

Product Range  
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metric

Actuated Valves  
Control Products













# Actuated Valves / Control Products

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# PVC-U metric

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## PVC-U metric

### Ball valves electric



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

**Model:**

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

**Option:**

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	EPDM Code	FPM Code	
16	10	10	199 107 002	199 107 012	
20	15	10	199 107 003	199 107 013	
25	20	10	199 107 004	199 107 014	
32	25	10	199 107 005	199 107 015	
40	32	10	199 107 006	199 107 016	
50	40	10	199 107 007	199 107 017	
63	50	10	199 107 008	199 107 018	



#### 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	EPDM Code	FPM Code	
16	10	10	199 107 022	199 107 032	
20	15	10	199 107 023	199 107 033	
25	20	10	199 107 024	199 107 034	
32	25	10	199 107 025	199 107 035	
40	32	10	199 107 026	199 107 036	
50	40	10	199 107 027	199 107 037	
63	50	10	199 107 028	199 107 038	

## PVC-U metric



### 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	EPDM Code	FPM Code	
3/8	10	10	199 107 622	199 107 632	
1/2	15	10	199 107 623	199 107 633	
3/4	20	10	199 107 624	199 107 634	
1	25	10	199 107 625	199 107 635	
1 1/4	32	10	199 107 626	199 107 636	
1 1/2	40	10	199 107 627	199 107 637	
2	50	10	199 107 628	199 107 638	



### 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	EPDM Code	FPM Code	
20	15	1/2	10	199 107 603	199 107 613	
25	20	3/4	10	199 107 604	199 107 614	
32	25	1	10	199 107 605	199 107 615	
40	32	1 1/4	10	199 107 606	199 107 616	
50	40	1 1/2	10	199 107 607	199 107 617	
63	50	2	10	199 107 608	199 107 618	

## PVC-U metric



### 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	EPDM Code	FPM Code	
16	10	10	199 107 042	199 107 052	
20	15	10	199 107 043	199 107 053	
25	20	10	199 107 044	199 107 054	
32	25	10	199 107 045	199 107 055	
40	32	10	199 107 046	199 107 056	
50	40	10	199 107 047	199 107 057	
63	50	10	199 107 048	199 107 058	



### 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	EPDM Code	FPM Code	
16	10	10	199 107 062	199 107 072	
20	15	10	199 107 063	199 107 073	
25	20	10	199 107 064	199 107 074	
32	25	10	199 107 065	199 107 075	
40	32	10	199 107 066	199 107 076	
50	40	10	199 107 067	199 107 077	
63	50	10	199 107 068	199 107 078	



## PVC-U metric



### 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	EPDM Code	FPM Code	
3/8	10	10	199 107 662	199 107 672	
1/2	15	10	199 107 663	199 107 673	
3/4	20	10	199 107 664	199 107 674	
1	25	10	199 107 665	199 107 675	
1 1/4	32	10	199 107 666	199 107 676	
1 1/2	40	10	199 107 667	199 107 677	
2	50	10	199 107 668	199 107 678	



### 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	EPDM Code	FPM Code	
20	15	1/2	10	199 107 643	199 107 653	
25	20	3/4	10	199 107 644	199 107 654	
32	25	1	10	199 107 645	199 107 655	
40	32	1 1/4	10	199 107 646	199 107 656	
50	40	1 1/2	10	199 107 647	199 107 657	
63	50	2	10	199 107 648	199 107 658	

## PVC-U metric






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

#### Model:

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

#### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	EPDM Code	FPM Code
16	10	10	199 130 002	199 130 012
20	15	10	199 130 003	199 130 013
25	20	10	199 130 004	199 130 014
32	25	10	199 130 005	199 130 015
40	32	10	199 130 006	199 130 016
50	40	10	199 130 007	199 130 017
63	50	10	199 130 008	199 130 018
 75	65	10	199 130 009	199 130 019
 90	80	10	199 130 010	199 130 020
 110	100	10	199 130 011	199 130 021






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

#### Model:

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

#### Option:

- Individual configuration of the valve (see form)

Rp [inch]	DN [mm]	PN	EPDM Code	FPM Code
3/8	10	10	199 130 122	199 130 132
1/2	15	10	199 130 123	199 130 133
3/4	20	10	199 130 124	199 130 134
1	25	10	199 130 125	199 130 135
1 1/4	32	10	199 130 126	199 130 136
1 1/2	40	10	199 130 127	199 130 137
2	50	10	199 130 128	199 130 138
 2 1/2	65	10	199 130 129	199 130 139
 3	80	10	199 130 130	199 130 140
 4	100	10	199 130 131	199 130 141

## PVC-U metric






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

#### Model:

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

#### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	EPDM Code	FPM Code	
16	10	10	199 130 022	199 130 032	
20	15	10	199 130 023	199 130 033	
25	20	10	199 130 024	199 130 034	
32	25	10	199 130 025	199 130 035	
40	32	10	199 130 026	199 130 036	
50	40	10	199 130 027	199 130 037	
63	50	10	199 130 028	199 130 038	
 75	65	10	199 130 029	199 130 039	
 90	80	10	199 130 030	199 130 040	
 110	100	10	199 130 031	199 130 041	



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

#### Model:

- Integrated stainless steel mounting inserts
- Voltage 100-230 V, 50-60 Hz
- Control range 90°<)
- Built on with electric actuator EA21
- Control time 5 s/90°<)
- Overall length according to EN 558-1
- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504

#### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	Inch	PN	EPDM Code	FPM Code	
20	15	½	10	199 130 103	199 130 113	
25	20	¾	10	199 130 104	199 130 114	
32	25	1	10	199 130 105	199 130 115	
40	32	1 ¼	10	199 130 106	199 130 116	
50	40	1 ½	10	199 130 107	199 130 117	
63	50	2	10	199 130 108	199 130 118	

## PVC-U metric



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

#### Model:

- Integrated stainless steel mounting inserts
- Voltage 100-230 V, 50-60 Hz
- Control range 90°<
- Assignment of actuators: EA21 (DN10/15-50), EA31 (DN65-100 if available)
- Image and drawing DN65-100 please see **"New product ball valve DN65-100"**
- Control time: EA21: 5s/90°<, EA31: 15s/90°<
- Overall length according to EN 558-1
- Connecting dimension: 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	EPDM Code	FPM Code
75	65	10	<b>199 134 349</b>	<b>199 134 359</b>
90	80	10	<b>199 134 350</b>	<b>199 134 360</b>
110	100	10	<b>199 134 351</b>	<b>199 134 361</b>



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

#### Model:

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

#### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	EPDM Code	FPM Code
16	10	10	<b>199 130 042</b>	<b>199 130 052</b>
20	15	10	<b>199 130 043</b>	<b>199 130 053</b>
25	20	10	<b>199 130 044</b>	<b>199 130 054</b>
32	25	10	<b>199 130 045</b>	<b>199 130 055</b>
40	32	10	<b>199 130 046</b>	<b>199 130 056</b>
50	40	10	<b>199 130 047</b>	<b>199 130 057</b>
63	50	10	<b>199 130 048</b>	<b>199 130 058</b>
75	65	10	<b>199 130 049</b>	<b>199 130 059</b>
90	80	10	<b>199 130 050</b>	<b>199 130 060</b>
110	100	10	<b>199 130 051</b>	<b>199 130 061</b>

## PVC-U metric



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

#### Model:

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

#### Option:

- Individual configuration of the valve (see form)

Rp [inch]	DN [mm]	PN	EPDM Code	FPM Code
3/8	10	10	199 130 162	199 130 172
1/2	15	10	199 130 163	199 130 173
3/4	20	10	199 130 164	199 130 174
1	25	10	199 130 165	199 130 175
1 1/4	32	10	199 130 166	199 130 176
1 1/2	40	10	199 130 167	199 130 177
2	50	10	199 130 168	199 130 178
2 1/2	65	10	199 130 169	199 130 179
3	80	10	199 130 170	199 130 180
4	100	10	199 130 171	199 130 181



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

#### Model:

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

#### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	EPDM Code	FPM Code
16	10	10	199 130 062	199 130 072
20	15	10	199 130 063	199 130 073
25	20	10	199 130 064	199 130 074
32	25	10	199 130 065	199 130 075
40	32	10	199 130 066	199 130 076
50	40	10	199 130 067	199 130 077
63	50	10	199 130 068	199 130 078
75	65	10	199 130 069	199 130 079
90	80	10	199 130 070	199 130 080
110	100	10	199 130 071	199 130 081

## PVC-U metric



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

#### Model:

- For easy installation and removal
- Integrated stainless steel mounting inserts
- Voltage 24 V AC/DC
- Control range 90°<
- Built on with electric actuator EA21
- Control time 5 s/90°<
- Overall length according to EN 558-1
- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504

#### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	Inch	PN	EPDM Code	FPM Code
20	15	½	10	199 130 143	199 130 153
25	20	¾	10	199 130 144	199 130 154
32	25	1	10	199 130 145	199 130 155
40	32	1 ¼	10	199 130 146	199 130 156
50	40	1 ½	10	199 130 147	199 130 157
63	50	2	10	199 130 148	199 130 158






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

#### Model:

- For easy installation and removal
- Integrated stainless steel mounting inserts
- Voltage 24 V AC/DC
- Control range 90°<
- Assignment of actuators: EA21 (DN10/15-50), EA31 (DN65-100 if available)
- Image and drawing DN65-100 please see "**New product ball valve DN65-100**"
- Control time: EA21: 5s/90°<, EA31: 15s/90°<
- Overall length according to EN 558-1
- Connecting dimension: 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	EPDM Code	FPM Code
 75	65	10	199 134 369	199 134 379
 90	80	10	199 134 370	199 134 380
 110	100	10	199 134 371	199 134 381

## PVC-U metric



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

#### Model:

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

d [mm]	DN [mm]	PN	EPDM Code	FPM Code	
16	10	10	199 175 022	199 175 032	
20	15	10	199 175 023	199 175 033	
25	20	10	199 175 024	199 175 034	
32	25	10	199 175 025	199 175 035	
40	32	10	199 175 026	199 175 036	
50	40	10	199 175 027	199 175 037	
63	50	10	199 175 028	199 175 038	



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

#### Model:

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

d [mm]	DN [mm]	PN	EPDM Code	FPM Code	
16	10	10	199 175 002	199 175 012	
20	15	10	199 175 003	199 175 013	
25	20	10	199 175 004	199 175 014	
32	25	10	199 175 005	199 175 015	
40	32	10	199 175 006	199 175 016	
50	40	10	199 175 007	199 175 017	
63	50	10	199 175 008	199 175 018	

## PVC-U metric



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

**Model:**

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

d [mm]	DN [mm]	PN	EPDM Code	FPM Code
16	10	10	199 175 202	199 175 212
20	15	10	199 175 203	199 175 213
25	20	10	199 175 204	199 175 214
32	25	10	199 175 205	199 175 215
40	32	10	199 175 206	199 175 216
50	40	10	199 175 207	199 175 217
63	50	10	199 175 208	199 175 218



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

**Model:**

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

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



## PVC-U metric



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

#### Model:

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

d [mm]	DN [mm]	PN	EPDM Code	FPM Code	
16	10	10	199 175 062	199 175 072	
20	15	10	199 175 063	199 175 073	
25	20	10	199 175 064	199 175 074	
32	25	10	199 175 065	199 175 075	
40	32	10	199 175 066	199 175 076	
50	40	10	199 175 067	199 175 077	
63	50	10	199 175 068	199 175 078	



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

#### Model:

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

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

## PVC-U metric



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

**Model:**

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

d [mm]	DN [mm]	PN	EPDM Code	FPM Code	
16	10	10	199 175 242	199 175 252	
20	15	10	199 175 243	199 175 253	
25	20	10	199 175 244	199 175 254	
32	25	10	199 175 245	199 175 255	
40	32	10	199 175 246	199 175 256	
50	40	10	199 175 247	199 175 257	
63	50	10	199 175 248	199 175 258	



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

**Model:**

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

d [mm]	DN [mm]	PN	EPDM Code	FPM Code	
16	10	10	199 175 222	199 175 232	
20	15	10	199 175 223	199 175 233	
25	20	10	199 175 224	199 175 234	
32	25	10	199 175 225	199 175 235	
40	32	10	199 175 226	199 175 236	
50	40	10	199 175 227	199 175 237	
63	50	10	199 175 228	199 175 238	

## PVC-U metric



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

**Model:**

- Built on with electric actuator EA21
- Vertical inlet solvent cement spigot
- 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°<)

d [mm]	DN [mm]	PN	EPDM Code	FPM Code	
16	10	10	199 178 242	199 178 252	
20	15	10	199 178 243	199 178 253	
25	20	10	199 178 244	199 178 254	
32	25	10	199 178 245	199 178 255	
40	32	10	199 178 246	199 178 256	
50	40	10	199 178 247	199 178 257	
63	50	10	199 178 248	199 178 258	



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

**Model:**

- Built on with electric actuator EA21
- Vertical inlet solvent cement spigot
- 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°<)

d [mm]	DN [mm]	PN	EPDM Code	FPM Code	
16	10	10	199 178 062	199 178 072	
20	15	10	199 178 063	199 178 073	
25	20	10	199 178 064	199 178 074	
32	25	10	199 178 065	199 178 075	
40	32	10	199 178 066	199 178 076	
50	40	10	199 178 067	199 178 077	
63	50	10	199 178 068	199 178 078	

## PVC-U metric



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

**Model:**

- Built on with electric actuator EA21
- Vertical inlet solvent cement spigot
- Voltage 24 V AC/DC
- Control range 90°<)
- Control time 5 s/90°<)

d [mm]	DN [mm]	PN	EPDM Code	FPM Code
16	10	10	199 178 262	199 178 272
20	15	10	199 178 263	199 178 273
25	20	10	199 178 264	199 178 274
32	25	10	199 178 265	199 178 275
40	32	10	199 178 266	199 178 276
50	40	10	199 178 267	199 178 277
63	50	10	199 178 268	199 178 278



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

**Model:**

- Built on with electric actuator EA21
- Vertical inlet solvent cement spigot
- Voltage 24 V AC/DC
- Control range 90°<)
- Control time 5 s/90°<)

d [mm]	DN [mm]	PN	EPDM Code	FPM Code
16	10	10	199 178 102	199 178 112
20	15	10	199 178 103	199 178 113
25	20	10	199 178 104	199 178 114
32	25	10	199 178 105	199 178 115
40	32	10	199 178 106	199 178 116
50	40	10	199 178 107	199 178 117
63	50	10	199 178 108	199 178 118

## PVC-U metric

### Ball valves pneumatic

**Ball valve type 230 PVC-U FC (Fail safe to close)**

**With manual override**

**With solvent cement sockets metric**



**Model:**

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

**Option:**

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	EPDM Code	FPM Code	
16	10	10	199 230 002	199 230 012	
20	15	10	199 230 003	199 230 013	
25	20	10	199 230 004	199 230 014	
32	25	10	199 230 005	199 230 015	
40	32	10	199 230 006	199 230 016	
50	40	10	199 230 007	199 230 017	
63	50	10	199 230 008	199 230 018	



**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°<) 1-2 s

**Option:**

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	EPDM Code	FPM Code	
16	10	10	199 230 022	199 230 032	
20	15	10	199 230 023	199 230 033	
25	20	10	199 230 024	199 230 034	
32	25	10	199 230 025	199 230 035	
40	32	10	199 230 026	199 230 036	
50	40	10	199 230 027	199 230 037	
63	50	10	199 230 028	199 230 038	

## PVC-U metric



### 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	EPDM Code	FPM Code	
3/8	10	10	199 230 362	199 230 372	
1/2	15	10	199 230 363	199 230 373	
3/4	20	10	199 230 364	199 230 374	
1	25	10	199 230 365	199 230 375	
1 1/4	32	10	199 230 366	199 230 376	
1 1/2	40	10	199 230 367	199 230 377	
2	50	10	199 230 368	199 230 378	



### 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°<) 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	EPDM Code	FPM Code	
20	15	1/2	10	199 230 243	199 230 253	
25	20	3/4	10	199 230 244	199 230 254	
32	25	1	10	199 230 245	199 230 255	
40	32	1 1/4	10	199 230 246	199 230 256	
50	40	1 1/2	10	199 230 247	199 230 257	
63	50	2	10	199 230 248	199 230 258	

## PVC-U metric



### 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	EPDM Code	FPM Code	
16	10	10	199 230 042	199 230 052	
20	15	10	199 230 043	199 230 053	
25	20	10	199 230 044	199 230 054	
32	25	10	199 230 045	199 230 055	
40	32	10	199 230 046	199 230 056	
50	40	10	199 230 047	199 230 057	
63	50	10	199 230 048	199 230 058	



### 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	EPDM Code	FPM Code	
16	10	10	199 230 062	199 230 072	
20	15	10	199 230 063	199 230 073	
25	20	10	199 230 064	199 230 074	
32	25	10	199 230 065	199 230 075	
40	32	10	199 230 066	199 230 076	
50	40	10	199 230 067	199 230 077	
63	50	10	199 230 068	199 230 078	

## PVC-U metric



### 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°<) 1-2 s

**Option:**

- Individual configuration of the valve (see form)

Rp [inch]	DN [mm]	PN	EPDM Code	FPM Code	
3/8	10	10	199 230 382	199 230 392	
1/2	15	10	199 230 383	199 230 393	
3/4	20	10	199 230 384	199 230 394	
1	25	10	199 230 385	199 230 395	
1 1/4	32	10	199 230 386	199 230 396	
1 1/2	40	10	199 230 387	199 230 397	
2	50	10	199 230 388	199 230 398	



### 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	EPDM Code	FPM Code	
20	15	1/2	10	199 230 263	199 230 273	
25	20	3/4	10	199 230 264	199 230 274	
32	25	1	10	199 230 265	199 230 275	
40	32	1 1/4	10	199 230 266	199 230 276	
50	40	1 1/2	10	199 230 267	199 230 277	
63	50	2	10	199 230 268	199 230 278	



## PVC-U metric



### 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	EPDM Code	FPM Code	
16	10	10	199 230 082	199 230 092	
20	15	10	199 230 083	199 230 093	
25	20	10	199 230 084	199 230 094	
32	25	10	199 230 085	199 230 095	
40	32	10	199 230 086	199 230 096	
50	40	10	199 230 087	199 230 097	
63	50	10	199 230 088	199 230 098	



### 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	EPDM Code	FPM Code	
16	10	10	199 230 102	199 230 112	
20	15	10	199 230 103	199 230 113	
25	20	10	199 230 104	199 230 114	
32	25	10	199 230 105	199 230 115	
40	32	10	199 230 106	199 230 116	
50	40	10	199 230 107	199 230 117	
63	50	10	199 230 108	199 230 118	

## PVC-U metric



### 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	EPDM Code	FPM Code	
3/8	10	10	199 230 642	199 230 652	
1/2	15	10	199 230 643	199 230 653	
3/4	20	10	199 230 644	199 230 654	
1	25	10	199 230 645	199 230 655	
1 1/4	32	10	199 230 646	199 230 656	
1 1/2	40	10	199 230 647	199 230 657	
2	50	10	199 230 648	199 230 658	



### 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°<) 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	EPDM Code	FPM Code	
20	15	1/2	10	199 230 283	199 230 293	
25	20	3/4	10	199 230 284	199 230 294	
32	25	1	10	199 230 285	199 230 295	
40	32	1 1/4	10	199 230 286	199 230 296	
50	40	1 1/2	10	199 230 287	199 230 297	
63	50	2	10	199 230 288	199 230 298	

## PVC-U metric






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

#### Model:

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

#### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	EPDM Code	FPM Code
16	10	10	199 230 122	199 230 132
20	15	10	199 230 123	199 230 133
25	20	10	199 230 124	199 230 134
32	25	10	199 230 125	199 230 135
40	32	10	199 230 126	199 230 136
50	40	10	199 230 127	199 230 137
63	50	10	199 230 128	199 230 138
 75	65	10	199 230 129	199 230 139
 90	80	10	199 230 130	199 230 140
 110	100	10	199 230 131	199 230 141






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

#### Model:

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

#### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	EPDM Code	FPM Code
16	10	10	199 230 142	199 230 152
20	15	10	199 230 143	199 230 153
25	20	10	199 230 144	199 230 154
32	25	10	199 230 145	199 230 155
40	32	10	199 230 146	199 230 156
50	40	10	199 230 147	199 230 157
63	50	10	199 230 148	199 230 158
 75	65	10	199 230 149	199 230 159
 90	80	10	199 230 150	199 230 160
 110	100	10	199 230 151	199 230 161

## PVC-U metric






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

#### Model:

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

#### Option:

- Individual configuration of the valve (see form)

Rp [inch]	DN [mm]	PN	EPDM Code	FPM Code	
3/8	10	10	199 230 662	199 230 672	
1/2	15	10	199 230 663	199 230 673	
3/4	20	10	199 230 664	199 230 674	
1	25	10	199 230 665	199 230 675	
1 1/4	32	10	199 230 666	199 230 676	
1 1/2	40	10	199 230 667	199 230 677	
2	50	10	199 230 668	199 230 678	
 2 1/2	65	10	199 230 669	199 230 679	
 3	80	10	199 230 670	199 230 680	
 4	100	10	199 230 671	199 230 681	



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

#### Model:

- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90°<) 1-2 s
- Built on with pneumatic actuator PA11/21
- 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	EPDM Code	FPM Code	
20	15	1/2	10	199 230 303	199 230 313	
25	20	3/4	10	199 230 304	199 230 314	
32	25	1	10	199 230 305	199 230 315	
40	32	1 1/4	10	199 230 306	199 230 316	
50	40	1 1/2	10	199 230 307	199 230 317	
63	50	2	10	199 230 308	199 230 318	

## PVC-U metric






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

#### Model:

- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90°<) 1-2 s
- Image and drawing DN65-100 please see "**New product ball valve DN65-100**"
- Assignment of actuators: PA11 (DN10/15-25), PA21 (DN32-50), PA30 (DN65), PA35 (DN80), PA40 (DN100)
- Overall length according to EN 558-1
- Connecting dimension: 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	EPDM Code	FPM Code	
 75	65	10	<b>199 234 469</b>	<b>199 234 479</b>	
 90	80	10	<b>199 234 470</b>	<b>199 234 480</b>	
 110	100	10	<b>199 234 471</b>	<b>199 234 481</b>	

## PVC-U metric






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

#### Model:

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

#### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	EPDM Code	FPM Code	
16	10	10	199 230 162	199 230 172	
20	15	10	199 230 163	199 230 173	
25	20	10	199 230 164	199 230 174	
32	25	10	199 230 165	199 230 175	
40	32	10	199 230 166	199 230 176	
50	40	10	199 230 167	199 230 177	
63	50	10	199 230 168	199 230 178	
 75	65	10	199 230 169	199 230 179	
 90	80	10	199 230 170	199 230 180	
 110	100	10	199 230 171	199 230 181	






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

#### Model:

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

#### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	EPDM Code	FPM Code	
16	10	10	199 230 182	199 230 192	
20	15	10	199 230 183	199 230 193	
25	20	10	199 230 184	199 230 194	
32	25	10	199 230 185	199 230 195	
40	32	10	199 230 186	199 230 196	
50	40	10	199 230 187	199 230 197	
63	50	10	199 230 188	199 230 198	
 75	65	10	199 230 189	199 230 199	
 90	80	10	199 230 190	199 230 200	
 110	100	10	199 230 191	199 230 201	

## PVC-U metric






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

**Model:**

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

**Option:**

- Individual configuration of the valve (see form)

Rp [inch]	DN [mm]	PN	EPDM Code	FPM Code	
3/8	10	10	199 230 682	199 230 692	
1/2	15	10	199 230 683	199 230 693	
3/4	20	10	199 230 684	199 230 694	
1	25	10	199 230 685	199 230 695	
1 1/4	32	10	199 230 686	199 230 696	
1 1/2	40	10	199 230 687	199 230 697	
2	50	10	199 230 688	199 230 698	
 2 1/2	65	10	199 230 689	199 230 699	
 3	80	10	199 230 690	199 230 700	
 4	100	10	199 230 691	199 230 701	



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

**Model:**

- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90°<) 1-2 s
- Built on with pneumatic actuator PA11/21
- 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	EPDM Code	FPM Code	
20	15	1/2	10	199 230 323	199 230 333	
25	20	3/4	10	199 230 324	199 230 334	
32	25	1	10	199 230 325	199 230 335	
40	32	1 1/4	10	199 230 326	199 230 336	
50	40	1 1/2	10	199 230 327	199 230 337	
63	50	2	10	199 230 328	199 230 338	

## PVC-U metric






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

#### Model:

- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90° < 1-2 s
- Image and drawing DN65-100 please see "**New product ball valve DN65-100**"
- Assignment of actuators: PA11 (DN10/15-25), PA21 (DN32-50), PA30 (DN65), PA35 (DN80), PA40 (DN100)
- Overall length according to EN 558-1
- Connecting dimension: 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	EPDM Code	FPM Code	
 75	65	10	<b>199 234 489</b>	<b>199 234 499</b>	
 90	80	10	<b>199 234 490</b>	<b>199 234 500</b>	
 110	100	10	<b>199 234 491</b>	<b>199 234 501</b>	



## PVC-U metric






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

#### Model:

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

#### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	EPDM Code	FPM Code	
16	10	10	199 230 202	199 230 212	
20	15	10	199 230 203	199 230 213	
25	20	10	199 230 204	199 230 214	
32	25	10	199 230 205	199 230 215	
40	32	10	199 230 206	199 230 216	
50	40	10	199 230 207	199 230 217	
63	50	10	199 230 208	199 230 218	
 75	65	10	199 230 209	199 230 219	
 90	80	10	199 230 210	199 230 220	
 110	100	10	199 230 211	199 230 221	






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

#### Model:

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

#### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	EPDM Code	FPM Code	
16	10	10	199 230 222	199 230 232	
20	15	10	199 230 223	199 230 233	
25	20	10	199 230 224	199 230 234	
32	25	10	199 230 225	199 230 235	
40	32	10	199 230 226	199 230 236	
50	40	10	199 230 227	199 230 237	
63	50	10	199 230 228	199 230 238	
 75	65	10	199 230 229	199 230 239	
 90	80	10	199 230 230	199 230 240	
 110	100	10	199 230 231	199 230 241	

## PVC-U metric






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

#### Model:

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

#### Option:

- Individual configuration of the valve (see form)

Rp [inch]	DN [mm]	PN	EPDM Code	FPM Code	
3/8	10	10	199 230 712	199 230 732	
1/2	15	10	199 230 713	199 230 733	
3/4	20	10	199 230 714	199 230 734	
1	25	10	199 230 715	199 230 735	
1 1/4	32	10	199 230 716	199 230 736	
1 1/2	40	10	199 230 717	199 230 737	
2	50	10	199 230 718	199 230 738	
 2 1/2	65	10	199 230 719	199 230 739	
 3	80	10	199 230 720	199 230 740	
 4	100	10	199 230 721	199 230 741	



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

#### Model:

- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90°<) 1-2 s
- Built on with pneumatic actuator PA11/21
- 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	EPDM Code	FPM Code	
20	15	1/2	10	199 230 343	199 230 353	
25	20	3/4	10	199 230 344	199 230 354	
32	25	1	10	199 230 345	199 230 355	
40	32	1 1/4	10	199 230 346	199 230 356	
50	40	1 1/2	10	199 230 347	199 230 357	
63	50	2	10	199 230 348	199 230 358	

## PVC-U metric






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

#### Model:

- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90°<) 1-2 s
- Assignment of actuators: PA11 (DN10/15-25), PA21 (DN32-50), PA35 (DN65), PA40 (DN80), PA45 (DN100)
- Image and drawing DN65-100 please see **"New product ball valve DN65-100"**
- Overall length according to EN 558-1
- Connecting dimension: 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	EPDM Code	FPM Code	
 75	65	10	<b>199 234 509</b>	<b>199 234 519</b>	
 90	80	10	<b>199 234 510</b>	<b>199 234 520</b>	
 110	100	10	<b>199 234 511</b>	<b>199 234 521</b>	

## PVC-U metric



### 3-Way ball valve type 275 PVC-U Horizontal/L-port Without manual override With solvent cement sockets metric

**Model:**

- Built on with pneumatic actuator PA11/21
- Actuator fails safe to the closed position FC
- Control time 90°(<) 1-3 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

d [mm]	DN [mm]	PN	EPDM Code	FPM Code	
16	10	10	199 275 022	199 275 032	
20	15	10	199 275 023	199 275 033	
25	20	10	199 275 024	199 275 034	
32	25	10	199 275 025	199 275 035	
40	32	10	199 275 026	199 275 036	
50	40	10	199 275 027	199 275 037	
63	50	10	199 275 028	199 275 038	



### 3-Way ball valve type 275 PVC-U Horizontal/L-port Without manual override With solvent cement spigots metric

**Model:**

- Built on with pneumatic actuator PA11/21
- Actuator fails safe to the closed position FC
- Control time 90°(<) 1-3 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

d [mm]	DN [mm]	PN	EPDM Code	FPM Code	
16	10	10	199 275 002	199 275 012	
20	15	10	199 275 003	199 275 013	
25	20	10	199 275 004	199 275 014	
32	25	10	199 275 005	199 275 015	
40	32	10	199 275 006	199 275 016	
50	40	10	199 275 007	199 275 017	
63	50	10	199 275 008	199 275 018	

## PVC-U metric



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

**Model:**

- Built on with pneumatic actuator PA11/21
- Control time 90°<) 1-3 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

d [mm]	DN [mm]	PN	EPDM Code	FPM Code	
16	10	10	199 275 202	199 275 212	
20	15	10	199 275 203	199 275 213	
25	20	10	199 275 204	199 275 214	
32	25	10	199 275 205	199 275 215	
40	32	10	199 275 206	199 275 216	
50	40	10	199 275 207	199 275 217	
63	50	10	199 275 208	199 275 218	



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

**Model:**

- Built on with pneumatic actuator PA11/21
- Control time 90°<) 1-3 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

d [mm]	DN [mm]	PN	EPDM Code	FPM Code	
16	10	10	199 275 182	199 275 192	
20	15	10	199 275 183	199 275 193	
25	20	10	199 275 184	199 275 194	
32	25	10	199 275 185	199 275 195	
40	32	10	199 275 186	199 275 196	
50	40	10	199 275 187	199 275 197	
63	50	10	199 275 188	199 275 198	

## PVC-U metric



### 3-Way ball valve type 275 PVC-U Horizontal/T-port Without manual override With solvent cement sockets metric

#### Model:

- Built on with pneumatic actuator PA11/21
- Actuator fails safe to the closed position FC
- For easy installation and removal
- Control time 90°<) 1-3 s
- Integrated stainless steel mounting inserts

d [mm]	DN [mm]	PN	EPDM Code	FPM Code	
16	10	10	199 275 062	199 275 072	
20	15	10	199 275 063	199 275 073	
25	20	10	199 275 064	199 275 074	
32	25	10	199 275 065	199 275 075	
40	32	10	199 275 066	199 275 076	
50	40	10	199 275 067	199 275 077	
63	50	10	199 275 068	199 275 078	



### 3-Way ball valve type 275 PVC-U Horizontal/T-port Without manual override With solvent cement spigots metric

#### Model:

- Built on with pneumatic actuator PA11/21
- Actuator fails safe to the closed position FC
- For easy installation and removal
- Control time 90°<) 1-3 s
- Integrated stainless steel mounting inserts

d [mm]	DN [mm]	PN	EPDM Code	FPM Code	
16	10	10	199 275 042	199 275 052	
20	15	10	199 275 043	199 275 053	
25	20	10	199 275 044	199 275 054	
32	25	10	199 275 045	199 275 055	
40	32	10	199 275 046	199 275 056	
50	40	10	199 275 047	199 275 057	
63	50	10	199 275 048	199 275 058	

## PVC-U metric



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

**Model:**

- Built on with pneumatic actuator PA11/21
- Control time 90°<) 1-3 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

d [mm]	DN [mm]	PN	EPDM Code	FPM Code	
16	10	10	199 275 242	199 275 252	
20	15	10	199 275 243	199 275 253	
25	20	10	199 275 244	199 275 254	
32	25	10	199 275 245	199 275 255	
40	32	10	199 275 246	199 275 256	
50	40	10	199 275 247	199 275 257	
63	50	10	199 275 248	199 275 258	



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

**Model:**

- Built on with pneumatic actuator PA11/21
- Control time 90°<) 1-3 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

d [mm]	DN [mm]	PN	EPDM Code	FPM Code	
16	10	10	199 275 222	199 275 232	
20	15	10	199 275 223	199 275 233	
25	20	10	199 275 224	199 275 234	
32	25	10	199 275 225	199 275 235	
40	32	10	199 275 226	199 275 236	
50	40	10	199 275 227	199 275 237	
63	50	10	199 275 228	199 275 238	

## PVC-U metric

### Diaphragm valves pneumatic

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

#### With solvent cement spigots metric



**Model:**

- Working pressure 6 bar one side

d [mm]	DN [mm]	PN	EPDM Code
20	15	6	199 024 001
25	20	6	199 024 002
32	25	6	199 024 003
40	32	6	199 024 004
50	40	6	199 024 005
63	50	6	199 024 006

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

#### Unions with solvent cement socket metric



**Model:**

- Working pressure 6 bar one side

d [mm]	DN [mm]	PN	EPDM Code
20	15	6	199 024 031
25	20	6	199 024 032
32	25	6	199 024 033
40	32	6	199 024 034
50	40	6	199 024 035
63	50	6	199 024 036

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

#### Unions with threaded sockets Rp



**Model:**

- Working pressure 6 bar one side

Rp [inch]	DN [mm]	PN	EPDM Code
½	15	6	199 024 061
¾	20	6	199 024 062
1	25	6	199 024 063
1 ¼	32	6	199 024 064
1 ½	40	6	199 024 065
2	50	6	199 024 066



## PVC-U metric

### Diaphragm valve DIASTAR Eco PVC-U FC (Fail safe to close) With backing flanges PVC-U metric



#### Model:

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

d [mm]	DN [mm]	Inch	PN	EPDM Code	
20	15	½	6	<b>199 024 091</b>	
25	20	¾	6	<b>199 024 092</b>	
32	25	1	6	<b>199 024 093</b>	
40	32	1 ¼	6	<b>199 024 094</b>	
50	40	1 ½	6	<b>199 024 095</b>	
63	50	2	6	<b>199 024 096</b>	

## PVC-U metric



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

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

\*PN: EPDM/PTFE

d [mm]	DN [mm]	PN [bar]		EPDM Code	PTFE/EPDM Code
20	15	10 / 5	*	199 028 001	199 028 031
25	20	10 / 7	*	199 028 002	199 028 032
32	25	10 / 7	*	199 028 003	199 028 033
40	32	10 / 7	*	199 028 004	199 028 034
50	40	10 / 7	*	199 028 005	199 028 035
63	50	10 / 7	*	199 028 006	199 028 036



### Diaphragm valve type DIASTAR PVC-U Series 028 FC (Fail safe to close) Unions with solvent cement sockets metric

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

\*PN: EPDM/PTFE

d [mm]	DN [mm]	PN [bar]		EPDM Code	PTFE/EPDM Code
20	15	10 / 5	*	199 028 061	199 028 091
25	20	10 / 7	*	199 028 062	199 028 092
32	25	10 / 7	*	199 028 063	199 028 093
40	32	10 / 7	*	199 028 064	199 028 094
50	40	10 / 7	*	199 028 065	199 028 095
63	50	10 / 7	*	199 028 066	199 028 096



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

**Model:**

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

\*PN: EPDM/PTFE

d [mm]	DN [mm]	Inch	PN [bar]		EPDM Code	PTFE/EPDM Code
20	15	½	10 / 5	*	199 028 121	199 028 151
25	20	¾	10 / 7	*	199 028 122	199 028 152
32	25	1	10 / 7	*	199 028 123	199 028 153
40	32	1 ¼	10 / 7	*	199 028 124	199 028 154
50	40	1 ½	10 / 7	*	199 028 125	199 028 155
63	50	2	10 / 7	*	199 028 126	199 028 156

## PVC-U metric



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

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

d [mm]	DN [mm]	PN	EPDM Code	PTFE/EPDM Code	
20	15	10	199 025 001	199 025 031	
25	20	10	199 025 002	199 025 032	
32	25	10	199 025 003	199 025 033	
40	32	10	199 025 004	199 025 034	
50	40	10	199 025 005	199 025 035	
63	50	10	199 025 006	199 025 036	



### Diaphragm valve type DIASTAR PVC-U Series 025 FC (Fail safe to close) Unions with solvent cement sockets metric

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

d [mm]	DN [mm]	PN	EPDM Code	PTFE/EPDM Code	
20	15	10	199 025 061	199 025 091	
25	20	10	199 025 062	199 025 092	
32	25	10	199 025 063	199 025 093	
40	32	10	199 025 064	199 025 094	
50	40	10	199 025 065	199 025 095	
63	50	10	199 025 066	199 025 096	



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

#### Model:

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

\* with backing flanges PVC-U metric

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

d [mm]	DN [mm]	Inch	PN	EPDM Code	PTFE/EPDM Code	
*75	65	2 ½	10	199 025 127	199 025 157	
**90	80	3	10	199 025 128	199 025 158	
110	100	4	8	199 025 129	199 025 159	
**160	150	6	6	199 025 130	-	

# PVC-U metric

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



### Model:

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

d [mm]	DN [mm]	Inch	PN	EPDM Code	PTFE/EPDM Code	
20	15	½	10	<b>199 025 121</b>	<b>199 025 151</b>	
25	20	¾	10	<b>199 025 122</b>	<b>199 025 152</b>	
32	25	1	10	<b>199 025 123</b>	<b>199 025 153</b>	
40	32	1 ¼	10	<b>199 025 124</b>	<b>199 025 154</b>	
50	40	1 ½	10	<b>199 025 125</b>	<b>199 025 155</b>	
63	50	2	10	<b>199 025 126</b>	<b>199 025 156</b>	

## PVC-U metric



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

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

d [mm]	DN [mm]	PN	EPDM Code	PTFE/EPDM Code	
20	15	10	199 025 011	199 025 041	
25	20	10	199 025 012	199 025 042	
32	25	10	199 025 013	199 025 043	
40	32	10	199 025 014	199 025 044	
50	40	10	199 025 015	199 025 045	
63	50	10	199 025 016	199 025 046	



### Diaphragm valve type DIASTAR PVC-U Series 025 FO (Fail safe to open) Unions with solvent cement sockets metric

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

d [mm]	DN [mm]	PN	EPDM Code	PTFE/EPDM Code	
20	15	10	199 025 071	199 025 101	
25	20	10	199 025 072	199 025 102	
32	25	10	199 025 073	199 025 103	
40	32	10	199 025 074	199 025 104	
50	40	10	199 025 075	199 025 105	
63	50	10	199 025 076	199 025 106	



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

#### Model:

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

\* with backing flanges PVC-U metric

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

d [mm]	DN [mm]	Inch	PN	EPDM Code	PTFE/EPDM Code	
*75	65	2 ½	10	199 025 137	199 025 167	
**90	80	3	10	199 025 138	199 025 168	
110	100	4	8	199 025 139	199 025 169	
**160	150	6	6	199 025 140	199 025 170	

# PVC-U metric

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



### Model:

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

d [mm]	DN [mm]	Inch	PN	EPDM Code	PTFE/EPDM Code	
20	15	½	10	<b>199 025 131</b>	<b>199 025 161</b>	
25	20	¾	10	<b>199 025 132</b>	<b>199 025 162</b>	
32	25	1	10	<b>199 025 133</b>	<b>199 025 163</b>	
40	32	1 ¼	10	<b>199 025 134</b>	<b>199 025 164</b>	
50	40	1 ½	10	<b>199 025 135</b>	<b>199 025 165</b>	
63	50	2	10	<b>199 025 136</b>	<b>199 025 166</b>	

## PVC-U metric



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

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

d [mm]	DN [mm]	PN	EPDM Code	PTFE/EPDM Code	
20	15	10	199 025 021	199 025 051	
25	20	10	199 025 022	199 025 052	
32	25	10	199 025 023	199 025 053	
40	32	10	199 025 024	199 025 054	
50	40	10	199 025 025	199 025 055	
63	50	10	199 025 026	199 025 056	



### Diaphragm valve type DIASTAR PVC-U Series 025 DA (Double acting) Unions with solvent cement sockets metric

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

d [mm]	DN [mm]	PN	EPDM Code	PTFE/EPDM Code	
20	15	10	199 025 081	199 025 111	
25	20	10	199 025 082	199 025 112	
32	25	10	199 025 083	199 025 113	
40	32	10	199 025 084	199 025 114	
50	40	10	199 025 085	199 025 115	
63	50	10	199 025 086	199 025 116	



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

#### Model:

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

\* with backing flanges PVC-U metric

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

d [mm]	DN [mm]	Inch	PN	EPDM Code	PTFE/EPDM Code	
*75	65	2 ½	10	199 025 147	199 025 177	
**90	80	3	10	199 025 148	199 025 178	
110	100	4	8	199 025 149	199 025 179	
**160	150	6	6	199 025 150	199 025 180	

# PVC-U metric

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



### Model:

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

d [mm]	DN [mm]	Inch	PN	EPDM Code	PTFE/EPDM Code	
20	15	½	10	<b>199 025 141</b>	<b>199 025 171</b>	
25	20	¾	10	<b>199 025 142</b>	<b>199 025 172</b>	
32	25	1	10	<b>199 025 143</b>	<b>199 025 173</b>	
40	32	1 ¼	10	<b>199 025 144</b>	<b>199 025 174</b>	
50	40	1 ½	10	<b>199 025 145</b>	<b>199 025 175</b>	
63	50	2	10	<b>199 025 146</b>	<b>199 025 176</b>	



## PVC-U metric

### Butterfly valves electric metric/ANSI/JIS



#### Butterfly valve type 567 PVC-U Bare shaft



**Model:**

- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, ANSI/ASME B 16.5 Class 150, BS 1560: 1989, BS 4504, JIS B 2220
- Overall length according to EN 558-1, ISO 5752
- Interface F07 for the dimensions DN50-200 according to DIN/ISO 5211
- Interface F10 for the dimensions DN250-300 according to DIN/ISO 5211

d [mm]	DN [mm]	Inch	PN	EPDM Code	FPM Code
63	50	2	10	161 567 802	161 567 822
75	65	2 ½	10	161 567 803	161 567 823
90	80	3	10	161 567 804	161 567 824
110	100	4	10	161 567 805	161 567 825
140	125	5	10	161 567 806	161 567 826
160	150	6	10	161 567 807	161 567 827
225	200	8	10	161 567 808	161 567 828
280	250	10	10	161 567 809	161 567 829
315	300	12	10	161 567 810	161 567 830



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



**Model:**

- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, ANSI/ASME B 16.5 Class 150, BS 1560: 1989, BS 4504, JIS B 2220
- Overall length according to EN 558-1, ISO 5752
- Voltage 100-230 V, 50-60 Hz
- Control time 15 s/90°<) EA31
- Control time 25s/90°<) EA42
- Control range 90°<)
- Actuator with integrated emergency manual override standard
- The dimension DN300 on request

d [mm]	DN [mm]	Inch	PN	EPDM Code	FPM Code
63	50	2	10	199 140 042	199 140 062
75	65	2 ½	10	199 140 043	199 140 063
90	80	3	10	199 140 044	199 140 064
110	100	4	10	199 140 045	199 140 065
140	125	5	10	199 140 046	199 140 066
160	150	6	10	199 140 047	199 140 067
225	200	8	10	199 140 048	199 140 068
280	250	10	6	199 140 049	199 140 069

## PVC-U metric

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



**Model:**

- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, ANSI/ASME B 16.5 Class 150, BS 1560: 1989, BS 4504, JIS B 2220
- Overall length according to EN 558-1, ISO 5752
- Voltage 100-230 V, 50-60 Hz
- Control time 15 s/90°<) EA31
- Control time 25s/90°<) EA42
- Control range 90°<)
- Actuator with integrated emergency manual override standard

d [mm]	DN [mm]	Inch	PN	EPDM Code	FPM Code
63	50	2	10	199 140 002	199 140 022
75	65	2 ½	10	199 140 003	199 140 023
90	80	3	10	199 140 004	199 140 024
110	100	4	10	199 140 005	199 140 025
140	125	5	10	199 140 006	199 140 026
160	150	6	10	199 140 007	199 140 027
225	200	8	10	199 140 008	199 140 028

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



**Model:**

- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, ANSI/ASME B 16.5 Class 150, BS 1560: 1989, BS 4504, JIS B 2220
- Overall length according to EN 558-1, ISO 5752
- Voltage 24 V AC/DC
- Control time 15 s/90°<) EA31
- Control time 25s/90°<) EA42
- Control range 90°<)
- Actuator with integrated emergency manual override standard
- The dimension DN300 on request

d [mm]	DN [mm]	Inch	PN	EPDM Code	FPM Code
63	50	2	10	199 140 122	199 140 142
75	65	2 ½	10	199 140 123	199 140 143
90	80	3	10	199 140 124	199 140 144
110	100	4	10	199 140 125	199 140 145
140	125	5	10	199 140 126	199 140 146
160	150	6	10	199 140 127	199 140 147
225	200	8	10	199 140 128	199 140 148
280	250	10	6	199 140 129	199 140 149

## PVC-U metric

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



#### Model:

- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, ANSI/ASME B 16.5 Class 150, BS 1560: 1989, BS 4504, JIS B 2220
- Overall length according to EN 558-1, ISO 5752
- Voltage 24 V AC/DC
- Control time 15 s/90°<) EA31
- Control time 25s/90°<) EA42
- Control range 90°<)
- Actuator with integrated emergency manual override standard

d [mm]	DN [mm]	Inch	PN	EPDM Code	FPM Code	
63	50	2	10	<b>199 140 082</b>	<b>199 140 102</b>	
75	65	2 ½	10	<b>199 140 083</b>	<b>199 140 103</b>	
90	80	3	10	<b>199 140 084</b>	<b>199 140 104</b>	
110	100	4	10	<b>199 140 085</b>	<b>199 140 105</b>	
140	125	5	10	<b>199 140 086</b>	<b>199 140 106</b>	
160	150	6	10	<b>199 140 087</b>	<b>199 140 107</b>	
225	200	8	10	<b>199 140 088</b>	<b>199 140 108</b>	

## PVC-U metric



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



**Model:**

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension: ISO 7005 PN10, EN 1092 PN10, DIN 2501 PN10
- Overall length according to EN 558-1, ISO 5752
- Interface F07 according to DIN/ISO 5211

d [mm]	DN [mm]	Inch	PN	EPDM Code	FPM Code
63	50	2	10	161 568 802	161 568 822
75	65	2 ½	10	161 568 803	161 568 823
90	80	3	10	161 568 804	161 568 824
110	100	4	10	161 568 805	161 568 825
140	125	5	10	161 568 806	161 568 826
160	150	6	10	161 568 807	161 568 827
225	200	8	10	161 568 808	161 568 828



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



**Model:**

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension: ISO 7005 PN10, EN 1092 PN10, DIN 2501 PN10
- Overall length according to EN 558-1, ISO 5752
- Voltage 100-230 V, 50-60 Hz
- Control time 15 s/90°<) EA31
- Control time 25s/90°<) EA42
- Control range 90°<)
- Actuator with integrated emergency manual override standard

d [mm]	DN [mm]	Inch	PN	EPDM Code	FPM Code
63	50	2	10	199 141 042	199 141 062
75	65	2 ½	10	199 141 043	199 141 063
90	80	3	10	199 141 044	199 141 064
110	100	4	10	199 141 045	199 141 065
140	125	5	10	199 141 046	199 141 066
160	150	6	10	199 141 047	199 141 067
225	200	8	10	199 141 048	199 141 068

## PVC-U metric

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



#### Model:

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension: ISO 7005 PN10, EN 1092 PN10, DIN 2501 PN10
- Overall length according to EN 558-1, ISO 5752
- Voltage 100-230 V, 50-60 Hz
- Control time 15 s/90°<) EA31
- Control time 25s/90°<) EA42
- Control range 90°<)
- Actuator with integrated emergency manual override standard

d [mm]	DN [mm]	Inch	PN	EPDM Code	FPM Code
63	50	2	10	199 141 002	199 141 022
75	65	2 ½	10	199 141 003	199 141 023
90	80	3	10	199 141 004	199 141 024
110	100	4	10	199 141 005	199 141 025
140	125	5	10	199 141 006	199 141 026
160	150	6	10	199 141 007	199 141 027
225	200	8	10	199 141 008	199 141 028

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



#### Model:

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension: ISO 7005 PN10, EN 1092 PN10, DIN 2501 PN10
- Overall length according to EN 558-1, ISO 5752
- Voltage 24 V AC/DC
- Control time 15 s/90°<) EA31
- Control time 25s/90°<) EA42
- Control range 90°<)
- Actuator with integrated emergency manual override standard

d [mm]	DN [mm]	Inch	PN	EPDM Code	FPM Code
63	50	2	10	199 141 122	199 141 142
75	65	2 ½	10	199 141 123	199 141 143
90	80	3	10	199 141 124	199 141 144
110	100	4	10	199 141 125	199 141 145
140	125	5	10	199 141 126	199 141 146
160	150	6	10	199 141 127	199 141 147
225	200	8	10	199 141 128	199 141 148

# PVC-U metric

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



### Model:

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension: ISO 7005 PN10, EN 1092 PN10, DIN 2501 PN10
- Overall length according to EN 558-1, ISO 5752
- Voltage 24 V AC/DC
- Control time 15 s/90°<) EA31
- Control time 25s/90°<) EA42
- Control range 90°<)
- Actuator with integrated emergency manual override standard

d [mm]	DN [mm]	Inch	PN	EPDM Code	FPM Code	
63	50	2	10	<b>199 141 082</b>	<b>199 141 102</b>	
75	65	2 ½	10	<b>199 141 083</b>	<b>199 141 103</b>	
90	80	3	10	<b>199 141 084</b>	<b>199 141 104</b>	
110	100	4	10	<b>199 141 085</b>	<b>199 141 105</b>	
140	125	5	10	<b>199 141 086</b>	<b>199 141 106</b>	
160	150	6	10	<b>199 141 087</b>	<b>199 141 107</b>	
225	200	8	10	<b>199 141 088</b>	<b>199 141 108</b>	

## PVC-U metric



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



**Model:**

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension ANSI/ASME B 16.5 Class 150
- Overall length according to EN 558-1, ISO 5752
- Interface F07 according to DIN/ISO 5211

Inch	DN [mm]	PN	EPDM Code	FPM Code	
2	50	10	<b>161 568 902</b>	<b>161 568 922</b>	
2 ½	65	10	<b>161 568 903</b>	<b>161 568 923</b>	
3	80	10	<b>161 568 904</b>	<b>161 568 924</b>	
4	100	10	<b>161 568 905</b>	<b>161 568 925</b>	
5	125	10	<b>161 568 906</b>	<b>161 568 926</b>	
6	150	10	<b>161 568 907</b>	<b>161 568 927</b>	
8	200	10	<b>161 568 908</b>	<b>161 568 928</b>	



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



**Model:**

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension ANSI/ASME B 16.5 Class 150
- Overall length according to EN 558-1, ISO 5752
- Voltage 100-230 V, 50-60 Hz
- Control time 15 s/90°<) EA31
- Control time 25s/90°<) EA42
- Control range 90°<)
- Actuator with integrated emergency manual override standard

Inch	DN [mm]	PN	EPDM Code	FPM Code	
2	50	10	<b>199 142 042</b>	<b>199 142 062</b>	
2 ½	65	10	<b>199 142 043</b>	<b>199 142 063</b>	
3	80	10	<b>199 142 044</b>	<b>199 142 064</b>	
4	100	10	<b>199 142 045</b>	<b>199 142 065</b>	
5	125	10	<b>199 142 046</b>	<b>199 142 066</b>	
6	150	10	<b>199 142 047</b>	<b>199 142 067</b>	
8	200	10	<b>199 142 048</b>	<b>199 142 068</b>	

## PVC-U metric

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



**Model:**

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension ANSI/ASME B 16.5 Class 150
- Overall length according to EN 558-1, ISO 5752
- Voltage 100-230 V, 50-60 Hz
- Control time 15 s/90°<) EA31
- Control time 25s/90°<) EA42
- Control range 90°<)
- Actuator with integrated emergency manual override standard

Inch	DN [mm]	PN	EPDM Code	FPM Code
2	50	10	199 142 002	199 142 022
2 ½	65	10	199 142 003	199 142 023
3	80	10	199 142 004	199 142 024
4	100	10	199 142 005	199 142 025
5	125	10	199 142 006	199 142 026
6	150	10	199 142 007	199 142 027
8	200	10	199 142 008	199 142 028

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



**Model:**

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension ANSI/ASME B 16.5 Class 150
- Overall length according to EN 558-1, ISO 5752
- Voltage 24 V AC/DC
- Control time 15 s/90°<) EA31
- Control time 25s/90°<) EA42
- Control range 90°<)
- Actuator with integrated emergency manual override standard

Inch	DN [mm]	PN	EPDM Code	FPM Code
2	50	10	199 142 122	199 142 142
2 ½	65	10	199 142 123	199 142 143
3	80	10	199 142 124	199 142 144
4	100	10	199 142 125	199 142 145
5	125	10	199 142 126	199 142 146
6	150	10	199 142 127	199 142 147
8	200	10	199 142 128	199 142 148



# PVC-U metric

## Lugstyle butterfly valve type 142 PVC-U 24V

### With manual override



#### Model:

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension ANSI/ASME B 16.5 Class 150
- Overall length according to EN 558-1, ISO 5752
- Voltage 24 V AC/DC
- Control time 15 s/90°<) EA31
- Control time 25s/90°<) EA42
- Control range 90°<)
- Actuator with integrated emergency manual override standard

Inch	DN [mm]	PN	EPDM Code	FPM Code	
2	50	10	<b>199 142 082</b>	<b>199 142 102</b>	
2 ½	65	10	<b>199 142 083</b>	<b>199 142 103</b>	
3	80	10	<b>199 142 084</b>	<b>199 142 104</b>	
4	100	10	<b>199 142 085</b>	<b>199 142 105</b>	
5	125	10	<b>199 142 086</b>	<b>199 142 106</b>	
6	150	10	<b>199 142 087</b>	<b>199 142 107</b>	
8	200	10	<b>199 142 088</b>	<b>199 142 108</b>	

## PVC-U metric

### Butterfly valves pneumatic metric/ANSI/JIS



#### Butterfly valve type 567 PVC-U Bare shaft



**Model:**

- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, ANSI/ASME B 16.5 Class 150, BS 1560: 1989, BS 4504, JIS B 2220
- Overall length according to EN 558-1, ISO 5752
- Interface F07 for the dimensions DN50-200 according to DIN/ISO 5211
- Interface F10 for the dimensions DN250-300 according to DIN/ISO 5211

d [mm]	DN [mm]	Inch	PN	EPDM Code	FPM Code
63	50	2	10	161 567 802	161 567 822
75	65	2 ½	10	161 567 803	161 567 823
90	80	3	10	161 567 804	161 567 824
110	100	4	10	161 567 805	161 567 825
140	125	5	10	161 567 806	161 567 826
160	150	6	10	161 567 807	161 567 827
225	200	8	10	161 567 808	161 567 828
280	250	10	10	161 567 809	161 567 829
315	300	12	10	161 567 810	161 567 830



#### Butterfly valve type 240 PVC-U FC (Fail safe to close) Without manual override



**Model:**

- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, ANSI/ASME B 16.5 Class 150, BS 1560: 1989, BS 4504, JIS B 2220
- Overall length according to EN 558-1, ISO 5752
- Control range 90°<)

d [mm]	DN [mm]	Inch	PN	EPDM Code	FPM Code
63	50	2	10	199 240 002	199 240 022
75	65	2 ½	10	199 240 003	199 240 023
90	80	3	10	199 240 004	199 240 024
110	100	4	10	199 240 005	199 240 025
140	125	5	10	199 240 006	199 240 026
160	150	6	10	199 240 007	199 240 027
225	200	8	10	199 240 008	199 240 028
280	250	10	10	199 240 009	199 240 029
315	300	12	10	199 240 010	199 240 030

## PVC-U metric



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



**Model:**

- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, ANSI/ASME B 16.5 Class 150, BS 1560: 1989, BS 4504, JIS B 2220
- Overall length according to EN 558-1, ISO 5752
- Control range 90°<)

d [mm]	DN [mm]	Inch	PN	EPDM Code	FPM Code	
63	50	2	10	199 240 042	199 240 062	
75	65	2 ½	10	199 240 043	199 240 063	
90	80	3	10	199 240 044	199 240 064	
110	100	4	10	199 240 045	199 240 065	
140	125	5	10	199 240 046	199 240 066	
160	150	6	10	199 240 047	199 240 067	
225	200	8	10	199 240 048	199 240 068	
280	250	10	10	199 240 049	199 240 069	
315	300	12	10	199 240 050	199 240 070	



### Butterfly valve type 240 PVC-U DA (Double acting) Without manual override



**Model:**

- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, ANSI/ASME B 16.5 Class 150, BS 1560: 1989, BS 4504, JIS B 2220
- Overall length according to EN 558-1, ISO 5752
- Control range 90°<)

d [mm]	DN [mm]	Inch	PN	EPDM Code	FPM Code	
63	50	2	10	199 240 082	199 240 102	
75	65	2 ½	10	199 240 083	199 240 103	
90	80	3	10	199 240 084	199 240 104	
110	100	4	10	199 240 085	199 240 105	
140	125	5	10	199 240 086	199 240 106	
160	150	6	10	199 240 087	199 240 107	
225	200	8	10	199 240 088	199 240 108	
280	250	10	10	199 240 089	199 240 109	
315	300	12	10	199 240 090	199 240 110	

## PVC-U metric



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



**Model:**

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension: ISO 7005 PN10, EN 1092 PN10, DIN 2501 PN10
- Overall length according to EN 558-1, ISO 5752
- Interface F07 according to DIN/ISO 5211

d [mm]	DN [mm]	Inch	PN	EPDM Code	FPM Code
63	50	2	10	161 568 802	161 568 822
75	65	2 ½	10	161 568 803	161 568 823
90	80	3	10	161 568 804	161 568 824
110	100	4	10	161 568 805	161 568 825
140	125	5	10	161 568 806	161 568 826
160	150	6	10	161 568 807	161 568 827
225	200	8	10	161 568 808	161 568 828



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



**Model:**

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension: ISO 7005 PN10, EN 1092 PN10, DIN 2501 PN10
- Overall length according to EN 558-1, ISO 5752
- Control range 90°<)

d [mm]	DN [mm]	Inch	PN	EPDM Code	FPM Code
63	50	2	10	199 241 002	199 241 022
75	65	2 ½	10	199 241 003	199 241 023
90	80	3	10	199 241 004	199 241 024
110	100	4	10	199 241 005	199 241 025
140	125	5	10	199 241 006	199 241 026
160	150	6	10	199 241 007	199 241 027
225	200	8	10	199 241 008	199 241 028



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



**Model:**

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension: ISO 7005 PN10, EN 1092 PN10, DIN 2501 PN10
- Overall length according to EN 558-1, ISO 5752
- Control range 90°<)

d [mm]	DN [mm]	Inch	PN	EPDM Code	FPM Code
63	50	2	10	199 241 042	199 241 062
75	65	2 ½	10	199 241 043	199 241 063
90	80	3	10	199 241 044	199 241 064
110	100	4	10	199 241 045	199 241 065
140	125	5	10	199 241 046	199 241 066
160	150	6	10	199 241 047	199 241 067
225	200	8	10	199 241 048	199 241 068

# PVC-U metric



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



### Model:

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension: ISO 7005 PN10, EN 1092 PN10, DIN 2501 PN10
- Overall length according to EN 558-1, ISO 5752
- Control range 90°<)

d [mm]	DN [mm]	Inch	PN	EPDM Code	FPM Code	
63	50	2	10	<b>199 241 082</b>	<b>199 241 102</b>	
75	65	2 ½	10	<b>199 241 083</b>	<b>199 241 103</b>	
90	80	3	10	<b>199 241 084</b>	<b>199 241 104</b>	
110	100	4	10	<b>199 241 085</b>	<b>199 241 105</b>	
140	125	5	10	<b>199 241 086</b>	<b>199 241 106</b>	
160	150	6	10	<b>199 241 087</b>	<b>199 241 107</b>	
225	200	8	10	<b>199 241 088</b>	<b>199 241 108</b>	

## PVC-U metric



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



**Model:**

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension ANSI/ASME B 16.5 Class 150
- Overall length according to EN 558-1, ISO 5752
- Interface F07 according to DIN/ISO 5211

Inch	DN [mm]	PN	EPDM Code	FPM Code	
2	50	10	161 568 902	161 568 922	
2 ½	65	10	161 568 903	161 568 923	
3	80	10	161 568 904	161 568 924	
4	100	10	161 568 905	161 568 925	
5	125	10	161 568 906	161 568 926	
6	150	10	161 568 907	161 568 927	
8	200	10	161 568 908	161 568 928	



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



**Model:**

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension ANSI/ASME B 16.5 Class 150
- Overall length according to EN 558-1, ISO 5752
- Control range 90°<)

Inch	DN [mm]	PN	EPDM Code	FPM Code	
2	50	10	199 242 002	199 242 022	
2 ½	65	10	199 242 003	199 242 023	
3	80	10	199 242 004	199 242 024	
4	100	10	199 242 005	199 242 025	
5	125	10	199 242 006	199 242 026	
6	150	10	199 242 007	199 242 027	
8	200	10	199 242 008	199 242 028	



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



**Model:**

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension ANSI/ASME B 16.5 Class 150
- Overall length according to EN 558-1, ISO 5752
- Control range 90°<)

Inch	DN [mm]	PN	EPDM Code	FPM Code	
2	50	10	199 242 042	199 242 062	
2 ½	65	10	199 242 043	199 242 063	
3	80	10	199 242 044	199 242 064	
4	100	10	199 242 045	199 242 065	
5	125	10	199 242 046	199 242 066	
6	150	10	199 242 047	199 242 067	
8	200	10	199 242 048	199 242 068	

# PVC-U metric



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



### Model:

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension ANSI/ASME B 16.5 Class 150
- Overall length according to EN 558-1, ISO 5752
- Control range 90°<)

Inch	DN [mm]	PN	EPDM Code	FPM Code	
2	50	10	<b>199 242 082</b>	<b>199 242 102</b>	
2 ½	65	10	<b>199 242 083</b>	<b>199 242 103</b>	
3	80	10	<b>199 242 084</b>	<b>199 242 104</b>	
4	100	10	<b>199 242 085</b>	<b>199 242 105</b>	
5	125	10	<b>199 242 086</b>	<b>199 242 106</b>	
6	150	10	<b>199 242 087</b>	<b>199 242 107</b>	
8	200	10	<b>199 242 088</b>	<b>199 242 108</b>	

## PVC-U metric

### Angle seat valves pneumatic

#### Angle seat valve type 211 PVC-U

FC (Fail safe to close)

With solvent cement spigots metric



d [mm]	DN [mm]	PN	EPDM Code	FPM Code	
16	10	6	199 211 305	199 211 355	
20	15	6	199 211 306	199 211 356	
25	20	6	199 211 307	199 211 357	
32	25	6	199 211 308	199 211 358	
40	32	6	199 211 309	199 211 359	
50	40	3	199 211 310	199 211 360	
63	50	2	199 211 311	199 211 361	

#### Angle seat valve type 211 PVC-U

FO (Fail safe to open)

With solvent cement spigots metric



d [mm]	DN [mm]	PN	EPDM Code	FPM Code	
16	10	10	199 211 705	199 211 755	
20	15	10	199 211 706	199 211 756	
25	20	10	199 211 707	199 211 757	
32	25	10	199 211 708	199 211 758	
40	32	10	199 211 709	199 211 759	
50	40	6	199 211 710	199 211 760	
63	50	4	199 211 711	199 211 761	

#### Angle seat valve type 211 PVC-U

DA (Double acting)

With solvent cement spigots metric



d [mm]	DN [mm]	PN	EPDM Code	FPM Code	
16	10	10	199 211 105	199 211 155	
20	15	10	199 211 106	199 211 156	
25	20	10	199 211 107	199 211 157	
32	25	10	199 211 108	199 211 158	
40	32	10	199 211 109	199 211 159	
50	40	10	199 211 110	199 211 160	
63	50	6	199 211 111	199 211 161	



## PVC-U metric

### Solenoid valves



#### Solenoid valve type 157 PVC-U

Nominal voltage 230V 50Hz  $\pm 10\%$

Function A straight passage valve

With threaded sockets parallel female thread Rp

- Solenoid valve 2/2 ways
- With manual override
- Electrical connection: cable plug
- Voltages: 24, 115, 230 V on request

DN [mm]	Inch	PN [bar]	EPDM Code	FPM Code	
4	G3/8	0.0 - 4.0	199 157 007	199 157 002	
6	G3/8	0.0 - 2.0	199 157 008	199 157 003	
8	G3/8	0.0 - 1.0	199 157 009	199 157 004	



#### Solenoid valve type 157 PVC-U

Nominal voltage 230V 50Hz  $\pm 10\%$

Function B straight passage valve

With threaded sockets parallel female thread Rp

- Solenoid valve 2/2 ways
- With manual override
- Electrical connection: cable plug
- Voltages: 24, 115, 230 V on request

DN [mm]	Inch	PN [bar]	EPDM Code	FPM Code	
4	G3/8	0.0 - 4.0	199 157 027	199 157 022	
6	G3/8	0.0 - 2.0	199 157 028	199 157 023	
8	G3/8	0.0 - 1.0	199 157 029	199 157 024	



#### Solenoid valve type 157 PVC-U

Nominal voltage 230V 50Hz  $\pm 10\%$

Function A right angle valve

With threaded sockets parallel female thread Rp

- Solenoid valve 2/2 ways
- With manual override
- Electrical connection: cable plug
- Voltages: 24, 115, 230 V on request

DN [mm]	Inch	PN [bar]	EPDM Code	FPM Code	
4	G3/8	0.0 - 4.0	199 157 077	199 157 072	
6	G3/8	0.0 - 2.0	199 157 078	199 157 073	
8	G3/8	0.0 - 1.0	199 157 079	199 157 074	

## PVC-U metric



**Solenoid valve type 157 PVC-U**  
**Nominal voltage 230V 50Hz ±10%**  
**Function B right angle valve**  
**With threaded sockets parallel female thread Rp**

- Solenoid valve 2/2 ways
- With manual override
- Electrical connection: cable plug
- Voltages: 24, 115, 230 V on request

DN [mm]	Inch	PN [bar]	EPDM Code	FPM Code	
4	G3/8	0.0 - 4.0	199 157 097	199 157 092	
6	G3/8	0.0 - 2.0	199 157 098	199 157 093	
8	G3/8	0.0 - 1.0	199 157 099	199 157 094	



**Solenoid valve type 157 PVC-U**  
**Nominal voltage 230V 50Hz ±10%**  
**Function A straight passage valve**  
**With solvent cement sockets metric**

- Solenoid valve 2/2 ways
- With manual override
- Electrical connection: cable plug
- Voltages: 24, 115, 230 V on request

DN [mm]	d [mm]	PN [bar]	EPDM Code	FPM Code	
4	16	0.0 - 4.0	199 157 017	199 157 012	
6	16	0.0 - 2.0	199 157 018	199 157 013	
8	16	0.0 - 1.0	199 157 019	199 157 014	



**Solenoid valve type 157 PVC-U**  
**Nominal voltage 230V 50Hz ±10%**  
**Function B straight passage valve**  
**With solvent cement sockets metric**

- Solenoid valve 2/2 ways
- With manual override
- Electrical connection: cable plug
- Voltages: 24, 115, 230 V on request

DN [mm]	d [mm]	PN [bar]	EPDM Code	FPM Code	
4	16	0.0 - 4.0	199 157 037	199 157 032	
6	16	0.0 - 2.0	199 157 038	199 157 033	
8	16	0.0 - 1.0	199 157 039	199 157 034	

## PVC-U metric



**Solenoid valve type 157 PVC-U**  
**Nominal voltage 230V 50Hz ±10%**  
**Function A right angle valve**  
**With solvent cement sockets metric**

- Solenoid valve 2/2 ways
- With manual override
- Electrical connection: cable plug
- Voltages: 24, 115, 230 V on request

DN [mm]	d [mm]	PN [bar]	EPDM Code	FPM Code	
4	16	0.0 - 4.0	199 157 087	199 157 082	
6	16	0.0 - 2.0	199 157 088	199 157 083	
8	16	0.0 - 1.0	199 157 089	199 157 084	



**Solenoid valve type 157 PVC-U**  
**Nominal voltage 230V 50Hz ±10%**  
**Function B right angle valve**  
**With solvent cement sockets metric**

- Solenoid valve 2/2 ways
- With manual override
- Electrical connection: cable plug
- Voltages: 24, 115, 230 V on request

DN [mm]	d [mm]	PN [bar]	EPDM Code	FPM Code	
4	16	0.0 - 4.0	199 157 107	199 157 102	
6	16	0.0 - 2.0	199 157 108	199 157 103	
8	16	0.0 - 1.0	199 157 109	199 157 104	



**Solenoid valve type 157 PVC-U**  
**Nominal voltage 24V DC \*24V AC/DC**  
**Function A straight passage valve**  
**With threaded sockets parallel female thread Rp**

- Solenoid valve 2/2 ways
- With manual override
- Electrical connection: cable plug
- Voltages: 24, 115, 230 V on request

DN [mm]	Inch	PN [bar]	EPDM Code	FPM Code	
4	G3/8	0.0 - 4.0	199 157 627	199 157 622	
6	G3/8	0.0 - 2.0	199 157 628	199 157 623	
*8	G3/8	0.0 - 1.0	199 157 629	199 157 624	

## PVC-U metric



**Solenoid valve type 157 PVC-U**  
**Nominal voltage 24V DC \*24V AC/DC**  
**Function B straight passage valve**  
**With threaded sockets parallel female thread Rp**

- Solenoid valve 2/2 ways
- With manual override
- Electrical connection: cable plug
- Voltages: 24, 115, 230 V on request

DN [mm]	Inch	PN [bar]	EPDM Code	FPM Code	
4	G3/8	0.0 - 4.0	<b>199 157 647</b>	<b>199 157 642</b>	
6	G3/8	0.0 - 2.0	<b>199 157 648</b>	<b>199 157 643</b>	
*8	G3/8	0.0 - 1.0	<b>199 157 649</b>	<b>199 157 644</b>	



**Solenoid valve type 157 PVC-U**  
**Nominal voltage 24V DC \*24V AC/DC**  
**Function A straight passage valve**  
**With solvent cement sockets metric**

- Solenoid valve 2/2 ways
- With manual override
- Electrical connection: cable plug
- Voltages: 24, 115, 230 V on request

DN [mm]	d [mm]	PN [bar]	EPDM Code	FPM Code	
4	16	0.0 - 4.0	<b>199 157 637</b>	<b>199 157 632</b>	
6	16	0.0 - 2.0	<b>199 157 638</b>	<b>199 157 633</b>	
*8	16	0.0 - 1.0	<b>199 157 639</b>	<b>199 157 634</b>	



**Solenoid valve type 157 PVC-U**  
**Nominal voltage 24V DC \*24V AC/DC**  
**Function B straight passage valve**  
**With solvent cement sockets metric**

- Solenoid valve 2/2 ways
- With manual override
- Electrical connection: cable plug
- Voltages: 24, 115, 230 V on request

DN [mm]	d [mm]	PN [bar]	EPDM Code	FPM Code	
4	16	0.0 - 4.0	<b>199 157 657</b>	<b>199 157 652</b>	
6	16	0.0 - 2.0	<b>199 157 658</b>	<b>199 157 653</b>	
*8	16	0.0 - 1.0	<b>199 157 659</b>	<b>199 157 654</b>	

## PVC-U metric



**Solenoid valve type 158 PVC-U**  
**Nominal voltage 230V 50Hz ±10%**

**Function C**

**With threaded sockets parallel female thread Rp**

- Solenoid valve 3/2 ways
- With manual override
- Electrical connection: cable plug
- Voltages: 24, 115, 230 V on request

DN [mm]	Inch	PN [bar]	EPDM Code	FPM Code	
4	G3/8	0.0 - 2.0	199 158 007	199 158 002	
6	G3/8	0.0 - 1.0	199 158 008	199 158 003	



**Solenoid valve type 158 PVC-U**  
**Nominal voltage 230V 50Hz ±10%**

**Function D**

**With threaded sockets parallel female thread Rp**

- Solenoid valve 3/2 ways
- With manual override
- Electrical connection: cable plug
- Voltages: 24, 115, 230 V on request

DN [mm]	Inch	PN [bar]	EPDM Code	FPM Code	
4	G3/8	0.0 - 2.0	199 158 027	199 158 022	
6	G3/8	0.0 - 1.0	199 158 028	199 158 023	



**Solenoid valve type 158 PVC-U**  
**Nominal voltage 230V 50Hz ±10%**

**Function C**

**With solvent cement sockets metric**

- Solenoid valve 3/2 ways
- With manual override
- Electrical connection: cable plug
- Voltages: 24, 115, 230 V on request

DN [mm]	d [mm]	PN [bar]	EPDM Code	FPM Code	
4	16	0.0 - 2.0	199 158 017	199 158 012	
6	16	0.0 - 1.0	199 158 018	199 158 013	



**Solenoid valve type 158 PVC-U**  
**Nominal voltage 230V 50Hz ±10%**

**Function D**

**With solvent cement sockets metric**

- Solenoid valve 3/2 ways
- With manual override
- Electrical connection: cable plug
- Voltages: 24, 115, 230 V on request

DN [mm]	d [mm]	PN [bar]	EPDM Code	FPM Code	
4	16	0.0 - 2.0	199 158 037	199 158 032	
6	16	0.0 - 1.0	199 158 038	199 158 033	

## PVC-U metric



**Solenoid valve type 160 PVC-U**  
**Nominal voltage 230V 50Hz ± 10%**  
**Function A**  
**With solvent cement sockets metric**

- Solenoid valve 2/2 ways
- Straight passage
- Electric connection with cable plug
- Protection class IP 65
- Voltages: 24, 115, 230 V on request

DN [mm]	d [mm]	PN [bar]	EPDM Code	FPM Code	
10	16	0.0 - 3.0	<b>199 160 010</b>	<b>199 160 005</b>	
10	20	0.0 - 3.0	<b>199 160 011</b>	<b>199 160 006</b>	
15	20	0.0 - 1.0	<b>199 160 012</b>	<b>199 160 007</b>	
15	25	0.0 - 1.0	<b>199 160 013</b>	<b>199 160 008</b>	
20	25	0.0 - 0.5	<b>199 160 014</b>	<b>199 160 009</b>	



**Solenoid valve type 160 PVC-U**  
**Nominal voltage 230V 50Hz ± 10%**  
**Function B**  
**With solvent cement sockets metric**

- Solenoid valve 2/2 ways
- Straight passage
- Electric connection with cable plug
- Protection class IP 65
- Voltages: 24, 115, 230 V on request

DN [mm]	d [mm]	PN [bar]	EPDM Code	FPM Code	
10	16	0.0 - 2.0	<b>199 160 025</b>	<b>199 160 020</b>	
10	20	0.0 - 2.0	<b>199 160 026</b>	<b>199 160 021</b>	
15	20	0.0 - 1.0	<b>199 160 027</b>	<b>199 160 022</b>	
15	25	0.0 - 1.0	<b>199 160 028</b>	<b>199 160 023</b>	
20	25	0.0 - 0.5	<b>199 160 029</b>	<b>199 160 024</b>	



**Solenoid valve type 160 PVC-U**  
**Nominal voltage 230V 50Hz ± 10%**  
**Function A**  
**With threaded sockets parallel female thread Rp**

- Solenoid valve 2/2 ways
- Straight passage
- Electric connection with cable plug
- Protection class IP 65

DN [mm]	d [mm]	Inch	PN [bar]	EPDM Code	FPM Code	
10	16	3/8	0.0 - 3.0	<b>199 160 040</b>	<b>199 160 035</b>	
10	20	1/2	0.0 - 3.0	<b>199 160 041</b>	<b>199 160 036</b>	
15	20	1/2	0.0 - 1.0	<b>199 160 042</b>	<b>199 160 037</b>	
15	25	3/4	0.0 - 1.0	<b>199 160 043</b>	<b>199 160 038</b>	
20	25	3/4	0.0 - 0.5	<b>199 160 044</b>	<b>199 160 039</b>	

## PVC-U metric



**Solenoid valve type 160 PVC-U**  
**Nominal voltage 230V 50Hz ± 10%**

**Function B**

**With threaded sockets parallel female thread Rp**

- Solenoid valve 2/2 ways
- Straight passage
- Electric connection with cable plug
- Protection class IP 65

DN [mm]	d [mm]	Inch	PN [bar]	EPDM Code	FPM Code
10	16	3/8	0.0 - 2.0	<b>199 160 055</b>	<b>199 160 050</b>
10	20	1/2	0.0 - 2.0	<b>199 160 056</b>	<b>199 160 051</b>
15	20	1/2	0.0 - 1.0	<b>199 160 057</b>	<b>199 160 052</b>
15	25	3/4	0.0 - 1.0	<b>199 160 058</b>	<b>199 160 053</b>
20	25	3/4	0.0 - 0.5	<b>199 160 059</b>	<b>199 160 054</b>



**Solenoid valve type 160 PVC-U**  
**Nominal voltage 24V AC/DC**

**Function A**

**With solvent cement sockets metric**

- Solenoid valve 2/2 ways
- Straight passage
- Electric connection with cable plug
- Protection class IP 65
- Voltages: 24, 115, 230 V on request

DN [mm]	d [mm]	PN [bar]	EPDM Code	FPM Code
10	16	0.0 - 3.0	<b>199 160 370</b>	<b>199 160 365</b>
10	20	0.0 - 3.0	<b>199 160 371</b>	<b>199 160 366</b>
15	20	0.0 - 1.0	<b>199 160 372</b>	<b>199 160 367</b>
15	25	0.0 - 1.0	<b>199 160 373</b>	<b>199 160 368</b>
20	25	0.0 - 0.5	<b>199 160 374</b>	<b>199 160 369</b>



**Solenoid valve type 160 PVC-U**  
**Nominal voltage 24V AC/DC**

**Function B**

**With solvent cement sockets metric**

- Solenoid valve 2/2 ways
- Straight passage
- Electric connection with cable plug
- Protection class IP 65
- Voltages: 24, 115, 230 V on request

DN [mm]	d [mm]	PN [bar]	EPDM Code	FPM Code
10	16	0.0 - 2.0	<b>199 160 385</b>	<b>199 160 380</b>
10	20	0.0 - 2.0	<b>199 160 386</b>	<b>199 160 381</b>
15	20	0.0 - 1.0	<b>199 160 387</b>	<b>199 160 382</b>
15	25	0.0 - 1.0	<b>199 160 388</b>	<b>199 160 383</b>
20	25	0.0 - 0.5	<b>199 160 389</b>	<b>199 160 384</b>

## PVC-U metric



### Solenoid valve type 160 PVC-U

Nominal voltage 24V AC/DC

#### Function A

With threaded sockets parallel female thread Rp

- Solenoid valve 2/2 ways
- Straight passage
- Electric connection with cable plug
- Protection class IP 65

DN [mm]	d [mm]	Inch	PN [bar]	EPDM Code	FPM Code	
10	16	3/8	0.0 - 3.0	<b>199 160 400</b>	<b>199 160 395</b>	
10	20	1/2	0.0 - 3.0	<b>199 160 401</b>	<b>199 160 396</b>	
15	20	1/2	0.0 - 1.0	<b>199 160 402</b>	<b>199 160 397</b>	
15	25	3/4	0.0 - 1.0	<b>199 160 403</b>	<b>199 160 398</b>	
20	25	3/4	0.0 - 0.5	<b>199 160 404</b>	<b>199 160 399</b>	



### Solenoid valve type 160 PVC-U

Nominal voltage 24V AC/DC

#### Function B

With threaded sockets parallel female thread Rp

- Solenoid valve 2/2 ways
- Straight passage
- Electric connection with cable plug
- Protection class IP 65

DN [mm]	d [mm]	Inch	PN [bar]	EPDM Code	FPM Code	
10	16	3/8	0.0 - 2.0	<b>199 160 415</b>	<b>199 160 410</b>	
10	20	1/2	0.0 - 2.0	<b>199 160 416</b>	<b>199 160 411</b>	
15	20	1/2	0.0 - 1.0	<b>199 160 417</b>	<b>199 160 412</b>	
15	25	3/4	0.0 - 1.0	<b>199 160 418</b>	<b>199 160 413</b>	
20	25	3/4	0.0 - 0.5	<b>199 160 419</b>	<b>199 160 414</b>	



## PVC-U metric



**Solenoid valve type 161 PVC-U**  
**Nominal voltage 230V 50Hz ± 10%**

**Function C**

**With solvent cement sockets metric**

- Solenoid valve 3/2 ways
- Electric connection with cable plug
- Protection class IP 65

DN [mm]	d [mm]	PN [bar]	EPDM Code	FPM Code	
10	16	0 - 1.00	<b>199 161 010</b>	<b>199 161 005</b>	
10	20	0 - 1.00	<b>199 161 011</b>	<b>199 161 006</b>	
15	20	0 - 0.50	<b>199 161 012</b>	<b>199 161 007</b>	
15	25	0 - 0.50	<b>199 161 013</b>	<b>199 161 008</b>	
20	25	0 - 0.25	<b>199 161 014</b>	<b>199 161 009</b>	



**Solenoid valve type 161 PVC-U**

**Nominal voltage 230V 50Hz ± 10%**

**Function C**

**With threaded sockets parallel female thread Rp**

- Solenoid valve 3/2 ways
- Electric connection with cable plug
- Protection class IP 65

DN [mm]	d [mm]	Inch	PN [bar]	EPDM Code	FPM Code	
10	16	3/8	0 - 1.00	<b>199 161 070</b>	<b>199 161 065</b>	
10	20	1/2	0 - 1.00	<b>199 161 071</b>	<b>199 161 066</b>	
15	20	1/2	0 - 0.50	<b>199 161 072</b>	<b>199 161 067</b>	
15	25	3/4	0 - 0.50	<b>199 161 073</b>	<b>199 161 068</b>	
20	25	3/4	0 - 0.25	<b>199 161 074</b>	<b>199 161 069</b>	



**Solenoid valve type 161 PVC-U**

**Nominal voltage 230V 50Hz ± 10%**

**Function D**

**With solvent cement sockets metric**

- Solenoid valve 3/2 ways
- Electric connection with cable plug
- Protection class IP 65

DN [mm]	d [mm]	PN [bar]	EPDM Code	FPM Code	
10	16	0 - 1.00	<b>199 161 025</b>	<b>199 161 020</b>	
10	20	0 - 1.00	<b>199 161 026</b>	<b>199 161 021</b>	
15	20	0 - 0.50	<b>199 161 027</b>	<b>199 161 022</b>	
15	25	0 - 0.50	<b>199 161 028</b>	<b>199 161 023</b>	
20	25	0 - 0.25	<b>199 161 029</b>	<b>199 161 024</b>	

## PVC-U metric

**Solenoid valve type 161 PVC-U**

**Nominal voltage 230V 50Hz ± 10%**

**Function D**

**With threaded sockets parallel female thread Rp**



- Solenoid valve 3/2 ways
- Electric connection with cable plug
- Protection class IP 65

<b>DN</b> [mm]	<b>d</b> [mm]	<b>Inch</b>	<b>PN</b> [bar]	<b>EPDM</b> <b>Code</b>	<b>FPM</b> <b>Code</b>	
10	16	3/8	0 - 1.00	<b>199 161 085</b>	<b>199 161 080</b>	
10	20	1/2	0 - 1.00	<b>199 161 086</b>	<b>199 161 081</b>	
15	20	1/2	0 - 0.50	<b>199 161 087</b>	<b>199 161 082</b>	
15	25	3/4	0 - 0.50	<b>199 161 088</b>	<b>199 161 083</b>	
20	25	3/4	0 - 0.25	<b>199 161 089</b>	<b>199 161 084</b>	

## PVC-U metric



### Solenoid valve type 165 PVC-U Standard voltage 230V 50Hz With solvent cement sockets metric

- Solenoid valve 2/2 ways
- Servo assisted
- Function A
- Function B on request
- Attention: Some inner parts in contact with the media are made of PVDF

DN [mm]	d [mm]	PN [bar]	EPDM Code	FPM Code	
15	20	0.5 - 6.0	<b>199 165 012</b>	<b>199 165 002</b>	
20	25	0.5 - 6.0	<b>199 165 013</b>	<b>199 165 003</b>	
25	32	0.5 - 6.0	<b>199 165 014</b>	<b>199 165 004</b>	
32	40	0.5 - 6.0	<b>199 165 015</b>	<b>199 165 005</b>	
40	50	0.5 - 6.0	<b>199 165 016</b>	<b>199 165 006</b>	
50	63	0.5 - 6.0	<b>199 165 017</b>	<b>199 165 007</b>	



### Solenoid valve type 165 PVC-U Standard voltage 115V 50Hz With solvent cement sockets metric

- Solenoid valve 2/2 ways
- Servo assisted
- Function A
- Function B on request
- Attention: Some inner parts in contact with the media are made of PVDF

DN [mm]	d [mm]	PN [bar]	EPDM Code	FPM Code	
15	20	0.5 - 6.0	<b>199 165 042</b>	<b>199 165 032</b>	
20	25	0.5 - 6.0	<b>199 165 043</b>	<b>199 165 033</b>	
25	32	0.5 - 6.0	<b>199 165 044</b>	<b>199 165 034</b>	
32	40	0.5 - 6.0	<b>199 165 045</b>	<b>199 165 035</b>	
40	50	0.5 - 6.0	<b>199 165 046</b>	<b>199 165 036</b>	
50	63	0.5 - 6.0	<b>199 165 047</b>	<b>199 165 037</b>	



### Solenoid valve type 165 PVC-U Standard voltage 24V DC With solvent cement sockets metric

- Solenoid valve 2/2 ways
- Servo assisted
- Function A
- Function B on request
- Attention: Some inner parts in contact with the media are made of PVDF

DN [mm]	d [mm]	PN [bar]	EPDM Code	FPM Code	
15	20	0.5 - 6.0	<b>199 165 022</b>	<b>199 165 072</b>	
20	25	0.5 - 6.0	<b>199 165 023</b>	<b>199 165 073</b>	
25	32	0.5 - 6.0	<b>199 165 024</b>	<b>199 165 074</b>	
32	40	0.5 - 6.0	<b>199 165 025</b>	<b>199 165 075</b>	
40	50	0.5 - 6.0	<b>199 165 026</b>	<b>199 165 076</b>	
50	63	0.5 - 6.0	<b>199 165 027</b>	<b>199 165 077</b>	

## PVC-U metric

### Process control valves

#### Pressure reducing valve type V82 PVC-U With solvent cement spigots metric



d [mm]	DN [mm]	Pressure range [bar]	EPDM Code	PTFE Code	
63	50	0.5 - 10	199 041 018	199 041 028	
75	65	0.5 - 6	199 041 019	199 041 029	
90	80	0.5 - 6	199 041 020	199 041 030	
110	100	0.5 - 4	199 041 021	199 041 031	

#### Pressure reducing valve type V182 PVC-U With solvent cement spigots metric



d [mm]	DN [mm]	Pressure range [bar]	EPDM Code	FPM Code	
16	10	0.5 - 10	199 041 600	199 041 611	
20	15	0.5 - 10	199 041 601	199 041 612	
25	20	0.5 - 10	199 041 602	199 041 613	
32	25	0.5 - 10	199 041 603	199 041 614	
40	32	0.5 - 10	199 041 604	199 041 615	
50	40	0.5 - 10	199 041 605	199 041 616	

#### Pressure reducing valve type V782 PVC-U With solvent cement spigots metric



d [mm]	DN [mm]	Pressure range [bar]	EPDM Code	PTFE Code	
16	10	0.5 - 10	199 041 060	199 041 066	
20	15	0.5 - 10	199 041 061	199 041 067	
25	20	0.5 - 10	199 041 062	199 041 068	
32	25	0.5 - 10	199 041 063	199 041 069	
40	32	0.5 - 10	199 041 064	199 041 070	
50	40	0.5 - 10	199 041 065	199 041 071	

#### Pressure relief valve type V85 PVC-U With solvent cement spigots metric



d [mm]	DN [mm]	Pressure range [bar]	EPDM Code	PTFE Code	
75	65	1.0 - 6	199 041 919	199 041 984	
90	80	1.0 - 6	199 041 940	199 041 985	
110	100	1.0 - 4	199 041 914	199 041 986	

## PVC-U metric



### Pressure relief valve type V185 PVC-U With solvent cement spigots metric

d [mm]	DN [mm]	Pressure range [bar]	EPDM Code	PTFE Code	
16	10	0.5 - 10	199 041 360	199 041 330	
20	15	0.5 - 10	199 041 361	199 041 331	
25	20	0.5 - 10	199 041 362	199 041 332	
32	25	0.5 - 10	199 041 363	199 041 333	
40	32	0.5 - 10	199 041 364	199 041 334	
50	40	0.5 - 10	199 041 365	199 041 335	
63	50	0.5 - 10	199 041 366	199 041 336	



### Pressure retaining valve type V86 PVC-U With solvent cement spigots metric

d [mm]	DN [mm]	Pressure range [bar]	EPDM Code	PTFE Code	
75	65	0.2 - 4	199 041 922	199 041 989	
75	65	1.0 - 6	199 041 950	199 041 990	
90	80	0.2 - 4	199 041 987	199 041 944	
90	80	1.0 - 6	199 041 988	199 041 991	
110	100	1.0 - 4	199 041 953	199 041 945	



### Pressure retaining valve type V186 PVC-U With solvent cement spigots metric

d [mm]	DN [mm]	Pressure range [bar]	EPDM Code	PTFE Code	
16	10	0.5 - 10	199 041 379	199 041 309	
20	15	0.5 - 10	199 041 380	199 041 310	
25	20	0.5 - 10	199 041 381	199 041 311	
32	25	0.5 - 10	199 041 382	199 041 312	
40	32	0.5 - 10	199 041 383	199 041 313	
50	40	0.5 - 10	199 041 384	199 041 314	
63	50	0.5 - 10	199 041 385	199 041 315	



### Pressure retaining valve type V786 PVC-U With solvent cement spigots metric

d [mm]	DN [mm]	Pressure range [bar]	EPDM Code	PTFE Code	
16	10	0.5 - 10	199 041 090	199 041 096	
20	15	0.5 - 10	199 041 091	199 041 097	
25	20	0.5 - 10	199 041 092	199 041 098	
32	25	0.5 - 10	199 041 093	199 041 099	
40	32	0.5 - 4	199 041 094	199 041 100	
50	40	0.5 - 4	199 041 095	199 041 101	

## PVC-U metric



### Gauge guard type Z700 PVC-U With manometer 0-10 bar

d [mm]	PTFE Code	
25	199 041 000	
32	199 041 001	



### Gauge guard type Z700 PVC-U With manometer 0-6 bar

d [mm]	PTFE Code	
25	199 041 292	
32	199 041 293	



### Gauge guard type Z701 PVC-U Without manometer

d [mm]	PTFE Code	
25	199 041 006	
32	199 041 007	



### Ventilating and bleed valve type V91 PVC-U With solvent cement spigots metric

d [mm]	DN [mm]	PN	FPM Code	
16	10	10	199 041 238	
20	15	10	199 041 239	
25	20	10	199 041 240	
32	25	10	199 041 241	
40	32	10	199 041 242	
50	40	10	199 041 243	
63	50	10	199 041 244	
75	65	10	199 041 245	
90	80	10	199 041 246	

## PVC-U metric



### Ventilating valve type V95 PVC-U With solvent cement spigots metric

d [mm]	DN [mm]	PN	FPM Code	
16	10	10	199 041 265	
20	15	10	199 041 266	
25	20	10	199 041 267	
32	25	10	199 041 268	
40	32	10	199 041 269	
50	40	10	199 041 270	
63	50	10	199 041 271	
75	65	10	199 041 272	
90	80	10	199 041 273	



### Throttle valve type V251 PVC-U With solvent cement sockets metric

d [mm]	DN [mm]	PN	EPDM Code	FPM Code	
16	10	10	199 041 203	199 041 210	
20	15	10	199 041 204	199 041 211	
25	20	10	199 041 205	199 041 212	
32	25	10	199 041 206	199 041 213	
40	32	10	199 041 207	199 041 214	
50	40	10	199 041 208	199 041 215	
63	50	10	199 041 209	199 041 216	



### Water jet suction pump type P20 PVC-U






- DN 10-20: BSP parallel female thread
- DN 25-50: Solvent cement socket metric
- DN 65-80: Solvent cement spigot metric

d [mm]	DN [mm]	PN	EPDM Code	
16	10	10	199 041 120	
20	15	10	199 041 121	
25	20	10	199 041 122	
32	25	10	199 041 123	
40	32	10	199 041 124	
50	40	10	199 041 125	
63	50	10	199 041 126	
75	65	10	199 041 127	
90	80	10	199 041 128	

# PVC-U metric



# PVC-C metric

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## PVC-C metric

### Ball valves electric



#### Ball valve type 107 PVC-C 100-230V With manual emergency override With solvent cement sockets 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	EPDM Code	FPM Code	
16	10	10	199 107 102	199 107 112	
20	15	10	199 107 103	199 107 113	
25	20	10	199 107 104	199 107 114	
32	25	10	199 107 105	199 107 115	
40	32	10	199 107 106	199 107 116	
50	40	10	199 107 107	199 107 117	
63	50	10	199 107 108	199 107 118	



#### 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	EPDM Code	FPM Code	
16	10	10	199 107 122	199 107 132	
20	15	10	199 107 123	199 107 133	
25	20	10	199 107 124	199 107 134	
32	25	10	199 107 125	199 107 135	
40	32	10	199 107 126	199 107 136	
50	40	10	199 107 127	199 107 137	
63	50	10	199 107 128	199 107 138	

## PVC-C metric



### 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	EPDM Code	FPM Code	
3/8	10	10	199 107 702	199 107 712	
1/2	15	10	199 107 703	199 107 713	
3/4	20	10	199 107 704	199 107 714	
1	25	10	199 107 705	199 107 715	
1 1/4	32	10	199 107 706	199 107 716	
1 1/2	40	10	199 107 707	199 107 717	
2	50	10	199 107 708	199 107 718	



### 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	EPDM Code	FPM Code	
16	10	10	199 107 142	199 107 152	
20	15	10	199 107 143	199 107 153	
25	20	10	199 107 144	199 107 154	
32	25	10	199 107 145	199 107 155	
40	32	10	199 107 146	199 107 156	
50	40	10	199 107 147	199 107 157	
63	50	10	199 107 148	199 107 158	

## PVC-C metric



### 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	EPDM Code	FPM Code	
16	10	10	199 107 162	199 107 172	
20	15	10	199 107 163	199 107 173	
25	20	10	199 107 164	199 107 174	
32	25	10	199 107 165	199 107 175	
40	32	10	199 107 166	199 107 176	
50	40	10	199 107 167	199 107 177	
63	50	10	199 107 168	199 107 178	



### 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	EPDM Code	FPM Code	
3/8	10	10	199 107 742	199 107 752	
1/2	15	10	199 107 743	199 107 753	
3/4	20	10	199 107 744	199 107 754	
1	25	10	199 107 745	199 107 755	
1 1/4	32	10	199 107 746	199 107 756	
1 1/2	40	10	199 107 747	199 107 757	
2	50	10	199 107 748	199 107 758	

## PVC-C metric






### 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	EPDM Code	FPM Code	
16	10	10	199 130 402	199 130 412	
20	15	10	199 130 403	199 130 413	
25	20	10	199 130 404	199 130 414	
32	25	10	199 130 405	199 130 415	
40	32	10	199 130 406	199 130 416	
50	40	10	199 130 407	199 130 417	
63	50	10	199 130 408	199 130 418	
 75	65	10	199 130 409	199 130 419	
 90	80	10	199 130 410	199 130 420	
 110	100	10	199 130 411	199 130 421	






### 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	EPDM Code	FPM Code	
16	10	10	199 130 422	199 130 432	
20	15	10	199 130 423	199 130 433	
25	20	10	199 130 424	199 130 434	
32	25	10	199 130 425	199 130 435	
40	32	10	199 130 426	199 130 436	
50	40	10	199 130 427	199 130 437	
63	50	10	199 130 428	199 130 438	
 75	65	10	199 130 429	199 130 439	
 90	80	10	199 130 430	199 130 440	
 110	100	10	199 130 431	199 130 441	

## PVC-C metric






### 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	EPDM Code	FPM Code	
3/8	10	10	199 130 182	199 130 192	
1/2	15	10	199 130 183	199 130 193	
3/4	20	10	199 130 184	199 130 194	
1	25	10	199 130 185	199 130 195	
1 1/4	32	10	199 130 186	199 130 196	
1 1/2	40	10	199 130 187	199 130 197	
2	50	10	199 130 188	199 130 198	
 2 1/2	65	10	199 130 189	199 130 199	
 3	80	10	199 130 190	199 130 200	
 4	100	10	199 130 191	199 130 201	






### 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 dimension: 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	EPDM Code	FPM Code	
 75	65	10	199 134 489	199 134 499	
 90	80	10	199 134 490	199 134 500	
 110	100	10	199 134 491	199 134 501	

## PVC-C metric






### 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	EPDM Code	FPM Code	
16	10	10	199 130 442	199 130 452	
20	15	10	199 130 443	199 130 453	
25	20	10	199 130 444	199 130 454	
32	25	10	199 130 445	199 130 455	
40	32	10	199 130 446	199 130 456	
50	40	10	199 130 447	199 130 457	
63	50	10	199 130 448	199 130 458	
 75	65	10	199 130 449	199 130 459	
 90	80	10	199 130 450	199 130 460	
 110	100	10	199 130 451	199 130 461	






### 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	EPDM Code	FPM Code	
16	10	10	199 130 462	199 130 472	
20	15	10	199 130 463	199 130 473	
25	20	10	199 130 464	199 130 474	
32	25	10	199 130 465	199 130 475	
40	32	10	199 130 466	199 130 476	
50	40	10	199 130 467	199 130 477	
63	50	10	199 130 468	199 130 478	
 75	65	10	199 130 469	199 130 479	
 90	80	10	199 130 470	199 130 480	
 110	100	10	199 130 471	199 130 481	

## PVC-C metric






### 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	EPDM Code	FPM Code	
3/8	10	10	199 130 202	199 130 212	
1/2	15	10	199 130 203	199 130 213	
3/4	20	10	199 130 204	199 130 214	
1	25	10	199 130 205	199 130 215	
1 1/4	32	10	199 130 206	199 130 216	
1 1/2	40	10	199 130 207	199 130 217	
2	50	10	199 130 208	199 130 218	
 2 1/2	65	10	199 130 209	199 130 219	
 3	80	10	199 130 210	199 130 220	
 4	100	10	199 130 211	199 130 221	






### 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 dimension: 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	EPDM Code	FPM Code	
 75	65	10	199 134 509	199 134 519	
 90	80	10	199 134 510	199 134 520	
 110	100	10	199 134 511	199 134 521	



## PVC-C metric



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

**Model:**

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

d [mm]	DN [mm]	PN	EPDM Code	FPM Code	
16	10	10	199 175 102	199 175 112	
20	15	10	199 175 103	199 175 113	
25	20	10	199 175 104	199 175 114	
32	25	10	199 175 105	199 175 115	
40	32	10	199 175 106	199 175 116	
50	40	10	199 175 107	199 175 117	
63	50	10	199 175 108	199 175 118	



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

**Model:**

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

d [mm]	DN [mm]	PN	EPDM Code	FPM Code	
16	10	10	199 175 262	199 175 272	
20	15	10	199 175 263	199 175 273	
25	20	10	199 175 264	199 175 274	
32	25	10	199 175 265	199 175 275	
40	32	10	199 175 266	199 175 276	
50	40	10	199 175 267	199 175 277	
63	50	10	199 175 268	199 175 278	

## PVC-C metric



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

#### Model:

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

d [mm]	DN [mm]	PN	EPDM Code	FPM Code	
16	10	10	199 175 142	199 175 152	
20	15	10	199 175 143	199 175 153	
25	20	10	199 175 144	199 175 154	
32	25	10	199 175 145	199 175 155	
40	32	10	199 175 146	199 175 156	
50	40	10	199 175 147	199 175 157	
63	50	10	199 175 148	199 175 158	



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

#### Model:

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

d [mm]	DN [mm]	PN	EPDM Code	FPM Code	
16	10	10	199 175 322	199 175 332	
20	15	10	199 175 323	199 175 333	
25	20	10	199 175 324	199 175 334	
32	25	10	199 175 325	199 175 335	
40	32	10	199 175 326	199 175 336	
50	40	10	199 175 327	199 175 337	
63	50	10	199 175 328	199 175 338	

## PVC-C metric

### Ball valves pneumatic

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

**With manual override**

**With solvent cement sockets metric**



**Model:**

- 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	EPDM Code	FPM Code	
16	10	10	199 230 402	199 230 412	
20	15	10	199 230 403	199 230 413	
25	20	10	199 230 404	199 230 414	
32	25	10	199 230 405	199 230 415	
40	32	10	199 230 406	199 230 416	
50	40	10	199 230 407	199 230 417	
63	50	10	199 230 408	199 230 418	



**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°<) 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	EPDM Code	FPM Code	
16	10	10	199 230 422	199 230 432	
20	15	10	199 230 423	199 230 433	
25	20	10	199 230 424	199 230 434	
32	25	10	199 230 425	199 230 435	
40	32	10	199 230 426	199 230 436	
50	40	10	199 230 427	199 230 437	
63	50	10	199 230 428	199 230 438	

## PVC-C metric



### 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	EPDM Code	FPM Code	
3/8	10	10	199 230 752	199 230 772	
1/2	15	10	199 230 753	199 230 773	
3/4	20	10	199 230 754	199 230 774	
1	25	10	199 230 755	199 230 775	
1 1/4	32	10	199 230 756	199 230 776	
1 1/2	40	10	199 230 757	199 230 777	
2	50	10	199 230 758	199 230 778	

## PVC-C metric



### 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	EPDM Code	FPM Code	
16	10	10	199 230 442	199 230 452	
20	15	10	199 230 443	199 230 453	
25	20	10	199 230 444	199 230 454	
32	25	10	199 230 445	199 230 455	
40	32	10	199 230 446	199 230 456	
50	40	10	199 230 447	199 230 457	
63	50	10	199 230 448	199 230 458	



### 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	EPDM Code	FPM Code	
16	10	10	199 230 462	199 230 472	
20	15	10	199 230 463	199 230 473	
25	20	10	199 230 464	199 230 474	
32	25	10	199 230 465	199 230 475	
40	32	10	199 230 466	199 230 476	
50	40	10	199 230 467	199 230 477	
63	50	10	199 230 468	199 230 478	

## PVC-C metric



### 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°<) 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	EPDM Code	FPM Code	
3/8	10	10	199 230 792	199 230 812	
1/2	15	10	199 230 793	199 230 813	
3/4	20	10	199 230 794	199 230 814	
1	25	10	199 230 795	199 230 815	
1 1/4	32	10	199 230 796	199 230 816	
1 1/2	40	10	199 230 797	199 230 817	
2	50	10	199 230 798	199 230 818	

## PVC-C metric



### 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	EPDM Code	FPM Code	
16	10	10	199 230 482	199 230 492	
20	15	10	199 230 483	199 230 493	
25	20	10	199 230 484	199 230 494	
32	25	10	199 230 485	199 230 495	
40	32	10	199 230 486	199 230 496	
50	40	10	199 230 487	199 230 497	
63	50	10	199 230 488	199 230 498	



### 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°<) 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	EPDM Code	FPM Code	
16	10	10	199 230 502	199 230 512	
20	15	10	199 230 503	199 230 513	
25	20	10	199 230 504	199 230 514	
32	25	10	199 230 505	199 230 515	
40	32	10	199 230 506	199 230 516	
50	40	10	199 230 507	199 230 517	
63	50	10	199 230 508	199 230 518	

## PVC-C metric



### 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	EPDM Code	FPM Code	
3/8	10	10	199 230 832	199 230 852	
1/2	15	10	199 230 833	199 230 853	
3/4	20	10	199 230 834	199 230 854	
1	25	10	199 230 835	199 230 855	
1 1/4	32	10	199 230 836	199 230 856	
1 1/2	40	10	199 230 837	199 230 857	
2	50	10	199 230 838	199 230 858	



## PVC-C metric






### 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	EPDM Code	FPM Code	
16	10	10	199 230 522	199 230 532	
20	15	10	199 230 523	199 230 533	
25	20	10	199 230 524	199 230 534	
32	25	10	199 230 525	199 230 535	
40	32	10	199 230 526	199 230 536	
50	40	10	199 230 527	199 230 537	
63	50	10	199 230 528	199 230 538	
 75	65	10	199 230 529	199 230 539	
 90	80	10	199 230 530	199 230 540	
 110	100	10	199 230 531	199 230 541	






### 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°<) 1-2 s

#### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	EPDM Code	FPM Code	
16	10	10	199 230 542	199 230 552	
20	15	10	199 230 543	199 230 553	
25	20	10	199 230 544	199 230 554	
32	25	10	199 230 545	199 230 555	
40	32	10	199 230 546	199 230 556	
50	40	10	199 230 547	199 230 557	
63	50	10	199 230 548	199 230 558	
 75	65	10	199 230 549	199 230 559	
 90	80	10	199 230 550	199 230 560	
 110	100	10	199 230 551	199 230 561	

## PVC-C metric






### 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	EPDM Code	FPM Code	
3/8	10	10	199 230 872	199 230 892	
1/2	15	10	199 230 873	199 230 893	
3/4	20	10	199 230 874	199 230 894	
1	25	10	199 230 875	199 230 895	
1 1/4	32	10	199 230 876	199 230 896	
1 1/2	40	10	199 230 877	199 230 897	
2	50	10	199 230 878	199 230 898	
 2 1/2	65	10	199 230 879	199 230 899	
 3	80	10	199 230 880	199 230 900	
 4	100	10	199 230 881	199 230 901	






### 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°<) 1-2 s
- Overall length according to EN 558-1
- Connecting dimension: 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	EPDM Code	FPM Code	
 75	65	10	199 234 609	199 234 619	
 90	80	10	199 234 610	199 234 620	
 110	100	10	199 234 611	199 234 621	

## PVC-C metric






### 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°<) 1-2 s

#### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	EPDM Code	FPM Code	
16	10	10	199 230 562	199 230 572	
20	15	10	199 230 563	199 230 573	
25	20	10	199 230 564	199 230 574	
32	25	10	199 230 565	199 230 575	
40	32	10	199 230 566	199 230 576	
50	40	10	199 230 567	199 230 577	
63	50	10	199 230 568	199 230 578	
 75	65	10	199 230 569	199 230 579	
 90	80	10	199 230 570	199 230 580	
 110	100	10	199 230 571	199 230 581	






### 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°<) 1-2 s

#### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	EPDM Code	FPM Code	
16	10	10	199 230 582	199 230 592	
20	15	10	199 230 583	199 230 593	
25	20	10	199 230 584	199 230 594	
32	25	10	199 230 585	199 230 595	
40	32	10	199 230 586	199 230 596	
50	40	10	199 230 587	199 230 597	
63	50	10	199 230 588	199 230 598	
 75	65	10	199 230 589	199 230 599	
 90	80	10	199 230 590	199 230 600	
 110	100	10	199 230 591	199 230 601	

## PVC-C metric






### 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°<) 1-2 s

#### Option:

- Individual configuration of the valve (see form)

Rp [inch]	DN [mm]	PN	EPDM Code	FPM Code	
3/8	10	10	199 230 912	199 230 932	
1/2	15	10	199 230 913	199 230 933	
3/4	20	10	199 230 914	199 230 934	
1	25	10	199 230 915	199 230 935	
1 1/4	32	10	199 230 916	199 230 936	
1 1/2	40	10	199 230 917	199 230 937	
2	50	10	199 230 918	199 230 938	
 2 1/2	65	10	199 230 919	199 230 939	
 3	80	10	199 230 920	199 230 940	
 4	100	10	199 230 921	199 230 941	






### 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°<) 1-2 s
- Overall length according to EN 558-1
- Connecting dimension: 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	EPDM Code	FPM Code	
 75	65	10	199 234 629	199 234 639	
 90	80	10	199 234 630	199 234 640	
 110	100	10	199 234 631	199 234 641	

## PVC-C metric






### 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	EPDM Code	FPM Code	
16	10	10	199 230 602	199 230 612	
20	15	10	199 230 603	199 230 613	
25	20	10	199 230 604	199 230 614	
32	25	10	199 230 605	199 230 615	
40	32	10	199 230 606	199 230 616	
50	40	10	199 230 607	199 230 617	
63	50	10	199 230 608	199 230 618	
 75	65	10	199 230 609	199 230 619	
 90	80	10	199 230 610	199 230 620	
 110	100	10	199 230 611	199 230 621	






### 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°<) 1-2 s

#### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	EPDM Code	FPM Code	
16	10	10	199 230 622	199 230 632	
20	15	10	199 230 623	199 230 633	
25	20	10	199 230 624	199 230 634	
32	25	10	199 230 625	199 230 635	
40	32	10	199 230 626	199 230 636	
50	40	10	199 230 627	199 230 637	
63	50	10	199 230 628	199 230 638	
 75	65	10	199 230 629	199 230 639	
 90	80	10	199 230 630	199 230 640	
 110	100	10	199 230 631	199 230 641	

## PVC-C metric



### 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° < 1-2 s

#### Option:

- Individual configuration of the valve (see form)

Rp [inch]	DN [mm]	PN	EPDM Code	FPM Code	
3/8	10	10	199 230 942	199 230 952	
1/2	15	10	199 230 943	199 230 953	
3/4	20	10	199 230 944	199 230 954	
1	25	10	199 230 945	199 230 955	
1 1/4	32	10	199 230 946	199 230 956	
1 1/2	40	10	199 230 947	199 230 957	
2	50	10	199 230 948	199 230 958	
2 1/2	65	10	199 230 949	199 230 959	
3	80	10	199 230 950	199 230 960	
4	100	10	199 230 951	199 230 961	



### 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° < 1-2 s
- Overall length according to EN 558-1
- Connecting dimension: 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	EPDM Code	FPM Code	
75	65	10	199 234 649	199 234 659	
90	80	10	199 234 650	199 234 660	
110	100	10	199 234 651	199 234 661	

## PVC-C metric



### 3-Way ball valve type 275 PVC-C Horizontal/L-port Without manual override With solvent cement sockets metric

#### Model:

- Built on with pneumatic actuator PA11/21
- Actuator fails safe to the closed position FC
- Control time 90°<) 1-3 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

d [mm]	DN [mm]	PN	EPDM Code	FPM Code	
16	10	10	199 275 102	199 275 112	
20	15	10	199 275 103	199 275 113	
25	20	10	199 275 104	199 275 114	
32	25	10	199 275 105	199 275 115	
40	32	10	199 275 106	199 275 116	
50	40	10	199 275 107	199 275 117	
63	50	10	199 275 108	199 275 118	



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

#### Model:

- Built on with pneumatic actuator PA11/21
- Control time 90°<) 1-3 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

d [mm]	DN [mm]	PN	EPDM Code	FPM Code	
16	10	10	199 275 282	199 275 292	
20	15	10	199 275 283	199 275 293	
25	20	10	199 275 284	199 275 294	
32	25	10	199 275 285	199 275 295	
40	32	10	199 275 286	199 275 296	
50	40	10	199 275 287	199 275 297	
63	50	10	199 275 288	199 275 298	

## PVC-C metric



### 3-Way ball valve type 275 PVC-C Horizontal/T-port Without manual override With solvent cement sockets metric

#### Model:

- Built on with pneumatic actuator PA11/21
- Actuator fails safe to the closed position FC
- Control time 90°(<) 1-3 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

d [mm]	DN [mm]	PN	EPDM Code	FPM Code	
16	10	10	199 275 142	199 275 152	
20	15	10	199 275 143	199 275 153	
25	20	10	199 275 144	199 275 154	
32	25	10	199 275 145	199 275 155	
40	32	10	199 275 146	199 275 156	
50	40	10	199 275 147	199 275 157	
63	50	10	199 275 148	199 275 158	



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

#### Model:

- Built on with pneumatic actuator PA11/21
- Control time 90°(<) 1-3 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

d [mm]	DN [mm]	PN	EPDM Code	FPM Code	
16	10	10	199 275 322	199 275 332	
20	15	10	199 275 323	199 275 333	
25	20	10	199 275 324	199 275 334	
32	25	10	199 275 325	199 275 335	
40	32	10	199 275 326	199 275 336	
50	40	10	199 275 327	199 275 337	
63	50	10	199 275 328	199 275 338	



## PVC-C metric

### Diaphragm valves pneumatic

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

##### With solvent cement spigots metric



**Model:**

- Working pressure 6 bar **one side**

d [mm]	DN [mm]	PN	EPDM Code	
20	15	6	199 024 121	
25	20	6	199 024 122	
32	25	6	199 024 123	
40	32	6	199 024 124	
50	40	6	199 024 125	
63	50	6	199 024 126	

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

##### With backing flanges PP-V metric



**Model:**

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

d [mm]	DN [mm]	Inch	PN	EPDM Code	
20	15	½	6	199 024 151	
25	20	¾	6	199 024 152	
32	25	1	6	199 024 153	
40	32	1 ¼	6	199 024 154	
50	40	1 ½	6	199 024 155	
63	50	2	6	199 024 156	

## PVC-C metric



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

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

\*PN: EPDM/PTFE

d [mm]	DN [mm]	PN [bar]		EPDM Code	PTFE/EPDM Code	
20	15	10 / 5	*	199 028 631	199 028 661	
25	20	10 / 7	*	199 028 632	199 028 662	
32	25	10 / 7	*	199 028 633	199 028 663	
40	32	10 / 7	*	199 028 634	199 028 664	
50	40	10 / 7	*	199 028 635	199 028 665	
63	50	10 / 7	*	199 028 636	199 028 666	



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

**Model:**

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

\*PN: EPDM/PTFE

d [mm]	DN [mm]	Inch	PN [bar]		EPDM Code	PTFE/EPDM Code	
20	15	½	10 / 5	*	199 028 691	199 028 721	
25	20	¾	10 / 7	*	199 028 692	199 028 722	
32	25	1	10 / 7	*	199 028 693	199 028 723	
40	32	1 ¼	10 / 7	*	199 028 694	199 028 724	
50	40	1 ½	10 / 7	*	199 028 695	199 028 725	
63	50	2	10 / 7	*	199 028 696	199 028 726	

## PVC-C metric



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

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

d [mm]	DN [mm]	PN	EPDM Code	PTFE/EPDM Code	
20	15	10	199 025 631	199 025 661	
25	20	10	199 025 632	199 025 662	
32	25	10	199 025 633	199 025 663	
40	32	10	199 025 634	199 025 664	
50	40	10	199 025 635	199 025 665	
63	50	10	199 025 636	199 025 666	



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

#### Model:

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

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

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

\* With backing flanges PP-V

d [mm]	DN [mm]	Inch	PN	EPDM Code	PTFE/EPDM Code	
*75	65	2 ½	10	199 025 697	199 025 727	
**90	80	3	10	199 025 698	199 025 728	
110	100	4	8	199 025 699	199 025 729	



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

#### Model:

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

d [mm]	DN [mm]	Inch	PN	EPDM Code	PTFE/EPDM Code	
20	15	½	10	199 025 691	199 025 721	
25	20	¾	10	199 025 692	199 025 722	
32	25	1	10	199 025 693	199 025 723	
40	32	1 ¼	10	199 025 694	199 025 724	
50	40	1 ½	10	199 025 695	199 025 725	
63	50	2	10	199 025 696	199 025 726	

## PVC-C metric



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

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

d [mm]	DN [mm]	PN	EPDM Code	PTFE/EPDM Code	
20	15	10	199 025 641	199 025 671	
25	20	10	199 025 642	199 025 672	
32	25	10	199 025 643	199 025 673	
40	32	10	199 025 644	199 025 674	
50	40	10	199 025 645	199 025 675	
63	50	10	199 025 646	199 025 676	



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

#### Model:

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

d [mm]	DN [mm]	Inch	PN	EPDM Code	PTFE/EPDM Code	
20	15	½	10	199 025 701	199 025 731	
25	20	¾	10	199 025 702	199 025 732	
32	25	1	10	199 025 703	199 025 733	
40	32	1 ¼	10	199 025 704	199 025 734	
50	40	1 ½	10	199 025 705	199 025 735	
63	50	2	10	199 025 706	199 025 736	



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

#### Model:

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

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

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

\* With backing flanges PP-V

d [mm]	DN [mm]	Inch	PN	EPDM Code	PTFE/EPDM Code	
*75	65	2 ½	10	199 025 707	199 025 737	
**90	80	3	10	199 025 708	199 025 738	
110	100	4	8	199 025 709	199 025 739	

## PVC-C metric



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

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

d [mm]	DN [mm]	PN	EPDM Code	PTFE/EPDM Code	
20	15	10	199 025 651	199 025 681	
25	20	10	199 025 652	199 025 682	
32	25	10	199 025 653	199 025 683	
40	32	10	199 025 654	199 025 684	
50	40	10	199 025 655	199 025 685	
63	50	10	199 025 656	199 025 686	



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

#### Model:

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

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

d [mm]	DN [mm]	Inch	PN	EPDM Code	PTFE/EPDM Code	
20	15	½	10	199 025 711	199 025 741	
25	20	¾	10	199 025 712	199 025 742	
32	25	1	10	199 025 713	199 025 743	
40	32	1 ¼	10	199 025 714	199 025 744	
50	40	1 ½	10	199 025 715	199 025 745	
63	50	2	10	199 025 716	199 025 746	



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

#### Model:

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

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

\* With backing flanges PP-V

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

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

d [mm]	DN [mm]	Inch	PN	EPDM Code	PTFE/EPDM Code	
*75	65	2 ½	10	199 025 717	199 025 747	
**90	80	3	10	199 025 718	199 025 748	
110	100	4	8	199 025 719	199 025 749	

## PVC-C metric

### Butterfly valves electric metric/ANSI/JIS



#### Butterfly valve type 567 PVC-C Bare shaft



**Model:**

- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, ANSI/ASME B 16.5 Class 150, BS 1560: 1989, BS 4504, JIS B 2220
- Overall length according to EN 558-1, ISO 5752
- Interface F07 according to DIN/ISO 5211

\* Available on request

d [mm]	DN [mm]	Inch	PN	EPDM Code	FPM Code
*63	50	2	10	163 567 802	163 567 822
75	65	2 ½	10	163 567 803	163 567 823
90	80	3	10	163 567 804	163 567 824
110	100	4	10	163 567 805	163 567 825
*140	125	5	10	163 567 806	163 567 826
160	150	6	10	163 567 807	163 567 827
225	200	8	10	163 567 808	163 567 828



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



**Model:**

- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, ANSI/ASME B 16.5 Class 150, BS 1560: 1989, BS 4504, JIS B 2220
- Overall length according to EN 558-1, ISO 5752
- Voltage 100-230 V, 50-60 Hz
- Control time 15 s/90°<) EA31
- Control time 25s/90°<) EA42
- Control range 90°<)
- Actuator with integrated emergency manual override standard

\* Available on request

d [mm]	DN [mm]	Inch	PN	EPDM Code	FPM Code
*63	50	2	10	199 140 202	199 140 222
75	65	2 ½	10	199 140 203	199 140 223
90	80	3	10	199 140 204	199 140 224
110	100	4	10	199 140 205	199 140 225
*140	125	5	10	199 140 206	199 140 226
160	150	6	10	199 140 207	199 140 227
225	200	8	10	199 140 208	199 140 228

## PVC-C metric

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



**Model:**

- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, ANSI/ASME B 16.5 Class 150, BS 1560: 1989, BS 4504, JIS B 2220
- Overall length according to EN 558-1, ISO 5752
- Voltage 100-230 V, 50-60 Hz
- Control time 15 s/90°<) EA31
- Control time 25s/90°<) EA42
- Control range 90°<)
- Actuator with integrated emergency manual override standard

\* Available on request

d [mm]	DN [mm]	Inch	PN	EPDM Code	FPM Code
*63	50	2	10	<b>199 140 162</b>	<b>199 140 182</b>
75	65	2 ½	10	<b>199 140 163</b>	<b>199 140 183</b>
90	80	3	10	<b>199 140 164</b>	<b>199 140 184</b>
110	100	4	10	<b>199 140 165</b>	<b>199 140 185</b>
*140	125	5	10	<b>199 140 166</b>	<b>199 140 186</b>
160	150	6	10	<b>199 140 167</b>	<b>199 140 187</b>
225	200	8	10	<b>199 140 168</b>	<b>199 140 188</b>

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



**Model:**

- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, ANSI/ASME B 16.5 Class 150, BS 1560: 1989, BS 4504, JIS B 2220
- Overall length according to EN 558-1, ISO 5752
- Voltage 24 V AC/DC
- Control time 15 s/90°<) EA31
- Control time 25s/90°<) EA42
- Control range 90°<)
- Actuator with integrated emergency manual override standard

\* Available on request

d [mm]	DN [mm]	Inch	PN	EPDM Code	FPM Code
*63	50	2	10	<b>199 140 282</b>	<b>199 140 302</b>
75	65	2 ½	10	<b>199 140 283</b>	<b>199 140 303</b>
90	80	3	10	<b>199 140 284</b>	<b>199 140 304</b>
110	100	4	10	<b>199 140 285</b>	<b>199 140 305</b>
*140	125	5	10	<b>199 140 286</b>	<b>199 140 306</b>
160	150	6	10	<b>199 140 287</b>	<b>199 140 307</b>
225	200	8	10	<b>199 140 288</b>	<b>199 140 308</b>

## PVC-C metric

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



#### Model:

- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, ANSI/ASME B 16.5 Class 150, BS 1560: 1989, BS 4504, JIS B 2220
- Overall length according to EN 558-1, ISO 5752
- Voltage 24 V AC/DC
- Control time 15 s/90°<) EA31
- Control time 25s/90°<) EA42
- Control range 90°<)
- Actuator with integrated emergency manual override standard

\* Available on request

d [mm]	DN [mm]	Inch	PN	EPDM Code	FPM Code
*63	50	2	10	<b>199 140 242</b>	<b>199 140 262</b>
75	65	2 ½	10	<b>199 140 243</b>	<b>199 140 263</b>
90	80	3	10	<b>199 140 244</b>	<b>199 140 264</b>
110	100	4	10	<b>199 140 245</b>	<b>199 140 265</b>
*140	125	5	10	<b>199 140 246</b>	<b>199 140 266</b>
160	150	6	10	<b>199 140 247</b>	<b>199 140 267</b>
225	200	8	10	<b>199 140 248</b>	<b>199 140 268</b>



## PVC-C metric



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



**Model:**

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension: ISO 7005 PN10, EN 1092 PN10, DIN 2501 PN10
- Overall length according to EN 558-1, ISO 5752
- Interface F07 according to DIN/ISO 5211

\* Available on request

d [mm]	DN [mm]	Inch	PN	EPDM Code	FPM Code
*63	50	2	10	163 568 802	163 568 822
75	65	2 ½	10	163 568 803	163 568 823
90	80	3	10	163 568 804	163 568 824
110	100	4	10	163 568 805	163 568 825
*140	125	5	10	163 568 806	163 568 826
160	150	6	10	163 568 807	163 568 827
225	200	8	10	163 568 808	163 568 828



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



**Model:**

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension: ISO 7005 PN10, EN 1092 PN10, DIN 2501 PN10
- Overall length according to EN 558-1, ISO 5752
- Voltage 100-230 V, 50-60 Hz
- Control time 15 s/90°<) EA31
- Control time 25s/90°<) EA42
- Control range 90°<)
- Actuator with integrated emergency manual override standard

\* Available on request

d [mm]	DN [mm]	Inch	PN	EPDM Code	FPM Code
*63	50	2	10	199 141 202	199 141 222
75	65	2 ½	10	199 141 203	199 141 223
90	80	3	10	199 141 204	199 141 224
110	100	4	10	199 141 205	199 141 225
*140	125	5	10	199 141 206	199 141 226
160	150	6	10	199 141 207	199 141 227
225	200	8	10	199 141 208	199 141 228

## PVC-C metric

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



**Model:**

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension: ISO 7005 PN10, EN 1092 PN10, DIN 2501 PN10
- Overall length according to EN 558-1, ISO 5752
- Voltage 100-230 V, 50-60 Hz
- Control time 15 s/90°<) EA31
- Control time 25s/90°<) EA42
- Control range 90°<)
- Actuator with integrated emergency manual override standard

\* Available on request

d [mm]	DN [mm]	Inch	PN	EPDM Code	FPM Code
*63	50	2	10	199 141 162	199 141 182
75	65	2 ½	10	199 141 163	199 141 183
90	80	3	10	199 141 164	199 141 184
110	100	4	10	199 141 165	199 141 185
*140	125	5	10	199 141 166	199 141 186
160	150	6	10	199 141 167	199 141 187
225	200	8	10	199 141 168	199 141 188

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



**Model:**

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension: ISO 7005 PN10, EN 1092 PN10, DIN 2501 PN10
- Overall length according to EN 558-1, ISO 5752
- Voltage 24 V AC/DC
- Control time 15 s/90°<) EA31
- Control time 25s/90°<) EA42
- Control range 90°<)
- Actuator with integrated emergency manual override standard

\* Available on request

d [mm]	DN [mm]	Inch	PN	EPDM Code	FPM Code
*63	50	2	10	199 141 282	199 141 302
75	65	2 ½	10	199 141 283	199 141 303
90	80	3	10	199 141 284	199 141 304
110	100	4	10	199 141 285	199 141 305
*140	125	5	10	199 141 286	199 141 306
160	150	6	10	199 141 287	199 141 307
225	200	8	10	199 141 288	199 141 308

## PVC-C metric

### Lugstyle butterfly valve type 141

#### PVC-C 24V

#### With manual override



#### Model:

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension: ISO 7005 PN10, EN 1092 PN10, DIN 2501 PN10
- Overall length according to EN 558-1, ISO 5752
- Voltage 24 V AC/DC
- Control time 15 s/90°<) EA31
- Control time 25s/90°<) EA42
- Control range 90°<)
- Actuator with integrated emergency manual override standard

\* Available on request

d [mm]	DN [mm]	Inch	PN	EPDM Code	FPM Code	
*63	50	2	10	<b>199 141 242</b>	<b>199 141 262</b>	
75	65	2 ½	10	<b>199 141 243</b>	<b>199 141 263</b>	
90	80	3	10	<b>199 141 244</b>	<b>199 141 264</b>	
110	100	4	10	<b>199 141 245</b>	<b>199 141 265</b>	
*140	125	5	10	<b>199 141 246</b>	<b>199 141 266</b>	
160	150	6	10	<b>199 141 247</b>	<b>199 141 267</b>	
225	200	8	10	<b>199 141 248</b>	<b>199 141 268</b>	

## PVC-C metric



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



**Model:**

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension ANSI/ASME B 16.5 Class 150
- Overall length according to EN 558-1, ISO 5752
- Interface F07 according to DIN/ISO 5211

\* Available on request

Inch	d [mm]	DN [mm]	PN	EPDM Code	FPM Code
*2	63	50	10	163 568 902	163 568 922
2 ½	75	65	10	163 568 903	163 568 923
3	90	80	10	163 568 904	163 568 924
4	110	100	10	163 568 905	163 568 925
*5	140	125	10	163 568 906	163 568 926
6	160	150	10	163 568 907	163 568 927
8	225	200	10	163 568 908	163 568 928



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



**Model:**

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension ANSI/ASME B 16.5 Class 150
- Overall length according to EN 558-1, ISO 5752
- Voltage 100-230 V, 50-60 Hz
- Control time 15 s/90°<) EA31
- Control time 25s/90°<) EA42
- Control range 90°<)
- Actuator with integrated emergency manual override standard

\* Available on request

Inch	DN [mm]	d [mm]	PN	EPDM Code	FPM Code
*2	50	63	10	199 142 202	199 142 222
2 ½	65	75	10	199 142 203	199 142 223
3	80	90	10	199 142 204	199 142 224
4	100	110	10	199 142 205	199 142 225
*5	125	140	10	199 142 206	199 142 226
6	150	160	10	199 142 207	199 142 227
8	200	225	10	199 142 208	199 142 228

## PVC-C metric

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



#### Model:

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension ANSI/ASME B 16.5 Class 150
- Overall length according to EN 558-1, ISO 5752
- Voltage 100-230 V, 50-60 Hz
- Control time 15 s/90°<) EA31
- Control time 25s/90°<) EA42
- Control range 90°<)
- Actuator with integrated emergency manual override standard

\* Available on request

Inch	DN [mm]	d [mm]	PN	EPDM Code	FPM Code
*2	50	63	10	199 142 162	199 142 182
2 ½	65	75	10	199 142 163	199 142 183
3	80	90	10	199 142 164	199 142 184
4	100	110	10	199 142 165	199 142 185
*5	125	140	10	199 142 166	199 142 186
6	150	160	10	199 142 167	199 142 187
8	200	225	10	199 142 168	199 142 188

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



#### Model:

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension ANSI/ASME B 16.5 Class 150
- Overall length according to EN 558-1, ISO 5752
- Voltage 24 V AC/DC
- Control time 15 s/90°<) EA31
- Control time 25s/90°<) EA42
- Control range 90°<)
- Actuator with integrated emergency manual override standard

\* Available on request

Inch	DN [mm]	d [mm]	PN	EPDM Code	FPM Code
*2	50	63	10	199 142 282	199 142 302
2 ½	65	75	10	199 142 283	199 142 303
3	80	90	10	199 142 284	199 142 304
4	100	110	10	199 142 285	199 142 305
*5	125	140	10	199 142 286	199 142 306
6	150	160	10	199 142 287	199 142 307
8	200	225	10	199 142 288	199 142 308

# PVC-C metric

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



### Model:

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension ANSI/ASME B 16.5 Class 150
- Overall length according to EN 558-1, ISO 5752
- Voltage 24 V AC/DC
- Control time 15 s/90°<) EA31
- Control time 25s/90°<) EA42
- Control range 90°<)
- Actuator with integrated emergency manual override standard

\* Available on request

Inch	DN [mm]	d [mm]	PN	EPDM Code	FPM Code	
*2	50	63	10	<b>199 142 242</b>	<b>199 142 262</b>	
2 ½	65	75	10	<b>199 142 243</b>	<b>199 142 263</b>	
3	80	90	10	<b>199 142 244</b>	<b>199 142 264</b>	
4	100	110	10	<b>199 142 245</b>	<b>199 142 265</b>	
*5	125	140	10	<b>199 142 246</b>	<b>199 142 266</b>	
6	150	160	10	<b>199 142 247</b>	<b>199 142 267</b>	
8	200	225	10	<b>199 142 248</b>	<b>199 142 268</b>	

## PVC-C metric

### Butterfly valves pneumatic metric/ANSI/JIS



#### Butterfly valve type 567 PVC-C Bare shaft



**Model:**

- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, ANSI/ASME B 16.5 Class 150, BS 1560: 1989, BS 4504, JIS B 2220
- Overall length according to EN 558-1, ISO 5752
- Interface F07 according to DIN/ISO 5211

\* Available on request

d [mm]	DN [mm]	Inch	PN	EPDM Code	FPM Code
*63	50	2	10	163 567 802	163 567 822
75	65	2 ½	10	163 567 803	163 567 823
90	80	3	10	163 567 804	163 567 824
110	100	4	10	163 567 805	163 567 825
*140	125	5	10	163 567 806	163 567 826
160	150	6	10	163 567 807	163 567 827
225	200	8	10	163 567 808	163 567 828



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



**Model:**

- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, ANSI/ASME B 16.5 Class 150, BS 1560: 1989, BS 4504, JIS B 2220
- Overall length according to EN 558-1, ISO 5752
- Control range 90°<

\* Available on request

d [mm]	DN [mm]	Inch	PN	EPDM Code	FPM Code
*63	50	2	10	199 240 162	199 240 182
75	65	2 ½	10	199 240 163	199 240 183
90	80	3	10	199 240 164	199 240 184
110	100	4	10	199 240 165	199 240 185
*140	125	5	10	199 240 166	199 240 186
160	150	6	10	199 240 167	199 240 187
225	200	8	10	199 240 168	199 240 188

## PVC-C metric

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



**Model:**

- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, ANSI/ASME B 16.5 Class 150, BS 1560: 1989, BS 4504, JIS B 2220
- Overall length according to EN 558-1, ISO 5752
- Control range 90°<)

\* Available on request

d [mm]	DN [mm]	Inch	PN	EPDM Code	FPM Code
*63	50	2	10	199 240 202	199 240 222
75	65	2 ½	10	199 240 203	199 240 223
90	80	3	10	199 240 204	199 240 224
110	100	4	10	199 240 205	199 240 225
*140	125	5	10	199 240 206	199 240 226
160	150	6	10	199 240 207	199 240 227
225	200	8	10	199 240 208	199 240 228

### Butterfly valve type 240 PVC-C DA (Double acting) Without manual override



**Model:**

- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, ANSI/ASME B 16.5 Class 150, BS 1560: 1989, BS 4504, JIS B 2220
- Overall length according to EN 558-1, ISO 5752
- Control range 90°<)

\* Available on request

d [mm]	DN [mm]	Inch	PN	EPDM Code	FPM Code
*63	50	2	10	199 240 242	199 240 262
75	65	2 ½	10	199 240 243	199 240 263
90	80	3	10	199 240 244	199 240 264
110	100	4	10	199 240 245	199 240 265
*140	125	5	10	199 240 246	199 240 266
160	150	6	10	199 240 247	199 240 267
225	200	8	10	199 240 248	199 240 268



## PVC-C metric



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



**Model:**

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension: ISO 7005 PN10, EN 1092 PN10, DIN 2501 PN10
- Overall length according to EN 558-1, ISO 5752
- Interface F07 according to DIN/ISO 5211

\* Available on request

d [mm]	DN [mm]	Inch	PN	EPDM Code	FPM Code
*63	50	2	10	163 568 802	163 568 822
75	65	2 ½	10	163 568 803	163 568 823
90	80	3	10	163 568 804	163 568 824
110	100	4	10	163 568 805	163 568 825
*140	125	5	10	163 568 806	163 568 826
160	150	6	10	163 568 807	163 568 827
225	200	8	10	163 568 808	163 568 828



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



**Model:**

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension: ISO 7005 PN10, EN 1092 PN10, DIN 2501 PN10
- Overall length according to EN 558-1, ISO 5752
- Control range 90°<)

\* Available on request

d [mm]	DN [mm]	Inch	PN	EPDM Code	FPM Code
*63	50	2	10	199 241 162	199 241 182
75	65	2 ½	10	199 241 163	199 241 183
90	80	3	10	199 241 164	199 241 184
110	100	4	10	199 241 165	199 241 185
*140	125	5	10	199 241 166	199 241 186
160	150	6	10	199 241 167	199 241 187
225	200	8	10	199 241 168	199 241 188

## PVC-C metric



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



**Model:**

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension: ISO 7005 PN10, EN 1092 PN10, DIN 2501 PN10
- Overall length according to EN 558-1, ISO 5752
- Control range 90°<)

\* Available on request

d [mm]	DN [mm]	Inch	PN	EPDM Code	FPM Code	
*63	50	2	10	199 241 202	199 241 222	
75	65	2 ½	10	199 241 203	199 241 223	
90	80	3	10	199 241 204	199 241 224	
110	100	4	10	199 241 205	199 241 225	
*140	125	5	10	199 241 206	199 241 226	
160	150	6	10	199 241 207	199 241 227	
225	200	8	10	199 241 208	199 241 228	



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



**Model:**

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension: ISO 7005 PN10, EN 1092 PN10, DIN 2501 PN10
- Overall length according to EN 558-1, ISO 5752
- Control range 90°<)

\* Available on request

d [mm]	DN [mm]	Inch	PN	EPDM Code	FPM Code	
*63	50	2	10	199 241 242	199 241 262	
75	65	2 ½	10	199 241 243	199 241 263	
90	80	3	10	199 241 244	199 241 264	
110	100	4	10	199 241 245	199 241 265	
*140	125	5	10	199 241 246	199 241 266	
160	150	6	10	199 241 247	199 241 267	
225	200	8	10	199 241 248	199 241 268	

## PVC-C metric



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



**Model:**

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension ANSI/ASME B 16.5 Class 150
- Overall length according to EN 558-1, ISO 5752
- Interface F07 according to DIN/ISO 5211

\* Available on request

Inch	d [mm]	DN [mm]	PN	EPDM Code	FPM Code
*2	63	50	10	163 568 902	163 568 922
2 ½	75	65	10	163 568 903	163 568 923
3	90	80	10	163 568 904	163 568 924
4	110	100	10	163 568 905	163 568 925
*5	140	125	10	163 568 906	163 568 926
6	160	150	10	163 568 907	163 568 927
8	225	200	10	163 568 908	163 568 928



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



**Model:**

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension ANSI/ASME B 16.5 Class 150
- Overall length according to EN 558-1, ISO 5752
- Control range 90°<)

\* Available on request

Inch	DN [mm]	d [mm]	PN	EPDM Code	FPM Code
*2	50	63	10	199 242 162	199 242 182
2 ½	65	75	10	199 242 163	199 242 183
3	80	90	10	199 242 164	199 242 184
4	100	110	10	199 242 165	199 242 185
*5	125	140	10	199 242 166	199 242 186
6	150	160	10	199 242 167	199 242 187
8	200	225	10	199 242 168	199 242 188

## PVC-C metric



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



**Model:**

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension ANSI/ASME B 16.5 Class 150
- Overall length according to EN 558-1, ISO 5752
- Control range 90°<

\* Available on request

Inch	DN [mm]	d [mm]	PN	EPDM Code	FPM Code
*2	50	63	10	199 242 202	199 242 222
2 ½	65	75	10	199 242 203	199 242 223
3	80	90	10	199 242 204	199 242 224
4	100	110	10	199 242 205	199 242 225
*5	125	140	10	199 242 206	199 242 226
6	150	160	10	199 242 207	199 242 227
8	200	225	10	199 242 208	199 242 228



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








**Model:**

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension ANSI/ASME B 16.5 Class 150
- Overall length according to EN 558-1, ISO 5752
- Control range 90°<

\* Available on request

Inch	DN [mm]	d [mm]	PN	EPDM Code	FPM Code
*2	50	63	10	199 242 242	199 242 262
2 ½	65	75	10	199 242 243	199 242 263
3	80	90	10	199 242 244	199 242 264
4	100	110	10	199 242 245	199 242 265
*5	125	140	10	199 242 246	199 242 266
6	150	160	10	199 242 247	199 242 267
8	200	225	10	199 242 248	199 242 268

# ABS metric

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# ABS metric

## Ball valves electric



### Ball valve type 107 ABS 100-230V With manual emergency override With solvent cement sockets 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	EPDM Code
16	10	10	199 107 082
20	15	10	199 107 083
25	20	10	199 107 084
32	25	10	199 107 085
40	32	10	199 107 086
50	40	10	199 107 087
63	50	10	199 107 088



### 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	EPDM Code
3/8	10	10	199 107 682
1/2	15	10	199 107 683
3/4	20	10	199 107 684
1	25	10	199 107 685
1 1/4	32	10	199 107 686
1 1/2	40	10	199 107 687
2	50	10	199 107 688

## ABS metric



### 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	EPDM Code
16	10	10	199 107 092
20	15	10	199 107 093
25	20	10	199 107 094
32	25	10	199 107 095
40	32	10	199 107 096
50	40	10	199 107 097
63	50	10	199 107 098



### 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	EPDM Code
3/8	10	10	199 107 692
1/2	15	10	199 107 693
3/4	20	10	199 107 694
1	25	10	199 107 695
1 1/4	32	10	199 107 696
1 1/2	40	10	199 107 697
2	50	10	199 107 698

## ABS metric






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

#### Model:

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

#### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	EPDM Code
16	10	10	199 130 702
20	15	10	199 130 703
25	20	10	199 130 704
32	25	10	199 130 705
40	32	10	199 130 706
50	40	10	199 130 707
63	50	10	199 130 708
 75	65	10	199 130 709
 90	80	10	199 130 710
 110	100	10	199 130 711



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

#### Model:

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

#### Option:

- Individual configuration of the valve (see form)

Rp [inch]	DN [mm]	PN	EPDM Code
3/8	10	10	199 130 722
1/2	15	10	199 130 723
3/4	20	10	199 130 724
1	25	10	199 130 725
1 1/4	32	10	199 130 726
1 1/2	40	10	199 130 727
2	50	10	199 130 728



## ABS metric






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

#### Model:

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

#### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	EPDM Code
16	10	10	199 130 742
20	15	10	199 130 743
25	20	10	199 130 744
32	25	10	199 130 745
40	32	10	199 130 746
50	40	10	199 130 747
63	50	10	199 130 748
 75	65	10	199 130 749
 90	80	10	199 130 750
 110	100	10	199 130 751



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

#### Model:

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

#### Option:

- Individual configuration of the valve (see form)

Rp [inch]	DN [mm]	PN	EPDM Code
3/8	10	10	199 130 762
1/2	15	10	199 130 763
3/4	20	10	199 130 764
1	25	10	199 130 765
1 1/4	32	10	199 130 766
1 1/2	40	10	199 130 767
2	50	10	199 130 768

## ABS metric



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

**Model:**

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

d [mm]	DN [mm]	PN	EPDM Code
16	10	10	199 175 162
20	15	10	199 175 163
25	20	10	199 175 164
32	25	10	199 175 165
40	32	10	199 175 166
50	40	10	199 175 167
63	50	10	199 175 168



### 3-Way ball valve type 175 ABS Horizontal/L-port 24V With manual emergency override With solvent cement sockets metric

**Model:**

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

d [mm]	DN [mm]	PN	EPDM Code
16	10	10	199 175 342
20	15	10	199 175 343
25	20	10	199 175 344
32	25	10	199 175 345
40	32	10	199 175 346
50	40	10	199 175 347
63	50	10	199 175 348

## ABS metric



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

**Model:**

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

d [mm]	DN [mm]	PN	EPDM Code	
16	10	10	199 175 172	
20	15	10	199 175 173	
25	20	10	199 175 174	
32	25	10	199 175 175	
40	32	10	199 175 176	
50	40	10	199 175 177	
63	50	10	199 175 178	



### 3-Way ball valve type 175 ABS Horizontal/T-port 24V With manual emergency override With solvent cement 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

d [mm]	DN [mm]	PN	EPDM Code	
16	10	10	199 175 352	
20	15	10	199 175 353	
25	20	10	199 175 354	
32	25	10	199 175 355	
40	32	10	199 175 356	
50	40	10	199 175 357	
63	50	10	199 175 358	

## ABS metric

### Ball valves pneumatic

#### Ball valve type 230 ABS FC (Fail safe to close)

##### 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	EPDM Code
16	10	10	199 230 702
20	15	10	199 230 703
25	20	10	199 230 704
32	25	10	199 230 705
40	32	10	199 230 706
50	40	10	199 230 707
63	50	10	199 230 708



#### 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	EPDM Code
3/8	10	10	199 230 722
1/2	15	10	199 230 723
3/4	20	10	199 230 724
1	25	10	199 230 725
1 1/4	32	10	199 230 726
1 1/2	40	10	199 230 727
2	50	10	199 230 728

## ABS metric



### 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	EPDM Code	
16	10	10	199 230 742	
20	15	10	199 230 743	
25	20	10	199 230 744	
32	25	10	199 230 745	
40	32	10	199 230 746	
50	40	10	199 230 747	
63	50	10	199 230 748	



### 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°<) 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	EPDM Code	
3/8	10	10	199 230 762	
1/2	15	10	199 230 763	
3/4	20	10	199 230 764	
1	25	10	199 230 765	
1 1/4	32	10	199 230 766	
1 1/2	40	10	199 230 767	
2	50	10	199 230 768	

## ABS metric



### 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°<) 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	EPDM Code	
16	10	10	199 230 782	
20	15	10	199 230 783	
25	20	10	199 230 784	
32	25	10	199 230 785	
40	32	10	199 230 786	
50	40	10	199 230 787	
63	50	10	199 230 788	



### 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	EPDM Code	
3/8	10	10	199 230 802	
1/2	15	10	199 230 803	
3/4	20	10	199 230 804	
1	25	10	199 230 805	
1 1/4	32	10	199 230 806	
1 1/2	40	10	199 230 807	
2	50	10	199 230 808	

## ABS metric






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

#### Model:

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

#### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	EPDM Code	
16	10	10	199 230 822	
20	15	10	199 230 823	
25	20	10	199 230 824	
32	25	10	199 230 825	
40	32	10	199 230 826	
50	40	10	199 230 827	
63	50	10	199 230 828	
 75	65	10	199 230 829	
 90	80	10	199 230 830	
 110	100	10	199 230 831	



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

#### Model:

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

#### Option:

- Individual configuration of the valve (see form)

Rp [inch]	DN [mm]	PN	EPDM Code	
3/8	10	10	199 230 842	
1/2	15	10	199 230 843	
3/4	20	10	199 230 844	
1	25	10	199 230 845	
1 1/4	32	10	199 230 846	
1 1/2	40	10	199 230 847	
2	50	10	199 230 848	

## ABS metric






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

#### Model:

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

#### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	EPDM Code
16	10	10	199 230 862
20	15	10	199 230 863
25	20	10	199 230 864
32	25	10	199 230 865
40	32	10	199 230 866
50	40	10	199 230 867
63	50	10	199 230 868
 75	65	10	199 230 869
 90	80	10	199 230 870
 110	100	10	199 230 871



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

#### Model:

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

#### Option:

- Individual configuration of the valve (see form)

Rp [inch]	DN [mm]	PN	EPDM Code
3/8	10	10	199 230 882
1/2	15	10	199 230 883
3/4	20	10	199 230 884
1	25	10	199 230 885
1 1/4	32	10	199 230 886
1 1/2	40	10	199 230 887
2	50	10	199 230 888



## ABS metric






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

**Model:**

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

**Option:**

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	EPDM Code
16	10	10	199 230 902
20	15	10	199 230 903
25	20	10	199 230 904
32	25	10	199 230 905
40	32	10	199 230 906
50	40	10	199 230 907
63	50	10	199 230 908
 75	65	10	199 230 909
 90	80	10	199 230 910
 110	100	10	199 230 911



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

**Model:**

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

**Option:**

- Individual configuration of the valve (see form)

Rp [inch]	DN [mm]	PN	EPDM Code
3/8	10	10	199 230 922
1/2	15	10	199 230 923
3/4	20	10	199 230 924
1	25	10	199 230 925
1 1/4	32	10	199 230 926
1 1/2	40	10	199 230 927
2	50	10	199 230 928

## ABS metric



### 3-Way ball valve type 275 ABS Horizontal/L-port Without manual override With solvent cement sockets metric

#### Model:

- Built on with pneumatic actuator PA11/21
- Actuator fails safe to the closed position FC
- Control time 90°<) 1-3 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

d [mm]	DN [mm]	PN	EPDM Code
16	10	10	199 275 162
20	15	10	199 275 163
25	20	10	199 275 164
32	25	10	199 275 165
40	32	10	199 275 166
50	40	10	199 275 167
63	50	10	199 275 168



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

#### Model:

- Built on with pneumatic actuator PA11/21
- Control time 90°<) 1-3 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

d [mm]	DN [mm]	PN	EPDM Code
16	10	10	199 275 342
20	15	10	199 275 343
25	20	10	199 275 344
32	25	10	199 275 345
40	32	10	199 275 346
50	40	10	199 275 347
63	50	10	199 275 348

## ABS metric



### 3-Way ball valve type 275 ABS Horizontal/T-port Without manual override With solvent cement sockets metric

**Model:**

- Built on with pneumatic actuator PA11/21
- Actuator fails safe to the closed position FC
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90°<) 1-3 s

d [mm]	DN [mm]	PN	EPDM Code
16	10	10	<b>199 275 172</b>
20	15	10	<b>199 275 173</b>
25	20	10	<b>199 275 174</b>
32	25	10	<b>199 275 175</b>
40	32	10	<b>199 275 176</b>
50	40	10	<b>199 275 177</b>
63	50	10	<b>199 275 178</b>



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

**Model:**

- Built on with pneumatic actuator PA11/21
- Control time 90°<) 1-3 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

d [mm]	DN [mm]	PN	EPDM Code
16	10	10	<b>199 275 352</b>
20	15	10	<b>199 275 353</b>
25	20	10	<b>199 275 354</b>
32	25	10	<b>199 275 355</b>
40	32	10	<b>199 275 356</b>
50	40	10	<b>199 275 357</b>
63	50	10	<b>199 275 358</b>

## ABS metric

### Diaphragm valves pneumatic

Diaphragm valve type DIASTAR Eco ABS  
FC (Fail safe to close)

With solvent cement spigots metric



Model:

- Working pressure 6 bar **one side**

d [mm]	DN [mm]	PN	EPDM Code	
20	15	6	199 024 181	
25	20	6	199 024 182	
32	25	6	199 024 183	
40	32	6	199 024 184	
50	40	6	199 024 185	
63	50	6	199 024 186	

Diaphragm valve type DIASTAR ABS  
Series 028 FC (Fail safe to close)

With solvent cement spigots metric

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



d [mm]	DN [mm]	PN	EPDM Code	
20	15	10	199 028 941	
25	20	10	199 028 942	
32	25	10	199 028 943	
40	32	10	199 028 944	
50	40	10	199 028 945	
63	50	10	199 028 946	

## ABS metric



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

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

d [mm]	DN [mm]	PN	EPDM Code	
20	15	10	<b>199 025 941</b>	
25	20	10	<b>199 025 942</b>	
32	25	10	<b>199 025 943</b>	
40	32	10	<b>199 025 944</b>	
50	40	10	<b>199 025 945</b>	
63	50	10	<b>199 025 946</b>	



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

#### Model:

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

\* with backing flanges UP-GF metric

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

d [mm]	DN [mm]	Inch	PN	EPDM Code	
*75	65	2 ½	10	<b>199 025 947</b>	
**90	80	3	10	<b>199 025 948</b>	
110	100	4	8	<b>199 025 949</b>	

## ABS metric



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

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

d [mm]	DN [mm]	PN	EPDM Code	
20	15	10	199 025 951	
25	20	10	199 025 952	
32	25	10	199 025 953	
40	32	10	199 025 954	
50	40	10	199 025 955	
63	50	10	199 025 956	



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

#### Model:

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

\* with backing flanges UP-GF metric

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

d [mm]	DN [mm]	Inch	PN	EPDM Code	
*75	65	2 ½	10	199 025 957	
**90	80	3	10	199 025 958	
110	100	4	8	199 025 959	

## ABS metric



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

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

d [mm]	DN [mm]	PN	EPDM Code	
20	15	10	199 025 961	
25	20	10	199 025 962	
32	25	10	199 025 963	
40	32	10	199 025 964	
50	40	10	199 025 965	
63	50	10	199 025 966	



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

#### Model:

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

\* with backing flanges UP-GF metric

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

d [mm]	DN [mm]	Inch	PN	EPDM Code	
*75	65	2 ½	10	199 025 967	
**90	80	3	10	199 025 968	
110	100	4	8	199 025 969	

## ABS metric

### Butterfly valves electric metric/ANSI/JIS



#### Butterfly valve type 567 ABS Bare shaft



**Model:**

- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, ANSI/ASME B 16.5 Class 150, BS 1560: 1989, BS 4504, JIS B 2220
- Overall length according to EN 558-1, ISO 5752
- Interface F07 according to DIN/ISO 5211

\* Available on request

d [mm]	DN [mm]	Inch	PN	EPDM Code
*63	50	2	10	169 567 802
*75	65	2 ½	10	169 567 803
90	80	3	10	169 567 804
110	100	4	10	169 567 805
*140	125	5	10	169 567 806
160	150	6	10	169 567 807
225	200	8	10	169 567 808



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



**Model:**

- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, ANSI/ASME B 16.5 Class 150, BS 1560: 1989, BS 4504, JIS B 2220
- Overall length according to EN 558-1, ISO 5752
- Voltage 100-230 V, 50-60 Hz
- Control time 15 s/90°<) EA31
- Control time 25s/90°<) EA42
- Control range 90°<)
- Actuator with integrated emergency manual override standard

\* Available on request

d [mm]	DN [mm]	Inch	PN	EPDM Code
*63	50	2	10	199 140 502
*75	65	2 ½	10	199 140 503
90	80	3	10	199 140 504
110	100	4	10	199 140 505
*140	125	5	10	199 140 506
160	150	6	10	199 140 507
225	200	8	10	199 140 508



## ABS metric

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



**Model:**

- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, ANSI/ASME B 16.5 Class 150, BS 1560: 1989, BS 4504, JIS B 2220
- Overall length according to EN 558-1, ISO 5752
- Voltage 100-230 V, 50-60 Hz
- Control time 15 s/90°<) EA31
- Control time 25s/90°<) EA42
- Control range 90°<)
- Actuator with integrated emergency manual override standard

\* Available on request

d [mm]	DN [mm]	Inch	PN	EPDM Code
*63	50	2	10	199 140 482
*75	65	2 ½	10	199 140 483
90	80	3	10	199 140 484
110	100	4	10	199 140 485
*140	125	5	10	199 140 486
160	150	6	10	199 140 487
225	200	8	10	199 140 488

### Butterfly valve type 140 ABS 24V Without manual override



**Model:**

- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, ANSI/ASME B 16.5 Class 150, BS 1560: 1989, BS 4504, JIS B 2220
- Overall length according to EN 558-1, ISO 5752
- Voltage 24 V AC/DC
- Control time 15 s/90°<) EA31
- Control time 25s/90°<) EA42
- Control range 90°<)
- Actuator with integrated emergency manual override standard

\* Available on request

d [mm]	DN [mm]	Inch	PN	EPDM Code
*63	50	2	10	199 140 542
*75	65	2 ½	10	199 140 543
90	80	3	10	199 140 544
110	100	4	10	199 140 545
*140	125	5	10	199 140 546
160	150	6	10	199 140 547
225	200	8	10	199 140 548

# ABS metric

## Butterfly valve type 140 ABS 24V With manual override



### Model:

- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, ANSI/ASME B 16.5 Class 150, BS 1560: 1989, BS 4504, JIS B 2220
- Overall length according to EN 558-1, ISO 5752
- Voltage 24 V AC/DC
- Control time 15 s/90°<) EA31
- Control time 25s/90°<) EA42
- Control range 90°<)
- Actuator with integrated emergency manual override standard

\* Available on request

d [mm]	DN [mm]	Inch	PN	EPDM Code	
*63	50	2	10	<b>199 140 522</b>	
*75	65	2 ½	10	<b>199 140 523</b>	
90	80	3	10	<b>199 140 524</b>	
110	100	4	10	<b>199 140 525</b>	
*140	125	5	10	<b>199 140 526</b>	
160	150	6	10	<b>199 140 527</b>	
225	200	8	10	<b>199 140 528</b>	

## ABS metric



### Lugstyle butterfly valve type 568 ABS Bare shaft



**Model:**

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension: ISO 7005 PN10, EN 1092 PN10, DIN 2501 PN10
- Overall length according to EN 558-1, ISO 5752
- Interface F07 according to DIN/ISO 5211

\* Available on request

d [mm]	DN [mm]	Inch	PN	EPDM Code
*63	50	2	10	<b>169 568 802</b>
*75	65	2 ½	10	<b>169 568 803</b>
90	80	3	10	<b>169 568 804</b>
110	100	4	10	<b>169 568 805</b>
*140	125	5	10	<b>169 568 806</b>
160	150	6	10	<b>169 568 807</b>
225	200	8	10	<b>169 568 808</b>



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



**Model:**

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension: ISO 7005 PN10, EN 1092 PN10, DIN 2501 PN10
- Overall length according to EN 558-1, ISO 5752
- Voltage 100-230 V, 50-60 Hz
- Control time 15 s/90°<) EA31
- Control time 25s/90°<) EA42
- Control range 90°<)
- Actuator with integrated emergency manual override standard

\* Available on request

d [mm]	DN [mm]	Inch	PN	EPDM Code
*63	50	2	10	<b>199 141 502</b>
*75	65	2 ½	10	<b>199 141 503</b>
90	80	3	10	<b>199 141 504</b>
110	100	4	10	<b>199 141 505</b>
*140	125	5	10	<b>199 141 506</b>
160	150	6	10	<b>199 141 507</b>
225	200	8	10	<b>199 141 508</b>

## ABS metric

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



#### Model:

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension: ISO 7005 PN10, EN 1092 PN10, DIN 2501 PN10
- Overall length according to EN 558-1, ISO 5752
- Voltage 100-230 V, 50-60 Hz
- Control time 15 s/90°<) EA31
- Control time 25s/90°<) EA42
- Control range 90°<)
- Actuator with integrated emergency manual override standard

\* Available on request

d [mm]	DN [mm]	Inch	PN	EPDM Code
*63	50	2	10	<b>199 141 482</b>
*75	65	2 ½	10	<b>199 141 483</b>
90	80	3	10	<b>199 141 484</b>
110	100	4	10	<b>199 141 485</b>
*140	125	5	10	<b>199 141 486</b>
160	150	6	10	<b>199 141 487</b>
225	200	8	10	<b>199 141 488</b>

### Lugstyle butterfly valve type 141 ABS 24V Without manual override



#### Model:

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension: ISO 7005 PN10, EN 1092 PN10, DIN 2501 PN10
- Overall length according to EN 558-1, ISO 5752
- Voltage 24 V AC/DC
- Control time 15 s/90°<) EA31
- Control time 25s/90°<) EA42
- Control range 90°<)
- Actuator with integrated emergency manual override standard

\* Available on request

d [mm]	DN [mm]	Inch	PN	EPDM Code
*63	50	2	10	<b>199 141 542</b>
*75	65	2 ½	10	<b>199 141 543</b>
90	80	3	10	<b>199 141 544</b>
110	100	4	10	<b>199 141 545</b>
*140	125	5	10	<b>199 141 546</b>
160	150	6	10	<b>199 141 547</b>
225	200	8	10	<b>199 141 548</b>

## ABS metric

### Lugstyle butterfly valve type 141 ABS 24V With manual override



#### Model:

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension: ISO 7005 PN10, EN 1092 PN10, DIN 2501 PN10
- Overall length according to EN 558-1, ISO 5752
- Voltage 24 V AC/DC
- Control time 15 s/90°<) EA31
- Control time 25s/90°<) EA42
- Control range 90°<)
- Actuator with integrated emergency manual override standard

\* Available on request

d [mm]	DN [mm]	Inch	PN	EPDM Code	
*63	50	2	10	<b>199 141 522</b>	
*75	65	2 ½	10	<b>199 141 523</b>	
90	80	3	10	<b>199 141 524</b>	
110	100	4	10	<b>199 141 525</b>	
*140	125	5	10	<b>199 141 526</b>	
160	150	6	10	<b>199 141 527</b>	
225	200	8	10	<b>199 141 528</b>	

## ABS metric



### Lugstyle butterfly valve type 568 ABS Bare shaft



**Model:**

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension ANSI/ASME B 16.5 Class 150
- Overall length according to EN 558-1, ISO 5752
- Interface F07 according to DIN/ISO 5211

\* Available on request

Inch	d [mm]	DN [mm]	PN	EPDM Code
*2	63	50	10	<b>169 568 902</b>
*2 1/2	75	65	10	<b>169 568 903</b>
3	90	80	10	<b>169 568 904</b>
4	110	100	10	<b>169 568 905</b>
*5	140	125	10	<b>169 568 906</b>
6	160	150	10	<b>169 568 907</b>
8	225	200	10	<b>169 568 908</b>



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



**Model:**

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension ANSI/ASME B 16.5 Class 150
- Overall length according to EN 558-1, ISO 5752
- Voltage 100-230 V, 50-60 Hz
- Control time 15 s/90°<) EA31
- Control time 25s/90°<) EA42
- Control range 90°<)
- Actuator with integrated emergency manual override standard

\* Available on request

Inch	DN [mm]	d [mm]	PN	EPDM Code
*2	50	63	10	<b>199 142 502</b>
*2 1/2	65	75	10	<b>199 142 503</b>
3	80	90	10	<b>199 142 504</b>
4	100	110	10	<b>199 142 505</b>
*5	125	140	10	<b>199 142 506</b>
6	150	160	10	<b>199 142 507</b>
8	200	225	10	<b>199 142 508</b>

## ABS metric

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



**Model:**

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension ANSI/ASME B 16.5 Class 150
- Overall length according to EN 558-1, ISO 5752
- Voltage 100-230 V, 50-60 Hz
- Control time 15 s/90°<) EA31
- Control time 25s/90°<) EA42
- Control range 90°<)
- Actuator with integrated emergency manual override standard

\* Available on request

Inch	DN [mm]	d [mm]	PN	EPDM Code
*2	50	63	10	199 142 482
*2 ½	65	75	10	199 142 483
3	80	90	10	199 142 484
4	100	110	10	199 142 485
*5	125	140	10	199 142 486
6	150	160	10	199 142 487
8	200	225	10	199 142 488

### Lugstyle butterfly valve type 142 ABS 24V Without manual override



**Model:**

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension ANSI/ASME B 16.5 Class 150
- Overall length according to EN 558-1, ISO 5752
- Voltage 24 V AC/DC
- Control time 15 s/90°<) EA31
- Control time 25s/90°<) EA42
- Control range 90°<)
- Actuator with integrated emergency manual override standard

\* Available on request

Inch	DN [mm]	d [mm]	PN	EPDM Code
*2	50	63	10	199 142 542
*2 ½	65	75	10	199 142 543
3	80	90	10	199 142 544
4	100	110	10	199 142 545
*5	125	140	10	199 142 546
6	150	160	10	199 142 547
8	200	225	10	199 142 548

# ABS metric

## Lugstyle butterfly valve type 142 ABS 24V With manual override



### Model:

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension ANSI/ASME B 16.5 Class 150
- Overall length according to EN 558-1, ISO 5752
- Voltage 24 V AC/DC
- Control time 15 s/90°<) EA31
- Control time 25s/90°<) EA42
- Control range 90°<)
- Actuator with integrated emergency manual override standard

\* Available on request

Inch	DN [mm]	d [mm]	PN	EPDM Code	
*2	50	63	10	<b>199 142 522</b>	
*2 ½	65	75	10	<b>199 142 523</b>	
3	80	90	10	<b>199 142 524</b>	
4	100	110	10	<b>199 142 525</b>	
*5	125	140	10	<b>199 142 526</b>	
6	150	160	10	<b>199 142 527</b>	
8	200	225	10	<b>199 142 528</b>	



## ABS metric

### Butterfly valves pneumatic metric/ANSI/JIS



#### Butterfly valve type 567 ABS Bare shaft



**Model:**

- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, ANSI/ASME B 16.5 Class 150, BS 1560: 1989, BS 4504, JIS B 2220
- Overall length according to EN 558-1, ISO 5752
- Interface F07 according to DIN/ISO 5211

\* Available on request

d [mm]	DN [mm]	Inch	PN	EPDM Code
*63	50	2	10	169 567 802
*75	65	2 ½	10	169 567 803
90	80	3	10	169 567 804
110	100	4	10	169 567 805
*140	125	5	10	169 567 806
160	150	6	10	169 567 807
225	200	8	10	169 567 808



#### Butterfly valve type 240 ABS FC (Fail safe to close) Without manual override



**Model:**

- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, ANSI/ASME B 16.5 Class 150, BS 1560: 1989, BS 4504, JIS B 2220
- Overall length according to EN 558-1, ISO 5752
- Control range 90°<)

\* Available on request

d [mm]	DN [mm]	Inch	PN	EPDM Code
*63	50	2	10	199 240 402
*75	65	2 ½	10	199 240 403
90	80	3	10	199 240 404
110	100	4	10	199 240 405
*140	125	5	10	199 240 406
160	150	6	10	199 240 407
225	200	8	10	199 240 408

## ABS metric



### Butterfly valve type 240 ABS FO (Fail safe to open) Without manual override



**Model:**

- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, ANSI/ASME B 16.5 Class 150, BS 1560: 1989, BS 4504, JIS B 2220
- Overall length according to EN 558-1, ISO 5752
- Control range 90°<)

\* Available on request

d [mm]	DN [mm]	Inch	PN	EPDM Code	
*63	50	2	10	199 240 422	
*75	65	2 ½	10	199 240 423	
90	80	3	10	199 240 424	
110	100	4	10	199 240 425	
*140	125	5	10	199 240 426	
160	150	6	10	199 240 427	
225	200	8	10	199 240 428	



### Butterfly valve type 240 ABS DA (Double acting) Without manual override



**Model:**

- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, ANSI/ASME B 16.5 Class 150, BS 1560: 1989, BS 4504, JIS B 2220
- Overall length according to EN 558-1, ISO 5752
- Control range 90°<)

\* Available on request

d [mm]	DN [mm]	Inch	PN	EPDM Code	
*63	50	2	10	199 240 442	
*75	65	2 ½	10	199 240 443	
90	80	3	10	199 240 444	
110	100	4	10	199 240 445	
*140	125	5	10	199 240 446	
160	150	6	10	199 240 447	
225	200	8	10	199 240 448	

## ABS metric



### Lugstyle butterfly valve type 568 ABS Bare shaft



**Model:**

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension: ISO 7005 PN10, EN 1092 PN10, DIN 2501 PN10
- Overall length according to EN 558-1, ISO 5752
- Interface F07 according to DIN/ISO 5211

\* Available on request

d [mm]	DN [mm]	Inch	PN	EPDM Code
*63	50	2	10	169 568 802
*75	65	2 ½	10	169 568 803
90	80	3	10	169 568 804
110	100	4	10	169 568 805
*140	125	5	10	169 568 806
160	150	6	10	169 568 807
225	200	8	10	169 568 808



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



**Model:**

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension: ISO 7005 PN10, EN 1092 PN10, DIN 2501 PN10
- Overall length according to EN 558-1, ISO 5752
- Control range 90°<)

\* Available on request

d [mm]	DN [mm]	Inch	PN	EPDM Code
*63	50	2	10	199 241 402
*75	65	2 ½	10	199 241 403
90	80	3	10	199 241 404
110	100	4	10	199 241 405
*140	125	5	10	199 241 406
160	150	6	10	199 241 407
225	200	8	10	199 241 408

## ABS metric



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



**Model:**

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension: ISO 7005 PN10, EN 1092 PN10, DIN 2501 PN10
- Overall length according to EN 558-1, ISO 5752
- Control range 90°<)

\* Available on request

d [mm]	DN [mm]	Inch	PN	EPDM Code	
*63	50	2	10	<b>199 241 422</b>	
*75	65	2 ½	10	<b>199 241 423</b>	
90	80	3	10	<b>199 241 424</b>	
110	100	4	10	<b>199 241 425</b>	
*140	125	5	10	<b>199 241 426</b>	
160	150	6	10	<b>199 241 427</b>	
225	200	8	10	<b>199 241 428</b>	



### Lugstyle butterfly valve type 241 ABS DA (Double acting) Without manual override



**Model:**

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension: ISO 7005 PN10, EN 1092 PN10, DIN 2501 PN10
- Overall length according to EN 558-1, ISO 5752
- Control range 90°<)

\* Available on request

d [mm]	DN [mm]	Inch	PN	EPDM Code	
*63	50	2	10	<b>199 241 442</b>	
*75	65	2 ½	10	<b>199 241 443</b>	
90	80	3	10	<b>199 241 444</b>	
110	100	4	10	<b>199 241 445</b>	
*140	125	5	10	<b>199 241 446</b>	
160	150	6	10	<b>199 241 447</b>	
225	200	8	10	<b>199 241 448</b>	

## ABS metric



### Lugstyle butterfly valve type 568 ABS Bare shaft



**Model:**

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension ANSI/ASME B 16.5 Class 150
- Overall length according to EN 558-1, ISO 5752
- Interface F07 according to DIN/ISO 5211

\* Available on request

Inch	d [mm]	DN [mm]	PN	EPDM Code
*2	63	50	10	<b>169 568 902</b>
*2 ½	75	65	10	<b>169 568 903</b>
3	90	80	10	<b>169 568 904</b>
4	110	100	10	<b>169 568 905</b>
*5	140	125	10	<b>169 568 906</b>
6	160	150	10	<b>169 568 907</b>
8	225	200	10	<b>169 568 908</b>



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



**Model:**

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension ANSI/ASME B 16.5 Class 150
- Overall length according to EN 558-1, ISO 5752
- Control range 90°<)

\* Available on request

Inch	DN [mm]	d [mm]	PN	EPDM Code
*2	50	63	10	<b>199 242 402</b>
*2 ½	65	75	10	<b>199 242 403</b>
3	80	90	10	<b>199 242 404</b>
4	100	110	10	<b>199 242 405</b>
*5	125	140	10	<b>199 242 406</b>
6	150	160	10	<b>199 242 407</b>
8	200	225	10	<b>199 242 408</b>

## ABS metric



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



**Model:**

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension ANSI/ASME B 16.5 Class 150
- Overall length according to EN 558-1, ISO 5752
- Control range 90°<)

\* Available on request

Inch	DN [mm]	d [mm]	PN	EPDM Code
*2	50	63	10	<b>199 242 422</b>
*2 ½	65	75	10	<b>199 242 423</b>
3	80	90	10	<b>199 242 424</b>
4	100	110	10	<b>199 242 425</b>
*5	125	140	10	<b>199 242 426</b>
6	150	160	10	<b>199 242 427</b>
8	200	225	10	<b>199 242 428</b>



### Lugstyle butterfly valve type 242 ABS DA (Double acting) Without manual override









**Model:**

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension ANSI/ASME B 16.5 Class 150
- Overall length according to EN 558-1, ISO 5752
- Control range 90°<)

\* Available on request

Inch	DN [mm]	d [mm]	PN	EPDM Code
*2	50	63	10	<b>199 242 442</b>
*2 ½	65	75	10	<b>199 242 443</b>
3	80	90	10	<b>199 242 444</b>
4	100	110	10	<b>199 242 445</b>
*5	125	140	10	<b>199 242 446</b>
6	150	160	10	<b>199 242 447</b>
8	200	225	10	<b>199 242 448</b>

# PP-H metric

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## PP-H metric

### Ball valves electric



#### Ball valve type 107 PP-H 100-230V With manual emergency override With fusion sockets 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	EPDM Code	FPM Code	
16	10	10	199 107 502	199 107 512	
20	15	10	199 107 503	199 107 513	
25	20	10	199 107 504	199 107 514	
32	25	10	199 107 505	199 107 515	
40	32	10	199 107 506	199 107 516	
50	40	10	199 107 507	199 107 517	
63	50	10	199 107 508	199 107 518	



#### 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	EPDM Code	FPM Code	
16	10	10	199 107 522	199 107 532	
20	15	10	199 107 523	199 107 533	
25	20	10	199 107 524	199 107 534	
32	25	10	199 107 525	199 107 535	
40	32	10	199 107 526	199 107 536	
50	40	10	199 107 527	199 107 537	
63	50	10	199 107 528	199 107 538	



## PP-H metric



### 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	EPDM Code	FPM Code
20	15	½	10	199 107 583	199 107 593
25	20	¾	10	199 107 584	199 107 594
32	25	1	10	199 107 585	199 107 595
40	32	1 ¼	10	199 107 586	199 107 596
50	40	1 ½	10	199 107 587	199 107 597
63	50	2	10	199 107 588	199 107 598



### 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	EPDM Code	FPM Code
16	10	10	199 107 542	199 107 552
20	15	10	199 107 543	199 107 553
25	20	10	199 107 544	199 107 554
32	25	10	199 107 545	199 107 555
40	32	10	199 107 546	199 107 556
50	40	10	199 107 547	199 107 557
63	50	10	199 107 548	199 107 558

## PP-H metric



### 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	EPDM Code	FPM Code	
16	10	10	199 107 562	199 107 572	
20	15	10	199 107 563	199 107 573	
25	20	10	199 107 564	199 107 574	
32	25	10	199 107 565	199 107 575	
40	32	10	199 107 566	199 107 576	
50	40	10	199 107 567	199 107 577	
63	50	10	199 107 568	199 107 578	



### 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	EPDM Code	FPM Code	
20	15	½	10	199 107 783	199 107 793	
25	20	¾	10	199 107 784	199 107 794	
32	25	1	10	199 107 785	199 107 795	
40	32	1 ¼	10	199 107 786	199 107 796	
50	40	1 ½	10	199 107 787	199 107 797	
63	50	2	10	199 107 788	199 107 798	

## PP-H metric






### Ball valve type 131 PP-H 100-230V With manual emergency override With fusion sockets metric

#### Model:

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

#### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	EPDM Code	FPM Code
16	10	10	199 131 002	199 131 012
20	15	10	199 131 003	199 131 013
25	20	10	199 131 004	199 131 014
32	25	10	199 131 005	199 131 015
40	32	10	199 131 006	199 131 016
50	40	10	199 131 007	199 131 017
63	50	10	199 131 008	199 131 018
 75	65	10	199 131 009	199 131 019
 90	80	10	199 131 010	199 131 020
 110	100	10	199 131 011	199 131 021






### Ball valve type 131 PP-H 100-230V With manual emergency override With socket fusion spigots metric

#### Model:

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

#### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	EPDM Code	FPM Code
16	10	10	199 131 022	199 131 032
20	15	10	199 131 023	199 131 033
25	20	10	199 131 024	199 131 034
32	25	10	199 131 025	199 131 035
40	32	10	199 131 026	199 131 036
50	40	10	199 131 027	199 131 037
63	50	10	199 131 028	199 131 038
 75	65	10	199 131 029	199 131 039
 90	80	10	199 131 030	199 131 040
 110	100	10	199 131 031	199 131 041

## PP-H metric



### Ball valve type 131 PP-H 100-230V With manual emergency override With fixed flanges PP-H serrated metric

#### Model:

- For easy installation and removal
- Integrated stainless steel mounting inserts
- Voltage 100-230 V, 50-60 Hz
- Control range 90°<
- Built on with electric actuator EA21
- Control time 5 s/90°<
- Overall length according to EN 558-1
- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504

#### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	Inch	PN	EPDM Code	FPM Code
20	15	½	10	199 131 083	199 131 093
25	20	¾	10	199 131 084	199 131 094
32	25	1	10	199 131 085	199 131 095
40	32	1 ¼	10	199 131 086	199 131 096
50	40	1 ½	10	199 131 087	199 131 097
63	50	2	10	199 131 088	199 131 098






### Ball valve type 131 PP-H 100-230V With manual emergency override With backing flanges PP-st metric

#### Model:

- For easy installation and removal
- Integrated stainless steel mounting inserts
- Voltage 100-230 V, 50-60 Hz
- Control range 90°<
- Assignment of actuators: EA21 (DN10/15-50), EA31 (DN65-100 if available)
- Image and drawing DN65-100 please see **"New product ball valve DN65-100"**
- Control time: EA21: 5s/90°<, EA31: 15s/90°<
- Overall length according to EN 558-1
- Connecting dimension: 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	EPDM Code	FPM Code
 75	65	2 ½	10	199 131 129	199 131 139
 90	80	3	10	199 131 130	199 131 140
 110	100	4	10	199 131 131	199 131 141

## PP-H metric






### Ball valve type 131 PP-H 100-230V With manual emergency override With butt fusion spigots IR-Plus SDR11 metric

#### Model:

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

#### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	EPDM Code	FPM Code	
 75	65	10	199 131 329	199 131 339	
 90	80	10	199 131 330	199 131 340	
 110	100	10	199 131 331	199 131 341	






### Ball valve type 131 PP-H 100-230V With manual emergency override With butt fusion spigots SDR17.6 metric

#### Model:

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

#### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	EPDM Code	FPM Code	
 75	65	10	199 131 729	199 131 739	
 90	80	10	199 131 730	199 131 740	
 110	100	10	199 131 731	199 131 741	

## PP-H metric






### Ball valve type 131 PP-H 24V With manual emergency override With fusion sockets metric

#### Model:

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

#### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	EPDM Code	FPM Code
16	10	10	199 131 042	199 131 052
20	15	10	199 131 043	199 131 053
25	20	10	199 131 044	199 131 054
32	25	10	199 131 045	199 131 055
40	32	10	199 131 046	199 131 056
50	40	10	199 131 047	199 131 057
63	50	10	199 131 048	199 131 058
 75	65	10	199 131 049	199 131 059
 90	80	10	199 131 050	199 131 060
 110	100	10	199 131 051	199 131 061






### Ball valve type 131 PP-H 24V With manual emergency override With socket fusion spigots metric

#### Model:

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

#### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	EPDM Code	FPM Code
16	10	10	199 131 062	199 131 072
20	15	10	199 131 063	199 131 073
25	20	10	199 131 064	199 131 074
32	25	10	199 131 065	199 131 075
40	32	10	199 131 066	199 131 076
50	40	10	199 131 067	199 131 077
63	50	10	199 131 068	199 131 078
 75	65	10	199 131 069	199 131 079
 90	80	10	199 131 070	199 131 080
 110	100	10	199 131 071	199 131 081

## PP-H metric



### Ball valve type 131 PP-H 24V With manual emergency override With fixed flanges PP-H serrated metric

#### Model:

- For easy installation and removal
- Integrated stainless steel mounting inserts
- Voltage 24 V AC/DC
- Control range 90°<
- Built on with electric actuator EA21
- Control time 5 s/90°<
- Overall length according to EN 558-1
- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504

#### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	Inch	PN	EPDM Code	FPM Code
20	15	½	10	199 131 103	199 131 113
25	20	¾	10	199 131 104	199 131 114
32	25	1	10	199 131 105	199 131 115
40	32	1 ¼	10	199 131 106	199 131 116
50	40	1 ½	10	199 131 107	199 131 117
63	50	2	10	199 131 108	199 131 118






### Ball valve type 131 PP-H 24V With manual emergency override With backing flanges PP-st metric

#### Model:

- For easy installation and removal
- Integrated stainless steel mounting inserts
- Voltage 24 V AC/DC
- Control range 90°<
- Assignment of actuators: EA21 (DN10/15-50), EA31 (DN65-100 if available)
- Image and drawing DN65-100 please see **"New product ball valve DN65-100"**
- Control time: EA21: 5s/90°<, EA31: 15s/90°<
- Overall length according to EN 558-1
- Connecting dimension: 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	EPDM Code	FPM Code
 75	65	2 ½	10	199 131 149	199 131 159
 90	80	3	10	199 131 150	199 131 160
 110	100	4	10	199 131 151	199 131 161

## PP-H metric






### Ball valve type 131 PP-H 24V With manual emergency override With butt fusion spigots IR-Plus SDR11 metric

#### Model:

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

#### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	EPDM Code	FPM Code	
 75	65	10	199 131 369	199 131 379	
 90	80	10	199 131 370	199 131 380	
 110	100	10	199 131 371	199 131 381	






### Ball valve type 131 PP-H 24V With manual emergency override With butt fusion spigots SDR17.6 metric

#### Model:

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

#### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	EPDM Code	FPM Code	
 75	65	10	199 131 769	199 131 779	
 90	80	10	199 131 770	199 131 780	
 110	100	10	199 131 771	199 131 781	



## PP-H metric



### 3-Way ball valve type 176 PP-H Horizontal/L-port 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

d [mm]	DN [mm]	PN	EPDM Code	FPM Code	
16	10	10	199 176 022	199 176 032	
20	15	10	199 176 023	199 176 033	
25	20	10	199 176 024	199 176 034	
32	25	10	199 176 025	199 176 035	
40	32	10	199 176 026	199 176 036	
50	40	10	199 176 027	199 176 037	
63	50	10	199 176 028	199 176 038	



### 3-Way ball valve type 176 PP-H Horizontal/L-port 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

d [mm]	DN [mm]	PN	EPDM Code	FPM Code	
20	15	10	199 176 083	199 176 093	
25	20	10	199 176 084	199 176 094	
32	25	10	199 176 085	199 176 095	
40	32	10	199 176 086	199 176 096	
50	40	10	199 176 087	199 176 097	
63	50	10	199 176 088	199 176 098	

## PP-H metric



### 3-Way ball valve type 176 PP-H Horizontal/L-port 100-230V With manual emergency override With socket fusion spigots

**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

d [mm]	DN [mm]	PN	EPDM Code	FPM Code
16	10	10	199 176 002	199 176 012
20	15	10	199 176 003	199 176 013
25	20	10	199 176 004	199 176 014
32	25	10	199 176 005	199 176 015
40	32	10	199 176 006	199 176 016
50	40	10	199 176 007	199 176 017
63	50	10	199 176 008	199 176 018



### 3-Way ball valve type 176 PP-H Horizontal/L-port 100-230V With manual emergency override With threaded sockets Rp

**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

Inch	DN [mm]	PN	EPDM Code	FPM Code
3/8	10	10	199 176 122	199 176 132
1/2	15	10	199 176 123	199 176 133
3/4	20	10	199 176 124	199 176 134
1	25	10	199 176 125	199 176 135
1 1/4	32	10	199 176 126	199 176 136
1 1/2	40	10	199 176 127	199 176 137
2	50	10	199 176 128	199 176 138

## PP-H metric



### 3-Way ball valve type 176 PP-H Horizontal/L-port 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

d [mm]	DN [mm]	PN	EPDM Code	FPM Code	
16	10	10	199 176 182	199 176 192	
20	15	10	199 176 183	199 176 193	
25	20	10	199 176 184	199 176 194	
32	25	10	199 176 185	199 176 195	
40	32	10	199 176 186	199 176 196	
50	40	10	199 176 187	199 176 197	
63	50	10	199 176 188	199 176 198	



### 3-Way ball valve type 176 PP-H Horizontal/L-port 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

d [mm]	DN [mm]	PN	EPDM Code	FPM Code	
20	15	10	199 176 243	199 176 253	
25	20	10	199 176 244	199 176 254	
32	25	10	199 176 245	199 176 255	
40	32	10	199 176 246	199 176 256	
50	40	10	199 176 247	199 176 257	
63	50	10	199 176 248	199 176 258	

## PP-H metric



### 3-Way ball valve type 176 PP-H Horizontal/L-port 24V With manual emergency override With socket fusion spigots

**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

d [mm]	DN [mm]	PN	EPDM Code	FPM Code	
16	10	10	199 176 162	199 176 172	
20	15	10	199 176 163	199 176 173	
25	20	10	199 176 164	199 176 174	
32	25	10	199 176 165	199 176 175	
40	32	10	199 176 166	199 176 176	
50	40	10	199 176 167	199 176 177	
63	50	10	199 176 168	199 176 178	



### 3-Way ball valve type 176 PP-H Horizontal/L-port 24V With manual emergency override With threaded sockets Rp

**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

Inch	DN [mm]	PN	EPDM Code	FPM Code	
3/8	10	10	199 176 282	199 176 292	
1/2	15	10	199 176 283	199 176 293	
3/4	20	10	199 176 284	199 176 294	
1	25	10	199 176 285	199 176 295	
1 1/4	32	10	199 176 286	199 176 296	
1 1/2	40	10	199 176 287	199 176 297	
2	50	10	199 176 288	199 176 298	

## PP-H metric



### 3-Way ball valve type 176 PP-H Horizontal/T-port 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

d [mm]	DN [mm]	PN	EPDM Code	FPM Code	
16	10	10	199 176 062	199 176 072	
20	15	10	199 176 063	199 176 073	
25	20	10	199 176 064	199 176 074	
32	25	10	199 176 065	199 176 075	
40	32	10	199 176 066	199 176 076	
50	40	10	199 176 067	199 176 077	
63	50	10	199 176 068	199 176 078	



### 3-Way ball valve type 176 PP-H Horizontal/T-port 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

d [mm]	DN [mm]	PN	EPDM Code	FPM Code	
20	15	10	199 176 103	199 176 113	
25	20	10	199 176 104	199 176 114	
32	25	10	199 176 105	199 176 115	
40	32	10	199 176 106	199 176 116	
50	40	10	199 176 107	199 176 117	
63	50	10	199 176 108	199 176 118	

## PP-H metric



### 3-Way ball valve type 176 PP-H Horizontal/T-port 100-230V With manual emergency override With socket fusion spigots

**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

d [mm]	DN [mm]	PN	EPDM Code	FPM Code	
16	10	10	199 176 042	199 176 052	
20	15	10	199 176 043	199 176 053	
25	20	10	199 176 044	199 176 054	
32	25	10	199 176 045	199 176 055	
40	32	10	199 176 046	199 176 056	
50	40	10	199 176 047	199 176 057	
63	50	10	199 176 048	199 176 058	



### 3-Way ball valve type 176 PP-H Horizontal/T-port 100-230V With manual emergency override With threaded sockets Rp

**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

Inch	DN [mm]	PN	EPDM Code	FPM Code	
3/8	10	10	199 176 142	199 176 152	
1/2	15	10	199 176 143	199 176 153	
3/4	20	10	199 176 144	199 176 154	
1	25	10	199 176 145	199 176 155	
1 1/4	32	10	199 176 146	199 176 156	
1 1/2	40	10	199 176 147	199 176 157	
2	50	10	199 176 148	199 176 158	

## PP-H metric



### 3-Way ball valve type 176 PP-H Horizontal/T-port 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

d [mm]	DN [mm]	PN	EPDM Code	FPM Code	
16	10	10	199 176 222	199 176 232	
20	15	10	199 176 223	199 176 233	
25	20	10	199 176 224	199 176 234	
32	25	10	199 176 225	199 176 235	
40	32	10	199 176 226	199 176 236	
50	40	10	199 176 227	199 176 237	
63	50	10	199 176 228	199 176 238	



### 3-Way ball valve type 176 PP-H Horizontal/T-port 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

d [mm]	DN [mm]	PN	EPDM Code	FPM Code	
20	15	10	199 176 263	199 176 273	
25	20	10	199 176 264	199 176 274	
32	25	10	199 176 265	199 176 275	
40	32	10	199 176 266	199 176 276	
50	40	10	199 176 267	199 176 277	
63	50	10	199 176 268	199 176 278	

## PP-H metric



### 3-Way ball valve type 176 PP-H Horizontal/T-port 24V With manual emergency override With socket fusion spigots

**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

d [mm]	DN [mm]	PN	EPDM Code	FPM Code	
16	10	10	199 176 202	199 176 212	
20	15	10	199 176 203	199 176 213	
25	20	10	199 176 204	199 176 214	
32	25	10	199 176 205	199 176 215	
40	32	10	199 176 206	199 176 216	
50	40	10	199 176 207	199 176 217	
63	50	10	199 176 208	199 176 218	



### 3-Way ball valve type 176 PP-H Horizontal/T-port 24V With manual emergency override With threaded sockets Rp

**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

Inch	DN [mm]	PN	EPDM Code	FPM Code	
3/8	10	10	199 176 302	199 176 312	
1/2	15	10	199 176 303	199 176 313	
3/4	20	10	199 176 304	199 176 314	
1	25	10	199 176 305	199 176 315	
1 1/4	32	10	199 176 306	199 176 316	
1 1/2	40	10	199 176 307	199 176 317	
2	50	10	199 176 308	199 176 318	



## PP-H metric

### Ball valves pneumatic

**Ball valve type 231 PP-H FC (Fail safe to close)**

**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	EPDM Code	FPM Code	
16	10	10	199 231 002	199 231 012	
20	15	10	199 231 003	199 231 013	
25	20	10	199 231 004	199 231 014	
32	25	10	199 231 005	199 231 015	
40	32	10	199 231 006	199 231 016	
50	40	10	199 231 007	199 231 017	
63	50	10	199 231 008	199 231 018	



**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	EPDM Code	FPM Code	
16	10	10	199 231 022	199 231 032	
20	15	10	199 231 023	199 231 033	
25	20	10	199 231 024	199 231 034	
32	25	10	199 231 025	199 231 035	
40	32	10	199 231 026	199 231 036	
50	40	10	199 231 027	199 231 037	
63	50	10	199 231 028	199 231 038	

## PP-H metric



### 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°<) 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	EPDM Code	FPM Code	
20	15	½	10	<b>199 231 243</b>	<b>199 231 253</b>	
25	20	¾	10	<b>199 231 244</b>	<b>199 231 254</b>	
32	25	1	10	<b>199 231 245</b>	<b>199 231 255</b>	
40	32	1 ¼	10	<b>199 231 246</b>	<b>199 231 256</b>	
50	40	1 ½	10	<b>199 231 247</b>	<b>199 231 257</b>	
63	50	2	10	<b>199 231 248</b>	<b>199 231 258</b>	

## PP-H metric



### 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	EPDM Code	FPM Code	
16	10	10	199 231 042	199 231 052	
20	15	10	199 231 043	199 231 053	
25	20	10	199 231 044	199 231 054	
32	25	10	199 231 045	199 231 055	
40	32	10	199 231 046	199 231 056	
50	40	10	199 231 047	199 231 057	
63	50	10	199 231 048	199 231 058	



### 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°<) 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	EPDM Code	FPM Code	
16	10	10	199 231 062	199 231 072	
20	15	10	199 231 063	199 231 073	
25	20	10	199 231 064	199 231 074	
32	25	10	199 231 065	199 231 075	
40	32	10	199 231 066	199 231 076	
50	40	10	199 231 067	199 231 077	
63	50	10	199 231 068	199 231 078	

## PP-H metric



### 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	EPDM Code	FPM Code	
20	15	½	10	199 231 263	199 231 273	
25	20	¾	10	199 231 264	199 231 274	
32	25	1	10	199 231 265	199 231 275	
40	32	1 ¼	10	199 231 266	199 231 276	
50	40	1 ½	10	199 231 267	199 231 277	
63	50	2	10	199 231 268	199 231 278	

## PP-H metric



### 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°<) 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	EPDM Code	FPM Code	
16	10	10	199 231 082	199 231 092	
20	15	10	199 231 083	199 231 093	
25	20	10	199 231 084	199 231 094	
32	25	10	199 231 085	199 231 095	
40	32	10	199 231 086	199 231 096	
50	40	10	199 231 087	199 231 097	
63	50	10	199 231 088	199 231 098	



### 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	EPDM Code	FPM Code	
16	10	10	199 231 102	199 231 112	
20	15	10	199 231 103	199 231 113	
25	20	10	199 231 104	199 231 114	
32	25	10	199 231 105	199 231 115	
40	32	10	199 231 106	199 231 116	
50	40	10	199 231 107	199 231 117	
63	50	10	199 231 108	199 231 118	

## PP-H metric



### 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°<) 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	EPDM Code	FPM Code	
20	15	½	10	199 231 283	199 231 293	
25	20	¾	10	199 231 284	199 231 294	
32	25	1	10	199 231 285	199 231 295	
40	32	1 ¼	10	199 231 286	199 231 296	
50	40	1 ½	10	199 231 287	199 231 297	
63	50	2	10	199 231 288	199 231 298	

## PP-H metric






### Ball valve type 231 PP-H FC (Fail safe to close) Without manual override With fusion sockets metric

#### Model:

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

#### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	EPDM Code	FPM Code
16	10	10	199 231 122	199 231 132
20	15	10	199 231 123	199 231 133
25	20	10	199 231 124	199 231 134
32	25	10	199 231 125	199 231 135
40	32	10	199 231 126	199 231 136
50	40	10	199 231 127	199 231 137
63	50	10	199 231 128	199 231 138
 75	65	10	199 231 129	199 231 139
 90	80	10	199 231 130	199 231 140
 110	100	10	199 231 131	199 231 141






### Ball valve type 231 PP-H FC (Fail safe to close) Without manual override With socket fusion spigots metric

#### Model:

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

#### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	EPDM Code	FPM Code
16	10	10	199 231 142	199 231 152
20	15	10	199 231 143	199 231 153
25	20	10	199 231 144	199 231 154
32	25	10	199 231 145	199 231 155
40	32	10	199 231 146	199 231 156
50	40	10	199 231 147	199 231 157
63	50	10	199 231 148	199 231 158
 75	65	10	199 231 149	199 231 159
 90	80	10	199 231 150	199 231 160
 110	100	10	199 231 151	199 231 161

## PP-H metric



### Ball valve type 231 PP-H FC (Fail safe to close) Without manual override With fixed flanges PP-H serrated metric

#### Model:

- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90°<) 1-2 s
- Built on with pneumatic actuator PA11/21
- 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	EPDM Code	FPM Code
20	15	½	10	199 231 423	199 231 433
25	20	¾	10	199 231 424	199 231 434
32	25	1	10	199 231 425	199 231 435
40	32	1 ¼	10	199 231 426	199 231 436
50	40	1 ½	10	199 231 427	199 231 437
63	50	2	10	199 231 428	199 231 438






### Ball valve type 231 PP-H FC (Fail safe to close) Without manual override With backing flanges PP-st metric

#### Model:

- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90°<) 1-2 s
- Assignment of actuators: PA11 (DN10/15-25), PA21 (DN32-50), PA30 (DN65), PA35 (DN80), PA40 (DN100)
- Image and drawing DN65-100 please see "**New product ball valve DN65-100**"
- Overall length according to EN 558-1
- Connecting dimension: 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	EPDM Code	FPM Code
 75	65	2 ½	10	199 231 329	199 231 339
 90	80	3	10	199 231 330	199 231 340
 110	100	4	10	199 231 331	199 231 341



## PP-H metric



### Ball valve type 231 PP-H FC (Fail safe to close)

Without manual override




With butt fusion spigots IR-Plus SDR11 metric

#### Model:

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

#### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	EPDM Code	FPM Code	
 75	65	10	199 231 839	199 231 849	
 90	80	10	199 231 840	199 231 850	
 110	100	10	199 231 841	199 231 851	



### Ball valve type 231 PP-H FC (Fail safe to close)

Without manual override




With butt fusion spigots SDR17.6 metric

#### Model:

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

#### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	EPDM Code	FPM Code	
 75	65	10	199 231 939	199 231 949	
 90	80	10	199 231 940	199 231 950	
 110	100	10	199 231 941	199 231 951	

## PP-H metric






### Ball valve type 231 PP-H FO (Fail safe to open) Without manual override With fusion sockets metric

**Model:**

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

**Option:**

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	EPDM Code	FPM Code	
16	10	10	199 231 162	199 231 172	
20	15	10	199 231 163	199 231 173	
25	20	10	199 231 164	199 231 174	
32	25	10	199 231 165	199 231 175	
40	32	10	199 231 166	199 231 176	
50	40	10	199 231 167	199 231 177	
63	50	10	199 231 168	199 231 178	
 75	65	10	199 231 169	199 231 179	
 90	80	10	199 231 170	199 231 180	
 110	100	10	199 231 171	199 231 181	






### Ball valve type 231 PP-H FO (Fail safe to open) Without manual override With socket fusion spigots metric

**Model:**

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

**Option:**

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	EPDM Code	FPM Code	
16	10	10	199 231 182	199 231 192	
20	15	10	199 231 183	199 231 193	
25	20	10	199 231 184	199 231 194	
32	25	10	199 231 185	199 231 195	
40	32	10	199 231 186	199 231 196	
50	40	10	199 231 187	199 231 197	
63	50	10	199 231 188	199 231 198	
 75	65	10	199 231 189	199 231 199	
 90	80	10	199 231 190	199 231 200	
 110	100	10	199 231 191	199 231 201	

## PP-H metric



### Ball valve type 231 PP-H FO (Fail safe to open) Without manual override With fixed flanges PP-H serrated metric

#### Model:

- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90°<) 1-2 s
- Built on with pneumatic actuator PA11/21
- 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	EPDM Code	FPM Code	
20	15	½	10	199 231 443	199 231 453	
25	20	¾	10	199 231 444	199 231 454	
32	25	1	10	199 231 445	199 231 455	
40	32	1 ¼	10	199 231 446	199 231 456	
50	40	1 ½	10	199 231 447	199 231 457	
63	50	2	10	199 231 448	199 231 458	






### Ball valve type 231 PP-H FO (Fail safe to open) Without manual override With backing flanges PP-st metric

#### Model:

- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90°<) 1-2 s
- Assignment of actuators: PA11 (DN10/15-25), PA21 (DN32-50), PA30 (DN65), PA35 (DN80), PA40 (DN100)
- Image and drawing DN65-100 please see **"New product ball valve DN65-100"**
- Overall length according to EN 558-1
- Connecting dimension: 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	EPDM Code	FPM Code	
 75	65	2 ½	10	199 231 349	199 231 359	
 90	80	3	10	199 231 350	199 231 360	
 110	100	4	10	199 231 351	199 231 361	

## PP-H metric



### Ball valve type 231 PP-H FO (Fail safe to open) Without manual override With butt fusion spigots IR-Plus SDR11 metric

**Model:**

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

**Option:**

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	EPDM Code	FPM Code	
75	65	10	<b>199 231 859</b>	<b>199 231 869</b>	
90	80	10	<b>199 231 860</b>	<b>199 231 870</b>	
110	100	10	<b>199 231 861</b>	<b>199 231 871</b>	



### Ball valve type 231 PP-H FO (Fail safe to open) Without manual override With butt fusion spigots SDR17.6 metric

**Model:**

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

**Option:**

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	EPDM Code	FPM Code	
75	65	10	<b>199 231 959</b>	<b>199 231 969</b>	
90	80	10	<b>199 231 960</b>	<b>199 231 970</b>	
110	100	10	<b>199 231 961</b>	<b>199 231 971</b>	

## PP-H metric






### Ball valve type 231 PP-H DA (Double acting) Without manual override With fusion sockets metric

#### Model:

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

#### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	EPDM Code	FPM Code
16	10	10	199 231 202	199 231 212
20	15	10	199 231 203	199 231 213
25	20	10	199 231 204	199 231 214
32	25	10	199 231 205	199 231 215
40	32	10	199 231 206	199 231 216
50	40	10	199 231 207	199 231 217
63	50	10	199 231 208	199 231 218
 75	65	10	199 231 209	199 231 219
 90	80	10	199 231 210	199 231 220
 110	100	10	199 231 211	199 231 221






### Ball valve type 231 PP-H DA (Double acting) Without manual override With socket fusion spigots metric

#### Model:

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

#### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	EPDM Code	FPM Code
16	10	10	199 231 222	199 231 232
20	15	10	199 231 223	199 231 233
25	20	10	199 231 224	199 231 234
32	25	10	199 231 225	199 231 235
40	32	10	199 231 226	199 231 236
50	40	10	199 231 227	199 231 237
63	50	10	199 231 228	199 231 238
 75	65	10	199 231 229	199 231 239
 90	80	10	199 231 230	199 231 240
 110	100	10	199 231 231	199 231 241

## PP-H metric



### Ball valve type 231 PP-H DA (Double acting) Without manual override With fixed flanges PP-H serrated metric

#### Model:

- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90°<) 1-2 s
- Built on with pneumatic actuator PA11/21
- 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	EPDM Code	FPM Code
20	15	½	10	199 231 463	199 231 473
25	20	¾	10	199 231 464	199 231 474
32	25	1	10	199 231 465	199 231 475
40	32	1 ¼	10	199 231 466	199 231 476
50	40	1 ½	10	199 231 467	199 231 477
63	50	2	10	199 231 468	199 231 478






### Ball valve type 231 PP-H DA (Double acting) Without manual override With backing flanges PP-st metric

#### Model:

- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90°<) 1-2 s
- Assignment of actuators: PA11 (DN10/15-25), PA21 (DN32-50), PA35 (DN65), PA40 (DN80), PA45 (DN100)
- Image and drawing DN65-100 please see **"New product ball valve DN65-100"**
- Overall length according to EN 558-1
- Connecting dimension: 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	EPDM Code	FPM Code
 75	65	2 ½	10	199 231 369	199 231 379
 90	80	3	10	199 231 370	199 231 380
 110	100	4	10	199 231 371	199 231 381

## PP-H metric






### Ball valve type 231 PP-H DA (Double acting) Without manual override With butt fusion spigots IR-Plus SDR11 metric

#### Model:

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

#### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	EPDM Code	FPM Code	
 75	65	10	199 231 879	199 231 889	
 90	80	10	199 231 880	199 231 890	
 110	100	10	199 231 881	199 231 891	






### Ball valve type 231 PP-H DA (Double acting) Without manual override With butt fusion spigots SDR17.6 metric

#### Model:

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

#### Option:

- Individual configuration of the valve (see form)

d [mm]	DN [mm]	PN	EPDM Code	FPM Code	
 75	65	10	199 231 979	199 231 989	
 90	80	10	199 231 980	199 231 990	
 110	100	10	199 231 981	199 231 991	

## PP-H metric



### 3-Way ball valve type 276 PP-H Horizontal/L-port Without manual override With fusion sockets metric

**Model:**

- Built on with pneumatic actuator PA11/21
- Actuator fails safe to the closed position FC
- Control time 90°<) 1-3 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

d [mm]	DN [mm]	PN	EPDM Code	FPM Code
16	10	10	199 276 022	199 276 032
20	15	10	199 276 023	199 276 033
25	20	10	199 276 024	199 276 034
32	25	10	199 276 025	199 276 035
40	32	10	199 276 026	199 276 036
50	40	10	199 276 027	199 276 037
63	50	10	199 276 028	199 276 038



### 3-Way ball valve type 276 PP-H Horizontal/L-port Without manual override With butt fusion spigots metric

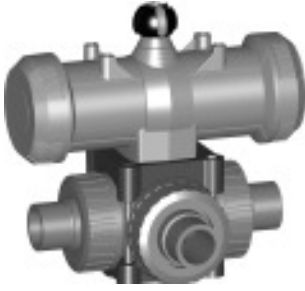
**Model:**

- Built on with pneumatic actuator PA11/21
- Actuator fails safe to the closed position FC
- Control time 90°<) 1-3 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

d [mm]	DN [mm]	PN	EPDM Code	FPM Code
20	15	10	199 276 083	199 276 093
25	20	10	199 276 084	199 276 094
32	25	10	199 276 085	199 276 095
40	32	10	199 276 086	199 276 096
50	40	10	199 276 087	199 276 097
63	50	10	199 276 088	199 276 098



## PP-H metric



### 3-Way ball valve type 276 PP-H Horizontal/L-port Without manual override With socket fusion spigots

**Model:**

- Built on with pneumatic actuator PA11/21
- Actuator fails safe to the closed position FC
- Control time 90°<) 1-3 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

d [mm]	DN [mm]	PN	EPDM Code	FPM Code
16	10	10	199 276 002	199 276 012
20	15	10	199 276 003	199 276 013
25	20	10	199 276 004	199 276 014
32	25	10	199 276 005	199 276 015
40	32	10	199 276 006	199 276 016
50	40	10	199 276 007	199 276 017
63	50	10	199 276 008	199 276 018



### 3-Way ball valve type 276 PP-H Horizontal/L-port Without manual override With threaded sockets Rp

**Model:**

- Built on with pneumatic actuator PA11/21
- Actuator fails safe to the closed position FC
- Control time 90°<) 1-3 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

Inch	DN [mm]	PN	EPDM Code	FPM Code
3/8	10	10	199 276 122	199 276 132
1/2	15	10	199 276 123	199 276 133
3/4	20	10	199 276 124	199 276 134
1	25	10	199 276 125	199 276 135
1 1/4	32	10	199 276 126	199 276 136
1 1/2	40	10	199 276 127	199 276 137
2	50	10	199 276 128	199 276 138

## PP-H metric



### 3-Way ball valve type 276 PP-H Horizontal/L-port DA (Double acting) Without manual override With fusion sockets metric

**Model:**

- Built on with pneumatic actuator PA11/21
- Control time 90°<) 1-3 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

d [mm]	DN [mm]	PN	EPDM Code	FPM Code
16	10	10	199 276 182	199 276 192
20	15	10	199 276 183	199 276 193
25	20	10	199 276 184	199 276 194
32	25	10	199 276 185	199 276 195
40	32	10	199 276 186	199 276 196
50	40	10	199 276 187	199 276 197
63	50	10	199 276 188	199 276 198



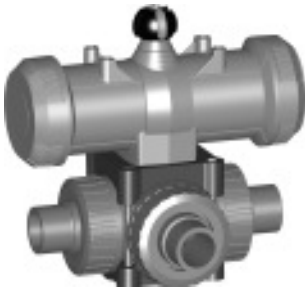
### 3-Way ball valve type 276 PP-H Horizontal/L-port DA (Double acting) Without manual override With butt fusion spigots metric

**Model:**

- Built on with pneumatic actuator PA11/21
- Control time 90°<) 1-3 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

d [mm]	DN [mm]	PN	EPDM Code	FPM Code
20	15	10	199 276 243	199 276 253
25	20	10	199 276 244	199 276 254
32	25	10	199 276 245	199 276 255
40	32	10	199 276 246	199 276 256
50	40	10	199 276 247	199 276 257
63	50	10	199 276 248	199 276 258

## PP-H metric



### 3-Way ball valve type 276 PP-H Horizontal/L-port DA (Double acting) Without manual override With socket fusion spigots

**Model:**

- Built on with pneumatic actuator PA11/21
- Control time 90°<) 1-3 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

d [mm]	DN [mm]	PN	EPDM Code	FPM Code	
16	10	10	199 276 162	199 276 172	
20	15	10	199 276 163	199 276 173	
25	20	10	199 276 164	199 276 174	
32	25	10	199 276 165	199 276 175	
40	32	10	199 276 166	199 276 176	
50	40	10	199 276 167	199 276 177	
63	50	10	199 276 168	199 276 178	



### 3-Way ball valve type 276 PP-H Horizontal/L-port DA (Double acting) Without manual override With threaded sockets Rp

**Model:**

- Built on with pneumatic actuator PA11/21
- Control time 90°<) 1-3 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

Inch	DN [mm]	PN	EPDM Code	FPM Code	
3/8	10	10	199 276 282	199 276 292	
1/2	15	10	199 276 283	199 276 293	
3/4	20	10	199 276 284	199 276 294	
1	25	10	199 276 285	199 276 295	
1 1/4	32	10	199 276 286	199 276 296	
1 1/2	40	10	199 276 287	199 276 297	
2	50	10	199 276 288	199 276 298	

## PP-H metric



### 3-Way ball valve type 276 PP-H Horizontal/T-port Without manual override With fusion sockets metric

#### Model:

- Built on with pneumatic actuator PA11/21
- Actuator fails safe to the closed position FC
- Control time  $90^\circ <$ ) 1-3 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

d [mm]	DN [mm]	PN	EPDM Code	FPM Code	
16	10	10	199 276 062	199 276 072	
20	15	10	199 276 063	199 276 073	
25	20	10	199 276 064	199 276 074	
32	25	10	199 276 065	199 276 075	
40	32	10	199 276 066	199 276 076	
50	40	10	199 276 067	199 276 077	
63	50	10	199 276 068	199 276 078	



### 3-Way ball valve type 276 PP-H Horizontal/T-port Without manual override With butt fusion spigots metric

#### Model:

- Built on with pneumatic actuator PA11/21
- Actuator fails safe to the closed position FC
- Control time  $90^\circ <$ ) 1-3 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

d [mm]	DN [mm]	PN	EPDM Code	FPM Code	
20	15	10	199 276 103	199 276 113	
25	20	10	199 276 104	199 276 114	
32	25	10	199 276 105	199 276 115	
40	32	10	199 276 106	199 276 116	
50	40	10	199 276 107	199 276 117	
63	50	10	199 276 108	199 276 118	

## PP-H metric



### 3-Way ball valve type 276 PP-H Horizontal/T-port Without manual override With threaded sockets Rp

**Model:**

- Built on with pneumatic actuator PA11/21
- Actuator fails safe to the closed position FC
- Control time 90°<) 1-3 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

Inch	DN [mm]	PN	EPDM Code	FPM Code	
3/8	10	10	199 276 142	199 276 152	
1/2	15	10	199 276 143	199 276 153	
3/4	20	10	199 276 144	199 276 154	
1	25	10	199 276 145	199 276 155	
1 1/4	32	10	199 276 146	199 276 156	
1 1/2	40	10	199 276 147	199 276 157	
2	50	10	199 276 148	199 276 158	



### 3-Way ball valve type 276 PP-H Horizontal/T-port Without manual override With socket fusion spigots

**Model:**

- Built on with pneumatic actuator PA11/21
- Actuator fails safe to the closed position FC
- Control time 90°<) 1-3 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

d [mm]	DN [mm]	PN	EPDM Code	FPM Code	
16	10	10	199 276 042	199 276 052	
20	15	10	199 276 043	199 276 053	
25	20	10	199 276 044	199 276 054	
32	25	10	199 276 045	199 276 055	
40	32	10	199 276 046	199 276 056	
50	40	10	199 276 047	199 276 057	
63	50	10	199 276 048	199 276 058	

## PP-H metric



### 3-Way ball valve type 276 PP-H Horizontal/T-port DA (Double acting) Without manual override With fusion sockets metric

**Model:**

- Built on with pneumatic actuator PA11/21
- Control time 90°<) 1-3 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

d [mm]	DN [mm]	PN	EPDM Code	FPM Code	
16	10	10	199 276 222	199 276 232	
20	15	10	199 276 223	199 276 233	
25	20	10	199 276 224	199 276 234	
32	25	10	199 276 225	199 276 235	
40	32	10	199 276 226	199 276 236	
50	40	10	199 276 227	199 276 237	
63	50	10	199 276 228	199 276 238	



### 3-Way ball valve type 276 PP-H Horizontal/T-port DA (Double acting) Without manual override With butt fusion spigots metric

**Model:**

- Built on with pneumatic actuator PA11/21
- Control time 90°<) 1-3 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

d [mm]	DN [mm]	PN	EPDM Code	FPM Code	
20	15	10	199 276 263	199 276 273	
25	20	10	199 276 264	199 276 274	
32	25	10	199 276 265	199 276 275	
40	32	10	199 276 266	199 276 276	
50	40	10	199 276 267	199 276 277	
63	50	10	199 276 268	199 276 278	

## PP-H metric



### 3-Way ball valve type 276 PP-H Horizontal/T-port DA (Double acting) Without manual override With socket fusion spigots

**Model:**

- Built on with pneumatic actuator PA11/21
- Control time 90°<) 1-3 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

d [mm]	DN [mm]	PN	EPDM Code	FPM Code	
16	10	10	199 276 202	199 276 212	
20	15	10	199 276 203	199 276 213	
25	20	10	199 276 204	199 276 214	
32	25	10	199 276 205	199 276 215	
40	32	10	199 276 206	199 276 216	
50	40	10	199 276 207	199 276 217	
63	50	10	199 276 208	199 276 218	



### 3-Way ball valve type 276 PP-H Horizontal/T-port DA (Double acting) Without manual override With threaded sockets Rp

**Model:**

- Built on with pneumatic actuator PA11/21
- Control time 90°<) 1-3 s
- For easy installation and removal
- Integrated stainless steel mounting inserts

Inch	DN [mm]	PN	EPDM Code	FPM Code	
3/8	10	10	199 276 302	199 276 312	
1/2	15	10	199 276 303	199 276 313	
3/4	20	10	199 276 304	199 276 314	
1	25	10	199 276 305	199 276 315	
1 1/4	32	10	199 276 306	199 276 316	
1 1/2	40	10	199 276 307	199 276 317	
2	50	10	199 276 308	199 276 318	

## PP-H metric

### Diaphragm valves pneumatic

Diaphragm valve type DIASTAR Eco PP-H  
FC (Fail safe to close)

With socket fusion spigots metric



Model:

- Working pressure 6 bar one side

d [mm]	DN [mm]	PN	EPDM Code	
20	15	6	199 024 251	
25	20	6	199 024 252	
32	25	6	199 024 253	
40	32	6	199 024 254	
50	40	6	199 024 255	
63	50	6	199 024 256	

Diaphragm valve type DIASTAR Eco PP-H  
FC (Fail safe to close)

With butt fusion spigots IR metric



Model:

- Working pressure 6 bar one side

d [mm]	DN [mm]	PN	EPDM Code	
20	15	6	199 024 281	
25	20	6	199 024 282	
32	25	6	199 024 283	
40	32	6	199 024 284	
50	40	6	199 024 285	
63	50	6	199 024 286	

Diaphragm valve type DIASTAR Eco PP-H  
FC (Fail safe to close)

Unions with fusion sockets metric



Model:

- Working pressure 6 bar one side

d [mm]	DN [mm]	PN	EPDM Code	
20	15	6	199 024 311	
25	20	6	199 024 312	
32	25	6	199 024 313	
40	32	6	199 024 314	
50	40	6	199 024 315	
63	50	6	199 024 316	



## PP-H metric



**Diaphragm valve type DIASTAR Eco PP-H  
FC (Fail safe to close)  
Unions with butt fusion spigots metric**



**Model:**

- Working pressure 6 bar **one side**

d [mm]	DN [mm]	PN	EPDM Code	
20	15	6	<b>199 024 341</b>	
25	20	6	<b>199 024 342</b>	
32	25	6	<b>199 024 343</b>	
40	32	6	<b>199 024 344</b>	
50	40	6	<b>199 024 345</b>	
63	50	6	<b>199 024 346</b>	



**Diaphragm valve type DIASTAR Eco PP-H  
FC (Fail safe to close)  
With backing flanges PP-V metric**



**Model:**

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

d [mm]	DN [mm]	Inch	PN	EPDM Code	
20	15	½	6	<b>199 024 371</b>	
25	20	¾	6	<b>199 024 372</b>	
32	25	1	6	<b>199 024 373</b>	
40	32	1 ¼	6	<b>199 024 374</b>	
50	40	1 ½	6	<b>199 024 375</b>	
63	50	2	6	<b>199 024 376</b>	

## PP-H metric



### Diaphragm valve type DIASTAR PP-H Series 028 FC (Fail safe to close) With fusion spigots metric

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

\*PN: EPDM/PTFE

d [mm]	DN [mm]	PN [bar]		EPDM Code	PTFE/EPDM Code
20	15	10 / 5	*	199 028 201	199 028 231
25	20	10 / 7	*	199 028 202	199 028 232
32	25	10 / 7	*	199 028 203	199 028 233
40	32	10 / 7	*	199 028 204	199 028 234
50	40	10 / 7	*	199 028 205	199 028 235
63	50	10 / 7	*	199 028 206	199 028 236



### Diaphragm valve type DIASTAR PP-H Series 028 FC (Fail safe to close) With butt fusion spigots metric

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

\*PN: EPDM/PTFE

d [mm]	DN [mm]	PN [bar]		EPDM Code	PTFE/EPDM Code
20	15	10 / 5	*	199 028 881	199 028 901
25	20	10 / 7	*	199 028 882	199 028 902
32	25	10 / 7	*	199 028 883	199 028 903
40	32	10 / 7	*	199 028 884	199 028 904
50	40	10 / 7	*	199 028 885	199 028 905
63	50	10 / 7	*	199 028 886	199 028 906



### Diaphragm valve type DIASTAR PP-H Series 028 FC (Fail safe to close) Unions with butt fusion spigots metric

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

\*PN: EPDM/PTFE

d [mm]	DN [mm]	PN [bar]		EPDM Code	PTFE/EPDM Code
20	15	10 / 5	*	199 028 431	199 028 461
25	20	10 / 7	*	199 028 432	199 028 462
32	25	10 / 7	*	199 028 433	199 028 463
40	32	10 / 7	*	199 028 434	199 028 464
50	40	10 / 7	*	199 028 435	199 028 465
63	50	10 / 7	*	199 028 436	199 028 466

## PP-H metric



### Diaphragm valve type DIASTAR PP-H Series 028 FC (Fail safe to close) Unions with fusion sockets metric

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

\*PN: EPDM/PTFE

d [mm]	DN [mm]	PN [bar]		EPDM Code	PTFE/EPDM Code
20	15	10 / 5	*	<b>199 028 181</b>	<b>199 028 187</b>
25	20	10 / 7	*	<b>199 028 182</b>	<b>199 028 188</b>
32	25	10 / 7	*	<b>199 028 183</b>	<b>199 028 189</b>
40	32	10 / 7	*	<b>199 028 184</b>	<b>199 028 190</b>
50	40	10 / 7	*	<b>199 028 185</b>	<b>199 028 191</b>
63	50	10 / 7	*	<b>199 028 186</b>	<b>199 028 192</b>



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

**Model:**

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

\*PN: EPDM/PTFE

d [mm]	DN [mm]	Inch	PN [bar]		EPDM Code	PTFE/EPDM Code
20	15	½	10 / 5	*	<b>199 028 261</b>	<b>199 028 291</b>
25	20	¾	10 / 7	*	<b>199 028 262</b>	<b>199 028 292</b>
32	25	1	10 / 7	*	<b>199 028 263</b>	<b>199 028 293</b>
40	32	1 ¼	10 / 7	*	<b>199 028 264</b>	<b>199 028 294</b>
50	40	1 ½	10 / 7	*	<b>199 028 265</b>	<b>199 028 295</b>
63	50	2	10 / 7	*	<b>199 028 266</b>	<b>199 028 296</b>

## PP-H metric



### Diaphragm valve type DIASTAR PP-H Series 025 FC (Fail safe to close) With fusion spigots metric

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

d [mm]	DN [mm]	PN	EPDM Code	PTFE/EPDM Code	
20	15	10	199 025 201	199 025 231	
25	20	10	199 025 202	199 025 232	
32	25	10	199 025 203	199 025 233	
40	32	10	199 025 204	199 025 234	
50	40	10	199 025 205	199 025 235	
63	50	10	199 025 206	199 025 236	



### Diaphragm valve type DIASTAR PP-H Series 025 FC (Fail safe to close) With butt fusion spigots metric

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

d [mm]	DN [mm]	PN	EPDM Code	PTFE/EPDM Code	
20	15	10	199 025 881	199 025 901	
25	20	10	199 025 882	199 025 902	
32	25	10	199 025 883	199 025 903	
40	32	10	199 025 884	199 025 904	
50	40	10	199 025 885	199 025 905	
63	50	10	199 025 886	199 025 906	



### Diaphragm valve type DIASTAR PP-H Series 025 FC (Fail safe to close) Unions with butt fusion spigots metric

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

d [mm]	DN [mm]	PN	EPDM Code	PTFE/EPDM Code	
20	15	10	199 027 431	199 027 461	
25	20	10	199 027 432	199 027 462	
32	25	10	199 027 433	199 027 463	
40	32	10	199 027 434	199 027 464	
50	40	10	199 027 435	199 027 465	
63	50	10	199 027 436	199 027 466	



### Diaphragm valve type DIASTAR PP-H Series 025 FC (Fail safe to close) Unions with fusion sockets metric

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

d [mm]	DN [mm]	PN	EPDM Code	PTFE/EPDM Code	
20	15	10	199 027 201	199 027 231	
25	20	10	199 027 202	199 027 232	
32	25	10	199 027 203	199 027 233	
40	32	10	199 027 204	199 027 234	
50	40	10	199 027 205	199 027 235	
63	50	10	199 027 206	199 027 236	

## PP-H metric



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

**Model:**

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

d [mm]	DN [mm]	Inch	PN	EPDM Code	PTFE/EPDM Code
20	15	½	10	199 025 261	199 025 291
25	20	¾	10	199 025 262	199 025 292
32	25	1	10	199 025 263	199 025 293
40	32	1 ¼	10	199 025 264	199 025 294
50	40	1 ½	10	199 025 265	199 025 295
63	50	2	10	199 025 266	199 025 296



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

**Model:**

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

\* With backing flanges PP-V

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

d [mm]	DN [mm]	Inch	PN	EPDM Code	PTFE/EPDM Code
*75	65	2 ½	10	199 025 267	199 025 297
**90	80	3	10	199 025 268	199 025 298
110	100	4	8	199 025 269	199 025 299
**160	150	6	6	199 025 270	-

## PP-H metric



### Diaphragm valve type DIASTAR PP-H Series 025 FO (Fail safe to open) With fusion spigots metric

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

d [mm]	DN [mm]	PN	EPDM Code	PTFE/EPDM Code	
20	15	10	199 025 211	199 025 241	
25	20	10	199 025 212	199 025 242	
32	25	10	199 025 213	199 025 243	
40	32	10	199 025 214	199 025 244	
50	40	10	199 025 215	199 025 245	
63	50	10	199 025 216	199 025 246	



### Diaphragm valve type DIASTAR PP-H Series 025 FO (Fail safe to open) With butt fusion spigots metric

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

d [mm]	DN [mm]	PN	EPDM Code	PTFE/EPDM Code	
20	15	10	199 025 887	199 025 907	
25	20	10	199 025 888	199 025 908	
32	25	10	199 025 889	199 025 909	
40	32	10	199 025 890	199 025 910	
50	40	10	199 025 891	199 025 911	
63	50	10	199 025 892	199 025 912	



### Diaphragm valve type DIASTAR PP-H Series 025 FO (Fail safe to open) Unions with butt fusion spigots metric

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

d [mm]	DN [mm]	PN	EPDM Code	PTFE/EPDM Code	
20	15	10	199 027 441	199 027 471	
25	20	10	199 027 442	199 027 472	
32	25	10	199 027 443	199 027 473	
40	32	10	199 027 444	199 027 474	
50	40	10	199 027 445	199 027 475	
63	50	10	199 027 446	199 027 476	



### Diaphragm valve type DIASTAR PP-H Series 025 FO (Fail safe to open) Unions with fusion sockets metric

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

d [mm]	DN [mm]	PN	EPDM Code	PTFE/EPDM Code	
20	15	10	199 027 211	199 027 241	
25	20	10	199 027 212	199 027 242	
32	25	10	199 027 213	199 027 243	
40	32	10	199 027 214	199 027 244	
50	40	10	199 027 215	199 027 245	
63	50	10	199 027 216	199 027 246	

## PP-H metric



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

**Model:**

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

d [mm]	DN [mm]	Inch	PN	EPDM Code	PTFE/EPDM Code
20	15	½	10	199 025 271	199 025 301
25	20	¾	10	199 025 272	199 025 302
32	25	1	10	199 025 273	199 025 303
40	32	1 ¼	10	199 025 274	199 025 304
50	40	1 ½	10	199 025 275	199 025 305
63	50	2	10	199 025 276	199 025 306



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

**Model:**

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

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

\* With backing flanges PP-V

\*\* with fixed flanges PP metric and Inch ANSI

d [mm]	DN [mm]	Inch	PN	EPDM Code	PTFE/EPDM Code
*75	65	2 ½	10	199 025 277	199 025 307
**90	80	3	10	199 025 278	199 025 308
110	100	4	8	199 025 279	199 025 309
160	150	6	6	199 025 280	199 025 310

## PP-H metric



### Diaphragm valve type DIASTAR PP-H Series 025 DA (Double acting) With fusion spigots metric

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

d [mm]	DN [mm]	PN	EPDM Code	PTFE/EPDM Code	
20	15	10	199 025 221	199 025 251	
25	20	10	199 025 222	199 025 252	
32	25	10	199 025 223	199 025 253	
40	32	10	199 025 224	199 025 254	
50	40	10	199 025 225	199 025 255	
63	50	10	199 025 226	199 025 256	



### Diaphragm valve type DIASTAR PP-H Series 025 DA (Double acting) With butt fusion spigots metric

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

d [mm]	DN [mm]	PN	EPDM Code	PTFE/EPDM Code	
20	15	10	199 025 893	199 025 913	
25	20	10	199 025 894	199 025 914	
32	25	10	199 025 895	199 025 915	
40	32	10	199 025 896	199 025 916	
50	40	10	199 025 897	199 025 917	
63	50	10	199 025 898	199 025 918	



### Diaphragm valve type DIASTAR PP-H Series 025 DA (Double acting) Unions with butt fusion spigots metric

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

d [mm]	DN [mm]	PN	EPDM Code	PTFE/EPDM Code	
20	15	10	199 027 451	199 027 481	
25	20	10	199 027 452	199 027 482	
32	25	10	199 027 453	199 027 483	
40	32	10	199 027 454	199 027 484	
50	40	10	199 027 455	199 027 485	
63	50	10	199 027 456	199 027 486	



### Diaphragm valve type DIASTAR PP-H Series 025 DA (Double acting) Unions with fusion sockets metric

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

d [mm]	DN [mm]	PN	EPDM Code	PTFE/EPDM Code	
20	15	10	199 027 221	199 027 251	
25	20	10	199 027 222	199 027 252	
32	25	10	199 027 223	199 027 253	
40	32	10	199 027 224	199 027 254	
50	40	10	199 027 225	199 027 255	
63	50	10	199 027 226	199 027 256	



## PP-H metric



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

**Model:**

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

d [mm]	DN [mm]	Inch	PN	EPDM Code	PTFE/EPDM Code
20	15	½	10	199 025 281	199 025 311
25	20	¾	10	199 025 282	199 025 312
32	25	1	10	199 025 283	199 025 313
40	32	1 ¼	10	199 025 284	199 025 314
50	40	1 ½	10	199 025 285	199 025 315
63	50	2	10	199 025 286	199 025 316



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

**Model:**

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

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

\* With backing flanges PP-V

\*\* with fixed flanges PP metric and Inch ANSI

d [mm]	DN [mm]	Inch	PN	EPDM Code	PTFE/EPDM Code
*75	65	2 ½	10	199 025 287	199 025 317
**90	80	3	10	199 025 288	199 025 318
110	100	4	8	199 025 289	199 025 319
160	150	6	6	199 025 290	199 025 320

## PP-H metric



### Diaphragm valve type DIASTAR PP-H Series 025 FC (Fail safe to close) ZERO STATIC with butt fusion spigots metric

- With position indicator
- DN2: for coordination of accessoires

d [mm]	d1 [mm]	DN [mm]	DN1 [mm]	DN2 [mm]	PN	EPDM Code	PTFE Code
20	20	15	15	15	10	199 029 461	199 029 301
25	20	20	15	20	10	199 029 462	199 029 302
25	25	20	20	20	10	199 029 463	199 029 303
32	20	25	15	25	10	199 029 464	199 029 304
32	25	25	20	25	10	199 029 465	199 029 305
32	32	25	25	25	10	199 029 466	199 029 306
40	20	32	15	25	10	199 029 467	199 029 307
50	20	40	15	25	10	199 029 471	199 029 311
50	25	40	20	25	10	199 029 472	199 029 312
50	32	40	25	25	10	199 029 473	199 029 313
63	20	50	15	25	10	199 029 476	199 029 316
63	25	50	20	25	10	199 029 477	199 029 317
63	32	50	25	25	10	199 029 478	199 029 318
90	20	80	15	25	10	199 029 485	199 029 325
90	25	80	20	25	6	199 029 486	199 029 326
90	32	80	25	25	6	199 029 487	199 029 327
90	50	80	40	50	6	199 029 488	199 029 328
90	63	80	50	50	6	199 029 489	199 029 329
110	20	100	15	25	6	199 029 490	199 029 330
110	25	100	20	25	6	199 029 491	199 029 331
110	50	100	25	25	6	199 029 492	199 029 332
110	63	100	40	50	6	199 029 493	199 029 333
110	63	100	50	50	10	199 029 494	199 029 334

## PP-H metric

### Butterfly valves electric metric/ANSI/JIS



#### Butterfly valve type 567 PP-H Bare shaft



**Model:**

- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, ANSI/ASME B 16.5 Class 150, BS 1560: 1989, BS 4504, JIS B 2220
- Overall length according to EN 558-1, ISO 5752
- Interface F07 for the dimensions DN50-200 according to DIN/ISO 5211
- Interface F10 for the dimensions DN250-300 according to DIN/ISO 5211

d [mm]	DN [mm]	Inch	PN	EPDM Code	FPM Code
63	50	2	10	<b>167 567 802</b>	<b>167 567 822</b>
75	65	2 ½	10	<b>167 567 803</b>	<b>167 567 823</b>
90	80	3	10	<b>167 567 804</b>	<b>167 567 824</b>
110	100	4	10	<b>167 567 805</b>	<b>167 567 825</b>
140	125	5	10	<b>167 567 806</b>	<b>167 567 826</b>
160	150	6	10	<b>167 567 807</b>	<b>167 567 827</b>
225	200	8	10	<b>167 567 808</b>	<b>167 567 828</b>
280	250	10	8	<b>167 567 809</b>	<b>167 567 829</b>
315	300	12	8	<b>167 567 810</b>	<b>167 567 830</b>



#### Butterfly valve type 140 PP-H 100-230V Without manual override



**Model:**

- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, ANSI/ASME B 16.5 Class 150, BS 1560: 1989, BS 4504, JIS B 2220
- Overall length according to EN 558-1, ISO 5752
- Voltage 100-230 V, 50-60 Hz
- Control time 15 s/90°<) EA31
- Control time 25s/90°<) EA42
- Control range 90°<)
- Actuator with integrated emergency manual override standard
- The dimension DN300 on request

d [mm]	DN [mm]	Inch	PN	EPDM Code	FPM Code
63	50	2	10	<b>199 140 362</b>	<b>199 140 382</b>
75	65	2 ½	10	<b>199 140 363</b>	<b>199 140 383</b>
90	80	3	10	<b>199 140 364</b>	<b>199 140 384</b>
110	100	4	10	<b>199 140 365</b>	<b>199 140 385</b>
140	125	5	10	<b>199 140 366</b>	<b>199 140 386</b>
160	150	6	10	<b>199 140 367</b>	<b>199 140 387</b>
225	200	8	10	<b>199 140 368</b>	<b>199 140 388</b>
280	250	10	6	<b>199 140 369</b>	<b>199 140 389</b>

## PP-H metric

### Butterfly valve type 140 PP-H 100-230V With manual override



**Model:**

- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, ANSI/ASME B 16.5 Class 150, BS 1560: 1989, BS 4504, JIS B 2220
- Overall length according to EN 558-1, ISO 5752
- Voltage 100-230 V, 50-60 Hz
- Control time 15 s/90°<) EA31
- Control time 25s/90°<) EA42
- Control range 90°<)
- Actuator with integrated emergency manual override standard

d [mm]	DN [mm]	Inch	PN	EPDM Code	FPM Code
63	50	2	10	199 140 322	199 140 342
75	65	2 ½	10	199 140 323	199 140 343
90	80	3	10	199 140 324	199 140 344
110	100	4	10	199 140 325	199 140 345
140	125	5	10	199 140 326	199 140 346
160	150	6	10	199 140 327	199 140 347
225	200	8	10	199 140 328	199 140 348

### Butterfly valve type 140 PP-H 24V Without manual override



**Model:**

- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, ANSI/ASME B 16.5 Class 150, BS 1560: 1989, BS 4504, JIS B 2220
- Overall length according to EN 558-1, ISO 5752
- Voltage 24 V AC/DC
- Control time 15 s/90°<) EA31
- Control time 25s/90°<) EA42
- Control range 90°<)
- Actuator with integrated emergency manual override standard
- The dimension DN300 on request

d [mm]	DN [mm]	Inch	PN	EPDM Code	FPM Code
63	50	2	10	199 140 442	199 140 462
75	65	2 ½	10	199 140 443	199 140 463
90	80	3	10	199 140 444	199 140 464
110	100	4	10	199 140 445	199 140 465
140	125	5	10	199 140 446	199 140 466
160	150	6	10	199 140 447	199 140 467
225	200	8	10	199 140 448	199 140 468
280	250	10	6	199 140 449	199 140 469

## PP-H metric

### Butterfly valve type 140 PP-H 24V With manual override



#### Model:

- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, ANSI/ASME B 16.5 Class 150, BS 1560: 1989, BS 4504, JIS B 2220
- Overall length according to EN 558-1, ISO 5752
- Voltage 24 V AC/DC
- Control time 15 s/90°<) EA31
- Control time 25s/90°<) EA42
- Control range 90°<)
- Actuator with integrated emergency manual override standard

d [mm]	DN [mm]	Inch	PN	EPDM Code	FPM Code	
63	50	2	10	<b>199 140 402</b>	<b>199 140 422</b>	
75	65	2 ½	10	<b>199 140 403</b>	<b>199 140 423</b>	
90	80	3	10	<b>199 140 404</b>	<b>199 140 424</b>	
110	100	4	10	<b>199 140 405</b>	<b>199 140 425</b>	
140	125	5	10	<b>199 140 406</b>	<b>199 140 426</b>	
160	150	6	10	<b>199 140 407</b>	<b>199 140 427</b>	
225	200	8	10	<b>199 140 408</b>	<b>199 140 428</b>	

## PP-H metric



### Lugstyle butterfly valve type 568 PP-H Bare shaft



**Model:**

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension: ISO 7005 PN10, EN 1092 PN10, DIN 2501 PN10
- Overall length according to EN 558-1, ISO 5752
- Interface F07 according to DIN/ISO 5211

d [mm]	DN [mm]	Inch	PN	EPDM Code	FPM Code
63	50	2	10	167 568 802	167 568 822
75	65	2 ½	10	167 568 803	167 568 823
90	80	3	10	167 568 804	167 568 824
110	100	4	10	167 568 805	167 568 825
140	125	5	10	167 568 806	167 568 826
160	150	6	10	167 568 807	167 568 827
225	200	8	10	167 568 808	167 568 828



### Lugstyle butterfly valve type 141 PP-H 100-230V Without manual override



**Model:**

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension: ISO 7005 PN10, EN 1092 PN10, DIN 2501 PN10
- Overall length according to EN 558-1, ISO 5752
- Voltage 100-230 V, 50-60 Hz
- Control time 15 s/90°<) EA31
- Control time 25s/90°<) EA42
- Control range 90°<)
- Actuator with integrated emergency manual override standard

d [mm]	DN [mm]	Inch	PN	EPDM Code	FPM Code
63	50	2	10	199 141 362	199 141 382
75	65	2 ½	10	199 141 363	199 141 383
90	80	3	10	199 141 364	199 141 384
110	100	4	10	199 141 365	199 141 385
140	125	5	10	199 141 366	199 141 386
160	150	6	10	199 141 367	199 141 387
225	200	8	10	199 141 368	199 141 388

## PP-H metric

### Lugstyle butterfly valve type 141 PP-H 100-230V With manual override



**Model:**

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension: ISO 7005 PN10, EN 1092 PN10, DIN 2501 PN10
- Overall length according to EN 558-1, ISO 5752
- Voltage 100-230 V, 50-60 Hz
- Control time 15 s/90°<) EA31
- Control time 25s/90°<) EA42
- Control range 90°<)
- Actuator with integrated emergency manual override standard

d [mm]	DN [mm]	Inch	PN	EPDM Code	FPM Code
63	50	2	10	199 141 322	199 141 342
75	65	2 ½	10	199 141 323	199 141 343
90	80	3	10	199 141 324	199 141 344
110	100	4	10	199 141 325	199 141 345
140	125	5	10	199 141 326	199 141 346
160	150	6	10	199 141 327	199 141 347
225	200	8	10	199 141 328	199 141 348

### Lugstyle butterfly valve type 141 PP-H 24V Without manual override



**Model:**

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension: ISO 7005 PN10, EN 1092 PN10, DIN 2501 PN10
- Overall length according to EN 558-1, ISO 5752
- Voltage 24 V AC/DC
- Control time 15 s/90°<) EA31
- Control time 25s/90°<) EA42
- Control range 90°<)
- Actuator with integrated emergency manual override standard

d [mm]	DN [mm]	Inch	PN	EPDM Code	FPM Code
63	50	2	10	199 141 442	199 141 462
75	65	2 ½	10	199 141 443	199 141 463
90	80	3	10	199 141 444	199 141 464
110	100	4	10	199 141 445	199 141 465
140	125	5	10	199 141 446	199 141 466
160	150	6	10	199 141 447	199 141 467
225	200	8	10	199 141 448	199 141 468

## PP-H metric

### Lugstyle butterfly valve type 141 PP-H 24V With manual override



**Model:**

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension: ISO 7005 PN10, EN 1092 PN10, DIN 2501 PN10
- Overall length according to EN 558-1, ISO 5752
- Voltage 24 V AC/DC
- Control time 15 s/90°<) EA31
- Control time 25s/90°<) EA42
- Control range 90°<)
- Actuator with integrated emergency manual override standard

d [mm]	DN [mm]	Inch	PN	EPDM Code	FPM Code
63	50	2	10	<b>199 141 402</b>	<b>199 141 422</b>
75	65	2 ½	10	<b>199 141 403</b>	<b>199 141 423</b>
90	80	3	10	<b>199 141 404</b>	<b>199 141 424</b>
110	100	4	10	<b>199 141 405</b>	<b>199 141 425</b>
140	125	5	10	<b>199 141 406</b>	<b>199 141 426</b>
160	150	6	10	<b>199 141 407</b>	<b>199 141 427</b>
225	200	8	10	<b>199 141 408</b>	<b>199 141 428</b>



## PP-H metric



### Lugstyle butterfly valve type 568 PP-H Bare shaft



**Model:**

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension ANSI/ASME B 16.5 Class 150
- Overall length according to EN 558-1, ISO 5752
- Interface F07 according to DIN/ISO 5211

Inch	DN [mm]	PN	EPDM Code	FPM Code	
2	50	10	<b>167 568 902</b>	<b>167 568 922</b>	
2 ½	65	10	<b>167 568 903</b>	<b>167 568 923</b>	
3	80	10	<b>167 568 904</b>	<b>167 568 924</b>	
4	100	10	<b>167 568 905</b>	<b>167 568 925</b>	
5	125	10	<b>167 568 906</b>	<b>167 568 926</b>	
6	150	10	<b>167 568 907</b>	<b>167 568 927</b>	
8	200	10	<b>167 568 908</b>	<b>167 568 928</b>	



### Lugstyle butterfly valve type 142 PP-H 100-230V Without manual override



**Model:**

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension ANSI/ASME B 16.5 Class 150
- Overall length according to EN 558-1, ISO 5752
- Voltage 100-230 V, 50-60 Hz
- Control time 15 s/90°<) EA31
- Control time 25s/90°<) EA42
- Control range 90°<)
- Actuator with integrated emergency manual override standard

Inch	DN [mm]	d [mm]	PN	EPDM Code	FPM Code	
2	50	63	10	<b>199 142 362</b>	<b>199 142 382</b>	
2 ½	65	75	10	<b>199 142 363</b>	<b>199 142 383</b>	
3	80	90	10	<b>199 142 364</b>	<b>199 142 384</b>	
4	100	110	10	<b>199 142 365</b>	<b>199 142 385</b>	
5	125	140	10	<b>199 142 366</b>	<b>199 142 386</b>	
6	150	160	10	<b>199 142 367</b>	<b>199 142 387</b>	
8	200	225	10	<b>199 142 368</b>	<b>199 142 388</b>	

## PP-H metric

### Lugstyle butterfly valve type 142 PP-H 100-230V With manual override



#### Model:

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension ANSI/ASME B 16.5 Class 150
- Overall length according to EN 558-1, ISO 5752
- Voltage 100-230 V, 50-60 Hz
- Control time 15 s/90°<) EA31
- Control time 25s/90°<) EA42
- Control range 90°<)
- Actuator with integrated emergency manual override standard

Inch	DN [mm]	d [mm]	PN	EPDM Code	FPM Code
2	50	63	10	<b>199 142 322</b>	<b>199 142 342</b>
2 ½	65	75	10	<b>199 142 323</b>	<b>199 142 343</b>
3	80	90	10	<b>199 142 324</b>	<b>199 142 344</b>
4	100	110	10	<b>199 142 325</b>	<b>199 142 345</b>
5	125	140	10	<b>199 142 326</b>	<b>199 142 346</b>
6	150	160	10	<b>199 142 327</b>	<b>199 142 347</b>
8	200	225	10	<b>199 142 328</b>	<b>199 142 348</b>

### Lugstyle butterfly valve type 142 PP-H 24V Without manual override



#### Model:

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension ANSI/ASME B 16.5 Class 150
- Overall length according to EN 558-1, ISO 5752
- Voltage 24 V AC/DC
- Control time 15 s/90°<) EA31
- Control time 25s/90°<) EA42
- Control range 90°<)
- Actuator with integrated emergency manual override standard

Inch	DN [mm]	d [mm]	PN	EPDM Code	FPM Code
2	50	63	10	<b>199 142 442</b>	<b>199 142 462</b>
2 ½	65	75	10	<b>199 142 443</b>	<b>199 142 463</b>
3	80	90	10	<b>199 142 444</b>	<b>199 142 464</b>
4	100	110	10	<b>199 142 445</b>	<b>199 142 465</b>
5	125	140	10	<b>199 142 446</b>	<b>199 142 466</b>
6	150	160	10	<b>199 142 447</b>	<b>199 142 467</b>
8	200	225	10	<b>199 142 448</b>	<b>199 142 468</b>

## PP-H metric

### Lugstyle butterfly valve type 142 PP-H 24V With manual override



#### Model:

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension ANSI/ASME B 16.5 Class 150
- Overall length according to EN 558-1, ISO 5752
- Voltage 24 V AC/DC
- Control time 15 s/90°<) EA31
- Control time 25s/90°<) EA42
- Control range 90°<)
- Actuator with integrated emergency manual override standard

Inch	DN [mm]	d [mm]	PN	EPDM Code	FPM Code
2	50	63	10	<b>199 142 402</b>	<b>199 142 422</b>
2 ½	65	75	10	<b>199 142 403</b>	<b>199 142 423</b>
3	80	90	10	<b>199 142 404</b>	<b>199 142 424</b>
4	100	110	10	<b>199 142 405</b>	<b>199 142 425</b>
5	125	140	10	<b>199 142 406</b>	<b>199 142 426</b>
6	150	160	10	<b>199 142 407</b>	<b>199 142 427</b>
8	200	225	10	<b>199 142 408</b>	<b>199 142 428</b>

## PP-H metric

### Butterfly valves pneumatic metric/ANSI/JIS



#### Butterfly valve type 567 PP-H Bare shaft



**Model:**

- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, ANSI/ASME B 16.5 Class 150, BS 1560: 1989, BS 4504, JIS B 2220
- Overall length according to EN 558-1, ISO 5752
- Interface F07 for the dimensions DN50-200 according to DIN/ISO 5211
- Interface F10 for the dimensions DN250-300 according to DIN/ISO 5211

d [mm]	DN [mm]	Inch	PN	EPDM Code	FPM Code
63	50	2	10	167 567 802	167 567 822
75	65	2 ½	10	167 567 803	167 567 823
90	80	3	10	167 567 804	167 567 824
110	100	4	10	167 567 805	167 567 825
140	125	5	10	167 567 806	167 567 826
160	150	6	10	167 567 807	167 567 827
225	200	8	10	167 567 808	167 567 828
280	250	10	8	167 567 809	167 567 829
315	300	12	8	167 567 810	167 567 830



#### Butterfly valve type 240 PP-H FC (Fail safe to close) Without manual override



**Model:**

- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, ANSI/ASME B 16.5 Class 150, BS 1560: 1989, BS 4504, JIS B 2220
- Overall length according to EN 558-1, ISO 5752
- Control range 90°<)

d [mm]	DN [mm]	Inch	PN	EPDM Code	FPM Code
63	50	2	10	199 240 282	199 240 302
75	65	2 ½	10	199 240 283	199 240 303
90	80	3	10	199 240 284	199 240 304
110	100	4	10	199 240 285	199 240 305
140	125	5	10	199 240 286	199 240 306
160	150	6	10	199 240 287	199 240 307
225	200	8	10	199 240 288	199 240 308
280	250	10	8	199 240 289	199 240 309
315	300	12	8	199 240 290	199 240 310

## PP-H metric



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



#### Model:

- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, ANSI/ASME B 16.5 Class 150, BS 1560: 1989, BS 4504, JIS B 2220
- Overall length according to EN 558-1, ISO 5752
- Control range 90°<)

d [mm]	DN [mm]	Inch	PN	EPDM Code	FPM Code	
63	50	2	10	199 240 322	199 240 342	
75	65	2 ½	10	199 240 323	199 240 343	
90	80	3	10	199 240 324	199 240 344	
110	100	4	10	199 240 325	199 240 345	
140	125	5	10	199 240 326	199 240 346	
160	150	6	10	199 240 327	199 240 347	
225	200	8	10	199 240 328	199 240 348	
280	250	10	8	199 240 329	199 240 349	
315	300	12	8	199 240 330	199 240 350	



### Butterfly valve type 240 PP-H DA (Double acting) Without manual override



#### Model:

- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, ANSI/ASME B 16.5 Class 150, BS 1560: 1989, BS 4504, JIS B 2220
- Overall length according to EN 558-1, ISO 5752
- Control range 90°<)

d [mm]	DN [mm]	Inch	PN	EPDM Code	FPM Code	
63	50	2	10	199 240 362	199 240 382	
75	65	2 ½	10	199 240 363	199 240 383	
90	80	3	10	199 240 364	199 240 384	
110	100	4	10	199 240 365	199 240 385	
140	125	5	10	199 240 366	199 240 386	
160	150	6	10	199 240 367	199 240 387	
225	200	8	10	199 240 368	199 240 388	
280	250	10	8	199 240 369	199 240 389	
315	300	12	8	199 240 370	199 240 390	

## PP-H metric



### Lugstyle butterfly valve type 568 PP-H Bare shaft



#### Model:

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension: ISO 7005 PN10, EN 1092 PN10, DIN 2501 PN10
- Overall length according to EN 558-1, ISO 5752
- Interface F07 according to DIN/ISO 5211

d [mm]	DN [mm]	Inch	PN	EPDM Code	FPM Code
63	50	2	10	167 568 802	167 568 822
75	65	2 ½	10	167 568 803	167 568 823
90	80	3	10	167 568 804	167 568 824
110	100	4	10	167 568 805	167 568 825
140	125	5	10	167 568 806	167 568 826
160	150	6	10	167 568 807	167 568 827
225	200	8	10	167 568 808	167 568 828



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



#### Model:

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension: ISO 7005 PN10, EN 1092 PN10, DIN 2501 PN10
- Overall length according to EN 558-1, ISO 5752
- Control range 90°<)

d [mm]	DN [mm]	Inch	PN	EPDM Code	FPM Code
63	50	2	10	199 241 282	199 241 302
75	65	2 ½	10	199 241 283	199 241 303
90	80	3	10	199 241 284	199 241 304
110	100	4	10	199 241 285	199 241 305
140	125	5	10	199 241 286	199 241 306
160	150	6	10	199 241 287	199 241 307
225	200	8	10	199 241 288	199 241 308



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



#### Model:

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension: ISO 7005 PN10, EN 1092 PN10, DIN 2501 PN10
- Overall length according to EN 558-1, ISO 5752
- Control range 90°<)

d [mm]	DN [mm]	Inch	PN	EPDM Code	FPM Code
63	50	2	10	199 241 322	199 241 342
75	65	2 ½	10	199 241 323	199 241 343
90	80	3	10	199 241 324	199 241 344
110	100	4	10	199 241 325	199 241 345
140	125	5	10	199 241 326	199 241 346
160	150	6	10	199 241 327	199 241 347
225	200	8	10	199 241 328	199 241 348

## PP-H metric



### Lugstyle butterfly valve type 241 PP-H DA (Double acting) Without manual override



#### Model:

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension: ISO 7005 PN10, EN 1092 PN10, DIN 2501 PN10
- Overall length according to EN 558-1, ISO 5752
- Control range 90°<

d [mm]	DN [mm]	Inch	PN	EPDM Code	FPM Code	
63	50	2	10	<b>199 241 362</b>	<b>199 241 382</b>	
75	65	2 ½	10	<b>199 241 363</b>	<b>199 241 383</b>	
90	80	3	10	<b>199 241 364</b>	<b>199 241 384</b>	
110	100	4	10	<b>199 241 365</b>	<b>199 241 385</b>	
140	125	5	10	<b>199 241 366</b>	<b>199 241 386</b>	
160	150	6	10	<b>199 241 367</b>	<b>199 241 387</b>	
225	200	8	10	<b>199 241 368</b>	<b>199 241 388</b>	

## PP-H metric



### Lugstyle butterfly valve type 568 PP-H Bare shaft



**Model:**

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension ANSI/ASME B 16.5 Class 150
- Overall length according to EN 558-1, ISO 5752
- Interface F07 according to DIN/ISO 5211

Inch	DN [mm]	PN	EPDM Code	FPM Code	
2	50	10	167 568 902	167 568 922	
2 ½	65	10	167 568 903	167 568 923	
3	80	10	167 568 904	167 568 924	
4	100	10	167 568 905	167 568 925	
5	125	10	167 568 906	167 568 926	
6	150	10	167 568 907	167 568 927	
8	200	10	167 568 908	167 568 928	



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



**Model:**

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension ANSI/ASME B 16.5 Class 150
- Overall length according to EN 558-1, ISO 5752
- Control range 90°<)

Inch	DN [mm]	d [mm]	PN	EPDM Code	FPM Code	
2	50	63	10	199 242 282	199 242 302	
2 ½	65	75	10	199 242 283	199 242 303	
3	80	90	10	199 242 284	199 242 304	
4	100	110	10	199 242 285	199 242 305	
5	125	140	10	199 242 286	199 242 306	
6	150	160	10	199 242 287	199 242 307	
8	200	225	10	199 242 288	199 242 308	



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



**Model:**

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension ANSI/ASME B 16.5 Class 150
- Overall length according to EN 558-1, ISO 5752
- Control range 90°<)

Inch	DN [mm]	d [mm]	PN	EPDM Code	FPM Code	
2	50	63	10	199 242 322	199 242 342	
2 ½	65	75	10	199 242 323	199 242 343	
3	80	90	10	199 242 324	199 242 344	
4	100	110	10	199 242 325	199 242 345	
5	125	140	10	199 242 326	199 242 346	
6	150	160	10	199 242 327	199 242 347	
8	200	225	10	199 242 328	199 242 348	



## PP-H metric



### Lugstyle butterfly valve type 242 PP-H DA (Double acting) Without manual override



#### Model:

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension ANSI/ASME B 16.5 Class 150
- Overall length according to EN 558-1, ISO 5752
- Control range 90°<

Inch	DN [mm]	d [mm]	PN	EPDM Code	FPM Code	
2	50	63	10	<b>199 242 362</b>	<b>199 242 382</b>	
2 ½	65	75	10	<b>199 242 363</b>	<b>199 242 383</b>	
3	80	90	10	<b>199 242 364</b>	<b>199 242 384</b>	
4	100	110	10	<b>199 242 365</b>	<b>199 242 385</b>	
5	125	140	10	<b>199 242 366</b>	<b>199 242 386</b>	
6	150	160	10	<b>199 242 367</b>	<b>199 242 387</b>	
8	200	225	10	<b>199 242 368</b>	<b>199 242 388</b>	

## PP-H metric

### Process control valves

#### Pressure reducing valve type V82 PP-H With fusion spigots metric



d [mm]	DN [mm]	Pressure range [bar]	EPDM Code	PTFE Code	
63	50	0.5 - 10	199 041 038	199 041 048	
75	65	0.5 - 6	199 041 039	199 041 049	
90	80	0.5 - 6	199 041 040	199 041 050	
110	100	0.5 - 4	199 041 041	199 041 051	

#### Pressure reducing valve type V182 PP-H With fusion spigots metric



d [mm]	DN [mm]	Pressure range [bar]	EPDM Code	FPM Code	
16	10	0.5 - 10	199 041 621	199 041 631	
20	15	0.5 - 10	199 041 622	199 041 632	
25	20	0.5 - 10	199 041 623	199 041 633	
32	25	0.5 - 10	199 041 624	199 041 634	
40	32	0.5 - 10	199 041 625	199 041 635	
50	40	0.5 - 10	199 041 626	199 041 636	

#### Pressure reducing valve type V182 PP-H With butt fusion spigots IR metric



d [mm]	DN [mm]	Pressure range [bar]	EPDM Code	FPM Code	
16	10	0.5 - 10	199 041 641	199 041 651	
20	15	0.5 - 10	199 041 642	199 041 652	
25	20	0.5 - 10	199 041 643	199 041 653	
32	25	0.5 - 10	199 041 644	199 041 654	
40	32	0.5 - 10	199 041 645	199 041 655	
50	40	0.5 - 10	199 041 646	199 041 656	

#### Pressure reducing valve type V782 PP-H With fusion spigots metric



d [mm]	DN [mm]	Pressure range [bar]	EPDM Code	PTFE Code	
16	10	0.5 - 10	199 041 072	199 041 078	
20	15	0.5 - 10	199 041 073	199 041 079	
25	20	0.5 - 10	199 041 074	199 041 080	
32	25	0.5 - 10	199 041 075	199 041 081	
40	32	0.5 - 10	199 041 076	199 041 082	
50	40	0.5 - 10	199 041 077	199 041 083	

## PP-H metric



### Pressure reducing valve type V782 PP-H With butt fusion spigots IR metric

d [mm]	DN [mm]	Pressure range [bar]	EPDM Code	PTFE Code	
20	15	0.5 - 10	199 041 299	199 041 404	
25	20	0.5 - 10	199 041 300	199 041 405	
32	25	0.5 - 10	199 041 301	199 041 406	
40	32	0.5 - 10	199 041 302	199 041 407	
50	40	0.5 - 10	199 041 303	199 041 408	



### Pressure relief valve type V85 PP-H With fusion spigots metric

d [mm]	DN [mm]	Pressure range [bar]	EPDM Code	PTFE Code	
75	65	1.0 - 6	199 041 926	199 041 895	
90	80	1.0 - 6	199 041 893	199 041 896	
110	100	1.0 - 4	199 041 894	199 041 897	



### Pressure relief valve type V185 PP-H With fusion spigots metric

d [mm]	DN [mm]	Pressure range [bar]	EPDM Code	PTFE Code	
16	10	0.5 - 10	199 041 367	199 041 337	
20	15	0.5 - 10	199 041 368	199 041 338	
25	20	0.5 - 10	199 041 369	199 041 339	
32	25	0.5 - 10	199 041 370	199 041 340	
40	32	0.5 - 10	199 041 371	199 041 341	
50	40	0.5 - 10	199 041 372	199 041 342	
63	50	0.5 - 10	199 041 373	199 041 343	



### Pressure relief valve type V185 PP-H With butt fusion spigots IR metric

d [mm]	DN [mm]	Pressure range [bar]	EPDM Code	PTFE Code	
20	15	0.5 - 10	199 041 505	199 041 512	
25	20	0.5 - 10	199 041 506	199 041 513	
32	25	0.5 - 10	199 041 507	199 041 514	
40	32	0.5 - 10	199 041 508	199 041 515	
50	40	0.5 - 10	199 041 509	199 041 516	
63	50	0.5 - 10	199 041 510	199 041 517	

## PP-H metric

### Pressure retaining valve type V86 PP-H With fusion spigots metric



d [mm]	DN [mm]	Pressure range [bar]	EPDM Code	PTFE Code	
75	65	0.2 - 4	199 041 882	199 041 887	
75	65	1.0 - 6	199 041 883	199 041 888	
90	80	0.2 - 4	199 041 884	199 041 889	
90	80	1.0 - 6	199 041 885	199 041 890	
110	100	1.0 - 4	199 041 886	199 041 891	

### Pressure retaining valve type V186 PP-H With fusion spigots metric



d [mm]	DN [mm]	Pressure range [bar]	EPDM Code	PTFE Code	
16	10	0.5 - 10	199 041 386	199 041 316	
20	15	0.5 - 10	199 041 387	199 041 317	
25	20	0.5 - 10	199 041 388	199 041 318	
32	25	0.5 - 10	199 041 389	199 041 319	
40	32	0.5 - 10	199 041 390	199 041 320	
50	40	0.5 - 10	199 041 391	199 041 321	
63	50	0.5 - 10	199 041 392	199 041 322	

### Pressure retaining valve type V186 PP-H With butt fusion spigots IR metric



d [mm]	DN [mm]	Pressure range [bar]	EPDM Code	PTFE Code	
20	15	0.5 - 10	199 041 446	199 041 453	
25	20	0.5 - 10	199 041 447	199 041 454	
32	25	0.5 - 10	199 041 448	199 041 455	
40	32	0.5 - 10	199 041 449	199 041 456	
50	40	0.5 - 10	199 041 450	199 041 457	
63	50	0.5 - 10	199 041 451	199 041 458	

### Pressure retaining valve type V786 PP-H With fusion spigots metric



d [mm]	DN [mm]	Pressure range [bar]	EPDM Code	PTFE Code	
16	10	0.5 - 10	199 041 102	199 041 108	
20	15	0.5 - 10	199 041 103	199 041 109	
25	20	0.5 - 10	199 041 104	199 041 110	
32	25	0.5 - 10	199 041 105	199 041 111	
40	32	0.5 - 4	199 041 106	199 041 112	
50	40	0.5 - 4	199 041 107	199 041 113	

## PP-H metric

### Pressure retaining valve type V786 PP-H With butt fusion spigots IR metric



d [mm]	DN [mm]	Pressure range [bar]	EPDM Code	PTFE Code	
20	15	0.5 - 10	199 041 431	199 041 437	
25	20	0.5 - 10	199 041 432	199 041 438	
32	25	0.5 - 10	199 041 433	199 041 439	
40	32	0.5 - 4	199 041 434	199 041 440	
50	40	0.5 - 4	199 041 435	199 041 441	

## PP-H metric



### Gauge guard type Z700 PP-H With manometer 0-10 bar

d [mm]	PTFE Code	
25	199 041 002	
32	199 041 003	



### Gauge guard type Z700 PP-H With manometer 0-6 bar

d [mm]	PTFE Code	
25	199 041 294	
32	199 041 295	



### Gauge guard type Z701 PP-H Without manometer

d [mm]	PTFE Code	
25	199 041 008	
32	199 041 009	



### Ventilating and bleed valve type V91 PP-H With fusion spigots metric

d [mm]	DN [mm]	PN	FPM Code	
16	10	10	199 041 247	
20	15	10	199 041 248	
25	20	10	199 041 249	
32	25	10	199 041 250	
40	32	10	199 041 251	
50	40	10	199 041 252	
63	50	10	199 041 253	
75	65	10	199 041 254	
90	80	10	199 041 255	

## PP-H metric

### Ventilating valve type V95 PP-H With fusion spigots metric



d [mm]	DN [mm]	PN	FPM Code	
16	10	10	199 041 274	
20	15	10	199 041 275	
25	20	10	199 041 276	
32	25	10	199 041 277	
40	32	10	199 041 278	
50	40	10	199 041 279	
63	50	10	199 041 280	
75	65	10	199 041 281	
90	80	10	199 041 282	



### Throttle valve type V251 PP-H With fusion sockets metric

d [mm]	DN [mm]	PN	EPDM Code	FPM Code	
16	10	10	199 041 217	199 041 224	
20	15	10	199 041 218	199 041 225	
25	20	10	199 041 219	199 041 226	
32	25	10	199 041 220	199 041 227	
40	32	10	199 041 221	199 041 228	
50	40	10	199 041 222	199 041 229	
63	50	10	199 041 223	199 041 230	



### Water jet suction pump type P20 PP-H

- DN 10-20: BSP parallel female thread
- DN 25-50: Fusion socket metric
- DN 65-80: Fusion spigot metric

d [mm]	DN [mm]	PN	EPDM Code	
16	10	10	199 041 129	
20	15	10	199 041 130	
25	20	10	199 041 131	
32	25	10	199 041 132	
40	32	10	199 041 133	
50	40	10	199 041 134	
63	50	10	199 041 135	
75	65	10	199 041 136	
90	80	10	199 041 137	

## PP-H metric



# PROGEF® Natural metric

Page



Diaphragm valves pneumatic

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# PROGEF<sup>®</sup> Natural metric

## Diaphragm valves pneumatic



**PROGEF<sup>®</sup> Natural**  
**Diaphragm valve type DIASTAR 028**  
**Function FC (Fail safe to close)**  
**With butt fusion spigots metric**

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

\*PN: EPDM/PTFE

d [mm]	DN [mm]	PN [bar]		EPDM Code	PTFE/EPDM Code	
20	15	10 / 5	*	<b>199 028 521</b>	<b>199 028 551</b>	
25	20	10 / 7	*	<b>199 028 522</b>	<b>199 028 552</b>	
32	25	10 / 7	*	<b>199 028 523</b>	<b>199 028 553</b>	
40	32	10 / 7	*	<b>199 028 524</b>	<b>199 028 554</b>	
50	40	10 / 7	*	<b>199 028 525</b>	<b>199 028 555</b>	
63	50	10 / 7	*	<b>199 028 526</b>	<b>199 028 556</b>	

## PROGEF® Natural metric



### PROGEF® Natural Diaphragm valve type DIASTAR 025 Function FC (Fail safe to close) With butt fusion spigots metric

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

d [mm]	DN [mm]	PN	EPDM Code	PTFE/EPDM Code
20	15	10	199 027 521	199 027 551
25	20	10	199 027 522	199 027 552
32	25	10	199 027 523	199 027 553
40	32	10	199 027 524	199 027 554
50	40	10	199 027 525	199 027 555
63	50	10	199 027 526	199 027 556



### PROGEF® Natural Diaphragm valve type DIASTAR 025 Function FO (Fail safe to open) With butt fusion spigots metric

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

d [mm]	DN [mm]	PN	EPDM Code	PTFE/EPDM Code
20	15	10	199 027 531	199 027 561
25	20	10	199 027 532	199 027 562
32	25	10	199 027 533	199 027 563
40	32	10	199 027 534	199 027 564
50	40	10	199 027 535	199 027 565
63	50	10	199 027 536	199 027 566



### PROGEF® Natural Diaphragm valve type DIASTAR 025 Function DA (Double acting) With butt fusion spigots metric

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

d [mm]	DN [mm]	PN	EPDM Code	PTFE/EPDM Code
20	15	10	199 027 541	199 027 571
25	20	10	199 027 542	199 027 572
32	25	10	199 027 543	199 027 573
40	32	10	199 027 544	199 027 574
50	40	10	199 027 545	199 027 575
63	50	10	199 027 546	199 027 576

# PROGEF<sup>®</sup> Natural metric










## PROGEF<sup>®</sup> Natural Diaphragm valve type DIASTAR 025 Function FC (Fail safe to close) ZERO STATIC with butt fusion spigots metric

### Model:

- d20-d63 SDR11, d90-d110 SDR17,6
- With position indicator
- DN2: for coordination of accessoires

d [mm]	d1 [mm]	DN [mm]	DN1 [mm]	DN2 [mm]	PN	EPDM Code	PTFE Code
20	20	15	15	15	10	199 029 421	199 029 381
25	20	20	15	20	10	199 029 422	199 029 382
25	25	20	20	20	10	199 029 423	199 029 383
32	20	25	15	25	10	199 029 424	199 029 384
32	25	25	20	25	10	199 029 425	199 029 385
32	32	25	25	25	10	199 029 426	199 029 386
40	20	32	15	25	10	199 029 427	199 029 387
50	20	40	15	25	10	199 029 431	199 029 391
50	25	40	20	25	10	199 029 432	199 029 392
50	32	40	25	25	10	199 029 433	199 029 393
63	20	50	15	25	10	199 029 436	199 029 396
63	25	50	20	25	10	199 029 437	199 029 397
63	32	50	25	25	10	199 029 438	199 029 398
90	20	80	15	25	6	199 029 445	199 029 405
90	25	80	20	25	6	199 029 446	199 029 406
90	32	80	25	25	6	199 029 447	199 029 407
90	50	80	40	50	6	199 029 448	199 029 408
90	63	80	50	50	6	199 029 449	199 029 409
110	20	100	15	25	6	199 029 450	199 029 410
110	25	100	20	25	6	199 029 451	199 029 411
110	32	100	25	25	6	199 029 452	199 029 412
110	50	100	40	50	6	199 029 453	199 029 413
110	63	100	50	40	6	199 029 454	199 029 414

## SYGEF® standard metric

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# SYGEF® standard metric

## Ball valves electric



### SYGEF® Standard Ball valve type 107 100-230V With manual emergency override With fusion sockets 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	FPM Code	
16	10	10	199 107 802	
20	15	10	199 107 803	
25	20	10	199 107 804	
32	25	10	199 107 805	
40	32	10	199 107 806	
50	40	10	199 107 807	
63	50	10	199 107 808	



### 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	FPM Code	
16	10	10	199 107 812	
20	15	10	199 107 813	
25	20	10	199 107 814	
32	25	10	199 107 815	
40	32	10	199 107 816	
50	40	10	199 107 817	
63	50	10	199 107 818	

## SYGEF® standard metric



### 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	FPM Code	
20	15	½	10	199 107 843	
25	20	¾	10	199 107 844	
32	25	1	10	199 107 845	
40	32	1 ¼	10	199 107 846	
50	40	1 ½	10	199 107 847	
63	50	2	10	199 107 848	



### 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	FPM Code	
16	10	10	199 107 822	
20	15	10	199 107 823	
25	20	10	199 107 824	
32	25	10	199 107 825	
40	32	10	199 107 826	
50	40	10	199 107 827	
63	50	10	199 107 828	

## SYGEF® standard metric



### 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	FPM Code
16	10	10	199 107 832
20	15	10	199 107 833
25	20	10	199 107 834
32	25	10	199 107 835
40	32	10	199 107 836
50	40	10	199 107 837
63	50	10	199 107 838



### 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	FPM Code
20	15	½	10	199 107 853
25	20	¾	10	199 107 854
32	25	1	10	199 107 855
40	32	1 ¼	10	199 107 856
50	40	1 ½	10	199 107 857
63	50	2	10	199 107 858



## SYGEF® standard metric



### SYGEF® Standard Ball valve type 132 100-230V With manual emergency override With fusion sockets metric

**Model:**

- Built on with electric actuator EA21
- 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	FPM Code	
16	10	10	199 132 012	
20	15	10	199 132 013	
25	20	10	199 132 014	
32	25	10	199 132 015	
40	32	10	199 132 016	
50	40	10	199 132 017	
63	50	10	199 132 018	



### SYGEF® Standard Ball valve type 132 100-230V With manual emergency override With fusion spigots metric

**Model:**

- Built on with electric actuator EA21
- 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	FPM Code	
16	10	10	199 132 032	
20	15	10	199 132 033	
25	20	10	199 132 034	
32	25	10	199 132 035	
40	32	10	199 132 036	
50	40	10	199 132 037	
63	50	10	199 132 038	

## SYGEF® standard metric



### SYGEF® Standard Ball valve type 132 100-230V With manual emergency override With butt fusion spigots IR-Plus metric

**Model:**

- Built on with electric actuator EA21
- 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	FPM Code
20	15	10	199 132 113
25	20	10	199 132 114
32	25	10	199 132 115
40	32	10	199 132 116
50	40	10	199 132 117
63	50	10	199 132 118



### SYGEF® Standard Ball valve type 132 100-230V With manual emergency override With fixed flanges PVDF serrated metric

**Model:**

- Built on with electric actuator EA21
- 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	FPM Code
20	15	½	10	199 132 083
25	20	¾	10	199 132 084
32	25	1	10	199 132 085
40	32	1 ¼	10	199 132 086
50	40	1 ½	10	199 132 087
63	50	2	10	199 132 088

## SYGEF® standard metric



### SYGEF® Standard Ball valve type 132 24V With manual emergency override With fusion sockets metric

**Model:**

- Built on with electric actuator EA21
- 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	FPM Code	
16	10	10	199 132 052	
20	15	10	199 132 053	
25	20	10	199 132 054	
32	25	10	199 132 055	
40	32	10	199 132 056	
50	40	10	199 132 057	
63	50	10	199 132 058	



### SYGEF® Standard Ball valve type 132 24V With manual emergency override With fusion spigots metric

**Model:**

- Built on with electric actuator EA21
- 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	FPM Code	
16	10	10	199 132 072	
20	15	10	199 132 073	
25	20	10	199 132 074	
32	25	10	199 132 075	
40	32	10	199 132 076	
50	40	10	199 132 077	
63	50	10	199 132 078	

## SYGEF® standard metric



### SYGEF® Standard Ball valve type 132 24V With manual emergency override With butt fusion spigots IR-Plus metric

**Model:**

- Built on with electric actuator EA21
- 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	FPM Code	
20	15	10	199 132 153	
25	20	10	199 132 154	
32	25	10	199 132 155	
40	32	10	199 132 156	
50	40	10	199 132 157	
63	50	10	199 132 158	



### SYGEF® Standard Ball valve type 132 24V With manual emergency override With fixed flanges PVDF serrated metric

**Model:**

- Built on with electric actuator EA21
- 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	FPM Code	
20	15	½	10	199 132 093	
25	20	¾	10	199 132 094	
32	25	1	10	199 132 095	
40	32	1 ¼	10	199 132 096	
50	40	1 ½	10	199 132 097	
63	50	2	10	199 132 098	

## SYGEF® standard metric



### SYGEF® Standard 3-Way ball valve type 177 Horizontal/L-port 100-230V With manual emergency override With fusion sockets

#### Model:

- Built on with electric actuator EA21
- 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

d [mm]	DN [mm]	PN	FPM Code	
16	10	10	199 177 092	
20	15	10	199 177 093	
25	20	10	199 177 094	
32	25	10	199 177 095	
40	32	10	199 177 096	
50	40	10	199 177 097	
63	50	10	199 177 098	



### SYGEF® Standard 3-Way ball valve type 177 Horizontal/L-port 100-230V With manual emergency override With butt fusion spigots IR metric

#### Model:

- Built on with electric actuator EA21
- 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

d [mm]	DN [mm]	PN	FPM Code	
16	10	10	199 177 052	
20	15	10	199 177 053	
25	20	10	199 177 054	
32	25	10	199 177 055	
40	32	10	199 177 056	
50	40	10	199 177 057	
63	50	10	199 177 058	

## SYGEF® standard metric



### SYGEF® Standard 3-Way ball valve type 177 Horizontal/L-port 100-230V With manual emergency override With socket fusion spigots

**Model:**

- Built on with electric actuator EA21
- 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

d [mm]	DN [mm]	PN	FPM Code	
16	10	10	199 177 012	
20	15	10	199 177 013	
25	20	10	199 177 014	
32	25	10	199 177 015	
40	32	10	199 177 016	
50	40	10	199 177 017	
63	50	10	199 177 018	



### SYGEF® Standard 3-Way ball valve type 177 Horizontal/L-port 24V With manual emergency override With fusion sockets

**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

d [mm]	DN [mm]	PN	FPM Code	
16	10	10	199 177 212	
20	15	10	199 177 213	
25	20	10	199 177 214	
32	25	10	199 177 215	
40	32	10	199 177 216	
50	40	10	199 177 217	
63	50	10	199 177 218	

## SYGEF® standard metric



**SYGEF® Standard**  
**3-Way ball valve type 177**  
**Horizontal/L-port 24V**  
**With manual emergency override**  
**With butt fusion spigots IR 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

d [mm]	DN [mm]	PN	FPM Code
16	10	10	199 177 172
20	15	10	199 177 173
25	20	10	199 177 174
32	25	10	199 177 175
40	32	10	199 177 176
50	40	10	199 177 177
63	50	10	199 177 178



**SYGEF® Standard**  
**3-Way ball valve type 177**  
**Horizontal/L-port 24V**  
**With manual emergency override**  
**With socket fusion spigots**

**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

d [mm]	DN [mm]	PN	FPM Code
16	10	10	199 177 132
20	15	10	199 177 133
25	20	10	199 177 134
32	25	10	199 177 135
40	32	10	199 177 136
50	40	10	199 177 137
63	50	10	199 177 138

## SYGEF® standard metric



### SYGEF® Standard 3-Way ball valve type 177 Horizontal/T-port 100-230V With manual emergency override With fusion sockets

**Model:**

- Built on with electric actuator EA21
- 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

d [mm]	DN [mm]	PN	FPM Code	
16	10	10	199 177 112	
20	15	10	199 177 113	
25	20	10	199 177 114	
32	25	10	199 177 115	
40	32	10	199 177 116	
50	40	10	199 177 117	
63	50	10	199 177 118	



### SYGEF® Standard 3-Way ball valve type 177 Horizontal/T-port 100-230V With manual emergency override With butt fusion spigots IR metric

**Model:**

- Built on with electric actuator EA21
- 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

d [mm]	DN [mm]	PN	FPM Code	
16	10	10	199 177 072	
20	15	10	199 177 073	
25	20	10	199 177 074	
32	25	10	199 177 075	
40	32	10	199 177 076	
50	40	10	199 177 077	
63	50	10	199 177 078	



## SYGEF® standard metric



### SYGEF® Standard 3-Way ball valve type 177 Horizontal/T-port 100-230V With manual emergency override With socket fusion spigots

**Model:**

- Built on with electric actuator EA21
- 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

d [mm]	DN [mm]	PN	FPM Code	
16	10	10	199 177 032	
20	15	10	199 177 033	
25	20	10	199 177 034	
32	25	10	199 177 035	
40	32	10	199 177 036	
50	40	10	199 177 037	
63	50	10	199 177 038	



### SYGEF® Standard 3-Way ball valve type 177 Horizontal/T-port 24V With manual emergency override With fusion sockets

**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

d [mm]	DN [mm]	PN	FPM Code	
16	10	10	199 177 232	
20	15	10	199 177 233	
25	20	10	199 177 234	
32	25	10	199 177 235	
40	32	10	199 177 236	
50	40	10	199 177 237	
63	50	10	199 177 238	

## SYGEF® standard metric



### SYGEF® Standard 3-Way ball valve type 177 Horizontal/T-port 24V With manual emergency override With butt fusion spigots IR 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

d [mm]	DN [mm]	PN	FPM Code
16	10	10	199 177 192
20	15	10	199 177 193
25	20	10	199 177 194
32	25	10	199 177 195
40	32	10	199 177 196
50	40	10	199 177 197
63	50	10	199 177 198



### SYGEF® Standard 3-Way ball valve type 177 Horizontal/T-port 24V With manual emergency override With socket fusion spigots

**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

d [mm]	DN [mm]	PN	FPM Code
16	10	10	199 177 152
20	15	10	199 177 153
25	20	10	199 177 154
32	25	10	199 177 155
40	32	10	199 177 156
50	40	10	199 177 157
63	50	10	199 177 158

# SYGEF® standard metric

## Ball valves pneumatic



### SYGEF® Standard Ball valve type 232 Function FC (Fail safe to close) 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	FPM Code	
16	10	10	199 232 012	
20	15	10	199 232 013	
25	20	10	199 232 014	
32	25	10	199 232 015	
40	32	10	199 232 016	
50	40	10	199 232 017	
63	50	10	199 232 018	



### 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	FPM Code	
16	10	10	199 232 032	
20	15	10	199 232 033	
25	20	10	199 232 034	
32	25	10	199 232 035	
40	32	10	199 232 036	
50	40	10	199 232 037	
63	50	10	199 232 038	

## SYGEF® standard metric



### SYGEF® Standard Ball valve type 232 Function FC (Fail safe to close) With manual override With butt fusion spigots IR-Plus 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	FPM Code	
20	15	10	199 232 713	
25	20	10	199 232 714	
32	25	10	199 232 715	
40	32	10	199 232 716	
50	40	10	199 232 717	
63	50	10	199 232 718	



### 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	FPM Code	
20	15	½	10	199 232 003	
25	20	¾	10	199 232 004	
32	25	1	10	199 232 005	
40	32	1 ¼	10	199 232 006	
50	40	1 ½	10	199 232 007	
63	50	2	10	199 232 008	

## SYGEF® standard metric



### 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)

d [mm]	DN [mm]	PN	FPM Code	
16	10	10	199 232 052	
20	15	10	199 232 053	
25	20	10	199 232 054	
32	25	10	199 232 055	
40	32	10	199 232 056	
50	40	10	199 232 057	
63	50	10	199 232 058	



### 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	FPM Code	
16	10	10	199 232 072	
20	15	10	199 232 073	
25	20	10	199 232 074	
32	25	10	199 232 075	
40	32	10	199 232 076	
50	40	10	199 232 077	
63	50	10	199 232 078	

## SYGEF® standard metric



### SYGEF® Standard Ball valve type 232 Function FO (Fail safe to open) With manual override With butt fusion spigots IR-Plus 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	FPM Code	
20	15	10	199 232 753	
25	20	10	199 232 754	
32	25	10	199 232 755	
40	32	10	199 232 756	
50	40	10	199 232 757	
63	50	10	199 232 758	



### 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	FPM Code	
20	15	½	10	199 232 023	
25	20	¾	10	199 232 024	
32	25	1	10	199 232 025	
40	32	1 ¼	10	199 232 026	
50	40	1 ½	10	199 232 027	
63	50	2	10	199 232 028	

## SYGEF® standard metric



### 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	FPM Code	
16	10	10	199 232 092	
20	15	10	199 232 093	
25	20	10	199 232 094	
32	25	10	199 232 095	
40	32	10	199 232 096	
50	40	10	199 232 097	
63	50	10	199 232 098	



### 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	FPM Code	
16	10	10	199 232 112	
20	15	10	199 232 113	
25	20	10	199 232 114	
32	25	10	199 232 115	
40	32	10	199 232 116	
50	40	10	199 232 117	
63	50	10	199 232 118	

## SYGEF® standard metric



### SYGEF® Standard Ball valve type 232 Function DA (Double acting) With manual override With butt fusion spigots IR-Plus 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	FPM Code	
20	15	10	199 232 793	
25	20	10	199 232 794	
32	25	10	199 232 795	
40	32	10	199 232 796	
50	40	10	199 232 797	
63	50	10	199 232 798	



### 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	FPM Code	
20	15	½	10	199 232 043	
25	20	¾	10	199 232 044	
32	25	1	10	199 232 045	
40	32	1 ¼	10	199 232 046	
50	40	1 ½	10	199 232 047	
63	50	2	10	199 232 048	



## SYGEF<sup>®</sup> standard metric



### SYGEF<sup>®</sup> 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	FPM Code	
16	10	10	199 232 132	
20	15	10	199 232 133	
25	20	10	199 232 134	
32	25	10	199 232 135	
40	32	10	199 232 136	
50	40	10	199 232 137	
63	50	10	199 232 138	



### SYGEF<sup>®</sup> 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	FPM Code	
16	10	10	199 232 152	
20	15	10	199 232 153	
25	20	10	199 232 154	
32	25	10	199 232 155	
40	32	10	199 232 156	
50	40	10	199 232 157	
63	50	10	199 232 158	

## SYGEF® standard metric



### SYGEF® Standard Ball valve type 232 Function FC (Fail safe to close) Without manual override With butt fusion spigots IR-Plus 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	FPM Code	
20	15	10	199 232 833	
25	20	10	199 232 834	
32	25	10	199 232 835	
40	32	10	199 232 836	
50	40	10	199 232 837	
63	50	10	199 232 838	



### 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	FPM Code	
20	15	½	10	199 232 063	
25	20	¾	10	199 232 064	
32	25	1	10	199 232 065	
40	32	1 ¼	10	199 232 066	
50	40	1 ½	10	199 232 067	
63	50	2	10	199 232 068	

## SYGEF® standard metric



### 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	FPM Code	
16	10	10	199 232 172	
20	15	10	199 232 173	
25	20	10	199 232 174	
32	25	10	199 232 175	
40	32	10	199 232 176	
50	40	10	199 232 177	
63	50	10	199 232 178	



### 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	FPM Code	
16	10	10	199 232 192	
20	15	10	199 232 193	
25	20	10	199 232 194	
32	25	10	199 232 195	
40	32	10	199 232 196	
50	40	10	199 232 197	
63	50	10	199 232 198	

## SYGEF® standard metric



### SYGEF® Standard Ball valve type 232 Function FO (Fail safe to open) Without manual override With butt fusion spigots IR-Plus 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	FPM Code	
20	15	10	199 232 873	
25	20	10	199 232 874	
32	25	10	199 232 875	
40	32	10	199 232 876	
50	40	10	199 232 877	
63	50	10	199 232 878	



### 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	FPM Code	
20	15	½	10	199 232 083	
25	20	¾	10	199 232 084	
32	25	1	10	199 232 085	
40	32	1 ¼	10	199 232 086	
50	40	1 ½	10	199 232 087	
63	50	2	10	199 232 088	

## SYGEF® standard metric



### 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	FPM Code	
16	10	10	199 232 212	
20	15	10	199 232 213	
25	20	10	199 232 214	
32	25	10	199 232 215	
40	32	10	199 232 216	
50	40	10	199 232 217	
63	50	10	199 232 218	



### 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	FPM Code	
16	10	10	199 232 232	
20	15	10	199 232 233	
25	20	10	199 232 234	
32	25	10	199 232 235	
40	32	10	199 232 236	
50	40	10	199 232 237	
63	50	10	199 232 238	

## SYGEF® standard metric



### SYGEF® Standard Ball valve type 232 Function DA (Double acting) Without manual override With butt fusion spigots IR-Plus 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	FPM Code	
20	15	10	199 232 913	
25	20	10	199 232 914	
32	25	10	199 232 915	
40	32	10	199 232 916	
50	40	10	199 232 917	
63	50	10	199 232 918	



### 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	FPM Code	
20	15	½	10	199 232 103	
25	20	¾	10	199 232 104	
32	25	1	10	199 232 105	
40	32	1 ¼	10	199 232 106	
50	40	1 ½	10	199 232 107	
63	50	2	10	199 232 108	

## SYGEF® standard metric



### SYGEF® Standard 3-Way ball valve type 277 Horizontal/L-port Without manual override With fusion sockets

#### Model:

- Built on with pneumatic actuator PA11/21
- Actuator fails safe to the closed position FC
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90°<) 1-3 s

d [mm]	DN [mm]	PN	FPM Code	
16	10	10	199 277 092	
20	15	10	199 277 093	
25	20	10	199 277 094	
32	25	10	199 277 095	
40	32	10	199 277 096	
50	40	10	199 277 097	
63	50	10	199 277 098	



### SYGEF® Standard 3-Way ball valve type 277 Horizontal/L-port Without manual override With butt fusion spigots IR metric

#### Model:

- Built on with pneumatic actuator PA11/21
- Actuator fails safe to the closed position FC
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90°<) 1-3 s

d [mm]	DN [mm]	PN	FPM Code	
16	10	10	199 277 052	
20	15	10	199 277 053	
25	20	10	199 277 054	
32	25	10	199 277 055	
40	32	10	199 277 056	
50	40	10	199 277 057	
63	50	10	199 277 058	

# SYGEF<sup>®</sup> standard metric



## SYGEF<sup>®</sup> Standard 3-Way ball valve type 277 Horizontal/L-port Without manual override With socket fusion spigots

### Model:

- Built on with pneumatic actuator PA11/21
- Actuator fails safe to the closed position FC
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90°<) 1-3 s

d [mm]	DN [mm]	PN	FPM Code	
16	10	10	<b>199 277 012</b>	
20	15	10	<b>199 277 013</b>	
25	20	10	<b>199 277 014</b>	
32	25	10	<b>199 277 015</b>	
40	32	10	<b>199 277 016</b>	
50	40	10	<b>199 277 017</b>	
63	50	10	<b>199 277 018</b>	



## SYGEF® standard metric



### SYGEF® Standard 3-Way ball valve type 277 Horizontal/L-port DA (Double acting) Without manual override With fusion sockets

#### Model:

- Built on with pneumatic actuator PA11/21
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90°<) 1-3 s

d [mm]	DN [mm]	PN	FPM Code	
16	10	10	199 277 212	
20	15	10	199 277 213	
25	20	10	199 277 214	
32	25	10	199 277 215	
40	32	10	199 277 216	
50	40	10	199 277 217	
63	50	10	199 277 218	



### SYGEF® Standard 3-Way ball valve type 277 Horizontal/L-port DA (Double acting) Without manual override With butt fusion spigots IR metric

#### Model:

- Built on with pneumatic actuator PA11/21
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90°<) 1-3 s

d [mm]	DN [mm]	PN	FPM Code	
16	10	10	199 277 172	
20	15	10	199 277 173	
25	20	10	199 277 174	
32	25	10	199 277 175	
40	32	10	199 277 176	
50	40	10	199 277 177	
63	50	10	199 277 178	

# SYGEF® standard metric



**SYGEF® Standard**  
**3-Way ball valve type 277**  
**Horizontal/L-port DA (Double acting)**  
**Without manual override**  
**With socket fusion spigots**

**Model:**

- Built on with pneumatic actuator PA11/21
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90°<) 1-3 s

d [mm]	DN [mm]	PN	FPM Code	
16	10	10	<b>199 277 132</b>	
20	15	10	<b>199 277 133</b>	
25	20	10	<b>199 277 134</b>	
32	25	10	<b>199 277 135</b>	
40	32	10	<b>199 277 136</b>	
50	40	10	<b>199 277 137</b>	
63	50	10	<b>199 277 138</b>	

## SYGEF® standard metric



### SYGEF® Standard 3-Way ball valve type 277 Horizontal/T-port Without manual override With fusion sockets

#### Model:

- Built on with pneumatic actuator PA11/21
- Actuator fails safe to the closed position FC
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90°<) 1-3 s

d [mm]	DN [mm]	PN	FPM Code	
16	10	10	199 277 112	
20	15	10	199 277 113	
25	20	10	199 277 114	
32	25	10	199 277 115	
40	32	10	199 277 116	
50	40	10	199 277 117	
63	50	10	199 277 118	



### SYGEF® Standard 3-Way ball valve type 277 Horizontal/T-port Without manual override With butt fusion spigots IR metric

#### Model:

- Built on with pneumatic actuator PA11/21
- Actuator fails safe to the closed position FC
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90°<) 1-3 s

d [mm]	DN [mm]	PN	FPM Code	
16	10	10	199 277 072	
20	15	10	199 277 073	
25	20	10	199 277 074	
32	25	10	199 277 075	
40	32	10	199 277 076	
50	40	10	199 277 077	
63	50	10	199 277 078	

# SYGEF® standard metric



## SYGEF® Standard 3-Way ball valve type 277 Horizontal/T-port Without manual override With socket fusion spigots

### Model:

- Built on with pneumatic actuator PA11/21
- Actuator fails safe to the closed position FC
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90°<) 1-3 s

d [mm]	DN [mm]	PN	FPM Code	
16	10	10	199 277 032	
20	15	10	199 277 033	
25	20	10	199 277 034	
32	25	10	199 277 035	
40	32	10	199 277 036	
50	40	10	199 277 037	
63	50	10	199 277 038	

## SYGEF® standard metric



### SYGEF® Standard 3-Way ball valve type 277 Horizontal/T-port DA (Double acting) Without manual override With fusion sockets

#### Model:

- Built on with pneumatic actuator PA11/21
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90°<) 1-3 s

d [mm]	DN [mm]	PN	FPM Code	
16	10	10	199 277 232	
20	15	10	199 277 233	
25	20	10	199 277 234	
32	25	10	199 277 235	
40	32	10	199 277 236	
50	40	10	199 277 237	
63	50	10	199 277 238	



### SYGEF® Standard 3-Way ball valve type 277 Horizontal/T-port DA (Double acting) Without manual override With butt fusion spigots IR metric

#### Model:

- Built on with pneumatic actuator PA11/21
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90°<) 1-3 s

d [mm]	DN [mm]	PN	FPM Code	
16	10	10	199 277 192	
20	15	10	199 277 193	
25	20	10	199 277 194	
32	25	10	199 277 195	
40	32	10	199 277 196	
50	40	10	199 277 197	
63	50	10	199 277 198	

# SYGEF® standard metric



**SYGEF® Standard**  
**3-Way ball valve type 277**  
**Horizontal/T-port DA (Double acting)**  
**Without manual override**  
**With socket fusion spigots**

**Model:**

- Built on with pneumatic actuator PA11/21
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90°<) 1-3 s

<b>d</b> [mm]	<b>DN</b> [mm]	<b>PN</b>	<b>FPM</b> <b>Code</b>	
16	10	10	<b>199 277 152</b>	
20	15	10	<b>199 277 153</b>	
25	20	10	<b>199 277 154</b>	
32	25	10	<b>199 277 155</b>	
40	32	10	<b>199 277 156</b>	
50	40	10	<b>199 277 157</b>	
63	50	10	<b>199 277 158</b>	

## SYGEF® standard metric

### Diaphragm valves pneumatic



#### SYGEF® Standard

Diaphragm valve type DIASTAR 028

Function FC (Fail safe to close)

With fusion spigots metric

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

d [mm]	DN [mm]	PN	PTFE/EPDM Code
20	15	5	199 028 321
25	20	7	199 028 322
32	25	7	199 028 323
40	32	7	199 028 324
50	40	7	199 028 325
63	50	7	199 028 326



#### SYGEF® Standard

Diaphragm valve type DIASTAR 028

Function FC (Fail safe to close)

With butt fusion spigots IR metric

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

d [mm]	DN [mm]	PN	PTFE/EPDM Code
20	15	5	199 028 961
25	20	7	199 028 962
32	25	7	199 028 963
40	32	7	199 028 964
50	40	7	199 028 965
63	50	7	199 028 966



#### SYGEF® Standard

Diaphragm valve type DIASTAR 028

Function FC (Fail safe to close)

Unions with fusion sockets metric

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

d [mm]	DN [mm]	PN	PTFE/EPDM Code
20	15	5	199 028 193
25	20	7	199 028 194
32	25	7	199 028 195
40	32	7	199 028 196
50	40	7	199 028 197
63	50	7	199 028 198

## SYGEF® standard metric



### SYGEF® Standard Diaphragm valve type DIASTAR 028 Function FC (Fail safe to close) Unions with butt fusion spigots IR metric

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

d [mm]	DN [mm]	PN	PTFE/EPDM Code	
20	15	5	199 028 491	
25	20	7	199 028 492	
32	25	7	199 028 493	
40	32	7	199 028 494	
50	40	7	199 028 495	
63	50	7	199 028 496	



### SYGEF® Standard Diaphragm valve type DIASTAR 028 Function FC (Fail safe to close) With backing flanges PP-V metric

**Model:**

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

d [mm]	DN [mm]	Inch	PN	PTFE/EPDM Code	
20	15	½	5	199 028 351	
25	20	¾	7	199 028 352	
32	25	1	7	199 028 353	
40	32	1 ¼	7	199 028 354	
50	40	1 ½	7	199 028 355	
63	50	2	7	199 028 356	



## SYGEF® standard metric



### SYGEF® Standard Diaphragm valve type DIASTAR 025 Function FC (Fail safe to close) With fusion spigots metric

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

d [mm]	DN [mm]	PN	PTFE/EPDM Code
20	15	10	199 025 321
25	20	10	199 025 322
32	25	10	199 025 323
40	32	10	199 025 324
50	40	10	199 025 325
63	50	10	199 025 326



### SYGEF® Standard Diaphragm valve type DIASTAR 025 Function FC (Fail safe to close) With butt fusion spigots IR metric

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

d [mm]	DN [mm]	PN	PTFE/EPDM Code
20	15	10	199 027 971
25	20	10	199 027 972
32	25	10	199 027 973
40	32	10	199 027 974
50	40	10	199 027 975
63	50	10	199 027 976



### SYGEF® Standard Diaphragm valve type DIASTAR 025 Function FC (Fail safe to close) Unions with fusion sockets metric

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

d [mm]	DN [mm]	PN	PTFE/EPDM Code
20	15	10	199 027 321
25	20	10	199 027 322
32	25	10	199 027 323
40	32	10	199 027 324
50	40	10	199 027 325
63	50	10	199 027 326

## SYGEF® standard metric



### SYGEF® Standard Diaphragm valve type DIASTAR 025 Function FC (Fail safe to close) Unions with butt fusion spigots IR metric

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

d [mm]	DN [mm]	PN	PTFE/EPDM Code
20	15	10	199 027 491
25	20	10	199 027 492
32	25	10	199 027 493
40	32	10	199 027 494
50	40	10	199 027 495
63	50	10	199 027 496



### SYGEF® Standard Diaphragm valve type DIASTAR 025 Function FC (Fail safe to close) With backing flanges PP-V metric

#### Model:

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

d [mm]	DN [mm]	Inch	PN	PTFE/EPDM Code
20	15	½	10	199 025 351
25	20	¾	10	199 025 352
32	25	1	10	199 025 353
40	32	1 ¼	10	199 025 354
50	40	1 ½	10	199 025 355
63	50	2	10	199 025 356



### SYGEF® Standard Diaphragm valve type DIASTAR 025 Function FC (Fail safe to close) With fixed flanges PVDF metric

#### Model:

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

\* With backing flanges PP-V

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

d [mm]	DN [mm]	Inch	PN	PTFE/EPDM Code
*75	65	2 ½	10	199 025 357
**90	80	3	10	199 025 358
110	100	4	8	199 025 359

## SYGEF® standard metric



### SYGEF® Standard Diaphragm valve type DIASTAR 025 Function FO (Fail safe to open) With fusion spigots metric

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

d [mm]	DN [mm]	PN	PTFE/EPDM Code
20	15	10	199 025 331
25	20	10	199 025 332
32	25	10	199 025 333
40	32	10	199 025 334
50	40	10	199 025 335
63	50	10	199 025 336



### SYGEF® Standard Diaphragm valve type DIASTAR 025 Function FO (Fail safe to open) With butt fusion spigots IR metric

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

d [mm]	DN [mm]	PN	PTFE/EPDM Code
20	15	10	199 027 977
25	20	10	199 027 978
32	25	10	199 027 979
40	32	10	199 027 980
50	40	10	199 027 981
63	50	10	199 027 982



### SYGEF® Standard Diaphragm valve type DIASTAR 025 Function FO (Fail safe to open) Unions with fusion sockets metric

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

d [mm]	DN [mm]	PN	PTFE/EPDM Code
20	15	10	199 027 331
25	20	10	199 027 332
32	25	10	199 027 333
40	32	10	199 027 334
50	40	10	199 027 335
63	50	10	199 027 336

## SYGEF® standard metric



### SYGEF® Standard Diaphragm valve type DIASTAR 025 Function FO (Fail safe to open) Unions with butt fusion spigots IR metric

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

d [mm]	DN [mm]	PN	PTFE/EPDM Code
20	15	10	199 027 501
25	20	10	199 027 502
32	25	10	199 027 503
40	32	10	199 027 504
50	40	10	199 027 505
63	50	10	199 027 506



### SYGEF® Standard Diaphragm valve type DIASTAR 025 Function FO (Fail safe to open) With backing flanges PP-V metric

#### Model:

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

d [mm]	DN [mm]	Inch	PN	PTFE/EPDM Code
20	15	½	10	199 025 361
25	20	¾	10	199 025 362
32	25	1	10	199 025 363
40	32	1 ¼	10	199 025 364
50	40	1 ½	10	199 025 365
63	50	2	10	199 025 366



### SYGEF® Standard Diaphragm valve type DIASTAR 025 Function FO (Fail safe to open) With fixed flanges PVDF metric

#### Model:

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

\* With backing flanges PP-V

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

d [mm]	DN [mm]	Inch	PN	PTFE/EPDM Code
*75	65	2 ½	10	199 025 367
**90	80	3	10	199 025 368
110	100	4	8	199 025 369
**160	150	6	6	199 025 370

## SYGEF® standard metric



### SYGEF® Standard Diaphragm valve type DIASTAR 025 Function DA (Double acting) With fusion spigots metric

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

d [mm]	DN [mm]	PN	PTFE/EPDM Code
20	15	10	199 025 341
25	20	10	199 025 342
32	25	10	199 025 343
40	32	10	199 025 344
50	40	10	199 025 345
63	50	10	199 025 346



### SYGEF® Standard Diaphragm valve type DIASTAR 025 Function DA (Double acting) With butt fusion spigots IR metric

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

d [mm]	DN [mm]	PN	PTFE/EPDM Code
20	15	10	199 027 983
25	20	10	199 027 984
32	25	10	199 027 985
40	32	10	199 027 986
50	40	10	199 027 987
63	50	10	199 027 988



### SYGEF® Standard Diaphragm valve type DIASTAR 025 Function DA (Double acting) Unions with fusion sockets metric

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

d [mm]	DN [mm]	PN	PTFE/EPDM Code
20	15	10	199 027 341
25	20	10	199 027 342
32	25	10	199 027 343
40	32	10	199 027 344
50	40	10	199 027 345
63	50	10	199 027 346

## SYGEF® standard metric



### SYGEF® Standard Diaphragm valve type DIASTAR 025 Function DA (Double acting) Unions with butt fusion spigots IR metric

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

d [mm]	DN [mm]	PN	PTFE/EPDM Code
20	15	10	199 027 511
25	20	10	199 027 512
32	25	10	199 027 513
40	32	10	199 027 514
50	40	10	199 027 515
63	50	10	199 027 516



### SYGEF® Standard Diaphragm valve type DIASTAR 025 Function DA (Double acting) With backing flanges PP-V metric

#### Model:

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

d [mm]	DN [mm]	Inch	PN	PTFE/EPDM Code
20	15	½	10	199 025 371
25	20	¾	10	199 025 372
32	25	1	10	199 025 373
40	32	1 ¼	10	199 025 374
50	40	1 ½	10	199 025 375
63	50	2	10	199 025 376



### SYGEF® Standard Diaphragm valve type DIASTAR 025 Function DA (Double acting) With fixed flanges PVDF metric

#### Model:

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

\* With backing flanges PP-V

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

d [mm]	DN [mm]	Inch	PN	PTFE/EPDM Code
*75	65	2 ½	10	199 025 377
**90	80	3	10	199 025 378
110	100	4	8	199 025 379
**160	150	6	6	199 025 380

## SYGEF® standard metric

### Butterfly valves electric metric/ANSI/JIS



#### SYGEF® Standard Butterfly valve type 567 PVDF Bare shaft



**Model:**

- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, ANSI/ASME B 16.5 Class 150, BS 1560: 1989, BS 4504, JIS B 2220
- Overall length according to EN 558-1, ISO 5752
- Interface F07 for the dimensions DN50-200 according to DIN/ISO 5211
- Interface F10 for the dimensions DN250-300 according to DIN/ISO 5211

d [mm]	DN [mm]	Inch	PN	FPM Code	
63	50	2	10	175 567 822	
75	65	2 ½	10	175 567 823	
90	80	3	10	175 567 824	
110	100	4	10	175 567 825	
140	125	5	10	175 567 826	
160	150	6	10	175 567 827	
225	200	8	10	175 567 828	
280	250	10	10	175 567 829	
315	300	12	10	175 567 830	



#### SYGEF® Standard Butterfly valve type 140 100-230V Without manual override



**Model:**

- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, ANSI/ASME B 16.5 Class 150, BS 1560: 1989, BS 4504, JIS B 2220
- Overall length according to EN 558-1, ISO 5752
- Voltage 100-230 V, 50-60 Hz
- Control time 15 s/90°<) EA31
- Control time 25s/90°<) EA42
- Control range 90°<)
- Actuator with integrated emergency manual override standard
- The dimension DN300 on request

d [mm]	DN [mm]	Inch	PN	FPM Code	
63	50	2	10	199 140 582	
75	65	2 ½	10	199 140 583	
90	80	3	10	199 140 584	
110	100	4	10	199 140 585	
140	125	5	10	199 140 586	
160	150	6	10	199 140 587	
225	200	8	10	199 140 588	
280	250	10	6	199 140 589	

## SYGEF® standard metric



### SYGEF® Standard Butterfly valve type 140 100-230V With manual override



**Model:**

- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, ANSI/ASME B 16.5 Class 150, BS 1560: 1989, BS 4504, JIS B 2220
- Overall length according to EN 558-1, ISO 5752
- Voltage 100-230 V, 50-60 Hz
- Control time 15 s/90°<) EA31
- Control time 25s/90°<) EA42
- Control range 90°<)
- Actuator with integrated emergency manual override standard

d [mm]	DN [mm]	Inch	PN	FPM Code
63	50	2	10	<b>199 140 562</b>
75	65	2 ½	10	<b>199 140 563</b>
90	80	3	10	<b>199 140 564</b>
110	100	4	10	<b>199 140 565</b>
140	125	5	10	<b>199 140 566</b>
160	150	6	10	<b>199 140 567</b>
225	200	8	10	<b>199 140 568</b>



### SYGEF® Standard Butterfly valve type 140 24V Without manual override



**Model:**

- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, ANSI/ASME B 16.5 Class 150, BS 1560: 1989, BS 4504, JIS B 2220
- Overall length according to EN 558-1, ISO 5752
- Voltage 24 V AC/DC
- Control time 15 s/90°<) EA31
- Control time 25s/90°<) EA42
- Control range 90°<)
- Actuator with integrated emergency manual override standard
- The dimension DN300 on request

d [mm]	DN [mm]	Inch	PN	FPM Code
63	50	2	10	<b>199 140 622</b>
75	65	2 ½	10	<b>199 140 623</b>
90	80	3	10	<b>199 140 624</b>
110	100	4	10	<b>199 140 625</b>
140	125	5	10	<b>199 140 626</b>
160	150	6	10	<b>199 140 627</b>
225	200	8	10	<b>199 140 628</b>
280	250	10	6	<b>199 140 629</b>



# SYGEF® standard metric

## SYGEF® Standard Butterfly valve type 140 24V With manual override



### Model:

- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, ANSI/ASME B 16.5 Class 150, BS 1560: 1989, BS 4504, JIS B 2220
- Overall length according to EN 558-1, ISO 5752
- Voltage 24 V AC/DC
- Control time 15 s/90°<) EA31
- Control time 25s/90°<) EA42
- Control range 90°<)
- Actuator with integrated emergency manual override standard

d [mm]	DN [mm]	Inch	PN	FPM Code	
63	50	2	10	<b>199 140 602</b>	
75	65	2 ½	10	<b>199 140 603</b>	
90	80	3	10	<b>199 140 604</b>	
110	100	4	10	<b>199 140 605</b>	
140	125	5	10	<b>199 140 606</b>	
160	150	6	10	<b>199 140 607</b>	
225	200	8	10	<b>199 140 608</b>	

## SYGEF® standard metric



### SYGEF® Standard Lugstyle butterfly valve type 568 PVDF Bare shaft



**Model:**

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension: ISO 7005 PN10, EN 1092 PN10, DIN 2501 PN10
- Overall length according to EN 558-1, ISO 5752
- Interface F07 according to DIN/ISO 5211

d [mm]	DN [mm]	Inch	PN	FPM Code	
63	50	2	10	<b>175 568 822</b>	
75	65	2 ½	10	<b>175 568 823</b>	
90	80	3	10	<b>175 568 824</b>	
110	100	4	10	<b>175 568 825</b>	
140	125	5	10	<b>175 568 826</b>	
160	150	6	10	<b>175 568 827</b>	
225	200	8	10	<b>175 568 828</b>	



### SYGEF® Standard Lugstyle butterfly valve type 141 100-230V Without manual override



**Model:**

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension: ISO 7005 PN10, EN 1092 PN10, DIN 2501 PN10
- Overall length according to EN 558-1, ISO 5752
- Voltage 100-230 V, 50-60 Hz
- Control time 15 s/90°<) EA31
- Control time 25s/90°<) EA42
- Control range 90°<)
- Actuator with integrated emergency manual override standard

d [mm]	DN [mm]	Inch	PN	FPM Code	
63	50	2	10	<b>199 141 582</b>	
75	65	2 ½	10	<b>199 141 583</b>	
90	80	3	10	<b>199 141 584</b>	
110	100	4	10	<b>199 141 585</b>	
140	125	5	10	<b>199 141 586</b>	
160	150	6	10	<b>199 141 587</b>	
225	200	8	10	<b>199 141 588</b>	

## SYGEF® standard metric



### SYGEF® Standard Lugstyle butterfly valve type 141 100-230V With manual override



**Model:**

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension: ISO 7005 PN10, EN 1092 PN10, DIN 2501 PN10
- Overall length according to EN 558-1, ISO 5752
- Voltage 100-230 V, 50-60 Hz
- Control time 15 s/90°<) EA31
- Control time 25s/90°<) EA42
- Control range 90°<)
- Actuator with integrated emergency manual override standard

d [mm]	DN [mm]	Inch	PN	FPM Code
63	50	2	10	<b>199 141 562</b>
75	65	2 ½	10	<b>199 141 563</b>
90	80	3	10	<b>199 141 564</b>
110	100	4	10	<b>199 141 565</b>
140	125	5	10	<b>199 141 566</b>
160	150	6	10	<b>199 141 567</b>
225	200	8	10	<b>199 141 568</b>



### SYGEF® Standard Lugstyle butterfly valve type 141 24V Without manual override



**Model:**

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension: ISO 7005 PN10, EN 1092 PN10, DIN 2501 PN10
- Overall length according to EN 558-1, ISO 5752
- Voltage 24 V AC/DC
- Control time 15 s/90°<) EA31
- Control time 25s/90°<) EA42
- Control range 90°<)
- Actuator with integrated emergency manual override standard

d [mm]	DN [mm]	Inch	PN	FPM Code
63	50	2	10	<b>199 141 622</b>
75	65	2 ½	10	<b>199 141 623</b>
90	80	3	10	<b>199 141 624</b>
110	100	4	10	<b>199 141 625</b>
140	125	5	10	<b>199 141 626</b>
160	150	6	10	<b>199 141 627</b>
225	200	8	10	<b>199 141 628</b>

# SYGEF® standard metric

## SYGEF® Standard Lugstyle butterfly valve type 141 24V With manual override



### Model:

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension: ISO 7005 PN10, EN 1092 PN10, DIN 2501 PN10
- Overall length according to EN 558-1, ISO 5752
- Voltage 24 V AC/DC
- Control time 15 s/90°<) EA31
- Control time 25s/90°<) EA42
- Control range 90°<)
- Actuator with integrated emergency manual override standard

d [mm]	DN [mm]	Inch	PN	FPM Code	
63	50	2	10	<b>199 141 602</b>	
75	65	2 ½	10	<b>199 141 603</b>	
90	80	3	10	<b>199 141 604</b>	
110	100	4	10	<b>199 141 605</b>	
140	125	5	10	<b>199 141 606</b>	
160	150	6	10	<b>199 141 607</b>	
225	200	8	10	<b>199 141 608</b>	

## SYGEF® standard metric



### SYGEF® Standard Lugstyle butterfly valve 568 PVDF/ANSI Bare shaft



**Model:**

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension ANSI/ASME B 16.5 Class 150
- Overall length according to EN 558-1, ISO 5752
- Interface F07 according to DIN/ISO 5211

Inch	d [mm]	DN [mm]	PN	FPM Code
2	63	50	10	175 568 922
2 ½	75	65	10	175 568 923
3	90	80	10	175 568 924
4	110	100	10	175 568 925
5	140	125	10	175 568 926
6	160	150	10	175 568 927
8	225	200	10	175 568 928



### SYGEF® Standard Lugstyle butterfly valve type 142 100-230V ANSI Without manual override



**Model:**

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension ANSI/ASME B 16.5 Class 150
- Overall length according to EN 558-1, ISO 5752
- Voltage 100-230 V, 50-60 Hz
- Control time 15 s/90°<) EA31
- Control time 25s/90°<) EA42
- Control range 90°<)
- Actuator with integrated emergency manual override standard

Inch	DN [mm]	d [mm]	PN	FPM Code
2	50	63	10	199 142 582
2 ½	65	75	10	199 142 583
3	80	90	10	199 142 584
4	100	110	10	199 142 585
5	125	140	10	199 142 586
6	150	160	10	199 142 587
8	200	225	10	199 142 588

# SYGEF® standard metric



## SYGEF® Standard Lugstyle butterfly valve type 142 100-230V ANSI With manual override



### Model:

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension ANSI/ASME B 16.5 Class 150
- Overall length according to EN 558-1, ISO 5752
- Voltage 100-230 V, 50-60 Hz
- Control time 15 s/90°<) EA31
- Control time 25s/90°<) EA42
- Control range 90°<)
- Actuator with integrated emergency manual override standard

Inch	DN [mm]	d [mm]	PN	FPM Code
2	50	63	10	<b>199 142 562</b>
2 ½	65	75	10	<b>199 142 563</b>
3	80	90	10	<b>199 142 564</b>
4	100	110	10	<b>199 142 565</b>
5	125	140	10	<b>199 142 566</b>
6	150	160	10	<b>199 142 567</b>
8	200	225	10	<b>199 142 568</b>



## SYGEF® Standard Lugstyle butterfly valve type 142 24V ANSI Without manual override



### Model:

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension ANSI/ASME B 16.5 Class 150
- Overall length according to EN 558-1, ISO 5752
- Voltage 24 V AC/DC
- Control time 15 s/90°<) EA31
- Control time 25s/90°<) EA42
- Control range 90°<)
- Actuator with integrated emergency manual override standard

Inch	DN [mm]	d [mm]	PN	FPM Code
2	50	63	10	<b>199 142 622</b>
2 ½	65	75	10	<b>199 142 623</b>
3	80	90	10	<b>199 142 624</b>
4	100	110	10	<b>199 142 625</b>
5	125	140	10	<b>199 142 626</b>
6	150	160	10	<b>199 142 627</b>
8	200	225	10	<b>199 142 628</b>

# SYGEF<sup>®</sup> standard metric



## SYGEF<sup>®</sup> Standard Lugstyle butterfly valve type 142 24V ANSI With manual override



### Model:

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension ANSI/ASME B 16.5 Class 150
- Overall length according to EN 558-1, ISO 5752
- Voltage 24 V AC/DC
- Control time 15 s/90°<) EA31
- Control time 25s/90°<) EA42
- Control range 90°<)
- Actuator with integrated emergency manual override standard

Inch	DN [mm]	d [mm]	PN	FPM Code	
2	50	63	10	<b>199 142 602</b>	
2 ½	65	75	10	<b>199 142 603</b>	
3	80	90	10	<b>199 142 604</b>	
4	100	110	10	<b>199 142 605</b>	
5	125	140	10	<b>199 142 606</b>	
6	150	160	10	<b>199 142 607</b>	
8	200	225	10	<b>199 142 608</b>	

# SYGEF® standard metric

## Butterfly valves pneumatic metric/ANSI/JIS



### SYGEF® Standard Butterfly valve type 567 PVDF Bare shaft



#### Model:

- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, ANSI/ASME B 16.5 Class 150, BS 1560: 1989, BS 4504, JIS B 2220
- Overall length according to EN 558-1, ISO 5752
- Interface F07 for the dimensions DN50-200 according to DIN/ISO 5211
- Interface F10 for the dimensions DN250-300 according to DIN/ISO 5211

d [mm]	DN [mm]	Inch	PN	FPM Code	
63	50	2	10	175 567 822	
75	65	2 ½	10	175 567 823	
90	80	3	10	175 567 824	
110	100	4	10	175 567 825	
140	125	5	10	175 567 826	
160	150	6	10	175 567 827	
225	200	8	10	175 567 828	
280	250	10	10	175 567 829	
315	300	12	10	175 567 830	



### SYGEF® Standard Butterfly valve type 240 FC (Fail safe to close) Without manual override



#### Model:

- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, ANSI/ASME B 16.5 Class 150, BS 1560: 1989, BS 4504, JIS B 2220
- Overall length according to EN 558-1, ISO 5752
- Control range 90°<)

d [mm]	DN [mm]	Inch	PN	FPM Code	
63	50	2	10	199 240 462	
75	65	2 ½	10	199 240 463	
90	80	3	10	199 240 464	
110	100	4	10	199 240 465	
140	125	5	10	199 240 466	
160	150	6	10	199 240 467	
225	200	8	10	199 240 468	
280	250	10	10	199 240 469	
315	300	12	10	199 240 470	



## SYGEF® standard metric



### SYGEF® Standard Butterfly valve type 240 FO (Fail safe to open) Without manual override



**Model:**

- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, ANSI/ASME B 16.5 Class 150, BS 1560: 1989, BS 4504, JIS B 2220
- Overall length according to EN 558-1, ISO 5752
- Control range 90°<

d [mm]	DN [mm]	Inch	PN	FPM Code
63	50	2	10	199 240 482
75	65	2 ½	10	199 240 483
90	80	3	10	199 240 484
110	100	4	10	199 240 485
140	125	5	10	199 240 486
160	150	6	10	199 240 487
225	200	8	10	199 240 488
280	250	10	10	199 240 489
315	300	12	10	199 240 490



### SYGEF® Standard Butterfly valve type 240 DA (Double acting) Without manual override



**Model:**

- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, ANSI/ASME B 16.5 Class 150, BS 1560: 1989, BS 4504, JIS B 2220
- Overall length according to EN 558-1, ISO 5752
- Control range 90°<

d [mm]	DN [mm]	Inch	PN	FPM Code
63	50	2	10	199 240 502
75	65	2 ½	10	199 240 503
90	80	3	10	199 240 504
110	100	4	10	199 240 505
140	125	5	10	199 240 506
160	150	6	10	199 240 507
225	200	8	10	199 240 508
280	250	10	10	199 240 509
315	300	12	10	199 240 510

## SYGEF® standard metric



### SYGEF® Standard Lugstyle butterfly valve type 568 PVDF Bare shaft



**Model:**

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension: ISO 7005 PN10, EN 1092 PN10, DIN 2501 PN10
- Overall length according to EN 558-1, ISO 5752
- Interface F07 according to DIN/ISO 5211

d [mm]	DN [mm]	Inch	PN	FPM Code
63	50	2	10	<b>175 568 822</b>
75	65	2 ½	10	<b>175 568 823</b>
90	80	3	10	<b>175 568 824</b>
110	100	4	10	<b>175 568 825</b>
140	125	5	10	<b>175 568 826</b>
160	150	6	10	<b>175 568 827</b>
225	200	8	10	<b>175 568 828</b>



### SYGEF® Standard Lugstyle butterfly valve type 241 FC (Fail safe to close) Without manual override



**Model:**

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension: ISO 7005 PN10, EN 1092 PN10, DIN 2501 PN10
- Overall length according to EN 558-1, ISO 5752
- Control range 90°<)

d [mm]	DN [mm]	Inch	PN	FPM Code
63	50	2	10	<b>199 241 462</b>
75	65	2 ½	10	<b>199 241 463</b>
90	80	3	10	<b>199 241 464</b>
110	100	4	10	<b>199 241 465</b>
140	125	5	10	<b>199 241 466</b>
160	150	6	10	<b>199 241 467</b>
225	200	8	10	<b>199 241 468</b>

## SYGEF® standard metric



### SYGEF® Standard Lugstyle butterfly valve type 241 FO (Fail safe to open) Without manual override



**Model:**

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension: ISO 7005 PN10, EN 1092 PN10, DIN 2501 PN10
- Overall length according to EN 558-1, ISO 5752
- Control range 90°<)

d [mm]	DN [mm]	Inch	PN	FPM Code
63	50	2	10	<b>199 241 482</b>
75	65	2 ½	10	<b>199 241 483</b>
90	80	3	10	<b>199 241 484</b>
110	100	4	10	<b>199 241 485</b>
140	125	5	10	<b>199 241 486</b>
160	150	6	10	<b>199 241 487</b>
225	200	8	10	<b>199 241 488</b>



### SYGEF® Standard Lugstyle butterfly valve type 241 DA (Double acting) Without manual override



**Model:**

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension: ISO 7005 PN10, EN 1092 PN10, DIN 2501 PN10
- Overall length according to EN 558-1, ISO 5752
- Control range 90°<)

d [mm]	DN [mm]	Inch	PN	FPM Code
63	50	2	10	<b>199 241 502</b>
75	65	2 ½	10	<b>199 241 503</b>
90	80	3	10	<b>199 241 504</b>
110	100	4	10	<b>199 241 505</b>
140	125	5	10	<b>199 241 506</b>
160	150	6	10	<b>199 241 507</b>
225	200	8	10	<b>199 241 508</b>

## SYGEF® standard metric



### SYGEF® Standard Lugstyle butterfly valve 568 PVDF/ANSI Bare shaft



**Model:**

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension ANSI/ASME B 16.5 Class 150
- Overall length according to EN 558-1, ISO 5752
- Interface F07 according to DIN/ISO 5211

Inch	d [mm]	DN [mm]	PN	FPM Code
2	63	50	10	175 568 922
2 ½	75	65	10	175 568 923
3	90	80	10	175 568 924
4	110	100	10	175 568 925
5	140	125	10	175 568 926
6	160	150	10	175 568 927
8	225	200	10	175 568 928



### SYGEF® Standard Lugstyle butterfly valve type 242 ANSI FC (Fail safe to close) Without manual override



**Model:**

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension ANSI/ASME B 16.5 Class 150
- Overall length according to EN 558-1, ISO 5752
- Control range 90°<)

Inch	DN [mm]	d [mm]	PN	FPM Code
2	50	63	10	199 242 462
2 ½	65	75	10	199 242 463
3	80	90	10	199 242 464
4	100	110	10	199 242 465
5	125	140	10	199 242 466
6	150	160	10	199 242 467
8	200	225	10	199 242 468

## SYGEF® standard metric



### SYGEF® Standard Lugstyle butterfly valve type 242 ANSI FO (Fail safe to open) Without manual override



**Model:**

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension ANSI/ASME B 16.5 Class 150
- Overall length according to EN 558-1, ISO 5752
- Control range 90°<)

Inch	DN [mm]	d [mm]	PN	FPM Code
2	50	63	10	199 242 482
2 ½	65	75	10	199 242 483
3	80	90	10	199 242 484
4	100	110	10	199 242 485
5	125	140	10	199 242 486
6	150	160	10	199 242 487
8	200	225	10	199 242 488



### SYGEF® Standard Lugstyle butterfly valve type 242 ANSI DA (Double acting) Without manual override



**Model:**

- Outer body in GGG-40.3 epoxy-coated
- Connecting dimension ANSI/ASME B 16.5 Class 150
- Overall length according to EN 558-1, ISO 5752
- Control range 90°<)

Inch	DN [mm]	d [mm]	PN	FPM Code
2	50	63	10	199 242 502
2 ½	65	75	10	199 242 503
3	80	90	10	199 242 504
4	100	110	10	199 242 505
5	125	140	10	199 242 506
6	150	160	10	199 242 507
8	200	225	10	199 242 508

# SYGEF® standard metric

## Solenoid valves



### SYGEF® Standard Solenoid valve type 165 Standard voltage 230V 50 Hz With fusion sockets metric

- Solenoid valve 2/2 ways
- Servo assisted
- Function A
- Function B on request
- Attention: Some inner parts in contact with the media are made of PVDF

d [mm]	DN [mm]	PN [bar]	EPDM Code	FPM Code	
20	15	0.5 - 6.0	199 165 412	199 165 402	
25	20	0.5 - 6.0	199 165 413	199 165 403	
32	25	0.5 - 6.0	199 165 414	199 165 404	
40	32	0.5 - 6.0	199 165 415	199 165 405	
50	40	0.5 - 6.0	199 165 416	199 165 406	
63	50	0.5 - 6.0	199 165 417	199 165 407	



### SYGEF® Standard Solenoid valve type 165 Standard voltage 115V 50 Hz With fusion sockets metric

- Solenoid valve 2/2 ways
- Servo assisted
- Function A
- Function B on request
- Attention: Some inner parts in contact with the media are made of PVDF

d [mm]	DN [mm]	PN [bar]	EPDM Code	FPM Code	
20	15	0.5 - 6.0	199 165 442	199 165 432	
25	20	0.5 - 6.0	199 165 443	199 165 433	
32	25	0.5 - 6.0	199 165 444	199 165 434	
40	32	0.5 - 6.0	199 165 445	199 165 435	
50	40	0.5 - 6.0	199 165 446	199 165 436	
63	50	0.5 - 6.0	199 165 447	199 165 437	



### SYGEF® Standard Solenoid valve type 165 Standard voltage 24V DC With fusion sockets metric

- Solenoid valve 2/2 ways
- Servo assisted
- Function A
- Function B on request
- Attention: Some inner parts in contact with the media are made of PVDF

d [mm]	DN [mm]	PN [bar]	EPDM Code	FPM Code	
20	15	0.5 - 6.0	199 165 422	199 165 452	
25	20	0.5 - 6.0	199 165 423	199 165 453	
32	25	0.5 - 6.0	199 165 424	199 165 454	
40	32	0.5 - 6.0	199 165 425	199 165 455	
50	40	0.5 - 6.0	199 165 426	199 165 456	
63	50	0.5 - 6.0	199 165 427	199 165 457	

## SYGEF® standard metric



**SYGEF® Standard**  
**Solenoid valve type 166**  
**Function A straight valve 2/2 ways**  
**Nominal voltage 24V DC**  
**With G 1/4 line connection**



- With manual override
- Electrical connection: cable plug
- Function C on request
- Voltage 24 VAC 42 VAC 110 VAC on request

DN [mm]	D1_G [inch]	Function	PN [bar]	FPM Code	
3	¼	A	0.0 - 8.0	<b>199 166 505</b>	
4	¼	A	0.0 - 4.0	<b>199 166 506</b>	
5	¼	A	0.0 - 3.0	<b>199 166 507</b>	



**SYGEF® Standard**  
**Solenoid valve type 166**  
**Function A straight valve 2/2 ways**  
**Nominal voltage 230V 50Hz ±10%**  
**With G 1/4 line connection**



- With manual override
- Electrical connection: cable plug
- Function C on request
- Voltage 24 VAC 42 VAC 110 VAC on request

DN [mm]	D1_G [inch]	Function	PN [bar]	FPM Code	
3	¼	A	0.0 - 10.0	<b>199 166 515</b>	
4	¼	A	0.0 - 5.0	<b>199 166 516</b>	
5	¼	A	0.0 - 4.5	<b>199 166 517</b>	



**SYGEF® Standard**  
**Solenoid valve type 166**  
**Function E blending valve 3/2 ways**  
**Nominal voltage 24V DC**  
**With G 1/4 line connection**



- With manual override
- Electrical connection: cable plug
- Function C on request
- Voltage 24 VAC 42 VAC 110 VAC on request

DN [mm]	D1_G [inch]	Function	PN [bar]	FPM Code	
4	¼	E	0.0 - 2.0	<b>199 166 656</b>	

# SYGEF<sup>®</sup> standard metric



**SYGEF<sup>®</sup> Standard**  
**Solenoid valve type 166**  
**Function E blending valve 3/2 ways**  
**Nominal voltage 230V 50Hz ±10%**  
**With G 1/4 line connection**



- With manual override
- Electrical connection: cable plug
- Function C on request
- Voltage 24 VAC 42 VAC 110 VAC on request

DN [mm]	D1_G [inch]	Function	PN [bar]	FPM Code	
4	¼	E	0.0 - 3.0	199 166 666	



## SYGEF® standard metric

### Process control valves



#### SYGEF® Standard Pressure reducing valve type V82 With fusion spigots metric

d [mm]	DN [mm]	Pressure range [bar]	PTFE Code
16	10	0.5 - 10	199 041 052
20	15	0.5 - 10	199 041 053
25	20	0.5 - 10	199 041 054
32	25	0.5 - 10	199 041 055
40	32	0.5 - 10	199 041 056
50	40	0.5 - 10	199 041 057
63	50	0.5 - 10	199 041 058
75	65	0.5 - 6	199 041 059



#### SYGEF® Standard Pressure reducing valve type V182 With fusion spigots metric

d [mm]	DN [mm]	Pressure range [bar]	FPM Code
16	10	0.5 - 10	199 041 661
20	15	0.5 - 10	199 041 662
25	20	0.5 - 10	199 041 663
32	25	0.5 - 10	199 041 664
40	32	0.5 - 10	199 041 665
50	40	0.5 - 10	199 041 666



#### SYGEF® Standard Pressure reducing valve type V782 With fusion spigots metric

d [mm]	DN [mm]	Pressure range [bar]	PTFE Code
16	10	0.5 - 10	199 041 084
20	15	0.5 - 10	199 041 085
25	20	0.5 - 10	199 041 086
32	25	0.5 - 10	199 041 087
40	32	0.5 - 10	199 041 088
50	40	0.5 - 10	199 041 089



#### SYGEF® Standard Pressure relief valve type V85 With fusion spigots metric

d [mm]	DN [mm]	Pressure range [bar]	PTFE Code
75	65	1.0 - 6	199 041 898

## SYGEF® standard metric



### SYGEF® Standard Pressure relief valve type V185 With fusion spigots metric

d [mm]	DN [mm]	Pressure range [bar]	PTFE Code
16	10	0.5 - 10	199 041 344
20	15	0.5 - 10	199 041 345
25	20	0.5 - 10	199 041 346
32	25	0.5 - 10	199 041 347
40	32	0.5 - 10	199 041 348
50	40	0.5 - 10	199 041 349
63	50	0.5 - 10	199 041 350



### SYGEF® Standard Pressure retaining valve type V86 With fusion spigots metric

d [mm]	DN [mm]	Pressure range [bar]	PTFE Code
75	65	1.0 - 6	199 041 892



### SYGEF® Standard Pressure retaining valve type V186 With fusion spigots metric

d [mm]	DN [mm]	Pressure range [bar]	PTFE Code
16	10	0.5 - 10	199 041 323
20	15	0.5 - 10	199 041 324
25	20	0.5 - 10	199 041 325
32	25	0.5 - 10	199 041 326
40	32	0.5 - 10	199 041 327
50	40	0.5 - 10	199 041 328
63	50	0.5 - 10	199 041 329



### SYGEF® Standard Pressure retaining valve type V786 With fusion spigots metric

d [mm]	DN [mm]	Pressure range [bar]	PTFE Code
16	10	0.5 - 10	199 041 114
20	15	0.5 - 10	199 041 115
25	20	0.5 - 10	199 041 116
32	25	0.5 - 10	199 041 117
40	32	0.5 - 4	199 041 118
50	40	0.5 - 4	199 041 119

## SYGEF® standard metric



### SYGEF® Standard Gauge guard type Z700 With manometer 0-10 bar

d [mm]	G [inch]	PTFE Code	
25	¼	199 041 004	
32	½	199 041 005	



### SYGEF® Standard Gauge guard type Z700 With manometer 0-6 bar

d [mm]	G [inch]	PTFE Code	
25	¼	199 041 296	
32	½	199 041 297	



### SYGEF® Standard Gauge guard type Z701 Without manometer

d [mm]	G [inch]	PTFE Code	
25	¼	199 041 010	
32	½	199 041 011	



### SYGEF® Standard Ventilating and bleed valve type V91 With fusion spigots metric

d [mm]	DN [mm]	FPM Code	
16	10	199 041 256	
20	15	199 041 257	
25	20	199 041 258	
32	25	199 041 259	
40	32	199 041 260	
50	40	199 041 261	
63	50	199 041 262	
75	65	199 041 263	
90	80	199 041 264	

## SYGEF® standard metric



### SYGEF® Standard Ventilating valve type V95 With fusion spigots metric

d [mm]	DN [mm]	FPM Code	
16	10	199 041 283	
20	15	199 041 284	
25	20	199 041 285	
32	25	199 041 286	
40	32	199 041 287	
50	40	199 041 288	
63	50	199 041 289	
75	65	199 041 290	
90	80	199 041 291	



### SYGEF® Standard Throttle valve type V251 With fusion sockets metric

d [mm]	DN [mm]	PN	FPM Code	
16	10	10	199 041 231	
20	15	10	199 041 232	
25	20	10	199 041 233	
32	25	10	199 041 234	
40	32	10	199 041 235	
50	40	10	199 041 236	
63	50	10	199 041 237	



### SYGEF® Standard Water jet suction pump type P20

- DN 10-20: BSP parallel female thread
- DN 25-50: Fusion socket metric
- DN 65-80: Fusion spigot metric

d [mm]	DN [mm]	PN	FPM Code	
16	10	10	199 041 138	
20	15	10	199 041 139	
25	20	10	199 041 140	
32	25	10	199 041 141	
40	32	10	199 041 142	
50	40	10	199 041 143	
63	50	10	199 041 144	
75	65	10	199 041 145	
90	80	10	199 041 146	

# SYGEF® Plus metric

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Diaphragm valves pneumatic

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# SYGEF® Plus metric

## Diaphragm valves pneumatic



### SYGEF® Plus

Diaphragm valve type DIASTAR 028

Function FC (Fail safe to close)

With butt fusion spigots IR metric

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

d [mm]	DN [mm]	PN	PTFE/EPDM Code
20	15	5	199 028 971
25	20	7	199 028 972
32	25	7	199 028 973
40	32	7	199 028 974
50	40	7	199 028 975
63	50	7	199 028 976



### SYGEF® Plus

Diaphragm valve type DIASTAR 028

Function FC (Fail safe to close)

Unions with fusion spigots metric

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

d [mm]	DN [mm]	PN	PTFE/EPDM Code
20	15	5	199 028 401
25	20	7	199 028 402
32	25	7	199 028 403
40	32	7	199 028 404
50	40	7	199 028 405
63	50	7	199 028 406



### SYGEF® Plus

Diaphragm valve type DIASTAR 028

Function FC (Fail safe to close)

With backing flanges PP-V metric

Model:

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

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

d [mm]	DN [mm]	Inch	PN	PTFE/EPDM Code
20	15	1/2	5	199 028 441
25	20	3/4	7	199 028 442
32	25	1	7	199 028 443
40	32	1 1/4	7	199 028 444
50	40	1 1/2	7	199 028 445
63	50	2	7	199 028 446

## SYGEF® Plus metric



**SYGEF® Plus**  
**Diaphragm valve type DIASTAR 025**  
**Function FC (Fail safe to close)**  
**With butt fusion spigots IR metric**

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

d [mm]	DN [mm]	PN	PTFE/EPDM Code	
20	15	10	199 025 971	
25	20	10	199 025 972	
32	25	10	199 025 973	
40	32	10	199 025 974	
50	40	10	199 025 975	
63	50	10	199 025 976	



**SYGEF® Plus**  
**Diaphragm valve type DIASTAR 025**  
**Function FC (Fail safe to close)**  
**Unions with fusion spigots metric**

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

d [mm]	DN [mm]	PN	PTFE/EPDM Code	
20	15	10	199 027 401	
25	20	10	199 027 402	
32	25	10	199 027 403	
40	32	10	199 027 404	
50	40	10	199 027 405	
63	50	10	199 027 406	



**SYGEF® Plus**  
**Diaphragm valve type DIASTAR 025**  
**Function FC (Fail safe to close)**  
**With backing flanges PP-V metric**

**Model:**

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

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

d [mm]	DN [mm]	Inch	PN	PTFE/EPDM Code	
20	15	½	10	199 025 441	
25	20	¾	10	199 025 442	
32	25	1	10	199 025 443	
40	32	1 ¼	10	199 025 444	
50	40	1 ½	10	199 025 445	
63	50	2	10	199 025 446	

# SYGEF® Plus metric



## SYGEF® Plus Diaphragm valve type DIASTAR 025 Function FC (Fail safe to close) With fixed flanges PVDF metric

### Model:

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

\* With backing flanges PP-V

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

d [mm]	DN [mm]	Inch	PN	PTFE/EPDM Code
*75	65	2 ½	10	199 025 447
**90	80	3	10	199 025 448
110	100	4	8	199 025 449



## SYGEF® Plus Diaphragm valve type DIASTAR 025 Function FC (Fail safe to close) ZERO STATIC with butt fusion spigots metric

- With position indicator / Working pressure: **both sides**
- With position indicator
- DN2: for coordination of accessoires

d [mm]	d1 [mm]	DN [mm]	DN1 [mm]	DN2 [mm]	PN	PTFE Code
20	20	15	15	15	10	199 029 341
25	20	20	15	20	10	199 029 342
25	25	20	20	20	10	199 029 343
32	20	25	15	25	10	199 029 344
32	25	25	20	25	10	199 029 345
32	32	25	25	25	10	199 029 346
40	20	32	15	25	10	199 029 347
40	25	32	20	25	10	199 029 348
40	32	32	25	25	10	199 029 349
40	40	32	32	32	10	199 029 350
50	20	40	15	25	10	199 029 351
50	25	40	20	25	10	199 029 352
50	32	40	25	25	10	199 029 353
50	40	40	32	40	10	199 029 354
50	50	40	40	40	10	199 029 355
63	20	50	15	25	10	199 029 356
63	25	50	20	25	10	199 029 357
63	32	50	25	25	10	199 029 358
63	40	50	32	50	10	199 029 359
63	50	50	40	50	10	199 029 360
63	63	50	50	50	10	199 029 361
75	40	65	32	32	10	199 029 362
75	50	65	40	50	10	199 029 363
75	63	65	50	50	10	199 029 364
90	20	80	15	25	10	199 029 365
90	25	80	20	25	10	199 029 366
90	32	80	25	25	10	199 029 367
90	50	80	40	50	10	199 029 368
90	63	80	50	50	10	199 029 369
110	20	100	15	25	10	199 029 370
110	25	100	20	25	10	199 029 371
110	32	100	25	25	10	199 029 372
110	50	100	40	50	10	199 029 373
110	63	100	50	50	10	199 029 374



## SYGEF® Plus metric



**SYGEF® Plus**  
**Diaphragm valve type DIASTAR 025**  
**Function FO (Fail safe to open)**  
**With butt fusion spigots IR metric**

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

d [mm]	DN [mm]	PN	PTFE/EPDM Code
20	15	10	199 025 977
25	20	10	199 025 978
32	25	10	199 025 979
40	32	10	199 025 980
50	40	10	199 025 981
63	50	10	199 025 982



**SYGEF® Plus**  
**Diaphragm valve type DIASTAR 025**  
**Function FO (Fail safe to open)**  
**Unions with fusion spigots metric**

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

d [mm]	DN [mm]	PN	PTFE/EPDM Code
20	15	10	199 027 411
25	20	10	199 027 412
32	25	10	199 027 413
40	32	10	199 027 414
50	40	10	199 027 415
63	50	10	199 027 416



**SYGEF® Plus**  
**Diaphragm valve type DIASTAR 025**  
**Function FO (Fail safe to open)**  
**With backing flanges PP-V metric**

**Model:**

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

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

d [mm]	DN [mm]	Inch	PN	PTFE/EPDM Code
20	15	½	10	199 025 451
25	20	¾	10	199 025 452
32	25	1	10	199 025 453
40	32	1 ¼	10	199 025 454
50	40	1 ½	10	199 025 455
63	50	2	10	199 025 456

# SYGEF<sup>®</sup> Plus metric



## SYGEF<sup>®</sup> Plus Diaphragm valve type DIASTAR 025 Function FO (Fail safe to open) With fixed flanges PVDF metric

### Model:

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

\* With backing flanges PP-V

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

d [mm]	DN [mm]	Inch	PN	PTFE/EPDM Code	
*75	65	2 ½	10	199 025 457	
**90	80	3	10	199 025 458	
110	100	4	8	199 025 459	
**160	150	6	6	199 025 460	

## SYGEF® Plus metric



### SYGEF® Plus Diaphragm valve type DIASTAR 025 Function DA (Double acting) With butt fusion spigots IR metric

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

d [mm]	DN [mm]	PN	PTFE/EPDM Code
20	15	10	199 025 983
25	20	10	199 025 984
32	25	10	199 025 985
40	32	10	199 025 986
50	40	10	199 025 987
63	50	10	199 025 988



### SYGEF® Plus Diaphragm valve type DIASTAR 025 Function DA (Double acting) Unions with fusion spigots metric

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

d [mm]	DN [mm]	PN	PTFE/EPDM Code
20	15	10	199 027 421
25	20	10	199 027 422
32	25	10	199 027 423
40	32	10	199 027 424
50	40	10	199 027 425
63	50	10	199 027 426



### SYGEF® Plus Diaphragm valve type DIASTAR 025 Function DA (Double acting) With backing flanges PP-V metric

#### Model:

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

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

d [mm]	DN [mm]	Inch	PN	PTFE/EPDM Code
20	15	½	10	199 025 461
25	20	¾	10	199 025 462
32	25	1	10	199 025 463
40	32	1 ¼	10	199 025 464
50	40	1 ½	10	199 025 465
63	50	2	10	199 025 466

# SYGEF® Plus metric



## SYGEF® Plus Diaphragm valve type DIASTAR 025 Function DA (Double acting) With fixed flanges PVDF metric

### Model:

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

\* With backing flanges PP-V

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

d [mm]	DN [mm]	Inch	PN	PTFE/EPDM Code	
*75	65	2 ½	10	<b>199 025 467</b>	
**90	80	3	10	<b>199 025 468</b>	
110	100	4	8	<b>199 025 469</b>	
**160	150	6	6	<b>199 025 470</b>	

# SYGEF® Plus HTR metric Infra Red (IR)

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Diaphragm valves pneumatic

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# SYGEF® Plus HTR metric Infra Red (IR)

## Diaphragm valves pneumatic



### SYGEF® Plus

#### Diaphragm valve type DIASTAR 025

#### Function FC (Fail safe to close)

#### With butt fusion spigots IR metric HTR

- With position indicator / Working pressure: **both sides** for correct clamping and fusion jointing of flange adapters

d [mm]	DN [mm]	PN	PTFE/EPDM Code
20	15	6	199 027 731
25	20	6	199 027 732
32	25	6	199 027 733
40	32	10	199 027 734
50	40	10	199 027 735
63	50	10	199 027 736



### SYGEF® Plus

#### Diaphragm valve type DIASTAR 025

#### Function FC (Fail safe to close)

#### Unions with fusion spigots metric HTR

- With position indicator / Working pressure: **both sides** for correct clamping and fusion jointing of flange adapters

d [mm]	DN [mm]	PN	PTFE/EPDM Code
20	15	10	199 027 771
25	20	10	199 027 772
32	25	10	199 027 773
40	32	10	199 027 774
50	40	10	199 027 775
63	50	10	199 027 776

# SYGEF® Plus HTR metric Infra Red (IR)



## SYGEF® Plus Diaphragm valve type DIASTAR 025 Function FC (Fail safe to close) ZERO STATIC with butt fusion spigots metric HTR

- With position indicator / Working pressure: **both sides** for correct clamping and fusion jointing of flange adapters

d [mm]	d1 [mm]	DN [mm]	DN1 [mm]	DN2 [mm]	PN	PTFE/EPDM Code
20	20	15	15	15	10	199 027 811
25	20	20	15	20	10	199 027 812
25	25	20	20	20	10	199 027 813
32	20	25	15	25	10	199 027 814
32	25	25	20	25	10	199 027 815
32	32	25	25	25	10	199 027 816
40	20	32	15	25	10	199 027 817
40	25	32	20	25	10	199 027 818
40	32	32	25	25	10	199 027 819
40	40	32	32	32	10	199 027 820
50	20	40	15	25	10	199 027 821
50	25	40	20	25	10	199 027 822
50	32	40	25	25	10	199 027 823
50	40	40	32	40	10	199 027 824
50	50	40	40	40	10	199 027 825
63	20	50	15	25	10	199 027 826
63	25	50	20	25	10	199 027 827
63	32	50	25	25	10	199 027 828
63	40	50	32	50	10	199 027 829
63	50	50	40	50	10	199 027 830
63	63	50	50	50	10	199 027 831
75	40	65	32	32	10	199 027 832
75	50	65	40	50	10	199 027 833
75	63	65	50	50	10	199 027 834
90	20	80	15	25	10	199 027 835
90	25	80	20	25	10	199 027 836
90	32	80	25	25	10	199 027 837
90	50	80	40	50	10	199 027 838
90	63	80	50	50	10	199 027 839
110	20	100	15	25	10	199 027 840
110	25	100	20	25	10	199 027 841
110	32	100	25	25	10	199 027 842
110	50	100	40	50	10	199 027 843
110	63	100	50	50	10	199 027 844

## SYGEF® Plus HTR metric Infra Red (IR)



### SYGEF® Plus Diaphragm valve type DIASTAR 025 Function FO (Fail safe to open) With butt fusion spigots IR metric HTR

- With position indicator / Working pressure: **both sides** for correct clamping and fusion jointing of flange adapters

d [mm]	DN [mm]	PN	PTFE/EPDM Code	
20	15	10	199 027 741	
25	20	10	199 027 742	
32	25	10	199 027 743	
40	32	10	199 027 744	
50	40	10	199 027 745	
63	50	10	199 027 746	



### SYGEF® Plus Diaphragm valve type DIASTAR 025 Function FO (Fail safe to open) Unions with fusion spigots metric HTR

- With position indicator / Working pressure: **both sides** for correct clamping and fusion jointing of flange adapters

d [mm]	DN [mm]	PN	PTFE/EPDM Code	
20	15	10	199 027 781	
25	20	10	199 027 782	
32	25	10	199 027 783	
40	32	10	199 027 784	
50	40	10	199 027 785	
63	50	10	199 027 786	



## SYGEF® Plus HTR metric Infra Red (IR)



### SYGEF® Plus Diaphragm valve type DIASTAR 025 Function DA (Double acting) With butt fusion spigots IR metric HTR

- With position indicator / Working pressure: **both sides** for correct clamping and fusion jointing of flange adapters

d [mm]	DN [mm]	PN	PTFE/EPDM Code	
20	15	10	199 027 751	
25	20	10	199 027 752	
32	25	10	199 027 753	
40	32	10	199 027 754	
50	40	10	199 027 755	
63	50	10	199 027 756	











### SYGEF® Plus Diaphragm valve type DIASTAR 025 Function DA (Double acting) Unions with fusion spigots metric HTR

- With position indicator / Working pressure: **both sides** for correct clamping and fusion jointing of flange adapters

d [mm]	DN [mm]	PN	PTFE/EPDM Code	
20	15	10	199 027 791	
25	20	10	199 027 792	
32	25	10	199 027 793	
40	32	10	199 027 794	
50	40	10	199 027 795	
63	50	10	199 027 796	

# **SYGEF<sup>®</sup> Plus HTR metric Infra Red (IR)**

# Metal - butterfly valves

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## Metal - butterfly valves

### Metal - butterfly valves wafer metric/Inch/ANSI

#### Metal - butterfly valve type 037M With hand lever



##### Model:

- Housing: Aluminium ASTM S 12A, Rilsan® coated
- Seatliner available in EPDM and FPM

d [mm]	DN [mm]	Inch	PN	Cv value ( $\Delta p=1$ psi) [gal (US) /min]	Disc: ductile iron/Rilsan® coated EPDM Code	Disc: ductile iron/Rilsan® coated FPM Code	Disc: stainless steel EPDM Code	
63	50	2	10	220	199 037 000	199 037 013	199 037 200	
75	65	2 ½	10	320	199 037 001	199 037 014	199 037 201	
90	80	3	10	500	199 037 002	199 037 015	199 037 202	
110	100	4	10	800	199 037 003	199 037 016	199 037 203	
140	125	5	10	1300	199 037 004	199 037 017	199 037 204	
160	150	6	10	1900	199 037 005	199 037 018	199 037 205	
225	200	8	10	3330	199 037 006	199 037 019	199 037 206	
280	250	10	10	5400	199 037 007	199 037 020	199 037 207	
315	300	12	10	8000	199 037 008	199 037 021	199 037 208	
d [mm]	DN [mm]	Inch	PN	Cv value ( $\Delta p=1$ psi) [gal (US) /min]	Disc: stainless steel FPM Code	Disc: Alu-bronze EPDM Code	Disc: Alu-bronze FPM Code	
63	50	2	10	220	199 037 213	199 037 400	199 037 413	
75	65	2 ½	10	320	199 037 214	199 037 401	199 037 414	
90	80	3	10	500	199 037 215	199 037 402	199 037 415	
110	100	4	10	800	199 037 216	199 037 403	199 037 416	
140	125	5	10	1300	199 037 217	199 037 404	199 037 417	
160	150	6	10	1900	199 037 218	199 037 405	199 037 418	
225	200	8	10	3330	199 037 219	199 037 406	199 037 419	
280	250	10	10	5400	199 037 220	199 037 407	199 037 420	
315	300	12	10	8000	199 037 221	199 037 408	199 037 421	

# Metal - butterfly valves

## Metal - butterfly valve type 037M Hand lever with fine adjustment



### Model:

- Housing: Aluminium ASTM S 12A, Rilsan® coated
- Seatliner available in EPDM and FPM

d [mm]	DN [mm]	Inch	PN	Cv value ( $\Delta p=1$ psi) [gal (US) /min]	Disc: ductile iron/Rilsan® coated EPDM Code	Disc: ductile iron/Rilsan® coated FPM Code	Disc: stainless steel EPDM Code	
63	50	2	10	220	199 037 180	199 037 187	199 037 380	
75	65	2 ½	10	320	199 037 181	199 037 188	199 037 381	
90	80	3	10	500	199 037 182	199 037 189	199 037 382	
110	100	4	10	820	199 037 183	199 037 190	199 037 383	
140	125	5	10	1300	199 037 184	199 037 191	199 037 384	
160	150	6	10	1900	199 037 185	199 037 192	199 037 385	
225	200	8	10	3330	199 037 186	199 037 193	199 037 386	
d [mm]	DN [mm]	Inch	PN	Cv value ( $\Delta p=1$ psi) [gal (US) /min]	Disc: stainless steel FPM Code	Disc: Alu-bronze EPDM Code	Disc: Alu-bronze FPM Code	
63	50	2	10	220	199 037 387	199 037 580	199 037 587	
75	65	2 ½	10	320	199 037 388	199 037 581	199 037 588	
90	80	3	10	500	199 037 389	199 037 582	199 037 589	
110	100	4	10	820	199 037 390	199 037 583	199 037 590	
140	125	5	10	1300	199 037 391	199 037 584	199 037 591	
160	150	6	10	1900	199 037 392	199 037 585	199 037 592	
225	200	8	10	3330	199 037 393	199 037 586	199 037 593	

# Metal - butterfly valves

## Metal - butterfly valve type 037G Reduction gear with handwheel



### Model:

- Housing: Aluminium ASTM S 12A, Rilsan® coated
- Seatliner available in EPDM and FPM

d [mm]	DN [mm]	Inch	PN	Cv value ( $\Delta p=1$ psi) [gal (US) /min]	Disc: ductile iron/Rilsan® coated EPDM Code	Disc: ductile iron/Rilsan® coated FPM Code	Disc: stainless steel EPDM Code	
63	50	2	10	220	199 037 026	199 037 039	199 037 226	
75	65	2 ½	10	320	199 037 027	199 037 040	199 037 227	
90	80	3	10	500	199 037 028	199 037 041	199 037 228	
110	100	4	10	820	199 037 029	199 037 042	199 037 229	
140	125	5	10	1300	199 037 030	199 037 043	199 037 230	
160	150	6	10	1900	199 037 031	199 037 044	199 037 231	
225	200	8	10	3330	199 037 032	199 037 045	199 037 232	
280	250	10	10	5400	199 037 033	199 037 046	199 037 233	
315	300	12	10	8000	199 037 034	199 037 047	199 037 234	

d [mm]	DN [mm]	Inch	PN	Cv value ( $\Delta p=1$ psi) [gal (US) /min]	Disc: stainless steel FPM Code	Disc: Alu-bronze EPDM Code	Disc: Alu-bronze FPM Code	
63	50	2	10	220	199 037 239	199 037 426	199 037 439	
75	65	2 ½	10	320	199 037 240	199 037 427	199 037 440	
90	80	3	10	500	199 037 241	199 037 428	199 037 441	
110	100	4	10	820	199 037 242	199 037 429	199 037 442	
140	125	5	10	1300	199 037 243	199 037 430	199 037 443	
160	150	6	10	1900	199 037 244	199 037 431	199 037 444	
225	200	8	10	3330	199 037 245	199 037 432	199 037 445	
280	250	10	10	5400	199 037 246	199 037 433	199 037 446	
315	300	12	10	8000	199 037 247	199 037 434	199 037 447	

# Metal - butterfly valves

## Metal - butterfly valves lug metric

### Metal - butterfly valve type 038M With hand lever



**Model:**

- Seatliner available in EPDM and FPM
- Housing: ductile iron GGG-40/ASTM A536, Rilsan® coated
- Available in ANSI standard upon request
- In case this valve is used at the end of the line, the following pressures must not be exceeded: DN50 to DN150 5,6bar and > DN200 3,5bar

d [mm]	DN [mm]	Inch	PN	Cv value ( $\Delta p=1$ psi) [gal (US) /min]	Disc: ductile iron/Rilsan® coated EPDM Code	Disc: ductile iron/Rilsan® coated FPM Code	Disc: stainless steel EPDM Code
63	50	2	10	220	199 038 000	199 038 013	199 038 200
75	65	2 ½	10	320	199 038 001	199 038 014	199 038 201
90	80	3	10	500	199 038 002	199 038 015	199 038 202
110	100	4	10	820	199 038 003	199 038 016	199 038 203
140	125	5	10	1300	199 038 004	199 038 017	199 038 204
160	150	6	10	1900	199 038 005	199 038 018	199 038 205
225	200	8	10	3330	199 038 006	199 038 019	199 038 206
280	250	10	10	5400	199 038 007	199 038 020	199 038 207
315	300	12	10	8000	199 038 008	199 038 021	199 038 208

d [mm]	DN [mm]	Inch	PN	Cv value ( $\Delta p=1$ psi) [gal (US) /min]	Disc: stainless steel FPM Code	Disc: Alu-bronze EPDM Code	Disc: Alu-bronze FPM Code
63	50	2	10	220	199 038 213	199 038 400	199 038 413
75	65	2 ½	10	320	199 038 214	199 038 401	199 038 414
90	80	3	10	500	199 038 215	199 038 402	199 038 415
110	100	4	10	820	199 038 216	199 038 403	199 038 416
140	125	5	10	1300	199 038 217	199 038 404	199 038 417
160	150	6	10	1900	199 038 218	199 038 405	199 038 418
225	200	8	10	3330	199 038 219	199 038 406	199 038 419
280	250	10	10	5400	199 038 220	199 038 407	199 038 420
315	300	12	10	8000	199 038 221	199 038 408	199 038 421

# Metal - butterfly valves

## Metal - butterfly valve type 038G Reduction gear with handwheel



### Model:

- Seatliner available in EPDM and FPM
- Housing: ductile iron GGG-40/ASTM A536, Rilsan® coated
- Available in ANSI standard upon request
- In case this valve is used at the end of the line, the following pressures must not be exceeded: DN50 to DN150 5,6bar and > DN200 3,5bar

d [mm]	DN [mm]	Inch	PN	Cv value ( $\Delta p=1$ psi) [gal (US) /min]	Disc: ductile iron/Rilsan® coated EPDM Code	Disc: ductile iron/Rilsan® coated FPM Code	Disc: stainless steel EPDM Code	
63	50	2	10	220	199 038 026	199 038 039	199 038 226	
75	65	2 ½	10	320	199 038 027	199 038 040	199 038 227	
90	80	3	10	500	199 038 028	199 038 041	199 038 228	
110	100	4	10	820	199 038 029	199 038 042	199 038 229	
140	125	5	10	1300	199 038 030	199 038 043	199 038 230	
160	150	6	10	1900	199 038 031	199 038 044	199 038 231	
225	200	8	10	3330	199 038 032	199 038 045	199 038 232	
280	250	10	10	5400	199 038 033	199 038 046	199 038 233	
315	300	12	10	8000	199 038 034	199 038 047	199 038 234	

d [mm]	DN [mm]	Inch	PN	Cv value ( $\Delta p=1$ psi) [gal (US) /min]	Disc: stainless steel FPM Code	Disc: Alu-bronze EPDM Code	Disc: Alu-bronze FPM Code	
63	50	2	10	220	199 038 239	199 038 426	199 038 439	
75	65	2 ½	10	320	199 038 240	199 038 427	199 038 440	
90	80	3	10	500	199 038 241	199 038 428	199 038 441	
110	100	4	10	820	199 038 242	199 038 429	199 038 442	
140	125	5	10	1300	199 038 243	199 038 430	199 038 443	
160	150	6	10	1900	199 038 244	199 038 431	199 038 444	
225	200	8	10	3330	199 038 245	199 038 432	199 038 445	
280	250	10	10	5400	199 038 246	199 038 433	199 038 446	
315	300	12	10	8000	199 038 247	199 038 434	199 038 447	



## Metal - butterfly valves

### Metal - butterfly valves pneumatic wafer Metric/Inch/ANSI

#### Metal - butterfly valve type 037P FC (Fail safe to close) Without manual override



**Model:**

- Housing: Aluminium ASTM S 12A, Rilsan® coated
- Seatliner available in EPDM and FPM

d [mm]	DN [mm]	Inch	PN	Cv value ( $\Delta p=1$ psi) [gal (US) /min]	Disc: ductile iron/Rilsan® coated EPDM Code	Disc: ductile iron/Rilsan® coated FPM Code	Disc: stainless steel EPDM Code	
63	50	2	10	220	199 037 052	199 037 065	199 037 252	
75	65	2 ½	10	320	199 037 053	199 037 066	199 037 253	
90	80	3	10	500	199 037 054	199 037 067	199 037 254	
110	100	4	10	820	199 037 055	199 037 068	199 037 255	
140	125	5	10	1300	199 037 056	199 037 069	199 037 256	
160	150	6	10	1900	199 037 057	199 037 070	199 037 257	
225	200	8	10	3330	199 037 058	199 037 071	199 037 258	
280	250	10	10	5400	199 037 059	199 037 072	199 037 259	
315	300	12	10	8000	199 037 060	199 037 073	199 037 260	

d [mm]	DN [mm]	Inch	PN	Cv value ( $\Delta p=1$ psi) [gal (US) /min]	Disc: stainless steel FPM Code	Disc: Alu-bronze EPDM Code	Disc: Alu-bronze FPM Code	
63	50	2	10	220	199 037 265	199 037 452	199 037 465	
75	65	2 ½	10	320	199 037 266	199 037 453	199 037 466	
90	80	3	10	500	199 037 267	199 037 454	199 037 467	
110	100	4	10	820	199 037 268	199 037 455	199 037 468	
140	125	5	10	1300	199 037 269	199 037 456	199 037 469	
160	150	6	10	1900	199 037 270	199 037 457	199 037 470	
225	200	8	10	3330	199 037 271	199 037 458	199 037 471	
280	250	10	10	5400	199 037 272	199 037 459	199 037 472	
315	300	12	10	8000	199 037 273	199 037 460	199 037 473	

# Metal - butterfly valves

## Metal - butterfly valve type 037P FO (Fail safe to open) Without manual override



### Model:

- Housing: Aluminium ASTM S 12A, Rilsan® coated
- Seatliner available in EPDM and FPM

d [mm]	DN [mm]	Inch	PN	Cv value ( $\Delta p=1$ psi) [gal (US) /min]	Disc: ductile iron/Rilsan® coated EPDM Code	Disc: ductile iron/Rilsan® coated FPM Code	Disc: stainless steel EPDM Code	
63	50	2	10	220	199 037 078	199 037 091	199 037 278	
75	65	2 ½	10	320	199 037 079	199 037 092	199 037 279	
90	80	3	10	500	199 037 080	199 037 093	199 037 280	
110	100	4	10	820	199 037 081	199 037 094	199 037 281	
140	125	5	10	1300	199 037 082	199 037 095	199 037 282	
160	150	6	10	1900	199 037 083	199 037 096	199 037 283	
225	200	8	10	3330	199 037 084	199 037 097	199 037 284	
280	250	10	10	5400	199 037 085	199 037 098	199 037 285	
315	300	12	10	8000	199 037 086	199 037 099	199 037 286	

d [mm]	DN [mm]	Inch	PN	Cv value ( $\Delta p=1$ psi) [gal (US) /min]	Disc: stainless steel FPM Code	Disc: Alu-bronze EPDM Code	Disc: Alu-bronze FPM Code	
63	50	2	10	220	199 037 291	199 037 478	199 037 491	
75	65	2 ½	10	320	199 037 292	199 037 479	199 037 492	
90	80	3	10	500	199 037 293	199 037 480	199 037 493	
110	100	4	10	820	199 037 294	199 037 481	199 037 494	
140	125	5	10	1300	199 037 295	199 037 482	199 037 495	
160	150	6	10	1900	199 037 296	199 037 483	199 037 496	
225	200	8	10	3330	199 037 297	199 037 484	199 037 497	
280	250	10	10	5400	199 037 298	199 037 485	199 037 498	
315	300	12	10	8000	199 037 299	199 037 486	199 037 499	

## Metal - butterfly valves

### Metal - butterfly valve type 037P DA (Double acting) Without manual override



#### Model:

- Housing: Aluminium ASTM S 12A, Rilsan® coated
- Seatliner available in EPDM and FPM

d [mm]	DN [mm]	Inch	PN	Cv value ( $\Delta p=1$ psi) [gal (US) /min]	Disc: ductile iron/Rilsan® coated EPDM Code	Disc: ductile iron/Rilsan® coated FPM Code	Disc: stainless steel EPDM Code	
63	50	2	10	220	199 037 104	199 037 117	199 037 304	
75	65	2 ½	10	320	199 037 105	199 037 118	199 037 305	
90	80	3	10	500	199 037 106	199 037 119	199 037 306	
110	100	4	10	820	199 037 107	199 037 120	199 037 307	
140	125	5	10	1300	199 037 108	199 037 121	199 037 308	
160	150	6	10	1900	199 037 109	199 037 122	199 037 309	
225	200	8	10	3330	199 037 110	199 037 123	199 037 310	
280	250	10	10	5400	199 037 111	199 037 124	199 037 311	
315	300	12	10	8000	199 037 112	199 037 125	199 037 312	

d [mm]	DN [mm]	Inch	PN	Cv value ( $\Delta p=1$ psi) [gal (US) /min]	Disc: stainless steel FPM Code	Disc: Alu-bronze EPDM Code	Disc: Alu-bronze FPM Code	
63	50	2	10	220	199 037 317	199 037 504	199 037 517	
75	65	2 ½	10	320	199 037 318	199 037 505	199 037 518	
90	80	3	10	500	199 037 319	199 037 506	199 037 519	
110	100	4	10	820	199 037 320	199 037 507	199 037 520	
140	125	5	10	1300	199 037 321	199 037 508	199 037 521	
160	150	6	10	1900	199 037 322	199 037 509	199 037 522	
225	200	8	10	3330	199 037 323	199 037 510	199 037 523	
280	250	10	10	5400	199 037 324	199 037 511	199 037 524	
315	300	12	10	8000	199 037 325	199 037 512	199 037 525	

## Metal - butterfly valves

### Metal - butterfly valves pneumatic lug metric

#### Metal - butterfly valve type 038P FC (Fail safe to close) Without manual override



**Model:**

- Seatliner available in EPDM and FPM
- Housing: ductile iron GGG-40/ASTM A536, Rilsan® coated
- Available in ANSI standard upon request
- In case this valve is used at the end of the line, the following pressures must not be exceeded: DN50 to DN150 5,6bar and > DN200 3,5bar

d [mm]	DN [mm]	Inch	PN	Cv value ( $\Delta p=1$ psi) [gal (US) /min]	Disc: ductile iron/Rilsan® coated EPDM Code	Disc: stainless steel EPDM Code
63	50	2	10	220	199 038 052	199 038 252
75	65	2 ½	10	320	199 038 053	199 038 253
90	80	3	10	500	199 038 054	199 038 254
110	100	4	10	820	199 038 055	199 038 255
140	125	5	10	1300	199 038 056	199 038 256
160	150	6	10	1900	199 038 057	199 038 257
225	200	8	10	3330	199 038 058	199 038 258
280	250	10	10	5400	199 038 059	199 038 259
315	300	12	10	8000	199 038 060	199 038 260

#### Metal - butterfly valve type 038P DA (Double acting) Without manual override



**Model:**

- Seatliner available in EPDM and FPM
- Housing: ductile iron GGG-40/ASTM A536, Rilsan® coated
- Available in ANSI standard upon request
- In case this valve is used at the end of the line, the following pressures must not be exceeded: DN50 to DN150 5,6bar and > DN200 3,5bar

d [mm]	DN [mm]	Inch	PN	Cv value ( $\Delta p=1$ psi) [gal (US) /min]	Disc: ductile iron/Rilsan® coated EPDM Code	Disc: stainless steel EPDM Code
63	50	2	10	220	199 038 104	199 038 304
75	65	2 ½	10	320	199 038 105	199 038 305
90	80	3	10	500	199 038 106	199 038 306
110	100	4	10	820	199 038 107	199 038 307
140	125	5	10	1300	199 038 108	199 038 308
160	150	6	10	1900	199 038 109	199 038 309
225	200	8	10	3330	199 038 110	199 038 310
280	250	10	10	5400	199 038 111	199 038 311
315	300	12	10	8000	199 038 112	199 038 312

## Metal - butterfly valves

### Metal - butterfly valves electric wafer Metric/Inch/ANSI

#### Metal - butterfly valve type 037E 100-230V 50-60Hz Without manual override



##### Model:

- Voltage 100-230 V, 50-60 Hz for EA31
- Voltage 115/230 V, 50-60 Hz for EA41/EA50
- Housing: Aluminium ASTM S 12A, Rilsan® coated
- Seatliner available in EPDM and FPM

\* Electric actuator for higher nominal pressure on request

d [mm]	DN [mm]	Inch	PN	Cv value ( $\Delta p=1$ psi) [gal (US) /min]	Disc: ductile iron/Rilsan® coated EPDM Code	Disc: ductile iron/Rilsan® coated FPM Code	Disc: stainless steel EPDM Code	
63	50	2	10	220	<b>199 037 130</b>	<b>199 037 143</b>	<b>199 037 330</b>	
75	65	2 ½	10	320	<b>199 037 131</b>	<b>199 037 144</b>	<b>199 037 331</b>	
90	80	3	10	500	<b>199 037 132</b>	<b>199 037 145</b>	<b>199 037 332</b>	
110	100	4	10	820	<b>199 037 133</b>	<b>199 037 146</b>	<b>199 037 333</b>	
140	125	5	10	1300	<b>199 037 134</b>	<b>199 037 147</b>	<b>199 037 334</b>	
160	150	6	10	1900	<b>199 037 135</b>	<b>199 037 148</b>	<b>199 037 335</b>	
225	200	8	10	3330	<b>199 037 136</b>	<b>199 037 149</b>	<b>199 037 336</b>	
*280	250	10	6	5400	<b>199 037 137</b>	<b>199 037 150</b>	<b>199 037 337</b>	
*315	300	12	4	8000	<b>199 037 138</b>	<b>199 037 151</b>	<b>199 037 338</b>	

d [mm]	DN [mm]	Inch	PN	Cv value ( $\Delta p=1$ psi) [gal (US) /min]	Disc: stainless steel FPM Code	Disc: Alu-bronze EPDM Code	Disc: Alu-bronze FPM Code	
63	50	2	10	220	<b>199 037 343</b>	<b>199 037 530</b>	<b>199 037 543</b>	
75	65	2 ½	10	320	<b>199 037 344</b>	<b>199 037 531</b>	<b>199 037 544</b>	
90	80	3	10	500	<b>199 037 345</b>	<b>199 037 532</b>	<b>199 037 545</b>	
110	100	4	10	820	<b>199 037 346</b>	<b>199 037 533</b>	<b>199 037 546</b>	
140	125	5	10	1300	<b>199 037 347</b>	<b>199 037 534</b>	<b>199 037 547</b>	
160	150	6	10	1900	<b>199 037 348</b>	<b>199 037 535</b>	<b>199 037 548</b>	
225	200	8	10	3330	<b>199 037 349</b>	<b>199 037 536</b>	<b>199 037 549</b>	
*280	250	10	6	5400	<b>199 037 350</b>	<b>199 037 537</b>	<b>199 037 550</b>	
*315	300	12	4	8000	<b>199 037 351</b>	<b>199 037 538</b>	<b>199 037 551</b>	

# Metal - butterfly valves

## Metal - butterfly valve type 037E 100-230V 50-60Hz With manual override



### Model:

- Voltage 100-230 V, 50-60 Hz for EA31
- Voltage 115/230 V, 50-60 Hz for EA41/EA50
- Housing: Aluminium ASTM S 12A, Rilsan® coated
- Seatliner available in EPDM and FPM

d [mm]	DN [mm]	Inch	PN	Cv value ( $\Delta p=1$ psi) [gal (US) /min]	Disc: ductile iron/Rilsan® coated EPDM Code	Disc: ductile iron/Rilsan® coated FPM Code	Disc: stainless steel EPDM Code	
63	50	2	10	220	199 037 156	199 037 169	199 037 356	
75	65	2 ½	10	320	199 037 157	199 037 170	199 037 357	
90	80	3	10	500	199 037 158	199 037 171	199 037 358	
110	100	4	10	820	199 037 159	199 037 172	199 037 359	
140	125	5	10	1300	199 037 160	199 037 173	199 037 360	
160	150	6	10	1900	199 037 161	199 037 174	199 037 361	
225	200	8	10	3330	199 037 162	199 037 175	199 037 362	
d [mm]	DN [mm]	Inch	PN	Cv value ( $\Delta p=1$ psi) [gal (US) /min]	Disc: stainless steel FPM Code	Disc: Alu-bronze EPDM Code	Disc: Alu-bronze FPM Code	
63	50	2	10	220	199 037 369	199 037 556	199 037 569	
75	65	2 ½	10	320	199 037 370	199 037 557	199 037 570	
90	80	3	10	500	199 037 371	199 037 558	199 037 571	
110	100	4	10	820	199 037 372	199 037 559	199 037 572	
140	125	5	10	1300	199 037 373	199 037 560	199 037 573	
160	150	6	10	1900	199 037 374	199 037 561	199 037 574	
225	200	8	10	3330	199 037 375	199 037 562	199 037 575	

## Metal - butterfly valves

### Metal - butterfly valves electric lug metric

#### Metal - butterfly valve type 038E 100-230V 50-60Hz Without manual override



**Model:**

- Voltage 100-230 V, 50-60 Hz for EA31
- Voltage 115/230 V, 50-60 Hz for EA41/EA50
- Seatliner available in EPDM and FPM
- Housing: ductile iron GGG-40/ASTM A536, Rilsan® coated
- Available in 24 V AC/DC and/other in ANSI standard upon request
- In case this valve is used at the end of the line, the following pressures must not be exceeded: DN50 to DN150 5,6bar and > DN200 3,5bar

\* Electric actuator for higher nominal pressure on request

d [mm]	DN [mm]	Inch	PN	Cv value ( $\Delta p=1$ psi) [gal (US) /min]	Disc: ductile iron/Rilsan® coated EPDM Code	Disc: stainless steel EPDM Code
63	50	2	10	220	<b>199 038 130</b>	<b>199 038 330</b>
75	65	2 ½	10	320	<b>199 038 131</b>	<b>199 038 331</b>
90	80	3	10	500	<b>199 038 132</b>	<b>199 038 332</b>
110	100	4	10	820	<b>199 038 133</b>	<b>199 038 333</b>
140	125	5	10	1300	<b>199 038 134</b>	<b>199 038 334</b>
160	150	6	10	1900	<b>199 038 135</b>	<b>199 038 335</b>
225	200	8	10	3330	<b>199 038 136</b>	<b>199 038 336</b>
*280	250	10	6	5400	<b>199 038 137</b>	<b>199 038 337</b>
*315	300	12	4	8000	<b>199 038 138</b>	<b>199 038 338</b>

# Metal - butterfly valves

## Spare parts to metal butterfly valves

### Hand lever kit for type 037M/038M



d-d [mm]	DN-DN [mm]	Inch	Code
63 - 90	50 - 80	2-3	<b>198 803 049</b>
110 - 110	100 - 100	4-5	<b>198 803 050</b>
140 - 140	125 - 125	6	<b>198 803 051</b>
160 - 225	150 - 200	8	<b>198 803 052</b>
280 - 315	250 - 300	10-12	<b>198 806 645</b>

### Hand lever kit with fine adjustment For type 037M/038M



d-d [mm]	DN-DN [mm]	Inch	Code
63 - 90	50 - 80	2-3	<b>198 803 384</b>
110 - 110	100 - 100	4	<b>198 803 385</b>
140 - 140	125 - 125	5	<b>198 803 386</b>
160 - 225	150 - 200	6-8	<b>198 803 387</b>

### For butterfly valve type 037M/038M With electric position indicator Limit switch box with 2 auxiliary switches

- Limit switch box and hand lever not included
- Solution for PNP, NPN, NAMUR on request



d-d [mm]	DN-DN [mm]	Inch	Code
63 - 90	50 - 80	2-3	<b>198 151 341</b>
110 - 110	100 - 100	4	<b>198 151 342</b>
140 - 140	125 - 125	5	<b>198 151 343</b>
160 - 225	150 - 200	6-8	<b>198 151 344</b>

### Reduction gear with handwheel for type 037G/038G

- Including assembly kit



d-d [mm]	DN-DN [mm]	Inch	Code
63 - 90	50 - 80	2-3	<b>198 806 690</b>
110 - 140	100 - 125	4-5	<b>198 806 691</b>
160 - 225	150 - 200	6-8	<b>198 806 692</b>
280 - 315	250 - 300	10-12	<b>198 806 693</b>

### Intermediate element to type 037E/038E Without manual override

d-d [mm]	DN-DN [mm]	Inch	Type	Code
63 - 90	50 - 80	2-3	EA 31	<b>198 000 411</b>
110 - 140	100 - 125	4-5	EA 31	<b>198 000 412</b>
160 - 225	150 - 200	6-8	EA 42	<b>198 000 315</b>
- 280	- 250	10	EA 42	<b>198 000 316</b>



# Metal - butterfly valves

## Intermediate element to type 037E/038E With manual override

### Model:

- EA30/41 no longer available, replacement by EA31/42
- EA50 will soon be phased out

d-d [mm]	DN-DN [mm]	Inch	Type	Code
63 - 90	50 - 80	2-3	EA 30	<b>198 000 338</b>
110 - 140	100 - 125	4-5	EA 41	<b>198 000 339</b>
160 - 225	150 - 200	6-8	EA 41	<b>198 000 340</b>
- 280	- 250	10	EA 50	-

## Intermediate element to type 037P/038P Without manual override

d	DN	Inch	Type	Code
63	50	2	PA30 FC/FO	198000382
63	50	2	PA35 DA	198000382
75	65	2 ½	PA30 FC/FO	198000382
75	65	2 ½	PA35 DA	198000382
90	80	3	PA35 FC/FO	198000383
90	80	3	PA35 DA	198000384
110	100	4	PA40 FC/FO	198000385
110	100	4	PA45 DA	198000385
140	125	5	PA45 FC/FO	198000386
140	125	5	PA45 DA	198000387
160	150	6	PA50 FC/FO	198000388
160	150	6	PA55 DA	198000388
225	200	8	PA60 FC/FO	198000389
225	200	8	PA60 DA	198000390
280	250	10	PA60 FC/FO	198000391
280	250	10	PA65 DA	198000391
315	300	12	PA70 FC/FO	198000392
315	300	12	PA70 DA	198000393

Code
<b>198 000 382</b>
<b>198 000 383</b>
<b>198 000 384</b>
<b>198 000 385</b>
<b>198 000 386</b>
<b>198 000 387</b>
<b>198 000 388</b>
<b>198 000 389</b>
<b>198 000 390</b>
<b>198 000 391</b>
<b>198 000 392</b>
<b>198 000 393</b>

# Metal - butterfly valves

## Spare parts to metal butterfly valves

### Bare shaft metal - butterfly valve type 037

#### Metric/Inch/ANSI

##### Model:

- Housing: Aluminium ASTM S 12A, Rilsan® coated
- Seatliner available in EPDM and FPM



d [mm]	DN [mm]	Inch	PN	Cv value ( $\Delta p=1$ psi) [gal (US) /min]	Disc: ductile iron/Rilsan® coated EPDM Code	Disc: ductile iron/Rilsan® coated FPM Code	Disc: stainless steel EPDM Code	
63	50	2	10	220	198 150 800	198 150 832	198 150 843	
75	65	2 ½	10	320	198 150 801	198 150 833	198 150 844	
90	80	3	10	500	198 150 802	198 150 834	198 150 845	
110	100	4	10	820	198 150 803	198 150 835	198 150 846	
140	125	5	10	1300	198 150 804	198 150 836	198 150 847	
160	150	6	10	1900	198 150 805	198 150 837	198 150 848	
225	200	8	10	3330	198 150 806	198 150 838	198 150 849	
280	250	10	10	5400	198 150 807	198 150 839	198 150 850	
315	300	12	10	8000	198 150 808	198 150 840	198 150 851	

d [mm]	DN [mm]	Inch	PN	Cv value ( $\Delta p=1$ psi) [gal (US) /min]	Disc: stainless steel FPM Code	Disc: Alu-bronze EPDM Code	Disc: Alu-bronze FPM Code	
63	50	2	10	220	198 150 854	198 151 000	198 151 011	
75	65	2 ½	10	320	198 150 855	198 151 001	198 151 012	
90	80	3	10	500	198 150 856	198 151 002	198 151 013	
110	100	4	10	820	198 150 857	198 151 003	198 151 014	
140	125	5	10	1300	198 150 858	198 151 004	198 151 015	
160	150	6	10	1900	198 150 859	198 151 005	198 151 016	
225	200	8	10	3330	198 150 860	198 151 006	198 151 017	
280	250	10	10	5400	198 150 861	198 151 007	198 151 018	
315	300	12	10	8000	198 150 862	198 151 008	198 151 019	

# Metal - butterfly valves

## Bare shaft metal - butterfly valve type 038 metric



### Model:

- Seatliner available in EPDM and FPM
- Housing: ductile iron GGG-40/ASTM A536, Rilsan® coated
- Available in ANSI standard upon request
- In case this valve is used at the end of the line, the following pressures must not be exceeded: DN50 to DN150 5,6bar and > DN200 3,5bar

d [mm]	DN [mm]	Inch	PN	Cv value ( $\Delta p=1$ psi) [gal (US) /min]	Disc: ductile iron/Rilsan® coated EPDM Code	Disc: ductile iron/Rilsan® coated FPM Code	Disc: stainless steel EPDM Code	
63	50	2	10	220	198 150 811	198 151 022	198 151 031	
75	65	2 ½	10	320	198 150 812	198 151 023	198 151 032	
90	80	3	10	500	198 150 813	198 151 024	198 151 033	
110	100	4	10	820	198 150 814	198 151 025	198 151 034	
140	125	5	10	1300	198 150 815	198 151 026	198 151 035	
160	150	6	10	1900	198 150 816	198 151 027	198 151 036	
225	200	8	10	3330	198 150 817	198 151 028	198 151 037	
280	250	10	10	5400	198 150 818	198 151 029	198 151 038	
315	300	12	10	8000	198 150 819	198 151 030	198 151 039	

d [mm]	DN [mm]	Inch	PN	Cv value ( $\Delta p=1$ psi) [gal (US) /min]	Disc: stainless steel FPM Code	Disc: Alu-bronze EPDM Code	Disc: Alu-bronze FPM Code	
63	50	2	10	220	198 151 040	198 151 049	198 151 058	
75	65	2 ½	10	320	198 151 041	198 151 050	198 151 059	
90	80	3	10	500	198 151 042	198 151 051	198 151 060	
110	100	4	10	820	198 151 043	198 151 052	198 151 061	
140	125	5	10	1300	198 151 044	198 151 053	198 151 062	
160	150	6	10	1900	198 151 045	198 151 054	198 151 063	
225	200	8	10	3330	198 151 046	198 151 055	198 151 064	
280	250	10	10	5400	198 151 047	198 151 056	198 151 065	
315	300	12	10	8000	198 151 048	198 151 057	198 151 066	

# Metal - butterfly valves

## Seat liner for type 037/038



d [mm]	DN [mm]	Inch	EPDM Code	FPM Code	CSM Code	NBR Code	
63	50	2	198 806 726	198 806 713	198 806 854	198 806 937	
75	65	2 ½	198 806 727	198 806 714	198 806 855	198 806 938	
90	80	3	198 806 728	198 806 715	198 806 856	198 806 939	
110	100	4	198 806 729	198 806 716	198 806 857	198 806 940	
140	125	5	198 806 730	198 806 717	198 806 858	198 806 941	
160	150	6	198 806 731	198 806 718	198 806 859	198 806 942	
225	200	8	198 806 732	198 806 719	198 806 860	198 806 943	
280	250	10	198 806 733	198 806 720	198 806 861	198 806 944	
315	300	12	198 806 734	198 806 721	198 806 862	198 806 945	

## Disc for type 037/038



d [mm]	DN [mm]	Inch	Ductile iron (GGG40)/ Rilsan® coated Code	Stainless steel (ASTM A351 - CF8M - 1.4408) Code	Aluminium- bronze (ASTM B-148) Code	
63	50	2	198 806 740	198 806 700	198 806 920	
75	65	2 ½	198 806 741	198 806 701	198 806 921	
90	80	3	198 806 742	198 806 702	198 806 922	
110	100	4	198 806 743	198 806 703	198 806 923	
140	125	5	198 806 744	198 806 704	198 806 924	
160	150	6	198 806 745	198 806 705	198 806 925	
225	200	8	198 806 746	198 806 706	198 806 926	
280	250	10	198 806 747	198 806 707	198 806 927	
315	300	12	198 806 748	198 806 708	198 806 928	



## Shaft for type 037/038

d [mm]	DN [mm]	Inch	Stainless steel AISI 420 / V2A Code	Stainless steel AISI 316 / V4A Code	
63	50	2	198 806 780	198 806 790	
75	65	2 ½	198 806 781	198 806 791	
90	80	3	198 806 782	198 806 792	
110	100	4	198 806 783	198 806 793	
140	125	5	198 806 784	198 806 794	
160	150	6	198 806 785	198 806 795	
225	200	8	198 806 786	198 806 796	
280	250	10	198 806 787	198 806 797	
315	300	12	198 806 788	198 806 798	

# Variable area flow meters



## Variable area flow meters

## Variable area flow meters

### Standard version

### Float in PVDF without magnet

### With solvent cement sockets PVC-U metric

#### Model:

- Union nuts and valve ends in other materials on request



Type	d [mm]	DN [mm]	Scale range [l/h]	Taper tube in Polyamid O-rings in EPDM Code	Taper tube in Polysulfone O-rings in EPDM Code	Taper tube in PVC-U transp. O-rings in EPDM Code
SK 10	32	25	50 - 500	198 801 900	198 801 901	198 803 290
SK 11	32	25	100 - 1000	198 801 902	198 801 903	198 803 291
SK 12	32	25	150 - 1500	198 803 734	198 803 735	198 803 736
SK 18	50	40	200 - 2000	198 803 738	198 803 739	198 803 740
SK 19	50	40	250 - 2500	198 803 741	198 803 742	198 803 743
SK 20	50	40	300 - 3000	198 801 904	198 801 905	198 803 292
SK 21	50	40	600 - 6000	198 801 906	198 801 907	198 803 293
SK 29	63	50	600 - 6000	198 803 744	198 803 745	198 803 746
SK 30	63	50	1000 - 10000	198 801 908	198 801 909	198 803 294
SK 31	63	50	1500 - 15000	198 801 910	198 801 911	198 803 295
SK 40	75	65	2000 - 20000	198 801 330	198 801 331	198 803 296
SK 41	75	65	3000 - 30000	198 801 332	198 801 333	198 803 297

### Standard version

### Float in PVDF with magnet

### With solvent cement sockets PVC-U metric

#### Model:

- Union nuts and valve ends in other materials on request
- Suitable limit switches see accessories for variable area flow meters



Type	d [mm]	DN [mm]	Scale range [l/h]	Taper tube in Polyamid O-rings in EPDM Code	Taper tube in Polysulfone O-rings in EPDM Code	Taper tube in PVC-U transp. O-Rings in EPDM Code
SK 100	32	25	50 - 500	198 801 912	198 801 913	198 803 300
SK 110	32	25	100 - 1000	198 801 914	198 801 915	198 803 301
SK 120	32	25	150 - 1500	198 803 747	198 803 748	198 803 749
SK 180	50	40	200 - 2000	198 803 750	198 803 751	198 803 752
SK 190	50	40	250 - 2500	198 803 753	198 803 754	198 803 755
SK 200	50	40	300 - 3000	198 801 916	198 801 917	198 803 302
SK 210	50	40	600 - 6000	198 801 918	198 801 919	198 803 303
SK 290	63	50	600 - 6000	198 803 756	198 803 757	198 803 758
SK 300	63	50	1000 - 10000	198 801 920	198 801 921	198 803 304
SK 310	63	50	1500 - 15000	198 801 922	198 801 923	198 803 305
SK 400	75	65	2000 - 20000	198 801 334	198 801 335	198 803 306
SK 410	75	65	3000 - 30000	198 801 336	198 801 337	198 803 307

# Variable area flow meters



## Short version

Float in PVDF without magnet

With solvent cement sockets PVC-U metric

### Model:

- Union nuts and valve ends in other materials on request

Type	d [mm]	DN [mm]	Scale range [l/h]	Taper tube in Polysulfone O-rings in EPDM Code	Taper tube in PVC-U transp. O-rings in EPDM Code
SK 50	16	10	2.5 - 25	198 801 880	198 803 310
SK 51	16	10	5 - 50	198 801 881	198 803 311
SK 52	16	10	10 - 100	198 801 882	198 803 312
SK 60	20	15	8 - 80	198 801 883	198 803 313
SK 61	20	15	15 - 150	198 801 884	198 803 314
SK 62	20	15	20 - 200	198 801 885	198 803 315
SK 70	32	25	15 - 150	198 801 886	198 803 316
SK 71	32	25	30 - 300	198 801 887	198 803 317
SK 72	32	25	50 - 500	198 801 888	198 803 318
SK 73	32	25	100 - 1000	198 801 889	198 803 319



## Short version

Float in PVDF with magnet

With solvent cement sockets PVC-U metric

### Model:

- Union nuts and valve ends in other materials on request
- Suitable limit switches see accessories for variable area flow meters

Type	d [mm]	DN [mm]	Scale range [l/h]	Taper tube in Polysulfone O-rings in EPDM Code	Taper tube in PVC-U transp. O-rings in EPDM Code
SK 500	16	10	2.5 - 25	198 801 890	198 803 320
SK 510	16	10	5 - 50	198 801 891	198 803 321
SK 520	16	10	10 - 100	198 801 892	198 803 322
SK 600	20	15	8 - 80	198 801 893	198 803 323
SK 610	20	15	15 - 150	198 801 894	198 803 324
SK 620	20	15	20 - 200	198 801 895	198 803 325
SK 700	32	25	15 - 150	198 801 896	198 803 326
SK 710	32	25	30 - 300	198 801 897	198 803 327
SK 720	32	25	50 - 500	198 801 898	198 803 328
SK 730	32	25	100 - 1000	198 801 899	198 803 329

## Variable area flow meters

### Special version PVDF-HP Float in PTFE With fusion spigots BCF



Type	d [mm]	DN [mm]	Scale range [l/h]	Scale range [gal/min]	Taper tube in Polysulfone O-rings in FPM Code
SK 73	32	25	136 - 795	0.6-3.5	<b>198 801 202</b>
SK 20	50	40	568 - 2273	2.5-10.0	<b>198 801 203</b>
SK 21	50	40	909 - 4091	4.0-18.0	<b>198 801 204</b>
SK 30	63	50	1000 - 8142	4.4-36.0	<b>198 801 205</b>
SK 31	63	50	1000 - 9091	4.4-40.0	<b>198 801 206</b>
SK 40	75	65	1848 - 11364	8.0-50.0	<b>198 801 207</b>
SK 41	75	65	2273 - 16364	10.0-72.0	<b>198 801 208</b>

### Special version PVDF Float in PVDF (red) without magnet

- Limit contacts (min. / max.) and special scales on request



Type	d [mm]	DN [mm]	Scale range [l/h]	Taper tube in PVDF O-rings in FPM fusion socket Code	Taper tube in PVDF O-rings in FPM IR fusion spigot Code
SK 10	32	25	50 - 500	<b>198 806 466</b>	<b>198 803 905</b>
SK 11	32	25	100 - 1000	<b>198 806 467</b>	<b>198 803 906</b>
SK 20	50	40	200 - 2000	<b>198 806 468</b>	<b>198 803 907</b>
SK 21	50	40	300 - 3000	<b>198 806 469</b>	<b>198 803 908</b>
SK 30	63	50	600 - 6000	<b>198 806 470</b>	<b>198 803 909</b>
SK 31	63	50	1200 - 12000	<b>198 806 471</b>	<b>198 803 910</b>
SK 40	75	65	2000 - 20000	<b>198 806 472</b>	<b>198 803 911</b>
SK 41	75	65	3000 - 30000	<b>198 806 473</b>	<b>198 803 912</b>

### Accessories Limit switch control bistable for standard version



Type	GK 01 Code
SK100-120 / 190-210 / 300-410 SK 180 / SK 290	<b>198 801 936</b> <b>198 801 841</b>



# Variable area flow meters



## Accessories Limit contact (min/max.) For short version

Type	top Code	bottom Code	
SK500-730 GK 03	<b>198 801 878</b>	-	
SK500-730 GK 04	-	<b>198 801 879</b>	



## Accessories 4-20 mA sensor

- Kit GK 05:
- 1 x sensor 4-20 mA
- 1 x float PVDF with magnet (monostable)
- Basic unit is standard version (without magnet)

Type	d [mm]	DN [mm]		Code	
GK 05	32	25	SK 10 / 11	<b>199 190 334</b>	
GK 05	50	40	SK 20 / 21	<b>199 190 335</b>	
GK 05	63	50	SK 30 / 31	<b>199 190 336</b>	
GK 05	75	65	SK 40	<b>199 190 337</b>	
GK 05	75	65	SK 41	<b>199 190 338</b>	

## Special scale for standard version Water l/h

Type	Scale range [l/h]	Code	
SK 10 / 100	50 - 500	<b>198 801 955</b>	
SK 11 / 110	100 - 1000	<b>198 801 956</b>	
SK 12 / 120	150 - 1500	<b>198 803 800</b>	
SK 18 / 180	200 - 2000	<b>198 803 801</b>	
SK 19 / 190	250 - 2500	<b>198 803 802</b>	
SK 20 / 200	300 - 3000	<b>198 801 957</b>	
SK 21 / 210	600 - 6000	<b>198 801 958</b>	
SK 29 / 290	600 - 6000	<b>198 803 803</b>	
SK 30 / 300	1000 - 10000	<b>198 801 959</b>	
SK 31 / 310	1500 - 15000	<b>198 801 960</b>	
SK 40 / 400	2000 - 20000	<b>198 801 876</b>	
SK 41 / 410	3000 - 30000	<b>198 801 877</b>	

## Variable area flow meters

### Special scale for standard version Water in %

Type	measure- ment range [%]	Code
SK 10 / 110	10 - 100	<b>198 802 076</b>
SK 11 / 110	10 - 100	<b>198 802 077</b>
SK 12 / 120	10 - 100	<b>198 803 804</b>
SK 18 / 180	10 - 100	<b>198 803 805</b>
SK 19 / 190	10 - 100	<b>198 803 806</b>
SK 20 / 200	10 - 100	<b>198 802 078</b>
SK 21 / 210	10 - 100	<b>198 802 079</b>
SK 29 / 290	10 - 100	<b>198 803 807</b>
SK 30 / 300	10 - 100	<b>198 802 080</b>
SK 31 / 310	10 - 100	<b>198 802 081</b>
SK 40 / 410	10 - 100	<b>198 802 082</b>
SK 41 / 410	10 - 100	<b>198 802 083</b>

### Special scale for standard version m<sup>3</sup>/h

Type	Scale range [m <sup>3</sup> /h]	Code
SK 10 / 100	0,05 - 0,5	<b>198 801 937</b>
SK 11 / 110	0,1 - 1	<b>198 801 938</b>
SK 12 / 120	0,15 - 1,5	<b>198 803 808</b>
SK 18 / 180	0,2 - 2	<b>198 803 809</b>
SK 19 / 190	0,25 - 2,5	<b>198 803 810</b>
SK 20 / 200	0,3 - 3	<b>198 801 939</b>
SK 21 / 210	0,6 - 6	<b>198 801 940</b>
SK 29 / 290	0,6 - 6	<b>198 803 811</b>
SK 30 / 300	1 - 10	<b>198 801 941</b>
SK 31 / 310	1,5 - 15	<b>198 801 942</b>
SK 40 / 400	2 - 20	<b>198 801 318</b>
SK 41 / 410	3 - 30	<b>198 801 319</b>

### Special scale for standard version Imp. GPM

Type	Scale range [gal/min]	Code
SK 10 / 100	0,183 - 1,83	<b>198 801 943</b>
SK 11 / 110	0,366 - 3,66	<b>198 801 944</b>
SK 12 / 120	0,55 - 5,5	<b>198 803 812</b>
SK 18 / 180	0,733 - 7,33	<b>198 803 813</b>
SK 19 / 190	0,916 - 9,16	<b>198 803 814</b>
SK 20 / 200	1,09 - 10,9	<b>198 801 945</b>
SK 21 / 210	2,19 - 21,9	<b>198 801 946</b>
SK 29 / 290	2,2 - 22	<b>198 803 815</b>
SK 30 / 300	3,66 - 36,6	<b>198 801 947</b>
SK 31 / 310	5,49 - 54,9	<b>198 801 948</b>

## Variable area flow meters

### Special scale for standard version US GPM

Type	Scale range [gal/min]	Code	
SK 10 / 100	0,22 - 2,2	<b>198 801 949</b>	
SK 11 / 110	0,44 - 4,4	<b>198 801 950</b>	
SK 12 / 120	0,66 - 6,6	<b>198 803 816</b>	
SK 18 / 180	0,66 - 6,6	<b>198 803 817</b>	
SK 19 / 190	1,1 - 11	<b>198 803 818</b>	
SK 20 / 200	1,32 - 13,2	<b>198 801 951</b>	
SK 21 / 210	2,64 - 26,4	<b>198 801 952</b>	
SK 29 / 290	2,64 - 26,4	<b>198 803 819</b>	
SK 30 / 300	4,40 - 44,02	<b>198 801 953</b>	
SK 31 / 310	6,60 - 66,04	<b>198 801 954</b>	
SK 40 / 400	8,80 - 88	<b>198 801 320</b>	
SK 41 / 410	13,20 - 132	<b>198 801 321</b>	

### Special scale for standard version Air/0bar/Nm<sup>3</sup>/h

Type	Scale range [m <sup>3</sup> /h]	Code	
SK 10 / 100	2,1 - 16	<b>198 801 284</b>	
SK 11 / 110	4,2 - 32	<b>198 801 285</b>	
SK 18 / 180	10 - 70	<b>198 803 821</b>	
SK 20 / 200	12,1 - 90	<b>198 801 286</b>	
SK 21 / 210	21,1 - 177	<b>198 801 287</b>	
SK 29 / 290	22 - 190	<b>198 803 823</b>	
SK 30 / 300	34,2 - 276	<b>198 801 288</b>	
SK 31 / 310	49,6 - 414	<b>198 801 289</b>	
SK 40 / 400	60 - 580	<b>198 801 322</b>	
SK 41 / 410	100 - 860	<b>198 801 323</b>	

### Special scale for standard version HCI 30-33% l/h

Type	Scale range [l/h]	Code	
SK 10 / 100	50 - 450	<b>198 801 290</b>	
SK 11 / 110	150 - 900	<b>198 801 291</b>	
SK 18 / 180	200 - 1900	<b>198 803 825</b>	
SK 20 / 200	500 - 2500	<b>198 801 292</b>	
SK 21 / 210	700 - 5000	<b>198 801 293</b>	
SK 29 / 290	800 - 5600	<b>198 803 827</b>	
SK 30 / 300	700 - 8500	<b>198 801 294</b>	
SK 31 / 310	1000 - 12000	<b>198 801 295</b>	
SK 40 / 400	2000 - 18000	<b>198 801 324</b>	
SK 41 / 410	3600 - 25000	<b>198 801 325</b>	

## Variable area flow meters

### Special scale for standard version NaOH 30% I/h

Type	Scale range [l/h]	Code	
SK 10 / 100	15 - 240	<b>198 801 296</b>	
SK 11 / 110	50 - 600	<b>198 801 297</b>	
SK 18 / 180	100 - 1400	<b>198 803 829</b>	
SK 20 / 200	200 - 2000	<b>198 801 298</b>	
SK 21 / 210	500 - 4500	<b>198 801 299</b>	
SK 30 / 300	500 - 7500	<b>198 801 300</b>	
SK 31 / 310	800 - 11000	<b>198 801 301</b>	
SK 40 / 400	1400 - 15000	<b>198 801 326</b>	
SK 41 / 410	2000 - 20000	<b>198 801 327</b>	

### Special scale for standard version NaOH 50% I/h

Type	Scale range [l/h]	Code	
SK 10 / 100	2 - 60	<b>198 801 302</b>	
SK 11 / 110	10 - 190	<b>198 801 303</b>	
SK 18 / 180	20 - 600	<b>198 803 833</b>	
SK 20 / 200	50 - 1000	<b>198 801 304</b>	
SK 21 / 210	100 - 2500	<b>198 801 305</b>	
SK 29 / 290	200 - 3400	<b>198 803 835</b>	
SK 30 / 300	100 - 4750	<b>198 801 306</b>	
SK 31 / 310	300 - 7000	<b>198 801 307</b>	
SK 40 / 400	500 - 11000	<b>198 801 328</b>	
SK 41 / 410	1000 - 14000	<b>198 801 329</b>	

### Special scale for short version Water I/h

Type	Scale range [l/h]	Code	
SK 50 / 500	2,5 - 25	<b>198 801 386</b>	
SK 51 / 510	5 - 50	<b>198 801 387</b>	
SK 52 / 520	10 - 100	<b>198 801 388</b>	
SK 60 / 600	8 - 80	<b>198 801 389</b>	
SK 61 / 610	15 - 150	<b>198 801 390</b>	
SK 62 / 620	20 - 200	<b>198 801 391</b>	
SK 70 / 700	15 - 150	<b>198 801 392</b>	
SK 71 / 710	30 - 300	<b>198 801 393</b>	
SK 72 / 720	50 - 500	<b>198 801 394</b>	
SK 73 / 730	100 - 1000	<b>198 801 395</b>	

## Variable area flow meters

### Special scale for short version US GPM

Type	Scale range [gal/min]	Code	
SK 50 / 500	0,01 - 0,11	<b>198 801 961</b>	
SK 51 / 510	0,02 - 0,22	<b>198 801 962</b>	
SK 52 / 520	0,04 - 0,44	<b>198 801 963</b>	
SK 60 / 600	0,03 - 0,35	<b>198 801 964</b>	
SK 61 / 610	0,06 - 0,66	<b>198 801 965</b>	
SK 62 / 620	0,08 - 0,88	<b>198 801 966</b>	
SK 70 / 700	0,06 - 0,66	<b>198 801 967</b>	
SK 71 / 710	0,13 - 1,32	<b>198 801 968</b>	
SK 72 / 720	0,22 - 2,20	<b>198 801 969</b>	
SK 73 / 730	0,44 - 4,40	<b>198 801 970</b>	

### Special scale for short version Air/0bar/Nm<sup>3</sup>/h

Type	Scale range [m <sup>3</sup> /h]	Code	
SK 50 / 500	0,5 - 0,95	<b>198 801 308</b>	
SK 51 / 510	0,5 - 1,9	<b>198 801 309</b>	
SK 52 / 520	0,8 - 3,0	<b>198 801 310</b>	
SK 60 / 600	0,6 - 2,8	<b>198 801 311</b>	
SK 61 / 610	1,4 - 5,6	<b>198 801 312</b>	
SK 62 / 620	1,5 - 7,0	<b>198 801 313</b>	
SK 70 / 700	1,0 - 6,5	<b>198 801 314</b>	
SK 71 / 710	1,5 - 11,0	<b>198 801 315</b>	
SK 72 / 720	3,0 - 18,0	<b>198 801 316</b>	
SK 73 / 730	6,0 - 30,0	<b>198 801 317</b>	

### Special scale for short version HCI 30 - 33% l/h

Type	Scale range [l/h]	Code	
SK 50 / 500	2,5 - 20	<b>198 806 511</b>	
SK 51 / 510	5 - 40	<b>198 806 512</b>	
SK 52 / 520	10 - 85	<b>198 806 513</b>	
SK 60 / 600	8 - 70	<b>198 806 514</b>	
SK 61 / 610	15 - 125	<b>198 806 515</b>	
SK 62 / 620	20 - 170	<b>198 806 516</b>	
SK 70 / 700	5 - 125	<b>198 806 517</b>	
SK 71 / 710	30 - 260	<b>198 806 518</b>	
SK 72 / 720	50 - 425	<b>198 806 519</b>	
SK 73 / 730	100 - 850	<b>198 806 520</b>	

# Variable area flow meters

## Special scale for short version NaOH 30% I/h

Type	Scale range [l/h]	Code	
SK 50 / 500	0.2 - 5	<b>198 806 521</b>	
SK 51 / 510	1 - 14	<b>198 806 522</b>	
SK 52 / 520	3 - 35	<b>198 806 523</b>	
SK 60 / 600	2 - 23	<b>198 806 524</b>	
SK 61 / 610	3 - 55	<b>198 806 525</b>	
SK 62 / 620	5 - 80	<b>198 806 526</b>	
SK 70 / 700	3 - 55	<b>198 806 527</b>	
SK 71 / 710	6 - 130	<b>198 806 528</b>	
SK 72 / 720	10 - 250	<b>198 806 529</b>	
SK 73 / 730	40 - 590	<b>198 806 530</b>	

## Special scale for short version NaOH 50% I/h

Type	Scale range [l/h]	Code	
SK 60 / 600	0,2 - 3,5	<b>198 806 531</b>	
SK 61 / 610	0,5 - 10	<b>198 806 532</b>	
SK 62 / 620	0,5 - 16	<b>198 806 533</b>	
SK 70 / 700	0,5 - 11	<b>198 806 534</b>	
SK 71 / 710	1 - 33	<b>198 806 535</b>	
SK 72 / 720	2 - 80	<b>198 806 536</b>	
SK 73 / 730	10 - 220	<b>198 806 537</b>	

## Variable area flow meters

### Spare part for variable area flow meter SK10-SK41/SK100-SK410 Standard version taper tube Polyamide

Type	d [mm]	DN [mm]	Code
SK 10 / 100	32	25	198 801 971
SK 11 / 110	32	25	198 801 972
SK 12 / 120	32	25	198 803 774
SK 18 / 180	50	40	198 803 775
SK 19 / 190	50	40	198 803 776
SK 20 / 200	50	40	198 801 973
SK 21 / 210	50	40	198 801 974
SK 29 / 290	63	50	198 803 777
SK 30 / 300	63	50	198 801 975
SK 31 / 310	63	50	198 801 976
SK 40 / 400	75	65	198 801 441
SK 41 / 410	75	65	198 801 443

### Spare part for variable area flow meter SK10-SK41/SK100-SK410 Standard version taper tube Polysulfone

Type	d [mm]	DN [mm]	Code
SK 10 / 100	32	25	198 801 990
SK 11 / 110	32	25	198 801 991
SK 12 / 120	32	25	198 803 836
SK 18 / 180	50	40	198 803 837
SK 19 / 190	50	40	198 803 838
SK 20 / 200	50	40	198 801 992
SK 21 / 210	50	40	198 801 993
SK 29 / 290	63	50	198 803 839
SK 30 / 300	63	50	198 801 994
SK 31 / 310	63	50	198 801 995
SK 40 / 400	75	65	198 801 442
SK 41 / 410	75	65	198 801 444

### Spare part for variable area flow meter SK10-SK41/SK100-SK410 Standard version taper tube PVC-U transparent

Type	d [mm]	DN [mm]	Code
SK 10 / 100	32	25	198 803 778
SK 11 / 110	32	25	198 803 779
SK 12 / 120	32	25	198 803 780
SK 18 / 180	50	40	198 803 781
SK 19 / 190	50	40	198 803 782
SK 20 / 200	50	40	198 803 783
SK 21 / 210	50	40	198 803 784
SK 29 / 290	63	50	198 803 785
SK 30 / 300	63	50	198 803 786
SK 31 / 310	63	50	198 803 787
SK 40 / 400	75	65	198 803 788
SK 41 / 410	75	65	198 803 789

## Variable area flow meters

**Spare part for variable area flow meter  
SK10-SK41/SK100-SK410  
Standard version float PVDF  
Without magnet**

Type	d [mm]	DN [mm]	Code
SK 10 / 11 / 12	32	25	<b>198 801 977</b>
SK 18	50	40	<b>198 803 959</b>
SK 19 / 20 / 21	50	40	<b>198 801 978</b>
SK 29	63	50	<b>198 803 961</b>
SK 30 / 31	63	50	<b>198 801 979</b>
SK 40	75	65	<b>198 801 987</b>
SK 41	75	65	<b>198 801 344</b>

**Spare part for variable area flow meter  
SK10-SK41/SK100-SK410  
Standard version float PVDF  
With magnet bistabil**

Type	d [mm]	DN [mm]	Code
SK 100 / 110 / 120	32	25	<b>198 801 980</b>
SK 180	50	40	<b>198 803 960</b>
SK 190 / 200 / 210	50	40	<b>198 801 981</b>
SK 290	63	50	<b>198 803 962</b>
SK 300 / 310	63	50	<b>198 801 982</b>
SK 400	75	65	<b>198 801 988</b>
SK 410	75	65	<b>198 801 345</b>

**Spare part for variable area flow meter  
SK10-SK41/SK100-SK410  
Standard version float PTFE  
Without magnet**

Type	d [mm]	DN [mm]	Code
SK 20	50	40	<b>198 807 167</b>
SK 21	50	40	<b>198 807 171</b>
SK 30	63	50	<b>198 807 168</b>
SK 31	63	50	<b>198 807 172</b>
SK 40	75	65	<b>198 807 169</b>
SK 41	75	65	<b>198 807 170</b>

**Spare part for variable area flow meter  
SK10-SK41/SK100-SK410  
Standard version top/bottom insert PVDF**

Type	d [mm]	DN [mm]	top=bottom Code	bottom Code
SK 10 / 100; 11 / 110; 12 / 120	32	25	<b>198 801 983</b>	-
SK 18 / 180	50	40	<b>198 803 957</b>	-
SK 19 / 190; 20 / 200; 21 / 210	50	40	<b>198 801 984</b>	-
SK 29 / 290	63	50	<b>198 803 958</b>	-
SK 30 / 300; 31 / 310			<b>198 801 986</b>	<b>198 801 985</b>
SK 40 / 400; 41 / 410			<b>198 801 998</b>	<b>198 801 997</b>



## Variable area flow meters

### Spare part for variable area flow meter SK50-SK73/SK500-SK730 Short version taper tube Polysulfone

Type	d [mm]	DN [mm]	Code
SK 50 / 500	16	10	198 801 341
SK 51 / 510	16	10	198 801 342
SK 52 / 520	16	10	198 801 343
SK 60 / 600	20	15	198 801 449
SK 61 / 610	20	15	198 801 450
SK 62 / 620	20	15	198 801 451
SK 70 / 700	32	25	198 801 445
SK 71 / 710	32	25	198 801 338
SK 72 / 720	32	25	198 801 339
SK 73 / 730	32	25	198 801 340

### Spare part for variable area flow meter SK50-SK73/SK500-SK730 Short version taper tube PVC-U transparent

Type	d [mm]	DN [mm]	Code
SK 50 / 500	16	10	198 803 790
SK 51 / 510	16	10	198 803 791
SK 52 / 520	16	10	198 803 792
SK 60 / 600	20	15	198 803 793
SK 61 / 610	20	15	198 803 794
SK 62 / 620	20	15	198 803 795
SK 70 / 700	32	25	198 803 796
SK 71 / 710	32	25	198 803 797
SK 72 / 720	32	25	198 803 798
SK 73 / 730	32	25	198 803 799

### Spare part for variable area flow meter SK50-SK73/SK500-SK730 Short version float PVDF Without magnet

Type	d [mm]	DN [mm]	Code
SK 50 / 51 / 52	16	10	198 806 219
SK 60 / 61 / 62	20	15	198 806 220
SK 70 / 71 / 72 / 73	32	25	198 806 221

### Spare part for variable area flow meter SK50-SK73/SK500-SK730 Short version float PVDF With magnet bistabil

Type	d [mm]	DN [mm]	Code
SK 500 / 510 / 520	16	10	198 806 222
SK 600 / 610 / 620	20	15	198 806 223
SK 700 / 710 / 720 / 730	32	25	198 806 224

## Variable area flow meters

**Spare part for variable area flow meter  
SK50-SK73/SK500-SK730  
Short version float PTFE  
Without magnet**

Type	d [mm]	DN [mm]	Code	
SK 73	32	25	198 807 166	

**Spare part for variable area flow meter  
SK50-SK73/SK500-SK730  
Short version top insert PVDF**

Type	d [mm]	DN [mm]	Code	
SK 50 / 500; 51 / 510; 52 / 520	16	10	198 807 188	
SK 60 / 600; 61 / 610; 62 / 620	20	15	198 807 187	
SK 70 / 700; 71 / 710; 72 / 720; 73 / 730	32	25	198 807 182	

## Control Ball Valve Type 546 linear in PVC-U, PP and PVDF, DN 15-50



### Product Features

- All-plastic valve
- Dimension range DN 15-50
- Large selection of materials
- Linear flow characteristics
- High kv value
- Manual and actuated versions
- Simple design
  
- Selectable with the configurator

# Product Range

## Selection

Materials Type of connection	PVC-U	PP	PVDF	
Socket	●	●	●	
Spigot	●	●	●	
Seal EPDM	●	●	●	
FPM	●	●	●	

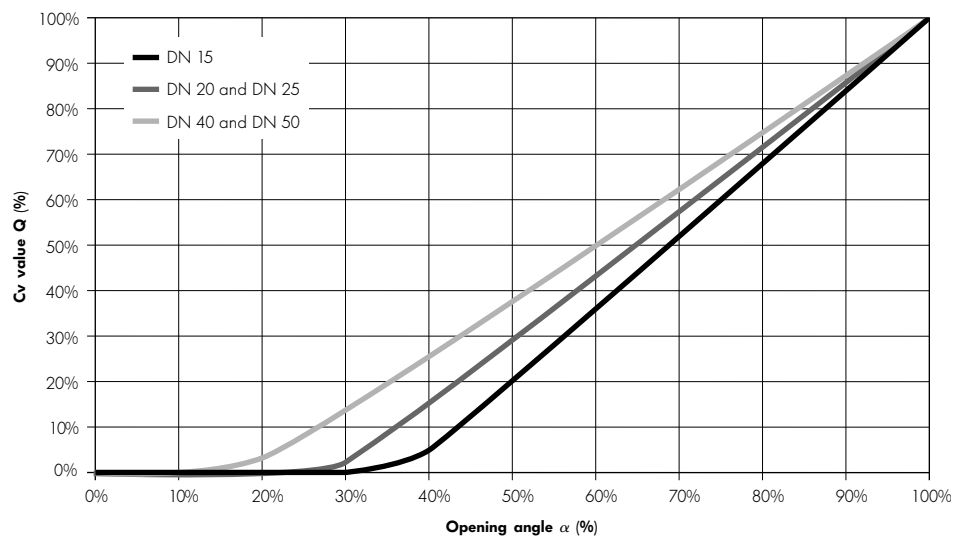
## Type of Actuator

Type M = with manual lever



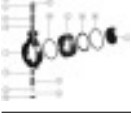
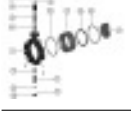
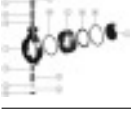
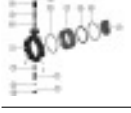
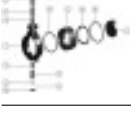
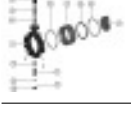
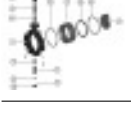

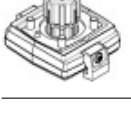


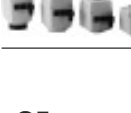
Type P = with pneumatic actuator FC with DSR 201 positioner

Type E = with electric actuator EA 21 with PE 25 positioner

## Flow Diagram



# Accessories for actuated valves

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386



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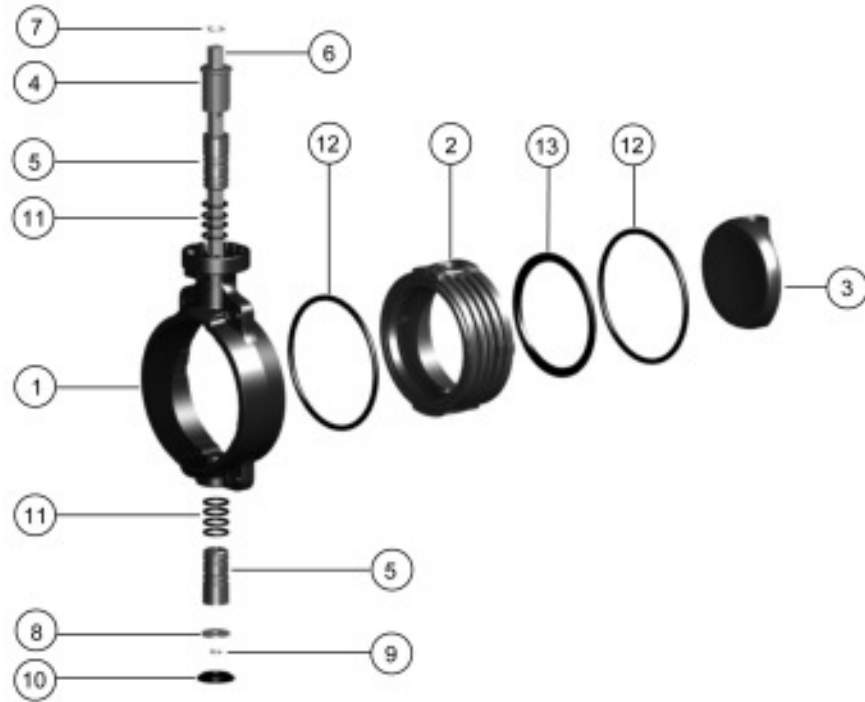


Controllers-PE65 / SRI986 / DSR100/101/201

390

# Accessories for actuated valves

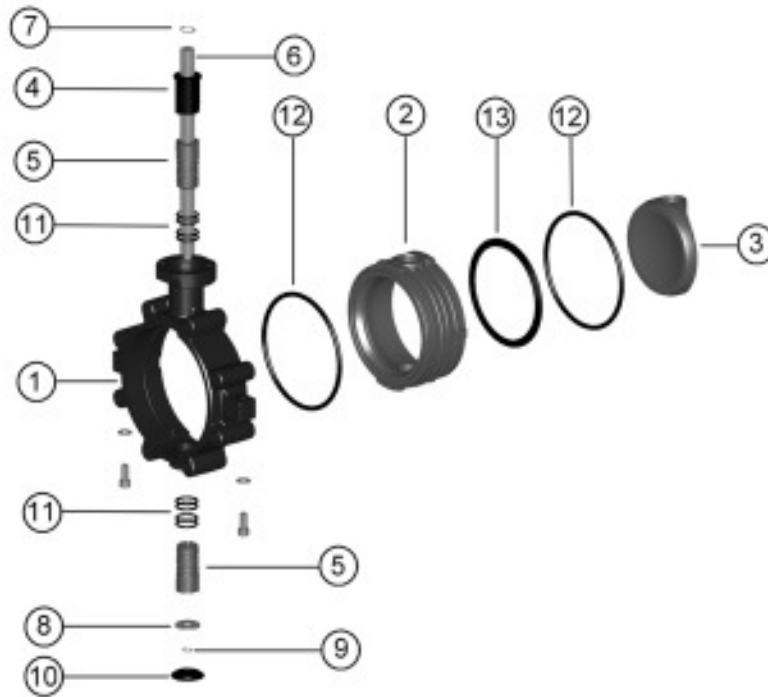
## Spare parts for butterfly valve type 567 PVC-U Hand lever with index plate



No.	Article / Material	Pieces	d63 DN50	d75 DN65	d90 DN80	d110 DN100	d140 DN125	d160 DN150	d225 DN200
3	Disc PVC-U	1	161 490 889	161 490 890	161 490 891	161 490 892	161 490 893	161 490 894	161 490 895
5	Bearing bush	2	161 486 886	161 486 886	161 486 886	161 486 887	161 486 887	161 486 888	161 486 888
11	Bush PVC-U								
11	O-ring EPDM								
5	Bearing bush	2	161 486 892	161 486 892	161 486 892	161 486 893	161 486 893	161 486 894	161 486 894
11	Bush PVC-U								
11	O-ring FPM								
2	Inner body	1	161 486 861	161 486 862	161 486 863	161 486 864	161 486 865	161 486 866	161 486 867
13	Body PVC-U								
13	Profile seal EPDM								
2	Inner body	1	161 486 873	161 486 874	161 486 875	161 486 876	161 486 877	161 486 878	161 486 879
13	Body PVC-U								
13	Profile seal FPM								
12	Flange gasket EPDM	2	161 486 959	161 486 960	161 486 961	161 486 962	161 486 963	161 486 964	161 486 965
12	Flange gasket FPM	2	161 486 979	161 486 980	161 486 981	161 486 982	161 486 983	161 486 984	161 486 985
4	End stop PP Glasfiber Reinforced	1	167 483 251	167 483 251	167 483 251	167 483 252	167 483 252	167 483 253	167 483 253
6	Shaft set	1	161 486 899	161 486 900	161 486 901	161 486 902	161 486 903	161 486 904	161 486 905
7+9	Shaft Chrom Steel 1.4301 AISI 304								
7+9	Retention ring	2							
8	Washer	1							
	Lever with index plate	1	161 486 690	161 486 690	161 486 690	161 486 691	161 486 691	161 486 694	161 486 695

# Accessories for actuated valves

## Spare parts for butterfly valve type 568 PVC-U Hand lever with index plate

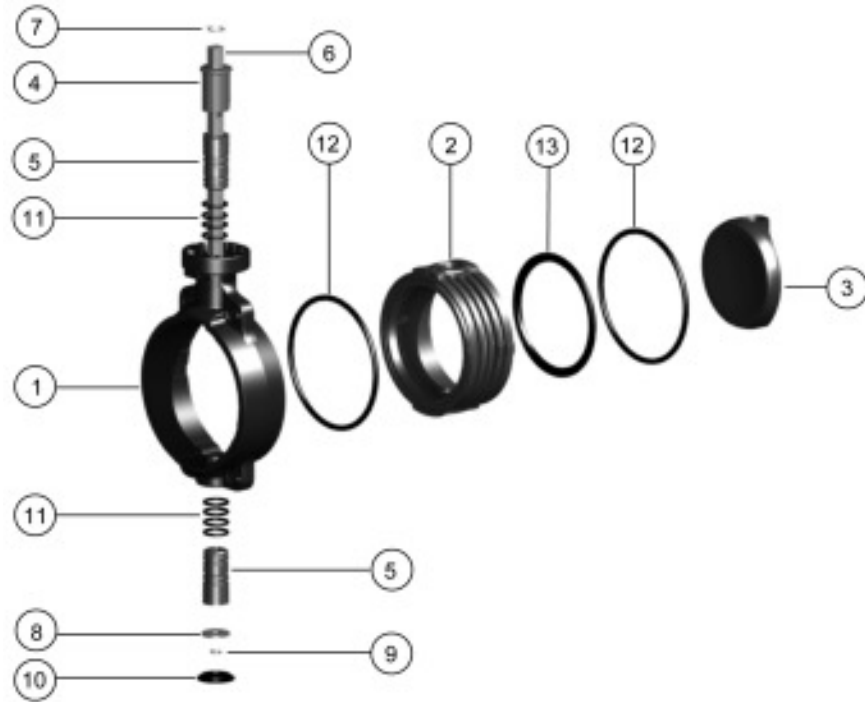


No.	Article / Material	Pieces	d63 DN50	d75 DN65	d90 DN80	d110 DN100	d140 DN125	d160 DN150	d225 DN200
3	Disc PVC-U	1	161 490 889	161 490 890	161 490 891	161 490 892	161 490 893	161 490 894	161 490 895
5	Bearing bush	2	161 486 886	161 486 886	161 486 886	161 486 887	161 486 887	161 486 888	161 486 888
11	Bush PVC-U								
5	Bearing bush	2	161 486 892	161 486 892	161 486 892	161 486 893	161 486 893	161 486 894	161 486 894
11	Bush PVC-U								
2	Inner body	1	161 486 861	161 486 862	161 486 863	161 486 864	161 486 865	161 486 866	161 486 867
13	Body PVC-U								
2	Inner body	1	161 486 873	161 486 874	161 486 875	161 486 876	161 486 877	161 486 878	161 486 879
13	Body PVC-U								
12	Profile seal EPDM	1							
12	Flange gasket EPDM	2	161 486 959	161 486 960	161 486 961	161 486 962	161 486 963	161 486 964	161 486 965
12	Flange gasket FPM	2	161 486 979	161 486 980	161 486 981	161 486 982	161 486 983	161 486 984	161 486 985
4	End stop PP Glasfiber Reinforced	1	167 486 251	167 486 251	167 486 251	167 483 252	167 483 252	167 483 253	167 483 253
6	Shaft set	1	161 486 899	161 486 900	161 486 901	161 486 902	161 486 903	161 486 904	161 486 905
7+9	Shaft Chrom Steel 1.4301 AISI 304								
8	Retention ring	2							
8	Washer	1							
	Lever with index plate	1	161 486 690	161 486 690	161 486 690	161 486 691	161 486 691	161 486 694	161 486 695



# Accessories for actuated valves

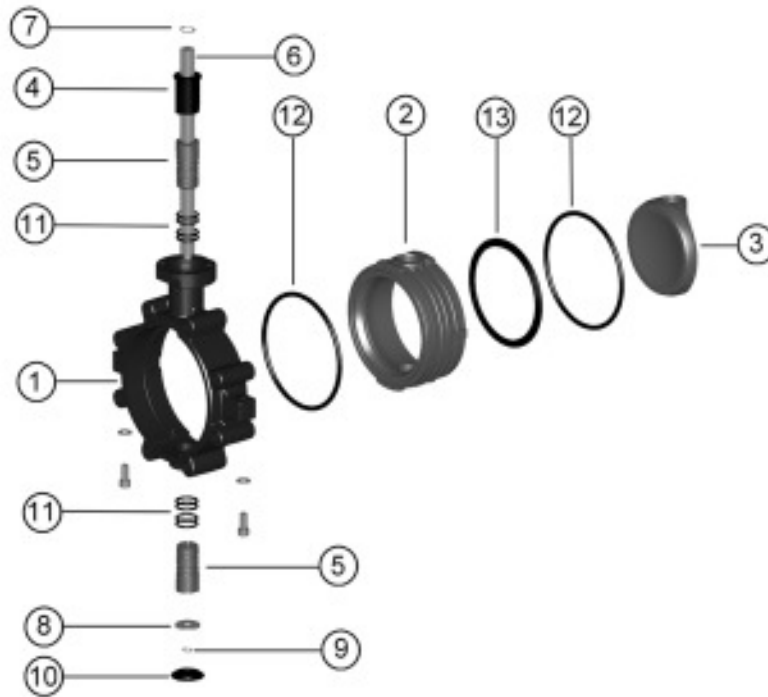
## Spare parts for butterfly valve type 567 PVC-C Hand lever with index plate



No.	Article / Material	Pieces	d63 DN50	d75 DN65	d90 DN80	d110 DN100	d140 DN125	d160 DN150	d225 DN200
3	Disc PVC-C	1	163 481 451	163 481 452	163 481 453	163 481 454	163 481 455	163 481 456	163 481 457
5	Bearing bush	2	163 481 576	163 481 576	163 481 576	163 481 577	163 481 577	163 481 578	163 481 578
11	Bush PVC-C								
11	O-ring EPDM								
5	Bearing bush	2	163 481 582	163 481 582	163 481 582	163 481 583	163 481 583	163 481 584	163 481 584
11	Bush PVC-C								
11	O-ring FPM								
2	Inner body	1	163 481 591	163 481 592	163 481 593	163 481 594	163 481 595	163 481 596	163 481 597
13	Body PVC-C								
13	Profile seal EPDM								
2	Inner body	1	163 481 603	163 481 604	163 481 605	163 481 606	163 481 607	163 481 608	163 481 609
13	Body PVC-C								
13	Profile seal FPM								
12	Flange gasket EPDM	2	161 486 959	161 486 960	161 486 961	161 486 962	161 486 963	161 486 964	161 486 965
12	Flange gasket FPM	2	161 486 979	161 486 980	161 486 981	161 486 982	161 486 983	161 486 984	161 486 985
4	End stop PP Glasfiber Reinforced	1	167 483 251	167 483 251	167 483 251	167 483 252	167 483 252	167 483 253	167 483 253
6	Shaft set	1	161 486 899	161 486 900	161 486 901	161 486 902	161 486 903	161 486 904	161 486 905
7+9	Shaft Chrom Steel 1.4301 AISI 304								
7+9	Retention ring	2							
8	Washer	1							
	Lever with index plate	1	161 486 690	161 486 690	161 486 690	161 486 691	161 486 691	161 486 694	161 486 695

## Accessories for actuated valves

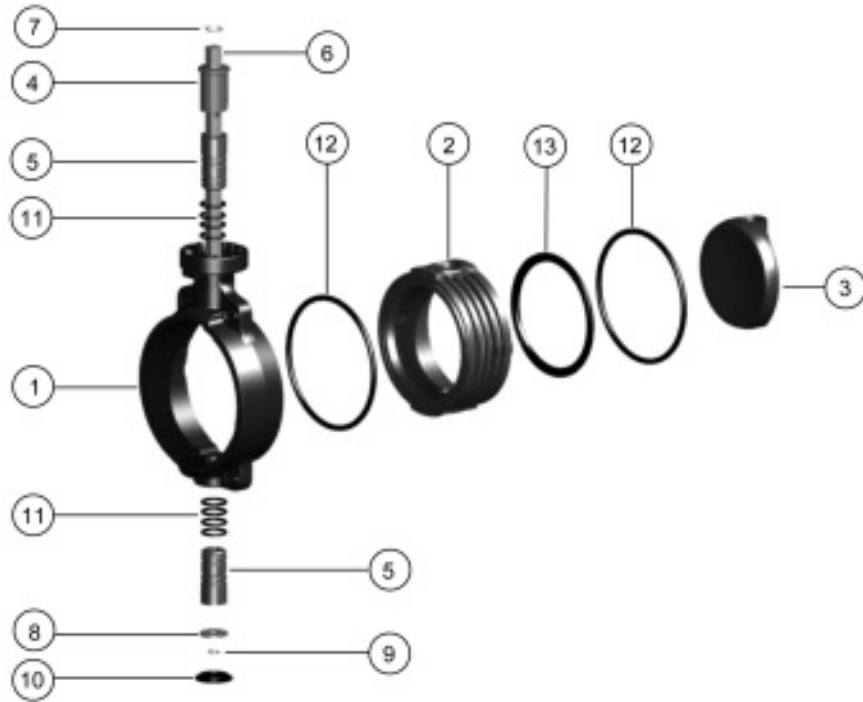
### Spare parts for butterfly valve type 568 PVC-C Hand lever with index plate



No.	Article / Material	Pieces	d63 DN50	d75 DN65	d90 DN80	d110 DN100	d140 DN125	d160 DN150	d225 DN200
3	Disc PVC-C	1	163 481 451	163 481 452	163 481 453	163 481 454	163 481 455	163 481 456	163 481 457
5	Bearing bush	2	163 481 576	163 481 576	163 481 576	163 481 577	163 481 577	163 481 578	163 481 578
11	Bush PVC-C								
5	Bearing bush	2	163 481 582	163 481 582	163 481 582	163 481 583	163 481 583	163 481 584	163 481 584
11	Bush PVC-C								
2	Inner body	1	163 481 591	163 481 592	163 481 593	163 481 594	163 481 595	163 481 596	163 481 597
13	Body PVC-C								
13	Profile seal	1							
2	Inner body	1	163 481 603	163 481 604	163 481 605	163 481 606	163 481 607	163 481 608	163 481 609
13	Body PVC-C								
13	Profile seal	1							
12	Flange gasket	2	161 486 959	161 486 960	161 486 961	161 486 962	161 486 963	161 486 964	161 486 965
12	Flange gasket	2	161 486 979	161 486 980	161 486 981	161 486 982	161 486 983	161 486 984	161 486 985
4	End stop PP	1	167 486 251	167 486 251	167 486 251	167 483 252	167 483 252	167 483 253	167 483 253
7+9	Glasfiber Reinforced								
6	Shaft set	1	161 486 899	161 486 900	161 486 901	161 486 902	161 486 903	161 486 904	161 486 905
7+9	Shaft Chrom Steel 1.4301 AISI 304								
7+9	Retention ring	2							
8	Washer	1							
8	Lever with index plate	1	161 486 690	161 486 690	161 486 690	161 486 691	161 486 691	161 486 694	161 486 695

# Accessories for actuated valves

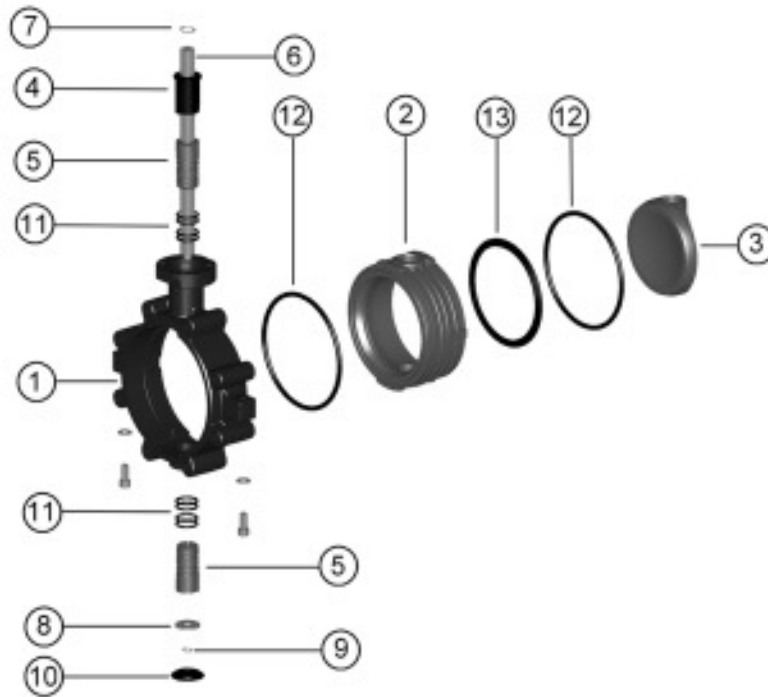
## Spare parts for butterfly valve type 567 ABS Hand lever with index plate



No.	Article / Material	Pieces	d63 DN50	d75 DN65	d90 DN80	d110 DN100	d140 DN125	d160 DN150	d225 DN200
3	Disc ABS	1	169 480 951	169 480 952	169 480 953	169 480 954	169 480 955	169 480 956	169 480 957
5	Bearing bush	2	167 484 259	167 484 259	167 484 259	167 484 260	167 484 260	167 484 261	167 484 261
11	Bush PP-H	2							
	O-ring EPDM								
5	Bearing bush	2	167 484 265	167 484 265	167 484 265	167 484 266	167 484 266	167 484 267	167 484 267
11	Bush PP-H	2							
	O-ring FPM								
2	Inner body	1	169 481 067	169 481 068	169 481 069	169 481 070	169 481 071	169 481 072	169 481 073
13	Body ABS	1							
12	Profile seal EPDM	1							
12	Flange gasket EPDM	2	161 486 959	161 486 960	161 486 961	161 486 962	161 486 963	161 486 964	161 486 965
12	Flange gasket FPM	2	161 486 979	161 486 980	161 486 981	161 486 982	161 486 983	161 486 984	161 486 985
4	End stop PP Glasfiber Reinforced	1	167 483 251	167 483 251	167 483 251	167 483 252	167 483 252	167 483 253	167 483 253
6	Shaft set	1	161 486 899	161 486 900	161 486 901	161 486 902	161 486 903	161 486 904	161 486 905
7+9	Shaft Chrom Steel 1.4301 AISI 304	1							
8	Retention ring	2							
8	Washer	1							
	Lever with index plate	1	161 486 690	161 486 690	161 486 690	161 486 691	161 486 691	161 486 694	161 486 695

# Accessories for actuated valves

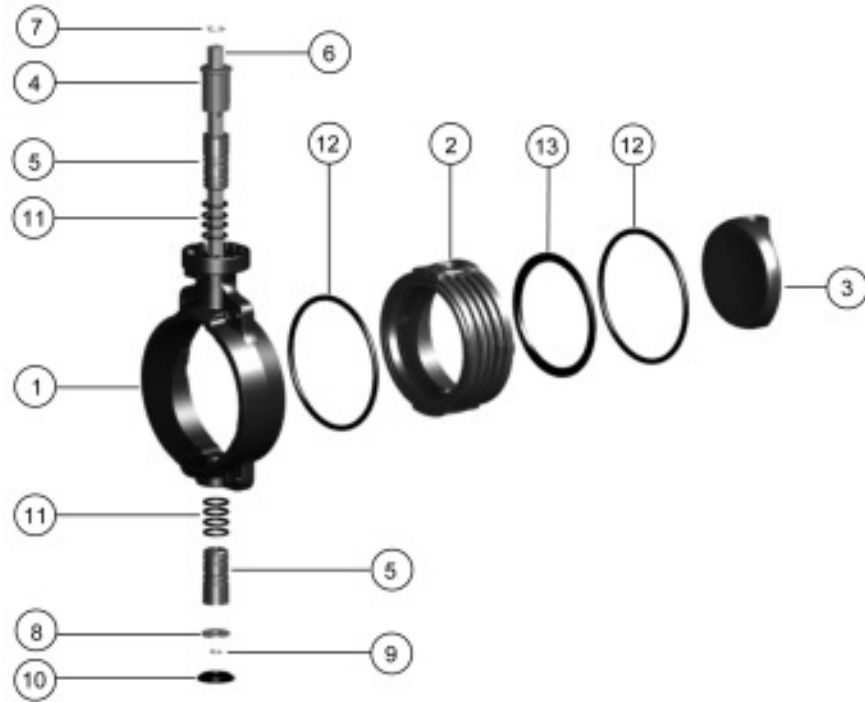
## Spare parts for butterfly valve type 568 ABS Hand lever with index plate



No.	Article / Material	Pieces	d63 DN50	d75 DN65	d90 DN80	d110 DN100	d140 DN125	d160 DN150	d225 DN200
3	Disc ABS	1	169 480 951	169 480 952	169 480 953	169 480 954	169 480 955	169 480 956	169 480 957
5	Bearing bush	2	167 484 259	167 484 259	167 484 259	167 484 260	167 484 260	167 484 261	167 484 261
11	O-ring EPDM								
5	Bearing bush	2	167 484 265	167 484 265	167 484 265	167 484 266	167 484 266	167 484 267	167 484 267
11	O-ring FPM								
2	Inner body	1	169 481 067	169 481 068	169 481 069	169 481 070	169 481 071	169 481 072	169 481 073
13	Body ABS	1							
13	Profile seal EPDM	1							
12	Flange gasket EPDM	2	161 486 959	161 486 960	161 486 961	161 486 962	161 486 963	161 486 964	161 486 965
12	Flange gasket FPM	2	161 486 979	161 486 980	161 486 981	161 486 982	161 486 983	161 486 984	161 486 985
4	End stop PP Glasfiber Reinforced	1	167 486 251	167 486 251	167 486 251	167 483 252	167 483 252	167 483 253	167 483 253
6	Shaft set	1	161 486 899	161 486 900	161 486 901	161 486 902	161 486 903	161 486 904	161 486 905
7+9	Shaft Chrom Steel 1.4301 AISI 304								
7+9	Retention ring	2							
8	Washer	1							
	Lever with index plate	1	161 486 690	161 486 690	161 486 690	161 486 691	161 486 691	161 486 694	161 486 695

# Accessories for actuated valves

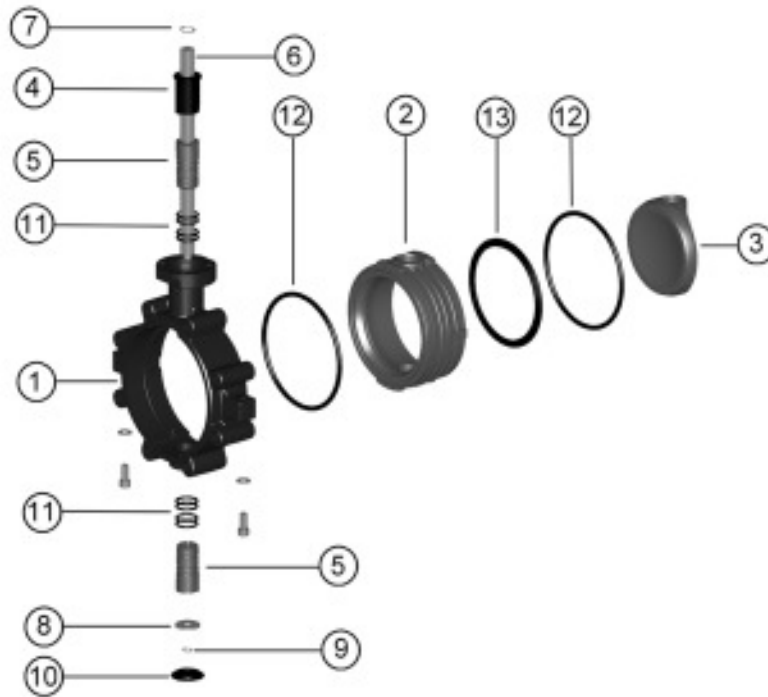
## Spare parts for butterfly valve type 567 PP-H Hand lever with index plate



No.	Article / Material	Pieces	d63 DN50	d75 DN65	d90 DN80	d110 DN100	d140 DN125	d160 DN150	d225 DN200
3	Disc PP-H	1	167 483 226	167 483 227	167 483 228	167 483 229	167 483 230	167 483 231	167 483 232
5	Bearing bush	2	167 484 259	167 484 259	167 484 259	167 484 260	167 484 260	167 484 261	167 484 261
11	Bush PP-H								
11	O-ring EPDM	2	167 484 265	167 484 265	167 484 265	167 484 266	167 484 266	167 484 267	167 484 267
5	Bearing bush								
5	Bush PP-H	2	167 484 271	167 484 272	167 484 273	167 484 274	167 484 275	167 484 276	167 484 277
11	O-ring FPM								
2	Inner body	1	167 484 286	167 484 287	167 484 288	167 484 289	167 484 290	167 484 291	167 484 292
13	Body PP-H								
13	Profile seal EPDM	1	161 486 959	161 486 960	161 486 961	161 486 962	161 486 963	161 486 964	161 486 965
2	Inner body								
2	Body PP-H	1	161 486 979	161 486 980	161 486 981	161 486 982	161 486 983	161 486 984	161 486 985
13	Profile seal FPM								
12	Flange gasket EPDM	2	167 483 251	167 483 251	167 483 251	167 483 252	167 483 252	167 483 253	167 483 253
12	Flange gasket FPM								
4	End stop PP Glasfiber Reinforced	1	161 486 899	161 486 900	161 486 901	161 486 902	161 486 903	161 486 904	161 486 905
6	Shaft set	1	167 483 251	167 483 251	167 483 251	167 483 252	167 483 252	167 483 253	167 483 253
7+9	Shaft Chrom Steel 1.4301 AISI 304								
7+9	Retention ring	2	161 486 899	161 486 900	161 486 901	161 486 902	161 486 903	161 486 904	161 486 905
8	Washer								
8	Washer	1	161 486 690	161 486 690	161 486 690	161 486 691	161 486 691	161 486 694	161 486 695
10	Lever with index plate	1	161 486 690	161 486 690	161 486 690	161 486 691	161 486 691	161 486 694	161 486 695

# Accessories for actuated valves

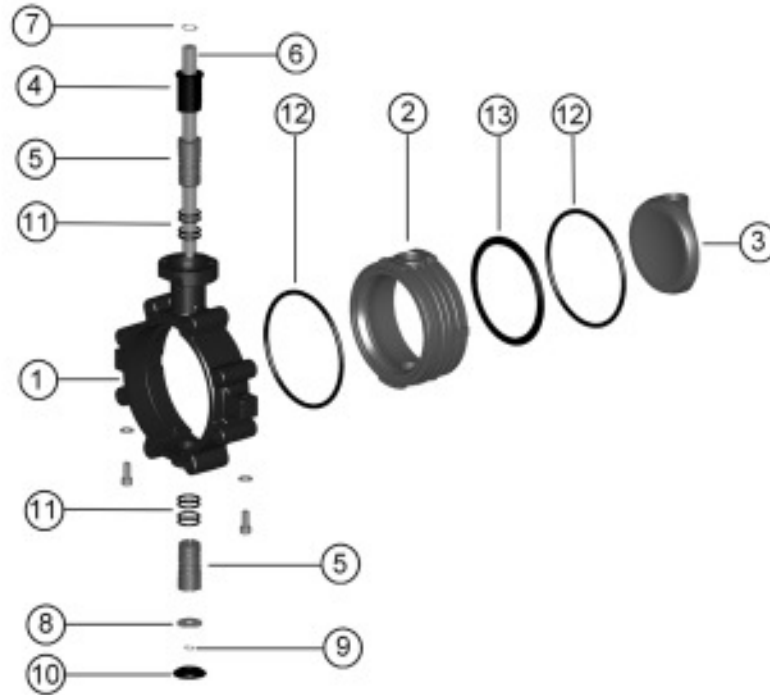
## Spare parts for butterfly valve type 568 PP-H Hand lever with index plate



No.	Article / Material	Pieces	d63 DN50	d75 DN65	d90 DN80	d110 DN100	d140 DN125	d160 DN150	d225 DN200
3	Disc PP-H	1	167 483 226	167 483 227	167 483 228	167 483 229	167 483 230	167 483 231	167 483 232
5	Bearing bush		167 484 259	167 484 259	167 484 259	167 484 260	167 484 260	167 484 261	167 484 261
11	Bush PP-H	2							
11	O-ring EPDM								
5	Bearing bush		167 484 265	167 484 265	167 484 265	167 484 266	167 484 266	167 484 267	167 484 267
5	Bush PP-H	2							
11	O-ring FPM								
2	Inner body		167 484 271	167 484 272	167 484 273	167 484 274	167 484 275	167 484 276	167 484 277
2	Body PP-H	1							
13	Profile seal EPDM	1							
2	Inner body		167 484 286	167 484 287	167 484 288	167 484 289	167 484 290	167 484 291	167 484 292
2	Body PP-H	1							
13	Profile seal FPM	1							
12	Flange gasket EPDM	2	161 486 959	161 486 960	161 486 961	161 486 962	161 486 963	161 486 964	161 486 965
12	Flange gasket FPM	2	161 486 979	161 486 980	161 486 981	161 486 982	161 486 983	161 486 984	161 486 985
4	End stop PP Glasfiber Reinforced	1	167 486 251	167 486 251	167 486 251	167 483 252	167 483 252	167 483 253	167 483 253
6	Shaft set		161 486 899	161 486 900	161 486 901	161 486 902	161 486 903	161 486 904	161 486 905
6	Shaft Chrom Steel 1.4301	1							
7+9	Retention ring	2							
8	Washer	1							
8	Lever with index plate	1	161 486 690	161 486 690	161 486 690	161 486 691	161 486 691	161 486 694	161 486 695

# Accessories for actuated valves

## Spare parts for butterfly valve type 568 PVDF Hand lever with index plate



No.	Article / Material	Pieces	d63 DN50	d75 DN65	d90 DN80	d110 DN100	d140 DN125	d160 DN150	d225 DN200
3	Disc PVDF	1	175 483 251	175 483 252	175 483 253	175 483 254	175 483 255	175 483 256	175 483 257
5	Bearing bush	2	175 483 426	175 483 426	175 483 426	175 483 427	175 483 427	175 483 428	175 483 428
11	Bush PVDF								
	O-ring FPM								
	Inner body	1	175 483 413	175 483 414	175 483 415	175 483 416	175 483 417	175 483 418	175 483 419
2	Body PVDF								
13	Profile seal FPM								
12	Flange gasket EPDM	2	161 486 959	161 486 960	161 486 961	161 486 962	161 486 963	161 486 964	161 486 965
12	Flange gasket FPM	2	161 486 979	161 486 980	161 486 981	161 486 982	161 486 983	161 486 984	161 486 985
4	End stop PP Glasfiber Reinforced	1	167 486 251	167 486 251	167 486 251	167 483 252	167 483 252	167 483 253	167 483 253
	Shaft set	1	161 486 899	161 486 900	161 486 901	161 486 902	161 486 903	161 486 904	161 486 905
6	Shaft Chrom Steel 1.4301 AISI 304								
7+9	Retention ring	2							
8	Washer	1							
	Hand lever with index plate Lever	1	161 486 690	161 486 690	161 486 690	161 486 691	161 486 691	161 486 694	161 486 695

## Accessories for actuated valves

### Spare parts to butterfly valves type 140-142/240-242



#### Integrated position indicator Automatic AU

Size	DN-DN [mm]	Code	
1	50 - 80	161 486 858	
2	100 - 125	161 486 304	
3	150 - 200	161 486 009	



#### Integrated position indicator Automatic AG NI

Size	DN-DN [mm]	Code	
1	50 - 80	161 486 859	
2	100 - 125	161 486 305	
3	150 - 200	161 486 010	



#### Integrated position indicator Electric Namur

Size	DN-DN [mm]	Code	
1	50 - 80	161 486 855	
2	100 - 125	161 486 301	
3	150 - 200	161 486 006	



#### Integrated position indicator Electric PNP

Size	DN-DN [mm]	Code	
1	50 - 80	161 486 856	
2	100 - 125	161 486 302	
3	150 - 200	161 486 007	



#### Integrated position indicator Electric NPN

Size	DN-DN [mm]	Code	
1	50 - 80	161 486 857	
2	100 - 125	161 486 303	
3	150 - 200	161 486 008	



## Accessories for actuated valves

### Accessories for electric and pneumatic actuators. limit switch boxes, AS-I-elements



#### Adapter plate incl. coupling

For actuator units electric type EA11/EA21

Pneumatic type PA11/PA21

To type 546

d-d [mm]	DN-DN [mm]	Code
16 - 20	10 - 15	<b>198 150 556</b>
25 - 32	20 - 25	<b>198 150 557</b>
40 - 50	32 - 40	<b>198 150 558</b>
- 63	- 50	<b>198 150 559</b>



DN10/15 - 50



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

##### Model:

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

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



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
16 - 20	10 - 15	<b>167 482 626</b>
25 - 32	20 - 25	<b>167 482 627</b>
40 - 50	32 - 40	<b>167 482 628</b>
- 63	- 50	<b>167 482 629</b>
75 - 90	65 - 80	<b>167 482 630</b>
- 110	- 100	<b>167 482 631</b>

# Accessories for actuated valves



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
16 - 20	10 - 15	<b>167 482 635</b>
25 - 32	20 - 25	<b>167 482 636</b>
40 - 50	32 - 40	<b>167 482 637</b>
- 63	- 50	<b>167 482 638</b>
75 - 90	65 - 80	<b>167 482 639</b>
- 110	- 100	<b>167 482 640</b>



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
16 - 20	10 - 15	<b>167 482 671</b>
25 - 32	20 - 25	<b>167 482 672</b>
40 - 50	32 - 40	<b>167 482 673</b>
- 63	- 50	<b>167 482 674</b>
75 - 90	65 - 80	<b>167 482 675</b>
- 110	- 100	<b>167 482 676</b>



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
16 - 20	10 - 15	<b>167 482 662</b>
25 - 32	20 - 25	<b>167 482 663</b>
40 - 50	32 - 40	<b>167 482 664</b>
- 63	- 50	<b>167 482 665</b>
75 - 90	65 - 80	<b>167 482 666</b>
- 110	- 100	<b>167 482 667</b>

## Accessories for actuated valves

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



DN10/15 - 50



#### 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	
16 - 20	10 - 15	<b>167 482 653</b>	
25 - 32	20 - 25	<b>167 482 654</b>	
40 - 50	32 - 40	<b>167 482 655</b>	
- 63	- 50	<b>167 482 656</b>	
75 - 90	65 - 80	<b>167 482 657</b>	
- 110	- 100	<b>167 482 658</b>	

## Accessories for actuated valves



For electric actuators  
Type EA21/EA31/EA42  
Testing adapter kit

Code	
198 151 426	



For electric actuators  
Type EA21/EA31/EA42  
Monitoring print

Code	
199 190 099	



For electric actuators  
Type EA21/EA31/EA42  
Cycle time extension

Model:

- Monitoring print required

Code	
199 190 080	



For electric actuators  
Type EA21/EA31/EA42  
Cycle time monitoring

Model:

- Monitoring print required

Code	
199 190 082	



For electric actuators  
Type EA21/EA31/EA42  
Cycle counter

Model:

- Monitoring print required

Code	
199 190 083	

## Accessories for actuated valves



### For electric actuators Type EA21/EA31/EA42 Motor current monitoring

**Model:**

- Monitoring print required

Code	
199 190 081	



### For electric actuators Type EA21/EA31/EA42 Position signalization

**Model:**

- Must be used with either the PE25 positioner or the monitoring print

Code	
199 190 084	



### For electric actuators Type EA21/EA31/EA42 Positioner PE25

**Model:**

- Positioner must use position signalization

\*\* galvanic isolated set value inputs

\* not galvanic isolated set value inputs

Voltage	Code	
*24 V=	199 190 100	
**24 V=	199 190 101	



### For electric actuators Type EA21/EA31/EA42 Limit switch kit with gold contacts Au

Voltage	Code	
30 V=, 100mA	199 190 093	



### For electric actuators Type EA21/EA31/EA42 Limit switch kit with inductive switches PNP

Voltage	Code	
5-30 V= 0,1 A	199 190 095	

## Accessories for actuated valves



For electric actuators  
Type EA21/EA31/EA42  
Limit switch kit with inductive switches NPN

Voltage	Code	
5-30 V= 0,1 A	199 190 096	



For electric actuators  
Type EA11/EA21/EA31/EA42  
Limit switch kit with mechanical limit switches AgNi

Voltage	Code	
250 V ~6 A	199 190 092	



For electric actuators  
Type EA21/EA31/EA42  
Assembly kit for 4 limit switches

Voltage	Code	
5-30 V= 0,1 A	199 190 097	



For electric actuators  
Type EA21/EA31/EA42  
Limit switch kit with mechanical limit switches  
Middle position

Voltage	Code	
4-30 V= 1-100 mA	199 190 094	



For electric actuators  
Type EA11/EA21/EA31/EA42  
Heating element

Voltage	Code	
24 V=	199 190 086	



For electric actuators  
Type EA11/EA21/EA31/EA42  
Fail safe return incl. battery kit

Voltage	Code	
24 V=	199 190 085	

## Accessories for actuated valves



**For electric actuators**  
**Type EA11/EA21/EA31/EA42**  
**Heating element + fail safe return incl. battery kit**

Voltage	Code	
24 V=	199 190 087	



**For electric actuators**  
**Type EA11/EA21/EA31/EA42**  
**Battery kit (spare)**

Voltage	Code	
24 V=	198 151 317	

## Accessories for actuated valves



### For pneumatic actuators type PA11 - PA90 Namur connecting plate

- PA30 - PA55

Code	
199 190 275	



### For actuator units pneumatic type PA11 - PA90 Namur mounting flange

No	Code	
3	199 190 281	



### For actuator units pneumatic type PA11 - PA90 Limit switch box with 2 auxiliary switches

- Including namur mounting flange

Voltage	Code	
250 V ~/10 A	199 190 282	



### For actuator units pneumatic type PA11 - PA90 Limit switch box with 2 inductive auxiliary switches NPN with luminous diode

- Including namur mounting flange

Voltage	Code	
10...30 V/ 0.1 A	199 190 283	



### For actuator units pneumatic type PA11 - PA90 Limit switch box with 2 inductive auxiliary switches PNP With luminous diode

- Including namur mounting flange

Voltage	Code	
10...30 V/ 0.1 A	199 190 284	



### For actuator units pneumatic type PA11 - PA90 Limit switch box with 2 inductive auxiliary switches Namur Eexi (intrinsically safe)

- Including namur mounting flange

Voltage	Code	
5-15 V	199 190 285	



## Accessories for actuated valves



### For actuator units pneumatic type PA11 - PA90 Limit switch box with 2 auxiliary switches Eexd

- Including namur mounting flange

Voltage	Code	
250 V ~/5 A	199 190 286	



### For actuator units pneumatic type PA11 - PA90 Limit switch box with 2 auxiliary switches With gold contact

- Including namur mounting flange

Voltage	Code	
30 V =/ 1-100 mA	199 190 287	

## Accessories for actuated valves



### For diaphragm valve type DIASTAR Electric position indicator with 2 auxiliary switches Ag Ni

DN-DN [mm]	Type	Voltage	Code
15 - 50	ER 52-1	250 V~ 6 A	199 190 305
65 - 150	ER 53-1	250 V~ 6 A	199 190 293



### For diaphragm valve type DIASTAR Electric position indicator with 2 auxiliary switches With gold contact

- Connection: Plug

DN-DN [mm]	Type	Voltage	Code
15 - 50	ER 52-2	4-30 V= 1-100 mA	199 190 306
65 - 150	ER 53-2	4-30 V= 1-100 mA	199 190 297



### For diaphragm valve type DIASTAR Electric position indicator with 2 inductive switches NPN

- Connection: Plug

DN-DN [mm]	Type	Voltage	Code
15 - 50	ER 52-3	5-30 V= 100 mA	199 190 307
65 - 150	ER 53-3	10-30 V= 100 mA	199 190 294



### For diaphragm valve type DIASTAR Electric position indicator with 2 inductive switches PNP

- Connection: Plug

DN-DN [mm]	Type	Voltage	Code
15 - 50	ER 52-4	5-30 V= 100 mA	199 190 308
65 - 150	ER 53-4	10-30 V= 100 mA	199 190 295



### For diaphragm valve type DIASTAR Electric position indicator with 2 inductive switches Namur Eexi (intrinsically safe)

- Connection: Plug

DN-DN [mm]	Type	Voltage	Code
15 - 50	ER 52-5	8 V=	199 190 309
65 - 150	ER 53-5	8 V=	199 190 296

## Accessories for actuated valves



### For diaphragm valve type DIASTAR Electric position indicator with 2 auxiliary switches Eexd

- Connection: Cable, 2 m

DN-DN [mm]	Type	Voltage	Code	
15 - 50	ER 52-6	250 V ~ 5 A	<b>199 190 405</b>	
65 - 150	ER 53-6	250 V ~ 5 A	<b>199 190 298</b>	



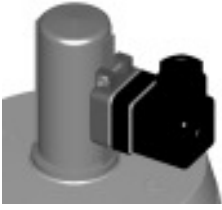
### For diaphragm valve type DIASTAR Adapter complete

for combination electric position indicator / stroke limiter / manual override

DN	type	Series <b>028-FC</b>	Series <b>025-FC</b>	Series <b>025-FO/DA</b>
15	ER 52	199 190 387	199 190 387	199 190 387
20	ER 52	199 190 387	199 190 387	199 190 387
25	ER 52	199 190 387	199 190 388	199 190 387
32	ER 52	199 190 388	199 190 389	199 190 388
40	ER 52	199 190 389	199 190 389	199 190 389
50	ER 52	199 190 389	199 190 389	199 190 389
65-150	ER 53	-	199 190 310	199 190 310

Adapter Code	
<b>199 190 387</b>	
<b>199 190 388</b>	
<b>199 190 389</b>	
<b>199 190 310</b>	

## Accessories for actuated valves



### For diaphragm valve type DIASTAR Electric position indicator with reed contact Type ER-55 for Diastar DN 15-150

for one position open or closed  
further position indicator with limit contact (198 804 875)

Connection: Plug

Voltage: 250V ~ 200 mA

DN	type	series 028-FC	series 025-FC / FO / DA
15	ER 55-1	199 190 462	199 190 462
20	ER 55-1	199 190 462	199 190 462
25	ER 55-1	199 190 462	199 190 462
32	ER 55-1	199 190 462	199 190 462
40	ER 55-1	199 190 462	199 190 462
50	ER 55-1	199 190 462	199 190 462
65	ER 55-2	-	199 190 464
80	ER 55-2	-	199 190 464
100	ER 55-2	-	199 190 464
150	ER 55-2	-	199 190 464

DN-DN [mm]	Diastar 025 / 028 Code	type Code	
15 - 50	199 190 462	ER 55-1	
65 - 150	199 190 464	ER 55-2	



### For diaphragm valve type DIASTAR Limit contact to ER55

Code	
198 804 875	

# Accessories for actuated valves



## For diaphragm valve type DIASTAR Min./max. stroke limiter/manual override

DN	Series 028-FC	Series 025-FC	Series 025-FO/DA
15	199 190 381	199 190 382	199 190 381
20	199 190 382	199 190 382	199 190 382
25	199 190 382	199 190 383	199 190 382
32	199 190 383	199 190 384	199 190 383
40	199 190 384	199 190 385	199 190 384
50	199 190 384	199 190 385	199 190 384
65-80		199 190 318	199 190 318
*100-150		199 190 319	199 190 319

Stroke limiter Code
199 190 381
199 190 382
199 190 383
199 190 384
199 190 385
199 190 318
199 190 319

## Accessories for actuated valves



### AS-Interface type ASEV 2400 For electric rotary actuators



- Without accessories

Code	
199 190 562	



### AS-Interface set type ASVC 2300 For pneumatic rotary actuators



Without accessories

- \* for 20mm shaft: PA11/21; PA30-45 DA; PA30/35 FC/FO
- \*\* for 30mm shaft: PA > 45 DA; PA > 35 FC/FO

Code	
*199 190 560	



### AS-Interface set type topmatic For Diastar Series 028-FC (Fail safe to close)

- Without accessories

DN-DN [mm]	Code	
15 - 20	199 190 456	
32 - 50	199 190 457	



### AS-Interface set type topmatic For Diastar Series 025-FC/FO

- Without accessories

DN-DN [mm]	Code	
15 - 20	199 190 456	
25 - 32	199 190 467	
40 - 50	199 190 468	

## Accessories for actuated valves

### AS-Interface set type topmatic For Diastar Series 025-FC/FO



- Without accessories

DN-DN [mm]	Code	
65 - 150	199 190 458	

# Accessories for actuated valves

## AS-Interface valve plug type MSR



DN-DN [mm]	Plug 19x19mm Code	Plug 19x16mm Code	
15 - 150	199 190 455	199 190 459	



## AS-Interface set type FL31 For pneumatic rotary actuators

With cable, without pilot valve Code	
199 190 451	



## AS-Interface connection by means of slave For electric rotary actuators

Code	
199 190 463	



## Accessories for actuated valves

### Pilot valves-PV94 / PV95 / 5470 / MNL532 / PV2000



#### Solenoid pilot valve type PV94 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 con-nection P	Actuator connec-tion	PN	NBR Code	
24 V=	1.2	G 1/8	G 1/8	10	<b>199 190 498</b>	
24 V, 50-60 Hz	1.2	G 1/8	G 1/8	10	<b>199 190 499</b>	
110 V, 50-60 Hz	1.2	G 1/8	G 1/8	10	<b>199 190 500</b>	
230 V, 50-60 Hz	1.2	G 1/8	G 1/8	10	<b>199 190 501</b>	



#### Solenoid pilot valve type PV94 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 con-nection P	Actuator connec-tion	PN	NBR Code	
24 V=	1.2	push-in	G 1/8	10	<b>199 190 510</b>	
24 V, 50-60 Hz	1.2	push-in	G 1/8	10	<b>199 190 511</b>	
110 V, 50-60 Hz	1.2	push-in	G 1/8	10	<b>199 190 512</b>	
230 V, 50-60 Hz	1.2	push-in	G 1/8	10	<b>199 190 513</b>	

## Accessories for actuated valves



### Solenoid pilot valve type PV94 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	NBR Code	
24 V=	1.2	NPT 1/8	G 1/8	10	<b>199 190 546</b>	
24 V AC	1.2	NPT 1/8	G 1/8	10	<b>199 190 561</b>	
110 V, 50-60 Hz	1.2	NPT 1/8	G 1/8	10	<b>199 190 547</b>	



### Solenoid pilot valve type PV94 Accessory



**Model:**

- Cable plug to DIN EN 175301-803 (DIN 43 650) form C

Voltage	Version	NBR Code	
0-250 V	no circuitry	<b>199 190 518</b>	
0-24 V	with LED	<b>199 190 519</b>	
0-24 V	with LED and varistor	<b>199 190 520</b>	
0-24 V	with rectifier LED and varistor	<b>199 190 521</b>	
200-240 V	with LED	<b>199 190 522</b>	
200-240 V	with LED and varistor	<b>199 190 523</b>	

## Accessories for actuated valves



### Solenoid pilot valve type PV95 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	NBR Code
24 V=	2.0	G 1/4	G 1/8	10	<b>199 190 532</b>
24 V, 50-60 Hz	2.0	G 1/4	G 1/8	10	<b>199 190 533</b>
110 V, 50-60 Hz	2.0	G 1/4	G 1/8	10	<b>199 190 534</b>
230 V, 50-60 Hz	2.0	G 1/4	G 1/8	10	<b>199 190 535</b>



### Solenoid pilot valve type PV95 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	NBR Code
24 V=	1.5	NPT 1/8	G 1/4	10	<b>199 190 554</b>
110 V, 50-60 Hz	1.5	NPT 1/8	G 1/4	10	<b>199 190 555</b>

# Accessories for actuated valves

## Solenoid pilot valve type PV95 Accessory



**Model:**

- Cable plug to DIN EN 175301-803 (DIN 43 650) form A

Voltage	Version	NBR Code	
0-250 V	no circuitry	<b>199 190 540</b>	
0-24 V	with LED	<b>199 190 541</b>	
0-24 V	with LED and varistor	<b>199 190 542</b>	
0-24 V	with rectifier LED and varistor	<b>199 190 543</b>	
200-240 V	with LED	<b>199 190 544</b>	
200-240 V	with LED and varistor	<b>199 190 545</b>	

## Accessories for actuated valves

### 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
230 V, AC/DC	4	199 190 302
115 V, AC/DC	4	199 190 303
24 V, AC/DC	4	199 190 304

### Pilot valve type MNL532

#### Pilot valve 3/2-5/2-ways



#### Model:

- With NAMUR connection and two silencers/throttle screws

#### Mode of action:

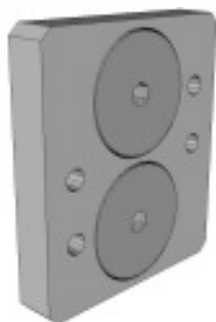
- 3/2-way valve, in rest position pressure inlet 1 closed, outlet 3 exhausted
- 5/2-way valve, in rest position pressure inlet 1 connected to outlet 4, outlet 3 exhausted
- Material of body: Aluminum

- to pneumatic actuators
- Electrical connection: cable plug

Voltage	DN [mm]	NBR Code
230 V, AC	5	199 190 360
110 V, AC	5	199 190 359
48 V, AC	5	199 190 361
24 V, AC	5	199 190 358
24 V, DC	5	199 190 357

### Accessories to type 5470 and type MNL532

#### NAMUR connector plate for type DIASTAR DN15-50 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

199 190 378  
199 190 379

# Accessories for actuated valves



## Solenoid pilot valve type PV2000 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	
1	24V/DC 100%	199 190 435	



## Solenoid pilot valve type PV2000 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	
2	24 V/DC 100%	199 190 436	



## Solenoid pilot valve type PV2000 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	
3	199 190 424	



## Solenoid pilot valve type PV2000 End module

- Version for 3/2-way and 5/2-way valves
- Electrical control over multiple and field bus connector

No	Code	
4	199 190 426	



## Solenoid pilot valve type PV2000 Connection module AS-interface

- Version for 3/2-way and 5/2-way valves
- Electrical control over multiple and field bus connector

No	Code	
1	199 190 430	

## Accessories for actuated valves



### Solenoid pilot valve type PV2000 Connection module profibus

- Version for 3/2-way and 5/2-way valves
- Electrical control over multiple and field bus connector

No	Code	
1	199 190 431	



### Solenoid pilot valve type PV2000 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	
2	199 190 425	

### Accessories to type PV2000 Silencer 8mm

Code	
199 190 427	

### Accessories to type PV2000 Plug (white)

d [mm]	Code	
8	199 190 428	
6	199 190 429	

### Accessories to type PV2000 D-Sub connector 25 poles With connection cable

Cable length [m]	Code	
1.50	199 190 432	
3.00	199 190 433	
5.00	199 190 434	

## Accessories for actuated valves

### Assembly parts-intermediate kits

#### Intermediate element to type 230 with manual override



DN-DN [mm]	Code	
10 - 25	<b>198 000 500</b>	
32 - 50	<b>198 000 501</b>	

#### Retrofit ball valve bracket For EA11/21 PA11/21 to ball valve 346

Type of actuator	d [mm]	d-d [mm]	DN [mm]	DN-DN [mm]	Master gauge	Code	
PA11	20	-	15	-	F04	<b>198 000 608</b>	
PA11 / EA11/21		16 - 20		10 - 15	F05	<b>198 000 580</b>	
PA11	25	-	20	-	F04	<b>198 000 609</b>	
EA11/21	25	-	20	-	F05	<b>198 000 604</b>	
PA11	32	-	25	-	F04	<b>198 000 610</b>	
PA11 / EA11/21	32	-	25	-	F05	<b>198 000 582</b>	
PA21 EA11/21	40	-	32	-	F05	<b>198 000 605</b>	
PA21 EA11/21	50	-	40	-	F05	<b>198 000 606</b>	
PA21 EA11/21	63	-	50	-	F05	<b>198 000 607</b>	



## Accessories for actuated valves

### Actuator units-EA11 / EA21 / EA31 / EA42 / EA50



#### Electric actuator type EA11

**Note:**

- F05 (WS11/14) per EN ISO 5211 with adapter 198.000.587

Voltage	Code	
100-230 V~ 24 V=/ ~	198 150 180 198 150 181	



#### Electric actuator type EA21

**Note:**

- F05 (WS11/14) per EN ISO 5211 with adapter 198.000.587

Voltage	Code	
100-230 V~ 24 V=/ ~	198 150 182 198 150 183	



#### Electric actuator type EA31



**Note:**

- F07 (WS 17) per EN ISO 5211

Voltage	Code	
100-230 V~ 24 V=/ ~	198 150 184 198 150 185	



#### Electric actuator type EA42



**Note:**

- F07 (WS 22) per EN ISO 5211

Voltage	Code	
100-230 V~ 24 V=/ ~	198 150 186 198 150 187	

## Accessories for actuated valves

### Actuator units-PA11/21 / PA30-PA90



#### Pneumatic actuator type PA11/PA21 Fail safe to close (FC)

Type	DN-DN [mm]	Code	
PA 11 FC	10 - 25	198 150 127	
PA 21 FC	32 - 50	198 150 130	



#### Pneumatic actuator type PA11/PA21 Fail safe to open (FO)

Type	DN-DN [mm]	Code	
PA 11 FO	10 - 25	198 150 128	
PA 21 FO	32 - 50	198 150 131	



#### Pneumatic actuator type PA11/PA21 Double action (DA)

Type	DN-DN [mm]	Code	
PA 11 DA	10 - 25	198 150 129	
PA 21 DA	32 - 50	198 150 132	



#### Pneumatic actuator type PA11/PA21 Fail safe to close (FC) with stroke limiter

Type	DN-DN [mm]	Code	
PA 11 FC	10 - 25	198 150 144	
PA 21 FC	32 - 50	198 150 147	



#### Pneumatic actuator type PA11/PA21 Fail safe to open (FO) with stroke limiter

Type	DN-DN [mm]	Code	
PA 11 FO	10 - 25	198 150 145	
PA 21 FO	32 - 50	198 150 148	



#### Pneumatic actuator type PA11/PA21 Double action (DA) with stroke limiter

Type	DN-DN [mm]	Code	
PA 11 DA	10 - 25	198 150 146	
PA 21 DA	32 - 50	198 150 149	

## Accessories for actuated valves



### Pneumatic actuator type PA30 PA90 Fail safe to close/fail safe to open (FC/FO)

\* Only valid for butterfly valve type 240, 241, 242 and ball valve type 230 - 235

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	-



### Pneumatic actuator type PA30 PA90 Double acting (DA)

Type	hard anodized Code
PA 30 DA	198 800 737
PA 35 DA	198 800 758
PA 40 DA	198 800 759
PA 45 DA	198 800 040
PA 50 DA	198 800 733
PA 55 DA	198 800 042
PA 60 DA	198 800 734
PA 65 DA	198 800 044
PA 70 DA	198 800 735
PA 75 DA	198 800 046
PA 80 DA	198 800 048
PA 85 DA	198 800 050
PA 90 DA	198 800 051

## Accessories for actuated valves

### Actuator units-Diastar FC/FO/DA

#### Pneumatic actuator DIASTAR Series 028-FC



d [mm]	DN [mm]	Inch	Size	for EPDM Code	for PTFE/EPDM Code
20	15	½	1	198 150 091	198 150 097
25	20	¾	2	198 150 126	-
25	20	¾	2	-	198 150 126
32	25	1	2	198 150 093	198 150 098
40	32	1 ¼	3	198 150 094	198 150 124
50	40	1 ½	4	198 150 095	198 150 099
63	50	2	4	198 150 125	-
63	50	2	4	-	198 150 125



#### Pneumatic actuator DIASTAR Series 025-FC

d [mm]	DN [mm]	Inch	Size	for EPDM Code	for PTFE/EPDM Code
20	15	½	2	198 150 087	198 150 962
25	20	¾	2	198 150 963	-
25	20	¾	2	-	198 150 963
32	25	1	3	198 150 088	198 150 964
40	32	1 ¼	4	198 150 965	-
40	32	1 ¼	4	-	198 150 965
50	40	1 ½	5	198 150 089	198 150 966
63	50	2	5	198 150 090	198 150 967
75	65	2 ½		198 150 736	-
75	65	2 ½		-	198 150 736
90	80	3		198 150 737	-
90	80	3		-	198 150 737
110	100	4		198 150 738	-
110	100	4		-	198 150 738
160	150	6		198 150 739	-



#### Pneumatic actuator DIASTAR Series 025-FO

d [mm]	DN [mm]	Inch	Size	for PTFE/EPDM and EPDM Code
20	15	½	1	198 150 105
25	20	¾	2	198 150 969
32	25	1	2	198 150 106
40	32	1 ¼	3	198 150 107
50	40	1 ½	4	198 150 108
63	50	2	4	198 150 109
75	65	2 ½		198 150 746
90	80	3		198 150 747
110	100	4		198 150 748
160	150	6		198 150 749

# Accessories for actuated valves

## Pneumatic actuator DIASTAR Series 025-DA



d [mm]	DN [mm]	Inch	Size	for EPDM Code	for PTFE/EPDM Code
20	15	1/2	1	<b>198 150 100</b>	<b>198 150 100</b>
25	20	3/4	2	<b>198 150 975</b>	<b>198 150 975</b>
32	25	1	2	<b>198 150 101</b>	<b>198 150 101</b>
40	32	1 1/4	3	<b>198 150 102</b>	<b>198 150 102</b>
50	40	1 1/2	4	<b>198 150 103</b>	<b>198 150 103</b>
63	50	2	4	<b>198 150 104</b>	<b>198 150 104</b>
75	65	2 1/2		<b>198 150 756</b>	<b>198 150 756</b>
90	80	3		<b>198 150 757</b>	<b>198 150 757</b>
110	100	4		<b>198 150 758</b>	<b>198 150 758</b>
160	150	6		<b>198 150 759</b>	<b>198 150 759</b>

## Accessories for actuated valves

### Controllers-PE65 / SRI986 / DSR100/101/201

#### Industrial controller type PE65 As 3-point stepping controller



Type	Voltage	Code
PE 65-1 PE 65-3	115/230 V ~ 24 V AC	199 192 150 199 192 152

#### Industrial controller type PE65 With analog continuous output 0/4-20 mA



Type	Voltage	Code
PE 65-2 PE 65-4	115/230 V ~ 24 V AC	199 192 151 199 192 153



#### Electro-pneumatic positioner Positioner type Eckardt SRI 986

- Other versions and accessories on request

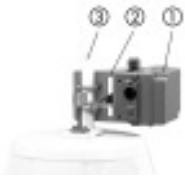
No	single acting (FC/FO) Code	double acting (DA) Code
1	199 190 348	199 190 349



#### 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
2	199 190 350	199 190 351

## Accessories for actuated valves



### Accessories for electro-pneumatic positioner Positioner mounting flange for type DIASTAR

Pos	DN	Series 028 - FC	Series 025 - FC	Series 025 - FO
3	15	-	199 190 372	-
3	20	199 190 372	199 190 372	199 190 372
3	25	199 190 372	199 190 373	199 190 372
3	32	199 190 373	199 190 373	199 190 373
3	40	199 190 373	199 190 373	199 190 373
3	50	199 190 373	199 190 373	199 190 373
3	65-150	-	199 190 311	199 190 311

No	Mounting flange Diastar 025/028 Code
3	199 190 372
3	199 190 373
3	199 190 311



### Digital electro-pneumatic positioner Type DSR 100 / 101 / 201

- Other versions and accessories on request
- For actuators function FC
- For actuators function FO only possible by assembly in the factory

No	Type Diastar DN 15-50 FC DSR 100 Code	Type Diastar DN 65-150 FC DSR 101 Code	pneumatic rotary actuator DSR 201 Code
1	199 190 410	199 190 411	199 190 412



### Accessories for digital electro-pneumatic positioner Attachment kit to type DSR 100 With optical position indicator for Diastar DN 15-50

Pos	DN	Series 028 - FC	Series 025 - FC	Series 025 - FO
2	15	-	199 190 417	-
2	20	199 190 417	199 190 417	199 190 417
2	25	199 190 417	199 190 418	199 190 417
2	32	199 190 418	199 190 418	199 190 418
2	40	199 190 418	199 190 418	199 190 418
2	50	199 190 418	199 190 418	199 190 418

Part No.	Attachment kit Code
2	199 190 417
2	199 190 418

## Accessories for actuated valves



### Accessories for digital electro-pneumatic positioner

#### Attachment kit to type DSR 100

#### Without optical position indicator for Diastar DN 15-50

Pos	DN	Series 028 - FC	Series 025 - FC	Series 025 - FO
3	15	-	199 190 414	-
3	20	199 190 414	199 190 414	199 190 414
3	25	199 190 414	199 190 415	199 190 414
3	32	199 190 415	199 190 415	199 190 415
3	40	199 190 415	199 190 415	199 190 415
3	50	199 190 415	199 190 415	199 190 415

No	Attachment kit Code
3	199 190 414
3	199 190 415



### Accessories for digital electro-pneumatic positioner

#### Attachment kit to type DSR 101

#### For Diastar DN 65-150

Part No.	with optical position indicator Code	without optical position indicator Code
2	199 190 419	-
3	-	199 190 416









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

## 1 General

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

## 2 Tenders

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

## 3 Scope of Delivery

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

## 4 Data and Documents

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

## 5 Confidentiality, Protection of Personal Data

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

## 6 Local Laws and Regulations, Export Controls

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

## 7 Price

- 7.1 Unless agreed otherwise, the prices shall be deemed quoted net ex works (according to Incoterms of the ICC, latest version) including standard packing. All supplementary costs such as the cost of carriage, insurance, export-, transit- and 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

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

## 12 Passing of Risk

- 12.1 The risk in the Products shall pass to the Purchaser as soon as they have left Georg Fischer's works (EX WORKS, Incoterms ICC, latest version), even if delivery is made carriage-paid, under similar clauses or including installation or when carriage is organized and managed by Georg Fischer.
- 12.2 If delivery is delayed for reasons beyond Georg Fischer's control, the risk shall pass to the Purchaser when he is notified that the Products are ready for despatch.

## 13 Carriage and Insurance

- 13.1 Unless agreed otherwise, the Purchaser shall bear the cost of carriage.
- 13.2 The Purchaser shall be responsible for transport insurance against damage of whatever kind. Even when such insurance is arranged by Georg Fischer it shall be deemed taken out by the order of and for the account of the Purchaser and at his risk.
- 13.3 Special requests regarding carriage and insurance shall be communicated to Georg Fischer in due time. Otherwise carriage shall be arranged by Georg Fischer at their discretion, but without responsibility, by the quickest and cheapest method possible.  
In case of carriage-paid delivery transport arrangements shall be made by Georg Fischer. If the Purchaser specifies particular requirements, any extra costs involved shall be borne by him.
- 13.4 In the event of damage or loss of the Products during carriage the Purchaser shall mark the delivery documents accordingly and immediately have the damage ascertained by the carrier. Not readily ascertainable damages sustained during carriage shall be notified to the carrier within six days after receipt of the Products.

## 14 Inspection, Notification of Defects and Damages

- 14.1 The Products will be subject to normal inspection by Georg Fischer during manufacture. Additional tests required by the Purchaser shall be agreed upon in writing and shall be charged to the Purchaser.
- 14.2 It shall be a condition of Georg Fischer's obligation under the warranties stated hereinafter that Georg Fischer be notified in writing by the Purchaser of any purported defect immediately upon discovery. Notice concerning weight, numbers or apparent defects is to be given latest within 30 days from receipt of the Products, notice of other defects immediately latest within 7 working days after discovery, in any event within the agreed warranty period.
- 14.3 Purchaser shall not dispose of allegedly defective Products until all warranty and/or damage claims are finally settled. At its request, defective Products are to be placed at Georg Fischer's disposal.
- 14.4 At its request, Georg Fischer shall be given the opportunity to inspect the defect and/or damage, prior to commencement of remedial work, either itself or by third party experts.

## 15 Warranty

- 15.1 At the written request of the Purchaser, Georg Fischer undertake to repair or replace at their discretion, as quickly as possible and free of charge all Products supplied which demonstrably suffer from faulty design, materials or workman-ship or from faulty operating or installation instructions.  
In order to protect employees from toxic or radioactive substances which may have been transported through defective parts returned to Georg Fischer's sales organisation, said parts must be accompanied by a Material Safety Disclosure Form. The form may be obtained from Georg Fischer's local sales company or via [www.piping.georgfischer.com](http://www.piping.georgfischer.com).  
Replaced parts shall become property of Georg Fischer.
- 15.2 For Products which are manufactured to specifications, drawings or patterns supplied by the Purchaser, Georg Fischer's warranty shall be restricted to proper materials and workmanship.
- 15.3 The Purchaser shall be entitled to cancel the contract or to demand a reduction in the contract price if also a second attempt to repair or replace the Products has failed.
- 15.4 For Products or essential components manufactured by a third party and supplied by Georg Fischer under this contract, Georg Fischer's warranty is limited to the warranty provided by said third party.
- 15.5 This warranty shall not apply to damage resulting from normal wear and tear, improper storage and maintenance, failure to observe the operating instructions, overloading, overpressure, unsuitable operating media, unsuitable construction work or unsuitable building ground, improper repairs or alterations by the Purchaser or third parties, the use of other than original spare parts and other reasons beyond Georg Fischer's control.
- 15.6 No action or claim may be brought by the Purchaser on account of any alleged breach of warranty or any other obligation of Georg Fischer after the expiration of twelve (12) months from receipt of the Products by the end user or at the latest within eighteen (18) months of the Products being despatched by Georg Fischer.
- 15.7 In case of Products for use in domestic installations or in utilities
  - Georg Fischer will assume the costs of dismantling the defective Product and restoring the damaged object as well as, in case of negligence, all other direct damages caused by the defective Product (damage to property and injury to or death of persons) up to CHF 1 000 000 per occurrence.
  - the statute of limitations for warranty or damage claims - contrary to Section 15.6 - will be 5 years from the date of installation.

## 16 Limitation of Liability

- 16.1 All cases of breach of contract and the relevant consequences as well as all rights and claims on the part of the customer, irrespective of what ground they are based, are exhaustively covered by these general conditions of supply. In particular, any claims not expressly mentioned for damages, reduction of price, termination of or withdrawal from the contract are excluded. In no case whatsoever shall the customer be entitled to claim damages other than compensation for costs of remedying defects in the supplies. This in particular refers, but shall not be limited, to loss of production, loss of use, loss of orders, loss of profit and other direct or indirect or consequential damage. This exclusion of liability, however, does not apply to unlawful intent or gross negligence on the part of Georg Fischer and in case of strict liability under applicable product liability statutes, but does apply to unlawful intent or gross negligence of persons employed or appointed by Georg Fischer to perform any of its obligations.

## 17 Severability

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

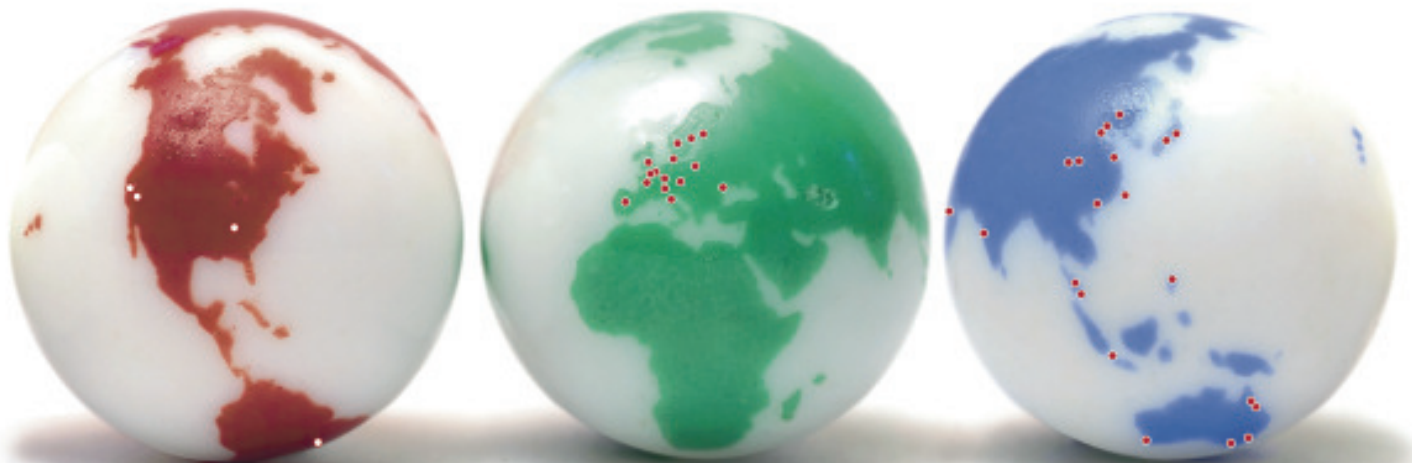
## 18 Place of Performance and Jurisdiction

- 18.1 Place of performance for the Products shall be the Georg Fischer works from which the Products are despatched.
- 18.2 Any civil action based upon any alleged breach of this contract shall be filed and prosecuted exclusively in the courts of Schaffhausen, Switzerland.  
Georg Fischer however reserves the right to file actions in any court having jurisdiction over controversies arising out of or in connection with the present contract.
- 18.3 The contract shall be governed by Swiss law without regard to conflict of law provisions that would require the application of another law.

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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.

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