


Fig. 10: Adequate ventilation of the workplace

6. Safety precautions

PVC-C Cement and PVC-C Cleaner contain highly volatile solvents. This makes good ventilation or adequate fume extraction essential in closed spaces (fig. 10). Since the solvent fumes are heavier than air, extraction must occur at floor level, or at least below the working level. Place paper which has been used for cleaning or for the removal of surplus cement into closed containers to minimize the amount of solvent fumes in the air.

Tangit-PVC-C Cement and Tangit Cleaner are inflammable. Extinguish open fires before commencing work. Switch off unprotected electrical apparatus, electric heaters, etc. Do not smoke! Discontinue any welding operations (fig. 11). Furthermore, observe all instructions issued by the solvent cement manufacturer (e.g. on the label of the tin and in any supplementary documentation).

Protect pipes and fittings from spilled solvent cement, cleaner and absorbent paper which has been used to wipe off cement. Do not dispose of surplus solvent cement or cleaner in drainage systems.

Do not close off cement pipelines during the drying process. This is particularly important at temperatures below +5°C, when there is otherwise a danger of damaging the material.



Fig. 11: No naked flames when cementing.
No smoking

Because of the danger of explosion, do not perform any welding near pipes which have been cemented but are not yet filled! Cemented pipes should be flushed through, filled with water or at least air-blasted as soon as possible.

Always obey the safety regulations issued by the authorities responsible.

7. Limitations

With regard to any chemical resistance limitations of the joint and other possible limitations of the cement please observe the relevant instructions and safety data sheets provided by the manufacturer of the cement.

PVC-C metric

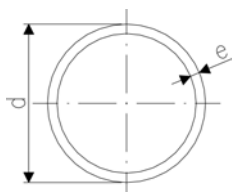
Pipes

Pipes PVC-C grey

Series S 6.3, SDR 13.6, nominal pressure PN 16

Model:

- Material: PVC-C
- Colour: RAL 7038 - agate grey
- Dimension: DIN 8079
- Pipe length: 5m, with plain ends



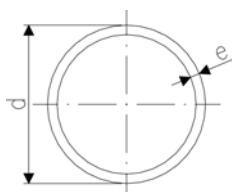
d [mm]	PN	Code	kg/m	e [mm]	
16	16	163 017 130	0.136	1,8	
20	16	163 017 131	0.217	2,3	
25	16	163 017 132	0.326	2,8	
32	16	163 017 133	0.379	2,4	
40	16	163 017 134	0.589	3,0	
50	16	163 017 135	0.896	3,7	
63	16	163 017 136	1.420	4,7	
75	16	163 017 137	2.010	5,6	
90	16	163 017 138	2.880	6,7	
110	16	163 017 139	4.270	8,2	
160	16	163 017 142	8.970	11,9	

Pipes PVC-C grey

Series S10, SDR 21, nominal pressure PN 10

Model:

- Material: PVC-C
- Colour: RAL 7038 - agate grey
- Dimension: DIN 8079
- Pipe length: 5m, with plain ends



d [mm]	PN	Code	kg/m	e [mm]	
75	10	163 017 187	1.320	3,6	
90	10	163 017 188	1.930	4,3	
110	10	163 017 189	2.890	5,3	
160	10	163 017 192	6.060	7,7	
225	10	163 017 195	11.900	10,8	

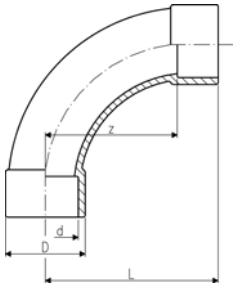
PVC-C metric

Fittings

23 00 01

Bend 90°, PVC-C Radius = 2 d

- Radius = 2 d



d [mm]	PN	Code	SP	kg	z [mm]	D [mm]	L [mm]
20	16	723 000 106	10	0.030	40	27	58
25	16	723 000 107	10	0.055	50	35	71
32	16	723 000 108	10	0.075	64	38	88
40	16	723 000 109	-	0.276	80	54	109
50	16	723 000 110	-	0.297	100	61	131
63	16	723 000 111	-	0.574	126	76	163
75	16	723 000 112	1	0.830	150	90	194
90	16	723 000 113	-	1.489	180	113	231
110	16	723 000 114	-	2.965	220	137	284
160	16	723 000 117	-	7.950	320	192	406

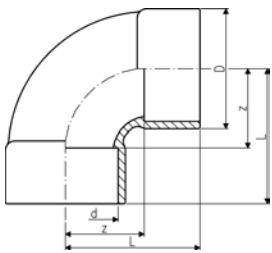
23 01 01

Bend 90°, short pattern, PVC-C Radius = 0,75 d

- Radius = 0,75 d



$r = 0,75 d$

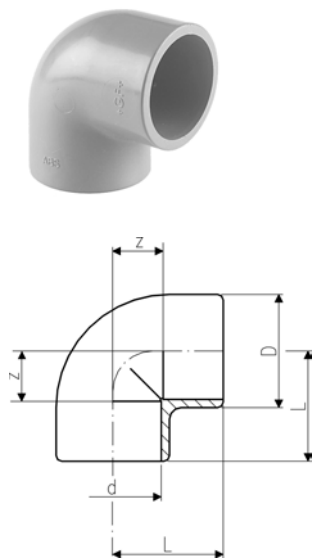


d [mm]	PN	Code	SP	kg	z [mm]	D [mm]	L [mm]
225	10	723 010 120	-	7.950	168	256	287

PVC-C metric

23 10 01

Elbow 90°, PVC-C



d [mm]	PN	Code	SP	kg	z [mm]	D [mm]	L [mm]
16	16	723 100 105	10	0.010	9	21	23
20	16	723 100 106	10	0.014	11	25	27
25	16	723 100 107	10	0.026	14	31	33
32	16	723 100 108	10	0.046	17	40	39
40	16	723 100 109	10	0.082	21	49	47
50	16	723 100 110	10	0.138	26	61	57
63	16	723 100 111	-	0.310	33	76	72
75	16	723 100 112	-	0.439	40	90	84
90	16	723 100 113	-	0.606	46	110	97
110	16	723 100 114	-	1.625	61	136	122
160	16	723 100 117	-	3.120	80	185	166

23 15 01

Elbow 45°, PVC-C

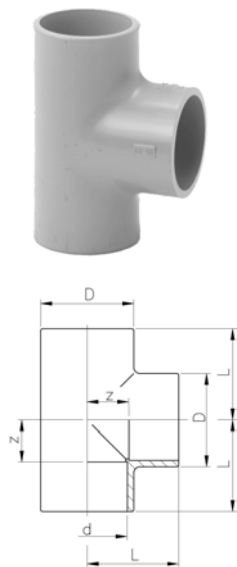


d [mm]	PN	Code	SP	kg	z [mm]	D [mm]	L [mm]
16	16	723 150 105	10	0.005	5	21	19
20	16	723 150 106	10	0.012	5	25	21
25	16	723 150 107	10	0.019	6	31	25
32	16	723 150 108	10	0.037	8	40	30
40	16	723 150 109	5	0.063	10	49	36
50	16	723 150 110	5	0.109	12	61	43
63	16	723 150 111	-	0.208	14	76	52
75	16	723 150 112	-	0.323	17	88	61
90	16	723 150 113	-	0.521	20	106	71
110	16	723 150 114	-	1.151	28	137	89
160	16	723 150 117	-	2.400	36	185	122
225	10	723 150 120	-	4.460	49	250	168

PVC-C metric

23 20 01

Tee 90°, PVC-C



d [mm]	PN	Code	SP	kg	z [mm]	D [mm]	L [mm]	
16	16	723 200 105	10	0.014	9	21	23	
20	16	723 200 106	10	0.020	11	25	27	
25	16	723 200 107	10	0.034	14	31	33	
32	16	723 200 108	10	0.060	17	40	39	
40	16	723 200 109	10	0.106	21	49	47	
50	16	723 200 110	-	0.186	26	61	57	
63	16	723 200 111	-	0.360	34	76	72	
75	16	723 200 112	-	0.645	41	92	84	
90	16	723 200 113	-	1.118	46	111	97	
110	16	723 200 114	-	1.446	61	139	122	
160	16	723 200 117	-	5.280	81	193	167	
225	10	723 200 120	-	9.550	114	256	233	

23 25 01

Tee 45°, PVC-C

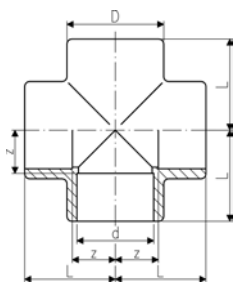


d [mm]	PN	Code	SP	kg	z [mm]	z1 [mm]	D [mm]	L [mm]	L1 [mm]	
20	10	723 250 106	10	0.039	30	6	28	68	46	
25	10	723 250 107	10	0.062	36	9	33	83	55	
32	10	723 250 108	10	0.108	45	10	41	99	67	
40	10	723 250 109	-	0.171	56	10	50	118	82	
50	10	723 250 110	-	0.287	66	12	60	140	97	
63	10	723 250 111	-	0.445	85	14	74	175	123	
75	6	723 250 112	-	0.870	101	18	91	207	145	
90	6	723 250 113	-	1.350	122	20	107	245	173	
110	6	723 250 114	-	2.695	149	27	134	298	210	

PVC-C metric

23 30 01

Crosses, PVC-C

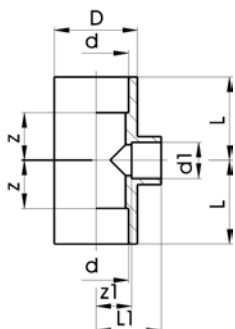


d [mm]	PN	Code	SP	kg	z [mm]	D [mm]	L [mm]	
32	16	723 300 108	-	0.101	17	43	39	
63	16	723 300 111	-	0.528	34	79	72	

23 20 01

Tees 90° reducing, PVC-C

*Tee 90° delivered with the required reducing bushes

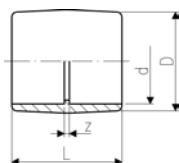


d [mm]	d1 [mm]	PN	Code	SP	kg	z [mm]	z1 [mm]	D [mm]	L [mm]	L1 [mm]	
25	20	16	723 200 134	10	0.042	14	14	33	33	30	
32	25	16	723 200 138	10	0.070	17	17	41	39	36	
40	25	16	723 200 151	10	0.120	23	23	50	49	42	
40	32	16	723 200 147	10	0.120	23	23	50	49	45	
50	20	16	723 200 009	5	0.196	28	28	62	59	44	
50	25	16	723 200 010	5	0.200	28	28	62	59	47	
50	32	16	723 200 164	5	0.200	28	28	62	59	50	
63	25	16	723 200 011	-	0.360	34	34	77	73	53	
63	32	16	723 200 178	-	0.368	35	34	77	73	56	
63	50	16	723 200 170	-	0.386	33	34	73	71	65	
*75	63	16	723 200 184	-	0.766	41		92	84		
*90	32	16	723 200 142	-	1.436	46		111	97		
*90	63	16	723 200 145	-	1.348	46		111	97		
*110	32	16	723 200 135	-	2.796	56		133	117		
*110	90	16	723 200 137	-	2.677	61		139	122		

PVC-C metric

23 91 01

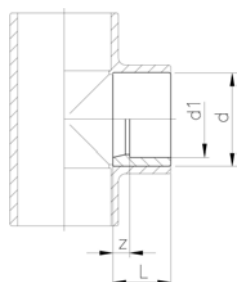
Socket, PVC-C



d [mm]	PN	Code	SP	kg	z [mm]	D [mm]	L [mm]
16	16	723 910 105	10	0.006	3	22	31
20	16	723 910 106	10	0.010	3	26	35
25	16	723 910 107	10	0.015	3	31	41
32	16	723 910 108	10	0.024	3	39	47
40	16	723 910 109	10	0.042	3	49	55
50	16	723 910 110	10	0.078	3	61	65
63	16	723 910 111	10	0.157	3	76	79
75	16	723 910 112	-	0.202	4	87	92
90	16	723 910 113	-	0.347	5	110	107
110	16	723 910 114	-	0.760	5	131	132
160	16	723 910 117	-	1.600	8	183	180
225	10	723 910 120	-	3.750	10	253	248

23 90 03

Reducing Bush (Short pattern), PVC-C



d [mm]	d1 [mm]	PN	Code	SP	kg	z [mm]	L [mm]
20	16	16	723 900 334	10	0.004	2	16
25	20	16	723 900 337	10	0.004	3	19
32	20	16	723 900 342	10	0.015	6	22
32	25	16	723 900 341	10	0.009	4	22
40	20	16	723 900 348	10	0.023	10	26
40	25	16	723 900 347	10	0.024	7	26
40	32	16	723 900 346	10	0.017	4	26
50	20	16	723 900 355	10	0.036	15	31
50	25	16	723 900 354	10	0.038	12	31
50	32	16	723 900 353	10	0.051	9	31
50	40	16	723 900 352	10	0.031	5	31
63	32	16	723 900 360	10	0.088	16	38
63	40	16	723 900 359	10	0.067	12	38
63	50	16	723 900 358	10	0.065	6	38
75	50	16	723 900 365	10	0.105	13	44
75	63	16	723 900 364	10	0.083	6	44
90	50	16	723 900 372	-	0.196	20	51
90	63	16	723 900 371	-	0.185	14	51
90	75	16	723 900 370	-	0.149	8	51
110	63	16	723 900 378	-	0.334	24	61
110	90	16	723 900 376	-	0.279	10	61
160	110	16	723 900 390	-	0.966	25	86
225	160	16	723 900 396	-	2.380	33	119

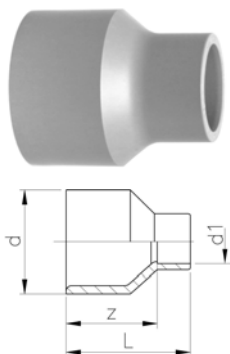
PVC-C metric

23 91 03

Reducing Bushes Long, PVC-C

Model:

- With spigot and solvent cement socket



d [mm]	d1 [mm]	PN	Code	SP	kg	z [mm]	L [mm]
32	20	16	723 910 342	-	0.023	30	46
40	25	16	723 910 347	10	0.036	36	55
50	25	16	723 910 354	10	0.059	44	63
63	32	16	723 910 360	5	0.110	54	76
75	40	16	723 910 366	5	0.165	62	88
90	63	16	723 910 371	-	0.313	74	112

23 96 01

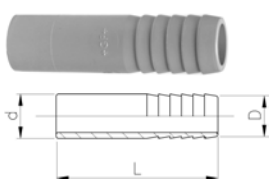
Cap, PVC-C



d [mm]	PN	Code	SP	kg	D [mm]	L [mm]
16	16	723 960 105	-	0.008	26	24
20	16	723 960 106	10	0.011	30	25
25	16	723 960 107	10	0.019	37	30
32	16	723 960 108	-	0.027	44	34
40	16	723 960 109	-	0.047	55	41
50	16	723 960 110	-	0.064	64	44
63	16	723 960 111	5	0.127	80	54
75	16	723 960 112	-	0.162	87	65
90	16	723 960 113	-	0.316	112	77
110	16	723 960 114	-	0.690	145	101
160	16	723 960 117	-	1.550	188	130

23 96 04

Hose Nozzle, PVC-C

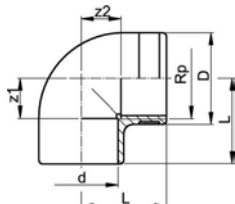


d [mm]	PN	Code	SP	kg	D [mm]	L [mm]
16	16	723 960 405	10	0.009	16	57
20	16	723 960 406	10	0.016	20	73
25	16	723 960 407	10	0.023	25	79
32	16	723 960 408	10	0.038	30	89

PVC-C metric

Adaptor Fittings

23 10 02



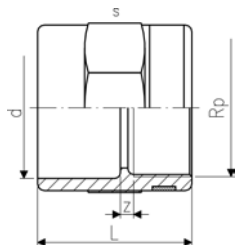
Elbows 90°, PVC-C

Model:

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

d [mm]	Rp [inch]	PN	Code	SP	kg	z1 [mm]	z2 [mm]	D [mm]	L [mm]
20	1/2	16	723 100 206	-	0.024	11	14	30	27
25	3/4	16	723 100 207	10	0.037	14	17	35	33
32	1	16	723 100 208	-	0.064	17	22	45	39
40	1 1/4	16	723 100 209	-	0.134	23	27	55	50
50	1 1/2	16	723 100 210	-	0.200	27	36	62	58
63	2	16	723 100 211	-	0.376	33	46	75	73

23 91 02



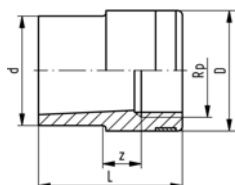
Socket, PVC-C

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-C
- Install with low mechanical stress and avoid large cyclic temperature changes

d [mm]	Rp [inch]	PN	Code	SP	kg	z [mm]	L [mm]	s [mm]
20	1/2	16	723 910 206	10	0.027	4	35	32
25	3/4	16	723 910 207	10	0.035	3	40	36
32	1	16	723 910 208	10	0.061	3	45	46
40	1 1/4	16	723 910 209	10	0.094	5	51	55
50	1 1/2	16	723 910 210	10	0.133	7	59	65
63	2	16	723 910 211	5	0.220	7	69	80

23 91 04



Reducing Bushes metric-Rp, PVC-C

Model:

- With solvent cement spigot metric and parallel female thread Rp
- Reinforcing ring stainless (A2)
- Connection to plastic or metal
- Install with low mechanical stress and avoid large cyclic temperature changes

d [mm]	Rp [inch]	PN	Code	SP	kg	Z [mm]	D [mm]	L [mm]	s [mm]
20	3/8	16	723 910 434	10	0.016	24	25	35	15
25	1/2	16	723 910 437	10	0.023	27	30	41	21
32	3/4	16	723 910 441	10	0.035	32	35	48	33
40	1	16	723 910 446	10	0.064	38	45	56	60
50	1 1/4	16	723 910 452	10	0.105	46	55	66	99
63	1 1/2	16	723 910 458	5	0.153	57	62	77	150

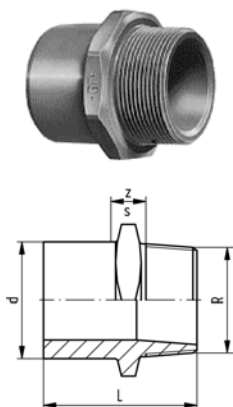
PVC-C metric

23 91 05

Adaptor Nipples, PVC-C

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-C
- Install with low mechanical stress and avoid large cyclic temperature changes



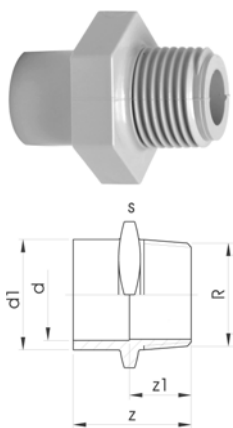
d [mm]	R [inch]	PN	Code	SP	kg	z [mm]	s [mm]
16	3/8	16	723 910 505	-	0.012	35	27

23 91 05

Adaptor Socket-Nipple, PVC-C

Model:

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



d [mm]	R [inch]	d1 [mm]	PN	Code	SP	kg	z [mm]	z1 [mm]	s [mm]
16	1/2	20	16	723 910 556	10	0.018	42	28	32
20	3/4	25	16	723 910 557	10	0.026	47	31	36
25	1	32	16	723 910 558	10	0.044	54	35	46
32	1 1/4	40	16	723 910 559	10	0.072	60	38	55
40	1 1/2	50	16	723 910 560	10	0.101	66	40	65
50	2	63	16	723 910 561	5	0.173	78	47	80

PVC-C metric

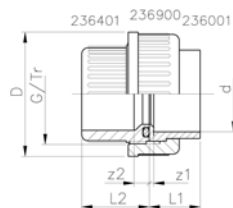
Unions

23 51 01

Solvent Cement Unions, PVC-C

Model:

- Union end: Solvent cement socket metric
- Union bush: Solvent cement socket metric
- Gasket: O-Ring EPDM No. 48 41 00, FPM No. 49 41 00



d [mm]	PN	EPDM Code	FPM Code	SP	kg	z1 [mm]	z2 [mm]	D [mm]	L1 [mm]	L2 [mm]	G/Tr
16	16	723 510 105	723 510 130	-	0.027	3	8	35	19	24	3/4
20	16	723 510 106	723 510 131	-	0.044	3	9	43	21	26	1
25	16	723 510 107	723 510 132	-	0.072	3	9	53	24	29	1 1/4
32	16	723 510 108	723 510 133	-	0.098	3	9	60	27	32	1 1/2
40	16	723 510 109	723 510 134	-	0.167	3	10	74	32	38	2
50	16	723 510 110	723 510 135	-	0.098	3	10	83	33	40	2 1/4
63	16	723 510 111	723 510 136	-	0.400	3	10	103	40	46	2 3/4
75	10	723 510 112	723 510 137	-	0.670	3	18	135	47	62	Tr108x5
90	10	723 510 113	723 510 138	-	1.008	5	18	158	56	69	Tr128x5
110	10	723 510 114	723 510 139	-	1.553	5	11	188	66	72	Tr154x6

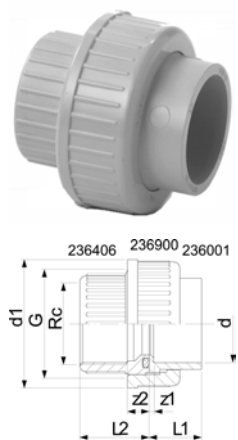
PVC-C metric

23 51 02

Adaptor Unions, PVC-C metric-Rp

Model:

- Union end: Solvent cement socket metric
- Union Bush: Parallel female thread Rp
- 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-C



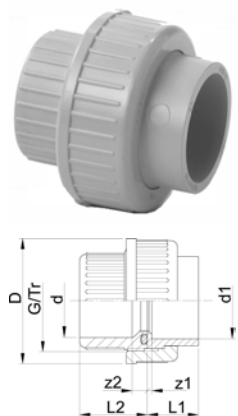
d [mm]	Rp [inch]	PN	EPDM Code	FPM Code	SP	kg	z1 [mm]	z2 [mm]	D [mm]	L1 [mm]	L2 [mm]	G [inch]
16	3/8	16	723 510 205	723 510 230	-	0.022	3	13	35	17	24	3/4
20	1/2	16	723 510 206	723 510 231	-	0.040	3	13	43	19	26	1
25	3/4	16	723 510 207	723 510 232	-	0.065	3	14	51	22	29	1 1/4
32	1	16	723 510 208	723 510 233	-	0.103	3	15	58	25	32	1 1/2
40	1 1/4	16	723 510 209	723 510 234	-	0.174	3	19	74	29	38	2
50	1 1/2	16	723 510 210	723 510 235	-	0.239	3	26	83	34	45	2 1/4
63	2	16	723 510 211	723 510 236	-	0.435	3	33	100	41	56	2 3/4

23 51 41

Adaptor Unions, PVC-C metric-ASTM

Model:

- Union end: solvent cement socket inch ASTM
- Union bush: Solvent cement socket metric
- Gasket: O-Ring EPDM No. 48 41 00, FPM No. 49 41 00



d [mm]	Inch	PN	EPDM Code	FPM Code	SP	kg	z1 [mm]	z2 [mm]	D [mm]	L1 [mm]	L2 [mm]	G [inch]
16	3/8	10	723 514 105	723 514 130	-	0.022	4	10	35	17	24	3/4
20	1/2	10	723 514 106	723 514 131	-	0.047	2	10	43	19	26	1
25	3/4	10	723 514 107	723 514 132	-	0.065	4	10	51	22	29	1 1/4
32	1	10	723 514 108	723 514 133	-	0.103	4	10	58	25	32	1 1/2
40	1 1/4	10	723 514 109	723 514 134	-	0.174	6	12	74	29	38	2
50	1 1/2	10	723 514 110	723 514 135	-	0.239	11	14	83	34	40	2 1/4
63	2	10	723 514 111	723 514 136	-	0.435	17	18	100	41	46	2 3/4

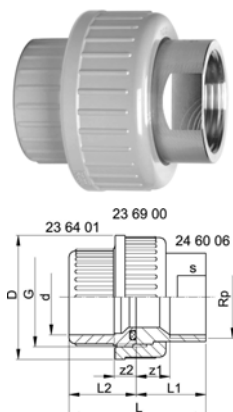
PVC-C metric

23 54 02

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

Model:

- Union End: stainless steel WN 1.4404 (316L), parallel female thread Rp
- Union Bush: Solvent cement socket PVC-C metric
- Union nut: PVC-C
- 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	723 540 205	723 540 230	-	0.053
20	1/2	16	723 540 206	723 540 231	-	0.096
25	3/4	16	723 540 207	723 540 232	-	0.154
32	1	16	723 540 208	723 540 233	-	0.212
40	1 1/4	16	723 540 209	723 540 234	-	0.356
50	1 1/2	16	723 540 210	723 540 235	-	0.455
63	2	16	723 540 211	723 540 236	-	0.721

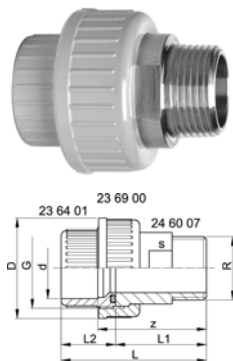
d [mm]	z1 [mm]	z2 [mm]	D [mm]	L [mm]	L1 [mm]	L2 [mm]	G [inch]	s [mm]
16	9	10	35	43	19	24	3/4	19
20	11	10	43	50	24	26	1	24
25	11	10	51	55	26	29	1 1/4	29
32	12	10	58	61	29	32	1 1/2	36
40	14	12	74	71	33	38	2	45
50	15	14	83	79	34	45	2 1/4	54
63	15	18	100	95	39	56	2 3/4	63

23 54 07

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

Model:

- Union End: stainless steel WN 1.4404 (316L), taper male thread R
- Union Bush: Solvent cement socket PVC-C metric
- Union nut: PVC-C
- 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	723 540 705	723 540 730	-	0.073
20	1/2	16	723 540 706	723 540 731	-	0.126
25	3/4	16	723 540 707	723 540 732	-	0.174
32	1	16	723 540 708	723 540 733	-	0.262
40	1 1/4	16	723 540 709	723 540 734	-	0.476
50	1 1/2	16	723 540 710	723 540 735	-	0.535
63	2	16	723 540 711	723 540 736	-	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	74	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

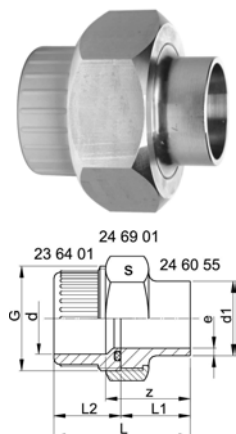
PVC-C metric

23 54 55

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

Model:

- Union End: Stainless steel 1.4404 (316L) with welding end
- Union Bush: Solvent cement socket PVC-C 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	kg
16	17	16	723 545 505	723 545 530	-	0.101
20	21	16	723 545 506	723 545 531	-	0.176
25	27	16	723 545 507	723 545 532	-	0.204
32	34	16	723 545 508	723 545 533	-	0.313
40	42	16	723 545 509	723 545 534	-	0.493
50	48	16	723 545 510	723 545 535	-	0.566
63	60	16	723 545 511	723 545 536	-	0.902

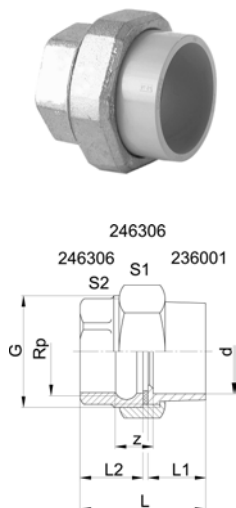
d [mm]	z [mm]	L [mm]	L1 [mm]	L2 [mm]	e [mm]	G [inch]	s [mm]
16	28	42	18	24	1.6	3/4	32
20	32	48	22	26	2.0	1	41
25	33	52	23	29	2.0	1 1/4	46
32	36	58	26	32	2.0	1 1/2	55
40	38	64	26	38	2.0	2	68
50	42	73	28	45	2.0	2 1/4	74
63	50	88	32	56	2.6	2 3/4	88

23 53 02

Adaptor Union Malleable Iron/ PVC-C Rp-metric

Model:

- Union End: PVC-C, solvent cement
- Union Bush: Malleable iron galvanized parallel female thread (Rp)
- Union Nut: malleable iron galvanized
- Gasket: Flat gasket No. 48 40 00 EPDM



d [mm]	Rp [inch]	PN	Code	kg	z [mm]	G [inch]	L1 [mm]	L2 [mm]	S1 [mm]	S2 [mm]
20	1/2	16	723 530 206	0.128	49	1	21	25	39	25
25	3/4	16	723 530 207	0.206	55	1 1/4	24	28	48	31
32	1	16	723 530 208	0.269	59	1 1/2	27	31	55	38
40	1 1/4	16	723 530 209	0.443	64	2	32	33	67	47
50	1 1/2	16	723 530 210	0.549	68	2 1/4	33	36	74	53
63	2	16	723 530 211	0.888	77	2 3/4	40	42	90	66

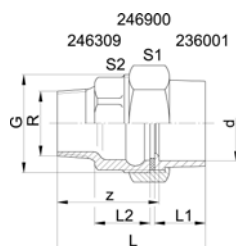
PVC-C metric

23 53 07

Adaptor Unions Malleable Iron / PVC-C R-metric

Model:

- Union End: PVC-C, solvent cement
- Union Bush: Malleable iron galvanized, taper male thread (R)
- Union Nut: malleable iron galvanized
- Gasket: Flat gasket No. 48 40 00 EPDM



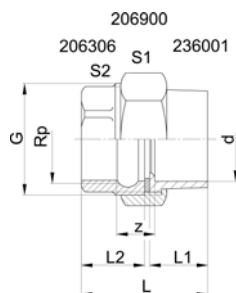
d	R	PN	Code	kg	z	G	L1	L2	S1	S2
[mm]	[inch]				[mm]	[inch]	[mm]	[mm]	[mm]	[mm]
20	1/2	16	723 530 706	0.159	12	1	21	20	39	25
25	3/4	16	723 530 707	0.254	13	1 1/4	24	23	48	31
32	1	16	723 530 708	0.355	14	1 1/2	27	26	55	38
40	1 1/4	16	723 530 709	0.592	15	2	32	28	67	47
50	1 1/2	16	723 530 710	0.701	15	2 1/4	33	29	74	53
63	2	16	723 530 711	0.998	16	2 3/4	40	34	90	66

23 55 02

Adapter Union Brass / PVC-C Rp-metric

Model:

- Union End: PVC-C, solvent cement
- Union Bush: Brass BSP parallel female thread (Rp)
- Union Nut: brass
- Gasket: Flat gasket No. 48 40 00 EPDM



d	Rp	PN	Code	kg	z	G	L1	L2	S1	S2
[mm]	[inch]				[mm]	[inch]	[mm]	[mm]	[mm]	[mm]
16	3/8	16	723 550 205	0.093	34	3/4	19	17	30	27
20	1/2	16	723 550 206	0.190	38	1	21	20	38	27
25	3/4	16	723 550 207	0.236	55	1 1/4	24	23	47	32
32	1	16	723 550 208	0.293	59	1 1/2	27	26	52	38
40	1 1/4	16	723 550 209	0.507	60	2	32	28	66	47
50	1 1/2	16	723 550 210	0.540	67	2 1/4	33	29	72	53
63	2	16	723 550 211	0.904	75	2 3/4	40	34	87	65

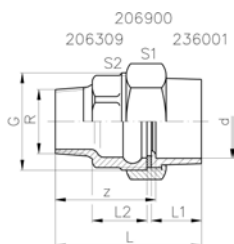
PVC-C metric

23 55 07

Adaptor Unions Brass / PVC-C R-metric

Model:

- Union End: PVC-C, solvent cement
- Union Bush: Brass, BSP, taper male thread R
- Union Nut: brass
- Gasket: Flat gasket No. 48 40 00 EPDM



d [mm]	R [inch]	PN	Code	kg	z [mm]	G [inch]	L1 [mm]	L2 [mm]	S1 [mm]	S2 [mm]
16	3/8	16	723 550 705	0.117	3	3/4	19	29	30	27
20	1/2	16	723 550 706	0.149	3	1	21	32	38	27
25	3/4	16	723 550 707	0.290	3	1 1/4	24	50	47	27
32	1	16	723 550 708	0.361	3	1 1/2	27	54	52	34
40	1 1/4	16	723 550 709	0.644	3	2	32	54	66	43
50	1 1/2	16	723 550 710	0.743	3	2 1/4	33	62	72	50
63	2	16	723 550 711	1.190	3	2 3/4	40	69	87	61

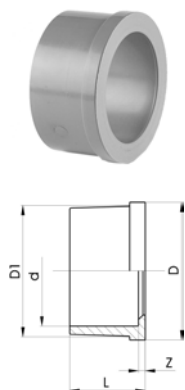
PVC-C metric

23 60 01

Union End, PVC-C

Model:

- For union 23 51 01



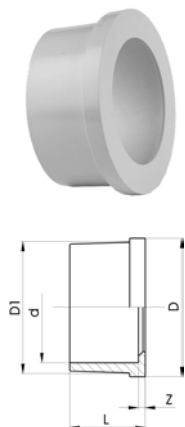
d [mm]	PN	Code	SP	kg	z [mm]	D [mm]	D1 [mm]	L [mm]
16	16	723 600 105	-	0.005	3	24	22.00	19
20	16	723 600 106	-	0.010	4	30	28.00	21
25	16	723 600 107	-	0.018	3	39	36.00	24
32	16	723 600 108	-	0.023	3	44	41.00	27
40	16	723 600 109	-	0.062	3	57	53.00	31
50	16	723 600 110	-	0.064	3	63	59.00	34
63	16	723 600 111	-	0.120	3	78	74.00	41
75	10	723 600 162	-	0.157	3	101	91.00	47
90	10	723 600 163	-	0.260	5	121	108.00	56
110	10	723 600 164	-	0.418	5	146	131.00	66

23 60 20

Union Ends, PVC-C ASTM

Model:

- Solvent cement socket ASTM



Inch	PN	Code	SP	kg	z [mm]	D [mm]	D1 [mm]	L [mm]
3/8	16	723 602 005	-	0.007	3	24	22.00	22
1/2	16	723 602 006	-	0.010	3	30	27.50	25
3/4	16	723 602 007	-	0.017	3	39	36.00	28
1	16	723 602 008	-	0.024	3	45	41.50	32
1 1/4	16	723 602 009	-	0.040	3	57	53.00	35
1 1/2	16	723 602 010	-	0.057	3	63	59.00	38
2	16	723 602 011	-	0.096	3	78	74.00	41

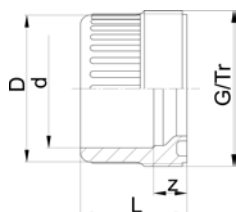
PVC-C metric

23 64 01

Union Bush, PVC-C

Model:

- Solvent cement socket metric
- For union 23 51 01
- Jointing face: with O-Ring groove
- Gasket: O-Ring EPDM No. 48 41 00, FPM No. 49 41 00



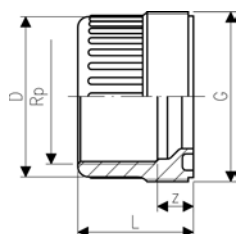
d [mm]	PN	Code	SP	kg	z [mm]	D [mm]	L [mm]	G/Tr
16	16	723 640 105	-	0.009	11	24	25	3/4
20	16	723 640 106	-	0.014	12	28	26	1
25	16	723 640 107	-	0.024	11	33	29	1 1/4
32	16	723 640 108	-	0.034	10	41	32	1 1/2
40	16	723 640 109	-	0.058	12	50	38	2
50	16	723 640 110	-	0.079	14	62	45	2 1/4
63	16	723 640 111	-	0.147	19	77	56	2 3/4
75	10	723 640 112	-	0.230	18	93	62	Tr108x5
90	10	723 640 113	-	0.345	18	110	69	Tr128x5
110	10	723 640 114	-	0.480	11	133	72	Tr154x6

23 64 06

Union Bushes Rp, PVC-C

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-C



Rp [inch]	PN	Code	SP	kg	z [mm]	D [mm]	L [mm]	G [inch]
3/8	10	723 640 605	-	0.012	13	24	24	3/4
1/2	10	723 640 606	-	0.015	13	29	26	1
3/4	10	723 640 607	-	0.024	14	34	29	1 1/4
1	10	723 640 608	10	0.034	15	42	32	1 1/2
1 1/4	10	723 640 609	10	0.060	19	53	38	2
1 1/2	10	723 640 610	-	0.092	26	63	45	2 1/4
2	10	723 640 611	-	0.114	33	78	56	2 3/4

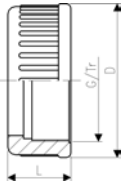
PVC-C metric

23 69 00

Union Nut, PVC-C

Model:

- For union 23 51 01



d [mm]	PN	Code	SP	kg	D [mm]	L [mm]	G/Tr
16	16	723 690 005	-	0.012	35	21	3/4
20	16	723 690 006	-	0.020	43	23	1
25	16	723 690 007	-	0.022	51	24	1 1/4
32	16	723 690 008	-	0.032	58	26	1 1/2
40	16	723 690 009	-	0.053	72	29	2
50	16	723 690 010	-	0.100	83	34	2 1/4
63	16	723 690 011	-	0.141	100	38	2 3/4
75	10	723 690 012	-	0.271	135	40	Tr108x5
90	10	723 690 013	-	0.383	158	43	Tr128x5
110	10	723 690 014	-	0.609	188	48	Tr154x6

PVC-C metric

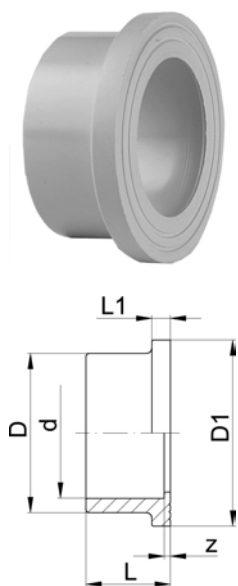
Flange Adaptors

23 79 01

Flange Adaptor (Serrated face), PVC-C

Model:

- Jointing faces serrated
- Counterpart: Flange Adaptor No. 23 79 01
- Gasket: Flat gasket No. 48 40 01 EPDM or No.49 40 01 FPM
- Flange: No. 27 70 04, 27 70 02, 23 70 00
- d160 and d225 can be used as serrated or flat flange adaptor



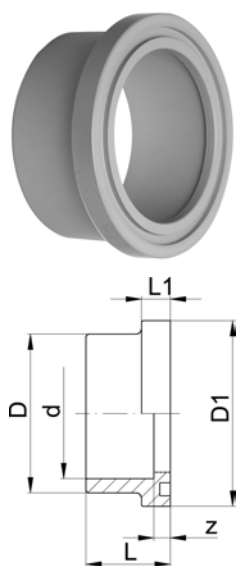
d [mm]	PN	Code	SP	kg	z [mm]	D [mm]	D1 [mm]	L [mm]	L1 [mm]
20	16	723 790 106	10	0.012	3	27	34.00	21	6
25	16	723 790 107	-	0.018	3	33	41.00	24	7
32	16	723 790 108	10	0.026	3	41	50.00	27	7
40	16	723 790 109	-	0.044	3	50	61.00	30	8
50	16	723 790 110	-	0.060	3	61	73.00	34	8
63	16	723 790 111	-	0.106	3	76	90.00	41	9
75	16	723 790 112	-	0.167	3	91	106.00	47	10
90	16	723 790 113	-	0.271	5	108	125.00	56	11
110	16	723 790 114	-	0.432	5	131	150.00	66	12
160	16	723 790 117	-	1.200	5	188	213.00	91	16
200	10	723 790 119	-	1.630	6	224	250.00	112	24
225	10	723 790 120	-	1.900	6	248	274.00	125	25

23 81 01

Flange Adaptor, with O-ring groove, PVC-C

Model:

- Jointing Face: with O-Ring groove
- Counterpart: Flange Adaptor No. 23 79 01
- Gasket: O-ring EPDM No. 48 41 01, FPM No. 49 41 01
- Flange: No. 27 70 04, 27 70 02, 23 70 00



d [mm]	PN	Code	SP	kg	z [mm]	D [mm]	D1 [mm]	L [mm]	L1 [mm]
160	16	723 810 117	-	1.300	11	188	213.00	97	22
225	10	723 810 120	-	2.050	12	248	274.00	131	31

PVC-C metric

Flanges

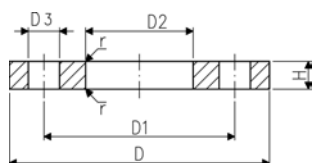
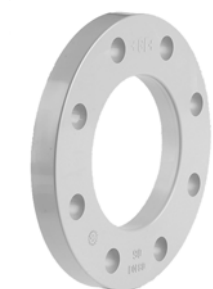
23 70 00

PVC-C Backing Flange for Socket Systems metric

Model:

- Connecting dimension: ISO 2501 PN 10

- Maximum temperature +60°C
- Material: PVC-C



d [mm]	DN [mm]	PN	Code	SP	kg
63	50	10	723 700 011	-	0.330
75	63	10	723 700 012	-	0.402
90	80	10	723 700 013	-	0.510
110	100	10	723 700 014	-	0.600

d [mm]	D [mm]	D1 [mm]	D2 [mm]	D3 [mm]	H [mm]	r [mm]	AL	SC
63	165	125.00	78.00	18.0	18	3	4	M 16
75	185	145.00	92.00	18.0	19	3	4	M 16
90	200	160.00	110.00	18.0	20	3	8	M 16
110	220	180.00	133.00	18.0	22	3	8	M 16

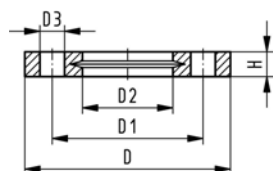
27 70 04

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
120	15	16	727 700 406	95	65.00	28.00	14.0	16	4	M12
125	20	16	727 700 407	105	75.00	34.00	14.0	17	4	M12
132	25	16	727 700 408	115	85.00	42.00	14.0	18	4	M12
140	32	16	727 700 409	140	100.00	51.00	18.0	20	4	M16
150	40	16	727 700 410	150	110.00	62.00	18.0	22	4	M16
163	50	16	727 700 411	165	125.00	78.00	18.0	24	4	M16
175	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

PVC-C metric

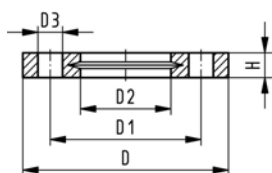
27 70 04
27 70 05

Backing Flanges, PP-V for Butt Fusion 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	727 700 513	200	160.00	108.00	18.0	27	8	M16
110	100	16	727 700 514	220	180.00	128.00	18.0	28	8	M16
125	100	16	727 700 515	220	180.00	135.00	18.0	28	8	M16
140	125	16	727 700 516	250	210.00	158.00	18.0	30	8	M16
160	150	16	727 700 517	285	241.00	178.00	22.0	32	8	M20
180	150	16	727 700 518	285	240.00	188.00	22.0	32	8	M20
200	200	16	727 700 519	340	295.00	235.00	22.0	34	8	M20
225	200	16	727 700 520	340	295.00	238.00	22.0	34	8	M20
250	250	16	727 700 521	395	350.00	288.00	22.0	38	12	M20
280	250	16	727 700 522	395	350.00	294.00	22.0	38	12	M20
315	300	16	727 700 523	445	400.00	338.00	22.0	42	12	M20

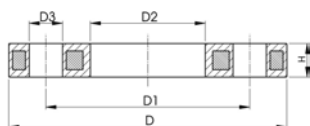
27 70 02
27 70 03

Backing Flanges, PP/Steel for Socket Systems metric

Model:

- Material: PP (30 % glass-fibre reinforced) with steel ring
- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10

¹⁾ Attention: bolt circle according ISO 2536



d [mm]	DN [mm]	PN	Code	SP	kg	D [mm]	D1 [mm]	D2 [mm]	D3 [mm]	H [mm]	AL	SC
20	15	16	727 700 206	-	0.220	95	65	28	14	12	4	M12
25	20	16	727 700 207	-	0.260	105	75	34	14	12	4	M12
32	25	16	727 700 208	-	0.430	115	85	42	14	16	4	M12
40	32	16	727 700 209	-	0.650	140	100	51	18	16	4	M16
50	40	16	727 700 210	-	0.820	150	110	62	18	18	4	M16
63	50	16	727 700 211	-	0.940	165	125	78	18	18	4	M16
75	65	16	727 700 212	-	1.300	185	145	92	18	18	4	M16
90	80	16	727 700 213	-	1.400	200	160	110	18	20	8	M16
110	100	16	727 700 214	-	1.560	220	180	133	18	20	8	M16
125	125	16	727 700 215	-	2.590	250	210	150	18	24	8	M16
140	125	16	727 700 216	-	2.120	250	210	167	18	24	8	M16
160	150	16	727 700 217	-	3.390	285	240	190	22	24	8	M20
200	200	16	727 700 219	-	5.850	340	295	226	22	27	8	M20
225	200	16	727 700 220	-	4.410	340	295	250	22	27	8	M20
250	250	16	727 700 021	-	8.340	395	350.00	277.00	22.0	30	12	M20
*250	250	16	727 700 221	-	8.340	395	325	277	22	30	8	M20
280	250	16	727 700 222	-	5.520	395	350	310	22	30	12	M20
315	300	16	727 700 223	-	7.600	445	400	348	22	34	12	M20
355	350	16	727 700 224	-	13.960	515	460	388	23	40	16	M20
400	400	16	727 700 225	-	17.380	574	515	442	26	40	16	M24

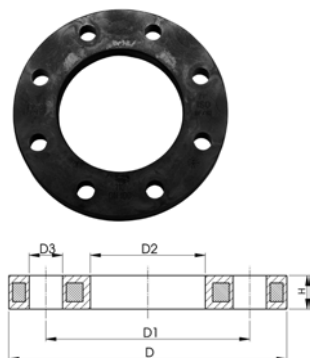
PVC-C metric

27 70 02
27 70 03

Backing Flanges, PP/Steel for Butt Fusion Systems metric

Model:

- Material: PP (30 % glass-fibre reinforced) with steel ring
- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10



d	DN	PN	Code	D	D1	D2	D3	H	AL	SC
[mm]	[mm]			[mm]	[mm]	[mm]	[mm]	[mm]		
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	727 700 313	200	160.00	108.00	18.0	20	8	M16
110	100	16	727 700 314	220	180.00	128.00	18.0	20	8	M16
125	100	16	727 700 315	220	180.00	135.00	18.0	20	8	M16
140	125	16	727 700 316	250	210.00	158.00	18.0	24	8	M16
160	150	16	727 700 317	285	240.00	178.00	22.0	24	8	M20
180	150	16	727 700 318	285	240.00	188.00	22.0	24	8	M20
200	200	16	727 700 319	340	295.00	235.00	22.0	27	8	M20
225	200	16	727 700 320	340	295.00	238.00	22.0	27	8	M20
250	250	16	727 700 321	395	350.00	288.00	22.0	30	12	M20
280	250	16	727 700 322	395	350.00	294.00	22.0	30	12	M20
315	300	16	727 700 323	445	400.00	338.00	22.0	34	12	M20
355	350	16	727 700 324	515	460.00	376.00	23.0	40	16	M20
400	400	16	727 700 325	574	515.00	430.00	26.0	40	16	M24

27 70 14
27 70 15

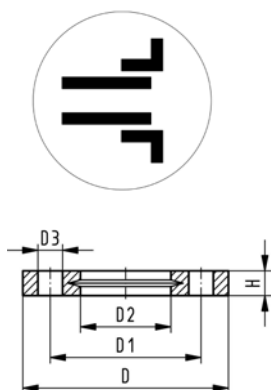
Backing Flanges, PP-V for Socket Systems Inch/ANSI

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)



d	DN	Inch	PN	Code	kg	D	D1	D2	D3	H	AL	SC
[mm]	[mm]					[mm]	[mm]	[mm]	[mm]	[mm]		
	15	1/2	16	727 701 406	0.080	95	60.00	28.00	16.0	16	4	M12
	20	3/4	16	727 701 407	0.100	105	70.00	34.00	16.0	17	4	M12
	25	1	16	727 701 408	0.140	115	79.00	42.00	16.0	18	4	M12
	32	1 1/4	16	727 701 409	0.220	140	89.00	51.00	16.0	20	4	M16
	40	1 1/2	16	727 701 410	0.210	150	98.00	62.00	16.0	22	4	M16
	50	2	16	727 701 411	0.380	165	121.00	78.00	19.0	24	4	M16
	65	2 1/2	16	727 701 412	0.480	185	140.00	92.00	19.0	26	4	M16
	80	3	16	727 701 413	0.520	200	152.00	110.00	19.0	27	4	M16
	110	4	16	727 701 414	0.680	229	190.00	133.00	19.0	28	8	M16
	160		16	727 700 417	1.200	285	241.00	190.00	22.0	32	8	M20
	225		16	727 700 420	1.400	340	295.00	250.00	22.0	34	8	M20
	250	10	16	727 701 422	1.700	406	362.00	310.00	26.0	38	12	M20
	300	12	16	727 701 423	2.400	483	432.00	348.00	26.0	42	12	M20

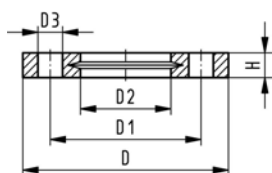
PVC-C metric

27 70 14
27 70 15

Backing Flanges, PP-V for Butt Fusion 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)

d [mm]	DN [mm]	Inch	PN	Code	SP	kg
	15	1/2	16	727 701 406	-	0.080
	20	3/4	16	727 701 407	-	0.100
	25	1	16	727 701 408	-	0.140
	32	1 1/4	16	727 701 409	-	0.220
	40	1 1/2	16	727 701 410	-	0.210
	50	2	16	727 701 411	-	0.380
	65	2 1/2	16	727 701 412	-	0.480
	80	3	16	727 701 513	-	0.520
110	100	4	16	727 701 514	-	0.680
160	150		16	727 700 517	-	1.200
200	200		16	727 700 519	-	1.400
225	200		16	727 700 520	-	1.400
	250	[10]	16	727 701 521	-	1.800
280	250	10	16	727 701 522	-	1.700
	300	12	16	727 701 523	-	2.400

d [mm]	D [mm]	D1 [mm]	D2 [mm]	D3 [mm]	H [mm]	AL	SC
	95	60.00	28.00	16.0	16	4	M12
	105	70.00	34.00	16.0	17	4	M12
	115	79.00	42.00	16.0	18	4	M12
	140	89.00	51.00	16.0	20	4	M16
	150	98.00	62.00	16.0	22	4	M16
	165	121.00	78.00	19.0	24	4	M16
	185	140.00	92.00	19.0	26	4	M16
	200	152.00	108.00	19.0	27	4	M16
110	229	190.00	128.00	19.0	28	8	M16
160	285	241.00	178.00	22.0	32	8	M20
200	340	295.00	235.00	22.0	34	8	M20
225	340	295.00	238.00	22.0	34	8	M20
	406	362.00	288.00	26.0	38	12	M20
280	406	362.00	294.00	26.0	38	12	M20
	483	432.00	338.00	26.0	42	12	M20

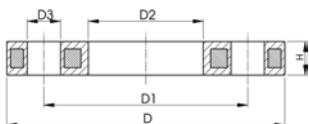
PVC-C metric

27 70 12

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



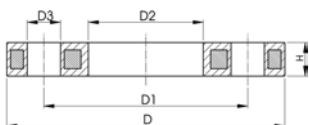
d	DN	Inch	PN	Code	kg	D	D1	D2	D3	H	AL	
[mm]	[mm]					[mm]	[mm]	[mm]	[mm]	[mm]		
20	15	1/2	16	727 701 206	0.210	95	60.00	28.00	16.0	12	4	
25	20	3/4	16	727 701 207	0.250	105	70.00	34.00	16.0	12	4	
32	25	1	16	727 701 208	0.420	115	79.00	42.00	16.0	16	4	
40	32	1 1/4	16	727 701 209	0.670	140	89.00	51.00	16.0	16	4	
50	40	1 1/2	16	727 701 210	0.860	150	98.00	62.00	16.0	18	4	
63	50	2	16	727 701 211	0.930	165	121.00	78.00	19.0	18	4	
75	65	2 1/2	16	727 701 212	1.340	185	140.00	92.00	19.0	18	4	
90	80	3	16	727 701 213	1.550	200	152.00	110.00	19.0	20	4	
110	100	4	16	727 701 214	1.810	229	190.00	133.00	19.0	20	8	
200	150	6	16	727 701 217	3.390	285	241.00	190.00	22.0	24	8	
225	200	8	16	727 701 220	4.410	340	298.00	250.00	22.0	27	8	

27 70 12

Backing Flanges, PP/Steel for Butt Fusion Systems Inch/ANSI

Model:

- For butt fusion systems
- Material: PP (30 % glass-fibre reinforced) with steel ring
- Bolt circle diameter and bolt holes: ANSI B16.5



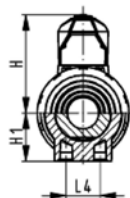
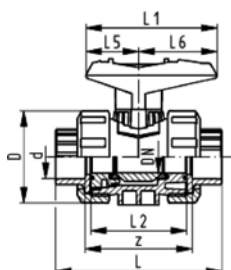
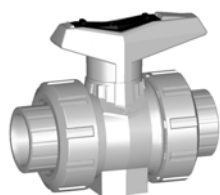
d	DN	Inch	PN	Code	SP	kg	D	D1	D2	D3	H	AL	
[mm]	[mm]						[mm]	[mm]	[mm]	[mm]	[mm]		
20	15	1/2	16	727 701 206	-	0.210	95	60.00	28.00	16.0	12	4	
25	20	3/4	16	727 701 207	-	0.250	105	70.00	34.00	16.0	12	4	
32	25	1	16	727 701 208	-	0.420	115	79.00	42.00	16.0	16	4	
40	32	1 1/4	16	727 701 209	-	0.670	140	89.00	51.00	16.0	16	4	
50	40	1 1/2	16	727 701 210	-	0.860	150	98.00	62.00	16.0	18	4	
63	50	2	16	727 701 211	-	0.930	165	121.00	78.00	19.0	18	4	
75	65	2 1/2	16	727 701 212	-	1.340	185	140.00	92.00	19.0	18	4	
90	80	3	16	727 701 313	-	1.550	200	152.00	108.00	19.0	20	4	
110	100	4	16	727 701 314	-	1.840	229	190.00	128.00	19.0	20	8	
125	150	6	16	727 701 317	-	3.890	285	241.00	178.00	22.0	24	8	
200	200	(8)	16	727 701 319	-	5.180	340	298.00	235.00	22.0	27	8	
225	200	8	16	727 701 320	-	5.150	340	298.00	238.00	22.0	27	8	

PVC-C metric

Ball valves

Ball valve type 546 PVC-C

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:

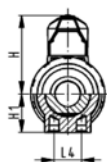
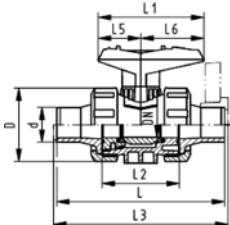
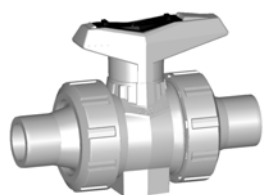
- Individual configuration of the valve (see form)
- Multifunctional module with integrated limit switches
- Pneumatic or electric actuators from +GF+

d [mm]	DN [mm]	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	16	71	163 546 001	163 546 011	0.160
20	15	16	185	163 546 002	163 546 012	0.160
25	20	16	350	163 546 003	163 546 013	0.245
32	25	16	700	163 546 004	163 546 014	0.365
40	32	16	1000	163 546 005	163 546 015	0.660
50	40	16	1600	163 546 006	163 546 016	0.890
63	50	16	3100	163 546 007	163 546 017	1.650

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

PVC-C metric

Ball valve type 546 PVC-C 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

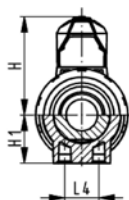
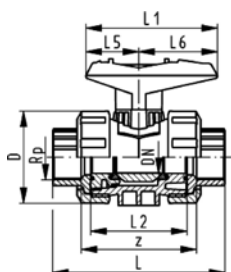
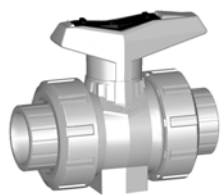
Option:

- 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	163 546 041	163 546 051	0.160
20	15	16	185	163 546 042	163 546 052	0.160
25	20	16	350	163 546 043	163 546 053	0.245
32	25	16	700	163 546 044	163 546 054	0.365
40	32	16	1000	163 546 045	163 546 055	0.660
50	40	16	1600	163 546 046	163 546 056	0.890
63	50	16	3100	163 546 047	163 546 057	1.650

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

PVC-C metric



Ball valve type 546 PVC-C 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:

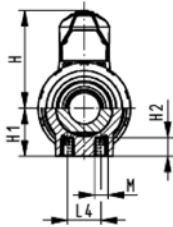
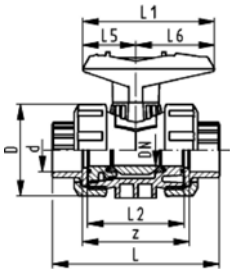
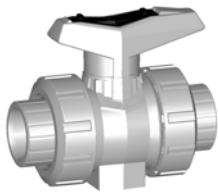
- Individual configuration of the valve (see form)
- Multifunctional module with integrated limit switches
- Pneumatic or electric actuators from +GF+

Rp [inch]	DN [mm]	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
3/8	10	10	71	163 546 021	163 546 031	0.160
1/2	15	10	185	163 546 022	163 546 032	0.160
3/4	20	10	350	163 546 023	163 546 033	0.245
1	25	10	700	163 546 024	163 546 034	0.365
1 1/4	32	10	1000	163 546 025	163 546 035	0.660
1 1/2	40	10	1600	163 546 026	163 546 036	0.890
2	50	10	3100	163 546 027	163 546 037	1.650

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

PVC-C metric

Ball valve type 546 PVC-C 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

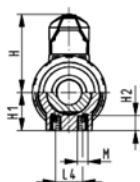
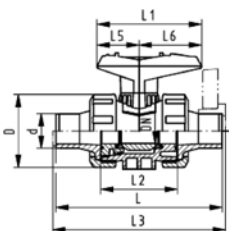
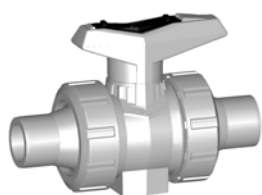
Option:

- 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	163 546 061	163 546 071	0.160
20	15	16	185	163 546 062	163 546 072	0.160
25	20	16	350	163 546 063	163 546 073	0.245
32	25	16	700	163 546 064	163 546 074	0.365
40	32	16	1000	163 546 065	163 546 075	0.660
50	40	16	1600	163 546 066	163 546 076	0.890
63	50	16	3100	163 546 067	163 546 077	1.650

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

PVC-C metric



Ball valve type 546 PVC-C 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:

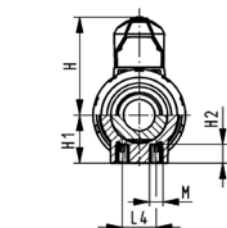
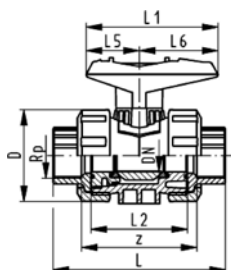
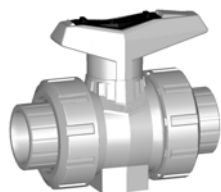
- Individual configuration of the valve (see form)
- Multifunctional module with integrated limit switches
- Pneumatic or electric actuators from +GF+

d [mm]	DN [mm]	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	16	71	163 546 381	163 546 391	0.162
20	15	16	185	163 546 382	163 546 392	0.162
25	20	16	350	163 546 383	163 546 393	0.247
32	25	16	700	163 546 384	163 546 394	0.367
40	32	16	1000	163 546 385	163 546 395	0.665
50	40	16	1600	163 546 386	163 546 396	0.895
63	50	16	3100	163 546 387	163 546 397	1.655

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		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

PVC-C metric

Ball valve type 546 PVC-C 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:

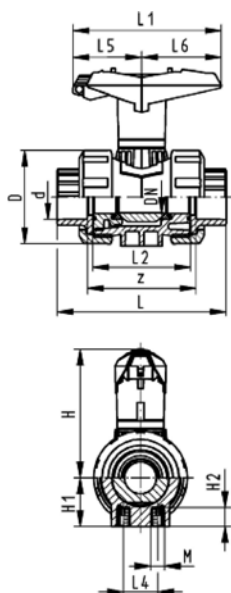
- Individual configuration of the valve (see form)
- Multifunctional module with integrated limit switches
- Pneumatic or electric actuators from +GF+

Rp [inch]	DN [mm]	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg	
3/8	10	10	71	163 546 401	163 546 411	0.162	
1/2	15	10	185	163 546 402	163 546 412	0.162	
3/4	20	10	350	163 546 403	163 546 413	0.247	
1	25	10	700	163 546 404	163 546 414	0.367	
1 1/4	32	10	1000	163 546 405	163 546 415	0.665	
1 1/2	40	10	1600	163 546 406	163 546 416	0.895	
2	50	10	3100	163 546 407	163 546 417	1.655	

Rp [inch]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	M	z [mm]	
3/8	50	57	27	12	95	77	56	25	32	45	M6	69	
1/2	50	57	27	12	100	77	56	25	32	45	M6	67	
3/4	58	67	30	12	114	97	65	25	39	58	M6	78	
1	68	73	36	12	127	97	71	25	39	58	M6	85	
1 1/4	84	90	44	12	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	

PVC-C metric

Ball valve type 546 PVC-C 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:

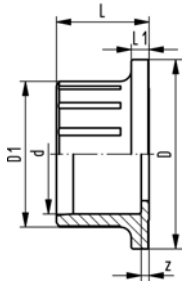
- Individual configuration of the valve (see form)
- Multifunctional module with integrated limit switches
- Pneumatic or electric actuators from +GF+

d [mm]	DN [mm]	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg	
16	10	16	71	163 546 081	163 546 091	0.175	
20	15	16	185	163 546 082	163 546 092	0.175	
25	20	16	350	163 546 083	163 546 093	0.270	
32	25	16	700	163 546 084	163 546 094	0.390	
40	32	16	1000	163 546 085	163 546 095	0.700	
50	40	16	1600	163 546 086	163 546 096	0.930	
63	50	16	3100	163 546 087	163 546 097	1.695	

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	

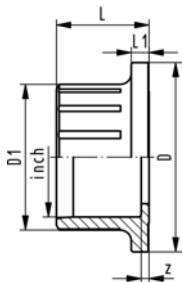
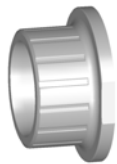
PVC-C metric

Valve end 546 PVC-C (G11) With solvent cement socket metric



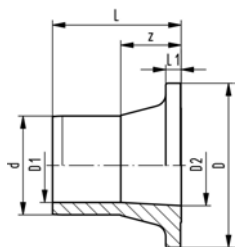
d [mm]	PN	Code	kg	D [mm]	D1 [mm]	L [mm]	L1 [mm]	z [mm]
16	16	163 481 275	0.009	38	23.20	18	4	4
20	16	163 481 276	0.011	38	27.20	20	4	4
25	16	163 481 277	0.016	44	33.20	23	5	4
32	16	163 481 278	0.025	53	41.00	26	5	4
40	16	163 481 279	0.043	65	51.00	31	5	5
50	16	163 481 280	0.064	77	62.00	34	6	3
63	16	163 481 281	0.119	99	77.00	41	7	3

Valve end 546 PVC-C (G13) With solvent cement socket Inch ASTM



Inch	PN	Code	kg	D [mm]	D1 [mm]	L [mm]	L1 [mm]	z [mm]
3/8	16	163 481 311	0.012	38	24.30	25	4	6
1/2	16	163 481 312	0.014	38	29.50	25	4	2
3/4	16	163 481 313	0.020	44	35.30	28	5	3
1	16	163 481 314	0.031	53	43.30	31	5	3
1 1/4	16	163 481 315	0.046	65	52.80	34	5	3
1 1/2	16	163 481 316	0.067	77	59.60	38	6	3
2	16	163 481 317	0.118	99	72.70	41	7	3

Valve end 546 PVC-C (G14) With solvent cement spigot metric



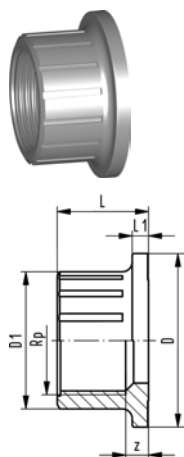
d [mm]	PN	Code	kg	D [mm]	D1 [mm]	D2 [mm]	L [mm]	L1 [mm]	z [mm]
16	16	163 481 300	0.012	38	10.00	15.50	29	4	15
20	16	163 481 301	0.015	38	14.00	15.50	34	4	18
25	16	163 481 302	0.023	44	19.00	20.50	39	5	20
32	16	163 481 303	0.040	53	24.00	26.10	42	5	20
40	16	163 481 304	0.054	65	31.00	32.80	45	5	19
50	16	163 481 305	0.093	77	39.00	41.30	53	6	22
63	16	163 481 306	0.177	99	49.00	51.20	62	7	24

PVC-C metric

Valve end 546 PVC-C (G15) With threaded socket Rp

Model:

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

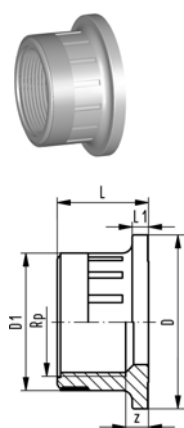


Rp [inch]	PN	Code	kg	D [mm]	D1 [mm]	L [mm]	L1 [mm]	z [mm]
3/8	10	163 481 286	0.011	38	24.00	20	4	7
1/2	10	163 481 287	0.013	38	28.00	22	4	6
3/4	10	163 481 288	0.019	44	33.80	25	5	7
1	10	163 481 289	0.031	53	42.00	28	5	7
1 1/4	10	163 481 290	0.047	65	52.00	30	5	7
1 1/2	10	163 481 291	0.081	77	63.00	32	6	9
2	10	163 481 292	0.150	99	77.50	38	7	10

Valve end 546 PVC-C (G16) 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-C

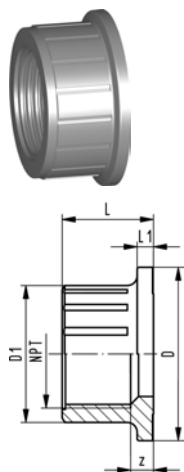


Rp [inch]	PN	Code	kg	D [mm]	D1 [mm]	L [mm]	L1 [mm]	z [mm]
3/8	16	163 481 400	0.014	38	24.00	20	4	7
1/2	16	163 481 401	0.018	38	28.00	22	4	6
3/4	16	163 481 402	0.025	44	33.80	25	5	7
1	16	163 481 403	0.044	53	42.00	28	5	7
1 1/4	16	163 481 404	0.064	65	52.00	30	5	7
1 1/2	16	163 481 405	0.106	77	63.00	32	6	9
2	16	163 481 406	0.182	99	77.50	38	7	10

Valve end 546 PVC-C (G17) With threaded socket NPT

Model:

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



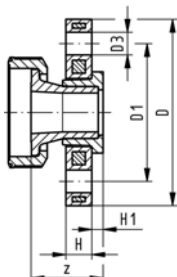
NPT [inch]	PN	Code	kg	D [mm]	D1 [mm]	L [mm]	L1 [mm]	z [mm]
3/8	10	163 481 322	0.014	38	26.20	21	4	7
1/2	10	163 481 323	0.019	38	33.30	21	4	4
3/4	10	163 481 324	0.026	44	38.90	23	5	5
1	10	163 481 325	0.043	53	47.00	28	5	6
1 1/4	10	163 481 326	0.064	65	56.90	31	5	7
1 1/2	10	163 481 327	0.093	77	64.70	34	6	11
2	10	163 481 328	0.157	99	77.40	41	7	17

PVC-C metric

Valve end 546 PVC-C (G72) Assembly with backing flange PP-St metric

Model:

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

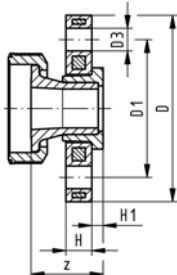


d	DN	PN	Code	kg	D	D1	D3	H	H1	z
[mm]	[mm]				[mm]	[mm]	[mm]	[mm]	[mm]	[mm]
20	15	16	163 481 412	0.265	95	65.00	14.0	12	6	37
25	20	16	163 481 413	0.330	105	75.00	14.0	12	7	42
32	25	16	163 481 414	0.540	115	85.00	14.0	16	7	45
40	32	16	163 481 415	0.820	140	100.00	18.0	16	8	48
50	40	16	163 481 416	1.075	150	110.00	18.0	18	8	56
63	50	16	163 481 417	1.435	165	125.00	18.0	18	9	65

Valve end 546 PVC-C (G73) Assembly with backing flange PP-St Inch ANSI

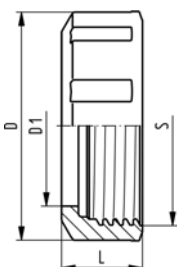
Model:

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



Inch	DN	PN	Code	kg	D	D1	D3	H	H1	z
	[mm]				[mm]	[mm]	[mm]	[mm]	[mm]	[mm]
½	15	16	163 481 425	0.255	95	60.00	16.0	12	6	37
¾	20	16	163 481 426	0.316	105	70.00	16.0	12	7	42
1	25	16	163 481 427	0.530	115	79.00	16.0	16	7	45
1 ¼	32	16	163 481 428	0.835	140	89.00	16.0	16	8	47
1 ½	40	16	163 481 429	1.135	150	98.00	16.0	18	8	56
2	50	16	163 481 430	1.435	165	121.00	19.0	18	9	65

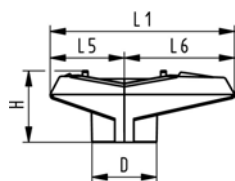
Union nut 546 PVC-C



d	DN	Code	kg	D	D1	L	S
[mm]	[mm]			[mm]	[mm]	[mm]	[mm]
16-20	10-15	163 481 226	0.013	50	33.70	19	42
25	20	163 481 227	0.019	58	39.30	20	48
32	25	163 481 228	0.028	68	47.40	24	58
40	32	163 481 229	0.054	84	57.40	27	71
50	40	163 481 230	0.072	97	65.20	30	84
63	50	163 481 231	0.225	124	79.00	36	106

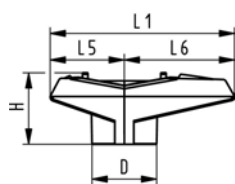
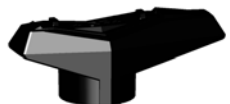
PVC-C metric

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

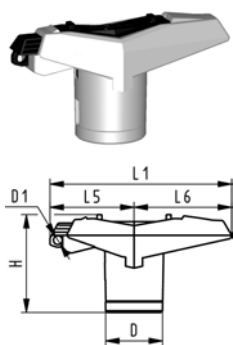
Standard handle 546 black (K02)



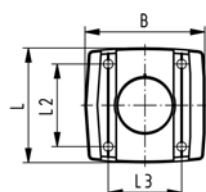
d [mm]	DN [mm]	Code	kg	L1 [mm]	L5 [mm]	L6 [mm]	H [mm]	D [mm]
16-20	10-15	167 484 076	0.012	77	32	45	31	26
25	20	167 484 077	0.022	97	39	58	37	34
32	25	167 484 078	0.022	97	39	58	37	34
40	32	167 484 079	0.042	128	54	74	46	40
50	40	167 484 080	0.042	128	54	74	46	40
63	50	167 484 081	0.059	152	66	87	54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

PVC-C metric

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



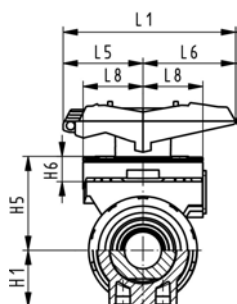
Multifunctional module (I02) PP-GF Module empty

Model:

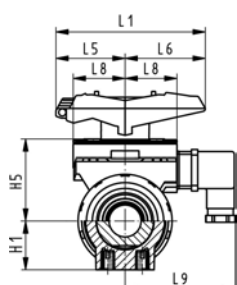
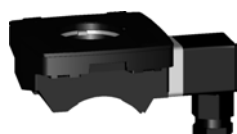
- Accessory to Ball Valve Type 546
- Multifunctional module acts as an intermediate element for actuators

- 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

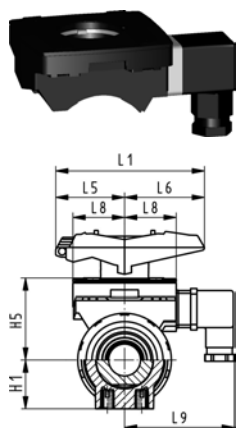
PVC-C metric

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



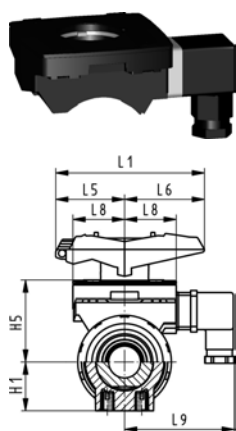
d-d [mm]	DN-DN [mm]	Code	kg	H1 [mm]	H5 [mm]	L1 [mm]	L5 [mm]	L6 [mm]	L8 [mm]	L9 [mm]
16 - 20	10 - 15	167 482 635	0.110	27	50	87	42	45	34	73
25 - 32	20 - 25	167 482 636	0.120	30	53	108	50	58	38	77
40 - 50	32 - 40	167 482 637	0.135	44	72	140	66	75	41	80
- 63	- 50	167 482 638	0.175	64	94	165	78	87	46	85

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



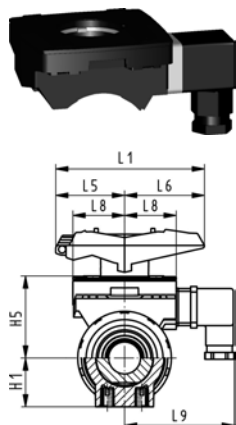
d-d [mm]	DN-DN [mm]	Code	kg	H1 [mm]	H5 [mm]	L1 [mm]	L5 [mm]	L6 [mm]	L8 [mm]	L9 [mm]
16 - 20	10 - 15	167 482 671	0.110	27	50	87	42	45	34	73
25 - 32	20 - 25	167 482 672	0.120	30	53	108	50	58	38	77
40 - 50	32 - 40	167 482 673	0.135	44	72	140	66	75	41	80
- 63	- 50	167 482 674	0.175	64	94	165	78	87	46	85

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

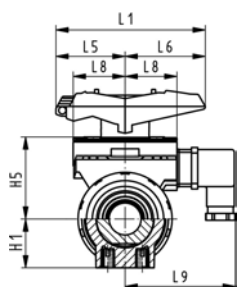
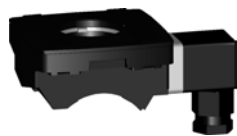
- Including screws



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

PVC-C metric

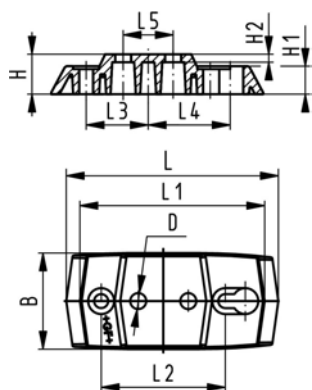
Multifunctional module (I07) PP-GF With inductive limit switches NPN



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

PVC-C metric

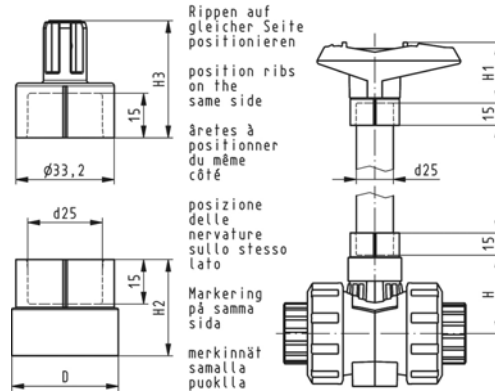
Handle extension 546 PVC-U metric

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

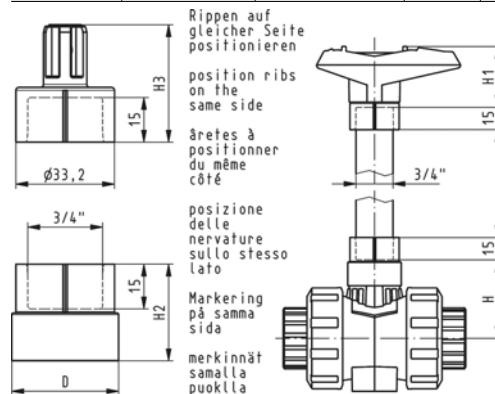


Handle extension 546 PVC-U inch BS/ASTM

- 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



PVC-C metric

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

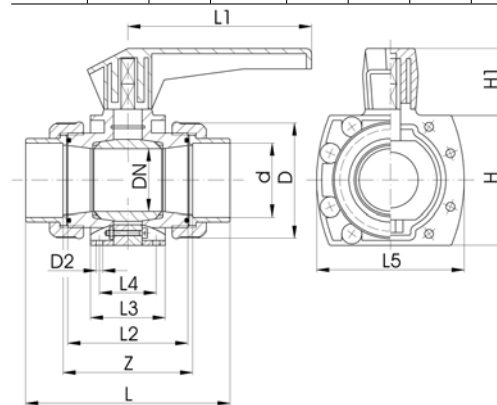


Model:

- For easy installation and removal
- Pneumatic or electric actuator available separately
- Other types available on request

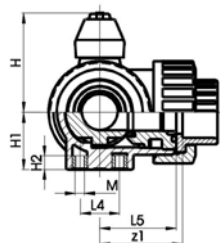
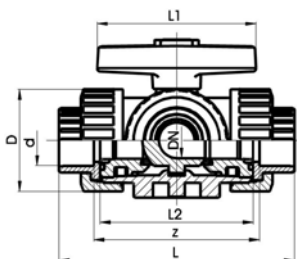
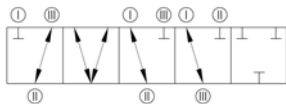
d [mm]	DN [mm]	Inch	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
75	65	2 1/2	10	5000	163 370 008	163 370 023	3.540
90	80		10	7000	163 370 009	163 370 024	4.980
110	100		10	11000	163 370 010	163 370 025	8.930

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



PVC-C metric

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



Model:

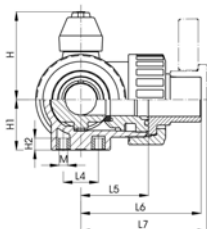
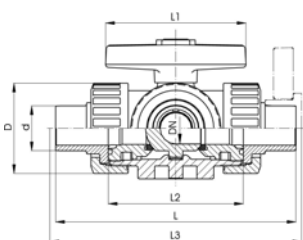
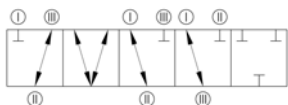
- L-port ball
- For easy installation and removal
- Ball seals PTFE
- Pneumatic or electric actuator available separately
- Angle of operation 45°, without turn limiter
- Other types available on request

d [mm]	DN [mm]	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	50	163 343 001	163 343 011	0.213
20	15	10	75	163 343 002	163 343 012	0.213
25	20	10	150	163 343 003	163 343 013	0.398
32	25	10	280	163 343 004	163 343 014	0.543
40	32	10	480	163 343 005	163 343 015	0.904
50	40	10	620	163 343 006	163 343 016	1.467
63	50	10	1230	163 343 007	163 343 017	2.834

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	52	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

PVC-C metric

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



Model:

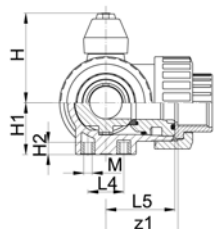
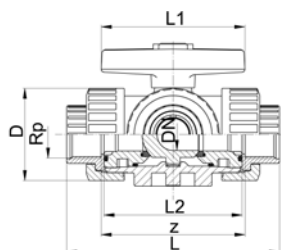
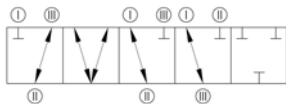
- L-port ball
- For easy installation and removal
- Ball seals PTFE
- Pneumatic or electric actuator available separately
- Angle of operation 45°, without turn limiter
- Other types available on request

d [mm]	DN [mm]	kv-value ($\Delta p=1$ bar) [l/min]	PN	EPDM Code	FPM Code	kg
16	10	50	10	163 343 021	163 343 031	0.213
20	15	75	10	163 343 022	163 343 032	0.213
25	20	150	10	163 343 023	163 343 033	0.398
32	25	280	10	163 343 024	163 343 034	0.543
40	32	480	10	163 343 025	163 343 035	0.904
50	40	620	10	163 343 026	163 343 036	1.467
63	50	1230	10	163 343 027	163 343 037	2.834

d [mm]	D [mm]	L [mm]	L1 [mm]	L3 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	H [mm]	H1 [mm]	H2 [mm]	M
16	45	124	78	129	72	25	36	62	65	50	27	8	6
20	45	134	78	139	72	25	36	67	70	50	27	8	6
25	52	156	92	161	86	25	43	78	81	60	33	8	6
32	65	172	100	177	96	25	48	86	89	68	36	8	6
40	78	202	110	207	116	45	58	101	104	79	44	9	8
50	92	238	120	242	137	45	69	119	121	90	49	9	8
63	116	290	146	294	179	45	90	145	147	109	61	9	8

PVC-C metric

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



Model:

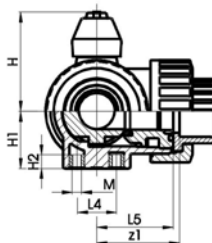
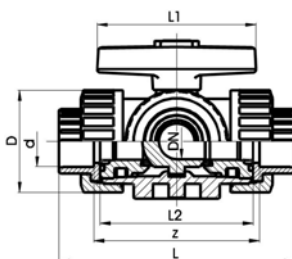
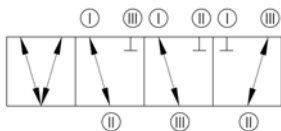
- L-port ball
- For easy installation and removal
- Ball seals PTFE
- Pneumatic or electric actuator available separately
- Angle of operation 45°, without turn limiter
- Other types available on request

Rp [inch]	DN [mm]	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
3/8	10	10	50	163 343 041	163 343 051	0.213
1/2	15	10	75	163 343 042	163 343 052	0.213
3/4	20	10	150	163 343 043	163 343 053	0.398
1	25	10	280	163 343 044	163 343 054	0.543
1 1/4	32	10	480	163 343 045	163 343 055	0.904
1 1/2	40	10	620	163 343 046	163 343 056	1.467
2	50	10	1230	163 343 047	163 343 057	2.834

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	52	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

PVC-C metric

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



Model:

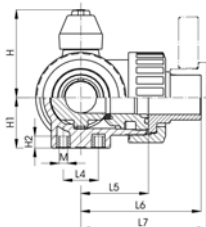
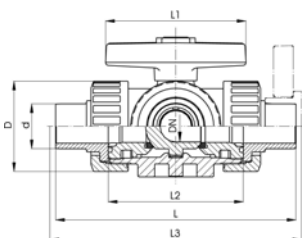
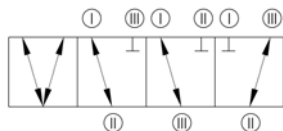
- T-port ball
- For easy installation and removal
- Ball seals PTFE
- Pneumatic or electric actuator available separately
- Angle of operation 90°, without turn limiter
- Other types available on request

d [mm]	DN [mm]	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	140	163 343 201	163 343 211	0.213
20	15	10	200	163 343 202	163 343 212	0.213
25	20	10	470	163 343 203	163 343 213	0.398
32	25	10	793	163 343 204	163 343 214	0.543
40	32	10	1290	163 343 205	163 343 215	0.904
50	40	10	1910	163 343 206	163 343 216	1.467
63	50	10	3100	163 343 207	163 343 217	2.834

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	52	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

PVC-C metric

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



Model:

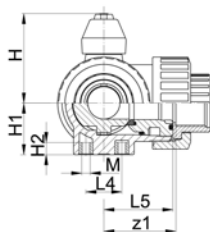
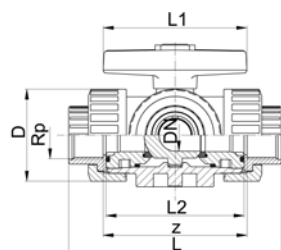
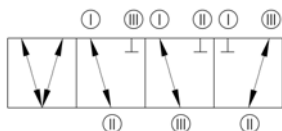
- T-port ball
- For easy installation and removal
- Ball seals PTFE
- Pneumatic or electric actuator available separately
- Angle of operation 90°, without turn limiter
- Other types available on request

d [mm]	DN [mm]	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	140	163 343 221	163 343 231	0.213
20	15	10	200	163 343 222	163 343 232	0.213
25	20	10	470	163 343 223	163 343 233	0.398
32	25	10	793	163 343 224	163 343 234	0.543
40	32	10	1290	163 343 225	163 343 235	0.904
50	40	10	1910	163 343 226	163 343 236	1.467
63	50	10	3100	163 343 227	163 343 237	2.834

d [mm]	D [mm]	L [mm]	L1 [mm]	L3 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	H [mm]	H1 [mm]	H2 [mm]	M
16	45	124	78	129	72	25	36	62	65	50	27	8	6
20	45	134	78	139	72	25	36	67	70	50	27	8	6
25	52	156	92	161	86	25	43	78	81	60	33	8	6
32	65	172	100	177	96	25	48	86	89	68	36	8	6
40	78	202	110	207	116	45	58	101	104	79	44	9	8
50	92	238	120	242	137	45	69	119	121	90	49	9	8
63	116	290	146	294	179	45	90	145	147	109	61	9	8

PVC-C metric

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



Model:

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

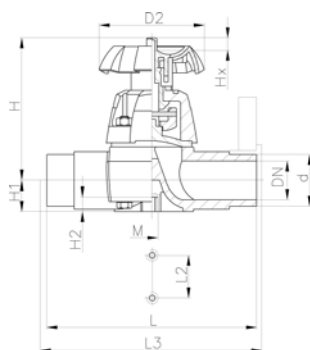
Rp [inch]	DN [mm]	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg	
3/8	10	10	140	163 343 241	163 343 251	0.213	
1/2	15	10	200	163 343 242	163 343 252	0.213	
3/4	20	10	470	163 343 243	163 343 253	0.398	
1	25	10	793	163 343 244	163 343 254	0.543	
1 1/4	32	10	1290	163 343 245	163 343 255	0.904	
1 1/2	40	10	1910	163 343 246	163 343 256	1.467	
2	50	10	3100	163 343 247	163 343 257	2.834	

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	52	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	

PVC-C metric

Diaphragm valves

Diaphragm valve type 315 PVC-C With solvent cement spigots



Model:

- Overall length according to EN 558-1

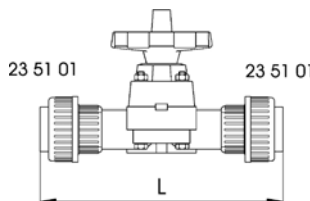
Option:

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

d [mm]	DN [mm]	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	PTFE with EPDM supp. diaphragm Code	kg	
20	15	10	72	163 315 617	163 315 632	0.290	
25	20	10	137	163 315 618	163 315 633	0.440	
32	25	10	207	163 315 619	163 315 634	0.710	
40	32	10	354	163 315 620	163 315 635	1.000	
50	40	10	517	163 315 621	163 315 636	1.300	
63	50	10	713	163 315 622	163 315 637	2.300	

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

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



Model:

- Type 315 with two adhesive jointed unions
- Overall length not standard
- For easy installation and removal

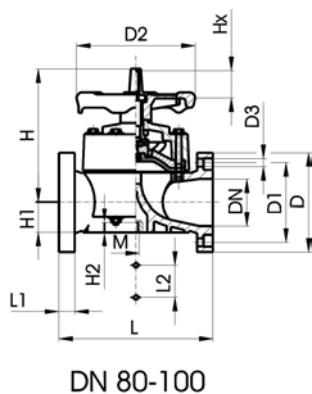
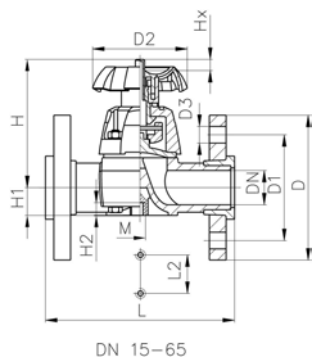
Option:

- 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	D2 [mm]	L [mm]	Lift = Hx [mm]
20	15	10	72	163 314 017	0.378	25.00	182	8
25	20	10	137	163 314 018	0.584	25.00	208	11
32	25	10	207	163 314 019	0.906	25.00	224	13
40	32	10	354	163 314 020	1.000	45.00	256	16
50	40	10	517	163 314 021	1.496	45.00	290	21
63	50	10	713	163 314 022	3.100	45.00	342	28

PVC-C metric

Diaphragm valve type 317 PVC-C With PP-V flanges



Model:

- Overall length according to EN 558-1
- Flanged for easy installation and removal
- Jointing face flat
- DN 15-40 with PP-V backing flange
- DN 50-65 mit PVC-C backing flange
- DN 80-100 with PVC-C fixed flange

Option:

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

d [mm]	DN [mm]	Inch	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	PTFE with EPDM Code	kg
20	15	½	10	72	163 317 517	163 317 532	0.460
25	20	¾	10	137	163 317 518	163 317 533	0.680
32	25	1	10	207	163 317 519	163 317 534	1.000
40	32	1 ¼	10	354	163 317 520	163 317 535	1.600
50	40	1 ½	10	517	163 317 521	163 317 536	1.900
63	50	2	10	713	163 317 522	163 317 537	3.200
75	65	2 ½	10	992	163 317 523	163 317 538	4.425
90	80	3	10	1700	163 317 024	163 317 039	9.888
110	100	4	10	2700	163 317 025	163 317 040	13.799

d [mm]	L [mm]	L1 [mm]	L2 [mm]	D [mm]	D1 [mm]	D2 [mm]	D3 [mm]	H [mm]	H1 [mm]	H2 [mm]	M	AL	Lift = Hx [mm]
20	130		25	95	65.00	80.00	14.0	90	14	12	M6	4	8
25	150		25	105	75.00	80.00	14.0	102	18	12	M6	4	11
32	160		25	115	85.00	94.00	14.0	119	21	12	M6	4	13
40	180		45	140	100.00	117.00	18.0	126	26	15	M8	4	16
50	200		45	150	110.00	117.00	18.0	139	33	15	M8	4	21
63	230		45	165	125.00	152.00	18.0	172	39	15	M8	4	28
75	290		70	185	145.00	152.00	18.0	201	46	15	M8	4	30
90	310	35	120	200	160.00	270.00	18.0	265	57	23	M12	8	40
110	350	35	120	225	180.00	270.00	18.0	304	69	23	M12	8	50



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

d [mm]	DN [mm]	d-d [inch]	Code	kg
32	25	1 -	167 481 944	0.043
40 - 50	32 - 40	1 ¼ - 1 ½	167 481 945	0.071
63 - 75	50 - 65	2 - 2 ½	167 481 946	0.217

PVC-C metric

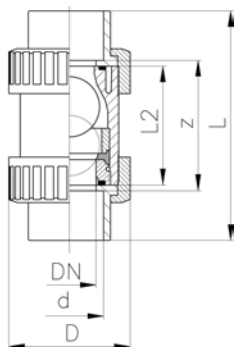
Ball check valves

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



Model:

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



d [mm]	DN [mm]	Inch	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg	z [mm]	D [mm]	L [mm]	L2 [mm]
16	10	3/8	16	170	163 360 401	163 360 411	0.139	71	45	99	63
20	15	1/2	16	150	163 360 402	163 360 412	0.139	70	45	102	63
25	20	3/4	16	330	163 360 403	163 360 413	0.231	82	56	120	75
32	25	1	16	390	163 360 404	163 360 414	0.359	87	67	131	79
40	32	1 1/4	16	710	163 360 405	163 360 415	0.592	98	82	150	89
50	40	1 1/2	16	900	163 360 406	163 360 416	0.950	101	98	163	95
63	50	2	16	1390	163 360 407	163 360 417	1.682	121	120	197	115

PVC-C metric

Butterfly valves

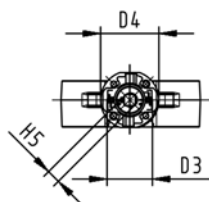
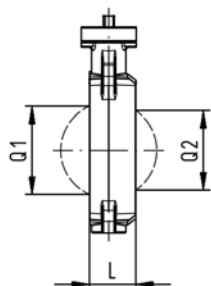
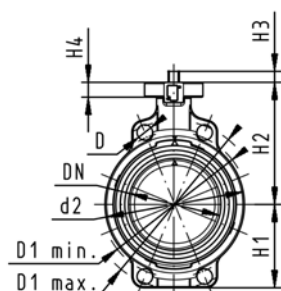
Butterfly valve type 567 PVC-C Bare shaft



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

- * Available on request



d [mm]	DN [mm]	Inch	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
*63	50	2	10	1470	163 567 802	163 567 822	0.835
75	65	2 ½	10	2200	163 567 803	163 567 823	0.952
90	80	3	10	3000	163 567 804	163 567 824	1.131
110	100	4	10	6500	163 567 805	163 567 825	1.773
*140	125	5	10	11500	163 567 806	163 567 826	2.379
160	150	6	10	16600	163 567 807	163 567 827	3.364
225	200	8	10	39600	163 567 808	163 567 828	5.094

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]
*63	19	120.0	125.0	104	85.0	90.0	222	77	134	26	23	11	45
75	19	139.7	145.0	115	85.0	90.0	235	83	140	26	23	11	46
90	19	150.0	160.0	131	85.0	90.0	247	89	146	26	23	11	49
110	19	175.0	190.5	161	85.0	90.0	287	104	167	15	23	14	56
*140	23	210.0	215.9	187	85.0	90.0	313	117	181	15	23	14	64
160	24	241.3	241.3	215	85.0	90.0	335	130	189	15	23	17	72
225	23	290.0	295.0	267	85.0	90.0	387	158	210	18	23	17	73

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

PVC-C metric

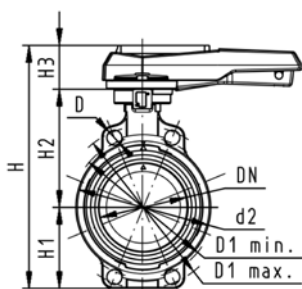
Butterfly valve type 567 PVC-C Hand lever with ratchet settings



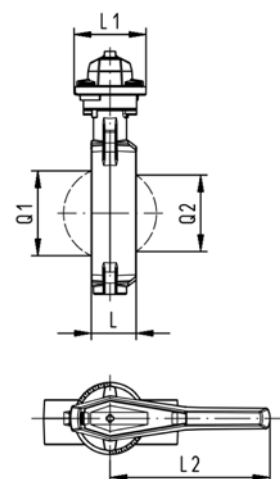
Model:

- 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 on request



d [mm]	DN [mm]	Inch	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg	
*63	50	2	10	1470	163 567 002	163 567 022		
75	65	2 ½	10	2200	163 567 003	163 567 023	1.174	
90	80	3	10	3000	163 567 004	163 567 024	1.353	
110	100	4	10	6500	163 567 005	163 567 025	2.043	
*140	125	5	10	11500	163 567 006	163 567 026		
160	150	6	10	16600	163 567 007	163 567 027	3.634	
225	200	8	10	39600	163 567 008	163 567 028	5.901	



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

PVC-C metric

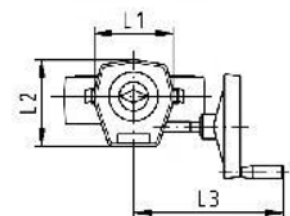
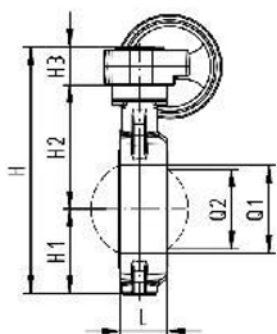
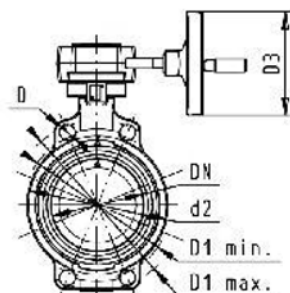
Butterfly valve type 567 PVC-C Reduction gear with handwheel



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

- * Available on request



d [mm]	DN [mm]	Inch	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
*63	50	2	10	1470	163 567 042	163 567 062	
75	65	2 ½	10	2200	163 567 043	163 567 063	3.212
90	80	3	10	3000	163 567 044	163 567 064	3.391
110	100	4	10	6500	163 567 045	163 567 065	4.033
*140	125	5	10	11500	163 567 046	163 567 066	
160	150	6	10	16600	163 567 047	163 567 067	5.624
225	200	8	10	39600	163 567 048	163 567 068	7.354

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

PVC-C metric

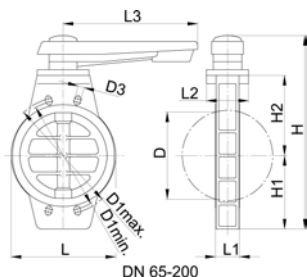
Butterfly valve type 367 PVC-C (DN80-DN200) Lever handle with ratchet settings



Model:

- Jointing face flat
- Overall length ISO 7508
- Overall length EN 558-1
- Connecting dimension: ISO 7005 PN 10, EN 1092, DIN 2501 PN 10, ANSI B16.5 class 150 (ASTM D 4024) BS 1560: 1958

Phase out product will be replaced with type 567



d [mm]	DN [mm]	Inch	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
90	80	3	10	3000	163 367 606	163 367 616	1.850
110	100	4	10	6500	163 367 607	163 367 617	2.550
160	150	6	6	16600	163 367 609	163 367 619	4.160
225	200	8	6	39600	163 367 610	163 367 620	7.560

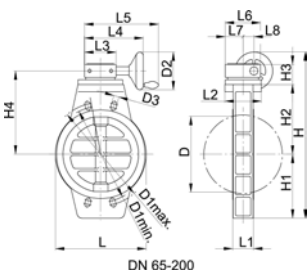
d [mm]	D [mm]	D1 min. [mm]	D1 max. [mm]	D3 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	H [mm]	H1 [mm]	H2 [mm]
90	66	150.0	160.0	19.0	132	49	77	230	290	92	120
110	85	175.0	190.5	19.0	160	56	92	230	328	108	138
160	135	240.0	241.0	23.0	216	70	116	355	415	140	170
225	189	290.0	298.0	23.0	272	71	128	355	495	175	215



Butterfly valve type 367 PVC-C (DN80-DN200) Reduction gear with handwheel

Model:

- Jointing face flat
- Overall length ISO 7508
- Overall length EN 558-1
- Connecting dimension: ISO 7005 PN 10, EN 1092, DIN 2501 PN 10, ANSI B16.5 class 150 (ASTM D 4024) BS 1560: 1958



Phase out product will be replaced with type 567

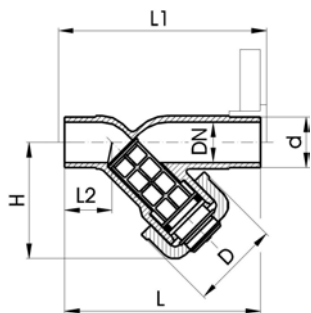
d [mm]	DN [mm]	Inch	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
90	80	3	10	3000	163 367 646	163 367 656	4.160
110	100	4	10	6500	163 367 647	163 367 657	4.830
160	150	6	6	16600	163 367 649	163 367 659	6.350
225	200	8	6	39600	163 367 650	163 367 660	10.000

d [mm]	D [mm]	D1 [mm]	D2 [mm]	D3 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	L8 [mm]	H [mm]
90	66	160.00	160.00	19.0	132	49	77	120	221	296	132	55	46	329
110	85	186.00	160.00	19.0	160	56	92	120	221	296	132	55	46	363
160	135	240.00	160.00	23.0	216	70	116	120	221	296	132	55	46	363
225	189	297.00	160.00	23.0	272	71	128	120	221	296	132	55	46	507

d [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]
90	92	120	68	157
110	108	138	68	175
160	108	138	68	175
225	175	215	68	252

PVC-C metric

Strainers



Line strainer type 305 PVC-C With solvent cement spigots metric

Model:

- Protects valves, pumps, etc. from becoming soiled
- Easy dismantling for cleaning the screens
- Cylindrical screen must be ordered separately
- Overall length EN 558-1

d [mm]	DN [mm]	PN	EPDM Code	FPM Code	kg	D [mm]	L [mm]	L1 [mm]	L2 [mm]	H [mm]
20	15	10	163 305 302	163 305 317	0.120	48	124	130	28	65
25	20	10	163 305 303	163 305 318	0.160	54	144	150	37	76
32	25	10	163 305 304	163 305 319	0.250	62	154	160	37	90
40	32	10	163 305 305	163 305 320	0.640	71	174	180	44	104
50	40	10	163 305 306	163 305 321	0.640	88	194	200	48	124
63	50	10	163 305 307	163 305 322	1.060	103	224	230	60	148

Screen stainless steel Screen perforation 0.5 mm

- For line strainers Type 305

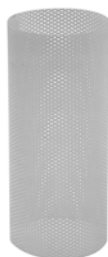
d [mm]	DN [mm]	Inch	kv-value ($\Delta p=1$ bar) [l/min]	Code	kg	D [mm]	L [mm]
20	15	½	35	161 486 100	0.002	14	39
25	20	¾	60	161 486 101	0.004	18	48
32	40	1	85	161 486 102	0.006	24	60
40	32	1 ¼	130	161 486 103	0.009	30	71
50	40	1 ½	200	161 486 104	0.014	38	87
63	50	2	330	161 486 105	0.022	48	106
75	65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

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

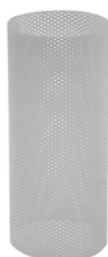
PVC-C metric



Cylindrical screen type 305 PVC-U Screen perforations 0.8 mm

- For line strainers Type 305

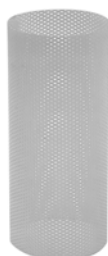
d [mm]	DN [mm]	Inch	kv-value ($\Delta p=1$ bar) [l/min]	Code	kg	D [mm]	L [mm]
20	15	½	35	161 305 338	0.005	14	39
25	20	¾	65	161 305 388	0.007	18	48
32	25	1	90	161 305 438	0.003	24	60
40	32	1 ¼	155	161 305 488	0.004	30	71
50	40	1 ½	225	161 305 538	0.006	38	87
63	50	2	370	161 305 588	0.009	48	106
75	65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

PVC-C metric

Pipe Clips metric

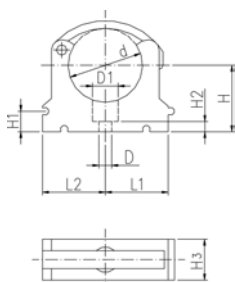
KLIP-IT Pipe Clips Type 061, PP metric



*

Model:

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

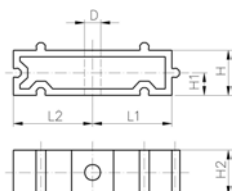


d [mm]	Code	SP	kg	D [mm]	D1 [mm]	L1 [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	SC
*10	167 061 003	10	0.003	5	8	11	14	20	10	6	12	M4
*12	167 061 004	10	0.003	5	8	11	14	21	10	6	12	M5
75	167 061 012	10	0.058	9	17	52	52	58	10	10	25	M8
90	167 061 013	10	0.090	9	17	65	65	65	10	10	28	M8
110	167 061 014	10	0.114	9	17	79	79	75	10	10	28	M8
125	167 061 015	10	0.174	9	17	88	88	90	10	10	32	M8
140	167 061 016	10	0.217	9	17	98	98	110	10	10	32	M8
160	167 061 017	10	0.237	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**



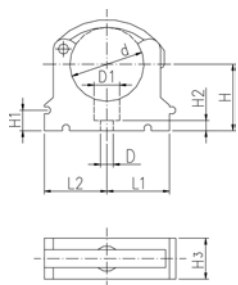
d [mm]	Inch	Code	SP	kg	D [mm]	L1 [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	SC
10-12	1/8-1/4	167 061 153	10	0.003	5	11	14	20	10	12	M4
16	3/8	167 061 155	10	0.006	6	14	17	20	10	16	M5
20	1/2	167 061 156	10	0.006	6	17	19	20	10	16	M5
25	3/4	167 061 157	10	0.007	6	19	22	20	10	16	M5
32	1	167 061 158	10	0.008	6	24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

PVC-C metric

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**

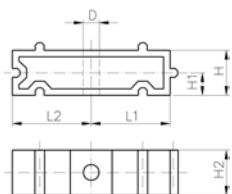


d [mm]	Code	SP	kg	D [mm]	D1 [mm]	L1 [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	SC
*10	173 061 003	10	0.003	5	8	11	14	20	10	6	12	M4
*12	173 061 004	10	0.006	5	8	11	14	21	10	6	12	M5
*16	173 061 005	10	0.007	6	11	14	17	23	10	6	16	M5
*20	173 061 006	10	0.008	6	11	17	19	25	10	6	16	M5
*25	173 061 007	10	0.009	6	11	19	22	28	10	6	16	M5
*32	173 061 008	10	0.012	6	11	24	27	31	10	6	16	M5
40	173 061 009	10	0.022	7	14	34	34	35	10	7	22	M6
50	173 061 010	10	0.030	7	14	37	37	40	10	7	22	M6
63	173 061 011	10	0.044	9	17	45	45	52	10	10	25	M8
75	173 061 012	10	0.062	9	17	52	52	58	10	10	25	M8
90	173 061 013	10	0.090	9	17	65	65	65	10	10	28	M8
110	173 061 014	10	0.114	9	17	79	79	75	10	10	28	M8
125	173 061 015	10	0.174	9	17	88	88	90	10	10	32	M8
140	173 061 016	10	0.217	9	17	98	98	110	10	10	32	M8
160	173 061 017	10	0.237	9	17	109	109	108	10	10	32	M8

KLIP-IT Spacer Type 061, PE

Model:

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



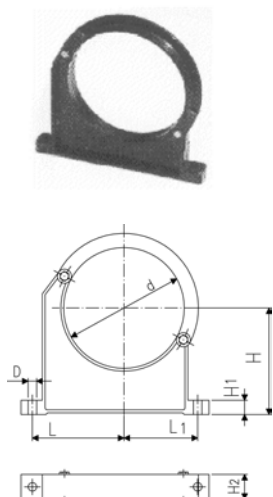
d [mm]	Inch	Code	SP	kg	D [mm]	L1 [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	SC
	1/8-1/4	173 061 153	10	0.003	5	11	14	20	10	12	M4
16	3/8	173 061 155	10	0.005	6	14	17	20	10	16	M5
20	1/2	173 061 156	10	0.006	6	17	19	20	10	16	M5
25	3/4	173 061 157	10	0.007	6	19	22	20	10	16	M5
32	1	173 061 158	10	0.008	6	24	27	20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

PVC-C metric

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

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

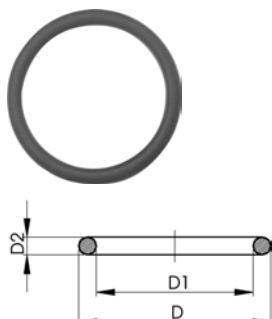


d [mm]	Code	SP	kg	D [mm]	D1 [mm]	L1 [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	SC
*16	167 061 035	10	0.006	6	11	14	17	27	10	6	16	M5
*20	167 061 036	10	0.008	6	11	17	19	27	10	6	16	M5
*25	167 061 037	10	0.009	6	11	19	22	30	10	6	16	M5
*32	167 061 038	10	0.012	6	11	24	27	36	10	6	16	M5
40	167 061 039	10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

PVC-C metric

Seals

EPDM 48 41 00
FPM 49 41 00



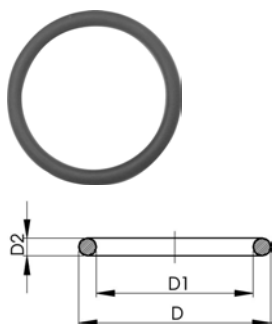
O-Ring Gaskets

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	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	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	0.010	70	59.70	5.30
75	65	748 410 014	749 410 014	100	0.012	93	81.90	5.30
90	80	748 410 015	749 410 015	100	0.015	112	101.00	5.30
110	100	748 410 016	749 410 016	50	0.031	134	120.00	7.00

EPDM 48 41 01
FPM 49 41 01



O-Ring Gaskets

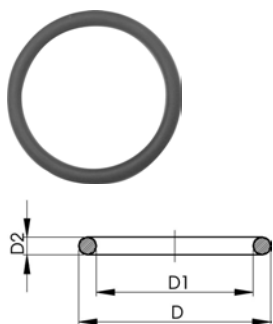
Model:

- For Flange Adaptors
- Hardness approx. 65° Shore

d [mm]	DN [mm]	EPDM Code	FPM Code	SP	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	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	0.008	64	53.30	5.30
63	50	748 410 013	749 410 013	100	0.011	80	69.00	5.30
75	65	748 410 014	749 410 014	100	0.012	93	81.90	5.30
90	80	748 410 015	749 410 015	100	0.015	112	101.00	5.30
110	100	748 410 016	749 410 016	50	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

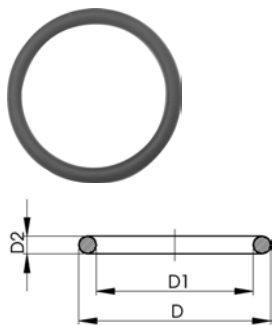
PVC-C metric

O-Ring Gaskets



d [mm]	DN [mm]	EPDM Code	FPM Code	SP	kg
75	65	-	749 410 119	-	0.010
90	80	748 410 112	749 410 112	-	0.070
110	100	748 410 099	749 410 099	-	0.015
160	150	-	-	-	-

O-Ring Gaskets



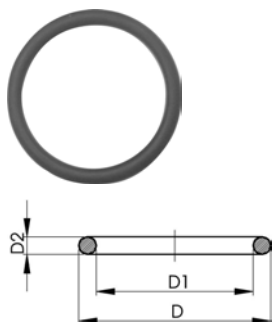
d [mm]	DN [mm]	EPDM Code	FPM Code	SP	kg
16	10	748 410 059	749 410 059	-	0.002

EPDM 48 41 01
FPM 49 41 01

O-Ring Gaskets

Model:

- Hardness approx. 65° Shore
- For Flange Adaptors No. 21 81 01 / 21 81 11, 21 80 01 (metric), 21 81 11 BS (ANSI)



d [mm]	DN [mm]	Inch	EPDM Code	FPM Code	SP	kg	D [mm]	D1 [mm]	D2 [mm]
63	50		748 410 013	749 410 013	100	0.011	80	69.00	5.30
90	80		748 410 015	749 410 015	100	0.015	112	101.00	5.30
110	100	4	748 410 020	749 410 020	-	0.010	134	120.00	7.00
160	150	6	748 410 021	-	-	0.009	191	177.00	7.00
225	200		748 410 022	749 410 022	150	0.060	255	241.00	7.00

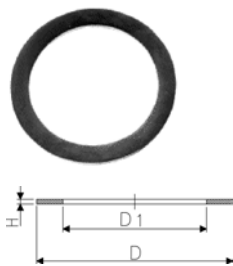
PVC-C metric

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	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

PVC-C metric

Solvent Cement and Tools

TANGIT PVC-C Solvent Cement Solvent cement tin



Code	SP	kg
799 298 027	-	0.700



Cap for cement

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

Code	SP	kg
799 298 028	-	0.030



Tangit Cleaner

Model:

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

Code	SP	kg
799 298 010	-	0.900



Round Brushes

d-d [mm]		Code	SP	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	SP	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



Chamfering Tool

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

PVC-C metric

KRA Plastic Pipe Cutter

- For cutting plastic pipes



d-d [mm]	Article	Code	SP	kg	
*10 - 63	PPC 63, s max. = 7,2mm	790 109 001	-	0.852	
50 - 110	PPC 110, s max. = 12.7mm	790 109 002	-	1.662	
110 - 160	PPC 160, s max. = 19,0mm	790 109 003	-	2.016	

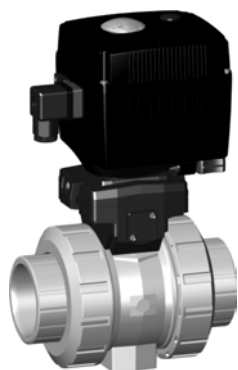
PVC-C metric

Ball valves electric

Ball valve type 107 PVC-C 100-230V

With manual emergency override

With solvent cement sockets metric



Model:

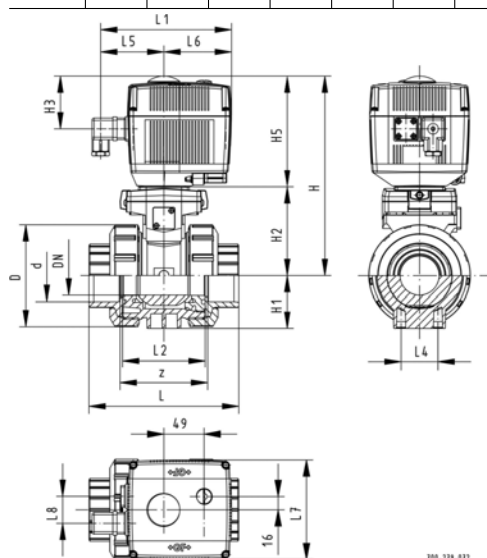
- Voltage 100-230 V, 50-60 Hz
- Control range 90°(<)
- Control time 5 s/90°(<)
- For easy installation and removal
- Integrated stainless steel mounting inserts

Option:

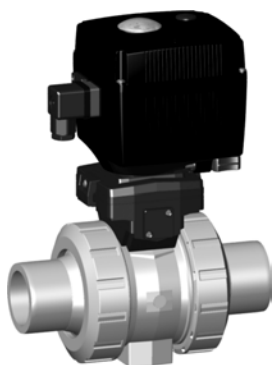
- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	70	199 107 102	199 107 112	1.770
20	15	10	185	199 107 103	199 107 113	1.780
25	20	10	350	199 107 104	199 107 114	1.860
32	25	10	700	199 107 105	199 107 115	1.950
40	32	10	1000	199 107 106	199 107 116	2.190
50	40	10	1600	199 107 107	199 107 117	2.360
63	50	10	3100	199 107 108	199 107 118	3.140

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	64	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



PVC-C metric



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

Model:

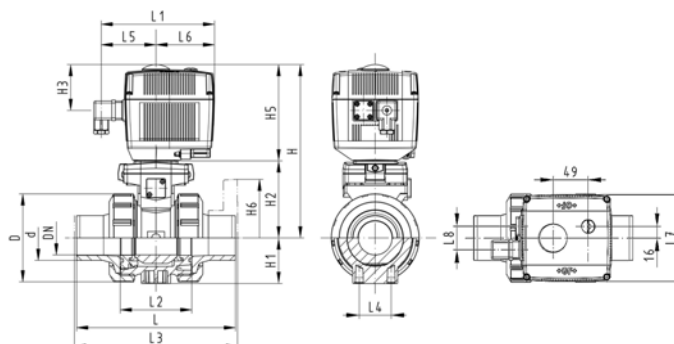
- Voltage 100-230 V, 50-60 Hz
- Control range 90° <
- Control time 5 s/90° <
- For easy installation and removal
- Integrated stainless steel mounting inserts

Option:

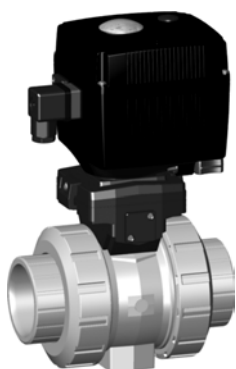
- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg	
16	10	10	70	199 107 122	199 107 132	1.770	
20	15	10	185	199 107 123	199 107 133	1.780	
25	20	10	350	199 107 124	199 107 134	1.860	
32	25	10	700	199 107 125	199 107 135	1.950	
40	32	10	1000	199 107 126	199 107 136	2.190	
50	40	10	1600	199 107 127	199 107 137	2.360	
63	50	10	3100	199 107 128	199 107 138	3.140	

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



PVC-C metric



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

Model:

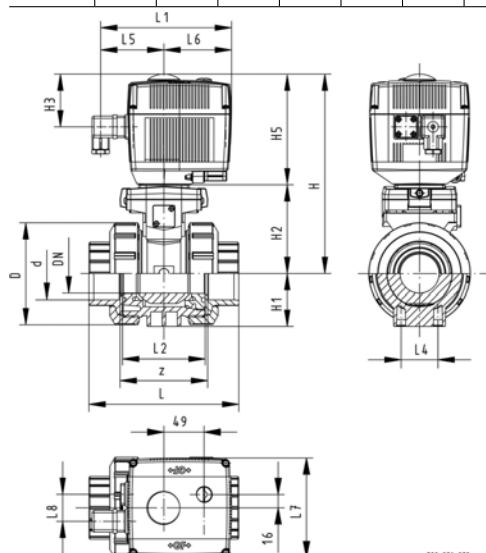
- Voltage 100-230 V, 50-60 Hz
- Control range 90°<
- Control time 5 s/90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts

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	199 107 702	199 107 712	2.100
1/2	15	10	185	199 107 703	199 107 713	2.100
3/4	20	10	350	199 107 704	199 107 714	2.200
1	25	10	700	199 107 705	199 107 715	2.300
1 1/4	32	10	1000	199 107 706	199 107 716	2.600
1 1/2	40	10	1600	199 107 707	199 107 717	3.000
2	50	10	3100	199 107 708	199 107 718	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



700_279_072

PVC-C metric



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

Model:

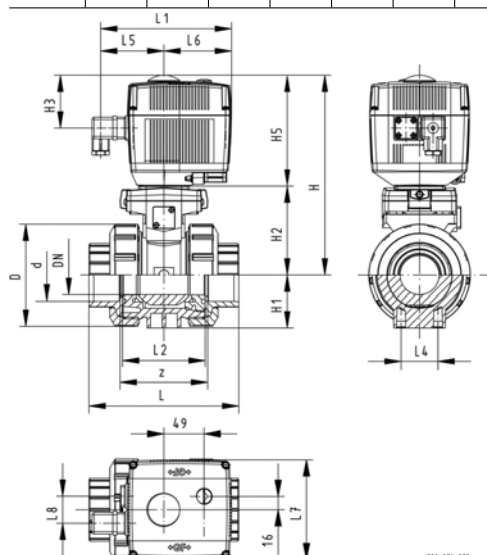
- Voltage 24 V AC/DC
- Control range 90° <
- Control time 5 s/90° <
- For easy installation and removal
- Integrated stainless steel mounting inserts

Option:

- Individual configuration of the valve (see form)

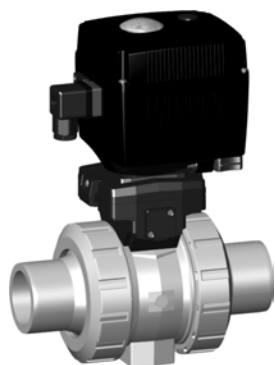
d [mm]	DN [mm]	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg	
16	10	10	70	199 107 142	199 107 152	1.770	
20	15	10	185	199 107 143	199 107 153	1.780	
25	20	10	350	199 107 144	199 107 154	1.860	
32	25	10	700	199 107 145	199 107 155	1.950	
40	32	10	1000	199 107 146	199 107 156	2.190	
50	40	10	1600	199 107 147	199 107 157	2.360	
63	50	10	3100	199 107 148	199 107 158	3.140	

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_219_012

PVC-C metric



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

Model:

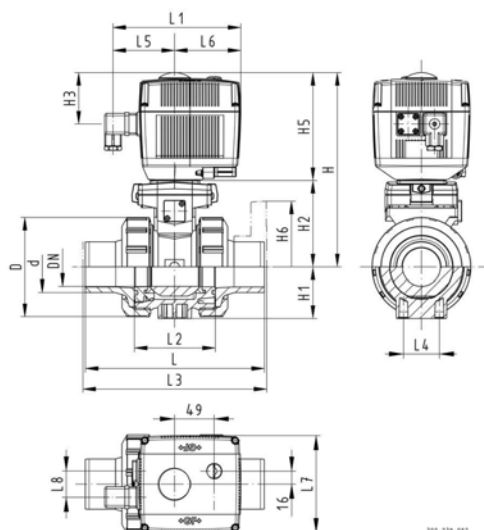
- Voltage 24 V AC/DC
- Control range 90°<
- Control time 5 s/90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts

Option:

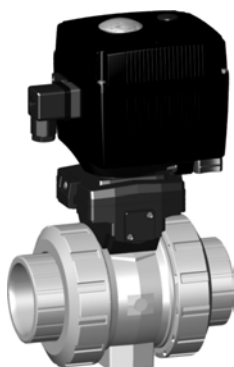
- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	70	199 107 162	199 107 172	1.770
20	15	10	185	199 107 163	199 107 173	1.780
25	20	10	350	199 107 164	199 107 174	1.860
32	25	10	700	199 107 165	199 107 175	1.950
40	32	10	1000	199 107 166	199 107 176	2.190
50	40	10	1600	199 107 167	199 107 177	2.360
63	50	10	3100	199 107 168	199 107 178	3.140

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



PVC-C metric



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

Model:

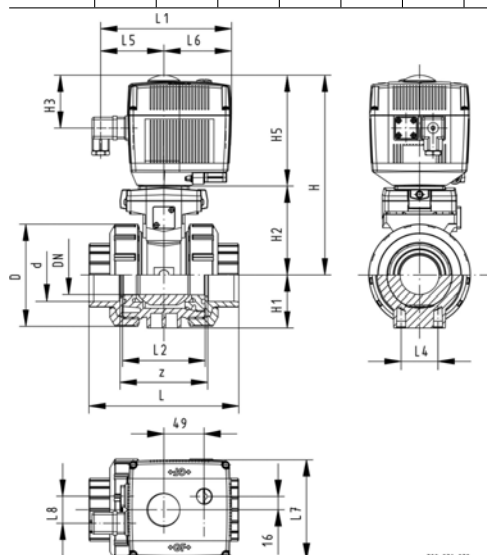
- Voltage 24 V AC/DC
- Control range 90° <
- Control time 5 s/90° <
- For easy installation and removal
- Integrated stainless steel mounting inserts

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	199 107 742	199 107 752	2.100
1/2	15	10	185	199 107 743	199 107 753	2.100
3/4	20	10	350	199 107 744	199 107 754	2.200
1	25	10	700	199 107 745	199 107 755	2.300
1 1/4	32	10	1000	199 107 746	199 107 756	2.600
1 1/2	40	10	1600	199 107 747	199 107 757	3.000
2	50	10	3100	199 107 748	199 107 758	3.800

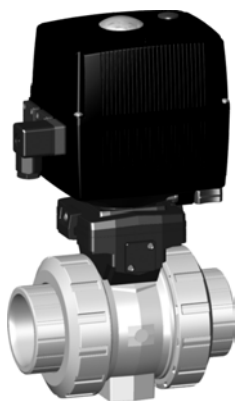
Rp [inch]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	L8 [mm]	z [mm]
3/8	50	200	27	64	64	137	92	161	56	25	77	83	122	33	64
1/2	50	200	27	64	64	137	95	161	56	25	77	83	122	33	64
3/4	58	209	30	73	64	137	110	161	65	25	77	83	122	33	72
1	68	209	36	73	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_219_012

PVC-C metric

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



Model:

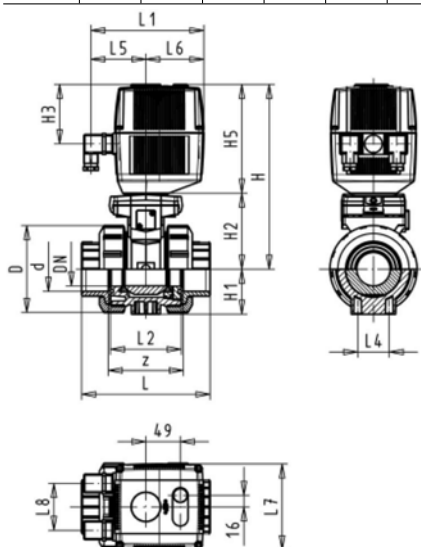
- Voltage 100-230 V, 50-60 Hz
- Control range 90°(<)
- Control time 5 s/90°(<)
- For easy installation and removal
- Integrated stainless steel mounting inserts

Option:

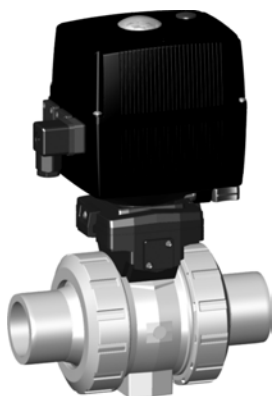
- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	70	199 130 402	199 130 412	2.100
20	15	10	185	199 130 403	199 130 413	2.100
25	20	10	350	199 130 404	199 130 414	2.200
32	25	10	700	199 130 405	199 130 415	2.300
40	32	10	1000	199 130 406	199 130 416	2.600
50	40	10	1600	199 130 407	199 130 417	3.000
63	50	10	3100	199 130 408	199 130 418	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



PVC-C metric



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

Model:

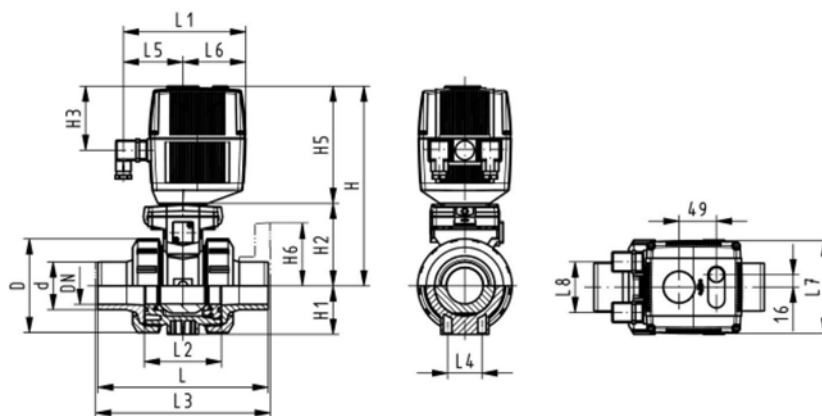
- Voltage 100-230 V, 50-60 Hz
- Control range 90° <
- Control time 5 s/90° <
- For easy installation and removal
- Integrated stainless steel mounting inserts

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	70	199 130 422	199 130 432	2.100
20	15	10	185	199 130 423	199 130 433	2.100
25	20	10	350	199 130 424	199 130 434	2.200
32	25	10	700	199 130 425	199 130 435	2.300
40	32	10	1000	199 130 426	199 130 436	2.600
50	40	10	1600	199 130 427	199 130 437	3.000
63	50	10	3100	199 130 428	199 130 438	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



PVC-C metric

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



Model:

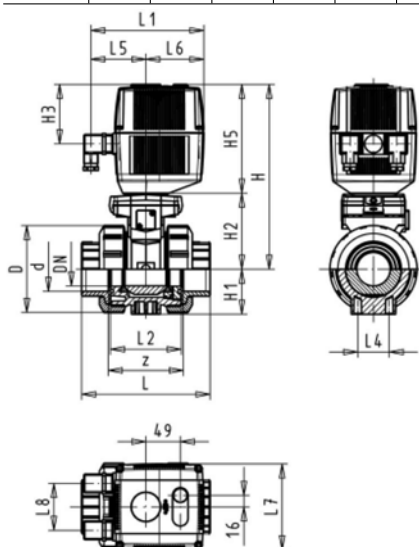
- Voltage 100-230 V, 50-60 Hz
- Control range 90°(<)
- Control time 5 s/90°(<)
- For easy installation and removal
- Integrated stainless steel mounting inserts

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	199 130 182	199 130 192	2.100										
1/2	15	10	185	199 130 183	199 130 193	2.100										
3/4	20	10	350	199 130 184	199 130 194	2.200										
1	25	10	700	199 130 185	199 130 195	2.300										
1 1/4	32	10	1000	199 130 186	199 130 196	2.600										
1 1/2	40	10	1600	199 130 187	199 130 197	3.000										
2	50	10	3100	199 130 188	199 130 198	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



PVC-C metric

Ball valve type 130 PVC-C 24V With manual emergency override With solvent cement sockets metric



Model:

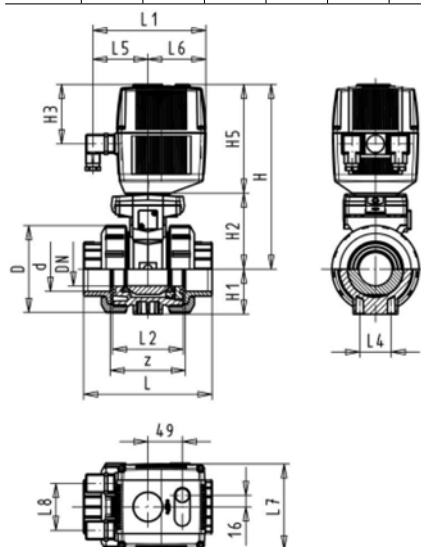
- Voltage 24 V AC/DC
- Control range 90°<
- Control time 5 s/90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts

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	70	199 130 442	199 130 452	2.100	
20	15	10	185	199 130 443	199 130 453	2.100	
25	20	10	350	199 130 444	199 130 454	2.200	
32	25	10	700	199 130 445	199 130 455	2.300	
40	32	10	1000	199 130 446	199 130 456	2.600	
50	40	10	1600	199 130 447	199 130 457	3.000	
63	50	10	3100	199 130 448	199 130 458	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



PVC-C metric



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

Model:

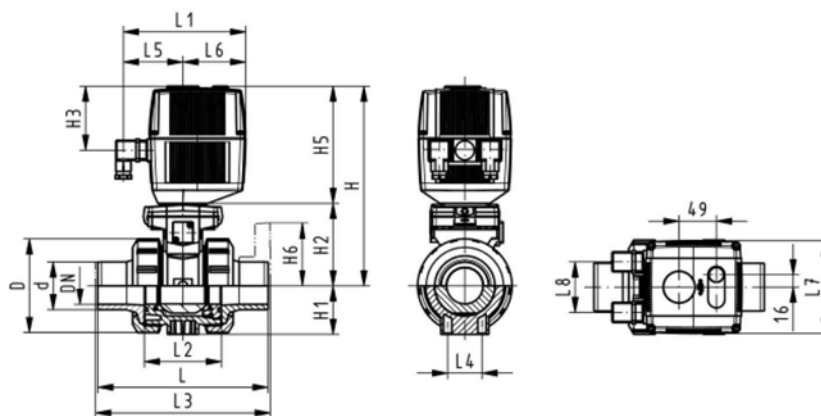
- Voltage 24 V AC/DC
- Control range 90°<
- Control time 5 s/90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts

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	70	199 130 462	199 130 472	2.100
20	15	10	185	199 130 463	199 130 473	2.100
25	20	10	350	199 130 464	199 130 474	2.200
32	25	10	700	199 130 465	199 130 475	2.300
40	32	10	1000	199 130 466	199 130 476	2.600
50	40	10	1600	199 130 467	199 130 477	3.000
63	50	10	3100	199 130 468	199 130 478	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	0	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



PVC-C metric

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



Model:

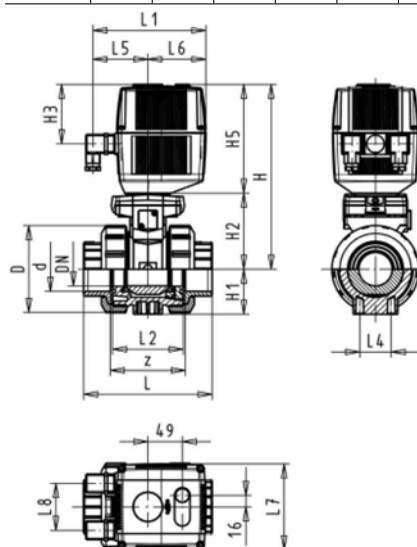
- Voltage 24 V AC/DC
- Control range 90° <
- Control time 5 s/90° <
- For easy installation and removal
- Integrated stainless steel mounting inserts

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	199 130 202	199 130 212	2.100
1/2	15	10	185	199 130 203	199 130 213	2.100
3/4	20	10	350	199 130 204	199 130 214	2.200
1	25	10	700	199 130 205	199 130 215	2.300
1 1/4	32	10	1000	199 130 206	199 130 216	2.600
1 1/2	40	10	1600	199 130 207	199 130 217	3.000
2	50	10	3100	199 130 208	199 130 218	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



PVC-C metric

Ball valve type 108 PVC-C 115/230V

With manual override

Unions with solvent cement sockets metric

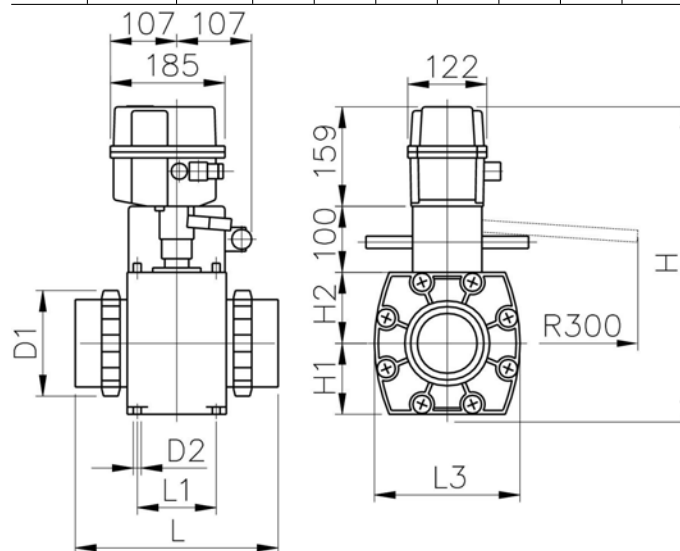


Model:

- 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	kv-value ($\Delta p=1$ bar) [l/min]	Type	EPDM Code	FPM Code	kg
75	65	10	5000	EA 30	199 108 018	199 108 021	7.900
90	80	10	7000	EA 30	199 108 019	199 108 022	9.400
110	100	6	11000	EA 30	199 108 020	199 108 023	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



PVC-C metric



Ball valve type 108 PVC-C 24V

With manual override

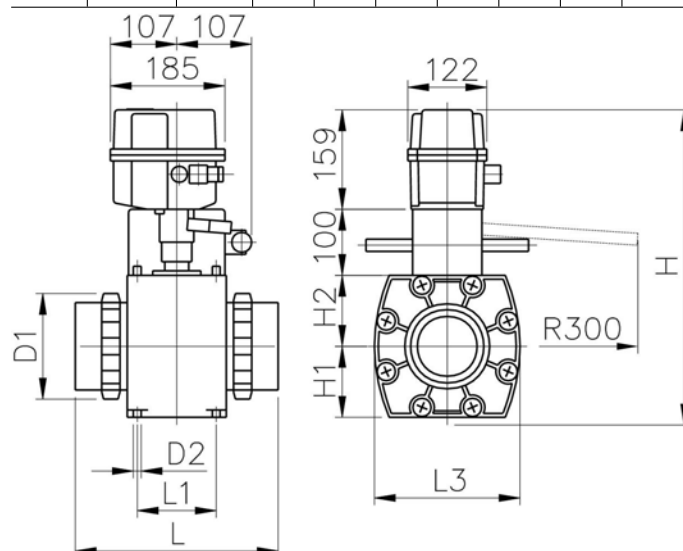
Unions with solvent cement sockets metric

Model:

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

d [mm]	DN [mm]	PN	kv-value ($\Delta p=1$ bar) [l/min]	Type	EPDM Code	FPM Code	kg
75	65	10	5000	EA 30	199 108 024	199 108 027	
90	80	10	7000	EA 30	199 108 025	199 108 028	9.400
110	100	6	11000	EA 30	199 108 026	199 108 029	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



PVC-C metric



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

Model:

- Voltage 100-230 V, 50-60 Hz
- For easy installation and removal
- Control range 90° (<)
- Integrated stainless steel mounting inserts
- Control time 5 s/90° (<)

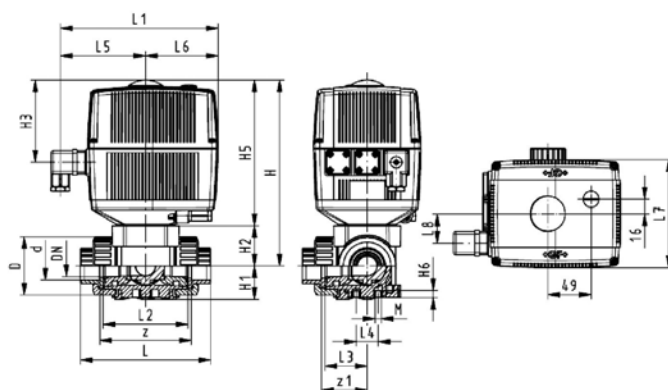
Option:

- 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	199 175 102	199 175 112	2.461
20	15	10	75	199 175 103	199 175 113	2.461
25	20	10	150	199 175 104	199 175 114	2.643
32	25	10	280	199 175 105	199 175 115	2.801
40	32	10	480	199 175 106	199 175 116	3.125
50	40	10	620	199 175 107	199 175 117	3.680
63	50	10	1230	199 175 108	199 175 118	5.052

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	43	197	29	31	93	166	8	108	182	72	36	25	99	83	122
20	43	197	29	31	93	166	8	111	182	72	36	25	99	83	122
25	52	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



PVC-C metric



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

Model:

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

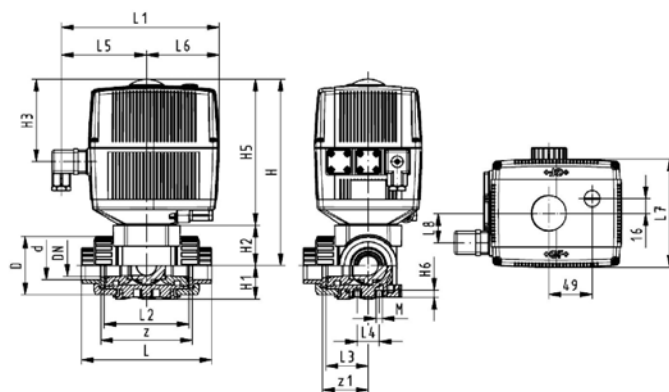
Option:

- 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	199 175 142	199 175 152	2.461
20	15	10	200	199 175 143	199 175 153	2.461
25	20	10	470	199 175 144	199 175 154	2.643
32	25	10	793	199 175 145	199 175 155	2.801
40	32	10	1290	199 175 146	199 175 156	3.125
50	40	10	1910	199 175 147	199 175 157	3.680
63	50	10	3100	199 175 148	199 175 158	5.052

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	43	197	29	31	93	166	8	108	182	72	36	25	99	83	122
20	43	197	29	31	93	166	8	111	182	72	36	25	99	83	122
25	52	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



PVC-C metric



3-Way ball valve type 175 PVC-C

Horizontal/L-port 24V

With manual emergency override

With solvent cement sockets metric

Model:

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

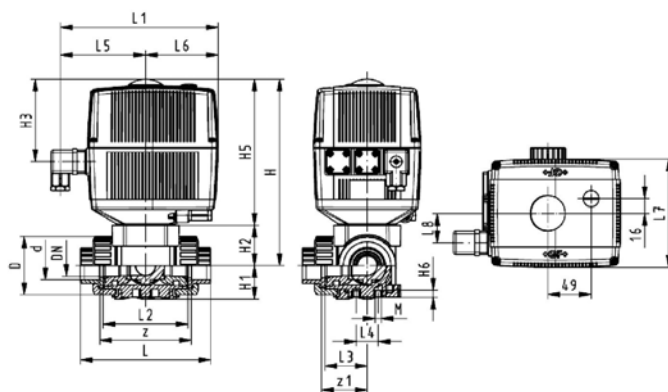
Option:

- 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	199 175 262	199 175 272	2.461
20	15	10	75	199 175 263	199 175 273	2.121
25	20	10	150	199 175 264	199 175 274	2.643
32	25	10	280	199 175 265	199 175 275	2.801
40	32	10	480	199 175 266	199 175 276	3.125
50	40	10	620	199 175 267	199 175 277	3.680
63	50	10	1230	199 175 268	199 175 278	5.052

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	43	197	29	31	93	166	8	108	182	72	36	25	99	83	122
20	43	197	29	31	93	166	8	111	182	72	36	25	99	83	122
25	52	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



PVC-C metric



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

Model:

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

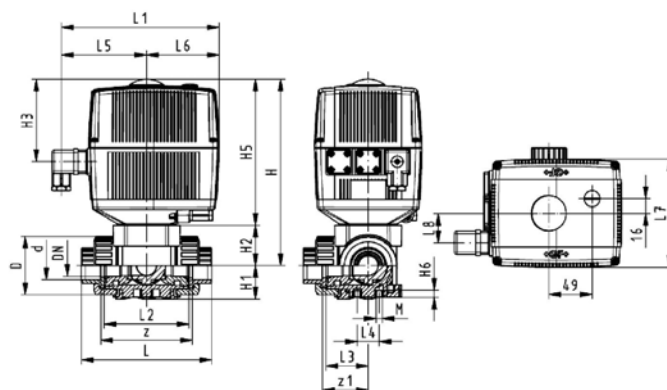
Option:

- 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	199 175 322	199 175 332	2.461
20	15	10	200	199 175 323	199 175 333	2.461
25	20	10	470	199 175 324	199 175 334	2.643
32	25	10	793	199 175 325	199 175 335	2.801
40	32	10	1290	199 175 326	199 175 336	3.125
50	40	10	1910	199 175 327	199 175 337	3.680
63	50	10	3100	199 175 328	199 175 338	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	43	197	29	31	93	166	8	108	182	72	36	25	99	83	122
20	43	197	29	31	93	166	8	111	182	72	36	25	99	83	122
25	52	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



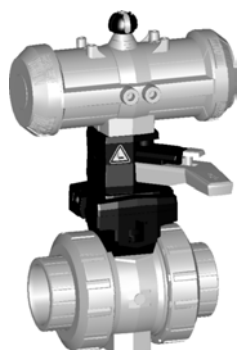
PVC-C metric

Ball valves pneumatic

Ball valve type 230 PVC-C FC (fail safe to close)

With manual override

With solvent cement sockets metric



Model:

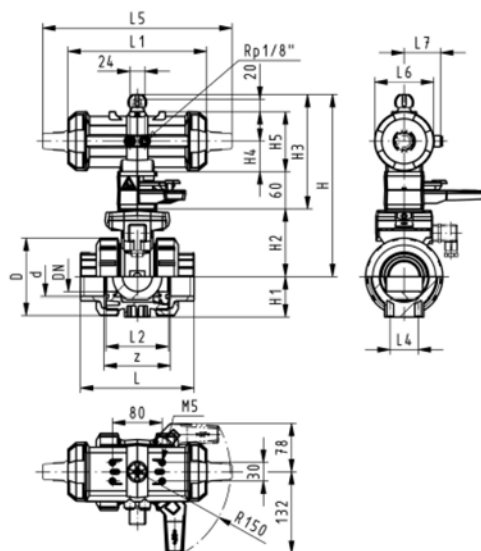
- Control time 90° <) 1-2 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

Option:

- Individual configuration of the valve (see form)

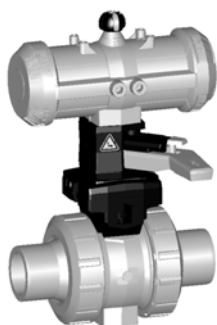
d [mm]	DN [mm]	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	70	199 230 402	199 230 412	1.459
20	15	10	185	199 230 403	199 230 413	1.459
25	20	10	350	199 230 404	199 230 414	1.576
32	25	10	700	199 230 405	199 230 415	1.700
40	32	10	1000	199 230 406	199 230 416	2.751
50	40	10	1600	199 230 407	199 230 417	3.073
63	50	10	3100	199 230 408	199 230 418	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



PVC-C metric

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



Model:

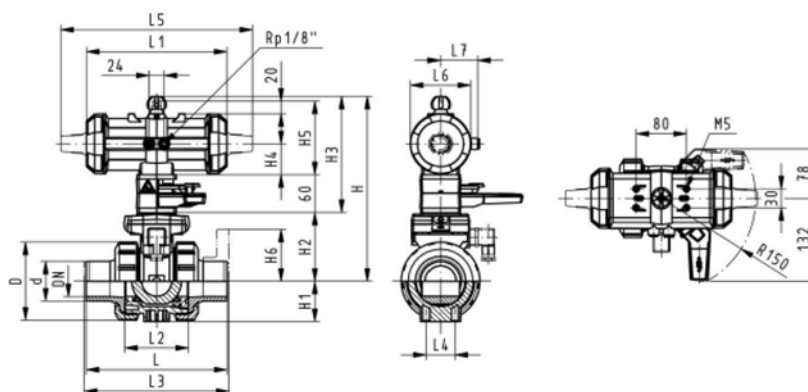
- Control time $90^\circ <$ 1-2 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

Option:

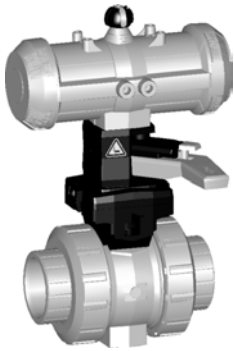
- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg	
16	10	10	70	199 230 422	199 230 432	1.459	
20	15	10	185	199 230 423	199 230 433	1.459	
25	20	10	350	199 230 424	199 230 434	1.576	
32	25	10	700	199 230 425	199 230 435	1.700	
40	32	10	1000	199 230 426	199 230 436	2.751	
50	40	10	1600	199 230 427	199 230 437	3.073	
63	50	10	3100	199 230 428	199 230 438	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



PVC-C metric



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

Model:

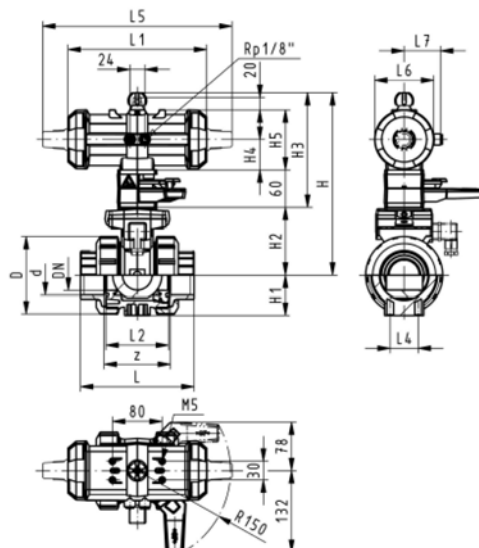
- Control time 90° < 1-2 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

Option:

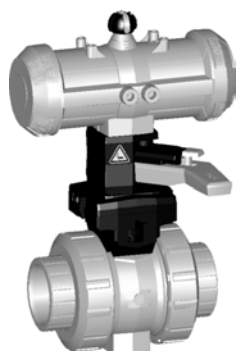
- Individual configuration of the valve (see form)

Rp [inch]	DN [mm]	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg	
3/8	10	10	70	199 230 752	199 230 772	1.500	
1/2	15	10	185	199 230 753	199 230 773	1.500	
3/4	20	10	350	199 230 754	199 230 774	1.600	
1	25	10	700	199 230 755	199 230 775	1.700	
1 1/4	32	10	1000	199 230 756	199 230 776	2.800	
1 1/2	40	10	1600	199 230 757	199 230 777	3.100	
2	50	10	3100	199 230 758	199 230 778	4.000	

Rp [inch]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	z [mm]
3/8	50	230	27	62	168	40	97	92	194	56	25	261	76	48	64
1/2	50	230	27	62	168	40	97	95	194	56	25	261	76	48	64
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 1/4	84	271	44	84	187	51	115	146	224	85	45	305	95	59	94
1 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



PVC-C metric



Ball valve type 230 PVC-C FO (Fail safe to open) With manual override

With solvent cement sockets metric

Model:

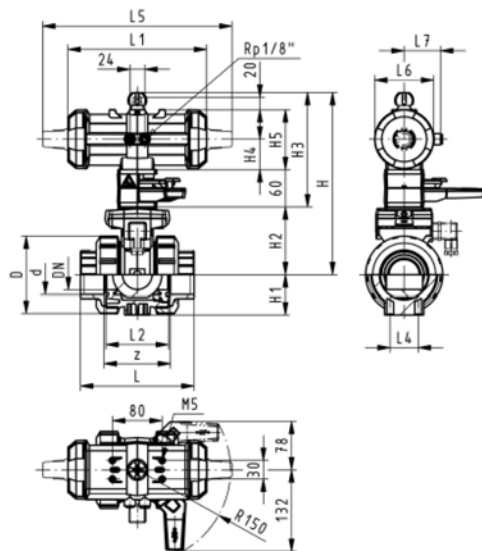
- Control time $90^\circ <$ 1-2 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

Option:

- Individual configuration of the valve (see form)

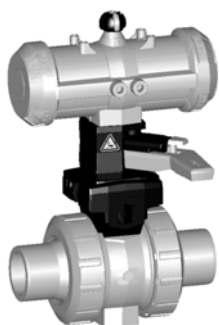
d [mm]	DN [mm]	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg	
16	10	10	70	199 230 442	199 230 452	1.149	
20	15	10	185	199 230 443	199 230 453	1.459	
25	20	10	350	199 230 444	199 230 454	1.576	
32	25	10	700	199 230 445	199 230 455	1.700	
40	32	10	1000	199 230 446	199 230 456	2.751	
50	40	10	1600	199 230 447	199 230 457	3.073	
63	50	10	3100	199 230 448	199 230 458	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



PVC-C metric

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



Model:

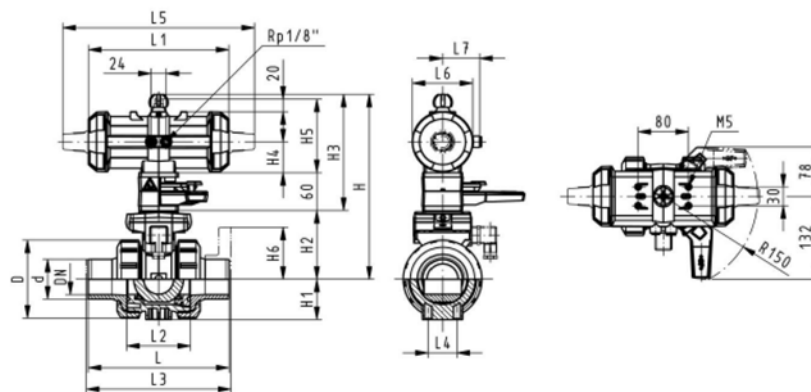
- Control time 90° < 1-2 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

Option:

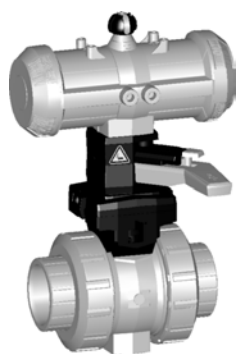
- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	70	199 230 462	199 230 472	1.459
20	15	10	185	199 230 463	199 230 473	1.459
25	20	10	350	199 230 464	199 230 474	1.576
32	25	10	700	199 230 465	199 230 475	1.700
40	32	10	1000	199 230 466	199 230 476	2.751
50	40	10	1600	199 230 467	199 230 477	3.073
63	50	10	3100	199 230 468	199 230 478	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



PVC-C metric



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

Model:

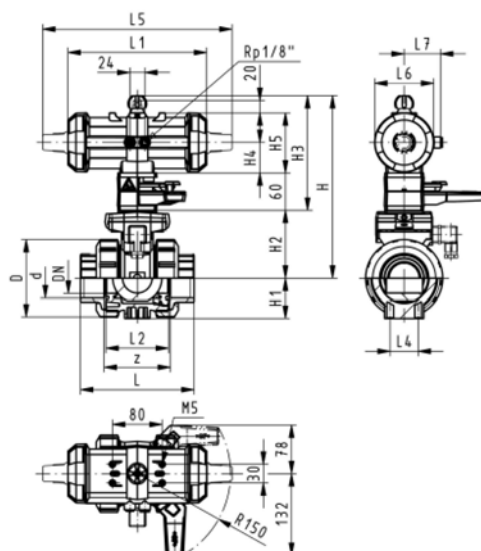
- Control time $90^\circ <$ 1-2 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

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	199 230 792	199 230 812	1.500
1/2	15	10	185	199 230 793	199 230 813	1.500
3/4	20	10	350	199 230 794	199 230 814	1.600
1	25	10	700	199 230 795	199 230 815	1.700
1 1/4	32	10	1000	199 230 796	199 230 816	2.800
1 1/2	40	10	1600	199 230 797	199 230 817	3.100
2	50	10	3100	199 230 798	199 230 818	4.000

Rp [inch]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	z [mm]
3/8	50	230	27	62	168	40	97	92	194	56	25	261	76	48	64
1/2	50	230	27	62	168	40	97	95	194	56	25	261	76	48	64
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 1/4	84	271	44	84	187	51	115	146	224	85	45	305	95	59	94
1 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

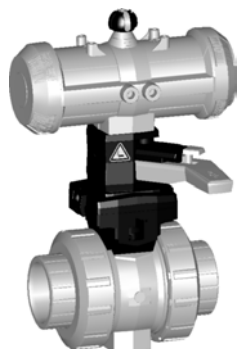


PVC-C metric

Ball valve type 230 PVC-C DA (Double acting)

With manual override

With solvent cement sockets metric



Model:

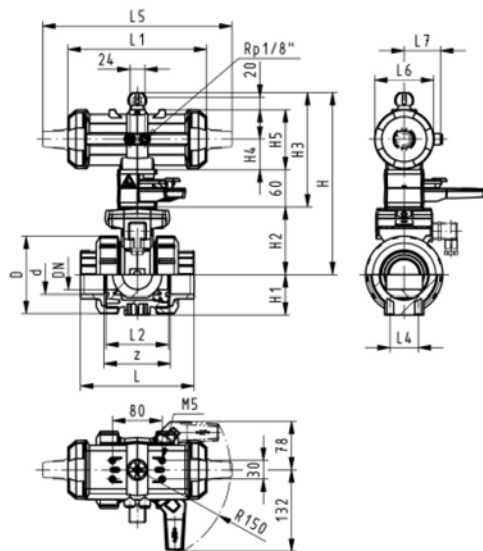
- Control time 90° < 1-2 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

Option:

- Individual configuration of the valve (see form)

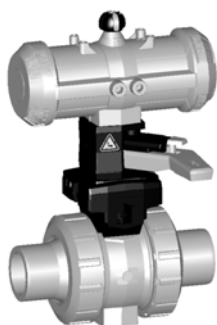
d [mm]	DN [mm]	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	70	199 230 482	199 230 492	1.459
20	15	10	185	199 230 483	199 230 493	1.459
25	20	10	350	199 230 484	199 230 494	1.576
32	25	10	700	199 230 485	199 230 495	1.700
40	32	10	1000	199 230 486	199 230 496	2.751
50	40	10	1600	199 230 487	199 230 497	3.073
63	50	10	3100	199 230 488	199 230 498	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



PVC-C metric

Ball valve type 230 PVC-C DA (Double acting) With manual override With solvent cement spigots metric



Model:

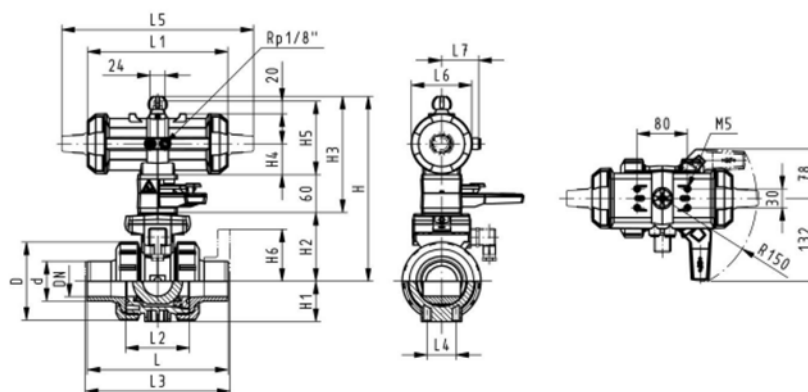
- Control time $90^\circ <$ 1-2 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

Option:

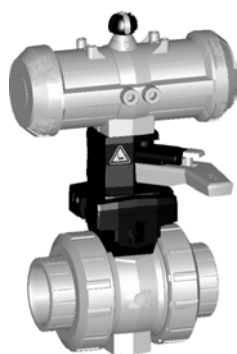
- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg	
16	10	10	70	199 230 502	199 230 512	1.459	
20	15	10	185	199 230 503	199 230 513	1.459	
25	20	10	350	199 230 504	199 230 514	1.576	
32	25	10	700	199 230 505	199 230 515	1.700	
40	32	10	1000	199 230 506	199 230 516	2.751	
50	40	10	1600	199 230 507	199 230 517	3.073	
63	50	10	3100	199 230 508	199 230 518	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



PVC-C metric



Ball valve type 230 PVC-C DA (Double acting) With manual override With threaded sockets Rp

Model:

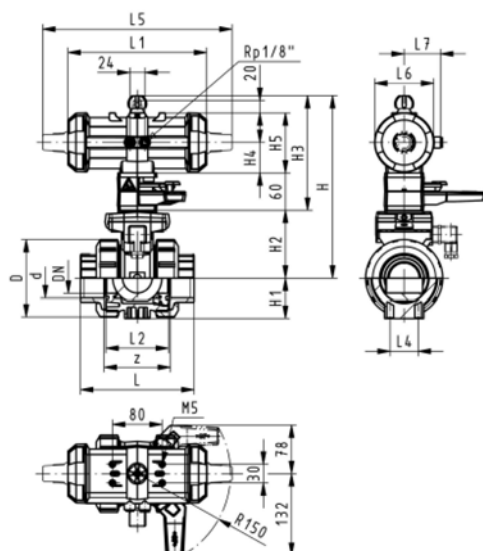
- Control time 90° < 1-2 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

Option:

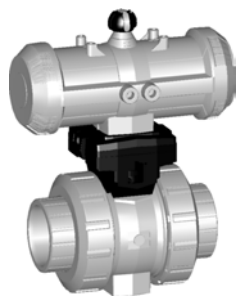
- Individual configuration of the valve (see form)

Rp [inch]	DN [mm]	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg	
3/8	10	10	70	199 230 832	199 230 852	1.500	
1/2	15	10	185	199 230 833	199 230 853	1.500	
3/4	20	10	350	199 230 834	199 230 854	1.600	
1	25	10	700	199 230 835	199 230 855	1.700	
1 1/4	32	10	1000	199 230 836	199 230 856	2.800	
1 1/2	40	10	1600	199 230 837	199 230 857	3.100	
2	50	10	3100	199 230 838	199 230 858	4.000	

Rp [inch]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	z [mm]
3/8	50	230	27	62	168	40	97	92	194	56	25	261	76	48	64
1/2	50	230	27	62	168	40	97	95	194	56	25	261	76	48	64
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 1/4	84	271	44	84	187	51	115	146	224	85	45	305	95	59	94
1 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



PVC-C metric



Ball valve type 230 PVC-C FC (Fail safe to close) Without manual override With solvent cement sockets metric

Model:

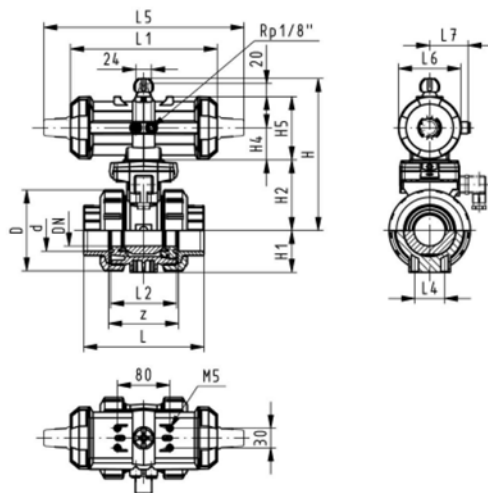
- Control time $90^\circ <$ 1-2 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

Option:

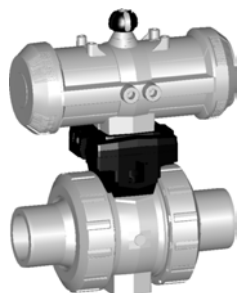
- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	70	199 230 522	199 230 532	1.159
20	15	10	185	199 230 523	199 230 533	1.159
25	20	10	350	199 230 524	199 230 534	1.276
32	25	10	700	199 230 525	199 230 535	1.400
40	32	10	1000	199 230 526	199 230 536	2.451
50	40	10	1600	199 230 527	199 230 537	2.773
63	50	10	3100	199 230 528	199 230 538	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



PVC-C metric



Ball valve type 230 PVC-C FC (Fail safe to close) Without manual override With solvent cement spigots metric

Model:

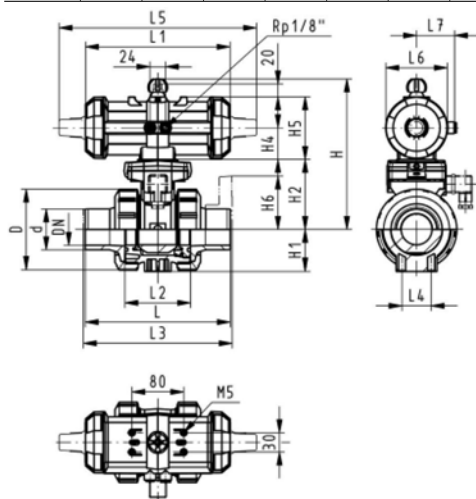
- Control time 90° < 1-2 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

Option:

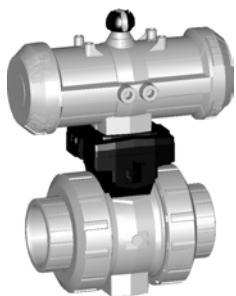
- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	70	199 230 542	199 230 552	1.159
20	15	10	185	199 230 543	199 230 553	1.159
25	20	10	350	199 230 544	199 230 554	1.276
32	25	10	700	199 230 545	199 230 555	1.400
40	32	10	1000	199 230 546	199 230 556	2.451
50	40	10	1600	199 230 547	199 230 557	2.773
63	50	10	3100	199 230 548	199 230 558	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



PVC-C metric



Ball valve type 230 PVC-C FC (Fail safe to close) Without manual override With threaded sockets Rp

Model:

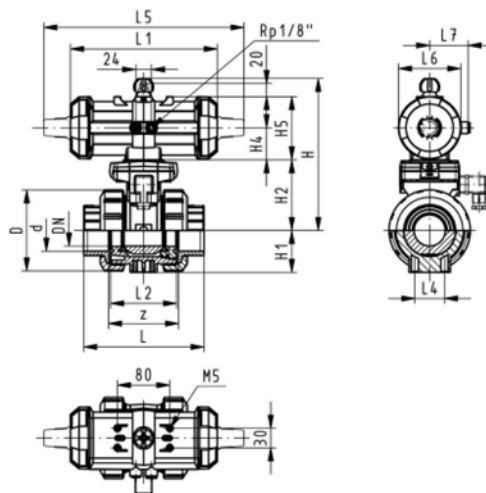
- Control time $90^\circ <$ 1-2 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

Option:

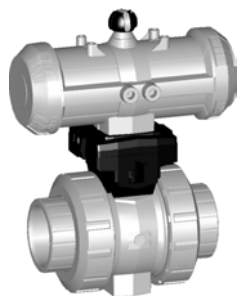
- Individual configuration of the valve (see form)

Rp [inch]	DN [mm]	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
3/8	10	10	70	199 230 872	199 230 892	1.200
1/2	15	10	185	199 230 873	199 230 893	1.200
3/4	20	10	350	199 230 874	199 230 894	1.300
1	25	10	700	199 230 875	199 230 895	1.400
1 1/4	32	10	1000	199 230 876	199 230 896	2.500
1 1/2	40	10	1600	199 230 877	199 230 897	2.800
2	50	10	3100	199 230 878	199 230 898	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]
3/8	50	167	27	62	40	97	92	194	56	25	261	76	48	64
1/2	50	167	27	62	40	97	95	194	56	25	261	76	48	64
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 1/4	84	210	44	84	51	115	146	224	85	45	305	95	59	94
1 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



PVC-C metric



Ball valve type 230 PVC-C FO (Fail safe to open) Without manual override With solvent cement sockets metric

Model:

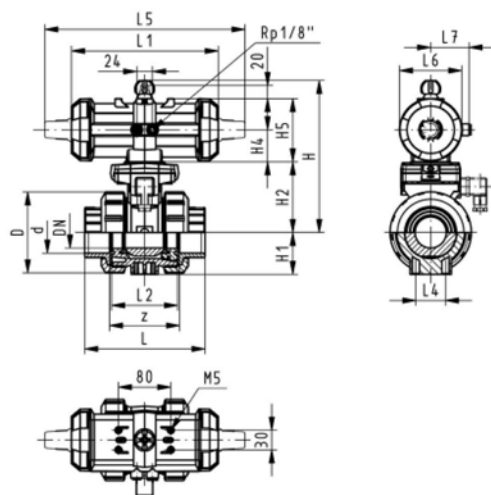
- Control time 90° < 1-2 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

Option:

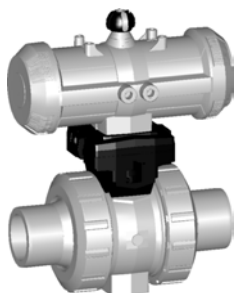
- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	70	199 230 562	199 230 572	1.159
20	15	10	185	199 230 563	199 230 573	1.159
25	20	10	350	199 230 564	199 230 574	1.276
32	25	10	700	199 230 565	199 230 575	1.400
40	32	10	1000	199 230 566	199 230 576	2.451
50	40	10	1600	199 230 567	199 230 577	2.773
63	50	10	3100	199 230 568	199 230 578	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



PVC-C metric



Ball valve type 230 PVC-C FO (Fail safe to open) Without manual override With solvent cement spigots metric

Model:

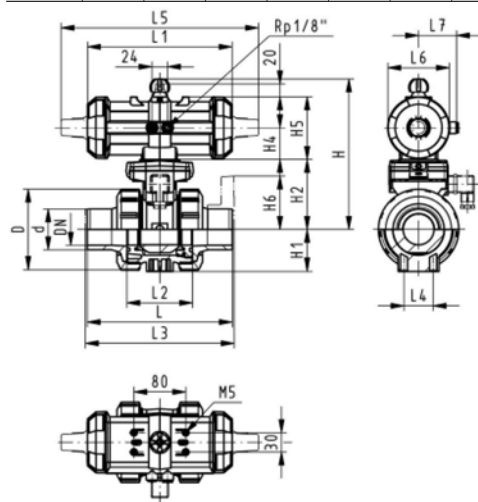
- Control time $90^\circ <$ 1-2 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

Option:

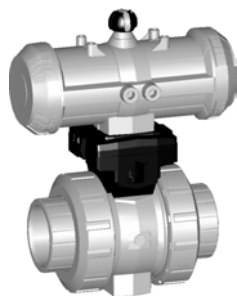
- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg	
16	10	10	70	199 230 582	199 230 592	1.159	
20	15	10	185	199 230 583	199 230 593	1.159	
25	20	10	350	199 230 584	199 230 594	1.276	
32	25	10	700	199 230 585	199 230 595	1.400	
40	32	10	1000	199 230 586	199 230 596	2.451	
50	40	10	1600	199 230 587	199 230 597	2.773	
63	50	10	3100	199 230 588	199 230 598	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	130	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



PVC-C metric



Ball valve type 230 PVC-C FO (Fail safe to open) Without manual override With threaded sockets Rp

Model:

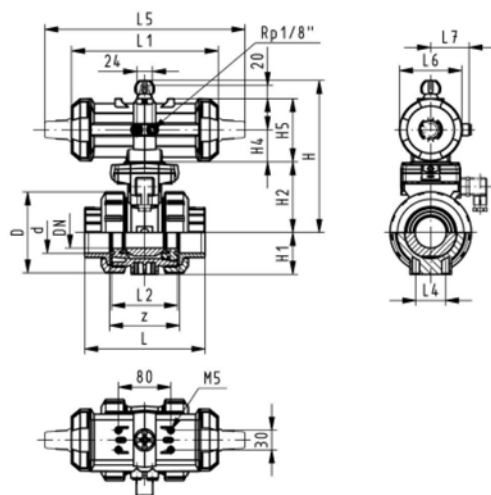
- Control time 90° < 1-2 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

Option:

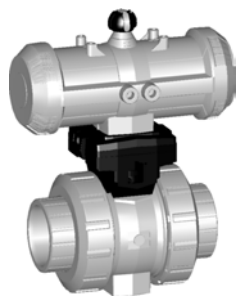
- Individual configuration of the valve (see form)

Rp [inch]	DN [mm]	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg	
3/8	10	10	70	199 230 912	199 230 932	1.200	
1/2	15	10	185	199 230 913	199 230 933	1.200	
3/4	20	10	350	199 230 914	199 230 934	1.300	
1	25	10	700	199 230 915	199 230 935	1.400	
1 1/4	32	10	1000	199 230 916	199 230 936	2.500	
1 1/2	40	10	1600	199 230 917	199 230 937	2.800	
2	50	10	3100	199 230 918	199 230 938	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]
3/8	50	167	27	62	40	97	92	194	56	25	261	76	48	64
1/2	50	167	27	62	40	97	95	194	56	25	261	76	48	64
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 1/4	84	210	44	84	51	115	146	224	85	45	305	95	59	94
1 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



PVC-C metric



Ball valve type 230 PVC-C DA (Double acting) Without manual override With solvent cement sockets metric

Model:

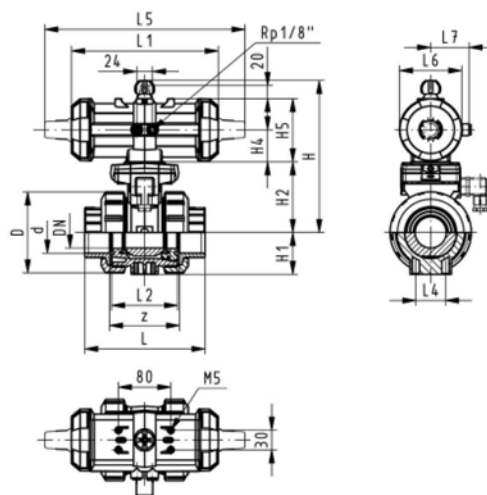
- Control time $90^\circ <$ 1-2 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

Option:

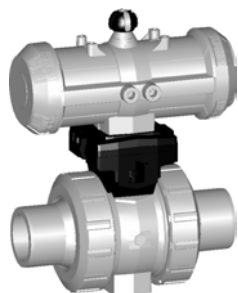
- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg	
16	10	10	70	199 230 602	199 230 612	1.159	
20	15	10	185	199 230 603	199 230 613	1.159	
25	20	10	350	199 230 604	199 230 614	1.276	
32	25	10	700	199 230 605	199 230 615	1.400	
40	32	10	1000	199 230 606	199 230 616	2.451	
50	40	10	1600	199 230 607	199 230 617	2.773	
63	50	10	3100	199 230 608	199 230 618	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



PVC-C metric



Ball valve type 230 PVC-C DA (Double acting) Without manual override With solvent cement spigots metric

Model:

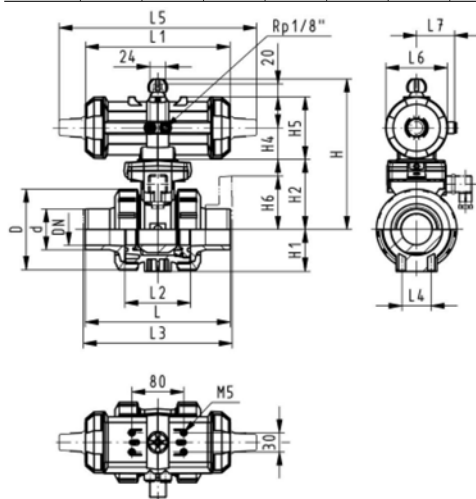
- Control time 90° < 1-2 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

Option:

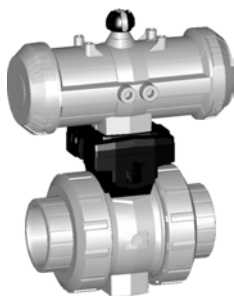
- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	70	199 230 622	199 230 632	1.159
20	15	10	185	199 230 623	199 230 633	1.159
25	20	10	350	199 230 624	199 230 634	1.276
32	25	10	700	199 230 625	199 230 635	1.400
40	32	10	1000	199 230 626	199 230 636	2.451
50	40	10	1600	199 230 627	199 230 637	2.773
63	50	10	3100	199 230 628	199 230 638	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	130	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



PVC-C metric



Ball valve type 230 PVC-C DA (Double acting) Without manual override With threaded sockets Rp

Model:

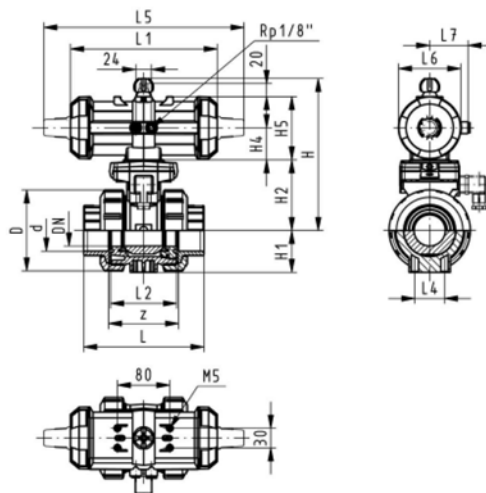
- Control time $90^\circ <$ 1-2 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

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	199 230 942	199 230 952	1.200
1/2	15	10	185	199 230 943	199 230 953	1.200
3/4	20	10	350	199 230 944	199 230 954	1.300
1	25	10	700	199 230 945	199 230 955	1.400
1 1/4	32	10	1000	199 230 946	199 230 956	2.500
1 1/2	40	10	1600	199 230 947	199 230 957	2.800
2	50	10	3100	199 230 948	199 230 958	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]
3/8	50	167	27	62	40	97	92	194	56	25	261	76	48	64
1/2	50	167	27	62	40	97	95	194	56	25	261	76	48	64
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 1/4	84	210	44	84	51	115	146	224	85	45	305	95	59	94
1 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



PVC-C metric



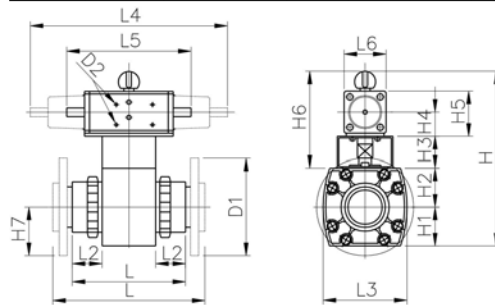
Ball valve type 208 PVC-C FC (Fail safe to close) Without manual override Unions with solvent cement sockets metric

Model:

- For easy installation and removal
- Control time 90° < 0,5-2 s

d [mm]	DN [mm]	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg							
75	65	10	5000	199 208 240	199 208 243	8.600							
90	80	10	7000	199 208 241	199 208 244	12.700							
110	100	10	11000	199 208 242	199 208 245	16.800							

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	1/4	233	72	160	376	80	337	75	73	60	46	86	189
90	1/4	267	82	188	439	100	395	88	88	70	56	106	219
110	1/2	318	95	225	439	100	451	110	113	80	56	106	229



PVC-C metric



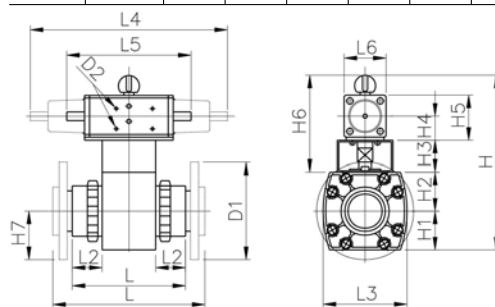
Ball valve type 208 PVC-C FO (Fail safe to open) Without manual override Unions with solvent cement sockets metric

Model:

- Control time $90^\circ <$) 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	199 208 250	199 208 253	8.600								
90	80	10	7000	199 208 251	199 208 254	13.650								
110	100	10	11000	199 208 252	199 208 255	18.260								

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		



PVC-C metric



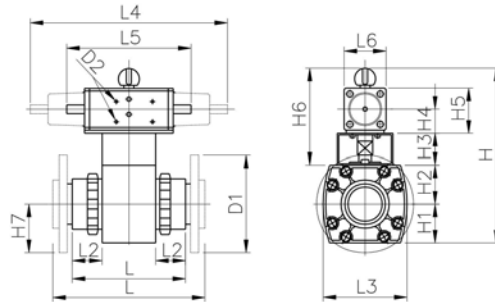
Ball valve type 208 PVC-C DA (Double acting) Without manual override Unions with solvent cement sockets metric

Model:

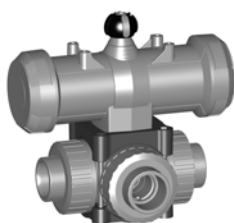
- Control time 90° < 0,5-2 s
- For easy installation and removal

d [mm]	DN [mm]	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg							
75	65	10	5000	199 208 260	199 208 263	5.600							
90	80	10	7000	199 208 261	199 208 264	13.650							
110	100	10	11000	199 208 262	199 208 265								

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	1/4	233	72	160	228	65	321	75	73	60	38	71	173
90	1/4	267	82	188	258	80	375	88	88	70	46	86	199
110	1/4	318	95	225	258	80	431	110	113	80	46	86	209



PVC-C metric



3-Way ball valve type 275 PVC-C Horizontal/L-port FC (Fail safe to close) Without manual override With solvent cement sockets metric

Model:

- Control time $90^\circ <$ 1-3 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

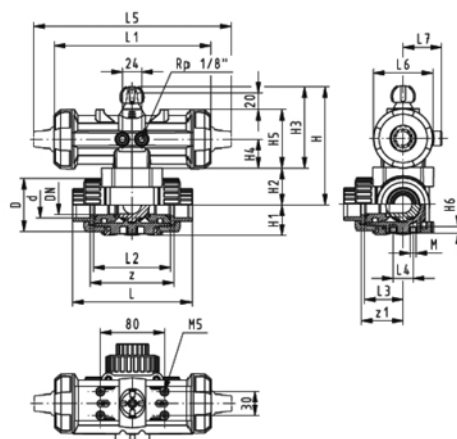
Option:

- Individual configuration of the valve (see form)

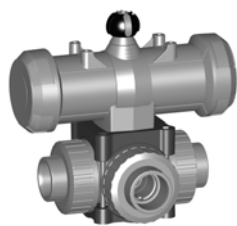
d [mm]	DN [mm]	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	50	199 275 102	199 275 112	1.337
20	15	10	75	199 275 103	199 275 113	
25	20	10	150	199 275 104	199 275 114	1.296
32	25	10	280	199 275 105	199 275 115	1.677
40	32	10	480	199 275 106	199 275 116	2.484
50	40	10	620	199 275 107	199 275 117	2.960
63	50	10	1230	199 275 108	199 275 118	

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	43	136	29	31	105	40	77	8	108	194	72	36	25	261	73
20	43	136	29	31	105	40	77	8	111	194	72	36	25	261	73
25	52	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



PVC-C metric



3-Way ball valve type 275 PVC-C Horizontal/L-port DA (Double acting) Without manual override With solvent cement sockets metric

Model:

- Control time 90° < 1-3 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

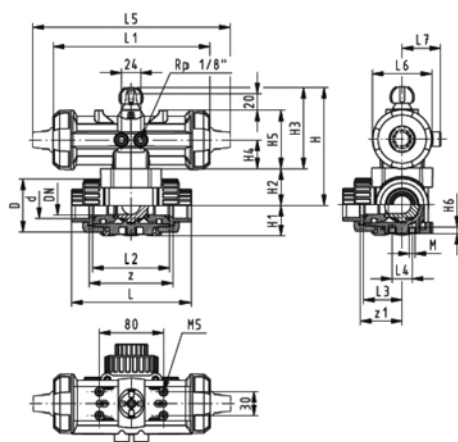
Option:

- Individual configuration of the valve (see form)

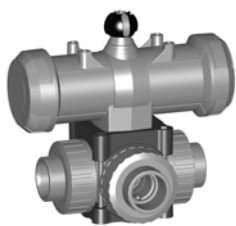
d [mm]	DN [mm]	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	50	199 275 282	199 275 292	1.337
20	15	10	75	199 275 283	199 275 293	
25	20	10	150	199 275 284	199 275 294	
32	25	10	280	199 275 285	199 275 295	1.677
40	32	10	480	199 275 286	199 275 296	
50	40	10	620	199 275 287	199 275 297	2.960
63	50	10	1230	199 275 288	199 275 298	

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	43	136	29	31	105	40	77	8	108	194	72	36	25	261	73
20	43	136	29	31	105	40	77	8	111	194	72	36	25	261	73
25	52	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



PVC-C metric



3-Way ball valve type 275 PVC-C Horizontal/T-port FC (Fail safe to close) Without manual override With solvent cement sockets metric

Model:

- Control time 90° < 1-3 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

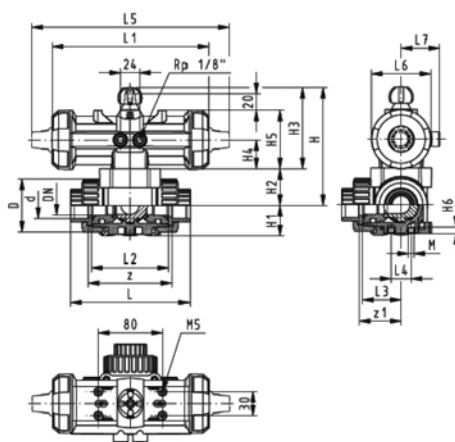
Option:

- Individual configuration of the valve (see form)

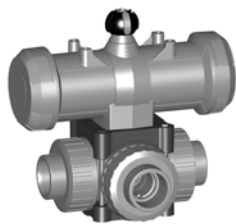
d [mm]	DN [mm]	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	140	199 275 142	199 275 152	1.337
20	15	10	200	199 275 143	199 275 153	
25	20	10	470	199 275 144	199 275 154	
32	25	10	793	199 275 145	199 275 155	1.677
40	32	10	1290	199 275 146	199 275 156	
50	40	10	1910	199 275 147	199 275 157	2.960
63	50	10	3100	199 275 148	199 275 158	

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	43	136	29	31	105	40	77	8	108	194	72	36	25	261	73
20	43	136	29	31	105	40	77	8	111	194	72	36	25	261	73
25	52	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



PVC-C metric



3-Way ball valve type 275 PVC-C Horizontal/T-port DA (Double acting) Without manual override With solvent cement sockets metric

Model:

- Control time 90° $\leq 1-3 s$
- For easy installation and removal
- Integrated stainless steel mounting inserts

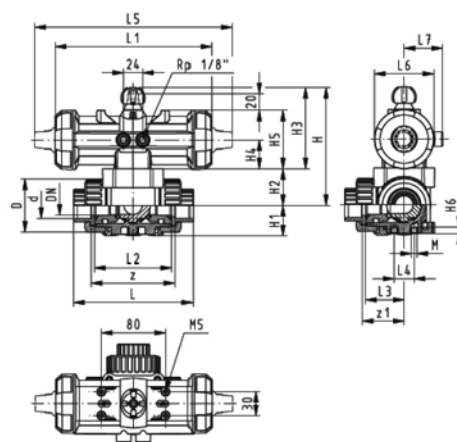
Option:

- 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	199 275 322	199 275 332	1.337	
20	15	10	200	199 275 323	199 275 333		
25	20	10	470	199 275 324	199 275 334		
32	25	10	793	199 275 325	199 275 335	1.677	
40	32	10	1290	199 275 326	199 275 336		
50	40	10	1910	199 275 327	199 275 337	2.960	
63	50	10	3100	199 275 328	199 275 338		

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	43	136	29	31	105	40	77	8	108	194	72	36	25	261	73
20	43	136	29	31	105	40	77	8	111	194	72	36	25	261	73
25	52	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



PVC-C metric

Diaphragm valves pneumatic

Diaphragm valve type 018 PVC-C

FC (Fail safe to close)

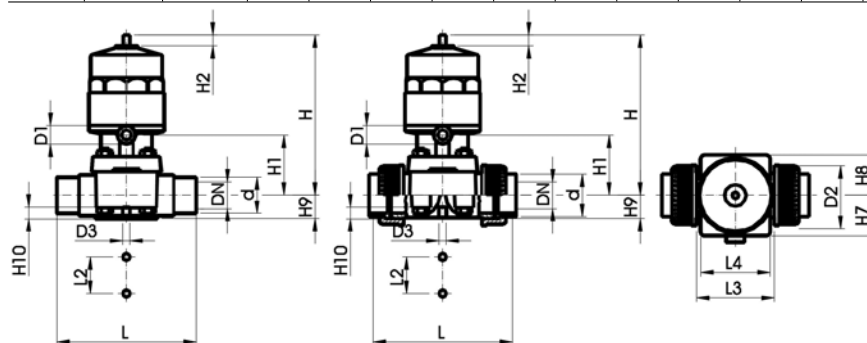
With solvent cement spigots metric

- With position indicator / Working pressure: **one side**



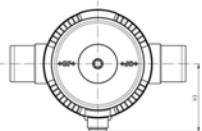
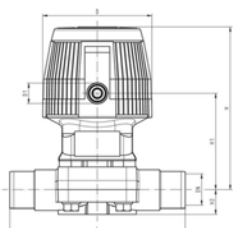
d [mm]	DN [mm]	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	kg
20	15	6	53	199 018 285	0.700
25	20	6	103	199 018 286	0.800
32	25	6	162	199 018 287	1.500
40	32	6	224	199 018 288	1.600
50	40	6	450	199 018 289	3.400
63	50	6	528	199 018 290	4.500

d [mm]	D1_G [inch]	D3[M] [mm]	L [mm]	L2 [mm]	L3 [mm]	L4 [mm]	H [mm]	H1 [mm]	H2 [mm]	H7 [mm]	H8 [mm]	H9 [mm]	H10 [mm]
20	¼	6	124	25	60	54	139	48	8	32	29	14	12
25	¼	6	144	25	60	65	147	56	8	32	36	18	12
32	¼	6	154	25	85	78	178	66	11	45	41	21	12
40	¼	8	174	45	85	90	192	78	13	45	50	26	15
50	¼	8	194	45	125	103	246	84	15	65	56	33	15
63	¼	8	224	45	125	118	256	90	18	65	65	39	15



PVC-C metric

Diaphragm valve type DIASTAR Eco PVC-C FC (Fail safe to close) With solvent cement spigots metric



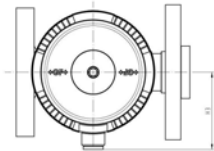
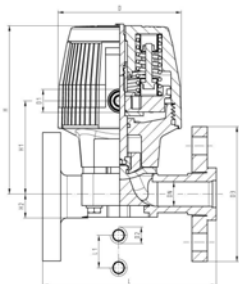
Model:

- 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	199 024 121	0.516
25	20	6	120	199 024 122	1.043
32	25	6	238	199 024 123	1.308
40	32	6	341	199 024 124	1.936
50	40	6	460	199 024 125	2.517
63	50	6	685	199 024 126	3.011

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 type DIASTAR Eco PVC-C FC (Fail safe to close) With backing flanges PP-V 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	199 024 151	0.568
25	20	3/4	6	120	199 024 152	1.155
32	25	1	6	238	199 024 153	1.451
40	32	1 1/4	6	341	199 024 154	2.185
50	40	1 1/2	6	460	199 024 155	3.173
63	50	2	6	685	199 024 156	4.028

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

PVC-C metric

Diaphragm valve type DIASTAR PVC-C Series 028 FC (Fail safe to close) With solvent cement spigots metric

- With position indicator / Working pressure: **one side**

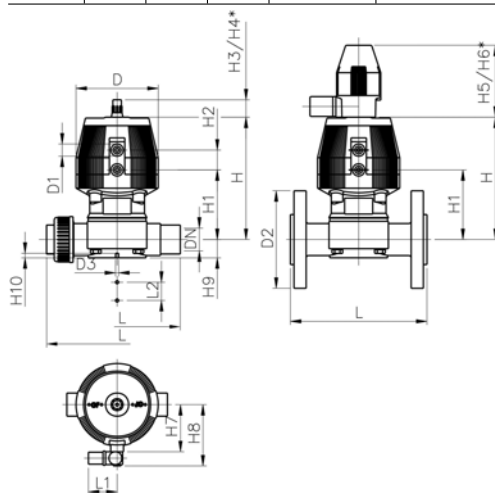


*PN: EPDM/PTFE

d [mm]	DN [mm]	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	PTFE/EPDM Code	kg
20	15	10/5*	72	199 028 631	199 028 661	0.470
25	20	10/7*	120	199 028 632	199 028 662	0.900
32	25	10/7*	238	199 028 633	199 028 663	1.190
40	32	10/7*	341	199 028 634	199 028 664	1.650
50	40	10/7*	460	199 028 635	199 028 665	3.050
63	50	10/7*	685	199 028 636	199 028 666	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



PVC-C metric

Diaphragm valve type DIASTAR PVC-C Series 028 FC (Fail safe to close) With backing flanges PP-V metric

- With position indicator / Working pressure: one side

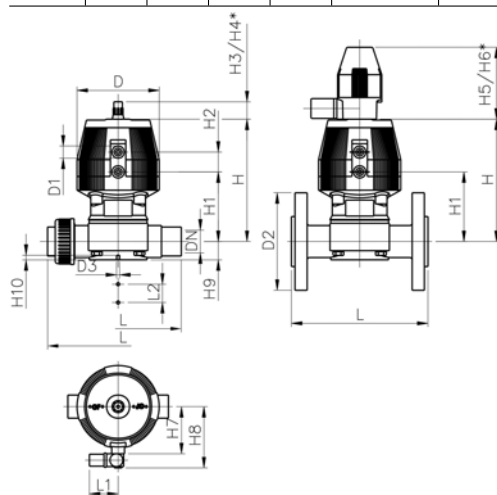


*PN: EPDM/PTFE

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	199 028 691	199 028 721	0.690
25	20	¾	10/7*	120	199 028 692	199 028 722	1.100
32	25	1	10/7*	238	199 028 693	199 028 723	1.470
40	32	1 ¼	10/7*	341	199 028 694	199 028 724	2.170
50	40	1 ½	10/7*	460	199 028 695	199 028 725	3.050
63	50	2	10/7*	685	199 028 696	199 028 726	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	⅞	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	⅞	150.00	8	200	60	45	203	108	36	36	64	100	170
63	150	⅞	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



PVC-C metric



Diaphragm valve type DIASTAR PVC-C Series 025 FC (Fail safe to close) With fixed flanges PVC-C metric

- With position indicator / Working pressure: **one side**

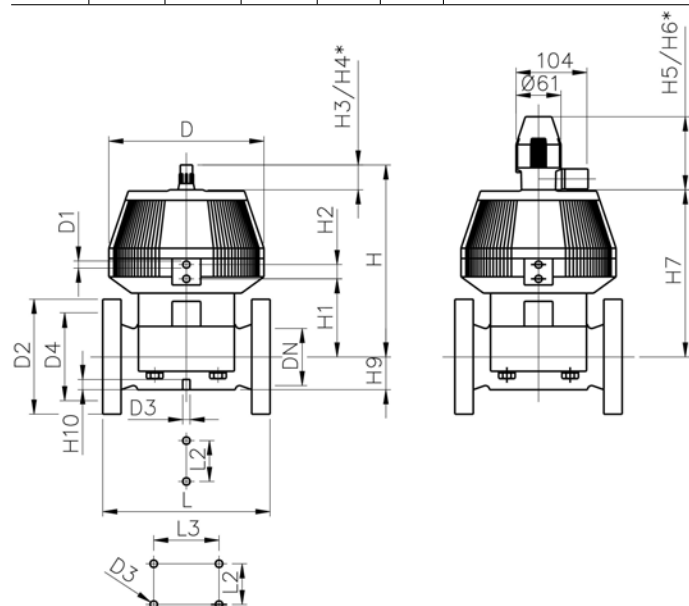
** with fixed flanges PVC-C metric and Inch ANSI

* with backing flanges PP-V

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	199 025 697	199 025 727	13.600
**90	80	3	10	1700	199 025 698	199 025 728	13.600
110	100	4	8	2700	199 025 699	199 025 729	24.700

d [mm]	D [mm]	D1_G [inch]	D2 [mm]	D3[M] [mm]	D4 [mm]	L [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]
*75	280	¼	185.00	8	145.0	290	70	344	148	24	46	100
**90	280	¼	200.00	12	160.0	310	120	348	150	24	46	100
110	335	¼	225.00	12	180.0	350	120	395	176	24	46	100

d [mm]	H5 [mm]	H6 [mm]	H7 [mm]	H9 [mm]	H10 [mm]
*75	129	195	298	46	15
**90	129	195	302	57	15
110	129	195	349	69	20



PVC-C metric

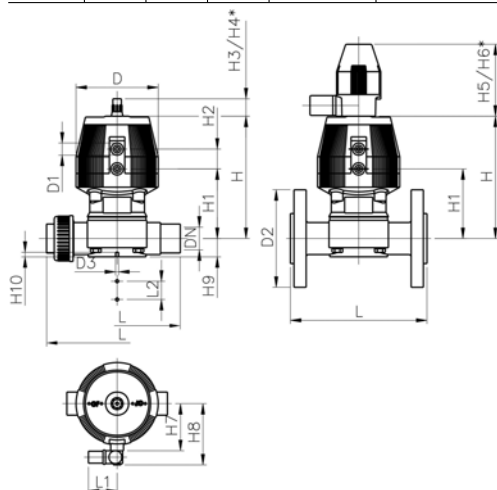
Diaphragm valve type DIASTAR PVC-C Series 025 FC (Fail safe to close) With solvent cement spigots metric



d [mm]	DN [mm]	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	PTFE/EPDM Code	kg
20	15	10	72	199 025 631	199 025 661	0.810
25	20	10	120	199 025 632	199 025 662	0.891
32	25	10	238	199 025 633	199 025 663	1.632
40	32	10	341	199 025 634	199 025 664	2.766
50	40	10	460	199 025 635	199 025 665	4.456
63	50	10	685	199 025 636	199 025 666	5.031

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	124	60	25	128	69	25	23	44	100	155	56
25	96	1/8	6	144	60	25	130	71	25	23	44	100	155	56
32	120	1/8	6	154	60	25	166	93	26	36	64	100	155	68
40	150	1/4	8	174	60	45	201	106	36	36	64	100	160	85
50	180	1/4	8	194	60	45	233	119	37	36	64	100	170	101
63	180	1/4	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



PVC-C metric

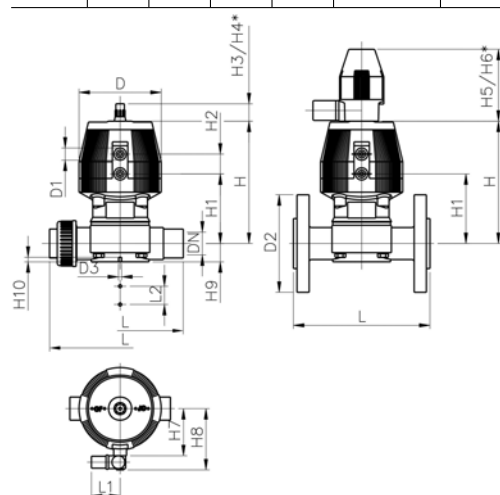
Diaphragm valve type DIASTAR PVC-C Series 025 FC (Fail safe to close) With backing flanges PP-V metric



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	199 025 691	199 025 721	0.810
25	20	3/4	10	120	199 025 692	199 025 722	0.891
32	25	1	10	238	199 025 693	199 025 723	1.632
40	32	1 1/4	10	341	199 025 694	199 025 724	2.766
50	40	1 1/2	10	460	199 025 695	199 025 725	4.456
63	50	2	10	685	199 025 696	199 025 726	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	1/8	95.00	6	130	60	25	128	69	25	23	44	100	155
25	96	1/8	105.00	6	150	60	25	130	71	25	23	44	100	155
32	120	1/8	115.00	6	160	60	25	166	93	26	36	64	100	155
40	150	1/4	140.00	8	180	60	45	201	106	36	36	64	100	160
50	180	1/4	150.00	8	200	60	45	233	119	37	36	64	100	170
63	180	1/4	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



PVC-C metric



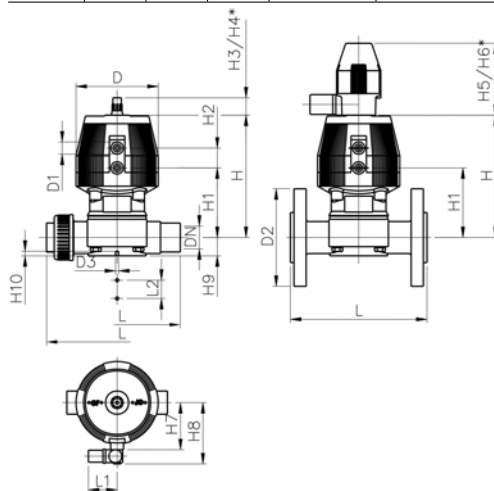
Diaphragm valve type DIASTAR PVC-C Series 025 FO (Fail safe to open) With solvent cement spigots metric

- 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	199 025 641	199 025 671	0.404
25	20	10	120	199 025 642	199 025 672	0.690
32	25	10	238	199 025 643	199 025 673	0.980
40	32	10	341	199 025 644	199 025 674	1.230
50	40	10	460	199 025 645	199 025 675	2.210
63	50	10	685	199 025 646	199 025 676	3.800

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	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



PVC-C metric

Diaphragm valve type DIASTAR PVC-C Series 025 FO (Fail safe to open) With backing flanges PP-V metric

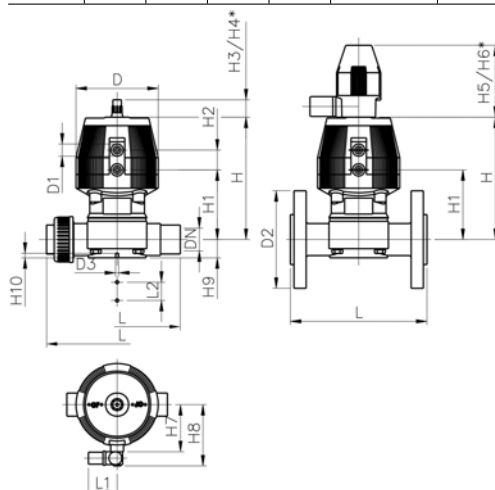
- With position indicator / Working pressure: both sides



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	199 025 701	199 025 731	0.624
25	20	3/4	10	120	199 025 702	199 025 732	0.890
32	25	1	10	238	199 025 703	199 025 733	1.260
40	32	1 1/4	10	341	199 025 704	199 025 734	1.750
50	40	1 1/2	10	460	199 025 705	199 025 735	2.210
63	50	2	10	685	199 025 706	199 025 736	3.800

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	1/8	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



PVC-C metric



Diaphragm valve type DIASTAR PVC-C Series 025 FO (Fail safe to open) With fixed flanges PVC-C metric

- With position indicator / Working pressure: **one side**

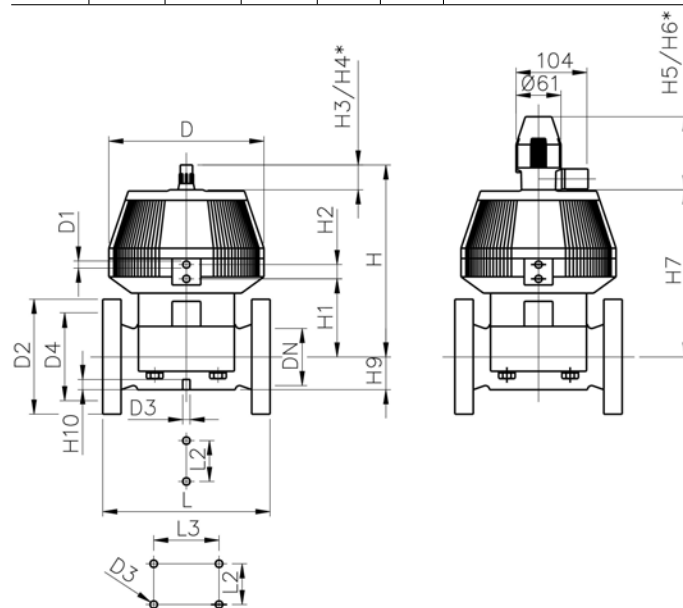
** with fixed flanges PVC-C metric and Inch ANSI

* with backing flanges PP-V

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	199 025 707	199 025 737	13.600
**90	80	3	10	1700	199 025 708	199 025 738	17.400
110	100	4	8	2700	199 025 709	199 025 739	24.700

d [mm]	D [mm]	D1_G [inch]	D3[M] [mm]	D2 [mm]	D4 [mm]	L [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]
*75	280	¼	8	185.00	145.0	290	70	344	148	24	46	100
**90	280	¼	12	200.00	160.0	310	120	348	150	24	46	100
110	335	¼	12	225.00	180.0	350	120	395	176	24	46	100

d [mm]	H5 [mm]	H6 [mm]	H7 [mm]	H9 [mm]	H10 [mm]
*75	129	195	298	46	15
**90	129	195	302	57	15
110	129	195	349	69	20



PVC-C metric



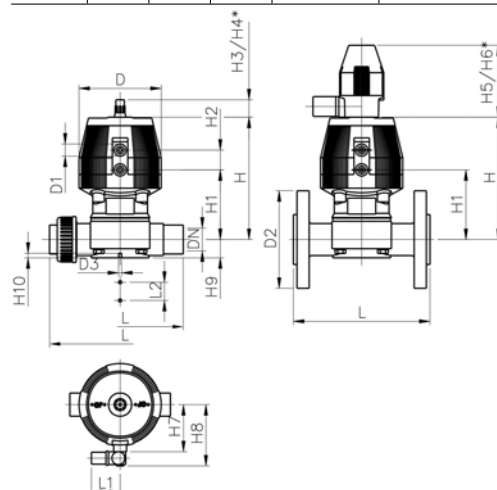
Diaphragm valve type DIASTAR PVC-C Series 025 DA (Double acting) With solvent cement spigots metric

- 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	199 025 651	199 025 681	0.404
25	20	10	120	199 025 652	199 025 682	0.690
32	25	10	238	199 025 653	199 025 683	0.980
40	32	10	341	199 025 654	199 025 684	1.230
50	40	10	460	199 025 655	199 025 685	2.935
63	50	10	685	199 025 656	199 025 686	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



PVC-C metric

Diaphragm valve type DIASTAR PVC-C Series 025 DA (Double acting) With backing flanges PP-V metric

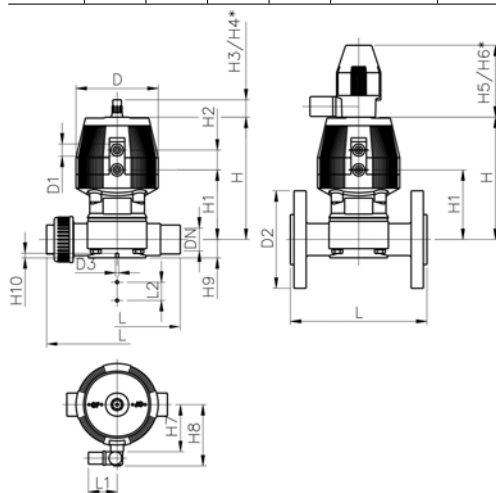
- With position indicator / Working pressure: both sides



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	199 025 711	199 025 741	0.624
25	20	3/4	10	120	199 025 712	199 025 742	0.890
32	25	1	10	238	199 025 713	199 025 743	1.260
40	32	1 1/4	10	341	199 025 714	199 025 744	1.750
50	40	1 1/2	10	460	199 025 715	199 025 745	2.210
63	50	2	10	685	199 025 716	199 025 746	3.760

d [mm]	D [mm]	D1 [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	M6	130	60	25	99	59	24	23	44	100	155
25	96	1/8	105.00	M6	150	60	25	127	71	25	23	44	100	155
32	96	1/8	115.00	M6	160	60	25	143	85	25	23	44	100	155
40	120	1/8	140.00	M8	180	60	45	167	97	26	36	64	100	160
50	150	1/4	150.00	M8	200	60	45	198	108	36	36	64	100	170
63	150	1/4	165.00	M8	230	60	45	216	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



PVC-C metric



Diaphragm valve type DIASTAR PVC-C Series 025 DA (Double acting) With fixed flanges PVC-C metric

- With position indicator / Working pressure: **one side**

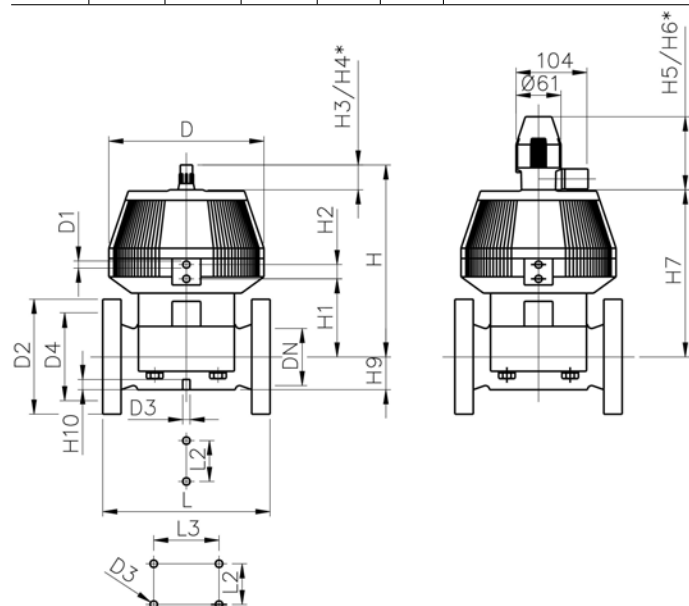
* with backing flanges PP-V

** with fixed flanges PVC-C 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	199 025 717	199 025 747	13.600
**90	80	3	10	1700	199 025 718	199 025 748	17.400
110	100	4	8	2700	199 025 719	199 025 749	

d [mm]	D [mm]	D1_G [inch]	D2 [mm]	D3[M] [mm]	D4 [mm]	L [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]
*75	280	¼	185.00	8	145.0	290	70	344	148	24	46	100
**90	280	¼	200.00	12	160.0	310	120	348	150	24	46	100
110	335	¼	225.00	12	180.0	350	120	395	176	24	46	100

d [mm]	H5 [mm]	H6 [mm]	H7 [mm]	H9 [mm]	H10 [mm]
*75	129	195	298	46	15
**90	129	195	302	57	15
110	129	195	349	69	20



PVC-C metric

Butterfly valves electric

Butterfly valve type 140 PVC-C 100-230V Without manual override



Model:

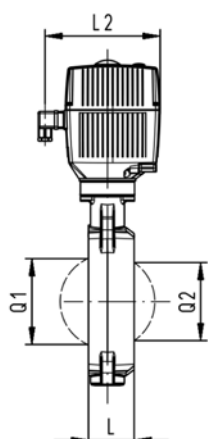
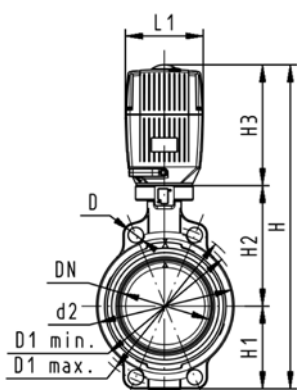
- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, ANSI B 16.5 Class 150, BS 1560: 1958, JIS B 2220
- Overall length according to EN 558-1, ISO 5752
- Voltage 100-230 V, 50-60 Hz
- Control time 15 s/90°<) EA31
- Control time 8s/90°<) EA41
- Control range 90°<)
- Actuator with integrated emergency manual override standard

- * Available on request

d [mm]	DN [mm]	Inch	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
*63	50	2	10	1470	199 140 202	199 140 222	
75	65	2 ½	10	2200	199 140 203	199 140 223	4.312
90	80	3	10	3000	199 140 204	199 140 224	4.491
110	100	4	10	6500	199 140 205	199 140 225	5.133
*140	125	5	10	11500	199 140 206	199 140 226	
160	150	6	10	16600	199 140 207	199 140 227	6.724
225	200	8	10	39600	199 140 208	199 140 228	12.994

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



PVC-C metric

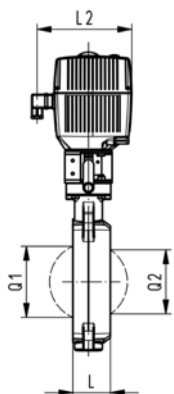
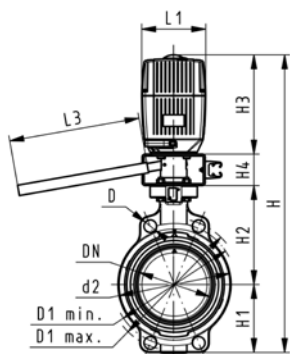
Butterfly valve type 140 PVC-C 100-230V With manual override



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

- * Available on request



d [mm]	DN [mm]	Inch	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
*63	50	2	10	1470	199 140 162	199 140 182	
75	65	2 ½	10	2200	199 140 163	199 140 183	5.812
90	80	3	10	3000	199 140 164	199 140 184	5.991
110	100	4	10	6500	199 140 165	199 140 185	6.633
*140	125	5	10	11500	199 140 166	199 140 186	
160	150	6	10	16600	199 140 167	199 140 187	8.224
225	200	8	10	39600	199 140 168	199 140 188	14.494

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]
*63	EA-31	19	120.0	125.0	104	460	77	134	188	60	45	122
75	EA-31	19	139.7	145.0	115	473	83	140	188	60	46	122
90	EA-31	19	150.0	160.0	131	488	89	146	188	60	49	122
110	EA-31	19	175.0	190.5	161	520	104	167	188	60	56	122
*140	EA-31	23	210.0	215.9	187	547	117	181	188	60	64	122
160	EA-31	24	241.3	241.3	215	568	130	189	188	60	72	122
225	EA-41	23	290.0	295.0	267	635	158	210	208	60	73	125

d [mm]	L2 [mm]	L3 [mm]	Q1 [mm]	Q2 [mm]
*63	180	200	35.74	
75	180	200	50.93	30.62
90	180	200	64.01	46.24
110	180	250	84.46	69.96
*140	180	250	110.71	94.50
160	180	250	136.08	121.54
225	180	250	175.62	166.23

PVC-C metric

Butterfly valve type 140 PVC-C 24V Without manual override

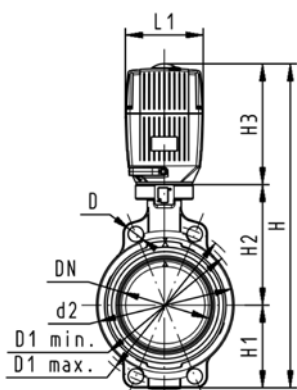


Model:

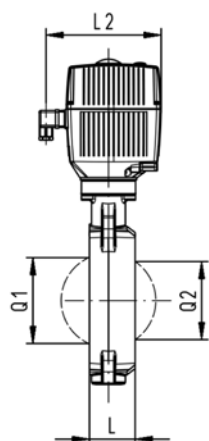
- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, ANSI B 16.5 Class 150, BS 1560: 1958, JIS B 2220
- Overall length according to EN 558-1, ISO 5752
- Voltage 24 V AC/DC
- Control time 15 s/90°<) EA31
- Control time 8s/90°<) EA41
- Control range 90°<)
- Actuator with integrated emergency manual override standard

- * Available on request

d [mm]	DN [mm]	Inch	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
*63	50	2	10	1470	199 140 282	199 140 302	
75	65	2 ½	10	2200	199 140 283	199 140 303	4.312
90	80	3	10	3000	199 140 284	199 140 304	4.491
110	100	4	10	6500	199 140 285	199 140 305	5.133
*140	125	5	10	11500	199 140 286	199 140 306	
160	150	6	10	16600	199 140 287	199 140 307	6.724
225	200	8	10	39600	199 140 288	199 140 308	12.994



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

PVC-C metric

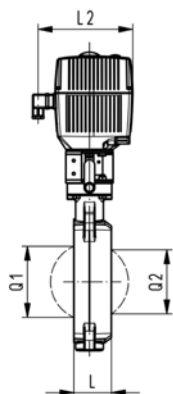
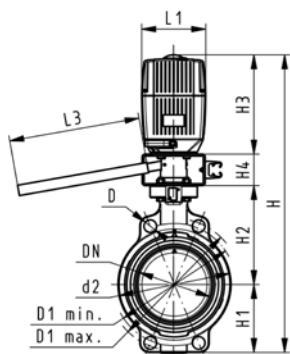
Butterfly valve type 140 PVC-C 24V With manual override



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

- * Available on request



d [mm]	DN [mm]	Inch	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
*63	50	2	10	1470	199 140 242	199 140 262	
75	65	2 ½	10	2200	199 140 243	199 140 263	5.812
90	80	3	10	3000	199 140 244	199 140 264	5.991
110	100	4	10	6500	199 140 245	199 140 265	6.633
*140	125	5	10	11500	199 140 246	199 140 266	
160	150	6	10	16600	199 140 247	199 140 267	8.224
225	200	8	10	39600	199 140 248	199 140 268	14.494

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]
*63	EA-31	19	120.0	125.0	104	460	77	134	188	60	45	122
75	EA-31	19	139.7	145.0	115	473	83	140	188	60	46	122
90	EA-31	19	150.0	160.0	131	488	89	146	188	60	49	122
110	EA-31	19	175.0	190.5	161	520	104	167	188	60	56	122
*140	EA-31	23	210.0	215.9	187	547	117	181	188	60	64	122
160	EA-31	24	241.3	241.3	215	568	130	189	188	60	72	122
225	EA-41	23	290.0	295.0	267	635	158	210	208	60	73	125

d [mm]	L2 [mm]	L3 [mm]	Q1 [mm]	Q2 [mm]
*63	180	200	35.74	
75	180	200	50.93	30.62
90	180	200	64.01	46.24
110	180	250	84.46	69.96
*140	180	250	110.71	94.50
160	180	250	136.08	121.54
225	180	250	175.62	166.23

PVC-C metric

Butterfly valve type 035 PVC-C 115/230 With manual override

Model:

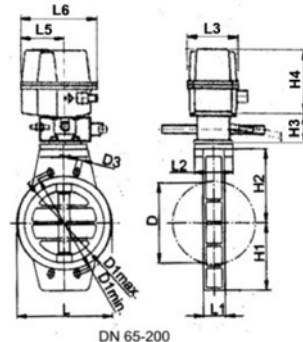
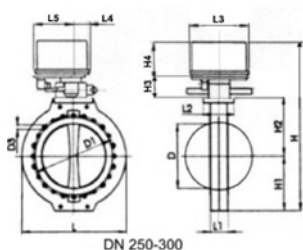
- Adjustable voltages for 115/230 V, 50-60 Hz
- Control range 90°<
- Control time 8 s/90°<

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
90	80	3	10	3000	EA 30	199 035 902	199 035 912	6.300
110	100	4	10	6500	EA 41	199 035 903	199 035 913	10.930
160	150	6	6	16600	EA 41	199 035 905	199 035 915	14.400
225	200	8	6	39600	EA 41	199 035 906	199 035 916	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]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]
90	49	140.0	145.0	19.0	132	49	77	146	64	185	439	92	120	60
110	66	150.0	160.0	19.0	160	56	92	220	60	210	464	108	138	60
160	85	175.0	190.5	23.0	216	70	116	220	60	210	528	140	170	60
225	110	210.0	216.0	23.0	272	71	128	220	60	210	608	175	215	60

d [mm]	H4 [mm]	Connecting dimension
90	163	ISO, EN, DIN, BS, ANSI
110	148	ISO, EN, DIN, BS, ANSI
160	148	ISO, EN, DIN, BS, ANSI
225	148	ISO, EN, DIN, BS, ANSI



PVC-C metric

Butterfly valve type 035 PVC-C 115/230 Without manual override

Model:

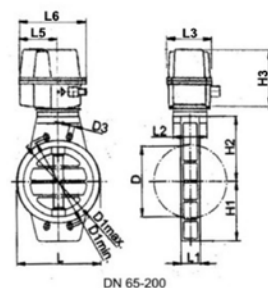
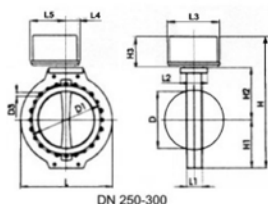
- Adjustable voltages for 115/230 V, 50-60 Hz
- Control range 90°<
- Control time 8 s/90°<

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	kg
90	80	3	10	3000	EA 30	199 035 922	199 035 932	5.300
110	100	4	10	6500	EA 41	199 035 923	199 035 933	9.700
160	150	6	6	16600	EA 41	199 035 925	199 035 935	12.400
225	200	8	6	39600	EA 41	199 035 926	199 035 936	15.400

d [mm]	D [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]	H2 [mm]
90	49	140.0	145.0	19.0	132	49	77	132	74	107	181	379	92	120
110	66	150.0	160.0	19.0	160	56	92	160	60	150	210	404	108	138
160	85	175.0	190.5	23.0	216	70	116	216	60	150	210	468	140	170
225	110	210.0	216.0	23.0	272	71	128	272	60	150	210	548	175	215

d [mm]	H3 [mm]	Connecting dimension
90	163	ISO, EN, DIN, BS, ANSI
110	148	ISO, EN, DIN, BS, ANSI
160	148	ISO, EN, DIN, BS, ANSI
225	148	ISO, EN, DIN, BS, ANSI



PVC-C metric

Butterfly valve type 035 PVC-C 24V With manual override

Model:

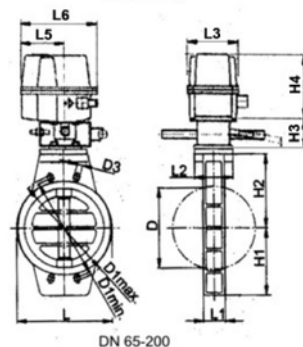
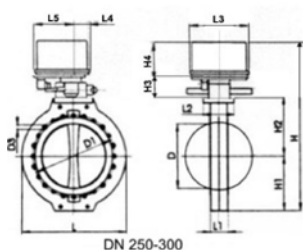
- Voltage 24 V AC/DC
- Control range 90°<
- Control time 8 s/90°<

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
90	80	3	10	3000	EA 30	199 035 942	199 035 952	6.300
110	100	4	10	6500	EA 41	199 035 943	199 035 953	10.700
160	150	6	6	16600	EA 41	199 035 945	199 035 955	14.400
225	200	8	6	39600	EA 41	199 035 946	199 035 956	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]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]
90	49	140.0	145.0	19.0	132	49	77	146	64	185	439	92	120	60
110	66	150.0	160.0	19.0	160	56	92	220	60	210	464	108	138	60
160	85	175.0	190.5	23.0	216	70	116	220	60	210	528	140	170	60
225	110	210.0	216.0	23.0	272	70	128	220	60	210	608	175	215	60

d [mm]	H4 [mm]	Connecting dimension
90	163	ISO, EN, DIN, BS, ANSI
110	148	ISO, EN, DIN, BS, ANSI
160	148	ISO, EN, DIN, BS, ANSI
225	148	ISO, EN, DIN, BS, ANSI



PVC-C metric

Butterfly valve type 035 PVC-C 24V Without manual override

Model:

- Voltage 24 V AC/DC
- Control range 90°<
- Control time 8 s/90°<

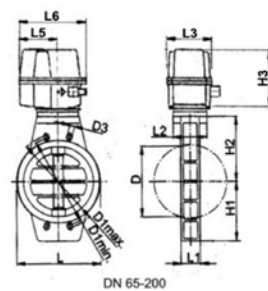
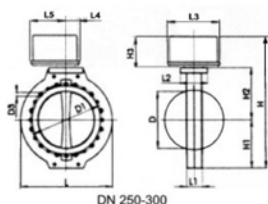
Phase out product will be replaced with type 140



d [mm]	DN [mm]	Inch	PN	kv-value ($\Delta p=1$ bar) [l/min]	Type	EPDM Code	FPM Code	kg
90	80	3	10	3000	EA 30	199 035 962	199 035 972	5.300
110	100	4	10	6500	EA 41	199 035 963	199 035 973	9.700
160	150	6	6	16600	EA 41	199 035 965	199 035 975	12.400
225	200	8	6	39600	EA 41	199 035 966	199 035 976	15.400

d [mm]	D [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]	H2 [mm]
90	49	140.0	145.0	19.0	132	49	77	132	74	107	181	379	92	120
110	66	150.0	160.0	19.0	160	56	92	160	60	150	210	404	108	138
160	85	175.0	190.5	23.0	216	70	116	216	60	150	210	468	140	170
225	110	210.0	216.0	23.0	272	71	128	272	60	150	210	548	175	215

d [mm]	H3 [mm]	Connecting dimension
90	163	ISO, EN, DIN, BS, ANSI
110	148	ISO, EN, DIN, BS, ANSI
160	148	ISO, EN, DIN, BS, ANSI
225	148	ISO, EN, DIN, BS, ANSI



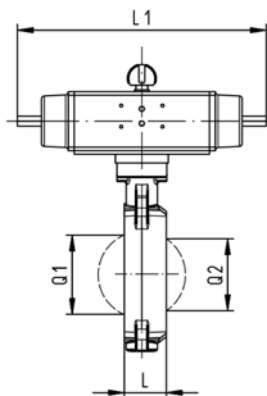
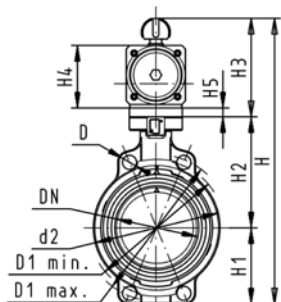
PVC-C metric

Butterfly valves pneumatic

Butterfly valve type 240 PVC-C

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°<

- * Available on request

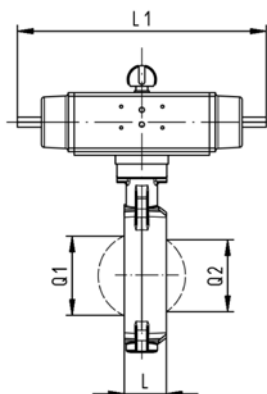
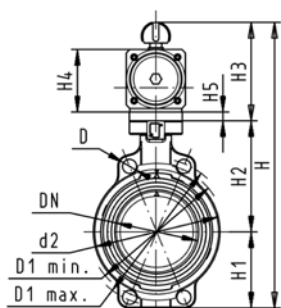
d [mm]	DN [mm]	Inch	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
*63	50	2	10	1470	199 240 162	199 240 182	
75	65	2 ½	10	2200	199 240 163	199 240 183	3.352
90	80	3	10	3000	199 240 164	199 240 184	3.531
110	100	4	10	6500	199 240 165	199 240 185	5.371
*140	125	5	10	11500	199 240 166	199 240 186	
160	150	6	10	16600	199 240 167	199 240 187	10.285
225	200	8	10	39600	199 240 168	199 240 188	14.494

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]
*63	PA-30 FC	19	120.0	125.0	104	327	77	134	117	70	15	45
75	PA-30 FC	19	139.7	145.0	115	340	83	140	117	70	15	46
90	PA-35 FC	19	150.0	160.0	131	361	89	146	126	78	15	49
110	PA-40 FC	19	175.0	190.5	161	400	104	167	129	86		56
*140	PA-45 FC	23	210.0	215.9	187	436	117	181	139	96		64
160	PA-50 FC	24	241.3	241.3	215	468	130	189	149	106		72
225	PA-55 FC	23	290.0	295.0	267	529	158	210	161	118		73

d [mm]	L1 [mm]	L2 [mm]	Q1 [mm]	Q2 [mm]
*63	276	65	35.74	
75	276	65	50.93	30.62
90	326	72	64.01	46.24
110	370	80	84.46	69.96
*140	411	90	110.71	94.50
160	423	100	136.08	121.54
225	452	112	175.62	166.23

PVC-C metric

Butterfly valve type 240 PVC-C 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° <

- * Available on request

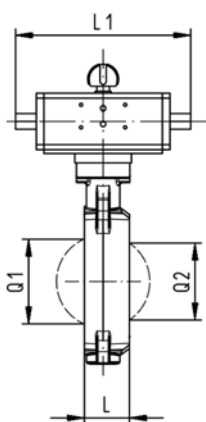
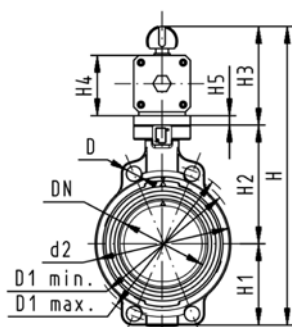
d [mm]	DN [mm]	Inch	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
*63	50	2	10	1470	199 240 202	199 240 222	
75	65	2 ½	10	2200	199 240 203	199 240 223	3.352
90	80	3	10	3000	199 240 204	199 240 224	3.531
110	100	4	10	6500	199 240 205	199 240 225	5.371
*140	125	5	10	11500	199 240 206	199 240 226	
160	150	6	10	16600	199 240 207	199 240 227	10.285
225	200	8	10	39600	199 240 208	199 240 228	14.494

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]
*63	PA-30 FO	19	120.0	125.0	104	327	77	134	117	70	15	45
75	PA-30 FO	19	139.7	145.0	115	340	83	140	117	70	15	46
90	PA-35 FO	19	150.0	160.0	131	361	89	146	126	78	15	49
110	PA-40 FO	19	175.0	190.5	161	400	104	167	129	86		56
*140	PA-45 FO	23	210.0	215.9	187	436	117	181	139	96		64
160	PA-50 FO	24	241.3	241.3	215	468	130	189	149	106		72
225	PA-55 FO	23	290.0	295.0	267	529	158	210	161	118		73

d [mm]	L1 [mm]	L2 [mm]	Q1 [mm]	Q2 [mm]
*63	276	65	35.74	
75	276	65	50.93	30.62
90	326	72	64.01	46.24
110	370	80	84.46	69.96
*140	411	90	110.71	94.50
160	423	100	136.08	121.54
225	452	112	175.62	166.23

PVC-C metric

Butterfly valve type 240 PVC-C 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° <

- * Available on request

d [mm]	DN [mm]	Inch	PN	kv-value ($\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
*63	50	2	10	1470	199 240 242	199 240 262	2.202
75	65	2 ½	10	2200	199 240 243	199 240 263	
90	80	3	10	3000	199 240 244	199 240 264	2.862
110	100	4	10	6500	199 240 245	199 240 265	3.623
*140	125	5	10	11500	199 240 246	199 240 266	6.764
160	150	6	10	16600	199 240 247	199 240 267	
225	200	8	10	39600	199 240 248	199 240 268	

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]
*63	PA-35 DA	19	120.0	125.0	104	317	77	134	107	60	15	45
75	PA-35 DA	19	139.7	145.0	115	330	83	140	107	60	15	46
90	PA-40 DA	19	150.0	160.0	131	348	89	146	113	66	15	49
110	PA-45 DA	19	175.0	190.5	161	372	104	167	102	71		56
*140	PA-45 DA	23	210.0	215.9	187	408	117	181	111	78		64
160	PA-55 DA	24	241.3	241.3	215	448	130	189	129	86		72
225	PA-55 DA	23	290.0	295.0	267	507	158	210	139	96		73

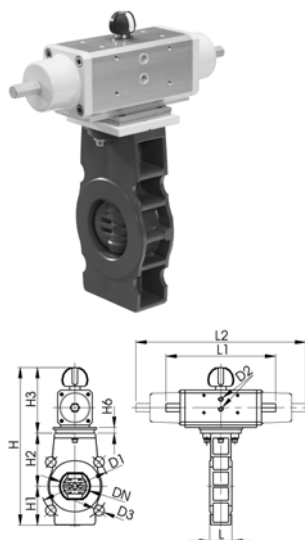
d [mm]	L1 [mm]	L2 [mm]	Q1 [mm]	Q2 [mm]
*63	177	55	35.74	
75	177	55	50.93	30.62
90	190	60	64.01	46.24
110	198	65	84.46	69.96
*140	235	72	110.71	94.50
160	250	80	136.08	121.54
225	279	90	175.62	166.23

PVC-C metric

Butterfly valve type 036 PVC-C FC (Fail safe to close) Without manual override

Connecting dimension: ISO, EN, BS, ANSI

Phase out product will be replaced with type 240



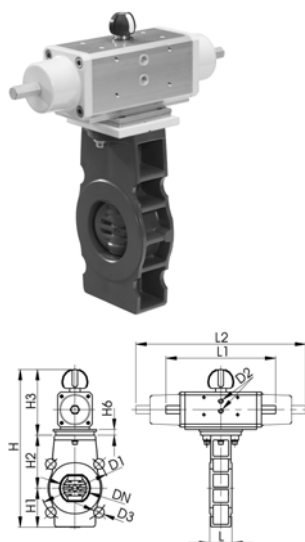
d [mm]	DN [mm]	Inch	PN	kv-value ($\Delta p=1$ bar) [l/min]	Type	EPDM Code	FPM Code	kg	
90	80	3	10	3000	PA 40 FC	199 036 802	199 036 812	6.520	
110	100	4	10	6500	PA 45 FC	199 036 803	199 036 813	10.750	
160	150	6	6	16600	PA 55 FC	199 036 805	199 036 815	18.480	
225	200	8	6	39600	PA 60 FC	199 036 806	199 036 816	21.120	

d [mm]	D [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]
90	49	140.0	145.0	1/8	19.0	49	370	401	92	120	141	12
110	66	150.0	160.0	1/8	19.0	56	411	445	108	138	148	9
160	85	175.0	190.5	1/8	23.0	70	452	551	140	170	169	8
225	110	210.0	216.0	1/8	23.0	71	503	643	175	215	181	8

Butterfly valve type 036 PVC-C FO (Fail safe to open) Without manual override

Connecting dimension: ISO, EN, BS, ANSI

Phase out product will be replaced with type 240



d [mm]	DN [mm]	Inch	PN	kv-value ($\Delta p=1$ bar) [l/min]	Type	EPDM Code	FPM Code	kg	
90	80	3	10	3000	PA 40 FO	199 036 822	199 036 832	6.520	
110	100	4	10	6500	PA 45 FO	199 036 823	199 036 833	10.750	
160	150	6	6	16600	PA 55 FO	199 036 825	199 036 835	18.480	
225	200	8	6	39600	PA 60 FO	199 036 826	199 036 836	21.120	

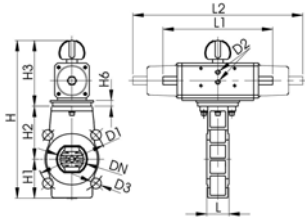
d [mm]	D [mm]	D1 min. [mm]	D1 max. [mm]	D2 [inch]	D3 [mm]	L [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H6 [mm]
90	49	140.0	145.0	1/8	19.0	49	370	401	92	120	141	12
110	66	150.0	160.0	1/8	19.0	56	411	445	108	138	148	9
160	85	175.0	190.5	1/8	23.0	70	452	551	140	170	169	8
225	110	210.0	216.0	1/8	23.0	71	503	643	175	215	181	8



Butterfly valve type 036 PVC-C DA (Double acting) Without manual override

Connecting dimension: ISO, EN, BS, ANSI

Phase out product will be replaced with type 240



d [mm]	DN [mm]	Inch	PN	kv-value ($\Delta p=1$ bar) [l/min]	Type	EPDM Code	FPM Code	kg
90	80	3	10	3000	PA 45 DA	199 036 842	199 036 852	6.520
110	100	4	10	6500	PA 45 DA	199 036 843	199 036 853	
160	150	6	6	16600	PA 55 DA	199 036 845	199 036 855	
225	200	8	6	39600	PA 60 DA	199 036 846	199 036 856	

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]
90	49	140.0	145.0	$\frac{1}{8}$	19.0	49	198	374	92	120	125	12
110	66	150.0	160.0	$\frac{1}{8}$	19.0	56	235	417	108	138	123	12
160	85	175.0	190.5	$\frac{1}{8}$	23.0	70	279	509	140	170	152	13
225	110	210.0	216.0	$\frac{1}{8}$	23.0	71	341	599	175	215	162	13

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General Condition of Supply of Georg Fischer Piping Systems Limited, Schaffhausen

1 General

- 1.1 These General Conditions shall apply to all Products supplied by Georg Fischer to the Purchaser. They shall also apply to all future business even when no express reference is made to them.
- 1.2 Any deviating or supplementary conditions especially Purchaser's general conditions of purchase and verbal agreements shall only be applicable if accepted in writing by Georg Fischer.
- 1.3 The written form shall be deemed to be fulfilled by all forms of transmission, evidenced in the form of text, such as telefax, e-mail, etc.

2 Tenders

- 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

- 16.1 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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