

Product Range

**Type 546  
Manual and Actuated  
Ball Valves  
DN10 to DN100**



# List of Abbreviations

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ANSI	American National Standard Institute
ASTM	American Society for Testing and Materials
BS	British Standard
DIN	Deutsche Industrie-Normen
ISO	International Standardization Organization
ABS	Acrylnitrile-Butadiene-Styrene
PVC-U	Polyvinyl chloride, unplasticized
PVC-C	Polyvinyl chloride, post-chlorinated
PP-H	Polypropylene, Homopolymeride
PE	Polyethylene
PVDF	Polyvinylidene fluoride
EPDM	Ethylene-Propylene-Rubber
FPM	Fluororubber, e.g. Viton®
PTFE	Polytetrafluoroethylene, e.g. Teflon®
d	Pipe outer diameter
DN	Nominal diameter
PN	Nominal pressure at 20 °C, water
kg	Weight in kilograms
®	Registered trademark

The technical data are not binding and not expressly warranted characteristics of the goods. They are subject to change. Our General Conditions of Sale apply.

## **Dimensions**

All dimensions are given in mm.

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# New product:

Ball valve type 546 now in DN65 - DN100



## Materials / pressure rating:

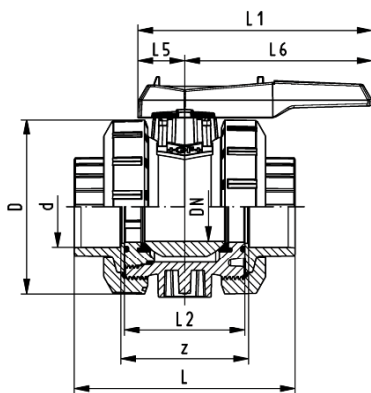
- PVC-U (PN16)
- PVC-C (PN16)
- ABS (PN10)
- PP-H (PN10)

## Options:

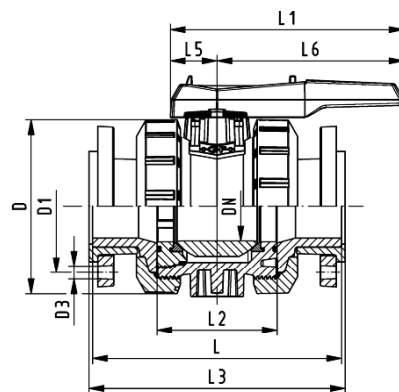
- with or without threaded inserts for easy mounting of the valve available
- electrical positioning feedback with different integrated switches
- lockable handle with ratchet function (5°-pitch)
- valve can be configured individually

## Valve ends:

- fusion and cement sockets ISO/DIN, ASTM, BS, JIS
- fusion and cement spigots ISO/DIN
- threaded socket Rp, Rc, NPT
- backing flanges ISO/DIN, ANSI, BS, JIS
- butt fusion spigots SDR11 and SDR17.6
- PE100 electro fusion spigots resp. butt fusion spigots SDR11 und SDR17.6



Execution: e.g. fusion/cement socket



execution: e.g. backing flange PVC-U

Code numbers and dimensions please see ball valve type 546.

# New product:

Ball valve type 130 - 134 now in DN65 - DN100

## Configuration:

- Ball valve type 546 DN65 to DN100 in PVC-U, PVC-C, ABS, PP-H
- Electrical actuator EA31 in 24V AC/DC or 100-230V 50-60Hz
- Flange connection for the actuator according to ISO 5211

## Equipment electric actuator:

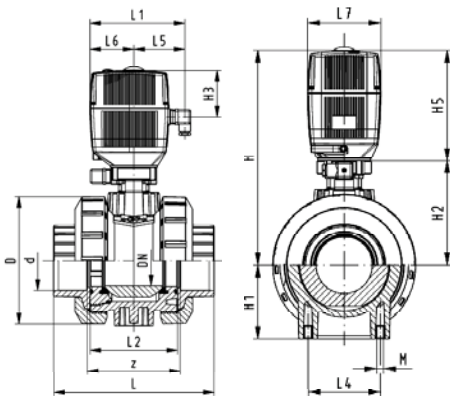
- With integrated emergency override
- With optical position indication
- Actuating angle 90°
- Control time 15 sec/90°

## Options and accessories:

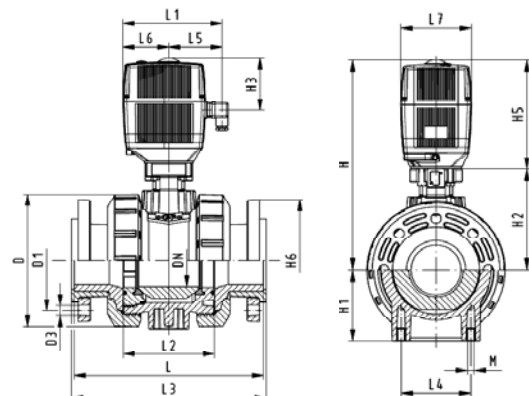
- Electrical positioning feedback in the multifunctional module

## Accessories for actuator EA31:

- Heating element
- Fail-safe return with battery
- Additional mechanical or inductive limit switches
- Monitoring print for cycle time extension, cycle time monitoring, cycle counter, motor current monitoring
- Position signalization 4-20 mA
- Positioner PE25



Execution: e.g. with cement socket



execution: e.g. with backing flange

Code numbers and dimensions please see ball valve type 130 - 134.

# New product:

Ball valve type 230 - 234 now in DN65 - DN100

## Configuration:

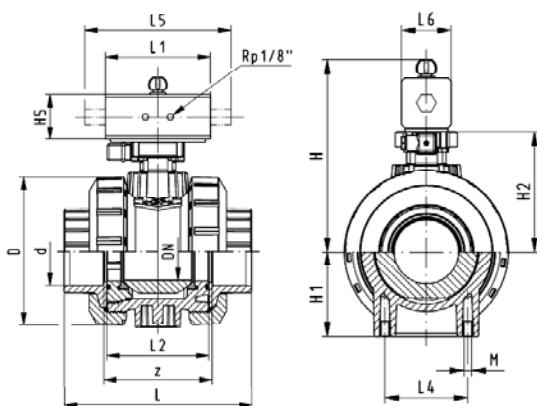
- Ball valve type 546 DN65 to DN100 in PVC-U, PVC-C, ABS, PP-H
- Flange connection for the actuator according to ISO 5211
- pneumatic actuators PA30-45

## Working principles for pneumatic actuators:

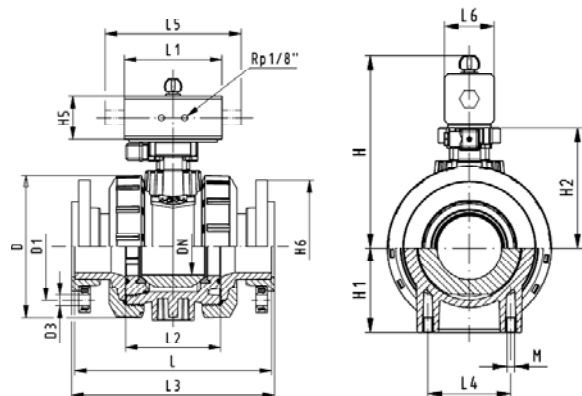
- fail-safe to close (FC)
- fail-safe to open (FO)
- Double acting (DA)
- Acting angle 90°
- Control time 0.5-2 sec/90°

## Options and accessories:

- Electrical positioning feedback in the multifunction module
- Namur mounting console to mount the limit switches on top of the actuator
- Solenoid valves for activation of the actuator



Execution: e.g. cement socket

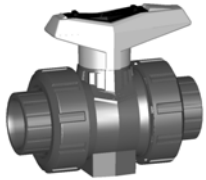


execution: e.g. backing flange

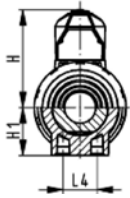
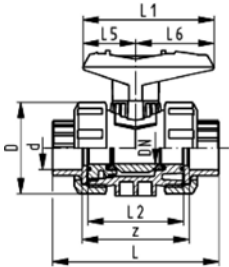
Code numbers and dimensions please see ball valve type 230 - 234

# Ball valves

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



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





### Model:

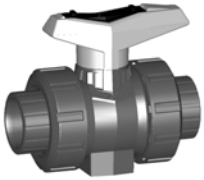
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- z-dimension, valve end and valve nut are **not compatible** with type 346 (DN10/15-50) resp. type 370 (DN65-100)
- Ball seals PTFE
- Without mounting inserts

### Option:

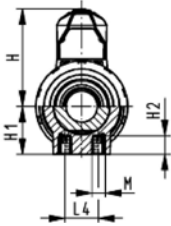
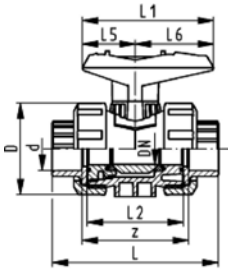
- Individual configuration of the valve (see form)
- Multifunctional module with integrated limit switches
- Pneumatic or electric actuators from +GF+

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

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



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

### Model:

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

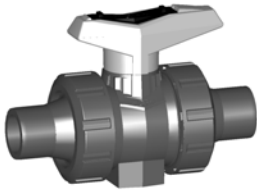
### Option:

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

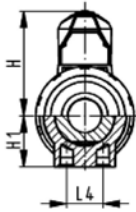
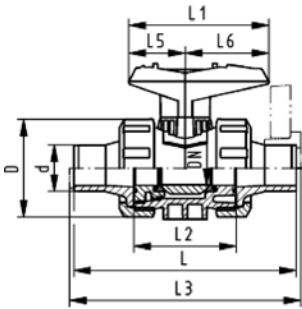
d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	16	71	<b>161 546 061</b>	<b>161 546 071</b>	0.150
20	15	16	185	<b>161 546 062</b>	<b>161 546 072</b>	0.150
25	20	16	350	<b>161 546 063</b>	<b>161 546 073</b>	0.230
32	25	16	700	<b>161 546 064</b>	<b>161 546 074</b>	0.330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

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





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

### Model:

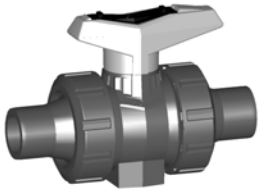
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- z-dimension, valve end and valve nut are **not compatible** with type 346 (DN10/15-50) resp. type 370 (DN65-100)
- Ball seals PTFE
- Without mounting inserts

### Option:

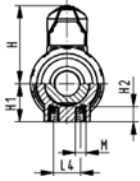
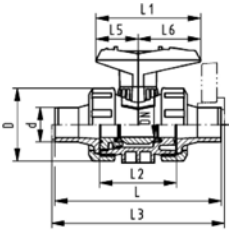
- Individual configuration of the valve (see form)
- Multifunctional module with integrated limit switches
- Pneumatic or electric actuators from +GF+

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

d [mm]	D [mm]	H [mm]	H1 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	
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	



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




### Model:

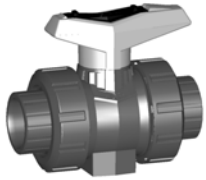
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- z-dimension, valve end and valve nut are **not compatible** with type 346 (DN10/15-50) resp. type 370 (DN65-100)
- Ball seals PTFE
- Integrated stainless steel mounting inserts

### Option:

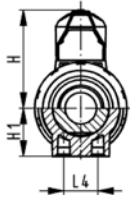
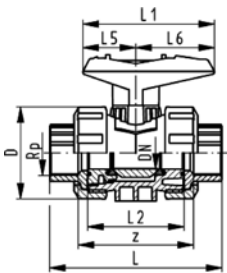
- Individual configuration of the valve (see form)
- Multifunctional module with integrated limit switches
- Pneumatic or electric actuators from +GF+

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

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	M	
16	50	57	27	12	114	77	56	130	25	32	45	M6	
20	50	57	27	12	124	77	56	130	25	32	45	M6	
25	58	67	30	12	144	97	65	150	25	39	58	M6	
32	68	73	36	12	154	97	71	160	25	39	58	M6	
40	84	90	44	15	174	128	85	180	45	54	74	M8	
50	97	97	51	15	194	128	89	200	45	54	74	M8	
63	124	116	64	15	224	152	101	230	45	66	87	M8	
 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	



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

### Model:

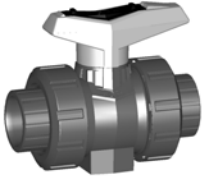
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- z-dimension, valve end and valve nut are **not compatible** with type 346 (DN10/15-50) resp. type 370 (DN65-100)
- Ball seals PTFE
- Without mounting inserts

### Option:

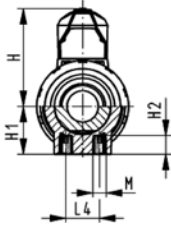
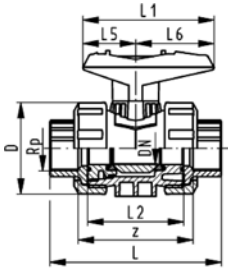
- Individual configuration of the valve (see form)
- Multifunctional module with integrated limit switches
- Pneumatic or electric actuators from +GF+

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

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



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

### Model:

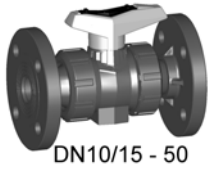
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- z-dimension, valve end and valve nut are **not compatible** with type 346 (DN10/15-50) resp. type 370 (DN65-100)
- Ball seals PTFE
- Integrated stainless steel mounting inserts

### Option:

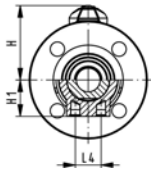
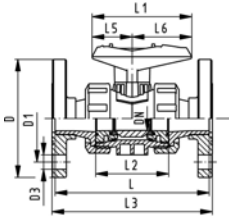
- Individual configuration of the valve (see form)
- Multifunctional module with integrated limit switches
- Pneumatic or electric actuators from +GF+

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

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



DN10/15 - 50



## Ball valve type 546 PVC-U With PVC-U fixed flanges serrated metric

### Model:

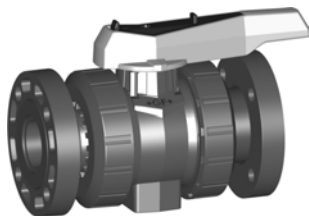
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- z-dimension, valve end and valve nut are **not compatible** with type 346 (DN10/15-50) resp. type 370 (DN65-100)
- Ball seals PTFE
- Without mounting inserts
- Overall length according to EN 558-1
- Connecting dimension: ISO 7005 PN10, EN 1092 PN10, DIN 2501 PN10

### Option:

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

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

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



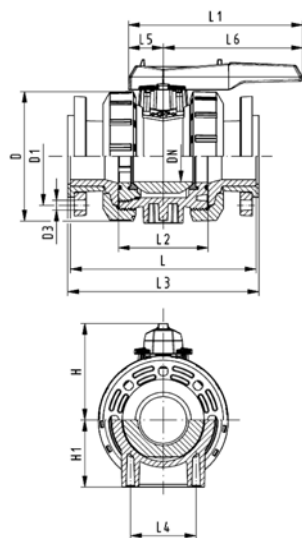
## Ball valve type 546 PVC-U With mounting inserts With backing flanges PVC-U metric

### Model:

- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- z-dimension, valve end and valve 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 558-1
- Connecting dimension: ISO 7005 PN10, EN 1092 PN10, DIN 2501 PN10

### Option:

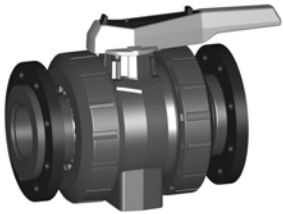
- Individual configuration of the valve (see form)
- Multifunctional module with integrated limit switches
- Pneumatic or electric actuators from +GF+



d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg						
75	65	10	5000	<b>161 546 108</b>	<b>161 546 118</b>	7.200						
90	80	10	7000	<b>161 546 109</b>	<b>161 546 119</b>	10.600						
110	100	10	11000	<b>161 546 110</b>	<b>161 546 120</b>	16.500						

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	M		
75	166	149	85	15	284	270	136	70	64	206	M8		
90	200	161	105	15	300	270	141	70	64	206	M8		
110	238	178	123	22	340	320	164	120	64	256	M12		



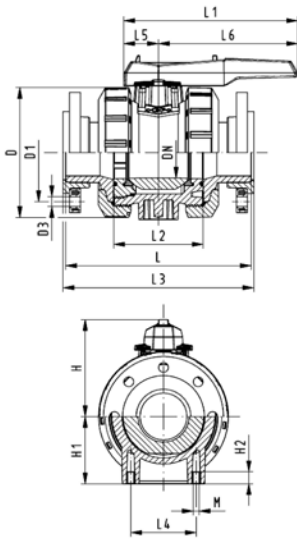
## Ball valve type 546 PVC-U With mounting inserts With backing flanges PP-st metric

### Model:

- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- z-dimension, valve end and valve 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 558-1
- Connecting dimensions: ISO 7005, EN 1092, BS 4504, DIN 2501; bolt circle PN 10

### Option:

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

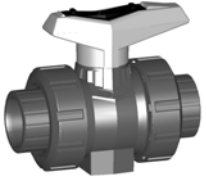


d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
75	65	16	5000	<b>161 546 948</b>	<b>161 546 958</b>	9.100
90	80	16	7000	<b>161 546 949</b>	<b>161 546 959</b>	12.400
110	100	16	11000	<b>161 546 950</b>	<b>161 546 960</b>	18.500

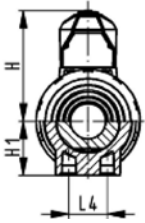
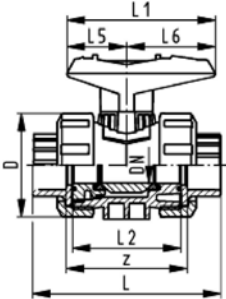
d [mm]	D [mm]	H [mm]	H1 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]
75	166	149	85	284	270	136	290	70	64	206
90	200	161	105	300	270	141	310	70	64	206
110	238	178	123	340	320	164	350	120	64	256

# Ball valves

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



DN10/15 - 50









### Model:

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

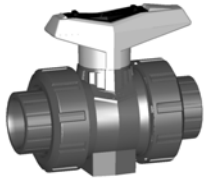
### Option:

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

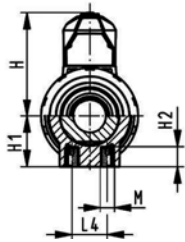
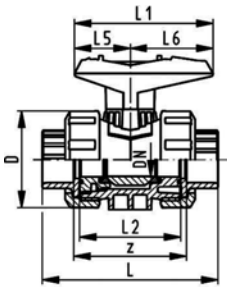
Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
3/8	10	16	71	<b>161 546 201</b>	<b>161 546 211</b>	0.150
1/2	15	16	185	<b>161 546 202</b>	<b>161 546 212</b>	0.150
3/4	20	16	350	<b>161 546 203</b>	<b>161 546 213</b>	0.230
1	25	16	700	<b>161 546 204</b>	<b>161 546 214</b>	0.330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

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





DN10/15 - 50




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


### Model:

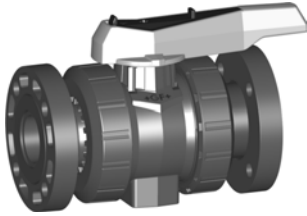
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- z-dimension, valve end and valve nut are **not compatible** with type 346 (DN10/15-50) resp. type 370 (DN65-100)
- Ball seals PTFE
- Integrated stainless steel mounting inserts

### Option:

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

Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg	
3/8	10	16	71	<b>161 546 241</b>	<b>161 546 251</b>	0.150	
1/2	15	16	185	<b>161 546 242</b>	<b>161 546 252</b>	0.150	
3/4	20	16	350	<b>161 546 243</b>	<b>161 546 253</b>	0.230	
1	25	16	700	<b>161 546 244</b>	<b>161 546 254</b>	0.330	
1 1/4	32	16	1000	<b>161 546 245</b>	<b>161 546 255</b>	0.585	
1 1/2	40	16	1600	<b>161 546 246</b>	<b>161 546 256</b>	0.815	
2	50	16	3100	<b>161 546 247</b>	<b>161 546 257</b>	1.490	
 2.5	65	16	5000	<b>161 546 068</b>	<b>161 546 078</b>	4.900	
3	80	16	7000	<b>161 546 249</b>	<b>161 546 259</b>		
4	100	16	11000	<b>161 546 250</b>	<b>161 546 260</b>		

Inch	D [mm]	H [mm]	H1 [mm]	H2 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	M	z [mm]	
3/8	50	57	27	12	92	77	56	25	32	45	6	67	
1/2	50	57	27	12	95	77	56	25	32	45	6	61	
3/4	58	67	30	12	110	97	65	25	39	58	6	70	
1	68	73	36	12	123	97	71	25	39	58	6	76	
1 1/4	84	90	44	15	146	128	85	45	54	74	8	90	
1 1/2	97	97	51	15	157	128	89	45	54	74	8	94	
2	124	116	64	15	183	152	101	45	66	87	8	107	
 2.5	166	149	85	15	233	270	136	70	64	206	8	144	
3	200	161	105	15	254	270	141	70	64	206	8	151	
4	238	178	123	22	301	320	164	120	64	256	12	174	



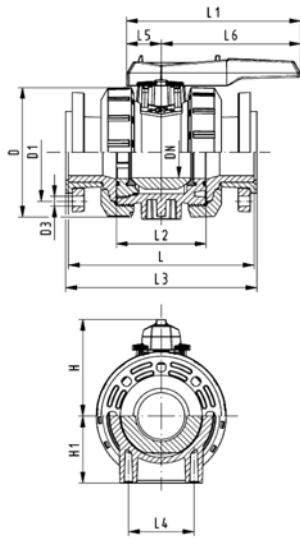
## Ball valve type 546 PVC-U With mounting inserts With backing flanges PVC-U ASTM/ANSI

### Model:

- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- z-dimension, valve end and valve 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 558-1
- Connecting dimension: ANSI/ASME B 16.5 class 150 (ASTM D 4024), BS EN 1759

### Option:

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

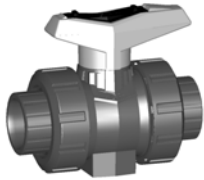


Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg	
2 1/2	65	10	5000	<b>161 546 168</b>	<b>161 546 178</b>	7.300	
3	80	10	7000	<b>161 546 169</b>	<b>161 546 179</b>	10.600	
4	100	10	11000	<b>161 546 170</b>	<b>161 546 180</b>	16.400	

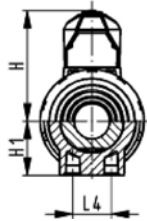
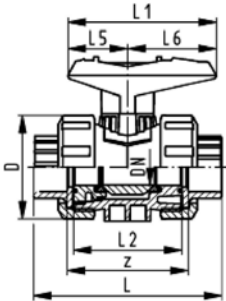
Inch	D [mm]	D1 [mm]	D3 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	H [mm]	H1 [mm]	M	
2 1/2	166	140	19	284	270	136	290	70	64	206	149	85	8	
3	200	152	19	300	270	141	310	70	64	206	161	105	8	
4	238	191	19	340	320	164	350	120	64	256	178	123	12	

# Ball valves

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



DN10/15 - 50



### Model:

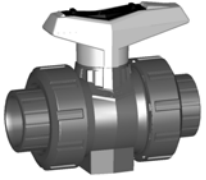
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- z-dimension, valve end and valve nut are **not compatible** with type 346 (DN10/15-50) resp. type 370 (DN65-100)
- Ball seals PTFE
- Without mounting inserts
- Threaded valve ends are only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

### Option:

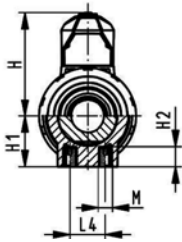
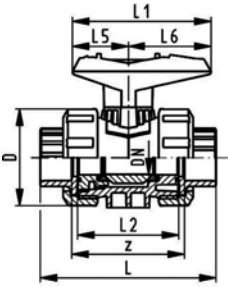
- Individual configuration of the valve (see form)
- Multifunctional module with integrated limit switches
- Pneumatic or electric actuators from +GF+

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

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



DN10/15 - 50



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

### Model:

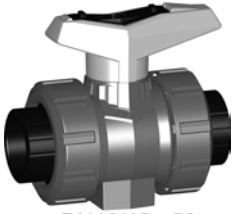
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- z-dimension, valve end and valve nut are **not compatible** with type 346 (DN10/15-50) resp. type 370 (DN65-100)
- Ball seals PTFE
- Integrated stainless steel mounting inserts
- Threaded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

### Option:

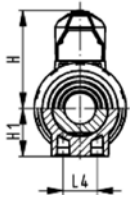
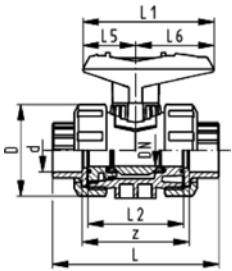
- Individual configuration of the valve (see form)
- Multifunctional module with integrated limit switches
- Pneumatic or electric actuators from +GF+

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

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



DN10/15 - 50



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

### Model:

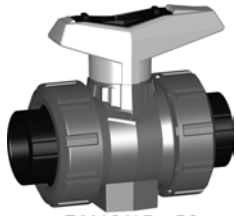
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- z-dimension, valve end and valve nut are **not compatible** with type 346 (DN10/15-50) resp. type 370 (DN65-100)
- Ball seals PTFE
- Without mounting inserts

### Option:

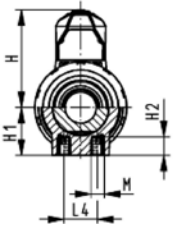
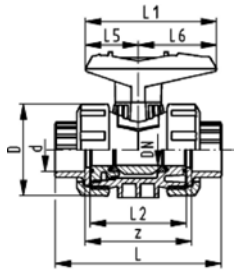
- Individual configuration of the valve (see form)
- Multifunctional module with integrated limit switches
- Pneumatic or electric actuators from +GF+

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

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



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

### Model:

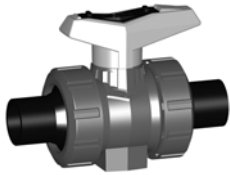
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- z-dimension, valve end and valve nut are **not compatible** with type 346 (DN10/15-50) resp. type 370 (DN65-100)
- Ball seals PTFE
- Integrated stainless steel mounting inserts

### Option:

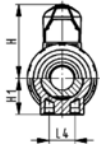
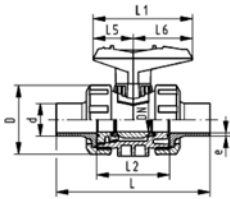
- Individual configuration of the valve (see form)
- Multifunctional module with integrated limit switches
- Pneumatic or electric actuators from +GF+

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

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



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

### Model:

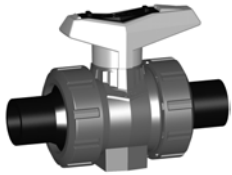
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- z-dimension, valve end and valve nut are **not compatible** with type 346 (DN10/15-50) resp. type 370 (DN65-100)
- Ball seals PTFE
- Without mounting inserts

### Option:

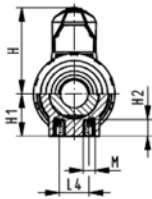
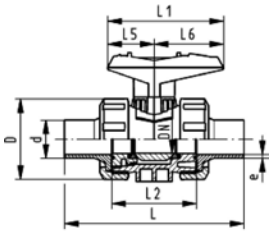
- Individual configuration of the valve (see form)
- Multifunctional module with integrated limit switches
- Pneumatic or electric actuators from +GF+

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

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



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

### Model:

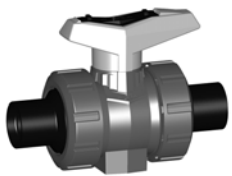
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- z-dimension, valve end and valve nut are **not compatible** with type 346 (DN10/15-50) resp. type 370 (DN65-100)
- Ball seals PTFE
- Integrated stainless steel mounting inserts

### Option:

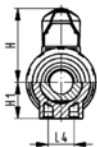
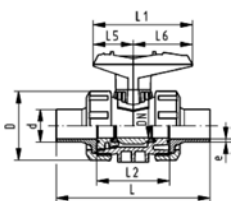
- Individual configuration of the valve (see form)
- Multifunctional module with integrated limit switches
- Pneumatic or electric actuators from +GF+

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

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



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

### Model:

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

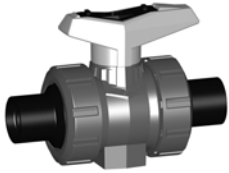
### Option:

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

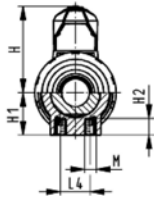
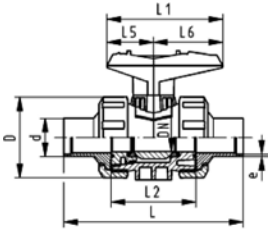
d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
40	32	10	1000	<b>800 000 125</b>	<b>800 000 135</b>	0.600
50	40	10	1600	<b>800 000 126</b>	<b>800 000 136</b>	0.830
63	50	10	3100	<b>800 000 127</b>	<b>800 000 137</b>	1.560

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





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

### Model:

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

### Option:

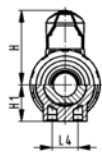
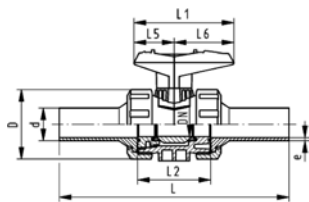
- Individual configuration of the valve (see form)
- Multifunctional module with integrated limit switches
- Pneumatic or electric actuators from +GF+

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

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



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

### Model:

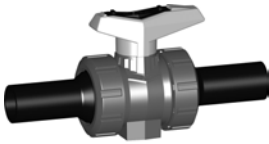
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- z-dimension, valve end and valve nut are **not compatible** with type 346 (DN10/15-50) resp. type 370 (DN65-100)
- Ball seals PTFE
- Without mounting inserts

### Option:

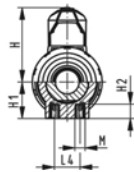
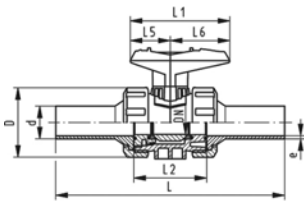
- Individual configuration of the valve (see form)
- Multifunctional module with integrated limit switches
- Pneumatic or electric actuators from +GF+

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

d [mm]	D [mm]	H [mm]	H1 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	e [mm]
20	50	57	27	193	77	56	25	32	45	2,25
25	58	67	30	216	97	65	25	39	58	2,3
32	68	73	36	223	97	71	25	39	58	3
40	84	90	44	249	128	85	45	54	74	3,7
50	97	97	51	271	128	89	45	54	74	4,6
63	124	116	64	321	152	101	45	66	87	5,8
75	166	149	85	386	270	136	70	64	206	6.8
90	200	161	105	421	270	141	70	64	206	8.2
110	238	178	123	484	320	164	120	64	256	10



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

### Model:

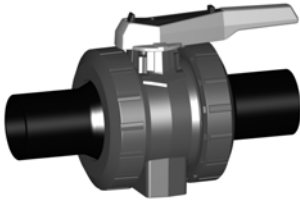
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- z-dimension, valve end and valve nut are **not compatible** with type 346 (DN10/15-50) resp. type 370 (DN65-100)
- Ball seals PTFE
- Integrated stainless steel mounting inserts

### 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 ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
20	15	16	185	<b>161 546 822</b>	<b>161 546 832</b>	0.150
25	20	16	350	<b>161 546 823</b>	<b>161 546 833</b>	0.220
32	25	16	700	<b>161 546 824</b>	<b>161 546 834</b>	0.310
40	32	16	1000	<b>161 546 825</b>	<b>161 546 835</b>	0.550
50	40	16	1600	<b>161 546 826</b>	<b>161 546 836</b>	0.750
63	50	16	3100	<b>161 546 827</b>	<b>161 546 837</b>	1.360

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	M	e [mm]
20	50	57	27	12	193	77	56	25	32	45	M6	2,3
25	58	67	30	12	216	97	65	25	39	58	M6	2,3
32	68	73	36	12	223	97	71	25	39	58	M6	3
40	84	90	44	15	249	128	85	45	54	74	M8	3,7
50	97	97	51	15	271	128	89	45	54	74	M8	4,6
63	124	116	64	15	321	152	101	45	66	87	M8	5,8



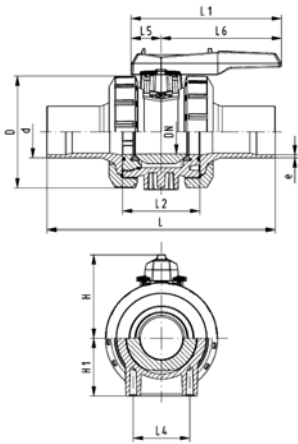
## Ball valve type 546 PVC-U With butt fusion spigots long PE 100 SDR17.6 metric

### Model:

- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- z-dimension, valve end and valve 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+



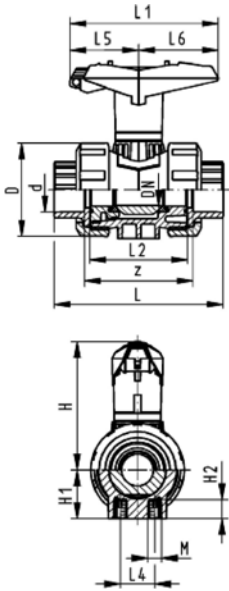
d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg					
75	65	16	5000	<b>800 000 218</b>	<b>800 000 228</b>	5.000					
90	80	16	7000	<b>800 000 219</b>	<b>800 000 229</b>	7.400					
110	100	16	11000	<b>800 000 220</b>	<b>800 000 230</b>	11.700					

d [mm]	D [mm]	H [mm]	H1 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	e [mm]	
75	166	149	85	386	270	136	70	64	206	4.3	
90	200	161	105	421	270	141	70	64	206	5.1	
110	238	178	123	484	320	164	120	64	256	6.3	



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

### Model:

- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- z-dimension, valve end and valve 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:

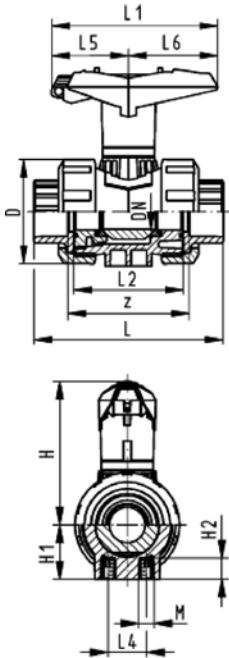
- Individual configuration of the valve (see form)
- Multifunctional module with integrated limit switches
- Pneumatic or electric actuators from +GF+

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

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



DN10/15 - 50






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




### Model:

- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- z-dimension, valve end and valve 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:

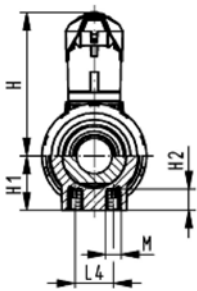
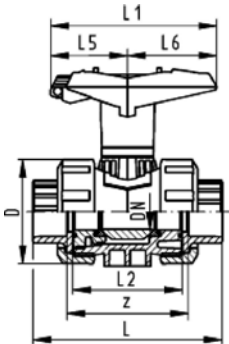
- Individual configuration of the valve (see form)
- Multifunctional module with integrated limit switches
- Pneumatic or electric actuators from +GF+

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

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



DN10/15 - 50



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

### Model:

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

### Option:

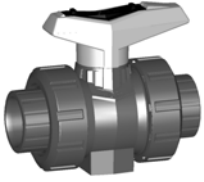
- Individual configuration of the valve (see form)
- Multifunctional module with integrated limit switches
- Pneumatic or electric actuators from +GF+

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

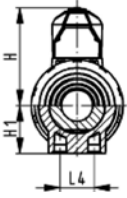
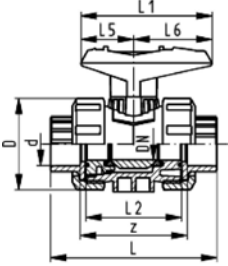
Inch	D [mm]	H [mm]	H1 [mm]	H2 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	M	z [mm]
3/8	50	79	27	12	105	87	56	25	42	45	M6	67
1/2	50	79	27	12	105	87	56	25	42	45	M6	61
3/4	58	88	30	12	121	108	65	25	50	58	M6	70
1	68	94	36	12	133	108	71	25	50	58	M6	76
1 1/4	84	113	44	15	154	140	85	45	66	74	M8	90
1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

# Ball valves

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



DN10/15 - 50



### Model:

- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- Silicon-free / paint-compatible
- For easy installation and removal
- With PVDF ball seal
- z-dimension, valve end and valve nut are **not compatible** with type 346 (DN10/15-50) resp. type 370 (DN65-100)
- Without mounting inserts

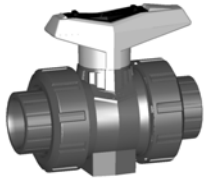
### Option:

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

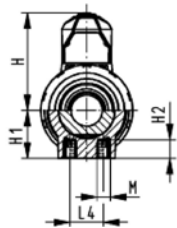
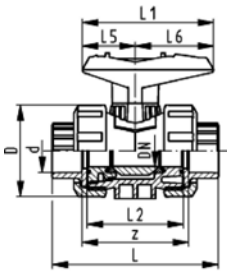
d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	16	71	<b>161 546 601</b>	<b>161 546 611</b>	0.150
20	15	16	185	<b>161 546 602</b>	<b>161 546 612</b>	0.150
25	20	16	350	<b>161 546 603</b>	<b>161 546 613</b>	0.230
32	25	16	700	<b>161 546 604</b>	<b>161 546 614</b>	0.330
40	32	16	1000	<b>161 546 605</b>	<b>161 546 615</b>	0.600
50	40	16	1600	<b>161 546 606</b>	<b>161 546 616</b>	0.800
63	50	16	3100	<b>161 546 607</b>	<b>161 546 617</b>	1.460
75	65	16	5000	<b>161 546 608</b>	<b>161 546 618</b>	4.900
90	80	16	7000	<b>161 546 609</b>	<b>161 546 619</b>	7.400
110	100	16	11000	<b>161 546 610</b>	<b>161 546 620</b>	11.600

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





DN10/15 - 50



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

### Model:

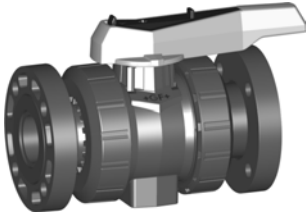
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- Silicon-free / paint-compatible
- For easy installation and removal
- z-dimension, valve end and valve nut are **not compatible** with type 346 (DN10/15-50) resp. type 370 (DN65-100)
- With PVDF ball seal
- Integrated stainless steel mounting inserts

### Option:

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

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	16	71	800 000 601	800 000 611	0.150
20	15	16	185	800 000 602	800 000 612	0.150
25	20	16	350	800 000 603	800 000 613	0.230
32	25	16	700	800 000 604	800 000 614	0.330
40	32	16	1000	800 000 605	800 000 615	0.600
50	40	16	1600	800 000 606	800 000 616	0.800
63	50	16	3100	800 000 607	800 000 617	1.460
75	65	16	5000	800 000 608	800 000 618	4.900
90	80	16	7000	800 000 609	800 000 619	7.400
110	100	16	11000	800 000 610	800 000 620	11.600

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



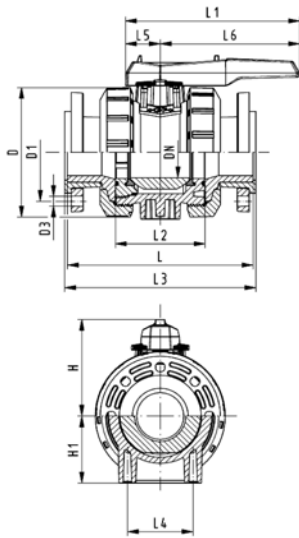
## Ball valve type 546 PVC-U SF With mounting inserts With backing flanges PVC-U metric

### Model:

- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- Silicon-free / paint-compatible
- For easy installation and removal
- z-dimension, valve end and valve nut are **not compatible** with type 346 (DN10/15-50) resp. type 370 (DN65-100)
- With PVDF ball seal
- Integrated stainless steel mounting inserts
- Overall length according to EN 558-1
- Connecting dimension: ISO 7005 PN10, EN 1092 PN10, DIN 2501 PN10

### Option:

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



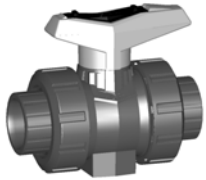
d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg								
75	65	10	5000	<b>161 546 128</b>	<b>161 546 138</b>	7.200								
90	80	10	7000	<b>161 546 129</b>	<b>161 546 139</b>	10.600								
110	100	10	11000	<b>161 546 130</b>	<b>161 546 140</b>	16.500								

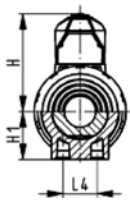
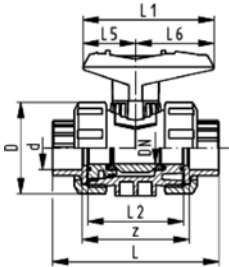
d [mm]	D [mm]	D1 [mm]	D3 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	H [mm]	H1 [mm]	M		
75	166	145	18	284	270	136	290	70	64	206	149	85	8		
90	200	160	18	300	270	141	310	70	64	206	161	105	8		
110	238	180	18	340	320	164	350	120	64	256	178	123	12		

# Ball valves

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



DN10/15 - 50



### Model:

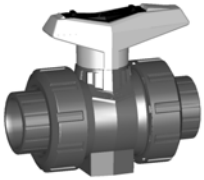
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- Silicon-free / paint-compatible
- For easy installation and removal
- z-dimension, valve end and valve nut are **not compatible** with type 346 (DN10/15-50) resp. type 370 (DN65-100)
- Ball seals: Inch ASTM in PTFE
- Without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

### Option:

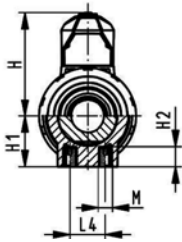
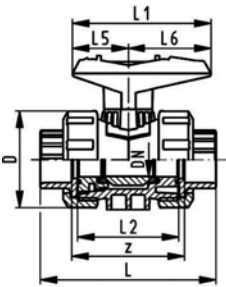
- Individual configuration of the valve (see form)
- Multifunctional module with integrated limit switches

Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
3/8	10	16	71	<b>161 546 681</b>	<b>161 546 691</b>	0.155
1/2	15	16	185	<b>161 546 682</b>	<b>161 546 692</b>	0.155
3/4	20	16	350	<b>161 546 683</b>	<b>161 546 693</b>	0.240
1	25	16	700	<b>161 546 684</b>	<b>161 546 694</b>	0.340
1 1/4	32	16	1000	<b>161 546 685</b>	<b>161 546 695</b>	0.605
1 1/2	40	16	1600	<b>161 546 686</b>	<b>161 546 696</b>	0.805
2	50	16	3100	<b>161 546 687</b>	<b>161 546 697</b>	1.460
2 1/2	65	16	5000	<b>161 546 688</b>	<b>161 546 698</b>	4.900
3	80	16	7000	<b>161 546 689</b>	<b>161 546 699</b>	7.400
4	100	16	11000	<b>161 546 690</b>	<b>161 546 700</b>	11.500

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



DN10/15 - 50



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

### Model:

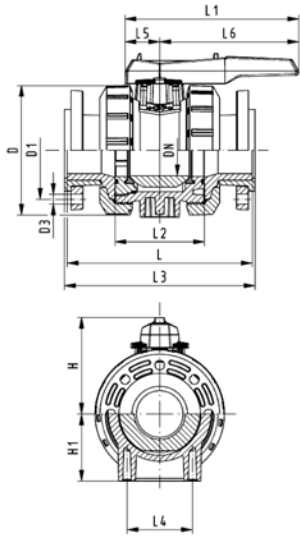
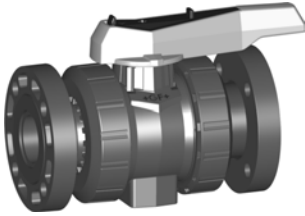
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- Silicon-free / paint-compatible
- For easy installation and removal
- z-dimension, valve end and valve nut are **not compatible** with type 346 (DN10/15-50) resp. type 370 (DN65-100)
- Ball seals: Inch ASTM in PTFE
- Integrated stainless steel 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	
3/8	10	16	71	<b>161 546 841</b>	<b>161 546 851</b>	0.159	
1/2	15	16	185	<b>161 546 842</b>	<b>161 546 852</b>	0.159	
3/4	20	16	350	<b>161 546 843</b>	<b>161 546 853</b>	0.244	
1	25	16	700	<b>161 546 844</b>	<b>161 546 854</b>	0.344	
1 1/4	32	16	1000	<b>161 546 845</b>	<b>161 546 855</b>	0.615	
1 1/2	40	16	1600	<b>161 546 846</b>	<b>161 546 856</b>	0.815	
2	50	16	3100	<b>161 546 847</b>	<b>161 546 857</b>	1.470	
2 1/2	65	16	5000	<b>161 546 848</b>	<b>161 546 858</b>	4.900	
3	80	16	7000	<b>161 546 849</b>	<b>161 546 859</b>	7.400	
4	100	16	11000	<b>161 546 850</b>	<b>161 546 860</b>	11.500	

Inch	D [mm]	H [mm]	H1 [mm]	H2 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	M	z [mm]	
3/8	50	57	27	12	105	77	56	25	32	45	M6	67	
1/2	50	57	27	12	105	77	56	25	32	45	M6	61	
3/4	58	67	30	12	121	97	65	25	39	58	M6	70	
1	68	73	36	12	133	97	71	25	39	58	M6	76	
1 1/4	84	90	44	16	154	128	85	45	54	74	M8	90	
1 1/2	97	97	51	16	164	128	89	45	54	74	M8	94	
2	124	116	64	16	183	152	101	45	66	87	M8	107	
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	



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

### Model:

- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- Silicon-free / paint-compatible
- For easy installation and removal
- z-dimension, valve end and valve nut are **not compatible** with type 346 (DN10/15-50) resp. type 370 (DN65-100)
- Ball seals: Inch ASTM in PTFE
- Integrated stainless steel mounting inserts
- Overall length according to EN 558-1
- Connecting dimension: ANSI/ASME B 16.5 class 150 (ASTM D 4024), BS EN 1759

### 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
2 1/2	65	10	5000	<b>161 546 188</b>	<b>161 546 198</b>	7.300
3	80	10	7000	<b>161 546 189</b>	<b>161 546 199</b>	10.600
4	100	10	11000	<b>161 546 190</b>	<b>161 546 200</b>	16.400

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

# Copiable

## Configurator GF Ball Valve Type 546 PVC-U

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

### Ball valve

A01 Ball valve 546

#### Material

B01 PVC-U

#### Dimension

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

#### Version

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

#### Seals

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

#### Threaded inserts

F01 without threaded inserts  
 F02 with threaded inserts

#### Connecting parts

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

#### Multi-functional module

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

#### Handle

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

#### Mounting plate

L01 without mounting plate  
 L02 with mounting plate

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

right

# Find the fitting solution with the Configurator

**Ball valve**  
A01 Ball valve 546

**Material**  
B01 PVC-U

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

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

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

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

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

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

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

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

**A01 B01 C09 D01 E01 F02 G01 G43 I01 K01 L02 =**

left right



## Example:

Type 546 PVC-U, dimension DN 32, PTFE ball seal, EPDM seals, with threaded inserts and mounting plate, connecting part left: PVC-U cement socket metric, right: PE-100 butt fusion spigot lang SDR11 metric  
**That's all it takes to configure your ball valve.**

# Ball valves electric

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



DN10/15 - 50

### Model:

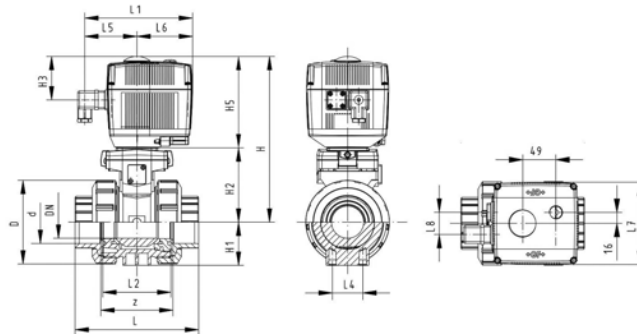
- Built on with electric actuator EA11
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Voltage 100-230 V, 50-60 Hz
- Control range 90°<
- Control time 5 s/90°<

### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	70	199 107 002	199 107 012	2.072
20	15	10	185	199 107 003	199 107 013	2.072
25	20	10	350	199 107 004	199 107 014	2.189
32	25	10	700	199 107 005	199 107 015	2.189
40	32	10	1000	199 107 006	199 107 016	2.592
50	40	10	1600	199 107 007	199 107 017	2.914
63	50	10	3100	199 107 008	199 107 018	2.914

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	L8 [mm]	z [mm]
16	50	200	27	64	64	137	92	161	56	25	77	83	122	33	64
20	50	200	27	64	64	137	95	161	56	25	77	83	122	33	64
25	58	209	30	73	64	137	110	161	65	25	77	83	122	33	72
32	68	209	36	73	64	137	123	161	71	25	77	83	122	33	79
40	84	220	44	84	64	137	146	161	85	45	77	83	122	33	94
50	97	220	51	84	64	137	157	161	89	45	77	83	122	33	95
63	124	243	64	106	64	137	183	161	101	45	77	83	122	33	107







DN10/15 - 50

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

### Model:

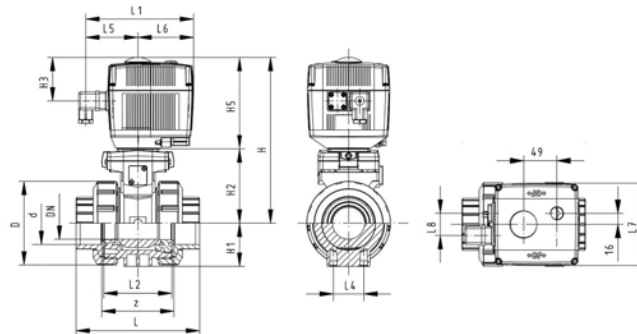
- Built on with electric actuator EA11
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Voltage 24 V AC/DC
- Control range 90°<
- Control time 5 s/90°<

### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	70	<b>199 107 042</b>	<b>199 107 052</b>	2.072
20	15	10	185	<b>199 107 043</b>	<b>199 107 053</b>	2.072
25	20	10	350	<b>199 107 044</b>	<b>199 107 054</b>	2.189
32	25	10	700	<b>199 107 045</b>	<b>199 107 055</b>	2.189
40	32	10	1000	<b>199 107 046</b>	<b>199 107 056</b>	2.592
50	40	10	1600	<b>199 107 047</b>	<b>199 107 057</b>	2.914
63	50	10	3100	<b>199 107 048</b>	<b>199 107 058</b>	3.772

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	L8 [mm]	z [mm]
16	50	200	27	64	64	137	92	161	56	25	77	83	122	33	64
20	50	200	27	64	64	137	95	161	56	25	77	83	122	33	64
25	58	209	30	73	64	137	110	161	65	25	77	83	122	33	72
32	68	209	36	73	64	137	123	161	71	25	77	83	122	33	79
40	84	220	44	84	64	137	146	161	85	45	77	83	122	33	94
50	97	220	51	84	64	137	157	161	89	45	77	83	122	33	95
63	124	243	64	106	64	137	183	161	101	45	77	83	122	33	107





DN10/15 - 50

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

### Model:

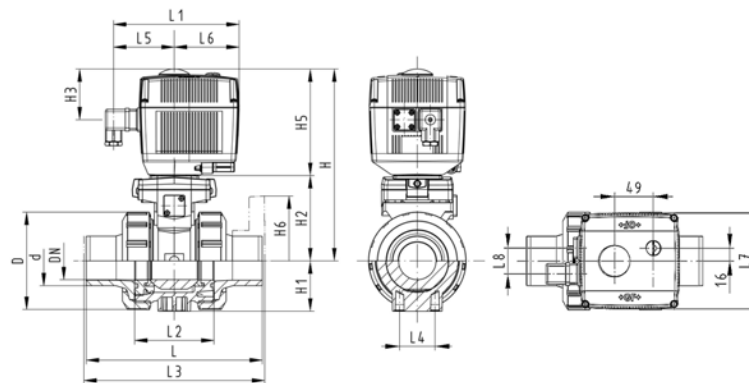
- Built on with electric actuator EA11
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Voltage 100-230 V, 50-60 Hz
- Control range 90°<
- Control time 5 s/90°<

### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	70	<b>199 107 022</b>	<b>199 107 032</b>	2.072
20	15	10	185	<b>199 107 023</b>	<b>199 107 033</b>	2.072
25	20	10	350	<b>199 107 024</b>	<b>199 107 034</b>	2.189
32	25	10	700	<b>199 107 025</b>	<b>199 107 035</b>	2.189
40	32	10	1000	<b>199 107 026</b>	<b>199 107 036</b>	2.592
50	40	10	1600	<b>199 107 027</b>	<b>199 107 037</b>	2.914
63	50	10	3100	<b>199 107 028</b>	<b>199 107 038</b>	3.772

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	L8 [mm]
16	50	200	27	64	64	137	114	161	56	130	25	77	83	122	33
20	50	200	27	64	64	137	124	161	56	130	25	77	83	122	33
25	58	209	30	73	64	137	144	161	65	150	25	77	83	122	33
32	68	209	36	73	64	137	154	161	71	160	25	77	83	122	33
40	84	220	44	84	64	137	174	161	85	180	45	77	83	122	33
50	97	220	51	84	64	137	194	161	89	200	45	77	83	122	33
63	124	243	64	106	64	137	224	161	101	230	45	77	83	122	33





DN10/15 - 50

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

### Model:

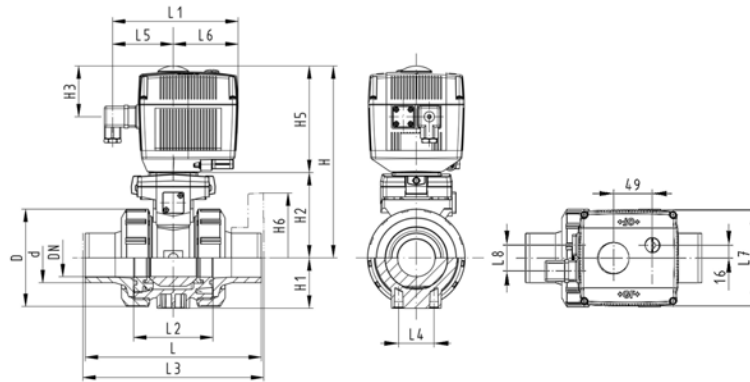
- Built on with electric actuator EA11
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Voltage 24 V AC/DC
- Control range 90°<
- Control time 5 s/90°<

### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	70	199 107 062	199 107 072	2.072
20	15	10	185	199 107 063	199 107 073	1.830
25	20	10	350	199 107 064	199 107 074	2.189
32	25	10	700	199 107 065	199 107 075	2.189
40	32	10	1000	199 107 066	199 107 076	2.592
50	40	10	1600	199 107 067	199 107 077	2.914
63	50	10	3100	199 107 068	199 107 078	3.772

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	L8 [mm]
16	50	200	27	64	64	137	114	161	56	130	25	77	83	122	33
20	50	200	27	64	64	137	124	161	56	130	25	77	83	122	33
25	58	209	30	73	64	137	144	161	65	150	25	77	83	122	33
32	68	209	36	73	64	137	154	161	71	160	25	77	83	122	33
40	84	220	44	84	64	137	174	161	85	180	45	77	83	122	33
50	97	220	51	84	64	137	194	161	89	200	45	77	83	122	33
63	124	243	64	106	64	137	224	161	101	230	45	77	83	122	33





DN10/15 - 50

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

### Model:

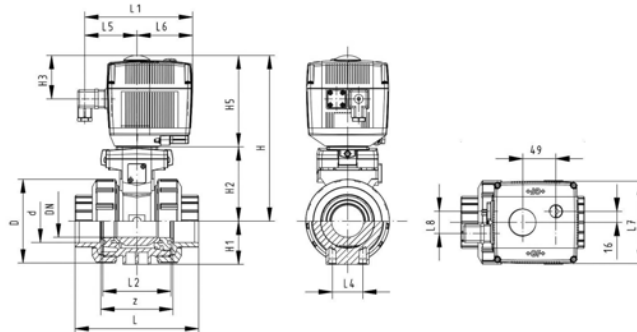
- Built on with electric actuator EA11
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Voltage 100-230 V, 50-60 Hz
- Control range 90°<
- Control time 5 s/90°<

### Option:

- Individual configuration of the valve (see form)

Rp [inch]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
3/8	10	10	70	199 107 622	199 107 632	2.100
1/2	15	10	185	199 107 623	199 107 633	2.100
3/4	20	10	350	199 107 624	199 107 634	2.200
1	25	10	700	199 107 625	199 107 635	2.300
1 1/4	32	10	1000	199 107 626	199 107 636	2.600
1 1/2	40	10	1600	199 107 627	199 107 637	3.000
2	50	10	3100	199 107 628	199 107 638	3.800

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





DN10/15 - 50

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

### Model:

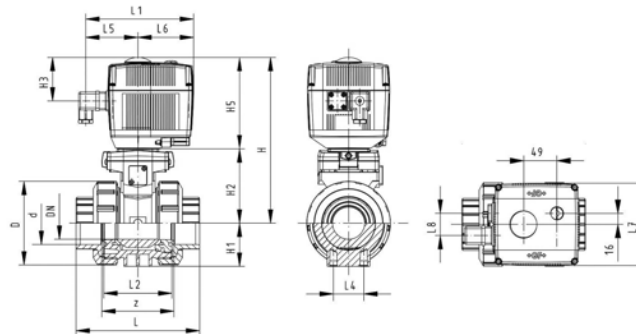
- Built on with electric actuator EA11
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Voltage 24 V AC/DC
- Control range 90°<
- Control time 5 s/90°<

### Option:

- Individual configuration of the valve (see form)

Rp [inch]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
3/8	10	10	70	<b>199 107 662</b>	<b>199 107 672</b>	2.100
1/2	15	10	185	<b>199 107 663</b>	<b>199 107 673</b>	2.100
3/4	20	10	350	<b>199 107 664</b>	<b>199 107 674</b>	2.200
1	25	10	700	<b>199 107 665</b>	<b>199 107 675</b>	2.300
1 1/4	32	10	1000	<b>199 107 666</b>	<b>199 107 676</b>	2.600
1 1/2	40	10	1600	<b>199 107 667</b>	<b>199 107 677</b>	3.000
2	50	10	3100	<b>199 107 668</b>	<b>199 107 678</b>	3.800

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





DN10/15 - 50

## Ball valve type 107 PVC-U 100-230V With manual emergency override With fixed flanges serrated metric

### Model:

- Built on with electric actuator EA11
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Voltage 100-230 V, 50-60 Hz
- Control range 90°<
- Control time 5 s/90°<
- Overall length according to EN 558-1
- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504

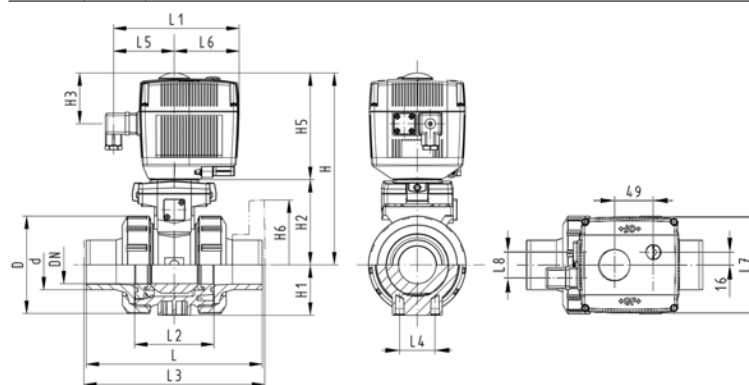
### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
20	15	½	10	185	<b>199 107 603</b>	<b>199 107 613</b>	2.300
25	20	¾	10	350	<b>199 107 604</b>	<b>199 107 614</b>	2.500
32	25	1	10	700	<b>199 107 605</b>	<b>199 107 615</b>	2.700
40	32	1 ¼	10	1000	<b>199 107 606</b>	<b>199 107 616</b>	3.200
50	40	1 ½	10	1600	<b>199 107 607</b>	<b>199 107 617</b>	3.700
63	50	2	10	3100	<b>199 107 608</b>	<b>199 107 618</b>	4.776

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
20	50	201	27	64	65	138	48	124	160	56	130	25	77	83	122
25	58	210	30	73	65	138	53	144	160	65	150	25	77	83	122
32	68	210	36	73	65	138	58	154	160	71	160	25	77	83	122
40	84	221	44	84	65	138	70	174	160	85	180	45	77	83	122
50	97	221	51	84	65	138	75	194	160	89	200	45	77	83	122
63	124	244	64	106	65	138	83	224	160	101	230	45	77	83	122

d [mm]	L8 [mm]
20	33
25	33
32	33
40	33
50	33
63	33





## Ball valve type 107 PVC-U 24V With manual emergency override With fixed flanges serrated metric

### Model:

- Built on with electric actuator EA11
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Voltage 24 V AC/DC
- Control range 90°<
- Control time 5 s/90°<
- Overall length according to EN 558-1
- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504

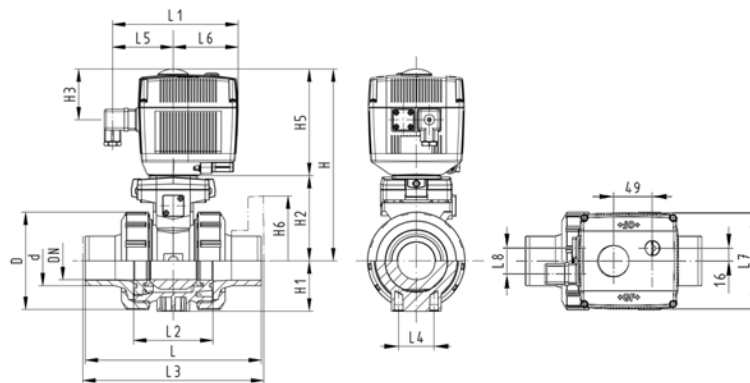
### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
20	15	½	10	185	<b>199 107 643</b>	<b>199 107 653</b>	2.300
25	20	¾	10	350	<b>199 107 644</b>	<b>199 107 654</b>	2.500
32	25	1	10	700	<b>199 107 645</b>	<b>199 107 655</b>	2.700
40	32	1 ¼	10	1000	<b>199 107 646</b>	<b>199 107 656</b>	3.200
50	40	1 ½	10	1600	<b>199 107 647</b>	<b>199 107 657</b>	3.700
63	50	2	10	3100	<b>199 107 648</b>	<b>199 107 658</b>	4.800

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
20	50	201	27	64	65	138	48	124	160	56	130	25	77	83	122
25	58	210	30	73	65	138	53	144	160	65	150	25	77	83	122
32	68	210	36	73	65	138	58	154	160	71	160	25	77	83	122
40	84	221	44	84	65	138	70	174	160	85	180	45	77	83	122
50	97	221	51	84	65	138	75	194	160	89	200	45	77	83	122
63	124	244	64	106	65	138	83	224	160	101	230	45	77	83	122

d [mm]	L8 [mm]
20	33
25	33
32	33
40	33
50	33
63	33





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

### Model:

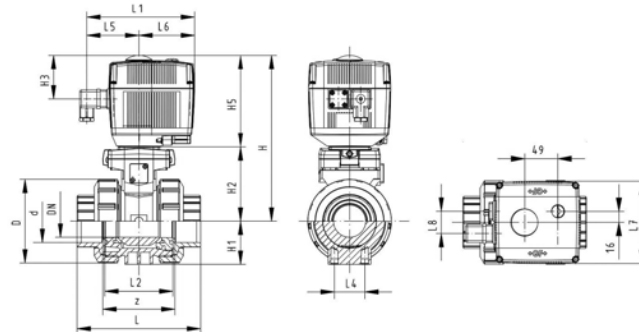
- Built on with electric actuator EA11
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Voltage 100-230 V, 50-60 Hz
- Control range 90°<
- Control time 5 s/90°<

### Option:

- Individual configuration of the valve (see form)

Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
3/8	10	10	70	199 107 402	199 107 412	2.100
1/2	15	10	185	199 107 403	199 107 413	2.100
3/4	20	10	350	199 107 404	199 107 414	2.200
1	25	10	700	199 107 405	199 107 415	2.300
1 1/4	32	10	1000	199 107 406	199 107 416	2.600
1 1/2	40	10	1600	199 107 407	199 107 417	3.000
2	50	10	3100	199 107 408	199 107 418	3.800

Inch	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	L8 [mm]	z [mm]
3/8	50	200	27	64	64	137	92	161	56	25	79	1	122	67	60
1/2	50	200	27	64	64	137	95	161	56	25	79	83	122	67	60
3/4	58	209	30	73	64	137	110	161	65	25	79	83	122	67	69
1	68	209	36	73	64	137	123	161	71	25	79	83	122	67	75
1 1/4	84	220	44	84	64	137	146	161	85	45	79	83	122	67	89
1 1/2	97	220	51	84	64	137	157	161	89	45	79	83	122	67	97
2	124	243	64	106	64	137	183	161	101	45	79	83	122	67	110







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

### Model:

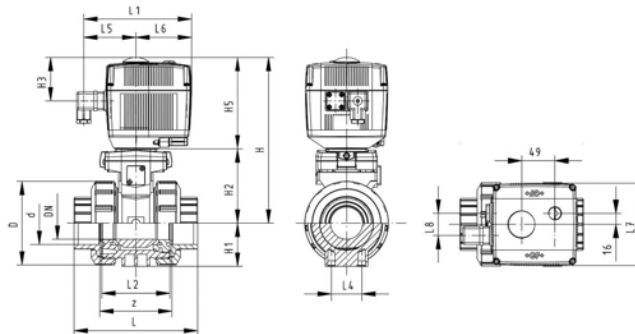
- Built on with electric actuator EA11
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Voltage 24 V AC/DC
- Control range 90°<
- Control time 5 s/90°<

### Option:

- Individual configuration of the valve (see form)

Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
3/8	10	10	70	<b>199 107 442</b>	<b>199 107 452</b>	2.100
1/2	15	10	185	<b>199 107 443</b>	<b>199 107 453</b>	2.100
3/4	20	10	350	<b>199 107 444</b>	<b>199 107 454</b>	2.200
1	25	10	700	<b>199 107 445</b>	<b>199 107 455</b>	2.300
1 1/4	32	10	1000	<b>199 107 446</b>	<b>199 107 456</b>	2.600
1 1/2	40	10	1600	<b>199 107 447</b>	<b>199 107 457</b>	3.000
2	50	10	3100	<b>199 107 448</b>	<b>199 107 458</b>	3.800

Inch	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	L8 [mm]	z [mm]
3/8	50	200	27	64	64	137	92	161	56	25	79	83	122	67	60
1/2	50	200	27	64	64	137	95	161	56	25	79	83	122	67	60
3/4	58	209	30	73	64	137	110	161	65	25	79	83	122	67	69
1	68	209	36	73	64	137	123	161	71	25	79	83	122	67	75
1 1/4	84	220	44	84	64	137	146	161	85	45	79	83	122	67	89
1 1/2	97	220	51	84	64	137	157	161	89	45	79	83	122	67	97
2	124	243	64	106	64	137	183	161	101	45	79	83	122	67	110





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

### Model:

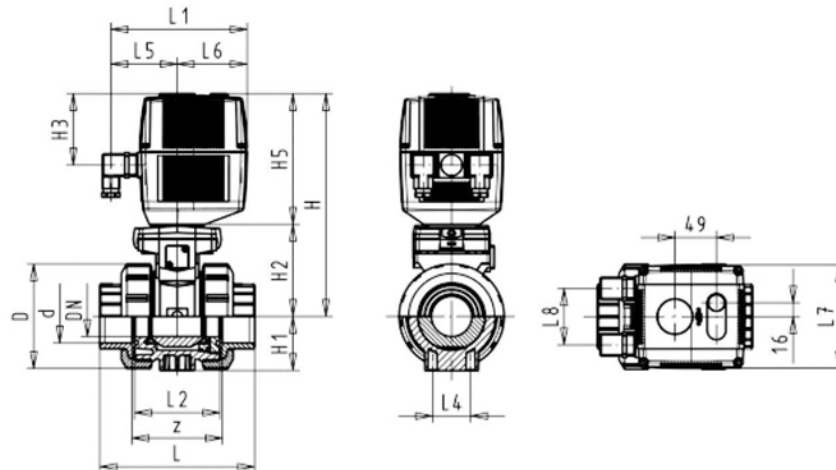
- Assignment of actuators EA21 (DN10/15-50), EA31 (DN65-100 if available)
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- Integrated stainless steel mounting inserts
- Voltage 100-230 V, 50-60 Hz
- Control range 90°<
- Control time: EA21: 5s/90°<, EA31: 15s/90°<

### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	70	199 130 002	199 130 012	2.100
20	15	10	185	199 130 003	199 130 013	2.100
25	20	10	350	199 130 004	199 130 014	2.200
32	25	10	700	199 130 005	199 130 015	2.300
40	32	10	1000	199 130 006	199 130 016	2.600
50	40	10	1600	199 130 007	199 130 017	3.000
63	50	10	3100	199 130 008	199 130 018	3.800
75	65	10	5000	199 130 009	199 130 019	3.900
90	80	10	7000	199 130 010	199 130 020	4.800
110	100	10	11000	199 130 011	199 130 021	6.300

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





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

### Model:

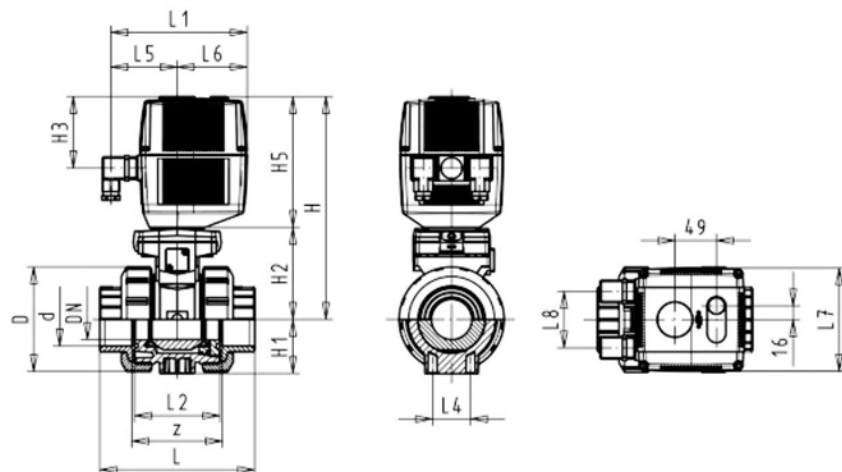
- Assignment of actuators EA21 (DN10/15-50), EA31 (DN65-100 if available)
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Voltage 24 V AC/DC
- Control range 90°<
- Control time: EA21: 5s/90°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

### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	70	<b>199 130 042</b>	<b>199 130 052</b>	2.100
20	15	10	185	<b>199 130 043</b>	<b>199 130 053</b>	2.100
25	20	10	350	<b>199 130 044</b>	<b>199 130 054</b>	2.200
32	25	10	700	<b>199 130 045</b>	<b>199 130 055</b>	2.300
40	32	10	1000	<b>199 130 046</b>	<b>199 130 056</b>	2.600
50	40	10	1600	<b>199 130 047</b>	<b>199 130 057</b>	3.000
63	50	10	3100	<b>199 130 048</b>	<b>199 130 058</b>	3.800
75	65	10	5000	<b>199 130 049</b>	<b>199 130 059</b>	3.900
90	80	10	7000	<b>199 130 050</b>	<b>199 130 060</b>	4.800
110	100	10	11000	<b>199 130 051</b>	<b>199 130 061</b>	6.300

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	347	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





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




### Model:

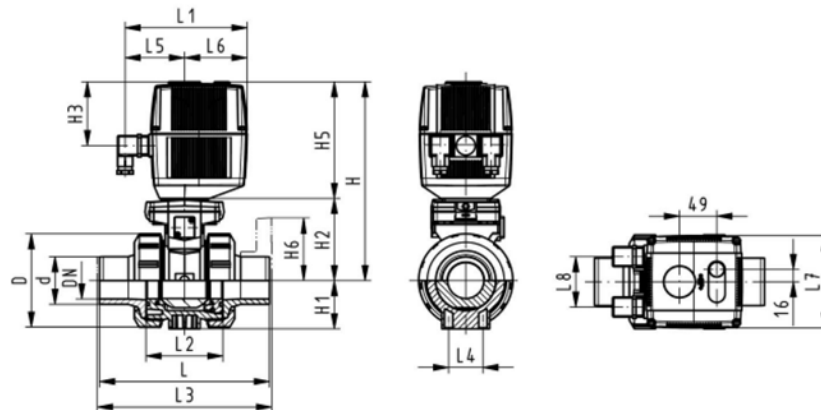
- Assignment of actuators EA21 (DN10/15-50), EA31 (DN65-100 if available)
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- Integrated stainless steel mounting inserts
- Voltage 100-230 V, 50-60 Hz
- Control range 90°<
- Control time: EA21: 5s/90°<, EA31: 15s/90°<

### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	70	<b>199 130 022</b>	<b>199 130 032</b>	2.100
20	15	10	185	<b>199 130 023</b>	<b>199 130 033</b>	2.100
25	20	10	350	<b>199 130 024</b>	<b>199 130 034</b>	2.200
32	25	10	700	<b>199 130 025</b>	<b>199 130 035</b>	2.300
40	32	10	1000	<b>199 130 026</b>	<b>199 130 036</b>	2.600
50	40	10	1600	<b>199 130 027</b>	<b>199 130 037</b>	3.000
63	50	10	3100	<b>199 130 028</b>	<b>199 130 038</b>	3.800
 75	65	10	5000	<b>199 130 029</b>	<b>199 130 039</b>	4.000
 90	80	10	7000	<b>199 130 030</b>	<b>199 130 040</b>	5.000
 110	100	10	11000	<b>199 130 031</b>	<b>199 130 041</b>	6.500

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





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

### Model:

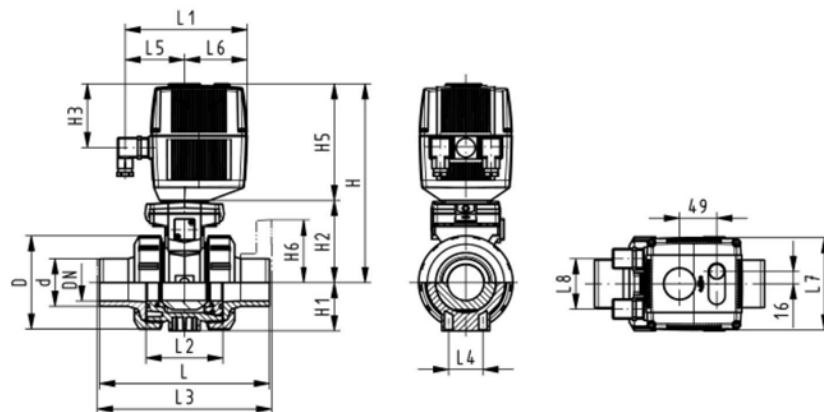
- Assignment of actuators EA21 (DN10/15-50), EA31 (DN65-100 if available)
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Voltage 24 V AC/DC
- Control range 90°<
- Control time: EA21: 5s/90°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

### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	70	<b>199 130 062</b>	<b>199 130 072</b>	2.100
20	15	10	185	<b>199 130 063</b>	<b>199 130 073</b>	2.100
25	20	10	350	<b>199 130 064</b>	<b>199 130 074</b>	2.200
32	25	10	700	<b>199 130 065</b>	<b>199 130 075</b>	2.300
40	32	10	1000	<b>199 130 066</b>	<b>199 130 076</b>	2.600
50	40	10	1600	<b>199 130 067</b>	<b>199 130 077</b>	3.000
63	50	10	3100	<b>199 130 068</b>	<b>199 130 078</b>	3.800
75	65	10	5000	<b>199 130 069</b>	<b>199 130 079</b>	4.000
90	80	10	7000	<b>199 130 070</b>	<b>199 130 080</b>	5.000
110	100	10	11000	<b>199 130 071</b>	<b>199 130 081</b>	6.500

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





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

### Model:

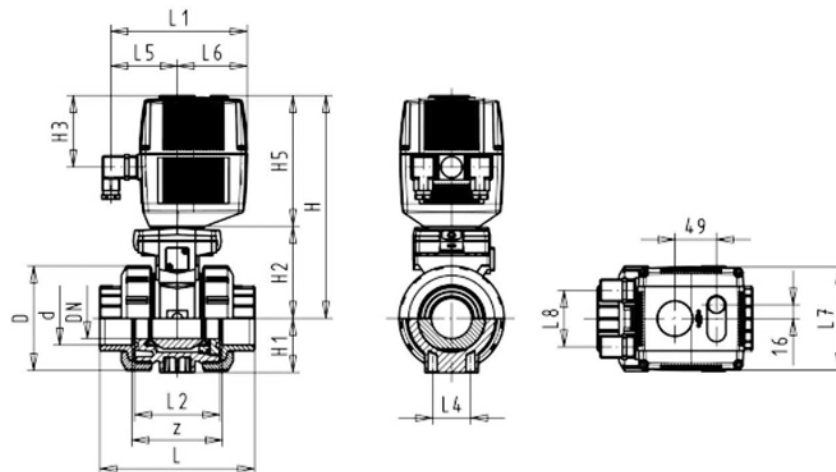
- Assignment of actuators EA21 (DN10/15-50), EA31 (DN65-100 if available)
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- Integrated stainless steel mounting inserts
- Voltage 100-230 V, 50-60 Hz
- Control range 90°<
- Control time: EA21: 5s/90°<, EA31: 15s/90°<

### 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	<b>199 130 122</b>	<b>199 130 132</b>	2.100
1/2	15	10	185	<b>199 130 123</b>	<b>199 130 133</b>	2.100
3/4	20	10	350	<b>199 130 124</b>	<b>199 130 134</b>	2.200
1	25	10	700	<b>199 130 125</b>	<b>199 130 135</b>	2.300
1 1/4	32	10	1000	<b>199 130 126</b>	<b>199 130 136</b>	2.600
1 1/2	40	10	1600	<b>199 130 127</b>	<b>199 130 137</b>	3.000
2	50	10	3100	<b>199 130 128</b>	<b>199 130 138</b>	3.800
2 1/2	65	10	5000	<b>199 130 129</b>	<b>199 130 139</b>	3.900
3	80	10	7000	<b>199 130 130</b>	<b>199 130 140</b>	4.900
4	100	10	11000	<b>199 130 131</b>	<b>199 130 141</b>	6.300

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





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

### Model:

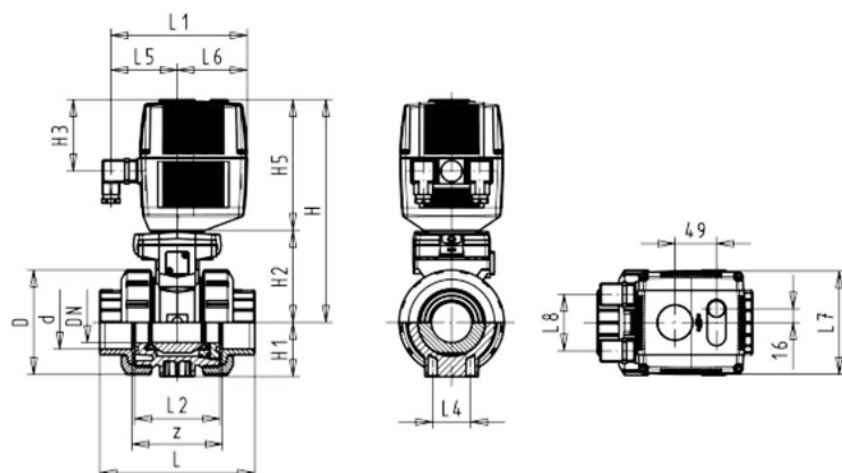
- Assignment of actuators EA21 (DN10/15-50), EA31 (DN65-100 if available)
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Voltage 24 V AC/DC
- Control range 90°<
- Control time: EA21: 5s/90°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

### Option:

- Individual configuration of the valve (see form)

Rp [inch]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
3/8	10	10	70	199 130 162	199 130 172	2.100
1/2	15	10	185	199 130 163	199 130 173	2.100
3/4	20	10	350	199 130 164	199 130 174	2.200
1	25	10	700	199 130 165	199 130 175	2.300
1 1/4	32	10	1000	199 130 166	199 130 176	2.600
1 1/2	40	10	1600	199 130 167	199 130 177	3.000
2	50	10	3100	199 130 168	199 130 178	3.800
2 1/2	65	10	5000	199 130 169	199 130 179	3.900
3	80	10	7000	199 130 170	199 130 180	4.900
4	100	10	11000	199 130 171	199 130 181	6.300

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

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

### Model:

- Assignment of actuators EA21 (DN10/15-50), EA31 (DN65-100 if available)
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- 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 558-1
- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504

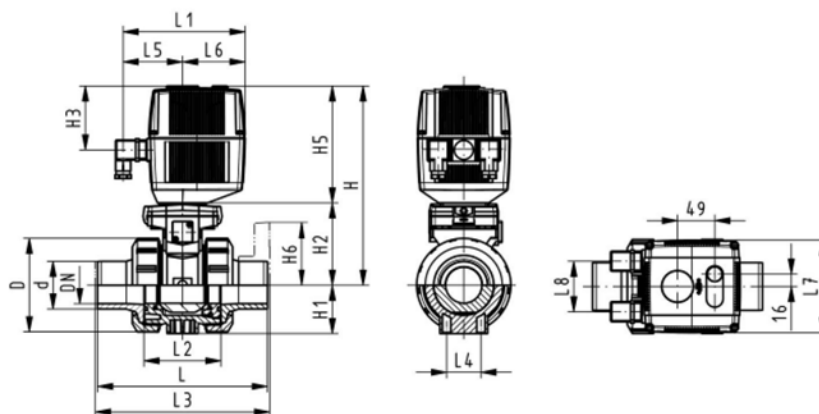
### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
20	15	½	10	185	<b>199 130 103</b>	<b>199 130 113</b>	2.300
25	20	¾	10	350	<b>199 130 104</b>	<b>199 130 114</b>	2.500
32	25	1	10	700	<b>199 130 105</b>	<b>199 130 115</b>	2.700
40	32	1 ¼	10	1000	<b>199 130 106</b>	<b>199 130 116</b>	3.200
50	40	1 ½	10	1600	<b>199 130 107</b>	<b>199 130 117</b>	3.700
63	50	2	10	3100	<b>199 130 108</b>	<b>199 130 118</b>	4.800

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
20	50	231	27	64	94	167	48	124	180	56	130	25	98	83	122
25	58	240	30	73	94	167	53	144	180	65	150	25	97	83	122
32	68	240	36	73	94	167	58	154	180	71	160	25	97	83	122
40	84	251	44	84	94	167	70	174	180	85	180	45	97	83	122
50	97	251	51	84	94	167	75	194	180	89	200	45	98	83	122
63	124	273	64	106	94	167	83	224	180	101	230	45	97	83	122

d [mm]	L8 [mm]
20	66
25	66
32	66
40	66
50	66
63	66







DN10/15 - 50

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

### Model:

- Assignment of actuators EA21 (DN10/15-50), EA31 (DN65-100 if available)
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- 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 558-1
- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504

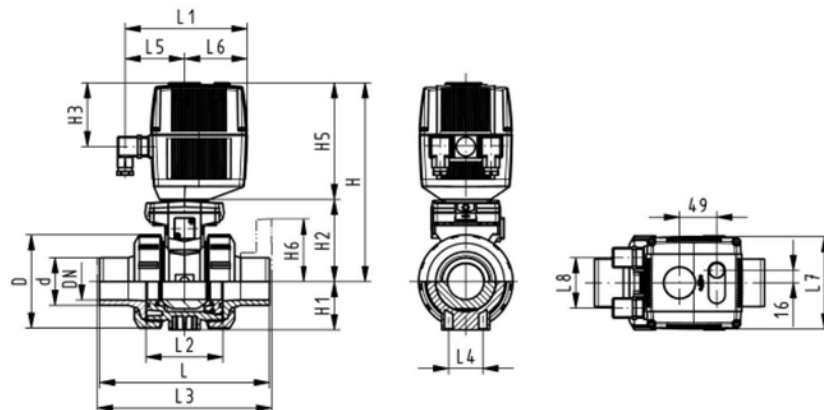
### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
20	15	½	10	185	<b>199 130 143</b>	<b>199 130 153</b>	2.300
25	20	¾	10	350	<b>199 130 144</b>	<b>199 130 154</b>	2.500
32	25	1	10	700	<b>199 130 145</b>	<b>199 130 155</b>	2.700
40	32	1 ¼	10	1000	<b>199 130 146</b>	<b>199 130 156</b>	3.200
50	40	1 ½	10	1600	<b>199 130 147</b>	<b>199 130 157</b>	3.700
63	50	2	10	3100	<b>199 130 148</b>	<b>199 130 158</b>	4.800

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
20	50	231	27	64	94	167	48	124	180	56	130	25	97	83	122
25	58	240	30	73	94	167	53	144	180	65	150	25	97	83	122
32	68	240	36	73	94	167	58	154	180	71	160	25	97	83	122
40	84	251	44	84	94	167	70	174	180	85	180	45	97	83	122
50	97	251	51	84	94	167	75	194	180	89	200	45	97	83	122
63	124	273	64	106	94	167	83	224	180	101	230	45	97	83	122

d [mm]	L8 [mm]
20	66
25	66
32	66
40	66
50	66
63	66





## Ball valve type 130 PVC-U 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)
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- 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 558-1
- Connecting dimensions: ISO 7005, EN 1092, BS 4504, DIN 2501; bolt circle PN 10

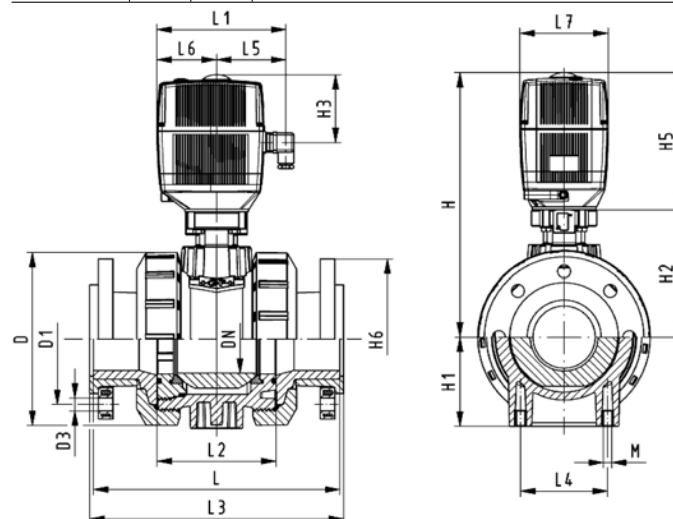
### Option:

- 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>199 134 349</b>	<b>199 134 359</b>	8.100
90	80	10	7000	<b>199 134 350</b>	<b>199 134 360</b>	9.900
110	100	10	11000	<b>199 134 351</b>	<b>199 134 361</b>	13.200

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]
75	166	346	85	156	94	190	93	284	180	136	290	70	98	83
90	200	358	105	168	94	190	100	300	180	141	310	70	98	83
110	238	365	123	175	94	190	110	340	180	164	350	120	98	83

d [mm]	L7 [mm]	L8 [mm]
75	122	66
90	122	66
110	122	66





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

### Model:

- Assignment of actuators EA21 (DN10/15-50), EA31 (DN65-100 if available)
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- 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 558-1
- Connecting dimensions: ISO 7005, EN 1092, BS 4504, DIN 2501; bolt circle PN 10

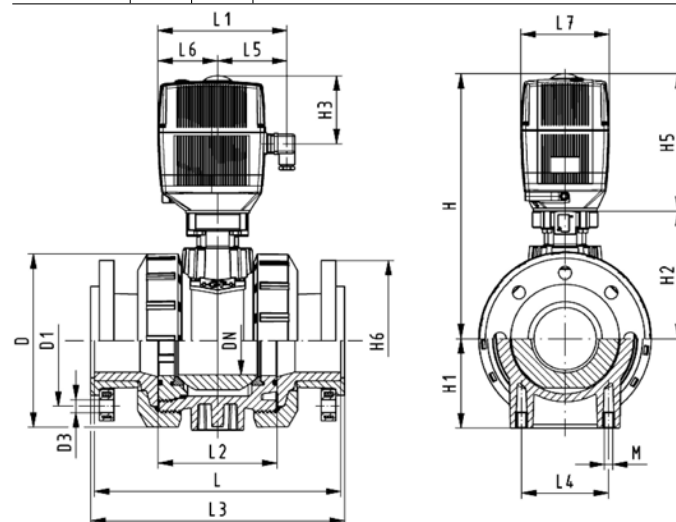
### Option:

- 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>199 134 369</b>	<b>199 134 379</b>	8.100
90	80	10	7000	<b>199 134 370</b>	<b>199 134 380</b>	9.900
110	100	10	11000	<b>199 134 371</b>	<b>199 134 381</b>	13.200

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]
75	166	346	85	156	94	190	93	284	180	136	290	70	98	83
90	200	358	105	168	94	190	100	300	180	141	310	70	98	83
110	238	365	123	175	94	190	110	340	180	164	350	120	98	83

d [mm]	L7 [mm]	L8 [mm]
75	122	66
90	122	66
110	122	66





DN10/15 - 50

## Ball valve type 134 PVC-U 100-230V With manual emergency override With solvent cement sockets Inch BS

### Model:

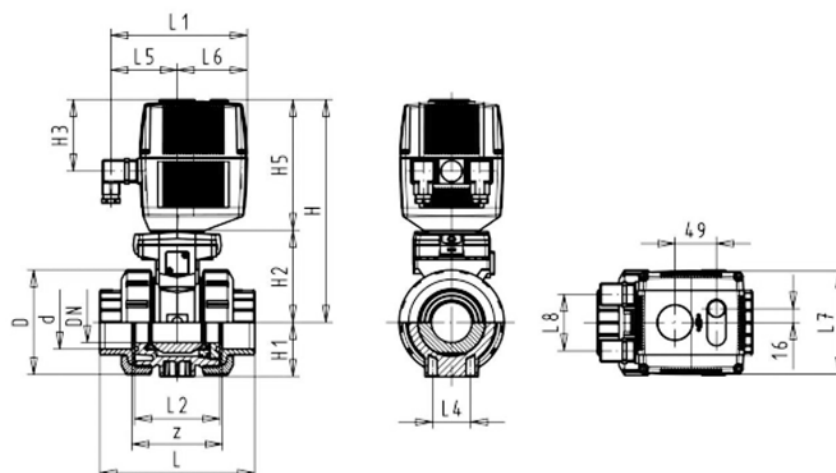
- Assignment of actuators EA21 (DN10/15-50), EA31 (DN65-100 if available)
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Voltage 100-230 V, 50-60 Hz
- Control range 90°<
- Control time: EA21: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

### Option:

- Individual configuration of the valve (see form)

Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg	
3/8	10	10	70	199 134 002	199 134 012	2.100	
1/2	15	10	185	199 134 003	199 134 013	2.100	
3/4	20	10	350	199 134 004	199 134 014	2.200	
1	25	10	700	199 134 005	199 134 015	2.300	
1 1/4	32	10	1000	199 134 006	199 134 016	2.600	
1 1/2	40	10	1600	199 134 007	199 134 017	3.000	
2	50	10	3100	199 134 008	199 134 018	3.800	
2 1/2	65	10	5000	199 134 009	199 134 019	3.900	
3	80	10	7000	199 134 010	199 134 020	4.800	
4	100	10	11000	199 134 011	199 134 021	6.200	

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	60
1/2	50	231	27	64	94	167	95	180	56	25	97	83	122	60
3/4	58	240	30	73	94	167	110	180	65	25	97	83	122	69
1	68	240	36	73	94	167	123	180	71	25	97	83	122	75
1 1/4	84	251	44	84	94	167	146	180	85	45	97	83	122	89
1 1/2	97	251	51	84	94	167	157	180	89	45	97	83	122	97
2	124	273	64	106	94	167	183	180	101	45	97	83	122	110
2 1/2	166	347	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

## Ball valve type 134 PVC-U 24V With manual emergency override With solvent cement sockets Inch BS

### Model:

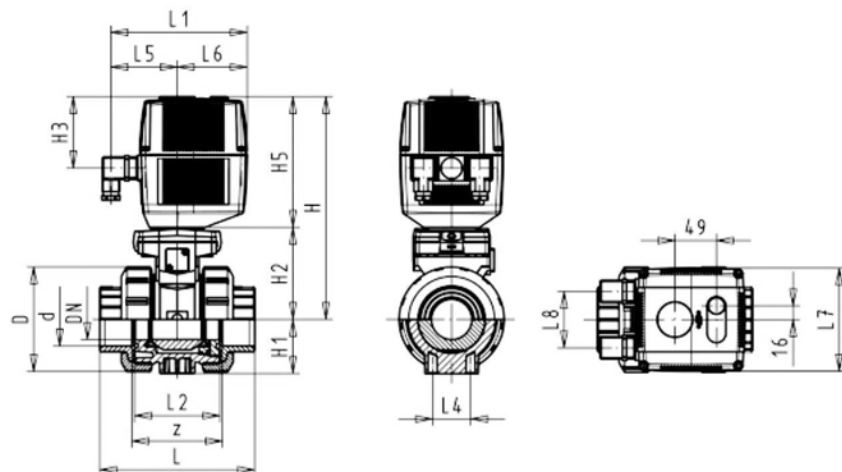
- Assignment of actuators EA21 (DN10/15-50), EA31 (DN65-100 if available)
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Voltage 24 V AC/DC
- Control range 90°<
- Control time: EA21: 5s/90°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

### Option:

- Individual configuration of the valve (see form)

Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
3/8	10	10	70	199 134 042	199 134 052	2.100
1/2	15	10	185	199 134 043	199 134 053	2.100
3/4	20	10	350	199 134 044	199 134 054	2.200
1	25	10	700	199 134 045	199 134 055	2.300
1 1/4	32	10	1000	199 134 046	199 134 056	2.600
1 1/2	40	10	1600	199 134 047	199 134 057	3.000
2	50	10	3100	199 134 048	199 134 058	3.800
2 1/2	65	10	5000	199 134 049	199 134 059	3.900
3	80	10	7000	199 134 050	199 134 060	4.800
4	100	10	11000	199 134 051	199 134 061	6.200

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	60
1/2	50	231	27	64	94	167	95	180	56	25	97	83	122	60
3/4	58	240	30	73	94	167	110	180	65	25	97	83	122	69
1	68	240	36	73	94	167	123	180	71	25	97	83	122	75
1 1/4	84	251	44	84	94	167	146	180	85	45	97	83	122	89
1 1/2	97	251	51	84	94	167	157	180	89	45	97	83	122	97
2	124	273	64	106	94	167	183	180	101	45	97	83	122	110
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



# Copiable

## Configurator GF Ball Valve Type 546 PVC-U

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

### Ball valve

A01 Ball valve 546

#### Material

B01 PVC-U

#### Dimension

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

#### Version

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

#### Seals

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

#### Threaded inserts

F01	without threaded inserts
F02	with threaded inserts

#### Connecting parts

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

#### Multi-functional module

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

#### Handle

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

#### Mounting plate

L01	without mounting plate
L02	with mounting plate

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

left

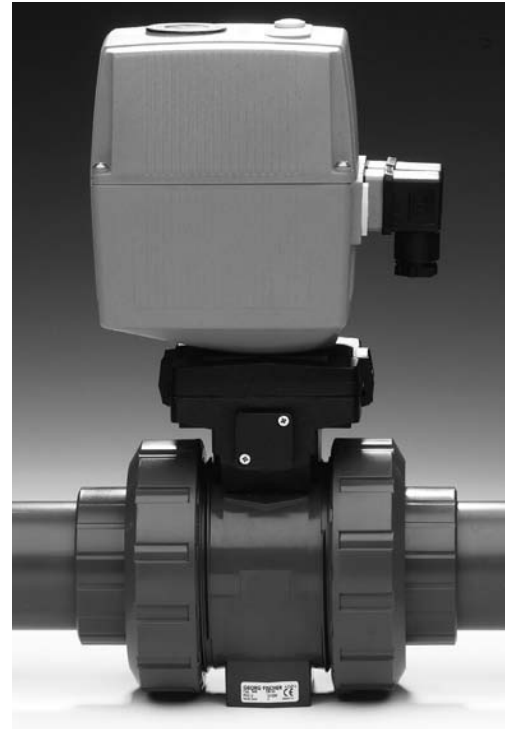
right

# 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 any type of operation.

**We supply what you put together.**



### Electric Actuator EA11

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

### Accessories EA11

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

### Electric Actuator EA21/31

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

### Accessories EA21

- W01 No accessories
- W02 Heating element
- W03 Cycle time module
- W04 Cycle time monitoring
- W05 Cycles monitoring
- W06 Motor current monitoring
- W07 2 limit switches Ag, Ni
- W08 2 limit switches Gold
- W09 2 limit switches NPN
- W10 2 limit switches PNP
- 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

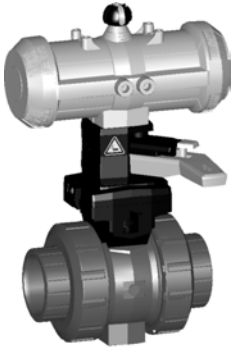
<b>T</b>	<b>U</b>	<b>T</b>	<b>W</b>	<b>W</b>	<b>W</b>	<b>W</b>	<b>W</b>	<b>W</b>





# Ball valves pneumatic

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



DN10/15 - 50

### Model:

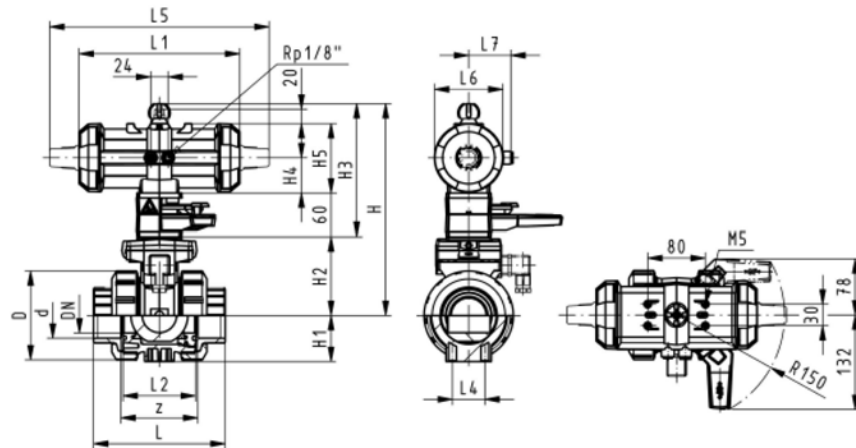
- Built on with pneumatic actuator PA11/21
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90°<) 1-2 s

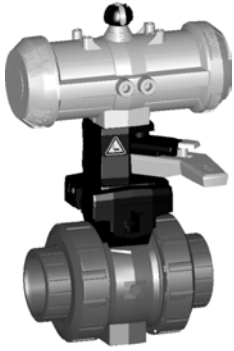
### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	70	199 230 002	199 230 012	1.459
20	15	10	185	199 230 003	199 230 013	1.459
25	20	10	350	199 230 004	199 230 014	1.576
32	25	10	700	199 230 005	199 230 015	1.700
40	32	10	1000	199 230 006	199 230 016	2.751
50	40	10	1600	199 230 007	199 230 017	3.073
63	50	10	3100	199 230 008	199 230 018	3.931

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	z [mm]
16	50	230	27	62	168	40	97	92	194	56	25	261	76	48	64
20	50	230	27	62	168	40	97	95	194	56	25	261	76	48	64
25	58	239	30	71	168	40	97	110	194	65	25	261	76	48	72
32	68	239	36	71	168	40	97	123	194	71	25	261	76	48	79
40	84	271	44	84	187	51	115	146	224	85	45	305	95	59	94
50	97	271	51	84	187	51	115	157	224	89	45	305	95	59	95
63	124	293	64	106	187	51	115	183	224	101	45	305	95	59	107





DN10/15 - 50

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

### Model:

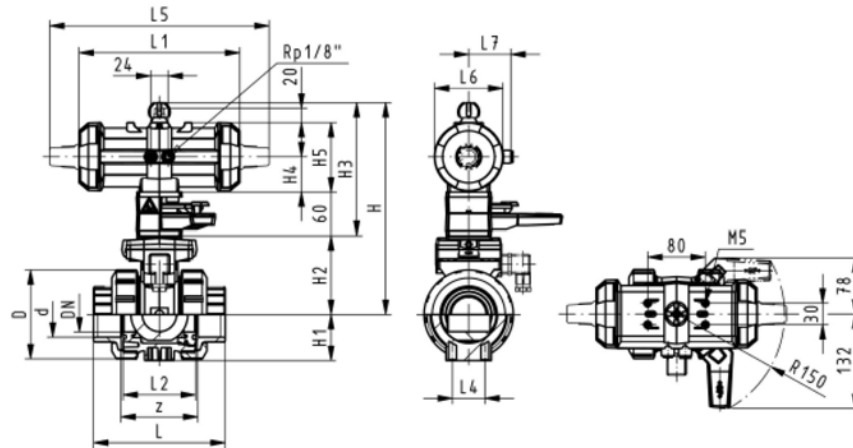
- Built on with pneumatic actuator PA11/21
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90° < 1-2 s

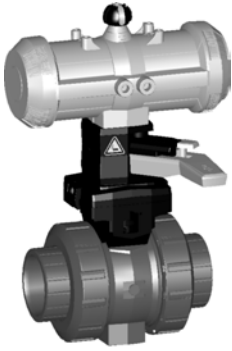
### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	70	199 230 042	199 230 052	1.459
20	15	10	185	199 230 043	199 230 053	1.459
25	20	10	350	199 230 044	199 230 054	1.576
32	25	10	700	199 230 045	199 230 055	1.700
40	32	10	1000	199 230 046	199 230 056	2.751
50	40	10	1600	199 230 047	199 230 057	3.073
63	50	10	3100	199 230 048	199 230 058	3.931

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	z [mm]
16	50	230	27	62	168	40	97	92	194	56	25	261	76	48	64
20	50	230	27	62	168	40	97	95	194	56	25	261	76	48	64
25	58	239	30	71	168	40	97	110	194	65	25	261	76	48	72
32	68	239	36	71	168	40	97	123	194	71	25	261	76	48	79
40	84	271	44	84	187	51	115	146	224	85	45	305	95	59	94
50	97	271	51	84	187	51	115	157	224	89	45	305	95	59	95
63	124	293	64	106	187	51	115	183	224	101	45	305	95	59	107





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

### Model:

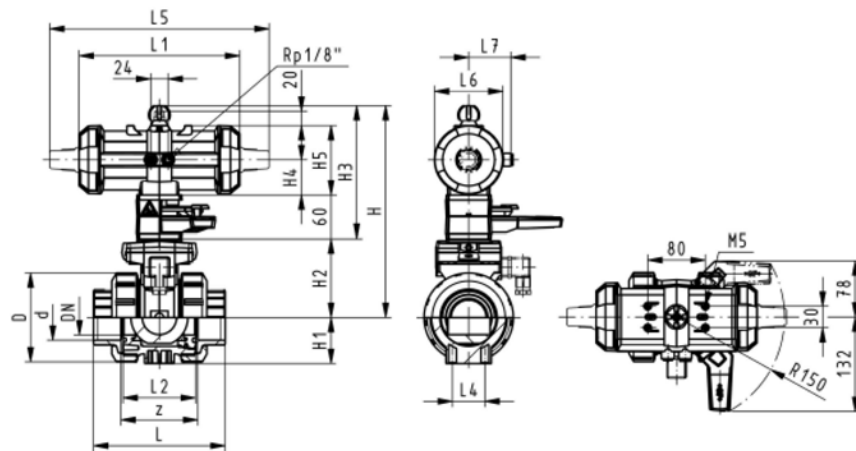
- Built on with pneumatic actuator PA11/21
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90° < 1-2 s

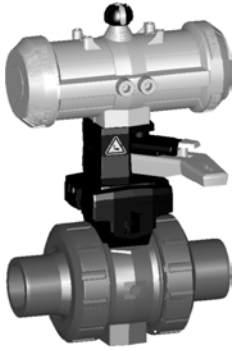
### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	70	199 230 082	199 230 092	1.459
20	15	10	185	199 230 083	199 230 093	1.459
25	20	10	350	199 230 084	199 230 094	1.576
32	25	10	700	199 230 085	199 230 095	1.700
40	32	10	1000	199 230 086	199 230 096	2.751
50	40	10	1600	199 230 087	199 230 097	3.073
63	50	10	3100	199 230 088	199 230 098	3.931

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	z [mm]
16	50	230	27	62	168	40	97	92	194	56	25	261	76	48	64
20	50	230	27	62	168	40	97	95	194	56	25	261	76	48	64
25	58	239	30	71	168	40	97	110	194	65	25	261	76	48	72
32	68	239	36	71	168	40	97	123	194	71	25	261	76	48	79
40	84	271	44	84	187	51	115	146	224	85	45	305	95	59	94
50	97	271	51	84	187	51	115	157	224	89	45	305	95	59	95
63	124	293	64	106	187	51	115	183	224	101	45	305	95	59	107





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

### Model:

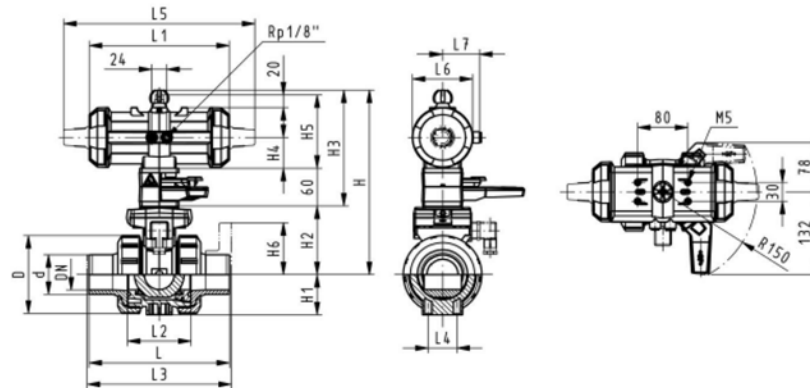
- Built on with pneumatic actuator PA11/21
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time  $90^\circ <$  1-2 s

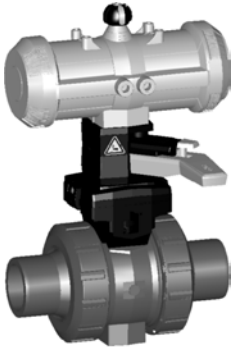
### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	70	199 230 022	199 230 032	1.459
20	15	10	185	199 230 023	199 230 033	1.459
25	20	10	350	199 230 024	199 230 034	1.576
32	25	10	700	199 230 025	199 230 035	1.700
40	32	10	1000	199 230 026	199 230 036	2.751
50	40	10	1600	199 230 027	199 230 037	3.073
63	50	10	3100	199 230 028	199 230 038	3.931

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
16	50	230	27	62	168	40	97	114	194	56	130	25	261	76	48
20	50	230	27	62	168	40	97	124	194	56	130	25	261	76	48
25	58	239	30	71	168	40	97	144	194	65	150	25	261	76	48
32	68	239	36	71	168	40	97	154	194	71	160	25	261	76	48
40	84	271	44	84	187	51	115	174	224	85	180	45	305	95	59
50	97	271	51	84	187	51	115	194	224	89	200	45	305	95	59
63	124	293	64	106	187	51	115	224	224	101	230	45	305	95	59





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

### Model:

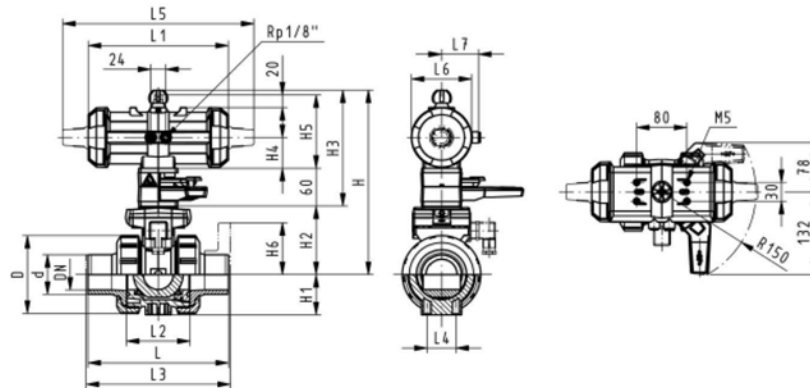
- Built on with pneumatic actuator PA11/21
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90°<) 1-2 s

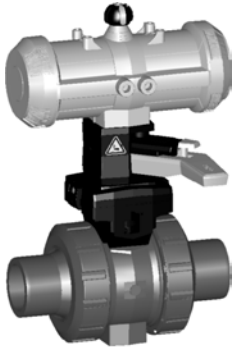
### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	70	199 230 062	199 230 072	1.459
20	15	10	185	199 230 063	199 230 073	1.459
25	20	10	350	199 230 064	199 230 074	1.576
32	25	10	700	199 230 065	199 230 075	1.700
40	32	10	1000	199 230 066	199 230 076	2.751
50	40	10	1600	199 230 067	199 230 077	3.073
63	50	10	3100	199 230 068	199 230 078	3.931

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
16	50	230	27	62	168	40	97	114	194	56	130	25	261	76	48
20	50	230	27	62	168	40	97	124	194	56	130	25	261	76	48
25	58	239	30	71	168	40	97	144	194	65	150	25	261	76	48
32	68	239	36	71	168	40	97	154	194	71	160	25	261	76	48
40	84	271	44	84	187	51	115	174	224	85	180	45	305	95	59
50	97	271	51	84	187	51	115	194	224	89	200	45	305	95	59
63	124	293	64	106	187	51	115	224	224	101	230	45	305	95	59





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

### Model:

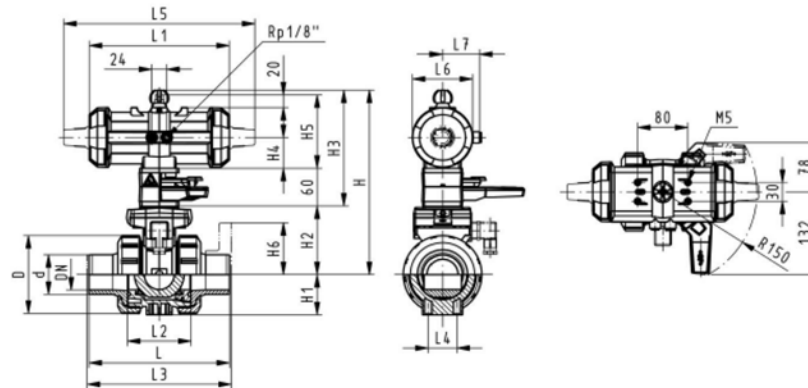
- Built on with pneumatic actuator PA11/21
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90° < 1-2 s

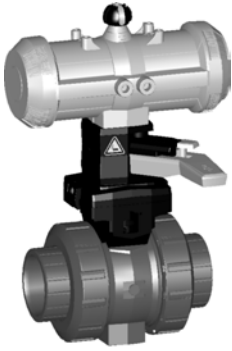
### Option:

- 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	<b>199 230 102</b>	<b>199 230 112</b>	1.459
20	15	10	185	<b>199 230 103</b>	<b>199 230 113</b>	1.459
25	20	10	350	<b>199 230 104</b>	<b>199 230 114</b>	1.576
32	25	10	700	<b>199 230 105</b>	<b>199 230 115</b>	1.700
40	32	10	1000	<b>199 230 106</b>	<b>199 230 116</b>	2.751
50	40	10	1600	<b>199 230 107</b>	<b>199 230 117</b>	3.073
63	50	10	3100	<b>199 230 108</b>	<b>199 230 118</b>	3.931

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
16	50	230	27	62	168	40	97	114	194	56	130	25	261	76	48
20	50	230	27	62	168	40	97	124	194	56	130	25	261	76	48
25	58	239	30	71	168	40	97	144	194	65	150	25	261	76	48
32	68	239	36	71	168	40	97	154	194	71	160	25	261	76	48
40	84	271	44	84	187	51	115	174	224	85	180	45	305	95	59
50	97	271	51	84	187	51	115	194	224	89	200	45	305	95	59
63	124	293	64	106	187	51	115	224	224	101	230	45	305	95	59





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

### Model:

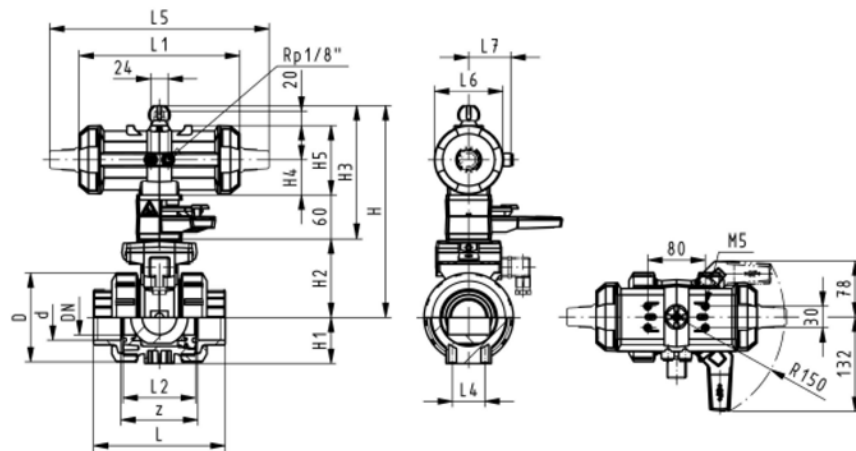
- Built on with pneumatic actuator PA11/21
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90° < 1-2 s

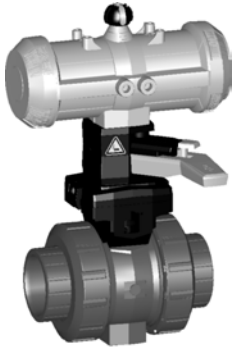
### Option:

- 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	199 230 362	199 230 372	1.500
1/2	15	10	185	199 230 363	199 230 373	1.500
3/4	20	10	350	199 230 364	199 230 374	1.600
1	25	10	700	199 230 365	199 230 375	1.700
1 1/4	32	10	1000	199 230 366	199 230 376	2.800
1 1/2	40	10	1600	199 230 367	199 230 377	3.100
2	50	10	3100	199 230 368	199 230 378	4.000

Rp [inch]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	z [mm]
3/8	50	230	27	62	168	40	97	92	194	56	25	261	76	48	64
1/2	50	230	27	62	168	40	97	95	194	56	25	261	76	48	64
3/4	58	239	30	71	168	40	97	110	194	65	25	261	76	48	72
1	68	239	36	71	168	40	97	123	194	71	25	261	76	48	79
1 1/4	84	271	44	84	187	51	115	146	224	85	45	305	95	59	94
1 1/2	97	271	51	84	187	51	115	157	224	89	45	305	95	59	95
2	124	293	64	106	187	51	115	183	224	101	45	305	95	59	107





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

### Model:

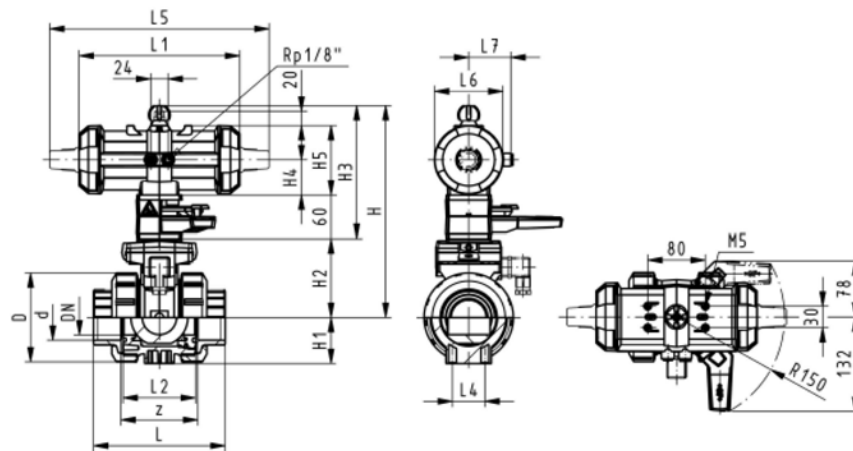
- Built on with pneumatic actuator PA11/21
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time  $90^\circ <$ ) 1-2 s

### Option:

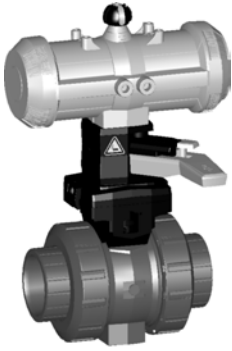
- Individual configuration of the valve (see form)

Rp [inch]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
$\frac{3}{8}$	10	10	70	<b>199 230 382</b>	<b>199 230 392</b>	1.500
$\frac{1}{2}$	15	10	185	<b>199 230 383</b>	<b>199 230 393</b>	1.500
$\frac{3}{4}$	20	10	350	<b>199 230 384</b>	<b>199 230 394</b>	1.600
1	25	10	700	<b>199 230 385</b>	<b>199 230 395</b>	1.700
1 $\frac{1}{4}$	32	10	1000	<b>199 230 386</b>	<b>199 230 396</b>	2.800
1 $\frac{1}{2}$	40	10	1600	<b>199 230 387</b>	<b>199 230 397</b>	3.100
2	50	10	3100	<b>199 230 388</b>	<b>199 230 398</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]
$\frac{3}{8}$	50	230	27	62	168	40	97	92	194	56	25	261	76	48	64
$\frac{1}{2}$	50	230	27	62	168	40	97	95	194	56	25	261	76	48	64
$\frac{3}{4}$	58	239	30	71	168	40	97	110	194	65	25	261	76	48	72
1	68	239	36	71	168	40	97	123	194	71	25	261	76	48	79
1 $\frac{1}{4}$	84	271	44	84	187	51	115	146	224	85	45	305	95	59	94
1 $\frac{1}{2}$	97	271	51	84	187	51	115	157	224	89	45	305	95	59	95
2	124	293	64	106	187	51	115	183	224	101	45	305	95	59	107







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

### Model:

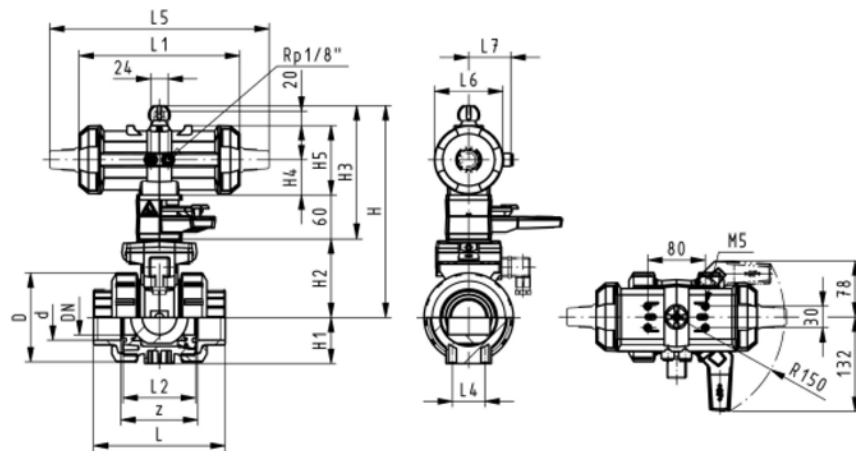
- Built on with pneumatic actuator PA11/21
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90°<) 1-2 s

### 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	<b>199 230 642</b>	<b>199 230 652</b>	1.500
1/2	15	10	185	<b>199 230 643</b>	<b>199 230 653</b>	1.500
3/4	20	10	350	<b>199 230 644</b>	<b>199 230 654</b>	1.600
1	25	10	700	<b>199 230 645</b>	<b>199 230 655</b>	1.700
1 1/4	32	10	1000	<b>199 230 646</b>	<b>199 230 656</b>	2.800
1 1/2	40	10	1600	<b>199 230 647</b>	<b>199 230 657</b>	3.100
2	50	10	3100	<b>199 230 648</b>	<b>199 230 658</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	230	27	62	168	40	97	92	194	56	25	261	76	48	64
1/2	50	230	27	62	168	40	97	95	194	56	25	261	76	48	64
3/4	58	239	30	71	168	40	97	110	194	65	25	261	76	48	72
1	68	239	36	71	168	40	97	123	194	71	25	261	76	48	79
1 1/4	84	271	44	84	187	51	115	146	224	85	45	305	95	59	94
1 1/2	97	271	51	84	187	51	115	157	224	89	45	305	95	59	95
2	124	293	64	106	187	51	115	183	224	101	45	305	95	59	107





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## Ball valve type 230 PVC-U FC (Fail safe to close) With manual override With fixed flanges serrated metric

### Model:

- Built on with pneumatic actuator PA11/21
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time  $90^\circ <$  1-2 s
- Overall length according to EN 558-1
- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504

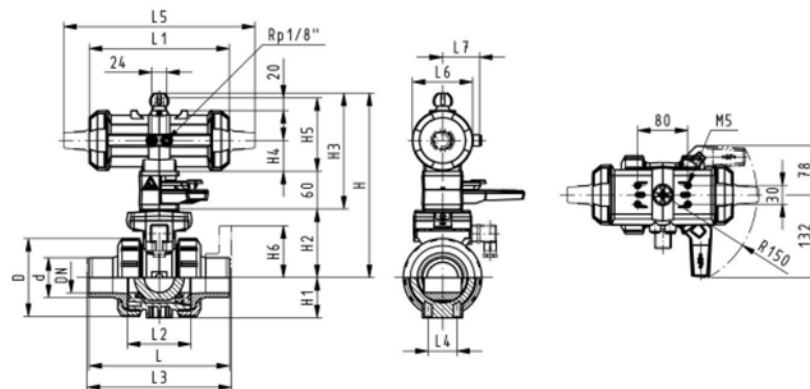
### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
20	15	1/2	10	185	<b>199 230 243</b>	<b>199 230 253</b>	1.700
25	20	3/4	10	350	<b>199 230 244</b>	<b>199 230 254</b>	1.900
32	25	1	10	700	<b>199 230 245</b>	<b>199 230 255</b>	2.100
40	32	1 1/4	10	1000	<b>199 230 246</b>	<b>199 230 256</b>	3.400
50	40	1 1/2	10	1600	<b>199 230 247</b>	<b>199 230 257</b>	3.800
63	50	2	10	3100	<b>199 230 248</b>	<b>199 230 258</b>	4.900

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]
20	50	230	27	62	168	40	97	48	124	194	56	130	25	261	76
25	58	239	30	71	168	40	97	53	144	194	65	150	25	261	76
32	68	239	36	71	168	40	97	58	154	194	71	160	25	261	76
40	84	271	44	84	187	51	115	70	174	224	85	180	45	305	95
50	97	271	51	84	187	51	115	75	194	224	89	200	45	305	95
63	124	293	64	106	187	51	115	83	224	224	101	230	45	305	95

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





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## Ball valve type 230 PVC-U FO (Fail safe to open) With manual override With fixed flanges serrated metric

### Model:

- Built on with pneumatic actuator PA11/21
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90° < 1-2 s
- Overall length according to EN 558-1
- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504

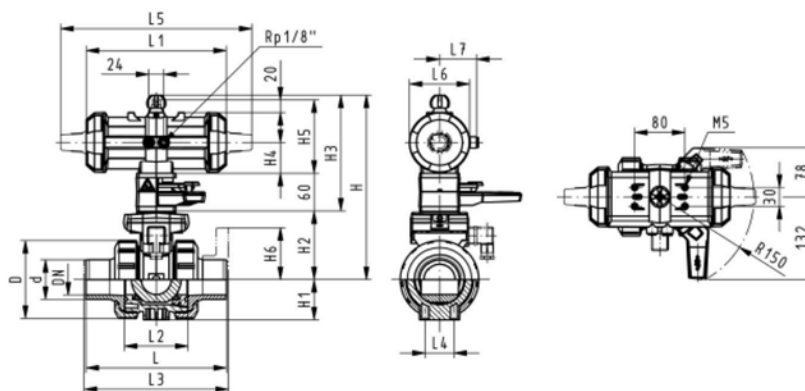
### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
20	15	1/2	10	185	<b>199 230 263</b>	<b>199 230 273</b>	1.700
25	20	3/4	10	350	<b>199 230 264</b>	<b>199 230 274</b>	1.900
32	25	1	10	700	<b>199 230 265</b>	<b>199 230 275</b>	2.100
40	32	1 1/4	10	1000	<b>199 230 266</b>	<b>199 230 276</b>	3.400
50	40	1 1/2	10	1600	<b>199 230 267</b>	<b>199 230 277</b>	3.800
63	50	2	10	3100	<b>199 230 268</b>	<b>199 230 278</b>	4.900

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]
20	50	230	27	62	168	40	97	48	124	194	56	130	25	261	76
25	58	239	30	71	168	40	97	53	144	194	65	150	25	261	76
32	68	239	36	71	168	40	97	58	154	194	71	160	25	261	76
40	84	271	44	84	187	51	115	70	174	224	85	180	45	305	95
50	97	271	51	84	187	51	115	75	194	224	89	200	45	305	95
63	124	293	64	106	187	51	115	83	224	224	101	230	45	305	95

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





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## Ball valve type 230 PVC-U DA (Double acting) With manual override With fixed flanges serrated metric

### Model:

- Built on with pneumatic actuator PA11/21
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time  $90^\circ <$  1-2 s
- Overall length according to EN 558-1
- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504

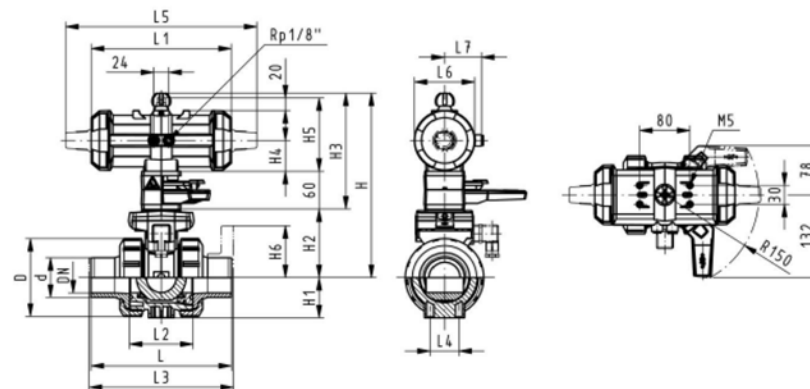
### Option:

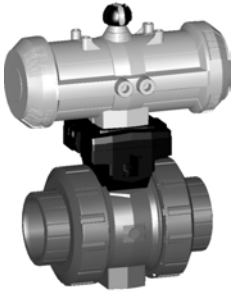
- Individual configuration of the valve (see form)

d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
20	15	1/2	10	185	<b>199 230 283</b>	<b>199 230 293</b>	1.700
25	20	3/4	10	350	<b>199 230 284</b>	<b>199 230 294</b>	1.900
32	25	1	10	700	<b>199 230 285</b>	<b>199 230 295</b>	2.100
40	32	1 1/4	10	1000	<b>199 230 286</b>	<b>199 230 296</b>	3.400
50	40	1 1/2	10	1600	<b>199 230 287</b>	<b>199 230 297</b>	3.800
63	50	2	10	3100	<b>199 230 288</b>	<b>199 230 298</b>	4.900

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]
20	50	230	27	62	168	40	97	48	124	194	56	130	25	261	76
25	58	239	30	71	168	40	97	53	144	194	65	150	25	261	76
32	68	239	36	71	168	40	97	58	154	194	71	160	25	261	76
40	84	271	44	84	187	51	115	70	174	224	85	180	45	305	95
50	97	271	51	84	187	51	115	75	194	224	89	200	45	305	95
63	124	293	64	106	187	51	115	83	224	224	101	230	45	305	95

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





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

### Model:

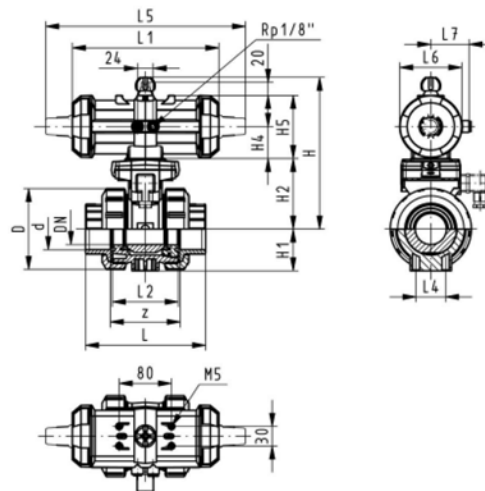
- Assignment of actuators PA11 (DN10/15-25), PA21 (DN32-50), PA30 (DN65), PA35 (DN80), PA40 (DN100)
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time  $90^\circ <$  1-2 s

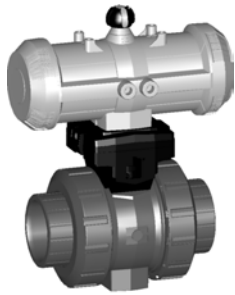
### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg	
16	10	10	70	199 230 122	199 230 132	1.159	
20	15	10	185	199 230 123	199 230 133	1.159	
25	20	10	350	199 230 124	199 230 134	1.276	
32	25	10	700	199 230 125	199 230 135	1.400	
40	32	10	1000	199 230 126	199 230 136	2.451	
50	40	10	1600	199 230 127	199 230 137	2.773	
63	50	10	3100	199 230 128	199 230 138	3.631	
75	65	10	5000	199 230 129	199 230 139	4.300	
90	80	10	7000	199 230 130	199 230 140	5.200	
110	100	10	11000	199 230 131	199 230 141	7.700	

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	z [mm]
16	50	167	27	62	40	97	92	194	56	25	261	76	48	64
20	50	167	27	62	40	97	95	194	56	25	261	76	48	64
25	58	176	30	71	40	97	110	194	65	25	261	76	48	72
32	68	176	36	71	40	97	123	194	71	25	261	76	48	79
40	84	210	44	84	51	115	146	224	85	45	305	95	59	94
50	97	210	51	84	51	115	157	224	89	45	305	95	59	95
63	124	232	64	106	51	115	183	224	101	45	305	95	59	107
75	166	262	85	156		70	233	218	136	70	276	65		144
90	200	281	105	168		78	254	259	141	70	341	72		151
110	238	292	123	175		86	301	287	164	120	369	80		174





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




### Model:

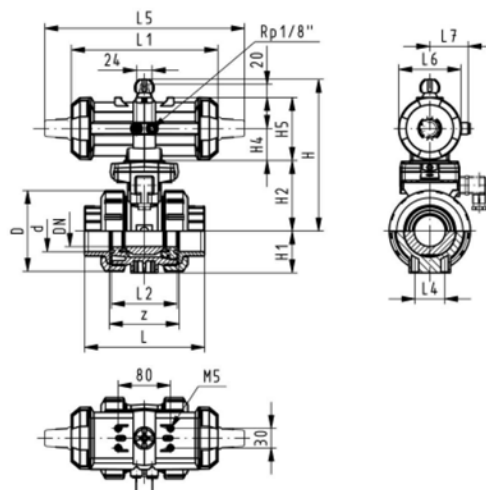
- Assignment of actuators PA11 (DN10/15-25), PA21 (DN32-50), PA30 (DN65), PA35 (DN80), PA40 (DN100)
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90° < 1-2 s

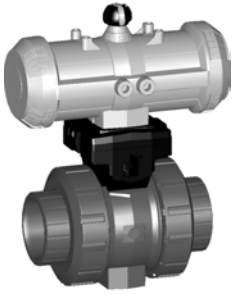
### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	70	<b>199 230 162</b>	<b>199 230 172</b>	1.159
20	15	10	185	<b>199 230 163</b>	<b>199 230 173</b>	1.159
25	20	10	350	<b>199 230 164</b>	<b>199 230 174</b>	1.276
32	25	10	700	<b>199 230 165</b>	<b>199 230 175</b>	1.400
40	32	10	1000	<b>199 230 166</b>	<b>199 230 176</b>	2.451
50	40	10	1600	<b>199 230 167</b>	<b>199 230 177</b>	2.773
63	50	10	3100	<b>199 230 168</b>	<b>199 230 178</b>	3.631
 75	65	10	5000	<b>199 230 169</b>	<b>199 230 179</b>	4.300
 90	80	10	7000	<b>199 230 170</b>	<b>199 230 180</b>	5.200
 110	100	10	11000	<b>199 230 171</b>	<b>199 230 181</b>	7.700

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	z [mm]
16	50	167	27	62	40	97	92	194	56	25	261	76	48	64
20	50	167	27	62	40	97	95	194	56	25	261	76	48	64
25	58	176	30	71	40	97	110	194	65	25	261	76	48	72
32	68	176	36	71	40	97	123	194	71	25	261	76	48	79
40	84	210	44	84	51	115	146	224	85	45	305	95	59	94
50	97	210	51	84	51	115	157	224	89	45	305	95	59	95
63	124	232	64	106	51	115	183	224	101	45	305	95	59	107
 75	166	262	85	156		70	233	218	136	70	276	65		144
 90	200	281	105	168		78	254	259	141	70	341	72		151
 110	238	292	123	175		86	301	287	164	120	369	80		174





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

### Model:

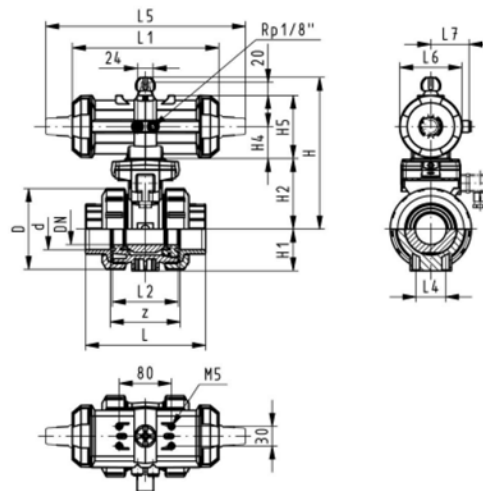
- Assignment of actuators: PA11 (DN10/15-25), PA21 (DN32-50), PA35 (DN65), PA40 (DN80), PA45 (DN100)
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90° < 1-2 s

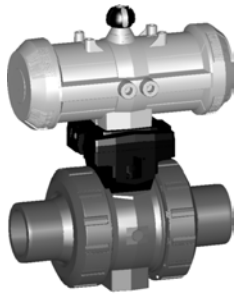
### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	70	199 230 202	199 230 212	1.159
20	15	10	185	199 230 203	199 230 213	1.159
25	20	10	350	199 230 204	199 230 214	1.276
32	25	10	700	199 230 205	199 230 215	1.400
40	32	10	1000	199 230 206	199 230 216	2.451
50	40	10	1600	199 230 207	199 230 217	2.773
63	50	10	3100	199 230 208	199 230 218	3.631
75	65	10	5000	199 230 209	199 230 219	3.100
90	80	10	7000	199 230 210	199 230 220	4.500
110	100	10	11000	199 230 211	199 230 221	5.900

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	z [mm]
16	50	167	27	62	40	97	92	194	56	25	261	76	48	64
20	50	167	27	62	40	97	95	194	56	25	261	76	48	64
25	58	176	30	71	40	97	110	194	65	25	261	76	48	72
32	68	176	36	71	40	97	123	194	71	25	261	76	48	79
40	84	210	44	84	51	115	146	224	85	45	305	95	59	94
50	97	210	51	84	51	115	157	224	89	45	305	95	59	95
63	124	232	64	106	51	115	183	224	101	45	305	95	59	107
75	166	257	85	156		66	233	144	136	70	190	60		144
90	200	274	105	168		70	254	152	141	70	198	65		151
110	238	273	123	175		78	301	169	164	120	235	72		174





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




### Model:

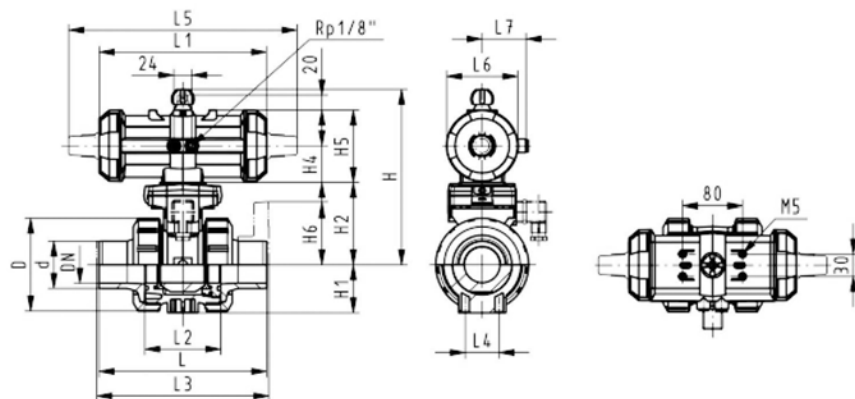
- Assignment of actuators PA11 (DN10/15-25), PA21 (DN32-50), PA30 (DN65), PA35 (DN80), PA40 (DN100)
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time  $90^\circ <$  1-2 s

### Option:

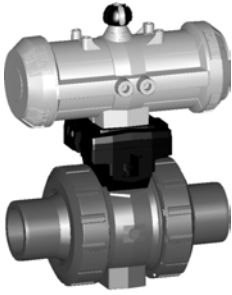
- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	70	<b>199 230 142</b>	<b>199 230 152</b>	1.159
20	15	10	185	<b>199 230 143</b>	<b>199 230 153</b>	1.159
25	20	10	350	<b>199 230 144</b>	<b>199 230 154</b>	1.276
32	25	10	700	<b>199 230 145</b>	<b>199 230 155</b>	1.400
40	32	10	1000	<b>199 230 146</b>	<b>199 230 156</b>	2.451
50	40	10	1600	<b>199 230 147</b>	<b>199 230 157</b>	2.773
63	50	10	3100	<b>199 230 148</b>	<b>199 230 158</b>	3.631
 75	65	10	5000	<b>199 230 149</b>	<b>199 230 159</b>	4.400
 90	80	10	7000	<b>199 230 150</b>	<b>199 230 160</b>	5.400
 110	100	10	11000	<b>199 230 151</b>	<b>199 230 161</b>	7.900

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
16	50	167	27	62	40	97	114	194	56	0	25	261	76	48
20	50	167	27	62	40	97	124	194	56	130	25	261	76	48
25	58	176	30	71	40	97	144	194	65	150	25	261	76	48
32	68	176	36	71	40	97	154	194	71	160	25	261	76	48
40	84	210	44	84	51	115	174	224	85	180	45	305	95	59
50	97	210	51	84	51	115	194	224	89	200	45	305	95	59
63	124	232	64	106	51	115	224	224	101	230	45	305	95	59
 75	166	262	85	156		70	284	218	136	290	70	276	65	
 90	200	281	105	168		78	300	259	141	310	70	341	72	
 110	238	292	123	175		86	340	287	164	350	120	369	80	







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

### Model:

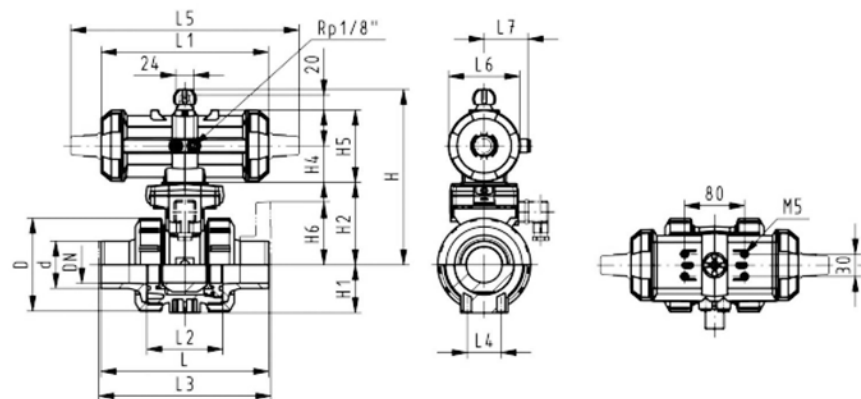
- Assignment of actuators PA11 (DN10/15-25), PA21 (DN32-50), PA30 (DN65), PA35 (DN80), PA40 (DN100)
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time  $90^\circ < 1-2$  s

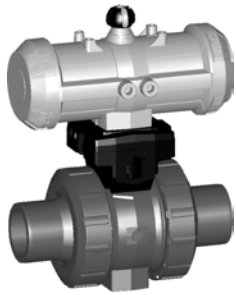
### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	70	199 230 182	199 230 192	1.159
20	15	10	185	199 230 183	199 230 193	1.159
25	20	10	350	199 230 184	199 230 194	1.276
32	25	10	700	199 230 185	199 230 195	1.400
40	32	10	1000	199 230 186	199 230 196	2.451
50	40	10	1600	199 230 187	199 230 197	2.773
63	50	10	3100	199 230 188	199 230 198	3.631
75	65	10	5000	199 230 189	199 230 199	4.400
90	80	10	7000	199 230 190	199 230 200	5.400
110	100	10	11000	199 230 191	199 230 201	7.900

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
16	50	167	27	62	40	97	114	194	56	0	25	261	76	48
20	50	167	27	62	40	97	124	194	56	130	25	261	76	48
25	58	176	30	71	40	97	144	194	65	150	25	261	76	48
32	68	176	36	71	40	97	154	194	71	160	25	261	76	48
40	84	210	44	84	51	115	174	224	85	180	45	305	95	59
50	97	210	51	84	51	115	194	224	89	200	45	305	95	59
63	124	232	64	106	51	115	224	224	101	230	45	305	95	59
75	166	262	85	156		70	284	218	136	290	70	276	65	
90	200	281	105	168		78	300	259	141	310	70	341	72	
110	238	292	123	175		86	340	287	164	350	120	369	80	





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

### Model:

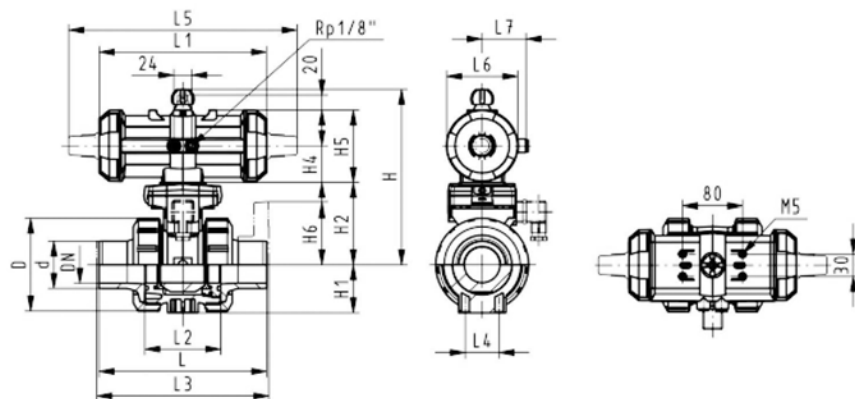
- Assignment of actuators: PA11 (DN10/15-25), PA21 (DN32-50), PA35 (DN65), PA40 (DN80), PA45 (DN100)
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time  $90^\circ <$  1-2 s

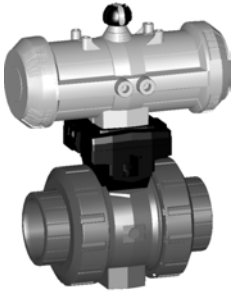
### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	70	199 230 222	199 230 232	1.159
20	15	10	185	199 230 223	199 230 233	1.159
25	20	10	350	199 230 224	199 230 234	1.276
32	25	10	700	199 230 225	199 230 235	1.400
40	32	10	1000	199 230 226	199 230 236	2.451
50	40	10	1600	199 230 227	199 230 237	2.773
63	50	10	3100	199 230 228	199 230 238	3.631
75	65	10	5000	199 230 229	199 230 239	3.300
90	80	10	7000	199 230 230	199 230 240	4.700
110	100	10	11000	199 230 231	199 230 241	6.200

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
16	50	167	27	62	40	97	114	194	56	0	25	261	76	48
20	50	167	27	62	40	97	124	194	56	130	25	261	76	48
25	58	176	30	71	40	97	144	194	65	150	25	261	76	48
32	68	176	36	71	40	97	154	194	71	160	25	261	76	48
40	84	210	44	84	51	115	174	224	85	180	45	305	95	59
50	97	210	51	84	51	115	194	224	89	200	45	305	95	59
63	124	232	64	106	51	115	224	224	101	230	45	305	95	59
75	166	257	85	156		66	284	144	136	290	70	190	60	
90	200	274	105	168		70	300	152	141	310	70	198	65	
110	238	273	123	175		78	340	169	164	350	120	235	72	





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

### Model:

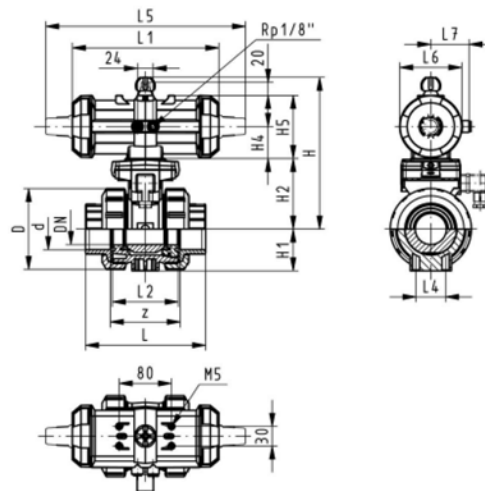
- Assignment of actuators PA11 (DN10/15-25), PA21 (DN32-50), PA30 (DN65), PA35 (DN80), PA40 (DN100)
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time  $90^\circ < 1-2$  s

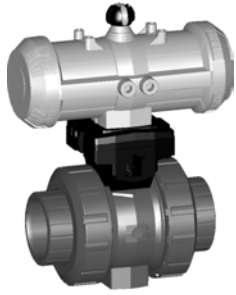
### Option:

- 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	199 230 662	199 230 672	1.200
1/2	15	10	185	199 230 663	199 230 673	1.200
3/4	20	10	350	199 230 664	199 230 674	1.300
1	25	10	700	199 230 665	199 230 675	1.400
1 1/4	32	10	1000	199 230 666	199 230 676	2.500
1 1/2	40	10	1600	199 230 667	199 230 677	2.800
2	50	10	3100	199 230 668	199 230 678	3.700
2 1/2	65	10	5000	199 230 669	199 230 679	4.300
3	80	10	7000	199 230 670	199 230 680	5.300
4	100	10	11000	199 230 671	199 230 681	7.700

Rp [inch]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	z [mm]
3/8	50	167	27	62	40	97	92	194	56	25	261	76	48	64
1/2	50	167	27	62	40	97	95	194	56	25	261	76	48	64
3/4	58	176	30	71	40	97	110	194	65	25	261	76	48	72
1	68	176	36	71	40	97	123	194	71	25	261	76	48	79
1 1/4	84	210	44	84	51	115	146	224	85	45	305	95	59	94
1 1/2	97	210	51	84	51	115	157	224	89	45	305	95	59	95
2	124	232	64	106	51	115	183	224	101	45	305	95	59	107
2 1/2	166	262	85	156		70	233	218	136	70	276	65		144
3	200	281	105	168		78	254	259	141	70	341	72		151
4	238	292	123	175		86	301	287	164	120	369	80		174





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

### Model:

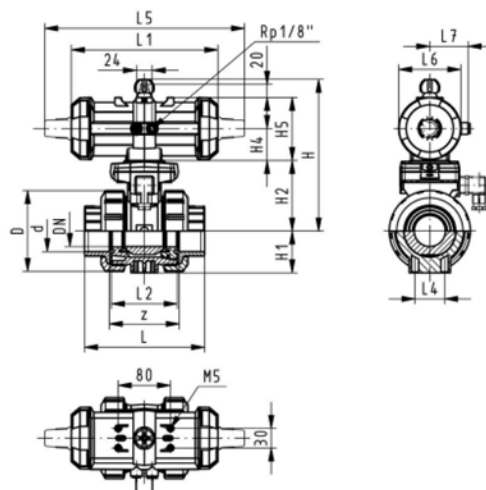
- Assignment of actuators PA11 (DN10/15-25), PA21 (DN32-50), PA30 (DN65), PA35 (DN80), PA40 (DN100)
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90°<) 1-2 s

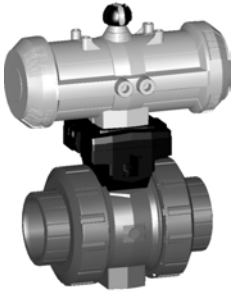
### Option:

- Individual configuration of the valve (see form)

Rp [inch]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
3/8	10	10	70	199 230 682	199 230 692	1.200
1/2	15	10	185	199 230 683	199 230 693	1.200
3/4	20	10	350	199 230 684	199 230 694	1.300
1	25	10	700	199 230 685	199 230 695	1.400
1 1/4	32	10	1000	199 230 686	199 230 696	2.500
1 1/2	40	10	1600	199 230 687	199 230 697	2.800
2	50	10	3100	199 230 688	199 230 698	3.700
2 1/2	65	10	5000	199 230 689	199 230 699	4.300
3	80	10	7000	199 230 690	199 230 700	5.300
4	100	10	11000	199 230 691	199 230 701	7.700

Rp [inch]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	z [mm]
3/8	50	167	27	62	40	97	92	194	56	25	261	76	48	64
1/2	50	167	27	62	40	97	95	194	56	25	261	76	48	64
3/4	58	176	30	71	40	97	110	194	65	25	261	76	48	72
1	68	176	36	71	40	97	123	194	71	25	261	76	48	79
1 1/4	84	210	44	84	51	115	146	224	85	45	305	95	59	94
1 1/2	97	210	51	84	51	115	157	224	89	45	305	95	59	95
2	124	232	64	106	51	115	183	224	101	45	305	95	59	107
2 1/2	166	262	85	156		70	233	218	136	70	276	65		144
3	200	281	105	168		78	254	259	141	70	341	72		151
4	238	292	123	175		86	301	287	164	120	369	80		174





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

### Model:

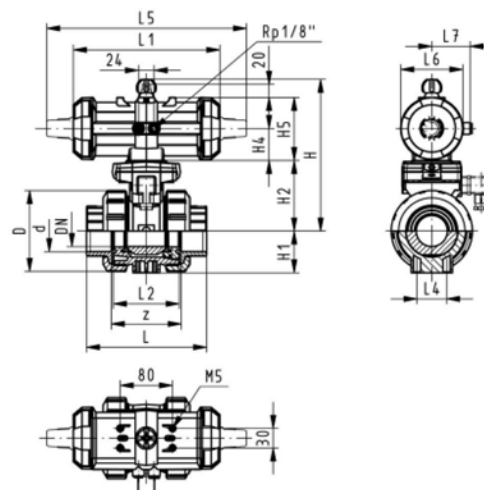
- Assignment of actuators: PA11 (DN10/15-25), PA21 (DN32-50), PA35 (DN65), PA40 (DN80), PA45 (DN100)
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90° < 1-2 s

### Option:

- Individual configuration of the valve (see form)

Rp [inch]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
3/8	10	10	70	199 230 712	199 230 732	1.200
1/2	15	10	185	199 230 713	199 230 733	1.200
3/4	20	10	350	199 230 714	199 230 734	1.300
1	25	10	700	199 230 715	199 230 735	1.400
1 1/4	32	10	1000	199 230 716	199 230 736	2.500
1 1/2	40	10	1600	199 230 717	199 230 737	2.800
2	50	10	3100	199 230 718	199 230 738	3.700
2 1/2	65	10	5000	199 230 719	199 230 739	3.200
3	80	10	7000	199 230 720	199 230 740	4.700
4	100	10	11000	199 230 721	199 230 741	6.000

Rp [inch]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	z [mm]
3/8	50	167	27	62	40	97	92	194	56	25	261	76	48	64
1/2	50	167	27	62	40	97	95	194	56	25	261	76	48	64
3/4	58	176	30	71	40	97	110	194	65	25	261	76	48	72
1	68	176	36	71	40	97	123	194	71	25	261	76	48	79
1 1/4	84	210	44	84	51	115	146	224	85	45	305	95	59	94
1 1/2	97	210	51	84	51	115	157	224	89	45	305	95	59	95
2	124	232	64	106	51	115	183	224	101	45	305	95	59	107
2 1/2	166	257	85	156		66	233	144	136	70	190	60		144
3	200	274	105	168		70	254	152	141	70	198	65		151
4	238	273	123	175		78	301	169	164	120	235	72		174





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## Ball valve type 230 PVC-U FC (Fail safe to close) Without manual override With fixed flanges serrated metric

### Model:

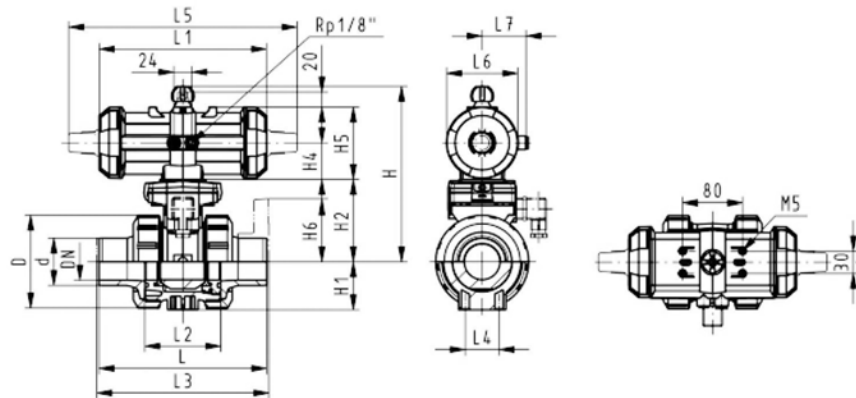
- Assignment of actuators PA11 (DN10/15-25), PA21 (DN32-50), PA30 (DN65), PA35 (DN80), PA40 (DN100)
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time  $90^\circ <$ ) 1-2 s
- Overall length according to EN 558-1
- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504

### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
20	15	1/2	10	185	<b>199 230 303</b>	<b>199 230 313</b>	1.700
25	20	3/4	10	350	<b>199 230 304</b>	<b>199 230 314</b>	1.900
32	25	1	10	700	<b>199 230 305</b>	<b>199 230 315</b>	2.100
40	32	1 1/4	10	1000	<b>199 230 306</b>	<b>199 230 316</b>	3.400
50	40	1 1/2	10	1600	<b>199 230 307</b>	<b>199 230 317</b>	3.800
63	50	2	10	3100	<b>199 230 308</b>	<b>199 230 318</b>	4.900

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H4 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
20	50	167	27	62	40	97	48	124	194	56	130	25	261	76	48
25	58	176	30	71	40	97	53	144	194	65	150	25	261	76	48
32	68	176	36	71	40	97	58	154	194	71	160	25	261	76	48
40	84	210	44	84	51	115	70	174	224	85	180	45	305	95	59
50	97	210	51	84	51	115	75	194	224	89	200	45	305	95	59
63	124	232	64	106	51	115	83	224	224	101	230	45	305	95	59





## Ball valve type 230 PVC-U FO (Fail safe to open) Without manual override With fixed flanges serrated metric

### Model:

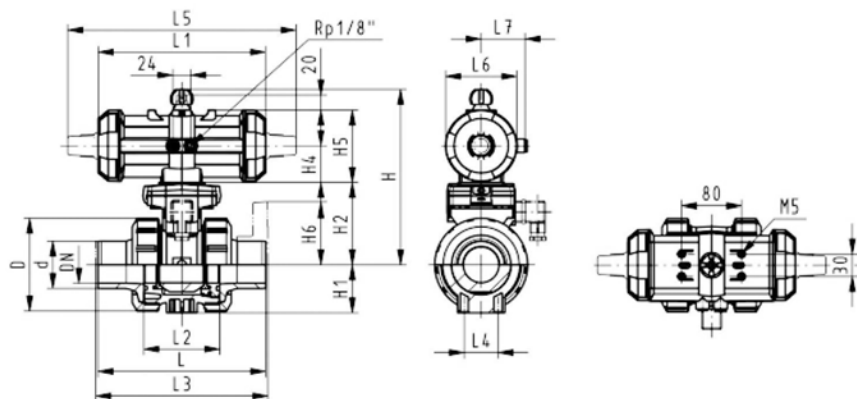
- Assignment of actuators PA11 (DN10/15-25), PA21 (DN32-50), PA30 (DN65), PA35 (DN80), PA40 (DN100)
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90°<) 1-2 s
- Overall length according to EN 558-1
- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504

### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
20	15	1/2	10	185	<b>199 230 323</b>	<b>199 230 333</b>	1.700
25	20	3/4	10	350	<b>199 230 324</b>	<b>199 230 334</b>	1.900
32	25	1	10	700	<b>199 230 325</b>	<b>199 230 335</b>	2.100
40	32	1 1/4	10	1000	<b>199 230 326</b>	<b>199 230 336</b>	3.400
50	40	1 1/2	10	1600	<b>199 230 327</b>	<b>199 230 337</b>	3.800
63	50	2	10	3100	<b>199 230 328</b>	<b>199 230 338</b>	4.900

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H4 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
20	50	167	27	62	40	97	48	124	194	56	130	25	261	76	48
25	58	176	30	71	40	97	53	144	194	65	150	25	261	76	48
32	68	176	36	71	40	97	58	154	194	71	160	25	261	76	48
40	84	210	44	84	51	115	70	174	224	85	180	45	305	95	59
50	97	210	51	84	51	115	75	194	224	89	200	45	305	95	59
63	124	232	64	106	51	115	83	224	224	101	230	45	305	95	59





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## Ball valve type 230 PVC-U DA (Double acting) Without manual override With fixed flanges metric

### Model:

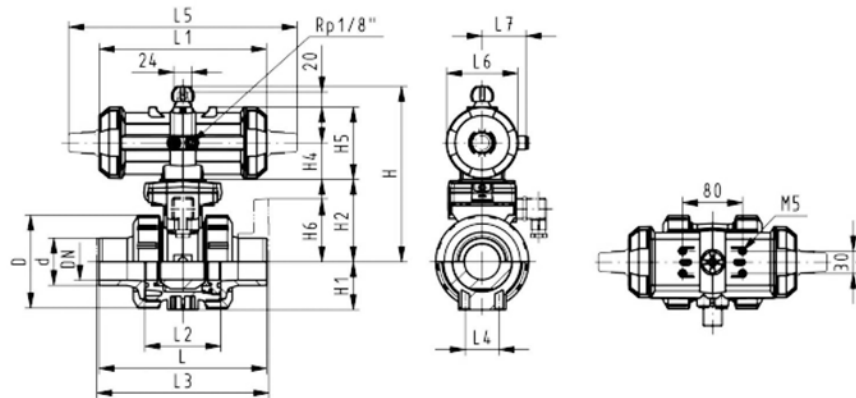
- Assignment of actuators: PA11 (DN10/15-25), PA21 (DN32-50), PA35 (DN65), PA40 (DN80), PA45 (DN100)
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time  $90^\circ <$ ) 1-2 s
- Overall length according to EN 558-1
- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504

### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
20	15	½	10	185	<b>199 230 343</b>	<b>199 230 353</b>	1.700
25	20	¾	10	350	<b>199 230 344</b>	<b>199 230 354</b>	1.900
32	25	1	10	700	<b>199 230 345</b>	<b>199 230 355</b>	2.100
40	32	1 ¼	10	1000	<b>199 230 346</b>	<b>199 230 356</b>	3.400
50	40	1 ½	10	1600	<b>199 230 347</b>	<b>199 230 357</b>	3.800
63	50	2	10	3100	<b>199 230 348</b>	<b>199 230 358</b>	4.900

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H4 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
20	50	167	27	62	40	97	48	124	194	56	130	25	261	76	48
25	58	176	30	71	40	97	53	144	194	65	150	25	261	76	48
32	68	176	36	71	40	97	58	154	194	71	160	25	261	76	48
40	84	210	44	84	51	115	70	174	224	85	180	45	305	95	59
50	97	210	51	84	51	115	75	194	224	89	200	45	305	95	59
63	124	232	64	106	51	115	83	224	224	101	230	45	305	95	59







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

### Model:

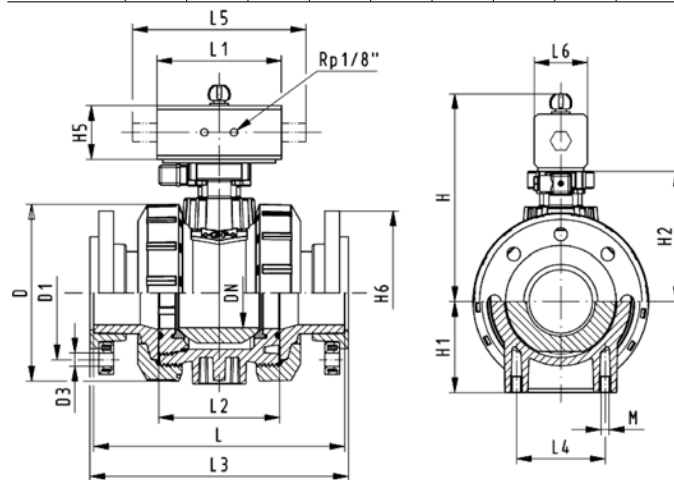
- Assignment of actuators PA11 (DN10/15-25), PA21 (DN32-50), PA30 (DN65), PA35 (DN80), PA40 (DN100)
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time  $90^\circ <$  1-2 s
- Overall length according to EN 558-1
- Connecting dimensions: ISO 7005, EN 1092, BS 4504, DIN 2501; bolt circle PN 10

### 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>199 234 469</b>	<b>199 234 479</b>	8.500
90	80	10	7000	<b>199 234 470</b>	<b>199 234 480</b>	10.300
110	100	10	11000	<b>199 234 471</b>	<b>199 234 481</b>	14.600

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]
75	166	262	85	156	70	93	284	218	136	290	70	276	65
90	200	281	105	168	78	100	300	259	141	310	70	341	72
110	238	292	123	175	86	110	340	287	164	350	120	369	80





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

### Model:

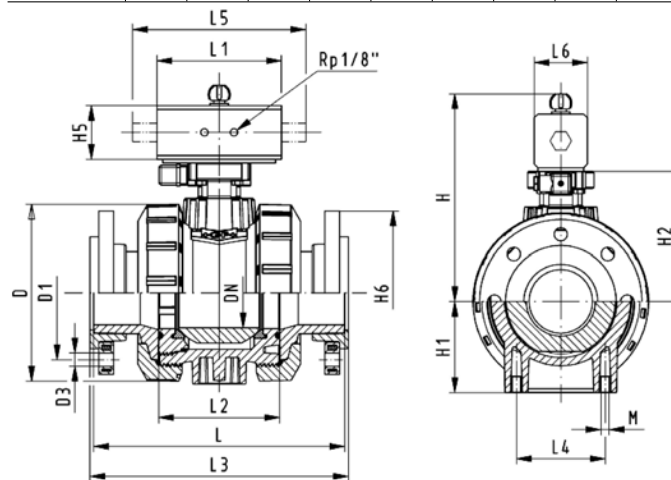
- Assignment of actuators PA11 (DN10/15-25), PA21 (DN32-50), PA30 (DN65), PA35 (DN80), PA40 (DN100)
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90° < 1-2 s
- Overall length according to EN 558-1
- Connecting dimensions: ISO 7005, EN 1092, BS 4504, DIN 2501; bolt circle PN 10

### 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>199 234 489</b>	<b>199 234 499</b>	8.500	
90	80	10	7000	<b>199 234 490</b>	<b>199 234 500</b>	10.300	
110	100	10	11000	<b>199 234 491</b>	<b>199 234 501</b>	14.600	

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	
75	166	262	85	156	70	93	284	218	136	290	70	276	65	
90	200	281	105	168	78	100	300	259	141	310	70	341	72	
110	238	292	123	175	86	110	340	287	164	350	120	369	80	





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

### Model:

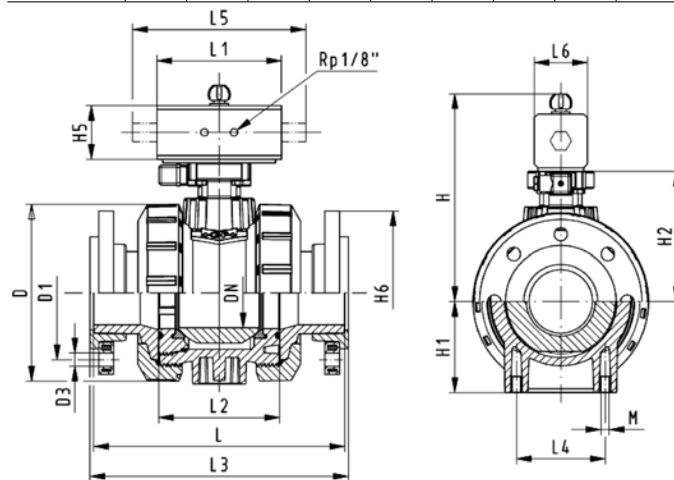
- Assignment of actuators: PA11 (DN10/15-25), PA21 (DN32-50), PA35 (DN65), PA40 (DN80), PA45 (DN100)
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time  $90^\circ <$  1-2 s
- Overall length according to EN 558-1
- Connecting dimensions: ISO 7005, EN 1092, BS 4504, DIN 2501; bolt circle PN 10

### 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>199 234 509</b>	<b>199 234 519</b>	7.300
90	80	10	7000	<b>199 234 510</b>	<b>199 234 520</b>	9.600
110	100	10	11000	<b>199 234 511</b>	<b>199 234 521</b>	12.800

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]
75	166	257	85	156	66	93	284	144	136	290	70	190	60
90	200	274	105	168	70	100	300	152	141	310	70	198	65
110	238	273	123	175	78	110	340	169	164	350	120	235	72

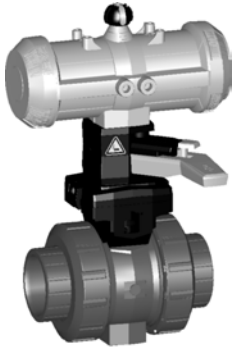


# Ball valves pneumatic

## Ball valve type 234 PVC-U FC (Fail safe to close)

### With manual override

### With solvent cement sockets Inch BS



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#### Model:

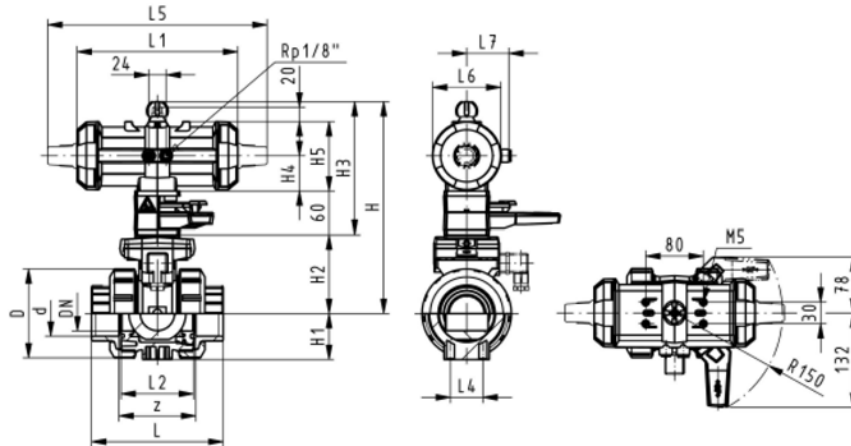
- Built on with pneumatic actuator PA11/21
- Control time 90° < 1-2 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

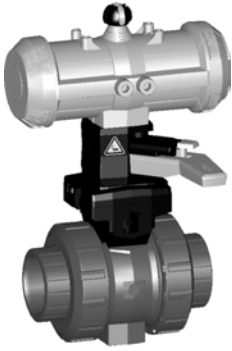
#### Option:

- Individual configuration of the valve (see form)

Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
3/8	10	10	70	199 234 002	199 234 012	1.500
1/2	15	10	185	199 234 003	199 234 013	1.500
3/4	20	10	350	199 234 004	199 234 014	1.600
1	25	10	700	199 234 005	199 234 015	1.700
1 1/4	32	10	1000	199 234 006	199 234 016	2.800
1 1/2	40	10	1600	199 234 007	199 234 017	3.100
2	50	10	3100	199 234 008	199 234 018	4.000

Inch	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	z [mm]
3/8	50	230	27	62	168	40	97	92	194	56	25	261	76	48	60
1/2	50	230	27	62	168	40	97	95	194	56	25	261	76	48	60
3/4	58	239	30	71	168	40	97	110	194	65	25	261	76	48	69
1	68	239	36	71	168	40	97	123	194	71	25	261	76	48	75
1 1/4	84	271	44	84	187	51	115	146	224	85	45	305	95	59	89
1 1/2	97	271	51	84	187	51	115	157	224	89	45	305	95	59	97
2	124	293	64	106	187	51	115	183	224	101	45	305	95	59	110





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## Ball valve type 234 PVC-U FO (Fail safe to open) With manual override With solvent cement sockets Inch BS

### Model:

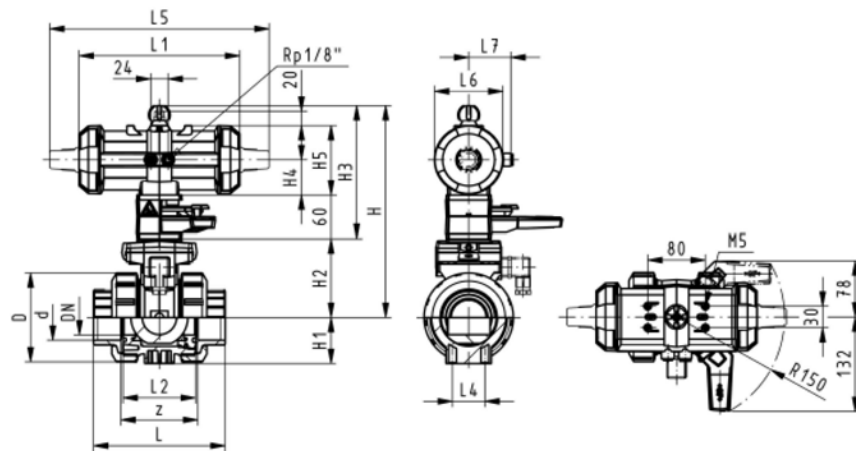
- Built on with pneumatic actuator PA11/21
- Control time 90°<) 1-2 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

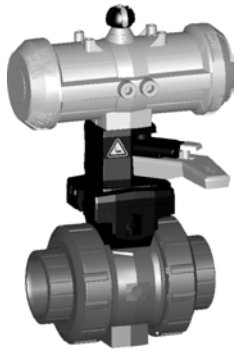
### Option:

- Individual configuration of the valve (see form)

Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
3/8	10	10	70	199 234 042	199 234 052	1.500
1/2	15	10	185	199 234 043	199 234 053	1.500
3/4	20	10	350	199 234 044	199 234 054	1.600
1	25	10	700	199 234 045	199 234 055	1.700
1 1/4	32	10	1000	199 234 046	199 234 056	2.800
1 1/2	40	10	1600	199 234 047	199 234 057	3.100
2	50	10	3100	199 234 048	199 234 058	4.000

Inch	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	z [mm]
3/8	50	230	27	62	168	40	97	92	194	56	25	261	76	48	60
1/2	50	230	27	62	168	40	97	95	194	56	25	261	76	48	60
3/4	58	239	30	71	168	40	97	110	194	65	25	261	76	48	69
1	68	239	36	71	168	40	97	123	194	71	25	261	76	48	75
1 1/4	84	271	44	84	187	51	115	146	224	85	45	305	95	59	89
1 1/2	97	271	51	84	187	51	115	157	224	89	45	305	95	59	97
2	124	293	64	106	187	51	115	183	224	101	45	305	95	59	110





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## Ball valve type 234 PVC-U DA (Double acting) With manual override With solvent cement sockets Inch BS

### Model:

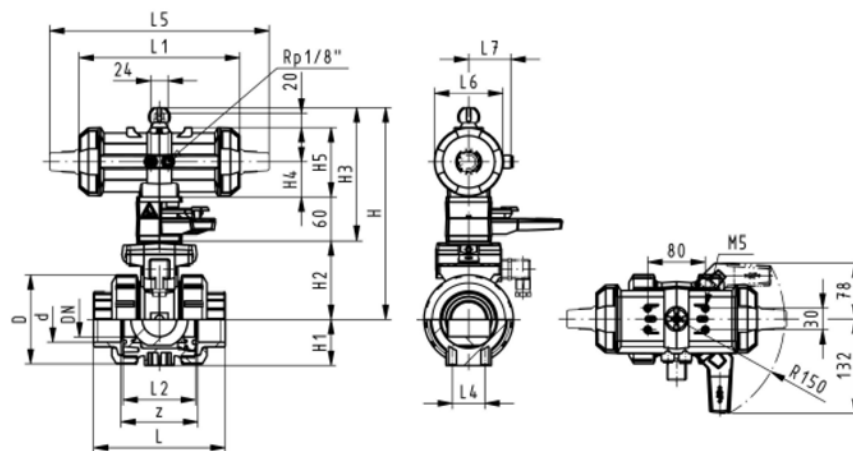
- Built on with pneumatic actuator PA11/21
- Control time  $90^\circ <$ ) 1-2 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

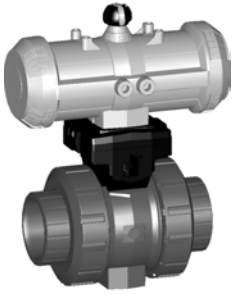
### Option:

- Individual configuration of the valve (see form)

Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
$\frac{3}{8}$	10	10	70	199 234 082	199 234 092	1.500
$\frac{1}{2}$	15	10	185	199 234 083	199 234 093	1.500
$\frac{3}{4}$	20	10	350	199 234 084	199 234 094	1.600
1	25	10	700	199 234 085	199 234 095	1.700
1 $\frac{1}{4}$	32	10	1000	199 234 086	199 234 096	2.800
1 $\frac{1}{2}$	40	10	1600	199 234 087	199 234 097	3.100
2	50	10	3100	199 234 088	199 234 098	4.000

Inch	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	z [mm]
$\frac{3}{8}$	50	230	27	62	168	40	97	92	194	56	25	261	76	48	60
$\frac{1}{2}$	50	230	27	62	168	40	97	95	194	56	25	261	76	48	60
$\frac{3}{4}$	58	239	30	71	168	40	97	110	194	65	25	261	76	48	69
1	68	239	36	71	168	40	97	123	194	71	25	261	76	48	75
1 $\frac{1}{4}$	84	271	44	84	187	51	115	146	224	85	45	305	95	59	89
1 $\frac{1}{2}$	97	271	51	84	187	51	115	157	224	89	45	305	95	59	97
2	124	293	64	106	187	51	115	183	224	101	45	305	95	59	110





DN10/15 - 50




## Ball valve type 234 PVC-U FC (Fail safe to close) Without manual override With solvent cement sockets Inch BS




### Model:

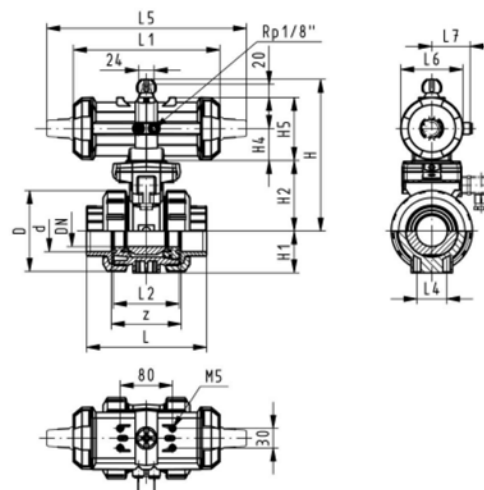
- Assignment of actuators PA11 (DN10/15-25), PA21 (DN32-50), PA30 (DN65), PA35 (DN80), PA40 (DN100)
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90° < 1-2 s

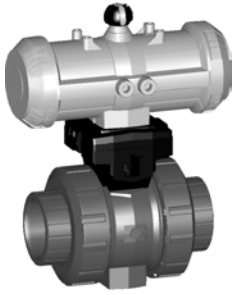
### Option:

- Individual configuration of the valve (see form)

Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
3/8	10	10	70	<b>199 234 122</b>	<b>199 234 132</b>	1.500
1/2	15	10	185	<b>199 234 123</b>	<b>199 234 133</b>	1.500
3/4	20	10	350	<b>199 234 124</b>	<b>199 234 134</b>	1.600
1	25	10	700	<b>199 234 125</b>	<b>199 234 135</b>	1.700
1 1/4	32	10	1000	<b>199 234 126</b>	<b>199 234 136</b>	2.800
1 1/2	40	10	1600	<b>199 234 127</b>	<b>199 234 137</b>	3.100
2	50	10	3100	<b>199 234 128</b>	<b>199 234 138</b>	4.000
 2 1/2	65	10	5000	<b>199 234 129</b>	<b>199 234 139</b>	4.300
 3	80	10	7000	<b>199 234 130</b>	<b>199 234 140</b>	5.200
 4	100	10	11000	<b>199 234 131</b>	<b>199 234 141</b>	7.600

Inch	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	z [mm]
3/8	50	167	27	62	40	97	92	194	56	25	261	76	48	60
1/2	50	167	27	62	40	97	95	194	56	25	261	76	48	60
3/4	58	176	30	71	40	97	110	194	65	25	261	76	48	69
1	68	176	36	71	40	97	123	194	71	25	261	76	48	75
1 1/4	84	210	44	84	51	115	146	224	85	45	305	95	59	89
1 1/2	97	210	51	84	51	115	157	224	89	45	305	95	59	97
2	124	232	64	106	51	115	183	224	101	45	305	95	59	110
 2 1/2	166	262	85	156		70	233	218	136	70	276	65		144
 3	200	281	105	168		78	254	259	141	70	341	72		151
 4	238	292	123	175		86	301	287	164	120	369	80		174





DN10/15 - 50

## Ball valve type 234 PVC-U FO (Fail safe to open) Without manual override With solvent cement sockets Inch BS

### Model:

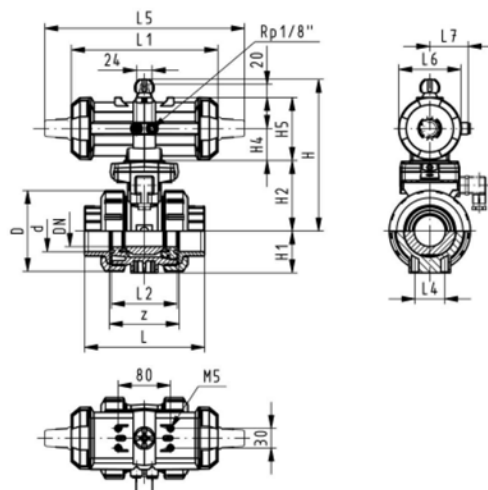
- Assignment of actuators PA11 (DN10/15-25), PA21 (DN32-50), PA30 (DN65), PA35 (DN80), PA40 (DN100)
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90°<) 1-2 s

### Option:

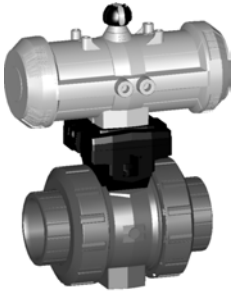
- Individual configuration of the valve (see form)

Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
3/8	10	10	70	199 234 162	199 234 172	1.500
1/2	15	10	185	199 234 163	199 234 173	1.500
3/4	20	10	350	199 234 164	199 234 174	1.600
1	25	10	700	199 234 165	199 234 175	1.700
1 1/4	32	10	1000	199 234 166	199 234 176	2.800
1 1/2	40	10	1600	199 234 167	199 234 177	3.100
2	50	10	3100	199 234 168	199 234 178	4.000
2 1/2	65	10	5000	199 234 169	199 234 179	4.300
3	80	10	7000	199 234 170	199 234 180	5.200
4	100	10	11000	199 234 171	199 234 181	7.600

Inch	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	z [mm]
3/8	50	167	27	62	40	97	92	194	56	25	261	76	48	60
1/2	50	167	27	62	40	97	95	194	56	25	261	76	48	60
3/4	58	176	30	71	40	97	110	194	65	25	261	76	48	69
1	68	176	36	71	40	97	123	194	71	25	261	76	48	75
1 1/4	84	210	44	84	51	115	146	224	85	45	305	95	59	89
1 1/2	97	210	51	84	51	115	157	224	89	45	305	95	59	97
2	124	232	64	106	51	115	183	224	101	45	305	95	59	110
2 1/2	166	262	85	156		70	233	218	136	70	276	65		144
3	200	281	105	168		78	254	259	141	70	341	72		151
4	238	292	123	175		86	301	287	164	120	369	80		174







DN10/15 - 50

## Ball valve type 234 PVC-U DA (Double acting) Without manual override With solvent cement sockets Inch BS

### Model:

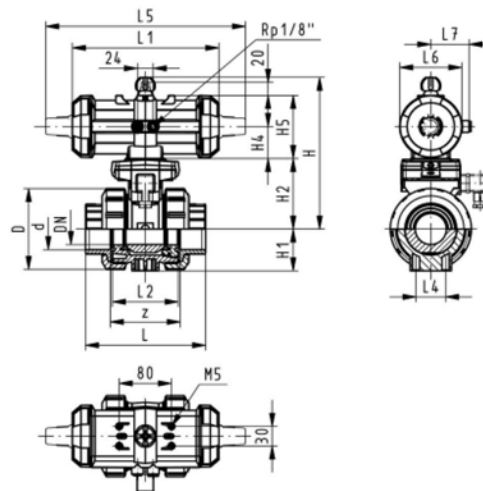
- Assignment of actuators: PA11 (DN10/15-25), PA21 (DN32-50), PA35 (DN65), PA40 (DN80), PA45 (DN100)
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90° < 1-2 s

### Option:

- Individual configuration of the valve (see form)

Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
3/8	10	10	70	<b>199 234 202</b>	<b>199 234 212</b>	1.500
1/2	15	10	185	<b>199 234 203</b>	<b>199 234 213</b>	1.500
3/4	20	10	350	<b>199 234 204</b>	<b>199 234 214</b>	1.600
1	25	10	700	<b>199 234 205</b>	<b>199 234 215</b>	1.700
1 1/4	32	10	1000	<b>199 234 206</b>	<b>199 234 216</b>	2.800
1 1/2	40	10	1600	<b>199 234 207</b>	<b>199 234 217</b>	3.100
2	50	10	3100	<b>199 234 208</b>	<b>199 234 218</b>	4.000
2 1/2	65	10	5000	<b>199 234 209</b>	<b>199 234 219</b>	3.100
3	80	10	7000	<b>199 234 210</b>	<b>199 234 220</b>	4.600
4	100	10	11000	<b>199 234 211</b>	<b>199 234 221</b>	5.800

Inch	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	z [mm]
3/8	50	167	27	62	40	97	92	194	56	25	261	76	48	60
1/2	50	167	27	62	40	97	95	194	56	25	261	76	48	60
3/4	58	176	30	71	40	97	110	194	65	25	261	76	48	69
1	68	176	36	71	40	97	123	194	71	25	261	76	48	75
1 1/4	84	210	44	84	51	115	146	224	85	45	305	95	59	89
1 1/2	97	210	51	84	51	115	157	224	89	45	305	95	59	97
2	124	232	64	106	51	115	183	224	101	45	305	95	59	110
2 1/2	166	257	85	156		66	233	144	136	70	190	60		144
3	200	274	105	168		70	254	152	141	70	198	65		151
4	238	273	123	175		78	301	169	164	120	235	72		174



# Copiable

## Configurator GF Ball Valve Type 546 PVC-U

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

### Ball valve

A01 Ball valve 546

#### Material

B01 PVC-U

#### Dimension

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

#### Version

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

#### Seals

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

#### Threaded inserts

F01 without threaded inserts  
 F02 with threaded inserts

#### Connecting parts

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

#### Multi-functional module

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

#### Handle

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

#### Mounting plate

L01 without mounting plate  
 L02 with mounting plate

A01	B01	C	D	E	F	G	G	I	K	L
						left	right			

# 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

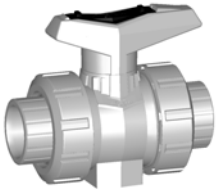
- R01 without stroke limiter
- R02 with stroke limiter

<b>P</b>	<b>Q</b>	<b>R</b>	
----------	----------	----------	--

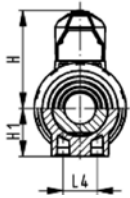
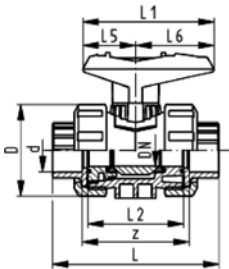


# Ball valves

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



DN10/15 - 50









### Model:

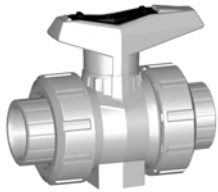
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- z-dimension, valve end and valve nut are **not compatible** with type 346 (DN10/15-50) resp. type 370 (DN65-100)
- Ball seals PTFE
- Without mounting inserts

### Option:

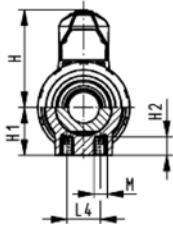
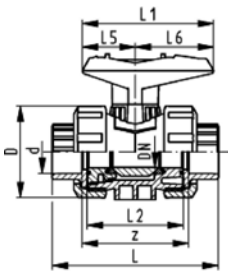
- Individual configuration of the valve (see form)
- Multifunctional module with integrated limit switches
- Pneumatic or electric actuators from +GF+

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	16	71	<b>163 546 001</b>	<b>163 546 011</b>	0.160
20	15	16	185	<b>163 546 002</b>	<b>163 546 012</b>	0.160
25	20	16	350	<b>163 546 003</b>	<b>163 546 013</b>	0.245
32	25	16	700	<b>163 546 004</b>	<b>163 546 014</b>	0.365
40	32	16	1000	<b>163 546 005</b>	<b>163 546 015</b>	0.660
50	40	16	1600	<b>163 546 006</b>	<b>163 546 016</b>	0.890
63	50	16	3100	<b>163 546 007</b>	<b>163 546 017</b>	1.650
 75	65	16	5000	<b>163 546 008</b>	<b>163 546 018</b>	5.300
 90	80	16	7000	<b>163 546 009</b>	<b>163 546 019</b>	8.000
 110	100	16	11000	<b>163 546 010</b>	<b>163 546 020</b>	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



DN10/15 - 50



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

### Model:

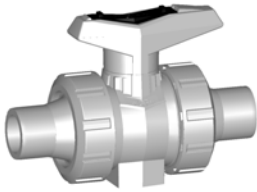
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- z-dimension, valve end and valve nut are **not compatible** with type 346 (DN10/15-50) resp. type 370 (DN65-100)
- Ball seals PTFE
- Integrated stainless steel mounting inserts

### Option:

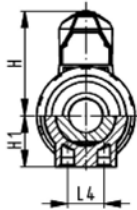
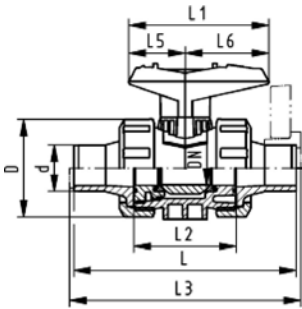
- Individual configuration of the valve (see form)
- Multifunctional module with integrated limit switches
- Pneumatic or electric actuators from +GF+

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



DN10/15 - 50



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

### Model:

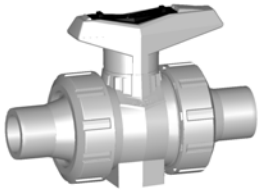
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- z-dimension, valve end and valve nut are **not compatible** with type 346 (DN10/15-50) resp. type 370 (DN65-100)
- Ball seals PTFE
- Without mounting inserts

### Option:

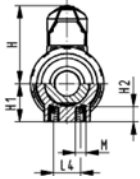
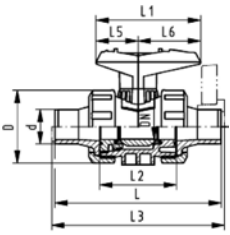
- Individual configuration of the valve (see form)
- Multifunctional module with integrated limit switches
- Pneumatic or electric actuators from +GF+

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



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

### Model:

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

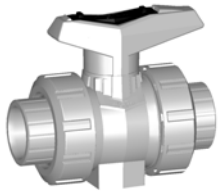
### Option:

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

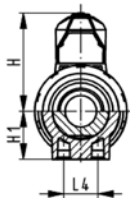
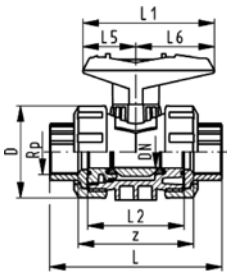
d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg	
16	10	16	71	<b>163 546 381</b>	<b>163 546 391</b>	0.162	
20	15	16	185	<b>163 546 382</b>	<b>163 546 392</b>	0.162	
25	20	16	350	<b>163 546 383</b>	<b>163 546 393</b>	0.247	
32	25	16	700	<b>163 546 384</b>	<b>163 546 394</b>	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	





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

### Model:

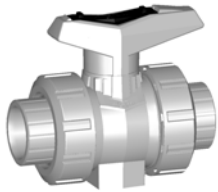
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- z-dimension, valve end and valve nut are **not compatible** with type 346 (DN10/15-50) resp. type 370 (DN65-100)
- Ball seals PTFE
- Without mounting inserts

### Option:

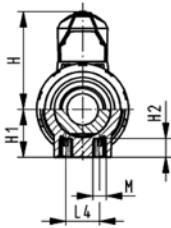
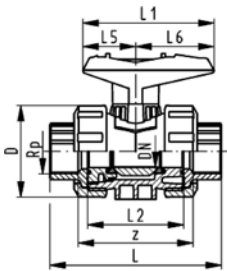
- Individual configuration of the valve (see form)
- Multifunctional module with integrated limit switches
- Pneumatic or electric actuators from +GF+

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	



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

### Model:

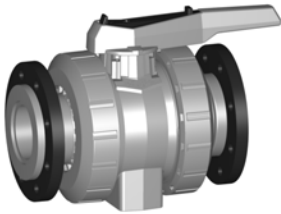
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- z-dimension, valve end and valve nut are **not compatible** with type 346 (DN10/15-50) resp. type 370 (DN65-100)
- Ball seals PTFE
- Integrated stainless steel mounting inserts

### 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	<b>163 546 401</b>	<b>163 546 411</b>	0.162	
1/2	15	10	185	<b>163 546 402</b>	<b>163 546 412</b>	0.162	
3/4	20	10	350	<b>163 546 403</b>	<b>163 546 413</b>	0.247	
1	25	10	700	<b>163 546 404</b>	<b>163 546 414</b>	0.367	
1 1/4	32	10	1000	<b>163 546 405</b>	<b>163 546 415</b>	0.665	
1 1/2	40	10	1600	<b>163 546 406</b>	<b>163 546 416</b>	0.895	
2	50	10	3100	<b>163 546 407</b>	<b>163 546 417</b>	1.655	
2 1/2	65	10	5000	<b>163 546 408</b>	<b>163 546 418</b>	5.400	
3	80	10	7000	<b>163 546 409</b>	<b>163 546 419</b>	8.100	
4	100	10	11000	<b>163 546 410</b>	<b>163 546 420</b>	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	



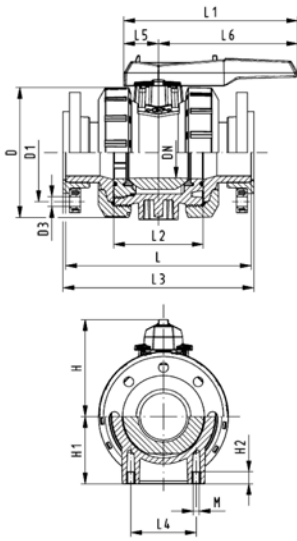
## Ball valve type 546 PVC-C With mounting inserts With backing flanges PP-st metric

### Model:

- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- z-dimension, valve end and valve 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 558-1
- Connecting dimensions: ISO 7005, EN 1092, BS 4504, DIN 2501; bolt circle PN 10

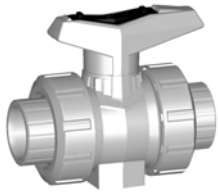
### Option:

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

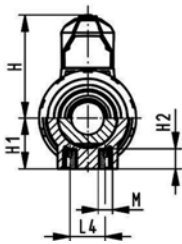
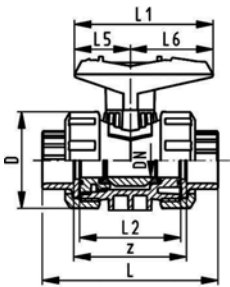


d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
75	65	16	5000	<b>163 546 108</b>	<b>163 546 118</b>	6.000
90	80	16	7000	<b>163 546 109</b>	<b>163 546 119</b>	9.100
110	100	16	11000	<b>163 546 110</b>	<b>163 546 120</b>	14.200

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



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

**Model:**

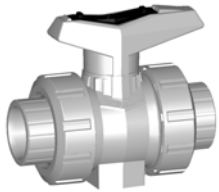
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- Ball seals PTFE
- z-dimension, valve end and valve nut are **not compatible** with type 346 (DN10/15-50) resp. type 370 (DN65-100)
- Integrated stainless steel mounting inserts

**Option:**

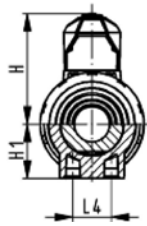
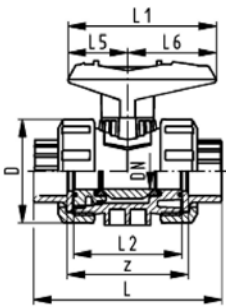
- Individual configuration of the valve (see form)
- Multifunctional module with integrated limit switches
- Pneumatic or electric actuators from +GF+

Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
3/8	10	16	71	<b>163 546 341</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



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

### Model:

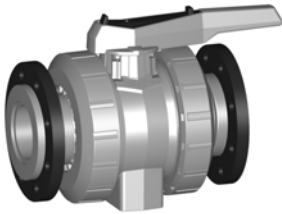
- For easy installation and removal
- z-dimension, valve end and valve nut are **not compatible** with type 346 (DN10/15-50) resp. type 370 (DN65-100)
- Ball seals PTFE
- Without mounting inserts
- Threaded valve ends are only enclosed for DN10/15-50

### 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



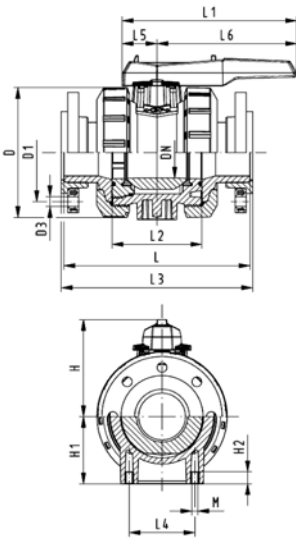
## Ball valve type 546 PVC-C With mounting inserts With backing flanges PP-st Inch/ANSI

### Model:

- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- z-dimension, valve end and valve 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 558-1
- 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+



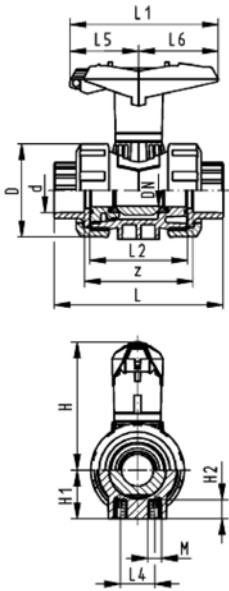
Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg	
2 1/2	65	16	5000	<b>163 546 168</b>	<b>163 546 178</b>	6.000	
3	80	16	7000	<b>163 546 169</b>	<b>163 546 179</b>	9.100	
4	100	16	11000	<b>163 546 170</b>	<b>163 546 180</b>	14.200	

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	



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

### Model:

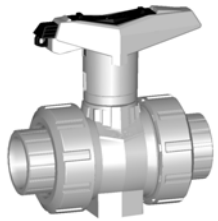
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- z-dimension, valve end and valve nut are **not compatible** with type 346 (DN10/15-50) resp. type 370 (DN65-100)
- Ball seals PTFE
- Integrated stainless steel mounting inserts
- Lockable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

### Option:

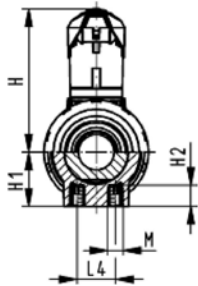
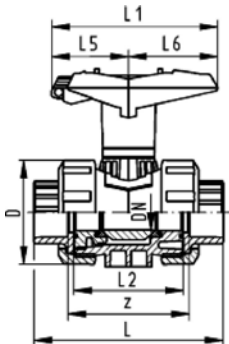
- Individual configuration of the valve (see form)
- Multifunctional module with integrated limit switches
- Pneumatic or electric actuators from +GF+

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg	
16	10	16	71	<b>163 546 081</b>	<b>163 546 091</b>	0.175	
20	15	16	185	<b>163 546 082</b>	<b>163 546 092</b>	0.175	
25	20	16	350	<b>163 546 083</b>	<b>163 546 093</b>	0.270	
32	25	16	700	<b>163 546 084</b>	<b>163 546 094</b>	0.390	
40	32	16	1000	<b>163 546 085</b>	<b>163 546 095</b>	0.700	
50	40	16	1600	<b>163 546 086</b>	<b>163 546 096</b>	0.930	
63	50	16	3100	<b>163 546 087</b>	<b>163 546 097</b>	1.695	
75	65	16	5000	<b>163 546 088</b>	<b>163 546 098</b>	-	
90	80	16	7000	<b>163 546 089</b>	<b>163 546 099</b>	-	
110	100	16	11000	<b>163 546 090</b>	<b>163 546 100</b>	-	

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	



DN10/15 - 50



## 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 valve 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+

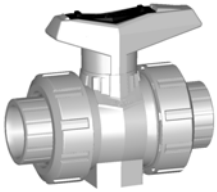
Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg	
3/8	10	16	71	<b>163 546 361</b>	<b>163 546 371</b>	0.205	
1/2	15	16	185	<b>163 546 362</b>	<b>163 546 372</b>	0.215	
3/4	20	16	350	<b>163 546 363</b>	<b>163 546 373</b>	0.325	
1	25	16	700	<b>163 546 364</b>	<b>163 546 374</b>	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	

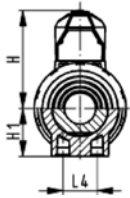
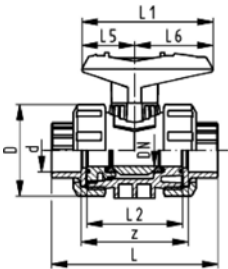


# Ball valves

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



DN10/15 - 50



### Model:

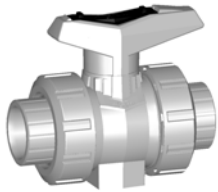
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- Silicon-free / paint-compatible
- For easy installation and removal
- z-dimension, valve end and valve nut are **not compatible** with type 346 (DN10/15-50) resp. type 370 (DN65-100)
- Ball seals PVDF
- Without mounting inserts

### Option:

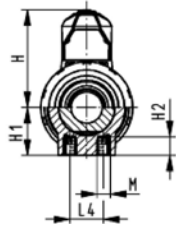
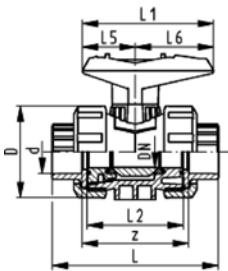
- Individual configuration of the valve (see form)
- Multifunctional module with integrated limit switches

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



DN10/15 - 50






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




### Model:

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

### Option:

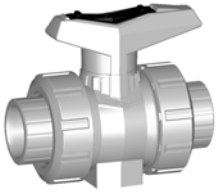
- Individual configuration of the valve (see form)
- Multifunctional module with integrated limit switches

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

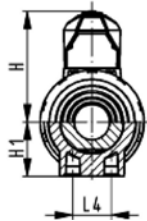
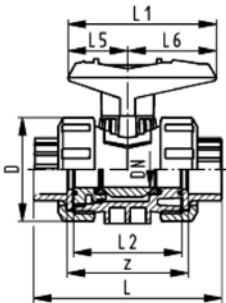
d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	M	z [mm]	
16	50	57	27	12	92	77	56	25	32	45	M6	64	
20	50	57	27	12	95	77	56	25	32	45	M6	64	
25	58	67	30	12	110	97	65	25	39	58	M6	72	
32	68	73	36	12	123	97	71	25	39	58	M6	79	
40	84	90	44	15	146	128	85	45	54	74	M8	94	
50	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	

# Ball valves

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



DN10/15 - 50



### Model:

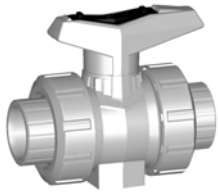
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- Silicon-free / paint-compatible
- For easy installation and removal
- z-dimension, valve end and valve nut are **not compatible** with type 346 (DN10/15-50) resp. type 370 (DN65-100)
- Ball seals: Inch ASTM in PTFE
- Without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

### Option:

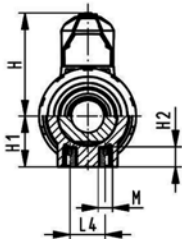
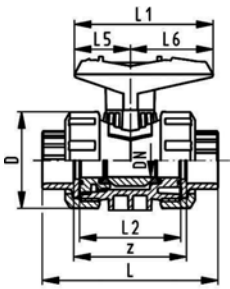
- Individual configuration of the valve (see form)
- Multifunctional module with integrated limit switches

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



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
- Silicon-free / paint-compatible
- Ball seals:
- - inch ASTM: PTFE
- For easy installation and removal
- z-dimension, valve end and valve nut are **not compatible** with type 346 (DN10/15-50) resp. type 370 (DN65-100)
- 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

# 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.**

# Ball valves electric

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



DN10/15 - 50

### Model:

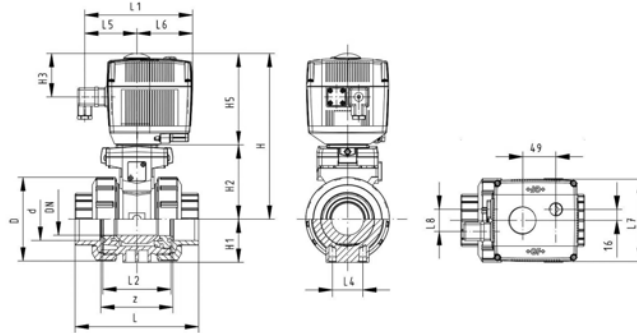
- Built on with electric actuator EA11
- Voltage 100-230 V, 50-60 Hz
- Control range 90°<
- Control time 5 s/90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts

### Option:

- Individual configuration of the valve (see form)

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





DN10/15 - 50

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

### Model:

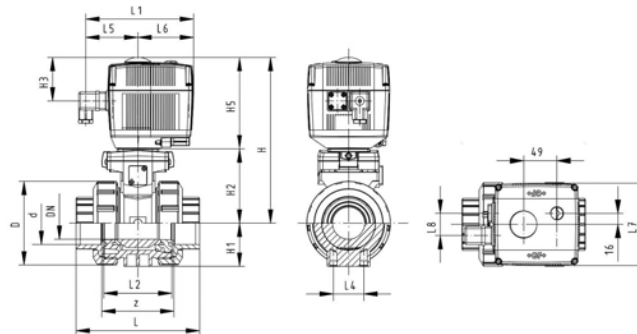
- Built on with electric actuator EA11
- Voltage 24 V AC/DC
- Control range 90°<
- Control time 5 s/90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts

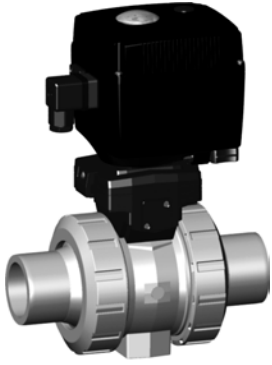
### Option:

- Individual configuration of the valve (see form)

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





DN10/15 - 50

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

### Model:

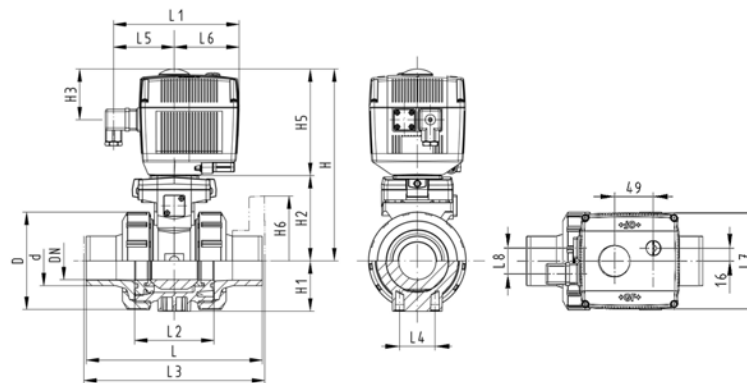
- Built on with electric actuator EA11
- Voltage 100-230 V, 50-60 Hz
- Control range 90°<
- Control time 5 s/90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts

### Option:

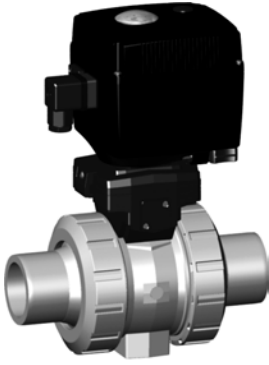
- Individual configuration of the valve (see form)

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







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

### Model:

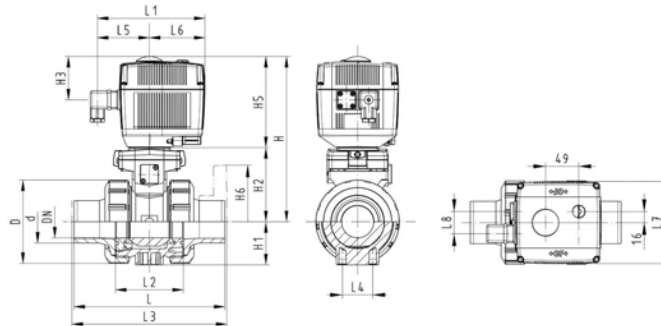
- Built on with electric actuator EA11
- Voltage 24 V AC/DC
- Control range 90°<
- Control time 5 s/90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts

### Option:

- Individual configuration of the valve (see form)

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

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	L8 [mm]
16	50	200	27	64	64	137	114	161	56	130	25	77	83	122	33
20	50	200	27	64	64	137	124	161	56	130	25	77	83	122	33
25	58	209	30	73	64	137	144	161	65	150	25	77	83	122	33
32	68	209	36	73	64	137	154	161	71	160	25	77	83	122	33
40	84	220	44	84	64	137	174	161	85	180	45	77	83	122	33
50	97	220	51	84	64	137	194	161	89	200	45	77	83	122	33
63	124	243	64	106	64	137	224	161	101	230	45	77	83	122	33





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

### Model:

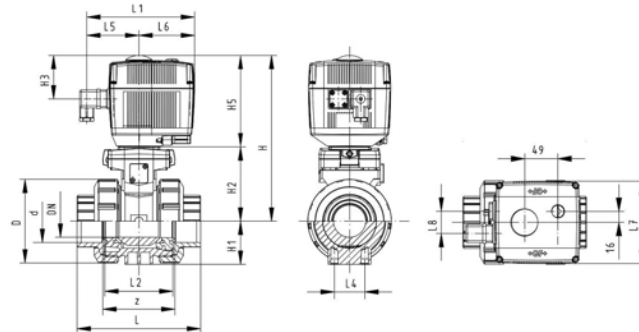
- Built on with electric actuator EA11
- Voltage 100-230 V, 50-60 Hz
- Control range 90°<
- Control time 5 s/90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts

### Option:

- Individual configuration of the valve (see form)

Rp [inch]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
3/8	10	10	70	199 107 702	199 107 712	2.100
1/2	15	10	185	199 107 703	199 107 713	2.100
3/4	20	10	350	199 107 704	199 107 714	2.200
1	25	10	700	199 107 705	199 107 715	2.300
1 1/4	32	10	1000	199 107 706	199 107 716	2.600
1 1/2	40	10	1600	199 107 707	199 107 717	3.000
2	50	10	3100	199 107 708	199 107 718	3.800

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





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

### Model:

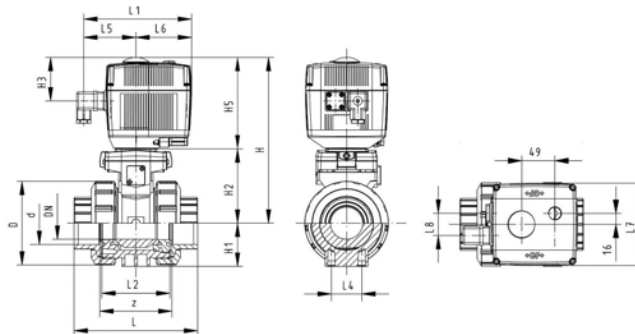
- Built on with electric actuator EA11
- Voltage 24 V AC/DC
- Control range 90°<
- Control time 5 s/90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts

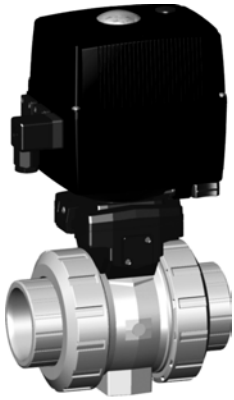
### Option:

- Individual configuration of the valve (see form)

Rp [inch]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
3/8	10	10	70	<b>199 107 742</b>	<b>199 107 752</b>	2.100
1/2	15	10	185	<b>199 107 743</b>	<b>199 107 753</b>	2.100
3/4	20	10	350	<b>199 107 744</b>	<b>199 107 754</b>	2.200
1	25	10	700	<b>199 107 745</b>	<b>199 107 755</b>	2.300
1 1/4	32	10	1000	<b>199 107 746</b>	<b>199 107 756</b>	2.600
1 1/2	40	10	1600	<b>199 107 747</b>	<b>199 107 757</b>	3.000
2	50	10	3100	<b>199 107 748</b>	<b>199 107 758</b>	3.800

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





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




### Model:

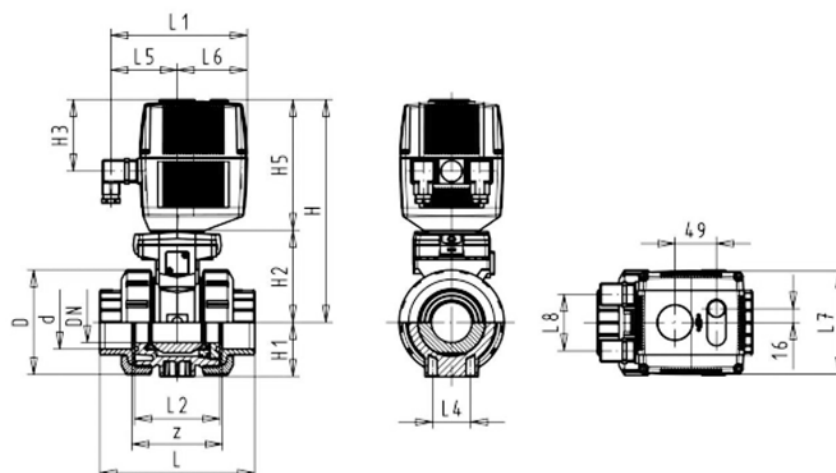
- Assignment of actuators EA21 (DN10/15-50), EA31 (DN65-100 if available)
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Voltage 100-230 V, 50-60 Hz
- Control range 90°<
- Control time: EA21: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

### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	70	<b>199 130 402</b>	<b>199 130 412</b>	2.100
20	15	10	185	<b>199 130 403</b>	<b>199 130 413</b>	2.100
25	20	10	350	<b>199 130 404</b>	<b>199 130 414</b>	2.200
32	25	10	700	<b>199 130 405</b>	<b>199 130 415</b>	2.300
40	32	10	1000	<b>199 130 406</b>	<b>199 130 416</b>	2.600
50	40	10	1600	<b>199 130 407</b>	<b>199 130 417</b>	3.000
63	50	10	3100	<b>199 130 408</b>	<b>199 130 418</b>	3.800
 75	65	10	5000	<b>199 130 409</b>	<b>199 130 419</b>	4.000
 90	80	10	7000	<b>199 130 410</b>	<b>199 130 420</b>	5.100
 110	100	10	11000	<b>199 130 411</b>	<b>199 130 421</b>	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





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

### Model:

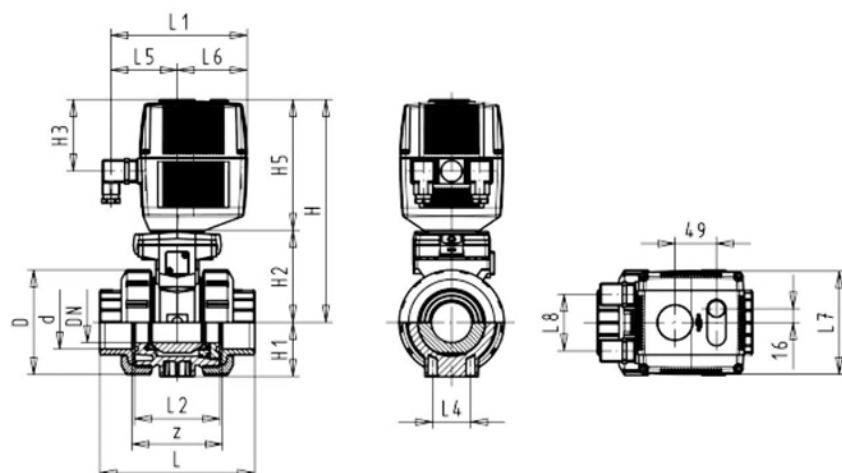
- Assignment of actuators EA21 (DN10/15-50), EA31 (DN65-100 if available)
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Voltage 24 V AC/DC
- Control range 90°<
- Control time: EA21: 5s/90°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

### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	70	<b>199 130 442</b>	<b>199 130 452</b>	2.100
20	15	10	185	<b>199 130 443</b>	<b>199 130 453</b>	2.100
25	20	10	350	<b>199 130 444</b>	<b>199 130 454</b>	2.200
32	25	10	700	<b>199 130 445</b>	<b>199 130 455</b>	2.300
40	32	10	1000	<b>199 130 446</b>	<b>199 130 456</b>	2.600
50	40	10	1600	<b>199 130 447</b>	<b>199 130 457</b>	3.000
63	50	10	3100	<b>199 130 448</b>	<b>199 130 458</b>	3.800
75	65	10	5000	<b>199 130 449</b>	<b>199 130 459</b>	4.000
90	80	10	7000	<b>199 130 450</b>	<b>199 130 460</b>	5.100
110	100	10	11000	<b>199 130 451</b>	<b>199 130 461</b>	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





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




### Model:

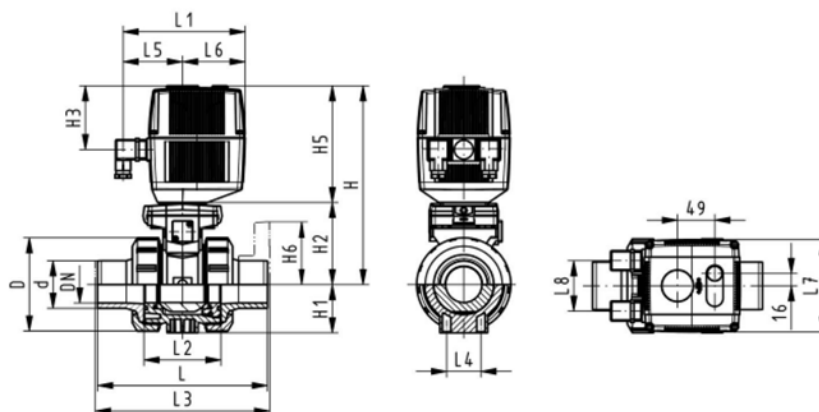
- Assignment of actuators EA21 (DN10/15-50), EA31 (DN65-100 if available)
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Voltage 100-230 V, 50-60 Hz
- Control range 90°<
- Control time: EA21: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

### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg	
16	10	10	70	<b>199 130 422</b>	<b>199 130 432</b>	2.100	
20	15	10	185	<b>199 130 423</b>	<b>199 130 433</b>	2.100	
25	20	10	350	<b>199 130 424</b>	<b>199 130 434</b>	2.200	
32	25	10	700	<b>199 130 425</b>	<b>199 130 435</b>	2.300	
40	32	10	1000	<b>199 130 426</b>	<b>199 130 436</b>	2.600	
50	40	10	1600	<b>199 130 427</b>	<b>199 130 437</b>	3.000	
63	50	10	3100	<b>199 130 428</b>	<b>199 130 438</b>	3.800	
 75	65	10	5000	<b>199 130 429</b>	<b>199 130 439</b>	4.200	
 90	80	10	7000	<b>199 130 430</b>	<b>199 130 440</b>	5.300	
 110	100	10	11000	<b>199 130 431</b>	<b>199 130 441</b>	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





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




### Model:

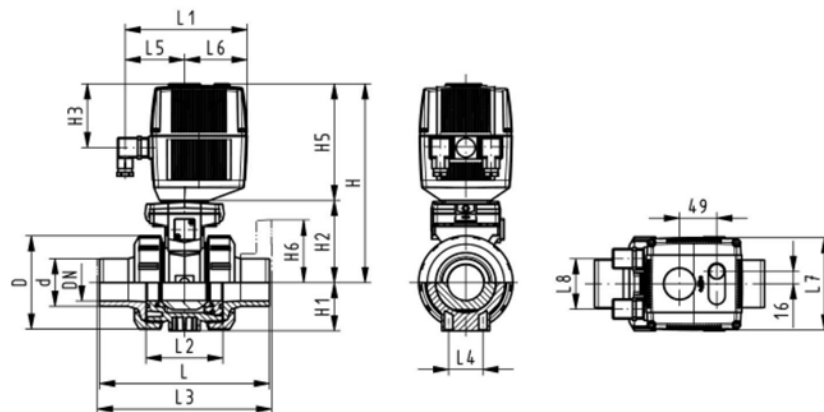
- Assignment of actuators EA21 (DN10/15-50), EA31 (DN65-100 if available)
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Voltage 24 V AC/DC
- Control range 90°<
- Control time: EA21: 5s/90°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

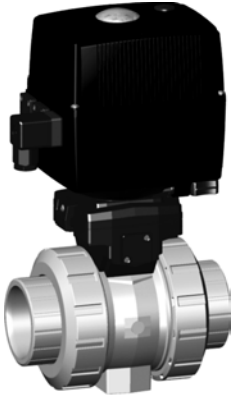
### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	70	<b>199 130 462</b>	<b>199 130 472</b>	2.100
20	15	10	185	<b>199 130 463</b>	<b>199 130 473</b>	2.100
25	20	10	350	<b>199 130 464</b>	<b>199 130 474</b>	2.200
32	25	10	700	<b>199 130 465</b>	<b>199 130 475</b>	2.300
40	32	10	1000	<b>199 130 466</b>	<b>199 130 476</b>	2.600
50	40	10	1600	<b>199 130 467</b>	<b>199 130 477</b>	3.000
63	50	10	3100	<b>199 130 468</b>	<b>199 130 478</b>	3.800
 75	65	10	5000	<b>199 130 469</b>	<b>199 130 479</b>	4.200
 90	80	10	7000	<b>199 130 470</b>	<b>199 130 480</b>	5.300
 110	100	10	11000	<b>199 130 471</b>	<b>199 130 481</b>	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





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

### Model:

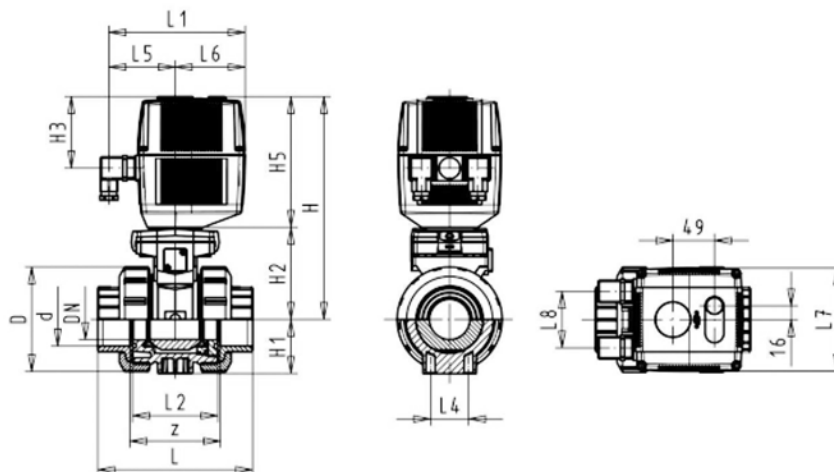
- Assignment of actuators EA21 (DN10/15-50), EA31 (DN65-100 if available)
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Voltage 100-230 V, 50-60 Hz
- Control range 90°<
- Control time: EA21: 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	<b>199 130 182</b>	<b>199 130 192</b>	2.100	
1/2	15	10	185	<b>199 130 183</b>	<b>199 130 193</b>	2.100	
3/4	20	10	350	<b>199 130 184</b>	<b>199 130 194</b>	2.200	
1	25	10	700	<b>199 130 185</b>	<b>199 130 195</b>	2.300	
1 1/4	32	10	1000	<b>199 130 186</b>	<b>199 130 196</b>	2.600	
1 1/2	40	10	1600	<b>199 130 187</b>	<b>199 130 197</b>	3.000	
2	50	10	3100	<b>199 130 188</b>	<b>199 130 198</b>	3.800	
2 1/2	65	10	5000	<b>199 130 189</b>	<b>199 130 199</b>	4.100	
3	80	10	7000	<b>199 130 190</b>	<b>199 130 200</b>	5.200	
4	100	10	11000	<b>199 130 191</b>	<b>199 130 201</b>	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







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

### Model:

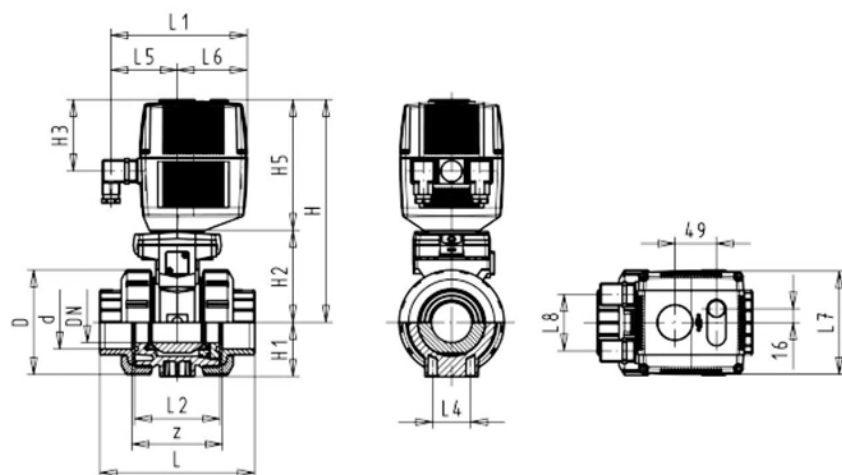
- Assignment of actuators EA21 (DN10/15-50), EA31 (DN65-100 if available)
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Voltage 24 V AC/DC
- Control range 90°<
- Control time: EA21: 5s/90°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

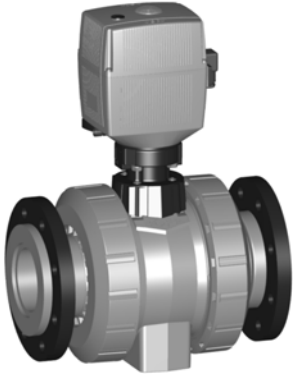
### Option:

- Individual configuration of the valve (see form)

Rp [inch]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
3/8	10	10	70	199 130 202	199 130 212	2.100
1/2	15	10	185	199 130 203	199 130 213	2.100
3/4	20	10	350	199 130 204	199 130 214	2.200
1	25	10	700	199 130 205	199 130 215	2.300
1 1/4	32	10	1000	199 130 206	199 130 216	2.600
1 1/2	40	10	1600	199 130 207	199 130 217	3.000
2	50	10	3100	199 130 208	199 130 218	3.800
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





## 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)
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- 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 558-1
- Connecting dimensions: ISO 7005, EN 1092, BS 4504, DIN 2501; bolt circle PN 10

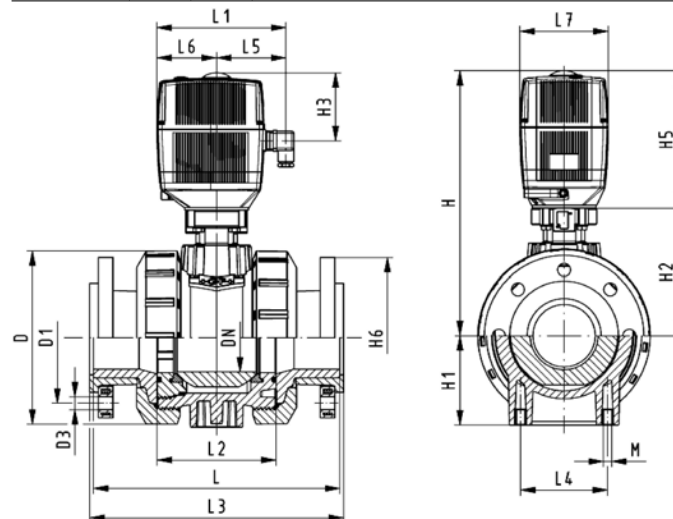
### Option:

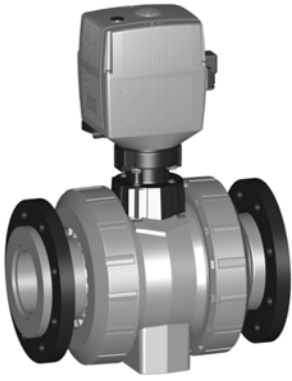
- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
75	65	10	5000	<b>199 134 489</b>	<b>199 134 499</b>	8.200
90	80	10	7000	<b>199 134 490</b>	<b>199 134 500</b>	10.100
110	100	10	11000	<b>199 134 491</b>	<b>199 134 501</b>	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]
75	166	346	85	156	94	190	93	284	180	136	290	70	98	83
90	200	358	105	168	94	190	100	300	180	141	310	70	98	83
110	238	365	123	175	94	190	110	340	180	164	350	120	98	83

d [mm]	L7 [mm]	L8 [mm]
75	122	66
90	122	66
110	122	66





## 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)
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- 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 558-1
- Connecting dimensions: ISO 7005, EN 1092, BS 4504, DIN 2501; bolt circle PN 10

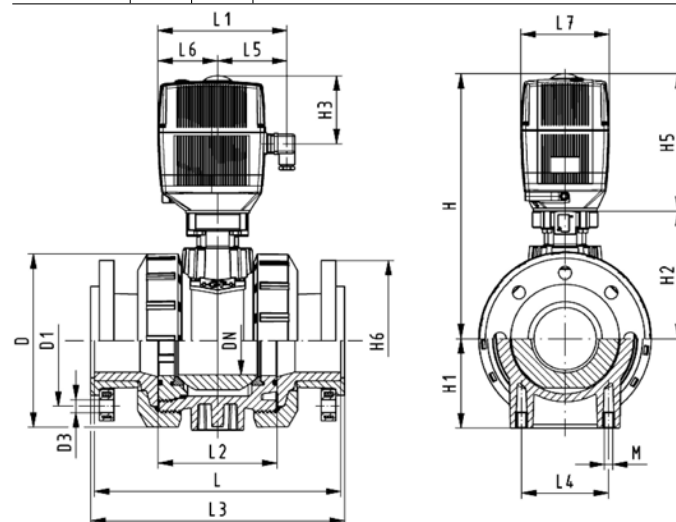
### Option:

- 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>199 134 509</b>	<b>199 134 519</b>	8.200
90	80	10	7000	<b>199 134 510</b>	<b>199 134 520</b>	10.100
110	100	10	11000	<b>199 134 511</b>	<b>199 134 521</b>	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]
75	166	346	85	156	94	190	93	284	180	136	290	70	98	83
90	200	358	105	168	94	190	100	300	180	141	310	70	98	83
110	238	365	123	175	94	190	110	340	180	164	350	120	98	83

d [mm]	L7 [mm]	L8 [mm]
75	122	66
90	122	66
110	122	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.

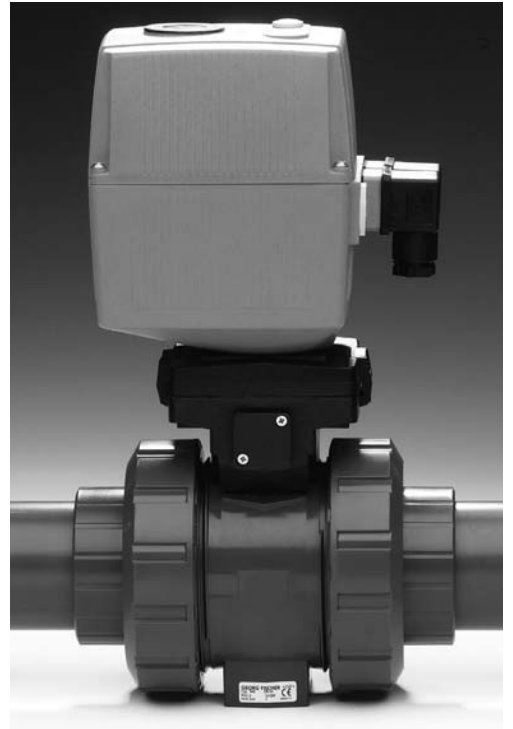
**We supply what you put together.**

# 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 any type of operation.

**We supply what you put together.**



### Electric Actuator EA11

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

### Accessories EA11

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

### Electric Actuator EA21/31

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

### Accessories EA21

- W01 No accessories
- W02 Heating element
- W03 Cycle time module
- W04 Cycle time monitoring
- W05 Cycles monitoring
- W06 Motor current monitoring
- W07 2 limit switches Ag, Ni
- W08 2 limit switches Gold
- W09 2 limit switches NPN
- W10 2 limit switches PNP
- 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

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

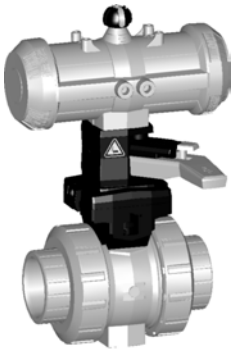


# Ball valves pneumatic

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

### With manual override

### With solvent cement sockets metric



DN10/15 - 50

#### Model:

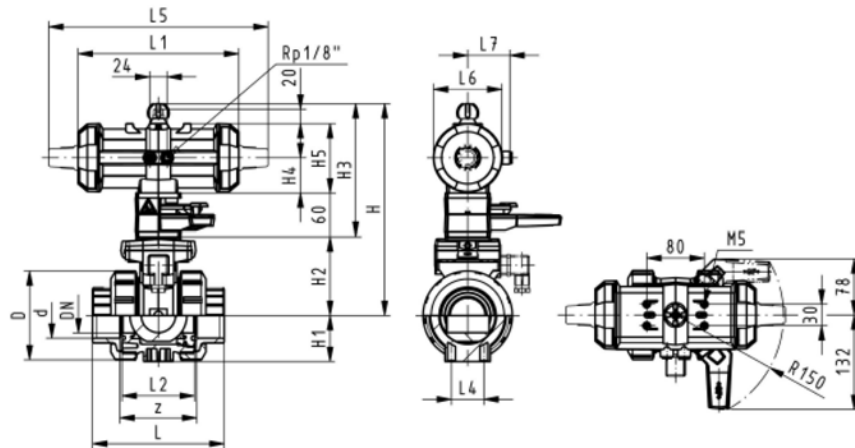
- Built on with pneumatic actuator PA11/21
- Control time 90°<) 1-2 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

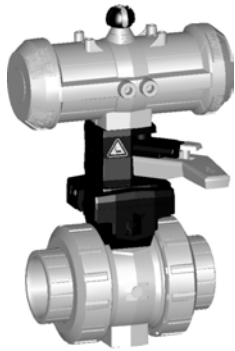
#### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	70	199 230 402	199 230 412	1.459
20	15	10	185	199 230 403	199 230 413	1.459
25	20	10	350	199 230 404	199 230 414	1.576
32	25	10	700	199 230 405	199 230 415	1.700
40	32	10	1000	199 230 406	199 230 416	2.751
50	40	10	1600	199 230 407	199 230 417	3.073
63	50	10	3100	199 230 408	199 230 418	3.931

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	z [mm]
16	50	230	27	62	168	40	97	92	194	56	25	261	76	48	64
20	50	230	27	62	168	40	97	95	194	56	25	261	76	48	64
25	58	239	30	71	168	40	97	110	194	65	25	261	76	48	72
32	68	239	36	71	168	40	97	123	194	71	25	261	76	48	79
40	84	271	44	84	187	51	115	146	224	85	45	305	95	59	94
50	97	271	51	84	187	51	115	157	224	89	45	305	95	59	95
63	124	293	64	106	187	51	115	183	224	101	45	305	95	59	107





DN10/15 - 50

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

### Model:

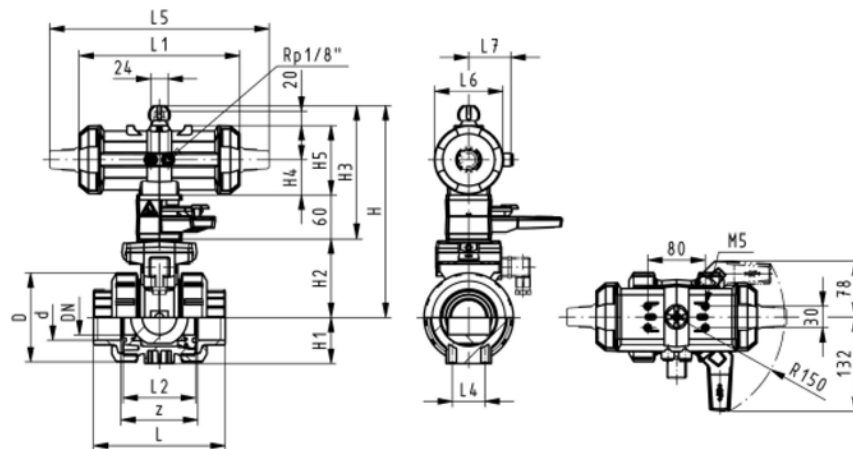
- Built on with pneumatic actuator PA11/21
- Control time 90°<) 1-2 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

### Option:

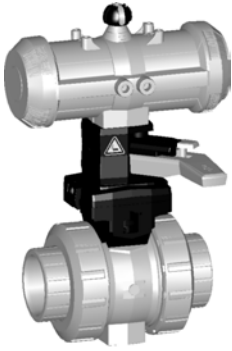
- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	70	199 230 442	199 230 452	1.149
20	15	10	185	199 230 443	199 230 453	1.459
25	20	10	350	199 230 444	199 230 454	1.576
32	25	10	700	199 230 445	199 230 455	1.700
40	32	10	1000	199 230 446	199 230 456	2.751
50	40	10	1600	199 230 447	199 230 457	3.073
63	50	10	3100	199 230 448	199 230 458	3.931

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	z [mm]
16	50	230	27	62	168	40	97	92	194	56	25	261	76	48	64
20	50	230	27	62	168	40	97	95	194	56	25	261	76	48	64
25	58	239	30	71	168	40	97	110	194	65	25	261	76	48	72
32	68	239	36	71	168	40	97	123	194	71	25	261	76	48	79
40	84	271	44	84	187	51	115	146	224	85	45	305	95	59	94
50	97	271	51	84	187	51	115	157	224	89	45	305	95	59	95
63	124	293	64	106	187	51	115	183	224	101	45	305	95	59	107







DN10/15 - 50

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

### Model:

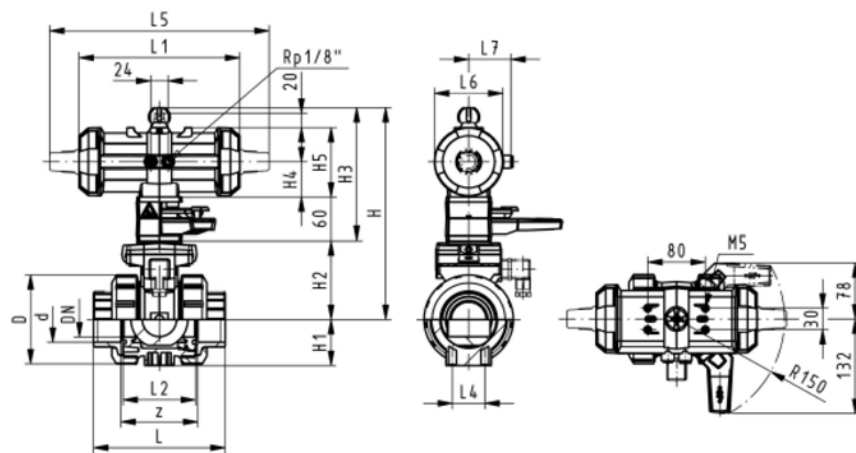
- Built on with pneumatic actuator PA11/21
- Control time 90°<) 1-2 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

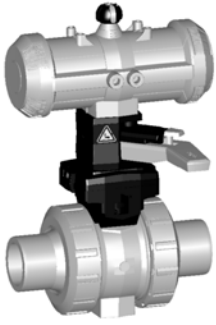
### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	70	199 230 482	199 230 492	1.459
20	15	10	185	199 230 483	199 230 493	1.459
25	20	10	350	199 230 484	199 230 494	1.576
32	25	10	700	199 230 485	199 230 495	1.700
40	32	10	1000	199 230 486	199 230 496	2.751
50	40	10	1600	199 230 487	199 230 497	3.073
63	50	10	3100	199 230 488	199 230 498	3.931

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	z [mm]
16	50	230	27	62	168	40	97	92	194	56	25	261	76	48	64
20	50	230	27	62	168	40	97	95	194	56	25	261	76	48	64
25	58	239	30	71	168	40	97	110	194	65	25	261	76	48	72
32	68	239	36	71	168	40	97	123	194	71	25	261	76	48	79
40	84	271	44	84	187	51	115	146	224	85	45	305	95	59	94
50	97	271	51	84	187	51	115	157	224	89	45	305	95	59	95
63	124	293	64	106	187	51	115	183	224	101	45	305	95	59	107





DN10/15 - 50

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

### Model:

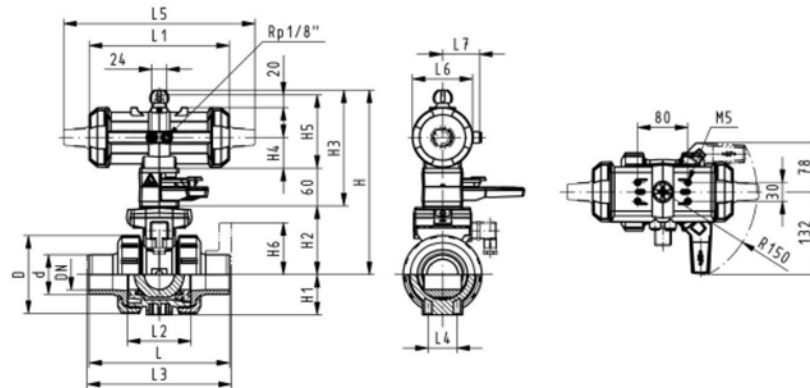
- Built on with pneumatic actuator PA11/21
- Control time  $90^\circ <$  1-2 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

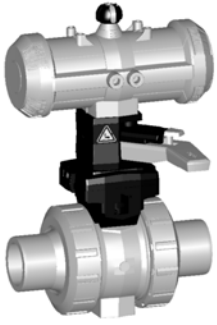
### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	70	199 230 422	199 230 432	1.459
20	15	10	185	199 230 423	199 230 433	1.459
25	20	10	350	199 230 424	199 230 434	1.576
32	25	10	700	199 230 425	199 230 435	1.700
40	32	10	1000	199 230 426	199 230 436	2.751
50	40	10	1600	199 230 427	199 230 437	3.073
63	50	10	3100	199 230 428	199 230 438	3.931

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
16	50	230	27	62	168	40	97	114	194	56	130	25	261	76	48
20	50	230	27	62	168	40	97	124	194	56	130	25	261	76	48
25	58	239	30	71	168	40	97	144	194	65	150	25	261	76	48
32	68	239	36	71	168	40	97	154	194	71	160	25	261	76	48
40	84	271	44	84	187	51	115	174	224	85	180	45	305	95	59
50	97	271	51	84	187	51	115	194	224	89	200	45	305	95	59
63	124	293	64	106	187	51	115	224	224	101	230	45	305	95	59





DN10/15 - 50

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

### Model:

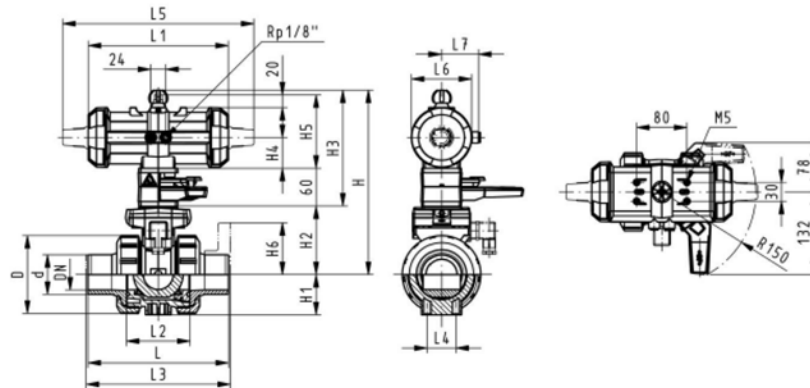
- Built on with pneumatic actuator PA11/21
- Control time 90° < 1-2 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

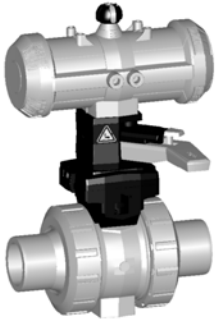
### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	70	199 230 462	199 230 472	1.459
20	15	10	185	199 230 463	199 230 473	1.459
25	20	10	350	199 230 464	199 230 474	1.576
32	25	10	700	199 230 465	199 230 475	1.700
40	32	10	1000	199 230 466	199 230 476	2.751
50	40	10	1600	199 230 467	199 230 477	3.073
63	50	10	3100	199 230 468	199 230 478	3.931

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
16	50	230	27	62	168	40	97	114	194	56	130	25	261	76	48
20	50	230	27	62	168	40	97	124	194	56	130	25	261	76	48
25	58	239	30	71	168	40	97	144	194	65	150	25	261	76	48
32	68	239	36	71	168	40	97	154	194	71	160	25	261	76	48
40	84	271	44	84	187	51	115	174	224	85	180	45	305	95	59
50	97	271	51	84	187	51	115	194	224	89	200	45	305	95	59
63	124	293	64	106	187	51	115	224	224	101	230	45	305	95	59





DN10/15 - 50

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

### Model:

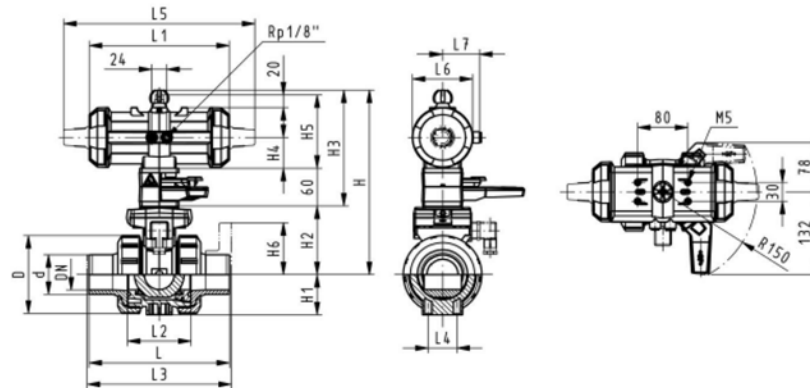
- Built on with pneumatic actuator PA11/21
- Control time  $90^\circ <$  1-2 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

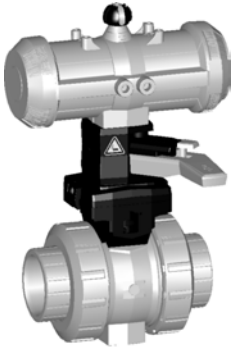
### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	70	199 230 502	199 230 512	1.459
20	15	10	185	199 230 503	199 230 513	1.459
25	20	10	350	199 230 504	199 230 514	1.576
32	25	10	700	199 230 505	199 230 515	1.700
40	32	10	1000	199 230 506	199 230 516	2.751
50	40	10	1600	199 230 507	199 230 517	3.073
63	50	10	3100	199 230 508	199 230 518	3.931

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
16	50	230	27	62	168	40	97	114	194	56	130	25	261	76	48
20	50	230	27	62	168	40	97	124	194	56	130	25	261	76	48
25	58	239	30	71	168	40	97	144	194	65	150	25	261	76	48
32	68	239	36	71	168	40	97	154	194	71	160	25	261	76	48
40	84	271	44	84	187	51	115	174	224	85	180	45	305	95	59
50	97	271	51	84	187	51	115	194	224	89	200	45	305	95	59
63	124	293	64	106	187	51	115	224	224	101	230	45	305	95	59





DN10/15 - 50

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

### Model:

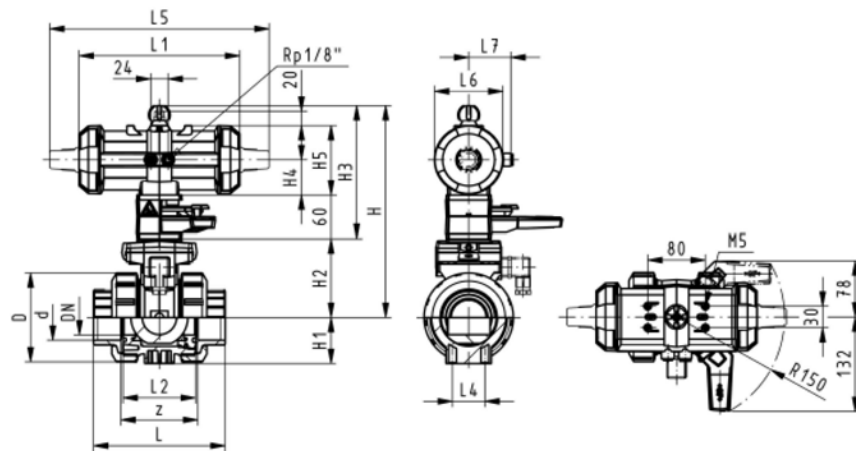
- Built on with pneumatic actuator PA11/21
- Control time 90°<) 1-2 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

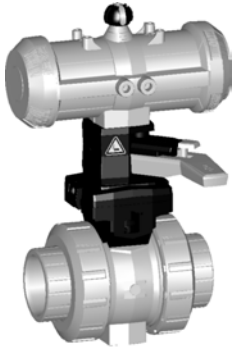
### Option:

- Individual configuration of the valve (see form)

Rp [inch]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
3/8	10	10	70	<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	230	27	62	168	40	97	92	194	56	25	261	76	48	64
1/2	50	230	27	62	168	40	97	95	194	56	25	261	76	48	64
3/4	58	239	30	71	168	40	97	110	194	65	25	261	76	48	72
1	68	239	36	71	168	40	97	123	194	71	25	261	76	48	79
1 1/4	84	271	44	84	187	51	115	146	224	85	45	305	95	59	94
1 1/2	97	271	51	84	187	51	115	157	224	89	45	305	95	59	95
2	124	293	64	106	187	51	115	183	224	101	45	305	95	59	107





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

### Model:

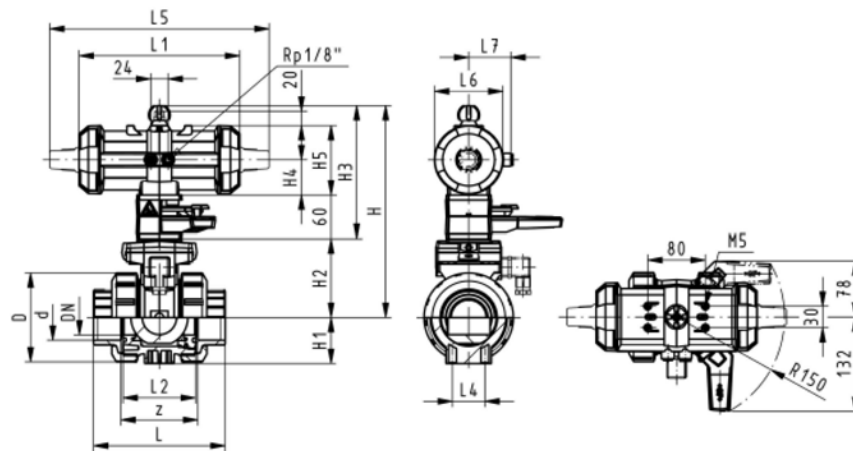
- Built on with pneumatic actuator PA11/21
- Control time  $90^\circ <$ ) 1-2 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

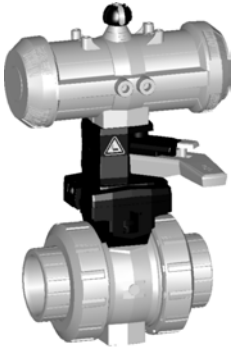
### Option:

- Individual configuration of the valve (see form)

Rp [inch]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
$\frac{3}{8}$	10	10	70	199 230 792	199 230 812	1.500
$\frac{1}{2}$	15	10	185	199 230 793	199 230 813	1.500
$\frac{3}{4}$	20	10	350	199 230 794	199 230 814	1.600
1	25	10	700	199 230 795	199 230 815	1.700
1 $\frac{1}{4}$	32	10	1000	199 230 796	199 230 816	2.800
1 $\frac{1}{2}$	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]
$\frac{3}{8}$	50	230	27	62	168	40	97	92	194	56	25	261	76	48	64
$\frac{1}{2}$	50	230	27	62	168	40	97	95	194	56	25	261	76	48	64
$\frac{3}{4}$	58	239	30	71	168	40	97	110	194	65	25	261	76	48	72
1	68	239	36	71	168	40	97	123	194	71	25	261	76	48	79
1 $\frac{1}{4}$	84	271	44	84	187	51	115	146	224	85	45	305	95	59	94
1 $\frac{1}{2}$	97	271	51	84	187	51	115	157	224	89	45	305	95	59	95
2	124	293	64	106	187	51	115	183	224	101	45	305	95	59	107





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

### Model:

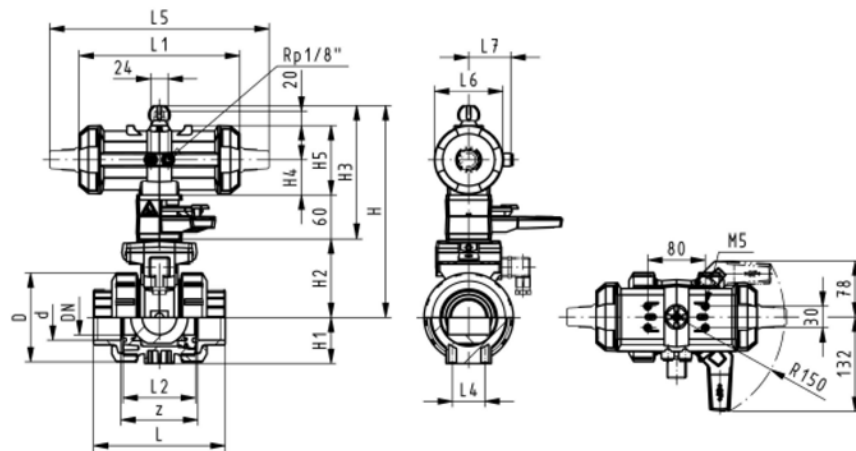
- Built on with pneumatic actuator PA11/21
- Control time 90°<) 1-2 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

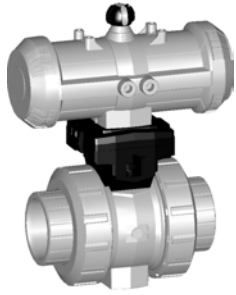
### Option:

- Individual configuration of the valve (see form)

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

Rp [inch]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	z [mm]
3/8	50	230	27	62	168	40	97	92	194	56	25	261	76	48	64
1/2	50	230	27	62	168	40	97	95	194	56	25	261	76	48	64
3/4	58	239	30	71	168	40	97	110	194	65	25	261	76	48	72
1	68	239	36	71	168	40	97	123	194	71	25	261	76	48	79
1 1/4	84	271	44	84	187	51	115	146	224	85	45	305	95	59	94
1 1/2	97	271	51	84	187	51	115	157	224	89	45	305	95	59	95
2	124	293	64	106	187	51	115	183	224	101	45	305	95	59	107





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




### Model:

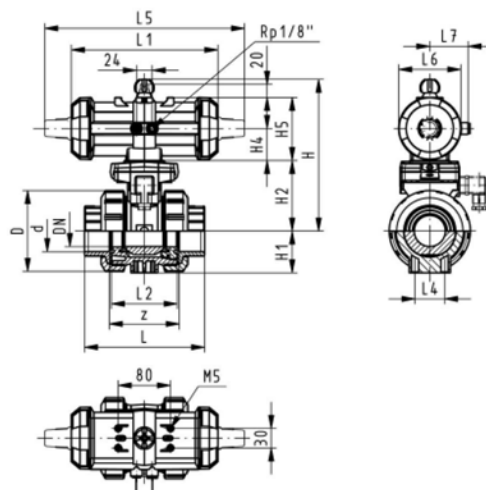
- Assignment of actuators PA11 (DN10/15-25), PA21 (DN32-50), PA30 (DN65), PA35 (DN80), PA40 (DN100)
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90°<) 1-2 s

### Option:

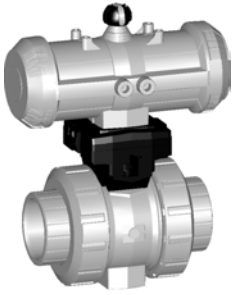
- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	70	<b>199 230 522</b>	<b>199 230 532</b>	1.159
20	15	10	185	<b>199 230 523</b>	<b>199 230 533</b>	1.159
25	20	10	350	<b>199 230 524</b>	<b>199 230 534</b>	1.276
32	25	10	700	<b>199 230 525</b>	<b>199 230 535</b>	1.400
40	32	10	1000	<b>199 230 526</b>	<b>199 230 536</b>	2.451
50	40	10	1600	<b>199 230 527</b>	<b>199 230 537</b>	2.773
63	50	10	3100	<b>199 230 528</b>	<b>199 230 538</b>	3.631
 75	65	10	5000	<b>199 230 529</b>	<b>199 230 539</b>	4.400
 90	80	10	7000	<b>199 230 530</b>	<b>199 230 540</b>	5.500
 110	100	10	11000	<b>199 230 531</b>	<b>199 230 541</b>	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	167	27	62	40	97	92	194	56	25	261	76	48	64
20	50	167	27	62	40	97	95	194	56	25	261	76	48	64
25	58	176	30	71	40	97	110	194	65	25	261	76	48	72
32	68	176	36	71	40	97	123	194	71	25	261	76	48	79
40	84	210	44	84	51	115	146	224	85	45	305	95	59	94
50	97	210	51	84	51	115	157	224	89	45	305	95	59	95
63	124	232	64	106	51	115	183	224	101	45	305	95	59	107
 75	166	262	85	156		70	233	218	136	70	276	65		144
 90	200	281	105	168		78	254	259	141	70	341	72		151
 110	238	292	123	175		86	301	287	164	120	369	80		174







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

### Model:

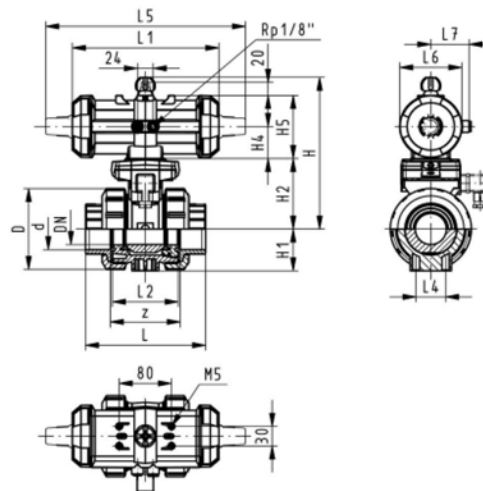
- Assignment of actuators PA11 (DN10/15-25), PA21 (DN32-50), PA30 (DN65), PA35 (DN80), PA40 (DN100)
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time  $90^\circ <$  1-2 s

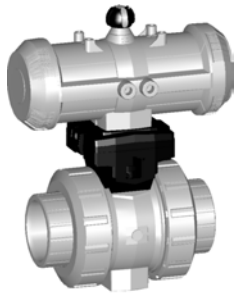
### Option:

- 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	167	27	62	40	97	92	194	56	25	261	76	48	64
20	50	167	27	62	40	97	95	194	56	25	261	76	48	64
25	58	176	30	71	40	97	110	194	65	25	261	76	48	72
32	68	176	36	71	40	97	123	194	71	25	261	76	48	79
40	84	210	44	84	51	115	146	224	85	45	305	95	59	94
50	97	210	51	84	51	115	157	224	89	45	305	95	59	95
63	124	232	64	106	51	115	183	224	101	45	305	95	59	107
75	166	262	85	156		70	233	218	136	70	276	65		144
90	200	281	105	168		78	254	259	141	70	341	72		151
110	238	292	123	175		86	301	287	164	120	369	80		174





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




### Model:

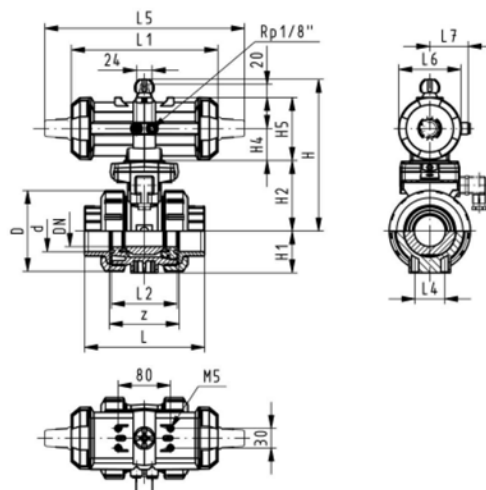
- Assignment of actuators: PA11 (DN10/15-25), PA21 (DN32-50), PA35 (DN65), PA40 (DN80), PA45 (DN100)
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90°<) 1-2 s

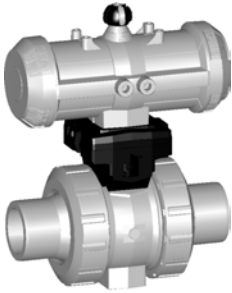
### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	70	<b>199 230 602</b>	<b>199 230 612</b>	1.159
20	15	10	185	<b>199 230 603</b>	<b>199 230 613</b>	1.159
25	20	10	350	<b>199 230 604</b>	<b>199 230 614</b>	1.276
32	25	10	700	<b>199 230 605</b>	<b>199 230 615</b>	1.400
40	32	10	1000	<b>199 230 606</b>	<b>199 230 616</b>	2.451
50	40	10	1600	<b>199 230 607</b>	<b>199 230 617</b>	2.773
63	50	10	3100	<b>199 230 608</b>	<b>199 230 618</b>	3.631
 75	65	10	5000	<b>199 230 609</b>	<b>199 230 619</b>	3.300
 90	80	10	7000	<b>199 230 610</b>	<b>199 230 620</b>	4.800
 110	100	10	11000	<b>199 230 611</b>	<b>199 230 621</b>	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	167	27	62	40	97	92	194	56	25	261	76	48	64
20	50	167	27	62	40	97	95	194	56	25	261	76	48	64
25	58	176	30	71	40	97	110	194	65	25	261	76	48	72
32	68	176	36	71	40	97	123	194	71	25	261	76	48	79
40	84	210	44	84	51	115	146	224	85	45	305	95	59	94
50	97	210	51	84	51	115	157	224	89	45	305	95	59	95
63	124	232	64	106	51	115	183	224	101	45	305	95	59	107
 75	166	257	85	156		66	233	144	136	70	190	60		144
 90	200	274	105	168		70	254	152	141	70	198	65		151
 110	238	273	123	175		78	301	169	164	120	235	72		174





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

### Model:

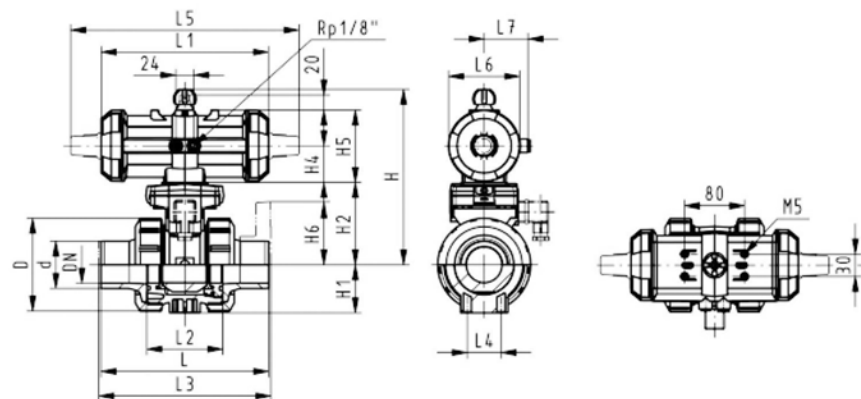
- Assignment of actuators PA11 (DN10/15-25), PA21 (DN32-50), PA30 (DN65), PA35 (DN80), PA40 (DN100)
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time  $90^\circ < 1-2$  s

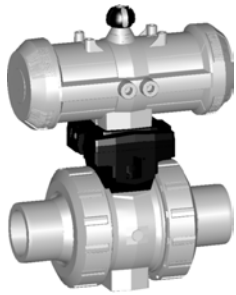
### Option:

- 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	167	27	62	40	97	114	194	56	0	25	261	76	48
20	50	167	27	62	40	97	124	194	56	130	25	261	76	48
25	58	176	30	71	40	97	144	194	65	150	25	261	76	48
32	68	176	36	71	40	97	154	194	71	160	25	261	76	48
40	84	210	44	84	51	115	174	224	85	180	45	305	95	59
50	97	210	51	84	51	115	194	224	89	200	45	305	95	59
63	124	232	64	106	51	115	224	224	101	230	45	305	95	59
75	166	262	85	156		70	284	218	136	290	70	276	65	
90	200	281	105	168		78	300	259	141	310	70	341	72	
110	238	292	123	175		86	340	287	164	350	120	369	80	





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

### Model:

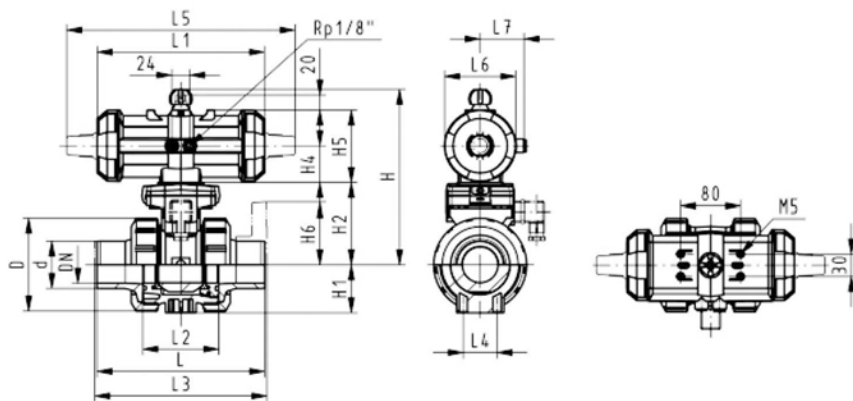
- Assignment of actuators PA11 (DN10/15-25), PA21 (DN32-50), PA30 (DN65), PA35 (DN80), PA40 (DN100)
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time  $90^\circ <$  1-2 s

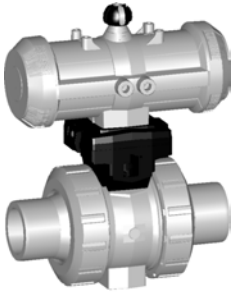
### Option:

- 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	199 230 582	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	167	27	62	40	97	114	194	56	130	25	261	76	48
20	50	167	27	62	40	97	124	194	56	130	25	261	76	48
25	58	176	30	71	40	97	144	194	65	150	25	261	76	48
32	68	176	36	71	40	97	154	194	71	160	25	261	76	48
40	84	210	44	84	51	115	174	224	85	180	45	305	95	59
50	97	210	51	84	51	115	194	224	89	200	45	305	95	59
63	124	232	64	106	51	115	224	224	101	230	45	305	95	59
75	166	262	85	156		70	284	218	136	290	70	276	65	
90	200	281	105	168		78	300	259	141	310	70	341	72	
110	238	292	123	175		86	340	287	164	350	120	369	80	





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




### Model:

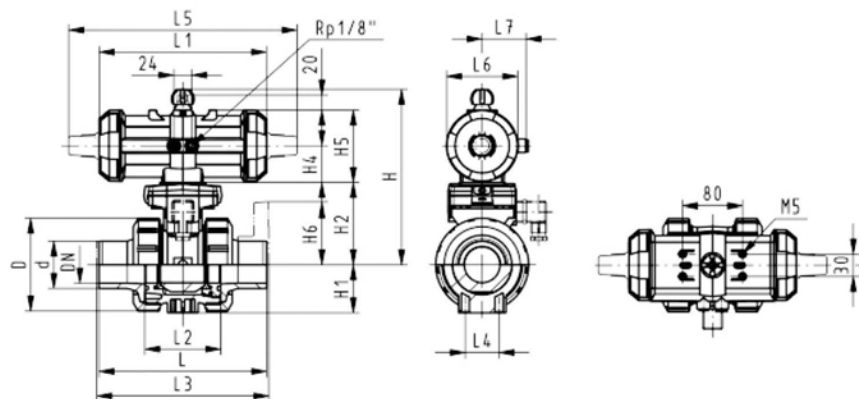
- Assignment of actuators: PA11 (DN10/15-25), PA21 (DN32-50), PA35 (DN65), PA40 (DN80), PA45 (DN100)
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time  $90^\circ <$  1-2 s

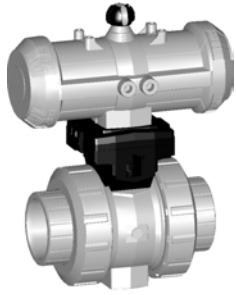
### Option:

- 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	<b>199 230 622</b>	<b>199 230 632</b>	1.159
20	15	10	185	<b>199 230 623</b>	<b>199 230 633</b>	1.159
25	20	10	350	<b>199 230 624</b>	<b>199 230 634</b>	1.276
32	25	10	700	<b>199 230 625</b>	<b>199 230 635</b>	1.400
40	32	10	1000	<b>199 230 626</b>	<b>199 230 636</b>	2.451
50	40	10	1600	<b>199 230 627</b>	<b>199 230 637</b>	2.773
63	50	10	3100	<b>199 230 628</b>	<b>199 230 638</b>	3.631
 75	65	10	5000	<b>199 230 629</b>	<b>199 230 639</b>	3.500
 90	80	10	7000	<b>199 230 630</b>	<b>199 230 640</b>	5.000
 110	100	10	11000	<b>199 230 631</b>	<b>199 230 641</b>	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	167	27	62	40	97	114	194	56	130	25	261	76	48
20	50	167	27	62	40	97	124	194	56	130	25	261	76	48
25	58	176	30	71	40	97	144	194	65	150	25	261	76	48
32	68	176	36	71	40	97	154	194	71	160	25	261	76	48
40	84	210	44	84	51	115	174	224	85	180	45	305	95	59
50	97	210	51	84	51	115	194	224	89	200	45	305	95	59
63	124	232	64	106	51	115	224	224	101	230	45	305	95	59
 75	166	257	85	156		66	284	144	136	290	70	190	60	
 90	200	274	105	168		70	300	152	141	310	70	198	65	
 110	238	273	123	175		78	340	169	164	350	120	235	72	





DN10/15 - 50

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

### Model:

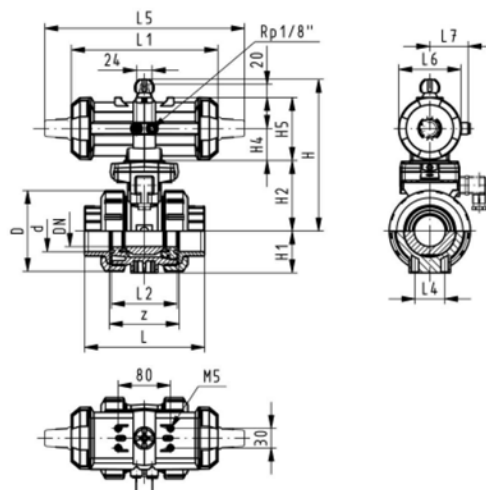
- Assignment of actuators PA11 (DN10/15-25), PA21 (DN32-50), PA30 (DN65), PA35 (DN80), PA40 (DN100)
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90°<) 1-2 s

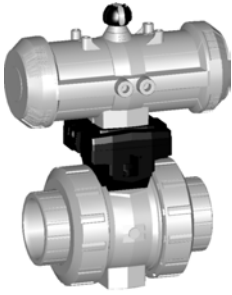
### Option:

- Individual configuration of the valve (see form)

Rp [inch]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
3/8	10	10	70	199 230 872	199 230 892	1.200
1/2	15	10	185	199 230 873	199 230 893	1.200
3/4	20	10	350	199 230 874	199 230 894	1.300
1	25	10	700	199 230 875	199 230 895	1.400
1 1/4	32	10	1000	199 230 876	199 230 896	2.500
1 1/2	40	10	1600	199 230 877	199 230 897	2.800
2	50	10	3100	199 230 878	199 230 898	3.700
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	167	27	62	40	97	92	194	56	25	261	76	48	64
1/2	50	167	27	62	40	97	95	194	56	25	261	76	48	64
3/4	58	176	30	71	40	97	110	194	65	25	261	76	48	72
1	68	176	36	71	40	97	123	194	71	25	261	76	48	79
1 1/4	84	210	44	84	51	115	146	224	85	45	305	95	59	94
1 1/2	97	210	51	84	51	115	157	224	89	45	305	95	59	95
2	124	232	64	106	51	115	183	224	101	45	305	95	59	107
2 1/2	166	262	85	156		70	233	218	136	70	276	65		144
3	200	281	105	168		78	254	259	141	70	341	72		151
4	238	292	123	175		86	301	287	164	120	369	80		174





DN10/15 - 50

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

### Model:

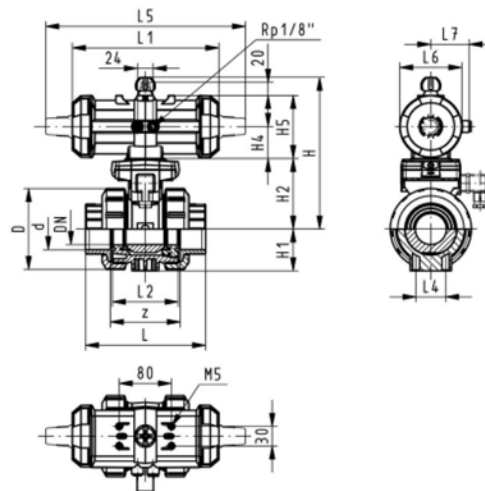
- Assignment of actuators PA11 (DN10/15-25), PA21 (DN32-50), PA30 (DN65), PA35 (DN80), PA40 (DN100)
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time  $90^\circ <$  1-2 s

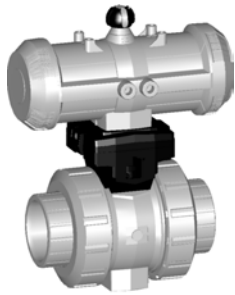
### Option:

- 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	167	27	62	40	97	92	194	56	25	261	76	48	64
1/2	50	167	27	62	40	97	95	194	56	25	261	76	48	64
3/4	58	176	30	71	40	97	110	194	65	25	261	76	48	72
1	68	176	36	71	40	97	123	194	71	25	261	76	48	79
1 1/4	84	210	44	84	51	115	146	224	85	45	305	95	59	94
1 1/2	97	210	51	84	51	115	157	224	89	45	305	95	59	95
2	124	232	64	106	51	115	183	224	101	45	305	95	59	107
2 1/2	166	262	85	156		70	233	218	136	70	276	65		144
3	200	281	105	168		78	254	259	141	70	341	72		151
4	238	292	123	175		86	301	287	164	120	369	80		174





DN10/15 - 50

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

### Model:

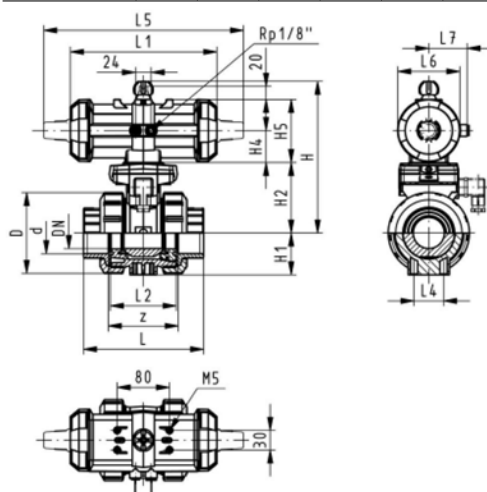
- Assignment of actuators: PA11 (DN10/15-25), PA21 (DN32-50), PA35 (DN65), PA40 (DN80), PA45 (DN100)
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time  $90^\circ <$ ) 1-2 s

### 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	199 230 942	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	167	27	62	40	97	92	194	56	25	261	76	48	64
1/2	50	167	27	62	40	97	95	194	56	25	261	76	48	64
3/4	58	176	30	71	40	97	110	194	65	25	261	76	48	72
1	68	176	36	71	40	97	123	194	71	25	261	76	48	79
1 1/4	84	210	44	84	51	115	146	224	85	45	305	95	59	94
1 1/2	97	210	51	84	51	115	157	224	89	45	305	95	59	95
2	124	232	64	106	51	115	183	224	101	45	305	95	59	107
2 1/2	166	257	85	156		66	233	144	136	70	190	60		144
3	200	274	105	168		70	254	152	141	70	198	65		151
4	238	273	123	175		78	301	169	164	120	235	72		174







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

### Model:

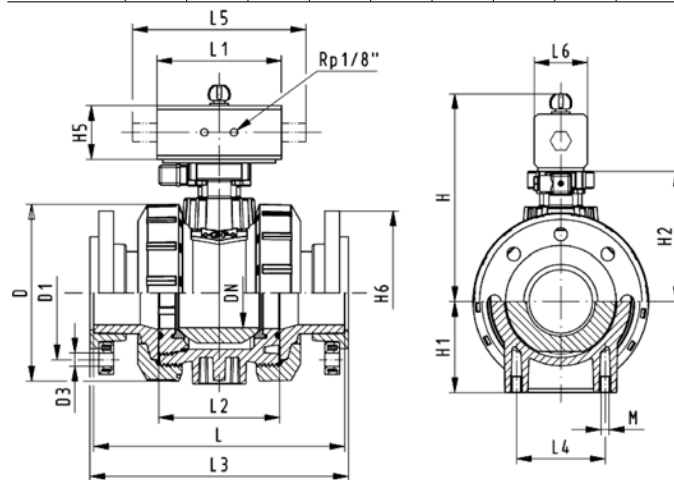
- Assignment of actuators PA11 (DN10/15-25), PA21 (DN32-50), PA30 (DN65), PA35 (DN80), PA40 (DN100)
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time  $90^\circ <$  1-2 s
- Overall length according to EN 558-1
- Connecting dimensions: ISO 7005, EN 1092, BS 4504, DIN 2501; bolt circle PN 10

### 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]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]
75	166	262	85	156	70	93	284	218	136	290	70	276	65
90	200	281	105	168	78	100	300	259	141	310	70	341	72
110	238	292	123	175	86	110	340	287	164	350	120	369	80





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

### Model:

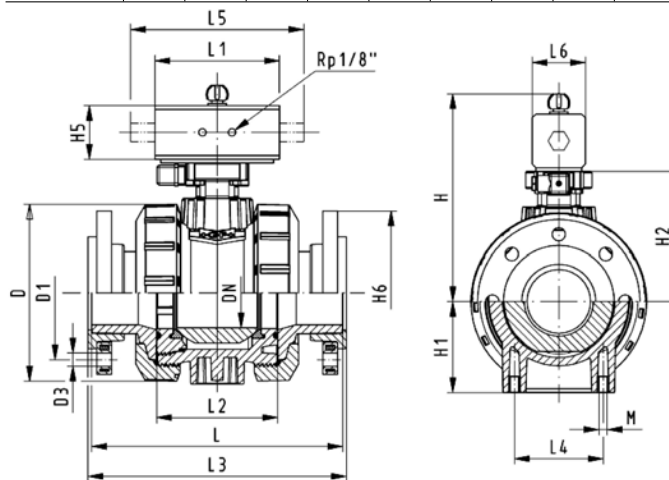
- Assignment of actuators PA11 (DN10/15-25), PA21 (DN32-50), PA30 (DN65), PA35 (DN80), PA40 (DN100)
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time  $90^\circ <$ ) 1-2 s
- Overall length according to EN 558-1
- Connecting dimensions: ISO 7005, EN 1092, BS 4504, DIN 2501; bolt circle PN 10

### 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]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	
75	166	262	85	156	70	93	284	218	136	290	70	276	65	
90	200	281	105	168	78	100	300	259	141	310	70	341	72	
110	238	292	123	175	86	110	340	287	164	350	120	369	80	





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

### Model:

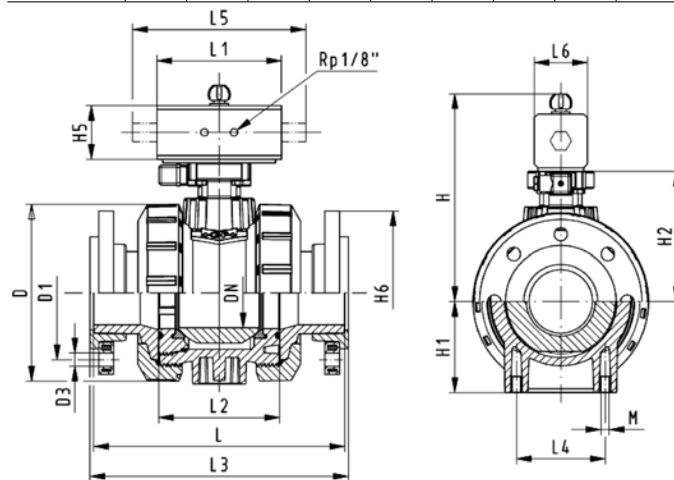
- Assignment of actuators: PA11 (DN10/15-25), PA21 (DN32-50), PA35 (DN65), PA40 (DN80), PA45 (DN100)
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time  $90^\circ <$  1-2 s
- Overall length according to EN 558-1
- Connecting dimensions: ISO 7005, EN 1092, BS 4504, DIN 2501; bolt circle PN 10

### 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]	L5 [mm]	L6 [mm]
75	166	257	85	156	66	93	284	144	136	290	70	190	60
90	200	274	105	168	70	100	300	152	141	310	70	198	65
110	238	273	123	175	78	110	340	169	164	350	120	235	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.

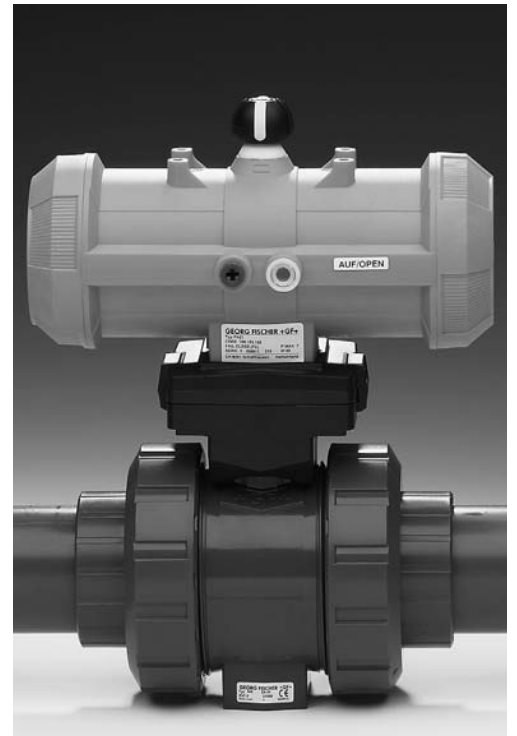
**We supply what you put together.**

# 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

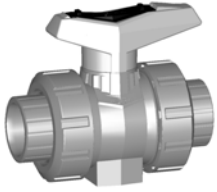
### Stroke limiter

- R01 without stroke limiter
- R02 with stroke limiter

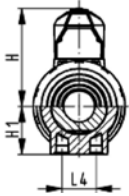
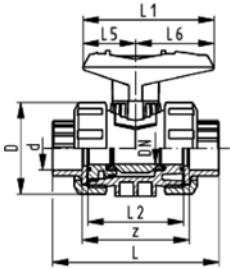
<b>P</b>	<b>Q</b>	<b>R</b>	
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# Ball valves

## Ball valve type 546 ABS With solvent cement sockets metric



DN10/15 - 50









### Model:

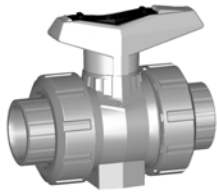
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- z-dimension, valve end and valve nut are **not compatible** with type 346 (DN10/15-50) resp. type 370 (DN65-100)
- Ball seals PTFE
- Without mounting inserts

### Option:

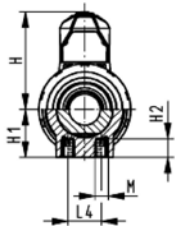
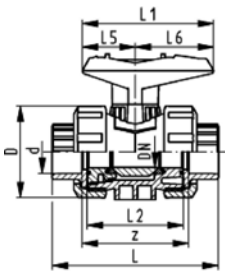
- Individual configuration of the valve (see form)
- Multifunctional module with integrated limit switches
- Pneumatic or electric actuators from +GF+

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	kg
16	10	10	71	<b>169 546 001</b>	0.112
20	15	10	185	<b>169 546 002</b>	0.114
25	20	10	350	<b>169 546 003</b>	0.178
32	25	10	700	<b>169 546 004</b>	0.258
40	32	10	1000	<b>169 546 005</b>	0.457
50	40	10	1600	<b>169 546 006</b>	0.642
63	50	10	3100	<b>169 546 007</b>	1.175
 75	65	10	5000	<b>169 546 008</b>	3.900
 90	80	10	7000	<b>169 546 009</b>	5.700
 110	100	10	11000	<b>169 546 010</b>	9.100

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



DN10/15 - 50



## Ball valve type 546 ABS With mounting inserts With solvent cement sockets metric

### Model:

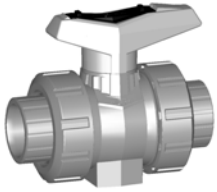
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- z-dimension, valve end and valve nut are **not compatible** with type 346 (DN10/15-50) resp. type 370 (DN65-100)
- Ball seals PTFE
- Integrated stainless steel mounting inserts

### Option:

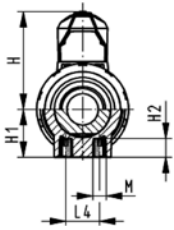
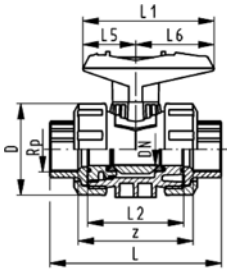
- Individual configuration of the valve (see form)
- Multifunctional module with integrated limit switches
- Pneumatic or electric actuators from +GF+

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	kg
16	10	10	71	<b>169 546 061</b>	0.112
20	15	10	185	<b>169 546 062</b>	0.114
25	20	10	350	<b>169 546 063</b>	0.178
32	25	10	700	<b>169 546 064</b>	0.258
40	32	10	1000	<b>169 546 065</b>	0.457
50	40	10	1600	<b>169 546 066</b>	0.642
63	50	10	3100	<b>169 546 067</b>	1.175
75	65	10	5000	<b>169 546 068</b>	3.900
90	80	10	7000	<b>169 546 069</b>	5.700
110	100	10	11000	<b>169 546 070</b>	9.100

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



DN10/15 - 50



## Ball valve type 546 ABS With mounting inserts With threaded sockets Rp

### Model:

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

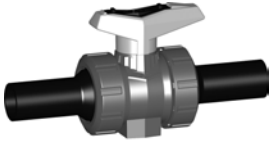
### Option:

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

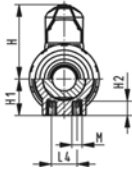
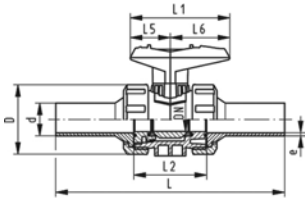
Rp [inch]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	kg
3/8	10	10	71	<b>169 546 021</b>	0.112
1/2	15	10	185	<b>169 546 022</b>	0.114
3/4	20	10	350	<b>169 546 023</b>	0.178
1	25	10	700	<b>169 546 024</b>	0.258
1 1/4	32	10	1000	<b>169 546 025</b>	0.457
1 1/2	40	10	1600	<b>169 546 026</b>	0.642
2	50	10	3100	<b>169 546 027</b>	1.175

Rp [inch]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	M	z [mm]
3/8	50	57	27	12	95	77	56	25	32	45	M6	69
1/2	50	57	27	12	100	77	56	25	32	45	M6	67
3/4	58	67	30	12	114	97	65	25	39	58	M6	78
1	68	73	36	12	127	97	71	25	39	58	M6	85
1 1/4	84	90	44	15	146	128	85	45	54	74	M8	100
1 1/2	97	97	51	15	152	128	89	45	54	74	M8	106
2	124	116	64	15	177	152	101	45	66	87	M8	121





DN10/15 - 50



## Ball valve type 546 ABS With mounting inserts With butt fusion spigots long PE 100 SDR11 metric

### Model:

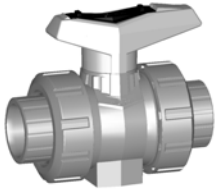
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- z-dimension, valve end and valve nut are **not compatible** with type 346 (DN10/15-50) resp. type 370 (DN65-100)
- Ball seals PTFE
- Integrated stainless steel mounting inserts

### Option:

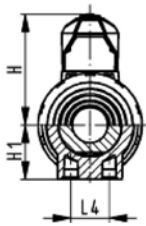
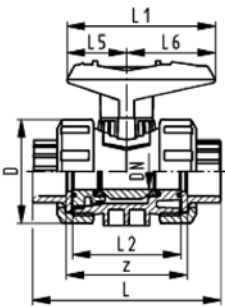
- Individual configuration of the valve (see form)
- Multifunctional module with integrated limit switches
- Pneumatic or electric actuators from +GF+

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	kg
20	15	16	185	<b>800 024 832</b>	0.150
25	20	16	350	<b>800 024 834</b>	0.220
32	25	16	700	<b>800 015 141</b>	0.310
40	32	16	1000	<b>800 015 142</b>	0.530
50	40	16	1600	<b>800 015 179</b>	0.740
63	50	16	3100	<b>800 015 143</b>	1.370

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	M	e [mm]
20	50	57	27	12	193	77	56	25	32	45	M6	2,3
25	58	67	30	12	216	97	65	25	39	58	M6	2,3
32	68	73	36	12	223	97	71	25	39	58	M6	3
40	84	90	44	15	249	128	85	45	54	74	M8	3,7
50	97	97	51	15	271	128	89	45	54	74	M8	4,6
63	124	116	64	15	321	152	101	45	66	87	M8	5,8



DN10/15 - 50






## Ball valve type 546 ABS With solvent cement sockets Inch BS




### Model:

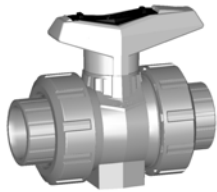
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- z-dimension, valve end and valve nut are **not compatible** with type 346 (DN10/15-50) resp. type 370 (DN65-100)
- Ball seals PTFE
- Without mounting inserts

### Option:

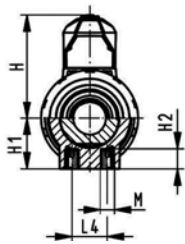
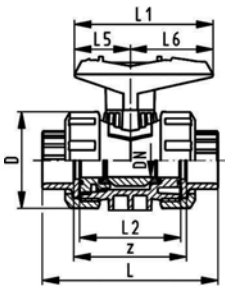
- Individual configuration of the valve (see form)
- Multifunctional module with integrated limit switches
- Pneumatic or electric actuators from +GF+

Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	kg
3/8	10	10	71	<b>169 546 201</b>	0.112
1/2	15	10	185	<b>169 546 202</b>	0.114
3/4	20	10	350	<b>169 546 203</b>	0.178
1	25	10	700	<b>169 546 204</b>	0.258
1 1/4	32	10	1000	<b>169 546 205</b>	0.457
1 1/2	40	10	1600	<b>169 546 206</b>	0.642
2	50	10	3100	<b>169 546 207</b>	1.175
	65	10	5000	<b>169 546 008</b>	3.900
	80	10	7000	<b>169 546 209</b>	5.700
	100	10	11000	<b>169 546 210</b>	9.100

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



DN10/15 - 50



## Ball valve type 546 ABS With mounting inserts With solvent cement sockets Inch BS

### Model:

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

### Option:

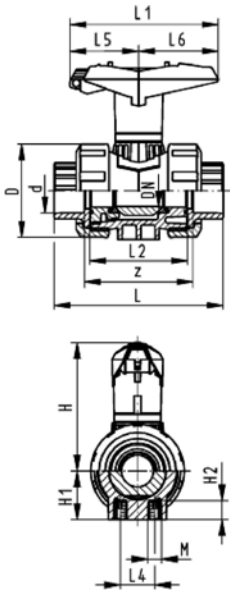
- Individual configuration of the valve (see form)
- Multifunctional module with integrated limit switches
- Pneumatic or electric actuators from +GF+

Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	kg
3/8	10	10	71	<b>169 546 241</b>	0.112
1/2	15	10	185	<b>169 546 242</b>	0.114
3/4	20	10	350	<b>169 546 243</b>	0.178
1	25	10	700	<b>169 546 244</b>	0.258
1 1/4	32	10	1000	<b>169 546 245</b>	0.457
1 1/2	40	10	1600	<b>169 546 246</b>	0.642
2	50	10	3100	<b>169 546 247</b>	1.175
2 1/2	65	10	5000	<b>169 546 068</b>	3.900
3	80	10	7000	<b>169 546 249</b>	5.700
4	100	10	11000	<b>169 546 250</b>	9.100

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	57	27	12	92	77	56	25	32	45	M6	60
1/2	50	57	27	12	95	77	56	25	32	45	M6	60
3/4	58	67	30	12	110	97	65	25	39	58	M6	69
1	68	73	36	12	123	97	71	25	39	58	M6	75
1 1/4	84	90	44	15	146	128	85	45	54	74	M8	89
1 1/2	97	97	51	15	157	128	89	45	54	74	M8	97
2	124	116	64	15	183	152	101	45	66	87	M8	110
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



DN10/15 - 50



## Ball valve type 546 ABS With lockable handle With solvent cement sockets metric

### Model:

- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- z-dimension, valve end and valve 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:

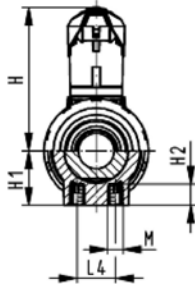
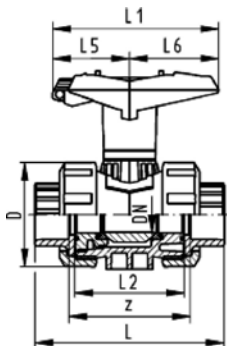
- Individual configuration of the valve (see form)
- Multifunctional module with integrated limit switches
- Pneumatic or electric actuators from +GF+

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	kg
16	10	10	71	<b>169 546 081</b>	0.121
20	15	10	185	<b>169 546 082</b>	0.123
25	20	10	350	<b>169 546 083</b>	0.193
32	25	10	700	<b>169 546 084</b>	0.273
40	32	10	1000	<b>169 546 085</b>	0.480
50	40	10	1600	<b>169 546 086</b>	0.665
63	50	10	3100	<b>169 546 087</b>	1.205
75	65	10	5000	<b>169 546 088</b>	4.200
90	80	10	7000	<b>169 546 089</b>	6.100
110	100	10	11000	<b>169 546 090</b>	9.400

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



DN10/15 - 50






## Ball valve type 546 ABS With lockable handle With solvent cement sockets Inch BS




### Model:

- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- z-dimension, valve end and valve 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:

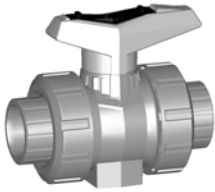
- Individual configuration of the valve (see form)
- Multifunctional module with integrated limit switches
- Pneumatic or electric actuators from +GF+

Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	kg
3/8	10	10	71	<b>169 546 221</b>	0.121
1/2	15	10	185	<b>169 546 222</b>	0.123
3/4	20	10	350	<b>169 546 223</b>	0.193
1	25	10	700	<b>169 546 224</b>	0.273
1 1/4	32	10	1000	<b>169 546 225</b>	0.480
1 1/2	40	10	1600	<b>169 546 226</b>	0.665
2	50	10	3100	<b>169 546 227</b>	1.205
 65	65	10	5000	<b>169 546 088</b>	4.200
 3	80	10	7000	<b>169 546 229</b>	6.100
 4	100		11000	<b>169 546 230</b>	9.400

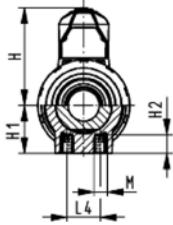
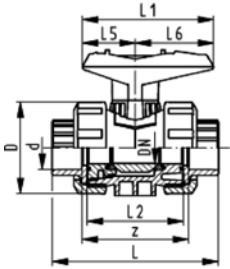
Inch	D [mm]	H [mm]	H1 [mm]	H2 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	M	z [mm]
3/8	50	79	27	12	92	87	56	25	42	45	M6	60
1/2	50	79	27	12	95	87	56	25	42	45	M6	60
3/4	58	88	30	12	110	108	65	25	50	58	M6	69
1	68	94	36	12	123	108	71	25	50	58	M6	75
1 1/4	84	113	44	15	146	140	85	45	66	75	M8	89
1 1/2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

# Ball valves

## Ball valve type 546 ABS SF With mounting inserts With solvent cement sockets metric



DN10/15 - 50









### Model:

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

### Option:

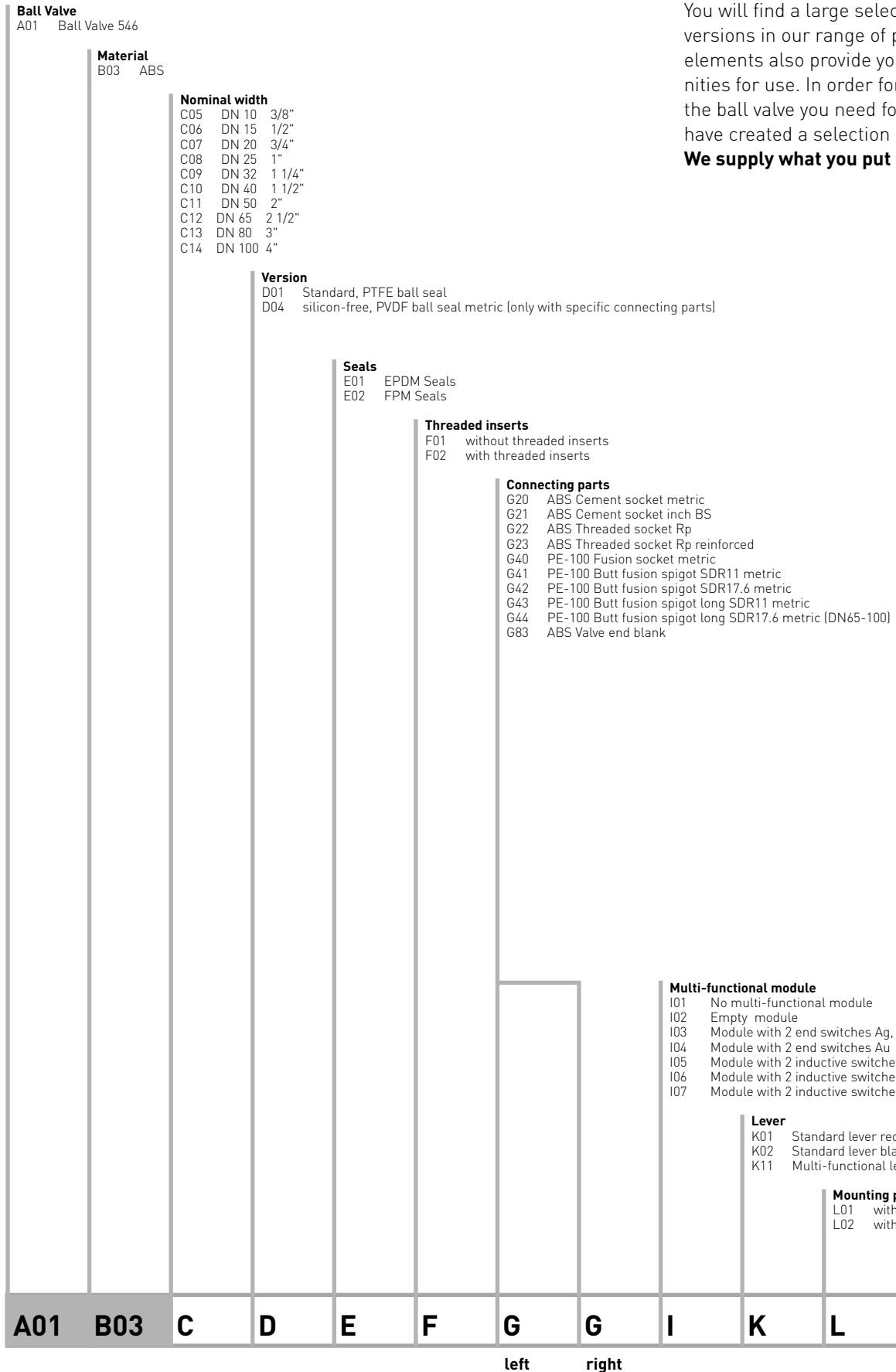
- Individual configuration of the valve (see form)
- Multifunctional module with integrated limit switches

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	kg
16	10	10	71	<b>169 546 601</b>	0.112
20	15	10	185	<b>169 546 602</b>	0.114
25	20	10	350	<b>169 546 603</b>	0.178
32	25	10	700	<b>169 546 604</b>	0.258
40	32	10	1000	<b>169 546 605</b>	0.457
50	40	10	1600	<b>169 546 606</b>	0.642
63	50	10	3100	<b>169 546 607</b>	1.175
 75	65	10	5000	<b>169 546 608</b>	3.900
 90	80	10	7000	<b>169 546 609</b>	5.700
 110	100	10	11000	<b>169 546 610</b>	9.100

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

# Copiable

## Configurator GF ball valve type 546 ABS



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 you application, we have created a selection menu for you.

**We supply what you put together.**

# Ball valves electric

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



DN10/15 - 50

### Model:

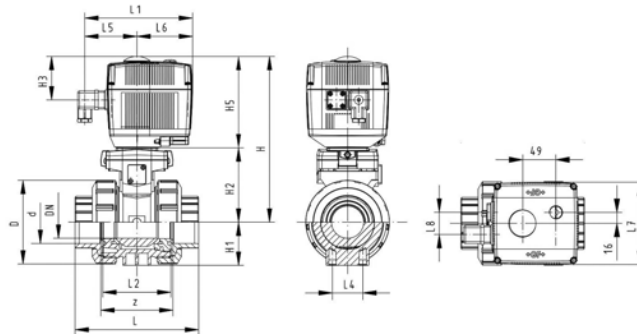
- Built on with electric actuator EA11
- Voltage 100-230 V, 50-60 Hz
- Control range 90°<
- Control time 5 s/90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts

### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	kg
16	10	10	70	<b>199 107 082</b>	2.072
20	15	10	185	<b>199 107 083</b>	2.072
25	20	10	350	<b>199 107 084</b>	2.189
32	25	10	700	<b>199 107 085</b>	2.189
40	32	10	1000	<b>199 107 086</b>	2.592
50	40	10	1600	<b>199 107 087</b>	2.914
63	50	10	3100	<b>199 107 088</b>	3.772

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	L8 [mm]	z [mm]
16	50	200	27	64	64	137	92	161	56	25	77	83	122	33	64
20	50	200	27	64	64	137	95	161	56	25	77	83	122	33	64
25	58	209	30	73	64	137	110	161	65	25	77	83	122	33	72
32	68	209	36	73	64	137	123	161	71	25	77	83	122	33	79
40	84	220	44	84	64	137	146	161	85	45	77	83	122	33	94
50	97	220	51	84	64	137	157	161	89	45	77	83	122	33	95
63	124	243	64	106	64	137	183	161	101	45	77	83	122	33	107







DN10/15 - 50

## Ball valve type 107 ABS 24V With manual emergency override With solvent cement sockets metric

### Model:

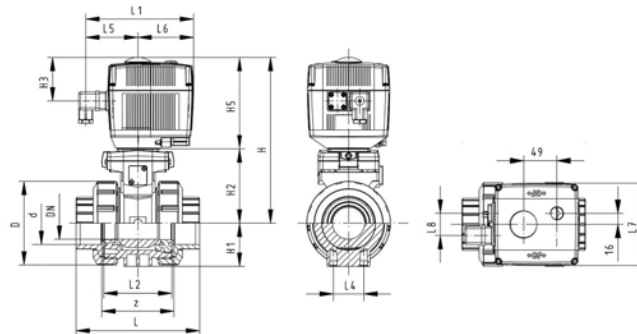
- Built on with electric actuator EA11
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Voltage 24 V AC/DC
- Control range 90°<
- Control time 5 s/90°<

### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	kg
16	10	10	70	<b>199 107 092</b>	2.072
20	15	10	185	<b>199 107 093</b>	2.072
25	20	10	350	<b>199 107 094</b>	2.189
32	25	10	700	<b>199 107 095</b>	2.189
40	32	10	1000	<b>199 107 096</b>	2.592
50	40	10	1600	<b>199 107 097</b>	2.914
63	50	10	3100	<b>199 107 098</b>	3.772

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	L8 [mm]	z [mm]
16	50	200	27	64	64	137	92	161	56	25	77	83	122	33	64
20	50	200	27	64	64	137	95	161	56	25	77	83	122	33	64
25	58	209	30	73	64	137	110	161	65	25	77	83	122	33	72
32	68	209	36	73	64	137	123	161	71	25	77	83	122	33	79
40	84	220	44	84	64	137	146	161	85	45	77	83	122	33	94
50	97	220	51	84	64	137	157	161	89	45	77	83	122	33	95
63	124	243	64	106	64	137	183	161	101	45	77	83	122	33	107





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

### Model:

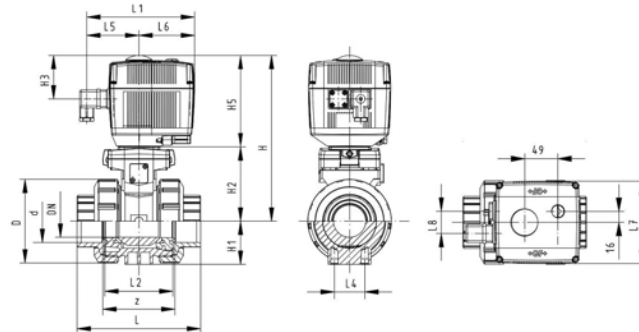
- Built on with electric actuator EA11
- Voltage 100-230 V, 50-60 Hz
- Control range 90°<
- Control time 5 s/90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts

### Option:

- Individual configuration of the valve (see form)

Rp [inch]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	kg
3/8	10	10	70	<b>199 107 682</b>	2.100
1/2	15	10	185	<b>199 107 683</b>	2.100
3/4	20	10	350	<b>199 107 684</b>	2.200
1	25	10	700	<b>199 107 685</b>	2.300
1 1/4	32	10	1000	<b>199 107 686</b>	2.600
1 1/2	40	10	1600	<b>199 107 687</b>	3.000
2	50	10	3100	<b>199 107 688</b>	3.800

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





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## Ball valve type 107 ABS 24V With manual emergency override With threaded sockets Rp

### Model:

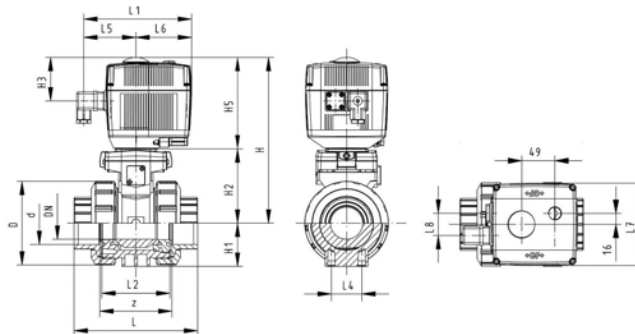
- Built on with electric actuator EA11
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Voltage 24 V AC/DC
- Control range 90°<
- Control time 5 s/90°<

### Option:

- Individual configuration of the valve (see form)

Rp [inch]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	kg
3/8	10	10	70	<b>199 107 692</b>	2.100
1/2	15	10	185	<b>199 107 693</b>	2.100
3/4	20	10	350	<b>199 107 694</b>	2.200
1	25	10	700	<b>199 107 695</b>	2.300
1 1/4	32	10	1000	<b>199 107 696</b>	2.600
1 1/2	40	10	1600	<b>199 107 697</b>	3.000
2	50	10	3100	<b>199 107 698</b>	3.800

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





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## Ball valve type 107 ABS 100-230V With manual emergency override With solvent cement sockets Inch BS

### Model:

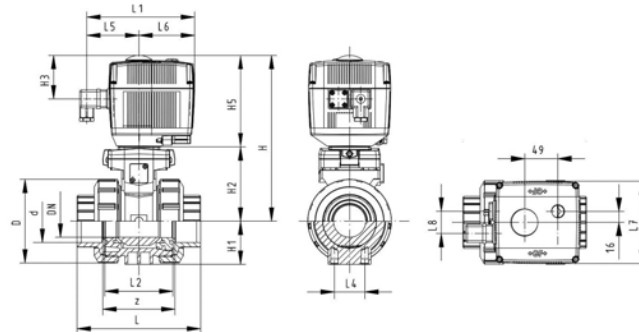
- Built on with electric actuator EA11
- Voltage 100-230 V, 50-60 Hz
- Control range 90°<
- Control time 5 s/90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts

### Option:

- Individual configuration of the valve (see form)

Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	kg
3/8	10	10	70	<b>199 107 182</b>	2.100
1/2	15	10	185	<b>199 107 183</b>	2.100
3/4	20	10	350	<b>199 107 184</b>	2.200
1	25	10	700	<b>199 107 185</b>	2.300
1 1/4	32	10	1000	<b>199 107 186</b>	2.600
1 1/2	40	10	1600	<b>199 107 187</b>	3.000
2	50	10	3100	<b>199 107 188</b>	3.800

Inch	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	L8 [mm]	z [mm]
3/8	50	200	27	64	64	137	92	161	56	25	79	83	122	67	60
1/2	50	200	27	64	64	137	95	161	56	25	79	83	122	67	60
3/4	58	209	30	73	64	137	110	161	65	25	79	83	122	67	69
1	68	209	36	73	64	137	123	161	71	25	79	83	122	67	75
1 1/4	84	220	44	84	64	137	146	161	85	45	79	83	122	67	89
1 1/2	97	220	51	84	64	137	157	161	89	45	79	83	122	67	97
2	124	243	64	106	64	137	183	161	101	45	79	83	122	67	110





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## Ball valve type 107 ABS 24V With manual emergency override With solvent cement sockets Inch BS

### Model:

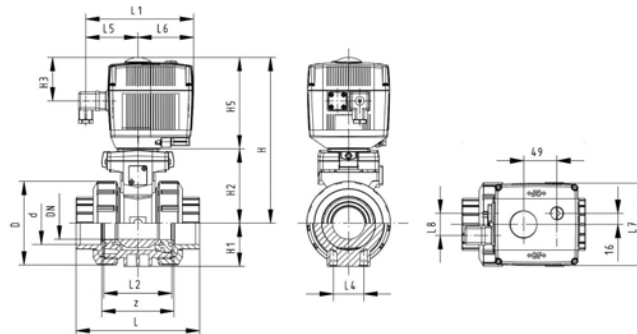
- Built on with electric actuator EA11
- Voltage 24 V AC/DC
- Control range 90°<
- Control time 5 s/90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts

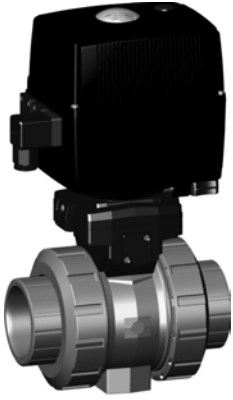
### Option:

- Individual configuration of the valve (see form)

Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	kg
3/8	10	10	70	<b>199 107 192</b>	2.100
1/2	15	10	185	<b>199 107 193</b>	2.100
3/4	20	10	350	<b>199 107 194</b>	2.200
1	25	10	700	<b>199 107 195</b>	2.300
1 1/4	32	10	1000	<b>199 107 196</b>	2.600
1 1/2	40	10	1600	<b>199 107 197</b>	3.000
2	50	10	3100	<b>199 107 198</b>	3.800

Inch	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	L8 [mm]	z [mm]
3/8	50	200	27	64	64	137	92	161	56	25	79	83	122	67	60
1/2	50	200	27	64	64	137	95	161	56	25	79	83	122	67	60
3/4	58	209	30	73	64	137	110	161	65	25	79	83	122	67	69
1	68	209	36	73	64	137	123	161	71	25	79	83	122	67	75
1 1/4	84	220	44	84	64	137	146	161	85	45	79	83	122	67	89
1 1/2	97	220	51	84	64	137	157	161	89	45	79	83	122	67	97
2	124	243	64	106	64	137	183	161	101	45	79	83	122	67	110





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




### Model:

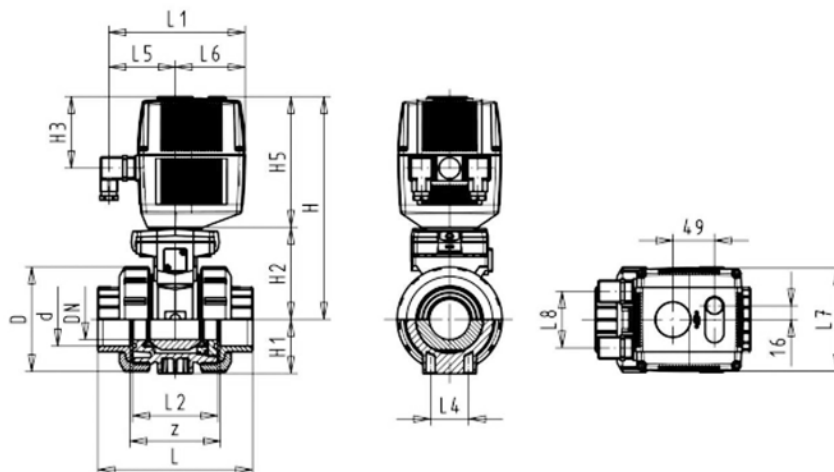
- Assignment of actuators EA21 (DN10/15-50), EA31 (DN65-100 if available)
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Voltage 100-230 V, 50-60 Hz
- Control range 90°<
- Control time: EA21: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

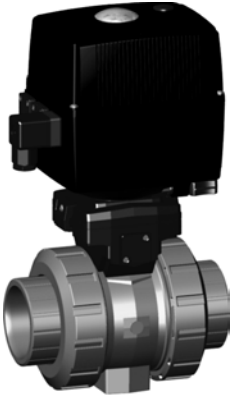
### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	kg
16	10	10	70	<b>199 130 702</b>	2.100
20	15	10	185	<b>199 130 703</b>	2.100
25	20	10	350	<b>199 130 704</b>	2.200
32	25	10	700	<b>199 130 705</b>	2.300
40	32	10	1000	<b>199 130 706</b>	2.600
50	40	10	1600	<b>199 130 707</b>	3.000
63	50	10	3100	<b>199 130 708</b>	3.800
 75	65	10	5000	<b>199 130 709</b>	3.500
 90	80	10	7000	<b>199 130 710</b>	4.300
 110	100	10	11000	<b>199 130 711</b>	5.400

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





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## Ball valve type 130 ABS 24V With manual emergency override With solvent cement sockets metric




### Model:

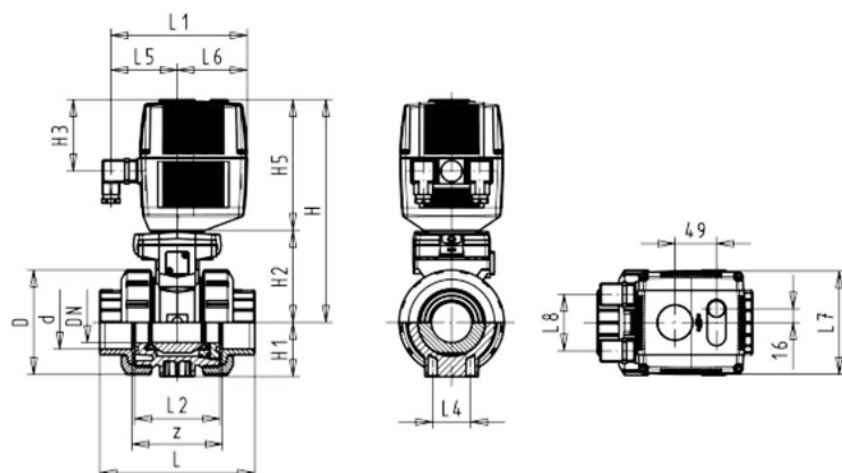
- Assignment of actuators EA21 (DN10/15-50), EA31 (DN65-100 if available)
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Voltage 24 V AC/DC
- Control range 90°<
- Control time: EA21: 5s/90°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

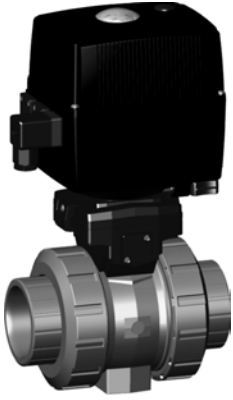
### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	kg
16	10	10	70	<b>199 130 742</b>	2.100
20	15	10	185	<b>199 130 743</b>	2.100
25	20	10	350	<b>199 130 744</b>	2.200
32	25	10	700	<b>199 130 745</b>	2.300
40	32	10	1000	<b>199 130 746</b>	2.600
50	40	10	1600	<b>199 130 747</b>	3.000
63	50	10	3100	<b>199 130 748</b>	3.800
 75	65	10	5000	<b>199 130 749</b>	3.500
 90	80	10	7000	<b>199 130 750</b>	4.300
 110	100	10	11000	<b>199 130 751</b>	5.400

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





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

### Model:

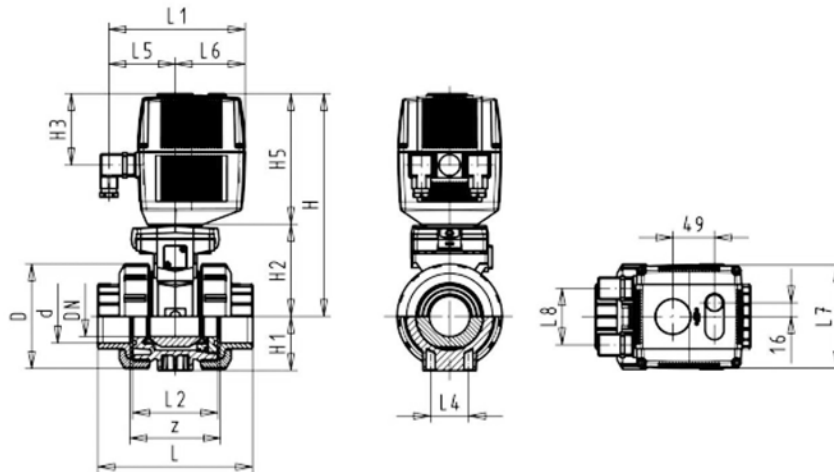
- Assignment of actuators EA21 (DN10/15-50), EA31 (DN65-100 if available)
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Voltage 100-230 V, 50-60 Hz
- Control range 90°<
- Control time: EA21: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

### Option:

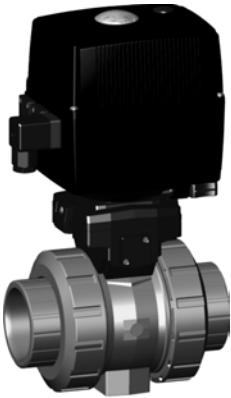
- Individual configuration of the valve (see form)

Rp [inch]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	kg
3/8	10	10	70	<b>199 130 722</b>	2.100
1/2	15	10	185	<b>199 130 723</b>	2.100
3/4	20	10	350	<b>199 130 724</b>	2.200
1	25	10	700	<b>199 130 725</b>	2.300
1 1/4	32	10	1000	<b>199 130 726</b>	2.600
1 1/2	40	10	1600	<b>199 130 727</b>	3.000
2	50	10	3100	<b>199 130 728</b>	3.800

Rp [inch]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	L8 [mm]	z [mm]
3/8	50	231	27	64	94	167	92	180	56	25	97	83	122	66	64
1/2	50	231	27	64	94	167	95	180	56	25	97	83	122	66	64
3/4	58	240	30	73	94	167	110	180	65	25	97	83	122	66	72
1	68	240	36	73	94	167	123	180	71	25	97	83	122	66	79
1 1/4	84	251	44	84	94	167	146	180	85	45	97	83	122	66	94
1 1/2	97	251	51	84	94	167	157	180	89	45	97	83	122	66	95
2	124	273	64	106	94	167	183	180	101	45	97	83	122	66	107







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## Ball valve type 130 ABS 24V With manual emergency override With threaded sockets Rp

### Model:

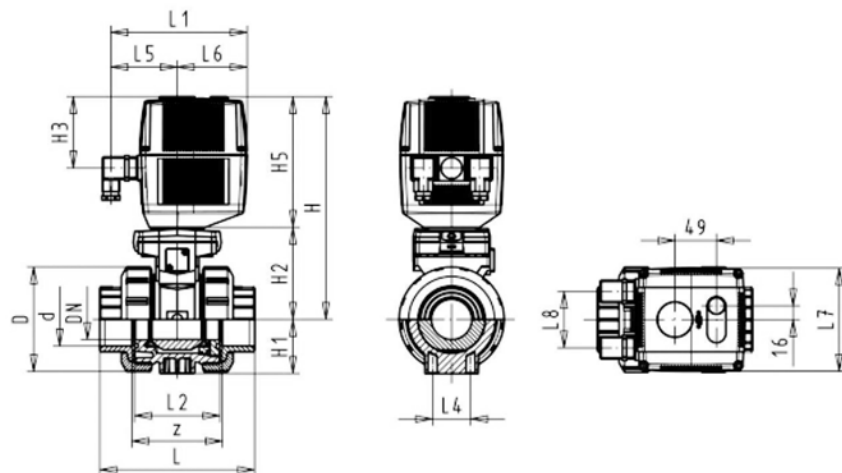
- Assignment of actuators EA21 (DN10/15-50), EA31 (DN65-100 if available)
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Voltage 24 V AC/DC
- Control range 90°<
- Control time: EA21: 5s/90°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

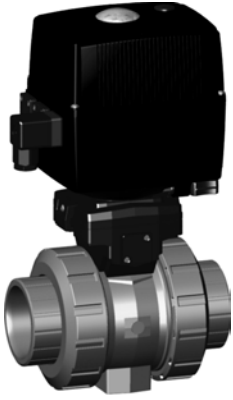
### Option:

- Individual configuration of the valve (see form)

Rp [inch]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	kg
3/8	10	10	70	<b>199 130 762</b>	2.100
1/2	15	10	185	<b>199 130 763</b>	2.100
3/4	20	10	350	<b>199 130 764</b>	2.200
1	25	10	700	<b>199 130 765</b>	2.300
1 1/4	32	10	1000	<b>199 130 766</b>	2.600
1 1/2	40	10	1600	<b>199 130 767</b>	3.000
2	50	10	3100	<b>199 130 768</b>	3.800

Rp [inch]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	L8 [mm]	z [mm]
3/8	50	231	27	64	94	167	92	180	56	25	97	83	122	66	64
1/2	50	231	27	64	94	167	95	180	56	25	97	83	122	66	64
3/4	58	240	30	73	94	167	110	180	65	25	97	83	122	66	72
1	68	240	36	73	94	167	123	180	71	25	97	83	122	66	79
1 1/4	84	251	44	84	94	167	146	180	85	45	97	83	122	66	94
1 1/2	97	251	51	84	94	167	157	180	89	45	97	83	122	66	95
2	124	273	64	106	94	167	183	180	101	45	97	83	122	66	107





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## Ball valve type 134 ABS 100-230V With manual emergency override With solvent cement sockets Inch BS




### Model:

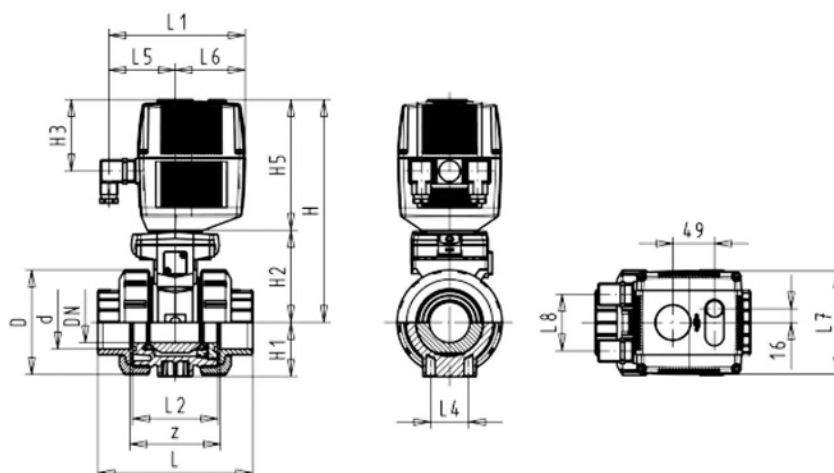
- Assignment of actuators EA21 (DN10/15-50), EA31 (DN65-100 if available)
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Voltage 100-230 V, 50-60 Hz
- Control range 90°<
- Control time: EA21: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

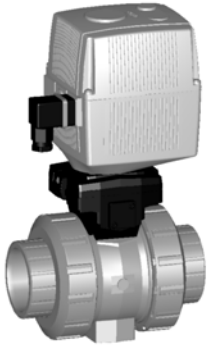
### Option:

- Individual configuration of the valve (see form)

Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	kg
3/8	10	10	70	<b>199 134 782</b>	2.100
1/2	15	10	185	<b>199 134 783</b>	2.100
3/4	20	10	350	<b>199 134 784</b>	2.200
1	25	10	700	<b>199 134 785</b>	2.300
1 1/4	32	10	1000	<b>199 134 786</b>	2.600
1 1/2	40	10	1600	<b>199 134 787</b>	3.000
2	50	10	3100	<b>199 134 788</b>	3.800
 2 1/2	65	10	5000	<b>199 134 789</b>	3.500
 3	80	10	7000	<b>199 134 790</b>	4.300
 4	100	10	11000	<b>199 134 791</b>	5.300

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	60
1/2	50	231	27	64	94	167	95	180	56	25	97	83	122	60
3/4	58	240	30	73	94	167	110	180	65	25	97	83	122	69
1	68	240	36	73	94	167	123	180	71	25	97	83	122	75
1 1/4	84	251	44	84	94	167	146	180	85	45	97	83	122	89
1 1/2	97	251	51	84	94	167	157	180	89	45	97	83	122	97
2	124	273	64	106	94	167	183	180	101	45	97	83	122	110
 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




## Ball valve type 134 ABS 24V With manual emergency override With solvent cement sockets Inch BS




### Model:

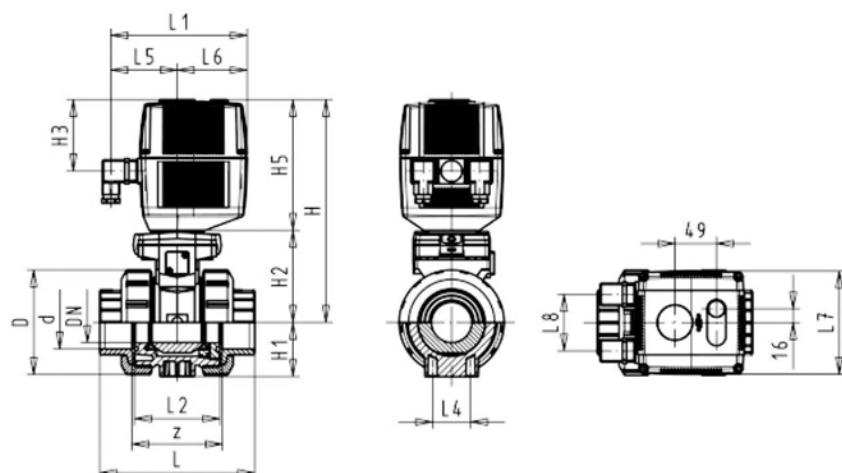
- Assignment of actuators EA21 (DN10/15-50), EA31 (DN65-100 if available)
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Voltage 24 V AC/DC
- Control range 90°<
- Control time: EA21: 5s/90°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

### Option:

- Individual configuration of the valve (see form)

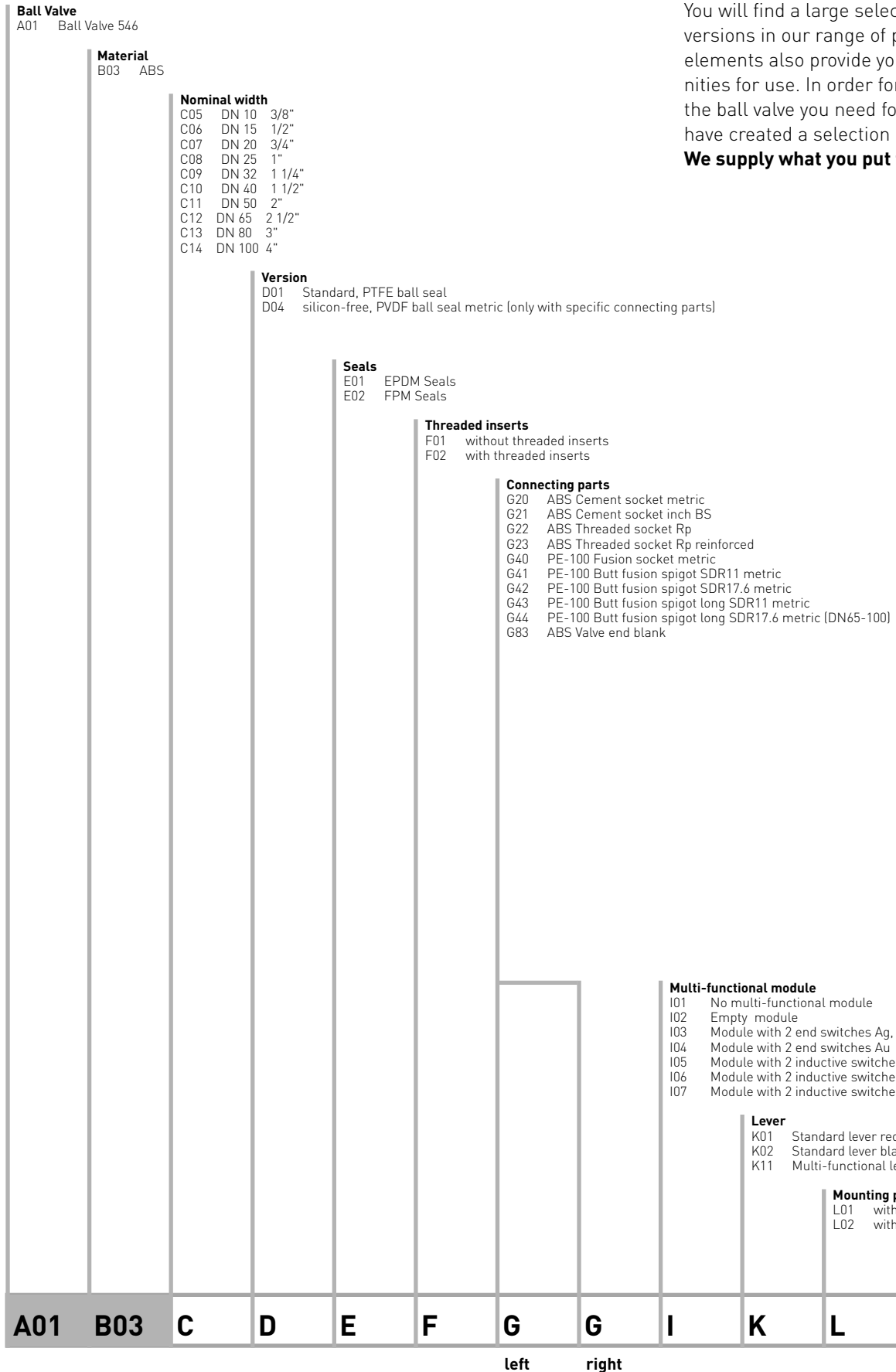
Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	kg
3/8	10	10	70	<b>199 134 822</b>	2.100
1/2	15	10	185	<b>199 134 823</b>	2.100
3/4	20	10	350	<b>199 134 824</b>	2.200
1	25	10	700	<b>199 134 825</b>	2.300
1 1/4	32	10	1000	<b>199 134 826</b>	2.600
1 1/2	40	10	1600	<b>199 134 827</b>	3.000
2	50	10	3100	<b>199 134 828</b>	3.800
 2 1/2	65	10	5000	<b>199 134 829</b>	3.500
 3	80	10	7000	<b>199 134 830</b>	4.300
 4	100	10	11000	<b>199 134 831</b>	5.300

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	60
1/2	50	231	27	64	94	167	95	180	56	25	97	83	122	60
3/4	58	240	30	73	94	167	110	180	65	25	97	83	122	69
1	68	240	36	73	94	167	123	180	71	25	97	83	122	75
1 1/4	84	251	44	84	94	167	146	180	85	45	97	83	122	89
1 1/2	97	251	51	84	94	167	157	180	89	45	97	83	122	97
2	124	273	64	106	94	167	183	180	101	45	97	83	122	110
 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



# Copiable

## Configurator GF ball valve type 546 ABS



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 you application, we have created a selection menu for you.

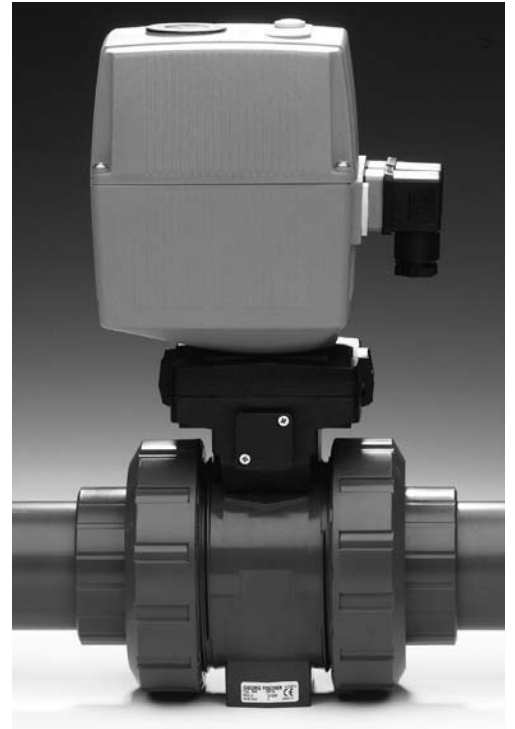
**We supply what you put together.**

# 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 any type of operation.

**We supply what you put together.**



### Electric Actuator EA11

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

### Accessories EA11

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

### Electric Actuator EA21/31

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

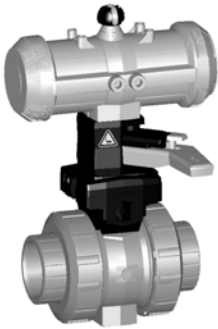
### Accessories EA21

- W01 No accessories
- W02 Heating element
- W03 Cycle time module
- W04 Cycle time monitoring
- W05 Cycles monitoring
- W06 Motor current monitoring
- W07 2 limit switches Ag, Ni
- W08 2 limit switches Gold
- W09 2 limit switches NPN
- W10 2 limit switches PNP
- 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

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

# Ball valves pneumatic

## Ball valve type 230 ABS FC (Fail safe to close) With manual override With solvent cement sockets metric



DN10/15 - 50

### Model:

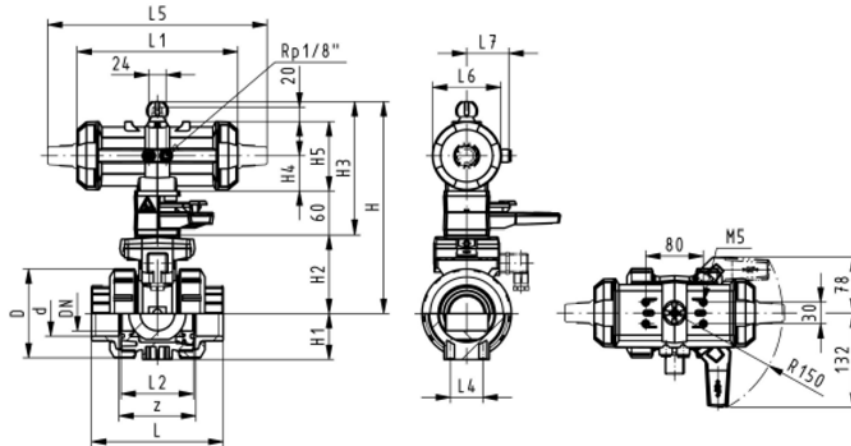
- Built on with pneumatic actuator PA11/21
- Control time  $90^\circ <$ ) 1-2 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

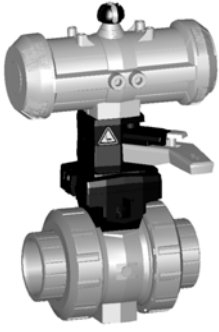
### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	kg
16	10	10	70	<b>199 230 702</b>	1.459
20	15	10	185	<b>199 230 703</b>	1.459
25	20	10	350	<b>199 230 704</b>	1.576
32	25	10	700	<b>199 230 705</b>	1.700
40	32	10	1000	<b>199 230 706</b>	2.751
50	40	10	1600	<b>199 230 707</b>	3.073
63	50	10	3100	<b>199 230 708</b>	3.931

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	z [mm]
16	50	230	27	62	168	40	97	92	194	56	25	261	76	48	64
20	50	230	27	62	168	40	97	95	194	56	25	261	76	48	64
25	58	239	30	71	168	40	97	110	194	65	25	261	76	48	72
32	68	239	36	71	168	40	97	123	194	71	25	261	76	48	79
40	84	271	44	84	187	51	115	146	224	85	45	305	95	59	94
50	97	271	51	84	187	51	115	157	224	89	45	305	95	59	95
63	124	293	64	106	187	51	115	183	224	101	45	305	95	59	107





DN10/15 - 50

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

### Model:

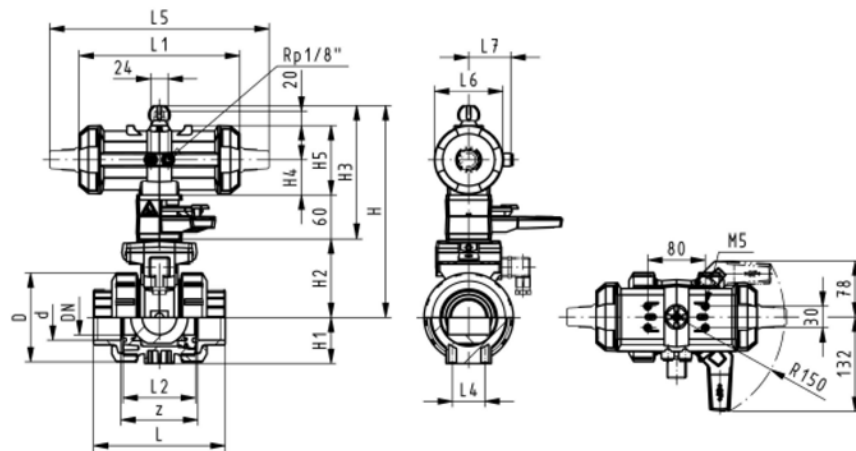
- Built on with pneumatic actuator PA11/21
- Control time 90°<) 1-2 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

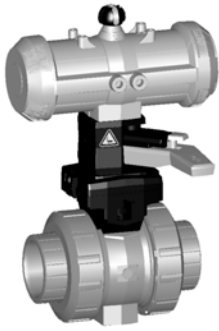
### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	kg
16	10	10	70	<b>199 230 742</b>	1.459
20	15	10	185	<b>199 230 743</b>	1.459
25	20	10	350	<b>199 230 744</b>	1.576
32	25	10	700	<b>199 230 745</b>	1.700
40	32	10	1000	<b>199 230 746</b>	2.751
50	40	10	1600	<b>199 230 747</b>	3.073
63	50	10	3100	<b>199 230 748</b>	3.931

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	z [mm]
16	50	230	27	62	168	40	97	92	194	56	25	261	76	48	64
20	50	230	27	62	168	40	97	95	194	56	25	261	76	48	64
25	58	239	30	71	168	40	97	110	194	65	25	261	76	48	72
32	68	239	36	71	168	40	97	123	194	71	25	261	76	48	79
40	84	271	44	84	187	51	115	146	224	85	45	305	95	59	94
50	97	271	51	84	187	51	115	157	224	89	45	305	95	59	95
63	124	293	64	106	187	51	115	183	224	101	45	305	95	59	107





DN10/15 - 50

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

### Model:

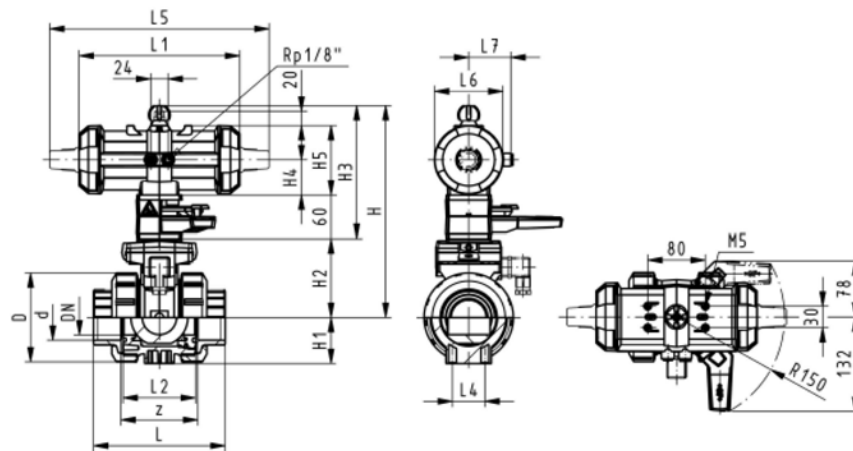
- Built on with pneumatic actuator PA11/21
- Control time  $90^\circ <$  1-2 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

### Option:

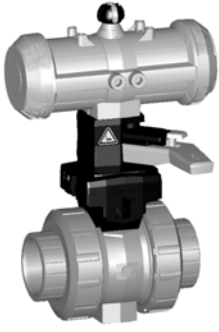
- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	kg
16	10	10	70	<b>199 230 782</b>	1.459
20	15	10	185	<b>199 230 783</b>	1.459
25	20	10	350	<b>199 230 784</b>	1.576
32	25	10	700	<b>199 230 785</b>	1.700
40	32	10	1000	<b>199 230 786</b>	2.751
50	40	10	1600	<b>199 230 787</b>	3.073
63	50	10	3100	<b>199 230 788</b>	3.931

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	z [mm]
16	50	230	27	62	168	40	97	92	194	56	25	261	76	48	64
20	50	230	27	62	168	40	97	95	194	56	25	261	76	48	64
25	58	239	30	71	168	40	97	110	194	65	25	261	76	48	72
32	68	239	36	71	168	40	97	123	194	71	25	261	76	48	79
40	84	271	44	84	187	51	115	146	224	85	45	305	95	59	94
50	97	271	51	84	187	51	115	157	224	89	45	305	95	59	95
63	124	293	64	106	187	51	115	183	224	101	45	305	95	59	107







DN10/15 - 50

## Ball valve type 230 ABS FC (Fail safe to close) With manual override With threaded sockets Rp

### Model:

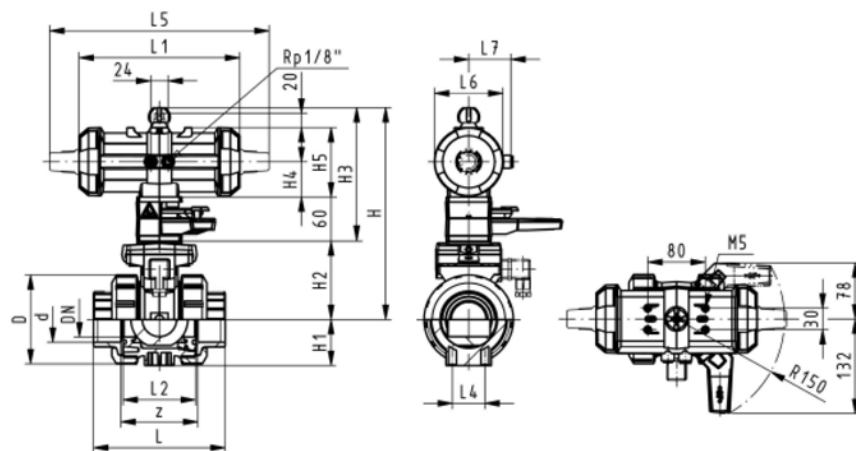
- Built on with pneumatic actuator PA11/21
- Control time 90°<) 1-2 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

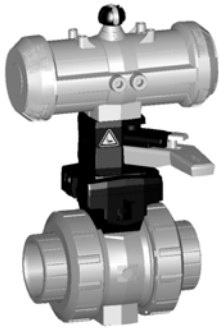
### Option:

- Individual configuration of the valve (see form)

Rp [inch]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	kg
3/8	10	10	70	<b>199 230 722</b>	1.459
1/2	15	10	185	<b>199 230 723</b>	1.459
3/4	20	10	350	<b>199 230 724</b>	1.576
1	25	10	700	<b>199 230 725</b>	1.700
1 1/4	32	10	1000	<b>199 230 726</b>	2.751
1 1/2	40	10	1600	<b>199 230 727</b>	3.073
2	50	10	3100	<b>199 230 728</b>	3.931

Rp [inch]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	z [mm]
3/8	50	230	27	62	168	40	97	92	194	56	25	261	76	48	64
1/2	50	230	27	62	168	40	97	95	194	56	25	261	76	48	64
3/4	58	239	30	71	168	40	97	110	194	65	25	261	76	48	72
1	68	239	36	71	168	40	97	123	194	71	25	261	76	48	79
1 1/4	84	271	44	84	187	51	115	146	224	85	45	305	95	59	94
1 1/2	97	271	51	84	187	51	115	157	224	89	45	305	95	59	95
2	124	293	64	106	187	51	115	183	224	101	45	305	95	59	107





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## Ball valve type 230 ABS FO (Fail safe to open) With manual override With threaded sockets Rp

### Model:

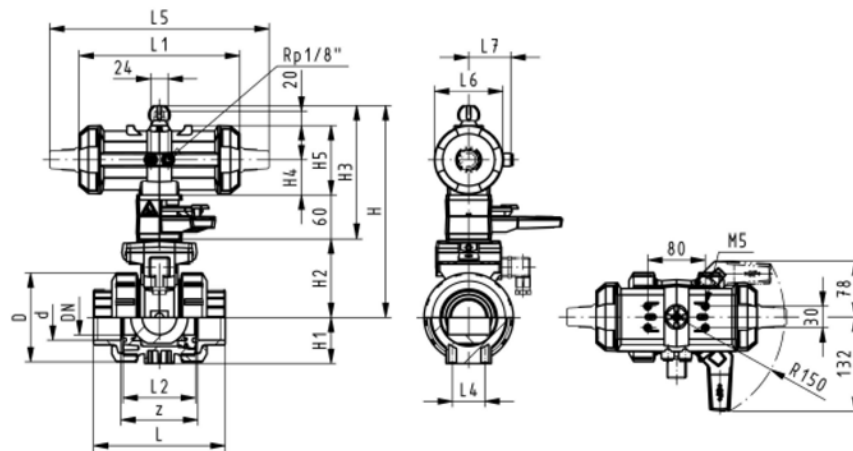
- Built on with pneumatic actuator PA11/21
- Control time  $90^\circ <$  1-2 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

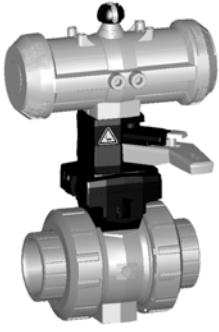
### Option:

- Individual configuration of the valve (see form)

Rp [inch]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	kg
$\frac{3}{8}$	10	10	70	<b>199 230 762</b>	1.459
$\frac{1}{2}$	15	10	185	<b>199 230 763</b>	1.459
$\frac{3}{4}$	20	10	350	<b>199 230 764</b>	1.576
1	25	10	700	<b>199 230 765</b>	1.700
1 $\frac{1}{4}$	32	10	1000	<b>199 230 766</b>	2.751
1 $\frac{1}{2}$	40	10	1600	<b>199 230 767</b>	3.073
2	50	10	3100	<b>199 230 768</b>	3.931

Rp [inch]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	z [mm]
$\frac{3}{8}$	50	230	27	62	168	40	97	92	194	56	25	261	76	48	64
$\frac{1}{2}$	50	230	27	62	168	40	97	95	194	56	25	261	76	48	64
$\frac{3}{4}$	58	239	30	71	168	40	97	110	194	65	25	261	76	48	72
1	68	239	36	71	168	40	97	123	194	71	25	261	76	48	79
1 $\frac{1}{4}$	84	271	44	84	187	51	115	146	224	85	45	305	95	59	94
1 $\frac{1}{2}$	97	271	51	84	187	51	115	157	224	89	45	305	95	59	95
2	124	293	64	106	187	51	115	183	224	101	45	305	95	59	107





DN10/15 - 50

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

### Model:

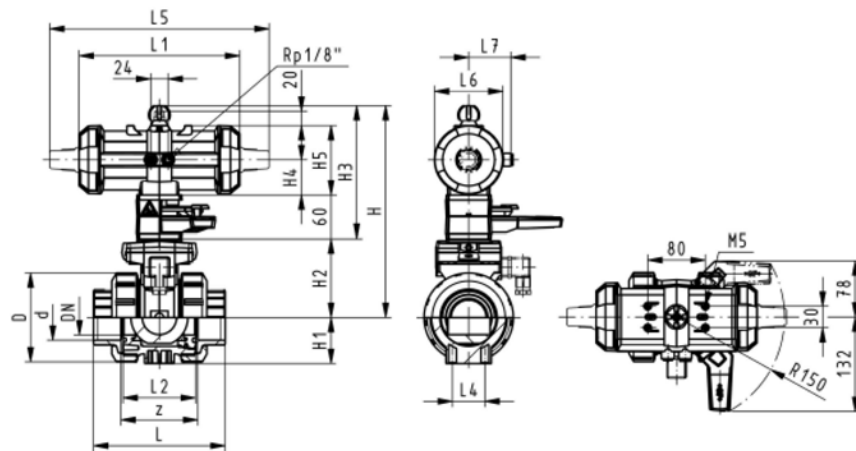
- Built on with pneumatic actuator PA11/21
- Control time 90°<) 1-2 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

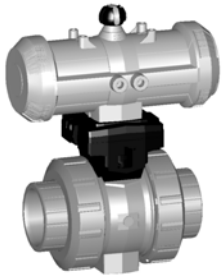
### Option:

- Individual configuration of the valve (see form)

Rp [inch]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	kg
3/8	10	10	70	<b>199 230 802</b>	1.459
1/2	15	10	185	<b>199 230 803</b>	1.459
3/4	20	10	350	<b>199 230 804</b>	1.576
1	25	10	700	<b>199 230 805</b>	1.700
1 1/4	32	10	1000	<b>199 230 806</b>	2.751
1 1/2	40	10	1600	<b>199 230 807</b>	3.073
2	50	10	3100	<b>199 230 808</b>	3.931

Rp [inch]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	z [mm]
3/8	50	230	27	62	168	40	97	92	194	56	25	261	76	48	64
1/2	50	230	27	62	168	40	97	95	194	56	25	261	76	48	64
3/4	58	239	30	71	168	40	97	110	194	65	25	261	76	48	72
1	68	239	36	71	168	40	97	123	194	71	25	261	76	48	79
1 1/4	84	271	44	84	187	51	115	146	224	85	45	305	95	59	94
1 1/2	97	271	51	84	187	51	115	157	224	89	45	305	95	59	95
2	124	293	64	106	187	51	115	183	224	101	45	305	95	59	107





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




### Model:

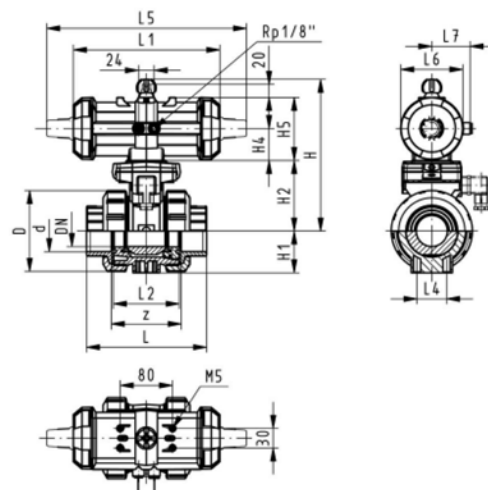
- Assignment of actuators PA11 (DN10/15-25), PA21 (DN32-50), PA30 (DN65), PA35 (DN80), PA40 (DN100)
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time  $90^\circ <$ ) 1-2 s

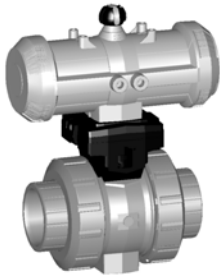
### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	kg
16	10	10	70	<b>199 230 822</b>	1.459
20	15	10	185	<b>199 230 823</b>	1.459
25	20	10	350	<b>199 230 824</b>	1.576
32	25	10	700	<b>199 230 825</b>	1.700
40	32	10	1000	<b>199 230 826</b>	2.751
50	40	10	1600	<b>199 230 827</b>	3.073
63	50	10	3100	<b>199 230 828</b>	3.931
 75	65	10	5000	<b>199 230 829</b>	3.900
 90	80	10	7000	<b>199 230 830</b>	4.700
 110	100	10	11000	<b>199 230 831</b>	6.800

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	z [mm]
16	50	167	27	62	40	97	92	194	56	25	261	76	48	64
20	50	167	27	62	40	97	95	194	56	25	261	76	48	64
25	58	176	30	71	40	97	110	194	65	25	261	76	48	72
32	68	176	36	71	40	97	123	194	71	25	261	76	48	79
40	84	210	44	84	51	115	146	224	85	45	305	95	59	94
50	97	210	51	84	51	115	157	224	89	45	305	95	59	95
63	124	232	64	106	51	115	183	224	101	45	305	95	59	107
 75	166	262	85	156		70	233	218	136	70	276	65		144
 90	200	281	105	168		78	254	259	141	70	341	72		151
 110	238	292	123	175		86	301	287	164	120	369	80		174





DN10/15 - 50




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




### Model:

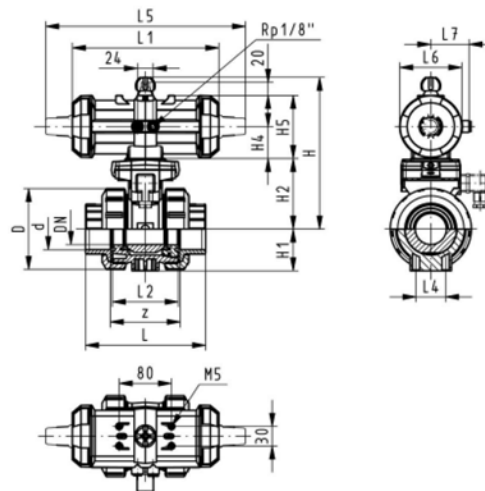
- Assignment of actuators PA11 (DN10/15-25), PA21 (DN32-50), PA30 (DN65), PA35 (DN80), PA40 (DN100)
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90° < 1-2 s

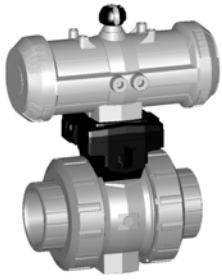
### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	kg
16	10	10	70	<b>199 230 862</b>	1.459
20	15	10	185	<b>199 230 863</b>	1.459
25	20	10	350	<b>199 230 864</b>	1.576
32	25	10	700	<b>199 230 865</b>	1.700
40	32	10	1000	<b>199 230 866</b>	2.751
50	40	10	1600	<b>199 230 867</b>	3.073
63	50	10	3100	<b>199 230 868</b>	3.931
 75	65	10	5000	<b>199 230 869</b>	3.900
 90	80	10	7000	<b>199 230 870</b>	4.700
 110	100	10	11000	<b>199 230 871</b>	6.800

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	z [mm]
16	50	167	27	62	40	97	92	194	56	25	261	76	48	64
20	50	167	27	62	40	97	95	194	56	25	261	76	48	64
25	58	176	30	71	40	97	110	194	65	25	261	76	48	72
32	68	176	36	71	40	97	123	194	71	25	261	76	48	79
40	84	210	44	84	51	115	146	224	85	45	305	95	59	94
50	97	210	51	84	51	115	157	224	89	45	305	95	59	95
63	124	232	64	106	51	115	183	224	101	45	305	95	59	107
 75	166	262	85	156		70	233	218	136	70	276	65		144
 90	200	281	105	168		78	254	259	141	70	341	72		151
 110	238	292	123	175		86	301	287	164	120	369	80		174





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




### Model:

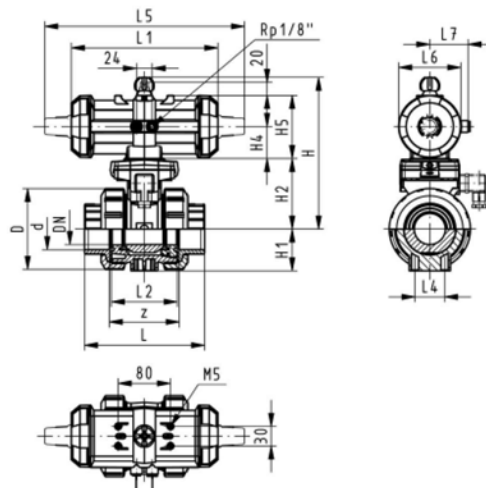
- Assignment of actuators: PA11 (DN10/15-25), PA21 (DN32-50), PA35 (DN65), PA40 (DN80), PA45 (DN100)
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time  $90^\circ <$ ) 1-2 s

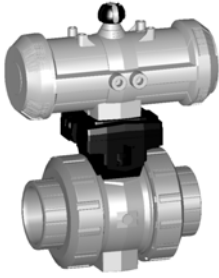
### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	kg
16	10	10	70	<b>199 230 902</b>	1.459
20	15	10	185	<b>199 230 903</b>	1.459
25	20	10	350	<b>199 230 904</b>	1.576
32	25	10	700	<b>199 230 905</b>	1.700
40	32	10	1000	<b>199 230 906</b>	2.751
50	40	10	1600	<b>199 230 907</b>	3.073
63	50	10	3100	<b>199 230 908</b>	3.931
 75	65	10	5000	<b>199 230 909</b>	2.800
 90	80	10	7000	<b>199 230 910</b>	4.000
 110	100	10	11000	<b>199 230 911</b>	5.000

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	z [mm]
16	50	167	27	62	40	97	92	194	56	25	261	76	48	64
20	50	167	27	62	40	97	95	194	56	25	261	76	48	64
25	58	176	30	71	40	97	110	194	65	25	261	76	48	72
32	68	176	36	71	40	97	123	194	71	25	261	76	48	79
40	84	210	44	84	51	115	146	224	85	45	305	95	59	94
50	97	210	51	84	51	115	157	224	89	45	305	95	59	95
63	124	232	64	106	51	115	183	224	101	45	305	95	59	107
 75	166	257	85	156		66	233	144	136	70	190	60		144
 90	200	274	105	168		70	254	152	141	70	198	65		151
 110	238	273	123	175		78	301	169	164	120	235	72		174





DN10/15 - 50

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

### Model:

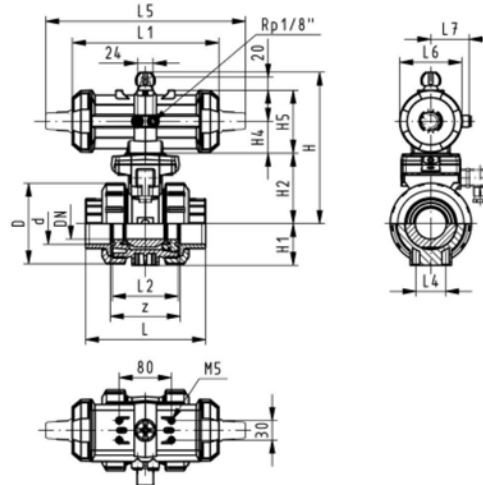
- Assignment of actuators PA11 (DN10/15-25), PA21 (DN32-50), PA30 (DN65), PA35 (DN80), PA40 (DN100)
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time  $90^\circ <$  1-2 s

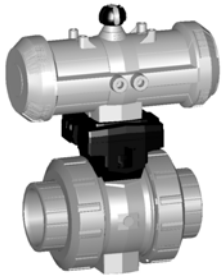
### Option:

- Individual configuration of the valve (see form)

Rp [inch]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	kg
3/8	10	10	70	<b>199 230 842</b>	1.200
1/2	15	10	185	<b>199 230 843</b>	1.200
3/4	20	10	350	<b>199 230 844</b>	1.300
1	25	10	700	<b>199 230 845</b>	1.400
1 1/4	32	10	1000	<b>199 230 846</b>	2.500
1 1/2	40	10	1600	<b>199 230 847</b>	2.800
2	50	10	3100	<b>199 230 848</b>	3.700

Rp [inch]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	z [mm]
3/8	50	167	27	62	40	97	92	194	56	25	261	76	48	64
1/2	50	167	27	62	40	97	95	194	56	25	261	76	48	64
3/4	58	176	30	71	40	97	110	194	65	25	261	76	48	72
1	68	176	36	71	40	97	123	194	71	25	261	76	48	79
1 1/4	84	210	44	84	51	115	146	224	85	45	305	95	59	94
1 1/2	97	210	51	84	51	115	157	224	89	45	305	95	59	95
2	124	232	64	106	51	115	183	224	101	45	305	95	59	107





DN10/15 - 50

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

### Model:

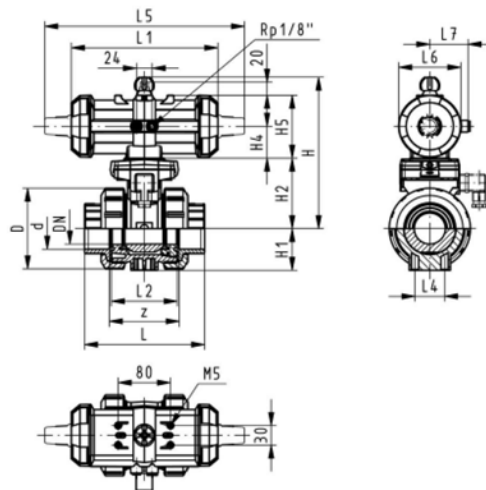
- Assignment of actuators PA11 (DN10/15-25), PA21 (DN32-50), PA30 (DN65), PA35 (DN80), PA40 (DN100)
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time  $90^\circ <$  1-2 s

### Option:

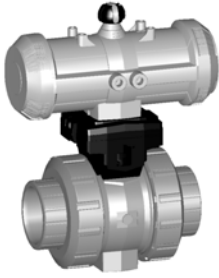
- Individual configuration of the valve (see form)

Rp [inch]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	kg
3/8	10	10	70	<b>199 230 882</b>	1.200
1/2	15	10	185	<b>199 230 883</b>	1.200
3/4	20	10	350	<b>199 230 884</b>	1.300
1	25	10	700	<b>199 230 885</b>	1.400
1 1/4	32	10	1000	<b>199 230 886</b>	2.500
1 1/2	40	10	1600	<b>199 230 887</b>	2.800
2	50	10	3100	<b>199 230 888</b>	3.700

Rp [inch]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	z [mm]
3/8	50	167	27	62	40	97	92	194	56	25	261	76	48	64
1/2	50	167	27	62	40	97	95	194	56	25	261	76	48	64
3/4	58	176	30	71	40	97	110	194	65	25	261	76	48	72
1	68	176	36	71	40	97	123	194	71	25	261	76	48	79
1 1/4	84	210	44	84	51	115	146	224	85	45	305	95	59	94
1 1/2	97	210	51	84	51	115	157	224	89	45	305	95	59	95
2	124	232	64	106	51	115	183	224	101	45	305	95	59	107







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

### Model:

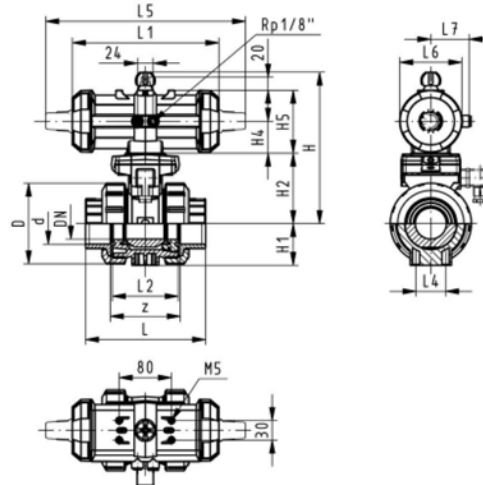
- Assignment of actuators: PA11 (DN10/15-25), PA21 (DN32-50), PA35 (DN65), PA40 (DN80), PA45 (DN100)
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time  $90^\circ <$  1-2 s

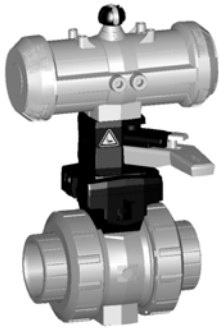
### Option:

- Individual configuration of the valve (see form)

Rp [inch]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	kg
3/8	10	10	70	<b>199 230 922</b>	1.200
1/2	15	10	185	<b>199 230 923</b>	1.200
3/4	20	10	350	<b>199 230 924</b>	1.300
1	25	10	700	<b>199 230 925</b>	1.400
1 1/4	32	10	1000	<b>199 230 926</b>	2.500
1 1/2	40	10	1600	<b>199 230 927</b>	2.800
2	50	10	3100	<b>199 230 928</b>	3.700

Rp [inch]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	z [mm]
3/8	50	167	27	62	40	97	92	194	56	25	261	76	48	64
1/2	50	167	27	62	40	97	95	194	56	25	261	76	48	64
3/4	58	176	30	71	40	97	110	194	65	25	261	76	48	72
1	68	176	36	71	40	97	123	194	71	25	261	76	48	79
1 1/4	84	210	44	84	51	115	146	224	85	45	305	95	59	94
1 1/2	97	210	51	84	51	115	157	224	89	45	305	95	59	95
2	124	232	64	106	51	115	183	224	101	45	305	95	59	107





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## Ball valve type 234 ABS FC (Fail safe to close) With manual override With solvent cement sockets Inch BS

### Model:

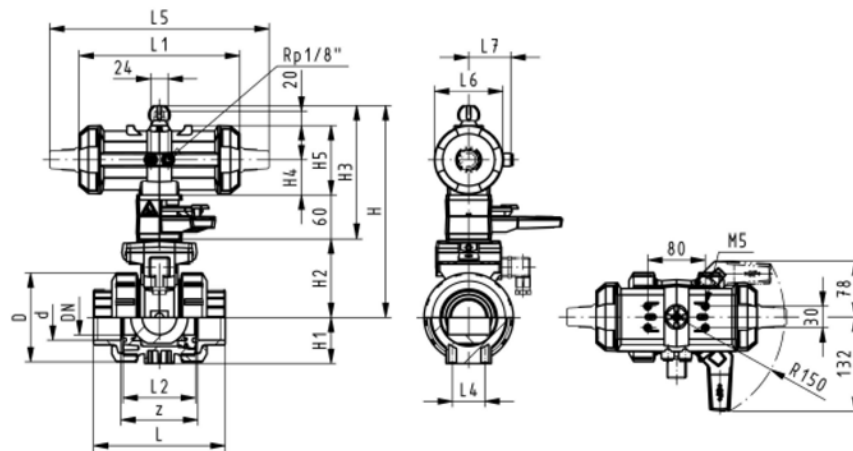
- Built on with pneumatic actuator PA11/21
- Control time  $90^\circ <$  1-2 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

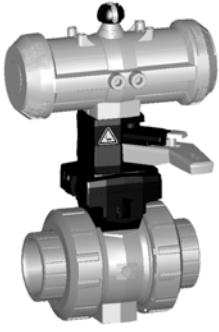
### Option:

- Individual configuration of the valve (see form)

Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	kg
$\frac{3}{8}$	10	10	70	<b>199 234 702</b>	1.500
$\frac{1}{2}$	15	10	185	<b>199 234 703</b>	1.500
$\frac{3}{4}$	20	10	350	<b>199 234 704</b>	1.600
1	25	10	700	<b>199 234 705</b>	1.700
1 $\frac{1}{4}$	32	10	1000	<b>199 234 706</b>	2.800
1 $\frac{1}{2}$	40	10	1600	<b>199 234 707</b>	3.100
2	50	10	3100	<b>199 234 708</b>	4.000

Inch	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	z [mm]
$\frac{3}{8}$	50	230	27	62	168	40	97	92	194	56	25	261	76	48	60
$\frac{1}{2}$	50	230	27	62	168	40	97	95	194	56	25	261	76	48	60
$\frac{3}{4}$	58	239	30	71	168	40	97	110	194	65	25	261	76	48	69
1	68	239	36	71	168	40	97	123	194	71	25	261	76	48	75
1 $\frac{1}{4}$	84	271	44	84	187	51	115	146	224	85	45	305	95	59	89
1 $\frac{1}{2}$	97	271	51	84	187	51	115	157	224	89	45	305	95	59	97
2	124	293	64	106	187	51	115	183	224	101	45	305	95	59	110





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## Ball valve type 234 ABS FO (Fail safe to open) With manual override With solvent cement sockets Inch BS

### Model:

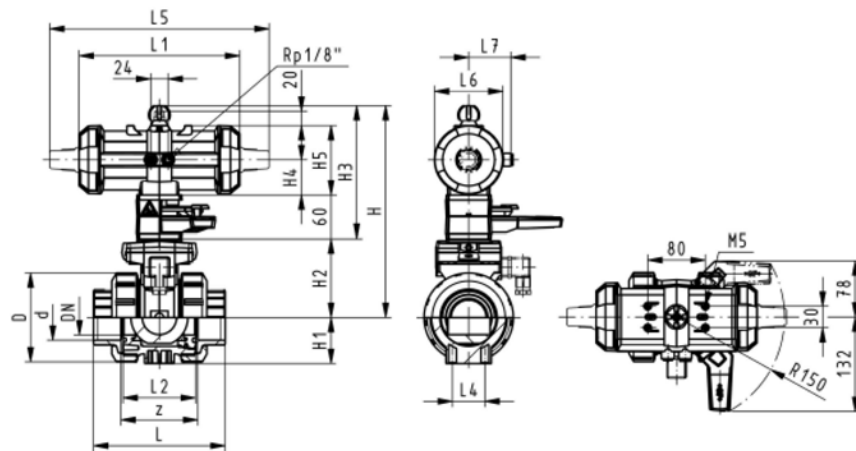
- Built on with pneumatic actuator PA11/21
- Control time 90°<) 1-2 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

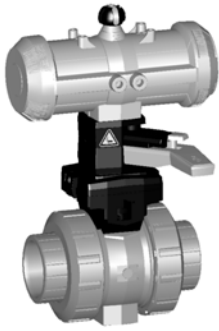
### Option:

- Individual configuration of the valve (see form)

Inch	Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	kg
3/8	3/8	10	10	70	<b>199 234 742</b>	1.500
1/2	1/2	15	10	185	<b>199 234 743</b>	1.500
3/4	3/4	20	10	350	<b>199 234 744</b>	1.600
1	1	25	10	700	<b>199 234 745</b>	1.700
1 1/4	1 1/4	32	10	1000	<b>199 234 746</b>	2.800
1 1/2	1 1/2	40	10	1600	<b>199 234 747</b>	3.100
2	2	50	10	3100	<b>199 234 748</b>	4.000

Inch	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	z [mm]
3/8	50	230	27	62	168	40	97	92	194	56	25	261	76	48	60
1/2	50	230	27	62	168	40	97	95	194	56	25	261	76	48	60
3/4	58	239	30	71	168	40	97	110	194	65	25	261	76	48	69
1	68	239	36	71	168	40	97	123	194	71	25	261	76	48	75
1 1/4	84	271	44	84	187	51	115	146	224	85	45	305	95	59	89
1 1/2	97	271	51	84	187	51	115	157	224	89	45	305	95	59	97
2	124	293	64	106	187	51	115	183	224	101	45	305	95	59	110





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## Ball valve type 234 ABS DA (Double acting) With manual override With solvent cement sockets Inch BS

### Model:

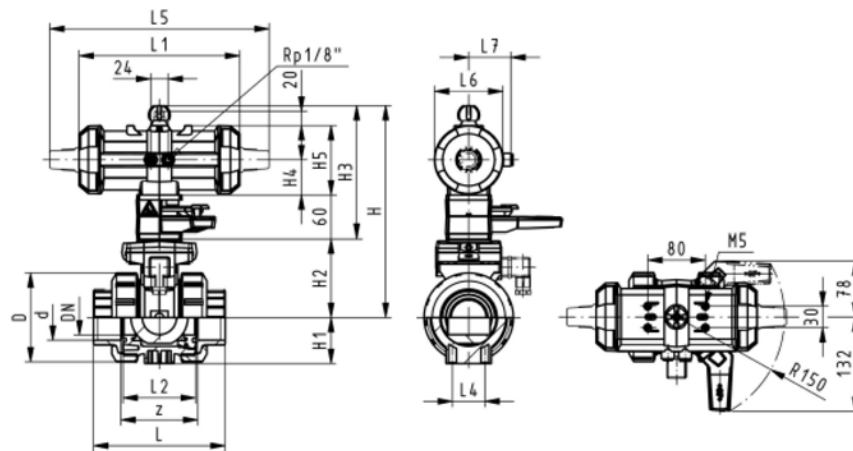
- Built on with pneumatic actuator PA11/21
- Control time  $90^\circ <$  1-2 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

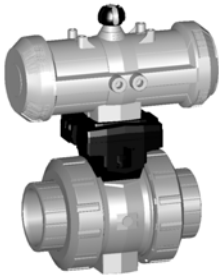
### Option:

- Individual configuration of the valve (see form)

Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	kg
$\frac{3}{8}$	10	10	70	<b>199 234 782</b>	1.500
$\frac{1}{2}$	15	10	185	<b>199 234 783</b>	1.500
$\frac{3}{4}$	20	10	350	<b>199 234 784</b>	1.600
1	25	10	700	<b>199 234 785</b>	1.700
1 $\frac{1}{4}$	32	10	1000	<b>199 234 786</b>	2.800
1 $\frac{1}{2}$	40	10	1600	<b>199 234 787</b>	3.100
2	50	10	3100	<b>199 234 788</b>	4.000

Inch	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	z [mm]
$\frac{3}{8}$	50	230	27	62	168	40	97	92	194	56	25	261	76	48	60
$\frac{1}{2}$	50	230	27	62	168	40	97	95	194	56	25	261	76	48	60
$\frac{3}{4}$	58	239	30	71	168	40	97	110	194	65	25	261	76	48	69
1	68	239	36	71	168	40	97	123	194	71	25	261	76	48	75
1 $\frac{1}{4}$	84	271	44	84	187	51	115	146	224	85	45	305	95	59	89
1 $\frac{1}{2}$	97	271	51	84	187	51	115	157	224	89	45	305	95	59	97
2	124	293	64	106	187	51	115	183	224	101	45	305	95	59	110





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## Ball valve type 234 ABS FC (Fail safe to close) Without manual override With solvent cement sockets Inch BS




### Model:

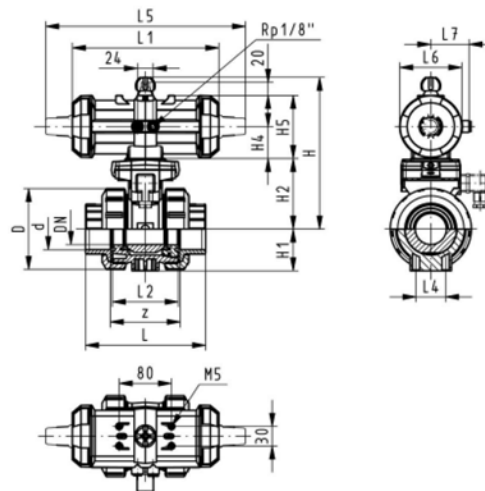
- Assignment of actuators PA11 (DN10/15-25), PA21 (DN32-50), PA30 (DN65), PA35 (DN80), PA40 (DN100)
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time  $90^\circ < 1-2$  s

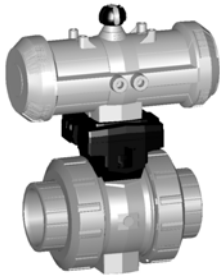
### Option:

- Individual configuration of the valve (see form)

Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	kg
3/8	10	10	70	<b>199 234 822</b>	1.200
1/2	15	10	185	<b>199 234 823</b>	1.200
3/4	20	10	350	<b>199 234 824</b>	1.300
1	25	10	700	<b>199 234 825</b>	1.400
1 1/4	32	10	1000	<b>199 234 826</b>	2.500
1 1/2	40	10	1600	<b>199 234 827</b>	2.800
2	50	10	3100	<b>199 234 828</b>	3.700
 2 1/2	65	10	5000	<b>199 234 829</b>	3.900
 3	80	10	7000	<b>199 234 830</b>	4.700
 4	100	10	11000	<b>199 234 831</b>	6.700

Inch	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	z [mm]
3/8	50	167	27	62	40	97	92	194	56	25	261	76	48	60
1/2	50	167	27	62	40	97	95	194	56	25	261	76	48	60
3/4	58	176	30	71	40	97	110	194	65	25	261	76	48	69
1	68	176	36	71	40	97	123	194	71	25	261	76	48	75
1 1/4	84	210	44	84	51	115	146	224	85	45	305	95	59	89
1 1/2	97	210	51	84	51	115	157	224	89	45	305	95	59	97
2	124	232	64	106	51	115	183	224	101	45	305	95	59	110
 2 1/2	166	262	85	156		70	233	218	136	70	276	65		144
 3	200	281	105	168		78	254	259	141	70	341	72		151
 4	238	292	123	175		86	301	287	164	120	369	80		174





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## Ball valve type 234 ABS FO (Fail safe to open) Without manual override With solvent cement sockets Inch BS

### Model:

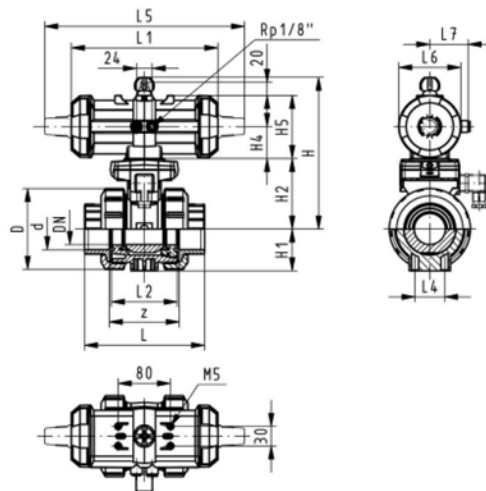
- Assignment of actuators PA11 (DN10/15-25), PA21 (DN32-50), PA30 (DN65), PA35 (DN80), PA40 (DN100)
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time  $90^\circ <$ ) 1-2 s

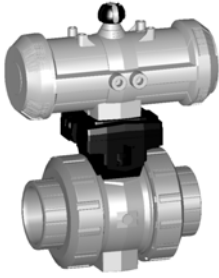
### Option:

- Individual configuration of the valve (see form)

Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	kg
3/8	10	10	70	199 234 862	1.200
1/2	15	10	185	199 234 863	1.200
3/4	20	10	350	199 234 864	1.300
1	25	10	700	199 234 865	1.400
1 1/4	32	10	1000	199 234 866	2.500
1 1/2	40	10	1600	199 234 867	2.800
2	50	10	3100	199 234 868	3.700
2 1/2	65	10	5000	199 234 869	3.900
3	80	10	7000	199 234 870	4.700
4	100	10	11000	199 234 871	6.700

Inch	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	z [mm]
3/8	50	167	27	62	40	97	92	194	56	25	261	76	48	60
1/2	50	167	27	62	40	97	95	194	56	25	261	76	48	60
3/4	58	176	30	71	40	97	110	194	65	25	261	76	48	69
1	68	176	36	71	40	97	123	194	71	25	261	76	48	75
1 1/4	84	210	44	84	51	115	146	224	85	45	305	95	59	89
1 1/2	97	210	51	84	51	115	157	224	89	45	305	95	59	97
2	124	232	64	106	51	115	183	224	101	45	305	95	59	110
2 1/2	166	262	85	156		70	233	218	136	70	276	65		144
3	200	281	105	168		78	254	259	141	70	341	72		151
4	238	292	123	175		86	301	287	164	120	369	80		174





DN10/15 - 50




## Ball valve type 234 ABS DA (Double acting) Without manual override With solvent cement sockets Inch BS




### Model:

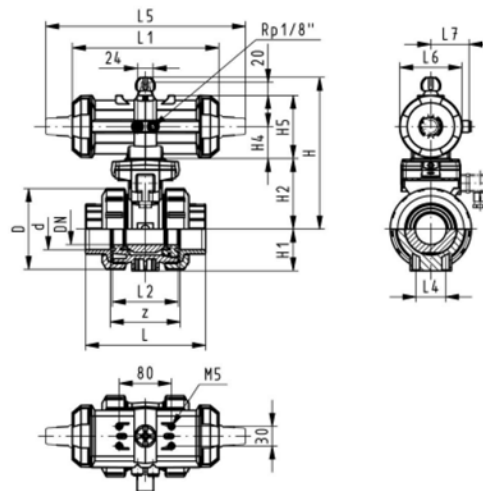
- Assignment of actuators: PA11 (DN10/15-25), PA21 (DN32-50), PA35 (DN65), PA40 (DN80), PA45 (DN100)
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time  $90^\circ <$  1-2 s

### Option:

- Individual configuration of the valve (see form)

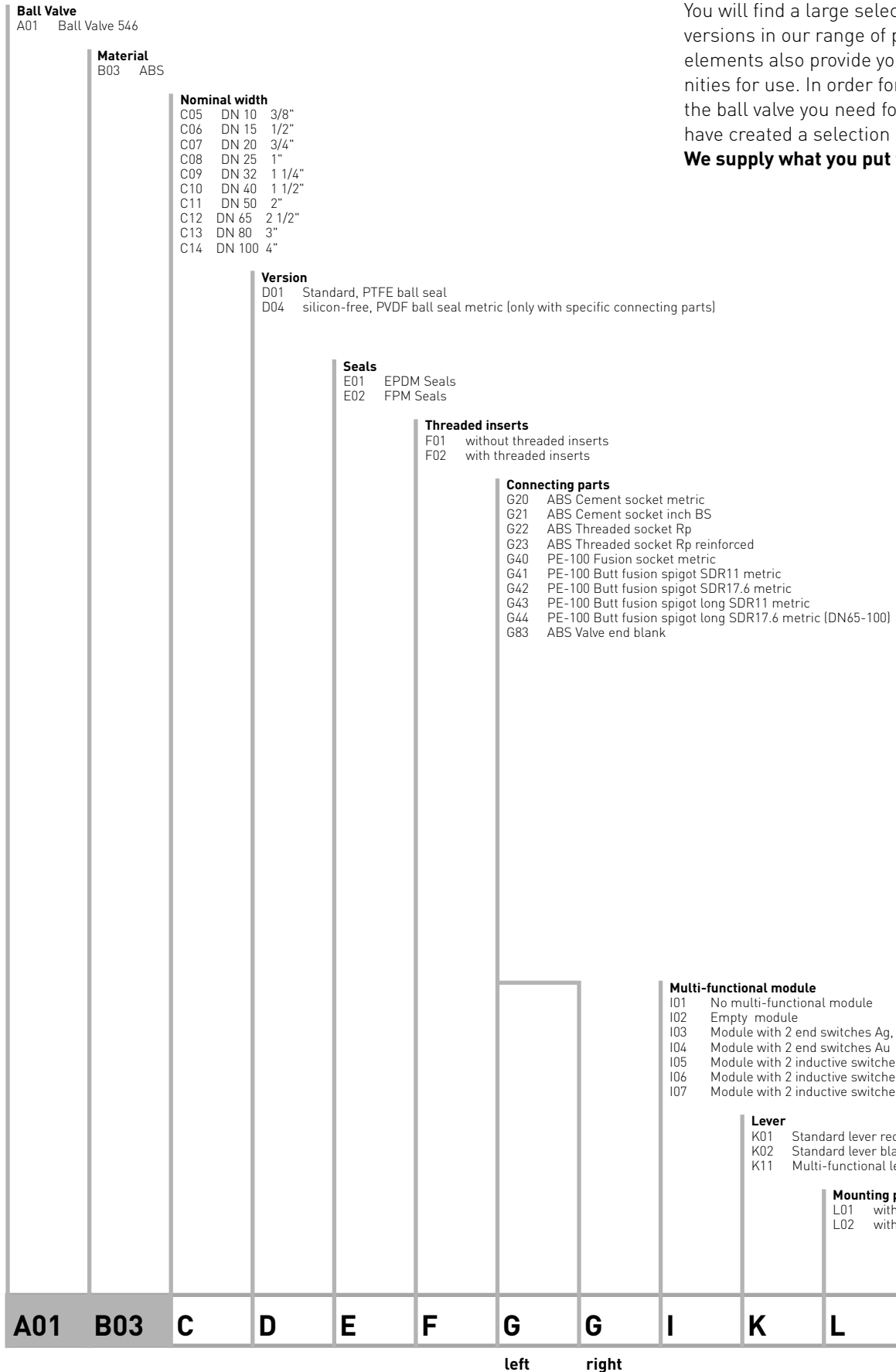
Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	kg
3/8	10	10	70	<b>199 234 902</b>	1.200
1/2	15	10	185	<b>199 234 903</b>	1.200
3/4	20	10	350	<b>199 234 904</b>	1.300
1	25	10	700	<b>199 234 905</b>	1.400
1 1/4	32	10	1000	<b>199 234 906</b>	2.500
1 1/2	40	10	1600	<b>199 234 907</b>	2.800
2	50	10	3100	<b>199 234 908</b>	3.700
 2 1/2	65	10	5000	<b>199 234 909</b>	2.800
 3	80	10	7000	<b>199 234 910</b>	4.000
 4	100	10	11000	<b>199 234 911</b>	4.900

Inch	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	z [mm]
3/8	50	167	27	62	40	97	92	194	56	25	261	76	48	60
1/2	50	167	27	62	40	97	95	194	56	25	261	76	48	60
3/4	58	176	30	71	40	97	110	194	65	25	261	76	48	69
1	68	176	36	71	40	97	123	194	71	25	261	76	48	75
1 1/4	84	210	44	84	51	115	146	224	85	45	305	95	59	89
1 1/2	97	210	51	84	51	115	157	224	89	45	305	95	59	97
2	124	232	64	106	51	115	183	224	101	45	305	95	59	110
 2 1/2	166	257	85	156		66	233	144	136	70	190	60		144
 3	200	274	105	168		70	254	152	141	70	198	65		151
 4	238	273	123	175		78	301	169	164	120	235	72		174



# Copiable

## Configurator GF ball valve type 546 ABS



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 you 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

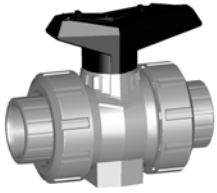
- R01 without stroke limiter
- R02 with stroke limiter

<b>P</b>	<b>Q</b>	<b>R</b>	
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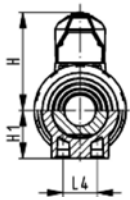
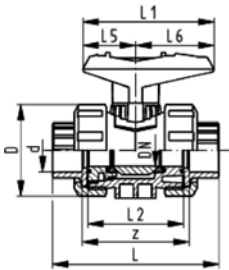


# Ball valves

## Ball valve type 546 PP-H With fusion sockets metric



DN10/15 - 50









### Model:

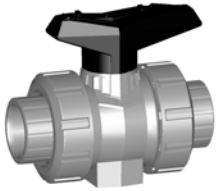
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- z-dimension, valve end and valve nut are **not compatible** with type 346 (DN10/15-50) resp. type 370 (DN65-100)
- Ball seals PTFE
- Without mounting inserts

### Option:

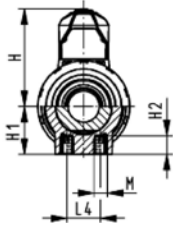
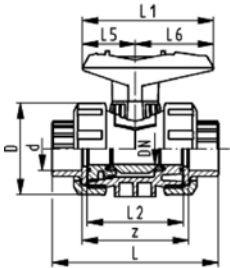
- Individual configuration of the valve (see form)
- Multifunctional module with integrated limit switches
- Pneumatic or electric actuators from +GF+

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	71	<b>167 546 001</b>	<b>167 546 011</b>	0.115
20	15	10	185	<b>167 546 002</b>	<b>167 546 012</b>	0.115
25	20	10	350	<b>167 546 003</b>	<b>167 546 013</b>	0.180
32	25	10	700	<b>167 546 004</b>	<b>167 546 014</b>	0.255
40	32	10	1000	<b>167 546 005</b>	<b>167 546 015</b>	0.440
50	40	10	1600	<b>167 546 006</b>	<b>167 546 016</b>	0.610
63	50	10	3100	<b>167 546 007</b>	<b>167 546 017</b>	1.145
 75	65	10	5000	<b>167 546 008</b>	<b>167 546 018</b>	3.700
 90	80	10	7000	<b>167 546 009</b>	<b>167 546 019</b>	5.500
 110	100	10	11000	<b>167 546 010</b>	<b>167 546 020</b>	8.700

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	93	77	56	25	32	45	67
20	50	57	27	95	77	56	25	32	45	66
25	58	67	30	109	97	65	25	39	58	77
32	68	73	36	119	97	71	25	39	58	83
40	84	90	44	135	128	85	45	54	74	99
50	97	97	51	147	128	89	45	54	74	105
63	124	116	64	168	152	101	45	66	87	117
 75	166	149	85	233	270	136	70	64	206	167
 90	200	161	105	254	270	141	70	64	206	180
 110	238	178	123	301	320	164	120	64	256	215



DN10/15 - 50



## Ball valve type 546 PP-H With mounting inserts With fusion sockets metric

### Model:

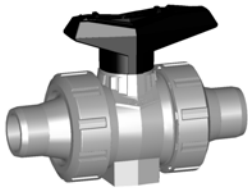
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- z-dimension, valve end and valve nut are **not compatible** with type 346 (DN10/15-50) resp. type 370 (DN65-100)
- Ball seals PTFE
- Integrated stainless steel mounting inserts

### Option:

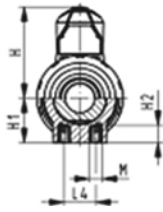
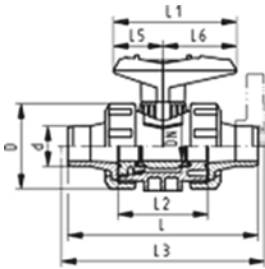
- Individual configuration of the valve (see form)
- Multifunctional module with integrated limit switches
- Pneumatic or electric actuators from +GF+

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg	
16	10	10	71	<b>167 546 401</b>	<b>167 546 411</b>	0.115	
20	15	10	185	<b>167 546 402</b>	<b>167 546 412</b>	0.115	
25	20	10	350	<b>167 546 403</b>	<b>167 546 413</b>	0.180	
32	25	10	700	<b>167 546 404</b>	<b>167 546 414</b>	0.255	
40	32	10	1000	<b>167 546 405</b>	<b>167 546 415</b>	0.440	
50	40	10	1600	<b>167 546 406</b>	<b>167 546 416</b>	0.610	
63	50	10	3100	<b>167 546 407</b>	<b>167 546 417</b>	1.145	
75	65	10	5000	<b>167 546 408</b>	<b>167 546 418</b>	3.700	
90	80	10	7000	<b>167 546 409</b>	<b>167 546 419</b>	5.500	
110	100	10	11000	<b>167 546 410</b>	<b>167 546 420</b>	8.700	

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	93	77	56	25	32	45	M6	67	
20	50	57	27	12	95	77	56	25	32	45	M6	66	
25	58	67	30	12	109	97	65	25	39	58	M6	77	
32	68	73	36	12	119	97	71	25	39	58	M6	83	
40	84	90	44	15	135	128	85	45	54	74	M8	99	
50	97	97	51	15	147	128	89	45	54	74	M8	105	
63	124	116	64	15	168	152	101	45	66	87	M8	117	
75	166	149	85	15	233	270	136	70	64	206	M8	167	
90	200	161	105	15	254	270	141	70	64	206	M8	180	
110	238	178	123	22	301	320	164	120	64	256	M12	215	



DN10/15 - 50



## Ball valve type 546 PP-H With mounting inserts With socket fusion spigots metric

### Model:

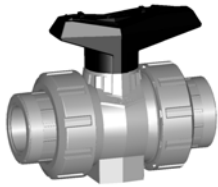
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- z-dimension, valve end and valve nut are **not compatible** with type 346 (DN10/15-50) resp. type 370 (DN65-100)
- Ball seals PTFE
- Integrated stainless steel mounting inserts

### Option:

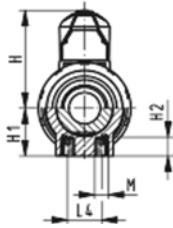
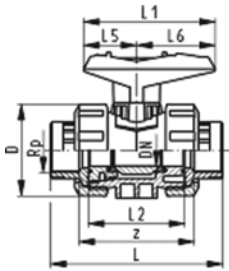
- Individual configuration of the valve (see form)
- Multifunctional module with integrated limit switches
- Pneumatic or electric actuators from +GF+

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	71	<b>167 546 041</b>	<b>167 546 051</b>	0.120
20	15	10	185	<b>167 546 042</b>	<b>167 546 052</b>	0.120
25	20	10	350	<b>167 546 043</b>	<b>167 546 053</b>	0.180
32	25	10	700	<b>167 546 044</b>	<b>167 546 054</b>	0.260
40	32	10	1000	<b>167 546 045</b>	<b>167 546 055</b>	0.450
50	40	10	1600	<b>167 546 046</b>	<b>167 546 056</b>	0.640
63	50	10	3100	<b>167 546 047</b>	<b>167 546 057</b>	1.210
75	65	10	5000	<b>167 546 048</b>	<b>167 546 058</b>	3.800
90	80	10	7000	<b>167 546 049</b>	<b>167 546 059</b>	5.600
110	100	10	11000	<b>167 546 050</b>	<b>167 546 060</b>	8.800

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	110	77	56		25	32	45	M6
20	50	57	27	12	120	77	56	130	25	32	45	M6
25	58	67	30	12	139	97	65	150	25	39	58	M6
32	68	73	36	12	150	97	71	160	25	39	58	M6
40	84	90	44	15	170	128	85	180	45	54	74	M8
50	97	97	51	15	190	128	89	200	45	54	74	M8
63	124	116	64	15	220	152	101	230	45	66	87	M8
75	166	149	85	15	280	270	136	290	70	64	206	M8
90	200	161	105	15	296	270	141	310	70	64	206	M8
110	238	178	123	22	336	320	164	350	120	64	256	M12



DN10/15 - 50



## Ball valve type 546 PP-H With mounting inserts With threaded sockets Rp

### Model:

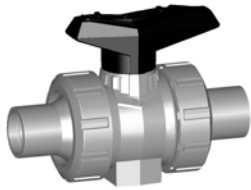
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- z-dimension, valve end and valve nut are **not compatible** with type 346 (DN10/15-50) resp. type 370 (DN65-100)
- Ball seals PTFE
- Integrated stainless steel mounting inserts

### Option:

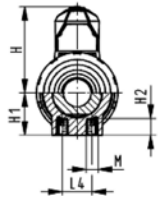
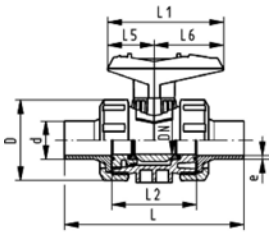
- Individual configuration of the valve (see form)
- Multifunctional module with integrated limit switches
- Pneumatic or electric actuators from +GF+

Rp [inch]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg	
3/8	10	10	71	<b>167 546 021</b>	<b>167 546 031</b>	0.120	
1/2	15	10	185	<b>167 546 022</b>	<b>167 546 032</b>	0.120	
3/4	20	10	350	<b>167 546 023</b>	<b>167 546 033</b>	0.180	
1	25	10	700	<b>167 546 024</b>	<b>167 546 034</b>	0.270	
1 1/4	32	10	1000	<b>167 546 025</b>	<b>167 546 035</b>	0.460	
1 1/2	40	10	1600	<b>167 546 026</b>	<b>167 546 036</b>	0.635	
2	50	10	3100	<b>167 546 027</b>	<b>167 546 037</b>	1.190	

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	96	77	56	25	32	45	M6	69	
1/2	50	57	27	12	99	77	56	25	32	45	M6	67	
3/4	58	67	30	12	111	97	65	25	39	58	M6	78	
1	68	73	36	12	127	97	71	25	39	58	M6	85	
1 1/4	84	90	44	15	146	128	85	45	54	74	M8	100	
1 1/2	97	97	51	15	157	128	89	45	54	74	M8	106	
2	124	116	64	15	183	152	101	45	66	87	M8	121	



DN10/15 - 50






## Ball valve type 546 PP-H With mounting inserts With butt fusion spigots IR-Plus SDR11 metric




### Model:

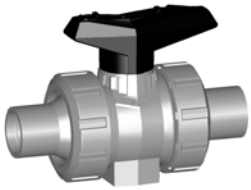
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- z-dimension, valve end and valve nut are **not compatible** with type 346 (DN10/15-50) resp. type 370 (DN65-100)
- Ball seals PTFE
- Integrated stainless steel mounting inserts

### Option:

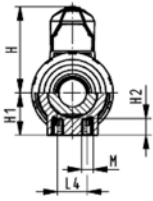
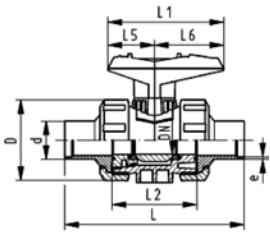
- Individual configuration of the valve (see form)
- Multifunctional module with integrated limit switches
- Pneumatic or electric actuators from +GF+

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
20	15	10	185	<b>167 546 442</b>	<b>167 546 452</b>	0.120
25	20	10	350	<b>167 546 443</b>	<b>167 546 453</b>	0.180
32	25	10	700	<b>167 546 444</b>	<b>167 546 454</b>	0.255
40	32	10	1000	<b>167 546 445</b>	<b>167 546 455</b>	0.440
50	40	10	1600	<b>167 546 446</b>	<b>167 546 456</b>	0.620
63	50	10	3100	<b>167 546 447</b>	<b>167 546 457</b>	1.200
 75	65	10	5000	<b>167 546 448</b>	<b>167 546 458</b>	3.800
 90	80	10	7000	<b>167 546 449</b>	<b>167 546 459</b>	5.500
 110	100	10	11000	<b>167 546 450</b>	<b>167 546 460</b>	8.700

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	M	e [mm]
20	50	57	27	12	130	77	56	25	32	45	M6	1,9
25	58	67	30	12	143	97	65	25	39	58	M6	2,3
32	68	73	36	12	150	97	71	25	39	58	M6	3
40	84	90	44	15	171	128	85	45	54	74	M8	3,7
50	97	97	51	15	191	128	89	45	54	74	M8	4,6
63	124	116	64	15	220	152	101	45	66	87	M8	5,8
 75	166	149	85	15	266	270	136	70	64	206	M8	8.2
 90	200	161	105	15	264	270	141	70	64	206	M8	9.9
 110	238	178	123	22	301	320	164	120	64	256	M12	12



DN10/15 - 50



## Ball valve type 546 PP-H With mounting inserts With butt fusion spigots SDR17.6 metric

### Model:

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

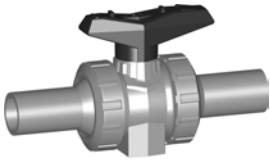
### Option:

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

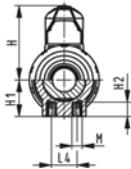
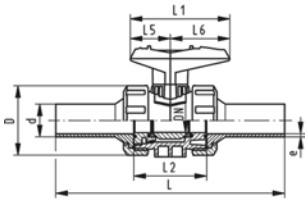
d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
50	40	6	1600	<b>167 546 066</b>	<b>167 546 076</b>	0.635
63	50	6	3100	<b>167 546 067</b>	<b>167 546 077</b>	1.200
75	65	6	5000	<b>167 546 068</b>	<b>167 546 078</b>	3.800
90	80	6	7000	<b>167 546 069</b>	<b>167 546 079</b>	5.500
110	100	6	11000	<b>167 546 070</b>	<b>167 546 080</b>	8.600

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	M	e [mm]
50	97	97	51	15	191	128	89	45	54	74	M8	2,9
63	124	116	64	15	220	152	101	45	66	87	M8	3,6
75	166	149	85	15	266	270	136	70	64	206	M8	4.7
90	200	161	105	15	264	270	141	70	64	206	M8	5.5
110	238	178	123	22	301	320	164	120	64	256	M12	6.8





DN10/15 - 50



## Ball valve type 546 PP-H With mounting inserts With butt fusion spigots long SDR11 metric

### Model:

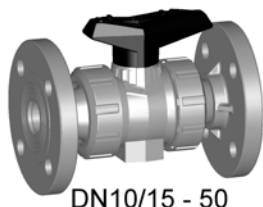
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- z-dimension, valve end and valve nut are **not compatible** with type 346 (DN10/15-50) resp. type 370 (DN65-100)
- Ball seals PTFE
- Integrated stainless steel mounting inserts

### Option:

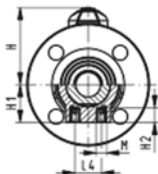
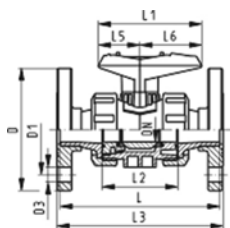
- Individual configuration of the valve (see form)
- Multifunctional module with integrated limit switches
- Pneumatic or electric actuators from +GF+

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
20	15	10	185	<b>167 546 262</b>	<b>167 546 272</b>	0.130
25	20	10	350	<b>167 546 263</b>	<b>167 546 273</b>	0.195
32	25	10	700	<b>167 546 264</b>	<b>167 546 274</b>	0.280
40	32	10	1000	<b>167 546 265</b>	<b>167 546 275</b>	0.480
50	40	10	1600	<b>167 546 266</b>	<b>167 546 276</b>	0.700
63	50	10	3100	<b>167 546 267</b>	<b>167 546 277</b>	1.320

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	M	e [mm]
20	50	57	27	12	193	77	56	25	32	45	M6	2,3
25	58	67	30	12	216	97	65	25	39	58	M6	2,3
32	68	73	36	12	223	97	71	25	39	58	M6	3
40	84	90	44	15	249	128	85	45	54	74	M8	3,7
50	97	97	51	15	271	128	89	45	54	74	M8	4,6
63	124	116	64	15	321	152	101	45	66	87	M8	5,8



DN10/15 - 50



## Ball valve type 546 PP-H With mounting inserts With fixed flanges PP-H serrated metric

### Model:

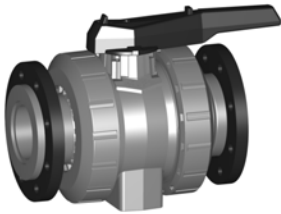
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- z-dimension, valve end and valve nut are **not compatible** with type 346 (DN10/15-50) resp. type 370 (DN65-100)
- Ball seals PTFE
- Integrated stainless steel mounting inserts
- Overall length EN 558-1
- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504

### Option:

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

d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
20	15	1/2	10	185	<b>167 546 182</b>	<b>167 546 192</b>	0.245
25	20	3/4	10	350	<b>167 546 183</b>	<b>167 546 193</b>	0.345
32	25	1	10	700	<b>167 546 184</b>	<b>167 546 194</b>	0.495
40	32	1 1/4	10	1000	<b>167 546 185</b>	<b>167 546 195</b>	0.830
50	40	1 1/2	10	1600	<b>167 546 186</b>	<b>167 546 196</b>	1.100
63	50	2	10	3100	<b>167 546 187</b>	<b>167 546 197</b>	1.830

d [mm]	D [mm]	D1 [mm]	D3 [mm]	H [mm]	H1 [mm]	H2 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	M
20	95	65	14	57	27	12	120	77	56	130	25	32	45	M6
25	105	75	14	67	30	12	140	97	65	150	25	39	58	M6
32	115	85	14	73	36	12	150	97	71	160	25	39	58	M6
40	140	100	18	90	44	15	170	128	85	180	45	54	74	M8
50	150	110	18	97	51	15	190	128	89	200	45	54	74	M8
63	165	125	18	116	64	15	220	152	101	230	45	66	87	M8



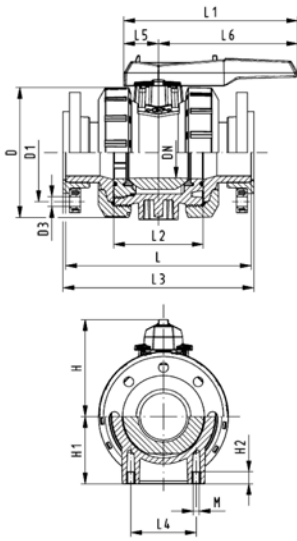
## Ball valve type 546 PP-H With mounting inserts With backing flanges PP-st metric

### Model:

- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- z-dimension, valve end and valve 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 558-1
- Connecting dimensions: ISO 7005, EN 1092, BS 4504, DIN 2501; bolt circle PN 10

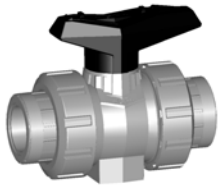
### Option:

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

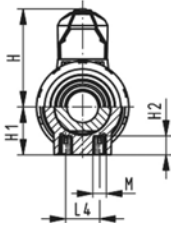
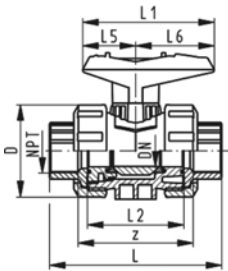


d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
75	65	10	5000	<b>167 546 808</b>	<b>167 546 818</b>	4.300
90	80	10	7000	<b>167 546 809</b>	<b>167 546 819</b>	6.400
110	100	10	11000	<b>167 546 810</b>	<b>167 546 820</b>	10.000

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	280	270	136	290	70	64	206	149	85	8
90	200	160	18	296	270	141	310	70	64	206	161	105	8
110	238	180	18	336	320	164	350	120	64	256	178	123	12



DN10/15 - 50



## Ball valve type 546 PP-H With mounting inserts With threaded sockets NPT

### Model:

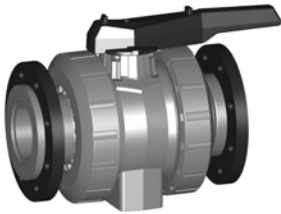
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- z-dimension, valve end and valve nut are **not compatible** with type 346 (DN10/15-50) resp. type 370 (DN65-100)
- Ball seals PTFE
- Integrated stainless steel mounting inserts

### Option:

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

NPT [inch]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg	
3/8	10	10	71	<b>167 546 321</b>	<b>167 546 331</b>	0.120	
1/2	15	10	185	<b>167 546 322</b>	<b>167 546 332</b>	0.120	
3/4	20	10	350	<b>167 546 323</b>	<b>167 546 333</b>	0.180	
1	25	10	700	<b>167 546 324</b>	<b>167 546 334</b>	0.270	
1 1/4	32	10	1000	<b>167 546 325</b>	<b>167 546 335</b>	0.460	
1 1/2	40	10	1600	<b>167 546 326</b>	<b>167 546 336</b>	0.635	
2	50	10	3100	<b>167 546 327</b>	<b>167 546 337</b>	1.190	

NPT [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	96	77	56	25	32	45	M6	71	
1/2	50	57	27	12	99	77	56	25	32	45	M6	64	
3/4	58	67	30	12	111	97	65	25	39	58	M6	76	
1	68	73	36	12	127	97	71	25	39	58	M6	83	
1 1/4	84	90	44	15	146	128	85	45	54	74	M8	100	
1 1/2	97	97	51	15	157	128	89	45	54	74	M8	111	
2	124	116	64	15	183	152	101	45	66	87	M8	134	



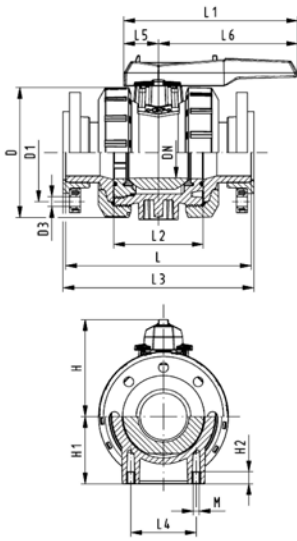
## Ball valve type 546 PP-H With mounting inserts With backing flanges PP-st ANSI

### Model:

- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- z-dimension, valve end and valve 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 558-1
- Connecting dimension ANSI/ASME B 16.5 / ASTM D 4024

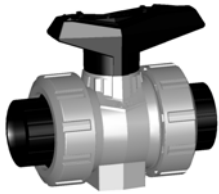
### Option:

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

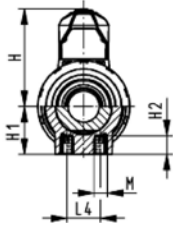
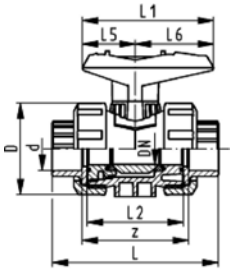


Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
2 1/2	65	10	5000	167 546 868	167 546 878	4.300
3	80	10	7000	167 546 869	167 546 879	6.400
4	100	10	11000	167 546 870	167 546 880	10.000

Inch	D [mm]	D1 [mm]	D3 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	H [mm]	H1 [mm]	M
2 1/2	166	140	19	280	270	136	290	70	64	206	149	85	8
3	200	152	19	296	270	141	310	70	64	206	161	105	8
4	238	191	19	336	320	164	350	120	64	256	178	123	12



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## Ball valve type 546 PP-H With mounting inserts With fusion sockets PE 100 metric

### Model:

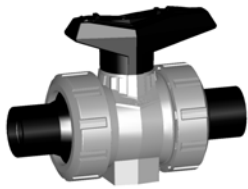
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- z-dimension, valve end and valve nut are **not compatible** with type 346 (DN10/15-50) resp. type 370 (DN65-100)
- Ball seals PTFE
- Integrated stainless steel mounting inserts

### Option:

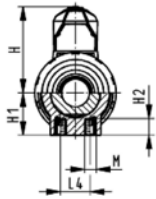
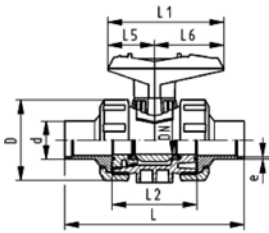
- Individual configuration of the valve (see form)
- Multifunctional module with integrated limit switches
- Pneumatic or electric actuators from +GF+

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	71	<b>167 546 161</b>	<b>167 546 171</b>	0.120
20	15	10	185	<b>167 546 162</b>	<b>167 546 172</b>	0.120
25	20	10	350	<b>167 546 163</b>	<b>167 546 173</b>	0.180
32	25	10	700	<b>167 546 164</b>	<b>167 546 174</b>	0.260
40	32	10	1000	<b>167 546 165</b>	<b>167 546 175</b>	0.450
50	40	10	1600	<b>167 546 166</b>	<b>167 546 176</b>	0.630
63	50	10	3100	<b>167 546 167</b>	<b>167 546 177</b>	1.195

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	93	77	56	25	32	45	M6	67
20	50	57	27	12	95	77	56	25	32	45	M6	67
25	58	67	30	12	109	97	65	25	39	58	M6	77
32	68	73	36	12	119	97	71	25	39	58	M6	83
40	84	90	44	15	135	128	85	45	54	74	M8	99
50	97	97	51	15	147	128	89	45	54	74	M8	105
63	124	116	64	15	168	152	101	45	66	87	M8	113



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## Ball valve type 546 PP-H With mounting inserts With butt fusion spigots PE 100 SDR11 metric

### Model:

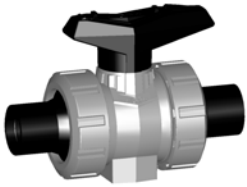
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- z-dimension, valve end and valve nut are **not compatible** with type 346 (DN10/15-50) resp. type 370 (DN65-100)
- Ball seals PTFE
- Integrated stainless steel mounting inserts

### Option:

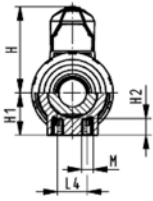
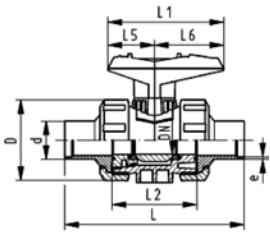
- Individual configuration of the valve (see form)
- Multifunctional module with integrated limit switches
- Pneumatic or electric actuators from +GF+

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
20	15	10	185	<b>167 546 142</b>	<b>167 546 152</b>	0.120
25	20	10	350	<b>167 546 143</b>	<b>167 546 153</b>	0.180
32	25	10	700	<b>167 546 144</b>	<b>167 546 154</b>	0.255
40	32	10	1000	<b>167 546 145</b>	<b>167 546 155</b>	0.440
50	40	10	1600	<b>167 546 146</b>	<b>167 546 156</b>	0.620
63	50	10	3100	<b>167 546 147</b>	<b>167 546 157</b>	1.200

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	e [mm]
20	50	57	27	12	130	77	56	130	25	32	45	M6	1,9
25	58	67	30	12	143	97	65	150	25	39	58	M6	2,3
32	68	73	36	12	150	97	71	160	25	39	58	M6	3
40	84	90	44	15	171	128	85	180	45	54	74	M8	3,7
50	97	97	51	15	191	128	89	200	45	54	74	M8	4,6
63	124	116	64	15	220	152	101	230	45	66	87	M8	5,8



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## Ball valve type 546 PP-H With mounting inserts With butt fusion spigots PE 100 SDR17.6 metric

### Model:

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

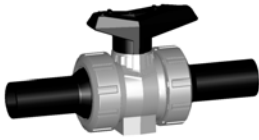
### Option:

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

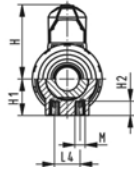
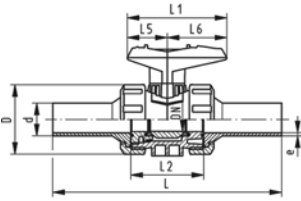
d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg	
50	40	6	1600	<b>167 546 126</b>	<b>167 546 136</b>	0.620	
63	50	6	3100	<b>167 546 127</b>	<b>167 546 137</b>	1.200	

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	M	e [mm]	
50	97	97	51	15	191	128	89	45	54	74	M8	2,9	
63	124	116	64	15	220	152	101	45	66	87	M8	3,6	





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## Ball valve type 546 PP-H With mounting inserts With butt fusion spigots long PE 100 SDR11 metric

### Model:

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

### Option:

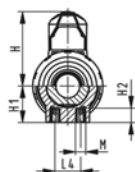
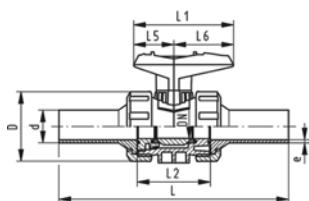
- Individual configuration of the valve (see form)
- Multifunctional module with integrated limit switches
- Pneumatic or electric actuators from +GF+

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
20	15	10	185	<b>167 546 282</b>	<b>167 546 292</b>	0.130
25	20	10	350	<b>167 546 283</b>	<b>167 546 293</b>	0.195
32	25	10	700	<b>167 546 284</b>	<b>167 546 294</b>	0.280
40	32	10	1000	<b>167 546 285</b>	<b>167 546 295</b>	0.485
50	40	10	1600	<b>167 546 286</b>	<b>167 546 296</b>	0.695
63	50	10	3100	<b>167 546 287</b>	<b>167 546 297</b>	1.320
75	65	10	5000	<b>167 546 288</b>	<b>167 546 298</b>	3.900
90	80	10	7000	<b>167 546 289</b>	<b>167 546 299</b>	5.900
110	100	10	11000	<b>167 546 290</b>	<b>167 546 300</b>	9.300

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	M	e [mm]
20	50	57	27	12	193	77	56	25	32	45	M6	2,3
25	58	67	30	12	216	97	65	25	39	58	M6	2,3
32	68	73	36	12	223	97	71	25	39	58	M6	3
40	84	90	44	15	249	128	85	45	54	74	M8	3,7
50	97	97	51	15	271	128	89	45	54	74	M8	4,6
63	124	116	64	15	321	152	101	45	66	87	M8	5,8
75	166	149	85	15	386	270	136	70	64	206	M8	6.8
90	200	161	105	15	421	270	141	70	64	206	M8	8.2
110	238	178	123	22	484	320	164	120	64	256	M12	10



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## Ball valve type 546 PP-H With mounting inserts With butt fusion spigots long PE 100 SDR17,6 metric

### Model:

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

### Option:

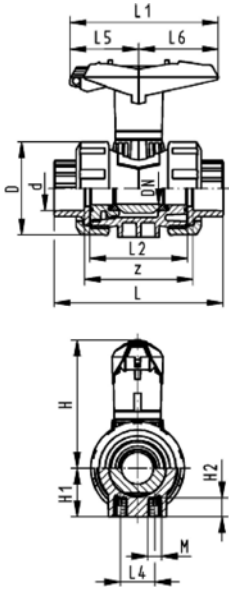
- Individual configuration of the valve (see form)
- Multifunctional module with integrated limit switches
- Pneumatic or electric actuators from +GF+

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
75	65	10	5000	<b>167 546 308</b>	<b>167 546 318</b>	3.900
90	80	10	7000	<b>167 546 309</b>	<b>167 546 319</b>	5.800
110	100	10	11000	<b>167 546 310</b>	<b>167 546 320</b>	9.200

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	M	e [mm]
75	166	149	85	15	386	270	136	70	64	206	8	4.3
90	200	161	105	15	421	270	141	70	64	206	8	5.1
110	238	178	123	22	484	320	164	120	64	256	12	6.3



DN10/15 - 50



## Ball valve type 546 PP-H With lockable handle With fusion sockets metric

### Model:

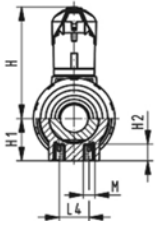
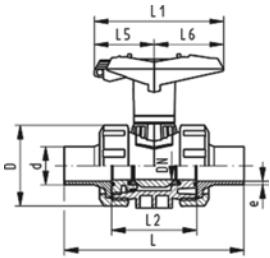
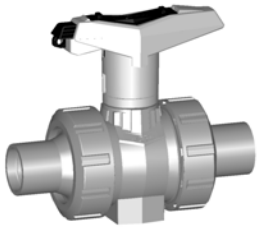
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- z-dimension, valve end and valve nut are **not compatible** with type 346 (DN10/15-50) resp. type 370 (DN65-100)
- Ball seals PTFE
- Integrated stainless steel mounting inserts
- Lockable 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 ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	71	<b>167 546 421</b>	<b>167 546 431</b>	0.125
20	15	10	185	<b>167 546 422</b>	<b>167 546 432</b>	0.125
25	20	10	350	<b>167 546 423</b>	<b>167 546 433</b>	0.195
32	25	10	700	<b>167 546 424</b>	<b>167 546 434</b>	0.270
40	32	10	1000	<b>167 546 425</b>	<b>167 546 435</b>	0.465
50	40	10	1600	<b>167 546 426</b>	<b>167 546 436</b>	0.635
63	50	10	3100	<b>167 546 427</b>	<b>167 546 437</b>	1.175
75	65	10	5000	<b>167 546 428</b>	<b>167 546 438</b>	4.000
90	80	10	7000	<b>167 546 429</b>	<b>167 546 439</b>	5.900
110	100	10	11000	<b>167 546 430</b>	<b>167 546 440</b>	9.100

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	93	77	56	25	32	45	M6	67
20	50	79	27	12	95	77	56	25	32	45	M6	66
25	58	88	30	12	109	97	65	25	39	58	M6	77
32	68	94	36	12	119	97	71	25	39	58	M6	83
40	84	113	44	15	135	128	85	45	54	74	M8	99
50	97	119	51	15	147	128	89	45	54	74	M8	105
63	124	141	64	15	168	152	101	45	66	87	M8	117
75	166	224	85	15	233	270	136	70	64	206	M8	167
90	200	235	105	15	254	270	141	70	64	206	M8	180
110	238	245	123	22	301	320	164	120	64	256	M12	215



## Ball valve type 546 PP-H With lockable handle With butt fusion spigots IR-Plus SDR11 metric

### Model:

- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- z-dimension, valve end and valve 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

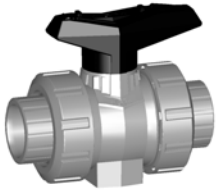
### Option:

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

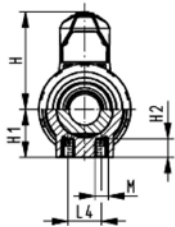
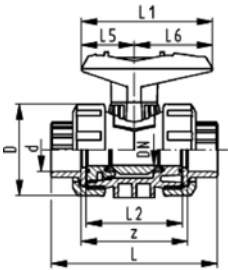
d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
20	15	10	185	<b>167 546 462</b>	<b>167 546 472</b>	0.130
25	20	10	350	<b>167 546 463</b>	<b>167 546 473</b>	0.195
32	25	10	700	<b>167 546 464</b>	<b>167 546 474</b>	0.270
40	32	10	1000	<b>167 546 465</b>	<b>167 546 475</b>	0.465
50	40	10	1600	<b>167 546 466</b>	<b>167 546 476</b>	0.645
63	50	10	3100	<b>167 546 467</b>	<b>167 546 477</b>	1.230
75	65	10	5000	<b>167 546 468</b>	<b>167 546 478</b>	4.100
90	80	10	7000	<b>167 546 469</b>	<b>167 546 479</b>	5.900
110	100	10	11000	<b>167 546 470</b>	<b>167 546 480</b>	9.000

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	M	e [mm]
20	50	79	27	12	130	87	56	25	42	45	M6	1,9
25	58	88	30	12	143	108	65	25	50	58	M6	2,3
32	68	94	36	12	150	108	71	25	50	58	M6	3
40	84	113	44	15	171	140	85	45	66	75	M8	3,7
50	97	119	51	15	191	140	89	45	66	75	M8	4,6
63	124	141	64	15	220	165	101	45	78	87	M8	5,8
75	166	149	85	15	266	270	136	70	64	206	M8	8,2
90	200	161	105	15	264	270	141	70	64	206	M8	9,9
110	238	178	123	22	301	320	164	120	64	256	M12	12

# Ball valves



DN10/15 - 50



## PROGEF® PLUS silicone free Ball valve type 546 PP-H SF With mounting inserts With fusion sockets metric

### Model:

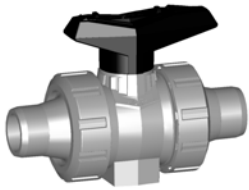
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- Silicon-free / paint-compatible
- For easy installation and removal
- z-dimension, valve end and valve nut are **not compatible** with type 346 (DN10/15-50) resp. type 370 (DN65-100)
- Integrated stainless steel mounting inserts
- Double bagged
- Ball seals PVDF

### Option:

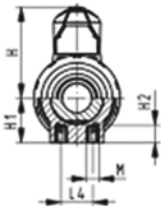
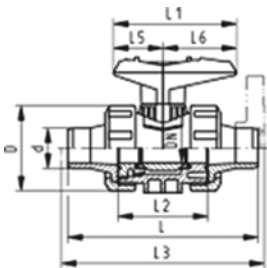
- Individual configuration of the valve (see form)
- Multifunctional module with integrated limit switches

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	71	<b>167 546 601</b>	<b>167 546 611</b>	0.115
20	15	10	185	<b>167 546 602</b>	<b>167 546 612</b>	0.115
25	20	10	350	<b>167 546 603</b>	<b>167 546 613</b>	0.180
32	25	10	700	<b>167 546 604</b>	<b>167 546 614</b>	0.255
40	32	10	1000	<b>167 546 605</b>	<b>167 546 615</b>	0.440
50	40	10	1600	<b>167 546 606</b>	<b>167 546 616</b>	0.610
63	50	10	3100	<b>167 546 607</b>	<b>167 546 617</b>	1.145
75	65	10	5000	<b>167 546 608</b>	<b>167 546 618</b>	3.700
90	80	10	7000	<b>167 546 609</b>	<b>167 546 619</b>	5.500
110	100	10	11000	<b>167 546 610</b>	<b>167 546 620</b>	8.700

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	93	77	56	25	32	45	M6	67
20	50	57	27	12	95	77	56	25	32	45	M6	66
25	58	67	30	12	108	97	65	25	39	58	M6	77
32	68	73	36	12	118	97	71	25	39	58	M6	83
40	84	90	44	15	137	128	85	45	54	74	M8	99
50	97	97	51	15	147	128	89	45	54	74	M8	105
63	124	116	64	15	168	152	101	45	66	87	M8	117
75	166	149	85	15	233	270	136	70	64	206	M8	167
90	200	161	105	15	254	270	141	70	64	206	M8	180
110	238	178	123	22	301	320	164	120	64	256	M12	215



DN10/15 - 50






## PROGEF® PLUS silicone free Ball valve type 546 PP-H SF With mounting inserts With socket fusion spigots metric




### Model:

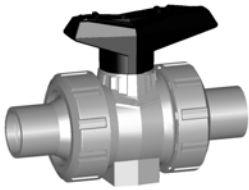
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- Silicon-free / paint-compatible
- For easy installation and removal
- z-dimension, valve end and valve nut are **not compatible** with type 346 (DN10/15-50) resp. type 370 (DN65-100)
- Integrated stainless steel mounting inserts
- Double bagged
- Ball seals PVDF

### Option:

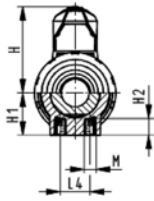
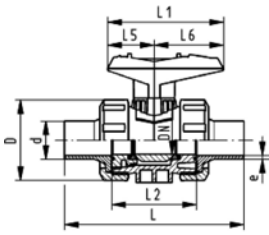
- Individual configuration of the valve (see form)
- Multifunctional module with integrated limit switches

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg	
16	10	10	71	<b>167 546 621</b>	<b>167 546 631</b>	0.120	
20	15	10	185	<b>167 546 622</b>	<b>167 546 632</b>	0.120	
25	20	10	350	<b>167 546 623</b>	<b>167 546 633</b>	0.180	
32	25	10	700	<b>167 546 624</b>	<b>167 546 634</b>	0.260	
40	32	10	1000	<b>167 546 625</b>	<b>167 546 635</b>	0.450	
50	40	10	1600	<b>167 546 626</b>	<b>167 546 636</b>	0.640	
63	50	10	3100	<b>167 546 627</b>	<b>167 546 637</b>	1.210	
 75	65	10	5000	<b>167 546 628</b>	<b>167 546 638</b>	3.800	
 90	80	10	7000	<b>167 546 629</b>	<b>167 546 639</b>	5.600	
 110	100	10	11000	<b>167 546 630</b>	<b>167 546 640</b>	8.800	

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	110	77	56		25	32	45	M6	
20	50	57	27	12	120	77	56	130	25	32	45	M6	
25	58	67	30	12	139	97	65	150	25	39	58	M6	
32	68	73	36	12	150	97	71	160	25	39	58	M6	
40	84	90	44	15	170	128	85	180	45	54	74	M8	
50	97	97	51	15	190	128	89	200	45	54	74	M8	
63	124	116	64	15	220	152	101	230	45	66	87	M8	
 75	166	149	85	15	280	270	136	290	70	64	206	M8	
 90	200	161	105	15	296	270	141	310	70	64	206	M8	
 110	238	178	123	22	336	320	164	350	120	64	256	M12	



DN10/15 - 50



**PROGEF® PLUS silicone free**  
**Ball valve type 546 PP-H SF**  
**With mounting inserts**  
**With butt fusion spigots IR-Plus SDR11 metric**

**Model:**

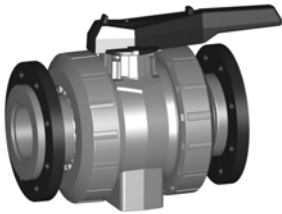
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- Silicon-free / paint-compatible
- For easy installation and removal
- z-dimension, valve end and valve nut are **not compatible** with type 346 (DN10/15-50) resp. type 370 (DN65-100)
- Integrated stainless steel mounting inserts
- Double bagged
- Ball seals PVDF

**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	
20	15	10	185	<b>167 546 662</b>	<b>167 546 672</b>	0.120	
25	20	10	350	<b>167 546 663</b>	<b>167 546 673</b>	0.180	
32	25	10	700	<b>167 546 664</b>	<b>167 546 674</b>	0.255	
40	32	10	1000	<b>167 546 665</b>	<b>167 546 675</b>	0.440	
50	40	10	1600	<b>167 546 666</b>	<b>167 546 676</b>	0.620	
63	50	10	3100	<b>167 546 667</b>	<b>167 546 677</b>	1.200	
75	65	10	5000	<b>167 546 668</b>	<b>167 546 678</b>	3.800	
90	80	10	7000	<b>167 546 669</b>	<b>167 546 679</b>	5.500	
110	100	10	11000	<b>167 546 670</b>	<b>167 546 680</b>	8.700	

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	M	e [mm]	
20	50	57	27	12	130	77	56	25	32	45	M6	1,9	
25	58	67	30	12	143	97	65	25	39	58	M6	2,3	
32	68	73	36	12	150	97	71	25	39	58	M6	3	
40	84	90	44	15	171	128	85	45	54	74	M8	3,7	
50	97	97	51	15	191	128	89	45	54	74	M8	4,6	
63	124	116	64	15	220	152	101	45	66	87	M8	5,8	
75	166	149	85	15	266	270	136	70	64	206	M8	8.2	
90	200	161	105	15	264	270	141	70	64	206	M8	9.9	
110	238	178	123	22	301	320	164	120	64	256	M12	12	



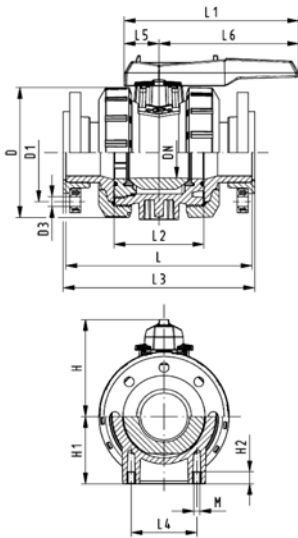
**PROGEF® PLUS silicone free**  
**Ball valve type 546 PP-H SF**  
**With mounting inserts**  
**With backing flanges PP-st metric**

**Model:**

- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- Silicone-free / paint-compatible
- For easy installation and removal
- z-dimension, valve end and valve nut are **not compatible** with type 346 (DN10/15-50) resp. type 370 (DN65-100)
- Integrated stainless steel mounting inserts
- Double bagged
- Ball seals PVDF
- Overall length according to EN 558-1
- Connecting dimensions: ISO 7005, EN 1092, BS 4504, DIN 2501; bolt circle PN 10

**Option:**

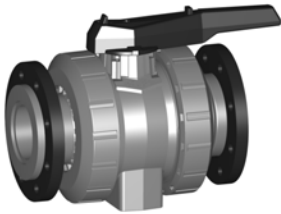
- Individual configuration of the valve (see form)
- Multifunctional module with integrated limit switches



d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
75	65	10	5000	<b>167 546 828</b>	<b>167 546 838</b>	4.300
90	80	10	7000	<b>167 546 829</b>	<b>167 546 839</b>	6.400
110	100	10	11000	<b>167 546 830</b>	<b>167 546 840</b>	10.000

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	280	270	136	290	70	64	206	149	85	8
90	200	160	18	296	270	141	310	70	64	206	161	105	8
110	238	180	18	336	320	164	350	120	64	256	178	123	12





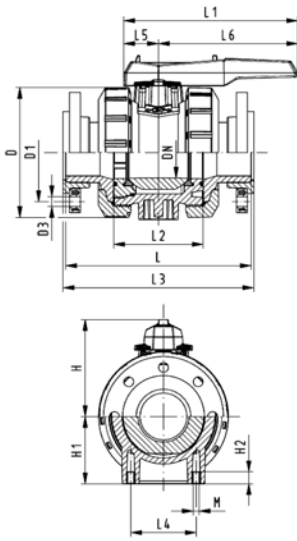
**PROGEF® PLUS silicone free  
Ball valve type 546 PP-H SF  
With mounting inserts  
With backing flanges PP-st ANSI**

**Model:**

- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- Silicon-free / paint-compatible
- For easy installation and removal
- z-dimension, valve end and valve nut are **not compatible** with type 346 (DN10/15-50) resp. type 370 (DN65-100)
- Integrated stainless steel mounting inserts
- Double bagged
- Ball seals PTFE
- Overall length according to EN 558-1
- Connecting dimension ANSI/ASME B 16.5 / ASTM D 4024

**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
75	65	10	5000	<b>167 546 888</b>	<b>167 546 898</b>	4.300
90	80	10	7000	<b>167 546 889</b>	<b>167 546 899</b>	6.400
110	100	10	11000	<b>167 546 890</b>	<b>167 546 900</b>	10.000

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	140	19	280	270	136	290	70	64	206	149	85	8
90	200	152	19	296	270	141	310	70	64	206	161	105	8
110	238	191	19	336	320	164	350	120	64	256	178	123	12

# Copiable

## Configurator GF ball valve type 546 PP-H

<b>Ball Valve</b>										
A01 Ball Valve 546										
A02 Linear Ball Valve										
<b>Material</b>										
B05 PP-H										
<b>Dimension</b>										
C05 d 16 DN 10 3/8"										
C06 d 20 DN 15 1/2"										
C07 d 25 DN 20 3/4"										
C08 d 32 DN 25 1"										
C09 d 40 DN 32 1 1/4"										
C10 d 50 DN 40 1 1/2"										
C11 d 63 DN 50 2"										
C12 d 75 DN 65 2 1/2"										
C13 d 90 DN 80 3"										
C14 d 110 DN 100 4"										
C15 d 160 DN 150 6"										
<b>Version</b>										
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 for metric (only with specific connecting parts)										
<b>Seals</b>										
E01 EPDM seals										
E02 FPM seals										
E03 FFPM (KALREZ®) seals										
<b>Threaded inserts</b>										
F01 without threaded inserts										
F02 with threaded inserts										
<b>Connecting parts</b>										
G30 PP-H Fusion socket metric										
G32 PP-H Socket fusion spigot metric										
G33 PP-H Threaded socket Rp reinforced										
G34 PP-H Threaded socket NPT reinforced										
G35 PP-H Butt fusion spigot SDR 11 metric IR-PLUS®										
G36 PP-H Butt fusion spigot SDR 17.6 metric with this valve end the maximum nominal pressure is reduced to PN 6										
G37 PP-H Butt fusion spigot long SDR11 metric										
G83 PP-H Valve end blank										
G44 PE-100 Butt fusion spigot long SDR17.6 metric (DN65-100)										
G63 Fixed flange PP-H serrated metric (DN10-50)										
G72 Backing flange PP-steel metric										
G73 Backing flange PP-steel inch ANSI										
G77 Backing flange PP JIS with connecting parts										
G78 Backing flange PP-GF JIS										
G40 PE-100 Fusion socket metric										
G41 PE-100 Butt fusion spigot SDR11 metric										
G42 PE-100 Butt fusion spigot SDR17.6 metric										
G43 PE-100 Butt fusion spigot long SDR11 metric										
<b>Multi-functional module</b>										
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										
<b>Lever</b>										
K01 Standard lever red										
K02 Standard lever black										
K11 Multi-functional lever red										
<b>Mounting plate</b>										
L01 without mounting plate										
L02 with mounting plate										
<b>A01</b>	<b>B05</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>F</b>	<b>G</b>	<b>G</b>	<b>I</b>	<b>K</b>	<b>L</b>
						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 you application, we have created a selection menu for you. (The maximum nominal pressure for the ball valve is PN10).

**We supply what you put together.**

# Find the fitting solution with the Configurator

## Ball Valve

A01 Ball Valve 546  
A02 Linear Ball Valve 546

### Material

B05 PP-H

### Dimension

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

### Version

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

### Seals

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

### Threaded inserts

F01 without threaded inserts  
F02 with threaded inserts

### Connecting parts

G30 PP-H Fusion socket metric  
G32 PP-H Socket fusion spigot metric  
G33 PP-H Threaded socket Rp reinforced  
G34 PP-H Threaded socket NPT reinforced  
G35 PP-H Butt fusion spigot SDR 11 metric IR Plus®  
G36 PP-H Butt fusion spigot SDR 17.6 metric (limited dimension range) with this valve end the maximum nominal pressure is reduced to PN 6  
G37 PP-H Butt fusion spigot long SDR11 metric  
G83 PP-H Valve end blank  
G63 Fixed flange PP-H serrated metric  
G72 Backing flange PP-steel metric  
G73 Backing flange PP-steel inch ANSI  
G77 Backing flange PP-GF JIS  
G40 PE-100 Fusion socket metric  
G41 PE-100 Butt fusion spigot SDR11 metric  
G42 PE-100 Butt fusion spigot SDR17.6 metric (limited dimension range)  
G43 PE-100 Butt fusion spigot long SDR11 metric  
G44 PE-100 Butt fusion spigot long SDR17.6 metric (DN65-100)  
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  
G17 PVC-C Threaded socket NPT

### Multi-functional module

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

### Lever

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

### Mounting plate

L01 without mounting plate  
L02 with mounting plate

## Example:

Type 546 PP-H, nominal width DN 32, PTFE ball seal, EPDM seals, with threaded inserts and mounting plate, Connecting part left, PP-H cement socket metric, Connecting part right, PE-100 butt fusion spigot SDR 11 metric

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

A01 B05 C09 D01 E01 F02 G30 G41 I01 K02 L02 =

left right



# Ball valves electric

## Ball valve type 107 PP-H 100-230V With manual emergency override With fusion sockets metric



DN10/15 - 50

### Model:

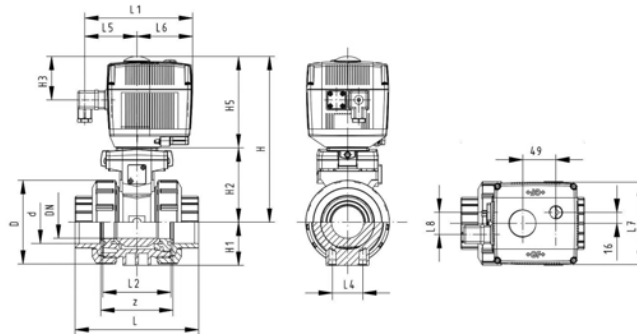
- Built on with electric actuator EA11
- Voltage 100-230 V, 50-60 Hz
- Control range 90°<
- Control time 5 s/90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts

### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	70	<b>199 107 502</b>	<b>199 107 512</b>	2.100
20	15	10	185	<b>199 107 503</b>	<b>199 107 513</b>	2.100
25	20	10	350	<b>199 107 504</b>	<b>199 107 514</b>	2.200
32	25	10	700	<b>199 107 505</b>	<b>199 107 515</b>	2.300
40	32	10	1000	<b>199 107 506</b>	<b>199 107 516</b>	2.600
50	40	10	1600	<b>199 107 507</b>	<b>199 107 517</b>	3.000
63	50	10	3100	<b>199 107 508</b>	<b>199 107 518</b>	3.800

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	L8 [mm]	z [mm]
16	50	200	27	64	64	137	93	161	56	25	77	83	122	33	67
20	50	200	27	64	64	137	95	161	56	25	77	83	122	33	66
25	58	209	30	73	64	137	108	161	65	25	77	83	122	33	77
32	68	209	36	73	64	137	118	161	71	25	77	83	122	33	83
40	84	220	44	84	64	137	137	161	85	45	77	83	122	33	99
50	97	220	51	84	64	137	147	161	89	45	77	83	122	33	105
63	124	243	64	106	64	137	168	161	101	45	77	83	122	33	117





DN10/15 - 50

## Ball valve type 107 PP-H 24V With manual emergency override With fusion sockets metric

### Model:

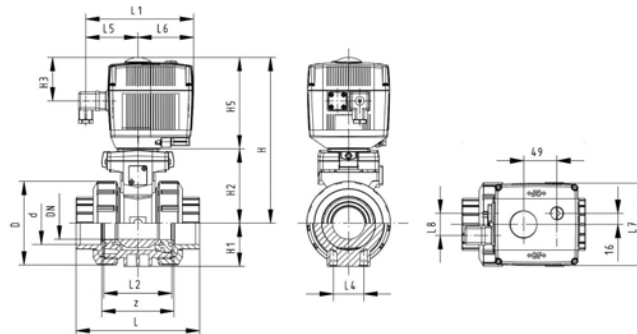
- Built on with electric actuator EA11
- Voltage 24 V AC/DC
- Control range 90°<
- Control time 5 s/90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts

### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	70	199 107 542	199 107 552	2.100
20	15	10	185	199 107 543	199 107 553	2.100
25	20	10	350	199 107 544	199 107 554	2.200
32	25	10	700	199 107 545	199 107 555	2.300
40	32	10	1000	199 107 546	199 107 556	2.600
50	40	10	1600	199 107 547	199 107 557	3.000
63	50	10	3100	199 107 548	199 107 558	3.800

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	L8 [mm]	z [mm]
16	50	200	27	64	64	137	93	161	56	25	77	83	122	33	67
20	50	200	27	64	64	137	95	161	56	25	77	83	122	33	66
25	58	209	30	73	64	137	108	161	65	25	77	83	122	33	77
32	68	209	36	73	64	137	118	161	71	25	77	83	122	33	83
40	84	220	44	84	64	137	137	161	85	45	77	83	122	33	99
50	97	220	51	84	64	137	147	161	89	45	77	83	122	33	105
63	124	243	64	106	64	137	168	161	101	45	77	83	122	33	117





DN10/15 - 50

## Ball valve type 107 PP-H 100-230V With manual emergency override With fusion spigots metric

### Model:

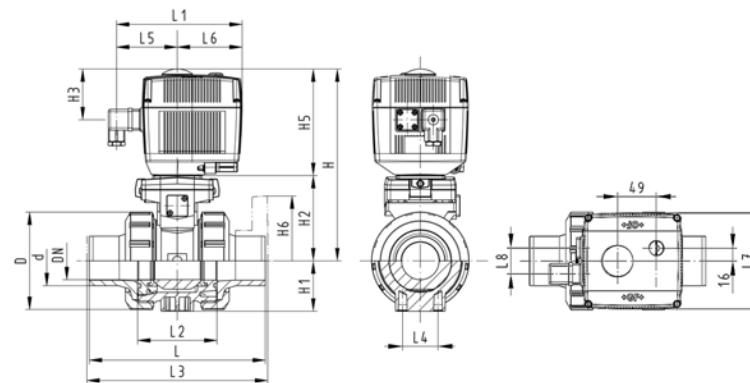
- Built on with electric actuator EA11
- Voltage 100-230 V, 50-60 Hz
- Control range 90°<
- Control time 5 s/90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts

### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	70	<b>199 107 522</b>	<b>199 107 532</b>	2.100
20	15	10	185	<b>199 107 523</b>	<b>199 107 533</b>	2.100
25	20	10	350	<b>199 107 524</b>	<b>199 107 534</b>	2.200
32	25	10	700	<b>199 107 525</b>	<b>199 107 535</b>	2.300
40	32	10	1000	<b>199 107 526</b>	<b>199 107 536</b>	2.600
50	40	10	1600	<b>199 107 527</b>	<b>199 107 537</b>	3.000
63	50	10	3100	<b>199 107 528</b>	<b>199 107 538</b>	3.800

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	L8 [mm]
16	50	200	27	64	64	137	110	161	56	130	25	77	83	122	33
20	50	200	27	64	64	137	120	161	56	130	25	77	83	122	33
25	58	209	30	73	64	137	139	161	65	150	25	77	83	122	33
32	68	209	36	73	64	137	150	161	71	160	25	77	83	122	33
40	84	220	44	84	64	137	170	161	85	180	45	77	83	122	33
50	97	220	51	84	64	137	190	161	89	200	45	77	83	122	33
63	124	243	64	106	64	137	220	161	101	230	45	77	83	122	33





DN10/15 - 50

## Ball valve type 107 PP-H 24V With manual emergency override With fusion spigots metric

### Model:

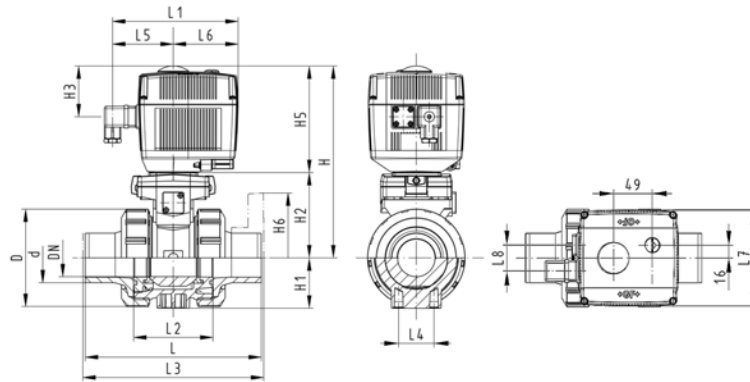
- Built on with electric actuator EA11
- Voltage 24 V AC/DC
- Control range 90°<
- Control time 5 s/90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts

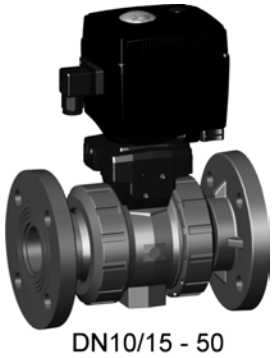
### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	70	<b>199 107 562</b>	<b>199 107 572</b>	2.100
20	15	10	185	<b>199 107 563</b>	<b>199 107 573</b>	2.100
25	20	10	350	<b>199 107 564</b>	<b>199 107 574</b>	2.200
32	25	10	700	<b>199 107 565</b>	<b>199 107 575</b>	2.300
40	32	10	1000	<b>199 107 566</b>	<b>199 107 576</b>	2.600
50	40	10	1600	<b>199 107 567</b>	<b>199 107 577</b>	3.000
63	50	10	3100	<b>199 107 568</b>	<b>199 107 578</b>	3.800

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	L8 [mm]
16	50	200	27	64	64	137	110	161	56	130	25	77	83	122	33
20	50	200	27	64	64	137	120	161	56	130	25	77	83	122	33
25	58	209	30	73	64	137	139	161	65	150	25	77	83	122	33
32	68	209	36	73	64	137	156	161	71	160	25	77	83	122	33
40	84	220	44	84	64	137	170	161	85	180	45	77	83	122	33
50	97	220	51	84	64	137	190	161	89	200	45	77	83	122	33
63	124	243	64	106	64	137	220	161	101	230	45	77	83	122	33





DN10/15 - 50

## Ball valve type 107 PP-H 100-230V With manual emergency override With fixed flanges PP-H serrated 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
- Overall length according to EN 558-1
- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504

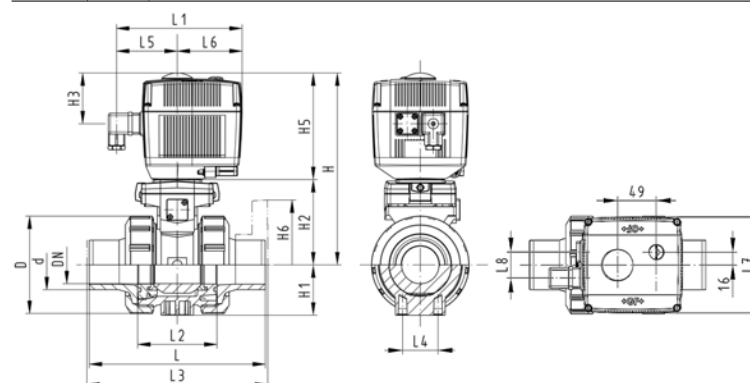
### Option:

- Individual configuration of the valve (see form)

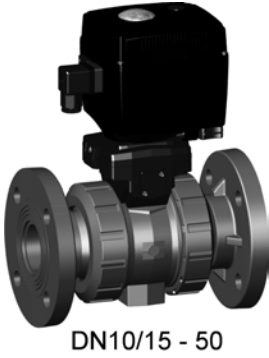
d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
20	15	1/2	10	185	<b>199 107 583</b>	<b>199 107 593</b>	2.300
25	20	3/4	10	350	<b>199 107 584</b>	<b>199 107 594</b>	2.500
32	25	1	10	700	<b>199 107 585</b>	<b>199 107 595</b>	2.700
40	32	1 1/4	10	1000	<b>199 107 586</b>	<b>199 107 596</b>	3.200
50	40	1 1/2	10	1600	<b>199 107 587</b>	<b>199 107 597</b>	3.700
63	50	2	10	3100	<b>199 107 588</b>	<b>199 107 598</b>	4.800

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
20	50	200	27	64	64	137	48	120	161	56	130	25	77	83	122
25	58	209	30	73	64	137	53	140	161	65	150	25	77	83	122
32	68	209	36	73	64	137	58	150	161	71	160	25	77	83	122
40	84	220	44	84	64	137	70	170	161	85	180	45	77	83	122
50	97	220	51	84	64	137	75	190	161	89	200	45	77	83	122
63	124	243	64	106	64	137	165	220	161	101	230	45	77	83	122

d [mm]	L8 [mm]
20	33
25	33
32	33
40	33
50	33
63	33







## Ball valve type 107 PP-H 24V With manual emergency override With fixed flanges PP-H serrated 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
- Overall length according to EN 558-1
- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504

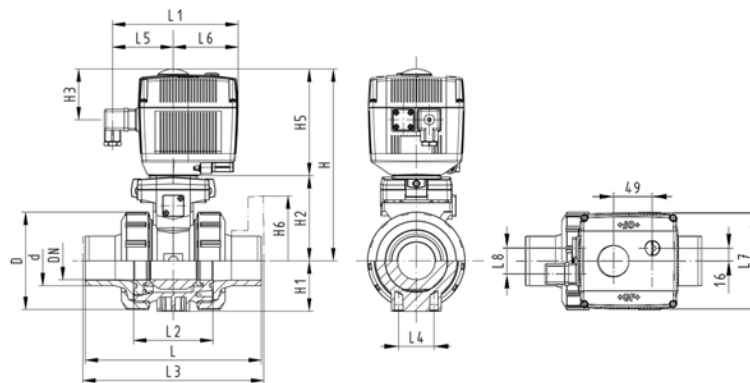
### Option:

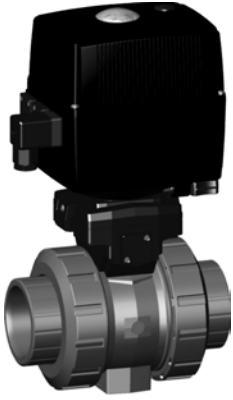
- Individual configuration of the valve (see form)

d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
20	15	1/2	10	185	<b>199 107 783</b>	<b>199 107 793</b>	2.300
25	20	3/4	10	350	<b>199 107 784</b>	<b>199 107 794</b>	2.500
32	25	1	10	700	<b>199 107 785</b>	<b>199 107 795</b>	2.700
40	32	1 1/4	10	1000	<b>199 107 786</b>	<b>199 107 796</b>	3.200
50	40	1 1/2	10	1600	<b>199 107 787</b>	<b>199 107 797</b>	3.700
63	50	2	10	3100	<b>199 107 788</b>	<b>199 107 798</b>	4.800

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
20	50	200	27	64	64	137	48	120	161	56	130	25	77	83	122
25	58	209	30	73	64	137	53	140	161	65	150	25	77	83	122
32	68	209	36	73	64	137	58	150	161	71	160	25	77	83	122
40	84	220	44	84	64	137	70	170	161	85	180	45	77	83	122
50	97	220	51	84	64	137	75	190	161	89	200	45	77	83	122
63	124	243	64	106	64	137	165	220	161	101	230	45	77	83	122

d [mm]	L8 [mm]
20	33
25	33
32	33
40	33
50	33
63	33





DN10/15 - 50




## Ball valve type 131 PP-H 100-230V With manual emergency override With fusion sockets metric




### Model:

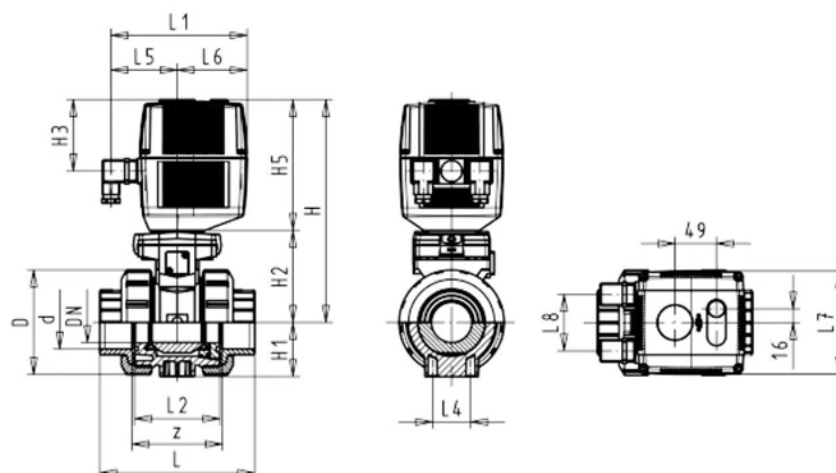
- Assignment of actuators EA21 (DN10/15-50), EA31 (DN65-100 if available)
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Voltage 100-230 V, 50-60 Hz
- Control range 90°<
- Control time: EA21: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

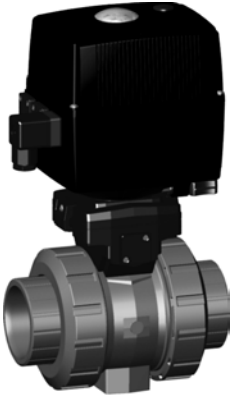
### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	70	<b>199 131 002</b>	<b>199 131 012</b>	2.100
20	15	10	185	<b>199 131 003</b>	<b>199 131 013</b>	2.100
25	20	10	350	<b>199 131 004</b>	<b>199 131 014</b>	2.200
32	25	10	700	<b>199 131 005</b>	<b>199 131 015</b>	2.300
40	32	10	1000	<b>199 131 006</b>	<b>199 131 016</b>	2.600
50	40	10	1600	<b>199 131 007</b>	<b>199 131 017</b>	3.000
63	50	10	3100	<b>199 131 008</b>	<b>199 131 018</b>	3.800
 75	65	10	5000	<b>199 131 009</b>	<b>199 131 019</b>	3.600
 90	80	10	7000	<b>199 131 010</b>	<b>199 131 020</b>	4.300
 110	100	10	11000	<b>199 131 011</b>	<b>199 131 021</b>	5.500

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	93	180	56	25	97	83	122	67
20	50	231	27	64	94	167	95	180	56	25	97	83	122	66
25	58	240	30	73	94	167	108	180	65	25	97	83	122	77
32	68	240	36	73	94	167	118	180	71	25	97	83	122	83
40	84	251	44	84	94	167	137	180	85	45	97	83	122	99
50	97	251	51	84	94	167	147	180	89	45	97	83	122	105
63	124	273	64	106	94	167	168	180	101	45	97	83	122	117
 75	166	346	85	156	94	190	233	180	136	70	98	83	122	167
 90	200	358	105	168	94	190	254	180	141	70	98	83	122	180
 110	238	365	123	175	94	190	301	180	164	120	98	83	122	215





DN10/15 - 50




## Ball valve type 131 PP-H 24V With manual emergency override With fusion sockets metric




### Model:

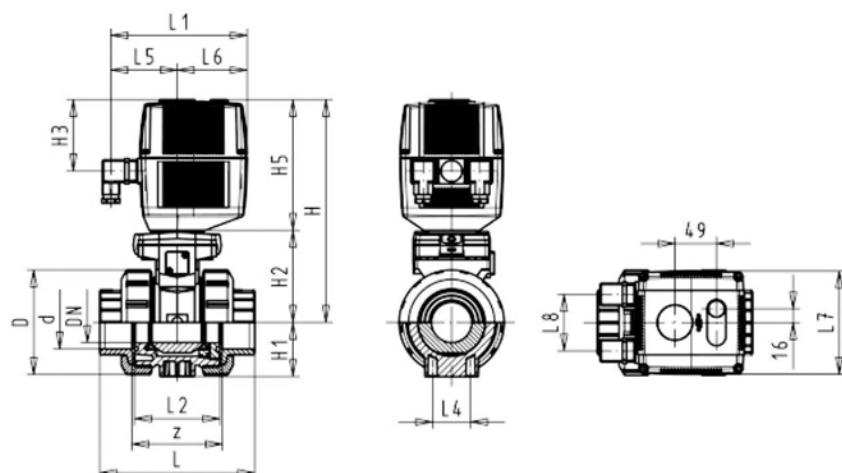
- Assignment of actuators EA21 (DN10/15-50), EA31 (DN65-100 if available)
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Voltage 24 V AC/DC
- Control range 90°<
- Control time: EA21: 5s/90°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

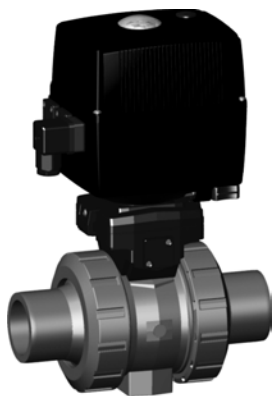
### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	70	<b>199 131 042</b>	<b>199 131 052</b>	2.100
20	15	10	185	<b>199 131 043</b>	<b>199 131 053</b>	2.100
25	20	10	350	<b>199 131 044</b>	<b>199 131 054</b>	2.200
32	25	10	700	<b>199 131 045</b>	<b>199 131 055</b>	2.300
40	32	10	1000	<b>199 131 046</b>	<b>199 131 056</b>	2.600
50	40	10	1600	<b>199 131 047</b>	<b>199 131 057</b>	3.000
63	50	10	3100	<b>199 131 048</b>	<b>199 131 058</b>	3.800
 75	65	10	5000	<b>199 131 049</b>	<b>199 131 059</b>	3.600
 90	80	10	7000	<b>199 131 050</b>	<b>199 131 060</b>	4.300
 110	100	10	11000	<b>199 131 051</b>	<b>199 131 061</b>	5.500

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	93	180	56	25	97	83	122	67
20	50	231	27	64	94	167	95	180	56	25	97	83	122	66
25	58	240	30	73	94	167	108	180	65	25	97	83	122	77
32	68	240	36	73	94	167	118	180	71	25	97	83	122	83
40	84	251	44	84	94	167	137	180	85	45	97	83	122	99
50	97	251	51	84	94	167	147	180	89	45	97	83	122	105
63	124	273	64	106	94	167	168	180	101	45	97	83	122	117
 75	166	346	85	156	94	190	233	180	136	70	98	83	122	167
 90	200	358	105	168	94	190	254	180	141	70	98	83	122	180
 110	238	365	123	175	94	190	301	180	164	120	98	83	122	215





DN10/15 - 50




## Ball valve type 131 PP-H 100-230V With manual emergency override With socket fusion spigots metric




### Model:

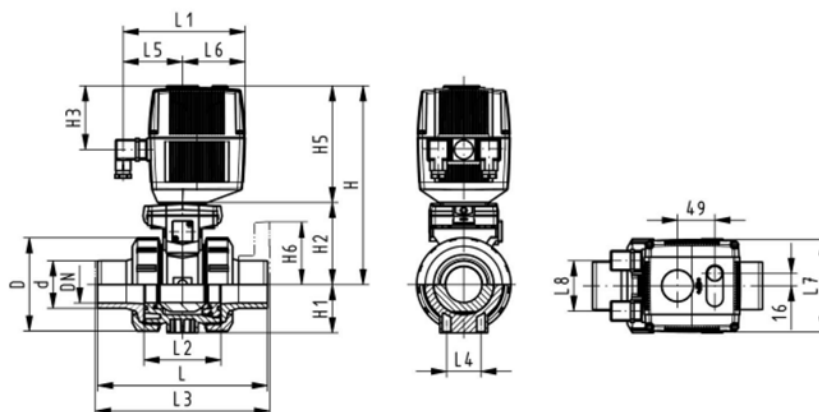
- Assignment of actuators EA21 (DN10/15-50), EA31 (DN65-100 if available)
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Voltage 100-230 V, 50-60 Hz
- Control range 90°<
- Control time: EA21: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

### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	70	<b>199 131 022</b>	<b>199 131 032</b>	2.100
20	15	10	185	<b>199 131 023</b>	<b>199 131 033</b>	2.100
25	20	10	350	<b>199 131 024</b>	<b>199 131 034</b>	2.200
32	25	10	700	<b>199 131 025</b>	<b>199 131 035</b>	2.300
40	32	10	1000	<b>199 131 026</b>	<b>199 131 036</b>	2.600
50	40	10	1600	<b>199 131 027</b>	<b>199 131 037</b>	3.000
63	50	10	3100	<b>199 131 028</b>	<b>199 131 038</b>	3.800
 75	65	10	5000	<b>199 131 029</b>	<b>199 131 039</b>	3.600
 90	80	10	7000	<b>199 131 030</b>	<b>199 131 040</b>	4.400
 110	100	10	11000	<b>199 131 031</b>	<b>199 131 041</b>	5.500

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	110	180	56	130	25	97	83	122
20	50	231	27	64	94	167	120	180	56	130	25	97	83	122
25	58	240	30	73	94	167	139	180	65	150	25	97	83	122
32	68	240	36	73	94	167	150	180	71	160	25	97	83	122
40	84	251	44	84	94	167	170	180	85	180	45	97	83	122
50	97	251	51	84	94	167	190	180	89	200	45	97	83	122
63	124	273	64	106	94	167	220	180	101	230	45	97	83	122
 75	166	346	85	156	94	190	280	180	136	290	70	98	83	122
 90	200	358	105	168	94	190	296	180	141	310	70	98	83	122
 110	238	365	123	175	94	190	336	180	164	350	120	98	83	122





DN10/15 - 50




## Ball valve type 131 PP-H 24V With manual emergency override With socket fusion spigots metric




### Model:

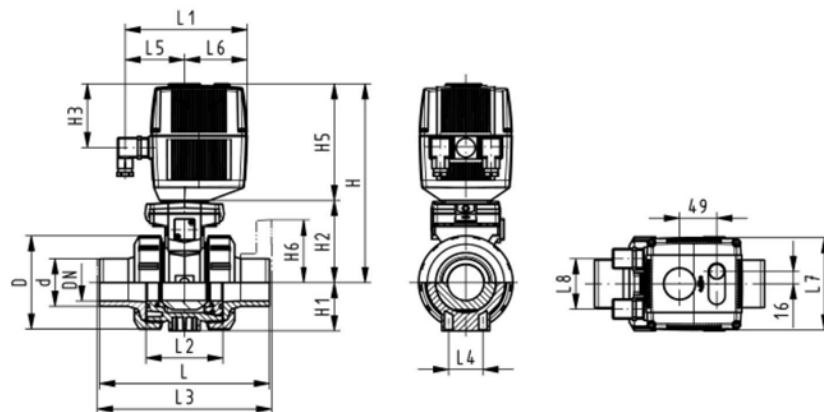
- Assignment of actuators EA21 (DN10/15-50), EA31 (DN65-100 if available)
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Voltage 24 V AC/DC
- Control range 90°<
- Control time: EA21: 5s/90°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

### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	70	<b>199 131 062</b>	<b>199 131 072</b>	2.100
20	15	10	185	<b>199 131 063</b>	<b>199 131 073</b>	2.100
25	20	10	350	<b>199 131 064</b>	<b>199 131 074</b>	2.200
32	25	10	700	<b>199 131 065</b>	<b>199 131 075</b>	2.300
40	32	10	1000	<b>199 131 066</b>	<b>199 131 076</b>	2.600
50	40	10	1600	<b>199 131 067</b>	<b>199 131 077</b>	3.000
63	50	10	3100	<b>199 131 068</b>	<b>199 131 078</b>	3.800
 75	65	10	5000	<b>199 131 069</b>	<b>199 131 079</b>	3.600
 90	80	10	7000	<b>199 131 070</b>	<b>199 131 080</b>	4.400
 110	100	10	11000	<b>199 131 071</b>	<b>199 131 081</b>	5.500

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	110	180	56	130	25	97	83	122
20	50	231	27	64	94	167	120	180	56	130	25	97	83	122
25	58	240	30	73	94	167	139	180	65	150	25	97	83	122
32	68	240	36	73	94	167	150	180	71	160	25	97	83	122
40	84	251	44	84	94	167	170	180	85	180	45	97	83	122
50	97	251	51	84	94	167	190	180	89	200	45	97	83	122
63	124	273	64	106	94	167	220	180	101	230	45	97	83	122
 75	166	346	85	156	94	190	280	180	136	290	70	98	83	122
 90	200	358	105	168	94	190	296	180	141	310	70	98	83	122
 110	238	365	123	175	94	190	336	180	164	350	120	98	83	122





## Ball valve type 131 PP-H 100-230V With manual emergency override With fixed flanges PP-H serrated metric

### Model:

- Assignment of actuators EA21 (DN10/15-50), EA31 (DN65-100 if available)
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- 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 558-1
- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504

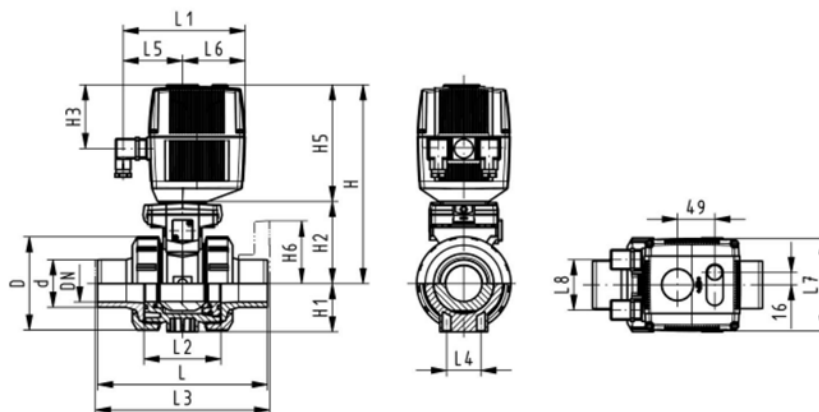
### Option:

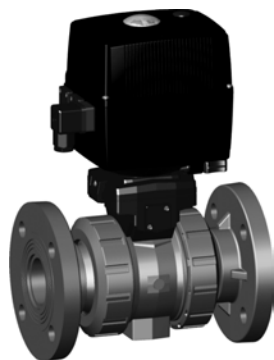
- Individual configuration of the valve (see form)

d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
20	15	½	10	185	<b>199 131 083</b>	<b>199 131 093</b>	2.300
25	20	¾	10	350	<b>199 131 084</b>	<b>199 131 094</b>	2.500
32	25	1	10	700	<b>199 131 085</b>	<b>199 131 095</b>	2.700
40	32	1 ¼	10	1000	<b>199 131 086</b>	<b>199 131 096</b>	3.200
50	40	1 ½	10	1600	<b>199 131 087</b>	<b>199 131 097</b>	3.700
63	50	2	10	3100	<b>199 131 088</b>	<b>199 131 098</b>	4.800

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
20	50	231	27	64	94	167	48	120	180	56	130	25	97	83	122
25	58	240	30	73	94	167	53	140	180	65	150	25	97	83	122
32	68	240	36	73	94	167	58	150	180	71	160	25	97	83	122
40	84	251	44	84	94	167	70	170	180	85	180	45	97	83	122
50	97	251	51	84	94	167	75	190	180	89	200	45	97	83	122
63	124	273	64	106	94	167	165	220	180	101	230	45	97	83	122

d [mm]	L8 [mm]
20	66
25	66
32	66
40	66
50	66
63	66





DN10/15 - 50

## Ball valve type 131 PP-H 24V With manual emergency override With fixed flanges PP-H serrated metric

### Model:

- Assignment of actuators EA21 (DN10/15-50), EA31 (DN65-100 if available)
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- 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 558-1
- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504

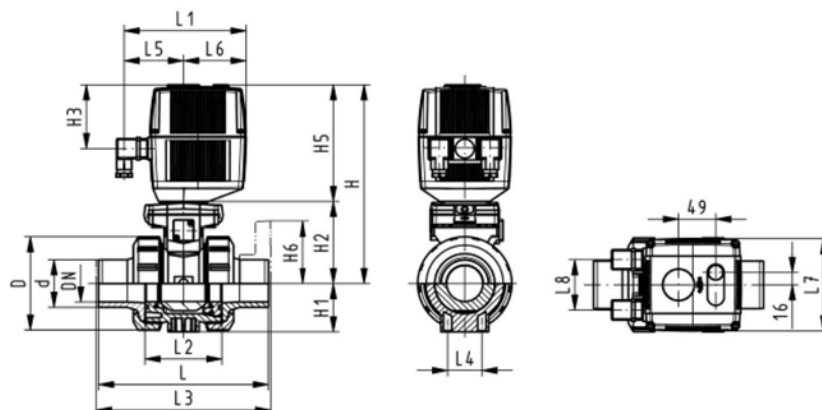
### Option:

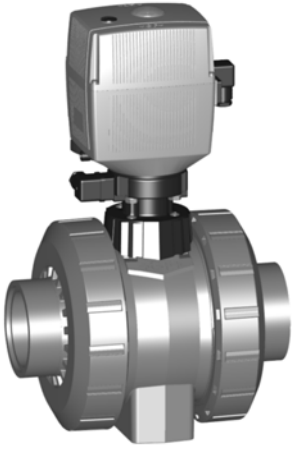
- Individual configuration of the valve (see form)

d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
20	15	½	10	185	<b>199 131 103</b>	<b>199 131 113</b>	2.300
25	20	¾	10	350	<b>199 131 104</b>	<b>199 131 114</b>	2.500
32	25	1	10	700	<b>199 131 105</b>	<b>199 131 115</b>	2.700
40	32	1 ¼	10	1000	<b>199 131 106</b>	<b>199 131 116</b>	3.200
50	40	1 ½	10	1600	<b>199 131 107</b>	<b>199 131 117</b>	3.700
63	50	2	10	3100	<b>199 131 108</b>	<b>199 131 118</b>	4.800

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
20	50	231	27	64	94	167	48	120	180	56	130	25	97	83	122
25	58	240	30	73	94	167	53	140	180	65	150	25	97	83	122
32	68	240	36	73	94	167	58	150	180	71	160	25	97	83	122
40	84	251	44	84	94	167	70	170	180	85	180	45	97	83	122
50	97	251	51	84	94	167	75	190	180	89	200	45	97	83	122
63	124	273	64	106	94	167	165	220	180	101	230	45	97	83	122

d [mm]	L8 [mm]
20	66
25	66
32	66
40	66
50	66
63	66





## Ball valve type 131 PP-H 100-230V With manual emergency override With butt fusion spigots SDR11 metric

### Model:

- Assignment of actuators EA21 (DN10/15-50), EA31 (DN65-100 if available)
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- 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°<

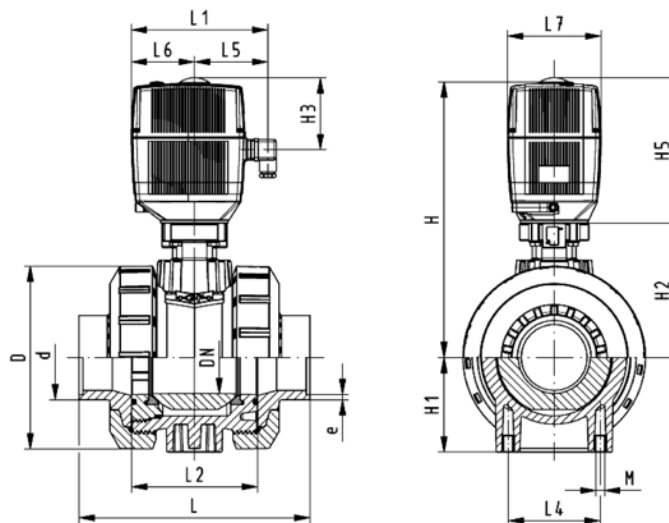
### Option:

- Individual configuration of the valve (see form)

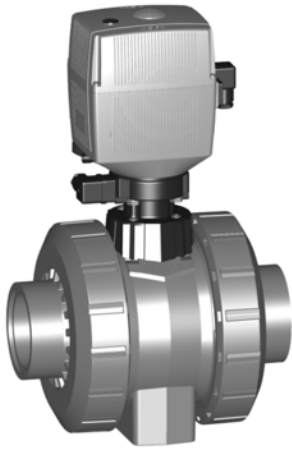
d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg	
75	65	10	5000	<b>199 131 329</b>	<b>199 131 339</b>	3.600	
90	80	10	7000	<b>199 131 330</b>	<b>199 131 340</b>	4.400	
110	100	10	11000	<b>199 131 331</b>	<b>199 131 341</b>	5.500	

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]
75	166	346	85	156	94	190	266	180	136	290	70	98	83	122
90	200	358	105	168	94	190	264	180	141	310	70	98	83	122
110	238	365	123	175	94	190	301	180	164	350	120	98	83	122

d [mm]	e [mm]
75	8.2
90	9.9
110	12.0







## Ball valve type 131 PP-H 24V

### With manual emergency override

### With butt fusion spigots SDR11 metric

#### Model:

- Assignment of actuators EA21 (DN10/15-50), EA31 (DN65-100 if available)
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- 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°<

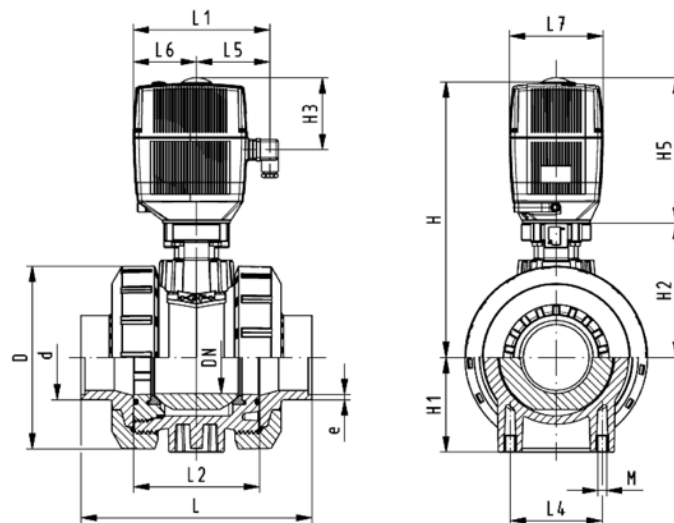
#### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
75	65	10	5000	<b>199 131 369</b>	<b>199 131 379</b>	3.600
90	80	10	7000	<b>199 131 370</b>	<b>199 131 380</b>	4.400
110	100	10	11000	<b>199 131 371</b>	<b>199 131 381</b>	5.500

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]
75	166	346	85	156	94	190	266	180	136	290	70	98	83	122
90	200	358	105	168	94	190	264	180	141	310	70	98	83	122
110	238	365	123	175	94	190	301	180	164	350	120	98	83	122

d [mm]	e [mm]
75	8.2
90	9.9
110	12.0





## Ball valve type 131 PP-H 100-230V With manual emergency override With butt fusion spigots SDR17.6 metric

### Model:

- Assignment of actuators EA21 (DN10/15-50), EA31 (DN65-100 if available)
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- 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°<

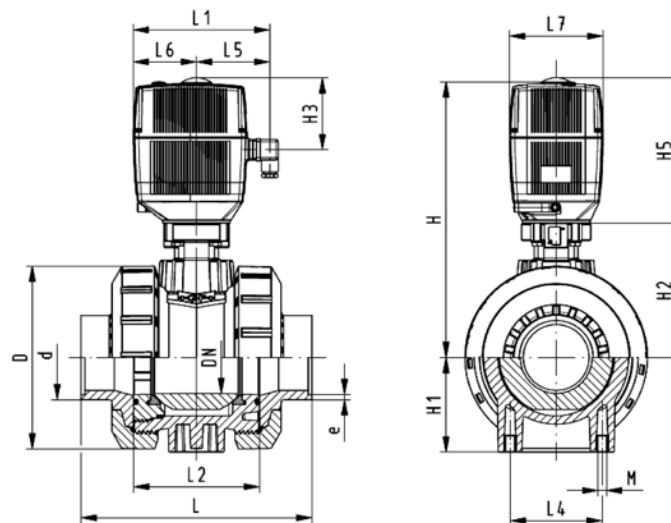
### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg	
75	65	10	5000	<b>199 131 729</b>	<b>199 131 739</b>	3.600	
90	80	10	7000	<b>199 131 730</b>	<b>199 131 740</b>	4.400	
110	100	10	11000	<b>199 131 731</b>	<b>199 131 741</b>	5.500	

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]
75	166	346	85	156	94	190	266	180	136	290	70	98	83	122
90	200	358	105	168	94	190	264	180	141	310	70	98	83	122
110	238	365	123	175	94	190	301	180	164	350	120	98	83	122

d [mm]	e [mm]
75	4.6
90	5.5
110	6.7





## Ball valve type 131 PP-H 24V

### With manual emergency override

### With butt fusion spigots SDR17.6 metric

#### Model:

- Assignment of actuators EA21 (DN10/15-50), EA31 (DN65-100 if available)
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- 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°<

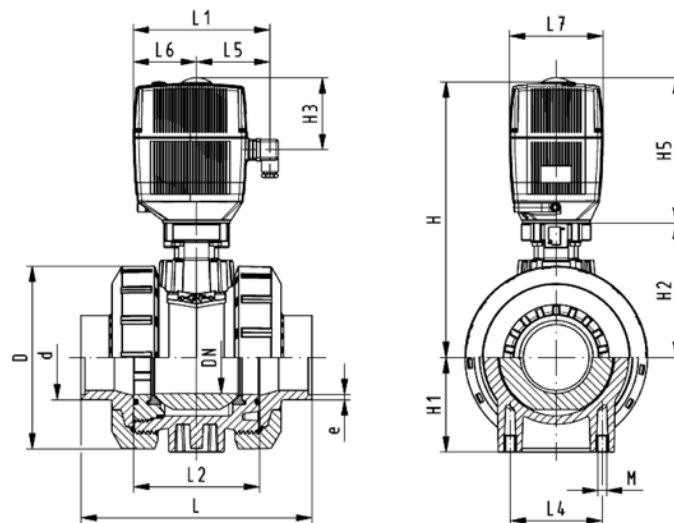
#### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
75	65	10	5000	<b>199 131 769</b>	<b>199 131 779</b>	3.600
90	80	10	7000	<b>199 131 770</b>	<b>199 131 780</b>	4.400
110	100	10	11000	<b>199 131 771</b>	<b>199 131 781</b>	5.500

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]
75	166	346	85	156	94	190	266	180	136	290	70	98	83	122
90	200	358	105	168	94	190	264	180	141	310	70	98	83	122
110	238	365	123	175	94	190	301	180	164	350	120	98	83	122

d [mm]	e [mm]
75	4.6
90	5.5
110	6.7





## Ball valve type 131 PP-H 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)
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- 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 558-1
- Connecting dimensions: ISO 7005, EN 1092, BS 4504, DIN 2501; bolt circle PN 10

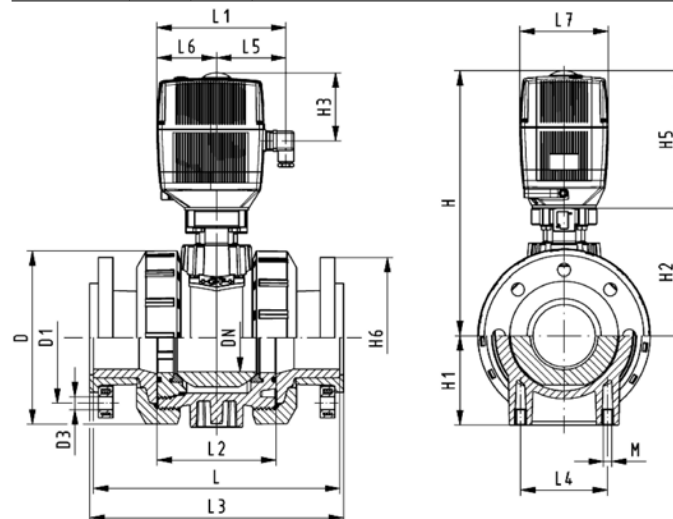
### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
75	65	2 1/2	10	5000	<b>199 131 129</b>	<b>199 131 139</b>	7.900
90	80	3	10	7000	<b>199 131 130</b>	<b>199 131 140</b>	9.600
110	100	4	10	11000	<b>199 131 131</b>	<b>199 131 141</b>	12.700

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]
75	166	346	85	156	94	190	93	280	180	136	290	70	98	83
90	200	358	105	168	94	190	100	296	180	141	310	70	98	83
110	238	365	123	175	94	190	110	336	180	164	350	120	98	83

d [mm]	L7 [mm]	L8 [mm]
75	122	66
90	122	66
110	122	66





## Ball valve type 131 PP-H 24V

### With manual emergency override

### With backing flanges PP-st metric

#### Model:

- Assignment of actuators EA21 (DN10/15-50), EA31 (DN65-100 if available)
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- 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 558-1
- Connecting dimensions: ISO 7005, EN 1092, BS 4504, DIN 2501; bolt circle PN 10

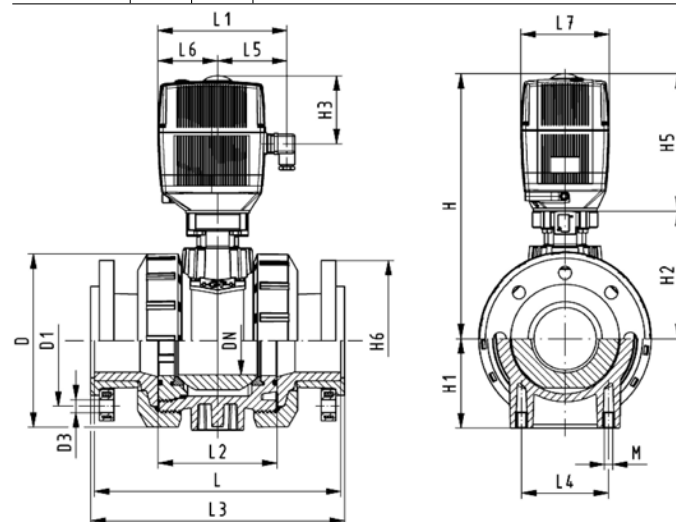
#### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
75	65	2 ½	10	5000	<b>199 131 149</b>	<b>199 131 159</b>	7.900
90	80	3	10	7000	<b>199 131 150</b>	<b>199 131 160</b>	9.600
110	100	4	10	11000	<b>199 131 151</b>	<b>199 131 161</b>	12.700

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]
75	166	346	85	156	94	190	93	280	180	136	290	70	98	83
90	200	358	105	168	94	190	100	296	180	141	310	70	98	83
110	238	365	123	175	94	190	110	336	180	164	350	120	98	83

d [mm]	L7 [mm]	L8 [mm]
75	122	66
90	122	66
110	122	66





## Ball valve type 131 PP-H 100-230V With manual emergency override With backing flanges PP-st ASTM

### Model:

- Assignment of actuators EA21 (DN10/15-50), EA31 (DN65-100 if available)
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- Control time 5 s/90°<
- 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 558-1
- Connecting dimension ANSI/ASME B 16.5 / ASTM D 4024

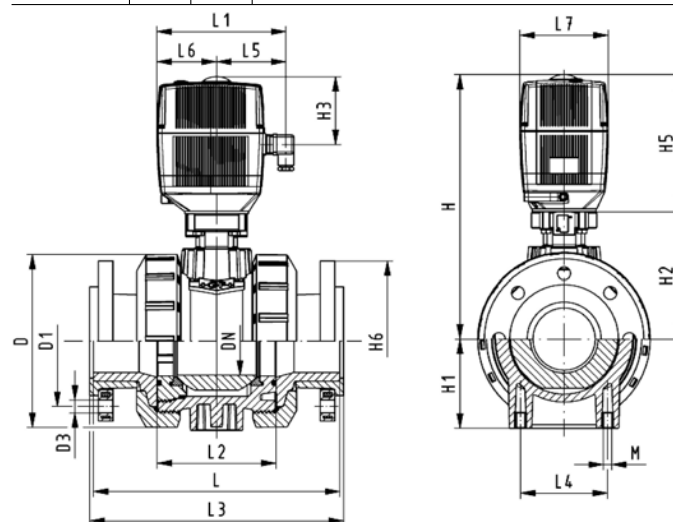
### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
75	65	2 1/2	10	5000	<b>199 131 529</b>	<b>199 131 539</b>	7.900
90	80	3	10	7000	<b>199 131 530</b>	<b>199 131 540</b>	9.600
110	100	4	10	11000	<b>199 131 531</b>	<b>199 131 541</b>	12.700

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]
75	166	346	85	156	94	190	93	280	180	136	290	70	98	83
90	200	358	105	168	94	190	100	296	180	141	310	70	98	83
110	238	365	123	175	94	190	110	336	180	164	350	120	98	83

d [mm]	L7 [mm]	L8 [mm]
75	122	66
90	122	66
110	122	66





## Ball valve type 131 PP-H 24V With manual emergency override With backing flanges PP-st ASTM

### Model:

- Assignment of actuators EA21 (DN10/15-50), EA31 (DN65-100 if available)
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- 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 558-1
- Connecting dimension ANSI/ASME B 16.5 / ASTM D 4024

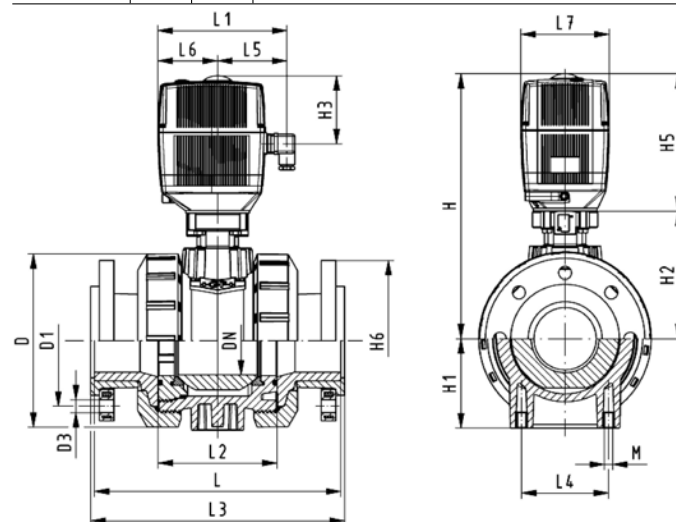
### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
75	65	2 ½	10	5000	<b>199 131 549</b>	<b>199 131 559</b>	7.900
90	80	3	10	7000	<b>199 131 550</b>	<b>199 131 560</b>	9.600
110	100	4	10	11000	<b>199 131 551</b>	<b>199 131 561</b>	12.700

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]
75	166	346	85	156	94	190	93	280	180	136	290	70	98	83
90	200	358	105	168	94	190	100	296	180	141	310	70	98	83
110	238	365	123	175	94	190	110	336	180	164	350	120	98	83

d [mm]	L7 [mm]	L8 [mm]
75	122	66
90	122	66
110	122	66



# Copiable

## Configurator GF ball valve type 546 PP-H

<b>Ball Valve</b>										
A01 Ball Valve 546										
A02 Linear Ball Valve										
<b>Material</b>										
B05 PP-H										
<b>Dimension</b>										
C05 d 16 DN 10 3/8"										
C06 d 20 DN 15 1/2"										
C07 d 25 DN 20 3/4"										
C08 d 32 DN 25 1"										
C09 d 40 DN 32 1 1/4"										
C10 d 50 DN 40 1 1/2"										
C11 d 63 DN 50 2"										
C12 d 75 DN 65 2 1/2"										
C13 d 90 DN 80 3"										
C14 d 110 DN 100 4"										
C15 d 160 DN 150 6"										
<b>Version</b>										
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 for metric (only with specific connecting parts)										
<b>Seals</b>										
E01 EPDM seals										
E02 FPM seals										
E03 FFPM (KALREZ®) seals										
<b>Threaded inserts</b>										
F01 without threaded inserts										
F02 with threaded inserts										
<b>Connecting parts</b>										
G30 PP-H Fusion socket metric										
G32 PP-H Socket fusion spigot metric										
G33 PP-H Threaded socket Rp reinforced										
G34 PP-H Threaded socket NPT reinforced										
G35 PP-H Butt fusion spigot SDR 11 metric IR-PLUS®										
G36 PP-H Butt fusion spigot SDR 17.6 metric with this valve end the maximum nominal pressure is reduced to PN 6										
G37 PP-H Butt fusion spigot long SDR11 metric										
G83 PP-H Valve end blank										
G44 PE-100 Butt fusion spigot long SDR17.6 metric (DN65-100)										
G63 Fixed flange PP-H serrated metric (DN10-50)										
G72 Backing flange PP-steel metric										
G73 Backing flange PP-steel inch ANSI										
G77 Backing flange PP JIS with connecting parts										
G78 Backing flange PP-GF JIS										
G40 PE-100 Fusion socket metric										
G41 PE-100 Butt fusion spigot SDR11 metric										
G42 PE-100 Butt fusion spigot SDR17.6 metric										
G43 PE-100 Butt fusion spigot long SDR11 metric										
<b>Multi-functional module</b>										
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										
<b>Lever</b>										
K01 Standard lever red										
K02 Standard lever black										
K11 Multi-functional lever red										
<b>Mounting plate</b>										
L01 without mounting plate										
L02 with mounting plate										
<b>A01</b>	<b>B05</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>F</b>	<b>G</b>	<b>G</b>	<b>I</b>	<b>K</b>	<b>L</b>
						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. (The maximum nominal pressure for the ball valve is PN10).

**We supply what you put together.**

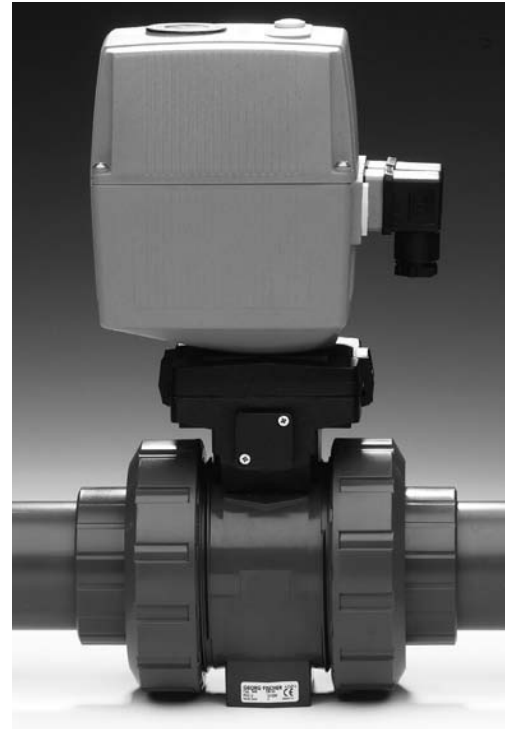


# Copiable GF ball valve type 546 with electric Actuator

## 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 any type of operation.

**We supply what you put together.**



### Electric Actuator EA11

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

### Accessories EA11

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

### Electric Actuator EA21/31

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

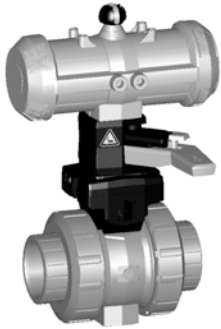
### Accessories EA21

- W01 No accessories
- W02 Heating element
- W03 Cycle time module
- W04 Cycle time monitoring
- W05 Cycles monitoring
- W06 Motor current monitoring
- W07 2 limit switches Ag, Ni
- W08 2 limit switches Gold
- W09 2 limit switches NPN
- W10 2 limit switches PNP
- 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

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

# Ball valves pneumatic

## Ball valve type 231 PP-H FC (Fail safe to close) With manual override With fusion sockets metric



DN10/15 - 50

### Model:

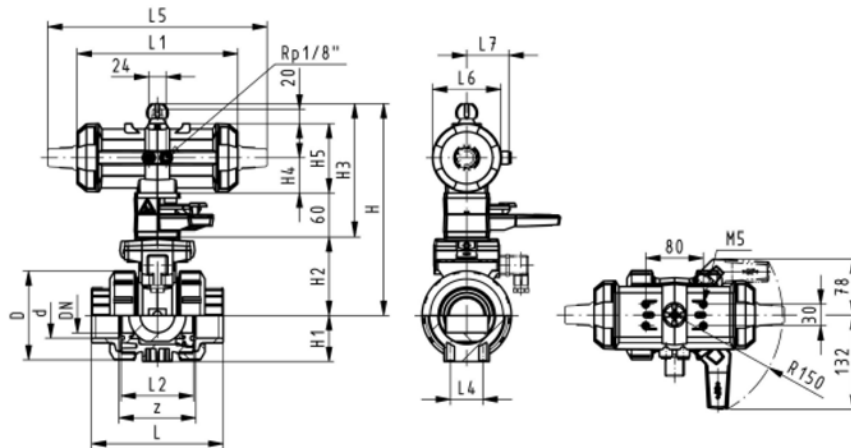
- Built on with pneumatic actuator PA11/21
- Control time  $90^\circ <$ ) 1-2 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

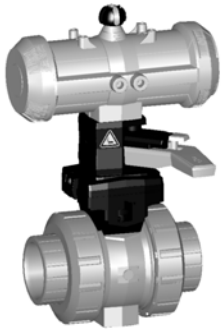
### Option:

- 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	199 231 002	199 231 012	1.500
20	15	10	185	199 231 003	199 231 013	1.500
25	20	10	350	199 231 004	199 231 014	1.600
32	25	10	700	199 231 005	199 231 015	1.700
40	32	10	1000	199 231 006	199 231 016	2.800
50	40	10	1600	199 231 007	199 231 017	3.100
63	50	10	3100	199 231 008	199 231 018	4.000

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	z [mm]
16	50	230	27	62	168	40	97	93	194	56	25	261	76	48	67
20	50	230	27	62	168	40	97	95	194	56	25	261	76	48	66
25	58	239	30	71	168	40	97	108	194	65	25	261	76	48	77
32	68	239	36	71	168	40	97	118	194	71	25	261	76	48	83
40	84	271	44	84	187	51	115	137	224	85	45	305	95	59	99
50	97	271	51	84	187	51	115	147	224	89	45	305	95	59	105
63	124	293	64	106	187	51	115	168	224	101	45	305	95	59	117





DN10/15 - 50

## Ball valve type 231 PP-H FO (Fail safe to open) With manual override With fusion sockets metric

### Model:

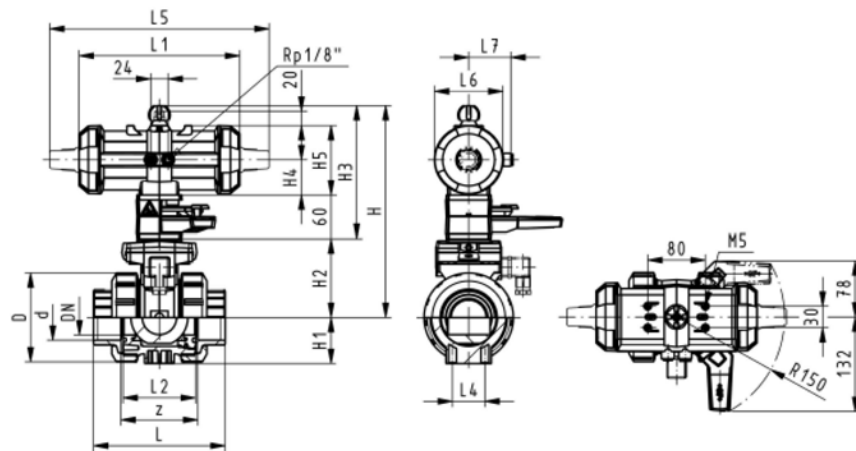
- Built on with pneumatic actuator PA11/21
- Control time 90°<) 1-2 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

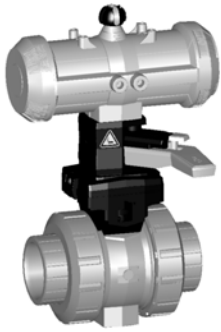
### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	70	199 231 042	199 231 052	1.500
20	15	10	185	199 231 043	199 231 053	1.500
25	20	10	350	199 231 044	199 231 054	1.600
32	25	10	700	199 231 045	199 231 055	1.700
40	32	10	1000	199 231 046	199 231 056	2.800
50	40	10	1600	199 231 047	199 231 057	3.100
63	50	10	3100	199 231 048	199 231 058	4.000

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	z [mm]
16	50	230	27	62	168	40	97	93	194	56	25	261	76	48	67
20	50	230	27	62	168	40	97	95	194	56	25	261	76	48	66
25	58	239	30	71	168	40	97	108	194	65	25	261	76	48	77
32	68	239	36	71	168	40	97	118	194	71	25	261	76	48	83
40	84	271	44	84	187	51	115	137	224	85	45	305	95	59	99
50	97	271	51	84	187	51	115	147	224	89	45	305	95	59	105
63	124	293	64	106	187	51	115	168	224	101	45	305	95	59	117





DN10/15 - 50

## Ball valve type 231 PP-H DA (Double acting) With manual override With fusion sockets metric

### Model:

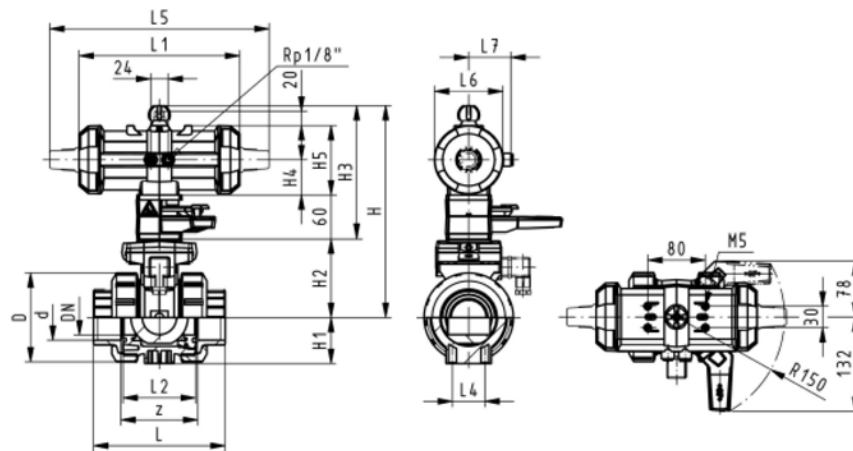
- Built on with pneumatic actuator PA11/21
- Control time  $90^\circ <$  1-2 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

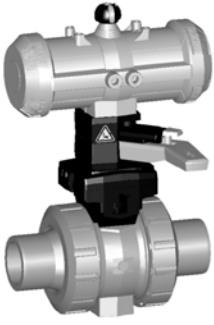
### Option:

- 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	199 231 082	199 231 092	1.500
20	15	10	185	199 231 083	199 231 093	1.500
25	20	10	350	199 231 084	199 231 094	1.600
32	25	10	700	199 231 085	199 231 095	1.700
40	32	10	1000	199 231 086	199 231 096	2.800
50	40	10	1600	199 231 087	199 231 097	3.100
63	50	10	3100	199 231 088	199 231 098	4.000

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	z [mm]
16	50	230	27	62	168	40	97	93	194	56	25	261	76	48	67
20	50	230	27	62	168	40	97	95	194	56	25	261	76	48	66
25	58	239	30	71	168	40	97	108	194	65	25	261	76	48	77
32	68	239	36	71	168	40	97	118	194	71	25	261	76	48	83
40	84	271	44	84	187	51	115	137	224	85	45	305	95	59	99
50	97	271	51	84	187	51	115	147	224	89	45	305	95	59	105
63	124	293	64	106	187	51	115	168	224	101	45	305	95	59	117





DN10/15 - 50

## Ball valve type 231 PP-H FC (Fail safe to close) With manual override With fusion spigots metric

### Model:

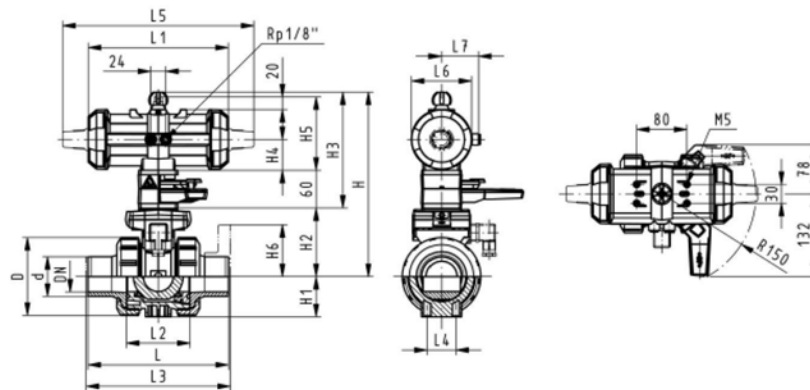
- Built on with pneumatic actuator PA11/21
- Control time 90°<) 1-2 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

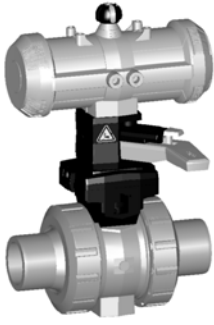
### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	70	199 231 022	199 231 032	1.500
20	15	10	185	199 231 023	199 231 033	1.500
25	20	10	350	199 231 024	199 231 034	1.600
32	25	10	700	199 231 025	199 231 035	1.700
40	32	10	1000	199 231 026	199 231 036	2.800
50	40	10	1600	199 231 027	199 231 037	3.100
63	50	10	3100	199 231 028	199 231 038	4.000

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
16	50	230	27	62	168	40	97	110	194	56		25	261	76	48
20	50	230	27	62	168	40	97	120	194	56	130	25	261	76	48
25	58	239	30	71	168	40	97	139	194	65	150	25	261	76	48
32	68	239	36	71	168	40	97	150	194	71	160	25	261	76	48
40	84	271	44	84	187	51	115	170	224	85	180	45	305	95	59
50	97	271	51	84	187	51	115	190	224	89	200	45	305	95	59
63	124	293	64	106	187	51	115	220	224	101	230	45	305	95	59





DN10/15 - 50

## Ball valve type 231 PP-H FO (Fail safe to open) With manual override With fusion spigots metric

### Model:

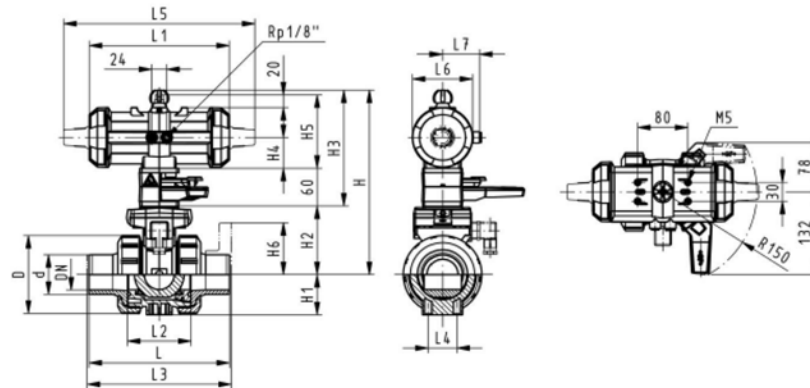
- Built on with pneumatic actuator PA11/21
- Control time  $90^\circ <$  1-2 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

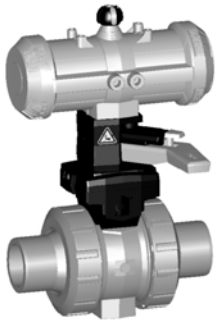
### Option:

- 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	199 231 062	199 231 072	1.500
20	15	10	185	199 231 063	199 231 073	1.500
25	20	10	350	199 231 064	199 231 074	1.600
32	25	10	700	199 231 065	199 231 075	1.700
40	32	10	1000	199 231 066	199 231 076	2.800
50	40	10	1600	199 231 067	199 231 077	3.100
63	50	10	3100	199 231 068	199 231 078	4.000

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
16	50	230	27	62	168	40	97	110	194	56	130	25	261	76	48
20	50	230	27	62	168	40	97	120	194	56	130	25	261	76	48
25	58	239	30	71	168	40	97	139	194	65	150	25	261	76	48
32	68	239	36	71	168	40	97	150	194	71	160	25	261	76	48
40	84	271	44	84	187	51	115	170	224	85	180	45	305	95	59
50	97	271	51	84	187	51	115	190	224	89	200	45	305	95	59
63	124	293	64	106	187	51	115	220	224	101	230	45	305	95	59





DN10/15 - 50

## Ball valve type 231 PP-H DA (Double acting) With manual override With fusion spigots metric

### Model:

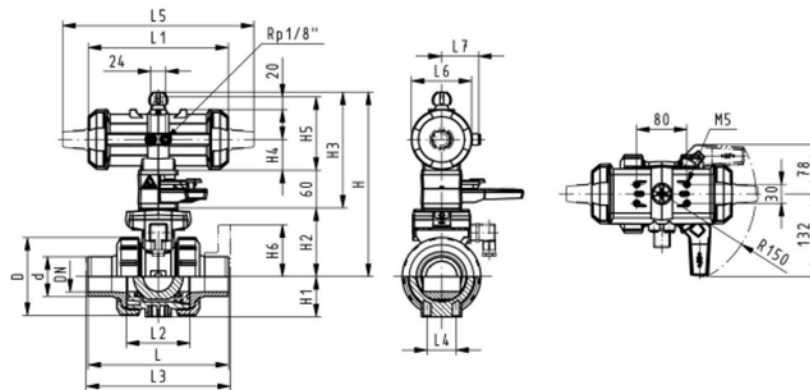
- Built on with pneumatic actuator PA11/21
- Control time 90°<) 1-2 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

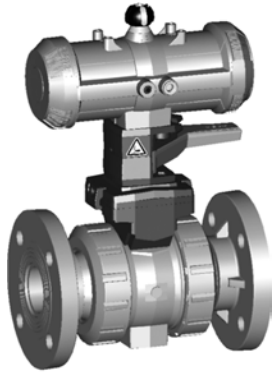
### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	70	199 231 102	199 231 112	1.500
20	15	10	185	199 231 103	199 231 113	1.500
25	20	10	350	199 231 104	199 231 114	1.600
32	25	10	700	199 231 105	199 231 115	1.700
40	32	10	1000	199 231 106	199 231 116	2.800
50	40	10	1600	199 231 107	199 231 117	3.100
63	50	10	3100	199 231 108	199 231 118	4.000

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
16	50	230	27	62	168	40	97	110	194	56		25	261	76	48
20	50	230	27	62	168	40	97	120	194	56	130	25	261	76	48
25	58	239	30	71	168	40	97	139	194	65	150	25	261	76	48
32	68	239	36	71	168	40	97	150	194	71	160	25	261	76	48
40	84	271	44	84	187	51	115	170	224	85	180	45	305	95	59
50	97	271	51	84	187	51	115	190	224	89	200	45	305	95	59
63	124	293	64	106	187	51	115	220	224	101	230	45	305	95	59





DN10/15 - 50

## Ball valve type 231 PP-H FC (Fail safe to close) With manual override With fixed flanges PP-H serrated metric

### Model:

- Built on with pneumatic actuator PA11/21
- Control time  $90^\circ <$  1-2 s
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Overall length according to EN 558-1
- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504

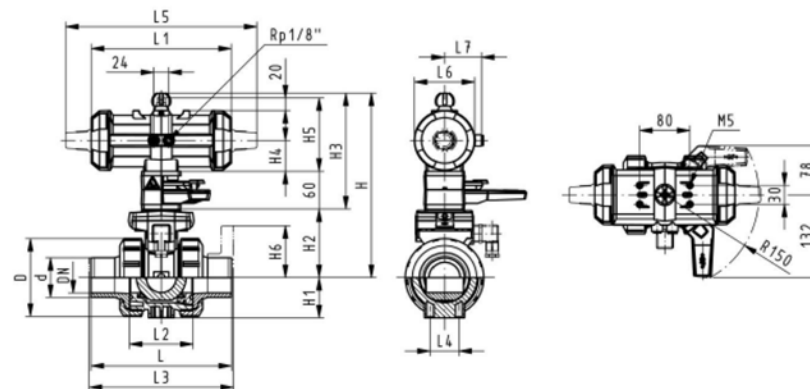
### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
20	15	1/2	10	185	<b>199 231 243</b>	<b>199 231 253</b>	1.700
25	20	3/4	10	350	<b>199 231 244</b>	<b>199 231 254</b>	1.900
32	25	1	10	700	<b>199 231 245</b>	<b>199 231 255</b>	2.100
40	32	1 1/4	10	1000	<b>199 231 246</b>	<b>199 231 256</b>	3.400
50	40	1 1/2	10	1600	<b>199 231 247</b>	<b>199 231 257</b>	3.900
63	50	2	10	3100	<b>199 231 248</b>	<b>199 231 258</b>	4.900

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]
20	50	230	27	62	168	40	97	48	120	194	56	130	25	261	76
25	58	239	30	71	168	40	97	53	139	194	65	150	25	261	76
32	68	239	36	71	168	40	97	58	150	194	71	160	25	261	76
40	84	271	44	84	187	51	115	70	170	224	85	180	45	305	95
50	97	271	51	84	187	51	115	75	190	224	89	200	45	305	95
63	124	293	64	106	187	51	115	83	220	224	101	230	45	305	95

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







DN10/15 - 50

## Ball valve type 231 PP-H FO (Fail safe to open) With manual override With fixed flanges PP-H serrated metric

### Model:

- Built on with pneumatic actuator PA11/21
- Control time 90°<) 1-2 s
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Overall length according to EN 558-1
- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504

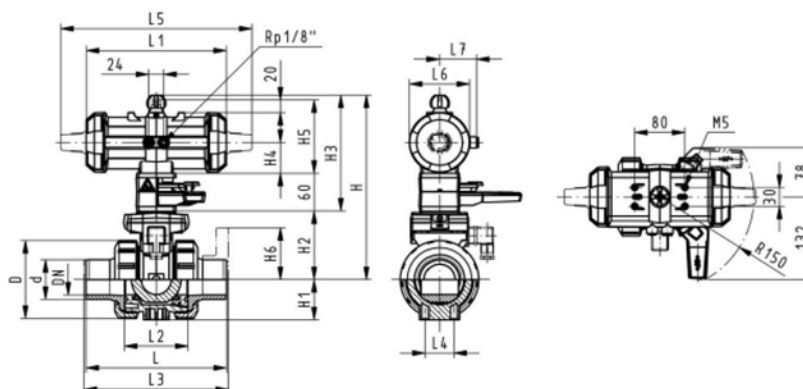
### Option:

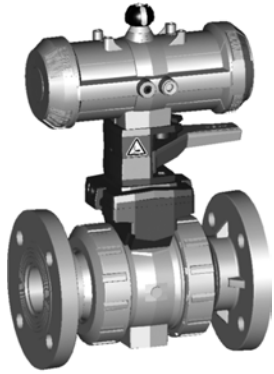
- Individual configuration of the valve (see form)

d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
20	15	1/2	10	185	<b>199 231 263</b>	<b>199 231 273</b>	1.700
25	20	3/4	10	350	<b>199 231 264</b>	<b>199 231 274</b>	1.900
32	25	1	10	700	<b>199 231 265</b>	<b>199 231 275</b>	2.100
40	32	1 1/4	10	1000	<b>199 231 266</b>	<b>199 231 276</b>	3.400
50	40	1 1/2	10	1600	<b>199 231 267</b>	<b>199 231 277</b>	3.900
63	50	2	10	3100	<b>199 231 268</b>	<b>199 231 278</b>	4.900

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]
20	58	230	27	62	168	40	97	48	120	194	56	130	25	261	76
25	58	239	30	71	168	40	97	53	139	194	65	150	25	261	76
32	68	239	36	71	168	40	97	58	150	194	71	160	25	261	76
40	84	271	44	84	187	51	115	70	170	224	85	180	45	305	95
50	97	271	51	84	187	51	115	75	190	224	89	200	45	305	95
63	124	293	64	106	187	51	115	83	220	224	101	230	45	305	95

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





DN10/15 - 50

## Ball valve type 231 PP-H DA (Double acting) With manual override With fixed flanges PP-H serrated metric

### Model:

- Built on with pneumatic actuator PA11/21
- Control time  $90^\circ <$  1-2 s
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Overall length according to EN 558-1
- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504

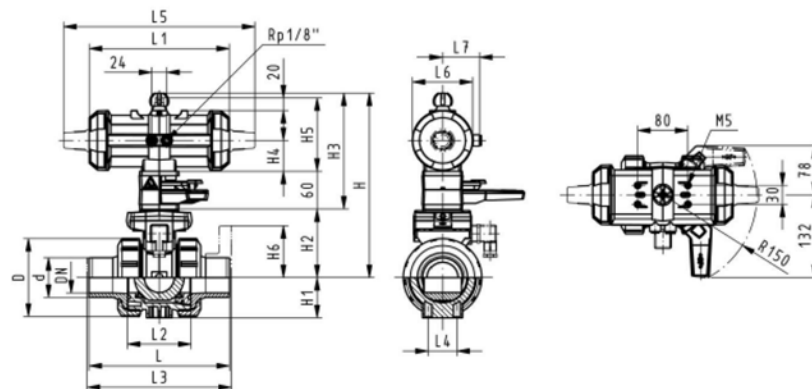
### Option:

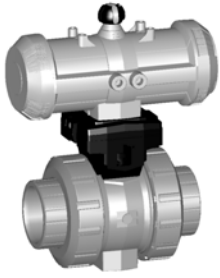
- Individual configuration of the valve (see form)

d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
20	15	1/2	10	185	199 231 283	199 231 293	1.700
25	20	3/4	10	350	199 231 284	199 231 294	1.900
32	25	1	10	700	199 231 285	199 231 295	2.100
40	32	1 1/4	10	1000	199 231 286	199 231 296	3.400
50	40	1 1/2	10	1600	199 231 287	199 231 297	3.900
63	50	2	10	3100	199 231 288	199 231 298	4.900

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]
20	50	230	27	62	168	40	97	48	120	194	56	130	25	261	76
25	58	239	30	71	168	40	97	53	139	194	65	150	25	261	76
32	68	239	36	71	168	40	97	58	150	194	71	160	25	261	76
40	84	271	44	84	187	51	115	70	170	224	85	180	45	305	95
50	97	271	51	84	187	51	115	75	190	224	89	200	45	305	95
63	124	293	64	106	187	51	115	83	220	224	101	230	45	305	95

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





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## Ball valve type 231 PP-H FC (Fail safe to close) Without manual override With fusion sockets metric

### Model:

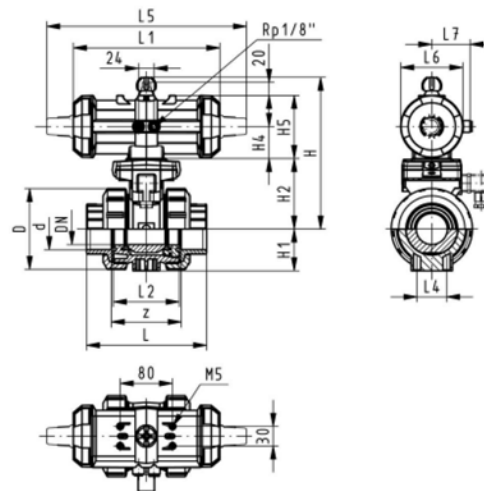
- Assignment of actuators PA11 (DN10/15-25), PA21 (DN32-50), PA30 (DN65), PA35 (DN80), PA40 (DN100)
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time  $90^\circ <$  1-2 s

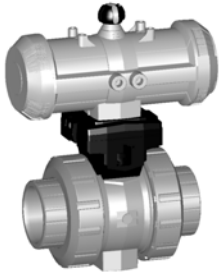
### Option:

- 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	199 231 122	199 231 132	1.200
20	15	10	185	199 231 123	199 231 133	1.200
25	20	10	350	199 231 124	199 231 134	1.300
32	25	10	700	199 231 125	199 231 135	1.400
40	32	10	1000	199 231 126	199 231 136	2.500
50	40	10	1600	199 231 127	199 231 137	2.800
63	50	10	3100	199 231 128	199 231 138	3.700
75	65	10	5000	199 231 129	199 231 139	4.000
90	80	10	7000	199 231 130	199 231 140	4.700
110	100	10	11000	199 231 131	199 231 141	6.900

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	z [mm]
16	50	167	27	62	40	97	93	194	56	25	261	76	48	67
20	50	167	27	62	40	97	95	194	56	25	261	76	48	66
25	58	176	30	71	40	97	108	194	65	25	261	76	48	77
32	68	176	36	71	40	97	118	194	71	25	261	76	48	83
40	84	210	44	84	51	115	137	224	85	45	305	95	59	99
50	97	210	51	84	51	115	147	224	89	45	305	95	59	105
63	124	232	64	106	51	115	168	224	101	45	305	95	59	117
75	166	262	85	156		70	233	218	136	70	276	65		167
90	200	281	105	168		78	254	259	141	70	341	72		180
110	238	292	123	175		86	301	287	164	120	369	80		215





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## Ball valve type 231 PP-H FO (Fail safe to open) Without manual override With fusion sockets metric




### Model:

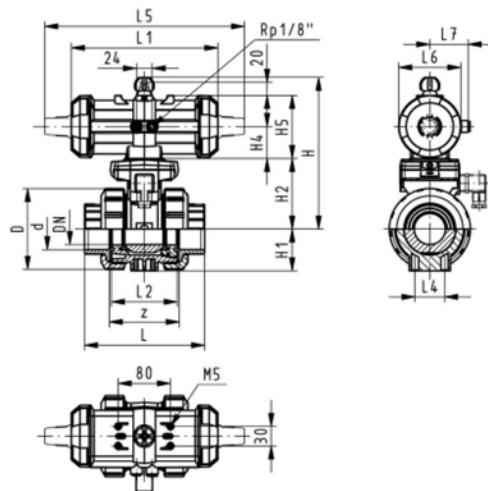
- Assignment of actuators PA11 (DN10/15-25), PA21 (DN32-50), PA30 (DN65), PA35 (DN80), PA40 (DN100)
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time  $90^\circ <$  1-2 s

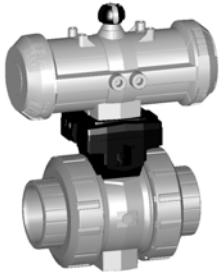
### Option:

- 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	<b>199 231 162</b>	<b>199 231 172</b>	1.200
20	15	10	185	<b>199 231 163</b>	<b>199 231 173</b>	1.200
25	20	10	350	<b>199 231 164</b>	<b>199 231 174</b>	1.300
32	25	10	700	<b>199 231 165</b>	<b>199 231 175</b>	1.400
40	32	10	1000	<b>199 231 166</b>	<b>199 231 176</b>	2.500
50	40	10	1600	<b>199 231 167</b>	<b>199 231 177</b>	2.800
63	50	10	3100	<b>199 231 168</b>	<b>199 231 178</b>	3.700
 75	65	10	5000	<b>199 231 169</b>	<b>199 231 179</b>	4.000
 90	80	10	7000	<b>199 231 170</b>	<b>199 231 180</b>	4.700
 110	100	10	11000	<b>199 231 171</b>	<b>199 231 181</b>	6.900

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	z [mm]
16	50	167	27	62	40	97	93	194	56	25	261	76	48	66
20	50	167	27	62	40	97	95	194	56	25	261	76	48	67
25	58	176	30	71	40	97	108	194	65	25	261	76	48	77
32	68	176	36	71	40	97	118	194	71	25	261	76	48	83
40	84	210	44	84	51	115	137	224	85	45	305	95	59	99
50	97	210	51	84	51	115	147	224	89	45	305	95	59	105
63	124	232	64	106	51	115	168	224	101	45	305	95	59	117
 75	166	262	85	156		70	233	218	136	70	276	65		167
 90	200	281	105	168		78	254	259	141	70	341	72		180
 110	238	292	123	175		86	301	287	164	120	369	80		215





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## Ball valve type 231 PP-H DA (Double acting) Without manual override With fusion sockets metric

### Model:

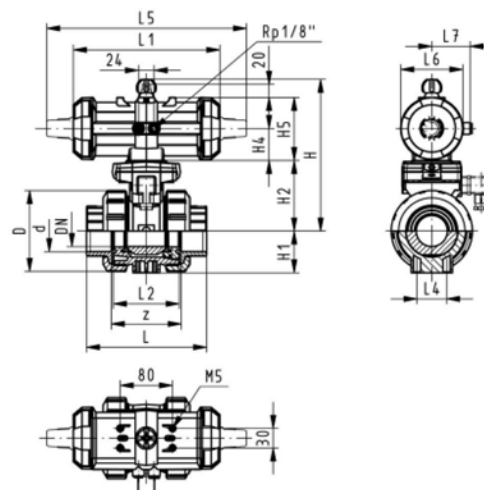
- Assignment of actuators: PA11 (DN10/15-25), PA21 (DN32-50), PA35 (DN65), PA40 (DN80), PA45 (DN100)
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90° < 1-2 s

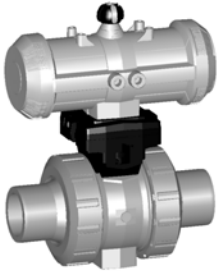
### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	70	<b>199 231 202</b>	<b>199 231 212</b>	1.200
20	15	10	185	<b>199 231 203</b>	<b>199 231 213</b>	1.200
25	20	10	350	<b>199 231 204</b>	<b>199 231 214</b>	1.300
32	25	10	700	<b>199 231 205</b>	<b>199 231 215</b>	1.400
40	32	10	1000	<b>199 231 206</b>	<b>199 231 216</b>	2.500
50	40	10	1600	<b>199 231 207</b>	<b>199 231 217</b>	2.800
63	50	10	3100	<b>199 231 208</b>	<b>199 231 218</b>	3.700
75	65	10	5000	<b>199 231 209</b>	<b>199 231 219</b>	2.800
90	80	10	7000	<b>199 231 210</b>	<b>199 231 220</b>	4.000
110	100	10	11000	<b>199 231 211</b>	<b>199 231 221</b>	5.100

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	167	27	62	40	97	93	194	56	25	261	76	48	66
20	50	167	27	62	40	97	95	194	56	25	261	76	48	67
25	58	176	30	71	40	97	108	194	65	25	261	76	48	77
32	68	176	36	71	40	97	118	194	71	25	261	76	48	83
40	84	210	44	84	51	115	137	224	85	45	305	95	59	99
50	97	210	51	84	51	115	147	224	89	45	305	95	59	105
63	124	232	64	106	51	115	168	224	101	45	305	95	59	117
75	166	257	85	156		66	233	144	136	70	190	60		167
90	200	274	105	168		70	254	152	141	70	198	65		180
110	238	273	123	175		78	301	169	164	120	235	72		215





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## Ball valve type 231 PP-H FC (Fail safe to close) Without manual override With socket fusion spigots metric




### Model:

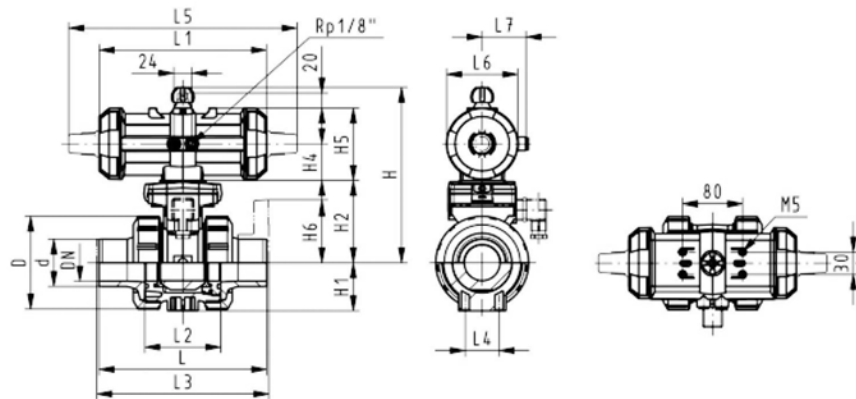
- Assignment of actuators PA11 (DN10/15-25), PA21 (DN32-50), PA30 (DN65), PA35 (DN80), PA40 (DN100)
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time  $90^\circ <$  1-2 s

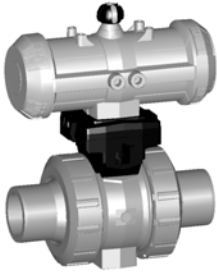
### Option:

- 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	<b>199 231 142</b>	<b>199 231 152</b>	1.200
20	15	10	185	<b>199 231 143</b>	<b>199 231 153</b>	1.200
25	20	10	350	<b>199 231 144</b>	<b>199 231 154</b>	1.300
32	25	10	700	<b>199 231 145</b>	<b>199 231 155</b>	1.400
40	32	10	1000	<b>199 231 146</b>	<b>199 231 156</b>	2.500
50	40	10	1600	<b>199 231 147</b>	<b>199 231 157</b>	2.800
63	50	10	3100	<b>199 231 148</b>	<b>199 231 158</b>	3.700
 75	65	10	5000	<b>199 231 149</b>	<b>199 231 159</b>	4.000
 90	80	10	7000	<b>199 231 150</b>	<b>199 231 160</b>	4.800
 110	100	10	11000	<b>199 231 151</b>	<b>199 231 161</b>	6.900

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
16	50	167	27	62	40	97	110	194	56	130	25	261	76	48
20	50	167	27	62	40	97	120	194	56	130	25	261	76	48
25	58	176	30	71	40	97	139	194	65	150	25	261	76	48
32	68	176	36	71	40	97	150	194	71	160	25	261	76	48
40	84	210	44	84	51	115	170	224	85	180	45	305	95	59
50	97	210	51	84	51	115	190	224	89	200	45	305	95	59
63	124	232	64	106	51	115	220	224	101	230	45	305	95	59
 75	166	262	85	156		70	280	218	136	290	70	276	65	
 90	200	281	105	168		78	296	259	141	310	70	341	72	
 110	238	292	123	175		86	336	287	164	350	120	369	80	





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## Ball valve type 231 PP-H FO (Fail safe to open) Without manual override With socket fusion spigots metric

### Model:

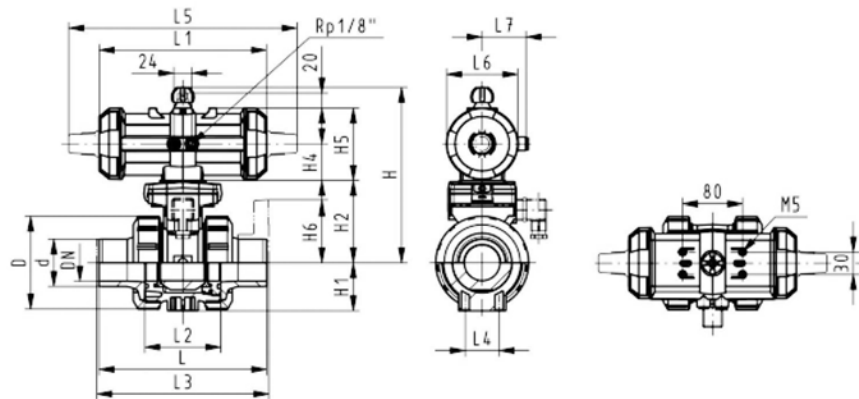
- Assignment of actuators PA11 (DN10/15-25), PA21 (DN32-50), PA30 (DN65), PA35 (DN80), PA40 (DN100)
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90° < 1-2 s

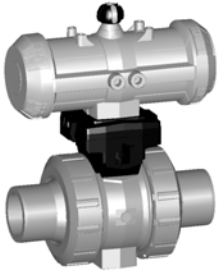
### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	70	199 231 182	199 231 192	1.200
20	15	10	185	199 231 183	199 231 193	1.200
25	20	10	350	199 231 184	199 231 194	1.300
32	25	10	700	199 231 185	199 231 195	1.400
40	32	10	1000	199 231 186	199 231 196	2.500
50	40	10	1600	199 231 187	199 231 197	2.800
63	50	10	3100	199 231 188	199 231 198	3.700
75	65	10	5000	199 231 189	199 231 199	4.000
90	80	10	7000	199 231 190	199 231 200	4.800
110	100	10	11000	199 231 191	199 231 201	6.900

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
16	50	167	27	62	40	97	110	194	56	130	25	261	76	48
20	50	167	27	62	40	97	120	194	56	130	25	261	76	48
25	58	176	30	71	40	97	139	194	65	150	25	261	76	48
32	68	176	36	71	40	97	150	194	71	160	25	261	76	48
40	84	210	44	84	51	115	170	224	85	180	45	305	95	59
50	97	210	51	84	51	115	190	224	89	200	45	305	95	59
63	124	232	64	106	51	115	220	224	101	230	45	305	95	59
75	166	262	85	156		70	280	218	136	290	70	276	65	
90	200	281	105	168		78	296	259	141	310	70	341	72	
110	238	292	123	175		86	336	287	164	350	120	369	80	





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## Ball valve type 231 PP-H DA (Double acting) Without manual override With socket fusion spigots metric

### Model:

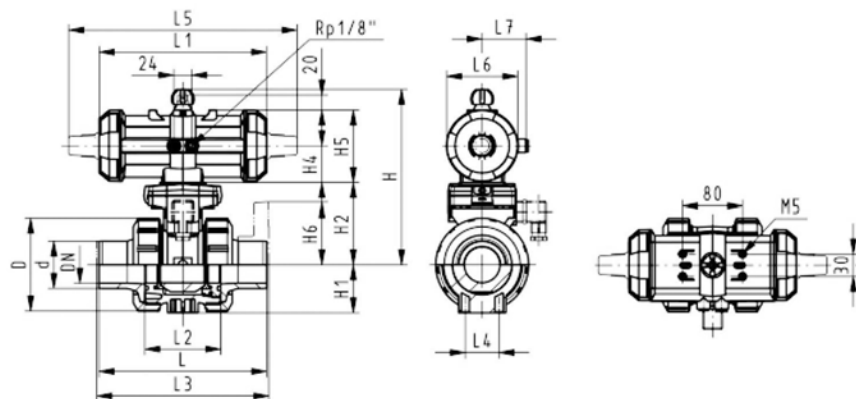
- Assignment of actuators: PA11 (DN10/15-25), PA21 (DN32-50), PA35 (DN65), PA40 (DN80), PA45 (DN100)
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time  $90^\circ <$  1-2 s

### Option:

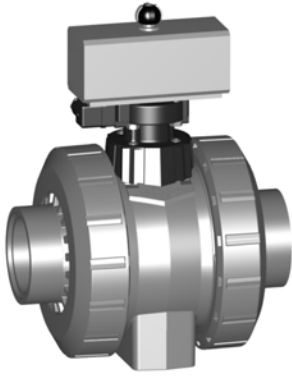
- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
16	10	10	70	199 231 222	199 231 232	1.200
20	15	10	185	199 231 223	199 231 233	1.200
25	20	10	350	199 231 224	199 231 234	1.300
32	25	10	700	199 231 225	199 231 235	1.400
40	32	10	1000	199 231 226	199 231 236	2.500
50	40	10	1600	199 231 227	199 231 237	2.800
63	50	10	3100	199 231 228	199 231 238	3.700
75	65	10	5000	199 231 229	199 231 239	2.900
90	80	10	7000	199 231 230	199 231 240	4.100
110	100	10	11000	199 231 231	199 231 241	5.200

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
16	50	167	27	62	40	97	110	194	56	130	25	261	76	48
20	50	167	27	62	40	97	120	194	56	130	25	261	76	48
25	58	176	30	71	40	97	139	194	65	150	25	261	76	48
32	68	176	36	71	40	97	150	194	71	160	25	261	76	48
40	84	210	44	84	51	115	170	224	85	180	45	305	95	59
50	97	210	51	84	51	115	190	224	89	200	45	305	95	59
63	124	232	64	106	51	115	220	224	101	230	45	305	95	59
75	166	257	85	156		66	280	144	136	290	70	190	60	
90	200	274	105	168		70	296	152	141	310	70	198	65	
110	238	273	123	175		78	336	169	164	350	120	235	72	







## Ball valve type 231 PP-H FC (Fail safe to close) Without manual override With butt fusion spigots SDR11 metric

### Model:

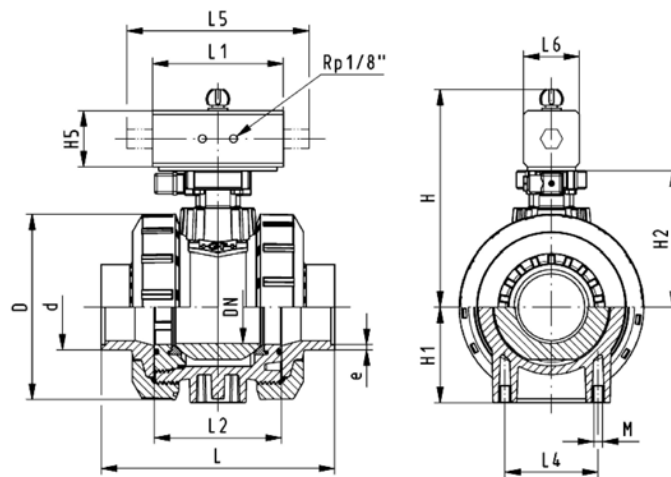
- Assignment of actuators PA11 (DN10/15-25), PA21 (DN32-50), PA30 (DN65), PA35 (DN80), PA40 (DN100)
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time  $90^\circ <$  1-2 s

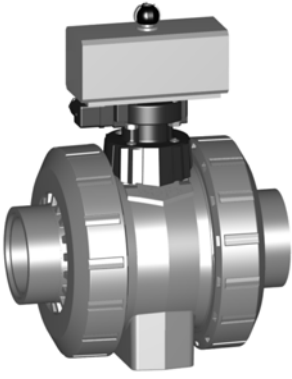
### Option:

- 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
75	65	10	5000	<b>199 231 839</b>	<b>199 231 849</b>	4.000
90	80	10	7000	<b>199 231 840</b>	<b>199 231 850</b>	4.800
110	100	10	11000	<b>199 231 841</b>	<b>199 231 851</b>	6.900

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	e [mm]
75	166	262	85	156	70	266	218	136	290	70	276	65	8.2
90	200	281	105	168	78	264	259	141	310	70	341	72	9.9
110	238	292	123	175	86	301	287	164	350	120	369	80	12.0





## Ball valve type 231 PP-H FO (Fail safe to open) Without manual override With butt fusion spigots SDR11 metric

### Model:

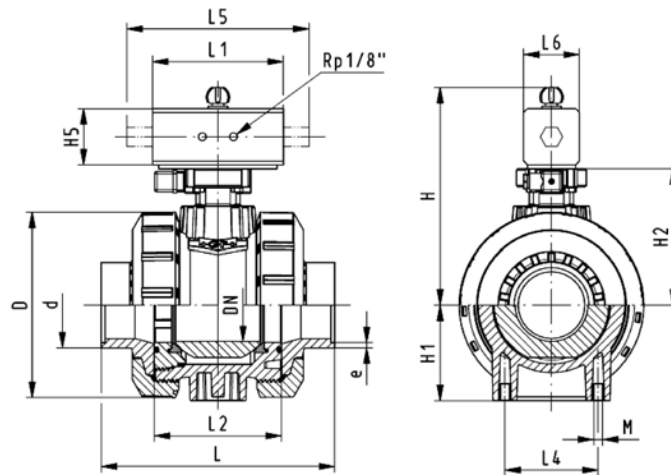
- Assignment of actuators PA11 (DN10/15-25), PA21 (DN32-50), PA30 (DN65), PA35 (DN80), PA40 (DN100)
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time  $90^\circ <$  1-2 s

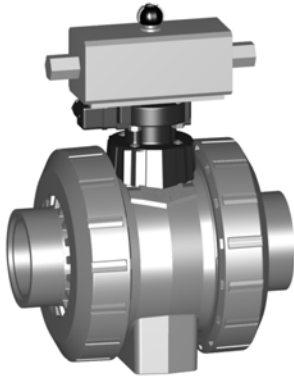
### Option:

- 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
75	65	10	5000	<b>199 231 859</b>	<b>199 231 869</b>	4.000
90	80	10	7000	<b>199 231 860</b>	<b>199 231 870</b>	4.800
110	100	10	11000	<b>199 231 861</b>	<b>199 231 871</b>	6.900

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	e [mm]
75	166	262	85	156	70	266	218	136	290	70	276	65	8.2
90	200	281	105	168	78	264	259	141	310	70	341	72	9.9
110	238	292	123	175	86	301	287	164	350	120	369	80	12.0





## Ball valve type 231 PP-H DA (Double acting) Without manual override With butt fusion spigots SDR11 metric

### Model:

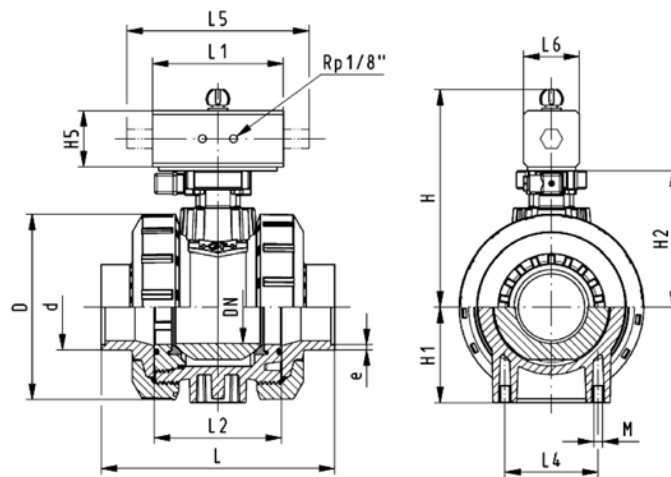
- Assignment of actuators: PA11 (DN10/15-25), PA21 (DN32-50), PA35 (DN65), PA40 (DN80), PA45 (DN100)
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time  $90^\circ <$  1-2 s

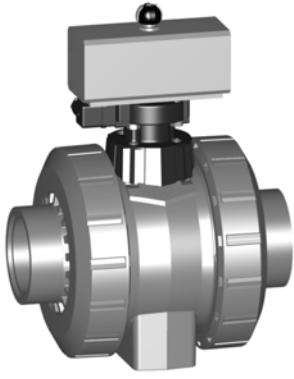
### Option:

- 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
75	65	10	5000	<b>199 231 879</b>	<b>199 231 889</b>	2.900
90	80	10	7000	<b>199 231 880</b>	<b>199 231 890</b>	4.100
110	100	10	11000	<b>199 231 881</b>	<b>199 231 891</b>	5.200

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	e [mm]
75	166	257	85	156	66	266	144	136	290	70	190	60	8.2
90	200	274	105	168	70	264	152	141	310	70	198	65	9.9
110	238	273	123	175	78	301	169	164	350	120	235	72	12.0





## Ball valve type 231 PP-H FC (Fail safe to close) Without manual override With butt fusion spigots SDR17.6 metric

### Model:

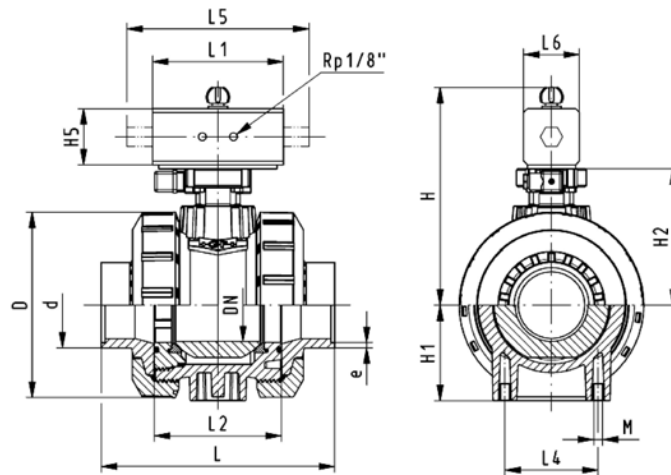
- Assignment of actuators PA11 (DN10/15-25), PA21 (DN32-50), PA30 (DN65), PA35 (DN80), PA40 (DN100)
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time  $90^\circ <$  1-2 s

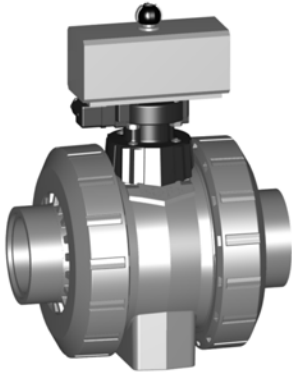
### Option:

- 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
75	65	10	5000	<b>199 231 939</b>	<b>199 231 949</b>	4.000
90	80	10	7000	<b>199 231 940</b>	<b>199 231 950</b>	4.800
110	100	10	11000	<b>199 231 941</b>	<b>199 231 951</b>	6.900

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	e [mm]
75	166	262	85	156	70	266	218	136	290	70	276	65	4.6
90	200	281	105	168	78	264	259	141	310	70	341	72	5.5
110	238	292	123	175	86	301	287	164	350	120	369	80	6.7





## Ball valve type 231 PP-H FO (Fail safe to open) Without manual override With butt fusion spigots SDR17.6 metric

### Model:

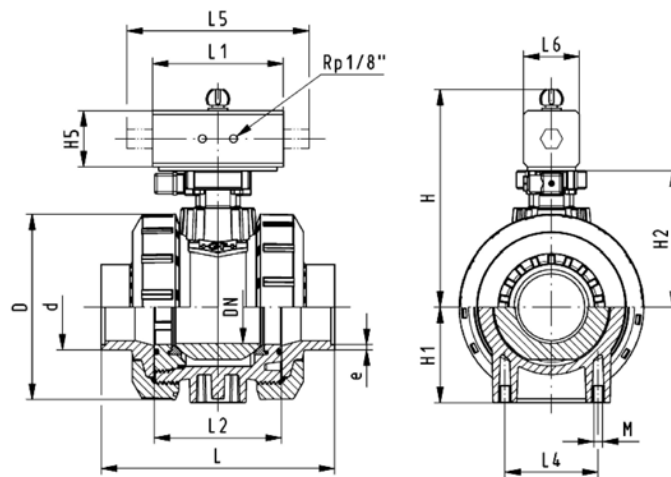
- Assignment of actuators PA11 (DN10/15-25), PA21 (DN32-50), PA30 (DN65), PA35 (DN80), PA40 (DN100)
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time  $90^\circ <$  1-2 s

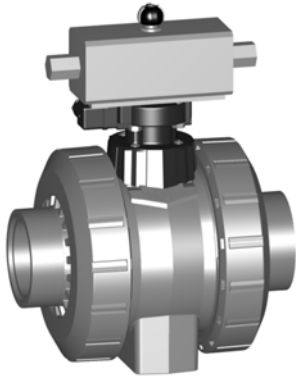
### Option:

- 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
75	65	10	5000	<b>199 231 959</b>	<b>199 231 969</b>	4.000
90	80	10	7000	<b>199 231 960</b>	<b>199 231 970</b>	4.800
110	100	10	11000	<b>199 231 961</b>	<b>199 231 971</b>	6.900

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	e [mm]
75	166	262	85	156	70	266	218	136	290	70	276	65	4.6
90	200	281	105	168	78	264	259	141	310	70	341	72	5.5
110	238	292	123	175	86	301	287	164	350	120	369	80	6.7





## Ball valve type 231 PP-H DA (Double acting) Without manual override With butt fusion spigots SDR17.6 metric

### Model:

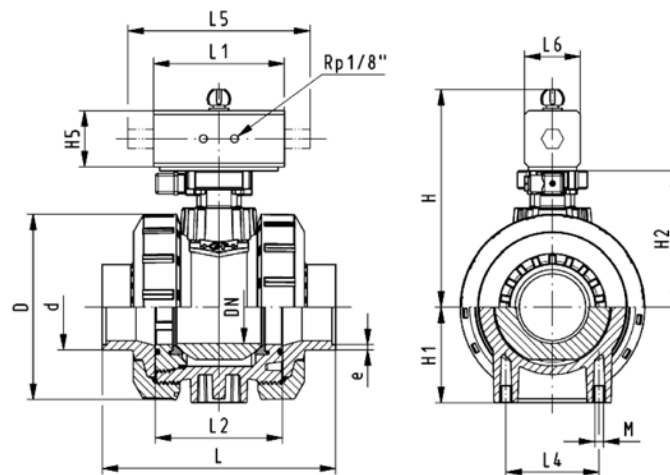
- Assignment of actuators: PA11 (DN10/15-25), PA21 (DN32-50), PA35 (DN65), PA40 (DN80), PA45 (DN100)
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time  $90^\circ <$  1-2 s

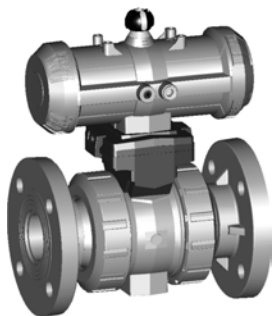
### Option:

- 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
75	65	10	5000	<b>199 231 979</b>	<b>199 231 989</b>	2.900
90	80	10	7000	<b>199 231 980</b>	<b>199 231 990</b>	4.100
110	100	10	11000	<b>199 231 981</b>	<b>199 231 991</b>	5.200

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	e [mm]
75	166	257	85	156	66	266	144	136	290	70	190	60	4.6
90	200	274	105	168	70	264	152	141	310	70	198	65	5.5
110	238	273	123	175	78	301	169	164	350	120	235	72	6.7





DN10/15 - 50

## Ball valve type 231 PP-H FC (Fail safe to close) Without manual override With fixed flanges PP-H serrated metric

### Model:

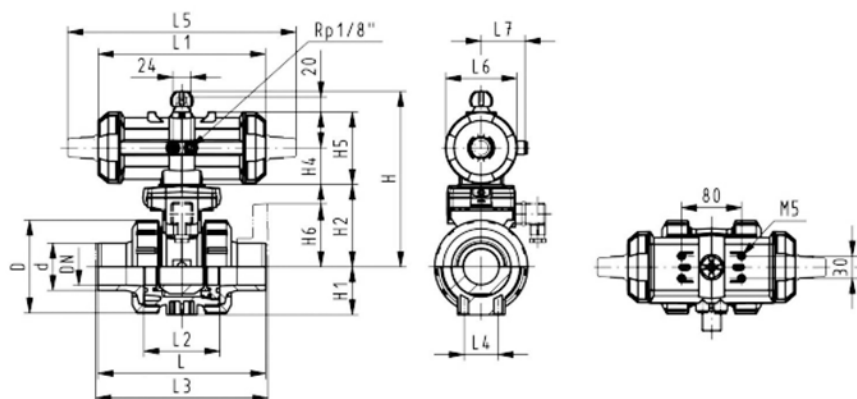
- Assignment of actuators PA11 (DN10/15-25), PA21 (DN32-50), PA30 (DN65), PA35 (DN80), PA40 (DN100)
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90° < 1-2 s
- Overall length according to EN 558-1
- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504

### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
20	15	1/2	10	185	<b>199 231 423</b>	<b>199 231 433</b>	1.400
25	20	3/4	10	350	<b>199 231 424</b>	<b>199 231 434</b>	1.600
32	25	1	10	700	<b>199 231 425</b>	<b>199 231 435</b>	1.800
40	32	1 1/4	10	1000	<b>199 231 426</b>	<b>199 231 436</b>	3.100
50	40	1 1/2	10	1600	<b>199 231 427</b>	<b>199 231 437</b>	3.600
63	50	2	10	3100	<b>199 231 428</b>	<b>199 231 438</b>	4.700

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H4 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
20	50	167	27	62	40	97	48	120	194	56	130	25	261	76	48
25	58	176	30	71	40	97	53	140	194	65	150	25	261	76	48
32	68	176	36	71	40	97	58	150	194	71	160	25	261	76	48
40	84	210	44	84	51	115	70	170	224	85	180	45	305	95	59
50	97	210	51	84	51	115	75	190	224	89	200	45	305	95	59
63	124	232	64	106	51	115	83	220	224	101	230	45	305	95	59





DN10/15 - 50

## Ball valve type 231 PP-H FO (Fail safe to open) Without manual override With fixed flanges PP-H serrated metric

### Model:

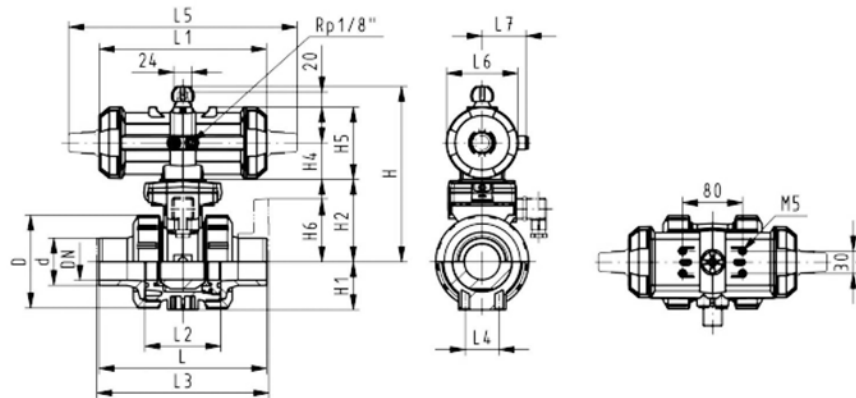
- Assignment of actuators PA11 (DN10/15-25), PA21 (DN32-50), PA30 (DN65), PA35 (DN80), PA40 (DN100)
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time  $90^\circ <$ ) 1-2 s
- Overall length according to EN 558-1
- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504

### Option:

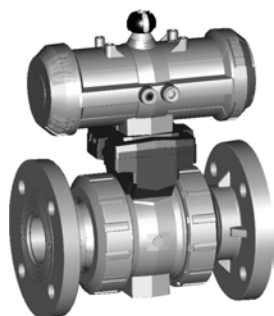
- Individual configuration of the valve (see form)

d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
20	15	1/2	10	185	<b>199 231 443</b>	<b>199 231 453</b>	1.400
25	20	3/4	10	350	<b>199 231 444</b>	<b>199 231 454</b>	1.600
32	25	1	10	700	<b>199 231 445</b>	<b>199 231 455</b>	1.800
40	32	1 1/4	10	1000	<b>199 231 446</b>	<b>199 231 456</b>	3.100
50	40	1 1/2	10	1600	<b>199 231 447</b>	<b>199 231 457</b>	3.600
63	50	2	10	3100	<b>199 231 448</b>	<b>199 231 458</b>	4.700

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H4 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
20	50	167	27	62	40	97	48	120	194	56	130	25	261	76	48
25	58	176	30	71	40	97	53	140	194	65	150	25	261	76	48
32	68	176	36	71	40	97	58	150	194	71	160	25	261	76	48
40	84	210	44	84	51	115	70	170	224	85	180	45	305	95	59
50	97	210	51	84	51	115	75	190	224	89	200	45	305	95	59
63	124	232	64	106	51	115	83	220	224	101	230	45	305	95	59







DN10/15 - 50

## Ball valve type 231 PP-H DA (Double acting) Without manual override With fixed flanges PP-H serrated metric

### Model:

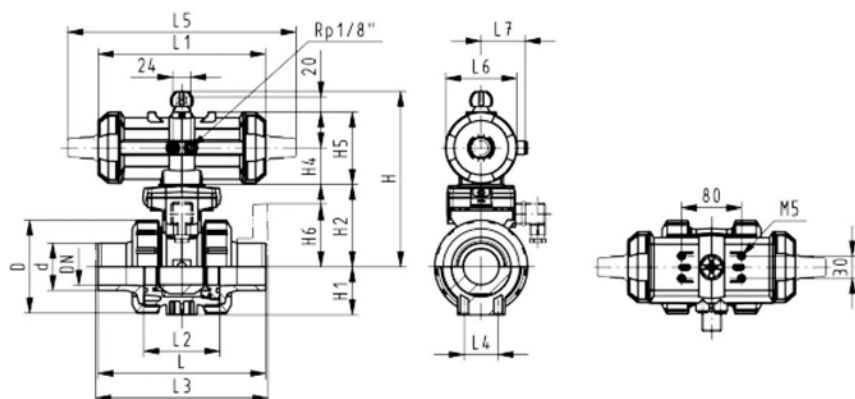
- Assignment of actuators: PA11 (DN10/15-25), PA21 (DN32-50), PA35 (DN65), PA40 (DN80), PA45 (DN100)
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90° < 1-2 s
- Overall length according to EN 558-1
- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504

### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
20	15	½	10	185	<b>199 231 463</b>	<b>199 231 473</b>	1.400
25	20	¾	10	350	<b>199 231 464</b>	<b>199 231 474</b>	1.600
32	25	1	10	700	<b>199 231 465</b>	<b>199 231 475</b>	1.800
40	32	1 ¼	10	1000	<b>199 231 466</b>	<b>199 231 476</b>	3.100
50	40	1 ½	10	1600	<b>199 231 467</b>	<b>199 231 477</b>	3.600
63	50	2	10	3100	<b>199 231 468</b>	<b>199 231 478</b>	4.700

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H4 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
20	50	167	27	62	40	97	48	120	194	56	130	25	261	76	48
25	58	176	30	71	40	97	53	140	194	65	150	25	261	76	48
32	68	176	36	71	40	97	58	150	194	71	160	25	261	76	48
40	84	210	44	84	51	115	70	170	224	85	180	45	305	95	59
50	97	210	51	84	51	115	75	190	224	89	200	45	305	95	59
63	124	232	64	106	51	115	83	220	224	101	230	45	305	95	59





## Ball valve type 231 PP-H FC (Fail safe to close) Without manual override With backing flanges PP-st metric

### Model:

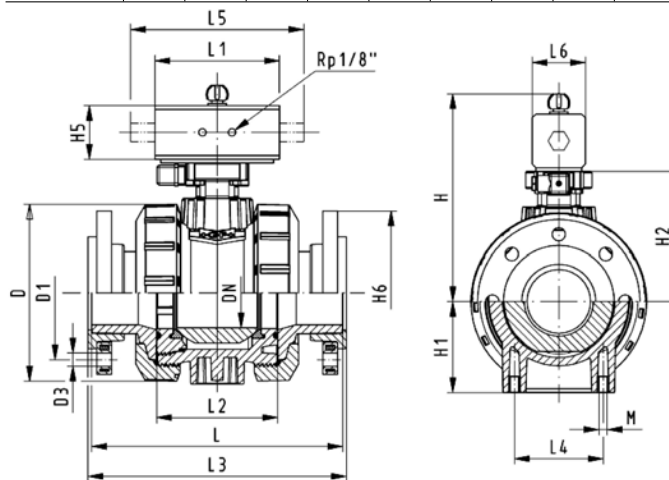
- Assignment of actuators PA11 (DN10/15-25), PA21 (DN32-50), PA30 (DN65), PA35 (DN80), PA40 (DN100)
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time  $90^\circ <$ ) 1-2 s
- Overall length according to EN 558-1
- Connecting dimensions: ISO 7005, EN 1092, BS 4504, DIN 2501; bolt circle PN 10

### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg	
75	65	2 1/2	10	5000	<b>199 231 329</b>	<b>199 231 339</b>	8.300	
90	80	3	10	7000	<b>199 231 330</b>	<b>199 231 340</b>	10.000	
110	100	4	10	11000	<b>199 231 331</b>	<b>199 231 341</b>	14.100	

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	
75	166	262	85	156	70	93	280	218	136	290	70	276	65	
90	200	281	105	168	78	100	296	259	141	310	70	341	72	
110	238	292	123	175	86	110	336	287	164	350	120	369	80	





## Ball valve type 231 PP-H FO (Fail safe to open) Without manual override With backing flanges PP-st metric

### Model:

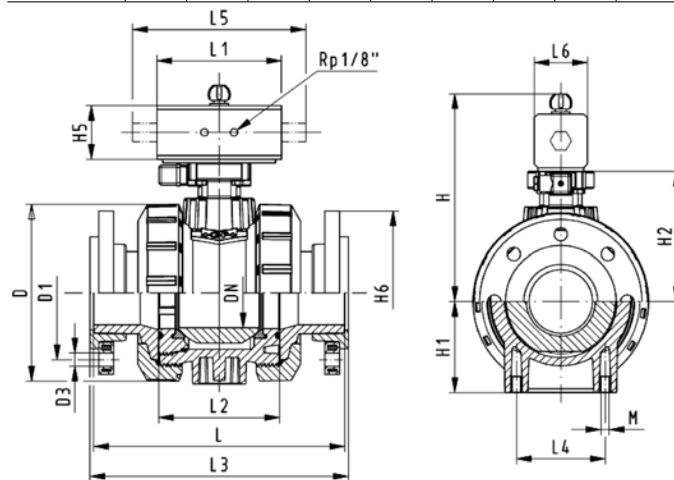
- Assignment of actuators PA11 (DN10/15-25), PA21 (DN32-50), PA30 (DN65), PA35 (DN80), PA40 (DN100)
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time  $90^\circ <$  1-2 s
- Overall length according to EN 558-1
- Connecting dimensions: ISO 7005, EN 1092, BS 4504, DIN 2501; bolt circle PN 10

### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
75	65	2 1/2	10	5000	<b>199 231 349</b>	<b>199 231 359</b>	8.300
90	80	3	10	7000	<b>199 231 350</b>	<b>199 231 360</b>	10.000
110	100	4	10	11000	<b>199 231 351</b>	<b>199 231 361</b>	14.100

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]
75	166	262	85	156	70	93	280	218	136	290	70	276	65
90	200	281	105	168	78	100	296	259	141	310	70	341	72
110	238	292	123	175	86	110	336	287	164	350	120	369	80





## Ball valve type 231 PP-H DA (Double acting) Without manual override With backing flanges PP-st metric

### Model:

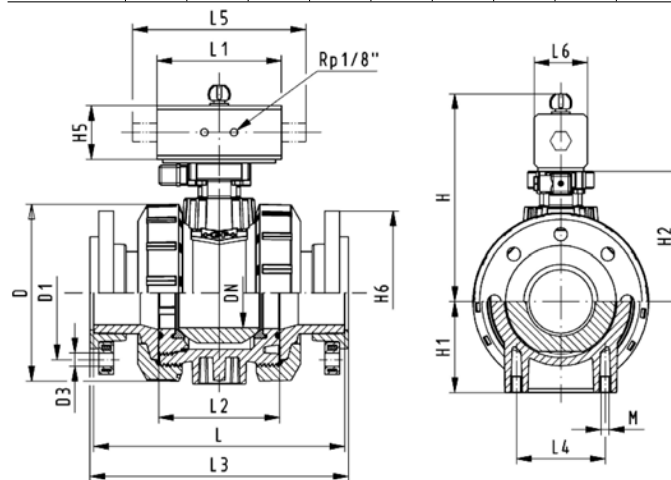
- Assignment of actuators: PA11 (DN10/15-25), PA21 (DN32-50), PA35 (DN65), PA40 (DN80), PA45 (DN100)
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time  $90^\circ <$ ) 1-2 s
- Overall length according to EN 558-1
- Connecting dimensions: ISO 7005, EN 1092, BS 4504, DIN 2501; bolt circle PN 10

### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg	
75	65	2 1/2	10	5000	<b>199 231 369</b>	<b>199 231 379</b>	7.100	
90	80	3	10	7000	<b>199 231 370</b>	<b>199 231 380</b>	9.300	
110	100	4	10	11000	<b>199 231 371</b>	<b>199 231 381</b>	12.300	

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	
75	166	257	85	156	66	93	280	144	136	290	70	190	60	
90	200	274	105	168	70	100	296	152	141	310	70	198	65	
110	238	273	123	175	78	110	336	169	164	350	120	235	72	





## Ball valve type 231 PP-H FC (Fail safe to close) Without manual override With backing flanges PP-st ASTM

### Model:

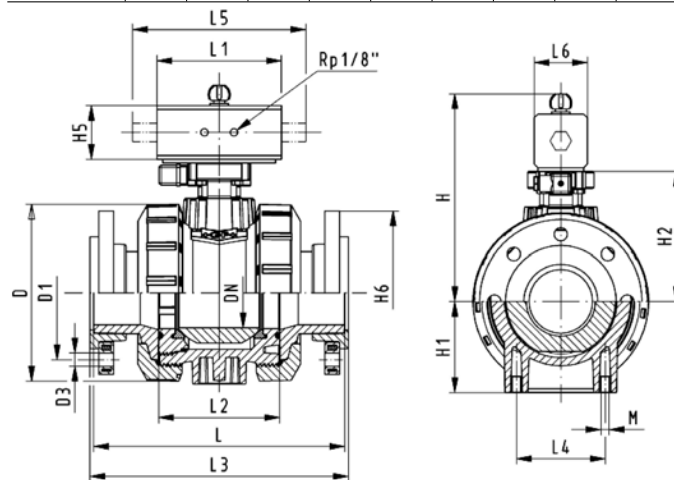
- Assignment of actuators PA11 (DN10/15-25), PA21 (DN32-50), PA30 (DN65), PA35 (DN80), PA40 (DN100)
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time  $90^\circ <$  1-2 s
- Overall length according to EN 558-1
- Connecting dimension ANSI/ASME B 16.5 / ASTM D 4024

### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
75	65	2 1/2	10	5000	<b>199 231 729</b>	<b>199 231 739</b>	8.300
90	80	3	10	7000	<b>199 231 730</b>	<b>199 231 740</b>	10.000
110	100	4	10	11000	<b>199 231 731</b>	<b>199 231 741</b>	14.100

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]
75	166	262	85	156	70	93	280	218	136	290	70	276	65
90	200	281	105	168	78	100	296	259	141	310	70	341	72
110	238	292	123	175	86	115	336	287	164	350	120	369	80





## Ball valve type 231 PP-H FO (Fail safe to open) Without manual override With backing flanges PP-st ASTM

### Model:

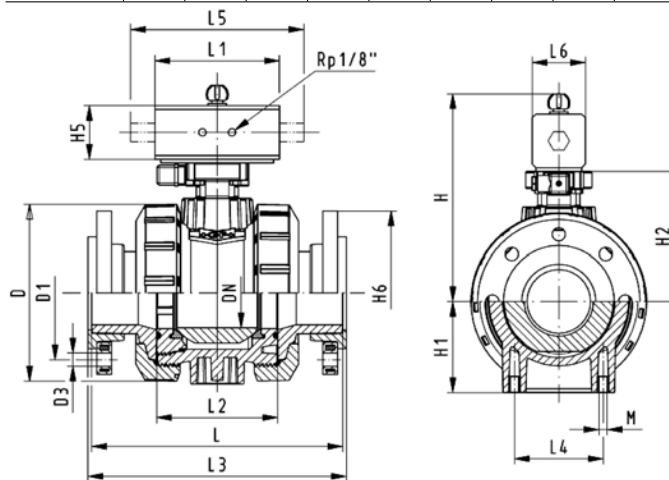
- Assignment of actuators PA11 (DN10/15-25), PA21 (DN32-50), PA30 (DN65), PA35 (DN80), PA40 (DN100)
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time  $90^\circ <$ ) 1-2 s
- Overall length according to EN 558-1
- Connecting dimension ANSI/ASME B 16.5 / ASTM D 4024

### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg	
75	65	2 1/2	10	5000	<b>199 231 749</b>	<b>199 231 759</b>	8.300	
90	80	3	10	7000	<b>199 231 750</b>	<b>199 231 760</b>	10.000	
110	100	4	10	11000	<b>199 231 751</b>	<b>199 231 761</b>	14.100	

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	
75	166	262	85	156	70	93	280	218	136	290	70	276	65	
90	200	281	105	168	78	100	296	259	141	310	70	341	72	
110	238	292	123	175	86	115	336	287	164	350	120	369	80	





## Ball valve type 231 PP-H DA (Double acting) Without manual override With backing flanges PP-st ASTM

### Model:

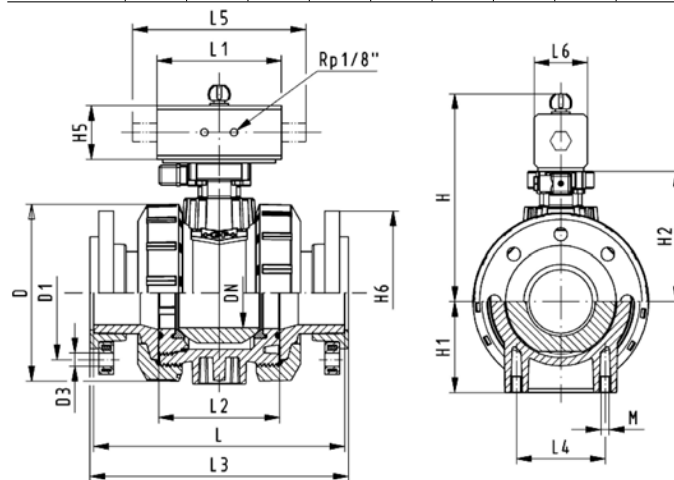
- Assignment of actuators: PA11 (DN10/15-25), PA21 (DN32-50), PA35 (DN65), PA40 (DN80), PA45 (DN100)
- Image and drawing DN65-100 please see **New product ball valve DN65-100**
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time  $90^\circ <$  1-2 s
- Overall length according to EN 558-1
- Connecting dimension ANSI/ASME B 16.5 / ASTM D 4024

### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	EPDM Code	FPM Code	kg
75	65	2 1/2	10	5000	<b>199 231 769</b>	<b>199 231 779</b>	7.100
90	80	3	10	7000	<b>199 231 770</b>	<b>199 231 780</b>	9.300
110	100	4	10	11000	<b>199 231 771</b>	<b>199 231 781</b>	12.300

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]
75	166	257	85	156	66	93	280	144	136	290	70	190	60
90	200	274	105	168	70	100	296	152	141	310	70	198	65
110	238	273	123	175	78	115	336	169	164	350	120	235	72



# Copiable

## Configurator GF ball valve type 546 PP-H

<b>Ball Valve</b>										
A01 Ball Valve 546										
A02 Linear Ball Valve										
<b>Material</b>										
B05 PP-H										
<b>Dimension</b>										
C05 d 16 DN 10 3/8"										
C06 d 20 DN 15 1/2"										
C07 d 25 DN 20 3/4"										
C08 d 32 DN 25 1"										
C09 d 40 DN 32 1 1/4"										
C10 d 50 DN 40 1 1/2"										
C11 d 63 DN 50 2"										
C12 d 75 DN 65 2 1/2"										
C13 d 90 DN 80 3"										
C14 d 110 DN 100 4"										
C15 d 160 DN 150 6"										
<b>Version</b>										
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 for metric (only with specific connecting parts)										
<b>Seals</b>										
E01 EPDM seals										
E02 FPM seals										
E03 FFPM (KALREZ®) seals										
<b>Threaded inserts</b>										
F01 without threaded inserts										
F02 with threaded inserts										
<b>Connecting parts</b>										
G30 PP-H Fusion socket metric										
G32 PP-H Socket fusion spigot metric										
G33 PP-H Threaded socket Rp reinforced										
G34 PP-H Threaded socket NPT reinforced										
G35 PP-H Butt fusion spigot SDR 11 metric IR-PLUS®										
G36 PP-H Butt fusion spigot SDR 17.6 metric with this valve end the maximum nominal pressure is reduced to PN 6										
G37 PP-H Butt fusion spigot long SDR11 metric										
G83 PP-H Valve end blank										
G44 PE-100 Butt fusion spigot long SDR17.6 metric (DN65-100)										
G63 Fixed flange PP-H serrated metric (DN10-50)										
G72 Backing flange PP-steel metric										
G73 Backing flange PP-steel inch ANSI										
G77 Backing flange PP JIS with connecting parts										
G78 Backing flange PP-GF JIS										
G40 PE-100 Fusion socket metric										
G41 PE-100 Butt fusion spigot SDR11 metric										
G42 PE-100 Butt fusion spigot SDR17.6 metric										
G43 PE-100 Butt fusion spigot long SDR11 metric										
<b>Multi-functional module</b>										
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										
<b>Lever</b>										
K01 Standard lever red										
K02 Standard lever black										
K11 Multi-functional lever red										
<b>Mounting plate</b>										
L01 without mounting plate										
L02 with mounting plate										
<b>A01</b>	<b>B05</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>F</b>	<b>G</b>	<b>G</b>	<b>I</b>	<b>K</b>	<b>L</b>
						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. (The maximum nominal pressure for the ball valve is PN10).

**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

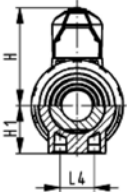
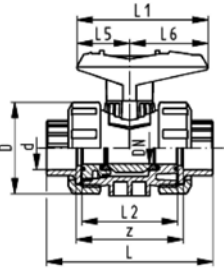
<b>P</b>	<b>Q</b>	<b>R</b>	
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# Ball valves

## SYGEF® standard Ball valve type 546 PVDF With fusion sockets metric



DN10/15 - 50



### Model:

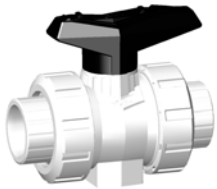
- For easy installation and removal
- z-dimension, valve end and valve nut are **not compatible** with type 346 (DN10/15-50) resp. type 370 (DN65-100)
- Ball seals PTFE
- Without mounting inserts

### Option:

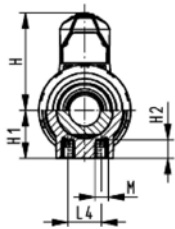
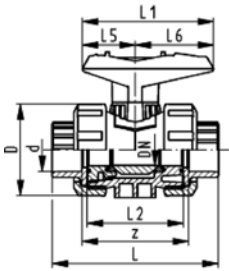
- Individual configuration of the valve (see form)
- Multifunctional module with integrated limit switches
- Pneumatic or electric actuators from +GF+

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code	kg
16	10	16	71	<b>175 546 011</b>	0.195
20	15	16	185	<b>175 546 012</b>	0.200
25	20	16	350	<b>175 546 013</b>	0.300
32	25	16	700	<b>175 546 014</b>	0.440
40	32	16	1000	<b>175 546 015</b>	0.760
50	40	16	1600	<b>175 546 016</b>	1.060
63	50	16	3100	<b>175 546 017</b>	2.055

d [mm]	D [mm]	H [mm]	H1 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	z [mm]
16	50	57	27	93	77	56	25	32	45	67
20	50	57	27	95	77	56	25	32	45	66
25	58	67	30	109	97	65	25	39	58	77
32	68	73	36	119	97	71	25	39	58	83
40	84	90	44	135	128	85	45	54	74	99
50	97	97	51	147	128	89	45	54	74	105
63	124	116	64	168	152	101	45	66	87	117



DN10/15 - 50



## SYGEF® standard Ball valve type 546 PVDF With mounting inserts With fusion sockets metric

### Model:

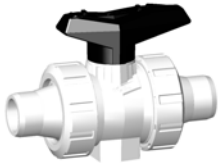
- For easy installation and removal
- z-dimension, valve end and valve nut are **not compatible** with type 346 (DN10/15-50) resp. type 370 (DN65-100)
- Ball seals PTFE
- Integrated stainless steel mounting inserts

### Option:

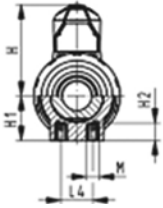
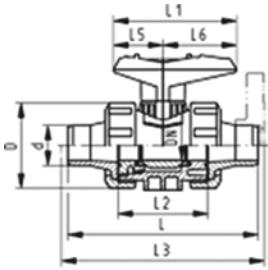
- Individual configuration of the valve (see form)
- Multifunctional module with integrated limit switches
- Pneumatic or electric actuators from +GF+

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code	kg
16	10	16	71	<b>175 546 411</b>	0.195
20	15	16	185	<b>175 546 412</b>	0.200
25	20	16	350	<b>175 546 413</b>	0.300
32	25	16	700	<b>175 546 414</b>	0.440
40	32	16	1000	<b>175 546 415</b>	0.760
50	40	16	1600	<b>175 546 416</b>	1.060
63	50	16	3100	<b>175 546 417</b>	2.055

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	93	77	56	25	32	45	M6	67
20	50	57	27	12	95	77	56	25	32	45	M6	66
25	58	67	30	12	109	97	65	25	39	58	M6	77
32	68	73	36	12	119	97	71	25	39	58	M6	83
40	84	90	44	15	135	128	85	45	54	74	M8	99
50	97	97	51	15	147	128	89	45	54	74	M8	105
63	124	116	64	15	168	152	101	45	66	87	M8	117



DN10/15 - 50



## SYGEF® standard Ball valve type 546 PVDF With mounting inserts With socket fusion spigots metric

### Model:

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

### Option:

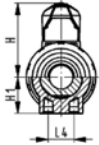
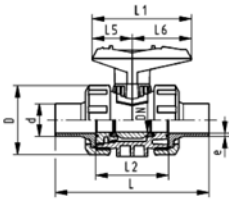
- Individual configuration of the valve (see form)
- Multifunctional module with integrated limit switches
- Pneumatic or electric actuators from +GF+

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code	kg
16	10	16	71	<b>175 546 051</b>	0.200
20	15	16	185	<b>175 546 052</b>	0.205
25	20	16	350	<b>175 546 053</b>	0.310
32	25	16	700	<b>175 546 054</b>	0.460
40	32	16	1000	<b>175 546 055</b>	0.780
50	40	16	1600	<b>175 546 056</b>	1.110
63	50	16	3100	<b>175 546 057</b>	2.150

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	110	77	56		25	32	45	M6
20	50	57	27	12	120	77	56	130	25	32	45	M6
25	58	67	30	12	139	97	65	150	25	39	58	M6
32	68	73	36	12	150	97	71	160	25	39	58	M6
40	84	90	44	15	170	128	85	180	45	54	74	M8
50	97	97	51	15	190	128	89	200	45	54	74	M8
63	124	116	64	15	220	152	101	230	45	66	87	M8



DN10/15 - 50



## SYGEF® standard Ball valve type 546 PVDF With butt fusion spigots metric

### Model:

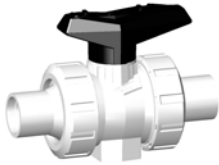
- For easy installation and removal
- z-dimension, valve end and valve nut are **not compatible** with type 346 (DN10/15-50) resp. type 370 (DN65-100)
- Ball seals PTFE
- Without mounting inserts

### Option:

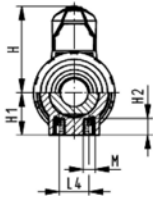
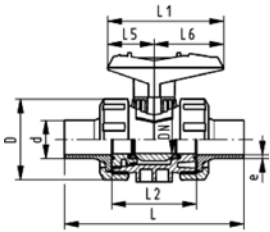
- Individual configuration of the valve (see form)
- Multifunctional module with integrated limit switches
- Pneumatic or electric actuators from +GF+

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code	kg
20	15	16	185	<b>175 546 092</b>	0.205
25	20	16	350	<b>175 546 093</b>	0.310
32	25	16	700	<b>175 546 094</b>	0.460
40	32	16	1000	<b>175 546 095</b>	0.780
50	40	16	1600	<b>175 546 096</b>	1.110
63	50	16	3100	<b>175 546 097</b>	2.150

d [mm]	D [mm]	H [mm]	H1 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	e [mm]
20	50	57	27	130	77	56	25	32	45	1,9
25	58	67	30	143	97	65	25	39	58	1,9
32	68	73	36	150	97	71	25	39	58	2,4
40	84	90	44	171	128	85	45	54	74	2,4
50	97	97	51	191	128	89	45	54	74	3
63	124	116	64	220	152	101	45	66	87	3



DN10/15 - 50



## SYGEF® standard Ball valve type 546 PVDF With mounting inserts With butt fusion spigots metric

### Model:

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

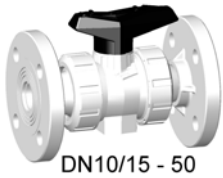
### Option:

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

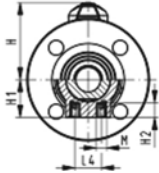
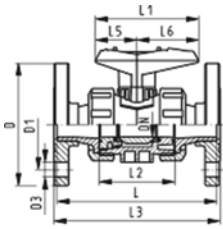
d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code	kg								
20	15	16	185	<b>175 546 272</b>	0.205								
25	20	16	350	<b>175 546 273</b>	0.310								
32	25	16	700	<b>175 546 274</b>	0.460								
40	32	16	1000	<b>175 546 275</b>	0.780								
50	40	16	1600	<b>175 546 276</b>	1.110								
63	50	16	3100	<b>175 546 277</b>	2.150								

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	M	e [mm]		
20	50	57	27	12	130	77	56	25	32	45	M6	1,9		
25	58	67	30	12	143	97	65	25	39	58	M6	1,9		
32	68	73	36	12	150	97	71	25	39	58	M6	2,4		
40	84	90	44	15	171	128	85	45	54	74	M8	2,4		
50	97	97	51	15	191	128	89	45	54	74	M8	3		
63	124	116	64	15	220	152	101	45	66	87	M8	3		



DN10/15 - 50



**SYGEF® standard**  
**Ball valve type 546 PVDF**  
**With mounting inserts**  
**With fixed flanges PVDF serrated metric**

**Model:**

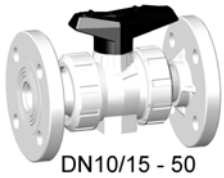
- For easy installation and removal
- z-dimension, valve end and valve nut are **not compatible** with type 346 (DN10/15-50) resp. type 370 (DN65-100)
- Ball seals PTFE
- Integrated stainless steel mounting inserts
- Overall length EN 558-1

**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]	FPM Code	kg
20	15	16	185	<b>175 546 192</b>	0.470
25	20	16	350	<b>175 546 193</b>	0.650
32	25	16	700	<b>175 546 194</b>	0.940
40	32	16	1000	<b>175 546 195</b>	1.570
50	40	16	1600	<b>175 546 196</b>	2.070
63	50	16	3100	<b>175 546 197</b>	3.490

d [mm]	D [mm]	D1 [mm]	D3 [mm]	H [mm]	H1 [mm]	H2 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	M
20	93	65	14	57	27	12	120	77	56	130	25	32	45	M6
25	103	75	14	67	30	12	140	97	65	150	25	39	58	M6
32	115	85	14	73	36	12	150	97	71	160	25	39	58	M6
40	137	100	18	90	44	15	170	128	85	180	45	54	74	M8
50	147	110	18	97	51	15	190	128	89	200	45	54	74	M8
63	162	125	18	116	64	15	220	152	101	230	45	66	87	M8



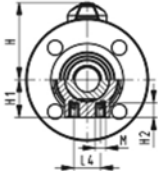
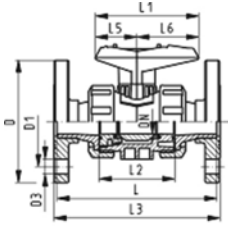
**SYGEF® standard**  
**Ball valve type 546 PVDF**  
**With mounting inserts**  
**With fixed flanges PVDF serrated ANSI**

**Model:**

- For easy installation and removal
- z-dimension, valve end and valve 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 EN 558-1

**Option:**

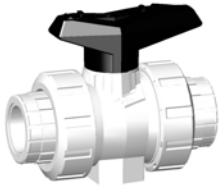
- Individual configuration of the valve (see form)
- Multifunctional module with integrated limit switches
- Pneumatic or electric actuators from +GF+



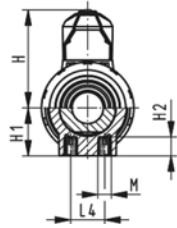
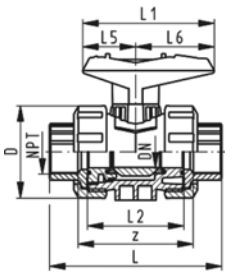
Inch	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code
½	15	16	185	<b>175 546 592</b>
¾	20	16	350	<b>175 546 593</b>
1	25	16	700	<b>175 546 594</b>
1 ¼	32	16	1000	<b>175 546 595</b>
1 ½	40	16	1600	<b>175 546 596</b>
2	50	16	3100	<b>175 546 597</b>

Inch	D [mm]	D1 [mm]	D3 [mm]	H [mm]	H1 [mm]	H2 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	M
½	93	65	14	57	27	12	120	77	56	130	25	32	45	M6
¾	103	75	14	67	30	12	140	97	65	150	25	39	58	M6
1	115	85	14	73	36	12	150	97	71	160	25	39	58	M6
1 ¼	137	100	18	90	44	15	170	128	85	180	45	54	74	M8
1 ½	147	110	18	97	51	15	190	128	89	200	45	54	74	M8
2	162	125	18	116	64	15	220	152	101	230	45	66	87	M8





DN10/15 - 50



## SYGEF® standard Ball valve type 546 PVDF With mounting inserts With threaded sockets NPT

### Model:

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

### Option:

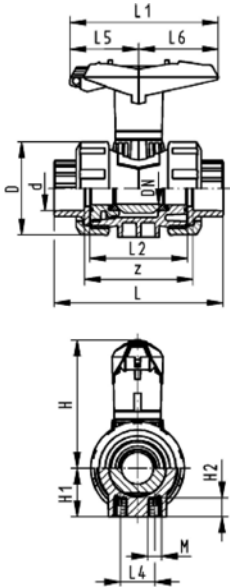
- Individual configuration of the valve (see form)
- Multifunctional module with integrated limit switches
- Pneumatic or electric actuators from +GF+

NPT [inch]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code	kg
3/8	10	10	71	<b>175 546 331</b>	0.205
1/2	15	10	185	<b>175 546 332</b>	0.220
3/4	20	10	350	<b>175 546 333</b>	0.325
1	25	10	700	<b>175 546 334</b>	0.490
1 1/4	32	10	1000	<b>175 546 335</b>	0.820
1 1/2	40	10	1600	<b>175 546 336</b>	1.135
2	50	10	3100	<b>175 546 337</b>	2.150

NPT [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	96	77	56	25	32	45	M6	69
1/2	50	57	27	12	99	77	56	25	32	45	M6	64
3/4	58	67	30	12	111	97	65	25	39	58	M6	76
1	68	73	36	12	127	97	71	25	39	58	M6	83
1 1/4	84	90	44	15	146	128	85	45	54	74	M8	101
1 1/2	97	97	51	15	157	128	89	45	54	74	M8	111
2	124	116	64	15	183	152	101	45	66	87	M8	135



DN10/15 - 50



## SYGEF® standard Ball valve type 546 PVDF With lockable handle With fusion sockets metric

### Model:

- For easy installation and removal
- z-dimension, valve end and valve 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:

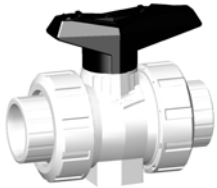
- Individual configuration of the valve (see form)
- Multifunctional module with integrated limit switches
- Pneumatic or electric actuators from +GF+

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code	kg
16	10	16	71	<b>175 546 431</b>	0.205
20	15	16	185	<b>175 546 432</b>	0.210
25	20	16	350	<b>175 546 433</b>	0.315
32	25	16	700	<b>175 546 434</b>	0.455
40	32	16	1000	<b>175 546 435</b>	0.785
50	40	16	1600	<b>175 546 436</b>	1.085
63	50	16	3100	<b>175 546 437</b>	2.085

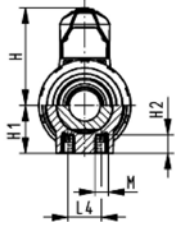
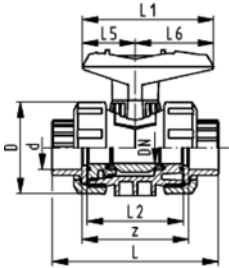
d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	M	z [mm]
16	50	79	27	12	93	77	56	25	32	45	M6	67
20	50	79	27	12	95	77	56	25	32	45	M6	66
25	58	88	30	12	109	97	65	25	39	58	M6	77
32	68	94	36	12	119	97	71	25	39	58	M6	83
40	84	113	44	15	135	128	85	45	54	74	M8	99
50	97	119	51	15	147	128	89	45	54	74	M8	105
63	124	141	64	15	168	152	101	45	66	87	M8	117

# Ball valves silicon free/paint compatible

## SYGEF® standard silicone free Ball valve type 546 SF With fusion sockets metric



DN10/15 - 50



### Model:

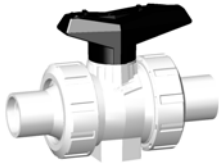
- Silicon-free / paint-compatible
- Ball seals PVDF
- For easy installation and removal
- z-dimension, valve end and valve nut are **not compatible** with type 346 (DN10/15-50) resp. type 370 (DN65-100)
- Integrated stainless steel mounting inserts

### Option:

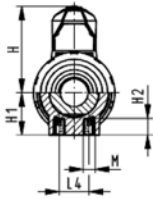
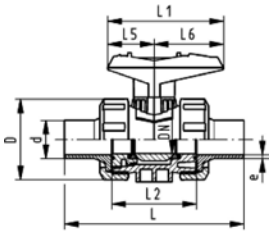
- Individual configuration of the valve (see form)
- Multifunctional module with integrated limit switches
- Pneumatic or electric actuators from +GF+

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code	kg
16	10	16	71	<b>175 546 691</b>	0.195
20	15	16	185	<b>175 546 692</b>	0.200
25	20	16	350	<b>175 546 693</b>	0.300
32	25	16	700	<b>175 546 694</b>	0.440
40	32	16	1000	<b>175 546 695</b>	0.760
50	40	16	1600	<b>175 546 696</b>	1.060
63	50	16	3100	<b>175 546 697</b>	2.055

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	93	77	56	25	32	45	M6	67
20	50	57	27	12	95	77	56	25	32	45	M6	66
25	58	67	30	12	109	97	65	25	39	58	M6	77
32	68	73	36	12	119	97	71	25	39	58	M6	83
40	84	90	44	15	135	128	85	45	54	74	M8	99
50	97	97	51	15	147	128	89	45	54	74	M8	105
63	124	116	64	15	168	152	101	45	66	87	M8	117



DN10/15 - 50



## SYGEF® standard silicone free Ball valve type 546 SF With butt fusion spigots IR-Plus metric

### Model:

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

### Option:

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

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code	kg
20	15	16	185	<b>175 546 752</b>	0.205
25	20	16	350	<b>175 546 753</b>	0.310
32	25	16	700	<b>175 546 754</b>	0.460
40	32	16	1000	<b>175 546 755</b>	0.780
50	40	16	1600	<b>175 546 756</b>	1.110
63	50	16	3100	<b>175 546 757</b>	2.150

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	M	e [mm]
20	50	57	27	12	130	77	56	25	32	45	M6	1,9
25	58	67	30	12	143	97	65	25	39	58	M6	1,9
32	68	73	36	12	150	97	71	25	39	58	M6	2,4
40	84	90	44	15	171	128	85	45	54	74	M8	2,4
50	97	97	51	15	191	128	89	45	54	74	M8	3
63	124	116	64	15	220	152	101	45	66	87	M8	3

# Copiable

## Configurator +GF+ Ball Valve Type 546 PVDF

### Ball valve

A01 Ball valve 546

#### Material

B15 PVDF

#### Dimension

C05 d 16 DN 10 3/8"  
 C06 d 20 DN 15 1/2"  
 C07 d 25 DN 20 3/4"  
 C08 d 32 DN 25 1"  
 C09 d 40 DN 32 1 1/4"  
 C10 d 50 DN 40 1 1/2"  
 C11 d 63 DN 50 2"

#### Version

D01 standard, PTFE ball seal  
 D02 oil-free, PTFE ball seal (only with specific connecting parts)  
 D04 silicon-free, PVDF ball seal (only with specific connecting parts)

#### Seals

E01 EPDM seals  
 E02 FPM seals

#### Threaded inserts

F01 without threaded inserts  
 F02 with threaded inserts

#### Connecting parts

G50 PVDF Fusion socket metric  
 G51 PVDF Socket fusion spigot metric  
 G52 PVDF Butt fusion spigot IR Plus® metric  
 G53 PVDF Threaded socket NPT  
 G64 Fixed flange PVDF serrated metric

#### Multi-functional module

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

#### Handle

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

#### Mounting plate

L01 without mounting plate  
 L02 with mounting plate

**A01 B15 C D E F G G I K L**

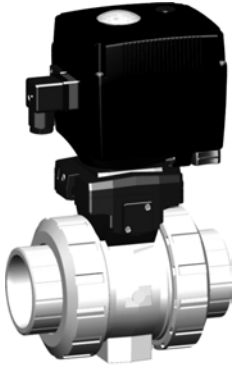
left right

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

**We supply what you put together.**

# Ball valves electric

## SYGEF® standard Ball valve type 107 100-230V With manual emergency override With fusion sockets metric



DN10/15 - 50

### Model:

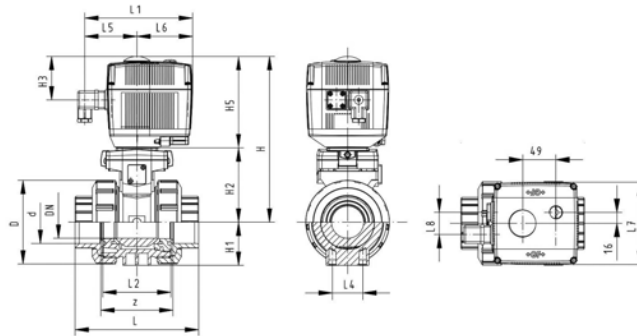
- Built on with electric actuator EA11
- Voltage 100-230 V, 50-60 Hz
- Control range 90°<
- Control time 5 s/90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts

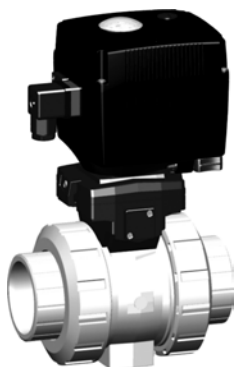
### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code	kg
16	10	10	70	<b>199 107 802</b>	2.100
20	15	10	185	<b>199 107 803</b>	2.100
25	20	10	350	<b>199 107 804</b>	2.200
32	25	10	700	<b>199 107 805</b>	2.300
40	32	10	1000	<b>199 107 806</b>	2.600
50	40	10	1600	<b>199 107 807</b>	3.000
63	50	10	3100	<b>199 107 808</b>	3.800

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	L8 [mm]	z [mm]
16	50	200	27	64	64	137	92	161	56	25	79	83	122	67	64
20	50	200	27	64	64	137	95	161	56	25	79	83	122	67	64
25	58	209	30	73	64	137	110	161	65	25	79	83	122	67	72
32	68	209	36	73	64	137	123	161	71	25	79	83	122	67	79
40	84	220	44	84	64	137	146	161	85	45	79	83	122	67	94
50	97	220	51	84	64	137	157	161	89	45	79	83	122	67	95
63	124	243	64	106	64	137	183	161	101	45	79	83	122	67	107





DN10/15 - 50

## SYGEF® standard Ball valve type 107 24V With manual emergency override With fusion sockets metric

### Model:

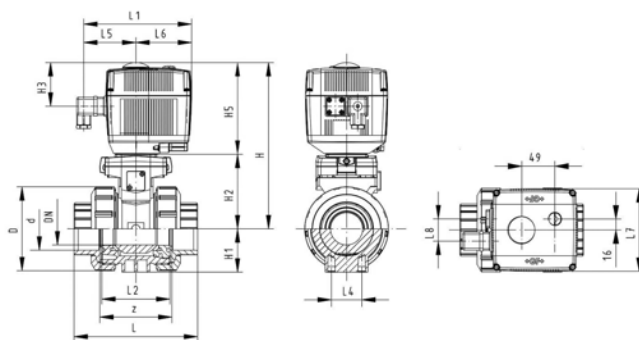
- Built on with electric actuator EA11
- Voltage 24 V AC/DC
- Control range 90°<
- Control time 5 s/90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts

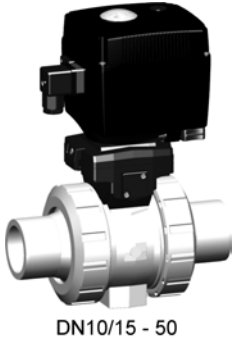
### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code	kg
16	10	10	70	<b>199 107 822</b>	2.100
20	15	10	185	<b>199 107 823</b>	2.100
25	20	10	350	<b>199 107 824</b>	2.200
32	25	10	700	<b>199 107 825</b>	2.300
40	32	10	1000	<b>199 107 826</b>	2.600
50	40	10	1600	<b>199 107 827</b>	3.000
63	50	10	3100	<b>199 107 828</b>	3.800

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	L8 [mm]	z [mm]
16	50	200	27	64	64	137	92	161	56	25	79	83	122	67	64
20	50	200	27	64	64	137	95	161	56	25	79	83	122	67	64
25	58	209	30	73	64	137	110	161	65	25	79	83	122	67	72
32	68	209	36	73	64	137	123	161	71	25	79	83	122	67	79
40	84	220	44	84	64	137	146	161	85	45	79	83	122	67	94
50	97	220	51	84	64	137	157	161	89	45	79	83	122	67	95
63	124	243	64	106	64	137	183	161	101	45	79	83	122	67	107





**SYGEF® standard**  
**Ball valve type 107 100-230V**  
**With manual emergency override**  
**With fusion spigots metric**

**Model:**

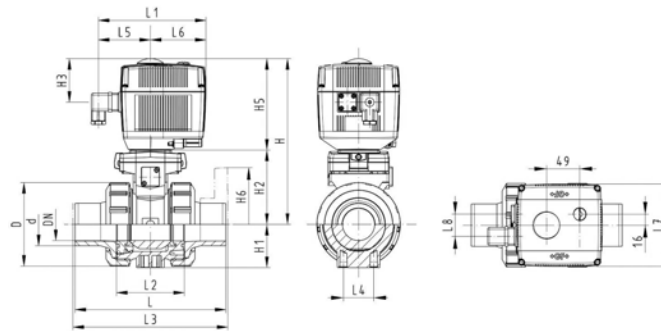
- Built on with electric actuator EA11
- Voltage 100-230 V, 50-60 Hz
- Control range 90°<
- Control time 5 s/90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts

**Option:**

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code	kg
16	10	10	70	<b>199 107 812</b>	2.100
20	15	10	185	<b>199 107 813</b>	2.100
25	20	10	350	<b>199 107 814</b>	2.200
32	25	10	700	<b>199 107 815</b>	2.300
40	32	10	1000	<b>199 107 816</b>	2.600
50	40	10	1600	<b>199 107 817</b>	3.000
63	50	10	3100	<b>199 107 818</b>	3.800

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	L8 [mm]
16	50	200	27	64	64	137	114	161	56	0	25	79	83	122	67
20	50	200	27	64	64	137	124	161	56	130	25	79	83	122	67
25	58	209	30	73	64	137	144	161	65	150	25	79	83	122	67
32	68	209	36	73	64	137	154	161	71	160	25	79	83	122	67
40	84	220	44	84	64	137	174	161	85	180	45	79	83	122	67
50	97	220	51	84	64	137	194	161	89	200	45	79	83	122	67
63	124	243	64	106	64	137	224	161	101	230	45	79	83	122	67







DN10/15 - 50

## SYGEF® standard Ball valve type 107 24V With manual emergency override With fusion spigots metric

### Model:

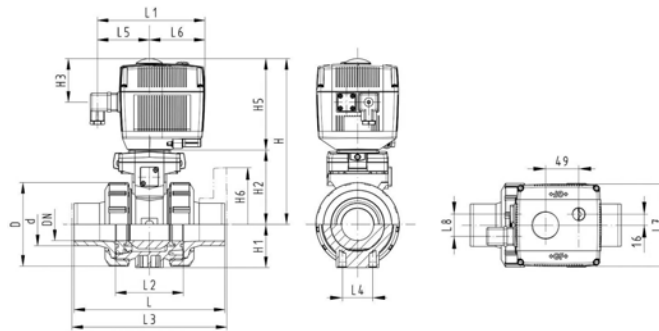
- Built on with electric actuator EA11
- Voltage 24 V AC/DC
- Control range 90°<
- Control time 5 s/90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts

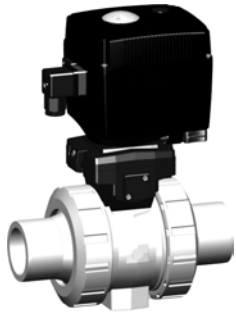
### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code	kg
16	10	10	70	<b>199 107 832</b>	2.100
20	15	10	185	<b>199 107 833</b>	2.100
25	20	10	350	<b>199 107 834</b>	2.200
32	25	10	700	<b>199 107 835</b>	2.300
40	32	10	1000	<b>199 107 836</b>	2.600
50	40	10	1600	<b>199 107 837</b>	3.000
63	50	10	3100	<b>199 107 838</b>	3.800

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	L8 [mm]
16	50	200	27	64	64	137	114	161	56	0	25	79	83	122	67
20	50	200	27	64	64	137	124	161	56	130	25	79	83	122	67
25	58	209	30	73	64	137	144	161	65	150	25	79	83	122	67
32	68	209	36	73	64	137	154	161	71	160	25	79	83	122	67
40	84	220	44	84	64	137	174	161	85	180	45	79	83	122	67
50	97	220	51	84	64	137	194	161	89	200	45	79	83	122	67
63	124	243	64	106	64	137	224	161	101	230	45	79	83	122	67





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## SYGEF® standard

### Ball valve type 107 100-230V

### With manual emergency override

### With butt fusion spigots metric

#### Model:

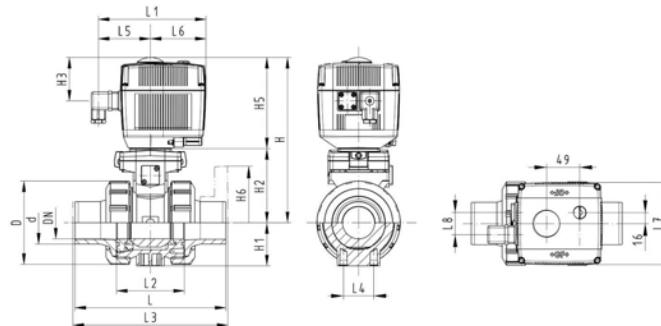
- Built on with electric actuator EA11
- Voltage 100-230 V, 50-60 Hz
- Control range 90°<
- Control time 5 s/90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts

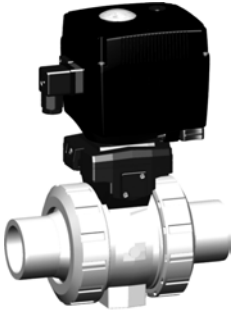
#### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code
20	15	10	185	<b>199 107 423</b>
25	20	10	350	<b>199 107 424</b>
32	25	10	700	<b>199 107 425</b>
40	32	10	1000	<b>199 107 426</b>
50	40	10	1600	<b>199 107 427</b>
63	50	10	3100	<b>199 107 428</b>

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]
20	50	200	27	64	64	137	130	161	56	25	79	83	122	67
25	58	209	30	73	64	137	143	161	65	25	79	83	122	67
32	68	209	36	73	64	137	150	161	71	25	79	83	122	67
40	84	220	44	84	64	137	171	161	85	45	79	83	122	67
50	97	220	51	84	64	137	191	161	89	45	79	83	122	67
63	124	243	64	106	64	137	220	161	101	45	79	83	122	67





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## SYGEF® standard Ball valve type 107 24V With manual emergency override With butt fusion spigots metric

### Model:

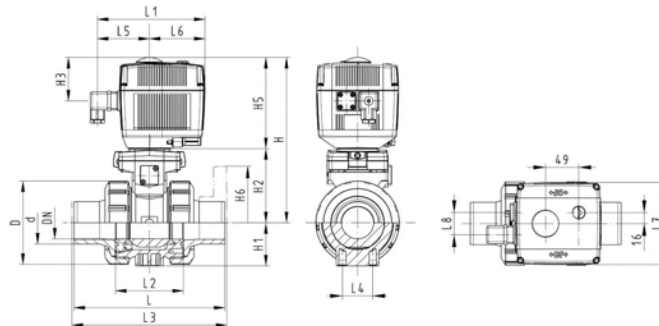
- Built on with electric actuator EA11
- Voltage 24 V AC/DC
- Control range 90°<
- Control time 5 s/90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts

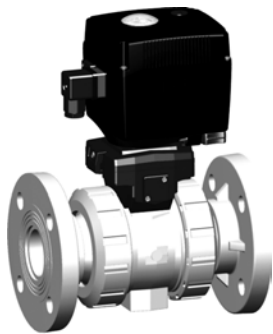
### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code
20	15	10	185	<b>199 107 433</b>
25	20	10	350	<b>199 107 434</b>
32	25	10	700	<b>199 107 435</b>
40	32	10	1000	<b>199 107 436</b>
50	40	10	1600	<b>199 107 437</b>
63	50	10	3100	<b>199 107 438</b>

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]
20	50	200	27	64	64	137	130	161	56	25	79	83	122	67
25	58	209	30	73	64	137	143	161	65	25	79	83	122	67
32	68	209	36	73	64	137	150	161	71	25	79	83	122	67
40	84	220	44	84	64	137	171	161	85	45	79	83	122	67
50	97	220	51	84	64	137	191	161	89	45	79	83	122	67
63	124	243	64	106	64	137	220	161	101	45	79	83	122	67





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**SYGEF® standard**  
**Ball valve type 107 100-230V**  
**With manual emergency override**  
**With fixed flanges PVDF serrated 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
- Overall length EN 558-1
- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504

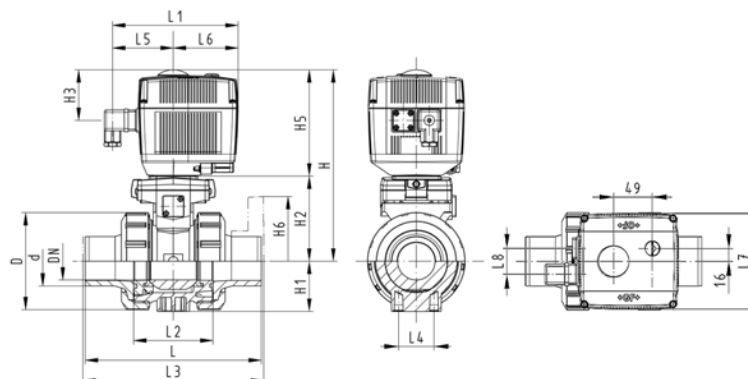
**Option:**

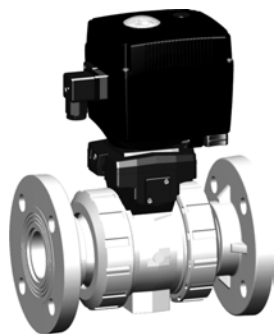
- Individual configuration of the valve (see form)

d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code	kg
20	15	½	10	185	<b>199 107 843</b>	2.300
25	20	¾	10	350	<b>199 107 844</b>	2.500
32	25	1	10	700	<b>199 107 845</b>	2.700
40	32	1 ¼	10	1000	<b>199 107 846</b>	3.200
50	40	1 ½	10	1600	<b>199 107 847</b>	3.700
63	50	2	10	3100	<b>199 107 848</b>	4.800

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
20	50	201	27	64	65	138	48	124	160	56	130	25	77	83	122
25	58	210	30	73	65	138	53	144	160	65	150	25	77	83	122
32	68	210	36	73	65	138	58	154	160	71	160	25	77	83	122
40	84	221	44	84	65	138	70	174	160	85	180	45	77	83	122
50	97	221	51	84	65	138	75	194	160	89	200	45	77	83	122
63	124	244	64	106	65	138	83	224	160	101	230	45	77	83	122

d [mm]	L8 [mm]
20	33
25	33
32	33
40	33
50	33
63	33





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## SYGEF® standard Ball valve type 107 24V With manual emergency override With fixed flanges PVDF serrated 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
- Overall length EN 558-1
- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504

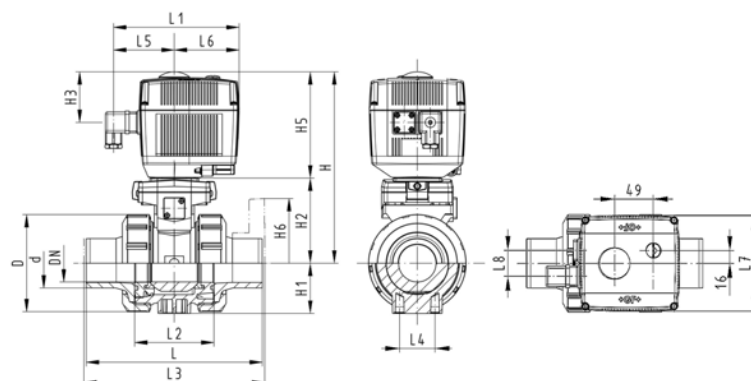
### Option:

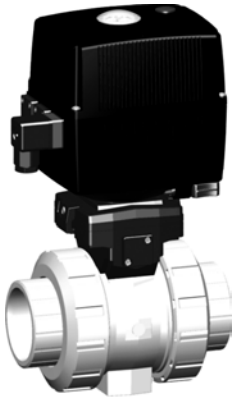
- Individual configuration of the valve (see form)

d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code	kg
20	15	½	10	185	<b>199 107 853</b>	2.300
25	20	¾	10	350	<b>199 107 854</b>	2.500
32	25	1	10	700	<b>199 107 855</b>	2.700
40	32	1 ¼	10	1000	<b>199 107 856</b>	3.200
50	40	1 ½	10	1600	<b>199 107 857</b>	3.700
63	50	2	10	3100	<b>199 107 858</b>	4.800

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
20	50	201	27	64	65	138	48	124	160	56	130	25	77	83	122
25	58	210	30	73	65	138	53	144	160	65	150	25	77	83	122
32	68	210	36	73	65	138	58	154	160	71	160	25	77	83	122
40	84	221	44	84	65	138	70	174	160	85	180	45	77	83	122
50	97	221	51	84	65	138	75	194	160	89	200	45	77	83	122
63	124	244	64	106	65	138	83	224	160	101	230	45	77	83	122

d [mm]	L8 [mm]
20	33
25	33
32	33
40	33
50	33
63	33





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## SYGEF® standard Ball valve type 132 100-230V With manual emergency override With fusion sockets metric

### Model:

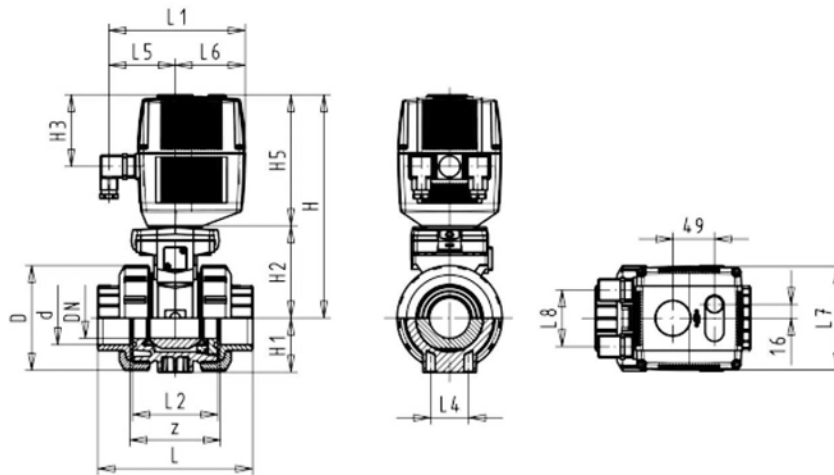
- Assignment of actuators EA21 (DN10/15-50), EA31 (DN65-100 if available)
- Voltage 100-230 V, 50-60 Hz
- Control range 90°<
- Control time 5 s/90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts

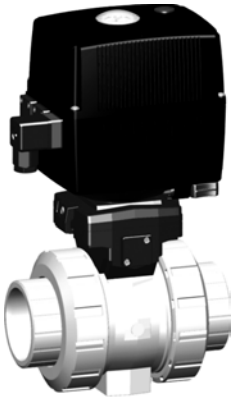
### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code	kg
16	10	10	70	<b>199 132 012</b>	2.100
20	15	10	185	<b>199 132 013</b>	2.100
25	20	10	350	<b>199 132 014</b>	2.200
32	25	10	700	<b>199 132 015</b>	2.300
40	32	10	1000	<b>199 132 016</b>	2.600
50	40	10	1600	<b>199 132 017</b>	3.000
63	50	10	3100	<b>199 132 018</b>	3.800

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	L8 [mm]	z [mm]
16	50	231	27	64	94	167	92	180	56	25	97	83	122	66	64
20	50	231	27	64	94	167	95	180	56	25	97	83	122	66	64
25	58	240	30	73	94	167	110	180	65	25	97	83	122	66	72
32	68	240	36	73	94	167	123	180	71	25	97	83	122	66	79
40	84	251	44	84	94	167	146	180	85	45	97	83	122	66	94
50	97	251	51	84	94	167	157	180	89	45	97	83	122	66	95
63	124	273	64	106	94	167	183	180	101	45	97	83	122	66	107





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## SYGEF® standard Ball valve type 132 24V With manual emergency override With fusion sockets metric

### Model:

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

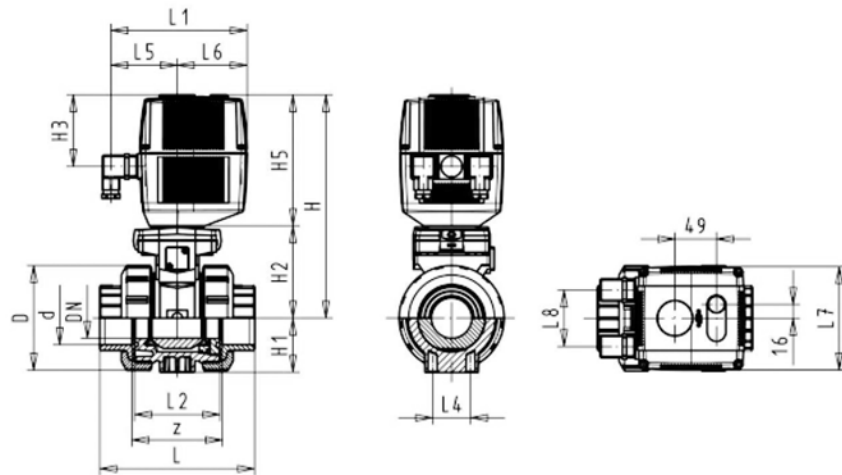
### Option:

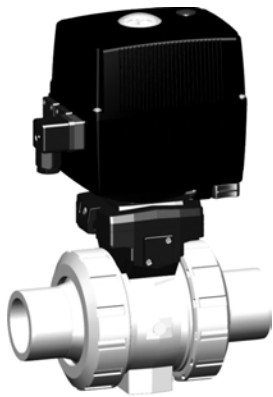
- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code	kg											
16	10	10	70	<b>199 132 052</b>	2.100											
20	15	10	185	<b>199 132 053</b>	2.100											
25	20	10	350	<b>199 132 054</b>	2.200											
32	25	10	700	<b>199 132 055</b>	2.300											
40	32	10	1000	<b>199 132 056</b>	2.600											
50	40	10	1600	<b>199 132 057</b>	3.000											
63	50	10	3100	<b>199 132 058</b>	3.800											

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	L8 [mm]	z [mm]
16	50	231	27	64	94	167	92	180	56	25	97	83	122	66	64
20	50	231	27	64	94	167	95	180	56	25	97	83	122	66	64
25	58	240	30	73	94	167	110	180	65	25	97	83	122	66	72
32	68	240	36	73	94	167	123	180	71	25	97	83	122	66	79
40	84	251	44	84	94	167	146	180	85	45	97	83	122	66	94
50	97	251	51	84	94	167	157	180	89	45	97	83	122	66	95
63	124	273	64	106	94	167	183	180	101	45	97	83	122	66	107





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**SYGEF® standard**  
**Ball valve type 132 100-230V**  
**With manual emergency override**  
**With fusion spigots metric**

**Model:**

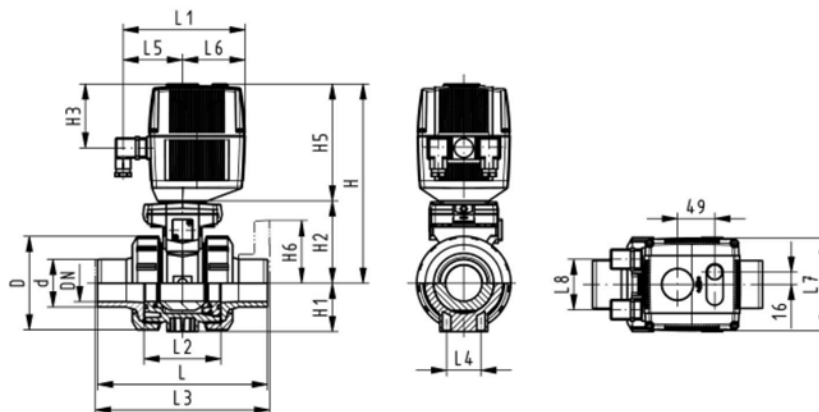
- Assignment of actuators EA21 (DN10/15-50), EA31 (DN65-100 if available)
- Voltage 100-230 V, 50-60 Hz
- Control range 90°<
- Control time 5 s/90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts

**Option:**

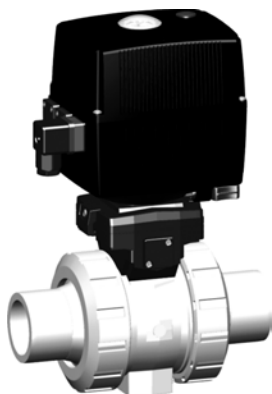
- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code	kg
16	10	10	70	<b>199 132 032</b>	2.100
20	15	10	185	<b>199 132 033</b>	2.100
25	20	10	350	<b>199 132 034</b>	2.200
32	25	10	700	<b>199 132 035</b>	2.300
40	32	10	1000	<b>199 132 036</b>	2.600
50	40	10	1600	<b>199 132 037</b>	3.000
63	50	10	3100	<b>199 132 038</b>	3.800

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	L8 [mm]
16	50	231	27	64	94	167	114	180	56	130	25	97	83	122	66
20	50	231	27	64	94	167	124	180	56	130	25	97	83	122	66
25	58	240	30	73	94	167	144	180	65	150	25	97	83	122	66
32	68	240	36	73	94	167	154	180	71	160	25	97	83	122	66
40	84	251	44	84	94	167	174	180	85	180	45	97	83	122	66
50	97	251	51	84	94	167	194	180	89	200	45	97	83	122	66
63	124	273	64	106	94	167	224	180	101	230	45	97	83	122	66







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## SYGEF® standard Ball valve type 132 24V With manual emergency override With fusion spigots metric

### Model:

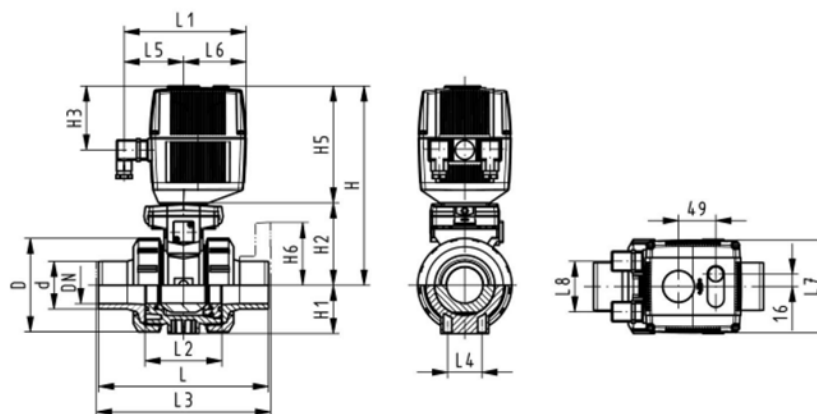
- Assignment of actuators EA21 (DN10/15-50), EA31 (DN65-100 if available)
- Voltage 24 V AC/DC
- Control range 90°<
- Control time 5 s/90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts

### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code	kg
16	10	10	70	<b>199 132 072</b>	2.100
20	15	10	185	<b>199 132 073</b>	2.100
25	20	10	350	<b>199 132 074</b>	2.200
32	25	10	700	<b>199 132 075</b>	2.300
40	32	10	1000	<b>199 132 076</b>	2.600
50	40	10	1600	<b>199 132 077</b>	3.000
63	50	10	3100	<b>199 132 078</b>	3.800

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	L8 [mm]
16	50	231	27	64	94	167	114	180	56	130	25	97	83	122	66
20	50	231	27	64	94	167	124	180	56	130	25	97	83	122	66
25	58	240	30	73	94	167	144	180	65	150	25	97	83	122	66
32	68	240	36	73	94	167	154	180	71	160	25	97	83	122	66
40	84	251	44	84	94	167	174	180	85	180	45	97	83	122	66
50	97	251	51	84	94	167	194	180	89	200	45	97	83	122	66
63	124	273	64	106	94	167	224	180	101	230	45	97	83	122	66





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## SYGEF® standard Ball valve type 132 100-230V With manual emergency override With butt fusion spigots metric

### Model:

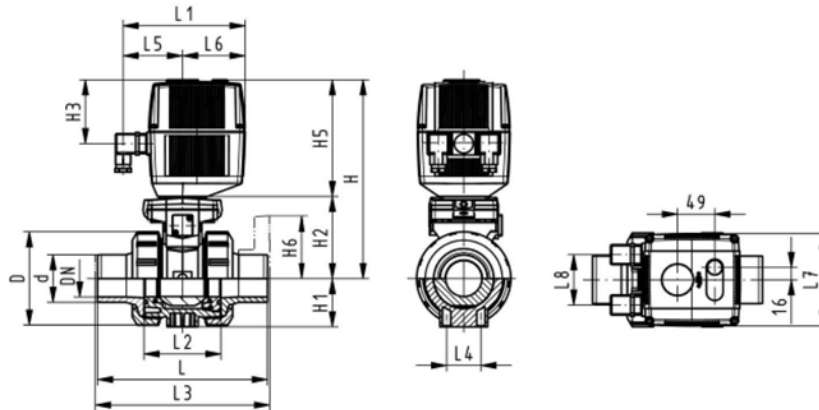
- Assignment of actuators EA21 (DN10/15-50), EA31 (DN65-100 if available)
- Voltage 100-230 V, 50-60 Hz
- Control range 90°<
- Control time 5 s/90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts

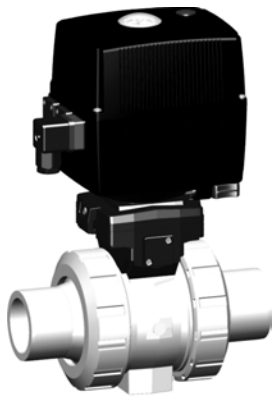
### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code
20	15	10	185	<b>199 132 113</b>
25	20	10	350	<b>199 132 114</b>
32	25	10	700	<b>199 132 115</b>
40	32	10	1000	<b>199 132 116</b>
50	40	10	1600	<b>199 132 117</b>
63	50	10	3100	<b>199 132 118</b>

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]
20	50	231	27	64	94	167	130	180	56	25	97	83	122	66
25	58	240	30	73	94	167	143	180	65	25	97	83	122	66
32	68	240	36	73	94	167	150	180	71	25	97	83	122	66
40	84	251	44	84	94	167	171	180	85	45	97	83	122	66
50	97	251	51	84	94	167	191	180	89	45	97	83	122	66
63	124	273	64	106	94	167	220	180	101	45	97	83	122	66





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## SYGEF® standard Ball valve type 132 24V With manual emergency override With butt fusion spigots metric

### Model:

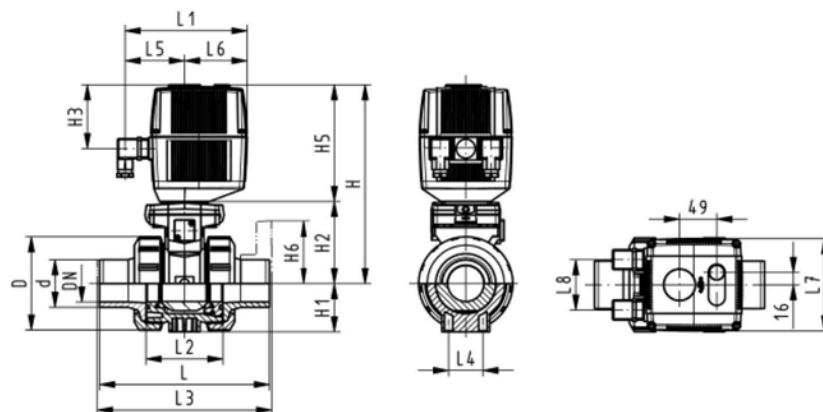
- Assignment of actuators EA21 (DN10/15-50), EA31 (DN65-100 if available)
- Voltage 24 V AC/DC
- Control range 90°<
- Control time 5 s/90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts

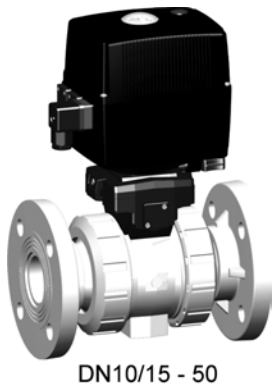
### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code
20	15	10	185	<b>199 132 153</b>
25	20	10	350	<b>199 132 154</b>
32	25	10	700	<b>199 132 155</b>
40	32	10	1000	<b>199 132 156</b>
50	40	10	1600	<b>199 132 157</b>
63	50	10	3100	<b>199 132 158</b>

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]
20	50	231	27	64	94	167	130	180	56	25	97	83	122	66
25	58	240	30	73	94	167	143	180	65	25	97	83	122	66
32	68	240	36	73	94	167	150	180	71	25	97	83	122	66
40	84	251	44	84	94	167	171	180	85	45	97	83	122	66
50	97	251	51	84	94	167	191	180	89	45	97	83	122	66
63	124	273	64	106	94	167	220	180	101	45	97	83	122	66





**SYGEF® standard**  
**Ball valve type 132 100-230V**  
**With manual emergency override**  
**With fixed flanges PVDF serrated metric**

**Model:**

- Assignment of actuators EA21 (DN10/15-50), EA31 (DN65-100 if available)
- 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
- Overall length EN 558-1
- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504

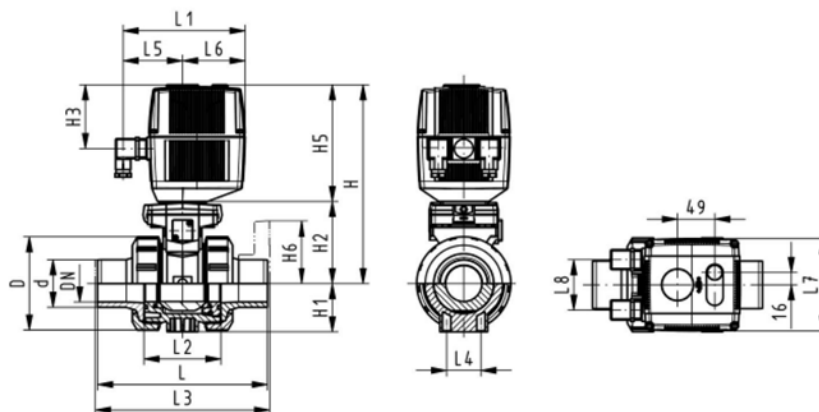
**Option:**

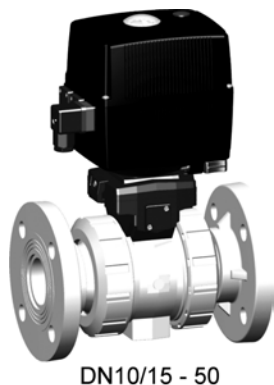
- Individual configuration of the valve (see form)

d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code	kg
20	15	½	10	185	<b>199 132 083</b>	2.300
25	20	¾	10	350	<b>199 132 084</b>	2.500
32	25	1	10	700	<b>199 132 085</b>	2.700
40	32	1 ¼	10	1000	<b>199 132 086</b>	3.200
50	40	1 ½	10	1600	<b>199 132 087</b>	3.700
63	50	2	10	3100	<b>199 132 088</b>	4.800

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
20	50	231	27	64	94	167	48	124	180	56	130	25	98	83	122
25	58	240	30	73	94	167	53	144	180	65	150	25	97	83	122
32	68	240	36	73	94	167	58	154	180	71	160	25	97	83	122
40	84	251	44	84	94	167	70	174	180	85	180	45	97	83	122
50	97	251	51	84	94	167	75	194	180	89	200	45	98	83	122
63	124	273	64	106	94	167	83	224	180	101	230	45	97	83	122

d [mm]	L8 [mm]
20	66
25	66
32	66
40	66
50	66
63	66





**SYGEF® standard**  
**Ball valve type 132 24V**  
**With manual emergency override**  
**With fixed flanges PVDF serrated metric**

**Model:**

- Assignment of actuators EA21 (DN10/15-50), EA31 (DN65-100 if available)
- Voltage 24 V AC/DC
- Control range 90°<
- Control time 5 s/90°<
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Overall length EN 558-1
- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504

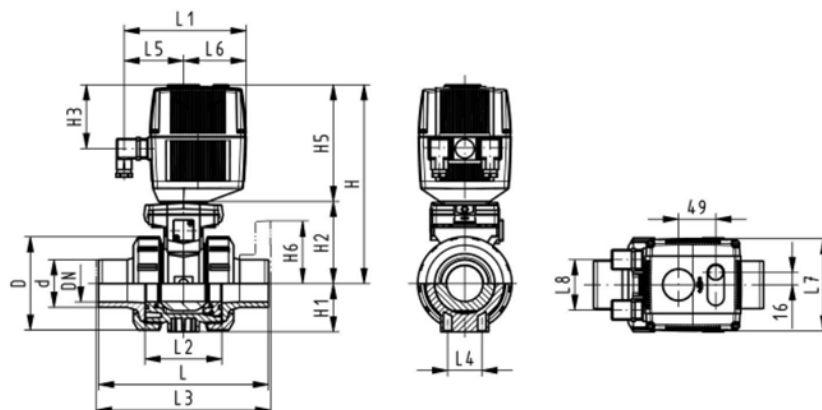
**Option:**

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code	kg
20	15	½	10	185	<b>199 132 093</b>	2.300
25	20	¾	10	350	<b>199 132 094</b>	2.500
32	25	1	10	700	<b>199 132 095</b>	2.700
40	32	1 ¼	10	1000	<b>199 132 096</b>	3.200
50	40	1 ½	10	1600	<b>199 132 097</b>	3.700
63	50	2	10	3100	<b>199 132 098</b>	4.800

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
20	50	231	27	64	94	167	48	124	180	56	130	25	98	83	122
25	58	240	30	73	94	167	53	144	180	65	150	25	97	83	122
32	68	240	36	73	94	167	58	154	180	71	160	25	97	83	122
40	84	251	44	84	94	167	70	174	180	85	180	45	97	83	122
50	97	251	51	84	94	167	75	194	180	89	200	45	98	83	122
63	124	273	64	106	94	167	83	224	180	101	230	45	97	83	122

d [mm]	L8 [mm]
20	66
25	66
32	66
40	66
50	66
63	66



# Copiable

## Configurator +GF+ Ball Valve Type 546 PVDF

### Ball valve

A01 Ball valve 546

#### Material

B15 PVDF

#### Dimension

C05 d 16 DN 10 3/8"  
 C06 d 20 DN 15 1/2"  
 C07 d 25 DN 20 3/4"  
 C08 d 32 DN 25 1"  
 C09 d 40 DN 32 1 1/4"  
 C10 d 50 DN 40 1 1/2"  
 C11 d 63 DN 50 2"

#### Version

D01 standard, PTFE ball seal  
 D02 oil-free, PTFE ball seal (only with specific connecting parts)  
 D04 silicon-free, PVDF ball seal (only with specific connecting parts)

#### Seals

E01 EPDM seals  
 E02 FPM seals

#### Threaded inserts

F01 without threaded inserts  
 F02 with threaded inserts

#### Connecting parts

G50 PVDF Fusion socket metric  
 G51 PVDF Socket fusion spigot metric  
 G52 PVDF Butt fusion spigot IR Plus® metric  
 G53 PVDF Threaded socket NPT  
 G64 Fixed flange PVDF serrated metric

#### Multi-functional module

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

#### Handle

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

#### Mounting plate

L01 without mounting plate  
 L02 with mounting plate

**A01 B15 C D E F G G I K L**

left right

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

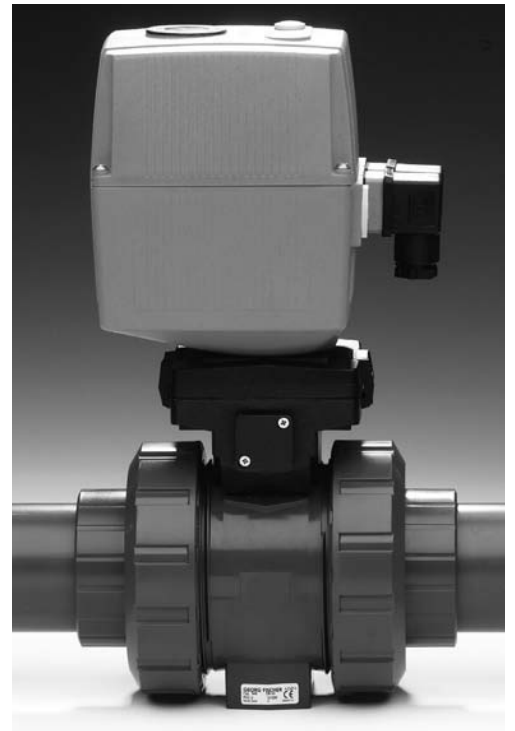
**We supply what you put together.**

# 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 any type of operation.

**We supply what you put together.**



### Electric Actuator EA11

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

### Accessories EA11

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

### Electric Actuator EA21/31

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

### Accessories EA21

- W01 No accessories
- W02 Heating element
- W03 Cycle time module
- W04 Cycle time monitoring
- W05 Cycles monitoring
- W06 Motor current monitoring
- W07 2 limit switches Ag, Ni
- W08 2 limit switches Gold
- W09 2 limit switches NPN
- W10 2 limit switches PNP
- 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

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

# Ball valves pneumatic

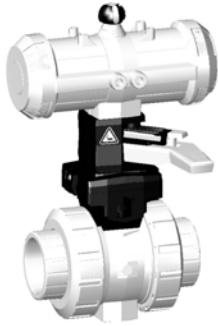
**SYGEF® standard**

**Ball valve type 232**

**Function FC (Fail safe to close)**

**With manual override**

**With fusion Sockets metric**



DN10/15 - 50

**Model:**

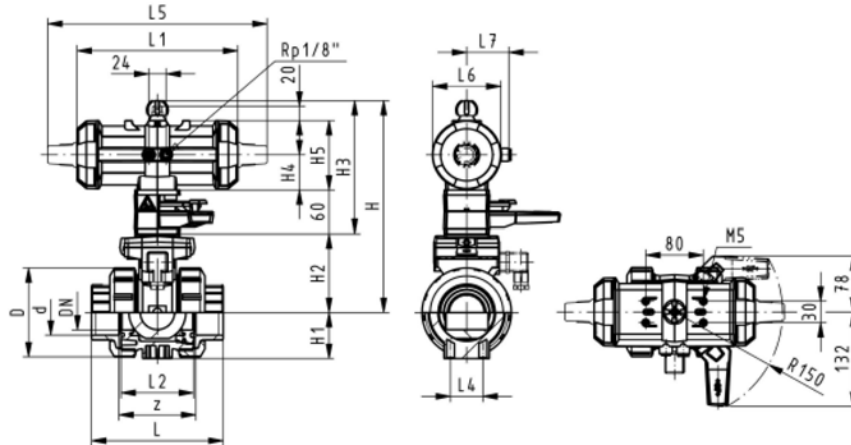
- Built on with pneumatic actuator PA11/21
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90°<) 1-2 s

**Option:**

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code	kg
16	10	10	70	<b>199 232 012</b>	1.500
20	15	10	185	<b>199 232 013</b>	1.500
25	20	10	350	<b>199 232 014</b>	1.600
32	25	10	700	<b>199 232 015</b>	1.700
40	32	10	1000	<b>199 232 016</b>	2.800
50	40	10	1600	<b>199 232 017</b>	3.100
63	50	10	3100	<b>199 232 018</b>	4.000

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	z [mm]
16	50	230	27	62	168	40	97	92	194	56	25	261	76	48	64
20	50	230	27	62	168	40	97	95	194	56	25	261	76	48	64
25	58	239	30	71	168	40	97	110	194	65	25	261	76	48	72
32	68	239	36	71	168	40	97	123	194	71	25	261	76	48	79
40	84	271	44	84	187	51	115	146	224	85	45	305	95	59	94
50	97	271	51	84	187	51	115	157	224	89	45	305	95	59	95
63	124	293	64	106	187	51	115	183	224	101	45	305	95	59	107







**SYGEF® standard**  
**Ball valve type 232**  
**Function FO (Fail safe to open)**  
**With manual override**  
**With fusion sockets metric**

**Model:**

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

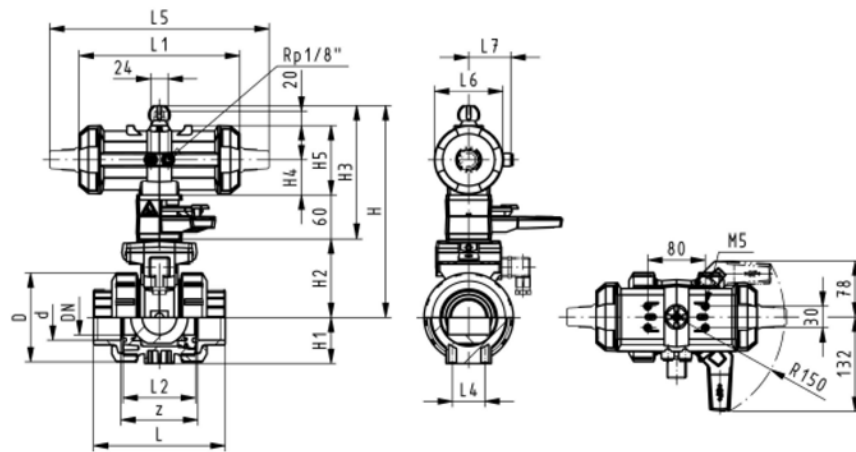
**Option:**

- Individual configuration of the valve (see form)

DN10/15 - 50

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code	kg
16	10	10	70	<b>199 232 052</b>	1.500
20	15	10	185	<b>199 232 053</b>	1.500
25	20	10	350	<b>199 232 054</b>	1.600
32	25	10	700	<b>199 232 055</b>	1.700
40	32	10	1000	<b>199 232 056</b>	2.800
50	40	10	1600	<b>199 232 057</b>	3.100
63	50	10	3100	<b>199 232 058</b>	4.000

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	z [mm]
16	50	230	27	62	168	40	97	92	194	56	25	261	76	48	64
20	50	230	27	62	168	40	97	95	194	56	25	261	76	48	64
25	58	239	30	71	168	40	97	110	194	65	25	261	76	48	72
32	68	239	36	71	168	40	97	123	194	71	25	261	76	48	79
40	84	271	44	84	187	51	115	146	224	85	45	305	95	59	94
50	97	271	51	84	187	51	115	157	224	89	45	305	95	59	95
63	124	293	64	106	187	51	115	183	224	101	45	305	95	59	107





**SYGEF® standard**  
**Ball valve type 232**  
**Function DA (Double acting)**  
**With manual override**  
**With fusion sockets metric**

**Model:**

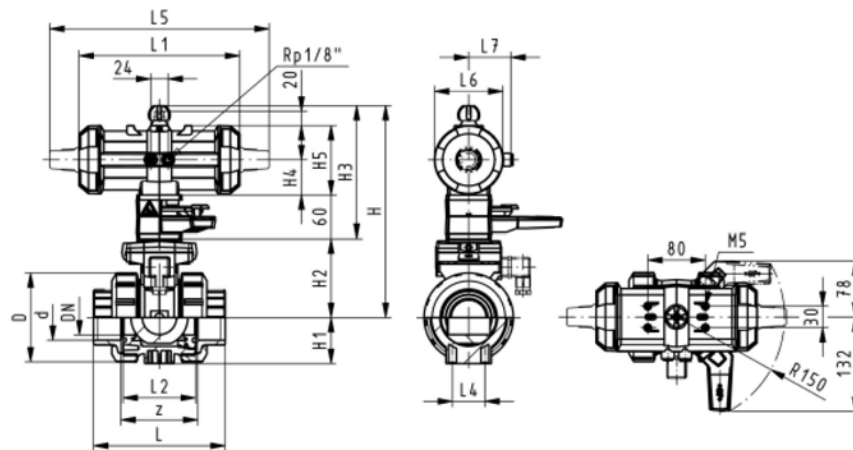
- Built on with pneumatic actuator PA11/21
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90°<) 1-2 s

**Option:**

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code	kg
16	10	10	70	<b>199 232 092</b>	1.500
20	15	10	185	<b>199 232 093</b>	1.500
25	20	10	350	<b>199 232 094</b>	1.600
32	25	10	700	<b>199 232 095</b>	1.700
40	32	10	1000	<b>199 232 096</b>	2.800
50	40	10	1600	<b>199 232 097</b>	3.100
63	50	10	3100	<b>199 232 098</b>	4.000

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	z [mm]
16	50	230	27	62	168	40	97	92	194	56	25	261	76	48	64
20	50	230	27	62	168	40	97	95	194	56	25	261	76	48	64
25	58	239	30	71	168	40	97	110	194	65	25	261	76	48	72
32	68	239	36	71	168	40	97	123	194	71	25	261	76	48	79
40	84	271	44	84	187	51	115	146	224	85	45	305	95	59	94
50	97	271	51	84	187	51	115	157	224	89	45	305	95	59	95
63	124	293	64	106	187	51	115	183	224	101	45	305	95	59	107





DN10/15 - 50

# SYGEF® standard

## Ball valve type 232

### Function FC (Fail safe to close)

### With manual override

### With fusion spigots metric

**Model:**

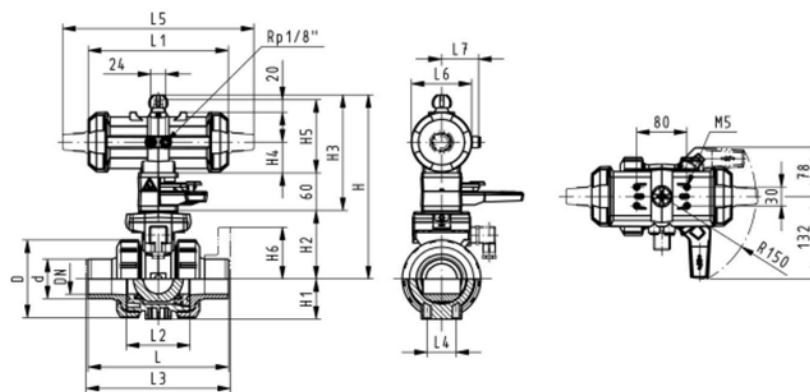
- Built on with pneumatic actuator PA11/21
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90°<) 1-2 s

**Option:**

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code	kg
16	10	10	70	<b>199 232 032</b>	1.500
20	15	10	185	<b>199 232 033</b>	1.500
25	20	10	350	<b>199 232 034</b>	1.600
32	25	10	700	<b>199 232 035</b>	1.700
40	32	10	1000	<b>199 232 036</b>	2.800
50	40	10	1600	<b>199 232 037</b>	3.100
63	50	10	3100	<b>199 232 038</b>	4.000

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
16	50	230	27	62	168	40	97	92	194	56	130	25	261	76	48
20	50	230	27	62	168	40	97	95	194	56	130	25	261	76	48
25	58	239	30	71	168	40	97	110	194	65	150	25	261	76	48
32	68	239	36	71	168	40	97	123	194	71	160	25	261	76	48
40	84	271	44	84	187	51	115	146	224	85	180	45	305	95	59
50	97	271	51	84	187	51	115	157	224	89	200	45	305	95	59
63	124	293	64	106	187	51	115	183	224	101	230	45	305	95	59





DN10/15 - 50

**SYGEF® standard**  
**Ball valve type 232**  
**Function FO (Fail safe to open)**  
**With manual override**  
**With fusion spigots metric**

**Model:**

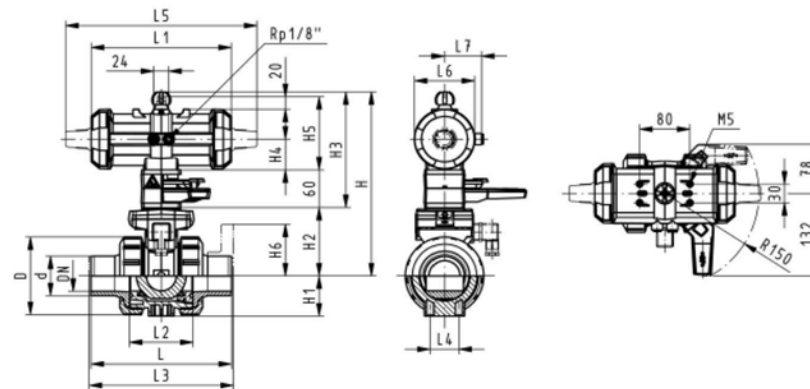
- Built on with pneumatic actuator PA11/21
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90°<) 1-2 s

**Option:**

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code	kg
16	10	10	70	<b>199 232 072</b>	1.500
20	15	10	185	<b>199 232 073</b>	1.500
25	20	10	350	<b>199 232 074</b>	1.600
32	25	10	700	<b>199 232 075</b>	1.700
40	32	10	1000	<b>199 232 076</b>	2.800
50	40	10	1600	<b>199 232 077</b>	3.100
63	50	10	3100	<b>199 232 078</b>	4.000

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
16	50	230	27	62	168	40	97	92	194	56	130	25	261	76	48
20	50	230	27	62	168	40	97	95	194	56	130	25	261	76	48
25	58	239	30	71	168	40	97	110	194	65	150	25	261	76	48
32	68	239	36	71	168	40	97	123	194	71	160	25	261	76	48
40	84	271	44	84	187	51	115	146	224	85	180	45	305	95	59
50	97	271	51	84	187	51	115	157	224	89	200	45	305	95	59
63	124	293	64	106	187	51	115	183	224	101	230	45	305	95	59





DN10/15 - 50

**SYGEF® standard**  
**Ball valve type 232**  
**Function DA (Double acting)**  
**With manual override**  
**With fusion spigots metric**

**Model:**

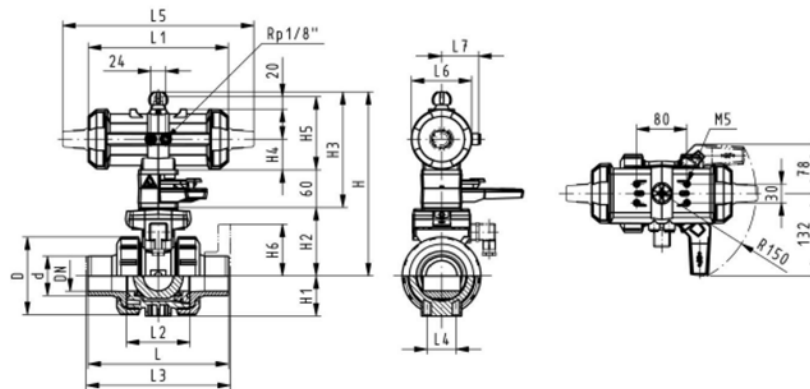
- Built on with pneumatic actuator PA11/21
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90°<) 1-2 s

**Option:**

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code	kg
16	10	10	70	<b>199 232 112</b>	1.500
20	15	10	185	<b>199 232 113</b>	1.500
25	20	10	350	<b>199 232 114</b>	1.600
32	25	10	700	<b>199 232 115</b>	1.700
40	32	10	1000	<b>199 232 116</b>	2.800
50	40	10	1600	<b>199 232 117</b>	3.100
63	50	10	3100	<b>199 232 118</b>	4.000

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
16	50	230	27	62	168	40	97	92	194	56	130	25	261	76	48
20	50	230	27	62	168	40	97	95	194	56	130	25	261	76	48
25	58	239	30	71	168	40	97	110	194	65	150	25	261	76	48
32	68	239	36	71	168	40	97	123	194	71	160	25	261	76	48
40	84	271	44	84	187	51	115	146	224	85	180	45	305	95	59
50	97	271	51	84	187	51	115	157	224	89	200	45	305	95	59
63	124	293	64	106	187	51	115	183	224	101	230	45	305	95	59





DN10/15 - 50

**SYGEF® standard**  
**Ball valve type 232**  
**Function FC (Fail safe to close)**  
**With manual override**  
**With butt fusion spigots metric**

**Model:**

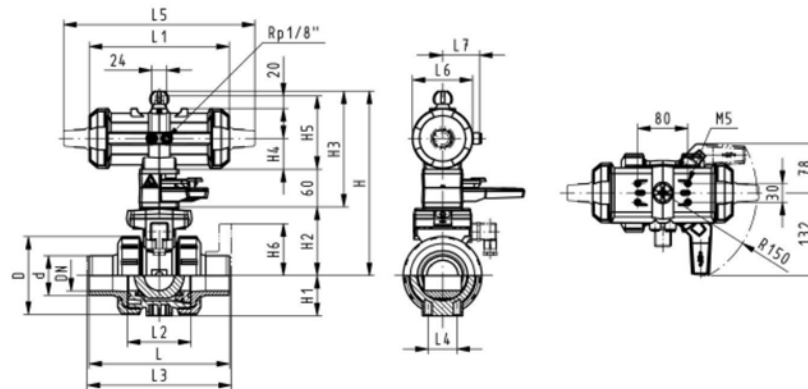
- Built on with pneumatic actuator PA11/21
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90°<) 1-2 s

**Option:**

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code
20	15	10	185	<b>199 232 713</b>
25	20	10	350	<b>199 232 714</b>
32	25	10	700	<b>199 232 715</b>
40	32	10	1000	<b>199 232 716</b>
50	40	10	1600	<b>199 232 717</b>
63	50	10	3100	<b>199 232 718</b>

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





DN10/15 - 50

**SYGEF® standard**  
**Ball valve type 232**  
**Function FO (Fail safe to open)**  
**With manual override**  
**With butt fusion spigots metric**

**Model:**

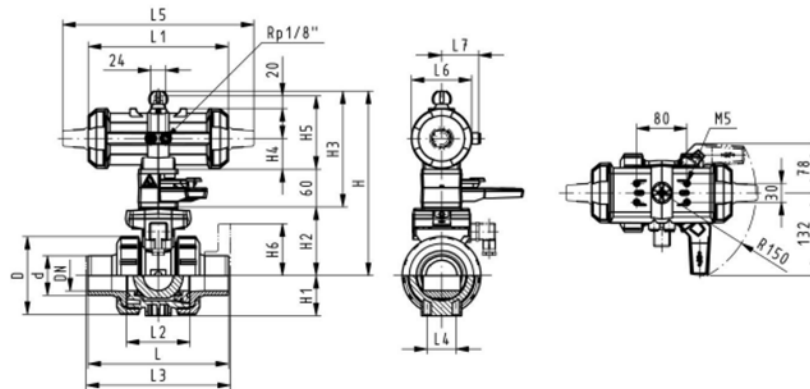
- Built on with pneumatic actuator PA11/21
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90°<) 1-2 s

**Option:**

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code
20	15	10	185	<b>199 232 753</b>
25	20	10	350	<b>199 232 754</b>
32	25	10	700	<b>199 232 755</b>
40	32	10	1000	<b>199 232 756</b>
50	40	10	1600	<b>199 232 757</b>
63	50	10	3100	<b>199 232 758</b>

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





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**SYGEF® standard**  
**Ball valve type 232**  
**Function DA (Double acting)**  
**With manual override**  
**With butt fusion spigots metric**

**Model:**

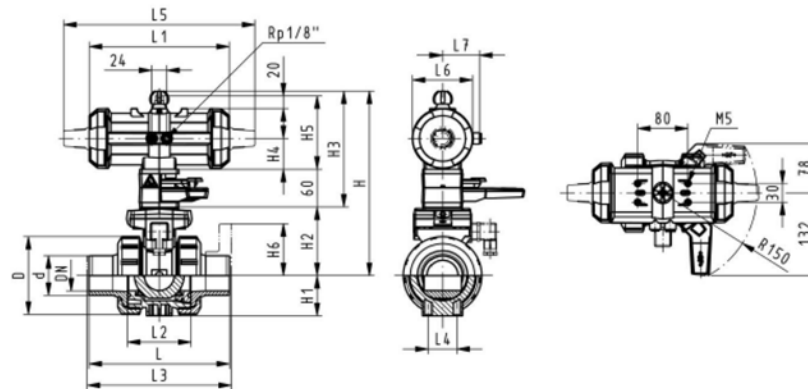
- Built on with pneumatic actuator PA11/21
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90°<) 1-2 s

**Option:**

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code
20	15	10	185	<b>199 232 793</b>
25	20	10	350	<b>199 232 794</b>
32	25	10	700	<b>199 232 795</b>
40	32	10	1000	<b>199 232 796</b>
50	40	10	1600	<b>199 232 797</b>
63	50	10	3100	<b>199 232 798</b>

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







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**SYGEF® standard**  
**Ball valve type 232**  
**Function FC (Fail safe to close)**  
**With manual override**  
**With fixed flanges PVDF serrated metric**

**Model:**

- Built on with pneumatic actuator PA11/21
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90°<) 1-2 s
- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504

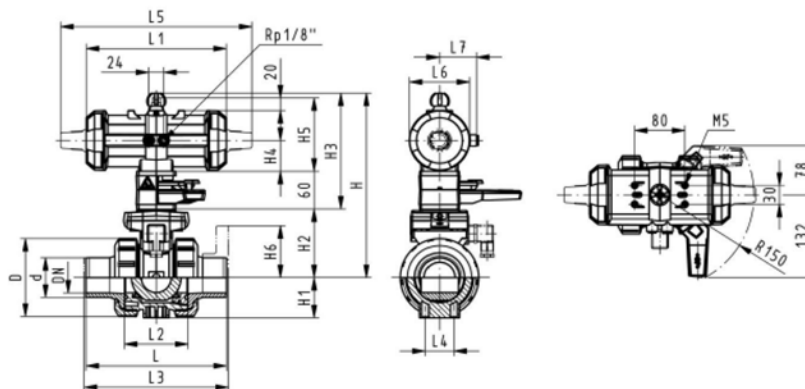
**Option:**

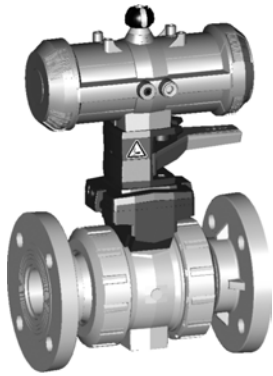
- Individual configuration of the valve (see form)

d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code	kg
20	15	½	10	185	<b>199 232 003</b>	1.700
25	20	¾	10	350	<b>199 232 004</b>	1.900
32	25	1	10	700	<b>199 232 005</b>	2.100
40	32	1 ¼	10	1000	<b>199 232 006</b>	3.400
50	40	1 ½	10	1600	<b>199 232 007</b>	3.900
63	50	2	10	3100	<b>199 232 008</b>	5.000

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]
20	50	230	27	62	168	40	97	48	124	194	56	130	25	261	76
25	58	239	30	71	168	40	97	53	144	194	65	150	25	261	76
32	68	239	36	71	168	40	97	58	154	194	71	160	25	261	76
40	84	271	44	84	187	51	115	70	174	224	85	180	45	305	95
50	97	271	51	84	187	51	115	75	194	224	89	200	45	305	95
63	124	293	64	106	187	51	115	83	224	224	101	230	45	305	95

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





DN10/15 - 50

**SYGEF® standard**  
**Ball valve type 232**  
**Function FO (Fail safe to open)**  
**With manual override**  
**With fixed flanges PVDF serrated metric**

**Model:**

- Built on with pneumatic actuator PA11/21
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90°<) 1-2 s
- Overall length EN 558-1
- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504

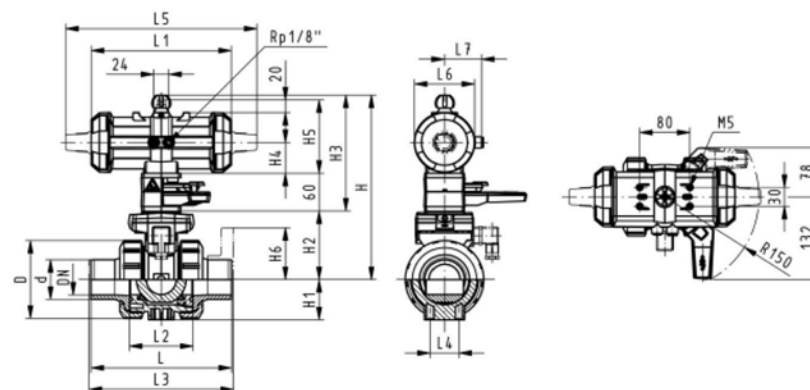
**Option:**

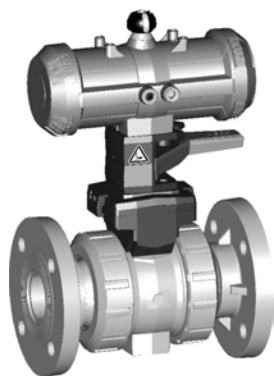
- Individual configuration of the valve (see form)

d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code	kg
20	15	½	10	185	<b>199 232 023</b>	1.700
25	20	¾	10	350	<b>199 232 024</b>	1.900
32	25	1	10	700	<b>199 232 025</b>	2.100
40	32	1 ¼	10	1000	<b>199 232 026</b>	3.400
50	40	1 ½	10	1600	<b>199 232 027</b>	3.900
63	50	2	10	3100	<b>199 232 028</b>	5.000

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]
20	50	230	27	62	168	40	97	48	124	194	56	130	25	261	76
25	58	239	30	71	168	40	97	53	144	194	65	150	25	261	76
32	68	239	36	71	168	40	97	58	154	194	71	160	25	261	76
40	84	271	44	84	187	51	115	70	174	224	85	180	45	305	95
50	97	271	51	84	187	51	115	75	194	224	89	200	45	305	95
63	124	293	64	106	187	51	115	83	224	224	101	230	45	305	95

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





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**SYGEF® standard**  
**Ball valve type 232**  
**Function DA (Double acting)**  
**With manual override**  
**With fixed flanges PVDF serrated metric**

**Model:**

- Built on with pneumatic actuator PA11/21
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90°<) 1-2 s
- Overall length EN 558-1
- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504

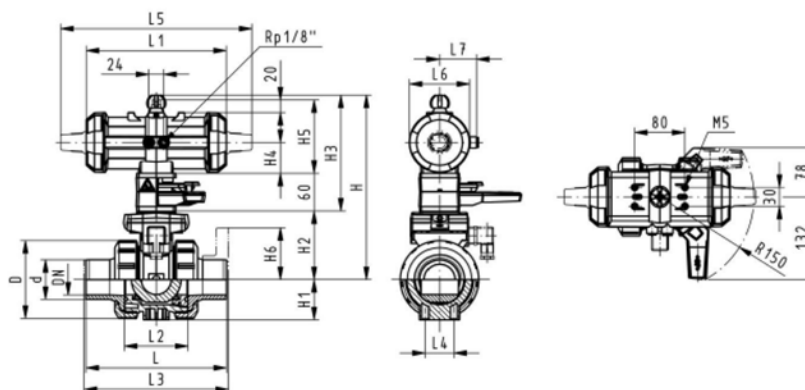
**Option:**

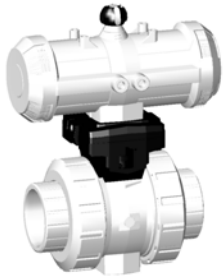
- Individual configuration of the valve (see form)

d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code	kg
20	15	½	10	185	<b>199 232 043</b>	1.700
25	20	¾	10	350	<b>199 232 044</b>	1.900
32	25	1	10	700	<b>199 232 045</b>	2.100
40	32	1 ¼	10	1000	<b>199 232 046</b>	3.400
50	40	1 ½	10	1600	<b>199 232 047</b>	3.900
63	50	2	10	3100	<b>199 232 048</b>	5.000

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]
20	50	230	27	62	168	40	97	48	124	194	56	130	25	261	76
25	58	239	30	71	168	40	97	53	144	194	65	150	25	261	76
32	68	239	36	71	168	40	97	58	154	194	71	160	25	261	76
40	84	271	44	84	187	51	115	70	174	224	85	180	45	305	95
50	97	271	51	84	187	51	115	75	194	224	89	200	45	305	95
63	124	293	64	106	187	51	115	83	224	224	101	230	45	305	95

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





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**SYGEF® standard**  
**Ball valve type 232**  
**Function FC (Fail safe to close)**  
**Without manual override**  
**With fusion sockets metric**

**Model:**

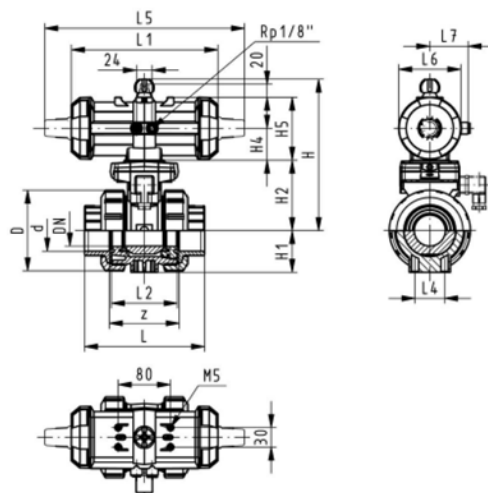
- Built on with pneumatic actuator PA11/21
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90°<) 1-2 s

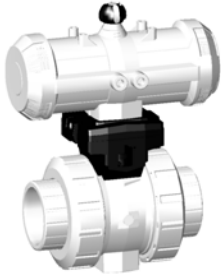
**Option:**

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code	kg
16	10	10	70	<b>199 232 132</b>	1.200
20	15	10	185	<b>199 232 133</b>	1.200
25	20	10	350	<b>199 232 134</b>	1.300
32	25	10	700	<b>199 232 135</b>	1.400
40	32	10	1000	<b>199 232 136</b>	2.500
50	40	10	1600	<b>199 232 137</b>	2.800
63	50	10	3100	<b>199 232 138</b>	3.700

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	z [mm]
16	50	167	27	62	40	97	92	194	56	25	261	76	48	64
20	50	167	27	62	40	97	95	194	56	25	261	76	48	64
25	58	176	30	71	40	97	110	194	65	25	261	76	48	72
32	68	176	36	71	40	97	123	194	71	25	261	76	48	79
40	84	210	44	84	51	115	146	224	85	45	305	95	59	94
50	97	210	51	84	51	115	157	224	89	45	305	95	59	95
63	124	232	64	106	51	115	183	224	101	45	305	95	59	107





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**SYGEF® standard**  
**Ball valve type 232**  
**Function FO (Fail safe to open)**  
**Without manual override**  
**With fusion sockets metric**

**Model:**

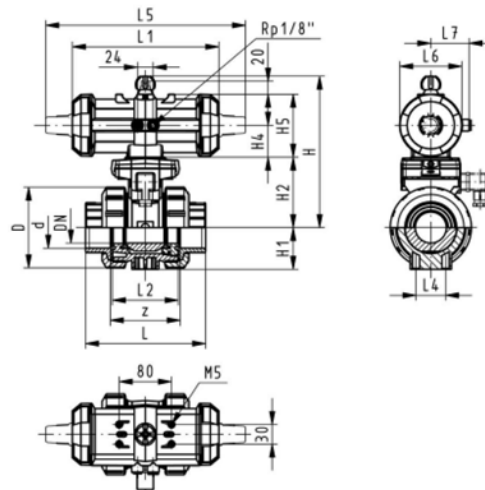
- Built on with pneumatic actuator PA11/21
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90°<) 1-2 s

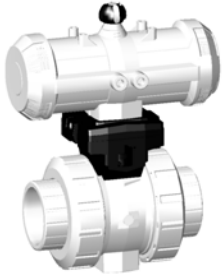
**Option:**

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code	kg
16	10	10	70	<b>199 232 172</b>	1.200
20	15	10	185	<b>199 232 173</b>	1.200
25	20	10	350	<b>199 232 174</b>	1.300
32	25	10	700	<b>199 232 175</b>	1.400
40	32	10	1000	<b>199 232 176</b>	2.500
50	40	10	1600	<b>199 232 177</b>	2.800
63	50	10	3100	<b>199 232 178</b>	3.700

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	z [mm]
16	50	167	27	62	40	97	92	194	56	25	261	76	48	64
20	50	167	27	62	40	97	95	194	56	25	261	76	48	64
25	58	176	30	71	40	97	110	194	65	25	261	76	48	72
32	68	176	36	71	40	97	123	194	71	25	261	76	48	79
40	84	210	44	84	51	115	146	224	85	45	305	95	59	94
50	97	210	51	84	51	115	157	224	89	45	305	95	59	95
63	124	232	64	106	51	115	183	224	101	45	305	95	59	107





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**SYGEF® standard**  
**Ball valve type 232**  
**Function DA (Double acting)**  
**Without manual override**  
**With fusion sockets metric**

**Model:**

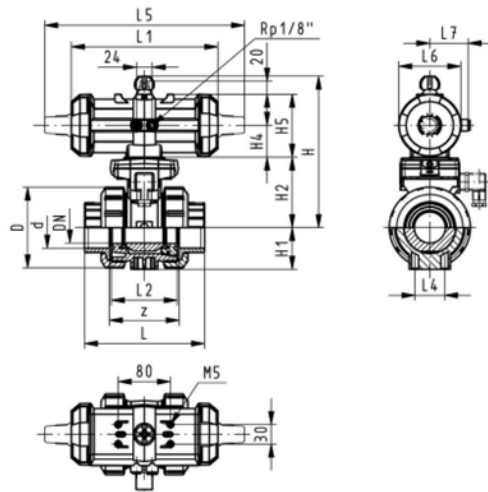
- Built on with pneumatic actuator PA11/21
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90°<) 1-2 s

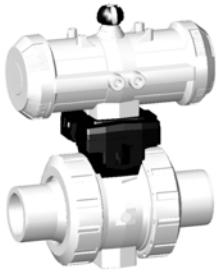
**Option:**

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code	kg
16	10	10	70	<b>199 232 212</b>	1.200
20	15	10	185	<b>199 232 213</b>	1.200
25	20	10	350	<b>199 232 214</b>	1.300
32	25	10	700	<b>199 232 215</b>	1.400
40	32	10	1000	<b>199 232 216</b>	2.500
50	40	10	1600	<b>199 232 217</b>	2.800
63	50	10	3100	<b>199 232 218</b>	3.700

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]	z [mm]
16	50	167	27	62	40	97	92	194	56	25	261	76	48	64
20	50	167	27	62	40	97	95	194	56	25	261	76	48	64
25	58	176	30	71	40	97	110	194	65	25	261	76	48	72
32	68	176	36	71	40	97	123	194	71	25	261	76	48	79
40	84	210	44	84	51	115	146	224	85	45	305	95	59	94
50	97	210	51	84	51	115	157	224	89	45	305	95	59	95
63	124	232	64	106	51	115	183	224	101	45	305	95	59	107





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**SYGEF® standard**  
**Ball valve type 232**  
**Function FC (Fail safe to close)**  
**Without manual override**  
**With fusion spigots metric**

**Model:**

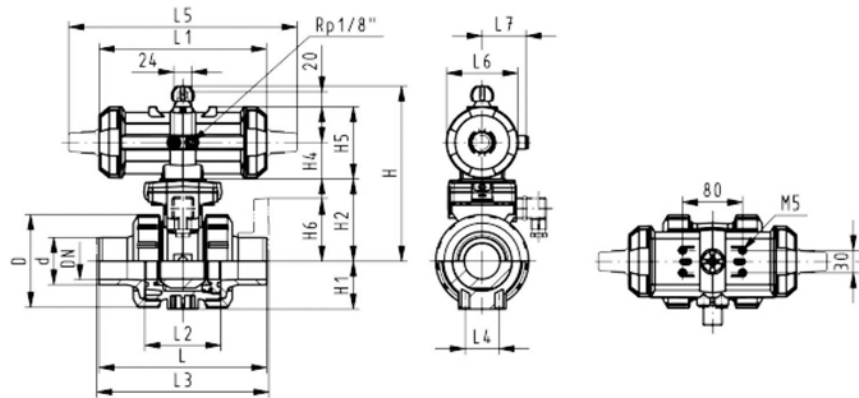
- Built on with pneumatic actuator PA11/21
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90°<) 1-2 s

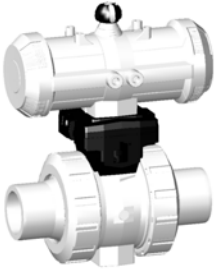
**Option:**

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code	kg
16	10	10	70	<b>199 232 152</b>	1.200
20	15	10	185	<b>199 232 153</b>	1.200
25	20	10	350	<b>199 232 154</b>	1.300
32	25	10	700	<b>199 232 155</b>	1.400
40	32	10	1000	<b>199 232 156</b>	2.500
50	40	10	1600	<b>199 232 157</b>	2.800
63	50	10	3100	<b>199 232 158</b>	3.700

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
16	50	167	27	62	40	97	114	194	56	130	25	261	76	48
20	50	167	27	62	40	97	124	194	56	130	25	261	76	48
25	58	176	30	71	40	97	144	194	65	150	25	261	76	48
32	68	176	36	71	40	97	154	194	71	160	25	261	76	48
40	84	210	44	84	51	115	174	224	85	180	45	305	95	59
50	97	210	51	84	51	115	194	224	89	200	45	305	95	59
63	124	232	64	106	51	115	224	224	101	230	45	305	95	59





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**SYGEF® standard**  
**Ball valve type 232**  
**Function FO (Fail safe to open)**  
**Without manual override**  
**With fusion spigots metric**

**Model:**

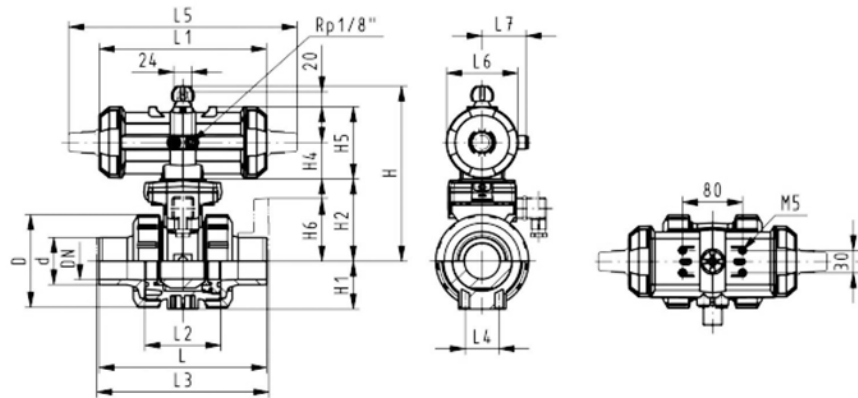
- Built on with pneumatic actuator PA11/21
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90°<) 1-2 s

**Option:**

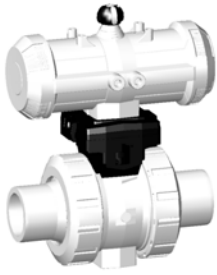
- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code	kg
16	10	10	70	<b>199 232 192</b>	1.200
20	15	10	185	<b>199 232 193</b>	1.200
25	20	10	350	<b>199 232 194</b>	1.300
32	25	10	700	<b>199 232 195</b>	1.400
40	32	10	1000	<b>199 232 196</b>	2.500
50	40	10	1600	<b>199 232 197</b>	2.800
63	50	10	3100	<b>199 232 198</b>	3.700

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
16	50	167	27	62	40	97	114	194	56	130	25	261	76	48
20	50	167	27	62	40	97	124	194	56	130	25	261	76	48
25	58	176	30	71	40	97	144	194	65	150	25	261	76	48
32	68	176	36	71	40	97	154	194	71	160	25	261	76	48
40	84	210	44	84	51	115	174	224	85	180	45	305	95	59
50	97	210	51	84	51	115	194	224	89	200	45	305	95	59
63	124	232	64	106	51	115	224	224	101	230	45	305	95	59







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**SYGEF® standard**  
**Ball valve type 232**  
**Function DA (Double acting)**  
**Without manual override**  
**With fusion spigots metric**

**Model:**

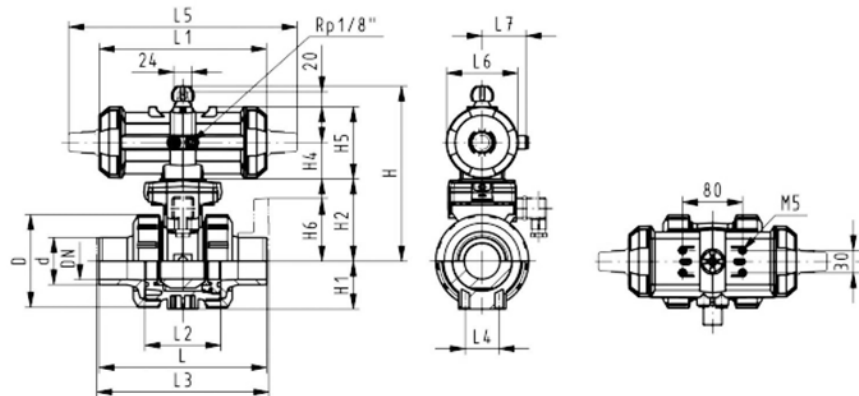
- Built on with pneumatic actuator PA11/21
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90°<) 1-2 s

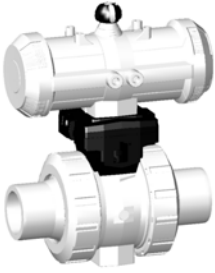
**Option:**

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code	kg
16	10	10	70	<b>199 232 232</b>	1.200
20	15	10	185	<b>199 232 233</b>	1.200
25	20	10	350	<b>199 232 234</b>	1.300
32	25	10	700	<b>199 232 235</b>	1.400
40	32	10	1000	<b>199 232 236</b>	2.500
50	40	10	1600	<b>199 232 237</b>	2.800
63	50	10	3100	<b>199 232 238</b>	3.700

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H4 [mm]	H5 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
16	50	167	27	62	40	97	114	194	56	130	25	261	76	48
20	50	167	27	62	40	97	124	194	56	130	25	261	76	48
25	58	176	30	71	40	97	144	194	65	150	25	261	76	48
32	68	176	36	71	40	97	154	194	71	160	25	261	76	48
40	84	210	44	84	51	115	174	224	85	180	45	305	95	59
50	97	210	51	84	51	115	194	224	89	200	45	305	95	59
63	124	232	64	106	51	115	224	224	101	230	45	305	95	59





DN10/15 - 50

**SYGEF® standard**  
**Ball valve type 232**  
**Function FC (Fail safe to close)**  
**Without manual override**  
**With butt fusion spigots metric**

**Model:**

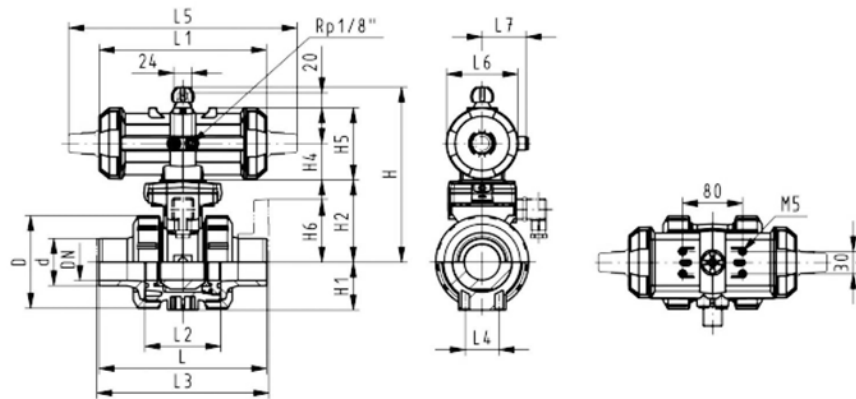
- Built on with pneumatic actuator PA11/21
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90°<) 1-2 s

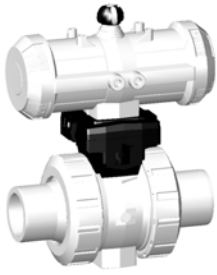
**Option:**

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code
20	15	10	185	<b>199 232 833</b>
25	20	10	350	<b>199 232 834</b>
32	25	10	700	<b>199 232 835</b>
40	32	10	1000	<b>199 232 836</b>
50	40	10	1600	<b>199 232 837</b>
63	50	10	3100	<b>199 232 838</b>

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]
20	50	167	27	62	40	97	130	194	56	25	261	76	48
25	58	176	30	71	40	97	130	194	65	25	261	76	48
32	68	176	36	71	40	97	130	194	71	25	261	76	48
40	84	210	44	84	51	115	130	224	85	45	305	95	59
50	97	210	51	84	51	115	130	224	89	45	305	95	59
63	124	232	64	106	51	115	130	224	101	45	305	95	59





DN10/15 - 50

**SYGEF® standard**  
**Ball valve type 232**  
**Function FO (Fail safe to open)**  
**Without manual override**  
**With butt fusion spigots metric**

**Model:**

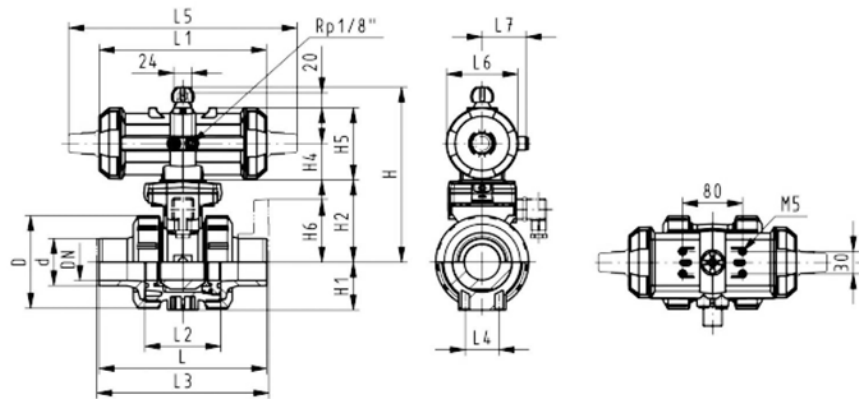
- Built on with pneumatic actuator PA11/21
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90°<) 1-2 s

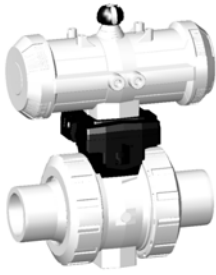
**Option:**

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code
20	15	10	185	<b>199 232 873</b>
25	20	10	350	<b>199 232 874</b>
32	25	10	700	<b>199 232 875</b>
40	32	10	1000	<b>199 232 876</b>
50	40	10	1600	<b>199 232 877</b>
63	50	10	3100	<b>199 232 878</b>

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]
20	50	167	27	62	40	97	130	194	56	25	261	76	48
25	58	176	30	71	40	97	130	194	65	25	261	76	48
32	68	176	36	71	40	97	130	194	71	25	261	76	48
40	84	210	44	84	51	115	130	224	85	45	305	95	59
50	97	210	51	84	51	115	130	224	89	45	305	95	59
63	124	232	64	106	51	115	130	224	101	45	305	95	59





DN10/15 - 50

**SYGEF® standard**  
**Ball valve type 232**  
**Function DA (Double acting)**  
**Without manual override**  
**With butt fusion spigots metric**

**Model:**

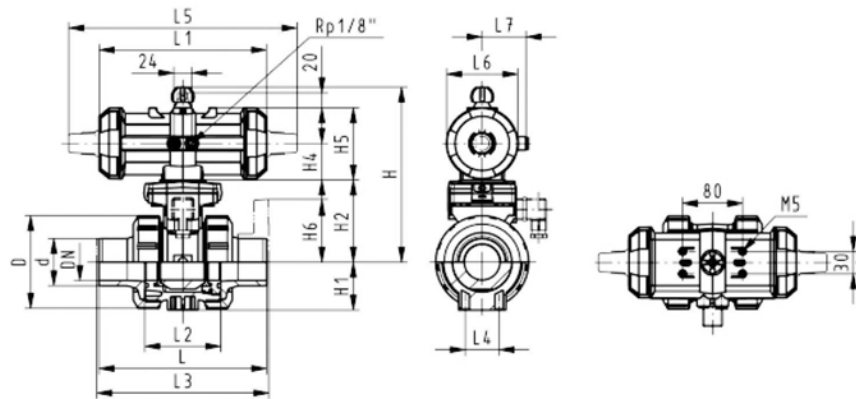
- Built on with pneumatic actuator PA11/21
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90°<) 1-2 s

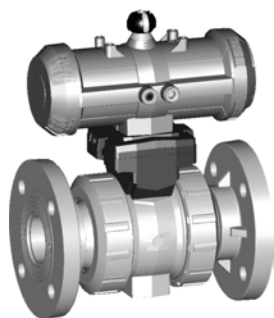
**Option:**

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code
20	15	10	185	<b>199 232 913</b>
25	20	10	350	<b>199 232 914</b>
32	25	10	700	<b>199 232 915</b>
40	32	10	1000	<b>199 232 916</b>
50	40	10	1600	<b>199 232 917</b>
63	50	10	3100	<b>199 232 918</b>

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]
20	50	167	27	62	40	97	130	194	56	25	261	76	48
25	58	176	30	71	40	97	130	194	65	25	261	76	48
32	68	176	36	71	40	97	130	194	71	25	261	76	48
40	84	210	44	84	51	115	130	224	85	45	305	95	59
50	97	210	51	84	51	115	130	224	89	45	305	95	59
63	124	232	64	106	51	115	130	224	101	45	305	95	59





DN10/15 - 50

**SYGEF® standard**  
**Ball valve type 232**  
**Function FC (Fail safe to close)**  
**Without manual override**  
**With fixed flanges PVDF serrated metric**

**Model:**

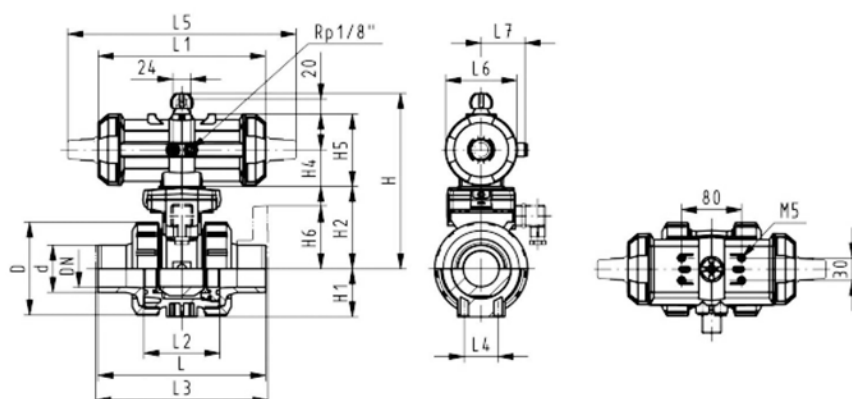
- Built on with pneumatic actuator PA11/21
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90°<) 1-2 s
- Overall length EN 558-1
- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504

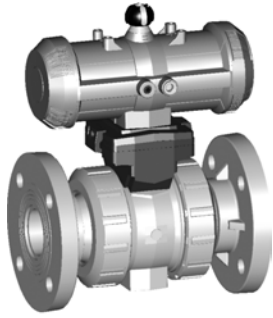
**Option:**

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code	kg
20	15	½	10	185	<b>199 232 063</b>	1.400
25	20	¾	10	350	<b>199 232 064</b>	1.600
32	25	1	10	700	<b>199 232 065</b>	1.800
40	32	1 ¼	10	1000	<b>199 232 066</b>	3.100
50	40	1 ½	10	1600	<b>199 232 067</b>	3.600
63	50	2	10	3100	<b>199 232 068</b>	4.700

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H4 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
20	50	167	27	62	40	97	48	124	194	56	130	25	261	76	48
25	58	176	30	71	40	97	53	144	194	65	150	25	261	76	48
32	68	176	36	71	40	97	58	154	194	71	160	25	261	76	48
40	84	210	44	84	51	115	70	174	224	85	180	45	305	95	59
50	97	210	51	84	51	115	75	194	224	89	200	45	305	95	59
63	124	232	64	106	51	115	83	224	224	101	230	45	305	95	59





DN10/15 - 50

**SYGEF® standard**  
**Ball valve type 232**  
**Function FO (Fail safe to open)**  
**Without manual override**  
**With fixed flanges PVDF serrated metric**

**Model:**

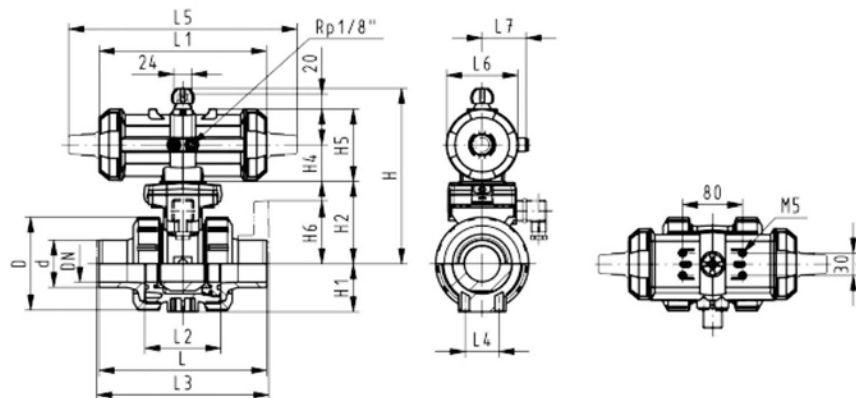
- Built on with pneumatic actuator PA11/21
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90° < 1-2 s
- Overall length EN 558-1
- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504

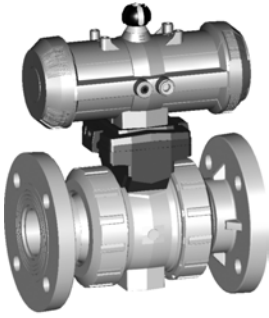
**Option:**

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code	kg
20	15	½	10	185	<b>199 232 083</b>	1.400
25	20	¾	10	350	<b>199 232 084</b>	1.600
32	25	1	10	700	<b>199 232 085</b>	1.800
40	32	1 ¼	10	1000	<b>199 232 086</b>	3.100
50	40	1 ½	10	1600	<b>199 232 087</b>	3.600
63	50	2	10	3100	<b>199 232 088</b>	4.700

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H4 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
20	50	167	27	62	40	97	48	124	194	56	130	25	261	76	48
25	58	176	30	71	40	97	53	144	194	65	150	25	261	76	48
32	68	176	36	71	40	97	58	154	194	71	160	25	261	76	48
40	84	210	44	84	51	115	70	174	224	85	180	45	305	95	59
50	97	210	51	84	51	115	75	194	224	89	200	45	305	95	59
63	124	232	64	106	51	115	83	224	224	101	230	45	305	95	59





DN10/15 - 50

**SYGEF® standard**  
**Ball valve type 232**  
**Function DA (Double acting)**  
**Without manual override**  
**With fixed flanges PVDF serrated metric**

**Model:**

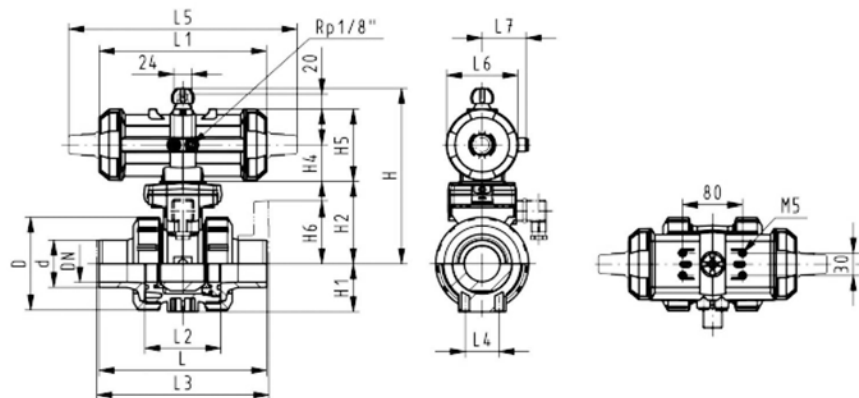
- Built on with pneumatic actuator PA11/21
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90°<) 1-2 s
- Overall length EN 558-1
- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504

**Option:**

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	Inch	PN	kv-value ( $\Delta p=1$ bar) [l/min]	FPM Code	kg
20	15	½	10	185	<b>199 232 103</b>	1.400
25	20	¾	10	350	<b>199 232 104</b>	1.600
32	25	1	10	700	<b>199 232 105</b>	1.800
40	32	1 ¼	10	1000	<b>199 232 106</b>	3.100
50	40	1 ½	10	1600	<b>199 232 107</b>	3.600
63	50	2	10	3100	<b>199 232 108</b>	4.700

d [mm]	D [mm]	H [mm]	H1 [mm]	H2 [mm]	H4 [mm]	H5 [mm]	H6 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	L7 [mm]
20	50	167	27	62	40	97	48	124	194	56	130	25	261	76	48
25	58	176	30	71	40	97	53	144	194	65	150	25	261	76	48
32	68	176	36	71	40	97	58	154	194	71	160	25	261	76	48
40	84	210	44	84	51	115	70	174	224	85	180	45	305	95	59
50	97	210	51	84	51	115	75	194	224	89	200	45	305	95	59
63	124	232	64	106	51	115	83	224	224	101	230	45	305	95	59



# Copiable

## Configurator +GF+ Ball Valve Type 546 PVDF

### Ball valve

A01 Ball valve 546

#### Material

B15 PVDF

#### Dimension

C05 d 16 DN 10 3/8"  
 C06 d 20 DN 15 1/2"  
 C07 d 25 DN 20 3/4"  
 C08 d 32 DN 25 1"  
 C09 d 40 DN 32 1 1/4"  
 C10 d 50 DN 40 1 1/2"  
 C11 d 63 DN 50 2"

#### Version

D01 standard, PTFE ball seal  
 D02 oil-free, PTFE ball seal (only with specific connecting parts)  
 D04 silicon-free, PVDF ball seal (only with specific connecting parts)

#### Seals

E01 EPDM seals  
 E02 FPM seals

#### Threaded inserts

F01 without threaded inserts  
 F02 with threaded inserts

#### Connecting parts

G50 PVDF Fusion socket metric  
 G51 PVDF Socket fusion spigot metric  
 G52 PVDF Butt fusion spigot IR Plus® metric  
 G53 PVDF Threaded socket NPT  
 G64 Fixed flange PVDF serrated metric

#### Multi-functional module

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

#### Handle

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

#### Mounting plate

L01 without mounting plate  
 L02 with mounting plate

**A01 B15 C D E F G G I K L**

left right

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

**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

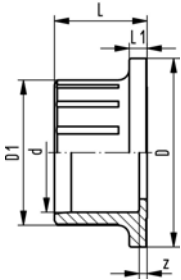
- R01 without stroke limiter
- R02 with stroke limiter

<b>P</b>	<b>Q</b>	<b>R</b>	
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# Valve ends ball valve type 546

## Valve end 546 PVC-U (G01)

### With solvent cement socket metric



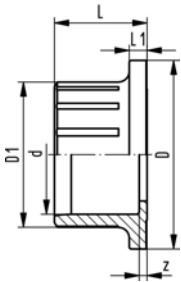
d [mm]	PN	Code	kg	D [mm]	D1 [mm]	L [mm]	L1 [mm]	z [mm]
16	16	<b>161 490 666</b>	0.009	38	23	18	4	4
20	16	<b>161 490 667</b>	0.011	38	27	20	4	4
25	16	<b>161 490 668</b>	0.016	44	33	23	5	4
32	16	<b>161 490 669</b>	0.025	53	41	26	5	4
40	16	<b>161 490 670</b>	0.043	65	51	31	5	5
50	16	<b>161 490 671</b>	0.064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

## Valve end 546 PVC-U

### With solvent cement socket metric

#### Model:

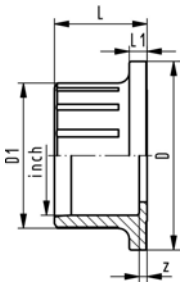
- Valve end 546 PVC-U to retrofit the ball valve 546 according the same z-dimension as for type 370 with nuts



d [mm]	PN	Code	kg	D [mm]	D1 [mm]	L [mm]	L1 [mm]	z [mm]
90	16	<b>161 491 084</b>	0.399	150	110	64	10	12
110	16	<b>161 491 085</b>	0.695	180	134	80	11	16

## Valve end 546 PVC-U (G03)

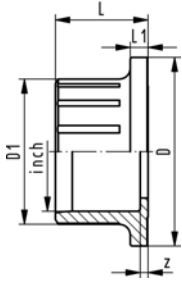
### With solvent cement socket Inch ASTM



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



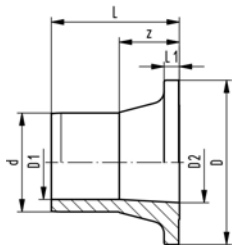
## Valve end 546 PVC-U (G04) With solvent cement socket Inch BS



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



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



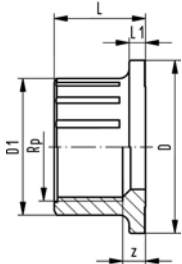
d [mm]	PN	Code	kg	D [mm]	D1 [mm]	D2 [mm]	L [mm]	L1 [mm]	z [mm]
16	16	<b>161 490 701</b>	0.011	38	10	16	29	4	15
20	16	<b>161 490 702</b>	0.014	38	14	16	34	4	18
25	16	<b>161 490 703</b>	0.021	44	19	20	39	5	20
32	16	<b>161 490 704</b>	0.033	53	24	26	42	5	20
40	16	<b>161 490 705</b>	0.050	65	31	33	45	5	19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



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

Model:

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



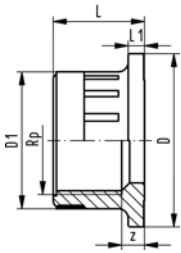
Rp [inch]	PN	Code	kg	D [mm]	D1 [mm]	L [mm]	L1 [mm]	z [mm]
3/8	10	<b>161 490 690</b>	0.011	38	24	20	4	7
1/2	10	<b>161 490 691</b>	0.013	38	28	22	4	6
3/4	10	<b>161 490 692</b>	0.019	44	34	25	5	7
1	10	<b>161 490 693</b>	0.031	53	42	28	5	7
1 1/4	10	<b>161 490 694</b>	0.047	65	52	30	5	7
1 1/2	10	<b>161 490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



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

### Model:

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



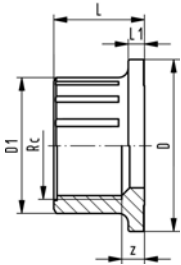
Rp [inch]	PN	Code	kg	D [mm]	D1 [mm]	L [mm]	L1 [mm]	z [mm]
3/8	16	<b>161 490 825</b>	0.013	38	24	20	4	7
1/2	16	<b>161 490 826</b>	0.016	38	28	22	4	6
3/4	16	<b>161 490 827</b>	0.023	44	34	25	5	7
1	16	<b>161 490 828</b>	0.040	53	42	28	5	7
1 1/4	16	<b>161 490 829</b>	0.058	65	52	30	5	7
1 1/2	16	<b>161 490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



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

### Model:

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



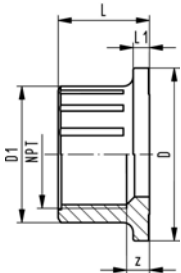
Rc [inch]	PN	Code	kg	D [mm]	D1 [mm]	L [mm]	L1 [mm]	z [mm]
1/2	10	<b>161 490 755</b>	0.013	38	28	22	4	5
3/4	10	<b>161 490 756</b>	0.019	44	34	25	5	7
1	10	<b>161 490 757</b>	0.033	53	42	28	5	7
1 1/4	10	<b>161 490 758</b>	0.047	65	52	30	5	6
1 1/2	10	<b>161 490 759</b>	0.081	77	63	32	6	8
2	10	<b>161 490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



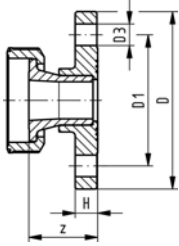
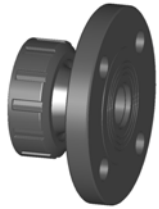
## Valve end 546 PVC-U (G09) With threaded socket NPT

### Model:

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



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

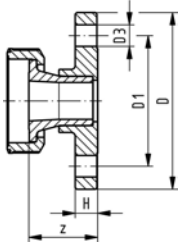


## Valve end 546 PVC-U (G60) Assembly with fixed flange serrated PVC-U metric

### Model:

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

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

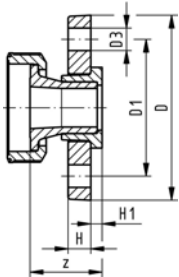


## Valve end 546 PVC-U (G61) Assembly with fixed flange flat PVC-U metric

### Model:

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




d [mm]	DN [mm]	PN	Code	kg	D [mm]	D1 [mm]	D3 [mm]	H [mm]	z [mm]
20	15	16	<b>161 486 295</b>	0.136	95	65	14	12	37
25	20	16	<b>161 486 296</b>	0.175	105	75	14	13	42
32	25	16	<b>161 486 297</b>	0.254	115	85	14	15	45
40	32	16	<b>161 486 298</b>	0.417	140	100	18	17	48
50	40	16	<b>161 486 299</b>	0.541	150	110	18	18	56
63	50	16	<b>161 486 300</b>	0.861	165	125	18	20	65

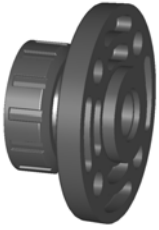


## Valve end 546 PVC-U (G70) Assembly with backing flange PVC-U metric

### Model:

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

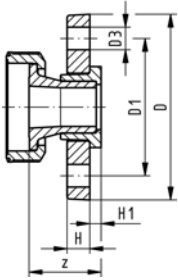
d [mm]	DN [mm]	PN	Code	kg	D [mm]	D1 [mm]	D3 [mm]	H [mm]	H1 [mm]	z [mm]
20	15	16	<b>161 486 265</b>	0.110	95	65	14	11	6	37
25	20	16	<b>161 486 266</b>	0.155	105	75	14	12	7	42
32	25	16	<b>161 486 267</b>	0.230	115	85	14	14	7	45
40	32	16	<b>161 486 268</b>	0.360	140	100	18	15	8	48
50	40	16	<b>161 486 269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



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

### Model:

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



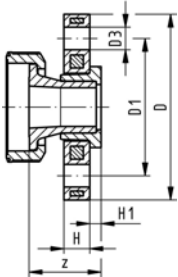
Inch	d [mm]	PN	Code	kg	D [mm]	D1 [mm]	D3 [mm]	H [mm]	H1 [mm]	z [mm]
1/2	20	16	<b>161 486 275</b>	0.110	95	60	14	11	6	37
3/4	25	16	<b>161 486 276</b>	0.150	105	70	14	12	7	42
1	32	16	<b>161 486 277</b>	0.225	115	79	14	14	7	45
1 1/4	40	16	<b>161 486 278</b>	0.375	140	89	18	15	8	48
1 1/2	50	16	<b>161 486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



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

### Model:

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



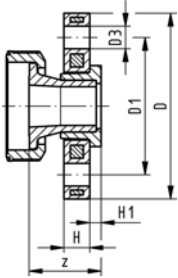
d [mm]	DN [mm]	PN	Code	kg	D [mm]	D1 [mm]	D3 [mm]	H [mm]	H1 [mm]	z [mm]
20	15	16	<b>161 486 285</b>	0.265	95	65	14	12	6	37
25	20	16	<b>161 486 286</b>	0.325	105	75	14	12	7	42
32	25	16	<b>161 486 287</b>	0.530	115	85	14	16	7	45
40	32	16	<b>161 486 288</b>	0.815	140	100	18	16	8	48
50	40	16	<b>161 486 289</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 PVC-U (G73) Assembly with backing flange PP-St inch

### Model:

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



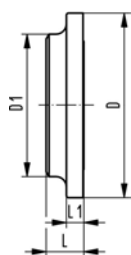
Inch	DN [mm]	PN	Code	kg	D [mm]	D1 [mm]	D3 [mm]	H [mm]	H1 [mm]	z [mm]
1/2	15	16	<b>161 486 425</b>	0.250	95	60	16	12	6	37
3/4	20	16	<b>161 486 426</b>	0.310	105	70	16	12	7	42
1	25	16	<b>161 486 427</b>	0.520	115	79	16	16	7	45
1 1/4	32	16	<b>161 486 428</b>	0.835	140	89	16	16	8	48
1 1/2	40	16	<b>161 486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



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

Model:

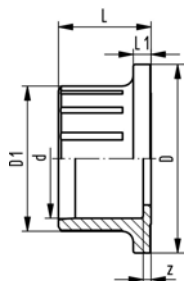
- Jointing face flat



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



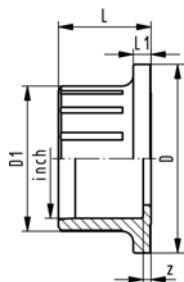
## Valve end 546 PVC-C (G11) With solvent cement socket metric



d [mm]	PN	Code	kg	D [mm]	D1 [mm]	L [mm]	L1 [mm]	z [mm]
16	16	<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



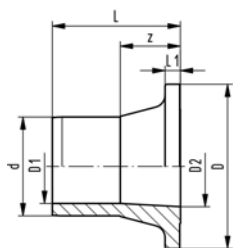
## Valve end 546 PVC-C (G13) With solvent cement socket Inch ASTM



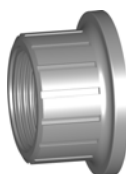
Inch	d [mm]	PN	Code	kg	D [mm]	D1 [mm]	L [mm]	L1 [mm]	z [mm]
¾	16	16	<b>163 481 311</b>	0.012	38	24	25	4	6
½	20	16	<b>163 481 312</b>	0.014	38	30	25	4	2
¾	25	16	<b>163 481 313</b>	0.020	44	35	28	5	3
1	32	16	<b>163 481 314</b>	0.031	53	43	31	5	3
1 ¼	40	16	<b>163 481 315</b>	0.046	65	53	34	5	3
1 ½	50	16	<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 ½	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 PVC-C (G14) With solvent cement spigot metric



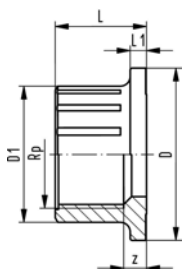
d [mm]	PN	Code	kg	D [mm]	D1 [mm]	D2 [mm]	L [mm]	L1 [mm]	z [mm]
16	16	<b>163 481 300</b>	0.012	38	10	16	29	4	15
20	16	<b>163 481 301</b>	0.015	38	14	16	34	4	18
25	16	<b>163 481 302</b>	0.023	44	19	20	39	5	20
32	16	<b>163 481 303</b>	0.040	53	24	26	42	5	20
40	16	<b>163 481 304</b>	0.054	65	31	33	45	5	19
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



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

Model:

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



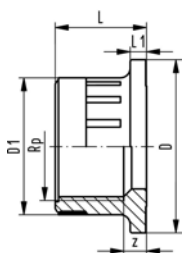
Rp [inch]	PN	Code	kg	D [mm]	D1 [mm]	L [mm]	L1 [mm]	z [mm]
3/8	10	<b>163 481 286</b>	0.011	38	24	20	4	7
1/2	10	<b>163 481 287</b>	0.013	38	28	22	4	6
3/4	10	<b>163 481 288</b>	0.019	44	34	25	5	7
1	10	<b>163 481 289</b>	0.031	53	42	28	5	7
1 1/4	10	<b>163 481 290</b>	0.047	65	52	30	5	7
1 1/2	10	<b>163 481 291</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 PVC-C (G16) With threaded socket Rp reinforced

Model:

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



Rp [inch]	PN	Code	kg	D [mm]	D1 [mm]	L [mm]	L1 [mm]	z [mm]
3/8	16	<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

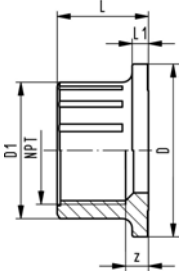




## Valve end 546 PVC-C (G17) With threaded socket NPT

### Model:

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



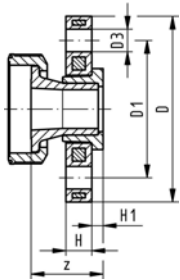
NPT [inch]	PN	Code	kg	D [mm]	D1 [mm]	L [mm]	L1 [mm]	z [mm]	
3/8	10	<b>163 481 322</b>	0.014	38	26	21	4	7	
1/2	10	<b>163 481 323</b>	0.019	38	33	21	4	4	
3/4	10	<b>163 481 324</b>	0.026	44	39	23	5	5	
1	10	<b>163 481 325</b>	0.043	53	47	28	5	6	
1 1/4	10	<b>163 481 326</b>	0.064	65	57	31	5	7	
1 1/2	10	<b>163 481 327</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	






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

### Model:

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



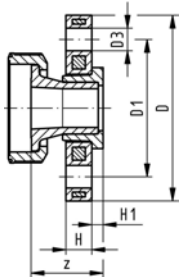
d [mm]	DN [mm]	PN	Code	kg	D [mm]	D1 [mm]	D3 [mm]	H [mm]	H1 [mm]	z [mm]	
20	15	16	<b>163 481 412</b>	0.265	95	65	14	12	6	37	
25	20	16	<b>163 481 413</b>	0.330	105	75	14	12	7	42	
32	25	16	<b>163 481 414</b>	0.540	115	85	14	16	7	45	
40	32	16	<b>163 481 415</b>	0.820	140	100	18	16	8	48	
50	40	16	<b>163 481 416</b>	1.075	150	110	18	18	8	56	
63	50	16	<b>163 481 417</b>	1.435	165	125	18	18	9	65	
 75	65	16	<b>163 481 418</b>	2.459	185	145	18	18	10	77	
 90	80	16	<b>163 481 419</b>	3.309	200	160	18	20	11	85	
 110	100	16	<b>163 481 420</b>	4.557	220	180	18	20	12	93	






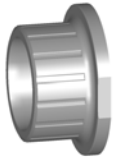
## Valve end 546 PVC-C (G73) Assembly with backing flange PP-St Inch ANSI

### Model:

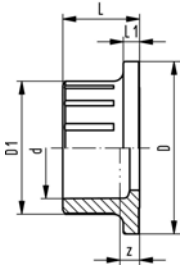
- Joint made with special adhesive Tangit for PVC-C
- Connecting dimensions: ANSI/ASME B 16.5, ASTM D 4024, BS 1560 (bolt circle 150 lbs)



Inch	DN [mm]	PN	Code	kg	D [mm]	D1 [mm]	D3 [mm]	H [mm]	H1 [mm]	z [mm]	
1/2	15	16	<b>163 481 425</b>	0.255	95	60	16	12	6	37	
3/4	20	16	<b>163 481 426</b>	0.316	105	70	16	12	7	42	
1	25	16	<b>163 481 427</b>	0.530	115	79	16	16	7	45	
1 1/4	32	16	<b>163 481 428</b>	0.835	140	89	16	16	8	47	
1 1/2	40	16	<b>163 481 429</b>	1.135	150	98	16	18	8	56	
2	50	16	<b>163 481 430</b>	1.435	165	121	19	18	9	65	
 2 1/2	65	16	<b>163 481 431</b>	2.459	185	140	19	18	10	77	
 3	80	16	<b>163 481 432</b>	3.309	200	152	19	20	11	85	
 4	100	16	<b>163 481 433</b>	4.557	229	190	19	20	12	93	



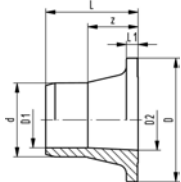
## Valve end 546 PP-H (G30) With fusion socket metric



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



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



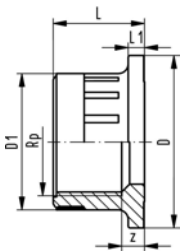
d [mm]	PN	Code	kg	D [mm]	D1 [mm]	D2 [mm]	L [mm]	L1 [mm]	L2 [mm]	z [mm]
16	10	<b>167 482 922</b>	0.007	38	10	16	27	4	13	14
20	10	<b>167 482 923</b>	0.009	38	14	16	32	4	14	18
25	10	<b>167 482 924</b>	0.013	44	19	20	37	5	16	21
32	10	<b>167 482 925</b>	0.021	53	24	26	40	5	18	22
40	10	<b>167 482 926</b>	0.032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



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

### Model:

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



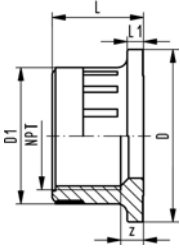
Rp [inch]	PN	Code	kg	D [mm]	D1 [mm]	L [mm]	L1 [mm]	z [mm]
3/8	16	<b>167 482 911</b>	0.008	38	24	20	4	7
1/2	16	<b>167 482 912</b>	0.009	38	28	21	4	6
3/4	16	<b>167 482 913</b>	0.012	44	34	23	5	7
1	16	<b>167 482 914</b>	0.024	53	42	28	5	7
1 1/4	16	<b>167 482 915</b>	0.037	65	52	31	5	7
1 1/2	16	<b>167 482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



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

Model:

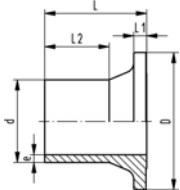
- Connection to plastic or metal
- Reinforcing ring stainless (A2)
- Do not use thread sealing pastes that are harmful to PP



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



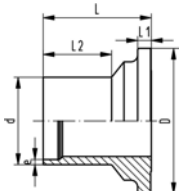
## Valve end 546 PP-H (G35) With butt fusion spigot IR-Plus® SDR11 metric



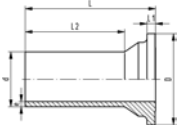
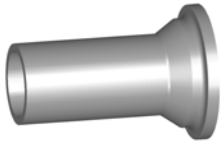
d [mm]	FM	PN	Code	kg	D [mm]	e [mm]	L [mm]	L1 [mm]	L2 [mm]
20	IR	10	<b>167 482 945</b>	0.007	38	1,9	37	4	25
25	IR	10	<b>167 482 946</b>	0.011	44	2,3	39	5	25
32	IR	10	<b>167 482 947</b>	0.017	53	3	40	5	25
40	IR	10	<b>167 482 948</b>	0.028	65	3,7	43	5	25
50	IR	10	<b>167 482 949</b>	0.045	77	4,6	51	6	25
63	IR	10	<b>167 482 950</b>	0.096	99	5,8	60	7	28
75	IR	10	<b>167 482 951</b>	0.193	125	8.2	65	9	41
90	IR	10	<b>167 482 952</b>	0.270	150	9.9	62	10	33
110	IR	10	<b>167 482 953</b>	0.421	180	12	69	11	37



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

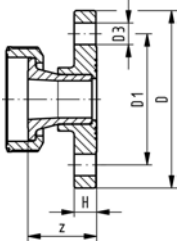
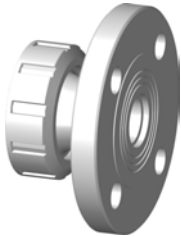


d [mm]	PN	Code	kg	D [mm]	e [mm]	L [mm]	L1 [mm]	L2 [mm]
40	6	<b>167 482 937</b>	0.032	65	2,3	43	5	25
50	6	<b>167 482 938</b>	0.053	77	2,9	51	6	25
63	6	<b>167 482 939</b>	0.099	99	3,6	60	7	28
75	6	<b>167 482 940</b>	0.189	125	4.65	65	9	41
90	6	<b>167 482 941</b>	0.265	150	5.5	62	10	33
110	6	<b>167 482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



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

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

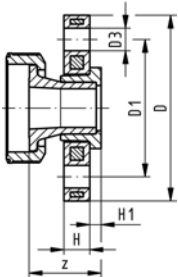
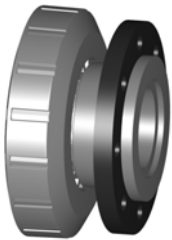


## Valve end 546 PP-H (G63) With fixed flange serrated PP-H metric

Model:

- Connecting dimension: ISO 7005 PN10, EN 1092 PN10, DIN 2501 PN10

d [mm]	DN [mm]	PN	Code	kg	D [mm]	D1 [mm]	D3 [mm]	H [mm]	z [mm]	
20	15	10	<b>167 484 160</b>	0.090	94	65	14	12	37	
25	20	10	<b>167 484 161</b>	0.115	103	75	14	13	42	
32	25	10	<b>167 484 162</b>	0.170	115	85	14	14	45	
40	32	10	<b>167 484 163</b>	0.275	138	100	18	15	48	
50	40	10	<b>167 484 164</b>	0.355	148	110	18	16	56	
63	50	10	<b>167 484 165</b>	0.565	163	125	18	18	65	

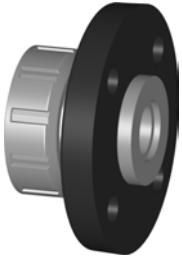


## Valve end 546 PP-H (G72) Assembly with backing flange PP-St metric

Model:

- Overall length according to EN 558-1
- Connecting dimensions: ISO 7005, EN 1092, BS 4504, DIN 2501; bolt circle PN 10

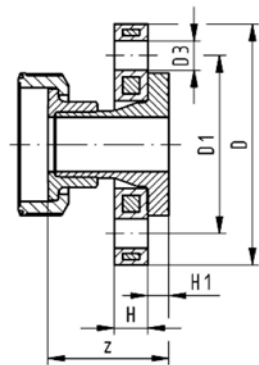
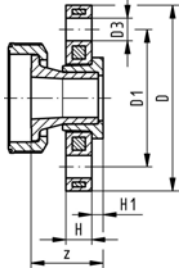
d [mm]	DN [mm]	PN	Code	kg	D [mm]	D1 [mm]	D3 [mm]	H [mm]	H1 [mm]	z [mm]	
75	65	10	<b>167 484 418</b>	1.834	185	145	18	18	16	77	
90	80	10	<b>167 484 419</b>	2.592	200	160	18	20	17	85	
110	100	10	<b>167 484 420</b>	3.272	220	180	18	20	18	93	



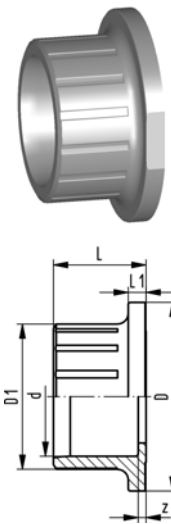
## Valve end 546 PP-H (G73) With backing flange PP-St inch ANSI

### Model:

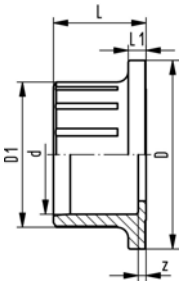
- DN15-50 overall length **NOT** according to EN 558-1
- DN 65-100 overall length according to EN 558-1
- Connecting dimension: ISO 7005 PN10, EN 1092 PN10, DIN 2501 PN10



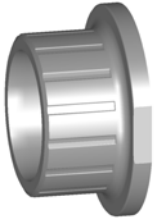
Inch	DN [mm]	PN	Code	kg	D [mm]	D1 [mm]	D3 [mm]	H [mm]	H1 [mm]	z [mm]
1/2	15	10	<b>167 484 065</b>	0.224	95	60	16	12	7	54
3/4	20	10	<b>167 484 066</b>	0.305	105	70	16	12	9	55
1	25	10	<b>167 484 067</b>	0.505	115	79	16	16	10	58
1 1/4	32	10	<b>167 484 068</b>	0.810	140	89	16	16	11	60
1 1/2	40	10	<b>167 484 069</b>	1.050	150	98	19	18	12	66
2	50	10	<b>167 484 070</b>	1.290	165	121	19	18	14	68
2 1/2	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



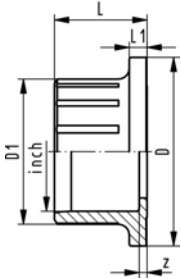
## Valve end 546 ABS (G20) With solvent cement socket metric



d [mm]	PN	Code	kg	D [mm]	D1 [mm]	L [mm]	L1 [mm]	z [mm]
16	10	<b>169 480 775</b>	0.006	38	23	18	4	4
20	10	<b>169 480 776</b>	0.008	38	27	20	4	4
25	10	<b>169 480 777</b>	0.012	44	33	22	5	4
32	10	<b>169 480 778</b>	0.019	53	41	26	5	4
40	10	<b>169 480 779</b>	0.031	65	51	31	5	5
50	10	<b>169 480 780</b>	0.047	77	62	34	6	3
63	10	<b>169 480 781</b>	0.086	99	77	41	7	3
75	10	<b>169 480 782</b>	0.175	125	92	49	9	4
90	10	<b>169 480 783</b>	0.292	150	110	57	10	5
110	10	<b>169 480 784</b>	0.495	180	134	69	11	5



## Valve end 546 ABS (G21) With solvent cement socket Inch BS



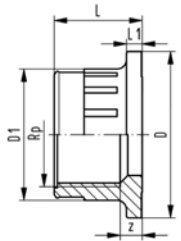
Inch	d [mm]	PN	Code	kg	D [mm]	D1 [mm]	L [mm]	L1 [mm]	z [mm]
3/8	16	10	<b>169 480 800</b>	0.007	38	23	18	4	2
1/2	20	10	<b>169 480 801</b>	0.007	38	27	20	4	2
3/4	25	10	<b>169 480 802</b>	0.009	44	33	23	5	2
1	32	10	<b>169 480 803</b>	0.016	53	41	26	5	2
1 1/4	40	10	<b>169 480 804</b>	0.026	65	51	31	5	2
1 1/2	50	10	<b>169 480 805</b>	0.052	77	62	34	6	4
2	63	10	<b>169 480 806</b>	0.098	99	77	41	7	5
	75	10	<b>169 480 782</b>	0.175	125	92	49	9	4
3	90	10	<b>169 480 808</b>	0.300	150	110	57	10	6
4	110	10	<b>169 480 809</b>	0.446	180	134	69	11	5



## Valve end 546 ABS (G22) With threaded socket Rp

### Model:

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



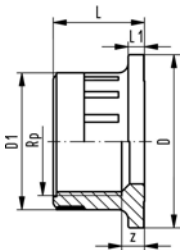
Rp [inch]	PN	Code	kg	D [mm]	D1 [mm]	L [mm]	L1 [mm]	z [mm]
3/8	10	<b>169 480 786</b>	0.008	38	24	20	4	7
1/2	10	<b>169 480 787</b>	0.009	38	28	22	4	6
3/4	10	<b>169 480 788</b>	0.014	44	34	25	5	7
1	10	<b>169 480 789</b>	0.023	53	42	28	5	7
1 1/4	10	<b>169 480 790</b>	0.034	65	52	30	5	7
1 1/2	10	<b>169 480 791</b>	0.059	77	63	32	6	9
2	10	<b>169 480 792</b>	0.109	99	78	38	7	10



## Valve end 546 ABS (G23) With threaded socket Rp reinforced

### Model:

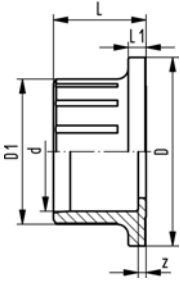
- Connection to plastic or metal
- Reinforcing ring stainless (A2)
- Do not use thread sealing pastes that are harmful to ABS



Rp [inch]	PN	Code	kg	D [mm]	D1 [mm]	L [mm]	L1 [mm]	z [mm]
3/8	16	<b>169 480 925</b>	0.008	38	24	20	4	7
1/2	16	<b>169 480 926</b>	0.010	38	28	22	4	6
3/4	16	<b>169 480 927</b>	0.014	44	34	25	5	7
1	16	<b>169 480 928</b>	0.023	53	42	28	5	7
1 1/4	16	<b>169 480 929</b>	0.035	65	52	30	5	7
1 1/2	16	<b>169 480 930</b>	0.060	77	63	32	6	9
2	16	<b>169 480 931</b>	0.110	99	78	38	7	10



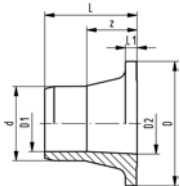
### Valve end 546 PVDF (G50) With fusion socket metric



d [mm]	PN	Code	kg	D [mm]	D1 [mm]	L [mm]	L1 [mm]	z [mm]
16	16	<b>175 483 025</b>	0.013	38	23	19	4	5
20	16	<b>175 483 026</b>	0.014	38	27	20	4	5
25	16	<b>175 483 027</b>	0.014	44	33	22	5	6
32	16	<b>175 483 028</b>	0.023	53	41	24	5	6
40	16	<b>175 483 029</b>	0.065	65	51	26	5	7
50	16	<b>175 483 030</b>	0.094	77	62	29	6	8
63	16	<b>175 483 031</b>	0.180	99	77	34	7	8



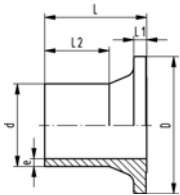
### Valve end 546 PVDF (G51) With socket fusion spigot metric



d [mm]	PN	Code	kg	D [mm]	D1 [mm]	D2 [mm]	L [mm]	L1 [mm]	L2 [mm]	z [mm]
16	16	<b>175 483 036</b>	0.014	38	10	16	27	4	13	14
20	16	<b>175 483 037</b>	0.018	38	14	16	32	4	14	18
25	16	<b>175 483 038</b>	0.028	44	19	20	37	5	16	21
32	16	<b>175 483 039</b>	0.047	53	24	26	40	5	18	22
40	16	<b>175 483 040</b>	0.065	65	31	33	43	5	20	23
50	16	<b>175 483 041</b>	0.112	77	39	41	51	6	23	28
63	16	<b>175 483 042</b>	0.210	99	49	51	60	7	27	33



### Valve end 546 PVDF (G52) With butt fusion spigot IR-Plus<sup>®</sup> metric



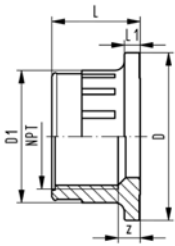
d [mm]	FM	PN	Code	kg	D [mm]	e [mm]	L [mm]	L1 [mm]	L2 [mm]
20	IR	16	<b>175 483 048</b>	0.015	38	1,9	37	4	25
25	IR	16	<b>175 483 049</b>	0.022	44	1,9	39	5	25
32	IR	16	<b>175 483 050</b>	0.035	53	2,4	40	5	25
40	IR	16	<b>175 483 051</b>	0.056	65	2,4	43	5	25
50	IR	16	<b>175 483 052</b>	0.101	77	3	51	6	25
63	IR	16	<b>175 483 053</b>	0.188	99	3	60	7	28



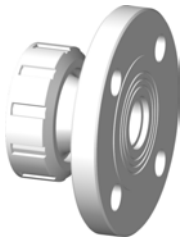
## Valve end 546 PVDF (G53) With threaded socket NPT

### Model:

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



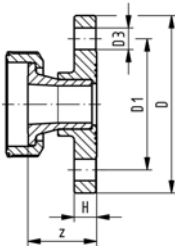
NPT [inch]	PN	Code	kg	D [mm]	D1 [mm]	D2 [mm]	L [mm]	L1 [mm]	z [mm]
3/8	10	175 483 058	0.010	38	26	14	20	4	6
1/2	10	175 483 059	0.014	38	33	16	21	4	4
3/4	10	175 483 060	0.022	44	39	20	23	5	5
1	10	175 483 061	0.040	53	47	26	28	5	6
1 1/4	10	175 483 062	0.070	65	55	33	31	5	8
1 1/2	10	175 483 063	0.100	77	65	41	34	6	11
2	10	175 483 064	0.180	99	77	51	41	7	17



## Valve end 546 PVDF (G64) With fixed flange serrated PVDF metric

### Model:

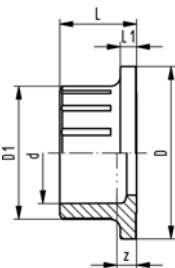
- Connecting dimension: ISO 7005 PN10, EN 1092 PN10, DIN 2501 PN10



d [mm]	DN [mm]	PN	Code	kg	D [mm]	D1 [mm]	D3 [mm]	H [mm]	z [mm]
20	15	16	175 483 285	0.170	93	65	14	12	37
25	20	16	175 483 286	0.230	103	75	14	13	42
32	25	16	175 483 287	0.330	115	85	14	14	45
40	32	16	175 483 288	0.540	137	100	18	15	48
50	40	16	175 483 289	0.710	147	110	18	16	56
63	50	16	175 483 290	1.120	162	125	18	18	65



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

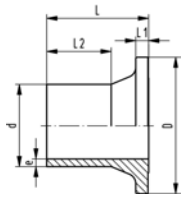


d [mm]	PN	Code	kg	D [mm]	D1 [mm]	L [mm]	L1 [mm]	z [mm]
16	16	193 480 175	0.007	38	23	19	4	5
20	16	193 480 176	0.008	38	27	20	4	5
25	16	193 480 177	0.012	44	33	22	5	6
32	16	193 480 178	0.019	53	41	24	5	6
40	16	193 480 179	0.033	65	51	26	5	7
50	16	193 480 180	0.050	77	62	29	6	8
63	16	193 480 181	0.095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





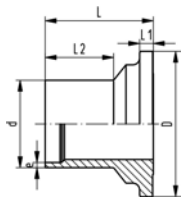
### Valve end 546 PE 100 (G41) With butt fusion spigot SDR11 metric



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



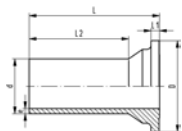
### Valve end 546 PE 100 (G42) With butt fusion spigot SDR17,6 metric



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



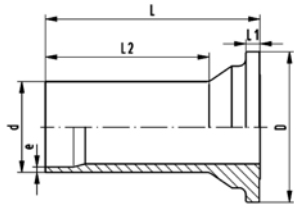
### Valve end 546 PE 100 (G43) With butt fusion spigot long SDR11 metric



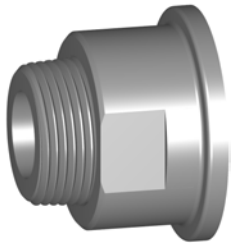
d [mm]	PN	Code	kg	D [mm]	e [mm]	L [mm]	L1 [mm]	L2 [mm]
20	16	<b>193 480 152</b>	0.012	38	2,25	69	4	53
25	16	<b>193 480 153</b>	0.019	44	2,3	76	5	58
32	16	<b>193 480 154</b>	0.029	53	3	76	5	58
40	16	<b>193 480 155</b>	0.048	65	3,7	82	5	61
50	16	<b>193 480 156</b>	0.082	77	4,6	91	6	63
63	16	<b>193 480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



## Valve end 546 PE 100 (G44) With butt fusion spigot long SDR17,6 metric



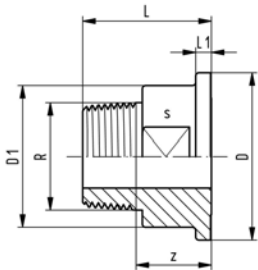
d [mm]	PN	Code	kg	D [mm]	e [mm]	L [mm]	L1 [mm]	L2 [mm]	
75	16	<b>193 480 168</b>	0.263	125	4.3	125	9	89	
90	16	<b>193 480 169</b>	0.415	150	5.1	140	10	103	
110	16	<b>193 480 170</b>	0.683	180	6.3	160	11	117	



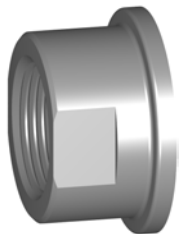
## Valve end 546 brass With threaded spigot R

Model:

- Connection to metal threads



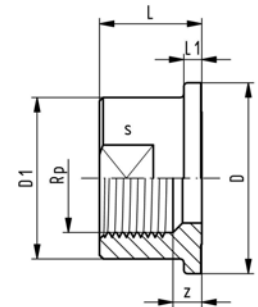
Inch	Code	kg	D [mm]	D1 [mm]	D2 [mm]	z [mm]	L [mm]	L1 [mm]	s [mm]	
1/2	<b>161 486 640</b>	0.160	38	32	13	23	36	4	30	
3/4	<b>161 486 641</b>	0.220	44	38	16	22	36	5	36	
1	<b>161 486 642</b>	0.350	53	45	20	24	41	5	41	



## Valve end 546 brass With threaded socket Rp

Model:

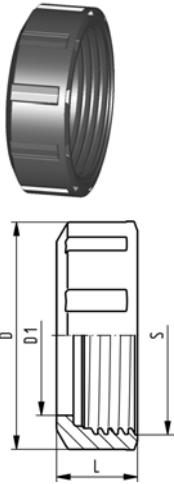
- Connection to metal threads



Inch	Code	kg	D [mm]	D1 [mm]	D2 [mm]	z [mm]	L [mm]	L1 [mm]	s [mm]	
1/2	<b>161 486 651</b>	0.100	38	32	15	5	20	4	30	
3/4	<b>161 486 652</b>	0.160	44	38	20	8	25	5	36	
1	<b>161 486 653</b>	0.250	53	45	25	10	29	5	41	

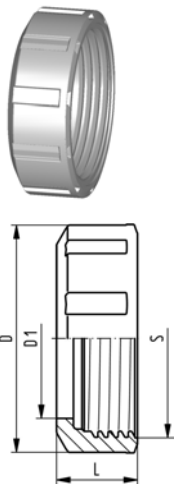
# Union nuts

## Union nut 546 PVC-U



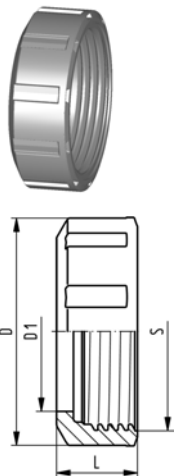
d [mm]	DN [mm]	Code	kg	D [mm]	D1 [mm]	L [mm]	S [mm]
16-20	10-15	<b>161 490 538</b>	0.019	50	34	19	42
25	20	<b>161 490 539</b>	0.026	58	39	20	48
32	25	<b>161 490 540</b>	0.041	68	47	24	58
40	32	<b>161 490 541</b>	0.077	84	57	27	71
50	40	<b>161 490 542</b>	0.111	97	65	30	84
63	50	<b>161 490 543</b>	0.191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

## Union nut 546 PVC-C



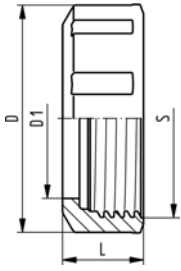
d [mm]	DN [mm]	Code	kg	D [mm]	D1 [mm]	L [mm]	S [mm]
16-20	10-15	<b>163 481 226</b>	0.013	50	34	19	42
25	20	<b>163 481 227</b>	0.019	58	39	20	48
32	25	<b>163 481 228</b>	0.028	68	47	24	58
40	32	<b>163 481 229</b>	0.054	84	57	27	71
50	40	<b>163 481 230</b>	0.072	97	65	30	84
63	50	<b>163 481 231</b>	0.225	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

## Union nut 546 ABS



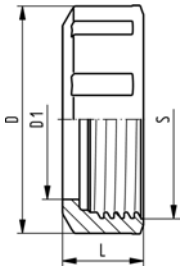
d [mm]	DN [mm]	Code	kg	D [mm]	D1 [mm]	L [mm]	S [mm]
16-20	10-15	<b>169 480 713</b>	0.014	50	34	19	42
25	20	<b>169 480 714</b>	0.019	58	39	20	48
32	25	<b>169 480 715</b>	0.030	68	47	24	58
40	32	<b>169 480 716</b>	0.056	84	57	27	71
50	40	<b>169 480 717</b>	0.081	97	65	30	84
63	50	<b>169 480 718</b>	0.139	124	79	36	106
75	65	<b>169 480 719</b>	0.435	166	94	48	135
90	80	<b>169 480 720</b>	0.683	200	113	54	135
110	100	<b>169 480 721</b>	1.048	238	137	60	198

## Union nut 546 PP-H



d [mm]	DN [mm]	Code	kg	D [mm]	D1 [mm]	L [mm]	S [mm]
16-20	10-15	<b>167 482 712</b>	0.012	50	34	19	42
25	20	<b>167 482 713</b>	0.018	58	39	20	48
32	25	<b>167 482 714</b>	0.027	68	47	24	58
40	32	<b>167 482 715</b>	0.052	84	57	27	71
50	40	<b>167 482 716</b>	0.069	97	65	30	84
63	50	<b>167 482 717</b>	0.135	124	79	36	106
75	65	<b>167 482 718</b>	0.463	166	94	48	135
90	80	<b>167 482 719</b>	0.728	200	113	54	135
110	100	<b>167 482 720</b>	1.117	238	137	60	198

## Union nut 546 PVDF



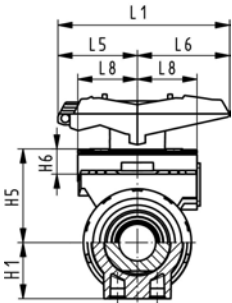
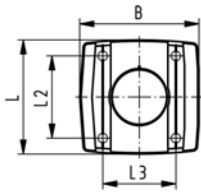
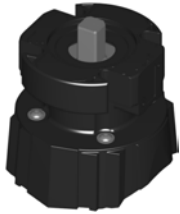
d [mm]	DN [mm]	Code	kg	D [mm]	D1 [mm]	L [mm]	S [mm]
16-20	10-15	<b>175 482 937</b>	0.024	50	34	19	42
25	20	<b>175 482 938</b>	0.033	58	39	20	48
32	25	<b>175 482 939</b>	0.053	68	47	24	58
40	32	<b>175 482 940</b>	0.099	84	57	27	71
50	40	<b>175 482 941</b>	0.142	94	65	30	84
63	50	<b>175 482 942</b>	0.245	120	79	36	106

# Multifunctional modules, handle and handle extensions

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



DN10/15 - 50

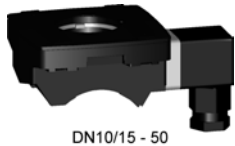


### Model:

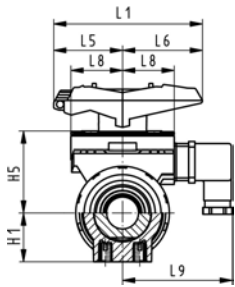
- Accessory to Ball Valve Type 546
- Multifunctional module acts as an intermediate element for actuators
- Including screws to mount the module and stainless steel coupling piece (V2A) for dimension DN65-100

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 - 50	<b>167 482 684</b>	0.397
- 110	- 100	<b>167 482 685</b>	0.425

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											
- 110											



DN10/15 - 50



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

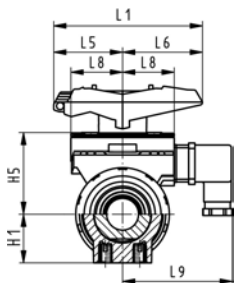
### Model:

- 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							
- 110	- 100	<b>167 482 631</b>	0.480							



DN10/15 - 50

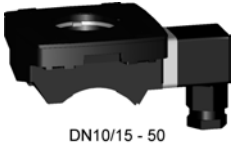


## Multifunctional module (I04) PP-GF With mechanical limit switches Au

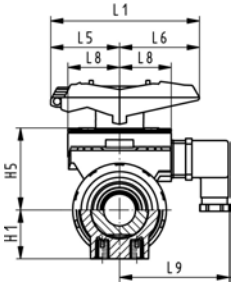
### Model:

- 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							
- 110	- 100	<b>167 482 640</b>	0.480							



DN10/15 - 50



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

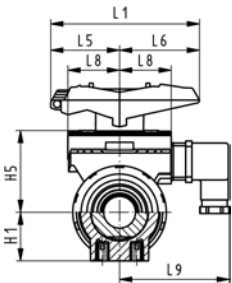
### Model:

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

d-d [mm]	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							
- 110	- 100	<b>167 482 676</b>	0.480							



DN10/15 - 50

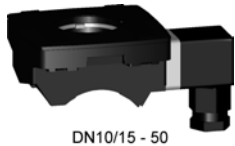


## Multifunctional module (I06) PP-GF With inductive limit switches PNP

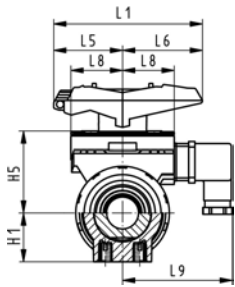
### Model:

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

d-d [mm]	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							
- 110	- 100	<b>167 482 667</b>	0.480							



DN10/15 - 50



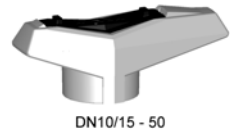
## Multifunctional module (I07) PP-GF With inductive limit switches NPN

### Model:

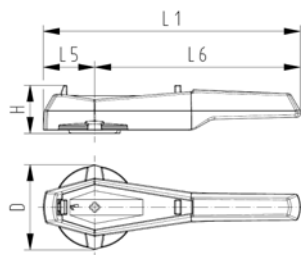
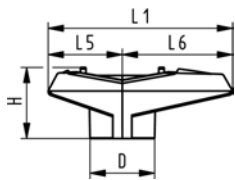
- Accessory to Ball Valve Type 546
- Multifunctional module acts as an intermediate element for actuators
- Including Plug 3P+E / Protection: IP65
- Including screws to mount the module and stainless steel coupling piece (V2A) for dimension DN65-100

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							
- 110	- 100	<b>167 482 658</b>	0.480							

## Standard handle 546 red (K01)

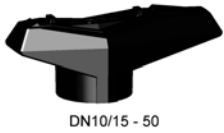


DN10/15 - 50

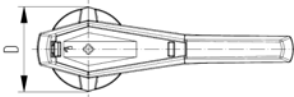
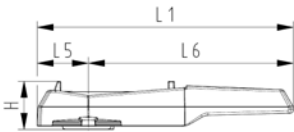
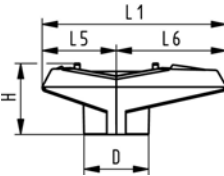


d [mm]	DN [mm]	Code	kg	L1 [mm]	L5 [mm]	L6 [mm]	H [mm]	D [mm]
16-20	10-15	<b>167 484 088</b>	0.012	77	32	45	31	26
25	20	<b>167 484 089</b>	0.022	97	39	58	37	34
32	25	<b>167 484 090</b>	0.022	97	39	58	37	34
40	32	<b>167 484 091</b>	0.042	128	54	74	46	40
50	40	<b>167 484 092</b>	0.042	128	54	74	46	40
63	50	<b>167 484 093</b>	0.059	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
100	100	<b>167 484 096</b>	0.298	320	64	256	60	106





DN10/15 - 50

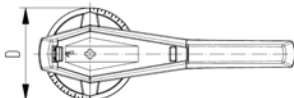
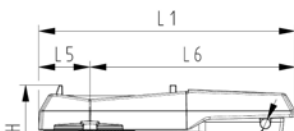
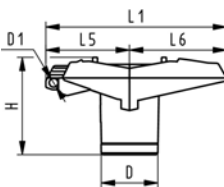


## Standard handle 546 black (K02)

d	DN	Code	kg	L1	L5	L6	H	D
[mm]	[mm]			[mm]	[mm]	[mm]	[mm]	[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



DN10/15 - 50

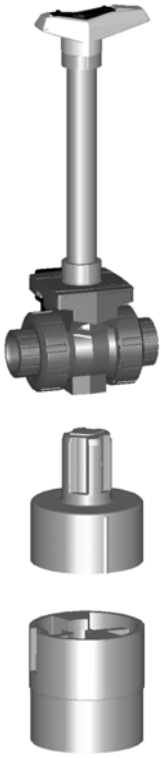


## Multifunctional handle 546 red (K11) With ratchet settings lockable

### Note:

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

d-d	DN-DN	Code	kg	D	D1	H	L1	L5	L6
[mm]	[mm]			[mm]	[mm]	[mm]	[mm]	[mm]	[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

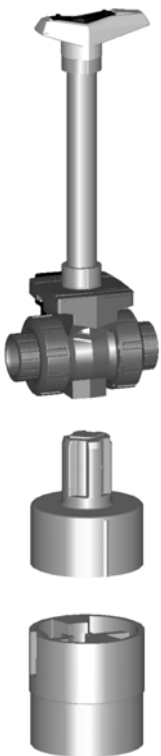
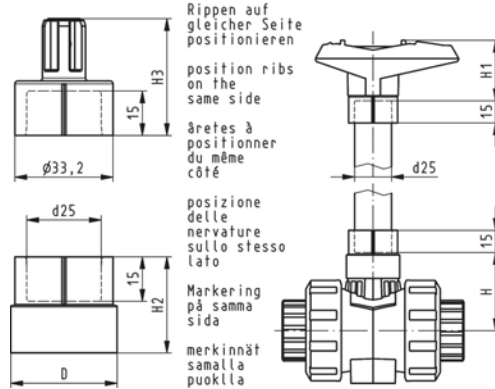


## Handle extension 546 PVC-U metric

### 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

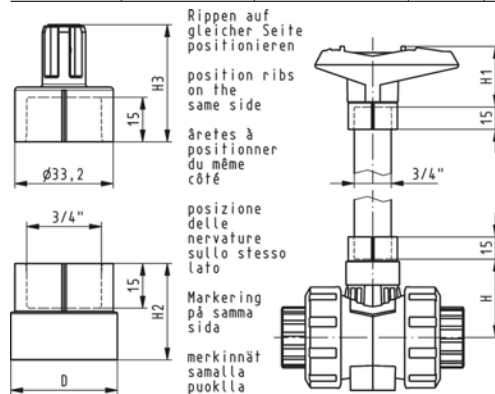
d-d [mm]	DN-DN [mm]	Code	kg	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	D [mm]
16 - 20	10 - 15	<b>161 486 435</b>	0.032	41	52	29	36	26
25 - 32	20 - 25	<b>161 486 436</b>	0.037	50	62	32	39	36
40 - 50	32 - 40	<b>161 486 437</b>	0.047	65	76	34	44	40
- 63	- 50	<b>161 486 438</b>	0.058	84	87	37	48	44



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

- For Ball Valve Type 546

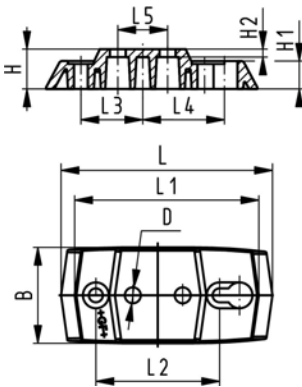
DN-DN [mm]	Inch	Code	kg	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	D [mm]
10 - 15	3/8-1/2	<b>161 486 443</b>	0.032	41	52	29	36	26
20 - 25	3/4-1	<b>161 486 444</b>	0.037	50	62	32	39	36
32 - 40	1 1/4-1 1/2	<b>161 486 445</b>	0.047	65	76	34	44	40
50 -	2	<b>161 486 446</b>	0.058	84	87	37	48	44



# Mounting plates

## 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

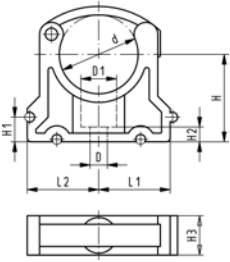
# Pipe Clips metric

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

### Model:

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

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

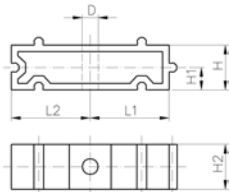


d [mm]	Code	kg	D [mm]	D1 [mm]	L1 [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	SC
*16	<b>167 061 035</b>	0.006	6	11	14	17	27	10	6	16	M5
*20	<b>167 061 036</b>	0.008	6	11	17	19	27	10	6	16	M5
*25	<b>167 061 037</b>	0.009	6	11	19	22	30	10	6	16	M5
*32	<b>167 061 038</b>	0.012	6	11	24	27	36	10	6	16	M5
40	<b>167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

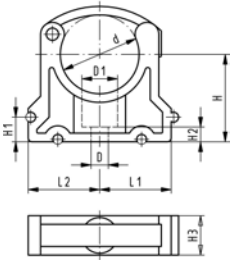
## KLIP-IT Spacer Type 061, PP

### Model:

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



d [mm]	Inch	Code	kg	D [mm]	L1 [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	SC
16	3/8	<b>167 061 155</b>	0.006	6	14	17	20	10	16	M5
20	1/2	<b>167 061 156</b>	0.006	6	17	19	20	10	16	M5
25	3/4	<b>167 061 157</b>	0.007	6	19	22	20	10	16	M5
32	1	<b>167 061 158</b>	0.008	6	24	27	20	10	16	M5
40	1 1/4	<b>167 061 159</b>	0.016	7	34	34	20	10	22	M6
50	1 1/2	<b>167 061 160</b>	0.017	7	37	37	20	10	22	M6
63	2	<b>167 061 161</b>	0.024	9	45	45	20	10	25	M8

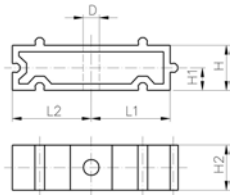


## KLIP-IT Pipe Clips Type 061H, PP BS/ASTM

### Model:

- Material: PP black, UV resistant
- **Minimum order quantity: standard packaging SP**
- Height designed for Ball Valve Type 546
- For Inch-pipes 3/8-2

Inch	Code	kg	D [mm]	D1 [mm]	L1 [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	SC
1/4	<b>167 061 054</b>	0.003	5	8	11	14	21	10	6	12	M5
3/8	<b>167 061 085</b>	0.006	6	10	14	17	27	10	6	16	M5
1/2	<b>167 061 086</b>	0.008	6	10	17	19	27	10	6	16	M5
3/4	<b>167 061 087</b>	0.009	6	10	19	22	30	10	6	16	M5
1	<b>167 061 088</b>	0.012	6	10	24	27	36	10	6	16	M5
1 1/4	<b>167 061 089</b>	0.027	7	14	34	34	44	10	7	22	M6
1 1/2	<b>167 061 090</b>	0.031	7	14	37	37	51	10	7	22	M6
2	<b>167 061 091</b>	0.054	9	17	45	45	64	10	10	25	M8
2 1/2	<b>167 061 112</b>	0.062	9	17	52	52	58	10	10	25	M8
	<b>167 061 013</b>	0.090	9		65	65	65	10	10	28	M8
4	<b>167 061 114</b>	0.114	9	17	79	79	81	10	10	28	M8
	<b>167 061 016</b>	0.217	9		98	98	110	10	10	32	M8



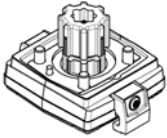
## KLIP-IT Spacer Type 061, PP

### Model:

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

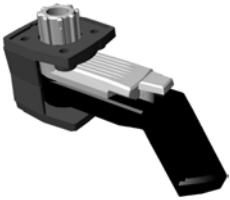
d [mm]	Inch	Code	kg	D [mm]	L1 [mm]	L2 [mm]	H [mm]	H1 [mm]	H2 [mm]	SC
16	3/8	<b>167 061 155</b>	0.006	6	14	17	20	10	16	M5
20	1/2	<b>167 061 156</b>	0.006	6	17	19	20	10	16	M5
25	3/4	<b>167 061 157</b>	0.007	6	19	22	20	10	16	M5
32	1	<b>167 061 158</b>	0.008	6	24	27	20	10	16	M5
40	1 1/4	<b>167 061 159</b>	0.016	7	34	34	20	10	22	M6
50	1 1/2	<b>167 061 160</b>	0.017	7	37	37	20	10	22	M6
63	2	<b>167 061 161</b>	0.024	9	45	45	20	10	25	M8

## Assembly parts for ball valves



**Adapter plate incl. coupling**  
**For actuator units electric type EA 11/ EA 21**  
**Pneumatic type PA 11 / PA 21**  
**To type 546**

d-d [mm]	DN-DN [mm]	Code	kg
16 - 20	10 - 15	<b>198 150 556</b>	0.098
25 - 32	20 - 25	<b>198 150 557</b>	0.114
40 - 50	32 - 40	<b>198 150 558</b>	0.154
- 63	- 50	<b>198 150 559</b>	0.184



**Intermediate element to type 107 - 130 / 230**  
**with manual override**

DN-DN [mm]	Code	kg
10 - 25	<b>198 000 500</b>	0.240
32 - 50	<b>198 000 501</b>	0.260

**Intermediate element**  
**(coupling/screws/distance pieces/reducing bush)**  
**For actuator units pneumatic PA30-45**  
**To type 546**

d	DN	Type	Code
75	65	PA30 FC/FO	198 000 595
75	65	PA35 DA	198 000 595
90	80	PA35 FC/FO	198 000 596
90	80	PA40 DA	198 000 595
110	100	PA40 FC/FO	198 000 599
110	100	PA45 DA	198 000 599

Code	kg
<b>198 000 595</b>	0.300
<b>198 000 596</b>	0.300
<b>198 000 599</b>	0.100

**Adapter set**  
**(screws/distance pieces/reducing bush)**  
**For actuator unit EA31**  
**To type 546**

d-d	DN-DN	Code
75-90	65-80	198 000 601
110	100	198 000 602

Code	kg
<b>198 000 601</b>	0.150
<b>198 000 602</b>	0.150

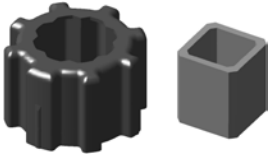
## Assembly parts for actuators



**Adapter set for PA11  
F04 (WS11) per EN ISO 5211**



Code	kg
198 000 586	0.006



**Adapter set for PA21 EA11 EA21  
F05 (WS11/14) per EN ISO 5211**



Code	kg
198 000 587	0.018

# Electric actuators

## Electric actuator type EA 11



**Note:**

- F05 (WS11/14) per EN ISO 5211 with adapter 198.000.587

Voltage	Code	kg	
100-230 V~	<b>198 150 180</b>	1.500	
24 V= / ~	<b>198 150 181</b>	1.500	

## Electric actuator type EA 21



**Note:**

- F05 (WS11/14) per EN ISO 5211 with adapter 198.000.587

Voltage	Code	kg	
100-230 V~	<b>198 150 182</b>	1.750	
24 V= / ~	<b>198 150 183</b>	1.750	

## Electric actuator type EA 31



**Note:**

- F07 (WS 17) per EN ISO 5211

Voltage	Code	kg	
100-230 V~	<b>198 150 184</b>	2.150	
24 V= / ~	<b>198 150 185</b>	2.150	



## Accessories for electric actuators



For electric actuators  
Type EA 11/ EA 21/ EA 31/ EA 42  
Heating element

Voltage	Code	kg	
24 V=	199 190 086	0.200	



For electric actuators  
Type EA 11/ EA 21/ EA 31/ EA 42  
Fail safe return incl. battery kit

Voltage	Code	kg	
24 V=	199 190 085	0.885	



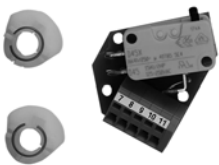
For electric actuators  
Type EA 11/ EA 21/ EA 31/ EA 42  
Heating element + fail safe return incl. battery kit

Voltage	Code	kg	
24 V=	199 190 087	0.200	



For electric actuators  
Type EA 11/ EA 21/ EA 31/ EA 42  
Battery kit (spare)

Voltage	Code	kg	
24 V=	198 151 317	0.250	



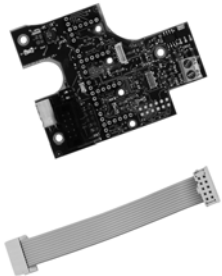
For electric actuators  
Type EA 11/ EA 21/ EA 31/ EA 42  
Limit switch kit with mechanical limit switches AgNi

Voltage	Code	kg	
250 V ~6 A	199 190 092	0.200	



**For electric actuators  
Type EA 21/ EA 31/ EA 42  
Testing adapter kit**

Code	kg	
198 151 426	0.100	



**For electric actuators  
Type EA 21/ EA 31/ EA 42  
Monitoring print**

Code	kg	
199 190 099	0.020	



**For electric actuators  
Type EA 21/ EA 31/ EA 42  
Cycle time extension**

**Model:**

- Monitoring print required

Code	kg	
199 190 080	0.020	



**For electric actuators  
Type EA 21/ EA 31/ EA 42  
Cycle time monitoring**

**Model:**

- Monitoring print required

Code	kg	
199 190 082	0.020	



**For electric actuators  
Type EA 21/ EA 31/ EA 42  
Cycle counter**

**Model:**

- Monitoring print required

Code	kg	
199 190 083	0.020	



**For electric actuators  
Type EA 21/ EA 31/ EA 42  
Motor current monitoring**

**Model:**

- Monitoring print required

Code	kg	
199 190 081	0.020	

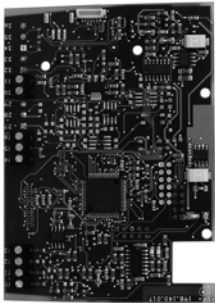


**For electric actuators  
Type EA 21/ EA 31/ EA 42  
Position signalization**

**Model:**

- Must be used with either the PE25 positioner or the monitoring print

Code	kg	
199 190 084	0.020	



**For electric actuators  
Type EA 21/ EA 31/ EA 42  
Positioner PE25**

**Model:**

- Positioner must use position signalization

\*\* galvanic isolated set value inputs

\* not galvanic isolated set value inputs

Voltage	Code	kg	
*24 V=	199 190 100	0.200	
**24 V=	199 190 101	0.200	



**For electric actuators  
Type EA 21/ EA 31/ EA 42  
Limit switch kit with gold contacts Au**

Voltage	Code	kg	
30 V=, 100mA	199 190 093	0.200	



**For electric actuators  
Type EA 21/ EA 31/ EA 42  
Limit switch kit with inductive switches PNP**

Voltage	Code	kg	
5-30 V= 0,1 A	199 190 095	0.200	



**For electric actuators  
Type EA 21/ EA 31/ EA 42  
Limit switch kit with inductive switches NPN**

Voltage	Code	kg	
5-30 V= 0,1 A	199 190 096	0.200	



**For electric actuators  
Type EA 21/ EA 31/ EA 42  
Assembly kit for 4 limit switches**

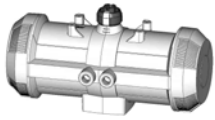
Voltage	Code	kg	
5-30 V= 0,1 A	199 190 097	0.200	



**For electric actuators  
Type EA 21/ EA 31/ EA 42  
Limit switch kit with mechanical limit switches  
Middle position**

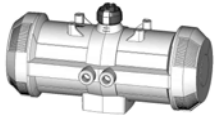
Voltage	Code	kg	
4-30 V= 1-100 mA	199 190 094	0.200	

# Pneumatic rotary actuators PA



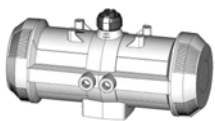
## Pneumatic actuator type PA 11 / PA 21 Fail safe to close (FC)

Type	DN-DN [mm]	Code	kg	
PA 11 FC	10 - 25	<b>198 150 127</b>	0.743	
PA 21 FC	32 - 50	<b>198 150 130</b>	1.419	



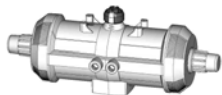
## Pneumatic actuator type PA 11 / PA 21 Fail safe to open (FO)

Type	DN-DN [mm]	Code	kg	
PA 11 FO	10 - 25	<b>198 150 128</b>	0.743	
PA 21 FO	32 - 50	<b>198 150 131</b>	1.419	



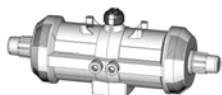
## Pneumatic actuator type PA 11 / PA 21 Double action (DA)

Type	DN-DN [mm]	Code	kg	
PA 11 DA	10 - 25	<b>198 150 129</b>	0.553	
PA 21 DA	32 - 50	<b>198 150 132</b>	0.995	



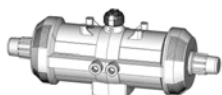
## Pneumatic actuator type PA 11 / PA 21 Fail safe to close (FC) with stroke limiter

Type	DN-DN [mm]	Code	kg	
PA 11 FC	10 - 25	<b>198 150 144</b>	0.837	
PA 21 FC	32 - 50	<b>198 150 147</b>	1.609	



## Pneumatic actuator type PA 11 / PA 21 Fail safe to open (FO) with stroke limiter

Type	DN-DN [mm]	Code	kg	
PA 11 FO	10 - 25	<b>198 150 145</b>	0.837	
PA 21 FO	32 - 50	<b>198 150 148</b>	1.609	



## Pneumatic actuator type PA 11 / PA 21 Double action (DA) with stroke limiter

Type	DN-DN [mm]	Code	kg	
PA 11 DA	10 - 25	<b>198 150 146</b>	0.647	
PA 21 DA	32 - 50	<b>198 150 149</b>	1.185	



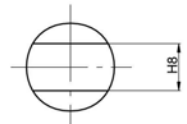
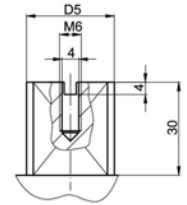
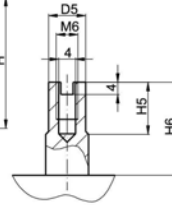
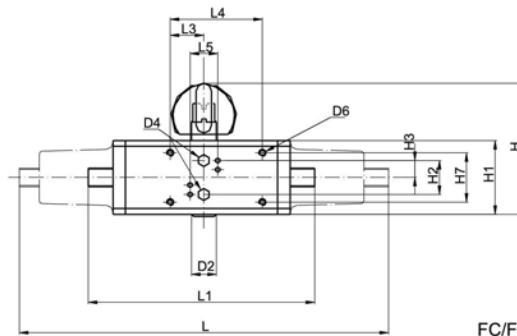
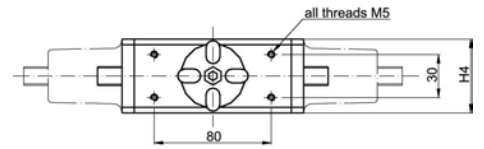
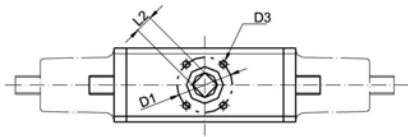
## Pneumatic actuator type PA 30 PA 90 Fail safe to close / Fail safe to open (FC/FO)

\* Only for butterfly valve type 240, 241, 242

Type	hard anodized Code	nickel plated Code	hard anodized with stroke limiter Code
PA 30 FC/FO	198 800 757	198 800 034	-
*PA 30 FO	198 811 025	-	-
PA 35 FC/FO	198 800 037	198 800 052	-
*PA 35 FO	198 811 026	-	-
PA 40 FC/FO	198 800 728	198 800 004	198 800 017
*PA 40 FO	198 811 027	-	-
PA 45 FC/FO	198 800 039	198 800 054	-
*PA45 FO	198 811 028	-	-
PA 50 FC/FO	198 800 729	198 800 005	198 800 018
*PA50 FO	198 811 029	-	-
PA 55 FC/FO	198 800 041	198 800 056	-
*PA 55 FO	198 811 030	-	-
PA 60 FC/FO	198 800 730	198 800 006	198 800 019
PA 65 FC/FO	198 800 043	198 800 058	-
PA 70 FC/FO	198 800 731	198 800 007	198 800 020
PA 75 FC/FO	198 800 045	198 800 060	-
PA 80 FC/FO	198 800 047	198 800 062	-

Type		D1 [mm]	D2 [mm]	D3[M] [mm]	D4 [inch]	D5 [mm]	L [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	H [mm]
PA 30 FC/FO	F04	42	30	M5x9	1/8	10	276	11	35	70	32	102
*PA 30 FO	F04	42	30	M5x9	1/8	10	276	11	35	70	32	102
PA 35 FC/FO	F05	50	35	M6x11	1/8	12	326	14	35	70	32	111
*PA 35 FO	F05	50	35	M6x11	1/8	12	326	14	35	70	32	111
PA 40 FC/FO	F05	50	35	M6x11	1/8	12	370	14	35	70	32	129
*PA 40 FO	F05	50	35	M6x11	1/8	12	370	14	35	70	32	129
PA 45 FC/FO	F07	70	55	M8x15	1/8	15	411	17	35	70	32	139
*PA45 FO	F07	70	55	M8x15	1/8	15	411	17	35	70	32	139
PA 50 FC/FO	F07	70	55	M8x15	1/8	15	423	17	35	70	32	149
*PA50 FO	F07	70	55	M8x15	1/8	15	423	17	35	70	32	149
PA 55 FC/FO	F10	102	70	M10x17	1/8	19	452	22	35	70	32	161
*PA 55 FO	F10	102	70	M10x17	1/8	19	452	22	35	70	32	161
PA 60 FC/FO	F10	102	70	M10x17	1/8	19	503	22	35	70	32	173
PA 65 FC/FO	F12	125	85	M12x21	1/4		648	27			32	191
PA 70 FC/FO	F12	125	85	M12x21	1/4		663	27			32	196
PA 75 FC/FO	F14	140	100	M16x25	1/4		824	36			32	229
PA 80 FC/FO	F14	140	100	M16x25	1/4		918	36			32	241

Type	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]	H7 [mm]	H8 [mm]
PA 30 FC/FO	70	21	18	65	13	20	36	
*PA 30 FO	70	21	18	65	13	20	36	
PA 35 FC/FO	78	21	18	72	13	20	36	
*PA 35 FO	78	21	18	72	13	20	36	
PA 40 FC/FO	86	25	21	80	13	30	36	
*PA 40 FO	86	25	21	80	13	30	36	
PA 45 FC/FO	96	25	21	90	16	30	36	
*PA45 FO	96	25	21	90	16	30	36	
PA 50 FC/FO	106	25	26	100	17	30	36	
*PA50 FO	106	25	26	100	17	30	36	
PA 55 FC/FO	118	25	25	112	19	30	36	
*PA 55 FO	118	25	25	112	19	30	36	
PA 60 FC/FO	130	25	32	124	19	30	36	
PA 65 FC/FO	148	24	34	137				22
PA 70 FC/FO	153	24	38	145				24
PA 75 FC/FO	186	24	43	166				27
PA 80 FC/FO	198	24	44	180				32



FC/FO: PA 30/35/40/45  
PA 50/55/60

DA: PA 30/35/40/45  
PA 50/55/60/65/70

FC/FO: PA 65/70/75/80  
DA: PA 75/80/85/90



## Pneumatic actuator type PA 30 PA 90 Double acting (DA)

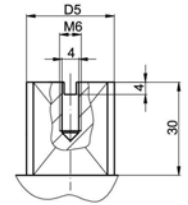
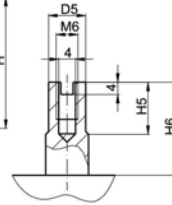
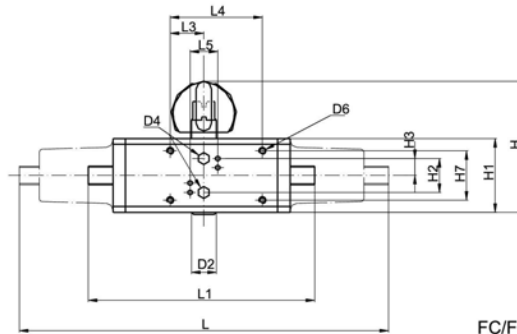
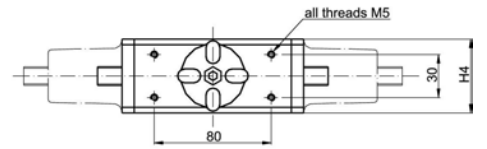
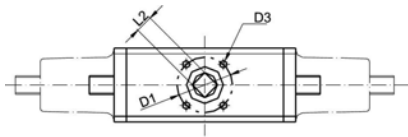
Other versions on request

Type	hard anodized Code	kg
PA 30 DA	<b>198 800 737</b>	2.400
PA 35 DA	<b>198 800 758</b>	1.250
PA 40 DA	<b>198 800 732</b>	1.731
PA 45 DA	<b>198 800 040</b>	1.850
PA 50 DA	<b>198 800 733</b>	2.984
PA 55 DA	<b>198 800 042</b>	3.400
PA 60 DA	<b>198 800 734</b>	6.040
PA 65 DA	<b>198 800 044</b>	7.200
PA 70 DA	<b>198 800 735</b>	10.300
PA 75 DA	<b>198 800 046</b>	12.000
PA 80 DA	<b>198 800 048</b>	14.000
PA 85 DA	<b>198 800 050</b>	19.700
PA 90 DA	<b>198 800 051</b>	25.400

Type		D1 [mm]	D2 [mm]	D3[M] [mm]	D4 [inch]	D5 [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	H [mm]	H1 [mm]
PA 30 DA	F03	36	25	M5x9	1/8	9	177	9	35	70		92	60
PA 35 DA	F04	42	30	M5x9	1/8	10	190	11	35	70		98	66
PA 40 DA	F04	42	30	M5x9	1/8	10	198	11	35	70		102	70
PA 45 DA	F05	50	35	M6x11	1/8	12	235	14	35	70		111	78
PA 50 DA	F05	50	35	M6x11	1/8	12	250	14	35	70		129	86
PA 55 DA	F07	70	55	M8x15	1/8	15	279	17	35	70		139	96
PA 60 DA	F07	70	55	M8x15	1/8	15	341	17	35	70		149	106
PA 65 DA	F10	102	70	M10x17	1/8	19	350	22	35	70		161	118
PA 70 DA	F10	102	70	M10x17	1/8	19	381	22	35	70		173	130
PA 75 DA	F12	125	85	M12x21	1/4		416	27			32	191	148
PA 80 DA	F12	125	85	M12x21	1/4		466	27			32	197	153
PA 85 DA	F14	140	100	M16x25	1/4		555	36			32	229	186
PA 90 DA	F14	140	100	M16x25	1/4		581	36			32	241	198

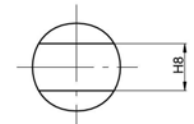
Type	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]	H7 [mm]	H8 [mm]
PA 30 DA	25	12	55	10	20	36	
PA 35 DA	25	13	60	13	20	36	
PA 40 DA	21	18	65	13	20	36	
PA 45 DA	21	18	72	13	20	36	
PA 50 DA	25	21	80	13	30	36	
PA 55 DA	25	21	90	16	30	36	
PA 60 DA	25	26	100	17	30	36	
PA 65 DA	25	25	112	19	30	36	
PA 70 DA	25	32	124	19	30	36	
PA 75 DA	24	34	137				22
PA 80 DA	24	38	145				24
PA 85 DA	24	43	166				27
PA 90 DA	24	44	180				32





FC/FO: PA 30/35/40/45  
PA 50/55/60

DA: PA 30/35/40/45  
PA 50/55/60/65/70



FC/FO: PA 65/70/75/80  
DA: PA 75/80/85/90

## Accessories for pneumatic rotary actuators

### For pneumatic actuators type PA 11 - PA 90 Namur connecting plate



- PA30 - PA55

Code	kg	
199 190 275	0.100	



### For pneumatic actuators type PA 11 - PA 90 Namur mounting flange

No	Code	kg	
3	199 190 281	0.312	

## Position indicator



For actuator units pneumatic type PA 11 - PA 90  
Namur mounting flange

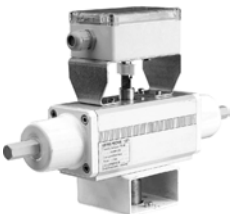
No	Code	kg	
3	199 190 281	0.312	



For actuator units pneumatic type PA 11 - PA 90  
Limit switch box with 2 auxiliary switches

- Including namur mounting flange

Voltage	Code	kg	
250 V ~/10 A	199 190 282	0.530	



For actuator units pneumatic type PA 11 - PA 90  
Limit switch box with 2 inductive auxiliary switches  
NPN with luminous diode

- Including namur mounting flange

Voltage	Code	kg	
10...30 V/ 0.1 A	199 190 283	0.530	



For actuator units pneumatic type PA 11 - PA 90  
Limit switch box with 2 inductive auxiliary switches PNP  
With luminous diode

- Including namur mounting flange

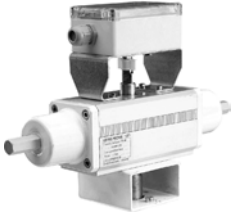
Voltage	Code	kg	
10...30 V/ 0.1 A	199 190 284	0.530	



For actuator units pneumatic type PA 11 - PA 90  
Limit switch box with 2 inductive auxiliary switches  
Namur Exi (intrinsically safe)

- Including namur mounting flange

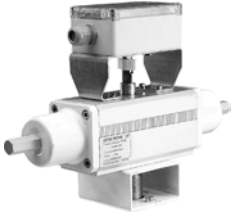
Voltage	Code	kg	
5-15 V	199 190 285	0.530	



### For actuator units pneumatic type PA 11 - PA 90 Limit switch box with 2 auxiliary switches Eexd

- Including namur mounting flange

Voltage	Code	kg	
250 V ~/5 A	199 190 286	0.600	



### For actuator units pneumatic type PA 11 - PA 90 Limit switch box with 2 auxiliary switches With gold contact

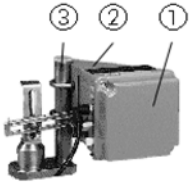
- Including namur mounting flange

Voltage	Code	kg	
30 V =/ 1-100 mA	199 190 287	0.530	

# Controllers

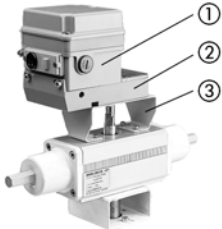
## Electro-pneumatic positioner Positioner type Eckardt SRI 986

- Other versions and accessories on request

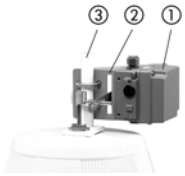


No	single acting (FC/FO) Code	double acting (DA) Code	kg	
1	199 190 348	199 190 349	1.900	

## Accessories for electro-pneumatic positioner Attachment kit for type Eckardt SRI 986

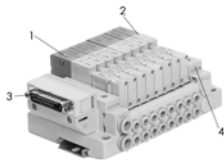


No	Typ DIASTAR DN 15-150 Code	Type PA 30 - PA 90 Code	kg	
2	199 190 350	199 190 351	0.200	



# Pilot valves

## Solenoid pilot valve type PV 2000 2 x 3/2-way valve

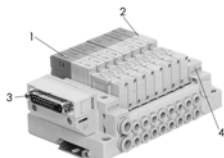


### Model:

- lockable manual override
- Version for 3/2-way and 5/2-way valves
- Electrical control over multiple and field bus connector

No	Voltage	Code	kg	
1	24V/DC 100%	199 190 435	0.110	

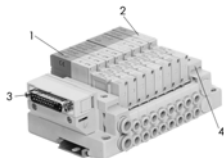
## Solenoid pilot valve type PV 2000 1 x 5/2-way valve



- Version for 3/2-way and 5/2-way valves
- Electrical control over multiple and field bus connector

No	Voltage	Code	kg	
2	24 V/DC 100%	199 190 423	0.105	

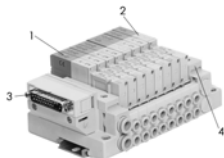
## Solenoid pilot valve type PV 2000 Connection module with D-sub connector



- Version for 3/2-way and 5/2-way valves
- Electrical control over multiple and field bus connector

No	Code	kg	
3	199 190 424	0.156	

## Solenoid pilot valve type PV 2000 End module



- Version for 3/2-way and 5/2-way valves
- Electrical control over multiple and field bus connector

No	Code	kg	
4	199 190 426	0.102	



## Solenoid pilot valve type PV 2000 Connection module AS-interface

- Version for 3/2-way and 5/2-way valves
- Electrical control over multiple and field bus connector

No	Code	kg	
1	199 190 430	0.200	



## Solenoid pilot valve type PV 2000 Connection module profibus

- Version for 3/2-way and 5/2-way valves
- Electrical control over multiple and field bus connector

No	Code	kg	
1	199 190 431	0.200	



## Solenoid pilot valve type PV 2000 Connection module with bus interface

- Version for 3/2-way and 5/2-way valves
- Electrical control over multiple and field bus connector

No	Code	kg	
2	199 190 425	0.156	



## Accessories to type PV 2000 Silencer 8mm

Code	kg	
199 190 427	0.020	

## Accessories to type PV 2000 Plug (white)

d [mm]	Code	kg	
8	199 190 428	0.010	
6	199 190 429	0.010	

## Accessories to type PV 2000 D-Sub connector 25 poles With connection cable

Cable length [m]	Code	kg	
1.50	199 190 432	0.500	
3.00	199 190 433	0.500	
5.00	199 190 434	0.500	



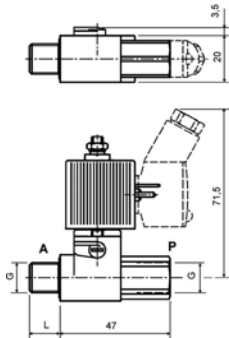


## Solenoid pilot valve type PV 94 Pilot valve 3/2 ways



### Model:

- For direct installation (including valve body and hollow screw)
- Port P compressed air connection G 1/8
- Port A actuator connection G 1/8
- With connector plug
- With adapter G1/8 to G1/4



- To pneumatic actuators FC/FO (single acting)
- Circuit function C: de-energized closed
- Valve material polyamid / brass

Voltage	DN [mm]	Com-pressed air connection P	Actuator connection	PN	kv-value ( $\Delta p=1$ bar) [l/min]	NBR Code	kg
24 V=	1.2	G 1/8	G 1/8	10	48	<b>199 190 498</b>	0.135
24 V, 50-60 Hz	1.2	G 1/8	G 1/8	10	48	<b>199 190 499</b>	0.135
110 V, 50-60 Hz	1.2	G 1/8	G 1/8	10	48	<b>199 190 500</b>	0.135
230 V, 50-60 Hz	1.2	G 1/8	G 1/8	10	48	<b>199 190 501</b>	0.135

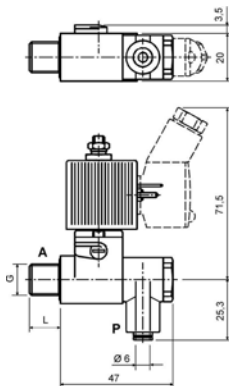


## Solenoid pilot valve type PV 94 Pilot valve 3/2 ways



### Model:

- For direct installation (including valve body and hollow screw)
- Port P compressed air connection tube push-in 6mm
- Port A actuator connection G 1/8
- With connector plug
- With adapter G1/8 to G1/4



- To pneumatic actuators FC/FO (single acting)
- Circuit function C: de-energized closed
- Valve material polyamid / brass

Voltage	DN [mm]	Com-pressed air connection P	Actuator connection	PN	kv-value ( $\Delta p=1$ bar) [l/min]	NBR Code	kg
24 V=	1.2	push-in	G 1/8	10	48	<b>199 190 510</b>	0.135
24 V, 50-60 Hz	1.2	push-in	G 1/8	10	48	<b>199 190 511</b>	0.135
110 V, 50-60 Hz	1.2	push-in	G 1/8	10	48	<b>199 190 512</b>	0.135
230 V, 50-60 Hz	1.2	push-in	G 1/8	10	48	<b>199 190 513</b>	0.135

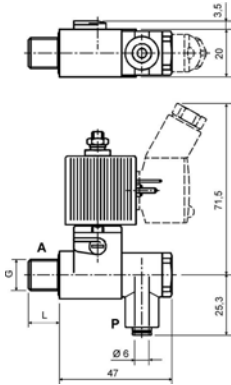


## Solenoid pilot valve type PV 94 Pilot valve 3/2 ways



### Model:

- For direct installation (including valve body and hollow screw)
- Port P compressed air connection NPT 1/8
- Port A actuator connection G 1/8
- With connector plug
- With adapter G1/8 to G1/4



- To pneumatic actuators FC/FO (single acting)
- Circuit function C: de-energized closed
- Valve material polyamid / brass

Voltage	DN [mm]	Com-pressed air con- nection P	Actuator connec- tion	PN	kv-value ( $\Delta p=1$ bar) [l/min]	NBR Code	kg
24 V=	1.2	NPT 1/8	G 1/8	10	48	<b>199 190 546</b>	0.135
24 V AC	1.2	NPT 1/8	G 1/8	10	48	<b>199 190 561</b>	0.135
110 V, 50-60 Hz	1.2	NPT 1/8	G 1/8	10	48	<b>199 190 547</b>	0.135

## Solenoid pilot valve type PV 94 Accessory



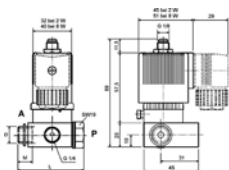
### Model:

- Cable plug to DIN EN 175301-803 (DIN 43 650) form C

Voltage	Version	NBR Code	kg
0-250 V	no circuitry	<b>199 190 518</b>	0.020
0-24 V	with LED	<b>199 190 519</b>	0.020
0-24 V	with LED and varistor	<b>199 190 520</b>	0.020
0-24 V	with rectifier LED and varistor	<b>199 190 521</b>	0.020
200-240 V	with LED	<b>199 190 522</b>	0.020
200-240 V	with LED and varistor	<b>199 190 523</b>	0.020



## Solenoid pilot valve type PV 95 Pilot valve 3/2 ways

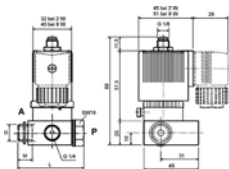


### Model:

- For direct installation (including valve body and hollow screw)
- Port P compressed air connection G 1/4
- Port A actuator connection G 1/8
- With connector plug
- With adapter G1/8 to G1/4
- To pneumatic actuators FC/FO (single acting)
- Circuit function C: de-energized closed
- Valve material: brass
- Power consumption: 24VA at AC inrush; 17VA/8W at AC hold; 8W at DC

Voltage	DN [mm]	Com-pressed air con- nection P	Actuator connec- tion	PN	kv-value ( $\Delta p=1$ bar) [l/min]	NBR Code	kg
24 V=	2.0	G 1/4	G 1/8	10	120	<b>199 190 532</b>	0.420
24 V, 50-60 Hz	2.0	G 1/4	G 1/8	10	120	<b>199 190 533</b>	0.420
110 V, 50-60 Hz	2.0	G 1/4	G 1/8	10	120	<b>199 190 534</b>	0.420
230 V, 50-60 Hz	2.0	G 1/4	G 1/8	10	120	<b>199 190 535</b>	0.420

## Solenoid pilot valve type PV 95 Pilot valve 3/2 ways

### Model:

- For direct installation (including valve body and hollow screw)
- Port P compressed air connection NPT 1/8
- Port A actuator connection G 1/4
- With connector plug
- With adapter G1/8 to G1/4
- To pneumatic actuators FC/FO (single acting)
- Circuit function C: de-energized closed
- Valve material: brass
- Power consumption: 24VA at AC inrush; 17VA/8W at AC hold; 8W at DC

Voltage	DN [mm]	Com-pressed air con- nection P	Actuator connec- tion	PN	kv-value ( $\Delta p=1$ bar) [l/min]	NBR Code	kg
24 V=	1.5	NPT 1/8	G 1/4	10	120	<b>199 190 554</b>	0.420
110 V, 50-60 Hz	1.5	NPT 1/8	G 1/4	10	120	<b>199 190 555</b>	0.420

## Solenoid pilot valve type PV 95 Accessory



### Model:

- Cable plug to DIN EN 175301-803 (DIN 43 650) form A

Voltage	Version	NBR Code	kg
0-250 V	no circuitry	<b>199 190 540</b>	0.020
0-24 V	with LED	<b>199 190 541</b>	0.020
0-24 V	with LED and varistor	<b>199 190 542</b>	0.020
0-24 V	with rectifier LED and varistor	<b>199 190 543</b>	0.020
200-240 V	with LED	<b>199 190 544</b>	0.020
200-240 V	with LED and varistor	<b>199 190 545</b>	0.020



## Pilot valve type 5470 Pilot valve 4/2 ways

- to pneumatic actuators DA (Double acting)
- Version with NAMUR connection
- Circuit function: 4/2-way valve, in rest position pressure inlet 1 connected to outlet 2, outlet 4 exhausted
- Valve material: polyamid
- Electrical connection: cable plug
- For AC 50-60 Hz and DC

Voltage	DN [mm]	NBR Code	kg
230 V, AC/DC	4	<b>199 190 302</b>	0.270
115 V, AC/DC	4	<b>199 190 303</b>	0.270
24 V, AC/DC	4	<b>199 190 304</b>	0.140



## Pilot valve type MNL532 Pilot valve 3/2-5/2-ways

### Model:

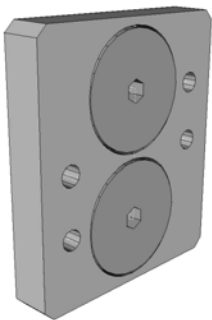
- With NAMUR connection and two silencers/throttle screws

### Mode of action:

- 3/2-way valve, in rest position pressure inlet 1 closed, outlet 3 exhausted
- 5/2-way valve, in rest position pressure inlet 1 connected to outlet 4, outlet 3 exhausted
- Material of body: Aluminum

- to pneumatic actuators
- Electrical connection: cable plug

Voltage	DN [mm]	NBR Code	kg
230 V, AC	5	<b>199 190 360</b>	0.270
110 V, AC	5	<b>199 190 359</b>	0.270
48 V, AC	5	<b>199 190 361</b>	0.270
24 V, AC	5	<b>199 190 358</b>	0.270
24 V, DC	5	<b>199 190 357</b>	0.270



## Accessories to type 5470 and type MNL532 NAMUR connector plate for type DIASTAR DN 15-50 and PA11/21

Pos	DN	Series PA11/21	Series 028-FC	Series 025-FC	Series 025-FO/DA
2	15	199 190 378	199 190 378	199 190 378	199 190 378
2	20	199 190 378	199 190 378	199 190 378	199 190 378
2	25	199 190 378	199 190 378	199 190 378	199 190 378
2	32	199 190 378	199 190 378	199 190 379	199 190 378
2	40	199 190 378	199 190 379	199 190 379	199 190 379
2	50	199 190 378	199 190 379	199 190 379	199 190 379

Series 025 / 028 Code	kg
<b>199 190 378</b>	0.111
<b>199 190 379</b>	0.354

## ASI bus



**AS-Interface type ASEV 2400-11.M**  
For electric rotary actuators



Code	
199 190 562	



**AS-Interface set type ASVC 2300-11**  
For pneumatic rotary drive



Code	kg	
199 190 560	0.300	



**AS-Interface set type FL31**  
for PA 11 - PA 21 / PA 30 - PA 90

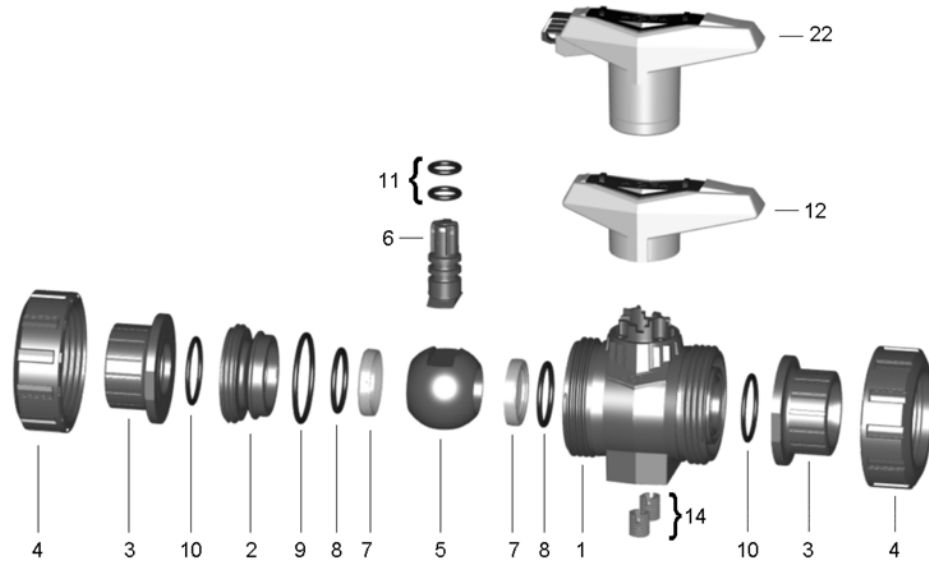
With cable, without pilot valve Code	kg	
199 190 451	0.530	



**AS-Interface connection by means of slave**  
for EA 11 - EA 21 / EA 20 - EA 41

Code	kg	
199 190 463	0.530	

## Spare parts for ball valve type 546 PVC-U (DN10/15-50)



No.	Article / Material	Pieces	d16 DN10	d20 DN15	d25 DN20	d32 DN25	d40 DN32	d50 DN40	Central part
	161 486 151	161 486 151	161 486 153	161 486 154	161 486 155	161 486 156			
1	Body PVC-U	1							
2	Union bush PVC-U	1							
5	Ball PVC-U	1							
6	Stem PVC-U	1							
7	Ball seal PTFE	2							
8	Backing seal EPDM	2							
9	Body seal EPDM	1							
10	Face seal EPDM	2							
11	Stem seal EPDM	2							
12	Lever PP red	1							
14	Threaded bush Stainless steel	2							
	Central part		161 486 163	161 486 163	161 486 164	161 486 165	161 486 166	161 486 167	161 486 168
1	Body PVC-U	1							
2	Union bush PVC-U	1							
5	Ball PVC-U	1							
6	Stem PVC-U	1							
7	Ball seal PTFE	2							
8	Backing seal FPM	2							
9	Body seal FPM	1							
10	Face seal FPM	2							
11	Stem seal FPM	2							
12	Lever PP red	1							
14	Threaded bush Stainless steel	2							

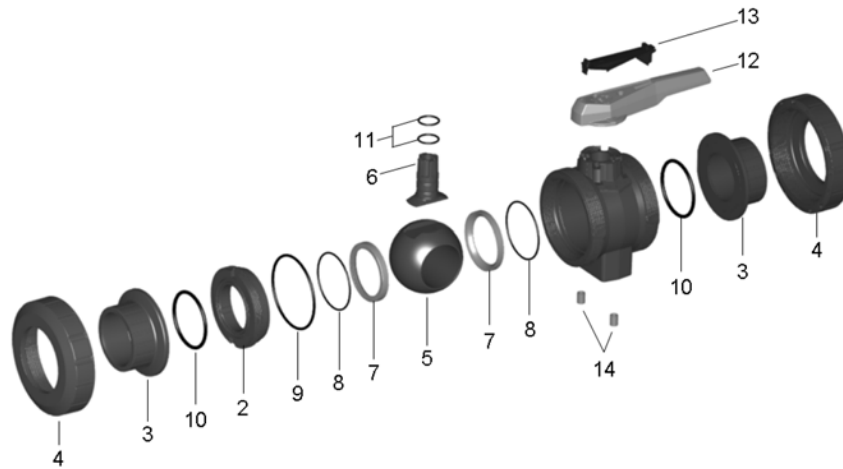
No.	Article / Material	Pieces	d16 DN10	d20 DN15	d25 DN20	d32 DN25	d40 DN32	d50 DN40	
	Ball set		161 486 375	161 486 375	161 486 376	161 486 377	161 486 378	161 486 379	161 486 380
5	Ball PVC-U	1							
6	Stem EPDM	1							
7	Ball seal PTFE	2							
8	Backing seal EPDM	2							
9	Body seal EPDM	1							
11	Stem seal EPDM	2							
	Ball set		161 486 385	161 486 385	161 486 386	161 486 387	161 486 388	161 486 389	161 486 390
5	Ball PVC-U	1							
6	Stem FPM	1							
7	Ball seal PTFE	2							
8	Backing seal FPM	2							
9	Body seal FPM	1							
11	Stem seal FPM	2							
	Seal set		161 486 400	161 486 400	161 486 401	161 486 402	161 486 403	161 486 404	161 486 405
8	Backing seal EPDM	2							
9	Body seal EPDM	1							
10	Face seal EPDM	2							
11	Stem seal EPDM	2							
	Seal set		161 486 410	161 486 410	161 486 411	161 486 412	161 486 413	161 486 414	161 486 415
8	Backing seal FPM	2							
9	Body seal FPM	1							
10	Face seal FPM	2							
11	Stem seal FPM	2							
3	Connecting piece 546 PVC-U (G01) with solvent cement socket metric	1	161 490 666	161 490 667	161 490 668	161 490 669	161 490 670	161 490 671	161 490 672
3	Connecting piece 546 PVC-U (G03) with solvent cement socket Inch ASTM	1	161 490 712	161 490 713	161 490 714	161 490 715	161 490 716	161 490 717	161 490 718
3	Connecting piece 546 PVC-U (G04) with solvent cement socket Inch BS	1	161 490 734	161 490 735	161 490 736	161 490 737	161 490 738	161 490 739	161 490 740
3	Connecting piece 546 PVC-U (G05) with solvent cement spigot metric	1	161 490 701	161 490 702	161 490 703	161 490 704	161 490 705	161 490 706	161 490 707
3	Connecting piece 546 PVC-U (G06) with threaded socket Rp	1	161 490 690	161 490 691	161 490 692	161 490 693	161 490 694	161 490 695	161 490 696
3	Connecting piece 546 PVC-U (G07) with threaded socket Rp fortified	1	161 490 825	161 490 826	161 490 827	161 490 828	161 490 829	161 490 830	161 490 831

No.	Article / Material	Pieces	d16 DN10	d20 DN15	d25 DN20	d32 DN25	d40 DN32	d50 DN40	
3	Connecting piece 546 PVC-U (G08) with threaded socket NPT	1	161 490 723	161 490 724	161 490 725	161 490 726	161 490 727	161 490 728	161 490 729
3	Connecting piece 546 PP-H (G30) with fusion socket metric	1	167 482 900	167 482 901	167 482 902	167 482 903	167 482 904	167 482 905	167 482 906
3	Connecting piece 546 PP-H (G32) with socket fusion spigot metric	1	167 482 922	167 482 923	167 482 924	167 482 925	167 482 926	167 482 927	167 482 928
3	Connecting piece 546 PP-H (G33) with threaded socket Rp fortified	1	167 482 911	167 482 912	167 482 913	167 482 914	167 482 915	167 482 916	167 482 917
3	Connecting piece 546 PP-H (G34) with threaded socket NPT fortified	1	167 480 966	167 482 967	167 482 968	167 482 969	167 482 970	167 482 971	167 482 972
3	Connecting piece 546 PP-H (G35) with butt fusion spigot IR Plus® SDR11 metric	1	-	167 482 945	167 482 946	167 482 947	167 482 948	167 482 749	167 482 950
3	Connecting piece 546 PP-H (G36) with butt fusion spigot SDR17,6 metric	1	-	-	-	-	167 482 937	167 482 938	167 482 939
3	Connecting piece 546 PP-H (G37) with butt fusion spigot long SDR11 metric	1	-	167 482 956	167 482 957	167 482 958	167 482 959	167 482 960	167 482 961
3	Connecting piece 546 PE 100 (G40) with fusion socket metric	1	193 480 175	193 480 176	193 480 177	193 480 178	193 480 179	193 480 180	193 480 181
3	Connecting piece 546 PE 100 (G41) with butt fusion spigot SDR11 metric	1	-	193 480 102	193 480 103	193 480 104	193 480 105	193 480 106	193 480 107
3	Connecting piece 546 PE 100 (G42) with butt fusion spigot SDR17,6 metric	1	-	-	-	-	193 480 086	193 480 087	193 480 088
3	Connecting piece 546 PE 100 (G43) with butt fusion spigot long SDR11 metric	1	-	193 480 152	193 480 153	193 480 154	193 480 155	193 480 156	193 480 157
3	Connecting piece 546 PVC-U (G60) subassembly with fixed flange serrated PVC-U metric	1	-	161 486 360	161 486 361	161 483 362	161 486 363	161 486 364	161 486 365



No.	Article / Material	Pieces	d16 DN10	d20 DN15	d25 DN20	d32 DN25	d40 DN32	d50 DN40	
3	Connecting piece 546 PVC-U (G61) subassembly with fixed flange flat PVC-U metric	1	-	161 486 295	161 486 296	161 486 297	161 486 298	161 486 299	161 486 300
3	Connecting piece 546 PVC-U (G70) subassembly with backing flange PVC-U Inch ANSI	1	-	161 486 265	161 486 266	161 486 267	161 486 268	161 486 269	161 486 270
3	Connecting piece 546 PVC-U (G71) subassembly with backing flange PVC-U Inch ANSI	1	-	161 486 275	161 486 276	161 486 277	161 486 278	161 486 279	161 486 280
3	Connecting piece 546 PVC-U (G72) subassembly with backing flange PP-ST metric	1	-	161 486 285	161 486 286	161 486 287	161 486 288	161 486 289	161 486 290
3	Connecting piece 546 PVC-U (G73) subassembly with backing flange PP-ST ANSI	1	-	161 486 425	161 486 426	161 486 427	161 486 428	161 486 429	161 486 430
3	Connecting piece blank 546 PVC-U (G80)	1	161 490 837	161 490 837	161 490 838	161 490 839	161 490 839	161 490 840	161 490 841
4	Union nut PVC-U	1	161 490 538	161 490 538	161 490 539	161 490 540	161 490 541	161 490 542	161 490 543
12	Standard handle 546 red (K01)	1	167 484 088	167 484 088	167 484 089	167 484 090	167 484 091	167 484 092	167 484 093
12	Standard handle 546 black (K02)	1	167 484 076	167 484 076	167 484 077	167 484 078	167 484 079	161 484 080	167 484 081
22	Multifunction handle 546 red (K11) with ratchet settings lockable	1	167 484 100	167 484 100	167 484 101	167 484 102	167 484 103	167 484 104	167 484 105
10	Face seal EPDM	1	748 410 059	748 410 059	748 410 106	748 410 151	748 410 062	748 410 003	748 410 231
10	Face seal FPM	1	749 410 059	749 410 059	749 410 106	749 410 151	749 410 062	749 410 003	749 410 231

## Spare parts for ball valve type 546 PVC-U (DN65-100)



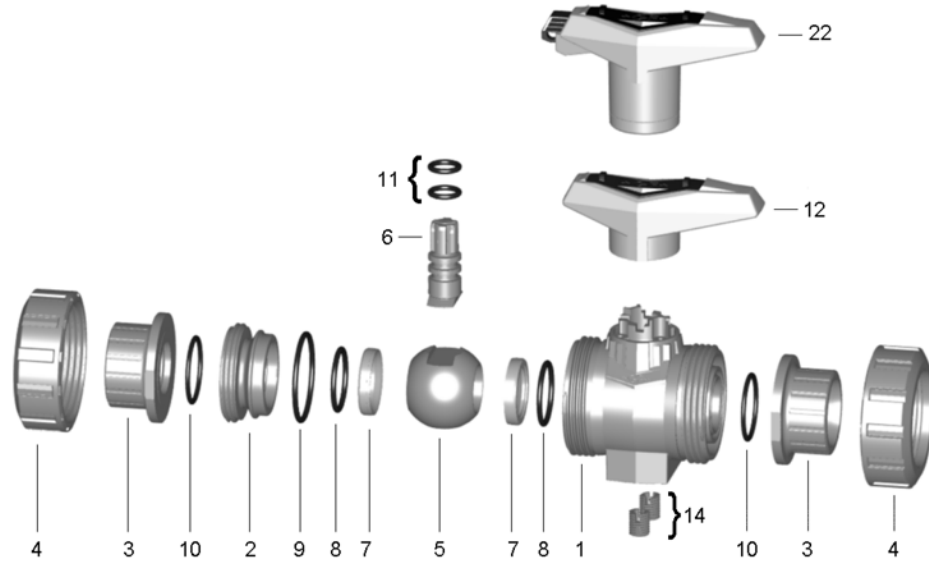
No.	Article / Material	Pieces	d75 DN65	d90 DN80	Central part
	161 486 157	161 486 158	161 486 159		
1	Body PVC-U	1			
2	Union bush PVC-U	1			
5	Ball PVC-U	1			
6	Stem PVC-U	1			
7	Ball seal PTFE	2			
8	Backing seal EPDM	2			
9	Body seal EPDM	1			
10	Face seal EPDM	2			
11	Stem seal EPDM	2			
12	Lever PP red	1			
13	handle clip	1			
14	Threaded bush Stainless steel	2			
	Central part		161 486 169	161 486 170	161 486 171
1	Body PVC-U	1			
2	Union bush PVC-U	1			
5	Ball PVC-U	1			
6	Stem PVC-U	1			
7	Ball seal PTFE	2			
8	Backing seal FPM	2			
9	Body seal FPM	1			
10	Face seal FPM	2			
11	Stem seal FPM	2			
12	Lever PP red	1			
13	handle clip	1			
14	Threaded bush Stainless steel	2			

No.	Article / Material	Pieces	d75 DN65	d90 DN80	
	Ball set		161 486 381	161 486 382	161 486 383
5	Ball PVC-U	1			
6	Stem EPDM	1			
7	Ball seal PTFE	2			
8	Backing seal EPDM	2			
9	Body seal EPDM	1			
11	Stem seal EPDM	2			
	Ball set		161 486 391	161 486 392	161 486 393
5	Ball PVC-U	1			
6	Stem FPM	1			
7	Ball seal PTFE	2			
8	Backing seal FPM	2			
9	Body seal FPM	1			
11	Stem seal FPM	2			
	Seal set		161 486 406	161 486 407	161 486 408
8	Backing seal EPDM	2			
9	Body seal EPDM	1			
10	Face seal EPDM	2			
11	Stem seal EPDM	2			
	Seal set		161 486 416	161 486 417	161 486 418
8	Backing seal FPM	2			
9	Body seal FPM	1			
10	Face seal FPM	2			
11	Stem seal FPM	2			
3	Connecting piece 546 PVC-U (G01) with solvent cement socket metric	1	161 490 673	161 490 674	161 490 675
3	Connecting piece 546 PVC-U (G02) with solvent cement socket JIS	1	161 490 751	161 490 752	161 490 753
3	Connecting piece 546 PVC-U (G03) with solvent cement socket Inch ASTM	1	161 490 719	161 490 720	161 490 721
3	Connecting piece 546 PVC-U (G04) with solvent cement socket Inch BS	1	161 490 673	161 490 742	161 490 743
3	Connecting piece 546 PVC-U (G05) with solvent cement spigot metric	1	161 490 708	161 490 709	161 490 710
3	Connecting piece 546 PVC-U (G06) with threaded socket Rp	1	161 490 697	161 490 698	161 490 699

No.	Article / Material	Pieces	d75 DN65	d90 DN80	
3	Connecting piece 546 PVC-U (G08) with threaded socket NPT	1	161 490 761	161 490 762	161 490 763
3	Connecting piece 546 PVC-U (G09) with threaded socket NPT	1	161 490 730	161 490 731	161 490 732
3	Connecting piece 546 PE 100 (G43) with butt fusion spigot long SDR11 metric	1	193 480 158	193 480 159	193 480 160
3	Connecting piece 546 PE 100 (G44) with butt fusion spigot long SDR17,6 metric	1	163 480 168	163 480 169	163 480 170
3	Connecting piece 546 PVC-U (G70) subassembly with backing flange PVC-U ISO BS	1	161 486 271	161 486 272	161 486 273
3	Connecting piece 546 PVC-U (G71) subassembly with backing flange PVC-U Inch ANSI	1	161 486 281	161 486 282	161 486 283
3	Connecting piece 546 PP (G72) subassembly with backing flange PP-ST ISO BS	1	161 486 291	161 486 292	161 486 293
3	Connecting piece 546 PP (G73) subassembly with backing flange PP-ST ANSI	1	161 486 431	161 486 432	161 486 433
3	Connecting piece 546 PVC-U (G78) subassembly with backing flange JIS	1	161 486 201	161 486 202	161 486 203
4	Union nut PVC-U	1	161 490 544	161 490 545	161 490 546
10	Face seal EPDM	1	748 410 119	748 410 023	748 410 254
10	Face seal FPM	1	749 410 119	749 410 023	749 410 254
12	Standard handle 546 red (K01)	1	167 484 094	167 484 095	167 484 096
12	Standard handle 546 black (K02)	1	167 484 082	167 484 083	167 484 084



## Spare parts for ball valve type 546 PVC-C (DN10/15-50)



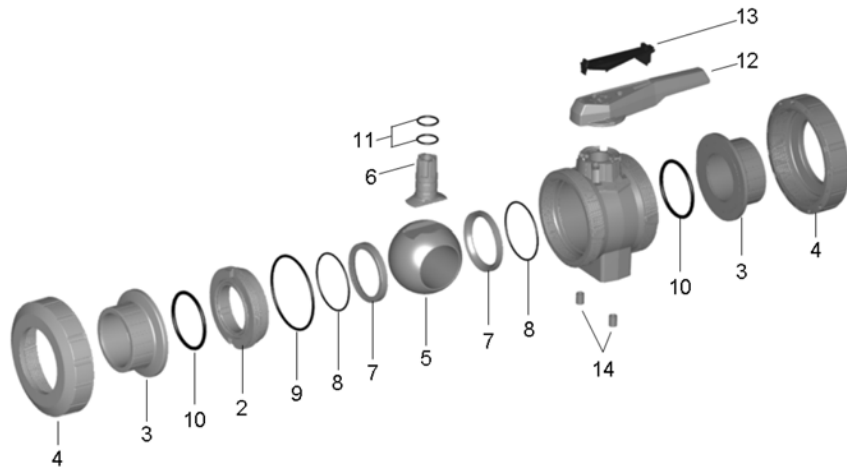
No.	Article / Material	Pieces	d16 DN10	d20 DN15	d25 DN20	d32 DN25	d40 DN32	d50 DN40	Central part
	163 481 251	163	163 481 253	163 481 254	163 480 255	163 481 256			
		481	481						
		251	252						
1	Body PVC-C	1							
2	Union bush PVC-C	1							
5	Ball PVC-C	1							
6	Stem PVC-C	1							
7	Ball seal PTFE	2							
8	Backing seal EPDM	2							
9	Body seal EPDM	1							
10	Face seal EPDM	2							
11	Stem seal EPDM	2							
12	Lever PP red	1							
14	Threaded bush Stainless steel	2							
	Central part		163 481 263	163 481 263	163 481 264	163 481 265	163 481 266	163 481 267	163 481 268
1	Body PVC-C	1							
2	Union bush PVC-C	1							
5	Ball PVC-C	1							
6	Stem PVC-C	1							
7	Ball seal PTFE	2							
8	Backing seal FPM	2							
9	Body seal FPM	1							
10	Face seal FPM	2							
11	Stem seal FPM	2							
12	Lever PP red	1							
14	Threaded bush Stainless steel	2							

No.	Article / Material	Pieces	d16 DN10	d20 DN15	d25 DN20	d32 DN25	d40 DN32	d50 DN40	
	Ball set		163 481 375	163 481 375	163 481 376	163 481 377	163 481 378	163 481 379	163 481 380
5	Ball PVC-C	1							
6	Stem PVC-C	1							
7	Ball seal PTFE	2							
8	Backing seal EPDM	2							
9	Body seal EPDM	1							
11	Stem seal EPDM	2							
	Ball set		163 481 385	163 481 385	163 481 386	163 481 387	163 481 388	163 481 389	163 481 390
5	Ball PVC-C	1							
6	Stem PVC-C	1							
7	Ball seal PTFE	2							
8	Backing seal FPM	2							
9	Body seal FPM	1							
11	Stem seal FPM	2							
	Seal set		161 486 400	161 486 400	161 486 401	161 486 402	161 486 403	161 486 404	161 486 405
8	Backing seal EPDM	2							
9	Body seal EPDM	1							
10	Face seal EPDM	2							
11	Stem seal EPDM	2							
	Seal set		161 486 410	161 486 410	161 486 411	161 486 412	161 486 413	161 486 414	161 486 415
8	Backing seal FPM	2							
9	Body seal FPM	1							
10	Face seal FPM	2							
11	Stem seal FPM	2							
3	Connecting piece 546 PVC-C (G11) with solvent cement socket metric	1	163 481 275	163 481 276	163 481 277	163 481 278	163 481 279	163 481 280	163 481 281
3	Connecting piece 546 PVC-C (G13) with solvent cement socket Inch ASTM	1	163 481 311	163 481 312	163 481 313	163 481 314	163 481 315	163 481 316	163 481 317
3	Connecting piece 546 PVC-C (G14) with solvent cement spigot metric	1	163 481 300	163 481 301	163 481 302	163 481 303	163 481 304	163 481 305	163 481 306
3	Connecting piece 546 PVC-C (G15) with threaded socket Rp	1	163 481 286	163 481 287	163 481 288	163 481 289	163 481 290	163 481 291	163 481 292
3	Connecting piece 546 PVC-C (G16) with threaded socket Rp fortified	1	163 481 400	163 481 401	163 481 402	163 481 403	163 481 404	163 481 405	163 481 406
3	Connecting piece 546 PVC-C (G17) with threaded socket NPT	1	163 481 322	163 481 323	163 481 324	163 481 325	163 481 326	163 481 327	163 481 328

No.	Article / Material	Pieces	d16 DN10	d20 DN15	d25 DN20	d32 DN25	d40 DN32	d50 DN40	
3	Connecting piece 546 PE 100 (G40) with fusion socket metric	1	193 480 175	193 480 176	193 480 177	193 480 178	193 480 179	193 480 180	193 480 181
3	Connecting piece 546 PE 100 (G41) with butt fusion spigot SDR11 metric	1	-	193 480 102	193 480 103	193 480 104	193 480 105	193 480 106	193 480 107
3	Connecting piece 546 PE 100	1	-	-	-	-	193 480 086	193 480 087	193 480 088
3	Connecting piece 546 PE 100 (G43) with butt fusion spigot long SDR11 metric	1	-	193 480 152	193 480 153	193 480 154	193 480 155	193 480 156	193 480 157
3	Connecting piece 546 PE 100 (G72) subassembly with backing flange PP-ST metric	1	-	163 481 412	163 481 413	163 481 414	163 481 415	163 481 416	163 481 417
3	Connecting piece blank 546 PVC-U (G80)	1	161 490 837	161 490 837	161 490 838	161 490 839	161 490 840	161 490 841	161 490 842
4	Union nut PVC-C	1	163 481 226	163 481 226	163 481 227	163 481 228	163 481 229	163 481 230	1634812231
12	Standard handle 546 red (K01)	1	167 484 088	167 484 088	167 484 089	167 484 090	167 484 091	167 484 092	167 484 093
12	Standard handle 546 black (K02)	1	167 484 076	167 484 076	167 484 077	167 484 078	167 484 079	167 484 080	167 484 081
22	Multifunction handle 546 red (K11) with ratchet settings lockable	1	167 484 100	167 484 100	167 484 101	167 484 102	167 484 103	167 484 104	167 484 105
10	Face seal EPDM	1	748 410 059	748 410 059	748 410 106	748 410 159	748 410 062	748 410 003	748 410 231
10	Face seal FPM	1	749 410 059	749 410 059	749 410 106	749 410 159	749 410 062	749 410 003	749 410 231



## Spare parts for ball valve type 546 PVC-C (DN65-100)

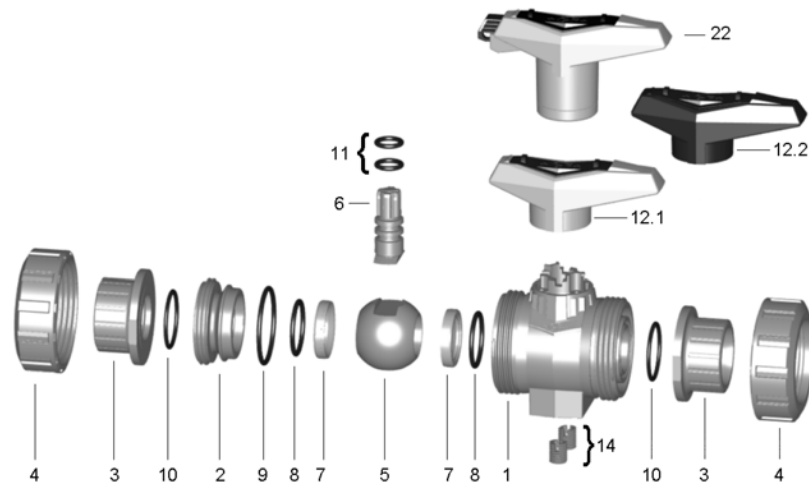


No.	Article / Material	Pieces	d75 DN65	d90 DN80	Central part
	163 481 257	163 480 258	163 481 259		
1	Body PVC-C	1			
2	Union bush PVC-C	1			
5	Ball PVC-C	1			
6	Stem PVC-C	1			
7	Ball seal PTFE	2			
8	Backing seal EPDM	2			
9	Body seal EPDM	1			
10	Face seal EPDM	2			
11	Stem seal EPDM	2			
12	Lever PP red	1			
13	handle clip	1			
14	Threaded bush Stainless steel	2			
	Central part		163 481 269	163 481 270	163 481 271
1	Body PVC-C	1			
2	Union bush PVC-C	1			
5	Ball PVC-C	1			
6	Stem PVC-C	1			
7	Ball seal PTFE	2			
8	Backing seal FPM	2			
9	Body seal FPM	1			
10	Face seal FPM	2			
11	Stem seal FPM	2			
12	Lever PP red	1			
13	handle clip	1			
14	Threaded bush Stainless steel	2			

No.	Article / Material	Pieces	d75 DN65	d90 DN80	
	Ball set		163 481 381	163 481 382	163 481 383
5	Ball PVC-C	1			
6	Stem PVC-C	1			
7	Ball seal PTFE	2			
8	Backing seal EPDM	2			
9	Body seal EPDM	1			
11	Stem seal EPDM	2			
	Ball set		163 481 391	163 481 392	163 481 393
5	Ball PVC-C	1			
6	Stem PVC-C	1			
7	Ball seal PTFE	2			
8	Backing seal FPM	2			
9	Body seal FPM	1			
11	Stem seal FPM	2			
	Seal set		161 486 406	161 486 407	161 486 408
8	Backing seal EPDM	2			
9	Body seal EPDM	1			
10	Face seal EPDM	2			
11	Stem seal EPDM	2			
	Seal set		161 486 416	161 486 417	161 486 418
8	Backing seal FPM	2			
9	Body seal FPM	1			
10	Face seal FPM	2			
11	Stem seal FPM	2			
3	Connecting piece 546 PVC-C (G11) with solvent cement socket metric	1	163 481 282	163 481 283	163 481 284
3	Connecting piece 546 PVC-C (G12) with solvent cement socket JIS	1	163 481 339	163 481 340	163 481 341
3	Connecting piece 546 PVC-C (G13) with solvent cement socket Inch ASTM	1	163 481 318	163 481 319	163 481 320
3	Connecting piece 546 PVC-C (G14) with solvent cement spigot metric	1	163 481 307	163 481 308	163 481 309
3	Connecting piece 546 PVC-C (G15) with threaded socket Rp	1	163 481 293	163 481 294	163 481 295
3	Connecting piece 546 PVC-C (G17) with threaded socket NPT	1	163 481 329	163 481 330	163 481 331

No.	Article / Material	Pieces	d75 DN65	d90 DN80	
3	Connecting piece 546 (G72) subassembly with backing flange PP-ST ISO BS	1	163 481 418	163 481 419	163 481 420
3	Connecting piece 546 (G73) subassembly with backing flange PP-ST ASTM	1	163 481 431	163 481 432	163 481 433
4	Union nut PVC-C	1	163 481 232	163 481 233	1634812234
10	Face seal EPDM	1	748 410 119	748 410 023	748 410 254
10	Face seal FPM	1	749 410 119	749 410 023	749 410 254
12	Standard handle 546 red (K01)	1	167 484 094	167 484 095	167 484 096
12	Standard handle 546 black (K02)	1	167 484 082	167 484 083	167 484 084

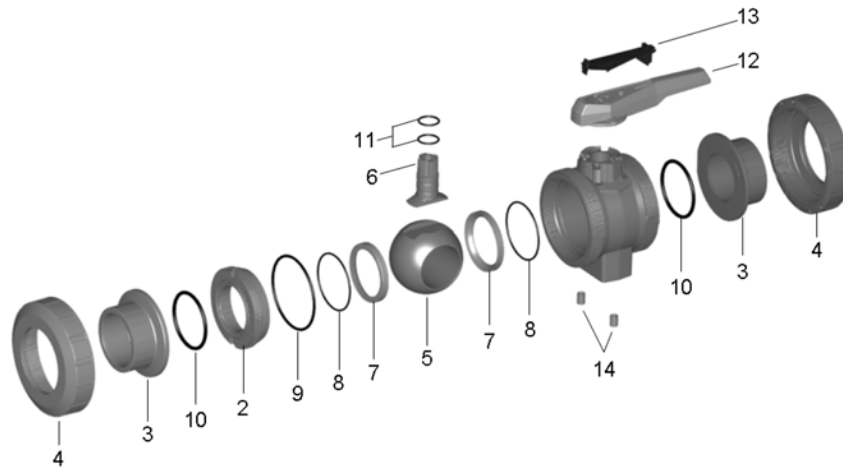
## Spare parts for ball valve type 546 ABS (DN10/15-50)



No.	Article / Material	Pieces	d16 DN10	d20 DN15	d25 DN20	d32 DN25	d40 DN32	d50 DN40	Central part
	169 480 751	169 480 751	169 480 753	169 480 754	169 480 755	169 480 756			
1	Body ABS	1							
2	Union bush ABS	1							
5	Ball ABS	1							
6	Stem ABS	1							
7	Ball seal PTFE	2							
8	Backing seal EPDM	2							
9	Body seal EPDM	1							
10	Face seal EPDM	2							
11	Stem seal EPDM	2							
12	Lever PP red	1							
14	Threaded bush Stainless steel	2							
	Ball set		169 480 900	169 480 900	169 480 901	169 480 902	169 480 903	169 480 904	169 480 905
5	Ball ABS	1							
6	Stem ABS	1							
7	Ball seal PTFE	2							
8	Backing seal EPDM	2							
9	Body seal EPDM	1							
11	Stem seal EPDM	2							
	Seal set		161 486 400	161 486 400	161 486 401	161 486 402	161 486 403	161 486 404	161 486 405
8	Backing seal EPDM	2							
9	Body seal EPDM	1							
10	Face seal EPDM	2							
11	Stem seal EPDM	2							

No.	Article / Material	Pieces	d16 DN10	d20 DN15	d25 DN20	d32 DN25	d40 DN32	d50 DN40	
	Seal set		161 486 410	161 486 410	161 486 411	161 486 412	161 486 413	161 486 414	161 486 415
8	Backing seal FPM	2							
9	Body seal FPM	1							
10	Face seal FPM	2							
11	Stem seal FPM	2							
3	Connecting piece 546 ABS (G20) with solvent cement socket metric	1	169 480 775	169 480 776	169 480 777	169 480 778	169 480 779	169 480 780	169 480 781
3	Connecting piece 546 ABS (G21) with solvent cement socket Inch BS	1	169 480 800	169 480 801	169 480 802	169 480 803	169 480 804	169 480 805	169 480 806
3	Connecting piece 546 ABS (G22) with threaded socket Rp	1	169 480 786	169 480 787	169 480 788	169 480 789	169 480 790	169 480 791	169 480 792
3	Connecting piece 546 ABS (G23) with threaded socket Rp fortified	1	169 480 925	169 480 926	169 480 927	169 480 928	169 480 929	169 480 930	169 480 931
3	Connecting piece 546 PE 100 (G40) with fusion socket metric	1	193 480 175	193 480 176	193 480 177	193 480 178	193 480 179	193 480 180	193 480 181
3	Connecting piece 546 PE 100	1	-	193 480 102	193 480 103	193 480 104	193 480 105	193 480 106	193 480 107
3	Connecting piece 546 PE 100 (G42) with butt fusion spigot SDR17,6 metric	1	-	-	-	-	193 480 086	193 480 087	193 480 088
3	Connecting piece 546 PE 100 (G43) with butt fusion spigot long SDR11 metric	1	-	193 480 152	193 480 153	193 480 154	193 480 155	193 480 156	193 480 157
3	Connecting piece blank 546 PVC-U (G80)	1	161 490 837	161 490 837	161 490 838	161 490 839	161 490 840	161 490 841	161 490 842
4	Union nut 546 ABS		169 480 713	169 480 713	169 480 714	169 480 715	169 480 716	169 480 717	169 480 718
12	Standard handle 546 red (K01)	1	167 484 088	167 484 088	167 484 089	167 484 090	167 484 091	167 484 092	167 484 093
12	Standard handle 546 black (K02)	1	167 484 076	167 484 076	167 484 077	167 484 078	167 484 079	167 484 080	167 484 081
22	Multifunction handle 546 red (K11) with ratchet settings lockable	1	167 484 100	167 484 100	167 484 101	167 484 102	167 484 103	167 484 104	167 484 105
10	Face seal EPDM		748 410 059	748 410 059	748 410 106	748 410 151	748 410 062	748 410 003	748 410 231

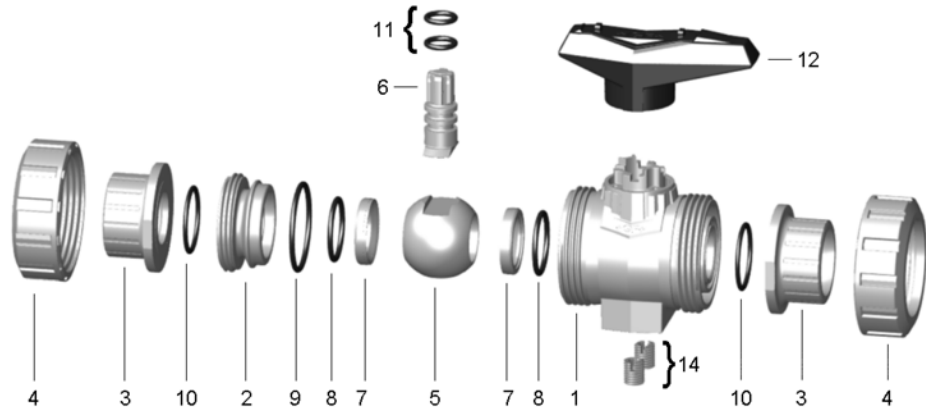
## Spare parts for ball valve type 546 ABS (DN65-100)



No.	Article / Material	Pieces	d75 DN65	d90 DN80	Central part
	169 480 757	169 480 758	169 480 759		
1	Body ABS	1			
2	Union bush ABS	1			
5	Ball ABS	1			
6	Stem ABS	1			
7	Ball seal PTFE	2			
8	Backing seal EPDM	2			
9	Body seal EPDM	1			
10	Face seal EPDM	2			
11	Stem seal EPDM	2			
12	Lever PP red	1			
13	handle clip	1			
14	Threaded bush Stainless steel	2			
	Ball set		169 480 906	169 480 907	169 480 908
5	Ball ABS	1			
6	Stem ABS	1			
7	Ball seal PTFE	2			
8	Backing seal EPDM	2			
9	Body seal EPDM	1			
11	Stem seal EPDM	2			
	Seal set		161 486 406	161 486 407	161 486 408
8	Backing seal EPDM	2			
9	Body seal EPDM	1			
10	Face seal EPDM	2			
11	Stem seal EPDM	2			

No.	Article / Material	Pieces	d75 DN65	d90 DN80	
3	Connecting piece 546 ABS (G20) with solvent cement socket metric	1	169 480 782	169 480 783	169 480 784
3	Connecting piece 546 ABS (G21) with solvent cement socket Inch BS	1	169 480 782	169 480 808	169 480 809
4	Union nut 546 ABS	1	169 480 719	169 480 720	169 480 721
12	Standard handle 546 red (K01)	1	167 484 094	167 484 095	167 484 096
12	Standard handle 546 black (K02)	1	167 484 082	167 484 083	167 484 084
10	Face seal EPDM	1	748 410 119	748 410 023	748 410 254

## Spare parts for ball valve type 546 PP-H (DN10/15-50)



No.	Article / Material	Pieces	d16 DN10	d20 DN15	d25 DN20	d32 DN25	d40 DN32	d50 DN40	Central part
	167 482 876	167 482 876	167 482 878	167 482 879	167 482 880	167 482 881			
1	Body PP	1							
2	Union bush PP	1							
5	Ball PP	1							
6	Stem PP	1							
7	Ball seal PTFE	2							
8	Backing seal EPDM	1							
9	Body seal EPDM	1							
10	Face seal EPDM	2							
11	Stem seal EPDM	2							
12	Lever PP black	1							
14	Threaded bush Stainless steel	3							
	Central part		167 482 888	167 482 888	167 482 889	167 482 890	167 482 891	167 482 892	167 482 893
1	Body PP	1							
2	Union bush PP	1							
5	Ball PP	1							
6	Stem PP	1							
7	Ball seal PTFE	2							
8	Backing seal FPM	1							
9	Body seal FPM	1							
10	Face seal FPM	2							
11	Stem seal FPM	2							
12	Lever PP black	1							
14	Threaded bush Stainless steel	3							
	Ball set		167 484 125	167 484 125	167 484 126	167 484 127	167 484 128	167 484 129	167 484 130
5	Ball PP	1							
6	Stem PP	1							
7	Ball seal PTFE	2							
8	Backing seal EPDM	2							
9	Body seal EPDM	1							
11	Stem seal EPDM	2							

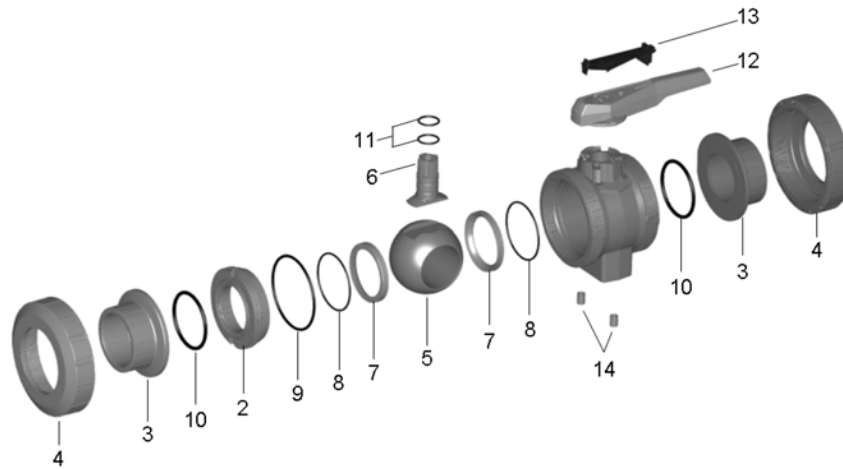


No.	Article / Material	Pieces	d16 DN10	d20 DN15	d25 DN20	d32 DN25	d40 DN32	d50 DN40	
	Ball set		167 484 135	167 484 135	167 484 136	167 484 137	167 484 138	167 484 139	167 484 140
5	Ball PP	1							
6	Stem PP	1							
7	Ball seal PTFE	2							
8	Backing seal FPM	2							
9	Body seal FPM	1							
11	Stem seal FPM	2							
	Seal set		161 486 400	161 486 400	161 486 401	161 486 402	161 486 403	161 486 404	161 486 405
8	Backing seal EPDM	2							
9	Body seal EPDM	1							
10	Face seal EPDM	2							
11	Stem seal EPDM	2							
	Seal set		161 486 410	161 486 410	161 486 411	161 486 412	161 486 413	161 486 414	161 486 415
8	Backing seal FPM	2							
9	Body seal FPM	1							
10	Face seal FPM	2							
11	Stem seal FPM	2							
3	Connecting piece 546 PP-H (G30) with fusion socket metric	1	167 482 900	167 482 901	167 482 902	167 482 903	167 482 904	167 482 905	167 482 906
3	Connecting piece 546 PP-H (G32) with socket fusion spigot metric	1	167 482 922	167 482 923	167 482 924	167 482 925	167 482 926	167 482 927	167 482 928
3	Connecting piece 546 PP-H (G33) with threaded socket Rp fortified	1	167 482 911	167 482 912	167 482 913	167 482 914	167 482 915	167 482 916	167 482 917
3	Connecting piece 546 PP-H (G34) with threaded socket NPT fortified	1	167 482 966	167 482 967	167 482 968	167 482 969	167 482 970	167 482 971	167 482 972
3	Connecting piece 546 PP-H (G35) with butt fusion spigot IR Plus® SDR11 metric	1	-	167 482 945	167 482 946	167 482 947	167 482 948	167 482 949	167 482 950
3	Connecting piece 546 PP-H (G36) with butt fusion spigot SDR17,6 metric	1	-	-	-	-	167 482 937	167 482 938	167 482 939
3	Connecting piece 546 PP-H (G37) with butt fusion spigot long SDR11 metric	1	-	167 482 956	167 482 957	167 482 958	167 482 959	167 482 960	167 482 961
3	Connecting piece 546 PP-H (G63) subassembly with fixed flange serrated PP-H metric	1	-	167 484 160	167 484 161	167 484 162	167 484 163	167 484 164	167 484 165

No.	Article / Material	Pieces	d16 DN10	d20 DN15	d25 DN20	d32 DN25	d40 DN32	d50 DN40	
3	Connecting piece 546 PP-H (G73) subassembly with backing flange PP-ST ANSI	1	-	167 482 956	167 482 957	167 482 958	167 482 959	-	-
3	Connecting piece 546 PE 100 (G40) with fusion socket metric	1	193 480 175	193 480 176	193 480 177	193 480 178	193 480 179	193 480 180	193 480 181
3	Connecting piece 546 PE 100 (G41) with butt fusion spigot SDR11 metric	1	-	193 480 102	193 480 103	193 480 104	193 480 105	193 480 106	193 480 107
3	Connecting piece 546 PE 100 (G42) with butt fusion spigot SDR17,6 metric	1	-	-	-	-	193 480 086	193 480 087	193 480 088
3	Connecting piece 546 PE 100 (G43) with butt fusion spigot long SDR11 metric	1	-	193 480 152	193 480 153	193 480 154	193 480 155	193 480 156	193 480 157
3	Connecting piece 546 PVC-C (G11) with solvent cement socket metric	1	163 481 275	163 481 276	163 481 277	163 481 278	163 481 279	163 481 280	163 481 281
3	Connecting piece 546 PVC-C (G13) with solvent cement socket Inch ASTM	1	163 481 311	163 481 312	163 481 313	163 481 314	163 481 315	163 481 316	163 481 317
3	Connecting piece 546 PVC-C (G14) with solvent cement spigot metric	1	163 481 300	163 481 301	163 481 302	163 481 303	163 481 304	163 481 305	163 481 306
3	Connecting piece 546 PVC-C (G15) with threaded socket Rp	1	163 481 286	163 481 287	163 481 288	163 481 289	163 481 290	163 481 291	163 481 292
3	Connecting piece 546 PVC-C (G16) with threaded socket Rp fortified	1	163 481 400	163 481 401	163 481 402	163 481 403	163 481 404	163 481 405	163 481 406
3	Connecting piece 546 PVC-C (G17) with threaded socket NPT	1	163 481 322	163 481 323	163 481 324	163 481 325	163 481 326	163 481 327	163 481 328
4	Union nut 546 PP-H	1	167 482 712	167 482 712	167 482 713	167 482 714	167 482 715	167 482 716	167 482 717
12	Standard handle 546 red (K01)	1	167 484 088	167 484 088	167 484 089	167 484 090	167 484 091	167 484 092	167 484 093

No.	Article / Material	Pieces	d16 DN10	d20 DN15	d25 DN20	d32 DN25	d40 DN32	d50 DN40	
12	Standard handle 546 black (K02)	1	167 484 076	167 484 076	167 484 077	167 484 078	167 484 079	167 484 080	167 484 081
22	Multifunction handle 546 red (K11) with ratchet settings lockable	1	167 484 100	167 484 100	167 484 101	167 484 102	167 484 103	167 484 104	167 484 105
10	Face seal EPDM	1	748 410 059	748 410 059	748 410 106	748 410 151	748 410 062	748 410 003	748 410 231
10	Face seal FPM	1	749 410 059	749 410 059	749 410 106	749 410 151	749 410 062	749 410 003	749 410 231

## Spare parts for ball valve type 546 PP-H (DN65-100)



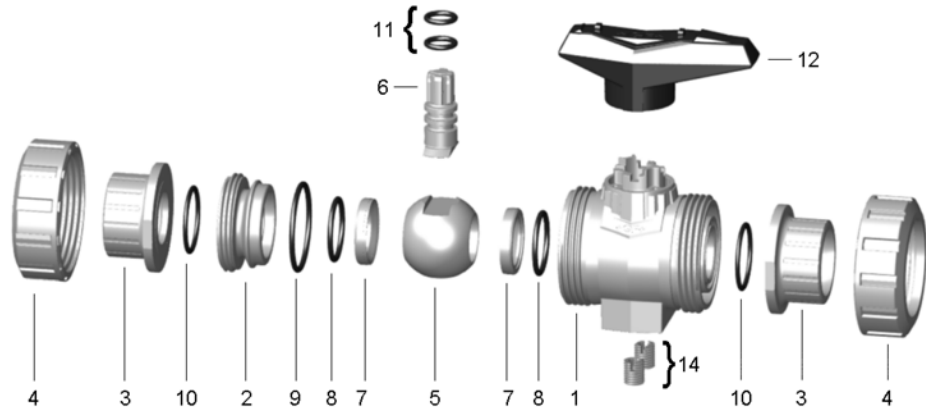
No.	Article / Material	Pieces	d75 DN65	d90 DN80	Central part
	167 482 882	167 482 883	167 482 884		
1	Body PP	1			
2	Union bush PP	1			
5	Ball PP	1			
6	Stem PP	1			
7	Ball seal PTFE	2			
8	Backing seal EPDM	1			
9	Body seal EPDM	1			
10	Face seal EPDM	2			
11	Stem seal EPDM	2			
12	Lever PP black	1			
13	handle clip	1			
14	Threaded bush Stainless steel	3			
	Central part		167 482 894	167 482 895	167 482 896
1	Body PP	1			
2	Union bush PP	1			
5	Ball PP	1			
6	Stem PP	1			
7	Ball seal PTFE	2			
8	Backing seal FPM	1			
9	Body seal FPM	1			
10	Face seal FPM	2			
11	Stem seal FPM	2			
12	Lever PP black	1			
13	handle clip	1			
14	Threaded bush Stainless steel	3			

No.	Article / Material	Pieces	d75 DN65	d90 DN80	
	Ball set		167 484 131	167 484 132	167 484 133
5	Ball PP	1			
6	Stem PP	1			
7	Ball seal PTFE	2			
8	Backing seal EPDM	2			
9	Body seal EPDM	1			
11	Stem seal EPDM	2			
	Ball set		167 484 141	167 484 142	167 484 143
5	Ball PP	1			
6	Stem PP	1			
7	Ball seal PTFE	2			
8	Backing seal FPM	2			
9	Body seal FPM	1			
11	Stem seal FPM	2			
	Seal set		161 486 406	161 486 407	161 486 408
8	Backing seal EPDM	2			
9	Body seal EPDM	1			
10	Face seal EPDM	2			
11	Stem seal EPDM	2			
	Seal set		161 486 416	161 486 417	161 486 418
8	Backing seal FPM	2			
9	Body seal FPM	1			
10	Face seal FPM	2			
11	Stem seal FPM	2			
3	Connecting piece 546 PP-H (G30) with fusion socket metric	1	167 482 907	167 482 908	167 482 909
3	Connecting piece 546 PP-H (G32) with socket fusion spigot metric	1	167 482 929	167 482 930	167 482 931
3	Connecting piece 546 PP-H (G35) with butt fusion spigot IR Plus® SDR11 metric	1	167 482 951	167 482 952	167 482 953
3	Connecting piece 546 PP-H (G36) with butt fusion spigot SDR17,6 metric	1	167 482 940	167 482 941	167 482 942
3	Connecting piece 546 (G73) subassembly with backing flange PP-ST ANSI	1	167 484 071	167 484 072	167 484 073
3	Connecting piece 546 (G77) subassembly with backing flange PP-GF JIS	1	167 484 481	167 484 482	167 484 483

No.	Article / Material	Pieces	d75 DN65	d90 DN80	
3	Connecting piece 546 (G72) subassembly with backing flange PP-ST ISO BS	1	167 484 418	167 484 419	167 484 420
3	Connecting piece 546 PE 100 (G43) with butt fusion spigot long SDR11 metric	1	193 480 158	193 480 159	193 480 160
3	Connecting piece 546 PE 100 (G44) with butt fusion spigot long SDR17,6 metric	1	193 480 168	193 480 169	193 480 170
4	Union nut 546 PP-H	1	167 482 718	167 482 719	167 482 720
12	Standard handle 546 red (K01)	1	167 484 094	167 484 095	167 484 096
12	Standard handle 546 black (K02)	1	167 484 082	167 484 083	167 484 084
10	Face seal EPDM	1	748 410 119	748 410 023	748 410 254
10	Face seal FPM	1	749 410 119	749 410 023	749 410 254



## Spare parts for ball valve type 546 PVDF



No.	Article / Material	Pieces	d16 DN10	d20 DN15	d25 DN20	d32 DN25	d40 DN32	d50 DN40	Central part
	175 482 963	175 482 963	175 482 965	175 482 966	175 482 967	175 482 968			
1	Body PVDF	1							
2	Union bush PVDF	1							
5	Ball PVDF	1							
6	Stem PVDF	1							
7	Ball seal PTFE	2							
8	Backing seal FPM	2							
9	Body seal FPM	1							
10	Face seal FPM	2							
11	Stem seal FPM	2							
12	Lever PP black	1							
14	Threaded bush Stainless steel	2							
	Ball set		175 483 275	175 483 275	175 483 276	175 483 277	175 483 278	175 483 279	175 483 280
5	Ball PVDF	1							
6	Stem PVDF	1							
7	Ball seal PTFE	2							
8	Backing seal FPM	2							
9	Body seal FPM	1							
11	Stem seal FPM	2							
	Seal set		161 486 410	161 486 410	161 486 411	161 486 412	161 486 413	161 486 414	161 486 415
8	Backing seal FPM	2							
9	Body seal FPM	1							
10	Face seal FPM	2							
11	Stem seal FPM	2							
3	Connecting piece 546 PVDF (G50) with fusion socket metric	1	175 483 025	175 483 026	175 483 027	175 483 028	175 483 029	175 483 030	175 483 031
3	Connecting piece 546 PVDF (G51) with socket fusion spigot metric	1	175 483 036	175 483 037	175 483 038	175 483 039	175 483 040	175 483 041	175 483 042
3	Connecting piece 546 PVDF (G52) with butt fusion spigot IR-Plus® metric	1	-	175 483 048	175 483 049	175 483 050	175 483 051	175 483 052	175 483 053



No.	Article / Material	Pieces	d16 DN10	d20 DN15	d25 DN20	d32 DN25	d40 DN32	d50 DN40	
3	Connecting piece 546 PVDF (G53) with threaded socket NPT	1	175 483 058	175 483 059	175 483 060	175 483 061	175 483 062	175 483 063	175 483 064
3	Connecting piece 546 PVDF (G64) subassembly with fixed flange serrated PVDF metric	1	-	175 483 285	175 483 286	175 483 287	175 483 288	175 483 289	175 483 290
4	Union nut 546 PVDF	1	175 482 937	175 482 937	175 482 938	175 482 939	175 482 940	175 482 941	175 482 942
12	Standard handle 546 red (K01)	1	167 484 088	167 484 088	167 484 089	167 484 090	167 484 091	167 484 092	167 484 093
12	Standard handle 546 black (K02)	1	167 484 076	167 484 076	167 484 077	167 484 078	167 484 079	167 484 080	167 484 081
22	Multifunction handle 546 red (K11) with ratchet settings lockable	1	167 484 100	167 484 100	167 484 101	167 484 102	167 484 103	167 484 104	167 484 105
10	Face seal FPM	1	749 470 059	749 470 059	749 470 106	749 470 151	749 470 062	749 470 003	749 470 231

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800 000 157	23	800 000 631	114
800 000 182	13	800 000 632	114
800 000 183	13	800 000 633	114
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800 000 187	13	800 000 637	114
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800 000 193	13	800 000 639	114
800 000 194	13	800 000 640	114
800 000 195	13	800 015 141	161
800 000 196	13	800 015 142	161
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# General Condition of Supply of Georg Fischer Piping Systems Limited, Schaffhausen

## 1 General

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

## 2 Tenders

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

## 3 Scope of Delivery

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

## 4 Data and Documents

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

## 5 Confidentiality, Protection of Personal Data

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

## 6 Local Laws and Regulations, Export Controls

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

## 7 Price

- 7.1 Unless agreed otherwise, the prices shall be deemed quoted net ex works (according to Incoterms of the ICC, latest version) including standard packing. All supplementary costs such as the cost of carriage, insurance, export-, transit- and importances etc. shall be borne by the Purchaser. The Purchaser shall also bear the costs of all taxes, fees, duties etc. connected with the contract.
- 7.2 If the costs of packing, carriage, insurance, fees and other supplementary costs are included in the tender price or contract price or are referred to specifically in the tender or confirmation of order, Georg Fischer reserve the right to revise their prices accordingly should any change occur in the relevant tariffs.

## 8 Terms of Payment

- 8.1 The Purchaser shall make payment in the manner agreed by the parties without any deductions such as discounts, costs, taxes or dues.
- 8.2 The Purchaser may only withhold or off-set payments due against counter claims which are either expressly acknowledged by Georg Fischer or finally awarded to the Purchaser. In particular, payment shall still be made when unessential items are still out-standing provided that the Products already delivered are not rendered unusable as a result.

## 9 Retention of Title

- 9.1 The Products shall remain the property of Georg Fischer until the Purchaser shall have settled all claims, present and future, which Georg Fischer may have against him.
- 9.2 Should the Purchaser resell Products to which title is reserved, in the ordinary course of business, he shall hereby be deemed to have tacitly assigned to Georg Fischer the proceeds deriving from their sale together with all collateral rights, securities and reservations of title until all claims held by Georg Fischer shall have been settled. Until revoked by Georg Fischer, this assignment shall not preclude Purchaser's right to collect the assigned receivables.
- 9.3 To the extent the value of the Products to which title is reserved together with collateral securities exceeds Georg Fischer's claims against the Purchaser by more than 20%, Georg Fischer shall re-assign the above proceeds to Purchaser at his request.

## 10 Delivery

- 10.1 The term of delivery shall commence as soon as the contract has been entered into, all official formalities such as import and payment permits have been obtained and all essential technical issues have been settled. The term of delivery shall be deemed duly observed when, upon its expiry, the Products are ready for despatch.
- 10.2 Delivery is subject to the following conditions, i.e. the term of delivery shall be reasonably extended:
  - a) if Georg Fischer are not supplied in time with the information necessary for the execution of the contract or if subsequent changes causing delays are made by the Purchaser.
  - b) if Georg Fischer are prevented from performing the contract by force majeure. Force majeure shall equally be deemed to be any unforeseeable event beyond Georg Fischer's control which renders Georg Fischer's performance commercially unpractical or impossible, such as delayed or defective supplies from sub contractors labour disputes, governmental orders or regulations, shortages in materials or energy, serious disturbances in Georg Fischer's works, such as the total or partial destruction of plant and equipment or the breakdown of essential facilities, serious disruptions in transport facilities, e.g. impassable roads.  
Should the effect of force majeure exceed a period of six months, either party may cancel the contract forthwith.  
Georg Fischer shall not be liable for any damage or loss of any kind whatsoever resulting therefrom, any suspension or cancellation being without prejudice to Georg Fischer's right to recover all sums due in respect of consignments delivered and costs incurred to date.
  - c) if the Purchaser is in delay with the fulfilment of his obligations under the contract, in particular, if he does not adhere to the agreed conditions of payment or if he has failed to timely provide the agreed securities.
- 10.3 If for reasons attributable to Georg Fischer the agreed term of delivery or a reasonable extension thereof is exceeded, Georg Fischer shall not be deemed in default until the Purchaser has granted to Georg Fischer in writing a reasonable extension thereof of not less than one month which equally is not met.  
The Purchaser shall then be entitled to the remedies provided at law, it being however understood that, subject to limitations of Art. 16, damage claims shall be limited to max. 10% of the price of the delayed delivery.
- 10.4 Part shipments shall be allowed and Georg Fischer shall be entitled to invoice for such partial deliveries.
- 10.5 If the Purchaser fails to take delivery within a reasonable time of Products notified as ready for despatch, Georg Fischer shall be entitled to store the Products at the Purchaser's expense and risk and to invoice them as delivered. If Purchaser fails to effect payment, Georg Fischer shall be entitled to dispose of the Products.
- 10.6 Should Purchaser cancel an order without justification and should Georg Fischer not insist on the performance of the contract, Georg Fischer shall be entitled to liquidated damages in the amount of 10% of the contract price, Georg Fischer's right to prove and claim higher damages remaining reserved. Purchaser shall be entitled to prove, that Georg Fischer has suffered no or a considerably lower damage.

## 11 Packing

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

## 12 Passing of Risk

- 12.1 The risk in the Products shall pass to the Purchaser as soon as they have left Georg Fischer's works (EX WORKS, Incoterms ICC, latest version), even if delivery is made carriage-paid, under similar clauses or including installation or when carriage is organized and managed by Georg Fischer.
- 12.2 If delivery is delayed for reasons beyond Georg Fischer's control, the risk shall pass to the Purchaser when he is notified that the Products are ready for despatch.

## 13 Carriage and Insurance

- 13.1 Unless agreed otherwise, the Purchaser shall bear the cost of carriage.
- 13.2 The Purchaser shall be responsible for transport insurance against damage of whatever kind. Even when such insurance is arranged by Georg Fischer it shall be deemed taken out by the order of and for the account of the Purchaser and at his risk.
- 13.3 Special requests regarding carriage and insurance shall be communicated to Georg Fischer in due time. Otherwise carriage shall be arranged by Georg Fischer at their discretion, but without responsibility, by the quickest and cheapest method possible.  
In case of carriage-paid delivery transport arrangements shall be made by Georg Fischer. If the Purchaser specifies particular requirements, any extra costs involved shall be borne by him.
- 13.4 In the event of damage or loss of the Products during carriage the Purchaser shall mark the delivery documents accordingly and immediately have the damage ascertained by the carrier. Not readily ascertainable damages sustained during carriage shall be notified to the carrier within six days after receipt of the Products.

## 14 Inspection, Notification of Defects and Damages

- 14.1 The Products will be subject to normal inspection by Georg Fischer during manufacture. Additional tests required by the Purchaser shall be agreed upon in writing and shall be charged to the Purchaser.
- 14.2 It shall be a condition of Georg Fischer's obligation under the warranties stated hereinafter that Georg Fischer be notified in writing by the Purchaser of any purported defect immediately upon discovery. Notice concerning weight, numbers or apparent defects is to be given latest within 30 days from receipt of the Products, notice of other defects immediately latest within 7 working days after discovery, in any event within the agreed warranty period.
- 14.3 Purchaser shall not dispose of allegedly defective Products until all warranty and/or damage claims are finally settled. At its request, defective Products are to be placed at Georg Fischer's disposal.
- 14.4 At its request, Georg Fischer shall be given the opportunity to inspect the defect and/or damage, prior to commencement of remedial work, either itself or by third party experts.

## 15 Warranty

- 15.1 At the written request of the Purchaser, Georg Fischer undertake to repair or replace at their discretion, as quickly as possible and free of charge all Products supplied which demonstrably suffer from faulty design, materials or workmanship or from faulty operating or installation instructions.  
In order to protect employees from toxic or radioactive substances which may have been transported through defective parts returned to Georg Fischer's sales organisation, said parts must be accompanied by a Material Safety Disclosure Form. The form may be obtained from Georg Fischer's local sales company or via [www.piping.georgfischer.com](http://www.piping.georgfischer.com).  
Replaced parts shall become property of Georg Fischer.
- 15.2 For Products which are manufactured to specifications, drawings or patterns supplied by the Purchaser, Georg Fischer's warranty shall be restricted to proper materials and workmanship.
- 15.3 The Purchaser shall be entitled to cancel the contract or to demand a reduction in the contract price if also a second attempt to repair or replace the Products has failed.
- 15.4 For Products or essential components manufactured by a third party and supplied by Georg Fischer under this contract, Georg Fischer's warranty is limited to the warranty provided by said third party.
- 15.5 This warranty shall not apply to damage resulting from normal wear and tear, improper storage and maintenance, failure to observe the operating instructions, overstressing or overloading, unsuitable operating media, unsuitable construction work or unsuitable building ground, improper repairs or alterations by the Purchaser or third parties, the use of other than original spare parts and other reasons beyond Georg Fischer's control.
- 15.6 No action or claim may be brought by the Purchaser on account of any alleged breach of warranty or any other obligation of Georg Fischer after the expiration of twelve (12) months from receipt of the Products by the end user or at the latest within eighteen (18) months of the Products being despatched by Georg Fischer.
- 15.7 In case of Products for use in domestic installations or in utilities
  - Georg Fischer will assume the costs of dismantling the defective Product and restoring the damaged object as well as, in case of negligence, all other direct damages caused by the defective Product (damage to property and injury to or death of persons) up to CHF 1 000 000 per occurrence.
  - the statute of limitations for warranty or damage claims - contrary to Section 15.6 - will be 5 years from the date of installation.

## 16 Limitation of Liability

- All cases of breach of contract and the relevant consequences as well as all rights and claims on the part of the customer, irrespective of what ground they are based, are exhaustively covered by these general conditions of supply. In particular, any claims not expressly mentioned for damages, reduction of price, termination of or withdrawal from the contract are excluded. In no case whatsoever shall the customer be entitled to claim damages other than compensation for costs of remedying defects in the supplies. This in particular refers, but shall not be limited, to loss of production, loss of use, loss of orders, loss of profit and other direct or indirect or consequential damage. This exclusion of liability, however, does not apply to unlawful intent or gross negligence on the part of Georg Fischer and in case of strict liability under applicable product liability statutes, but does apply to unlawful intent or gross negligence of persons employed or appointed by Georg Fischer to perform any of its obligations.

## 17 Severability

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

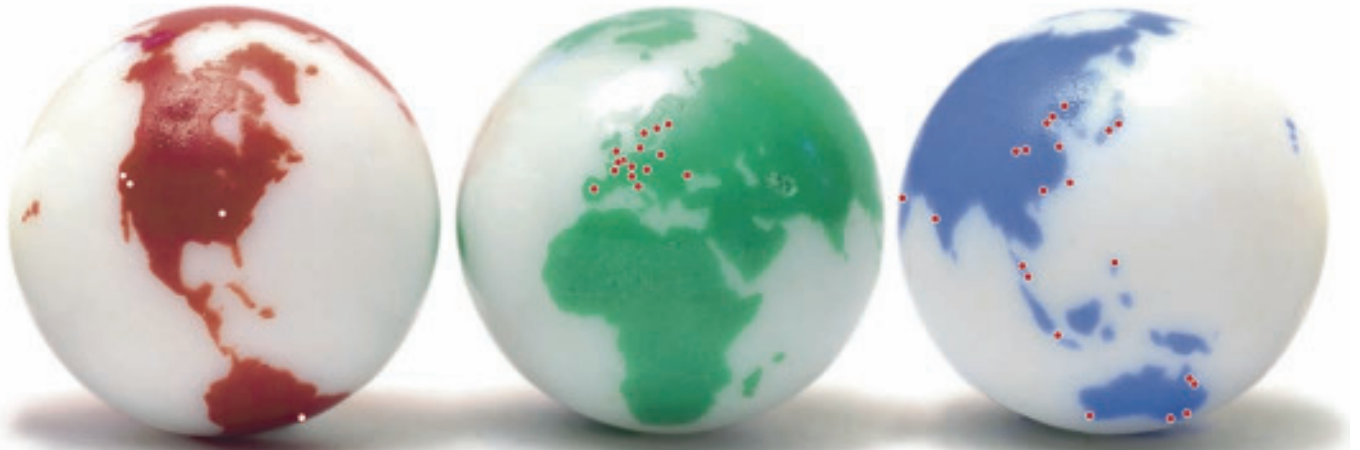
## 18 Place of Performance and Jurisdiction

- 18.1 Place of performance for the Products shall be the Georg Fischer works from which the Products are despatched.
- 18.2 Any civil action based upon any alleged breach of this contract shall be filed and prosecuted exclusively in the courts of Schaffhausen, Switzerland.  
Georg Fischer however reserves the right to file actions in any court having jurisdiction over controversies arising out of or in connection with the present contract.
- 18.3 The contract shall be governed by Swiss law without regard to conflict of law provisions that would require the application of another law.

# GF Piping Systems → worldwide at home

Our sales companies and representatives ensure local customer support in over 100 countries.

[www.piping.georgfischer.com](http://www.piping.georgfischer.com)



The technical data are not binding and not expressly warranted characteristics of the goods. They are subject to change. Our General Conditions of Sale apply.

## Adding Quality to People's Lives

### Australia

Georg Fischer Pty Ltd  
Unit 1, 100 Belmore Road  
Riverwood NSW 2210 Australia  
Phone +61(0)2/9502 8000  
[australia.ps@georgfischer.com](mailto:australia.ps@georgfischer.com)  
[www.georgfischer.com.au](http://www.georgfischer.com.au)

### Austria

Georg Fischer  
Rohrleitungssysteme GmbH  
3130 Herzogenburg  
Phone +43(0)2782/856 43-0  
[austria.ps@georgfischer.com](mailto:austria.ps@georgfischer.com)  
[www.georgfischer.at](http://www.georgfischer.at)

### Belgium/Luxembourg

Georg Fischer NV/SA  
1070 Bruxelles/Brüssel  
Phone +32(0)2/556 40 20  
[be.ps@georgfischer.com](mailto:be.ps@georgfischer.com)  
[www.georgfischer.be](http://www.georgfischer.be)

### Brazil

Georg Fischer Ltda  
04795-100 São Paulo  
Phone +55(0)11/5687 1311  
[br.ps@georgfischer.com](mailto:br.ps@georgfischer.com)

### China

Georg Fischer  
Piping Systems Ltd Shanghai  
Pudong, Shanghai 201319  
Phone +86(0)21/58 13 33 33  
[china.ps@georgfischer.com](mailto:china.ps@georgfischer.com)  
[www.cn.piping.georgfischer.com](http://www.cn.piping.georgfischer.com)

### Denmark/Iceland

Georg Fischer A/S  
2630 Taastrup  
Phone +45 (0)70 22 19 75  
[info.dk.ps@georgfischer.com](mailto:info.dk.ps@georgfischer.com)  
[www.georgfischer.dk](http://www.georgfischer.dk)

### France

Georg Fischer SAS  
Bâtiment Le Rabelais Paris Nord 2  
22 Avenue des Nations  
BP 88026 Villepinte  
95932 Roissy Charles de Gaulle Cedex  
Phone +33(0)1 41 84 68 84  
[fr.ps@georgfischer.com](mailto:fr.ps@georgfischer.com)  
[www.georgfischer.fr](http://www.georgfischer.fr)

### Germany

Georg Fischer GmbH  
73095 Albershausen  
Phone +49(0)7161/302-0  
[info.de.ps@georgfischer.com](mailto:info.de.ps@georgfischer.com)  
[www.vgd.georgfischer.de](http://www.vgd.georgfischer.de)

### India

Georg Fischer Piping Systems Ltd  
400 076 Mumbai  
Phone +91 224007 2001  
[in.ps@georgfischer.com](mailto:in.ps@georgfischer.com)  
[www.georgfischer.in](http://www.georgfischer.in)

### Italy

Georg Fischer S.p.A.  
20063 Cernusco S/N (MI)  
Phone +3902/921 861  
[it.ps@georgfischer.com](mailto:it.ps@georgfischer.com)  
[www.georgfischer.it](http://www.georgfischer.it)

### Japan

Georg Fischer Ltd  
556-0011 Osaka,  
Phone +81(0)6/6635 2691  
[jp.ps@georgfischer.com](mailto:jp.ps@georgfischer.com)  
[www.georgfischer.jp](http://www.georgfischer.jp)

### Korea

Georg Fischer Piping Systems  
#902 Ace Techno-Tower III  
197-48, Guro-dong, Guro-gu  
Seoul 152-050 Korea  
Phone +82 2 851 3861/3862  
Fax +82 2 851 3844  
[kor.ps@georgfischer.com](mailto:kor.ps@georgfischer.com)

### Malaysia

Georg Fischer [M] Sdn. Bhd.  
47500 Subang Jaya  
Phone +60 (0)3-8024 7879  
[conne.kong@georgfischer.com.my](mailto:conne.kong@georgfischer.com.my)

### Middle East

Georg Fischer Piping Systems  
Dubai, United Arab Emirates  
Phone +971 4 289 41 20  
[gfdubai@emirates.net.ae](mailto:gfdubai@emirates.net.ae)  
[www.piping.georgfischer.com](http://www.piping.georgfischer.com)

### Netherlands

Georg Fischer N.V.  
8161 PA Epe  
Phone +31(0)578/678 222  
[nL.ps@georgfischer.com](mailto:nL.ps@georgfischer.com)  
[www.georgfischer.nl](http://www.georgfischer.nl)

### Norway

Georg Fischer AS  
1351 Rud  
Phone +47(0)67 18 29 00  
[no.ps@georgfischer.com](mailto:no.ps@georgfischer.com)  
[www.georgfischer.no](http://www.georgfischer.no)

### Poland

Georg Fischer Sp. z o.o.  
02-226 Warszawa  
Phone +48(0)22/313 10 50  
[poland.ps@georgfischer.com](mailto:poland.ps@georgfischer.com)  
[www.georgfischer.pl](http://www.georgfischer.pl)

### Romania

Georg Fischer  
Piping Systems Ltd  
020257 Bucharest - Sector 2  
Phone +40(0)21/230 53 80  
[ro.ps@georgfischer.com](mailto:ro.ps@georgfischer.com)

### Russia

Georg Fischer Piping Systems  
Office 14a, 3 Entrance, 9 Floor  
Business Center Parus  
1<sup>st</sup> Tverskaya-Yamskaya Street, 23  
Moscow 125047  
Tel. +7 495 258 60 80  
[ru.ps@georgfischer.com](mailto:ru.ps@georgfischer.com)

### Singapore

Georg Fischer Pte Ltd  
528 872 Singapore  
Phone +65(0)67 47 06 11  
[sgp.ps@georgfischer.com](mailto:sgp.ps@georgfischer.com)  
[www.georgfischer.com.sg](http://www.georgfischer.com.sg)

### Spain/Portugal

Georg Fischer S.A.  
28046 Madrid  
Phone +34(0)91/781 98 90  
[es.ps@georgfischer.com](mailto:es.ps@georgfischer.com)  
[www.georgfischer.es](http://www.georgfischer.es)

### Sweden/Finland

Georg Fischer AB  
12523 Älvsjö-Stockholm  
Phone +46(0)8/506 775 00  
[info.se.ps@georgfischer.com](mailto:info.se.ps@georgfischer.com)  
[www.georgfischer.se](http://www.georgfischer.se)

### Switzerland

Georg Fischer  
Rohrleitungssysteme (Schweiz) AG  
8201 Schaffhausen  
Phone +41(0)52 631 30 26  
[ch.ps@georgfischer.com](mailto:ch.ps@georgfischer.com)  
[www.piping.georgfischer.ch](http://www.piping.georgfischer.ch)

### Taiwan

Georg Fischer Piping Systems  
2F, No. 88, Hsing Te Road  
San Chung City  
Taipei Hsien, Taiwan (R.O.C.)  
Phone +886 2 8512 2822  
Fax +886 2 8512 2823

### United Kingdom/Ireland

Georg Fischer Sales Limited  
Coventry, CV2 2ST  
Phone +44(0)2476 535 535  
[uk.ps@georgfischer.com](mailto:uk.ps@georgfischer.com)  
[www.georgfischer.co.uk](http://www.georgfischer.co.uk)

### USA/Canada/Latin America/Caribbean

Georg Fischer Inc.  
Tustin, CA 92780-7258  
Phone +1(714) 731 88 00  
Toll Free 800/854 40 90  
[us.ps@georgfischer.com](mailto:us.ps@georgfischer.com)  
[www.us.piping.georgfischer.com](http://www.us.piping.georgfischer.com)

### Export

Georg Fischer  
Piping Systems (Switzerland) Ltd.  
8201 Schaffhausen  
Phone +41 (0)52-631 30 26  
Fax +41 (0)52-631 28 93  
[export.ps@georgfischer.com](mailto:export.ps@georgfischer.com)  
[www.piping.georgfischer.ch](http://www.piping.georgfischer.ch)