

**Product Range  
International  
2013**

**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

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# Application area of pipes and fittings

## General

The choice of material and the pressure rating of the pipe components are important for both operating safety and for attaining the specified minimum operational life of the system.

The decisive factors are:

- operating pressure
- operating temperature
- medium transported
- duration of service.

Separate calculations are necessary if safety factors are different or the operational lifetime is modified.

The chemical resistance of the material used can be determined from our special list for "Chemical resistance of thermoplastics and elastomers for piping systems".

## Pressure/temperature diagram for PVC-C

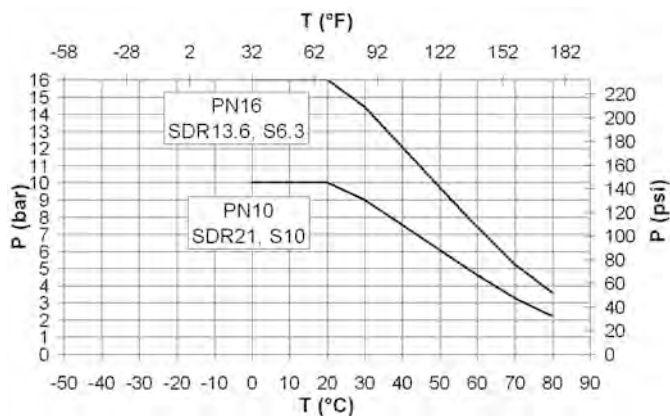
The following pressure/temperature diagram for PVC-C pipes and fittings is valid for a lifetime of 25 years.

The design factor recommended by GF is incorporated.

It can be used for water or media resembling water, in other words, media which have no derating factor regarding the chemical resistance.

**Remark:** Please take into account the pressure/temperature diagrams for valves and special fittings. Because of the construction and/or sealing material used, differences are possible when compared with pipes and fittings. This information can be found in the planning fundamentals of the relevant types of valves, respectively special fittings.

Under certain conditions working temperatures up to 90 °C are possible for limited times. Please contact your local GF representative for advice on any applications lying outside of our standard guidelines.

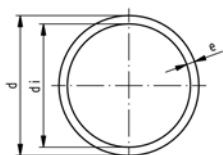


P Permissible pressure in bar, psi

T Temperature in °C, °F

# PVC-C

## Pipes



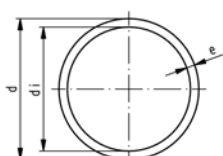
### Pipe PVC-C, metric

#### Series S4, SDR 9, nominal pressure PN 16 (at 20°C)

**Model:**

- Material: PVC-C
- Colour: RAL 7038 - agate grey
- Dimension: DIN 8079
- Pipe length: 5m, with plain ends
- Minimum order quantity: 1 length

d [mm]	PN	Code	kg/m	e [mm]	di [mm]
16	16	<b>163 017 130</b>	0.136	1,8	12.4
20	16	<b>163 017 131</b>	0.217	2,3	15.4
25	16	<b>163 017 132</b>	0.326	2,8	20.2



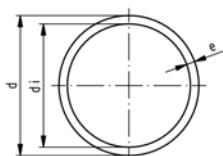
### Pipe PVC-C, metric

#### Series S 6.3, SDR 13.6, nominal pressure PN 16 (at 20°C)

**Model:**

- Material: PVC-C
- Colour: RAL 7038 - agate grey
- Dimension: DIN 8079
- Pipe length: 5m, with plain ends
- Minimum order quantity: 1 length

d [mm]	PN	Code	kg/m	e [mm]	di [mm]
32	16	<b>163 017 133</b>	0.379	2.4	26.0
40	16	<b>163 017 134</b>	0.589	3.0	34.0
50	16	<b>163 017 135</b>	0.896	3.7	42.0
63	16	<b>163 017 136</b>	1.420	4.7	53.0
75	16	<b>163 017 137</b>	2.010	5.6	63.0
90	16	<b>163 017 138</b>	2.880	6.7	76.0
110	16	<b>163 017 139</b>	4.270	8.2	93.0
160	16	<b>163 017 142</b>	8.970	11.9	136.0



### Pipe PVC-C, metric

#### Series S10, SDR 21, nominal pressure PN 10 (at 20°C)

**Model:**

- Material: PVC-C
- Colour: RAL 7038 - agate grey
- Dimension: DIN 8079
- Pipe length: 5m, with plain ends
- Minimum order quantity: 1 length

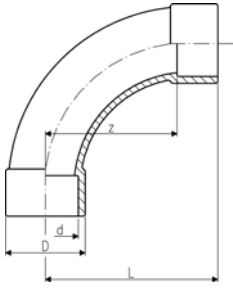
d [mm]	PN	Code	kg/m	e [mm]	di [mm]
75	10	<b>163 017 187</b>	1.320	3,6	67.8
90	10	<b>163 017 188</b>	1.930	4,3	81.4
110	10	<b>163 017 189</b>	2.890	5,3	99.4
160	10	<b>163 017 192</b>	6.060	7,7	124.6
225	10	<b>163 017 195</b>	11.900	10,8	203.4

# PVC-C

## Fittings

23 00 01

### Bend 90°, PVC-C metric

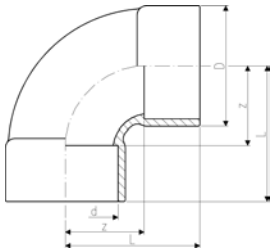


d [mm]	PN	Code	SP	kg	z [mm]	D [mm]	L [mm]
20	16	723 000 106	10	0.030	40	27	58
25	16	723 000 107	10	0.055	50	35	71
32	16	723 000 108	10	0.075	64	38	88
40	16	723 000 109	30	0.141	80	54	109
50	16	723 000 110	5	0.297	100	61	131
63	16	723 000 111	5	0.574	126	76	163
75	16	723 000 112	1	0.830	150	90	194
90	16	723 000 113	5	1.489	180	113	231
110	16	723 000 114	5	2.965	220	137	284
160	16	723 000 117	0	7.950	320	192	406

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### Bend 90°, short pattern, PVC-C metric

- Radius = 0,75 d



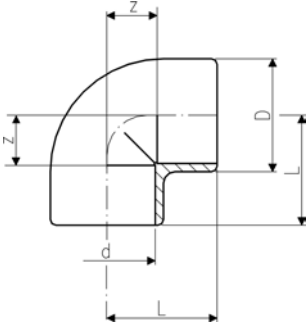
d [mm]	PN	Code	SP	kg	z [mm]	D [mm]	L [mm]
225	10	723 010 120	0	7.950	168	256	287



# PVC-C

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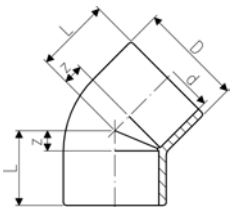
## Elbow 90°, PVC-C metric



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	10	0.310	33	76	72
75	16	723 100 112	5	0.439	40	90	84
90	16	723 100 113	5	0.606	46	110	97
110	16	723 100 114	2	1.120	61	136	122
160	16	723 100 117	1	3.120	80	185	166

23 15 01

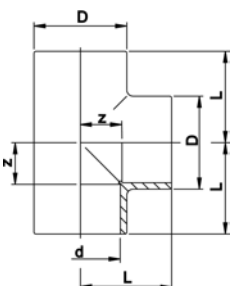
## Elbow 45°, PVC-C metric



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	10	0.208	14	76	52
75	16	723 150 112	5	0.323	17	88	61
90	16	723 150 113	5	0.521	20	106	71
110	16	723 150 114	10	1.151	28	137	89
160	16	723 150 117	1	2.400	36	185	122
225	10	723 150 120	0	4.460	49	250	168

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## Tee 90°, PVC-C metric

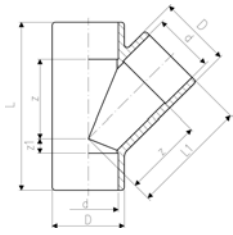


d [mm]	PN	Code	SP	kg	z [mm]	D [mm]	L [mm]
16	16	723 200 105	10	0.014	9	21	23
20	16	723 200 106	10	0.020	11	25	27
25	16	723 200 107	10	0.034	14	31	33
32	16	723 200 108	10	0.060	17	40	39
40	16	723 200 109	10	0.106	21	49	47
50	16	723 200 110	10	0.186	26	61	57
63	16	723 200 111	10	0.360	34	76	72
75	16	723 200 112	5	0.645	41	90	84
90	16	723 200 113	5	1.118	46	107	97
110	16	723 200 114	3	1.446	55	128	116
160	16	723 200 117	0	5.280	81	193	167
225	10	723 200 120	1	9.550	114	256	233

# PVC-C

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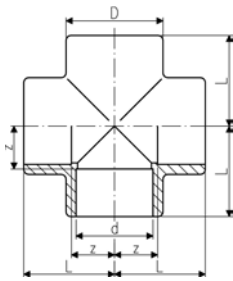
## Tee 45°, PVC-C metric



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	10	0.171	56	10	50	118	82
50	10	723 250 110	10	0.287	66	12	60	140	97
63	10	723 250 111	10	0.445	85	14	74	175	123
75	6	723 250 112	5	0.870	101	18	91	207	145
90	6	723 250 113	1	1.344	122	20	107	245	173
110	6	723 250 114	3	2.695	149	27	134	298	210

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## Cross, PVC-C metric



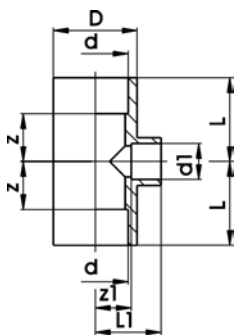
d [mm]	PN	Code	SP	kg	z [mm]	D [mm]	L [mm]
32	16	723 300 108	0	0.101	17	43	39
63	16	723 300 111	0	0.528	34	79	72

# PVC-C

23 20 01

## Tee 90° reducing, PVC-C metric

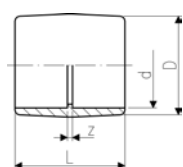
\*Tee 90° delivered with the required reducing bushes



d [mm]	d1 [mm]	PN	Code	SP	kg	z [mm]	z1 [mm]	D [mm]	L [mm]	L1 [mm]
25	20	16	<b>723 200 134</b>	10	0.042	14	14	33	33	30
32	25	16	<b>723 200 138</b>	10	0.070	17	17	41	39	36
40	25	16	<b>723 200 151</b>	10	0.120	23	23	50	49	42
40	32	16	<b>723 200 147</b>	10	0.120	23	23	50	49	45
50	20	16	<b>723 200 009</b>	5	0.196	28	28	62	59	44
50	25	16	<b>723 200 010</b>	5	0.200	28	28	62	59	47
50	32	16	<b>723 200 164</b>	5	0.200	28	28	62	59	50
63	25	16	<b>723 200 011</b>	10	0.360	34	34	77	73	53
63	32	16	<b>723 200 178</b>	5	0.368	35	34	77	73	56
63	50	16	<b>723 200 170</b>	5	0.386	35	34	77	73	65
* 75	63	16	<b>723 200 184</b>	8	0.766	41	47	92	84	84
* 90	32	16	<b>723 200 142</b>	6	1.436	46	75	111	97	97
* 90	63	16	<b>723 200 145</b>	5	1.348	46	66	111	97	97
* 110	32	16	<b>723 200 135</b>	3	2.796	55	101	128	116	116
* 110	90	16	<b>723 200 137</b>	3	2.677	55	71	128	116	116

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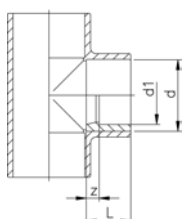
## Socket, PVC-C metric



d [mm]	PN	Code	SP	kg	z [mm]	D [mm]	L [mm]
16	16	<b>723 910 105</b>	10	0.008	3	22	31
20	16	<b>723 910 106</b>	10	0.010	3	26	35
25	16	<b>723 910 107</b>	10	0.015	3	31	41
32	16	<b>723 910 108</b>	10	0.024	3	39	47
40	16	<b>723 910 109</b>	10	0.042	3	49	55
50	16	<b>723 910 110</b>	10	0.078	3	61	65
63	16	<b>723 910 111</b>	10	0.157	3	76	79
75	16	<b>723 910 112</b>	10	0.202	4	87	92
90	16	<b>723 910 113</b>	10	0.347	5	110	107
110	16	<b>723 910 114</b>	5	0.760	5	131	132
160	16	<b>723 910 117</b>	1	1.600	8	183	180
225	10	<b>723 910 120</b>	1	3.750	10	253	248

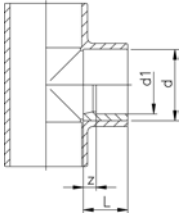
23 90 03

## Reducing Bush, short pattern, PVC-C metric



d [mm]	d1 [mm]	PN	Code	SP	kg	z [mm]	L [mm]
20	16	16	<b>723 900 334</b>	10	0.004	2	16
25	20	16	<b>723 900 337</b>	10	0.004	3	19
32	20	16	<b>723 900 342</b>	10	0.015	6	22
32	25	16	<b>723 900 341</b>	10	0.009	4	22
40	20	16	<b>723 900 348</b>	10	0.023	10	26
40	25	16	<b>723 900 347</b>	10	0.024	7	26
40	32	16	<b>723 900 346</b>	10	0.017	4	26
50	20	16	<b>723 900 355</b>	10	0.036	15	31
50	25	16	<b>723 900 354</b>	10	0.038	12	31
50	32	16	<b>723 900 353</b>	10	0.051	9	31
50	40	16	<b>723 900 352</b>	10	0.031	5	31
63	32	16	<b>723 900 360</b>	10	0.088	16	38
63	40	16	<b>723 900 359</b>	10	0.067	12	38
63	50	16	<b>723 900 358</b>	10	0.065	6	38
75	50	16	<b>723 900 365</b>	10	0.105	13	44
75	63	16	<b>723 900 364</b>	10	0.083	6	44
90	50	16	<b>723 900 372</b>	10	0.196	20	51

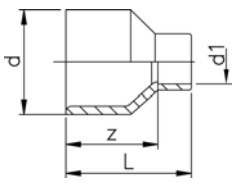
# PVC-C



d [mm]	d1 [mm]	PN	Code	SP	kg	z [mm]	L [mm]
90	63	16	723 900 371	10	0.185	14	51
90	75	16	723 900 370	10	0.190	8	51
110	63	16	723 900 378	5	0.334	24	61
110	90	16	723 900 376	5	0.279	10	61
160	110	16	723 900 390	5	0.966	25	86
225	160	16	723 900 396	2	2.380	33	119

23 91 03

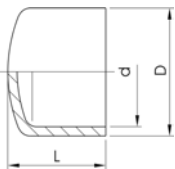
## Reducing Bush, long pattern, PVC-C metric



d [mm]	d1 [mm]	PN	Code	SP	kg	z [mm]	L [mm]
32	20	16	723 910 342	10	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	5	0.313	74	112

23 96 01

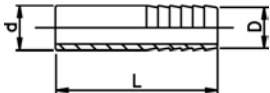
## Cap, PVC-C metric



d [mm]	PN	Code	SP	kg	D [mm]	L [mm]
16	16	723 960 105	0	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	0.027	44	34
40	16	723 960 109	0	0.047	55	41
50	16	723 960 110	0	0.064	64	44
63	16	723 960 111	5	0.127	80	54
75	16	723 960 112	5	0.162	87	65
90	16	723 960 113	10	0.324	112	77
110	16	723 960 114	5	0.690	145	101
160	16	723 960 117	2	1.550	188	130

23 96 04

## Hose Nozzle, PVC-C metric



Model:

- With solvent cement spigot and parallel hose connection

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

## Adaptor Fittings

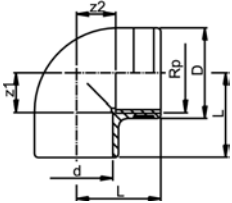
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### Elbow 90°, PVC-C metric - Rp

**Model:**

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

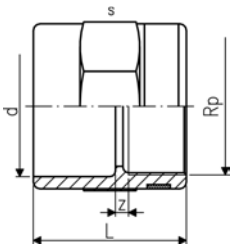


d [mm]	Rp [inch]	PN	Code	SP	kg	z1 [mm]	z2 [mm]	D [mm]	L [mm]
20	1/2	16	723 100 206	0	0.024	11	14	30	27
25	3/4	16	723 100 207	10	0.037	14	17	35	33
32	1	16	723 100 208	40	0.064	17	22	45	39
40	1 1/4	16	723 100 209	100	0.134	23	27	55	50
50	1 1/2	16	723 100 210	30	0.200	27	36	62	58
63	2	16	723 100 211	10	0.376	33	46	75	73

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### Socket, PVC-C metric - Rp

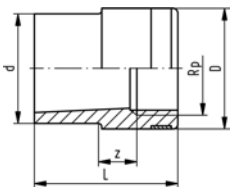


d [mm]	Rp [inch]	PN	Code	SP	kg	z [mm]	L [mm]	s [mm]
20	1/2	16	723 910 206	10	0.027	4	35	32
25	3/4	16	723 910 207	10	0.035	3	40	36
32	1	16	723 910 208	10	0.061	3	45	46
40	1 1/4	16	723 910 209	10	0.094	5	51	55
50	1 1/2	16	723 910 210	10	0.133	7	59	65
63	2	16	723 910 211	5	0.220	7	69	80

23 91 04



### Reducing Bush, PVC-C metric - Rp

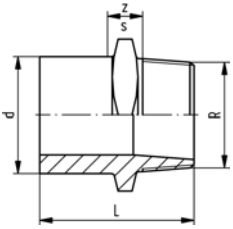


d [mm]	Rp [inch]	PN	Code	SP	kg	z [mm]	D [mm]	L [mm]	s [mm]
20	3/8	16	723 910 434	10	0.016	24	25	35	15
25	1/2	16	723 910 437	10	0.023	27	30	41	21
32	3/4	16	723 910 441	10	0.035	32	35	48	33
40	1	16	723 910 446	10	0.064	38	45	56	60
50	1 1/4	16	723 910 452	10	0.105	46	55	66	99
63	1 1/2	16	723 910 458	5	0.153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

# PVC-C

23 91 05

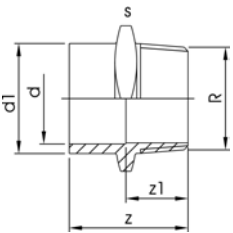
## Adaptor Nipple, PVC-C metric - R



d [mm]	R [inch]	PN	Code	SP	kg	z [mm]	s [mm]
16	3/8	16	723 910 505	0	0.012	35	27

23 91 05

## Adaptor Socket-Nipple, PVC-C metric - R



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

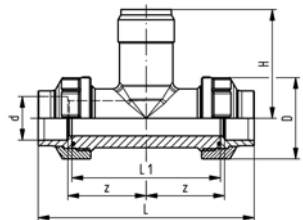
23 31 00

## Installation Fitting Type 310, PVC-C for Socket Systems metric



### Model:

- Threaded outlet 1 1/4" NPSM
- For Signet Paddlewheel Sensors Type -X0 (104 mm)
- Body and union nut PVDF
- Union end with solvent cement socket PVC-C



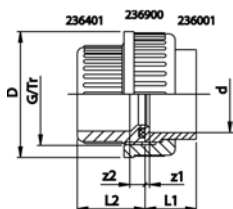
d [mm]	DN [mm]	PN	EPDM Code	FPM Code	kg
20	15	16	723 310 006	723 310 036	0.250
25	20	16	723 310 007	723 310 037	0.355
32	25	16	723 310 008	723 310 038	0.427
40	32	16	723 310 009	723 310 039	0.700
50	40	16	723 310 010	723 310 040	0.850
63	50	16	723 310 011	723 310 041	1.182

d [mm]	DN [mm]	D [mm]	z [mm]	L [mm]	L1 [mm]	H [mm]	Sensor Type
20	15	45	49	132	90	76	X0
25	20	55	53	148	100	78	X0
32	25	62	58	164	110	81	X0
40	32	75	58	172	110	85	X0
50	40	84	63	188	120	89	X0
63	50	101	68	212	130	95	X0

# PVC-C

## Unions

### 23 51 01



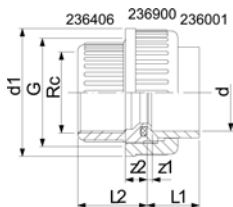
### Solvent Cement Unions, PVC-C

**Model:**

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

d [mm]	PN	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	0.027	3	8	35	19	24	3/4
20	16	723 510 106	723 510 131	0	0.044	3	9	43	21	26	1
25	16	723 510 107	723 510 132	0	0.072	3	9	53	24	29	1 1/4
32	16	723 510 108	723 510 133	0	0.098	3	9	60	27	33	1 1/2
40	16	723 510 109	723 510 134	0	0.167	3	10	74	32	39	2
50	16	723 510 110	723 510 135	0	0.098	3	10	83	33	46	2 1/4
63	16	723 510 111	723 510 136	0	0.400	3	10	103	40	58	2 3/4
75	10	723 510 112	723 510 137	2	0.670	3	18	135	47	62	Tr108x5
90	10	723 510 113	723 510 138	2	1.008	5	18	158	56	69	Tr128x5
110	10	723 510 114	723 510 139	1	1.553	5	11	188	66	72	Tr154x6

### 23 51 02



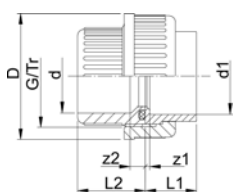
### Adaptor Union, PVC-C metric - Rp

**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 threads 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	0.022	3	13	35	17	24	3/4
20	1/2	16	723 510 206	723 510 231	0	0.040	3	13	43	19	26	1
25	3/4	16	723 510 207	723 510 232	0	0.065	3	14	51	22	29	1 1/4
32	1	16	723 510 208	723 510 233	0	0.103	3	15	58	25	32	1 1/2
40	1 1/4	16	723 510 209	723 510 234	0	0.174	3	19	74	29	38	2
50	1 1/2	16	723 510 210	723 510 235	0	0.239	3	26	83	34	45	2 1/4
63	2	16	723 510 211	723 510 236	0	0.435	3	33	100	41	56	2 3/4

### 23 51 41



### Adaptor Unions, PVC-C metric-ASTM

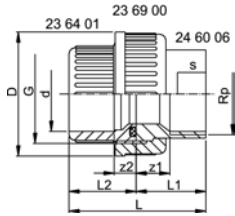
**Model:**

- 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	0.022	4	10	35	17	24	3/4
20	1/2	10	723 514 106	723 514 131	0	0.047	2	10	43	19	26	1
25	3/4	10	723 514 107	723 514 132	0	0.065	4	10	51	22	29	1 1/4
32	1	10	723 514 108	723 514 133	0	0.103	4	10	58	25	33	1 1/2
40	1 1/4	10	723 514 109	723 514 134	0	0.174	6	12	74	29	39	2
50	1 1/2	10	723 514 110	723 514 135	0	0.239	11	14	83	34	46	2 1/4
63	2	10	723 514 111	723 514 136	0	0.435	17	18	100	41	58	2 3/4

# PVC-C

23 54 02



## Adaptor Union, PVC-C / Stainless Steel metric - Rp

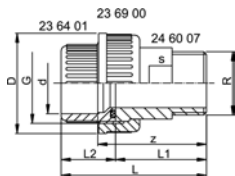
### Model:

- 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	0.053
20	1/2	16	723 540 206	723 540 231	0	0.096
25	3/4	16	723 540 207	723 540 232	0	0.154
32	1	16	723 540 208	723 540 233	0	0.212
40	1 1/4	16	723 540 209	723 540 234	0	0.356
50	1 1/2	16	723 540 210	723 540 235	0	0.455
63	2	16	723 540 211	723 540 236	0	0.721

d [mm]	z1 [mm]	z2 [mm]	D [mm]	L [mm]	L1 [mm]	L2 [mm]	G [inch]	s [mm]
16	9	10	35	43	19	24	3/4	19
20	11	10	43	50	24	26	1	24
25	11	10	51	55	26	29	1 1/4	29
32	12	10	58	61	29	33	1 1/2	36
40	14	12	74	71	33	39	2	45
50	15	14	83	79	34	46	2 1/4	54
63	15	18	100	95	39	58	2 3/4	63

23 54 07



## Adaptor Union, PVC-C / Stainless Steel 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

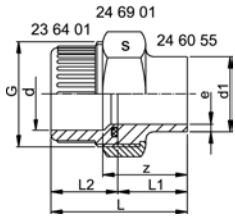
d [mm]	R [inch]	PN	EPDM Code	FPM Code	SP	kg
16	3/8	16	723 540 705	723 540 730	0	0.073
20	1/2	16	723 540 706	723 540 731	0	0.126
25	3/4	16	723 540 707	723 540 732	0	0.174
32	1	16	723 540 708	723 540 733	0	0.262
40	1 1/4	16	723 540 709	723 540 734	0	0.476
50	1 1/2	16	723 540 710	723 540 735	0	0.535
63	2	16	723 540 711	723 540 736	0	0.931

d [mm]	z [mm]	D [mm]	L [mm]	L1 [mm]	L2 [mm]	G [inch]	s [mm]
16	40	35	54	30	24	3/4	19
20	44	43	60	34	26	1	24
25	46	51	65	36	29	1 1/4	32
32	50	58	72	40	33	1 1/2	37
40	58	74	84	46	39	2	48
50	62	83	93	48	46	2 1/4	54
63	73	100	111	55	58	2 3/4	69



# PVC-C

23 54 55



## Adaptor Union, PVC-C / Stainless Steel metric - Welding End

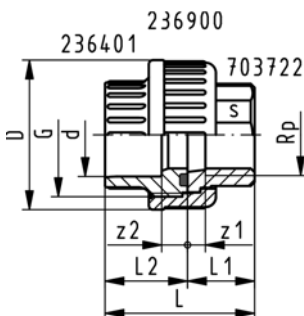
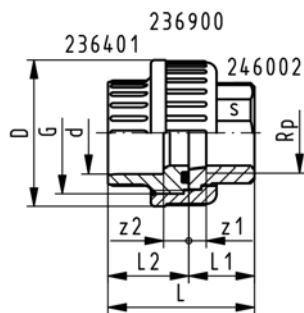
### Model:

- 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	0.101
20	21	16	723 545 506	723 545 531	0	0.176
25	27	16	723 545 507	723 545 532	0	0.204
32	34	16	723 545 508	723 545 533	0	0.313
40	42	16	723 545 509	723 545 534	0	0.493
50	48	16	723 545 510	723 545 535	0	0.566
63	60	16	723 545 511	723 545 536	0	0.902

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

23 53 03



## Adaptor Union, PVC-C / malleable iron metric - Rp

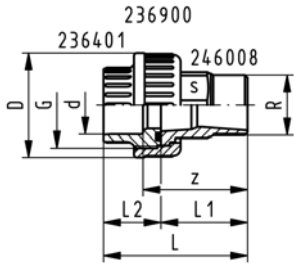
### Model:

- Union Nut: PVC-C
- Union Bush: Solvent cement socket PVC-C metric
- Union End: malleable iron with parallel female thread Rp
- Gasket: O-Ring EPDM No. 48 41 00

d [mm]	Rp [inch]	Code	SP	kg	D [mm]	L [mm]	L1 [mm]	L2 [mm]	z1 [mm]	z2 [mm]	G [inch]	s [mm]
20	1/2	723 530 306	1	0.075	43	48	22	26	9	10	1	25
25	3/4	723 530 307	1	0.112	51	51	22	29	7	10	1 1/4	31
32	1	723 530 308	1	0.157	58	58	26	33	9	10	1 1/2	38
40	1 1/4	723 530 309	1	0.300	72	69	31	39	12	12	2	48
50	1 1/2	723 530 310	1	0.384	83	78	33	46	14	14	2 1/4	54
63	2	723 530 311	1	0.603	100	91	35	58	11	18	2 3/4	67

# PVC-C

23 53 08



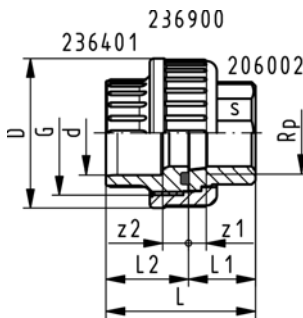
## Adaptor Union, PVC-C / malleable iron metric - R

### Model:

- Union Nut: PVC-C
- Union Bush: Solvent cement socket PVC-C metric
- Union End: Malleable iron with taper male thread R
- Gasket: O-Ring EPDM No. 48 41 00

d [mm]	R [inch]	Code	SP	kg	D [mm]	L [mm]	L1 [mm]	L2 [mm]	z [mm]	G [inch]	s [mm]
20	1/2	<b>723 530 806</b>	1	0.114	43	66	40	26	50	1	25
25	3/4	<b>723 530 807</b>	1	0.165	51	72	43	29	53	1 1/4	31
32	1	<b>723 530 808</b>	1	0.205	58	80	48	33	58	1 1/2	38
40	1 1/4	<b>723 530 809</b>	1	0.403	72	95	57	39	69	2	48
50	1 1/2	<b>723 530 810</b>	1	0.539	83	104	59	46	73	2 1/4	54
63	2	<b>723 530 811</b>	1	0.787	100	118	62	58	80	2 3/4	67

23 55 03



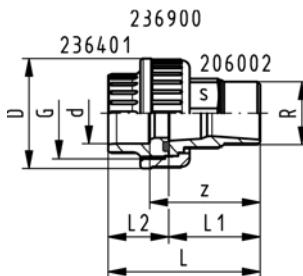
## Adaptor Union, PVC-C / Brass metric - Rp

### Model:

- Union Nut: PVC-C
- Union Bush: Solvent cement socket PVC-C metric
- Union End: Brass with parallel female thread Rp
- Gasket: O-Ring EPDM No. 48 41 00

d [mm]	Rp [inch]	Code	SP	kg	D [mm]	L [mm]	L1 [mm]	L2 [mm]	z1 [mm]	z2 [mm]	G [inch]	s [mm]
20	1/2	<b>723 550 306</b>	1	0.086	43	48	22	26	10	10	1	25
25	3/4	<b>723 550 307</b>	1	0.123	51	51	22	29	6	10	1 1/4	31
32	1	<b>723 550 308</b>	1	0.184	58	58	27	33	8	10	1 1/2	38
40	1 1/4	<b>723 550 309</b>	1	0.336	72	69	31	39	10	12	2	48
50	1 1/2	<b>723 550 310</b>	1	0.414	83	75	30	46	9	14	2 1/4	54
63	2	<b>723 550 311</b>	1	0.702	100	90	34	58	8	18	2 3/4	67

23 55 08



## Adaptor Union, PVC-C / Brass metric - R

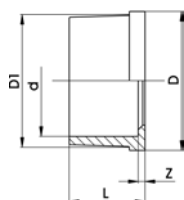
### Model:

- Union Nut: PVC-C
- Union Bush: Solvent cement socket PVC-C metric
- Union End: Brass with taper male thread R
- Gasket: O-Ring EPDM No. 48 41 00

d [mm]	R [inch]	Code	SP	kg	D [mm]	L [mm]	L1 [mm]	L2 [mm]	z [mm]	G [inch]	s [mm]
20	1/2	<b>723 550 806</b>	1	0.125	43	63	37	26	47	1	25
25	3/4	<b>723 550 807</b>	1	0.178	51	69	40	29	50	1 1/4	31
32	1	<b>723 550 808</b>	1	0.270	58	75	43	33	53	1 1/2	38
40	1 1/4	<b>723 550 809</b>	1	0.468	72	86	48	39	60	2	48
50	1 1/2	<b>723 550 810</b>	1	0.650	83	95	50	46	64	2 1/4	54
63	2	<b>723 550 811</b>	1	0.972	100	113	57	58	75	2 3/4	67

# PVC-C

23 60 01



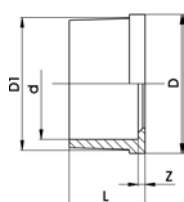
## Union End, PVC-C

### Model:

- For union 23 51 01
- With solvent cement socket metric

d [mm]	PN	Code	SP	kg	z [mm]	D [mm]	D1 [mm]	L [mm]
16	16	<b>723 600 105</b>	0	0.006	3	24	22	19
20	16	<b>723 600 106</b>	0	0.010	4	30	28	21
25	16	<b>723 600 107</b>	0	0.018	3	39	36	24
32	16	<b>723 600 108</b>	0	0.023	3	44	41	27
40	16	<b>723 600 109</b>	0	0.062	3	57	53	31
50	16	<b>723 600 110</b>	380	0.064	3	63	59	34
63	16	<b>723 600 111</b>	0	0.120	3	78	74	41
75	10	<b>723 600 162</b>	0	0.157	3	101	91	47
90	10	<b>723 600 163</b>	0	0.260	5	121	108	56
110	10	<b>723 600 164</b>	0	0.418	5	146	131	66

23 60 20



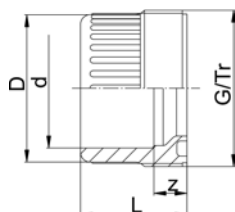
## Union Ends, PVC-C ASTM

### Model:

- For union 23 51 01
- With solvent cement socket ASTM

Inch	PN	Code	SP	kg	z [mm]	D [mm]	D1 [mm]	L [mm]
3/8	16	<b>723 602 005</b>	0	0.007	3	24	22	22
1/2	16	<b>723 602 006</b>	0	0.010	3	30	28	25
3/4	16	<b>723 602 007</b>	0	0.017	3	39	36	28
1	16	<b>723 602 008</b>	0	0.024	3	45	42	32
1 1/4	16	<b>723 602 009</b>	0	0.040	3	57	53	35
1 1/2	16	<b>723 602 010</b>	0	0.057	3	63	59	38
2	16	<b>723 602 011</b>	0	0.096	3	78	74	41

23 64 01



## Union Bush, PVC-C

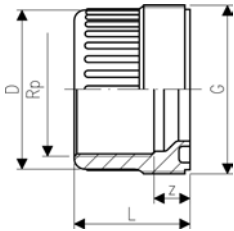
### Model:

- 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	<b>723 640 105</b>	0	0.009	11	24	25	3/4
20	16	<b>723 640 106</b>	0	0.014	12	28	26	1
25	16	<b>723 640 107</b>	0	0.024	11	33	29	1 1/4
32	16	<b>723 640 108</b>	0	0.038	10	41	33	1 1/2
40	16	<b>723 640 109</b>	0	0.066	12	50	39	2
50	16	<b>723 640 110</b>	0	0.083	14	62	46	2 1/4
63	16	<b>723 640 111</b>	0	0.158	19	77	58	2 3/4
75	10	<b>723 640 112</b>	0	0.230	18	93	62	Tr108x5
90	10	<b>723 640 113</b>	0	0.345	18	110	69	Tr128x5
110	10	<b>723 640 114</b>	0	0.480	11	133	72	Tr154x6

# PVC-C

23 64 06



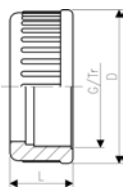
## Union Bushes Rp, PVC-C

**Model:**

- For union 23 51 01
- With parallel female thread Rp
- Jointing face: With O-Ring groove
- Gasket: O-Ring EPDM No. 48 41 00, FPM No. 49 41 00
- Connection to plastic threads only
- Do not use thread sealing pastes that are harmful to PVC-C

Rp [inch]	PN	Code	SP	kg	z [mm]	D [mm]	L [mm]	G [inch]
3/8	10	<b>723 640 605</b>	0	0.012	13	24	24	3/4
1/2	10	<b>723 640 606</b>	0	0.015	13	29	26	1
3/4	10	<b>723 640 607</b>	0	0.024	14	34	29	1 1/4
1	10	<b>723 640 608</b>	10	0.034	15	42	32	1 1/2
1 1/4	10	<b>723 640 609</b>	10	0.060	19	53	38	2
1 1/2	10	<b>723 640 610</b>	0	0.092	26	63	45	2 1/4
2	10	<b>723 640 611</b>	0	0.114	33	78	56	2 3/4

23 69 00



## Union Nut, PVC-C

**Model:**

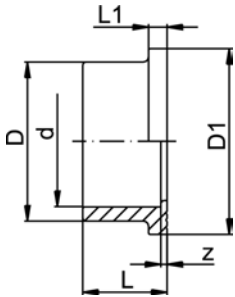
- For union 23 51 01

d [mm]	PN	Code	SP	kg	D [mm]	L [mm]	G/Tr
16	16	<b>723 690 005</b>	0	0.012	35	21	3/4
20	16	<b>723 690 006</b>	0	0.020	43	23	1
25	16	<b>723 690 007</b>	0	0.022	51	24	1 1/4
32	16	<b>723 690 008</b>	0	0.032	58	26	1 1/2
40	16	<b>723 690 009</b>	0	0.053	72	29	2
50	16	<b>723 690 010</b>	0	0.100	83	34	2 1/4
63	16	<b>723 690 011</b>	0	0.141	100	38	2 3/4
75	10	<b>723 690 012</b>	0	0.271	135	40	Tr108x5
90	10	<b>723 690 013</b>	0	0.383	158	43	Tr128x5
110	10	<b>723 690 014</b>	0	0.609	188	48	Tr154x6

# PVC-C

## Flange Adaptors

23 79 01



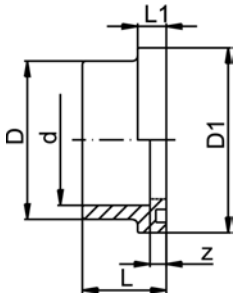
### Flange Adaptor, PVC-C Combined Jointing face flat and serrated, metric

**Model:**

- Gasket: Profile flange gasket EPDM No. 48 44 07, FPM No. 49 44 07
- Gasket: Flat gasket EPDM No. 48 40 03
- Flange: No. 27 70 04, 27 70 02, 21 70 00

d [mm]	DN [mm]	PN	Code	SP	kg	z [mm]	D [mm]	D1 [mm]	L [mm]	L1 [mm]
20	15	16	<b>723 790 106</b>	10	0.012	3	27	34	21	6
25	20	16	<b>723 790 107</b>	0	0.018	3	33	41	24	7
32	25	16	<b>723 790 108</b>	10	0.026	3	41	50	27	7
40	32	16	<b>723 790 109</b>	0	0.044	3	50	61	30	8
50	40	16	<b>723 790 110</b>	0	0.060	3	61	73	34	8
63	50	16	<b>723 790 111</b>	10	0.106	3	76	90	41	9
75	65	16	<b>723 790 112</b>	10	0.167	3	91	106	47	10
90	80	16	<b>723 790 113</b>	10	0.271	5	108	125	56	11
110	100	16	<b>723 790 114</b>	10	0.432	5	131	150	66	12
160	150	16	<b>723 790 117</b>	2	1.200	5	188	213	91	16
200	200	10	<b>723 790 119</b>	2	1.630	6	224	250	112	24
225	200	10	<b>723 790 120</b>	2	1.900	6	248	274	125	25

23 81 01



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

**Model:**

- 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, 21 70 00

d [mm]	PN	Code	SP	kg	z [mm]	D [mm]	D1 [mm]	L [mm]	L1 [mm]
160	16	<b>723 810 117</b>	2	1.300	11	188	213	97	22
225	10	<b>723 810 120</b>	2	2.050	12	248	274	131	31

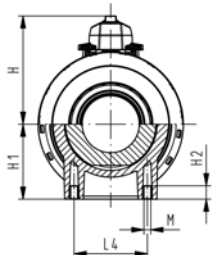
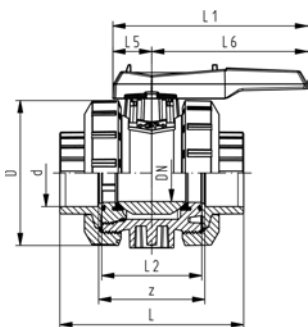
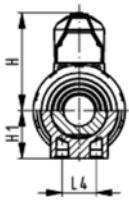
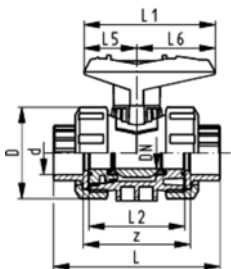
# PVC-C

## Ball valves 2-way

### Ball valve type 546 PVC-C With solvent cement sockets metric



DN10/15 - 50



#### Model:

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

#### 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 (Δp=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
75	65	16	5000	163 546 008	163 546 018	5.300
90	80	16	7000	163 546 009	163 546 019	8.000
110	100	16	11000	163 546 010	163 546 020	12.700

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
75	166	149	85	233	270	136	70	64	206	144
90	200	161	105	254	270	141	70	64	206	151
110	238	178	123	301	320	164	120	64	256	174

# PVC-C

## Ball valve type 546 PVC-C With mounting inserts With solvent cement sockets metric



DN10/15 - 50

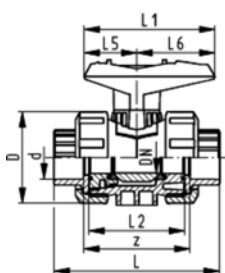


### Model:

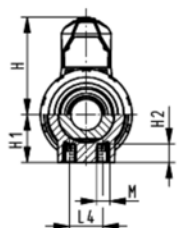
- For easy installation and removal
- z-dimension, valve end and union nut are **not compatible** with type 346 (DN10/15-50) resp. type 370 (DN65-100)
- Ball seals PTFE
- Integrated stainless steel mounting inserts

### Option:

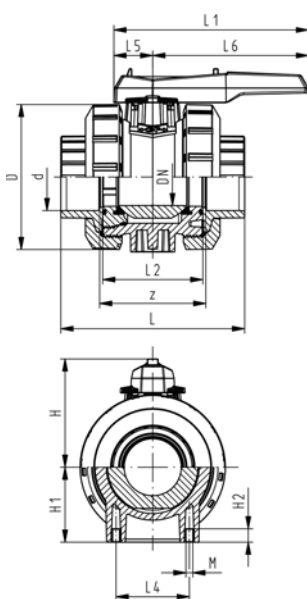
- Individual configuration of the valve (see form)
- Multifunctional module with integrated limit switches
- Pneumatic or electric actuators from +GF+



d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
16	10	16	71	<b>163 546 061</b>	<b>163 546 071</b>	0.160
20	15	16	185	<b>163 546 062</b>	<b>163 546 072</b>	0.160
25	20	16	350	<b>163 546 063</b>	<b>163 546 073</b>	0.245
32	25	16	700	<b>163 546 064</b>	<b>163 546 074</b>	0.365
40	32	16	1000	<b>163 546 065</b>	<b>163 546 075</b>	0.660
50	40	16	1600	<b>163 546 066</b>	<b>163 546 076</b>	0.890
63	50	16	3100	<b>163 546 067</b>	<b>163 546 077</b>	1.650
75	65	16	5000	<b>163 546 068</b>	<b>163 546 078</b>	5.300
90	80	16	7000	<b>163 546 069</b>	<b>163 546 079</b>	8.000
110	100	16	11000	<b>163 546 070</b>	<b>163 546 080</b>	12.700



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
75	166	149	85	15	233	270	136	70	64	206	M8	144
90	200	161	105	15	254	270	141	70	64	206	M8	151
110	238	178	123	22	301	320	164	120	64	256	M12	174



# PVC-C

## Ball valve type 546 PVC-C With solvent cement spigots metric



DN10/15 - 50

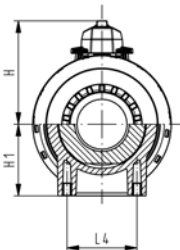
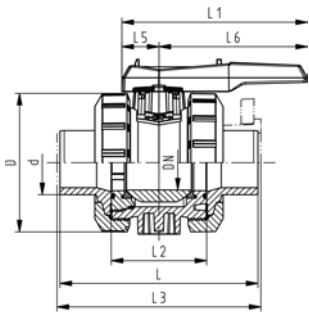
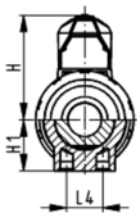
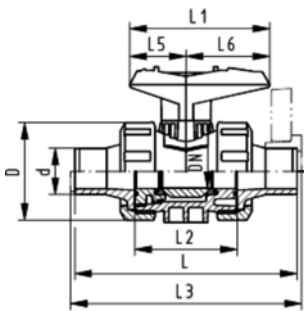


### Model:

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

### 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 (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
16	10	16	71	<b>163 546 041</b>	<b>163 546 051</b>	0.160
20	15	16	185	<b>163 546 042</b>	<b>163 546 052</b>	0.160
25	20	16	350	<b>163 546 043</b>	<b>163 546 053</b>	0.245
32	25	16	700	<b>163 546 044</b>	<b>163 546 054</b>	0.365
40	32	16	1000	<b>163 546 045</b>	<b>163 546 055</b>	0.660
50	40	16	1600	<b>163 546 046</b>	<b>163 546 056</b>	0.890
63	50	16	3100	<b>163 546 047</b>	<b>163 546 057</b>	1.650
75	65	16	5000	<b>163 546 048</b>	<b>163 546 058</b>	5.500
90	80	16	7000	<b>163 546 049</b>	<b>163 546 059</b>	8.200
110	100	16	11000	<b>163 546 050</b>	<b>163 546 060</b>	12.900

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
75	166	149	85	284	270	136	290	70	64	206
90	200	161	105	300	270	141	310	70	64	206
110	238	178	123	340	320	164	350	120	64	256



# PVC-C

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



DN10/15 - 50

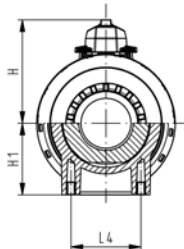
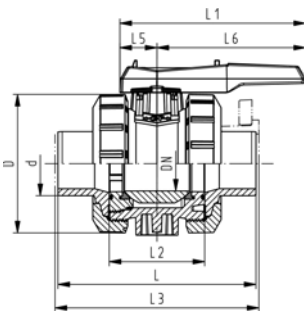
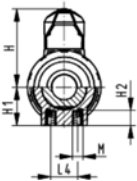
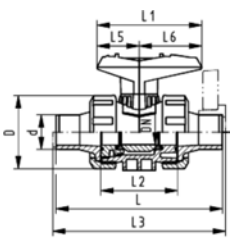


### Model:

- For easy installation and removal
- z-dimension, valve end and union nut are **not compatible** with type 346 (DN10/15-50) resp. type 370 (DN65-100)
- Ball seals PTFE
- 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 (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
16	10	16	71	<b>163 546 381</b>	<b>163 546 391</b>	0.162
20	15	16	185	<b>163 546 382</b>	<b>163 546 392</b>	0.162
25	20	16	350	<b>163 546 383</b>	<b>163 546 393</b>	0.247
32	25	16	700	<b>163 546 384</b>	<b>163 546 394</b>	0.367
40	32	16	1000	<b>163 546 385</b>	<b>163 546 395</b>	0.665
50	40	16	1600	<b>163 546 386</b>	<b>163 546 396</b>	0.895
63	50	16	3100	<b>163 546 387</b>	<b>163 546 397</b>	1.655
75	65	16	5000	<b>163 546 388</b>	<b>163 546 398</b>	5.500
90	80	16	7000	<b>163 546 389</b>	<b>163 546 399</b>	8.200
110	100	16	11000	<b>163 546 390</b>	<b>163 546 400</b>	12.900

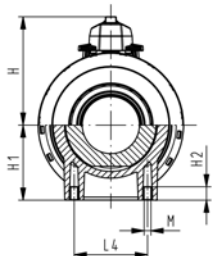
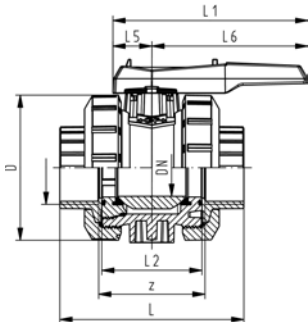
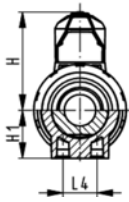
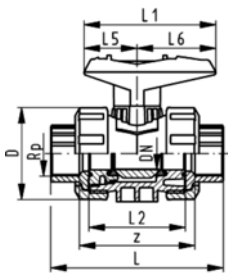
d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	M
16	50	57	27	12	114	77	56		25	32	45	M6
20	50	57	27	12	124	77	56	130	25	32	45	M6
25	58	67	30	12	144	97	65	150	25	39	58	M6
32	68	73	36	12	154	97	71	160	25	39	58	M6
40	84	90	44	15	174	128	85	180	45	54	74	M8
50	97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

# PVC-C

## Ball valve type 546 PVC-C With threaded sockets Rp



DN10/15 - 50



### Model:

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

### 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	<b>163 546 021</b>	<b>163 546 031</b>	0.160
1/2	15	10	185	<b>163 546 022</b>	<b>163 546 032</b>	0.160
3/4	20	10	350	<b>163 546 023</b>	<b>163 546 033</b>	0.245
1	25	10	700	<b>163 546 024</b>	<b>163 546 034</b>	0.365
1 1/4	32	10	1000	<b>163 546 025</b>	<b>163 546 035</b>	0.660
1 1/2	40	10	1600	<b>163 546 026</b>	<b>163 546 036</b>	0.890
2	50	10	3100	<b>163 546 027</b>	<b>163 546 037</b>	1.650
2 1/2	65	10	5000	<b>163 546 028</b>	<b>163 546 038</b>	5.400
3	80	10	7000	<b>163 546 029</b>	<b>163 546 039</b>	8.100
4	100	10	11000	<b>163 546 030</b>	<b>163 546 040</b>	12.700

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

# PVC-C

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



DN10/15 - 50

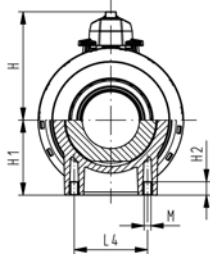
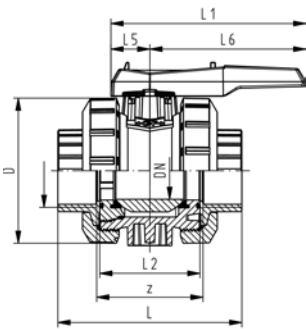
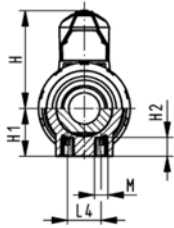
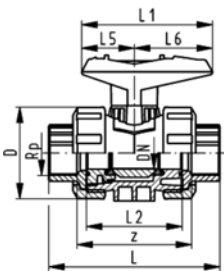


### Model:

- For easy installation and removal
- z-dimension, valve end and union nut are **not compatible** with type 346 (DN10/15-50) resp. type 370 (DN65-100)
- Ball seals PTFE
- 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
2 1/2	65	10	5000	163 546 408	163 546 418	5.400
3	80	10	7000	163 546 409	163 546 419	8.100
4	100	10	11000	163 546 410	163 546 420	12.700

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

# PVC-C



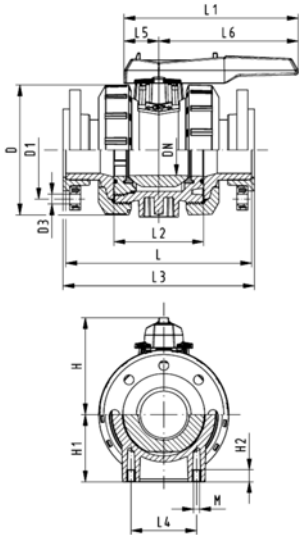
## Ball valve type 546 PVC-C With mounting inserts With backing flanges PP-st metric

### Model:

- For easy installation and removal
- z-dimension, valve end and union nut are **not compatible** with type 346 (DN10/15-50) resp. type 370 (DN65-100)
- Ball seals PTFE
- Integrated stainless steel mounting inserts
- Overall length according to EN 558
- Connecting dimension: ISO 7005, EN 1092, BS 4504, DIN 2501

### 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
75	65	16	5000	<b>163 546 108</b>	<b>163 546 118</b>	6.000
90	80	16	7000	<b>163 546 109</b>	<b>163 546 119</b>	9.100
110	100	16	11000	<b>163 546 110</b>	<b>163 546 120</b>	14.200

d [mm]	D [mm]	D1 [mm]	D3 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	H [mm]	H1 [mm]	M
75	166	145	18	284	270	136	290	70	64	206	149	85	8
90	200	160	18	300	270	141	310	70	64	206	161	105	8
110	238	180	18	340	320	164	350	120	64	256	178	123	12

# PVC-C



DN10/15 - 50



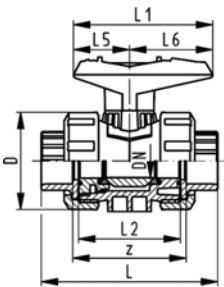
## Ball valve type 546 PVC-C With mounting inserts With solvent cement sockets Inch ASTM Including 2 threaded union ends NPT

### Model:

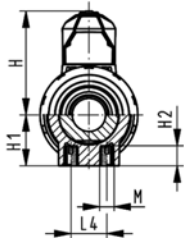
- For easy installation and removal
- z-dimension, valve end and union nut are **not compatible** with type 346 (DN10/15-50) resp. type 370 (DN65-100)
- Ball seals PTFE
- Integrated stainless steel mounting inserts
- Threaded valve ends are only enclosed for DN10/15-50

### Option:

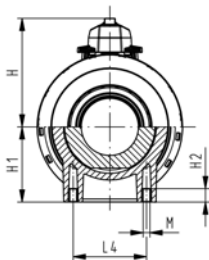
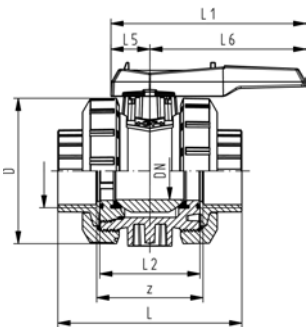
- Individual configuration of the valve (see form)
- Multifunctional module with integrated limit switches
- Pneumatic or electric actuators from +GF+



Inch	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
3/8	10	16	71	<b>163 546 341</b>	<b>163 546 351</b>	0.194
1/2	15	16	185	<b>163 546 342</b>	<b>163 546 352</b>	0.204
3/4	20	16	350	<b>163 546 343</b>	<b>163 546 353</b>	0.304
1	25	16	700	<b>163 546 344</b>	<b>163 546 354</b>	0.464
1 1/4	32	16	1000	<b>163 546 345</b>	<b>163 546 355</b>	0.810
1 1/2	40	16	1600	<b>163 546 346</b>	<b>163 546 356</b>	1.105
2	50	16	3100	<b>163 546 347</b>	<b>163 546 357</b>	2.005



Inch	D [mm]	H [mm]	H1 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	M	z [mm]
3/8	50	57	27	105	77	56	25	32	45	M6	67
1/2	50	57	27	105	77	56	25	32	45	M6	61
3/4	58	67	30	121	97	65	25	39	58	M6	70
1	68	73	36	133	97	71	25	39	58	M6	76
1 1/4	84	90	44	154	128	85	45	54	74	M8	90
1 1/2	97	97	51	164	128	89	45	54	74	M8	94
2	124	116	64	183	152	101	45	66	87	M8	107



# PVC-C



DN10/15 - 50



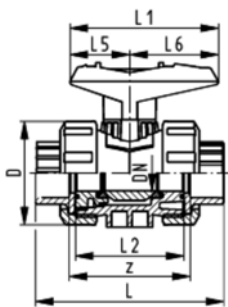
## Ball valve type 546 PVC-C With solvent cement sockets Inch ASTM Including 2 threaded union ends NPT

### Model:

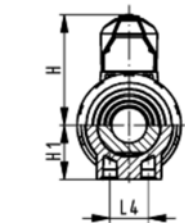
- For easy installation and removal
- z-dimension, valve end and union nut are **not compatible** with type 346 (DN10/15-50) resp. type 370 (DN65-100)
- Ball seals PTFE
- Without mounting inserts
- Threaded valve ends are only enclosed for DN10/15-50

### Option:

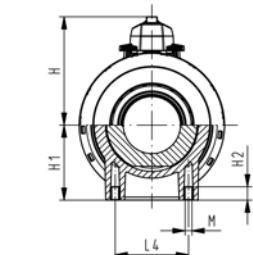
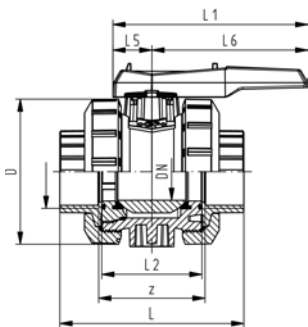
- Individual configuration of the valve (see form)
- Multifunctional module with integrated limit switches
- Pneumatic or electric actuators from +GF+



Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
3/8	10	16	71	<b>163 546 301</b>	<b>163 546 311</b>	0.190
1/2	15	16	185	<b>163 546 302</b>	<b>163 546 312</b>	0.200
3/4	20	16	350	<b>163 546 303</b>	<b>163 546 313</b>	0.300
1	25	16	700	<b>163 546 304</b>	<b>163 546 314</b>	0.460
1 1/4	32	16	1000	<b>163 546 305</b>	<b>163 546 315</b>	0.800
1 1/2	40	16	1600	<b>163 546 306</b>	<b>163 546 316</b>	1.095
2	50	16	3100	<b>163 546 307</b>	<b>163 546 317</b>	1.995
2 1/2	65	16	5000	<b>163 546 308</b>	<b>163 546 318</b>	5.400
3	80	16	7000	<b>163 546 309</b>	<b>163 546 319</b>	8.100
4	100	16	11000	<b>163 546 310</b>	<b>163 546 320</b>	12.800



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



# PVC-C



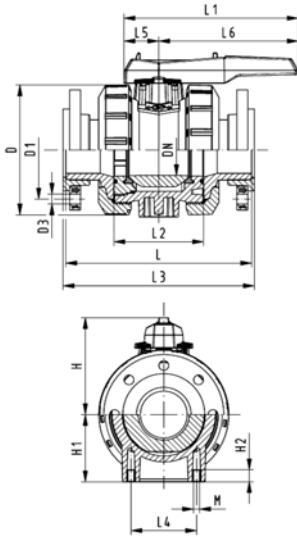
## Ball valve type 546 PVC-C With mounting inserts With backing flanges PP-st Inch ANSI

### Model:

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

### Option:

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



Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg	
2 1/2	65	16	5000	<b>163 546 168</b>	<b>163 546 178</b>	6.000	
3	80	16	7000	<b>163 546 169</b>	<b>163 546 179</b>	9.100	
4	100	16	11000	<b>163 546 170</b>	<b>163 546 180</b>	14.200	

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



# PVC-C



DN10/15 - 50



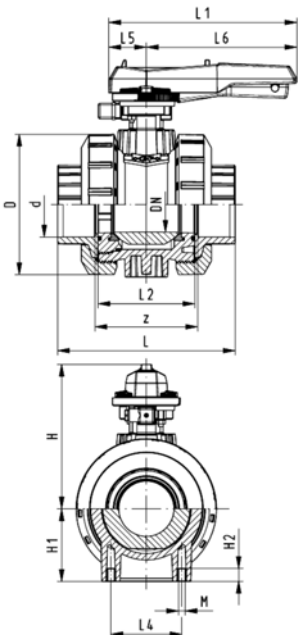
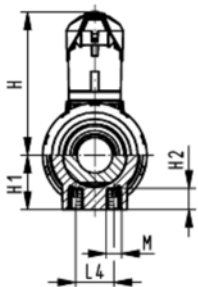
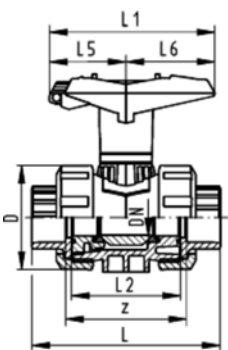
## Ball valve type 546 PVC-C With lockable handle With solvent cement sockets metric

### Model:

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

### Option:

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



d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
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
75	65	16	5000	163 546 088	163 546 098	0.001
90	80	16	7000	163 546 089	163 546 099	0.001
110	100	16	11000	163 546 090	163 546 100	0.001

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
75	166	224	85	15	233	270	136	70	64	206	M8	144
90	200	235	105	15	254	270	141	70	64	206	M8	151
110	238	245	123	22	301	320	164	120	64	256	M12	174



# PVC-C

## Ball valve type 546 PVC-C With lockable handle With solvent cement sockets Inch ASTM Including 2 threaded union ends NPT

### Model:

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

### Option:

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

Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
3/8	10	16	71	<b>163 546 361</b>	<b>163 546 371</b>	0.205
1/2	15	16	185	<b>163 546 362</b>	<b>163 546 372</b>	0.215
3/4	20	16	350	<b>163 546 363</b>	<b>163 546 373</b>	0.325
1	25	16	700	<b>163 546 364</b>	<b>163 546 374</b>	0.485
1 1/4	32	16	1000	<b>163 546 365</b>	<b>163 546 375</b>	0.840
1 1/2	40	16	1600	<b>163 546 366</b>	<b>163 546 376</b>	1.135
2	50	16	3100	<b>163 546 367</b>	<b>163 546 377</b>	2.035
2 1/2	65	16	5000	<b>163 546 368</b>	<b>163 546 378</b>	5.800
3	80	16	7000	<b>163 546 369</b>	<b>163 546 379</b>	8.500
4	100	16	11000	<b>163 546 370</b>	<b>163 546 380</b>	13.100

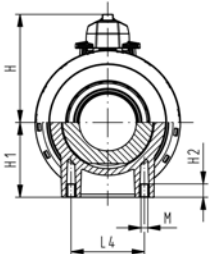
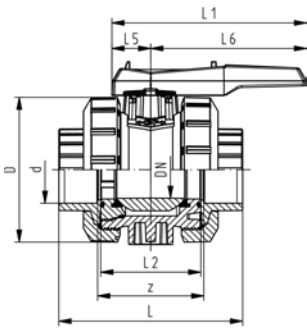
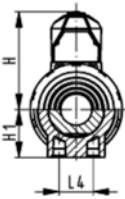
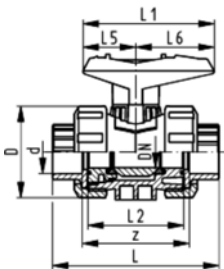
Inch	D [mm]	H [mm]	H1 [mm]	H2 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	M	z [mm]
3/8	50	79	27	12	105	87	56	25	42	45	M6	67
1/2	50	79	27	12	105	87	56	25	42	45	M6	61
3/4	58	88	30	12	121	108	65	25	50	58	M6	70
1	68	94	36	12	133	108	71	25	50	58	M6	76
1 1/4	84	113	44	15	154	140	85	45	66	75	M8	90
1 1/2	97	119	51	15	164	140	89	45	66	75	M8	94
2	124	141	64	15	183	165	101	45	78	87	M8	107
2 1/2	166	224	85	15	233	270	136	70	64	206	M8	144
3	200	235	105	15	254	270	141	70	64	206	M8	151
4	238	245	123	22	301	320	164	120	64	256	M12	174

# PVC-C

## Ball valve type 546 PVC-C SF With solvent cement sockets metric



DN10/15 - 50



### Model:

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

### Option:

- Individual configuration of the valve (see form)
- Multifunctional module with integrated limit switches

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	16	71	<b>163 546 601</b>	<b>163 546 611</b>	0.160
20	15	16	185	<b>163 546 602</b>	<b>163 546 612</b>	0.160
25	20	16	350	<b>163 546 603</b>	<b>163 546 613</b>	0.245
32	25	16	700	<b>163 546 604</b>	<b>163 546 614</b>	0.365
40	32	16	1000	<b>163 546 605</b>	<b>163 546 615</b>	0.660
50	40	16	1600	<b>163 546 606</b>	<b>163 546 616</b>	0.890
63	50	16	3100	<b>163 546 607</b>	<b>163 546 617</b>	1.650
75	65	16	5000	<b>163 546 608</b>	<b>163 546 618</b>	5.400
90	80	16	7000	<b>163 546 609</b>	<b>163 546 619</b>	8.100
110	100	16	11000	<b>163 546 610</b>	<b>163 546 620</b>	12.800

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
75	166	149	85	233	270	136	70	64	206	144
90	200	161	105	254	270	141	70	64	206	151
110	238	178	123	301	320	164	120	64	256	174

# PVC-C

## Ball valve type 546 PVC-C SF With mounting inserts With solvent cement sockets metric



DN10/15 - 50

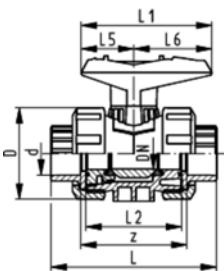


### Model:

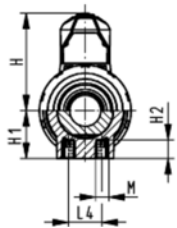
- Silicone free / paint-compatible
- For easy installation and removal
- z-dimension, valve end and union nut are **not compatible** with type 346 (DN10/15-50) resp. type 370 (DN65-100)
- Ball seals PVDF
- Integrated stainless steel mounting inserts

### Option:

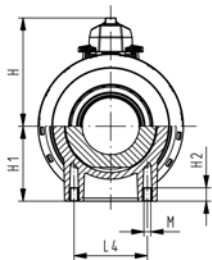
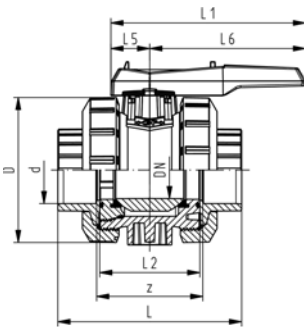
- Individual configuration of the valve (see form)
- Multifunctional module with integrated limit switches



d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
16	10	16	71	800 000 621	800 000 631	0.160
20	15	16	185	800 000 622	800 000 632	0.160
25	20	16	350	800 000 623	800 000 633	0.245
32	25	16	700	800 000 624	800 000 634	0.365
40	32	16	1000	800 000 625	800 000 635	0.660
50	40	16	1600	800 000 626	800 000 636	0.890
63	50	16	3100	800 000 627	800 000 637	1.650
75	65	16	5000	800 000 628	800 000 638	5.400
90	80	16	7000	800 000 629	800 000 639	8.100
110	100	16	11000	800 000 630	800 000 640	12.800



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
75	166	149	85	15	233	270	136	70	64	206	M8	144
90	200	161	105	15	254	270	141	70	64	206	M8	151
110	238	178	123	22	301	320	164	120	64	256	M12	174

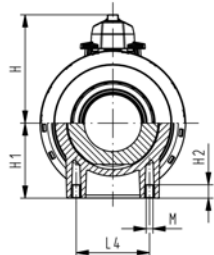
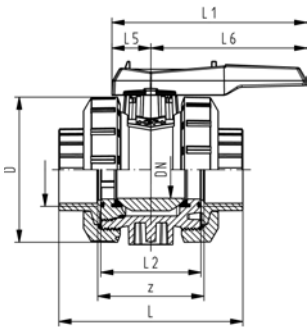
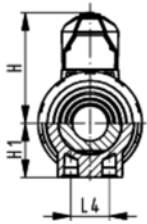
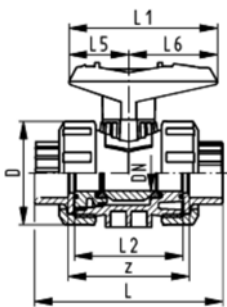


# PVC-C

## Ball valve type 546 PVC-C SF With solvent cement sockets Inch ASTM



DN10/15 - 50



### Model:

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

### Option:

- Individual configuration of the valve (see form)
- Multifunctional module with integrated limit switches

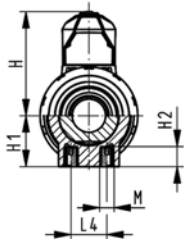
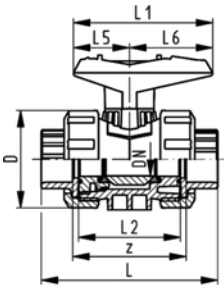
Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code	kg
1/2	15	16	185	<b>163 546 692</b>	0.160
3/4	20	16	350	<b>163 546 693</b>	0.245
1	25	16	700	<b>163 546 694</b>	0.365
1 1/4	32	16	1000	<b>163 546 695</b>	0.660
1 1/2	40	16	1600	<b>163 546 696</b>	0.890
2	50	16	3100	<b>163 546 697</b>	1.650
2 1/2	65	16	5000	<b>163 546 698</b>	5.300
3	80	16	7000	<b>163 546 699</b>	7.900
4	100	16	11000	<b>163 546 700</b>	12.600

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

# PVC-C



DN10/15 - 50



## Ball valve type 546 PVC-C SF With mounting inserts With solvent cement sockets Inch ASTM

### Model:

- Integrated stainless steel mounting inserts
- Silicone free / paint-compatible
- Ball seals:
- - inch ASTM: PTFE
- For easy installation and removal
- z-dimension, valve end and union nut are not compatible with type 346
- Without mounting inserts

### Option:

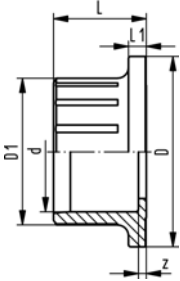
- Individual configuration of the valve (see form)
- Multifunctional module with integrated limit switches

Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
1/2	15	16	185	<b>163 546 842</b>	<b>163 546 852</b>	0.164
3/4	20	16	350	<b>163 546 843</b>	<b>163 546 853</b>	0.249
1	25	16	700	<b>163 546 844</b>	<b>163 546 854</b>	0.369
1 1/4	32	16	1000	<b>163 546 845</b>	<b>163 546 855</b>	0.670
1 1/2	40	16	1600	<b>163 546 846</b>	<b>163 546 856</b>	0.900
2	50	16	3100	<b>163 546 847</b>	<b>163 546 857</b>	1.660

Inch	D [mm]	H [mm]	H1 [mm]	H2 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	M	z [mm]
1/2	50	57	27	12	105	77	56	25	32	45	6	61
3/4	58	67	30	12	121	97	65	25	39	58	6	70
1	68	73	36	12	133	97	71	25	39	58	6	76
1 1/4	84	90	44	15	154	128	85	45	54	74	8	90
1 1/2	97	97	51	15	164	128	89	45	54	74	8	94
2	124	116	64	15	183	152	101	45	66	87	8	107

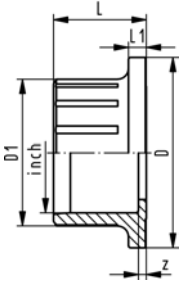
# PVC-C

## Valve end 546 and 543 PVC-C (G11) With solvent cement socket metric



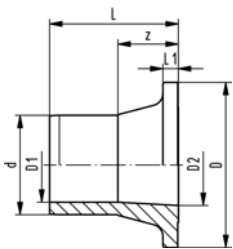
d [mm]	PN	Code	kg	D [mm]	D1 [mm]	L [mm]	L1 [mm]	z [mm]
16	16	<b>163 481 275</b>	0.009	38	23	18	4	4
20	16	<b>163 481 276</b>	0.011	38	27	20	4	4
25	16	<b>163 481 277</b>	0.016	44	33	23	5	4
32	16	<b>163 481 278</b>	0.025	53	41	26	5	4
40	16	<b>163 481 279</b>	0.043	65	51	31	5	5
50	16	<b>163 481 280</b>	0.064	77	62	34	6	3
63	16	<b>163 481 281</b>	0.119	99	77	41	7	3
75	16	<b>163 481 282</b>	0.249	125	92	49	9	4
90	16	<b>163 481 283</b>	0.416	150	110	57	10	5
110	16	<b>163 481 284</b>	0.705	180	134	69	11	5

## Valve end 546 and 543 PVC-C (G13) With solvent cement socket Inch ASTM



Inch	d [mm]	PN	Code	kg	D [mm]	D1 [mm]	L [mm]	L1 [mm]	z [mm]
3/8	16	16	<b>163 481 311</b>	0.012	38	24	25	4	6
1/2	20	16	<b>163 481 312</b>	0.014	38	30	25	4	2
3/4	25	16	<b>163 481 313</b>	0.020	44	35	28	5	3
1	32	16	<b>163 481 314</b>	0.031	53	43	31	5	3
1 1/4	40	16	<b>163 481 315</b>	0.046	65	53	34	5	3
1 1/2	50	16	<b>163 481 316</b>	0.067	77	60	38	6	3
2	63	16	<b>163 481 317</b>	0.118	99	73	41	7	3
2 1/2	75	16	<b>163 481 318</b>	0.266	125	92	49	9	4
3	90	16	<b>163 481 319</b>	0.394	150	110	57	10	8
4	110	16	<b>163 481 320</b>	0.651	180	134	69	11	11

## Valve end 546 and 543 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	<b>163 481 300</b>	0.012	38	10	16	29	4	15
20	16	<b>163 481 301</b>	0.015	38	14	16	34	4	18
25	16	<b>163 481 302</b>	0.023	44	19	20	39	5	20
32	16	<b>163 481 303</b>	0.040	53	24	26	42	5	20
40	16	<b>163 481 304</b>	0.054	65	31	33	45	5	19
50	16	<b>163 481 305</b>	0.093	77	39	41	53	6	22
63	16	<b>163 481 306</b>	0.177	99	49	51	62	7	24
75	16	<b>163 481 307</b>	0.333	125	58	65	74	9	30
90	16	<b>163 481 308</b>	0.515	150	70	90	80	10	28
110	16	<b>163 481 309</b>	0.822	180	86	100	88	11	27

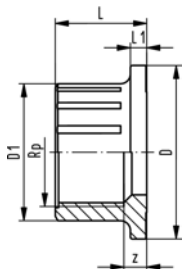
# PVC-C



## Valve end 546 and 543 PVC-C (G15) With threaded socket Rp

### Model:

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



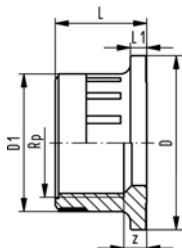
Rp [inch]	PN	Code	kg	D [mm]	D1 [mm]	L [mm]	L1 [mm]	z [mm]
3/8	10	<b>163 481 286</b>	0.011	38	24	20	4	7
1/2	10	<b>163 481 287</b>	0.013	38	28	22	4	6
3/4	10	<b>163 481 288</b>	0.019	44	34	25	5	7
1	10	<b>163 481 289</b>	0.031	53	42	28	5	7
1 1/4	10	<b>163 481 290</b>	0.047	65	52	30	5	7
1 1/2	10	<b>163 481 291</b>	0.081	77	63	32	6	9
2	10	<b>163 481 292</b>	0.150	99	78	38	7	10
2 1/2	10	<b>163 481 293</b>	0.282	125	58	49	9	19
3	10	<b>163 481 294</b>	0.481	150	110	57	10	23
4	10	<b>163 481 295</b>	0.735	180	134	69	11	29



## Valve end 546 and 543 PVC-C (G16) With threaded socket Rp reinforced

### Model:

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



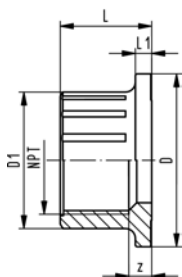
Rp [inch]	PN	Code	kg	D [mm]	D1 [mm]	L [mm]	L1 [mm]	z [mm]
3/8	16	<b>163 481 400</b>	0.014	38	24	20	4	7
1/2	16	<b>163 481 401</b>	0.018	38	28	22	4	6
3/4	16	<b>163 481 402</b>	0.025	44	34	25	5	7
1	16	<b>163 481 403</b>	0.044	53	42	28	5	7
1 1/4	16	<b>163 481 404</b>	0.064	65	52	30	5	7
1 1/2	16	<b>163 481 405</b>	0.106	77	63	32	6	9
2	16	<b>163 481 406</b>	0.182	99	78	38	7	10



## Valve end 546 and 543 PVC-C (G17) With threaded socket NPT

### Model:

- Connection to plastic threads 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	<b>163 481 322</b>	0.014	38	26	21	4	7
1/2	10	<b>163 481 323</b>	0.019	38	33	21	4	4
3/4	10	<b>163 481 324</b>	0.026	44	39	23	5	5
1	10	<b>163 481 325</b>	0.043	53	47	28	5	6
1 1/4	10	<b>163 481 326</b>	0.064	65	57	31	5	7
1 1/2	10	<b>163 481 327</b>	0.093	77	65	34	6	11
2	10	<b>163 481 328</b>	0.157	99	77	41	7	17
2 1/2	10	<b>163 481 329</b>	0.317	125	58	49	9	15
3	10	<b>163 481 330</b>	0.497	150	110	57	10	21
4	10	<b>163 481 331</b>	0.763	180	134	69	11	31

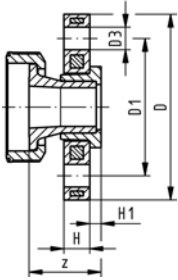
# PVC-C



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

### Model:

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



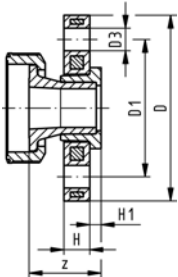
d [mm]	DN [mm]	PN	Code	kg	D [mm]	D1 [mm]	D3 [mm]	H [mm]	H1 [mm]	z [mm]
20	15	16	<b>161 486 285</b>	0.265	95	65	14	12	6	37
25	20	16	<b>161 486 286</b>	0.325	105	75	14	12	7	42
32	25	16	<b>161 486 287</b>	0.530	115	85	14	16	7	45
40	32	16	<b>161 486 288</b>	0.815	140	100	18	16	8	48
50	40	16	<b>161 486 289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



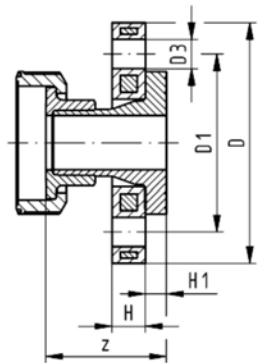
## Valve end 546 PP-H (G73) With backing flange PP-St inch ANSI

### Model:

- DN15-50 overall length **NOT** according to EN 558
- DN 65-100 overall length according to EN 558
- Connecting dimension: ISO 7005 PN10, EN 1092 PN10, DIN 2501 PN10



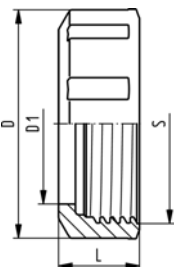
Inch	DN [mm]	PN	Code	kg	D [mm]	D1 [mm]	D3 [mm]	H [mm]	H1 [mm]	z [mm]
½	15	10	<b>167 484 065</b>	0.224	95	60	16	12	7	54
¾	20	10	<b>167 484 066</b>	0.307	105	70	16	12	9	55
1	25	10	<b>167 484 067</b>	0.506	115	79	16	16	10	58
1 ¼	32	10	<b>167 484 068</b>	0.813	140	89	16	16	11	60
1 ½	40	10	<b>167 484 069</b>	1.049	150	98	19	18	12	66
2	50	10	<b>167 484 070</b>	1.290	165	121	19	18	14	68
2 ½	65	10	<b>167 484 071</b>	2.161	185	140	19	18	16	77
3	80	10	<b>167 484 072</b>	2.818	200	152	19	20	17	85
4	100	10	<b>167 484 073</b>	3.741	229	190	19	20	18	93





# PVC-C

## Union nut 546 and 543 PVC-C



d [mm]	DN [mm]	Code	kg	D [mm]	D1 [mm]	L [mm]	S [mm]
16 - 20	10 - 15	<b>163 481 226</b>	0.013	50	34	19	42
25	20	<b>163 481 227</b>	0.019	58	39	20	48
32	25	<b>163 481 228</b>	0.028	68	47	24	58
40	32	<b>163 481 229</b>	0.054	84	57	27	71
50	40	<b>163 481 230</b>	0.072	97	65	30	84
63	50	<b>163 481 231</b>	0.225	124	79	36	106
75	65	<b>163 481 232</b>	0.619	166	94	48	135
90	80	<b>163 481 233</b>	0.973	200	113	54	135
110	100	<b>163 481 234</b>	1.493	238	137	60	198

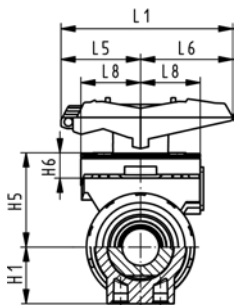
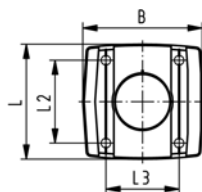


DN10/15 - 50

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

### Model:

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



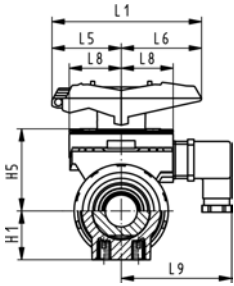
d-d [mm]	DN-DN [mm]	Code	kg
16 - 20	10 - 15	<b>167 482 680</b>	0.055
25 - 32	20 - 25	<b>167 482 681</b>	0.070
40 - 50	32 - 40	<b>167 482 682</b>	0.080
- 63	- 50	<b>167 482 683</b>	0.120
75 - 90	65 - 80	<b>167 482 684</b>	0.135
- 110	- 100	<b>167 482 685</b>	0.175

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

# PVC-C



DN10/15 - 50



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

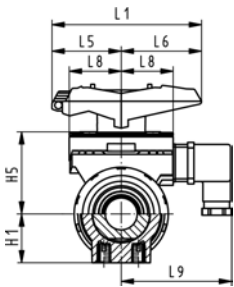
### Model:

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

d-d [mm]	DN-DN [mm]	Code	kg	H1 [mm]	H5 [mm]	L1 [mm]	L5 [mm]	L6 [mm]	L8 [mm]	L9 [mm]
16 - 20	10 - 15	<b>167 482 626</b>	0.110	27	50	87	42	45	34	73
25 - 32	20 - 25	<b>167 482 627</b>	0.120	30	53	108	50	58	38	77
40 - 50	32 - 40	<b>167 482 628</b>	0.135	44	72	140	66	75	41	80
- 63	- 50	<b>167 482 629</b>	0.175	64	94	165	78	87	46	85
75 - 90	65 - 80	<b>167 482 630</b>	0.460	85	157	270	64	206		
- 110	- 100	<b>167 482 631</b>	0.480	123	175	320	64	256		



DN10/15 - 50



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

### Model:

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

d-d [mm]	DN-DN [mm]	Code	kg	H1 [mm]	H5 [mm]	L1 [mm]	L5 [mm]	L6 [mm]	L8 [mm]	L9 [mm]
16 - 20	10 - 15	<b>167 482 635</b>	0.110	27	50	87	42	45	34	73
25 - 32	20 - 25	<b>167 482 636</b>	0.120	30	53	108	50	58	38	77
40 - 50	32 - 40	<b>167 482 637</b>	0.135	44	72	140	66	75	41	80
- 63	- 50	<b>167 482 638</b>	0.175	64	94	165	78	87	46	85
75 - 90	65 - 80	<b>167 482 639</b>	0.460	85	157	270	64	206		
- 110	- 100	<b>167 482 640</b>	0.480	123	175	320	64	256		

# PVC-C

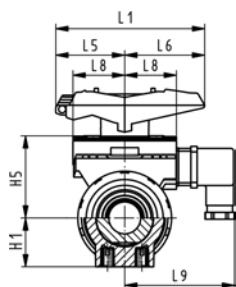
## Multifunctional module (I05) PP-GF With inductive limit switches Namur

### Model:

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



DN10/15 - 50



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	<b>167 482 671</b>	0.110	27	50	87	42	45	34	73
25 - 32	20 - 25	<b>167 482 672</b>	0.120	30	53	108	50	58	38	77
40 - 50	32 - 40	<b>167 482 673</b>	0.135	44	72	140	66	75	41	80
- 63	- 50	<b>167 482 674</b>	0.175	64	94	165	78	87	46	85
75 - 90	65 - 80	<b>167 482 675</b>	0.460	85	157	270	64	206		
- 110	- 100	<b>167 482 676</b>	0.480	123	175	320	64	256		

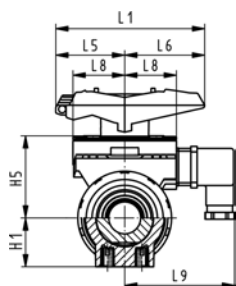
## Multifunctional module (I06) PP-GF With inductive limit switches PNP

### Model:

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



DN10/15 - 50

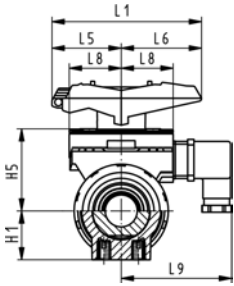


d-d [mm]	DN-DN [mm]	Code	kg	H1 [mm]	H5 [mm]	L1 [mm]	L5 [mm]	L6 [mm]	L8 [mm]	L9 [mm]
16 - 20	10 - 15	<b>167 482 662</b>	0.110	27	50	87	42	45	34	73
25 - 32	20 - 25	<b>167 482 663</b>	0.120	30	53	108	50	58	38	77
40 - 50	32 - 40	<b>167 482 664</b>	0.135	44	72	140	66	75	41	80
- 63	- 50	<b>167 482 665</b>	0.175	64	94	165	78	87	46	85
75 - 90	65 - 80	<b>167 482 666</b>	0.460	85	157	270	64	206		
- 110	- 100	<b>167 482 667</b>	0.480	123	175	320	64	256		

# PVC-C



DN10/15 - 50



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

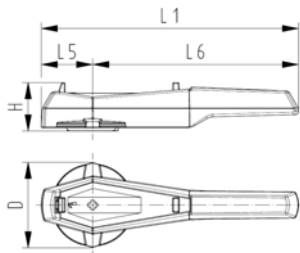
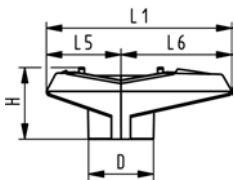
### Model:

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

d-d [mm]	DN-DN [mm]	Code	kg	H1 [mm]	H5 [mm]	L1 [mm]	L5 [mm]	L6 [mm]	L8 [mm]	L9 [mm]
16 - 20	10 - 15	<b>167 482 653</b>	0.110	27	50	87	42	45	34	73
25 - 32	20 - 25	<b>167 482 654</b>	0.120	30	53	108	50	58	38	77
40 - 50	32 - 40	<b>167 482 655</b>	0.135	44	72	140	66	75	41	80
- 63	- 50	<b>167 482 656</b>	0.175	64	94	165	78	87	46	85
75 - 90	65 - 80	<b>167 482 657</b>	0.460	85	157	270	64	206		
- 110	- 100	<b>167 482 658</b>	0.480	123	175	320	64	256		



DN10/15 - 50



## Standard handle 546 red (K01)

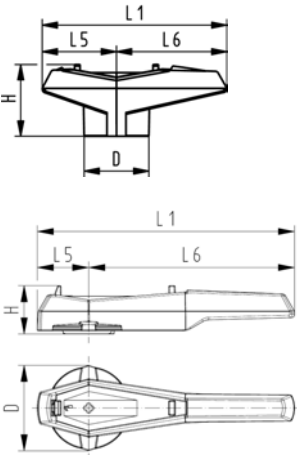
d [mm]	DN [mm]	Code	kg	L1 [mm]	L5 [mm]	L6 [mm]	H [mm]	D [mm]
16 - 20	10 - 15	<b>167 484 088</b>	0.012	77	32	45	31	26
25	20	<b>167 484 089</b>	0.022	97	39	58	37	34
32	25	<b>167 484 090</b>	0.022	97	39	58	37	34
40	32	<b>167 484 091</b>	0.042	128	54	74	46	40
50	40	<b>167 484 092</b>	0.042	128	54	74	46	40
63	50	<b>167 484 093</b>	0.064	152	66	87	54	44
75	65	<b>167 484 094</b>	0.250	270	64	206	58	106
90	80	<b>167 484 095</b>	0.250	270	64	206	58	106
110	100	<b>167 484 096</b>	0.298	320	64	256	60	106

# PVC-C

## Standard handle 546 black (K02)



DN10/15 - 50



d [mm]	DN [mm]	Code	kg	L1 [mm]	L5 [mm]	L6 [mm]	H [mm]	D [mm]
16 - 20	10 - 15	<b>167 484 076</b>	0.012	77	32	45	31	26
25	20	<b>167 484 077</b>	0.022	97	39	58	37	34
32	25	<b>167 484 078</b>	0.022	97	39	58	37	34
40	32	<b>167 484 079</b>	0.042	128	54	74	46	40
50	40	<b>167 484 080</b>	0.042	128	54	74	46	40
63	50	<b>167 484 081</b>	0.059	152	66	87	54	44
75	65	<b>167 484 082</b>	0.250	270	64	206	58	106
90	80	<b>167 484 083</b>	0.250	270	64	206	58	106
110	100	<b>167 484 084</b>	0.298	320	64	256	60	106

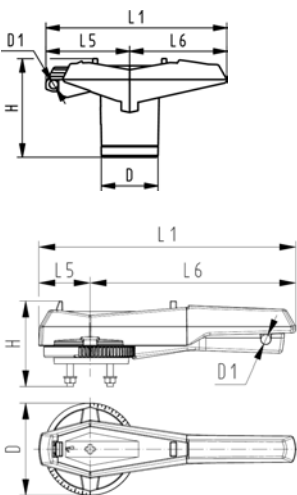
## Multifunctional handle 546 red (K11) With ratchet settings lockable

### Note:

- To retrofit the ball valve 546 with the multifunctional handle a multifunction module is necessary in the dimensions DN65-100



DN10/15 - 50



d-d [mm]	DN-DN [mm]	Code	kg	D [mm]	D1 [mm]	H [mm]	L1 [mm]	L5 [mm]	L6 [mm]
16 - 20	10 - 15	<b>167 484 100</b>	0.026	26	5	53	87	42	45
- 25	- 20	<b>167 484 101</b>	0.045	34	5	59	108	50	58
- 32	- 25	<b>167 484 102</b>	0.045	34	5	59	108	50	58
- 40	- 32	<b>167 484 103</b>	0.082	40	5	69	140	66	75
- 50	- 40	<b>167 484 104</b>	0.082	40	5	69	140	66	75
- 63	- 50	<b>167 484 105</b>	0.104	44	5	80	165	78	87
- 75	- 65	<b>161 486 689</b>	0.480	115	12	105	270	64	206
- 90	- 80	<b>161 486 690</b>	0.480	115	12	105	270	64	206
110 - 140	100 - 125	<b>161 486 691</b>	0.480	115	12	107	320	64	256

# PVC-C

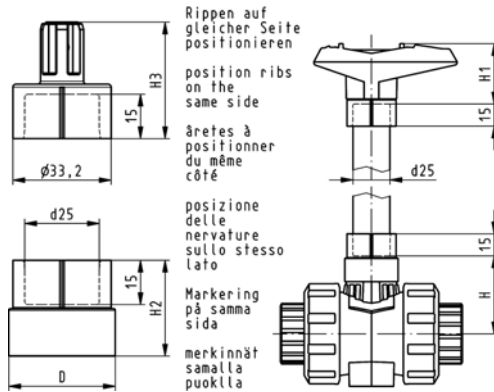
## Handle extension 546 PVC-U metric

### 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



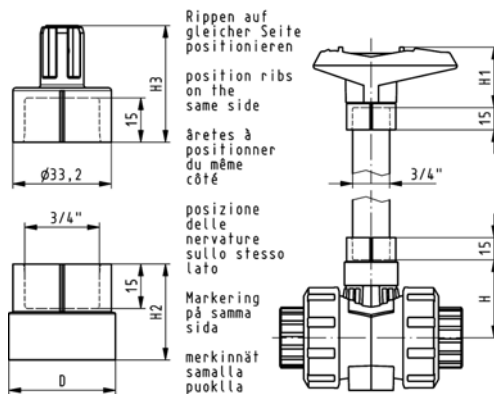
d-d [mm]	DN-DN [mm]	Code	kg	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	D [mm]
16 - 20	10 - 15	<b>161 486 435</b>	0.032	41	52	29	36	26
25 - 32	20 - 25	<b>161 486 436</b>	0.037	50	62	32	39	36
40 - 50	32 - 40	<b>161 486 437</b>	0.047	65	76	34	44	40
- 63	- 50	<b>161 486 438</b>	0.058	84	87	37	48	44



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

- For Ball Valve Type 546

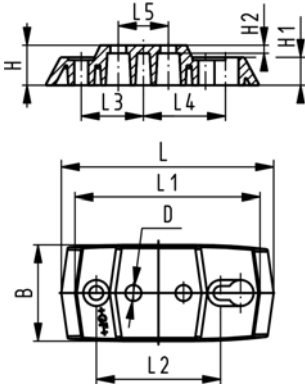
DN-DN [mm]	Inch	Code	kg	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	D [mm]
10 - 15	3/8-1/2	<b>161 486 443</b>	0.032	41	52	29	36	26
20 - 25	3/4-1	<b>161 486 444</b>	0.037	50	62	32	39	36
32 - 40	1 1/4-1 1/2	<b>161 486 445</b>	0.047	65	76	34	44	40
50 -	2	<b>161 486 446</b>	0.058	84	87	37	48	44



# PVC-C

## Mounting plate 546 PP-GF (L02)

- 2 mounting screws inclusive



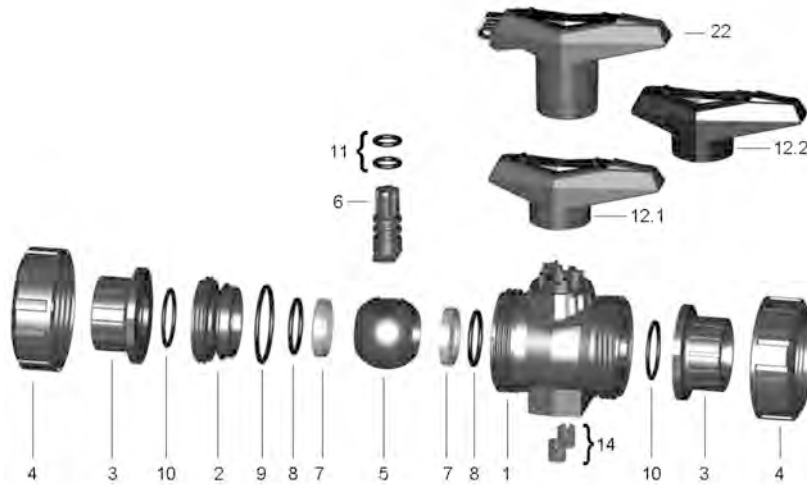
d-d [mm]	DN-DN [mm]	Code	kg
16 - 32	10 - 25	<b>167 484 110</b>	0.055
40 - 63	32 - 50	<b>167 484 111</b>	0.086

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

# PVC-C

## Spare parts ball valves 2-way

### Spare parts ball valve type 546



### Central part

**Model:**

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

d [mm]	DN [mm]	PVC-C EPDM Code	PVC-C FPM Code	kg
16	10	163 481 251	163 481 263	0.100
20	15	163 481 251	163 481 263	0.100
25	20	163 481 252	163 481 264	0.160
32	25	163 481 253	163 481 265	0.230
40	32	163 481 254	163 481 266	0.410
50	40	163 481 255	163 481 267	0.540
63	50	163 481 256	163 481 268	0.950
75	65	163 481 257	163 481 269	3.560
90	80	163 481 258	163 481 270	5.200
110	100	163 481 259	163 481 271	8.270



### Ball set

**Model:**

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

d [mm]	DN [mm]	PVC-C EPDM Code	PVC-C FPM Code	kg
16	10	163 481 375	163 481 385	0.017
20	15	163 481 375	163 481 385	0.017
25	20	163 481 376	163 481 386	0.026
32	25	163 481 377	163 481 387	0.045
40	32	163 481 378	163 481 388	0.088
50	40	163 481 379	163 481 389	0.138
63	50	163 481 380	163 481 390	0.268
75	65	163 481 381	163 481 391	0.538
90	80	163 481 382	163 481 392	0.849
110	100	163 481 383	163 481 393	1.408



# PVC-C

## Lever



DN10/15 - 50



DN10/15 - 50



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

## Face seal



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

## Seal set

### Model:

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



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

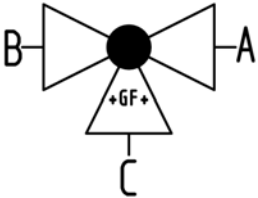
# PVC-C

## Ball valves 3-way

### 3-Way ball valve type 543 PVC-C

#### Horizontal/L-port

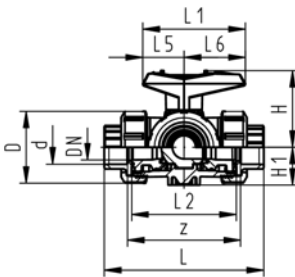
#### With solvent cement sockets metric



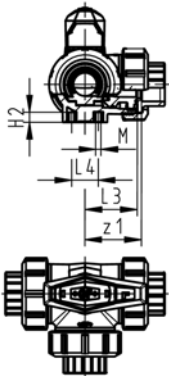
#### Model:

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

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	50	<b>163 543 001</b>	<b>163 543 011</b>	0.265
20	15	10	75	<b>163 543 002</b>	<b>163 543 012</b>	0.272
25	20	10	150	<b>163 543 003</b>	<b>163 543 013</b>	0.391
32	25	10	280	<b>163 543 004</b>	<b>163 543 014</b>	0.598
40	32	10	480	<b>163 543 005</b>	<b>163 543 015</b>	1.018
50	40	10	620	<b>163 543 006</b>	<b>163 543 016</b>	1.509
63	50	10	1230	<b>163 543 007</b>	<b>163 543 017</b>	2.938

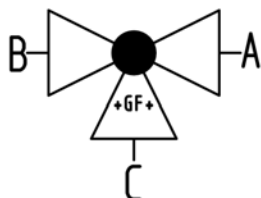


d [mm]	D [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	H [mm]	H1 [mm]	H2 [mm]	M	z [mm]	z1 [mm]
16	50	109	77	73	36	25	32	45	57	28	8	6	81	40
20	50	112	77	73	36	25	32	45	57	28	8	6	81	40
25	58	131	97	86	43	25	39	58	67	32	8	6	94	47
32	68	151	97	99	50	25	39	58	73	36	8	6	107	54
40	84	181	128	120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



# PVC-C

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

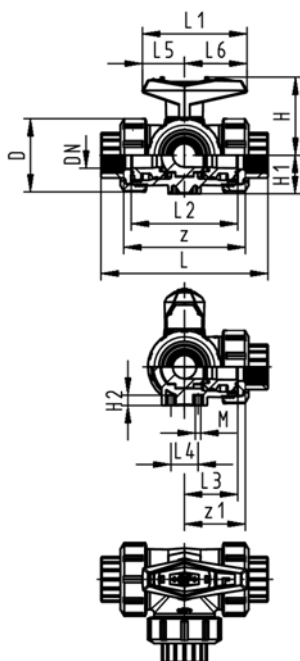


### Model:

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

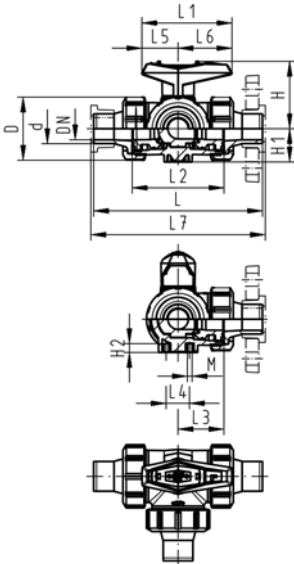
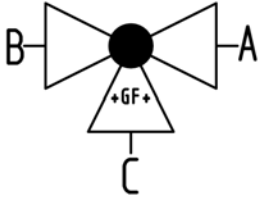
Rp [inch]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
3/8	10	10	50	163 543 041	163 543 051	0.265
1/2	15	10	75	163 543 042	163 543 052	0.272
3/4	20	10	150	163 543 043	163 543 053	0.391
1	25	10	280	163 543 044	163 543 054	0.598
1 1/4	32	10	480	163 543 045	163 543 055	1.018
1 1/2	40	10	620	163 543 046	163 543 056	1.509
2	50	10	1230	163 543 047	163 543 057	2.938

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



# PVC-C

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



### Model:

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

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	50	<b>163 543 021</b>	<b>163 543 031</b>	0.272
20	15	10	75	<b>163 543 022</b>	<b>163 543 032</b>	0.282
25	20	10	150	<b>163 543 023</b>	<b>163 543 033</b>	0.408
32	25	10	280	<b>163 543 024</b>	<b>163 543 034</b>	0.624
40	32	10	480	<b>163 543 025</b>	<b>163 543 035</b>	1.041
50	40	10	620	<b>163 543 026</b>	<b>163 543 036</b>	1.578
63	50	10	1230	<b>163 543 027</b>	<b>163 543 037</b>	3.075

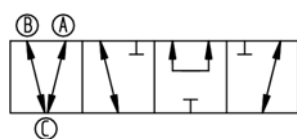
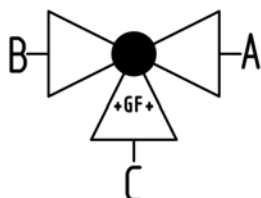
d [mm]	D [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	H [mm]	H1 [mm]	H2 [mm]	M
16	50	131	77	73	36	25	32	45	137	57	28	8	6
20	50	141	77	73	36	25	32	45	147	57	28	8	6
25	58	165	97	86	43	25	39	58	171	67	32	8	6
32	68	182	97	99	50	25	39	58	188	73	36	8	6
40	84	209	128	120	60	45	54	74	215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

# PVC-C

## 3-Way ball valve type 543 PVC-C

### Horizontal/T-port

### With solvent cement sockets metric

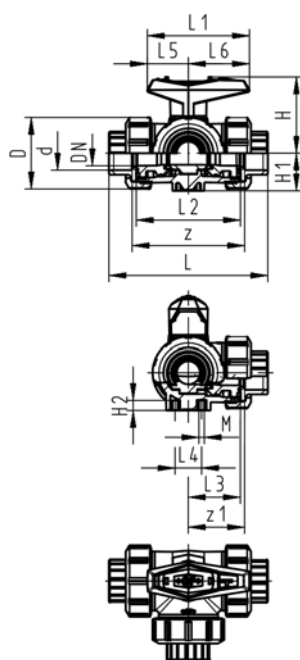


#### Model:

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

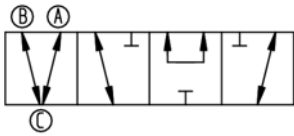
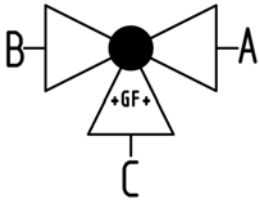
d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	140	163 543 201	163 543 211	0.264
20	15	10	200	163 543 202	163 543 212	0.271
25	20	10	470	163 543 203	163 543 213	0.389
32	25	10	793	163 543 204	163 543 214	0.590
40	32	10	1290	163 543 205	163 543 215	1.007
50	40	10	1910	163 543 206	163 543 216	1.487
63	50	10	3100	163 543 207	163 543 217	2.889

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



# PVC-C

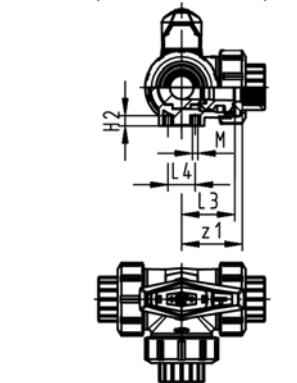
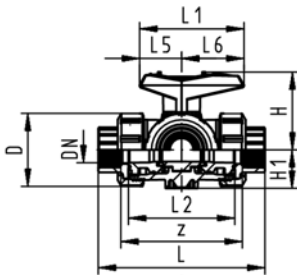
## 3-Way ball valve type 543 PVC-C Horizontal/T-port With threaded sockets Rp



### Model:

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

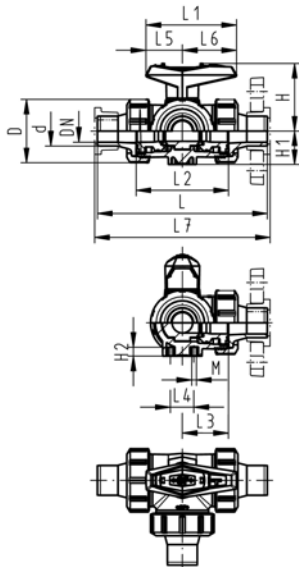
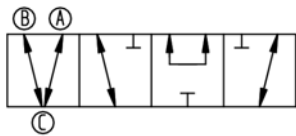
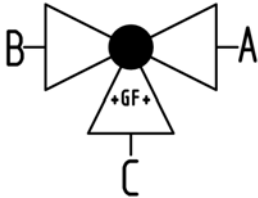
Rp [inch]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
3/8	10	10	140	<b>163 543 241</b>	<b>163 543 251</b>	0.264
1/2	15	10	200	<b>163 543 242</b>	<b>163 543 252</b>	0.271
3/4	20	10	470	<b>163 543 243</b>	<b>163 543 253</b>	0.389
1	25	10	793	<b>163 543 244</b>	<b>163 543 254</b>	0.590
1 1/4	32	10	1290	<b>163 543 245</b>	<b>163 543 255</b>	1.007
1 1/2	40	10	1910	<b>163 543 246</b>	<b>163 543 256</b>	1.487
2	50	10	3100	<b>163 543 247</b>	<b>163 543 257</b>	2.889



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

# PVC-C

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



### Model:

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

d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	140	<b>163 543 221</b>	<b>163 543 231</b>	0.264
20	15	10	200	<b>163 543 222</b>	<b>163 543 232</b>	0.271
25	20	10	470	<b>163 543 223</b>	<b>163 543 233</b>	0.389
32	25	10	793	<b>163 543 224</b>	<b>163 543 234</b>	0.590
40	32	10	1290	<b>163 543 225</b>	<b>163 543 235</b>	1.007
50	40	10	1910	<b>163 543 226</b>	<b>163 543 236</b>	1.487
63	50	10	3100	<b>163 543 227</b>	<b>163 543 237</b>	2.889

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

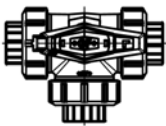
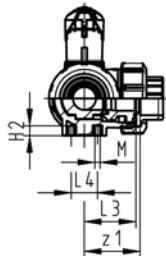
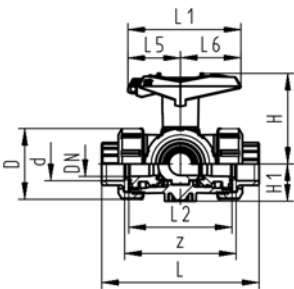
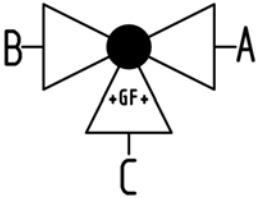
# PVC-C



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

### Model:

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



d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	50	163 543 381	163 543 391	0.281
20	15	10	75	163 543 382	163 543 392	0.287
25	20	10	150	163 543 383	163 543 393	0.410
32	25	10	280	163 543 384	163 543 394	0.616
40	32	10	480	163 543 385	163 543 395	1.043
50	40	10	620	163 543 386	163 543 396	1.534
63	50	10	1230	163 543 387	163 543 397	2.972

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



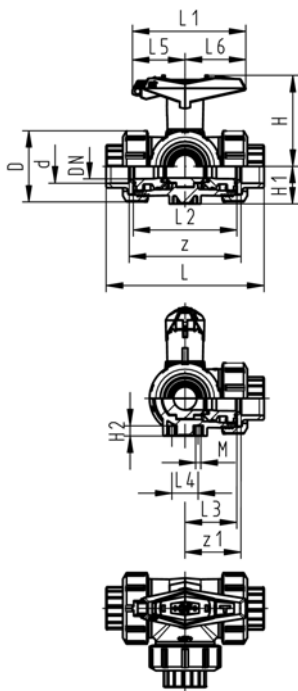
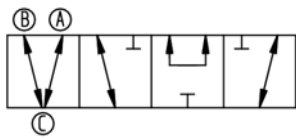
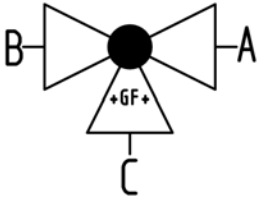
# PVC-C



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

### Model:

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



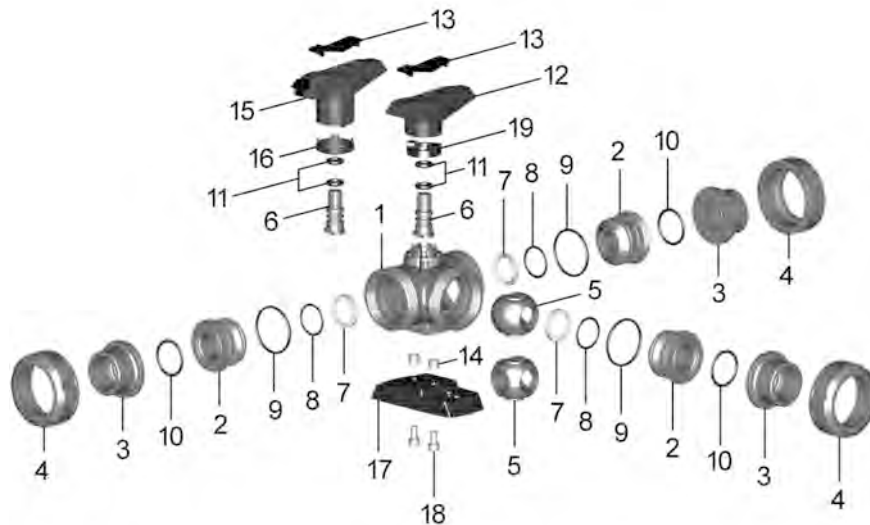
d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	140	163 543 401	163 543 411	0.280
20	15	10	200	163 543 402	163 543 412	0.286
25	20	10	470	163 543 403	163 543 413	0.408
32	25	10	793	163 543 404	163 543 414	0.609
40	32	10	1290	163 543 405	163 543 415	1.031
50	40	10	1910	163 543 406	163 543 416	1.512
63	50	10	3100	163 543 407	163 543 417	2.923

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

# PVC-C

## Spare parts ball valves 3-way

### Spare parts ball valve type 543 horizontal



#### Central part L-port

**Model:**

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

d [mm]	DN [mm]	PVC-C EPDM Code	PVC-C FPM Code	kg
16	10	163 481 902	163 481 912	0.000
20	15	163 481 902	163 481 912	0.000
25	20	163 481 903	163 481 913	0.000
32	25	163 481 904	163 481 914	0.000
40	32	163 481 905	163 481 915	0.000
50	40	163 481 906	163 481 916	0.000
63	50	163 481 907	163 481 917	0.000



#### Central part T-port

**Model:**

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

d [mm]	DN [mm]	PVC-C EPDM Code	PVC-C FPM Code	kg
16	10	163 481 922	163 481 932	0.000
20	15	163 481 922	163 481 932	0.000
25	20	163 481 923	163 481 933	0.000
32	25	163 481 924	163 481 934	0.000
40	32	163 481 925	163 481 935	0.000
50	40	163 481 926	163 481 936	0.000
63	50	163 481 927	163 481 937	0.000

# PVC-C

## Ball set L-port

### Model:

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



d [mm]	DN [mm]	PVC-C EPDM Code	PVC-C FPM Code	kg
16	10	163 481 982	163 481 992	2.969
20	15	163 481 982	163 481 992	2.969
25	20	163 481 983	163 481 993	5.747
32	25	163 481 984	163 481 994	7.985
40	32	163 481 985	163 481 995	0.138
50	40	163 481 986	163 481 996	0.212
63	50	163 481 987	163 481 997	0.358

## Ball set T-port

### Model:

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



d [mm]	DN [mm]	PVC-C EPDM Code	PVC-C FPM Code	kg
16	10	163 482 002	163 482 012	0.028
20	15	163 482 002	163 482 012	0.028
25	20	163 482 003	163 482 013	5.529
32	25	163 482 004	163 482 014	7.224
40	32	163 482 005	163 482 015	0.126
50	40	163 482 006	163 482 016	0.189
63	50	163 482 007	163 482 017	0.309

## Lever



d [mm]	DN [mm]	Standard lever L-port red Code	Standard lever T-port red Code	Multifunctional-lever L-port red Code	Multifunctional-lever T-port red Code	kg
16	10	167 484 488	167 484 588	167 484 442	167 484 542	0.026
20	15	167 484 488	167 484 588	167 484 442	167 484 542	0.026
25	20	167 484 489	167 484 589	167 484 443	167 484 543	0.045
32	25	167 484 490	167 484 590	167 484 444	167 484 544	0.045
40	32	167 484 491	167 484 591	167 484 445	167 484 545	0.082
50	40	167 484 492	167 484 592	167 484 446	167 484 546	0.082
63	50	167 484 493	167 484 593	167 484 447	167 484 547	0.104

## Face seal



d [mm]	DN [mm]	EPDM Code	FPM Code	kg
16	10	748 410 059	749 410 059	0.002
20	15	748 410 059	749 410 059	0.002
25	20	748 410 106	749 410 106	0.002
32	25	748 410 151	749 410 151	0.002
40	32	748 410 062	749 410 062	0.005
50	40	748 410 003	749 410 003	0.007
63	50	748 410 231	749 410 231	0.002

# PVC-C



## Seal set

### Model:

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

d [mm]	DN [mm]	EPDM Code	FPM Code	kg
16	10	<b>161 488 242</b>	<b>161 488 248</b>	0.011
20	15	<b>161 488 242</b>	<b>161 488 248</b>	0.011
25	20	<b>161 488 243</b>	<b>161 488 249</b>	0.011
32	25	<b>161 488 244</b>	<b>161 488 250</b>	0.014
40	32	<b>161 488 245</b>	<b>161 488 251</b>	0.014
50	40	<b>161 488 246</b>	<b>161 488 252</b>	0.026
63	50	<b>161 488 247</b>	<b>161 488 253</b>	0.032



## Turn limiter 90°

d [mm]	DN [mm]	Code	kg
16	10	<b>167 482 479</b>	0.001
20	15	<b>167 482 479</b>	0.001
25	20	<b>167 482 480</b>	0.002
32	25	<b>167 482 480</b>	0.002
40	32	<b>167 482 481</b>	0.004
50	40	<b>167 482 481</b>	0.004
63	50	<b>167 482 482</b>	0.004



## Assembly kit

### Model:

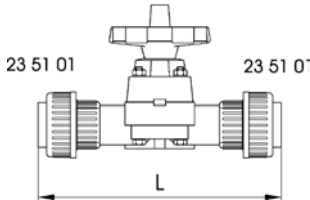
- Intermediate element for ball valve type 543 horizontal and electric or pneumatic actuators EA21; PA11/21
- Including screws and position indicator for actuators

d [mm]	DN [mm]	Code	kg
16 - 20	10 - 15	<b>167 484 941</b>	0.000
25 - 32	20 - 25	<b>167 484 942</b>	0.000
40 - 50	32 - 40	<b>167 484 943</b>	0.000
63	50	<b>167 484 944</b>	0.000

# PVC-C

## Diaphragm valves PVC-C metric

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



**Model:**

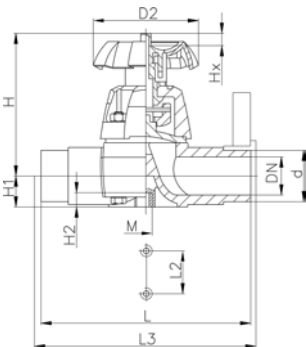
- Type 315 with two adhesive jointed unions
- Overall length not standard
- For easy installation and removal

**Option:**

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

d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	kg	D2 [mm]	L [mm]	Lift = Hx [mm]
20	15	10	72	<b>163 314 017</b>	0.378	25	182	8
25	20	10	137	<b>163 314 018</b>	0.584	25	208	11
32	25	10	207	<b>163 314 019</b>	0.906	25	224	13
40	32	10	354	<b>163 314 020</b>	1.000	45	256	16
50	40	10	517	<b>163 314 021</b>	1.496	45	290	21
63	50	10	713	<b>163 314 022</b>	3.100	45	342	28

### Diaphragm valve type 315 PVC-C With solvent cement spigots



**Model:**

- Overall length according to EN 558

**Option:**

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

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

d [mm]	D2 [mm]	L [mm]	L2 [mm]	L3 [mm]	H [mm]	H1 [mm]	H2 [mm]	M	Lift = Hx [mm]
20	80	124	25	130	90	14	12	M6	8
25	80	144	25	150	102	18	12	M6	11
32	94	154	25	160	119	21	12	M6	13
40	117	174	45	180	126	26	15	M8	16
50	117	194	45	200	139	33	15	M8	21
63	152	224	45	230	172	39	15	M8	28

# PVC-C

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



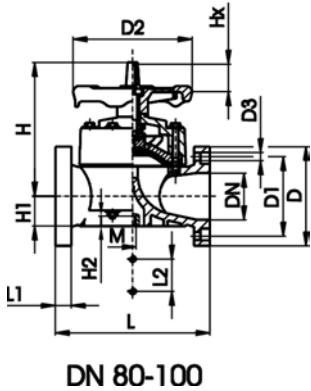
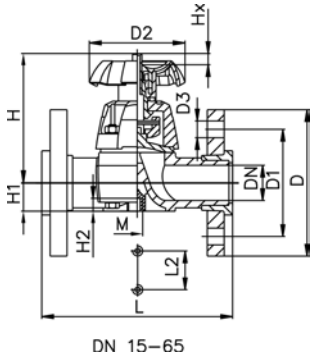
### Model:

- Jointing face flat
- DN 15-65 with backing flange
- DN 80-150 with fixed flange
- Overall length according to EN 558

### Option:

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

\* DN80 and DN150 fixed flanges metric and Inch ANSI B16.5



d [mm]	DN [mm]	Inch	PN	kv-value (Δp=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	A L	Lift = Hx [mm]
20	130		25	95	65	80	14	90	14	12	M6	4	8
25	150		25	105	75	80	14	102	18	12	M6	4	11
32	160		25	115	85	94	14	119	21	12	M6	4	13
40	180		45	140	100	117	18	126	26	15	M8	4	16
50	200		45	150	110	117	18	139	33	15	M8	4	21
63	230		45	165	125	152	18	172	39	15	M8	4	28
75	290		70	185	145	152	18	201	46	15	M8	4	30
* 90	310	35	120	200	160	270	18	265	57	23	M12	8	40
110	350	35	120	225	180	270	18	304	69	23	M12	8	50



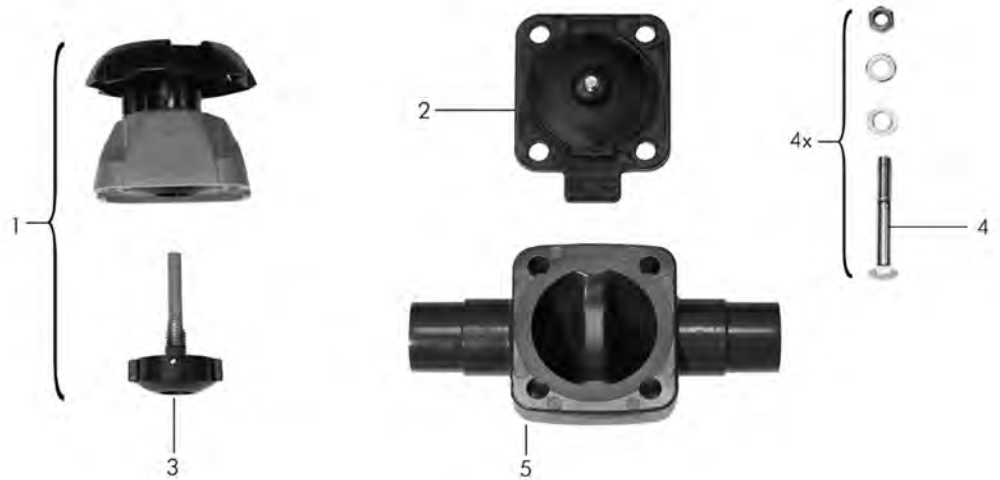
## Handwheel with built-in locking mechanism For diaphragm valve type 314 / 315 / 317 / 319

d-d [mm]	DN-DN [mm]	d-d [inch]	Code	kg
20 - 25	15 - 20	½ - ¾	167 481 943	0.032
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

## Spare parts diaphragm valves

### Spare parts diaphragm valve type 315



#### Bonnet complete

**Model:**

- Without diaphragm (1, 3)



d [mm]	DN [mm]	elastomer diaphragm Code	PTFE diaphragm Code	kg	
20	15	161 484 625	161 484 632	0.185	
25	20	161 484 626	161 484 633	0.299	
32	25	161 484 627	161 484 634	0.367	
40	32	161 484 628	161 484 635	0.361	
50	40	161 484 629	161 484 636	0.422	
63	50	161 484 630	161 484 637	0.896	

#### Diaphragm (2)



d [mm]	DN [mm]	EPDM Code	PTFE/EPDM Code	kg	
20	15	161 481 022	161 311 698	0.025	
25	20	161 481 023	161 311 699	0.035	
32	25	161 481 024	161 311 700	0.060	
40	32	161 481 025	161 311 701	0.083	
50	40	161 481 026	161 311 702	0.106	
63	50	161 481 027	161 311 703	0.150	

#### Pressure spindle (3)



d [mm]	DN [mm]	elastomer diaphragm Code	PTFE diaphragm Code	kg	
20	15	161 484 688	161 484 696	0.060	
25	20	161 484 689	161 484 697	0.105	
32	25	161 484 690	161 484 698	0.046	
40	32	161 484 691	161 484 699	0.062	
50	40	161 484 692	161 484 700	0.057	
63	50	161 484 693	161 484 701	0.113	

# PVC-C



## Fastening set (4)

d [mm]	DN [mm]	for PVC-U PVC- C ABS Code	kg
20	15	<b>161 484 704</b>	0.067
25	20	<b>161 484 705</b>	0.073
32	25	<b>161 484 706</b>	0.150
40	32	<b>161 484 707</b>	0.168
50	40	<b>161 484 708</b>	0.327
63	50	<b>161 484 709</b>	0.525



## Valve body metric (5)

d [mm]	DN [mm]	PVC-C solvent cement spigot Code	kg
20	15	<b>163 480 271</b>	0.083
25	20	<b>163 480 272</b>	0.143
32	25	<b>163 480 273</b>	0.232
40	32	<b>163 480 274</b>	0.371
50	40	<b>163 480 275</b>	0.564
63	50	<b>163 480 276</b>	0.733



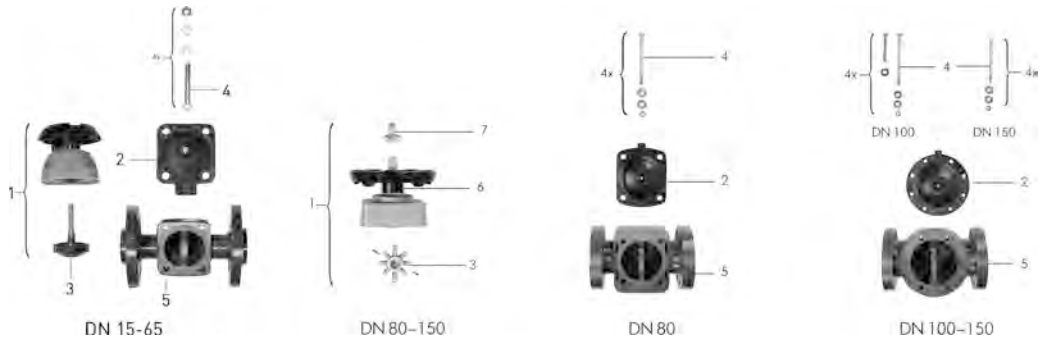
## Valve body BS/ASTM (5)

Inch	DN [mm]	PVC-C solvent cement spigot Code	kg
½	15	<b>163 480 135</b>	0.090
¾	20	<b>163 480 136</b>	0.150
1	25	<b>163 480 137</b>	0.215
1 ¼	32	<b>163 480 138</b>	0.344
1 ½	40	<b>163 480 139</b>	0.545
2	50	<b>163 480 140</b>	0.846



# PVC-C

## Spare parts diaphragm valve type 317



### Bonnet complete

#### Model:

- Without diaphragm (1, 3)



d [mm]	DN [mm]	elastomer diaphragm Code	PTFE diaphragm Code	kg
20	15	161 484 625	161 484 632	0.185
25	20	161 484 626	161 484 633	0.299
32	25	161 484 627	161 484 634	0.367
40	32	161 484 628	161 484 635	0.361
50	40	161 484 629	161 484 636	0.422
63	50	161 484 630	161 484 637	0.896
75	65	161 484 631	161 484 638	1.526
90	80	161 482 514	161 482 516	3.967
110	100	161 482 515	161 482 517	5.700
160	150	161 482 901	161 482 906	14.040

### Diaphragm (2)



d [mm]	DN [mm]	EPDM Code	PTFE/EPDM Code	kg
20	15	161 481 022	161 311 698	0.025
25	20	161 481 023	161 311 699	0.035
32	25	161 481 024	161 311 700	0.060
40	32	161 481 025	161 311 701	0.083
50	40	161 481 026	161 311 702	0.106
63	50	161 481 027	161 311 703	0.150
75	65	161 481 028	161 480 240	0.252
90	80	161 481 029	161 480 241	0.390
110	100	161 481 030	161 480 242	0.630
160	150	161 482 754	161 482 760	1.421

### Pressure spindle (3)



d [mm]	DN [mm]	elastomer diaphragm Code	PTFE diaphragm Code	kg
20	15	161 484 688	161 484 696	0.060
25	20	161 484 689	161 484 697	0.105
32	25	161 484 690	161 484 698	0.046
40	32	161 484 691	161 484 699	0.062
50	40	161 484 692	161 484 700	0.057
63	50	161 484 693	161 484 701	0.113
75	65	161 484 694	161 484 702	0.134
90	80	161 483 008	161 483 020	0.335
110	100	161 483 009	161 483 021	0.495
125	150	161 483 011	161 483 023	4.500

# PVC-C



## Fastening set (4)

d [mm]	DN [mm]	for PVC-U PVC- C ABS Code	kg
20	15	<b>161 484 704</b>	0.067
25	20	<b>161 484 705</b>	0.073
32	25	<b>161 484 706</b>	0.150
40	32	<b>161 484 707</b>	0.168
50	40	<b>161 484 708</b>	0.327
63	50	<b>161 484 709</b>	0.525
75	65	<b>161 483 032</b>	0.679
90	80	<b>161 483 033</b>	0.845
110	100	<b>161 483 034</b>	1.440
160	150	<b>161 483 037</b>	0.400



## Valve body with backing/flange (5)

Inch	d [mm]	DN [mm]	PVC-C metric Code	kg
½	20	15	<b>163 480 808</b>	0.135
¾	25	20	<b>163 480 809</b>	0.255
1	32	25	<b>163 480 810</b>	0.375
1 ¼	40	32	<b>163 480 811</b>	0.620
1 ½	50	40	<b>163 480 812</b>	1.220
2	63	50	<b>163 480 813</b>	1.750
2 ½	75	65	<b>163 480 814</b>	2.940
3	90	80	<b>163 480 677</b>	4.750
4	110	100	<b>163 480 678</b>	6.900



## O-ring seal (6)

d [mm]	DN [mm]	EPDM Code
90	80	-
110	100	-
160	150	<b>748 410 212</b>

## Indicator cap (7)

d [mm]	DN [mm]	PVC-U SAN Code	kg
90	80	<b>161 481 759</b>	0.032
110	100	<b>161 481 760</b>	0.035
160	150	<b>161 482 744</b>	0.010

# PVC-C

## Ball check valves PVC-C metric

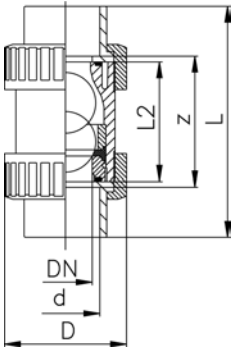
### Ball check valve type 360 PVC-C

#### With solvent cement sockets metric



#### Model:

- Union ends for easy installation and removal
- Ball is sealing at a minimum water column of 2 m
- Vibration free even at high flow velocity
- Installation position horizontal or vertical



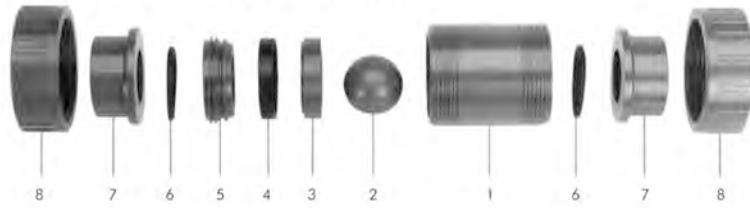
d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg	z [mm]	D [mm]	L [mm]	L2 [mm]
16	10	16	170	<b>163 360 401</b>	<b>163 360 411</b>	0.139	71	45	99	63
20	15	16	150	<b>163 360 402</b>	<b>163 360 412</b>	0.139	70	45	102	63
25	20	16	330	<b>163 360 403</b>	<b>163 360 413</b>	0.231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

# PVC-C

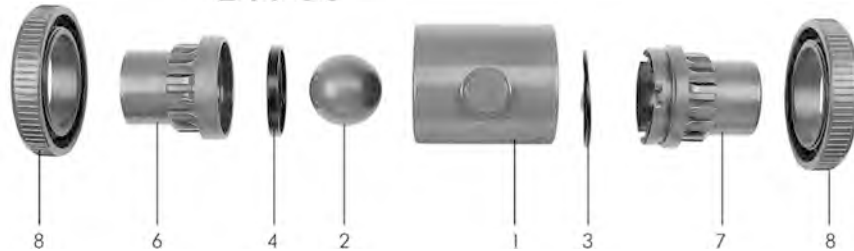
## Spare parts ball check valves

### Spare parts ball check valve type 360

DN 10-50



DN 80



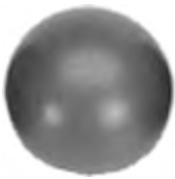
### Central part

#### Model:

- Central part consisting of: body (1), ball (2), support ring (3), sealing ring (4) and uni-on bush (5)

d [mm]	DN [mm]	PVC-C EPDM Code	PVC-C FPM Code	kg
16	10	163 480 645	163 480 655	0.064
20	15	163 480 646	163 480 656	0.064
25	20	163 480 647	163 480 657	0.106
32	25	163 480 648	163 480 658	0.171
40	32	163 480 649	163 480 659	0.276
50	40	163 480 650	163 480 660	0.424
63	50	163 480 651	163 480 661	0.802

### Ball (2)



d [mm]	DN [mm]	PVC-U Code	PP-H with talc density 1.24 Code	PP-H 100% Code	PVDF Code	kg
16	10	161 330 304	167 481 165	167 480 024	175 480 153	0.010
20	15	161 330 304	167 481 165	167 480 024	175 480 153	0.010
25	20	161 330 354	167 481 166	167 480 025	175 480 154	0.014
32	25	161 330 404	167 481 167	167 480 026	175 480 155	0.028
40	32	161 330 454	167 481 168	167 480 027	175 480 156	0.064
50	40	161 330 504	167 481 169	167 480 028	175 480 157	0.093
63	50	161 330 554	167 481 170	167 480 029	175 480 158	0.214
90	80	161 330 654				0.475

# PVC-C

## Sealing ring (4)



d [mm]	DN [mm]	EPDM Code	FPM Code	kg
16	10	161 483 259	161 483 265	0.004
20	15	161 483 259	161 483 265	0.004
25	20	161 483 260	161 483 266	0.006
32	25	161 483 261	161 483 267	0.003
40	32	161 483 262	161 483 268	0.015
50	40	161 483 263	161 483 269	0.025
63	50	161 483 264	161 483 270	0.050
90	80	161 480 141	161 480 149	0.080

## Face seal (6)



d [mm]	DN [mm]	EPDM Code	FPM Code	kg
16	10	748 410 042	749 410 042	0.002
20	15	748 410 042	749 410 042	0.002
25	20	748 410 116	749 410 116	0.030
32	25	748 410 103	749 410 103	0.002
40	32	748 410 027	749 410 027	0.003
50	40	748 410 010	749 410 010	0.007
63	50	748 410 011	749 410 011	0.010
90	80	748 410 099	749 410 099	0.015

## Union nut (8)



d [mm]	DN [mm]	PVC-C Code	kg
16	10	163 480 995	0.021
20	15	163 480 995	0.021
25	20	163 480 081	0.036
32	25	163 480 082	0.043
40	32	163 480 083	0.077
50	40	163 480 084	0.145
63	50	163 480 085	0.303

## Valve end with socket (7)



d [mm]	Inch	DN [mm]	PVC-C metric Code	kg
16	1/2	10	163 480 522	0.011
20	3/8	15	163 480 523	0.011
25	1	20	163 480 524	0.017
32	1 1/4	25	163 480 525	0.025
40	1 1/2	32	163 480 526	0.047
50	2	40	163 480 527	0.073
63	3	50	163 480 528	0.129

## Seal set (4, 6)



d [mm]	DN [mm]	EPDM Code	FPM Code	kg
16	10	161 482 910	161 482 920	0.003
20	15	161 482 910	161 482 920	0.003
25	20	161 482 911	161 482 921	0.007
32	25	161 482 912	161 482 922	0.011
40	32	161 482 913	161 482 923	0.016
50	40	161 482 914	161 482 924	0.032
63	50	161 482 915	161 482 925	0.065

# PVC-C



## Body (1)

d [mm]	DN [mm]	PVC-U Code	kg	
90	80	161 480 158	1.790	

# PVC-C

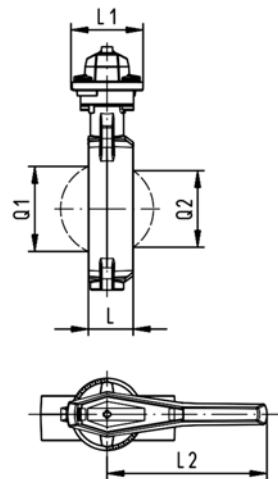
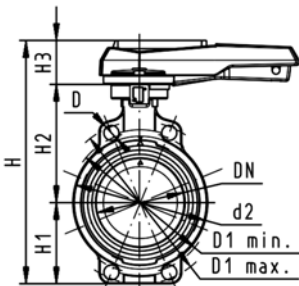
## Butterfly valves PVC-C

### 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/ASME B 16.5 Class 150, BS 1560: 1989, BS 4504, JIS B 2220
- Overall length according to EN 558, ISO 5752



d [mm]	DN [mm]	Inch	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
63	50	2	10	1470	<b>163 567 002</b>	<b>163 567 022</b>	1.400
75	65	2 ½	10	2200	<b>163 567 003</b>	<b>163 567 023</b>	1.174
90	80	3	10	3000	<b>163 567 004</b>	<b>163 567 024</b>	1.353
110	100	4	10	6500	<b>163 567 005</b>	<b>163 567 025</b>	2.043
140	125	5	10	11500	<b>163 567 006</b>	<b>163 567 026</b>	2.536
160	150	6	10	16600	<b>163 567 007</b>	<b>163 567 027</b>	3.634
225	200	8	10	39600	<b>163 567 008</b>	<b>163 567 028</b>	5.901

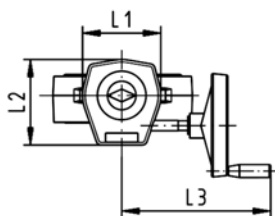
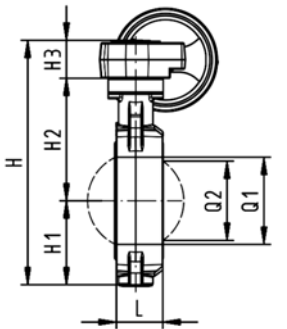
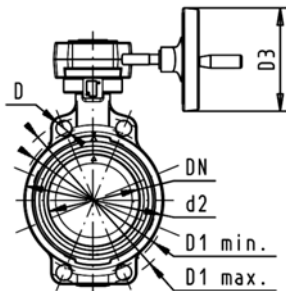
d [mm]	D [mm]	D1 min. [mm]	D1 max. [mm]	d2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	L [mm]	L1 [mm]	L2 [mm]	Q1 [mm]	Q2 [mm]
63	19	120.0	125.0	104	264	77	134	54	45	106	205	40	
75	19	139.7	145.0	115	277	83	140	54	46	106	205	54	35
90	19	150.0	160.0	131	289	89	146	54	49	106	205	67	50
110	19	175.0	190.5	161	325	104	167	55	56	106	255	88	74
140	23	210.0	215.9	187	352	117	181	55	64	106	255	113	97
160	24	241.3	241.3	215	373	130	189	55	72	106	255	139	123
225	23	290.0	295.0	267	435	158	210	67	73	140	408	178	169

# PVC-C

## 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/ASME B 16.5 Class 150, BS 1560: 1989, BS 4504, JIS B 2220
- Overall length according to EN 558, ISO 5752



d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
63	50	2	10	1470	<b>163 567 042</b>	<b>163 567 062</b>	3.078
75	65	2 ½	10	2200	<b>163 567 043</b>	<b>163 567 063</b>	3.212
90	80	3	10	3000	<b>163 567 044</b>	<b>163 567 064</b>	3.391
110	100	4	10	6500	<b>163 567 045</b>	<b>163 567 065</b>	4.033
140	125	5	10	11500	<b>163 567 046</b>	<b>163 567 066</b>	4.526
160	150	6	10	16600	<b>163 567 047</b>	<b>163 567 067</b>	5.624
225	200	8	10	39600	<b>163 567 048</b>	<b>163 567 068</b>	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]	Q1 [mm]
63	19	120.0	125.0	104	160	278	77	134	60	45	120	132	236	40
75	19	139.7	145.0	115	160	291	83	140	60	46	120	132	236	54
90	19	150.0	160.0	131	160	303	89	146	60	49	120	132	236	67
110	19	175.0	190.5	160	160	339	104	167	60	56	120	132	236	88
140	23	210.0	215.9	187	160	365	117	181	60	64	120	132	236	113
160	24	241.3	241.3	215	160	387	130	189	60	72	120	132	236	139
225	23	290.0	295.0	267	160	436	158	210	60	73	120	132	236	178

d [mm]	Q2 [mm]
63	
75	35
90	50
110	74
140	97
160	123
225	169



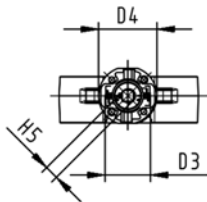
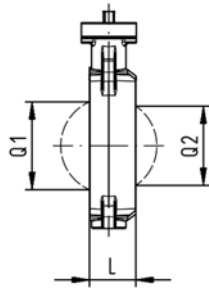
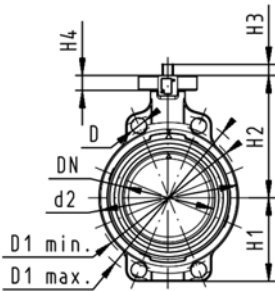
# PVC-C

## Butterfly valve type 567 PVC-C Bare shaft



### Model:

- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, ANSI/ASME B 16.5 Class 150, BS 1560: 1989, BS 4504, JIS B 2220
- Overall length according to EN 558, ISO 5752
- Interface F07 according to DIN/ISO 5211



d [mm]	DN [mm]	Inch	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
63	50	2	10	1470	<b>163 567 802</b>	<b>163 567 822</b>	0.835
75	65	2 ½	10	2200	<b>163 567 803</b>	<b>163 567 823</b>	0.952
90	80	3	10	3000	<b>163 567 804</b>	<b>163 567 824</b>	1.131
110	100	4	10	6500	<b>163 567 805</b>	<b>163 567 825</b>	1.773
140	125	5	10	11500	<b>163 567 806</b>	<b>163 567 826</b>	2.379
160	150	6	10	16600	<b>163 567 807</b>	<b>163 567 827</b>	3.364
225	200	8	10	39600	<b>163 567 808</b>	<b>163 567 828</b>	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]	Q1 [mm]	Q2 [mm]
63	19	120.0	125.0	104	70	90	222	77	134	27	23	11	45	40	
75	19	139.7	145.0	115	70	90	235	83	140	27	23	11	46	54	35
90	19	150.0	160.0	131	70	90	247	89	146	27	23	11	49	67	50
110	19	175.0	190.5	161	70	90	287	104	167	16	23	14	56	88	74
140	23	210.0	215.9	187	70	90	313	117	181	16	23	14	64	113	97
160	24	241.3	241.3	215	70	90	335	130	189	19	23	17	72	139	123
225	23	290.0	295.0	267	70	90	387	158	210	19	23	17	73	178	169

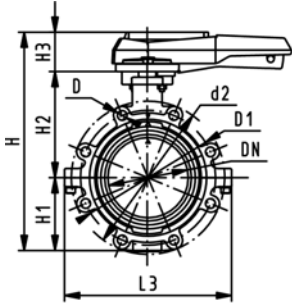
# PVC-C

## Lugstyle butterfly valve type 568 PVC-C Hand lever with ratchet settings

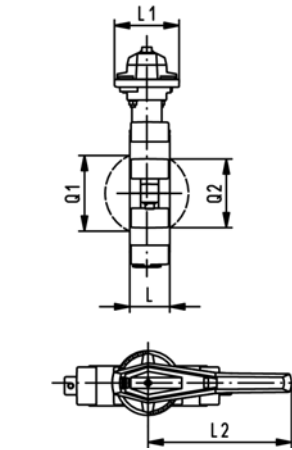


### Model:

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension: ISO 7005 PN10, EN 1092 PN10, DIN 2501 PN10
- Overall length according to EN 558, ISO 5752



d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
63	50	2	10	1470	<b>163 568 002</b>	<b>163 568 022</b>	3.143
75	65	2 ½	10	2200	<b>163 568 003</b>	<b>163 568 023</b>	3.510
90	80	3	10	3000	<b>163 568 004</b>	<b>163 568 024</b>	4.564
110	100	4	10	6500	<b>163 568 005</b>	<b>163 568 025</b>	6.127
140	125	5	10	11500	<b>163 568 006</b>	<b>163 568 026</b>	8.115
160	150	6	10	16600	<b>163 568 007</b>	<b>163 568 027</b>	10.094
225	200	8	10	39600	<b>163 568 008</b>	<b>163 568 028</b>	15.849



d [mm]	d2 [mm]	D	D1 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	Q1 [mm]	Q2 [mm]
63	150	M16	125	265	77	134	54	45	106	205	150	40	
75	170	M16	145	277	83	140	54	46	106	205	160	54	35
90	184	M16	160	289	89	146	54	49	106	205	205	67	50
110	216	M16	180	326	104	167	55	56	106	255	244	88	74
140	246	M16	210	353	117	181	55	64	106	255	272	113	97
160	273	M20	240	374	130	189	55	72	106	255	297	139	123
225	334	M20	295	435	158	210	67	73	140	408	360	178	169

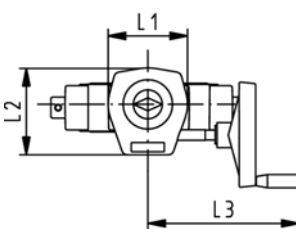
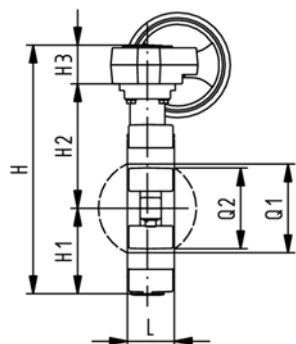
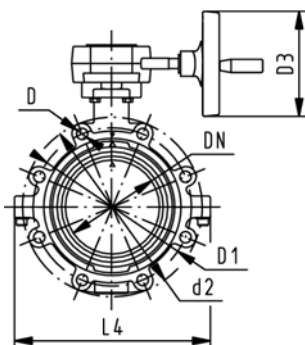
# PVC-C

## Lugstyle butterfly valve type 568 PVC-C Reduction gear with handwheel



### Model:

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension: ISO 7005 PN10, EN 1092 PN10, DIN 2501 PN10
- Overall length according to EN 558, ISO 5752



d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
63	50	2	10	1470	<b>163 568 042</b>	<b>163 568 062</b>	5.181
75	65	2 1/2	10	2200	<b>163 568 043</b>	<b>163 568 063</b>	5.548
90	80	3	10	3000	<b>163 568 044</b>	<b>163 568 064</b>	6.602
110	100	4	10	6500	<b>163 568 045</b>	<b>163 568 065</b>	8.117
140	125	5	10	11500	<b>163 568 046</b>	<b>163 568 066</b>	10.105
160	150	6	10	16600	<b>163 568 047</b>	<b>163 568 067</b>	12.084
225	200	8	10	39600	<b>163 568 048</b>	<b>163 568 068</b>	17.302

d [mm]	d2 [mm]	D	D1 [mm]	D3 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	Q1 [mm]	Q2 [mm]
63	150	M16	125	160	279	77	134	60	45	120	132	236	150	40	
75	170	M16	145	160	291	83	140	60	46	120	132	236	160	54	35
90	184	M16	160	160	303	89	146	60	49	120	132	236	205	67	50
110	216	M16	180	160	339	104	167	60	56	120	132	236	244	88	74
140	246	M16	210	160	366	117	181	60	64	120	132	236	272	113	97
160	273	M20	240	160	387	130	189	60	72	120	132	236	297	139	123
225	334	M20	295	160	436	158	210	60	73	120	132	236	360	178	169

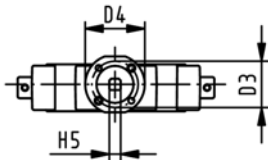
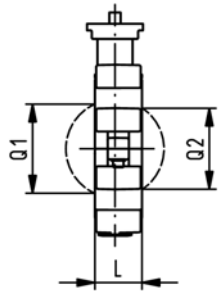
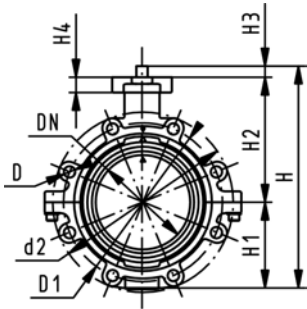
# PVC-C

## Lugstyle butterfly valve type 568 PVC-C Bare shaft



### Model:

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension: ISO 7005 PN10, EN 1092 PN10, DIN 2501 PN10
- Overall length according to EN 558, ISO 5752
- Interface F07 according to DIN/ISO 5211



d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
63	50	2	10	1470	<b>163 568 802</b>	<b>163 568 822</b>	2.921
75	65	2 ½	10	2200	<b>163 568 803</b>	<b>163 568 823</b>	3.288
90	80	3	10	3000	<b>163 568 804</b>	<b>163 568 824</b>	4.342
110	100	4	10	6500	<b>163 568 805</b>	<b>163 568 825</b>	5.857
140	125	5	10	11500	<b>163 568 806</b>	<b>163 568 826</b>	7.845
160	150	6	10	16600	<b>163 568 807</b>	<b>163 568 827</b>	9.824
225	200	8	10	39600	<b>163 568 808</b>	<b>163 568 828</b>	15.042

d [mm]	d2 [mm]	D	D1 [mm]	D3 [mm]	D4 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	L [mm]	Q1 [mm]	Q2 [mm]
63	150	M16	125	70	90	222	77	134	27	23	45	40	
75	170	M16	145	70	90	235	83	140	27	23	46	54	35
90	184	M16	160	70	90	247	89	146	27	23	49	67	50
110	216	M16	180	70	90	287	104	167	16	23	56	88	74
140	246	M16	210	70	90	313	117	181	16	23	64	113	97
160	273	M20	240	70	90	335	130	189	19	23	72	139	123
225	334	M20	295	70	90	387	158	210	19	23	73	178	169

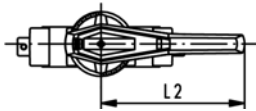
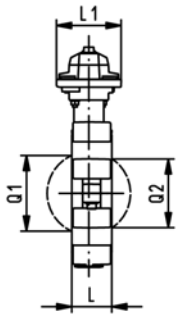
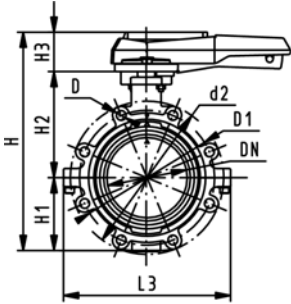
# PVC-C

## Lugstyle butterfly valve type 568 PVC-C Hand lever with ratchet settings



### Model:

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension ANSI/ASME B 16.5 Class 150
- Overall length according to EN 558, ISO 5752

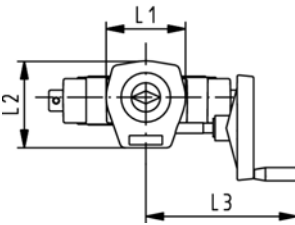
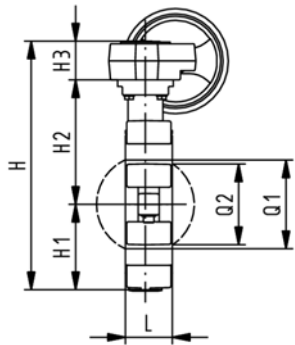
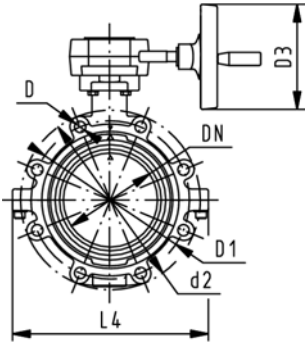


Inch	d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
2	63	50	10	1470	<b>163 568 102</b>	<b>163 568 122</b>	3.143
2 ½	75	65	10	2200	<b>163 568 103</b>	<b>163 568 123</b>	3.510
3	90	80	10	3000	<b>163 568 104</b>	<b>163 568 124</b>	3.935
4	110	100	10	6500	<b>163 568 105</b>	<b>163 568 125</b>	6.127
5	140	125	10	11500	<b>163 568 106</b>	<b>163 568 126</b>	8.115
6	160	150	10	16600	<b>163 568 107</b>	<b>163 568 127</b>	10.094
8	225	200	10	39600	<b>163 568 108</b>	<b>163 568 128</b>	15.849

Inch	d2 [mm]	D	D1 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	Q1 [mm]	Q2 [mm]
2	150	UNC 5/8	121	265	77	134	54	45	106	205	150	40	
2 ½	170	UNC 5/8	138	277	83	140	54	46	106	205	160	54	35
3	177	UNC 5/8	152	289	89	146	54	49	106	205	175	67	50
4	216	UNC 5/8	191	326	104	167	55	56	106	255	244	88	74
5	246	UNC 3/4	216	353	117	181	55	64	106	255	272	113	97
6	273	UNC 3/4	241	374	130	189	55	72	106	255	297	139	123
8	334	UNC 3/4	298	435	158	210	67	73	140	408	360	178	169

# PVC-C

## Lugstyle butterfly valve type 568 PVC-C Reduction gear with handwheel



### Model:

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension ANSI/ASME B 16.5 Class 150
- Overall length according to EN 558, ISO 5752

Inch	d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
2	63	50	10	1470	<b>163 568 142</b>	<b>163 568 162</b>	5.181
2 1/2	75	65	10	2200	<b>163 568 143</b>	<b>163 568 163</b>	5.548
3	90	80	10	3000	<b>163 568 144</b>	<b>163 568 164</b>	5.973
4	110	100	10	6500	<b>163 568 145</b>	<b>163 568 165</b>	8.117
5	140	125	10	11500	<b>163 568 146</b>	<b>163 568 166</b>	10.105
6	160	150	10	16600	<b>163 568 147</b>	<b>163 568 167</b>	12.084
8	225	200	10	39600	<b>163 568 148</b>	<b>163 568 168</b>	17.302

Inch	d2 [mm]	D	D1 [mm]	D3 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	Q1 [mm]
2	150	UNC 5/8	121	160	279	77	134	60	45	120	132	236	150	40
2 1/2	170	UNC 5/8	138	160	291	83	140	60	46	120	132	236	160	54
3	177	UNC 5/8	152	160	303	89	146	60	49	120	132	236	175	67
4	216	UNC 5/8	191	160	339	104	167	60	56	120	132	236	244	88
5	246	UNC 3/4	216	160	366	117	181	60	64	120	132	236	272	113
6	273	UNC 3/4	241	160	387	130	189	60	72	120	132	236	297	139
8	334	UNC 3/4	298	160	436	158	210	60	73	120	132	236	360	178

Inch	Q2 [mm]
2	
2 1/2	35
3	50
4	74
5	97
6	123
8	169

# PVC-C

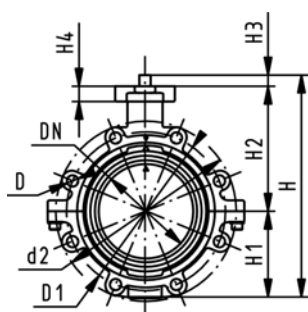
## Lugstyle butterfly valve type 568 PVC-C Bare shaft



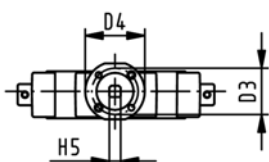
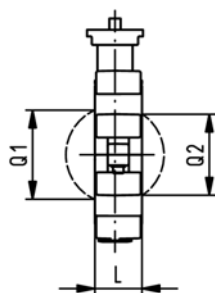
### Model:

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension ANSI/ASME B 16.5 Class 150
- Overall length according to EN 558, ISO 5752
- Interface F07 according to DIN/ISO 5211

Inch	d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
2	63	50	10	1470	<b>163 568 902</b>	<b>163 568 922</b>	2.921
2 ½	75	65	10	2200	<b>163 568 903</b>	<b>163 568 923</b>	3.288
3	90	80	10	3000	<b>163 568 904</b>	<b>163 568 924</b>	3.713
4	110	100	10	6500	<b>163 568 905</b>	<b>163 568 925</b>	5.857
5	140	125	10	11500	<b>163 568 906</b>	<b>163 568 926</b>	7.845
6	160	150	10	16600	<b>163 568 907</b>	<b>163 568 927</b>	9.824
8	225	200	10	39600	<b>163 568 908</b>	<b>163 568 928</b>	15.042



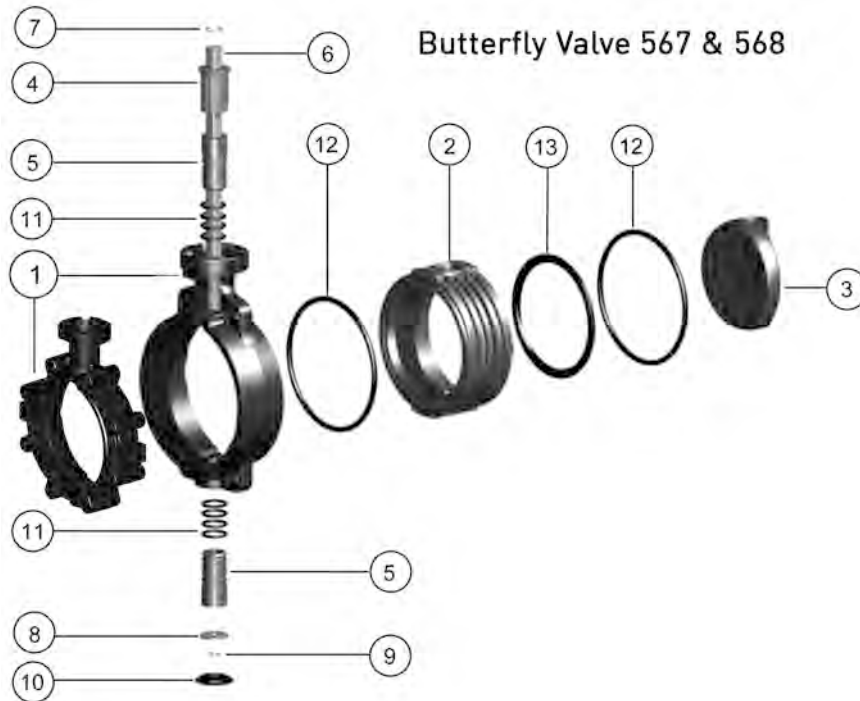
Inch	d2 [mm]	D	D1 [mm]	D3 [mm]	D4 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	L [mm]	Q1 [mm]	Q2 [mm]
2	150	UNC 5/8	121	70	90	222	77	134	27	23	45	40	
2 ½	170	UNC 5/8	138	70	90	235	83	140	27	23	46	54	35
3	177	UNC 5/8	152	70	90	247	89	146	27	23	49	67	50
4	216	UNC 5/8	191	70	90	287	104	167	16	23	56	88	74
5	246	UNC 3/4	216	70	90	313	117	181	16	23	64	113	97
6	273	UNC 3/4	241	70	90	335	130	189	19	23	72	139	123
8	334	UNC 3/4	298	70	90	387	158	210	19	23	73	178	169



# PVC-C

## Spare parts butterfly valves

### Spare parts butterfly valve type 567/568



### Inner body

**Model:**

- Inner body consisting of: inner body (2) and profile seal (13)



d [mm]	DN [mm]	PVC-C EPDM Code	kg
63	50	163 481 591	0.159
75	65	163 481 592	0.191
90	80	163 481 593	0.264
110	100	163 481 594	0.484
140	125	163 481 595	0.716
160	150	163 481 596	0.887
225	200	163 481 597	1.528

### Flange gasket (12)

**Model:**

- included in delivery 2 pcs.



d [mm]	DN [mm]	EPDM Code	FPM Code	kg
63	50	161 486 959	161 486 979	0.012
75	65	161 486 960	161 486 980	0.014
90	80	161 486 961	161 486 981	0.016
110	100	161 486 962	161 486 982	0.036
125	125	161 486 963	161 486 983	0.043
160	150	161 486 964	161 486 984	0.050
225	200	161 486 965	161 486 985	0.064
280	250	161 486 966	161 486 986	0.091
315	300	161 486 967	161 486 987	0.104



# PVC-C



## Disc (3)

d [mm]	DN [mm]	PVC-C Code	kg
63	50	<b>163 481 451</b>	0.037
75	65	<b>163 481 452</b>	0.070
90	80	<b>163 481 453</b>	0.112
110	100	<b>163 481 454</b>	0.215
140	125	<b>163 481 455</b>	0.387
160	150	<b>163 481 456</b>	0.000
225	200	<b>163 481 457</b>	0.000



## Bearing bush (5, 11)

### Model:

- included in delivery 2 pcs.
- With O-ring



d [mm]	DN [mm]	PVC-C EPDM Code	PVC-C FPM Code	kg
63	50	<b>163 481 576</b>	<b>163 481 582</b>	0.033
75	65	<b>163 481 576</b>	<b>163 481 582</b>	0.033
90	80	<b>163 481 576</b>	<b>163 481 582</b>	0.033
110	100	<b>163 481 577</b>	<b>163 481 583</b>	0.059
140	125	<b>163 481 577</b>	<b>163 481 583</b>	0.059
160	150	<b>163 481 578</b>	<b>163 481 584</b>	0.126
225	200	<b>163 481 578</b>	<b>163 481 584</b>	0.126



## End stop PP glasfiber reinforced (4)

d [mm]	DN [mm]	Code	kg
63	50	<b>167 483 251</b>	0.023
75	65	<b>167 483 251</b>	0.023
90	80	<b>167 483 251</b>	0.023
110	100	<b>167 483 252</b>	0.033
140	125	<b>167 483 252</b>	0.033
160	150	<b>167 483 253</b>	0.049
225	200	<b>167 483 253</b>	0.049
280	250	<b>167 483 254</b>	0.096
315	300	<b>167 483 254</b>	0.096



## Shaft set

### Model:

- Shaft set consisting of: shaft chrom steel 1.4301 AISI 304 (6), retention ring (7, 9) and washer (8)

DN [mm]	d [mm]	Code	kg
50	63	<b>161 486 899</b>	0.225
65	75	<b>161 486 900</b>	0.237
80	90	<b>161 486 901</b>	0.249
100	110	<b>161 486 902</b>	0.429
125	140	<b>161 486 903</b>	0.469
150	160	<b>161 486 904</b>	0.749
200	225	<b>161 486 905</b>	0.844
250	280	<b>161 486 906</b>	0.000
300	315	<b>161 486 907</b>	2.536

# PVC-C

## Lever



d [mm]	DN [mm]	with index plate Code	with fine adjustment Code	kg	
63	50	<b>161 486 690</b>	<b>161 486 325</b>	0.485	
75	65	<b>161 486 690</b>	<b>161 486 325</b>	0.485	
90	80	<b>161 486 690</b>	<b>161 486 325</b>	0.485	
110	100	<b>161 486 691</b>	<b>161 486 326</b>	0.540	
140	125	<b>161 486 691</b>	<b>161 486 326</b>	0.540	
160	150	<b>161 486 694</b>	<b>161 486 327</b>	0.537	
225	200	<b>161 486 695</b>	<b>161 486 328</b>	1.375	
280	250	<b>161 486 697</b>		0.330	
315	300	<b>161 486 697</b>		0.330	

# PVC-C

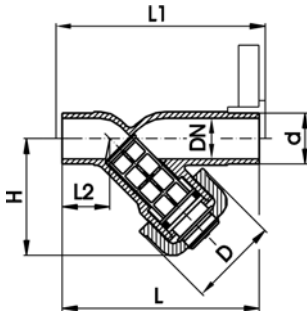
## Strainers PVC-C metric



### 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

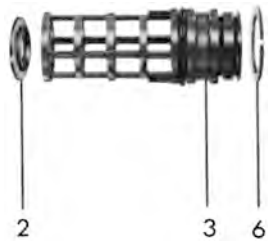
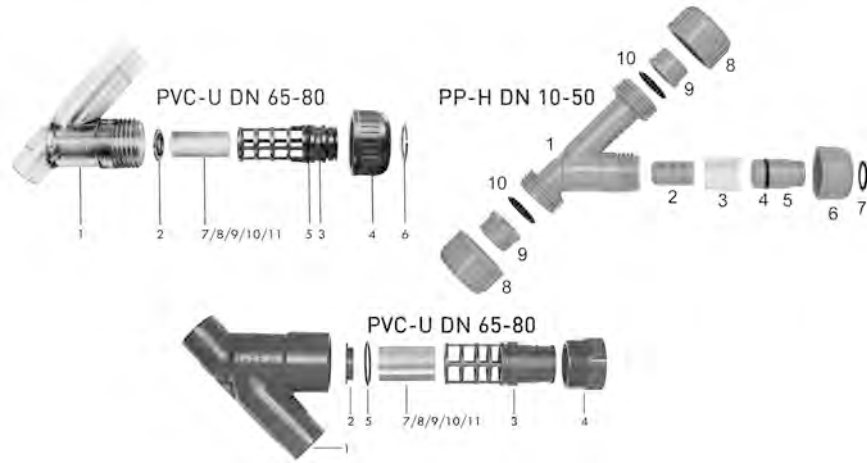


d [mm]	DN [mm]	PN	EPDM Code	FPM Code	kg	D [mm]	L [mm]	L1 [mm]	L2 [mm]	H [mm]
20	15	10	<b>163 305 302</b>	<b>163 305 317</b>	0.120	48	124	130	28	65
25	20	10	<b>163 305 303</b>	<b>163 305 318</b>	0.160	54	144	150	37	76
32	25	10	<b>163 305 304</b>	<b>163 305 319</b>	0.250	62	154	160	37	90
40	32	10	<b>163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

# PVC-C

## Spare parts line strainer

### Spare parts line strainer type 305/306



### Screen set

#### Model:

- Screen set PVC-U DN10-DN50 consisting of: screen (3), screen support ring (2) and circlip (6), PVC-U DN65-DN80: screen (3) and screen support ring (2). PP-H DN15-DN50: screen basket compl. without screen (2) and circlip (7)



d [mm]	DN [mm]	PVC-U Code	kg
20	15	<b>161 483 126</b>	0.110
25	20	<b>161 483 127</b>	0.070
32	25	<b>161 483 128</b>	0.255
40	32	<b>161 483 129</b>	0.135
50	40	<b>161 483 130</b>	0.140
63	50	<b>161 483 131</b>	0.140
75	65	<b>161 483 132</b>	0.490
90	80	<b>161 483 133</b>	0.390



### Body (1)

d [mm]	DN [mm]	PVC-C Code	kg
20	15	<b>163 481 075</b>	0.046
25	20	<b>163 481 076</b>	0.079
32	25	<b>163 481 077</b>	0.125
40	32	<b>163 481 078</b>	0.177
50	40	<b>163 481 079</b>	0.303
63	50	<b>163 481 080</b>	0.514

# PVC-C

## Screen cage

### Model:

- Screen cage in PVC-U (3) and PP-H (2)



d [mm]	DN [mm]	PVC-C Code	kg
20	15	<b>163 481 102</b>	0.018
25	20	<b>163 481 103</b>	0.024
32	25	<b>163 481 104</b>	0.035
40	32	<b>163 481 105</b>	0.055
50	40	<b>163 481 106</b>	0.088
63	50	<b>163 481 107</b>	0.132

## Valve nut

### Model:

- Union nut PVC-U DN10-DN50 (4), PP-H (6, 8)



d [mm]	DN [mm]	Cap nut PVC-C Code	kg
20	15	<b>163 481 084</b>	0.025
25	20	<b>163 481 085</b>	0.027
32	25	<b>163 481 086</b>	0.029
40	32	<b>163 481 087</b>	0.035
50	40	<b>163 481 088</b>	0.064
63	50	<b>163 481 089</b>	0.099

## Body seal

### Model:

- Body seal vor PVC-U (5), PP-H (10)



d [mm]	DN [mm]	EPDM Code	FPM Code	kg
20	15	<b>748 410 006</b>	<b>749 410 006</b>	0.002
25	20	<b>748 410 001</b>	<b>749 410 001</b>	0.002
32	25	<b>748 410 007</b>	<b>749 410 007</b>	0.002
40	32	<b>748 410 002</b>	<b>749 410 002</b>	0.003
50	40	<b>748 410 003</b>	<b>749 410 003</b>	0.007
63	50	<b>748 410 012</b>	<b>749 410 012</b>	0.008
75	65	<b>748 410 013</b>	<b>749 410 013</b>	0.011
90	80	<b>748 410 014</b>	<b>749 410 014</b>	0.012

## Screen perforation

### Model:

- For PVC-U (7), PP-H (3)



d [mm]	DN [mm]	PVC-U 0.5mm Code	PVC-U 0.8mm Code	PVC-U 1.4mm Code	PVC-U 2.2mm Code
20	15	<b>161 305 339</b>	<b>161 305 338</b>	<b>161 305 337</b>	<b>161 305 336</b>
25	20	<b>161 305 389</b>	<b>161 305 388</b>	<b>161 305 387</b>	<b>161 305 386</b>
32	25	<b>161 305 439</b>	<b>161 305 438</b>	<b>161 305 437</b>	<b>161 305 436</b>
40	32	<b>161 305 489</b>	<b>161 305 488</b>	<b>161 305 487</b>	<b>161 305 486</b>
50	40	<b>161 305 539</b>	<b>161 305 538</b>	<b>161 305 537</b>	<b>161 305 536</b>
63	50	<b>161 305 589</b>	<b>161 305 588</b>	<b>161 305 587</b>	<b>161 305 586</b>
75	65	<b>161 305 639</b>	<b>161 305 638</b>	<b>161 305 637</b>	<b>161 305 636</b>
90	80	<b>161 305 689</b>	<b>161 305 688</b>	<b>161 305 687</b>	<b>161 305 686</b>

# PVC-C

<b>d</b> [mm]	<b>DN</b> [mm]	<b>stainless steel</b> <b>0.5mm</b> <b>Code</b>	<b>kg</b>
20	15	<b>161 486 100</b>	0.002
25	20	<b>161 486 101</b>	0.004
32	25	<b>161 486 102</b>	0.006
40	32	<b>161 486 103</b>	0.009
50	40	<b>161 486 104</b>	0.014
63	50	<b>161 486 105</b>	0.022
75	65	<b>161 486 106</b>	0.026
90	80	<b>161 486 107</b>	0.036

# PVC-C

## Ball valves electric

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



DN10/15 - 50

#### Model:

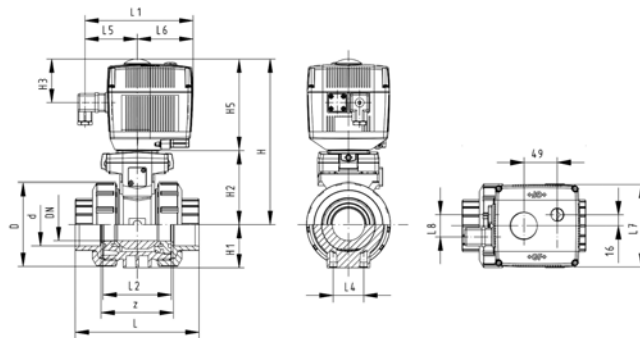
- Built on with electric actuator EA11
- Voltage 100-230 V, 50-60 Hz
- Control range 90°<
- Control time 5 s/90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts

#### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value (Δp=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



DN10/15 - 50

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

### Model:

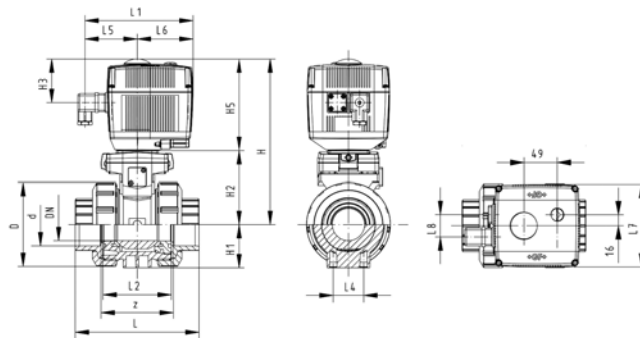
- Built on with electric actuator EA11
- Voltage 24 V AC/DC
- Control range 90°<
- Control time 5 s/90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts

### Option:

- Individual configuration of the valve (see form)

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





# PVC-C



DN10/15 - 50

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

### Model:

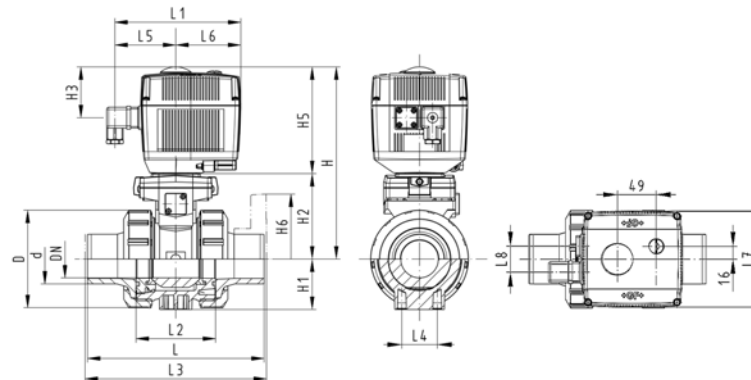
- Built on with electric actuator EA11
- Voltage 100-230 V, 50-60 Hz
- Control range 90°<
- Control time 5 s/90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts

### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value (Δp=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

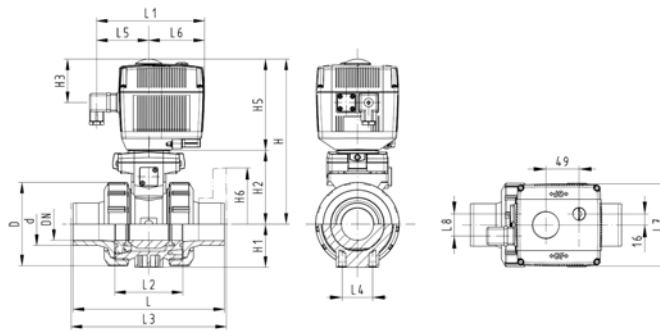


DN10/15 - 50

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

d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	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



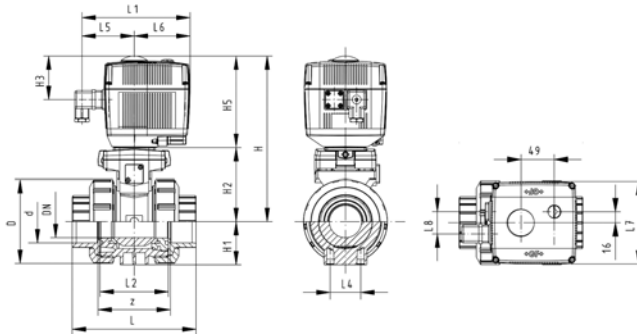
DN10/15 - 50

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

Rp [inch]	DN [mm]	PN	kv-value (Δp=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

# PVC-C

Rp [inch]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	L8 [mm]	z [mm]
3/8	50	200	27	64	64	137	92	161	56	25	77	83	122	33	64
1/2	50	200	27	64	64	137	95	161	56	25	77	83	122	33	64
3/4	58	209	30	73	64	137	110	161	65	25	77	83	122	33	72
1	68	209	36	73	64	137	123	161	71	25	77	83	122	33	79
1 1/4	84	220	44	84	64	137	146	161	85	45	77	83	122	33	94
1 1/2	97	220	51	84	64	137	157	161	89	45	77	83	122	33	95
2	124	243	64	106	64	137	183	161	101	45	77	83	122	33	107

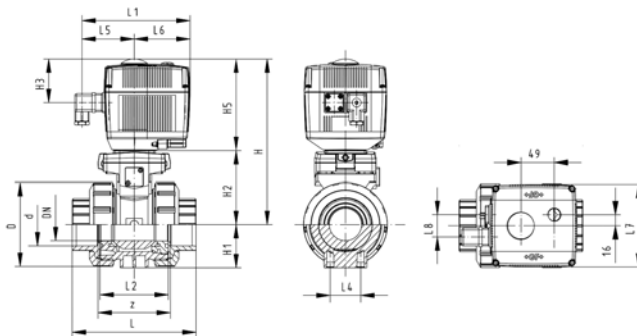


DN10/15 - 50

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

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



# PVC-C

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



DN10/15 - 50



### Model:

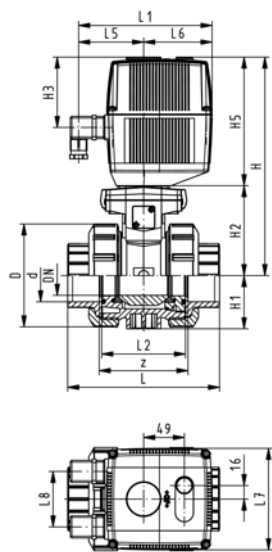
- Assignment of actuators: EA21 (DN10/15-50), EA31 (DN65-100 if available)
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Voltage 100-230 V, 50-60 Hz
- Control range 90°<
- Control time: EA21: 5s/90°<, EA31: 15s/90°<

### Option:

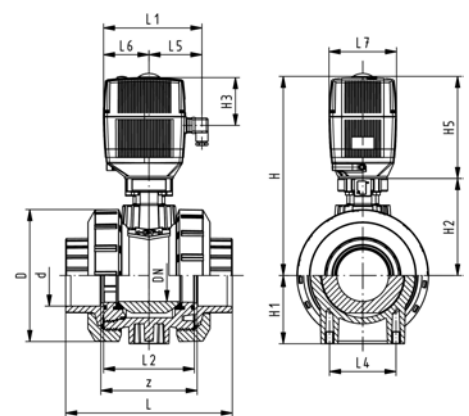
- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value (Δp=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
75	65	10	5000	199 130 409	199 130 419	4.000
90	80	10	7000	199 130 410	199 130 420	5.100
110	100	10	11000	199 130 411	199 130 421	6.700

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]	z [mm]
16	50	231	27	64	94	167	92	180	56	25	97	83	122	64
20	50	231	27	64	94	167	95	180	56	25	97	83	122	64
25	58	240	30	73	94	167	110	180	65	25	97	83	122	72
32	68	240	36	73	94	167	123	180	71	25	97	83	122	79
40	84	251	44	84	94	167	146	180	85	45	97	83	122	94
50	97	251	51	84	94	167	157	180	89	45	97	83	122	95
63	124	273	64	106	94	167	183	180	101	45	97	83	122	107
75	166	346	85	156	94	190	233	180	136	70	98	83	122	144
90	200	358	105	168	94	190	254	180	141	70	98	83	122	151
110	238	365	123	175	94	190	301	180	164	120	98	83	122	174



DN10/15-50



DN65-100

# PVC-C

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



DN10/15 - 50



### Model:

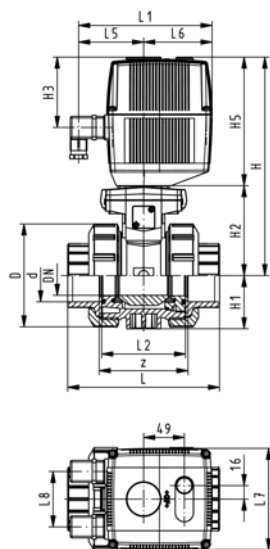
- Assignment of actuators: EA21 (DN10/15-50), EA31 (DN65-100 if available)
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Voltage 24 V AC/DC
- Control range 90°<
- Control time: EA21: 5s/90°<, EA31: 15s/90°<

### Option:

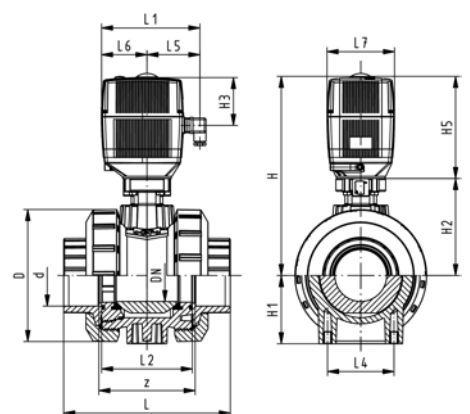
- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value (Δp=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
75	65	10	5000	199 130 449	199 130 459	4.000
90	80	10	7000	199 130 450	199 130 460	5.100
110	100	10	11000	199 130 451	199 130 461	6.700

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]	z [mm]
16	50	231	27	64	94	167	92	180	56	25	97	83	122	64
20	50	231	27	64	94	167	95	180	56	25	97	83	122	64
25	58	240	30	73	94	167	110	180	65	25	97	83	122	72
32	68	240	36	73	94	167	123	180	71	25	97	83	122	79
40	84	251	44	84	94	167	146	180	85	45	97	83	122	94
50	97	251	51	84	94	167	157	180	89	45	97	83	122	95
63	124	273	64	106	94	167	183	180	101	45	97	83	122	107
75	166	346	85	156	94	190	233	180	136	70	98	83	122	144
90	200	358	105	168	94	190	254	180	141	70	98	83	122	151
110	238	365	123	175	94	190	301	180	164	120	98	83	122	174



DN10/15-50



DN65-100

# PVC-C

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



DN10/15 - 50



### Model:

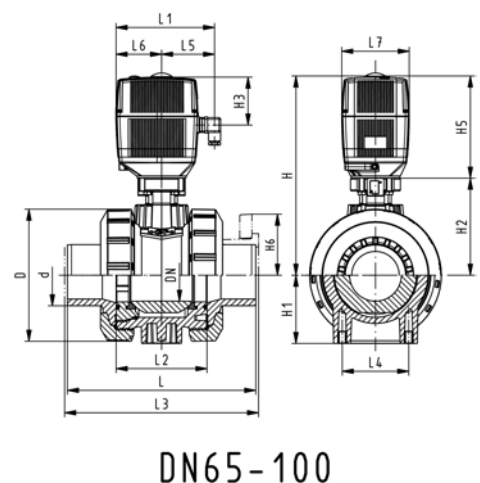
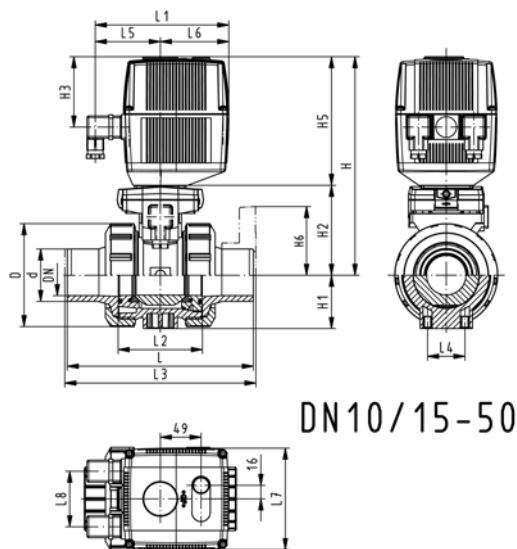
- Assignment of actuators: EA21 (DN10/15-50), EA31 (DN65-100 if available)
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Voltage 100-230 V, 50-60 Hz
- Control range 90°<
- Control time: EA21: 5s/90°<, EA31: 15s/90°<

### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value (Δp=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
75	65	10	5000	199 130 429	199 130 439	4.200
90	80	10	7000	199 130 430	199 130 440	5.300
110	100	10	11000	199 130 431	199 130 441	6.900

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]
16	50	231	27	64	94	167	114	180	56	130	25	97	83	122
20	50	231	27	64	94	167	124	180	56	130	25	97	83	122
25	58	240	30	73	94	167	144	180	65	150	25	97	83	122
32	68	240	36	73	94	167	154	180	71	160	25	97	83	122
40	84	251	44	84	94	167	174	180	85	180	45	97	83	122
50	97	251	51	84	94	167	194	180	89	200	45	97	83	122
63	124	273	64	106	94	167	224	180	101	230	45	97	83	122
75	166	346	85	156	94	190	284	180	136	290	70	98	83	122
90	200	358	105	168	94	190	300	180	141	310	70	98	83	122
110	238	365	123	175	94	190	340	180	164	350	120	98	83	122





# PVC-C

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



DN10/15 - 50



### Model:

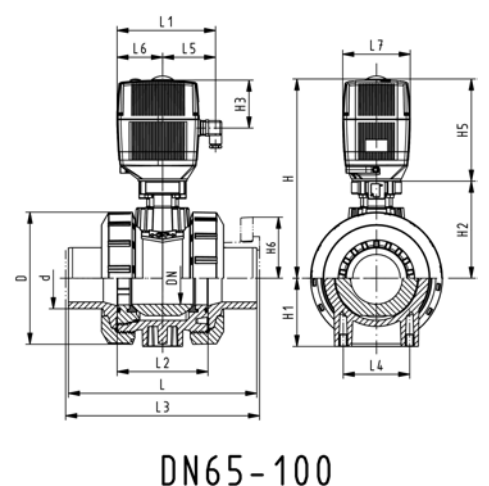
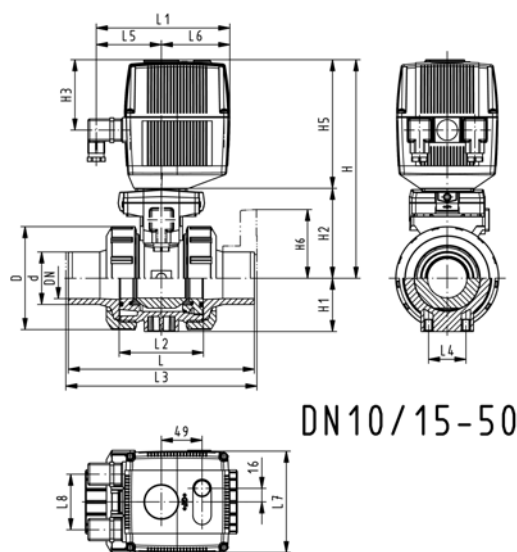
- Assignment of actuators: EA21 (DN10/15-50), EA31 (DN65-100 if available)
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Voltage 24 V AC/DC
- Control range 90°<
- Control time: EA21: 5s/90°<, EA31: 15s/90°<

### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value (Δp=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
75	65	10	5000	199 130 469	199 130 479	4.200
90	80	10	7000	199 130 470	199 130 480	5.300
110	100	10	11000	199 130 471	199 130 481	6.900

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]
16	50	231	27	64	94	167	114	180	56	0	25	97	83	122
20	50	231	27	64	94	167	124	180	56	130	25	97	83	122
25	58	240	30	73	94	167	144	180	65	150	25	97	83	122
32	68	240	36	73	94	167	154	180	71	160	25	97	83	122
40	84	251	44	84	94	167	174	180	85	180	45	97	83	122
50	97	251	51	84	94	167	194	180	89	200	45	97	83	122
63	124	273	64	106	94	167	224	180	101	230	45	97	83	122
75	166	346	85	156	94	190	284	180	136	290	70	98	83	122
90	200	358	105	168	94	190	300	180	141	310	70	98	83	122
110	238	365	123	175	94	190	340	180	164	350	120	98	83	122



# PVC-C

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



DN10/15 - 50



### Model:

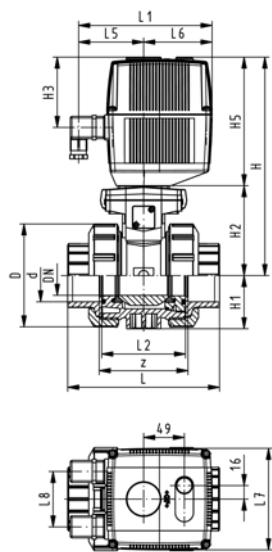
- Assignment of actuators: EA21 (DN10/15-50), EA31 (DN65-100 if available)
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Voltage 100-230 V, 50-60 Hz
- Control range 90°<
- Control time: EA21: 5s/90°<, EA31: 15s/90°<

### Option:

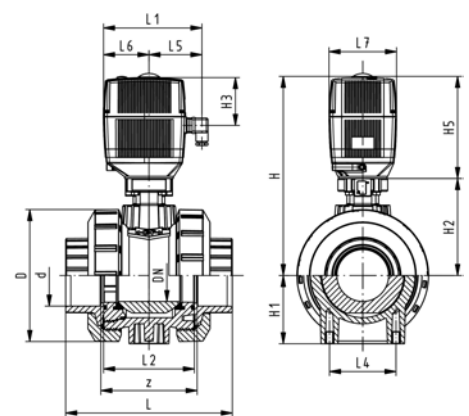
- Individual configuration of the valve (see form)

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
2 1/2	65	10	5000	199 130 189	199 130 199	4.100
3	80	10	7000	199 130 190	199 130 200	5.200
4	100	10	11000	199 130 191	199 130 201	6.800

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]	z [mm]
3/8	50	231	27	64	94	167	92	180	56	25	97	83	122	64
1/2	50	231	27	64	94	167	95	180	56	25	97	83	122	64
3/4	58	240	30	73	94	167	110	180	65	25	97	83	122	72
1	68	240	36	73	94	167	123	180	71	25	97	83	122	79
1 1/4	84	251	44	84	94	167	146	180	85	45	97	83	122	94
1 1/2	97	251	51	84	94	167	157	180	89	45	97	83	122	95
2	124	273	64	106	94	167	183	180	101	45	97	83	122	107
2 1/2	166	346	85	156	94	190	233	180	136	70	98	83	122	144
3	200	358	105	168	94	190	254	180	141	70	98	83	122	151
4	238	365	123	175	94	190	301	180	164	120	98	83	122	174



DN10/15-50



DN65-100



# PVC-C

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



DN10/15 - 50



### Model:

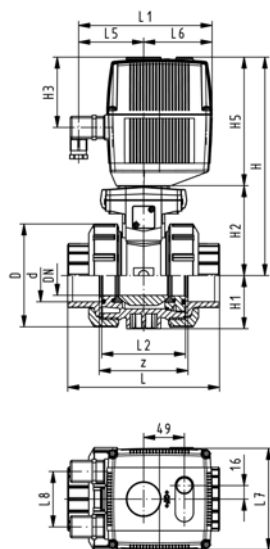
- Assignment of actuators: EA21 (DN10/15-50), EA31 (DN65-100 if available)
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Voltage 24 V AC/DC
- Control range 90°<
- Control time: EA21: 5s/90°<, EA31: 15s/90°<

### Option:

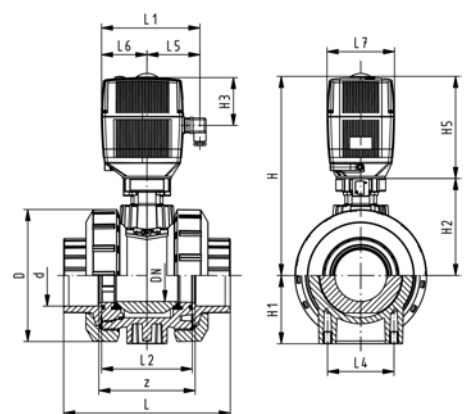
- Individual configuration of the valve (see form)

Rp [inch]	DN [mm]	PN	kv-value (Δp=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
2 1/2	65	10	5000	199 130 209	199 130 219	4.100
3	80	10	7000	199 130 210	199 130 220	5.200
4	100	10	11000	199 130 211	199 130 221	6.800

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]	z [mm]
3/8	50	231	27	64	94	167	92	180	56	25	97	83	122	64
1/2	50	231	27	64	94	167	95	180	56	25	97	83	122	64
3/4	58	240	30	73	94	167	110	180	65	25	97	83	122	72
1	68	240	36	73	94	167	123	180	71	25	97	83	122	79
1 1/4	84	251	44	84	94	167	146	180	85	45	97	83	122	94
1 1/2	97	251	51	84	94	167	157	180	89	45	97	83	122	95
2	124	273	64	106	94	167	183	180	101	45	97	83	122	107
2 1/2	166	346	85	156	94	190	233	180	136	70	98	83	122	144
3	200	358	105	168	94	190	254	180	141	70	98	83	122	151
4	238	365	123	175	94	190	301	180	164	120	98	83	122	174



DN10/15-50



DN65-100

# PVC-C



## Ball valve type 130 PVC-C 100-230V With manual emergency override With backing flanges PP-st metric

### Model:

- Assignment of actuators: EA21 (DN10/15-50), EA31 (DN65-100 if available)
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Voltage 100-230 V, 50-60 Hz
- Control range 90°<
- Control time: EA21: 5s/90°<, EA31: 15s/90°<
- Overall length according to EN 558
- Connecting dimension: ISO 7005, EN 1092, BS 4504, DIN 2501

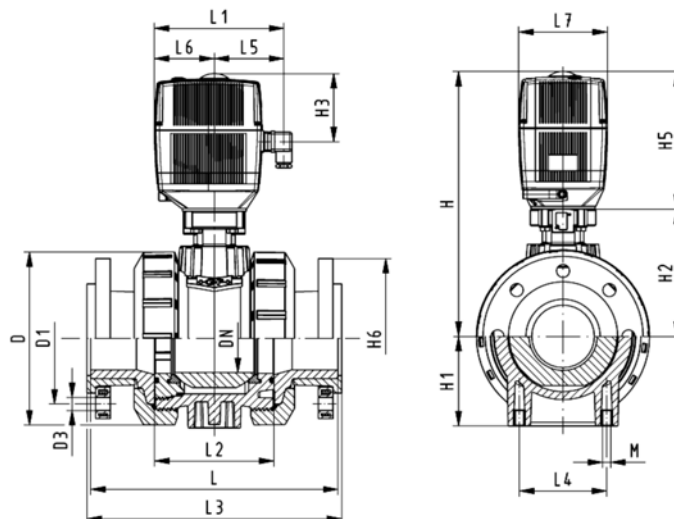
### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
75	65	10	5000	199 134 489	199 134 499	8.200
90	80	10	7000	199 134 490	199 134 500	10.100
110	100	10	11000	199 134 491	199 134 501	13.400

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
75	166	346	85	156	94	190	93	284	180	136	290	70	98	83	122
90	200	358	105	168	94	190	100	300	180	141	310	70	98	83	122
110	238	365	123	175	94	190	110	340	180	164	350	120	98	83	122

d [mm]	L8 [mm]
75	66
90	66
110	66



# PVC-C



## Ball valve type 130 PVC-C 24V With manual emergency override With backing flanges PP-st metric

### Model:

- Assignment of actuators: EA21 (DN10/15-50), EA31 (DN65-100 if available)
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Voltage 24 V AC/DC
- Control range 90°<
- Control time: EA21: 5s/90°<, EA31: 15s/90°<
- Overall length according to EN 558
- Connecting dimension: ISO 7005, EN 1092, BS 4504, DIN 2501

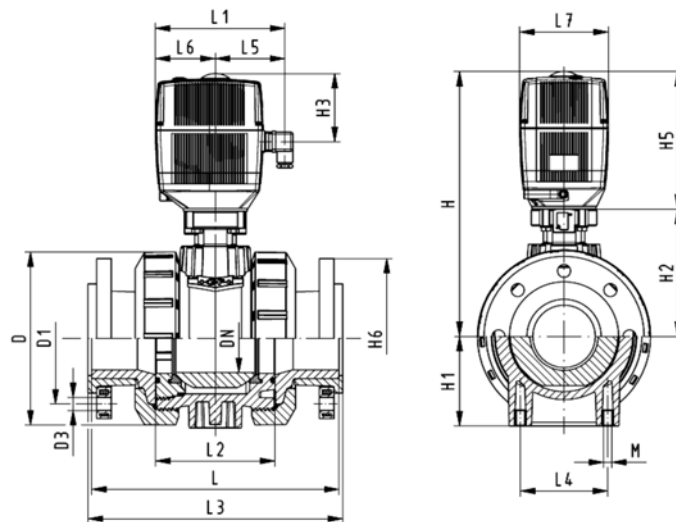
### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
75	65	10	5000	199 134 509	199 134 519	8.200
90	80	10	7000	199 134 510	199 134 520	10.100
110	100	10	11000	199 134 511	199 134 521	13.400

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
75	166	346	85	156	94	190	93	284	180	136	290	70	98	83	122
90	200	358	105	168	94	190	100	300	180	141	310	70	98	83	122
110	238	365	123	175	94	190	110	340	180	164	350	120	98	83	122

d [mm]	L8 [mm]
75	66
90	66
110	66



# Copiable

## Configurator GF ball valve type 546 PVC-C

### Ball Valve

A01 Ball Valve 546

#### Material

B02 PVC-C

#### Dimension

C05 DN 10 3/8"  
 C06 DN 15 1/2"  
 C07 DN 20 3/4"  
 C08 DN 25 1"  
 C09 DN 32 1 1/4"  
 C10 DN 40 1 1/2"  
 C11 DN 50 2"  
 C12 DN 65 2 1/2"  
 C13 DN 80 3"  
 C14 DN 100 4"

#### Version

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

#### Seals

E01 EPDM seals  
 E02 FPM seals

#### Threaded inserts

F01 without threaded inserts  
 F02 with threaded inserts

#### Connecting parts

G11 PVC-C Cement socket metric  
 G12 PVC-C Cement socket JIS  
 G13 PVC-C Cement socket inch ASTM  
 G14 PVC-C Cement spigot metric  
 G15 PVC-C Threaded socket Rp  
 G16 PVC-C Threaded socket Rp reinforced (DN10-50)  
 G17 PVC-C Threaded socket NPT  
 G40 PE-100 Butt fusion metric  
 G41 PE-100 Butt fusion spigot SDR11 metric  
 G42 PE-100 Butt fusion spigot SDR17.6 metric (DN65-100)  
 G43 PE-100 Butt fusion spigot long SDR11 metric  
 G72 Backing flange PP-steel metric  
 G73 Backing flange PP-steel inch ANSI  
 G81 PVC-C Valve end blank

#### Multi-functional module

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

#### Lever

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

#### Mounting plate

L01 without mounting plate  
 L02 with mounting plate

A01 B02 C D E F G G I K L

left right

You will find a large selection of different versions in our range of products. New system elements also provide you with new opportunities for use. In order for us to supply exactly the ball valve you need for your application, we have created a selection menu for you.

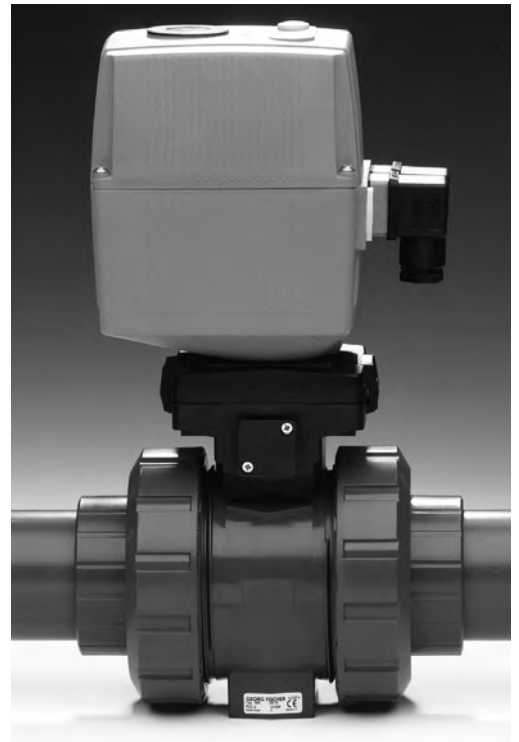
**We supply what you put together.**

# Copiable GF ball valve type 546 with electric Actuator

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

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

**We supply what you put together.**



### Electric Actuator EA11

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

### Accessories EA11

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

### Electric Actuator EA21/31

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

### Accessories EA21

- W01 No accessories
- W02 Heating element
- W03 Cycle time module
- W04 Cycle time monitoring
- W05 Cycles monitoring
- W06 Motor current monitoring
- W07 2 limit switches Ag, Ni
- W08 2 limit switches Gold
- W09 2 limit switches NPN
- W10 2 limit switches PNP
- W11 Positioner
- W12 Electric position indicator
- W14 Fail-safe return unit
- W15 Switch intermediate position
- W27 2 limit switches Ag, Ni normally open with connector
- W31 Positioner PE25 with galv. separation

T	U	T	W	W	W	W	W	W

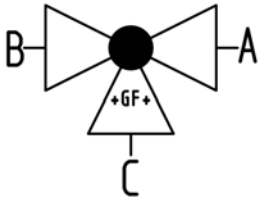
# PVC-C

## 3-Way ball valve type 185 PVC-C Horizontal/L-port 100-230V With manual emergency override With solvent cement sockets metric



### Model:

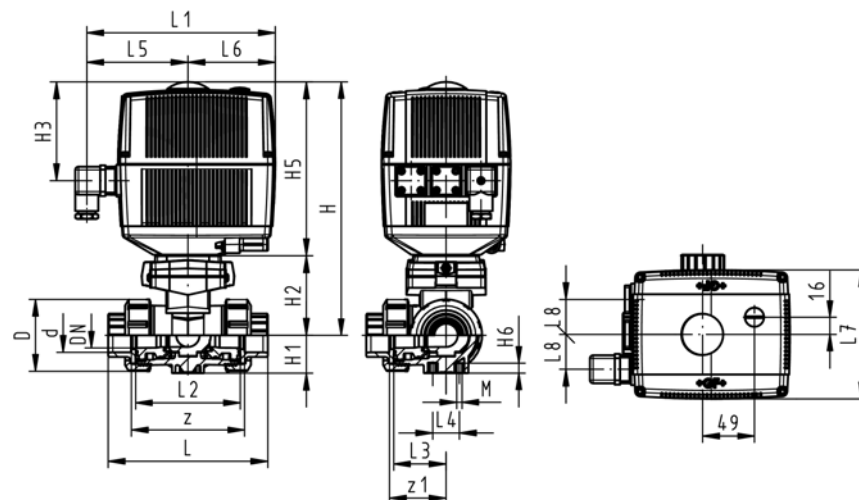
- Built on with electric actuator EA21
- Voltage 100-230 V, 50-60 Hz
- Control range 90°<
- Basic position A-C opened, activated position B-C opened, see flow scheme
- Other positions possible by adjusting the limit switches
- Control time 5 s/90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts



d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	50	199 185 102	199 185 112	2.143
20	15	10	75	199 185 103	199 185 113	2.149
25	20	10	150	199 185 104	199 185 114	2.287
32	25	10	280	199 185 105	199 185 115	2.493
40	32	10	480	199 185 106	199 185 116	2.950
50	40	10	620	199 185 107	199 185 117	3.441
63	50	10	1230	199 185 108	199 185 118	4.916

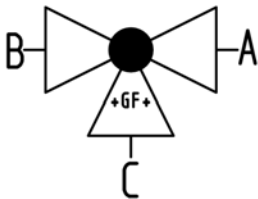
d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
16	50	231	28	64	94	167	8	109	180	73	36	25	97	83	122
20	50	231	28	64	94	167	8	112	180	73	36	25	97	83	122
25	58	240	32	73	94	167	8	131	180	86	43	25	97	83	122
32	68	240	36	73	94	167	8	151	180	99	50	25	97	83	122
40	84	251	45	84	94	167	9	181	180	120	60	45	97	83	122
50	97	251	51	84	94	167	9	205	180	137	69	45	97	83	122
63	124	273	65	106	94	167	9	261	180	179	89	45	97	83	122

d [mm]	L8 [mm]	M	z [mm]	z1 [mm]
16	33	6	81	40
20	33	6	81	40
25	33	6	94	47
32	33	6	107	54
40	33	8	130	65
50	33	8	143	72
63	33	8	185	92



# PVC-C

## 3-Way ball valve type 185 PVC-C Horizontal/L-port 100-230V With manual emergency override With solvent cement spigots metric



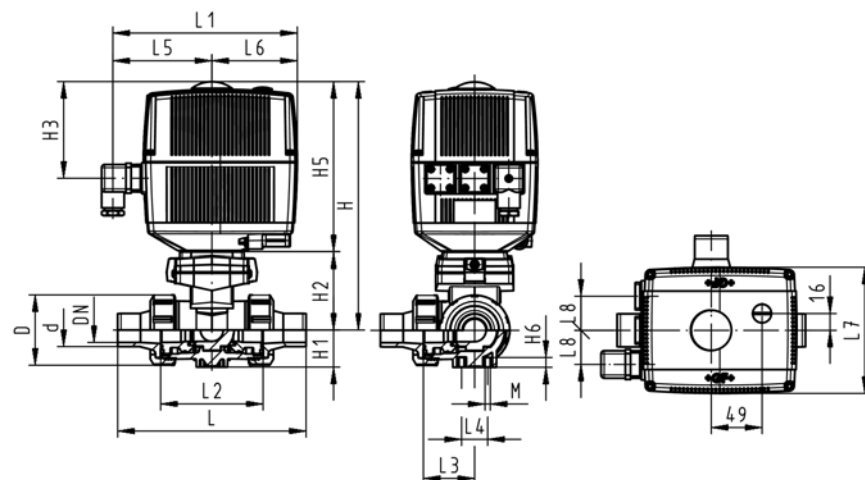
### Model:

- Built on with electric actuator EA21
- Voltage 100-230 V, 50-60 Hz
- Control range 90°<
- Basic position A-C opened, activated position B-C opened, see flow scheme
- Other positions possible by adjusting the limit switches
- Control time 5 s/90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts

d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	50	199 185 082	199 185 092	2.149
20	15	10	75	199 185 083	199 185 093	2.159
25	20	10	150	199 185 084	199 185 094	2.303
32	25	10	280	199 185 085	199 185 095	2.519
40	32	10	480	199 185 086	199 185 096	2.973
50	40	10	620	199 185 087	199 185 097	3.510
63	50	10	1230	199 185 088	199 185 098	5.053

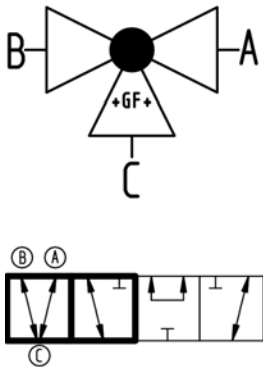
d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
16	50	231	28	64	94	167	8	131	180	73	36	25	97	83	122
20	50	231	28	64	94	167	8	141	180	73	36	25	97	83	122
25	58	240	32	73	94	167	8	165	180	86	43	25	97	83	122
32	68	240	36	73	94	167	8	182	180	99	50	25	97	83	122
40	84	251	45	84	94	167	9	209	180	120	60	45	97	83	122
50	97	251	51	84	94	167	9	242	180	137	69	45	97	83	122
63	124	273	65	106	94	167	9	302	180	179	89	45	97	83	122

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



# PVC-C

## 3-Way ball valve type 185 PVC-C Horizontal/T-port 100-230V With manual emergency override With solvent cement sockets metric



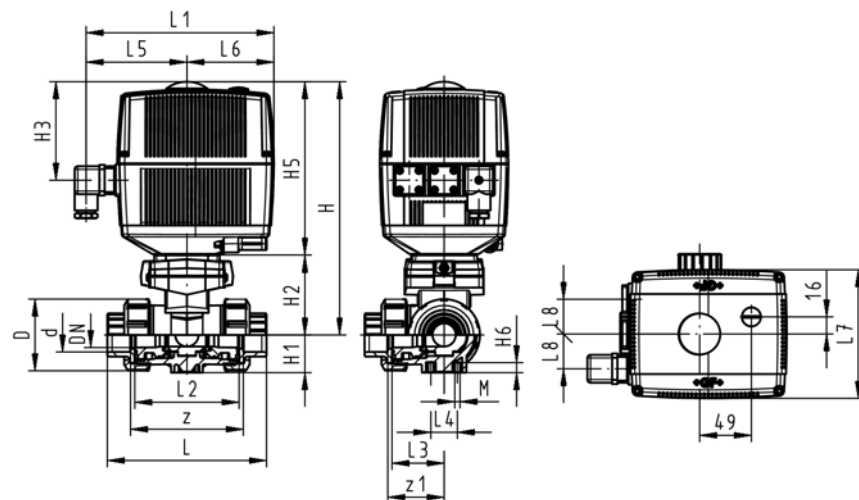
### Model:

- Built on with electric actuator EA21
- Voltage 100-230 V, 50-60 Hz
- Control range 90°<
- Basic position A-B-C opened, activated position B-C opened, see flow scheme
- Other positions possible by adjusting the limit switches
- Control time 5 s/90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts

d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	140	199 185 142	199 185 152	2.142
20	15	10	200	199 185 143	199 185 153	2.148
25	20	10	470	199 185 144	199 185 154	2.285
32	25	10	793	199 185 145	199 185 155	2.486
40	32	10	1290	199 185 146	199 185 156	2.939
50	40	10	1910	199 185 147	199 185 157	3.419
63	50	10	3100	199 185 148	199 185 158	4.867

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
16	50	231	28	64	94	167	8	109	180	73	36	25	97	83	122
20	50	231	28	64	94	167	8	112	180	73	36	25	97	83	122
25	58	240	32	73	94	167	8	131	180	86	43	25	97	83	122
32	68	240	36	73	94	167	8	151	180	99	50	25	97	83	122
40	84	251	45	84	94	167	9	181	180	120	60	45	97	83	122
50	97	251	51	84	94	167	9	205	180	137	69	45	97	83	122
63	124	273	65	106	94	167	9	261	180	179	89	45	97	83	122

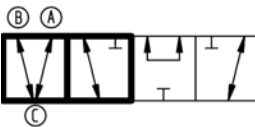
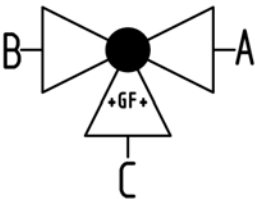
d [mm]	L8 [mm]	M	z [mm]	z1 [mm]
16	33	6	81	40
20	33	6	81	40
25	33	6	94	47
32	33	6	107	54
40	33	8	130	65
50	33	8	143	72
63	33	8	185	92





# PVC-C

## 3-Way ball valve type 185 PVC-C Horizontal/T-port 100-230V With manual emergency override With solvent cement spigots metric



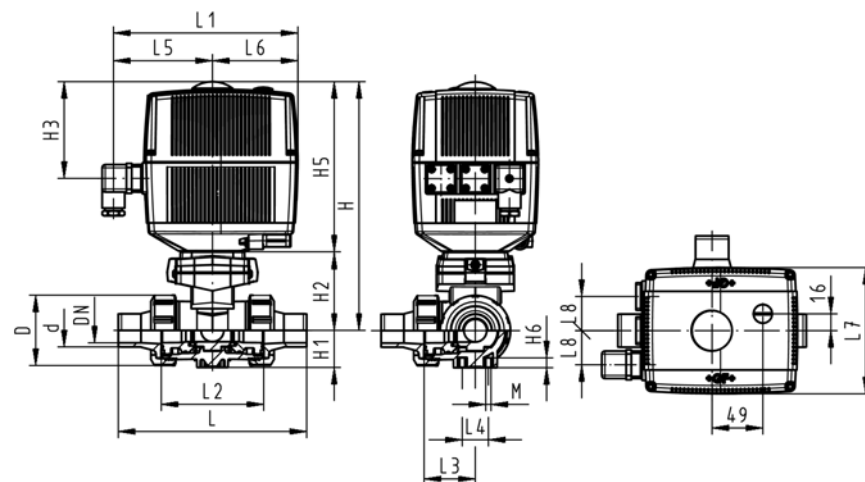
### Model:

- Built on with electric actuator EA21
- Voltage 100-230 V, 50-60 Hz
- Control range 90°<
- Basic position A-B-C opened, activated position B-C opened, see flow scheme
- Other positions possible by adjusting the limit switches
- Control time 5 s/90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts

d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	140	199 185 122	199 185 132	2.148
20	15	10	200	199 185 123	199 185 133	2.158
25	20	10	470	199 185 124	199 185 134	2.301
32	25	10	793	199 185 125	199 185 135	2.512
40	32	10	1290	199 185 126	199 185 136	2.961
50	40	10	1910	199 185 127	199 185 137	3.487
63	50	10	3100	199 185 128	199 185 138	5.004

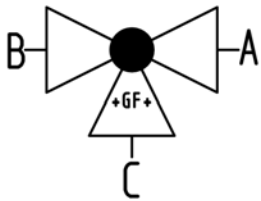
d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
16	50	231	28	64	94	167	8	131	180	73	36	25	97	83	122
20	50	231	28	64	94	167	8	141	180	73	36	25	97	83	122
25	58	240	32	73	94	167	8	165	180	86	43	25	97	83	122
32	68	240	36	73	94	167	8	182	180	99	50	25	97	83	122
40	84	251	45	84	94	167	9	209	180	120	60	45	97	83	122
50	97	251	51	84	94	167	9	242	180	137	69	45	97	83	122
63	124	273	65	106	94	167	9	302	180	179	89	45	97	83	122

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



# PVC-C

## 3-Way ball valve type 185 PVC-C Horizontal/L-port 24V With manual emergency override With solvent cement sockets metric



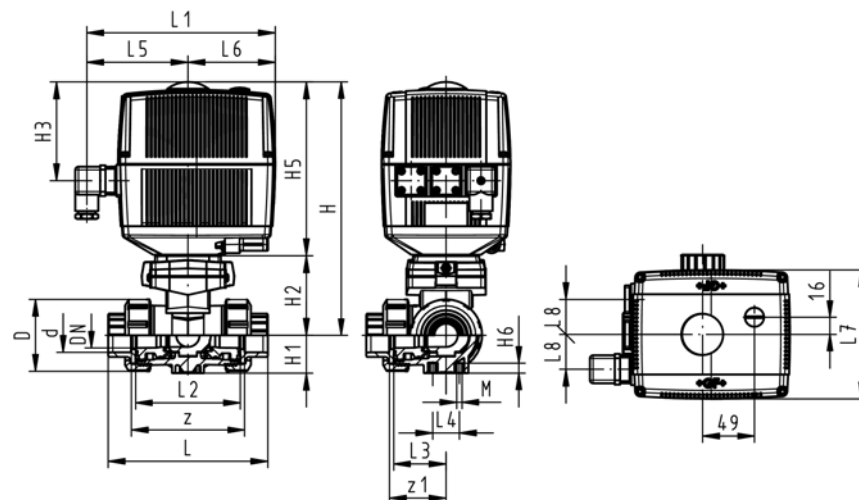
### Model:

- Built on with electric actuator EA21
- Voltage 24 V AC/DC
- Control range 90°<
- Basic position A-C opened, activated position B-C opened, see flow scheme
- Other positions possible by adjusting the limit switches
- Control time 5 s/90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts

d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	50	199 185 262	199 185 272	2.143
20	15	10	75	199 185 263	199 185 273	2.149
25	20	10	150	199 185 264	199 185 274	2.287
32	25	10	280	199 185 265	199 185 275	2.493
40	32	10	480	199 185 266	199 185 276	2.950
50	40	10	620	199 185 267	199 185 277	3.441
63	50	10	1230	199 185 268	199 185 278	4.916

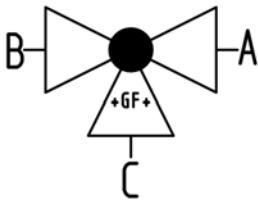
d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
16	50	231	28	64	94	167	8	109	180	73	36	25	97	83	122
20	50	231	28	64	94	167	8	112	180	73	36	25	97	83	122
25	58	240	32	73	94	167	8	131	180	86	43	25	97	83	122
32	68	240	36	73	94	167	8	151	180	99	50	25	97	83	122
40	84	251	45	84	94	167	9	181	180	120	60	45	97	83	122
50	97	251	51	84	94	167	9	205	180	137	69	45	97	83	122
63	124	273	65	106	94	167	9	261	180	179	89	45	97	83	122

d [mm]	L8 [mm]	M	z [mm]	z1 [mm]
16	33	6	81	40
20	33	6	81	40
25	33	6	94	47
32	33	6	107	54
40	33	8	130	65
50	33	8	143	72
63	33	8	185	92



# PVC-C

## 3-Way ball valve type 185 PVC-C Horizontal/L-port 24V With manual emergency override With solvent cement spigots metric



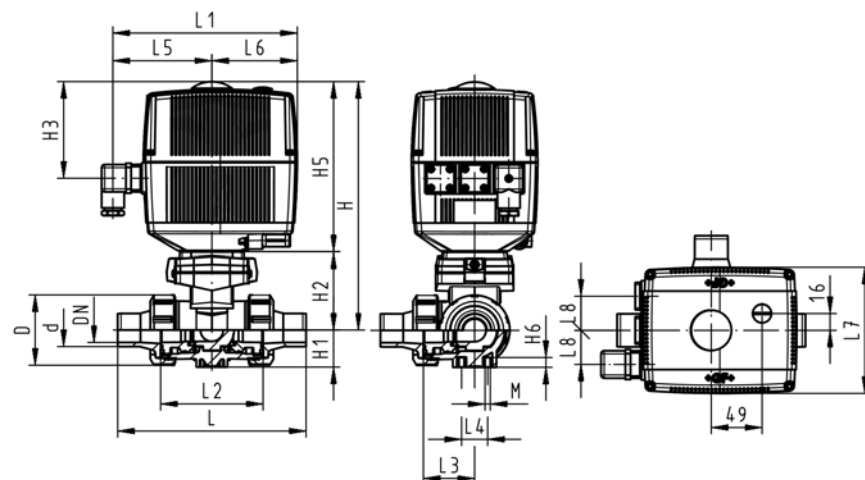
### Model:

- Built on with electric actuator EA21
- Voltage 24 V AC/DC
- Control range 90°<
- Basic position A-C opened, activated position B-C opened, see flow scheme
- Other positions possible by adjusting the limit switches
- Control time 5 s/90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts

d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	50	199 185 282	199 185 292	2.149
20	15	10	75	199 185 283	199 185 293	2.159
25	20	10	150	199 185 284	199 185 294	2.303
32	25	10	280	199 185 285	199 185 295	2.519
40	32	10	480	199 185 286	199 185 296	2.973
50	40	10	620	199 185 287	199 185 297	3.510
63	50	10	1230	199 185 288	199 185 298	5.053

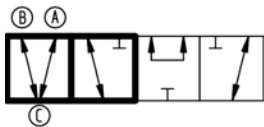
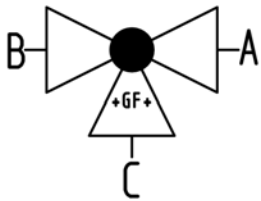
d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
16	50	231	28	64	94	167	8	131	180	73	36	25	97	83	122
20	50	231	28	64	94	167	8	141	180	73	36	25	97	83	122
25	58	240	32	73	94	167	8	165	180	86	43	25	97	83	122
32	68	240	36	73	94	167	8	182	180	99	50	25	97	83	122
40	84	251	45	84	94	167	9	209	180	120	60	45	97	83	122
50	97	251	51	84	94	167	9	242	180	137	69	45	97	83	122
63	124	273	65	106	94	167	9	302	180	179	89	45	97	83	122

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



# PVC-C

## 3-Way ball valve type 185 PVC-C Horizontal/T-port 24V With manual emergency override With solvent cement sockets metric



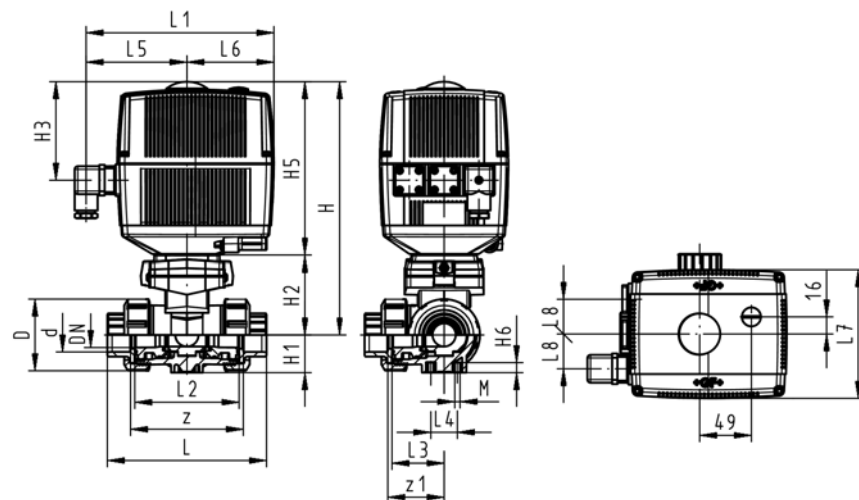
### Model:

- Built on with electric actuator EA21
- Voltage 24 V AC/DC
- Control range 90°<
- Basic position A-B-C opened, activated position B-C opened, see flow scheme
- Other positions possible by adjusting the limit switches
- Control time 5 s/90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts

d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	140	199 185 322	199 185 332	2.142
20	15	10	200	199 185 323	199 185 333	2.148
25	20	10	470	199 185 324	199 185 334	2.285
32	25	10	793	199 185 325	199 185 335	2.486
40	32	10	1290	199 185 326	199 185 336	2.939
50	40	10	1910	199 185 327	199 185 337	3.419
63	50	10	3100	199 185 328	199 185 338	4.867

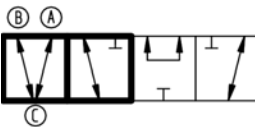
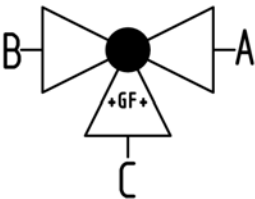
d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
16	50	231	28	64	94	167	8	109	180	73	36	25	97	83	122
20	50	231	28	64	94	167	8	112	180	73	36	25	97	83	122
25	58	240	32	73	94	167	8	131	180	86	43	25	97	83	122
32	68	240	36	73	94	167	8	151	180	99	50	25	97	83	122
40	84	251	45	84	94	167	9	181	180	120	60	45	97	83	122
50	97	251	51	84	94	167	9	205	180	137	69	45	97	83	122
63	124	273	65	106	94	167	9	261	180	179	89	45	97	83	122

d [mm]	L8 [mm]	M	z [mm]	z1 [mm]
16	33	6	81	40
20	33	6	81	40
25	33	6	94	47
32	33	6	107	54
40	33	8	130	65
50	33	8	143	72
63	33	8	185	92



# PVC-C

## 3-Way ball valve type 185 PVC-C Horizontal/T-port 24V With manual emergency override With solvent cement spigots metric



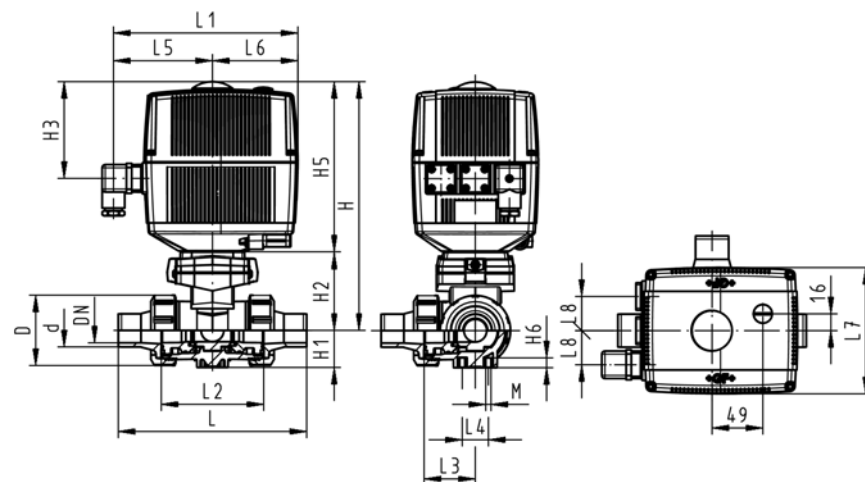
### Model:

- Built on with electric actuator EA21
- Voltage 24 V AC/DC
- Control range 90°<
- Basic position A-B-C opened, activated position B-C opened, see flow scheme
- Other positions possible by adjusting the limit switches
- Control time 5 s/90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts

d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	140	199 185 302	199 185 312	2.148
20	15	10	200	199 185 303	199 185 313	2.158
25	20	10	470	199 185 304	199 185 314	2.301
32	25	10	793	199 185 305	199 185 315	2.512
40	32	10	1290	199 185 306	199 185 316	2.961
50	40	10	1910	199 185 307	199 185 317	3.487
63	50	10	3100	199 185 308	199 185 318	5.004

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
16	50	231	28	64	94	167	8	131	180	73	36	25	97	83	122
20	50	231	28	64	94	167	8	141	180	73	36	25	97	83	122
25	58	240	32	73	94	167	8	165	180	86	43	25	97	83	122
32	68	240	36	73	94	167	8	182	180	99	50	25	97	83	122
40	84	251	45	84	94	167	9	209	180	120	60	45	97	83	122
50	97	251	51	84	94	167	9	242	180	137	69	45	97	83	122
63	124	273	65	106	94	167	9	302	180	179	89	45	97	83	122

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



# PVC-C

## Ball valves pneumatic

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



DN10/15 - 50

#### Model:

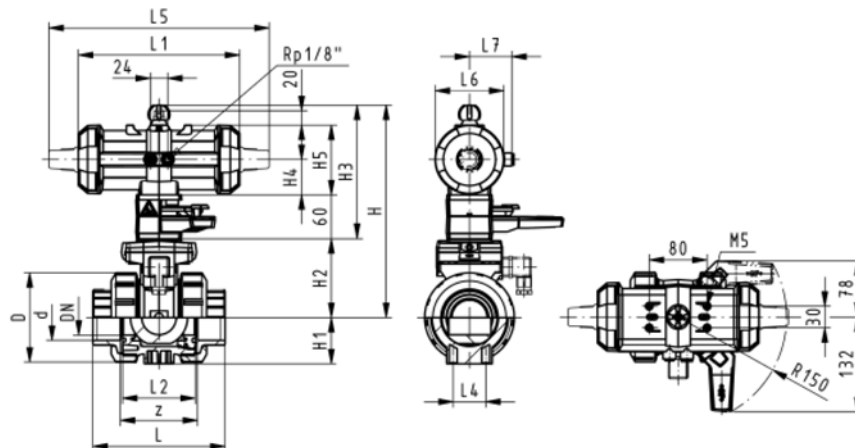
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- Control time 90°< 1-2 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

#### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value (Δp=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	159	27	62	168	40	77	92	194	56	25	261	76	48	64
20	50	159	27	62	168	40	77	95	194	56	25	261	76	48	64
25	58	168	30	71	168	40	77	110	194	65	25	261	76	48	72
32	68	168	36	71	168	40	77	123	194	71	25	261	76	48	79
40	84	202	44	84	187	51	99	146	224	85	45	305	95	59	94
50	97	202	51	84	187	51	99	157	224	89	45	305	95	59	95
63	124	225	64	106	187	51	99	183	224	101	45	305	95	59	107



# PVC-C



DN10/15 - 50

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

### Model:

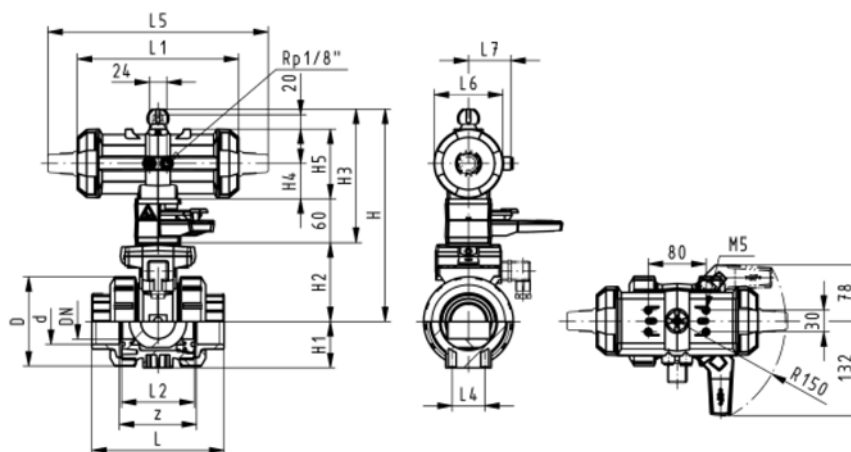
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- Control time 90°< 1-2 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value (Δp=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	159	27	62	168	40	77	92	194	56	25	261	76	48	64
20	50	159	27	62	168	40	77	95	194	56	25	261	76	48	64
25	58	168	30	71	168	40	77	110	194	65	25	261	76	48	72
32	68	168	36	71	168	40	77	123	194	71	25	261	76	48	79
40	84	202	44	84	187	51	99	146	224	85	45	305	95	59	94
50	97	202	51	84	187	51	99	157	224	89	45	305	95	59	95
63	124	225	64	106	187	51	99	183	224	101	45	305	95	59	107





# PVC-C



DN10/15 - 50

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

### Model:

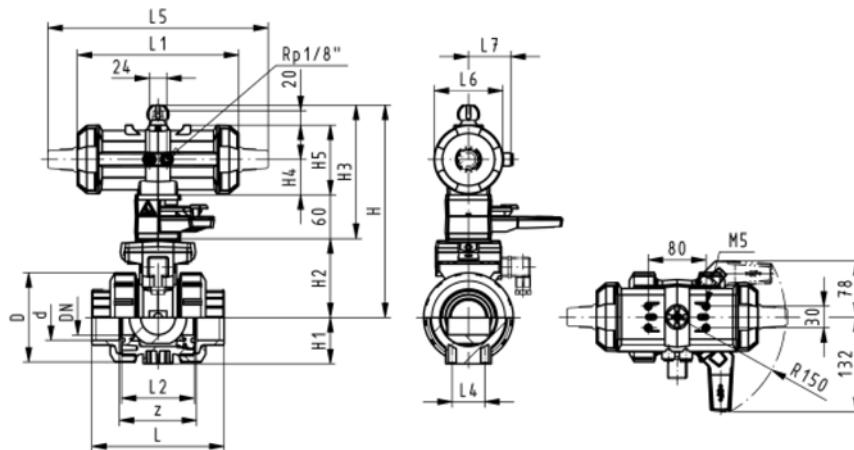
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- Control time  $90^\circ <$  1-2 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

### Option:

- Individual configuration of the valve (see 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	159	27	62	168	40	77	92	194	56	25	261	76	48	64
20	50	159	27	62	168	40	77	95	194	56	25	261	76	48	64
25	58	168	30	71	168	40	77	110	194	65	25	261	76	48	72
32	68	168	36	71	168	40	77	123	194	71	25	261	76	48	79
40	84	202	44	84	187	51	99	146	224	85	45	305	95	59	94
50	97	202	51	84	187	51	99	157	224	89	45	305	95	59	95
63	124	225	64	106	187	51	99	183	224	101	45	305	95	59	107







# PVC-C

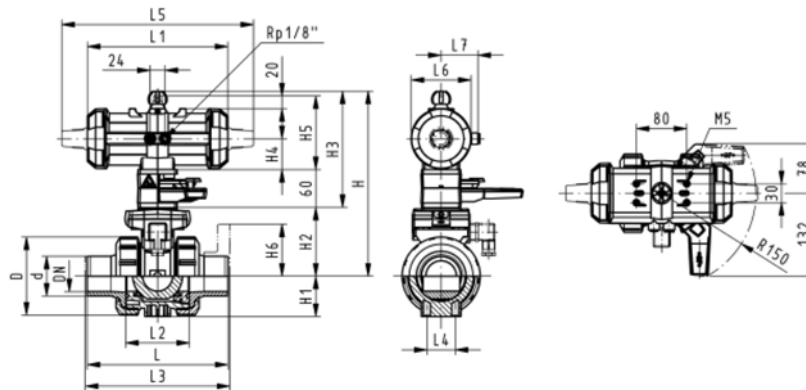
## Ball valve type 230 PVC-C FO (Fail safe to open) With manual override With solvent cement spigots metric



DN10/15 - 50

d [mm]	DN [mm]	PN	kv-value (Δp=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	159	27	62	168	40	77	114	194	56	130	25	261	76	48
20	50	159	27	62	168	40	77	124	194	56	130	25	261	76	48
25	58	168	30	71	168	40	77	144	194	65	150	25	261	76	48
32	68	168	36	71	168	40	77	154	194	71	160	25	261	76	48
40	84	202	44	84	187	51	99	174	224	85	180	45	305	95	59
50	97	202	51	84	187	51	99	194	224	89	200	45	305	95	59
63	124	225	64	106	187	51	99	224	224	101	230	45	305	95	59



# PVC-C

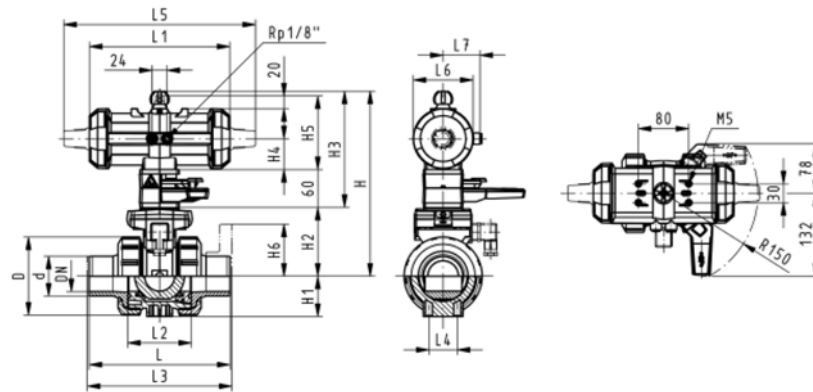


DN10/15 - 50

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

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	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	159	27	62	168	40	77	114	194	56	130	25	261	76	48
20	50	159	27	62	168	40	77	124	194	56	130	25	261	76	48
25	58	168	30	71	168	40	77	144	194	65	150	25	261	76	48
32	68	168	36	71	168	40	77	154	194	71	160	25	261	76	48
40	84	202	44	84	187	51	99	174	224	85	180	45	305	95	59
50	97	202	51	84	187	51	99	194	224	89	200	45	305	95	59
63	124	225	64	106	187	51	99	224	224	101	230	45	305	95	59



# PVC-C

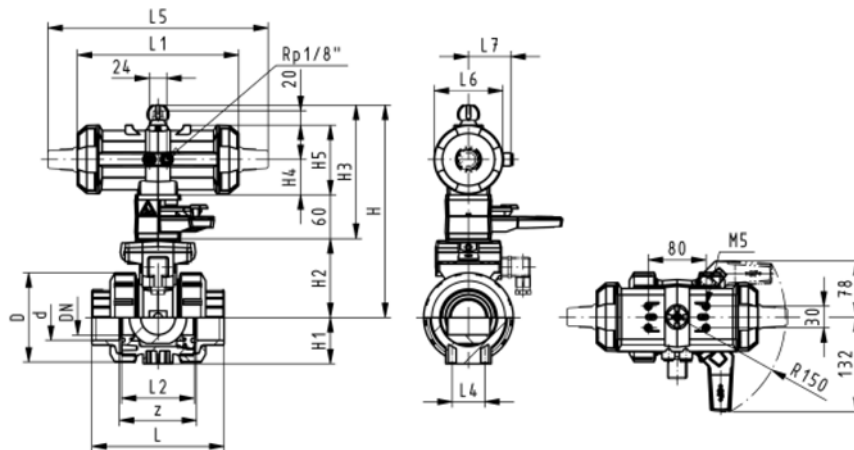
## Ball valve type 230 PVC-C FC (fail safe to close) With manual override With threaded sockets Rp



DN10/15 - 50

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

Rp [inch]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	z [mm]
3/8	50	159	27	62	168	40	77	92	194	56	25	261	76	48	64
1/2	50	159	27	62	168	40	77	95	194	56	25	261	76	48	64
3/4	58	168	30	71	168	40	77	110	194	65	25	261	76	48	72
1	68	168	36	71	168	40	77	123	194	71	25	261	76	48	79
1 1/4	84	202	44	84	187	51	99	146	224	85	45	305	95	59	94
1 1/2	97	202	51	84	187	51	99	157	224	89	45	305	95	59	95
2	124	225	64	106	187	51	99	183	224	101	45	305	95	59	107



# PVC-C

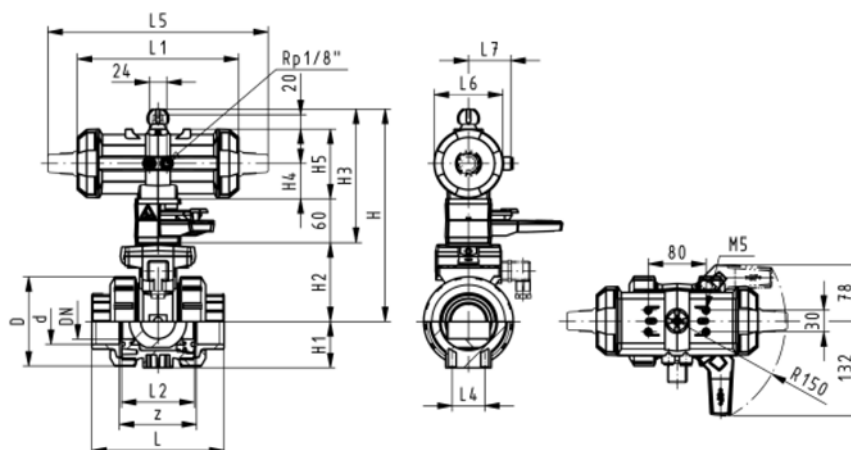


DN10/15 - 50

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

Rp [inch]	DN [mm]	PN	kv-value (Δp=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	159	27	62	168	40	77	92	194	56	25	261	76	48	64
1/2	50	159	27	62	168	40	77	95	194	56	25	261	76	48	64
3/4	58	168	30	71	168	40	77	110	194	65	25	261	76	48	72
1	68	168	36	71	168	40	77	123	194	71	25	261	76	48	79
1 1/4	84	202	44	84	187	51	99	146	224	85	45	305	95	59	94
1 1/2	97	202	51	84	187	51	99	157	224	89	45	305	95	59	95
2	124	225	64	106	187	51	99	183	224	101	45	305	95	59	107



# PVC-C

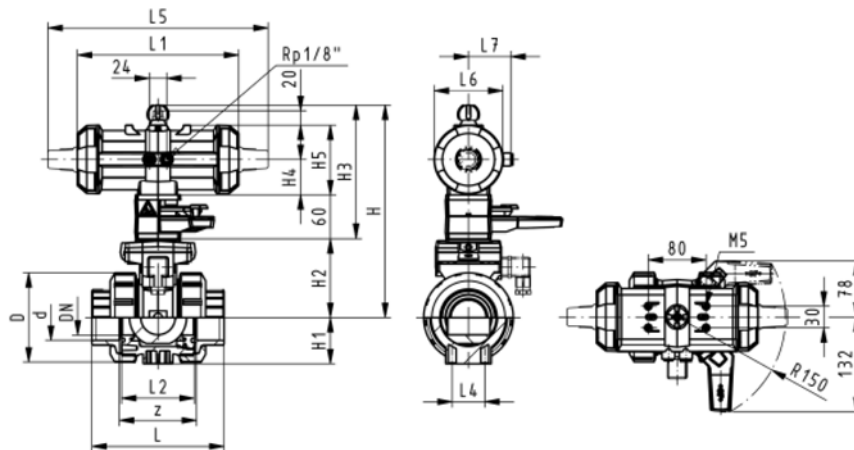
## Ball valve type 230 PVC-C DA (Double acting) With manual override With threaded sockets Rp



DN10/15 - 50

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	159	27	62	168	40	77	92	194	56	25	261	76	48	64
1/2	50	159	27	62	168	40	77	95	194	56	25	261	76	48	64
3/4	58	168	30	71	168	40	77	110	194	65	25	261	76	48	72
1	68	168	36	71	168	40	77	123	194	71	25	261	76	48	79
1 1/4	84	202	44	84	187	51	99	146	224	85	45	305	95	59	94
1 1/2	97	202	51	84	187	51	99	157	224	89	45	305	95	59	95
2	124	225	64	106	187	51	99	183	224	101	45	305	95	59	107



# PVC-C

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



DN10/15 - 50



### Model:

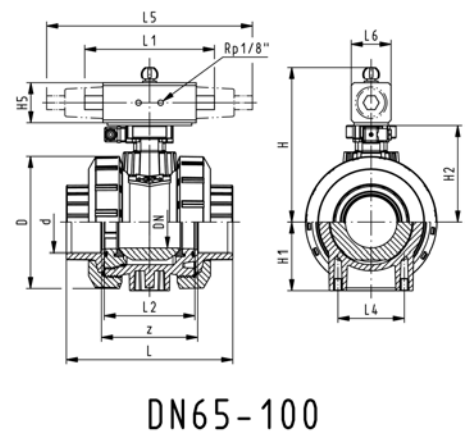
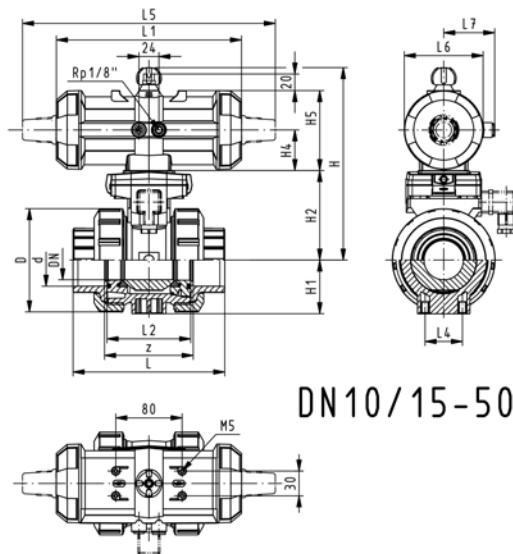
- Assignment of actuators: PA11 (DN10/15-25), PA21 (DN32-50), PA30 (DN65), PA35 (DN80), PA40 (DN100)
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90°< 1-2 s

### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value (Δp=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
75	65	10	5000	199 230 529	199 230 539	4.400
90	80	10	7000	199 230 530	199 230 540	5.500
110	100	10	11000	199 230 531	199 230 541	8.100

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	159	27	62	40	77	92	194	56	25	261	76	48	64
20	50	159	27	62	40	77	95	194	56	25	261	76	48	64
25	58	168	30	71	40	77	110	194	65	25	261	76	48	72
32	68	168	36	71	40	77	123	194	71	25	261	76	48	79
40	84	202	44	84	51	99	146	224	85	45	305	95	59	94
50	97	202	51	84	51	99	157	224	89	45	305	95	59	95
63	124	225	64	106	51	99	183	224	101	45	305	95	59	107
75	166	262	85	156		70	233		136	70	276	65		144
90	200	281	105	168		78	254		141	70	341	72		151
110	238	292	123	175		86	301		164	120	369	80		174



# PVC-C

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



DN10/15 - 50



### Model:

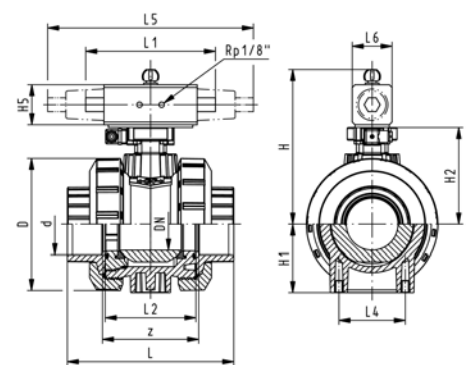
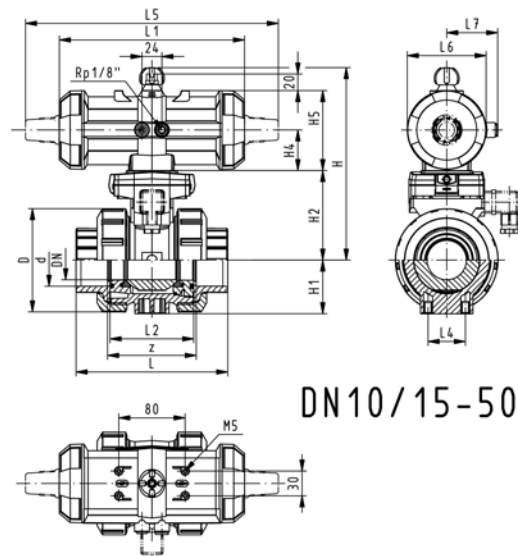
- Assignment of actuators: PA11 (DN10/15-25), PA21 (DN32-50), PA30 (DN65), PA35 (DN80), PA40 (DN100)
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time  $90^\circ <$  1-2 s

### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	70	199 230 562	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
75	65	10	5000	199 230 569	199 230 579	4.400
90	80	10	7000	199 230 570	199 230 580	5.500
110	100	10	11000	199 230 571	199 230 581	8.100

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	159	27	62	40	77	92	194	56	25	261	76	48	64
20	50	159	27	62	40	77	95	194	56	25	261	76	48	64
25	58	168	30	71	40	77	110	194	65	25	261	76	48	72
32	68	168	36	71	40	77	123	194	71	25	261	76	48	79
40	84	202	44	84	51	99	146	224	85	45	305	95	59	94
50	97	202	51	84	51	99	157	224	89	45	305	95	59	95
63	124	225	64	106	51	99	183	224	101	45	305	95	59	107
75	166	262	85	156		70	233		136	70	276	65		144
90	200	281	105	168		78	254		141	70	341	72		151
110	238	292	123	175		86	301		164	120	369	80		174





# PVC-C

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



DN10/15 - 50



### Model:

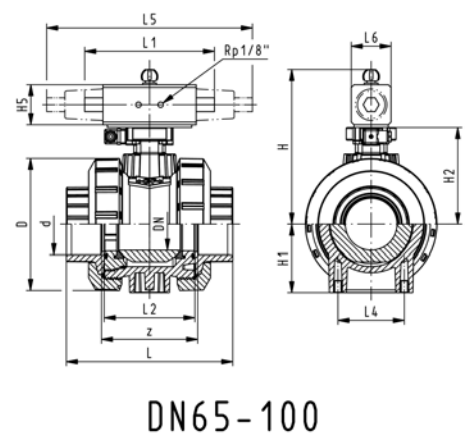
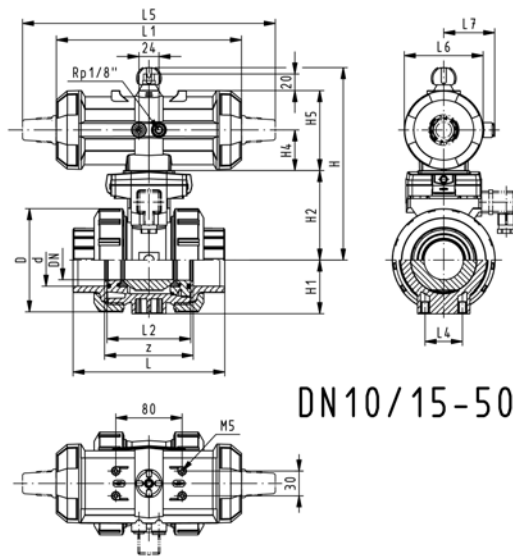
- Assignment of actuators: PA11 (DN10/15-25), PA21 (DN32-50), PA35 (DN65), PA40 (DN80), PA45 (DN100)
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90°< 1-2 s

### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value (Δp=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
75	65	10	5000	199 230 609	199 230 619	3.300
90	80	10	7000	199 230 610	199 230 620	4.800
110	100	10	11000	199 230 611	199 230 621	6.300

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	159	27	62	40	77	92	194	56	25	261	76	48	64
20	50	159	27	62	40	77	95	194	56	25	261	76	48	64
25	58	168	30	71	40	77	110	194	65	25	261	76	48	72
32	68	168	36	71	40	77	123	194	71	25	261	76	48	79
40	84	202	44	84	51	99	146	224	85	45	305	95	59	94
50	97	202	51	84	51	99	157	224	89	45	305	95	59	95
63	124	225	64	106	51	99	183	224	101	45	305	95	59	107
75	166	257	85	156		66	233	144	136	70		60		144
90	200	274	105	168		70	254	152	141	70		65		151
110	238	273	123	175		78	301	169	164	120		72		174



# PVC-C

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



DN10/15 - 50



### Model:

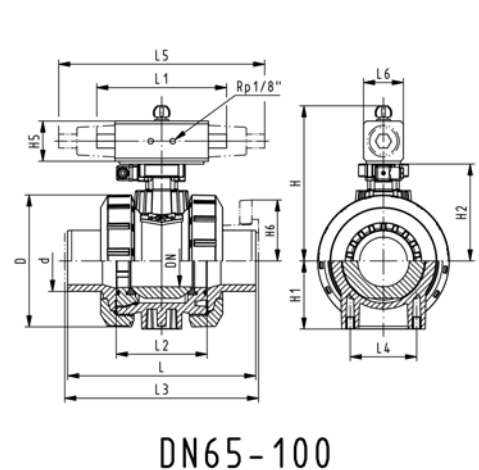
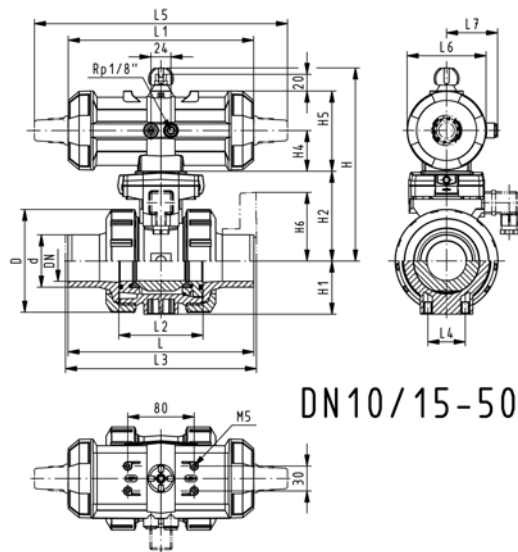
- Assignment of actuators: PA11 (DN10/15-25), PA21 (DN32-50), PA30 (DN65), PA35 (DN80), PA40 (DN100)
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time  $90^\circ <$  1-2 s

### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	70	199 230 542	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
75	65	10	5000	199 230 549	199 230 559	4.600
90	80	10	7000	199 230 550	199 230 560	5.700
110	100	10	11000	199 230 551	199 230 561	8.300

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	159	27	62	40	77	114	194	56	0	25	261	76	48
20	50	159	27	62	40	77	124	194	56	130	25	261	76	48
25	58	168	30	71	40	77	144	194	65	150	25	261	76	48
32	68	168	36	71	40	77	154	194	71	160	25	261	76	48
40	84	202	44	84	51	99	174	224	85	180	45	305	95	59
50	97	202	51	84	51	99	194	224	89	200	45	305	95	59
63	124	225	64	106	51	99	224	224	101	230	45	305	95	59
75	166	262	85	156		70	284		136	290	70	276	65	
90	200	281	105	168		78	300		141	310	70	341	72	
110	238	292	123	175		86	340		164	350	120	369	80	



# PVC-C

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



### Model:

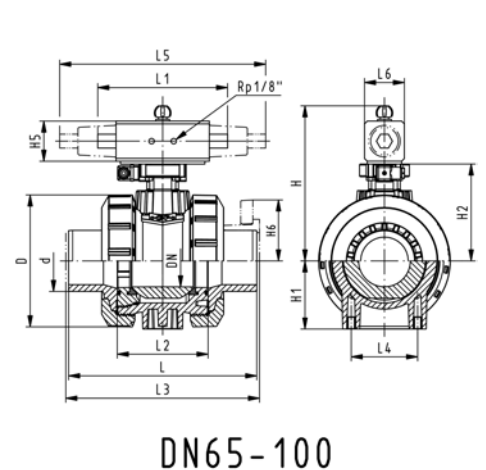
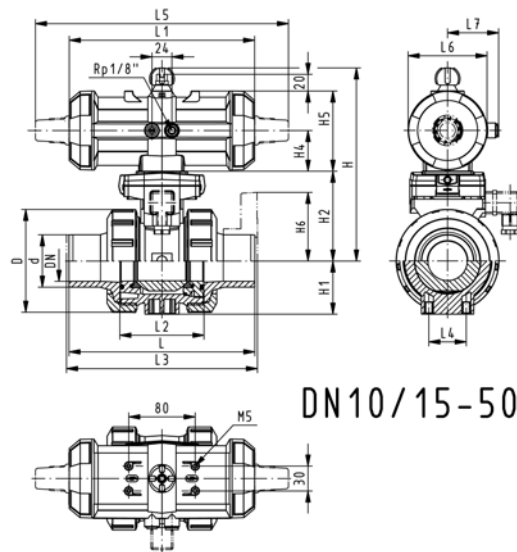
- Assignment of actuators: PA11 (DN10/15-25), PA21 (DN32-50), PA30 (DN65), PA35 (DN80), PA40 (DN100)
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90°< 1-2 s

### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value (Δp=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
75	65	10	5000	199 230 589	199 230 599	4.600
90	80	10	7000	199 230 590	199 230 600	5.700
110	100	10	11000	199 230 591	199 230 601	8.300

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	159	27	62	40	77	114	194	56	130	25	261	76	48
20	50	159	27	62	40	77	124	194	56	130	25	261	76	48
25	58	168	30	71	40	77	144	194	65	150	25	261	76	48
32	68	168	36	71	40	77	154	194	71	160	25	261	76	48
40	84	202	44	84	51	99	174	224	85	180	45	305	95	59
50	97	202	51	84	51	99	194	224	89	200	45	305	95	59
63	124	225	64	106	51	99	224	224	101	230	45	305	95	59
75	166	262	85	156		70	284		136	290	70	276	65	
90	200	281	105	168		78	300		141	310	70	341	72	
110	238	292	123	175		86	340		164	350	120	369	80	



# PVC-C

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



DN10/15 - 50



### Model:

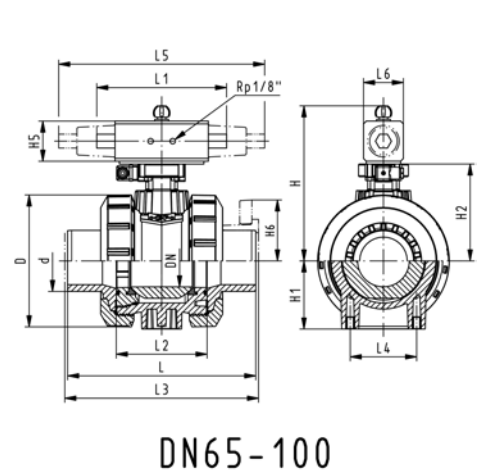
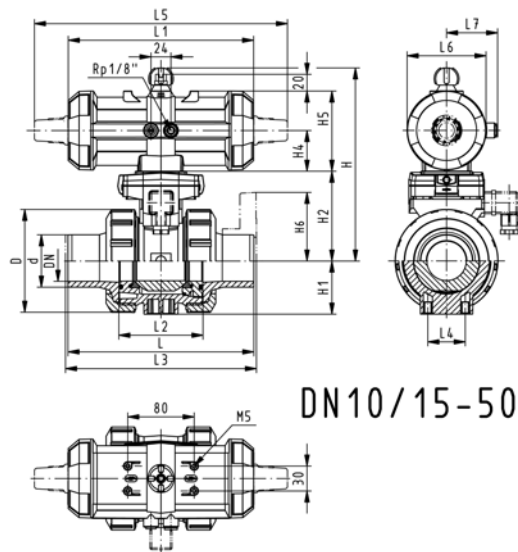
- Assignment of actuators: PA11 (DN10/15-25), PA21 (DN32-50), PA35 (DN65), PA40 (DN80), PA45 (DN100)
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time  $90^\circ <$  1-2 s

### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	70	199 230 622	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
75	65	10	5000	199 230 629	199 230 639	3.500
90	80	10	7000	199 230 630	199 230 640	5.000
110	100	10	11000	199 230 631	199 230 641	6.600

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	159	27	62	40	77	114	194	56	130	25	261	76	48
20	50	159	27	62	40	77	124	194	56	130	25	261	76	48
25	58	168	30	71	40	77	144	194	65	150	25	261	76	48
32	68	168	36	71	40	77	154	194	71	160	25	261	76	48
40	84	202	44	84	51	99	174	224	85	180	45	305	95	59
50	97	202	51	84	51	99	194	224	89	200	45	305	95	59
63	124	225	64	106	51	99	224	224	101	230	45	305	95	59
75	166	257	85	156		66	284	144	136	290	70		60	
90	200	274	105	168		70	300	152	141	310	70		65	
110	238	273	123	175		78	340	169	164	350	120		72	



# PVC-C

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



DN10/15 - 50



### Model:

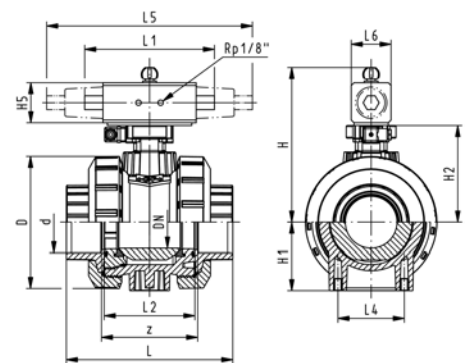
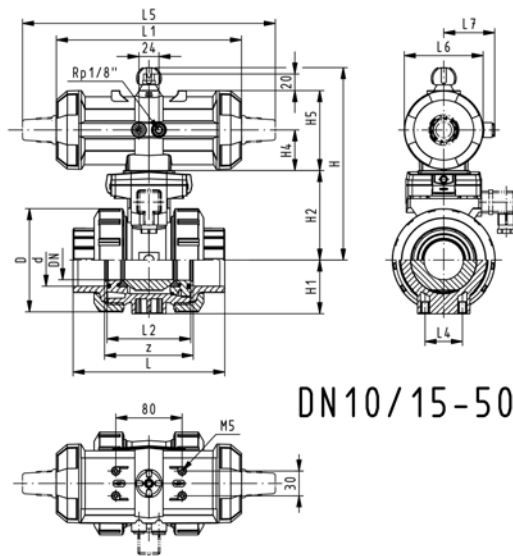
- Assignment of actuators: PA11 (DN10/15-25), PA21 (DN32-50), PA30 (DN65), PA35 (DN80), PA40 (DN100)
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90° < 1-2 s

### Option:

- Individual configuration of the valve (see form)

Rp [inch]	DN [mm]	PN	kv-value (Δp=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
2 1/2	65	10	5000	199 230 879	199 230 899	4.500
3	80	10	7000	199 230 880	199 230 900	5.600
4	100	10	11000	199 230 881	199 230 901	8.200

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	159	27	62	40	77	92	194	56	25	261	76	48	64
1/2	50	159	27	62	40	77	95	194	56	25	261	76	48	64
3/4	58	168	30	71	40	77	110	194	65	25	261	76	48	72
1	68	168	36	71	40	77	123	194	71	25	261	76	48	79
1 1/4	84	202	44	84	51	99	146	224	85	45	305	95	59	94
1 1/2	97	202	51	84	51	99	157	224	89	45	305	95	59	95
2	124	225	64	106	51	99	183	224	101	45	305	95	59	107
2 1/2	166	262	85	156		70	233		136	70	276	65		144
3	200	281	105	168		78	254		141	70	341	72		151
4	238	292	123	175		86	301		164	120	369	80		174





# PVC-C



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

### Model:

- Assignment of actuators: PA11 (DN10/15-25), PA21 (DN32-50), PA30 (DN65), PA35 (DN80), PA40 (DN100)
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time  $90^\circ <$  1-2 s

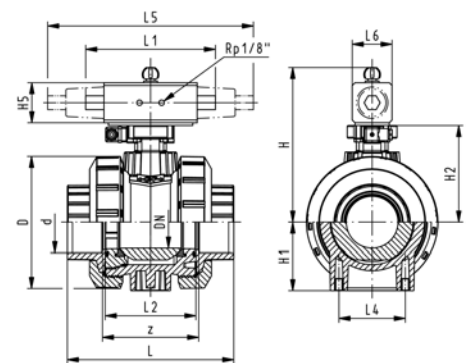
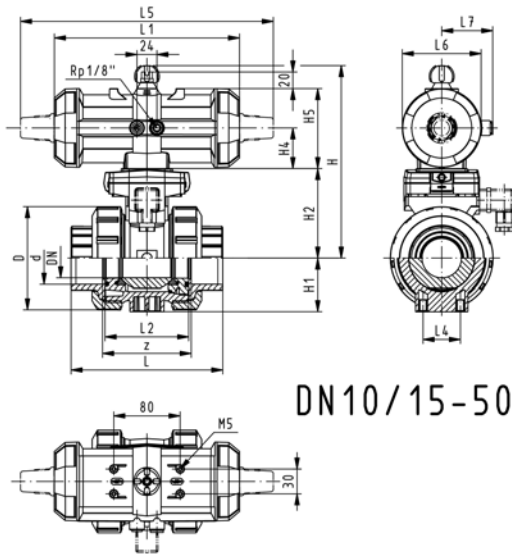
### Option:

- Individual configuration of the valve (see form)



Rp [inch]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
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
2 1/2	65	10	5000	199 230 919	199 230 939	4.500
3	80	10	7000	199 230 920	199 230 940	5.600
4	100	10	11000	199 230 921	199 230 941	8.200

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	159	27	62	40	77	92	194	56	25	261	76	48	64
1/2	50	159	27	62	40	77	95	194	56	25	261	76	48	64
3/4	58	168	30	71	40	77	110	194	65	25	261	76	48	72
1	68	168	36	71	40	77	123	194	71	25	261	76	48	79
1 1/4	84	202	44	84	51	99	146	224	85	45	305	95	59	94
1 1/2	97	202	51	84	51	99	157	224	89	45	305	95	59	95
2	124	225	64	106	51	99	183	224	101	45	305	95	59	107
2 1/2	166	262	85	156		70	233		136	70	276	65		144
3	200	281	105	168		78	254		141	70	341	72		151
4	238	292	123	175		86	301		164	120	369	80		174



# PVC-C

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



### Model:

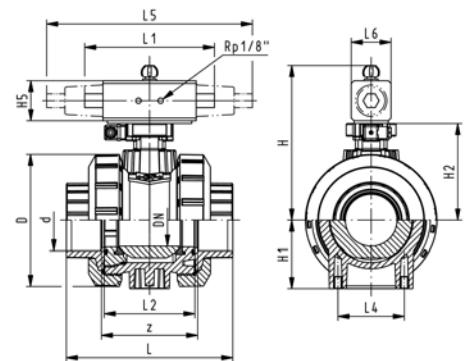
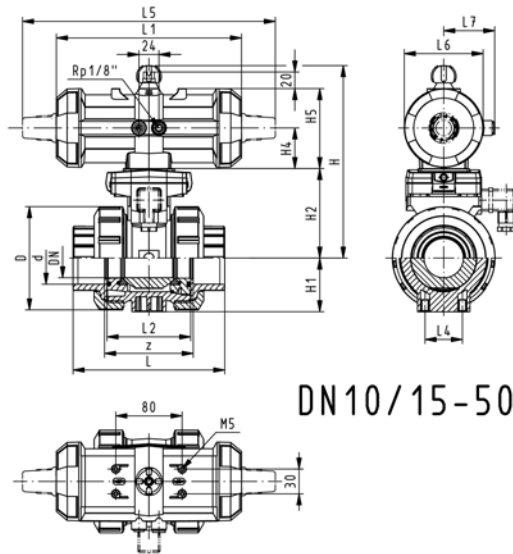
- Assignment of actuators: PA11 (DN10/15-25), PA21 (DN32-50), PA35 (DN65), PA40 (DN80), PA45 (DN100)
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90°< 1-2 s

### Option:

- Individual configuration of the valve (see form)

Rp [inch]	DN [mm]	PN	kv-value (Δp=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
2 1/2	65	10	5000	199 230 949	199 230 959	3.400
3	80	10	7000	199 230 950	199 230 960	4.900
4	100	10	11000	199 230 951	199 230 961	6.400

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	159	27	62	40	77	92	194	56	25	261	76	48	64
1/2	50	159	27	62	40	77	95	194	56	25	261	76	48	64
3/4	58	168	30	71	40	77	110	194	65	25	261	76	48	72
1	68	168	36	71	40	77	123	194	71	25	261	76	48	79
1 1/4	84	202	44	84	51	99	146	224	85	45	305	95	59	94
1 1/2	97	202	51	84	51	99	157	224	89	45	305	95	59	95
2	124	225	64	106	51	99	183	224	101	45	305	95	59	107
2 1/2	166	257	85	156		66	233	144	136	70		60		144
3	200	274	105	168		70	254	152	141	70		65		151
4	238	273	123	175		78	301	169	164	120		72		174



# PVC-C



## Ball valve type 230 PVC-C FC (Fail safe to close) Without manual override With backing flanges PP-st metric

### Model:

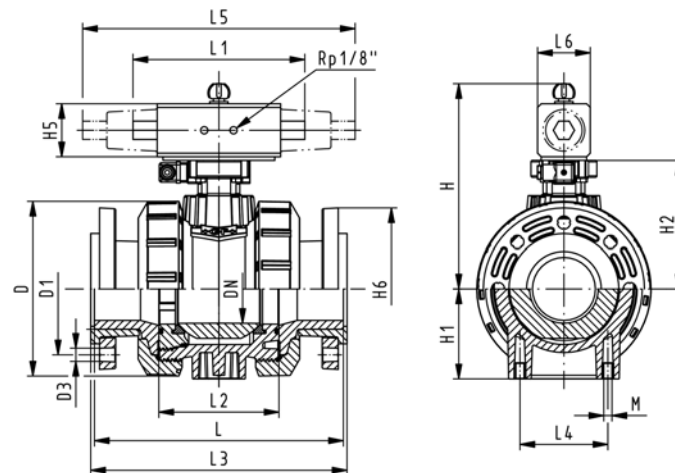
- Assignment of actuators: PA11 (DN10/15-25), PA21 (DN32-50), PA30 (DN65), PA35 (DN80), PA40 (DN100)
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time  $90^\circ <$  1-2 s
- Overall length according to EN 558
- Connecting dimension: ISO 7005, EN 1092, BS 4504, DIN 2501

### 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
75	65	10	5000	<b>199 234 609</b>	<b>199 234 619</b>	8.600
90	80	10	7000	<b>199 234 610</b>	<b>199 234 620</b>	10.500
110	100	10	11000	<b>199 234 611</b>	<b>199 234 621</b>	14.800

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H5 [mm]	H6 [mm]	L [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]
75	166	262	85	156	70	93	284	136	290	70	276	65
90	200	281	105	168	78	100	300	141	310	70	341	72
110	238	292	123	175	86	110	340	164	350	120	369	80





# PVC-C



## Ball valve type 230 PVC-C FO (Fail safe to open) Without manual override With backing flanges PP-st metric

### Model:

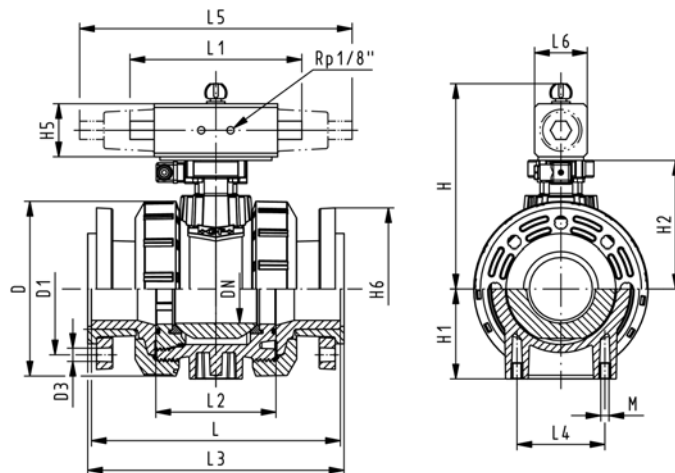
- Assignment of actuators: PA11 (DN10/15-25), PA21 (DN32-50), PA30 (DN65), PA35 (DN80), PA40 (DN100)
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time  $90^\circ <$  1-2 s
- Overall length according to EN 558
- Connecting dimension: ISO 7005, EN 1092, BS 4504, DIN 2501

### 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
75	65	10	5000	<b>199 234 629</b>	<b>199 234 639</b>	8.600
90	80	10	7000	<b>199 234 630</b>	<b>199 234 640</b>	10.500
110	100	10	11000	<b>199 234 631</b>	<b>199 234 641</b>	14.800

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H5 [mm]	H6 [mm]	L [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]
75	166	262	85	156	70	93	284	136	290	70	276	65
90	200	281	105	168	78	100	300	141	310	70	341	72
110	238	292	123	175	86	110	340	164	350	120	369	80



# PVC-C



## Ball valve type 230 PVC-C DA (Double acting) Without manual override With backing flanges PP-st metric

### Model:

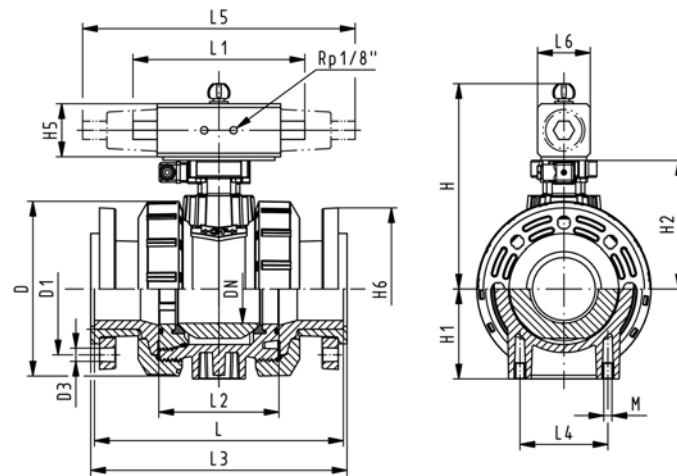
- Assignment of actuators: PA11 (DN10/15-25), PA21 (DN32-50), PA35 (DN65), PA40 (DN80), PA45 (DN100)
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time  $90^\circ <$  1-2 s
- Overall length according to EN 558
- Connecting dimension: ISO 7005, EN 1092, BS 4504, DIN 2501

### 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
75	65	10	5000	<b>199 234 649</b>	<b>199 234 659</b>	7.400
90	80	10	7000	<b>199 234 650</b>	<b>199 234 660</b>	9.800
110	100	10	11000	<b>199 234 651</b>	<b>199 234 661</b>	13.100

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L6 [mm]
75	166	257	85	156	66	93	284	144	136	290	70	60
90	200	274	105	168	70	100	300	152	141	310	70	65
110	238	273	123	175	78	110	340	169	164	350	120	72





# Copiable

## Configurator GF ball valve type 546 PVC-C

### Ball Valve

A01 Ball Valve 546

#### Material

B02 PVC-C

#### Dimension

C05 DN 10 3/8"  
 C06 DN 15 1/2"  
 C07 DN 20 3/4"  
 C08 DN 25 1"  
 C09 DN 32 1 1/4"  
 C10 DN 40 1 1/2"  
 C11 DN 50 2"  
 C12 DN 65 2 1/2"  
 C13 DN 80 3"  
 C14 DN 100 4"

#### Version

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

#### Seals

E01 EPDM seals  
 E02 FPM seals

#### Threaded inserts

F01 without threaded inserts  
 F02 with threaded inserts

#### Connecting parts

G11 PVC-C Cement socket metric  
 G12 PVC-C Cement socket JIS  
 G13 PVC-C Cement socket inch ASTM  
 G14 PVC-C Cement spigot metric  
 G15 PVC-C Threaded socket Rp  
 G16 PVC-C Threaded socket Rp reinforced (DN10-50)  
 G17 PVC-C Threaded socket NPT  
 G40 PE-100 Butt fusion metric  
 G41 PE-100 Butt fusion spigot SDR11 metric  
 G42 PE-100 Butt fusion spigot SDR17.6 metric (DN65-100)  
 G43 PE-100 Butt fusion spigot long SDR11 metric  
 G72 Backing flange PP-steel metric  
 G73 Backing flange PP-steel inch ANSI  
 G81 PVC-C Valve end blank

#### Multi-functional module

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

#### Lever

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

#### Mounting plate

L01 without mounting plate  
 L02 with mounting plate

A01 B02 C D E F G G I K L

left right

You will find a large selection of different versions in our range of products. New system elements also provide you with new opportunities for use. In order for us to supply exactly the ball valve you need for your application, we have created a selection menu for you.

**We supply what you put together.**

# Copiable GF ball valve type 546 with pneumatic actuator

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

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

**We supply what you put together.**



### Pneumatic actuators PA11/PA21

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

### Manual override

- Q01 without manual override
- Q02 with manual override

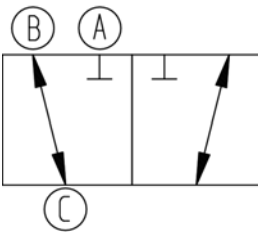
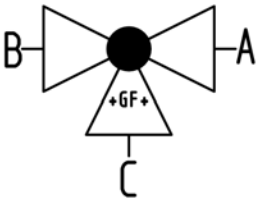
### Stroke limiter

- R01 without stroke limiter
- R02 with stroke limiter

<b>P</b>	<b>Q</b>	<b>R</b>	
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# PVC-C

## 3-Way ball valve type 285 PVC-C Horizontal/L-port Without manual override With solvent cement sockets metric



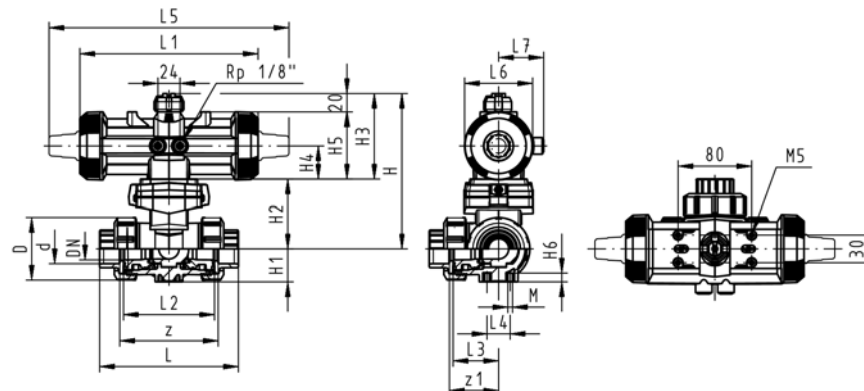
### Model:

- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- Actuator fails safe to the closed position FC
- Basic position B-C opened, activated position A-C opened, see flow scheme
- Control time 90°<) 1-3 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	50	<b>199 285 102</b>	<b>199 285 112</b>	1.136
20	15	10	75	<b>199 285 103</b>	<b>199 285 113</b>	1.142
25	20	10	150	<b>199 285 104</b>	<b>199 285 114</b>	1.280
32	25	10	280	<b>199 285 105</b>	<b>199 285 115</b>	1.486
40	32	10	480	<b>199 285 106</b>	<b>199 285 116</b>	2.619
50	40	10	620	<b>199 285 107</b>	<b>199 285 117</b>	3.110
63	50	10	1230	<b>199 285 108</b>	<b>199 285 118</b>	4.585

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]
16	50	159	28	62	97	40	77	8	109	194	73	36	25	261	76
20	50	159	28	62	97	40	77	8	112	194	73	36	25	261	76
25	58	168	32	71	97	40	77	8	131	194	86	43	25	261	76
32	68	168	36	71	97	40	77	8	151	194	99	50	25	261	76
40	84	203	45	84	119	51	99	9	181	224	120	60	45	305	95
50	97	203	51	84	119	51	99	9	205	224	137	69	45	305	95
63	124	225	65	106	119	51	99	9	261	224	179	89	45	305	95

d [mm]	L7 [mm]	M	z [mm]	z1 [mm]
16	48	6	81	40
20	48	6	81	40
25	48	6	94	47
32	48	6	107	54
40	59	8	130	65
50	59	8	143	72
63	59	8	185	92



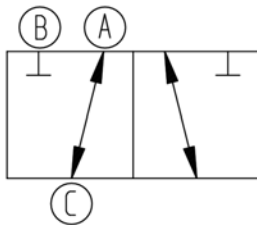
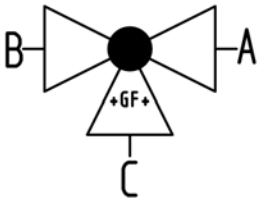
# PVC-C



## 3-Way ball valve type 285 PVC-C Horizontal/L-port DA (Double acting) Without manual override With solvent cement sockets metric

### Model:

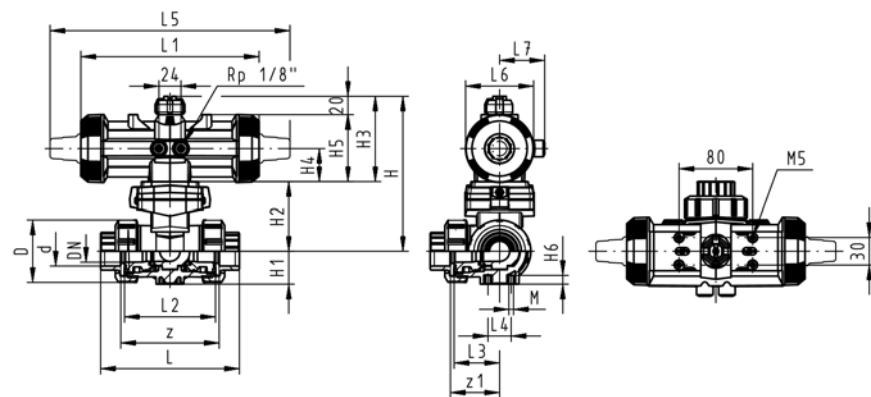
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- Basic position A-C opened, activated position B-C opened, see flow scheme
- Control time  $90^\circ <$  1-3 s
- For easy installation and removal
- Integrated stainless steel mounting inserts



d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	50	199 285 282	199 285 292	9.459
20	15	10	75	199 285 283	199 285 293	9.524
25	20	10	150	199 285 284	199 285 294	1.090
32	25	10	280	199 285 285	199 285 295	1.296
40	32	10	480	199 285 286	199 285 296	2.195
50	40	10	620	199 285 287	199 285 297	2.686
63	50	10	1230	199 285 288	199 285 298	4.161

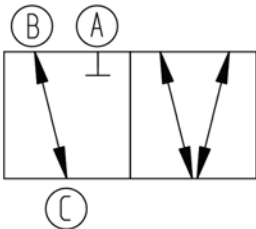
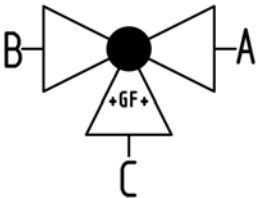
d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]
16	50	159	28	62	97	40	77	8	109	194	73	36	25	261	76
20	50	159	28	62	97	40	77	8	112	194	73	36	25	261	76
25	58	168	32	71	97	40	77	8	131	194	86	43	25	261	76
32	68	168	36	71	97	40	77	8	151	194	99	50	25	261	76
40	84	203	45	84	119	51	99	9	181	224	120	60	45	305	95
50	97	203	51	84	119	51	99	9	205	224	137	69	45	305	95
63	124	225	65	106	119	51	99	9	261	224	179	89	45	305	95

d [mm]	L7 [mm]	M	z [mm]	z1 [mm]
16	48	6	81	40
20	48	6	81	40
25	48	6	94	47
32	48	6	107	54
40	59	8	130	65
50	59	8	143	72
63	59	8	185	92



# PVC-C

## 3-Way ball valve type 285 PVC-C Horizontal/T-port Without manual override With solvent cement sockets metric



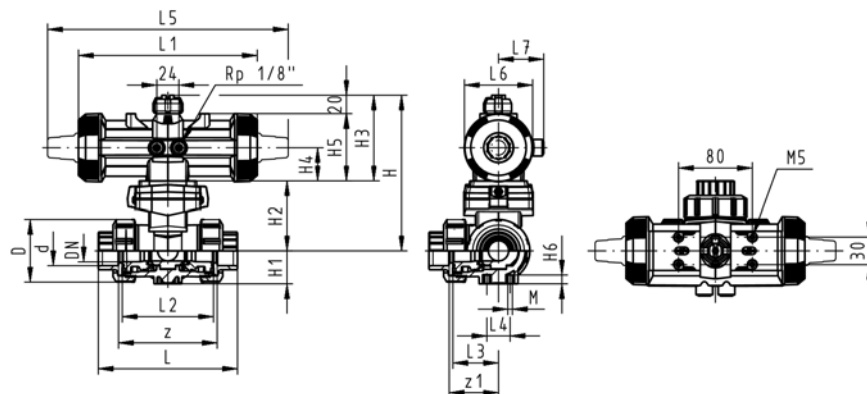
### Model:

- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- Actuator fails safe to the closed position FC
- Basic position B-C opened, activated position A-B-C opened, see flow scheme
- Control time 90°< 1-3 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

d [mm]	DN [mm]	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	140	199 285 142	199 285 152	1.135
20	15	10	200	199 285 143	199 285 153	1.141
25	20	10	470	199 285 144	199 285 154	1.278
32	25	10	793	199 285 145	199 285 155	1.479
40	32	10	1290	199 285 146	199 285 156	2.608
50	40	10	1910	199 285 147	199 285 157	3.088
63	50	10	3100	199 285 148	199 285 158	4.536

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]
16	50	159	28	62	97	40	77	8	109	194	73	36	25	261	76
20	50	159	28	62	97	40	77	8	112	194	73	36	25	261	76
25	58	168	32	71	97	40	77	8	131	194	86	43	25	261	76
32	68	168	36	71	97	40	77	8	151	194	99	50	25	261	76
40	84	203	45	84	119	51	99	9	181	224	120	60	45	305	95
50	97	203	51	84	119	51	99	9	205	224	137	69	45	305	95
63	124	225	65	106	119	51	99	9	261	224	179	89	45	305	95

d [mm]	L7 [mm]	M	z [mm]	z1 [mm]
16	48	6	81	40
20	48	6	81	40
25	48	6	94	47
32	48	6	107	54
40	59	8	130	65
50	59	8	143	72
63	59	8	185	92





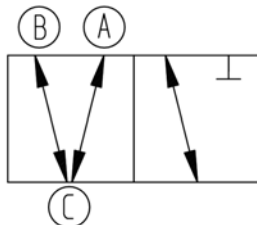
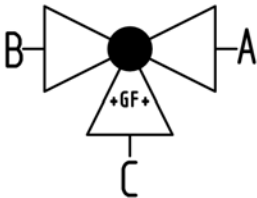
# PVC-C



## 3-Way ball valve type 285 PVC-C Horizontal/T-port DA (Double acting) Without manual override With solvent cement sockets metric

### Model:

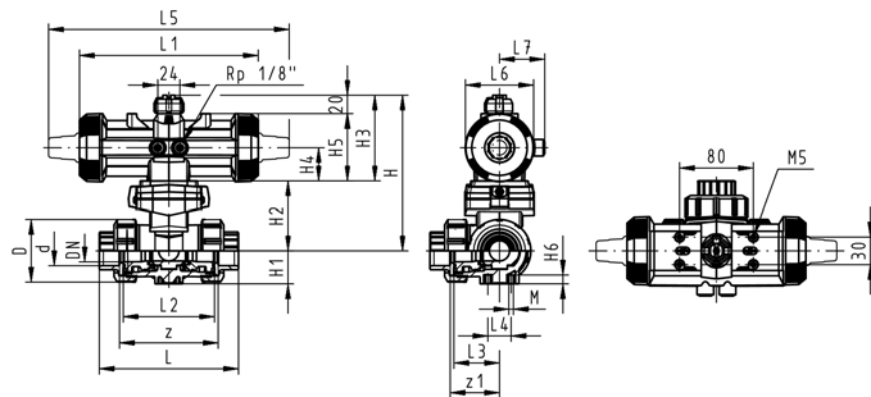
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- Basic position A-B-C opened, activated position B-C opened, see flow scheme
- Control time  $90^\circ <$  1-3 s
- For easy installation and removal
- Integrated stainless steel mounting inserts



d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	140	199 285 322	199 285 332	9.448
20	15	10	200	199 285 323	199 285 333	9.513
25	20	10	470	199 285 324	199 285 334	1.088
32	25	10	793	199 285 325	199 285 335	1.289
40	32	10	1290	199 285 326	199 285 336	2.184
50	40	10	1910	199 285 327	199 285 337	2.664
63	50	10	3100	199 285 328	199 285 338	4.112

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]
16	50	159	28	62	97	40	77	8	109	194	73	36	25	261	76
20	50	159	28	62	97	40	77	8	112	194	73	36	25	261	76
25	58	168	32	71	97	40	77	8	131	194	86	43	25	261	76
32	68	168	36	71	97	40	77	8	151	194	99	50	25	261	76
40	84	203	45	84	119	51	99	9	181	224	120	60	45	305	95
50	97	203	51	84	119	51	99	9	205	224	137	69	45	305	95
63	124	225	65	106	119	51	99	9	261	224	179	89	45	305	95

d [mm]	L7 [mm]	M	z [mm]	z1 [mm]
16	48	6	81	40
20	48	6	81	40
25	48	6	94	47
32	48	6	107	54
40	59	8	130	65
50	59	8	143	72
63	59	8	185	92



# PVC-C

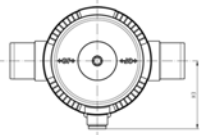
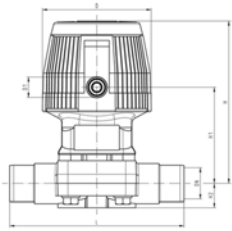
## Diaphragm valves pneumatic

### Diaphragm valve 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 (Δp=1 bar) [l/min]	EPDM Code	kg
20	15	6	72	<b>199 024 121</b>	0.516
25	20	6	120	<b>199 024 122</b>	1.043
32	25	6	238	<b>199 024 123</b>	1.308
40	32	6	341	<b>199 024 124</b>	1.936
50	40	6	460	<b>199 024 125</b>	2.517
63	50	6	685	<b>199 024 126</b>	3.011

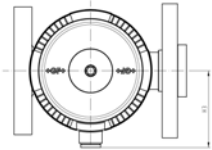
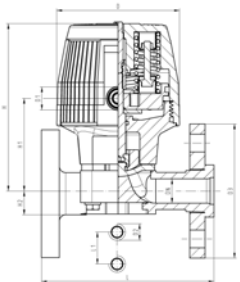
d [mm]	D [mm]	D1_G [inch]	D2 (M)	L [mm]	L1 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	Lift = Hx [mm]
20	68	1/8	M6	124	25	99	59	14	44	8
25	96	1/8	M6	144	25	130	71	18	56	10
32	96	1/8	M6	154	25	143	85	21	56	12
40	120	1/8	M8	174	45	170	97	26	68	14
50	120	1/8	M8	194	45	182	109	33	68	16
63	120	1/8	M8	224	45	199	126	39	68	16

### Diaphragm valve DIASTAR Eco PVC-C FC (Fail safe to close)

#### With backing flanges PP-V metric

**Model:**

- Working pressure 6 bar **one side**
- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504



d [mm]	DN [mm]	Inch	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	kg
20	15	1/2	6	72	<b>199 024 151</b>	0.568
25	20	3/4	6	120	<b>199 024 152</b>	1.155
32	25	1	6	238	<b>199 024 153</b>	1.451
40	32	1 1/4	6	341	<b>199 024 154</b>	2.185
50	40	1 1/2	6	460	<b>199 024 155</b>	3.173
63	50	2	6	685	<b>199 024 156</b>	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	130	25	99	59	14	44	8
25	96	1/8	M6	105	150	25	130	71	18	56	10
32	96	1/8	M6	115	160	25	143	85	21	56	12
40	120	1/8	M8	140	180	45	170	97	26	68	14
50	120	1/8	M8	150	200	45	182	109	33	68	16
63	120	1/8	M8	165	230	45	199	126	39	68	16

# PVC-C



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

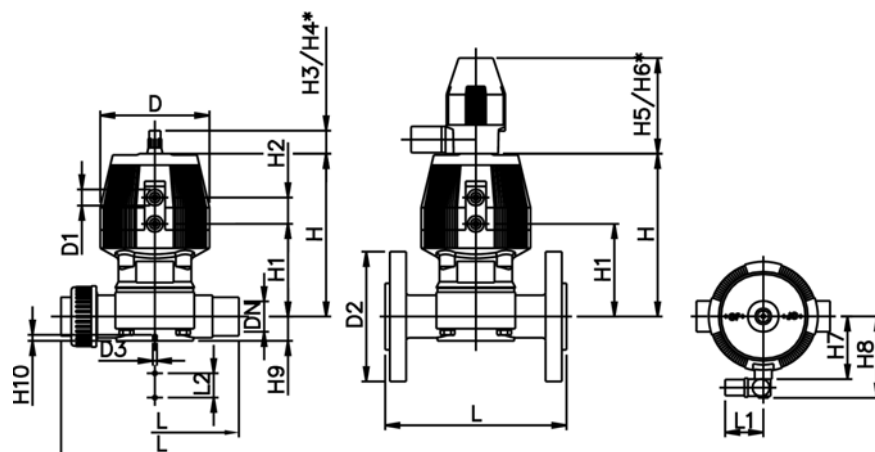
- With position indicator / Working pressure: **one side**

\*PN: EPDM/PTFE

d [mm]	DN [mm]	PN [bar]		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

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

### Model:

- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504
- With position indicator / Working pressure: **one side**

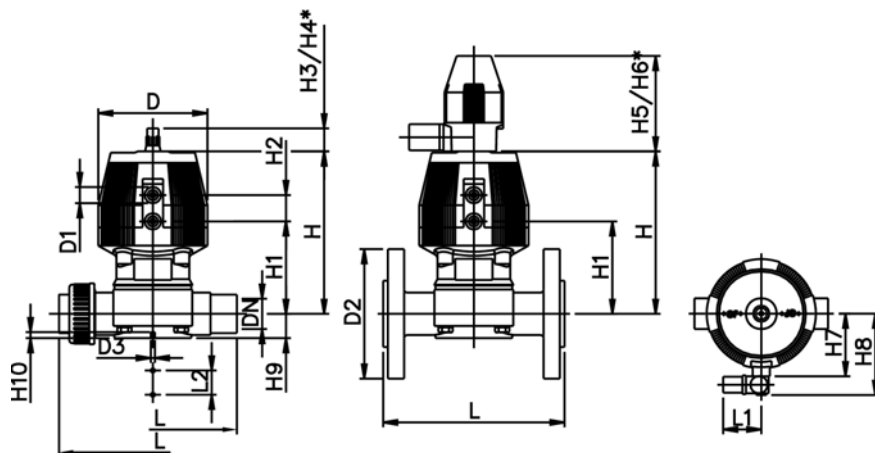
\*PN: EPDM/PTFE



d [mm]	DN [mm]	Inch	PN [bar]		kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	PTFE/EPDM Code	kg
20	15	1/2	10 / 5	*	72	<b>199 028 691</b>	<b>199 028 721</b>	0.690
25	20	3/4	10 / 7	*	120	<b>199 028 692</b>	<b>199 028 722</b>	1.100
32	25	1	10 / 7	*	238	<b>199 028 693</b>	<b>199 028 723</b>	1.470
40	32	1 1/4	10 / 7	*	341	<b>199 028 694</b>	<b>199 028 724</b>	2.170
50	40	1 1/2	10 / 7	*	460	<b>199 028 695</b>	<b>199 028 725</b>	3.050
63	50	2	10 / 7	*	685	<b>199 028 696</b>	<b>199 028 726</b>	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	1/8	95	6	130	60	25	99	59	24	23	44	100	155
25	96	1/8	105	6	150	60	25	130	71	25	23	44	100	155
32	96	1/8	115	6	160	60	25	143	85	25	23	44	100	155
40	120	1/8	140	8	180	60	45	170	97	26	36	64	100	160
50	150	1/4	150	8	200	60	45	203	108	36	36	64	100	170
63	150	1/4	165	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



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

### Model:

- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504
- With position indicator / Working pressure: **one side**

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

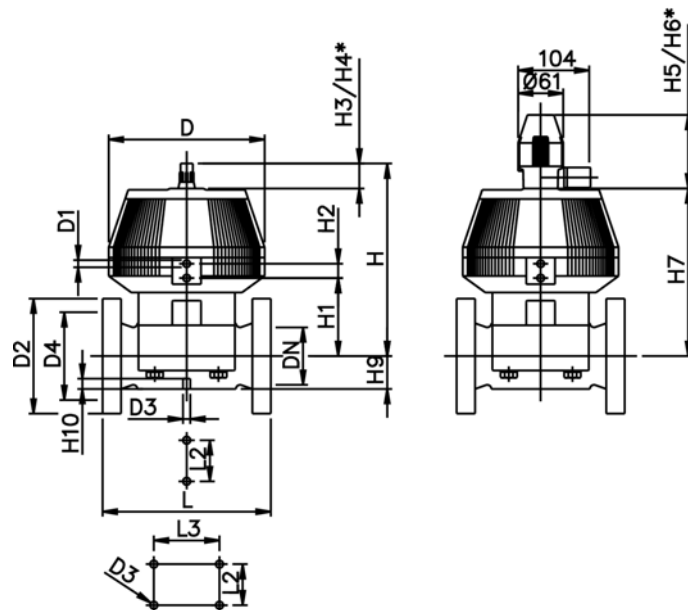
\*\* Connecting dimensions DN80 and DN150 metric and Inch ANSI B16.5

\* With backing flanges PP-V

d [mm]	DN [mm]	Inch	PN	kv-value (Δp=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 [mm]	D4 [mm]	L [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]
* 75	280	¼	185	8	145	290	70	344	148	24	46	100	129	195
** 90	280	¼	200	12	160	310	120	348	150	24	46	100	129	195
110	335	¼	225	12	180	350	120	395	176	24	46	100	129	195

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



# PVC-C

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

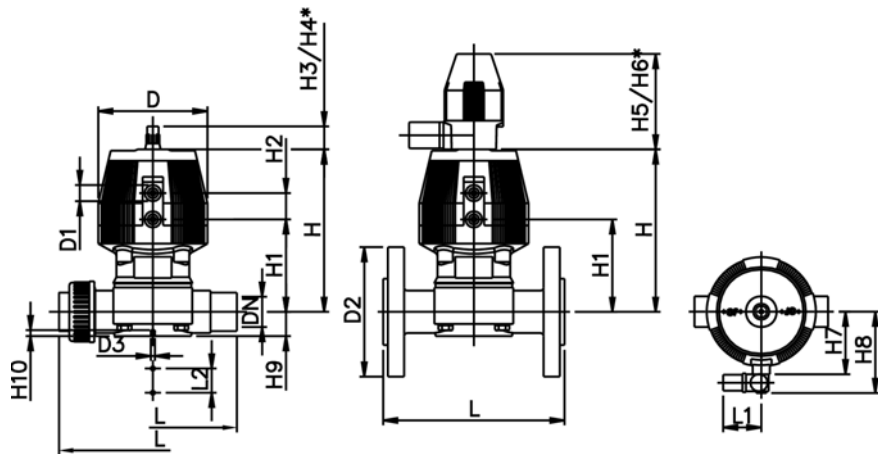


- With position indicator / Working pressure: **both sides**

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	PTFE/EPDM Code	kg
20	15	10	72	199 025 631	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

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



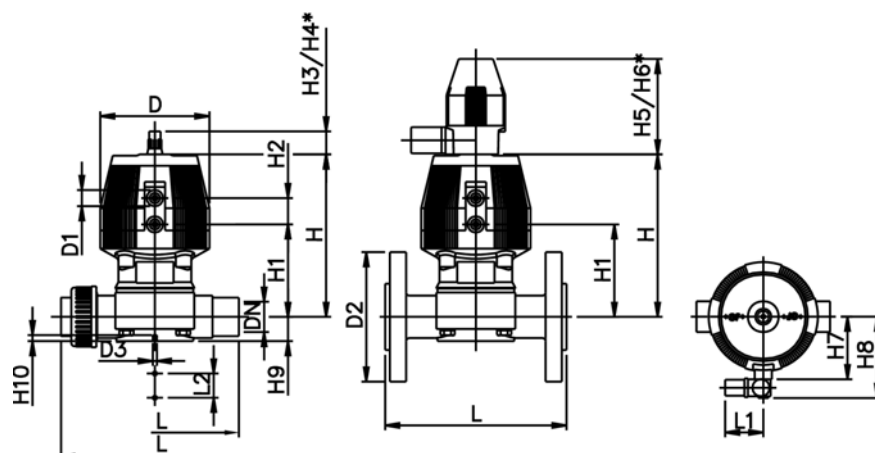
### Model:

- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504
- 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	199 025 691	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	6	130	60	25	128	69	25	23	44	100	155
25	96	1/8	105	6	150	60	25	130	71	25	23	44	100	155
32	120	1/8	115	6	160	60	25	166	93	26	36	64	100	155
40	150	1/4	140	8	180	60	45	201	106	36	36	64	100	160
50	180	1/4	150	8	200	60	45	233	119	37	36	64	100	170
63	180	1/4	165	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

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

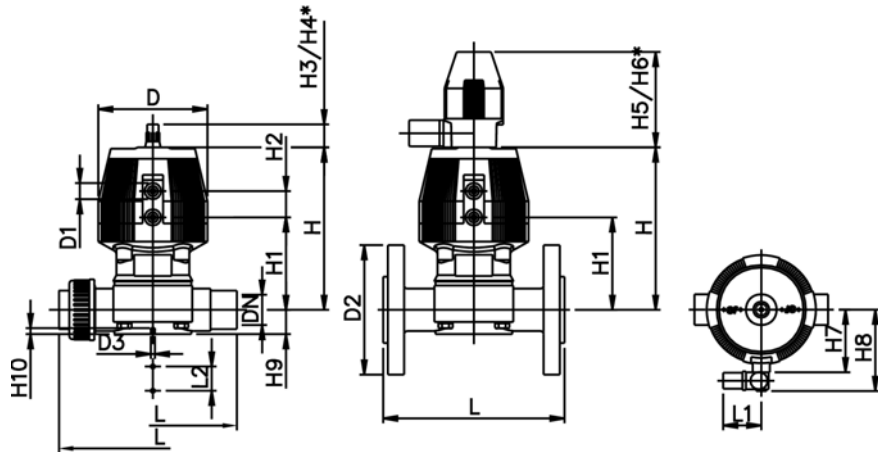


- With position indicator / Working pressure: **both sides**

d [mm]	DN [mm]	PN	kv-value (Δp=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



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

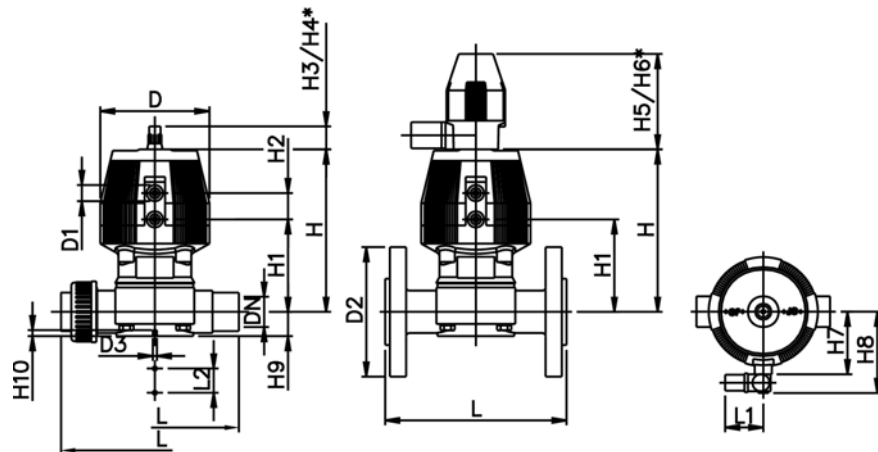
### Model:

- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504
- 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	<b>199 025 701</b>	<b>199 025 731</b>	0.624
25	20	3/4	10	120	<b>199 025 702</b>	<b>199 025 732</b>	0.890
32	25	1	10	238	<b>199 025 703</b>	<b>199 025 733</b>	1.260
40	32	1 1/4	10	341	<b>199 025 704</b>	<b>199 025 734</b>	1.750
50	40	1 1/2	10	460	<b>199 025 705</b>	<b>199 025 735</b>	2.210
63	50	2	10	685	<b>199 025 706</b>	<b>199 025 736</b>	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	6	130	60	25	99	59	24	23	44	100	155
25	96	1/8	105	6	150	60	25	130	71	25	23	44	100	155
32	96	1/8	115	6	160	60	25	143	85	25	23	44	100	155
40	120	1/8	140	8	180	60	45	170	97	26	36	64	100	160
50	150	1/4	150	8	200	60	45	203	108	36	36	64	100	170
63	150	1/4	165	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



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

### Model:

- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504

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

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

\*\* Connecting dimensions DN80 and DN150 metric and Inch ANSI B16.5

\* With backing flanges PP-V

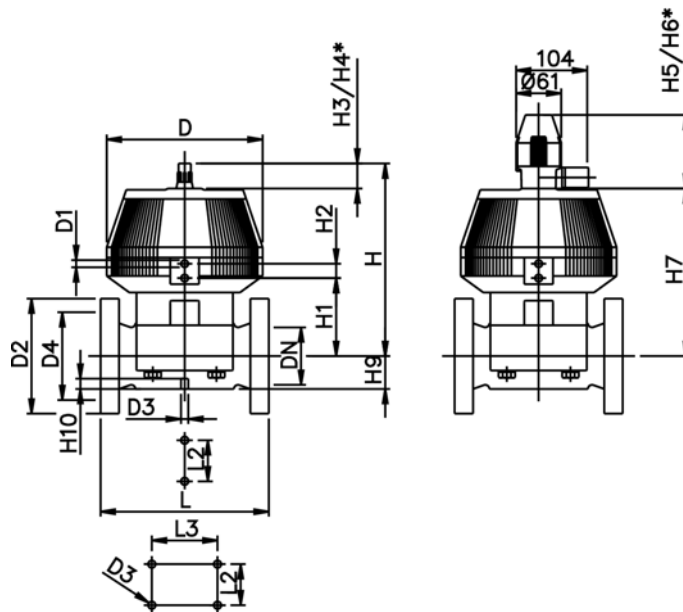
d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	PTFE/EPDM Code	kg								
* 75	65	2 ½	10	992	<b>199 025 707</b>	<b>199 025 737</b>	13.600								
** 90	80	3	10	1700	<b>199 025 708</b>	<b>199 025 738</b>	17.400								
110	100	4	8	2700	<b>199 025 709</b>	<b>199 025 739</b>	24.700								

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]	H5 [mm]	H6 [mm]
* 75	280	¼	8	185	145	290	70	344	148	24	46	100	129	195
** 90	280	¼	12	200	160	310	120	348	150	24	46	100	129	195
110	335	¼	12	225	180	350	120	395	176	24	46	100	129	195

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



# PVC-C

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

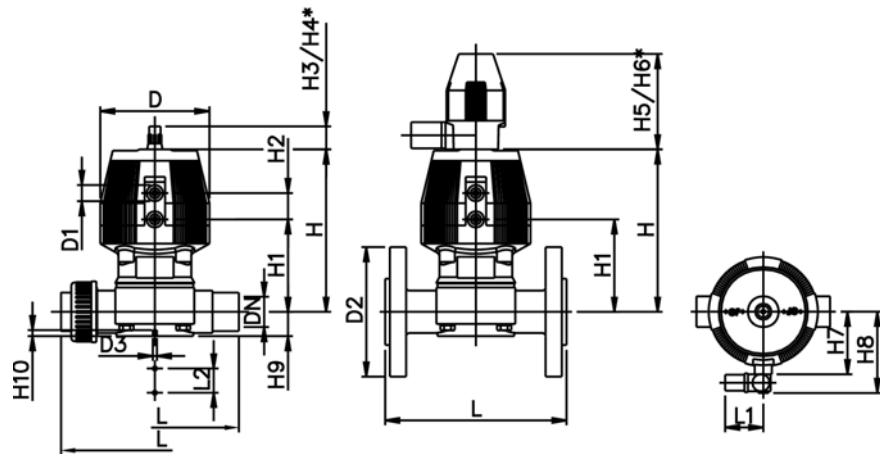


- With position indicator / Working pressure: **both sides**

d [mm]	DN [mm]	PN	kv-value (Δp=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

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

### Model:

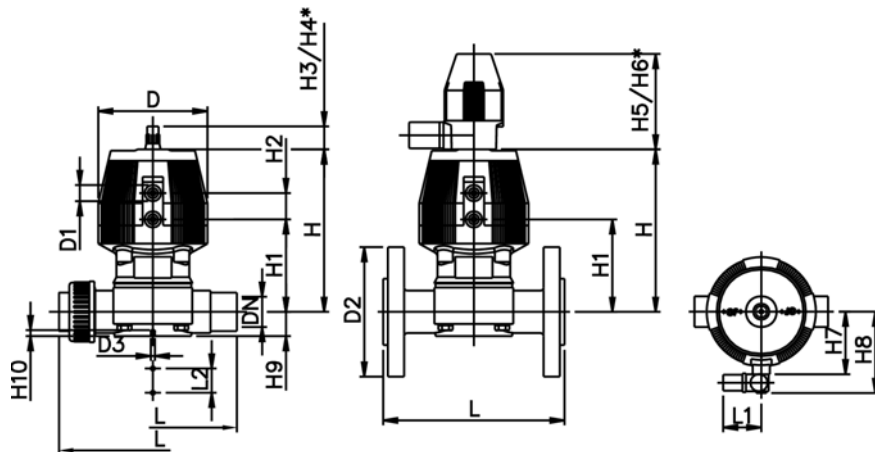
- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504
- With position indicator / Working pressure: **both sides**



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	<b>199 025 711</b>	<b>199 025 741</b>	0.624
25	20	3/4	10	120	<b>199 025 712</b>	<b>199 025 742</b>	0.890
32	25	1	10	238	<b>199 025 713</b>	<b>199 025 743</b>	1.260
40	32	1 1/4	10	341	<b>199 025 714</b>	<b>199 025 744</b>	1.750
50	40	1 1/2	10	460	<b>199 025 715</b>	<b>199 025 745</b>	2.210
63	50	2	10	685	<b>199 025 716</b>	<b>199 025 746</b>	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]	H7 [mm]
20	68	1/8	95	M6	130	60	25	99	59	24	23	44	100	155	44
25	96	1/8	105	M6	150	60	25	127	71	25	23	44	100	155	56
32	96	1/8	115	M6	160	60	25	143	85	25	23	44	100	155	56
40	120	1/8	140	M8	180	60	45	167	97	26	36	64	100	160	68
50	150	1/4	150	M8	200	60	45	198	108	36	36	64	100	170	85
63	150	1/4	165	M8	230	60	45	216	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

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



### Model:

- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504
- With position indicator / Working pressure: **one side**

\* With backing flanges PP-V

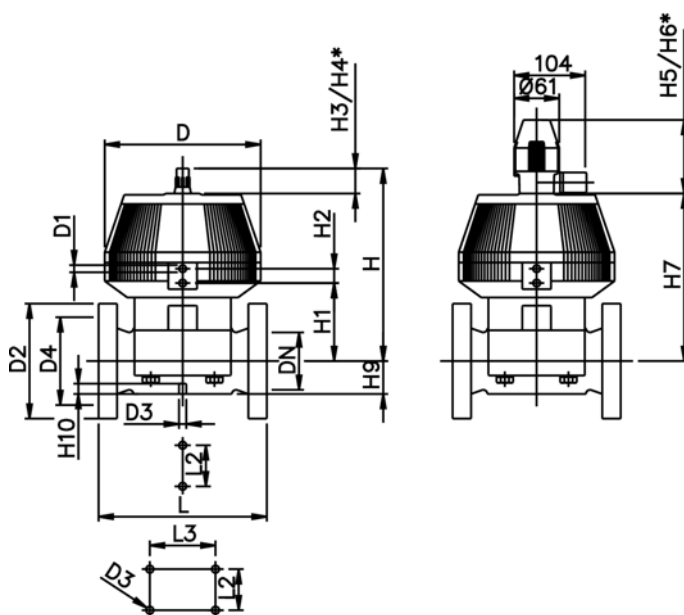
\*\* Connecting dimensions DN80 and DN150 metric and Inch ANSI B16.5

\*\* 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	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]	H5 [mm]	H6 [mm]
* 75	280	¼	185	8	145	290	70	344	148	24	46	100	129	195
** 90	280	¼	200	12	160	310	120	348	150	24	46	100	129	195
110	335	¼	225	12	180	350	120	395	176	24	46	100	129	195

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



# PVC-C

## Butterfly valves electric

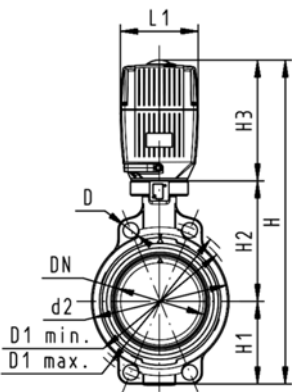
### Butterfly valve type 140 PVC-C 100-230V Without manual override



**Model:**

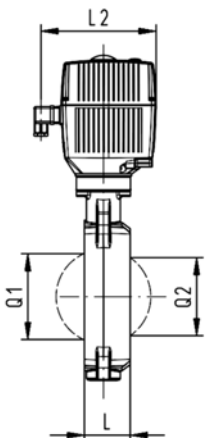
- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, ANSI/ASME B 16.5 Class 150, BS 1560: 1989, BS 4504, JIS B 2220
- Overall length according to EN 558, ISO 5752
- Voltage 100-230 V, 50-60 Hz
- Control time 15 s/90°<) EA31
- Control time 25s/90°<) EA42
- Control range 90°<)
- Actuator with integrated emergency manual override standard

d [mm]	DN [mm]	Inch	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
63	50	2	10	1470	199 140 202	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]	Q1 [mm]
63	EA-31	19	120.0	125.0	104	400	77	134	188	45	122	180	40
75	EA-31	19	139.7	145.0	115	413	83	140	188	46	122	180	54
90	EA-31	19	150.0	160.0	131	428	89	146	188	49	122	180	67
110	EA-31	19	175.0	190.5	161	460	104	167	188	56	122	180	88
140	EA-31	23	210.0	215.9	187	487	117	181	188	64	122	180	113
160	EA-31	24	241.3	241.3	215	508	130	189	188	72	122	180	139
225	EA-42	23	290.0	295.0	267	575	158	210	208	73	122	180	178

d [mm]	Q2 [mm]
63	
75	35
90	50
110	74
140	97
160	123
225	169



# PVC-C

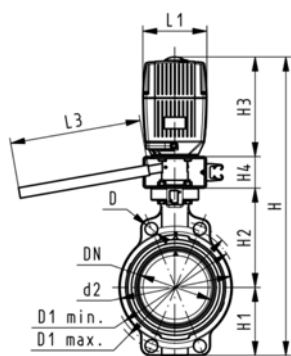
## Butterfly valve type 140 PVC-C 100-230V With manual override

### Model:

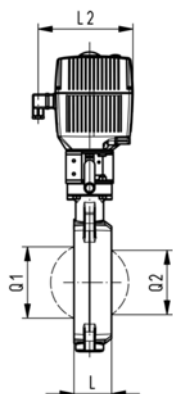
- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, ANSI/ASME B 16.5 Class 150, BS 1560: 1989, BS 4504, JIS B 2220
- Overall length according to EN 558, ISO 5752
- Voltage 100-230 V, 50-60 Hz
- Control time 15 s/90°<) EA31
- Control time 25s/90°<) EA42
- Control range 90°<)
- Actuator with integrated emergency manual override standard



d [mm]	DN [mm]	Inch	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
63	50	2	10	1470	<b>199 140 162</b>	<b>199 140 182</b>	
75	65	2 ½	10	2200	<b>199 140 163</b>	<b>199 140 183</b>	5.812
90	80	3	10	3000	<b>199 140 164</b>	<b>199 140 184</b>	5.991
110	100	4	10	6500	<b>199 140 165</b>	<b>199 140 185</b>	6.633
140	125	5	10	11500	<b>199 140 166</b>	<b>199 140 186</b>	
160	150	6	10	16600	<b>199 140 167</b>	<b>199 140 187</b>	8.224
225	200	8	10	39600	<b>199 140 168</b>	<b>199 140 188</b>	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]	L2 [mm]
63	EA-31	19	120.0	125.0	104	460	77	134	188	60	45	122	180
75	EA-31	19	139.7	145.0	115	473	83	140	188	60	46	122	180
90	EA-31	19	150.0	160.0	131	488	89	146	188	60	49	122	180
110	EA-31	19	175.0	190.5	161	520	104	167	188	60	56	122	180
140	EA-31	23	210.0	215.9	187	547	117	181	188	60	64	122	180
160	EA-31	24	241.3	241.3	215	568	130	189	188	60	72	122	180
225	EA-42	23	290.0	295.0	267	635	158	210	208	60	73	122	180



d [mm]	L3 [mm]	Q1 [mm]	Q2 [mm]
63	250	40	
75	250	54	35
90	250	67	50
110	250	88	74
140	250	113	97
160	250	139	123
225	250	178	169

# PVC-C

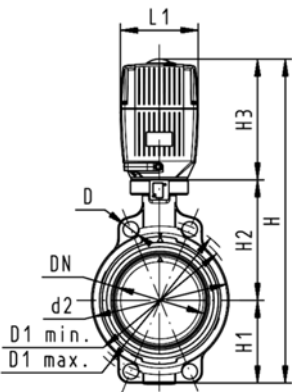
## Butterfly valve type 140 PVC-C 24V Without manual override



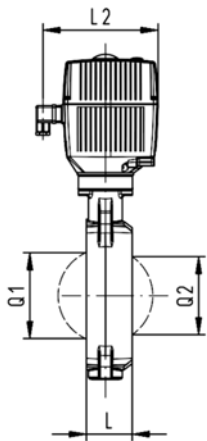
### Model:

- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, ANSI/ASME B 16.5 Class 150, BS 1560: 1989, BS 4504, JIS B 2220
- Overall length according to EN 558, ISO 5752
- Voltage 24 V AC/DC
- Control time 15 s/90°<) EA31
- Control time 25s/90°<) EA42
- Control range 90°<)
- Actuator with integrated emergency manual override standard

d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
63	50	2	10	1470	<b>199 140 282</b>	<b>199 140 302</b>	
75	65	2 ½	10	2200	<b>199 140 283</b>	<b>199 140 303</b>	4.312
90	80	3	10	3000	<b>199 140 284</b>	<b>199 140 304</b>	4.491
110	100	4	10	6500	<b>199 140 285</b>	<b>199 140 305</b>	5.133
140	125	5	10	11500	<b>199 140 286</b>	<b>199 140 306</b>	
160	150	6	10	16600	<b>199 140 287</b>	<b>199 140 307</b>	6.724
225	200	8	10	39600	<b>199 140 288</b>	<b>199 140 308</b>	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]	Q1 [mm]
63	EA-31	19	120.0	125.0	104	400	77	134	188	45	122	180	40
75	EA-31	19	139.7	145.0	115	413	83	140	188	46	122	180	54
90	EA-31	19	150.0	160.0	131	428	89	146	188	49	122	180	67
110	EA-31	19	175.0	190.5	161	460	104	167	188	56	122	180	88
140	EA-31	23	210.0	215.9	187	487	117	181	188	64	122	180	113
160	EA-31	24	241.3	241.3	215	508	130	189	188	72	122	180	139
225	EA-42	23	290.0	295.0	267	575	158	210	208	73	122	180	178



d [mm]	Q2 [mm]
63	
75	35
90	50
110	74
140	97
160	123
225	169



# PVC-C

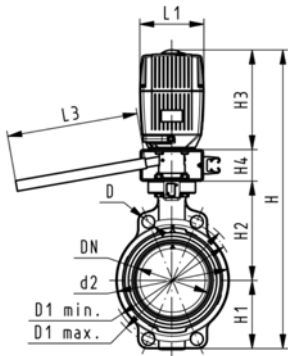
## Butterfly valve type 140 PVC-C 24V With manual override



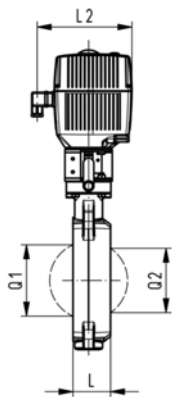
### Model:

- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, ANSI/ASME B 16.5 Class 150, BS 1560: 1989, BS 4504, JIS B 2220
- Overall length according to EN 558, ISO 5752
- Voltage 24 V AC/DC
- Control time 15 s/90°<) EA31
- Control time 25s/90°<) EA42
- Control range 90°<)
- Actuator with integrated emergency manual override standard

d [mm]	DN [mm]	Inch	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
63	50	2	10	1470	<b>199 140 242</b>	<b>199 140 262</b>	5.678
75	65	2 ½	10	2200	<b>199 140 243</b>	<b>199 140 263</b>	5.812
90	80	3	10	3000	<b>199 140 244</b>	<b>199 140 264</b>	5.991
110	100	4	10	6500	<b>199 140 245</b>	<b>199 140 265</b>	6.633
140	125	5	10	11500	<b>199 140 246</b>	<b>199 140 266</b>	
160	150	6	10	16600	<b>199 140 247</b>	<b>199 140 267</b>	8.224
225	200	8	10	39600	<b>199 140 248</b>	<b>199 140 268</b>	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]	L2 [mm]
63	EA-31	19	120.0	125.0	104	460	77	134	188	60	45	122	180
75	EA-31	19	139.7	145.0	115	473	83	140	188	60	46	122	180
90	EA-31	19	150.0	160.0	131	488	89	146	188	60	49	122	180
110	EA-31	19	175.0	190.5	161	520	104	167	188	60	56	122	180
140	EA-31	23	210.0	215.9	187	547	117	181	188	60	64	122	180
160	EA-31	24	241.3	241.3	215	568	130	189	188	60	72	122	180
225	EA-42	23	290.0	295.0	267	635	158	210	208	60	73	122	180



d [mm]	L3 [mm]	Q1 [mm]	Q2 [mm]
63	250	40	
75	250	54	35
90	250	67	50
110	250	88	74
140	250	113	97
160	250	139	123
225	250	178	169

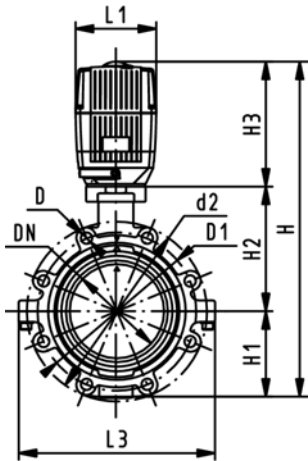
# PVC-C

## Lugstyle butterfly valve type 141 PVC-C 100-230V Without manual override

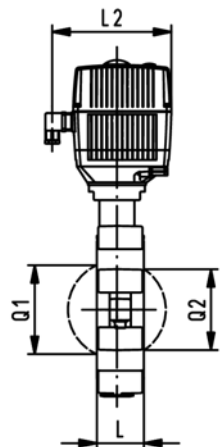


### Model:

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension: ISO 7005 PN10, EN 1092 PN10, DIN 2501 PN10
- Overall length according to EN 558, ISO 5752
- Voltage 100-230 V, 50-60 Hz
- Control time 15 s/90°<) EA31
- Control time 25s/90°<) EA42
- Control range 90°<)
- Actuator with integrated emergency manual override standard



d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
63	50	2	10	1470	<b>199 141 202</b>	<b>199 141 222</b>	6.281
75	65	2 1/2	10	2200	<b>199 141 203</b>	<b>199 141 223</b>	6.648
90	80	3	10	3000	<b>199 141 204</b>	<b>199 141 224</b>	7.702
110	100	4	10	6500	<b>199 141 205</b>	<b>199 141 225</b>	9.217
140	125	5	10	11500	<b>199 141 206</b>	<b>199 141 226</b>	11.205
160	150	6	10	16600	<b>199 141 207</b>	<b>199 141 227</b>	13.184
225	200	8	10	39600	<b>199 141 208</b>	<b>199 141 228</b>	22.942



d [mm]	Actuator unit type	D	D1 [mm]	d2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	Q1 [mm]
63	EA-31	M16	125	150	399	77	134	188	45	122	180	150	40
75	EA-31	M16	145	170	411	83	140	188	46	122	180	160	54
90	EA-31	M16	160	184	423	89	146	188	49	122	180	205	67
110	EA-31	M16	180	216	459	104	167	188	56	122	180	244	88
140	EA-31	M16	210	246	486	117	181	188	64	122	180	272	113
160	EA-31	M20	240	273	507	130	189	188	72	122	180	297	139
225	EA-42	M20	295	334	576	158	210	208	73	122	180	360	178

d [mm]	Q2 [mm]
63	
75	35
90	50
110	74
140	97
160	123
225	169

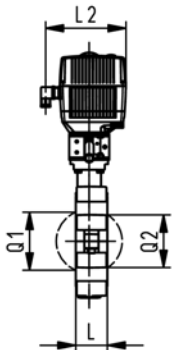
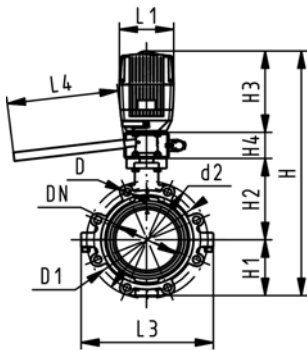
# PVC-C

## Lugstyle butterfly valve type 141 PVC-C 100-230V With manual override



### Model:

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension: ISO 7005 PN10, EN 1092 PN10, DIN 2501 PN10
- Overall length according to EN 558, ISO 5752
- Voltage 100-230 V, 50-60 Hz
- Control time 15 s/90°<) EA31
- Control time 25s/90°<) EA42
- Control range 90°<)
- Actuator with integrated emergency manual override standard



d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
63	50	2	10	1470	199 141 162	199 141 182	7.781
75	65	2 ½	10	2200	199 141 163	199 141 183	8.148
90	80	3	10	3000	199 141 164	199 141 184	9.202
110	100	4	10	6500	199 141 165	199 141 185	10.717
140	125	5	10	11500	199 141 166	199 141 186	12.705
160	150	6	10	16600	199 141 167	199 141 187	14.684
225	200	8	10	39600	199 141 168	199 141 188	24.442

d [mm]	Actuator unit type	D	D1 [mm]	d2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]
63	EA-31	M16	125	150	459	77	134	188	60	45	122	180	150
75	EA-31	M16	145	170	471	83	140	188	60	46	122	180	160
90	EA-31	M16	160	184	483	89	146	188	60	49	122	180	205
110	EA-31	M16	180	216	519	104	167	188	60	56	122	180	244
140	EA-31	M16	210	246	546	117	181	188	60	64	122	180	272
160	EA-31	M20	240	273	567	130	189	188	60	72	122	180	297
225	EA-42	M20	295	334	636	158	210	208	60	73	122	180	360

d [mm]	L4 [mm]	Q1 [mm]	Q2 [mm]
63	200	40	
75	200	54	35
90	200	67	50
110	250	88	74
140	250	113	97
160	250	139	123
225	250	178	169

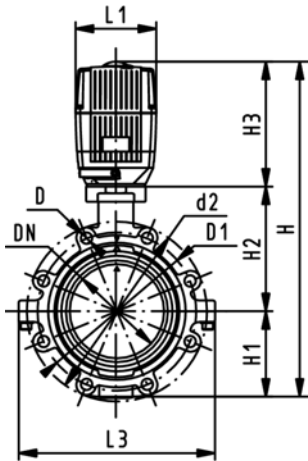
# PVC-C

## Lugstyle butterfly valve type 141 PVC-C 24V Without manual override



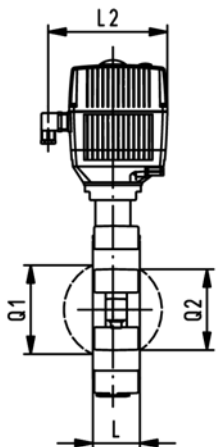
### Model:

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension: ISO 7005 PN10, EN 1092 PN10, DIN 2501 PN10
- Overall length according to EN 558, ISO 5752
- Voltage 24 V AC/DC
- Control time 15 s/90°<) EA31
- Control time 25s/90°<) EA42
- Control range 90°<)
- Actuator with integrated emergency manual override standard



d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
63	50	2	10	1470	<b>199 141 282</b>	<b>199 141 302</b>	6.281
75	65	2 1/2	10	2200	<b>199 141 283</b>	<b>199 141 303</b>	6.648
90	80	3	10	3000	<b>199 141 284</b>	<b>199 141 304</b>	7.702
110	100	4	10	6500	<b>199 141 285</b>	<b>199 141 305</b>	9.217
140	125	5	10	11500	<b>199 141 286</b>	<b>199 141 306</b>	11.205
160	150	6	10	16600	<b>199 141 287</b>	<b>199 141 307</b>	13.184
225	200	8	10	39600	<b>199 141 288</b>	<b>199 141 308</b>	22.942

d [mm]	Actuator unit type	D	D1 [mm]	d2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	Q1 [mm]
63	EA-31	M16	125	150	399	77	134	188	45	122	180	150	40
75	EA-31	M16	145	170	411	83	140	188	46	122	180	160	54
90	EA-31	M16	160	184	423	89	146	188	49	122	180	205	67
110	EA-31	M16	180	216	459	104	167	188	56	122	180	244	88
140	EA-31	M16	210	246	486	117	181	188	64	122	180	272	113
160	EA-31	M20	240	273	507	130	189	188	72	122	180	297	139
225	EA-42	M20	295	334	576	158	210	208	73	122	180	360	178



d [mm]	Q2 [mm]
63	
75	35
90	50
110	74
140	97
160	123
225	169

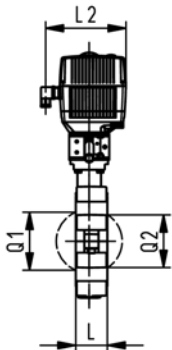
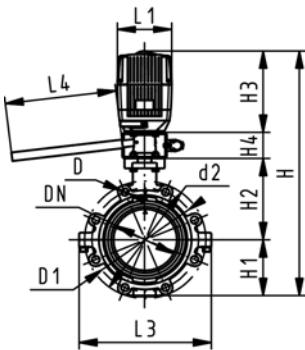
# PVC-C

## Lugstyle butterfly valve type 141 PVC-C 24V With manual override



### Model:

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension: ISO 7005 PN10, EN 1092 PN10, DIN 2501 PN10
- Overall length according to EN 558, ISO 5752
- Voltage 24 V AC/DC
- Control time 15 s/90°<) EA31
- Control time 25s/90°<) EA42
- Control range 90°<)
- Actuator with integrated emergency manual override standard



d [mm]	DN [mm]	Inch	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
63	50	2	10	1470	199 141 242	199 141 262	7.781
75	65	2 ½	10	2200	199 141 243	199 141 263	8.148
90	80	3	10	3000	199 141 244	199 141 264	9.202
110	100	4	10	6500	199 141 245	199 141 265	10.717
140	125	5	10	11500	199 141 246	199 141 266	12.705
160	150	6	10	16600	199 141 247	199 141 267	14.684
225	200	8	10	39600	199 141 248	199 141 268	24.442

d [mm]	Actuator unit type	D	D1 [mm]	d2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]
63	EA-31	M16	125	150	459	77	134	188	60	45	122	180	150
75	EA-31	M16	145	170	471	83	140	188	60	46	122	180	160
90	EA-31	M16	160	184	483	89	146	188	60	49	122	180	205
110	EA-31	M16	180	216	519	104	167	188	60	56	122	180	244
140	EA-31	M16	210	246	546	117	181	188	60	64	122	180	272
160	EA-31	M20	240	273	567	130	189	188	60	72	122	180	297
225	EA-42	M20	295	334	636	158	210	208	60	73	122	180	360

d [mm]	L4 [mm]	Q1 [mm]	Q2 [mm]
63	200	40	
75	200	54	35
90	200	67	50
110	250	88	74
140	250	113	97
160	250	139	123
225	250	178	169

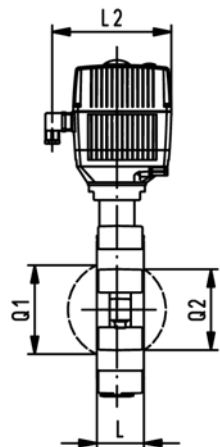
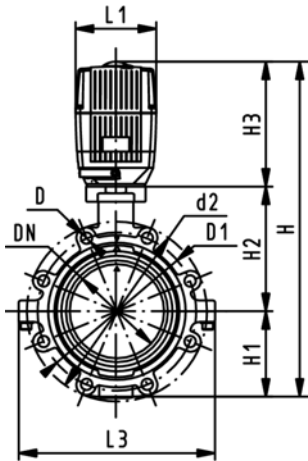
# PVC-C

## Lugstyle butterfly valve type 142 PVC-C 100-230V Without manual override



### Model:

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension ANSI/ASME B 16.5 Class 150
- Overall length according to EN 558, ISO 5752
- Voltage 100-230 V, 50-60 Hz
- Control time 15 s/90°<) EA31
- Control time 25s/90°<) EA42
- Control range 90°<)
- Actuator with integrated emergency manual override standard



Inch	DN [mm]	d [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
2	50	63	10	1470	<b>199 142 202</b>	<b>199 142 222</b>	6.281
2 ½	65	75	10	2200	<b>199 142 203</b>	<b>199 142 223</b>	6.648
3	80	90	10	3000	<b>199 142 204</b>	<b>199 142 224</b>	7.073
4	100	110	10	6500	<b>199 142 205</b>	<b>199 142 225</b>	9.217
5	125	140	10	11500	<b>199 142 206</b>	<b>199 142 226</b>	11.205
6	150	160	10	16600	<b>199 142 207</b>	<b>199 142 227</b>	13.184
8	200	225	10	39600	<b>199 142 208</b>	<b>199 142 228</b>	22.942

Inch	Actuator unit type	D	D1 [mm]	d2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	Q1 [mm]
2	EA-31	UNC 5/8	121	150	399	77	134	188	45	122	180	150	40
2 ½	EA-31	UNC 5/8	140	170	411	83	140	188	46	122	180	160	54
3	EA-31	UNC 5/8	153	177	423	89	146	188	49	122	180	175	67
4	EA-31	UNC 5/8	191	216	459	104	167	188	56	122	180	244	88
5	EA-31	UNC 3/4	216	246	486	117	181	188	64	122	180	272	113
6	EA-31	UNC 3/4	242	273	507	130	189	188	72	122	180	297	139
8	EA-42	UNC 3/4	299	334	576	158	210	208	73	122	180	360	178

Inch	Q2 [mm]
2	
2 ½	35
3	50
4	74
5	97
6	123
8	169

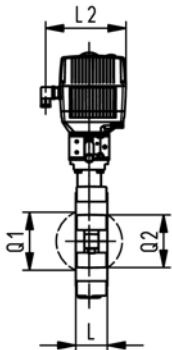
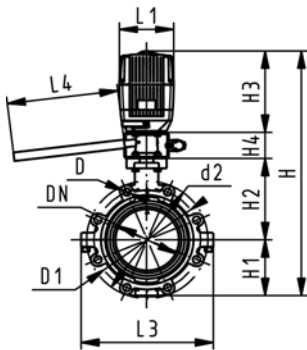
# PVC-C

## Lugstyle butterfly valve type 142 PVC-C 100-230V With manual override



### Model:

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension ANSI/ASME B 16.5 Class 150
- Overall length according to EN 558, ISO 5752
- Voltage 100-230 V, 50-60 Hz
- Control time 15 s/90°<) EA31
- Control time 25s/90°<) EA42
- Control range 90°<)
- Actuator with integrated emergency manual override standard



Inch	DN [mm]	d [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
2	50	63	10	1470	199 142 162	199 142 182	7.781
2 1/2	65	75	10	2200	199 142 163	199 142 183	8.148
3	80	90	10	3000	199 142 164	199 142 184	8.573
4	100	110	10	6500	199 142 165	199 142 185	10.717
5	125	140	10	11500	199 142 166	199 142 186	12.705
6	150	160	10	16600	199 142 167	199 142 187	14.684
8	200	225	10	39600	199 142 168	199 142 188	24.442

Inch	Actuator unit type	D	D1 [mm]	d2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]
2	EA-31	UNC 5/8	121	150	459	77	134	188	60	45	122	180	150
2 1/2	EA-31	UNC 5/8	140	170	471	83	140	188	60	46	122	180	160
3	EA-31	UNC 5/8	153	177	483	89	146	188	60	49	122	180	175
4	EA-31	UNC 5/8	191	216	519	104	167	188	60	56	122	180	244
5	EA-31	UNC 3/4	216	246	546	117	181	188	60	64	122	180	272
6	EA-31	UNC 3/4	242	273	567	130	189	188	60	72	122	180	297
8	EA-42	UNC 3/4	299	334	636	158	210	208	60	73	122	180	360

Inch	L4 [mm]	Q1 [mm]	Q2 [mm]
2	200	40	
2 1/2	200	54	35
3	200	67	50
4	250	88	74
5	250	113	97
6	250	139	123
8	250	178	169



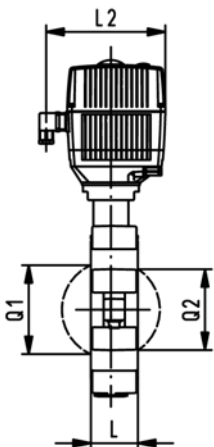
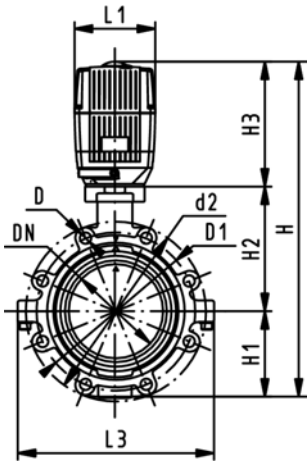
# PVC-C

## Lugstyle butterfly valve type 142 PVC-C 24V Without manual override



### Model:

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension ANSI/ASME B 16.5 Class 150
- Overall length according to EN 558, ISO 5752
- Voltage 24 V AC/DC
- Control time 15 s/90°<) EA31
- Control time 25s/90°<) EA42
- Control range 90°<)
- Actuator with integrated emergency manual override standard



Inch	DN [mm]	d [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
2	50	63	10	1470	<b>199 142 282</b>	<b>199 142 302</b>	6.281
2 ½	65	75	10	2200	<b>199 142 283</b>	<b>199 142 303</b>	6.648
3	80	90	10	3000	<b>199 142 284</b>	<b>199 142 304</b>	7.073
4	100	110	10	6500	<b>199 142 285</b>	<b>199 142 305</b>	9.217
5	125	140	10	11500	<b>199 142 286</b>	<b>199 142 306</b>	11.205
6	150	160	10	16600	<b>199 142 287</b>	<b>199 142 307</b>	13.184
8	200	225	10	39600	<b>199 142 288</b>	<b>199 142 308</b>	22.942

Inch	Actuator unit type	D	D1 [mm]	d2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	Q1 [mm]
2	EA-31	UNC 5/8	121	150	399	77	134	188	45	122	180	150	40
2 ½	EA-31	UNC 5/8	140	170	411	83	140	188	46	122	180	160	54
3	EA-31	UNC 5/8	153	177	423	89	146	188	49	122	180	175	67
4	EA-31	UNC 5/8	191	216	459	104	167	188	56	122	180	244	88
5	EA-31	UNC 3/4	216	246	486	117	181	188	64	122	180	272	113
6	EA-31	UNC 3/4	242	273	507	130	189	188	72	122	180	297	139
8	EA-42	UNC 3/4	299	334	576	158	210	208	73	122	180	360	178

Inch	Q2 [mm]
2	
2 ½	35
3	50
4	74
5	97
6	123
8	169



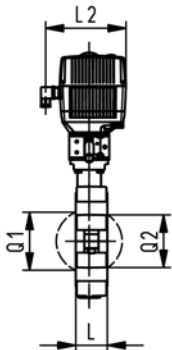
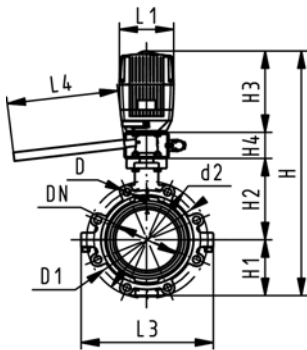
# PVC-C

## Lugstyle butterfly valve type 142 PVC-C 24V With manual override



### Model:

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension ANSI/ASME B 16.5 Class 150
- Overall length according to EN 558, ISO 5752
- Voltage 24 V AC/DC
- Control time 15 s/90°<) EA31
- Control time 25s/90°<) EA42
- Control range 90°<)
- Actuator with integrated emergency manual override standard



Inch	DN [mm]	d [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
2	50	63	10	1470	199 142 242	199 142 262	7.781
2 ½	65	75	10	2200	199 142 243	199 142 263	8.148
3	80	90	10	3000	199 142 244	199 142 264	8.573
4	100	110	10	6500	199 142 245	199 142 265	10.717
5	125	140	10	11500	199 142 246	199 142 266	12.705
6	150	160	10	16600	199 142 247	199 142 267	14.684
8	200	225	10	39600	199 142 248	199 142 268	24.442

Inch	Actuator unit type	D	D1 [mm]	d2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]
2	EA-31	UNC 5/8	121	150	459	77	134	188	60	45	122	180	150
2 ½	EA-31	UNC 5/8	140	170	471	83	140	188	60	46	122	180	160
3	EA-31	UNC 5/8	153	177	483	89	146	188	60	49	122	180	175
4	EA-31	UNC 5/8	191	216	519	104	167	188	60	56	122	180	244
5	EA-31	UNC 3/4	216	246	546	117	181	188	60	64	122	180	272
6	EA-31	UNC 3/4	242	273	567	130	189	188	60	72	122	180	297
8	EA-42	UNC 3/4	299	334	636	158	210	208	60	73	122	180	360

Inch	L4 [mm]	Q1 [mm]	Q2 [mm]
2	200	40	
2 ½	200	54	35
3	200	67	50
4	250	88	74
5	250	113	97
6	250	139	123
8	250	178	169

# PVC-C

## Butterfly valves pneumatic

### Butterfly valve type 240 PVC-C

FC (Fail safe to close)

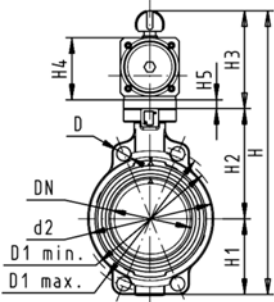
Without manual override



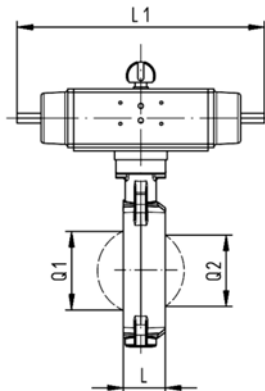
#### Model:

- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, ANSI/ASME B 16.5 Class 150, BS 1560: 1989, BS 4504, JIS B 2220
- Overall length according to EN 558, ISO 5752
- Control range 90°<

d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
63	50	2	10	1470	<b>199 240 162</b>	<b>199 240 182</b>	3.218
75	65	2 ½	10	2200	<b>199 240 163</b>	<b>199 240 183</b>	3.352
90	80	3	10	3000	<b>199 240 164</b>	<b>199 240 184</b>	3.531
110	100	4	10	6500	<b>199 240 165</b>	<b>199 240 185</b>	5.371
140	125	5	10	11500	<b>199 240 166</b>	<b>199 240 186</b>	
160	150	6	10	16600	<b>199 240 167</b>	<b>199 240 187</b>	10.285
225	200	8	10	39600	<b>199 240 168</b>	<b>199 240 188</b>	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]	L1 [mm]
63	PA-30 FC	19	120.0	125.0	104	327	77	134	117	70	15	45	276
75	PA-30 FC	19	139.7	145.0	115	340	83	140	117	70	15	46	276
90	PA-35 FC	19	150.0	160.0	131	361	89	146	126	78	15	49	326
110	PA-40 FC	19	175.0	190.5	161	400	104	167	129	86		56	370
140	PA-45 FC	23	210.0	215.9	187	436	117	181	139	96		64	411
160	PA-50 FC	24	241.3	241.3	215	468	130	189	149	106		72	423
225	PA-55 FC	23	290.0	295.0	267	529	158	210	161	118		73	452



d [mm]	L2 [mm]	Q1 [mm]	Q2 [mm]
63	65	40	
75	65	54	35
90	72	67	50
110	80	88	74
140	90	113	97
160	100	139	123
225	112	178	169

# PVC-C

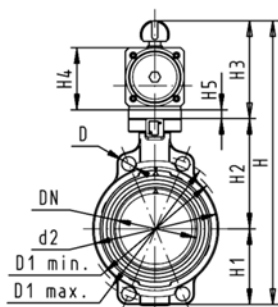
## Butterfly valve type 240 PVC-C FO (Fail safe to open) Without manual override



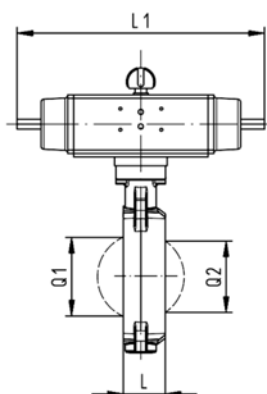
### Model:

- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, ANSI/ASME B 16.5 Class 150, BS 1560: 1989, BS 4504, JIS B 2220
- Overall length according to EN 558, ISO 5752
- Control range 90°<

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



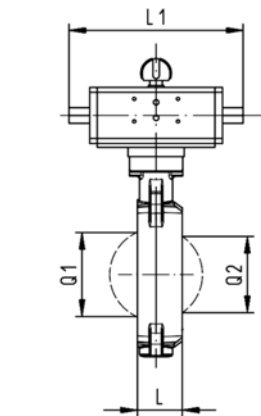
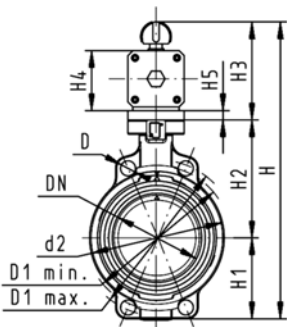
d [mm]	Actuator unit type	D [mm]	D1 min. [mm]	D1 max. [mm]	d2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]
63	PA-30 FO	19	120.0	125.0	104	327	77	134	117	70	15	45	276
75	PA-30 FO	19	139.7	145.0	115	340	83	140	117	70	15	46	276
90	PA-35 FO	19	150.0	160.0	131	361	89	146	126	78	15	49	326
110	PA-40 FO	19	175.0	190.5	161	400	104	167	129	86		56	370
140	PA-45 FO	23	210.0	215.9	187	436	117	181	139	96		64	411
160	PA-50 FO	24	241.3	241.3	215	468	130	189	149	106		72	423
225	PA-55 FO	23	290.0	295.0	267	529	158	210	161	118		73	452



d [mm]	L2 [mm]	Q1 [mm]	Q2 [mm]
63	65	40	
75	65	54	35
90	72	67	50
110	80	88	74
140	90	113	97
160	100	139	123
225	112	178	169

# PVC-C

## 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/ASME B 16.5 Class 150, BS 1560: 1989, BS 4504, JIS B 2220
- Overall length according to EN 558, ISO 5752
- Control range 90°<

d [mm]	DN [mm]	Inch	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
63	50	2	10	1470	<b>199 240 242</b>	<b>199 240 262</b>	5.184
75	65	2 ½	10	2200	<b>199 240 243</b>	<b>199 240 263</b>	2.202
90	80	3	10	3000	<b>199 240 244</b>	<b>199 240 264</b>	2.862
110	100	4	10	6500	<b>199 240 245</b>	<b>199 240 265</b>	3.623
140	125	5	10	11500	<b>199 240 246</b>	<b>199 240 266</b>	4.500
160	150	6	10	16600	<b>199 240 247</b>	<b>199 240 267</b>	6.764
225	200	8	10	39600	<b>199 240 248</b>	<b>199 240 268</b>	8.494

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]	L1 [mm]
63	PA-35 DA	19	120.0	125.0	104	317	77	134	107	60	15	45	177
75	PA-35 DA	19	139.7	145.0	115	330	83	140	107	60	15	46	177
90	PA-40 DA	19	150.0	160.0	131	348	89	146	113	66	15	49	190
110	PA-45 DA	19	175.0	190.5	161	372	104	167	102	71		56	235
140	PA-45 DA	23	210.0	215.9	187	408	117	181	111	78		64	235
160	PA-55 DA	24	241.3	241.3	215	448	130	189	129	86		72	279
225	PA-55 DA	23	290.0	295.0	267	507	158	210	139	96		73	279

d [mm]	L2 [mm]	Q1 [mm]	Q2 [mm]
63	55	40	
75	55	54	35
90	60	67	50
110	65	88	74
140	72	113	97
160	80	139	123
225	90	178	169

# PVC-C

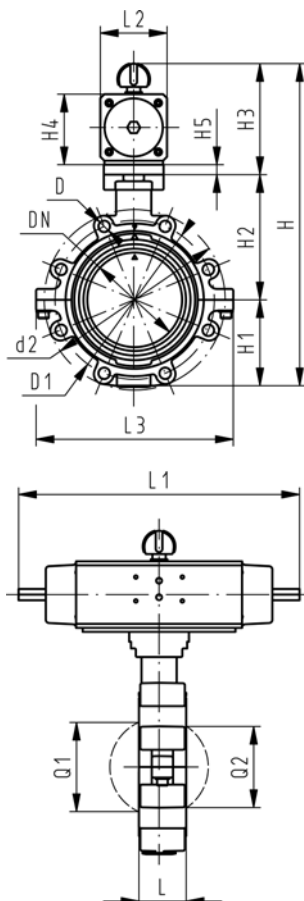
## Lugstyle butterfly valve type 241 PVC-C FC (Fail safe to close) Without manual override



### Model:

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension: ISO 7005 PN10, EN 1092 PN10, DIN 2501 PN10
- Overall length according to EN 558, ISO 5752
- Control range 90°<

d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
63	50	2	10	1470	<b>199 241 162</b>	<b>199 241 182</b>	5.321
75	65	2 ½	10	2200	<b>199 241 163</b>	<b>199 241 183</b>	5.688
90	80	3	10	3000	<b>199 241 164</b>	<b>199 241 184</b>	6.742
110	100	4	10	6500	<b>199 241 165</b>	<b>199 241 185</b>	9.455
140	125	5	10	11500	<b>199 241 166</b>	<b>199 241 186</b>	12.445
160	150	6	10	16600	<b>199 241 167</b>	<b>199 241 187</b>	16.745
225	200	8	10	39600	<b>199 241 168</b>	<b>199 241 188</b>	24.442



d [mm]	Actuator unit type	D	D1 [mm]	d2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]
63	PA-30 FC	M16	125	150	328	77	134	117	70	15	45	276	65
75	PA-30 FC	M16	145	170	340	83	140	117	70	15	46	276	65
90	PA-35 FC	M16	160	184	361	89	146	126	78	15	49	326	72
110	PA-40 FC	M16	180	216	400	104	167	129	86		56	370	80
140	PA-45 FC	M16	210	246	437	117	181	139	96		64	411	90
160	PA-50 FC	M20	240	273	468	130	189	149	106		72	423	100
225	PA-55 FC	M20	295	334	529	158	210	161	118		73	452	112

d [mm]	L3 [mm]	Q1 [mm]	Q2 [mm]
63	150	40	
75	160	54	35
90	205	67	50
110	244	88	74
140	272	113	97
160	297	139	123
225	360	178	169

# PVC-C

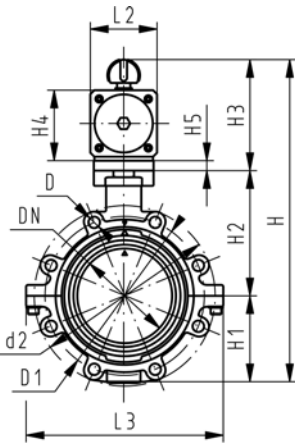
## Lugstyle butterfly valve type 241 PVC-C FO (Fail safe to open) Without manual override



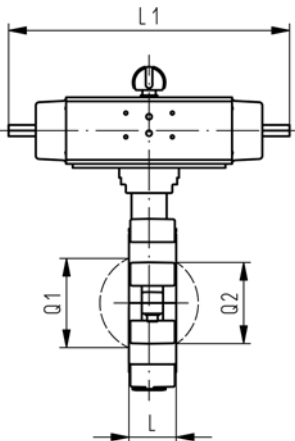
### Model:

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension: ISO 7005 PN10, EN 1092 PN10, DIN 2501 PN10
- Overall length according to EN 558, ISO 5752
- Control range 90°<

d [mm]	DN [mm]	Inch	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
63	50	2	10	1470	<b>199 241 202</b>	<b>199 241 222</b>	5.321
75	65	2 ½	10	2200	<b>199 241 203</b>	<b>199 241 223</b>	5.688
90	80	3	10	3000	<b>199 241 204</b>	<b>199 241 224</b>	6.742
110	100	4	10	6500	<b>199 241 205</b>	<b>199 241 225</b>	9.455
140	125	5	10	11500	<b>199 241 206</b>	<b>199 241 226</b>	12.445
160	150	6	10	16600	<b>199 241 207</b>	<b>199 241 227</b>	16.745
225	200	8	10	39600	<b>199 241 208</b>	<b>199 241 228</b>	24.442



d [mm]	Actuator unit type	D	D1 [mm]	d2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]
63	PA-30 FO	M16	125	150	328	77	134	117	70	15	45	276	65
75	PA-30 FO	M16	145	170	340	83	140	117	70	15	46	276	65
90	PA-35 FO	M16	160	184	361	89	146	126	78	15	49	326	72
110	PA-40 FO	M16	180	216	400	104	167	129	86		56	370	80
140	PA-45 FO	M16	210	246	437	117	181	139	96		64	411	90
160	PA-50 FO	M20	240	273	468	130	189	149	106		72	423	100
225	PA-55 FO	M20	295	334	529	158	210	161	118		73	452	112



d [mm]	L3 [mm]	Q1 [mm]	Q2 [mm]
63	150	40	
75	160	54	35
90	205	67	50
110	244	88	74
140	272	113	97
160	297	139	123
225	360	178	169

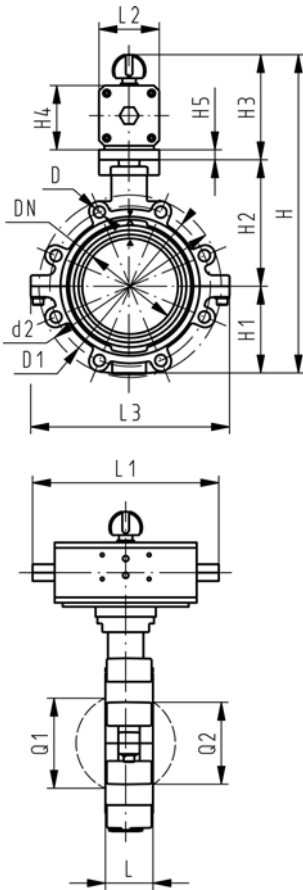
# PVC-C

## Lugstyle butterfly valve type 241 PVC-C DA (Double acting) Without manual override



### Model:

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension: ISO 7005 PN10, EN 1092 PN10, DIN 2501 PN10
- Overall length according to EN 558, ISO 5752
- Control range 90°<



d [mm]	DN [mm]	Inch	PN	kv-value (Δp=1 bar) [l/min]	EPDM Code	FPM Code	kg
63	50	2	10	1470	<b>199 241 242</b>	<b>199 241 262</b>	4.171
75	65	2 ½	10	2200	<b>199 241 243</b>	<b>199 241 263</b>	4.538
90	80	3	10	3000	<b>199 241 244</b>	<b>199 241 264</b>	6.073
110	100	4	10	6500	<b>199 241 245</b>	<b>199 241 265</b>	7.707
140	125	5	10	11500	<b>199 241 246</b>	<b>199 241 266</b>	9.695
160	150	6	10	16600	<b>199 241 247</b>	<b>199 241 267</b>	13.224
225	200	8	10	39600	<b>199 241 248</b>	<b>199 241 268</b>	18.442

d [mm]	Actuator unit type	D	D1 [mm]	d2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]
63	PA-35 DA	M16	125	150	318	77	134	107	60	15	45	177	55	150
75	PA-35 DA	M16	145	170	330	83	140	107	60	15	46	177	55	160
90	PA-40 DA	M16	160	184	348	89	146	113	66	15	49	190	60	205
110	PA-45 DA	M16	180	216	373	104	167	102	71		56	235	65	244
140	PA-45 DA	M16	210	246	409	117	181	111	78		64	235	72	272
160	PA-55 DA	M20	240	273	448	130	189	129	86		72	279	80	297
225	PA-55 DA	M20	295	334	507	158	210	139	96		73	279	90	360

d [mm]	Q1 [mm]	Q2 [mm]
63	40	
75	54	35
90	67	50
110	88	74
140	113	97
160	139	123
225	178	169

# PVC-C

## Lugstyle butterfly valve type 242 PVC-C FC (Fail safe to close) Without manual override



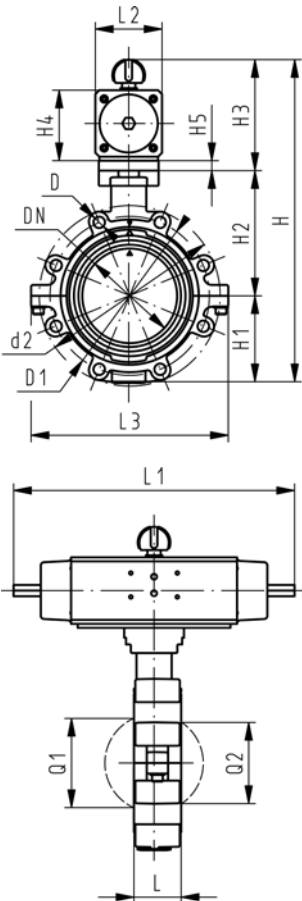
### Model:

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension ANSI/ASME B 16.5 Class 150
- Overall length according to EN 558, ISO 5752
- Control range 90°<

Inch	DN [mm]	d [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
2	50	63	10	1470	<b>199 242 162</b>	<b>199 242 182</b>	5.321
2 ½	65	75	10	2200	<b>199 242 163</b>	<b>199 242 183</b>	5.688
3	80	90	10	3000	<b>199 242 164</b>	<b>199 242 184</b>	6.113
4	100	110	10	6500	<b>199 242 165</b>	<b>199 242 185</b>	9.455
5	125	140	10	11500	<b>199 242 166</b>	<b>199 242 186</b>	12.445
6	150	160	10	16600	<b>199 242 167</b>	<b>199 242 187</b>	16.745
8	200	225	10	39600	<b>199 242 168</b>	<b>199 242 188</b>	24.442

Inch	Actuator unit type	D	D1 [mm]	d2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]
2	PA-30 FC	UNC 5/8	121	150	328	77	134	117	70	15	45	276	65
2 ½	PA-30 FC	UNC 5/8	140	170	340	83	140	117	70	15	46	276	65
3	PA-35 FC	UNC 5/8	153	177	361	89	146	126	78	15	49	326	72
4	PA-40 FC	UNC 5/8	191	216	400	104	167	129	86		56	370	80
5	PA-45 FC	UNC 3/4	216	246	437	117	181	139	96		64	411	90
6	PA-50 FC	UNC 3/4	242	273	468	130	189	149	106		72	423	100
8	PA-55 FC	UNC 3/4	299	334	529	158	210	161	118		73	452	112

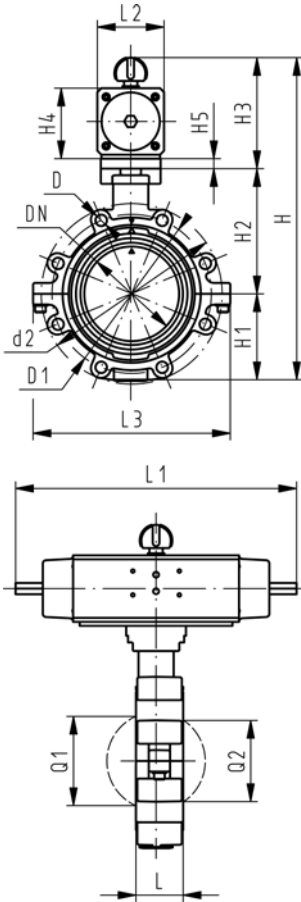
Inch	L3 [mm]	Q1 [mm]	Q2 [mm]
2	150	40	
2 ½	160	54	35
3	175	67	50
4	244	88	74
5	272	113	97
6	297	139	123
8	360	178	169





# PVC-C

## Lugstyle butterfly valve type 242 PVC-C FO (Fail safe to open) Without manual override



### Model:

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension ANSI/ASME B 16.5 Class 150
- Overall length according to EN 558, ISO 5752
- Control range 90°<

Inch	DN [mm]	d [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
2	50	63	10	1470	<b>199 242 202</b>	<b>199 242 222</b>	5.321
2 ½	65	75	10	2200	<b>199 242 203</b>	<b>199 242 223</b>	5.688
3	80	90	10	3000	<b>199 242 204</b>	<b>199 242 224</b>	6.113
4	100	110	10	6500	<b>199 242 205</b>	<b>199 242 225</b>	9.455
5	125	140	10	11500	<b>199 242 206</b>	<b>199 242 226</b>	12.445
6	150	160	10	16600	<b>199 242 207</b>	<b>199 242 227</b>	16.745
8	200	225	10	39600	<b>199 242 208</b>	<b>199 242 228</b>	24.442

Inch	Actuator unit type	D	D1 [mm]	d2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]
2	PA-30 FO	UNC 5/8	121	150	328	77	134	117	70	15	45	276	65
2 ½	PA-30 FO	UNC 5/8	140	170	340	83	140	117	70	15	46	276	65
3	PA-35 FO	UNC 5/8	153	177	361	89	146	126	78	15	49	326	72
4	PA-40 FO	UNC 5/8	191	216	400	104	167	129	86		56	370	80
5	PA-45 FO	UNC 3/4	216	246	437	117	181	139	96		64	411	90
6	PA-50 FO	UNC 3/4	242	273	468	130	189	149	106		72	423	100
8	PA-55 FO	UNC 3/4	299	334	529	158	210	161	118		73	452	112

Inch	L3 [mm]	Q1 [mm]	Q2 [mm]
2	150	40	
2 ½	160	54	35
3	175	67	50
4	244	88	74
5	272	113	97
6	297	139	123
8	360	178	169

# PVC-C

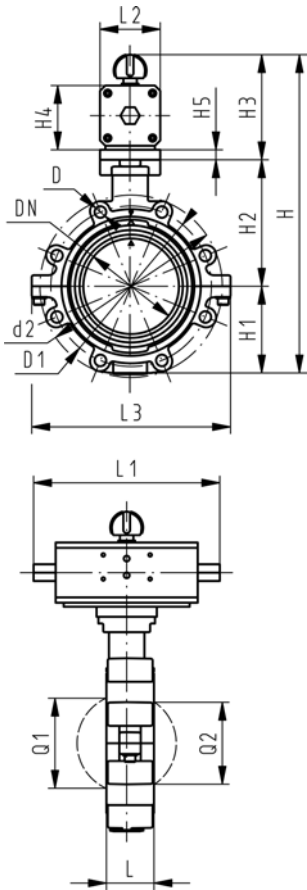
## Lugstyle butterfly valve type 242 PVC-C DA (Double acting) Without manual override



### Model:

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension ANSI/ASME B 16.5 Class 150
- Overall length according to EN 558, ISO 5752
- Control range 90°<

Inch	DN [mm]	d [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
2	50	63	10	1470	<b>199 242 242</b>	<b>199 242 262</b>	4.171
2 ½	65	75	10	2200	<b>199 242 243</b>	<b>199 242 263</b>	4.538
3	80	90	10	3000	<b>199 242 244</b>	<b>199 242 264</b>	5.444
4	100	110	10	6500	<b>199 242 245</b>	<b>199 242 265</b>	7.707
5	125	140	10	11500	<b>199 242 246</b>	<b>199 242 266</b>	9.695
6	150	160	10	16600	<b>199 242 247</b>	<b>199 242 267</b>	13.224
8	200	225	10	39600	<b>199 242 248</b>	<b>199 242 268</b>	18.442



Inch	Actuator unit type	D	D1 [mm]	d2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]
2	PA-35 DA	UNC 5/8	121	150	318	77	134	107	60	15	45	177	55
2 ½	PA-35 DA	UNC 5/8	140	170	330	83	140	107	60	15	46	177	55
3	PA-40 DA	UNC 5/8	153	177	348	89	146	113	66	15	49	190	60
4	PA-45 DA	UNC 5/8	191	216	373	104	167	102	71		56	235	65
5	PA-45 DA	UNC 3/4	216	246	409	117	181	111	78		64	235	72
6	PA-55 DA	UNC 3/4	242	273	448	130	189	129	86		72	279	80
8	PA-55 DA	UNC 3/4	299	334	507	158	210	139	96		73	279	90

Inch	L3 [mm]	Q1 [mm]	Q2 [mm]
2	150	40	
2 ½	160	54	35
3	175	67	50
4	244	88	74
5	272	113	97
6	297	139	123
8	360	178	169

# PVC-C Accessories

## Backing Flanges, PP-V, PP/Steel

27 70 04  
27 70 05

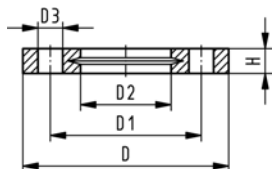


### Backing Flange, PP-V for Socket Systems metric

**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, EN 1092, BS 4504, DIN 2501
- **Bolt circle PN 10**

<sup>1)</sup> Suitable for socket- and butt fusion systems (no pictograph on flange)  
AL: number of holes



d [mm]	Inch	DN [mm]	PN	Code	SP	GP	kg	D [mm]	D1 [mm]	D2 [mm]	D3 [mm]	H [mm]	A L	SC
20		15	16	727 700 406	56	0	0.080	95	65	28	14	16	4	M12
25		20	16	727 700 407	38	0	0.100	105	75	34	14	17	4	M12
32		25	16	727 700 408	80	0	0.140	115	85	42	14	18	4	M12
40		32	16	727 700 409	40	0	0.220	140	100	51	18	20	4	M16
50		40	16	727 700 410	30	0	0.210	150	110	62	18	22	4	M16
63		50	16	727 700 411	25	0	0.380	165	125	78	18	24	4	M16
75		65	16	727 700 412	19	0	0.480	185	145	92	18	26	4	M16
90		80	16	727 700 413	15	0	0.520	200	160	110	18	27	8	M16
110		100	16	727 700 414	13	0	0.680	220	180	133	18	28	8	M16
140		125	16	727 700 416	10	0	0.800	250	210	167	18	30	8	M16
160	6	150	16	727 700 417	0	0	1.200	285	241	190	22	32	8	M20
200		200	16	727 700 419	0	0	1.500	340	296	226	22	34	8	M20
225	8	200	16	727 700 420	0	0	1.400	340	295	250	22	34	8	M20

27 70 02



### Backing Flange, PP/Steel for Socket Systems metric

**Model:**

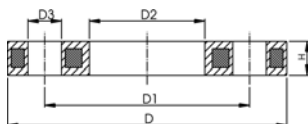
- PP-GF (30% glass-fibre reinforced) with steel ring
- Connecting dimension: ISO 7005, EN 1092, BS 4504, DIN 2501
- **Bolt circle PN 10**

<sup>1</sup> Connecting dimension: ISO 2536 DN125

\* Connecting dimension: ISO 2536

AL: number of holes

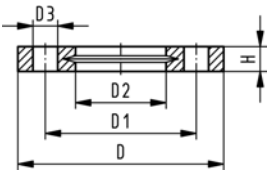
Suitable for socket and butt fusion systems, no pictograph on flange.



d [mm]	DN [mm]	PN	Code	kg	D [mm]	D1 [mm]	D2 [mm]	D3 [mm]	H [mm]	A L	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	100	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	277	22	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 Accessories

27 70 14  
27 70 15



## Backing Flange, PP-V for Socket Systems Inch/ANSI

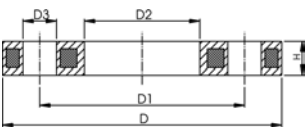
### Model:

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

<sup>1)</sup> Suitable for socket- and butt fusion systems (no pictograph on flange)  
AL: number of holes

Inch	DN [mm]	PN	Code	kg	kg/m	D [mm]	D1 [mm]	D2 [mm]	D3 [mm]	H [mm]	A L	SC
1/2	15	16	<b>727 701 406</b>	0.080	0.080	95	60	28	16	16	4	M12
3/4	20	16	<b>727 701 407</b>	0.100	0.100	105	70	34	16	17	4	M12
1	25	16	<b>727 701 408</b>	0.140	0.140	115	79	42	16	18	4	M12
1 1/4	32	16	<b>727 701 409</b>	0.220	0.220	140	89	51	16	20	4	M16
1 1/2	40	16	<b>727 701 410</b>	0.210	0.210	150	98	62	16	22	4	M16
2	50	16	<b>727 701 411</b>	0.380	0.380	165	121	78	19	24	4	M16
2 1/2	65	16	<b>727 701 412</b>	0.480	0.480	185	140	92	19	26	4	M16
3	80	16	<b>727 701 413</b>	0.520	0.520	200	152	110	19	27	4	M16
4	100	16	<b>727 701 414</b>	0.680	0.680	229	190	133	19	28	8	M16
6	150	16	<b>727 700 417</b>	1.200	1.199	285	241	190	22	32	8	M20
8	200	16	<b>727 700 420</b>	1.400	1.400	340	295	250	22	34	8	M20

27 70 12



## Backing Flange, PP/Steel for Socket Systems Inch/ANSI

### Model:

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

AL: number of holes

DN [mm]	d [mm]	PN	Code	GP	kg	kg/m	D1 [mm]	D2 [mm]	D3 [mm]	D [mm]	H [mm]	A L
15	20	16	<b>727 701 206</b>	0	0.210	0.210	60	28	16	95	12	4
20	25	16	<b>727 701 207</b>	0	0.250	0.250	70	34	16	105	12	4
25	32	16	<b>727 701 208</b>	0	0.420	0.420	79	42	16	115	16	4
32	40	16	<b>727 701 209</b>	0	0.670	0.670	89	51	16	140	16	4
40	50	16	<b>727 701 210</b>	0	0.860	0.860	98	62	16	150	18	4
50	63	16	<b>727 701 211</b>	0	0.930	0.930	121	78	19	165	18	4
65	75	16	<b>727 701 212</b>	0	1.340	1.340	140	92	19	185	18	4
80	90	16	<b>727 701 213</b>	0	1.550	1.550	152	110	19	200	20	4
100	110	16	<b>727 701 214</b>	0	1.810	1.810	190	133	19	229	20	8
150	160	16	<b>727 700 217</b>	0	3.390	3.390	240	190	22	285	24	8
200	200	16	<b>727 701 220</b>	0	4.410	4.410	298	250	22	340	27	8

# PVC-C Accessories

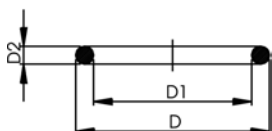
## Seals

EPDM 48 41 00  
FPM 49 41 00

### O-Ring Gasket, FPM black

Model:

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



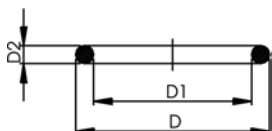
d [mm]	DN [mm]	EPDM Code	FPM Code	SP	kg	D [mm]	D1 [mm]	D2 [mm]
10 - 12	8	748 410 004	749 410 004	0	0.002	18	12	2.62
16	10	748 410 005	749 410 005	0	0.002	21	16	2.62
20	15	748 410 006	749 410 006	0	0.002	27	20	3.53
25	20	748 410 007	749 410 007	100	0.002	35	28	3.53
32	25	748 410 008	749 410 008	100	0.002	40	33	3.53
40	32	748 410 009	749 410 009	0	0.006	51	41	5.34
50	40	748 410 010	749 410 010	0	0.007	58	47	5.34
63	50	748 410 011	749 410 011	100	0.010	70	60	5.34
75	65	748 410 014	749 410 014	100	0.012	93	82	5.34
90	80	748 410 015	749 410 015	100	0.015	112	101	5.34
110	100	748 410 016	749 410 016	50	0.031	134	120	6.99

EPDM 48 41 00  
FPM 49 41 00

### O-Ring Gasket, FPM black

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	0.002	26	19	3.53
20	15	748 410 001	749 410 001	100	0.002	31	23	3.53
32	25	748 410 002	749 410 002	100	0.003	43	36	3.53
40	32	748 410 003	749 410 003	0	0.007	55	44	5.34
50	40	748 410 012	749 410 012	100	0.008	64	53	5.34
63	50	748 410 013	749 410 013	100	0.011	80	69	5.34
75	65	748 410 014	749 410 014	100	0.012	93	82	5.34
90	80	748 410 015	749 410 015	100	0.015	112	101	5.34
125	100	748 410 017	749 410 017	200	0.036	150	136	6.99
140	125	748 410 018	749 410 018	200	0.039	166	152	6.99
160	150	748 410 019	749 410 019	200	0.044	191	177	6.99
200	200	748 410 163	749 410 163	0	0.056	236	222	6.99
225	200	748 410 022	749 410 022	150	0.060	255	241	6.99
250	250	748 410 182	749 410 182	0	0.003	280	266	6.99
280	250	748 410 173	749 410 173	0	0.044	306	292	6.99
315	300	748 410 174	749 410 174	0	0.051	356	342	6.99

# PVC-C Accessories

EPDM 48 40 03

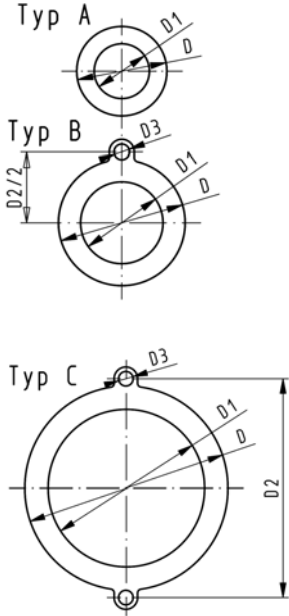


## Flat Gasket EPDM

### Model:

- For all GF Flange Adaptors
- Hardness : EPDM ca. 70° Shore
- Integrated fixation aids from d110
- Centering on the inner diameter of the screw crown

di FA are the suitable inner diameters of flange adaptors



d [mm]	DN [mm]	PN	Type	EPDM Code	kg	D [mm]	D1 [mm]	D2 [mm]	D3 [mm]	H [mm]	di FA [mm]
16	10	10	A	748 400 305	0.005	46	16			2	6 - 26
20	15	10	A	748 400 306	0.010	51	20			2	10 - 30
25	20	10	A	748 400 307	0.020	61	25			2	15 - 35
32	25	10	A	748 400 308	0.025	71	32			2	22 - 42
40	32	10	A	748 400 309	0.030	82	40			3	30 - 50
50	40	10	A	748 400 310	0.035	92	50			3	40 - 60
63	50	10	A	748 400 311	0.040	107	63			3	53 - 73
75	65	10	A	748 400 312	0.045	127	71			3	61 - 81
90	80	10	A	748 400 313	0.050	142	84			3	74 - 94
110	100	10	B	748 400 314	0.032	162	104	180	18	4	94 - 114
125	100	10	B	748 400 315	0.058	162	119	180	18	4	109 - 129
140	125	10	B	748 400 316	0.062	192	134	210	18	4	124 - 144
160 / 180	150	10	B	748 400 317	0.068	218	155	241	22	4	145 - 165
200	200	6	C	748 400 319	0.075	273	195	295	22	5	185 - 205
225	200	6	C	748 400 320	0.079	273	216	295	22	5	206 - 226

EPDM 48 44 07  
FPM 49 44 07

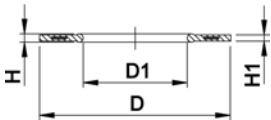


## Profile Flange Gasket metric EPDM / FPM

### Model:

- For all GF Flange Adaptors
- Profile Gasket with steel insert (type G-ST-P/K)
- Hardness: 70° Shore **EPDM**, 75° Shore **FPM**
- Centering on the inner diameter of the screw crown

di FA are the suitable inner diameters of flange adaptors



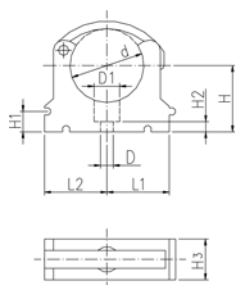
d [mm]	DN [mm]	PN	EPDM Code	FPM Code	kg	D [mm]	D1 [mm]	H [mm]	H1 [mm]	di FA [mm]
16	10	16	748 440 705	749 440 705	0.007	46	16	4	3	6 - 16
20	15	16	748 440 706	749 440 706	0.008	51	20	4	3	10 - 20
25	20	16	748 440 707	749 440 707	0.011	61	22	4	3	12 - 22
32	25	16	748 440 708	749 440 708	0.014	71	28	4	3	18 - 28
40	32	16	748 440 709	749 440 709	0.021	82	40	4	3	30 - 40
50	40	16	748 440 710	749 440 710	0.022	92	46	4	3	36 - 46
63	50	16	748 440 711	749 440 711	0.041	107	58	5	4	48 - 58
75	65	16	748 440 712	749 440 712	0.055	127	69	5	4	59 - 69
90	80	16	748 440 713	749 440 713	0.062	142	84	5	4	73 - 84
110	100	16	748 440 714	749 440 714	0.085	162	104	6	5	94 - 104
125	100	16	748 440 715	749 440 715	0.158	162	123	6	5	113 - 123
140	125	16	748 440 716	749 440 716	0.118	192	137	6	5	127 - 137
160 / 180	150	16	748 440 717	749 440 717	0.153	218	160	8	6	150 - 160
200	200	16	748 440 719	749 440 719	0.263	273	203	8	6	192 - 203
225	200	16	748 440 720	749 440 720	0.181	273	220	8	6	207 - 220



# PVC-C Accessories

## Pipe Clips metric

### KLIP-IT Pipe Clip Type 061, PP metric

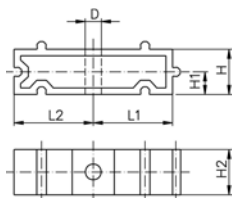


#### Model:

- For mm pipes
- Material: Clip and safety clip PP black, UV resistant
- d16 - d63: Height designed for Ball Valve Type 546 and 543
- **Minimum order quantity: standard packagings SP**

d [mm]	Code	SP	GP	kg/m	D [mm]	D1 [mm]	L1 [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	SC
* 10	<b>167 061 003</b>	10	500	0.003	5	8	11	14	20	10	6	12	M4
* 12	<b>167 061 004</b>	10	500	0.003	5	8	11	14	21	10	6	12	M5
* 16	<b>167 061 035</b>	200	0	0.006	6	11	14	17	27	10	6	16	M5
* 20	<b>167 061 036</b>	200	0	0.008	6	11	17	19	27	10	6	16	M5
* 25	<b>167 061 037</b>	10	200	0.009	6	11	19	22	30	10	6	16	M5
* 32	<b>167 061 038</b>	10	150	0.012	6	11	24	27	36	10	6	16	M5
40	<b>167 061 039</b>	10	140	0.027	7	14	34	34	44	10	7	22	M6
50	<b>167 061 040</b>	10	100	0.031	7	14	37	37	51	10	7	22	M6
63	<b>167 061 041</b>	10	80	0.054	9	17	45	45	64	10	10	25	M8
75	<b>167 061 012</b>	10	60	0.058	9	17	52	52	58	10	10	25	M8
90	<b>167 061 013</b>	10	80	0.090	9	17	65	65	65	10	10	28	M8
110	<b>167 061 014</b>	10	40	0.114	9	17	79	79	75	10	10	28	M8
125	<b>167 061 015</b>	10	30	0.174	9	17	88	88	90	10	10	32	M8
140	<b>167 061 016</b>	10	20	0.217	9	17	98	98	110	10	10	32	M8
160	<b>167 061 017</b>	10	20	0.237	9	17	109	109	108	10	10	32	M8

### KLIP-IT Spacer Type 061, PP



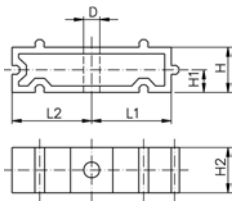
#### Model:

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

d [mm]	Inch [inch]	Code	SP	GP	kg	kg/m
10 - 12	1/8 - 1/4	<b>167 061 153</b>	10	500	0.003	0.003
16	3/8	<b>167 061 155</b>	10	200	0.006	0.006
20	1/2	<b>167 061 156</b>	10	200	0.006	0.006
25	3/4	<b>167 061 157</b>	10	200	0.007	0.007
32	1	<b>167 061 158</b>	10	200	0.008	0.008
40	1 1/4	<b>167 061 159</b>	10	150	0.016	0.016
50	1 1/2	<b>167 061 160</b>	10	140	0.017	0.017
63	2	<b>167 061 161</b>	10	80	0.024	0.024
75	2 1/2	<b>167 061 162</b>	10	60	0.027	0.027
90	3	<b>167 061 163</b>	10	140	0.040	0.040
110	4	<b>167 061 164</b>	10	100	0.048	0.048
125	4 1/2	<b>167 061 165</b>	10	100	0.059	0.059
140	5	<b>167 061 166</b>	10	80	0.065	0.065
160	6	<b>167 061 167</b>	10	80	0.074	0.074

d [mm]	D [mm]	L1 [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	SC
10 - 12	5	11	14	20	10	12	M4
16	6	14	17	20	10	16	M5
20	6	17	19	20	10	16	M5
25	6	19	22	20	10	16	M5
32	6	24	27	20	10	16	M5
40	7	34	34	20	10	22	M6
50	7	37	37	20	10	22	M6
63	9	45	45	20	10	25	M8
75	9	52	52	20	10	25	M8
90	9	65	65	20	10	28	M8
110	9	79	79	20	10	28	M8

# PVC-C Accessories



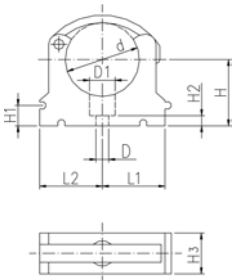
d [mm]	D [mm]	L1 [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	SC
125	9	88	88	20	10	32	M8
140	9	98	98	20	10	32	M8
160	9	109	109	20	10	32	M8



## KLIP-IT Pipe Clip Type 061, PE metric

### Model:

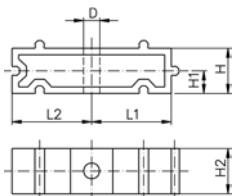
- For mm pipes
- Material: Clip PE and safety clip PP black
- **Minimum order quantity: standard packaging SP**
- Height not designed for ball valve 546. Please use spacer 73 06 11.



d [mm]	Code	SP	GP	kg	kg/m
* 10	<b>173 061 003</b>	10	500	0.003	0.003
* 12	<b>173 061 004</b>	10	500	0.006	0.006
* 16	<b>173 061 005</b>	10	200	0.007	0.007
* 20	<b>173 061 006</b>	10	200	0.008	0.008
* 25	<b>173 061 007</b>	10	200	0.009	0.009
* 32	<b>173 061 008</b>	10	200	0.012	0.012
40	<b>173 061 009</b>	10	150	0.022	0.022
50	<b>173 061 010</b>	10	140	0.030	0.030
63	<b>173 061 011</b>	10	80	0.044	0.044
75	<b>173 061 012</b>	10	60	0.062	0.062
90	<b>173 061 013</b>	10	80	0.090	0.090
110	<b>173 061 014</b>	10	40	0.114	0.114
125	<b>173 061 015</b>	10	30	0.174	0.174
140	<b>173 061 016</b>	10	20	0.217	0.217
160	<b>173 061 017</b>	10	20	0.237	0.237

d [mm]	D [mm]	D1 [mm]	L1 [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	SC
* 10	5	8	11	14	20	10	6	12	M4
* 12	5	8	11	14	21	10	6	12	M5
* 16	6	11	14	17	23	10	6	16	M5
* 20	6	11	17	19	25	10	6	16	M5
* 25	6	11	19	22	28	10	6	16	M5
* 32	6	11	24	27	31	10	6	16	M5
40	7	14	34	34	35	10	7	22	M6
50	7	14	37	37	40	10	7	22	M6
63	9	17	45	45	52	10	10	25	M8
75	9	17	52	52	58	10	10	25	M8
90	9	17	65	65	65	10	10	28	M8
110	9	17	79	79	75	10	10	28	M8
125	9	17	88	88	90	10	10	32	M8
140	9	17	98	98	110	10	10	32	M8
160	9	17	109	109	108	10	10	32	M8

## 73 06 11

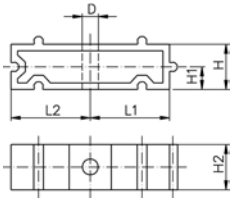


## KLIP-IT Spacer Type 061, PE

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



# PVC-C Accessories



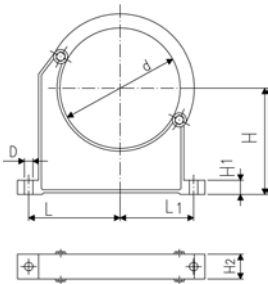
d [mm]	Inch	Code	SP	GP	kg	kg/m	D [mm]	L1 [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	SC
125	4 1/2	<b>173 061 165</b>	10	100	0.059	0.059	9	88	88	20	10	32	M8
140	5	<b>173 061 166</b>	10	80	0.065	0.065	9	98	98	20	10	32	M8
160	6	<b>173 061 167</b>	10	80	0.074	0.074	9	109	109	20	10	32	M8

## Pipe Clip 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	GP	kg	kg/m	D [mm]	L [mm]	L1 [mm]	H [mm]	H1 [mm]	H2 [mm]	SC
90	<b>167 060 038</b>	0	40	0.163	0.163	9	89	71	105	15	33	M 8
110	<b>167 060 039</b>	0	30	0.179	0.179	9	94	80	115	15	33	M 8
125	<b>167 060 040</b>	10	20	0.300	0.300	11	116	91	130	20	35	M10
140	<b>167 060 041</b>	10	20	0.309	0.309	11	121	98	130	20	35	M10
160	<b>167 060 042</b>	10	20	0.348	0.348	11	131	107	148	20	35	M10
180	<b>167 060 043</b>	10	0	0.378	0.378	11	143	115	163	20	35	M10
200	<b>167 060 019</b>	5	0	0.582	0.582	13	152	120	175	25	39	M12
225	<b>167 060 020</b>	5	0	0.612	0.612	13	165	132	175	25	39	M12
250	<b>167 060 021</b>	5	0	0.698	0.698	13	183	143	200	25	39	M12
280	<b>167 060 022</b>	5	0	0.722	0.722	13	198	156	200	25	39	M12
315	<b>167 060 023</b>	5	0	0.842	0.842	13	219	172	225	25	39	M12
355	<b>167 060 024</b>	5	0	1.250	1.250	17	275	209	258	30	50	M16
400	<b>167 060 025</b>	5	0	1.450	1.450	17	300	228	288	30	50	M16

## KLIP-IT Pipe Clip Type 061H, PP metric

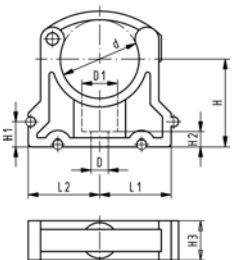


### Model:

- For mm-pipes d16-d63
- Material: PP black, UV resistant
- **Minimum order quantity: standard packagings SP**
- d16 - d63: height designed for Ball Valve Type 546
- \* d16 to d32 without bracket



d [mm]	Code	SP	GP	kg	kg/m
* 16	<b>167 061 035</b>	200	0	0.006	0.006
* 20	<b>167 061 036</b>	200	0	0.008	0.008
* 25	<b>167 061 037</b>	10	200	0.009	0.009
* 32	<b>167 061 038</b>	10	150	0.012	0.012
40	<b>167 061 039</b>	10	140	0.027	0.027
50	<b>167 061 040</b>	10	100	0.031	0.031
63	<b>167 061 041</b>	10	80	0.054	0.054



d [mm]	D [mm]	D1 [mm]	L1 [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	SC
* 16	6	11	14	17	27	10	6	16	M5
* 20	6	11	17	19	27	10	6	16	M5
* 25	6	11	19	22	30	10	6	16	M5
* 32	6	11	24	27	36	10	6	16	M5
40	7	14	34	34	44	10	7	22	M6
50	7	14	37	37	51	10	7	22	M6
63	9	17	45	45	64	10	10	25	M8

# PVC-C Accessories



## Tangit Solvent Cement for PVC-C

Code	SP	GP	kg	kg/m
799 298 027	0	0	0.700	0.700



## Tangit Dytex special solvent cement

### Model:

- Special solvent cement, transparent.
- For concentrated acids and strong oxidizing agents the use of Dytex is recommended
- 1.350 kg (net) tin

Code	SP	GP	kg	kg/m
799 298 012	0	0	1.465	1.465



## Cap for cement

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

Code	SP	GP	kg	kg/m
799 298 028	0	0	0.030	0.030



## PPC Plastic pipe cutter

- For cutting plastic pipes d10 - d160

d-d [mm]	Article	Code	SP	GP	kg	kg/m
10 - 63	PPC 63, s max. = 7.2mm	790 109 001	0	0	0.710	0.710
50 - 110	PPC 110, s max. = 12.7mm	790 109 002	0	0	1.400	1.400
110 - 160	PPC 160, s max. = 19.0mm	790 109 003	0	0	2.220	2.220



## Chamfering Tool

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



## Tangit Cleaner

### Model:

- 1 litre tin

Code	SP	GP	kg	kg/m
799 298 010	0	0	0.900	0.900



## Dytex Cleaner

### Model:

- 1 litre tin

Code	SP	GP	kg	kg/m
799 298 013	0	0	1.380	1.380

# PVC-C Accessories



## Round Brush

d-d [mm]	Code	SP	GP	kg	kg/m	
6 - 10	<b>799 299 001</b>	0	0	0.005	0.005	
12 - 32	<b>799 299 002</b>	0	0	0.009	0.009	



## Flat Brush

d-d [mm]	Code	SP	GP	kg	kg/m	
40 - 63	<b>799 299 003</b>	0	0	0.015	0.015	
75 - 225	<b>799 299 004</b>	0	0	0.026	0.026	
250 - 400	<b>799 299 005</b>	0	0	0.045	0.045	

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

## 2 Tenders

Tenders shall only be binding if they contain a specifically stated period for acceptance.

## 3 Scope of Delivery

- 3.1 Georg Fischer's product range is subject to change.
- 3.2 The confirmation of order shall govern the scope and execution of the contract.

## 4 Data and Documents

- 4.1 Technical documents such as drawings, descriptions, illustrations and data on dimensions, performance and weight as well as the reference to standards are for information purposes only. They are not warranted characteristics and are subject to change.
- 4.2 All technical documents shall remain the exclusive property of Georg Fischer and may only be used for the agreed purposes or as Georg Fischer may consent.

## 5 Confidentiality, Protection of Personal Data

- 5.1 Each party shall keep in strict confidence all commercial or technical information relating to the business of the other party, of which it has gained knowledge in the course of its dealing with the other party. Such information shall neither be disclosed to third parties nor used for other purposes than those for which the information has been supplied.
- 5.2 In the context of the contractual relation with the Purchaser personal data may be processed. The Purchaser agrees to the disclosure of said data to third parties such as foreign subcontractors and suppliers etc.

## 6 Local Laws and Regulations, Export Controls

- 6.1 The Purchaser shall bring to the attention of Georg Fischer all local laws and regulations at the place of destination which bear connection with the execution of the contract and the adherence to relevant safety regulations and approval procedures.
- 6.2 In case of re-exports, Purchaser shall be responsible for compliance with pertinent export control regulations.

## 7 Price

- 7.1 Unless agreed otherwise, the prices shall be deemed quoted net ex works (according to Incoterms 2010 of the ICC, or latest version) including standard packing. All supplementary costs such as the cost of carriage, insurance, export-, transit- and import- licences 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 outstanding 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 impractical 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 (6) months, either party may cancel the contract forthwith. Georg Fischer shall not be liable for any damage or loss of any kind whatsoever resulting the reform, 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 (1) 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 a penalty amounting to 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 than the penalty forfeited.

## 11 Packing

If the Products are provided with additional packing over and above the standard packing, such packing shall be charged additionally.

## 12 Passing of Risk

- 12.1 The risk in the Products shall pass to the Purchaser as soon as they have left Georg Fischer's works (EX WORKS, Incoterms 2010 ICC, or 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 (6) 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 seven (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 undertakes to repair or replace at its discretion, as quickly as possible and free of charge, all Products supplied which demonstrably suffer from faulty design, materials or workmanship, from faulty operating or installation instructions or which become defective or unusable due to faulty advice. In order to protect employees from toxic or radioactive substances which may have been transported through defective parts returned to Georg Fischer's sales organisation, said parts must be accompanied by a Material Safety Disclosure Form. The form may be obtained from Georg Fischer's local sales company or via [www.piping.georgfischer.com](http://www.piping.georgfischer.com). Replaced parts shall become property of Georg Fischer, unless Georg Fischer waives such claim.
- 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 rescind the contract or to demand a reduction of the contract price if
  - the repair or replacement of the defective Product is impossible
  - the defective Product is not repaired or replaced within a reasonable period
  - Georg Fischer refuses the repair or replacement or if for reasons attributable to Georg Fischer the repair or replacement is delayed.
- 15.4 For Products or essential components manufactured by a third party and supplied by Georg Fischer under this contract, Georg Fischer's warranty is limited to the warranty provided by said third party.
- 15.5 This warranty shall not apply to damage resulting from normal wear and tear, improper storage and maintenance, failure to observe the operating instructions, oversteering or overloading, unsuitable operating media, unsuitable construction work or unsuitable building ground, improper repairs or alterations by the Purchaser or third parties, the use of other than original spare parts and other reasons beyond Georg Fischer's control.
- 15.6 No action or claim may be brought by the Purchaser on account of any alleged breach of warranty or any other obligation of Georg Fischer after the expiration of twelve (12) months from receipt of the Products by the end user or at the latest within eighteen (18) months of the Products being despatched by Georg Fischer.
- 15.7 In case of Products for use in domestic installations or in utilities
  - Georg Fischer will assume the costs of dismantling the defective Product and restoring the damaged object up to CHF 1'000'000 per occurrence.
  - warranty or damage claims - contrary to Section 15.6 - are time-barred five (5) years from the date of installation or seven (7) years from the production date, whichever is earlier.

## 16 Limitation of Liability

The rights and remedies of the customer shall be exclusively governed by these General Conditions of Supply and shall be in lieu of any remedies at law. All further claims for damages, reduction of the purchase price, termination of or rescission of 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, third party recovery claims and other direct or indirect or consequential damages. This limitation of liability equally applies to the extent Georg Fischer is liable for acts or omissions of its employees or third parties engaged for the performance of its obligations. It does not apply in case of unlawful intent or gross negligence on the part of Georg Fischer's management and in case of Georg Fischer's statutory liability, in particular under applicable product liability laws.

## 17 Severability

Should any term or clause of these General Conditions in whole or in part be found to be unenforceable or void, all other provisions shall remain in full force and effect and the unenforceable or void provision shall be replaced by a valid provision, which comes closest to the original intention of the unenforceable or invalid provision.

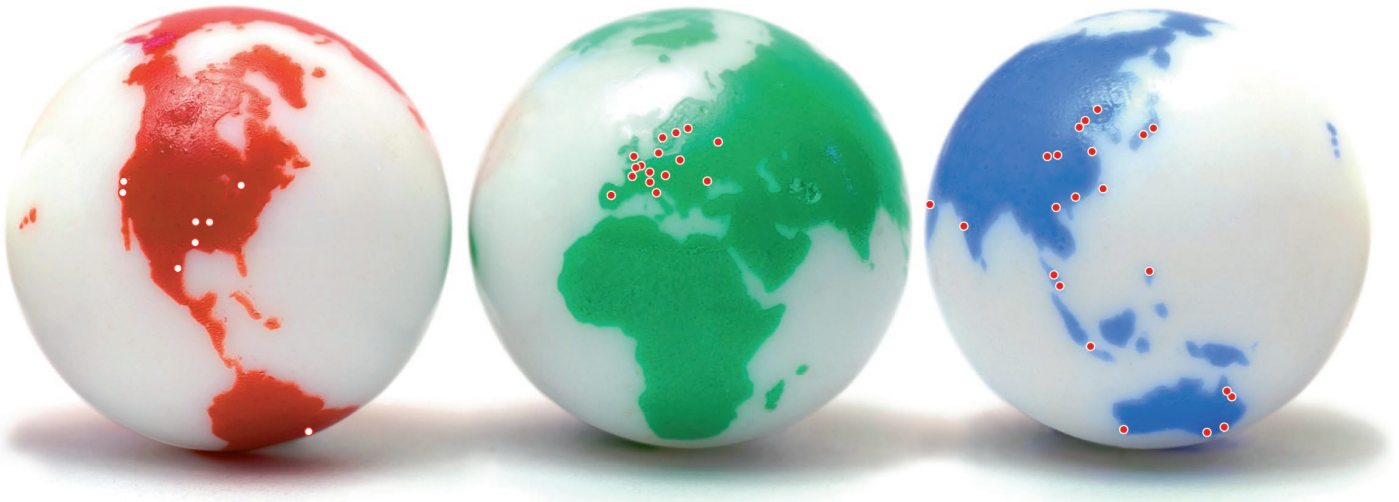
## 18 Place of Performance and Jurisdiction

- 18.1 Place of performance for the Products shall be the Georg Fischer works from which the Products are despatched.
- 18.2 The contract shall be governed by Swiss law without regard to conflict of law provisions that would require the application of another law.
- 18.3 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.

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The technical data are not binding. They neither constitute expressly warranted characteristics nor guaranteed properties nor a guaranteed durability. They are subject to modification. Our General Terms of Sale apply.

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