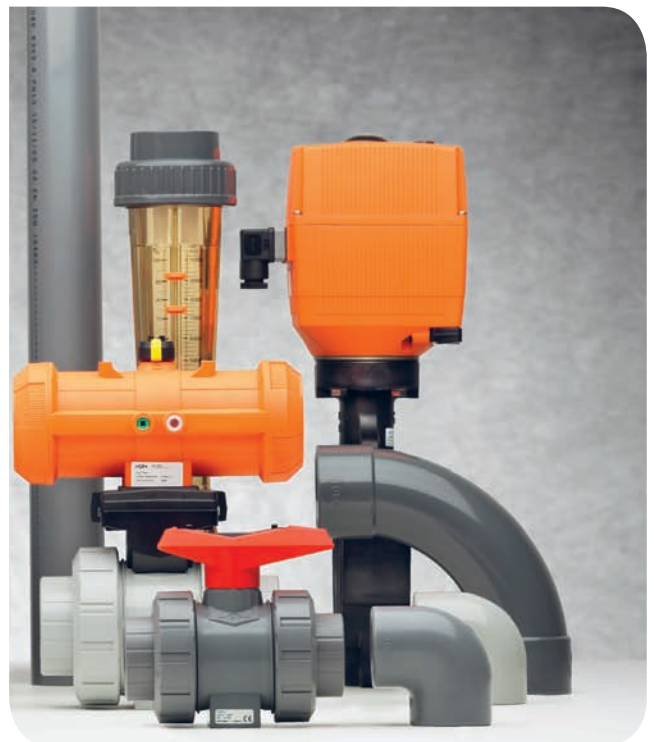


Product Range
effective 2009/2010
metric









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



DN10/15 - 50

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 diagram)

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



DN10/15 - 50

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

Model:

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

Option:

- Individual configuration of the valve (see diagram)

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



DN10/15 - 50

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

Model:

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

Option:

- Individual configuration of the valve (see diagram)

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	



DN10/15 - 50

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

Model:

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

Option:

- Individual configuration of the valve (see diagram)

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



DN10/15 - 50

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

Model:

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

Option:

- Individual configuration of the valve (see diagram)

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



DN10/15 - 50

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

Model:

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

Option:

- Individual configuration of the valve (see diagram)

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



DN10/15 - 50

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

Model:

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

Option:

- Individual configuration of the valve (see diagram)

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	



DN10/15 - 50

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

Option:

- Individual configuration of the valve (see diagram)

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



DN10/15 - 50

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)
- Control time: EA21: 5s/90°<, EA31: 15s/90°<

Option:

- Individual configuration of the valve (see diagram)

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)
- Control time: EA21: 5s/90°<, EA31: 15s/90°<

Option:

- Individual configuration of the valve (see diagram)

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

DN10/15 - 50



PVC-U metric



DN10/15 - 50

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)
- Control time: EA21: 5s/90°<, EA31: 15s/90°<

Option:

- Individual configuration of the valve (see diagram)

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



DN10/15 - 50

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

Option:

- Individual configuration of the valve (see diagram)

d [mm]	DN [mm]	Inch	PN	EPDM Code	FPM Code
20	15	1/2	10	199 130 103	199 130 113
25	20	3/4	10	199 130 104	199 130 114
32	25	1	10	199 130 105	199 130 115
40	32	1 1/4	10	199 130 106	199 130 116
50	40	1 1/2	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)
- Control time: EA21: 5s/90°<, EA31: 15s/90°<
- Overall length according to EN 558
- Connecting dimension: ISO 7005, EN 1092, BS 4504, DIN 2501

Option:

- Individual configuration of the valve (see diagram)

d [mm]	DN [mm]	PN	EPDM Code	FPM Code	
75	65	10	199 134 349	199 134 359	
90	80	10	199 134 350	199 134 360	
110	100	10	199 134 351	199 134 361	



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)
- Control time: EA21: 5s/90°<, EA31: 15s/90°<

Option:

- Individual configuration of the valve (see diagram)

DN10/15 - 50

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



PVC-U metric



DN10/15 - 50

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)
- Control time: EA21: 5s/90°<, EA31: 15s/90°<

Option:

- Individual configuration of the valve (see diagram)

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



DN10/15 - 50

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)
- Control time: EA21: 5s/90°<, EA31: 15s/90°<

Option:

- Individual configuration of the valve (see diagram)

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



DN10/15 - 50

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

Option:

- Individual configuration of the valve (see diagram)

d [mm]	DN [mm]	Inch	PN	EPDM Code	FPM Code
20	15	1/2	10	199 130 143	199 130 153
25	20	3/4	10	199 130 144	199 130 154
32	25	1	10	199 130 145	199 130 155
40	32	1 1/4	10	199 130 146	199 130 156
50	40	1 1/2	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)
- Control time: EA21: 5s/90°<, EA31: 15s/90°<
- Overall length according to EN 558
- Connecting dimension: ISO 7005, EN 1092, BS 4504, DIN 2501

Option:

- Individual configuration of the valve (see diagram)

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 185 PVC-U Horizontal/L-port 100-230V With manual emergency override With solvent cement sockets metric



Model:

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

d [mm]	DN [mm]	PN	EPDM Code	FPM Code
16	10	10	199 185 022	199 185 032
20	15	10	199 185 023	199 185 033
25	20	10	199 185 024	199 185 034
32	25	10	199 185 025	199 185 035
40	32	10	199 185 026	199 185 036
50	40	10	199 185 027	199 185 037
63	50	10	199 185 028	199 185 038



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



Model:

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

d [mm]	DN [mm]	PN	EPDM Code	FPM Code
16	10	10	199 185 002	199 185 012
20	15	10	199 185 003	199 185 013
25	20	10	199 185 004	199 185 014
32	25	10	199 185 005	199 185 015
40	32	10	199 185 006	199 185 016
50	40	10	199 185 007	199 185 017
63	50	10	199 185 008	199 185 018

PVC-U metric



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



Model:

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

d [mm]	DN [mm]	PN	EPDM Code	FPM Code
16	10	10	199 185 202	199 185 212
20	15	10	199 185 203	199 185 213
25	20	10	199 185 204	199 185 214
32	25	10	199 185 205	199 185 215
40	32	10	199 185 206	199 185 216
50	40	10	199 185 207	199 185 217
63	50	10	199 185 208	199 185 218



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



Model:

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

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

PVC-U metric



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



Model:

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

d [mm]	DN [mm]	PN	EPDM Code	FPM Code
16	10	10	199 185 062	199 185 072
20	15	10	199 185 063	199 185 073
25	20	10	199 185 064	199 185 074
32	25	10	199 185 065	199 185 075
40	32	10	199 185 066	199 185 076
50	40	10	199 185 067	199 185 077
63	50	10	199 185 068	199 185 078



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



Model:

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

d [mm]	DN [mm]	PN	EPDM Code	FPM Code
16	10	10	199 185 042	199 185 052
20	15	10	199 185 043	199 185 053
25	20	10	199 185 044	199 185 054
32	25	10	199 185 045	199 185 055
40	32	10	199 185 046	199 185 056
50	40	10	199 185 047	199 185 057
63	50	10	199 185 048	199 185 058

PVC-U metric



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



Model:

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

d [mm]	DN [mm]	PN	EPDM Code	FPM Code
16	10	10	199 185 242	199 185 252
20	15	10	199 185 243	199 185 253
25	20	10	199 185 244	199 185 254
32	25	10	199 185 245	199 185 255
40	32	10	199 185 246	199 185 256
50	40	10	199 185 247	199 185 257
63	50	10	199 185 248	199 185 258



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



Model:

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

d [mm]	DN [mm]	PN	EPDM Code	FPM Code
16	10	10	199 185 222	199 185 232
20	15	10	199 185 223	199 185 233
25	20	10	199 185 224	199 185 234
32	25	10	199 185 225	199 185 235
40	32	10	199 185 226	199 185 236
50	40	10	199 185 227	199 185 237
63	50	10	199 185 228	199 185 238

PVC-U metric



3-Way ball valve type 188 PVC-U Vertical/L-port 100-230V With manual emergency override With solvent cement sockets metric



Model:

- Vertical inlet solvent cement spigot metric
- Built on with electric actuator EA21
- Voltage 100-230 V, 50-60 Hz
- Control range 180°<)
- Basic position B-C opened, activated position A-C opened, see flow scheme
- Control time 10 s/180°<)
- Easy installation and removal using union on third outlet

d [mm]	DN [mm]	PN	EPDM Code	FPM Code
16	10	10	199 188 242	199 188 252
20	15	10	199 188 243	199 188 253
25	20	10	199 188 244	199 188 254
32	25	10	199 188 245	199 188 255
40	32	10	199 188 246	199 188 256
50	40	10	199 188 247	199 188 257
63	50	10	199 188 248	199 188 258



3-Way ball valve type 188 PVC-U Vertical/L-port 100-230V With manual emergency override With solvent cement spigots metric



Model:

- Vertical inlet solvent cement spigot metric
- Built on with electric actuator EA21
- Voltage 100-230 V, 50-60 Hz
- Control range 180°<)
- Basic position B-C opened, activated position A-C opened, see flow scheme
- Control time 10 s/180°<)
- Easy installation and removal using union on third outlet

d [mm]	DN [mm]	PN	EPDM Code	FPM Code
16	10	10	199 188 062	199 188 072
20	15	10	199 188 063	199 188 073
25	20	10	199 188 064	199 188 074
32	25	10	199 188 065	199 188 075
40	32	10	199 188 066	199 188 076
50	40	10	199 188 067	199 188 077
63	50	10	199 188 068	199 188 078

PVC-U metric



3-Way ball valve type 188 PVC-U Vertical/L-port 24V With manual emergency override With solvent cement sockets metric



Model:

- Vertical inlet solvent cement spigot metric
- Built on with electric actuator EA21
- Voltage 24 V AC/DC
- Control range 180°<
- Basic position B-C opened, activated position A-C opened, see flow scheme
- Control time 10 s/180°<
- Easy installation and removal using union on third outlet

d [mm]	DN [mm]	PN	EPDM Code	FPM Code
16	10	10	199 188 262	199 188 272
20	15	10	199 188 263	199 188 273
25	20	10	199 188 264	199 188 274
32	25	10	199 188 265	199 188 275
40	32	10	199 188 266	199 188 276
50	40	10	199 188 267	199 188 277
63	50	10	199 188 268	199 188 278



3-Way ball valve type 188 PVC-U Vertical/L-port 24V With manual emergency override With solvent cement spigots metric



Model:

- Vertical inlet solvent cement spigot metric
- Built on with electric actuator EA21
- Voltage 24 V AC/DC
- Control range 180°<
- Basic position B-C opened, activated position A-C opened, see flow scheme
- Control time 10 s/180°<
- Easy installation and removal using union on third outlet

d [mm]	DN [mm]	PN	EPDM Code	FPM Code
16	10	10	199 188 102	199 188 112
20	15	10	199 188 103	199 188 113
25	20	10	199 188 104	199 188 114
32	25	10	199 188 105	199 188 115
40	32	10	199 188 106	199 188 116
50	40	10	199 188 107	199 188 117
63	50	10	199 188 108	199 188 118

PVC-U metric

Ball valves pneumatic



DN10/15 - 50

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

Option:

- Individual configuration of the valve (see diagram)

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	



DN10/15 - 50

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

Option:

- Individual configuration of the valve (see diagram)

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



DN10/15 - 50

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

Option:

- Individual configuration of the valve (see diagram)

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



DN10/15 - 50

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 (DN10/15-25), PA21 (DN32-50)
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90°<) 1-2 s
- Overall length according to EN 558
- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504

Option:

- Individual configuration of the valve (see diagram)

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



DN10/15 - 50

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

Model:

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

Option:

- Individual configuration of the valve (see diagram)

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



DN10/15 - 50

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

Option:

- Individual configuration of the valve (see diagram)

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



DN10/15 - 50

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

Option:

- Individual configuration of the valve (see diagram)

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



DN10/15 - 50

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 (DN10/15-25), PA21 (DN32-50)
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90°<) 1-2 s
- Overall length according to EN 558
- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504

Option:

- Individual configuration of the valve (see diagram)

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



DN10/15 - 50

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

Model:

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

Option:

- Individual configuration of the valve (see diagram)

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



DN10/15 - 50

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

Model:

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

Option:

- Individual configuration of the valve (see diagram)

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



DN10/15 - 50

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

Model:

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

Option:

- Individual configuration of the valve (see diagram)

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



DN10/15 - 50

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

Model:

- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90°<) 1-2 s
- Overall length according to EN 558
- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504

Option:

- Individual configuration of the valve (see diagram)

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



DN10/15 - 50

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
- Assignment of actuators: PA11 (DN10/15-25), PA21 (DN32-50), PA30 (DN65), PA40 (DN80), PA40 (DN100)

Option:

- Individual configuration of the valve (see diagram)



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



DN10/15 - 50

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
- Assignment of actuators: PA11 (DN10/15-25), PA21 (DN32-50), PA30 (DN65), PA40 (DN80), PA40 (DN100)

Option:

- Individual configuration of the valve (see diagram)



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



DN10/15 - 50

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
- Assignment of actuators: PA11 (DN10/15-25), PA21 (DN32-50), PA30 (DN65), PA40 (DN80), PA40 (DN100)

Option:

- Individual configuration of the valve (see diagram)



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	



DN10/15 - 50

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 (DN10/15-25), PA21 (DN32-50)
- Overall length according to EN 558
- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504

Option:

- Individual configuration of the valve (see diagram)

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:

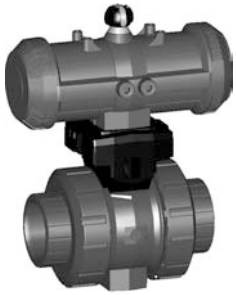
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90°<) 1-2 s
- Assignment of actuators: PA11 (DN10/15-25), PA21 (DN32-50), PA30 (DN65), PA40 (DN80), PA40 (DN100)
- Overall length according to EN 558
- Connecting dimension: ISO 7005, EN 1092, BS 4504, DIN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

Option:

- Individual configuration of the valve (see diagram)

d [mm]	DN [mm]	PN	EPDM Code	FPM Code	
75	65	10	199 234 469	199 234 479	
90	80	10	199 234 470	199 234 480	
110	100	10	199 234 471	199 234 481	

PVC-U metric



DN10/15 - 50

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
- Assignment of actuators: PA11 (DN10/15-25), PA21 (DN32-50), PA30 (DN65), PA40 (DN80), PA40 (DN100)

Option:

- Individual configuration of the valve (see diagram)



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



DN10/15 - 50

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
- Assignment of actuators: PA11 (DN10/15-25), PA21 (DN32-50), PA30 (DN65), PA40 (DN80), PA40 (DN100)

Option:

- Individual configuration of the valve (see diagram)



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



DN10/15 - 50

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), PA40 (DN80), PA40 (DN100)

Option:

- Individual configuration of the valve (see diagram)



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	



DN10/15 - 50

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 (DN10/15-25), PA21 (DN32-50)
- Overall length according to EN 558
- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504

Option:

- Individual configuration of the valve (see diagram)

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
- Assignment of actuators: PA11 (DN10/15-25), PA21 (DN32-50), PA30 (DN65), PA40 (DN80), PA40 (DN100)
- Overall length according to EN 558
- Connecting dimension: ISO 7005, EN 1092, BS 4504, DIN 2501

Option:

- Individual configuration of the valve (see diagram)

d [mm]	DN [mm]	PN	EPDM Code	FPM Code	
75	65	10	199 234 489	199 234 499	
90	80	10	199 234 490	199 234 500	
110	100	10	199 234 491	199 234 501	

PVC-U metric



DN10/15 - 50

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
- Assignment of actuators: PA11 (DN10/15-25), PA21 (DN32-50), PA35 (DN65), PA40 (DN80), PA45 (DN100)

Option:

- Individual configuration of the valve (see diagram)

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



DN10/15 - 50

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
- Assignment of actuators: PA11 (DN10/15-25), PA21 (DN32-50), PA35 (DN65), PA40 (DN80), PA45 (DN100)

Option:

- Individual configuration of the valve (see diagram)

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



DN10/15 - 50

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
- Assignment of actuators: PA11 (DN10/15-25), PA21 (DN32-50), PA35 (DN65), PA40 (DN80), PA45 (DN100)

Option:

- Individual configuration of the valve (see diagram)



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	



DN10/15 - 50

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 (DN10/15-25), PA21 (DN32-50)
- Overall length according to EN 558
- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504

Option:

- Individual configuration of the valve (see diagram)

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)
- Overall length according to EN 558
- Connecting dimension: ISO 7005, EN 1092, BS 4504, DIN 2501

Option:

- Individual configuration of the valve (see diagram)

d [mm]	DN [mm]	PN	EPDM Code	FPM Code	
75	65	10	199 234 509	199 234 519	
90	80	10	199 234 510	199 234 520	
110	100	10	199 234 511	199 234 521	

PVC-U metric



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



Model:

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

d [mm]	DN [mm]	PN	EPDM Code	FPM Code
16	10	10	199 285 022	199 285 032
20	15	10	199 285 023	199 285 033
25	20	10	199 285 024	199 285 034
32	25	10	199 285 025	199 285 035
40	32	10	199 285 026	199 285 036
50	40	10	199 285 027	199 285 037
63	50	10	199 285 028	199 285 038



3-Way ball valve type 285 PVC-U Horizontal/L-port Without manual override With solvent cement spigots metric



Model:

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

d [mm]	DN [mm]	PN	EPDM Code	FPM Code
16	10	10	199 285 002	199 285 012
20	15	10	199 285 003	199 285 013
25	20	10	199 285 004	199 285 014
32	25	10	199 285 005	199 285 015
40	32	10	199 285 006	199 285 016
50	40	10	199 285 007	199 285 017
63	50	10	199 285 008	199 285 018

PVC-U metric



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



Model:

- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- Basic position A-C opened, activated position B-C opened, see flow scheme
- Control time 90°<) 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	199 285 202	199 285 212
20	15	10	199 285 203	199 285 213
25	20	10	199 285 204	199 285 214
32	25	10	199 285 205	199 285 215
40	32	10	199 285 206	199 285 216
50	40	10	199 285 207	199 285 217
63	50	10	199 285 208	199 285 218



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



Model:

- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- Basic position A-C opened, activated position B-C opened, see flow scheme
- Control time 90°<) 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	199 285 182	199 285 192
20	15	10	199 285 183	199 285 193
25	20	10	199 285 184	199 285 194
32	25	10	199 285 185	199 285 195
40	32	10	199 285 186	199 285 196
50	40	10	199 285 187	199 285 197
63	50	10	199 285 188	199 285 198

PVC-U metric



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



Model:

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

d [mm]	DN [mm]	PN	EPDM Code	FPM Code
16	10	10	199 285 062	199 285 072
20	15	10	199 285 063	199 285 073
25	20	10	199 285 064	199 285 074
32	25	10	199 285 065	199 285 075
40	32	10	199 285 066	199 285 076
50	40	10	199 285 067	199 285 077
63	50	10	199 285 068	199 285 078



3-Way ball valve type 285 PVC-U Horizontal/T-port Without manual override With solvent cement spigots metric



Model:

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

d [mm]	DN [mm]	PN	EPDM Code	FPM Code
16	10	10	199 285 042	199 285 052
20	15	10	199 285 043	199 285 053
25	20	10	199 285 044	199 285 054
32	25	10	199 285 045	199 285 055
40	32	10	199 285 046	199 285 056
50	40	10	199 285 047	199 285 057
63	50	10	199 285 048	199 285 058

PVC-U metric



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



Model:

- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- Basic position A-B-C opened, activated position B-C opened, see flow scheme
- Control time 90°<) 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	199 285 242	199 285 252
20	15	10	199 285 243	199 285 253
25	20	10	199 285 244	199 285 254
32	25	10	199 285 245	199 285 255
40	32	10	199 285 246	199 285 256
50	40	10	199 285 247	199 285 257
63	50	10	199 285 248	199 285 258



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



Model:

- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- Basic position A-B-C opened, activated position B-C opened, see flow scheme
- Control time 90°<) 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	199 285 222	199 285 232
20	15	10	199 285 223	199 285 233
25	20	10	199 285 224	199 285 234
32	25	10	199 285 225	199 285 235
40	32	10	199 285 226	199 285 236
50	40	10	199 285 227	199 285 237
63	50	10	199 285 228	199 285 238

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
1/2	15	6	199 024 061
3/4	20	6	199 024 062
1	25	6	199 024 063
1 1/4	32	6	199 024 064
1 1/2	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	1/2	6	199 024 091	
25	20	3/4	6	199 024 092	
32	25	1	6	199 024 093	
40	32	1 1/4	6	199 024 094	
50	40	1 1/2	6	199 024 095	
63	50	2	6	199 024 096	

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: PTFE/EPDM

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: PTFE/EPDM

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: PTFE/EPDM

d [mm]	DN [mm]	Inch	PN [bar]		EPDM Code	PTFE/EPDM Code
20	15	1/2	10 / 5	*	199 028 121	199 028 151
25	20	3/4	10 / 7	*	199 028 122	199 028 152
32	25	1	10 / 7	*	199 028 123	199 028 153
40	32	1 1/4	10 / 7	*	199 028 124	199 028 154
50	40	1 1/2	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	6	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	199 025 121	199 025 151	
25	20	¾	10	199 025 122	199 025 152	
32	25	1	10	199 025 123	199 025 153	
40	32	1 ¼	10	199 025 124	199 025 154	
50	40	1 ½	10	199 025 125	199 025 155	
63	50	2	10	199 025 126	199 025 156	

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	6	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	199 025 131	199 025 161	
25	20	¾	10	199 025 132	199 025 162	
32	25	1	10	199 025 133	199 025 163	
40	32	1 ¼	10	199 025 134	199 025 164	
50	40	1 ½	10	199 025 135	199 025 165	
63	50	2	10	199 025 136	199 025 166	

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	6	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	199 025 141	199 025 171	
25	20	¾	10	199 025 142	199 025 172	
32	25	1	10	199 025 143	199 025 173	
40	32	1 ¼	10	199 025 144	199 025 174	
50	40	1 ½	10	199 025 145	199 025 175	
63	50	2	10	199 025 146	199 025 176	

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, 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, 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
315	300	12	4	199 140 050	199 140 070

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, 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, 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
315	300	12	4	199 140 130	199 140 150

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, 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	199 140 082	199 140 102	
75	65	2 ½	10	199 140 083	199 140 103	
90	80	3	10	199 140 084	199 140 104	
110	100	4	10	199 140 085	199 140 105	
140	125	5	10	199 140 086	199 140 106	
160	150	6	10	199 140 087	199 140 107	
225	200	8	10	199 140 088	199 140 108	

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, 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, 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



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, 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

PVC-U metric



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, 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



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, 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	199 141 082	199 141 102
75	65	2 ½	10	199 141 083	199 141 103
90	80	3	10	199 141 084	199 141 104
110	100	4	10	199 141 085	199 141 105
140	125	5	10	199 141 086	199 141 106
160	150	6	10	199 141 087	199 141 107
225	200	8	10	199 141 088	199 141 108

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, 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 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, 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	199 142 042	199 142 062
2 ½	65	10	199 142 043	199 142 063
3	80	10	199 142 044	199 142 064
4	100	10	199 142 045	199 142 065
5	125	10	199 142 046	199 142 066
6	150	10	199 142 047	199 142 067
8	200	10	199 142 048	199 142 068



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, 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

PVC-U metric



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, 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



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, 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	199 142 082	199 142 102
2 ½	65	10	199 142 083	199 142 103
3	80	10	199 142 084	199 142 104
4	100	10	199 142 085	199 142 105
5	125	10	199 142 086	199 142 106
6	150	10	199 142 087	199 142 107
8	200	10	199 142 088	199 142 108

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, 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, 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, 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, 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, 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, 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, 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, ISO 5752
- Control range 90°<

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

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, 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, 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, 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, ISO 5752
- Control range 90°<

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

PVC-U metric



Butterfly valve type 563 PVC-U FC (Fail safe to close) Without manual override

Model:

- Only useable for system pressure of max. 4 bar
- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, ANSI/ASME B 16.5 Class 150, BS 1560: 1989, BS 4504, JIS B 2220
- Overall length according to EN 558, ISO 5752
- Control range 90°<

d [mm]	DN [mm]	Inch	PN	EPDM Code	FPM Code
63	50	2	4	161 563 142	161 563 162
75	65	2 ½	4	161 563 143	161 563 163
90	80	3	4	161 563 144	161 563 164
110	100	4	4	161 563 145	161 563 165
140	125	5	4	161 563 146	161 563 166
160	150	6	4	161 563 147	161 563 167
225	200	8	4	161 563 148	161 563 168
280	250	10	4	161 563 149	161 563 169
315	300	12	4	161 563 150	161 563 170



Butterfly valve type 563 PVC-U DA (Double acting) Without manual override

Model:

- Only useable for system pressure of max. 4 bar
- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, ANSI/ASME B 16.5 Class 150, BS 1560: 1989, BS 4504, JIS B 2220
- Overall length according to EN 558, ISO 5752
- Control range 90°<

d [mm]	DN [mm]	Inch	PN	EPDM Code	FPM Code
63	50	2	4	161 563 102	161 563 122
75	65	2 ½	4	161 563 103	161 563 123
90	80	3	4	161 563 104	161 563 124
110	100	4	4	161 563 105	161 563 125
140	125	5	4	161 563 106	161 563 126
160	150	6	4	161 563 107	161 563 127
225	200	8	4	161 563 108	161 563 128
280	250	10	4	161 563 109	161 563 129
315	300	12	4	161 563 110	161 563 130

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 ±10%
Function A straight-through valve 2/2 ways
With threaded sockets parallel female thread Rp

- With manual override
- Electrical connection: cable plug
- Protection class IP 65

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 ±10%
Function B straight-through valve 2/2 ways
With threaded sockets parallel female thread Rp

- With manual override
- Electrical connection: cable plug
- Protection class IP 65

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 24V DC *24V AC/DC
Function A straight-through valve 2/2 ways
With threaded sockets parallel female thread Rp

- With manual override
- Electrical connection: cable plug
- Protection class IP 65

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-through valve 2/2 ways
With threaded sockets parallel female thread Rp

- With manual override
- Electrical connection: cable plug
- Protection class IP 65

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

PVC-U metric



Solenoid valve type 160 PVC-U Nominal voltage 230V 50Hz \pm 10% Function A straight through valve 2/2 ways With solvent cement sockets metric

- With manual override
- 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	199 160 010	199 160 005
10	20	0.0 - 3.0	199 160 011	199 160 006
15	20	0.0 - 1.0	199 160 012	199 160 007
15	25	0.0 - 1.0	199 160 013	199 160 008
20	25	0.0 - 0.5	199 160 014	199 160 009



Solenoid valve type 160 PVC-U Nominal voltage 230V 50Hz \pm 10% Function B straight through valve 2/2 ways With solvent cement sockets metric

- With manual override
- 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	199 160 025	199 160 020
10	20	0.0 - 2.0	199 160 026	199 160 021
15	20	0.0 - 1.0	199 160 027	199 160 022
15	25	0.0 - 1.0	199 160 028	199 160 023
20	25	0.0 - 0.5	199 160 029	199 160 024



Solenoid valve type 160 PVC-U Nominal voltage 24V AC/DC Function A straight through valve 2/2 ways With solvent cement sockets metric

- With manual override
- 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	199 160 370	199 160 365
10	20	0.0 - 3.0	199 160 371	199 160 366
15	20	0.0 - 1.0	199 160 372	199 160 367
15	25	0.0 - 1.0	199 160 373	199 160 368
20	25	0.0 - 0.5	199 160 374	199 160 369

PVC-U metric



Solenoid valve type 160 PVC-U
Nominal voltage 24V AC/DC
Function B straight-through valve 2/2 ways
With solvent cement sockets metric

- With manual override
- 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	199 160 385	199 160 380	
10	20	0.0 - 2.0	199 160 386	199 160 381	
15	20	0.0 - 1.0	199 160 387	199 160 382	
15	25	0.0 - 1.0	199 160 388	199 160 383	
20	25	0.0 - 0.5	199 160 389	199 160 384	

PVC-U metric



Solenoid valve type 161 PVC-U
Nominal voltage 230V 50Hz ± 10%
Function E mixing valve 3/2 ways
With solvent cement sockets metric

- With manual override
- Electrical connection: cable plug
- Protection class IP 65

DN [mm]	d [mm]	PN [bar]	EPDM Code	FPM Code
10	16	0.0 - 0.6	199 161 040	199 161 035
10	20	0.0 - 0.6	199 161 041	199 161 036
15	20	0.0 - 0.3	199 161 042	199 161 037
15	25	0.0 - 0.3	199 161 043	199 161 038
20	25	0.0 - 0.2	199 161 044	199 161 039



Solenoid valve type 161 PVC-U
Nominal voltage 24V AC/DC
Function E mixing valve 3/2 ways
With solvent cement sockets metric

- With manual override
- Electrical connection: cable plug
- Protection class IP 65

DN [mm]	d [mm]	PN [bar]	EPDM Code	FPM Code
10	16	0.0 - 0.6	199 161 430	199 161 425
10	20	0.0 - 0.6	199 161 431	199 161 426
15	20	0.0 - 0.3	199 161 432	199 161 427
15	25	0.0 - 0.3	199 161 433	199 161 428
20	25	0.0 - 0.2	199 161 434	199 161 429



Solenoid valve type 161 PVC-U
Nominal voltage 230V 50Hz ± 10%
Function F distribution valve 3/2 ways
With solvent cement sockets metric

- With manual override
- Electrical connection: cable plug
- Protection class IP 65

DN [mm]	d [mm]	PN [bar]	EPDM Code	FPM Code
10	16	0 - 1.00	199 161 055	199 161 050
10	20	0 - 1.00	199 161 056	199 161 051
15	20	0 - 0.50	199 161 057	199 161 052
15	25	0 - 0.50	199 161 058	199 161 053
20	25	0 - 0.25	199 161 059	199 161 054

PVC-U metric



Solenoid valve type 161 PVC-U
Nominal voltage 24V AC/DC
Function F distribution valve 3/2 ways
With solvent cement sockets metric

- With manual override
- Electrical connection: cable plug
- Protection class IP 65

DN [mm]	d [mm]	PN [bar]	EPDM Code	FPM Code	
10	16	0 - 1.00	199 161 445	199 161 440	
10	20	0 - 1.00	199 161 446	199 161 441	
15	20	0 - 0.50	199 161 447	199 161 442	
15	25	0 - 0.50	199 161 448	199 161 443	
20	25	0 - 0.25	199 161 449	199 161 444	

PVC-U metric



Solenoid valve type 165 PVC-U
Standard voltage 230V 50Hz
Function A straight-through valve 2/2 ways
With solvent cement sockets metric

- With manual override
- Electrical connection: cable plug
- Protection class IP 65

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



Solenoid valve type 165 PVC-U
Standard voltage 115V 50Hz
Function A straight-through valve 2/2 ways
With solvent cement sockets metric

- With manual override
- Electrical connection: cable plug
- Protection class IP 65

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



Solenoid valve type 165 PVC-U
Standard voltage 24V DC
Function A straight-through valve 2/2 ways
With solvent cement sockets metric

- With manual override
- Electrical connection: cable plug
- Protection class IP 65

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

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	



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	

PVC-U metric

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-C metric

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PVC-C metric

Ball valves electric



DN10/15 - 50

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 diagram)

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	



DN10/15 - 50

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

Model:

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

Option:

- Individual configuration of the valve (see diagram)

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



DN10/15 - 50

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 diagram)

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	



DN10/15 - 50

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

Model:

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

Option:

- Individual configuration of the valve (see diagram)

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



DN10/15 - 50

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 diagram)

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



DN10/15 - 50

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 diagram)

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



DN10/15 - 50

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)
- 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 diagram)

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



DN10/15 - 50

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)
- 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 diagram)

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



DN10/15 - 50

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)
- 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 diagram)

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

Option:

- Individual configuration of the valve (see diagram)

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



DN10/15 - 50

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)
- 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 diagram)

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



DN10/15 - 50

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)
- 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 diagram)

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



DN10/15 - 50

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)
- 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 diagram)

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

Option:

- Individual configuration of the valve (see diagram)

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 185 PVC-C Horizontal/L-port 100-230V With manual emergency override With solvent cement sockets metric



Model:

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

d [mm]	DN [mm]	PN	EPDM Code	FPM Code
16	10	10	199 185 102	199 185 112
20	15	10	199 185 103	199 185 113
25	20	10	199 185 104	199 185 114
32	25	10	199 185 105	199 185 115
40	32	10	199 185 106	199 185 116
50	40	10	199 185 107	199 185 117
63	50	10	199 185 108	199 185 118



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



Model:

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

d [mm]	DN [mm]	PN	EPDM Code	FPM Code
16	10	10	199 185 082	199 185 092
20	15	10	199 185 083	199 185 093
25	20	10	199 185 084	199 185 094
32	25	10	199 185 085	199 185 095
40	32	10	199 185 086	199 185 096
50	40	10	199 185 087	199 185 097
63	50	10	199 185 088	199 185 098

PVC-C metric



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



Model:

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

d [mm]	DN [mm]	PN	EPDM Code	FPM Code
16	10	10	199 185 262	199 185 272
20	15	10	199 185 263	199 185 273
25	20	10	199 185 264	199 185 274
32	25	10	199 185 265	199 185 275
40	32	10	199 185 266	199 185 276
50	40	10	199 185 267	199 185 277
63	50	10	199 185 268	199 185 278



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



Model:

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

d [mm]	DN [mm]	PN	EPDM Code	FPM Code
16	10	10	199 185 282	199 185 292
20	15	10	199 185 283	199 185 293
25	20	10	199 185 284	199 185 294
32	25	10	199 185 285	199 185 295
40	32	10	199 185 286	199 185 296
50	40	10	199 185 287	199 185 297
63	50	10	199 185 288	199 185 298

PVC-C metric



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



Model:

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

d [mm]	DN [mm]	PN	EPDM Code	FPM Code
16	10	10	199 185 142	199 185 152
20	15	10	199 185 143	199 185 153
25	20	10	199 185 144	199 185 154
32	25	10	199 185 145	199 185 155
40	32	10	199 185 146	199 185 156
50	40	10	199 185 147	199 185 157
63	50	10	199 185 148	199 185 158



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



Model:

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

d [mm]	DN [mm]	PN	EPDM Code	FPM Code
16	10	10	199 185 122	199 185 132
20	15	10	199 185 123	199 185 133
25	20	10	199 185 124	199 185 134
32	25	10	199 185 125	199 185 135
40	32	10	199 185 126	199 185 136
50	40	10	199 185 127	199 185 137
63	50	10	199 185 128	199 185 138

PVC-C metric



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



Model:

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

d [mm]	DN [mm]	PN	EPDM Code	FPM Code
16	10	10	199 185 322	199 185 332
20	15	10	199 185 323	199 185 333
25	20	10	199 185 324	199 185 334
32	25	10	199 185 325	199 185 335
40	32	10	199 185 326	199 185 336
50	40	10	199 185 327	199 185 337
63	50	10	199 185 328	199 185 338



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



Model:

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

d [mm]	DN [mm]	PN	EPDM Code	FPM Code
16	10	10	199 185 302	199 185 312
20	15	10	199 185 303	199 185 313
25	20	10	199 185 304	199 185 314
32	25	10	199 185 305	199 185 315
40	32	10	199 185 306	199 185 316
50	40	10	199 185 307	199 185 317
63	50	10	199 185 308	199 185 318

PVC-C metric

Ball valves pneumatic



DN10/15 - 50

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

Option:

- Individual configuration of the valve (see diagram)

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	



DN10/15 - 50

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

Model:

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

Option:

- Individual configuration of the valve (see diagram)

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



DN10/15 - 50

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

Model:

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

Option:

- Individual configuration of the valve (see diagram)

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



DN10/15 - 50

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

Model:

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

Option:

- Individual configuration of the valve (see diagram)

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



DN10/15 - 50

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

Model:

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

Option:

- Individual configuration of the valve (see diagram)

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



DN10/15 - 50

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

Option:

- Individual configuration of the valve (see diagram)

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



DN10/15 - 50

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

Model:

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

Option:

- Individual configuration of the valve (see diagram)

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



DN10/15 - 50

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

Model:

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

Option:

- Individual configuration of the valve (see diagram)

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



DN10/15 - 50

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

Model:

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

Option:

- Individual configuration of the valve (see diagram)

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



DN10/15 - 50

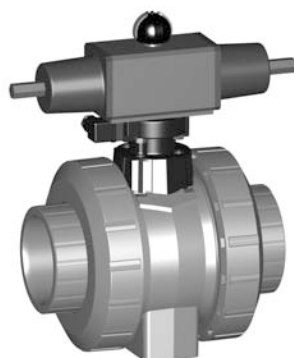
Ball valve type 230 PVC-C FC (Fail safe to close) Without manual override With solvent cement sockets metric

Model:

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

Option:

- Individual configuration of the valve (see diagram)



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



DN10/15 - 50

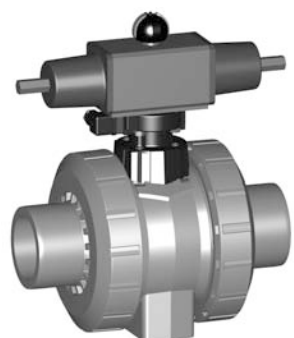
Ball valve type 230 PVC-C FC (Fail safe to close) Without manual override With solvent cement spigots metric

Model:

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

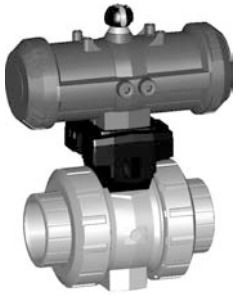
Option:

- Individual configuration of the valve (see diagram)



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



DN10/15 - 50

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

Model:

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

Option:

- Individual configuration of the valve (see diagram)



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), PA40 (DN80), PA40 (DN100)
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90°<) 1-2 s
- Overall length according to EN 558
- Connecting dimension: ISO 7005, EN 1092, BS 4504, DIN 2501

Option:

- Individual configuration of the valve (see diagram)

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



DN10/15 - 50

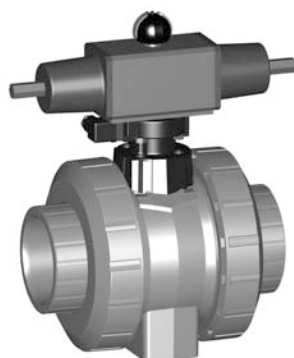
Ball valve type 230 PVC-C FO (Fail safe to open) Without manual override With solvent cement sockets metric

Model:

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

Option:

- Individual configuration of the valve (see diagram)



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



DN10/15 - 50

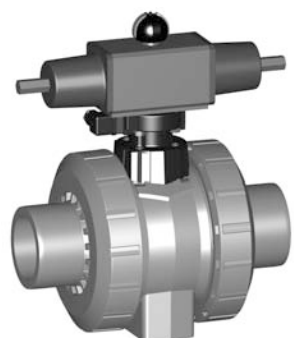
Ball valve type 230 PVC-C FO (Fail safe to open) Without manual override With solvent cement spigots metric

Model:

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

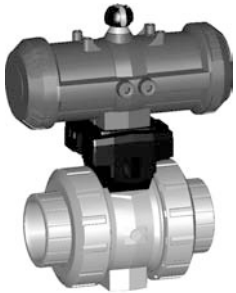
Option:

- Individual configuration of the valve (see diagram)



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



DN10/15 - 50

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

Model:

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

Option:

- Individual configuration of the valve (see diagram)



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), PA40 (DN80), PA40 (DN100)
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90°<) 1-2 s
- Overall length according to EN 558
- Connecting dimension: ISO 7005, EN 1092, BS 4504, DIN 2501

Option:

- Individual configuration of the valve (see diagram)

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



DN10/15 - 50

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

Option:

- Individual configuration of the valve (see diagram)



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



DN10/15 - 50

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

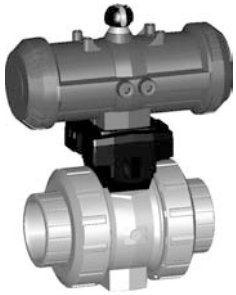
Option:

- Individual configuration of the valve (see diagram)



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



DN10/15 - 50

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

Model:

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

Option:

- Individual configuration of the valve (see diagram)



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)
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90°<) 1-2 s
- Overall length according to EN 558
- Connecting dimension: ISO 7005, EN 1092, BS 4504, DIN 2501

Option:

- Individual configuration of the valve (see diagram)

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 285 PVC-C

Horizontal/L-port

Without manual override

With solvent cement sockets metric



Model:

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

d [mm]	DN [mm]	PN	EPDM Code	FPM Code
16	10	10	199 285 102	199 285 112
20	15	10	199 285 103	199 285 113
25	20	10	199 285 104	199 285 114
32	25	10	199 285 105	199 285 115
40	32	10	199 285 106	199 285 116
50	40	10	199 285 107	199 285 117
63	50	10	199 285 108	199 285 118



3-Way ball valve type 285 PVC-C

Horizontal/L-port

Without manual override

With solvent cement spigots metric



Model:

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

d [mm]	DN [mm]	PN	EPDM Code	FPM Code
16	10	10	199 285 082	199 285 092
20	15	10	199 285 083	199 285 093
25	20	10	199 285 084	199 285 094
32	25	10	199 285 085	199 285 095
40	32	10	199 285 086	199 285 096
50	40	10	199 285 087	199 285 097
63	50	10	199 285 088	199 285 098

PVC-C metric



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



Model:

- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- Basic position A-C opened, activated position B-C opened, see flow scheme
- Control time 90°<) 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	199 285 282	199 285 292
20	15	10	199 285 283	199 285 293
25	20	10	199 285 284	199 285 294
32	25	10	199 285 285	199 285 295
40	32	10	199 285 286	199 285 296
50	40	10	199 285 287	199 285 297
63	50	10	199 285 288	199 285 298



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



Model:

- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- Basic position A-C opened, activated position B-C opened, see flow scheme
- Control time 90°<) 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	199 285 262	199 285 272
20	15	10	199 285 263	199 285 273
25	20	10	199 285 264	199 285 274
32	25	10	199 285 265	199 285 275
40	32	10	199 285 266	199 285 276
50	40	10	199 285 267	199 285 277
63	50	10	199 285 268	199 285 278

PVC-C metric



3-Way ball valve type 285 PVC-C

Horizontal/T-port

Without manual override

With solvent cement sockets metric



Model:

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

d [mm]	DN [mm]	PN	EPDM Code	FPM Code
16	10	10	199 285 142	199 285 152
20	15	10	199 285 143	199 285 153
25	20	10	199 285 144	199 285 154
32	25	10	199 285 145	199 285 155
40	32	10	199 285 146	199 285 156
50	40	10	199 285 147	199 285 157
63	50	10	199 285 148	199 285 158



3-Way ball valve type 285 PVC-C

Horizontal/T-port

Without manual override

With solvent cement spigots metric



Model:

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

d [mm]	DN [mm]	PN	EPDM Code	FPM Code
16	10	10	199 285 122	199 285 132
20	15	10	199 285 123	199 285 133
25	20	10	199 285 124	199 285 134
32	25	10	199 285 125	199 285 135
40	32	10	199 285 126	199 285 136
50	40	10	199 285 127	199 285 137
63	50	10	199 285 128	199 285 138

PVC-C metric



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



Model:

- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- Basic position A-B-C opened, activated position B-C opened, see flow scheme
- Control time 90°<) 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	199 285 322	199 285 332
20	15	10	199 285 323	199 285 333
25	20	10	199 285 324	199 285 334
32	25	10	199 285 325	199 285 335
40	32	10	199 285 326	199 285 336
50	40	10	199 285 327	199 285 337
63	50	10	199 285 328	199 285 338



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



Model:

- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- Basic position A-B-C opened, activated position B-C opened, see flow scheme
- Control time 90°<) 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	199 285 302	199 285 312
20	15	10	199 285 303	199 285 313
25	20	10	199 285 304	199 285 314
32	25	10	199 285 305	199 285 315
40	32	10	199 285 306	199 285 316
50	40	10	199 285 307	199 285 317
63	50	10	199 285 308	199 285 318

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: PTFE/EPDM

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: PTFE/EPDM

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 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	199 025 697	199 025 727	
** 90	80	3	10	199 025 698	199 025 728	
110	100	4	6	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	1/2	10	199 025 701	199 025 731	
25	20	3/4	10	199 025 702	199 025 732	
32	25	1	10	199 025 703	199 025 733	
40	32	1 1/4	10	199 025 704	199 025 734	
50	40	1 1/2	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 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 1/2	10	199 025 707	199 025 737	
** 90	80	3	10	199 025 708	199 025 738	
110	100	4	6	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

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	6	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, ISO 5752
- Interface F07 according to DIN/ISO 5211

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, 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	199 140 202	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, 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	199 140 162	199 140 182
75	65	2 ½	10	199 140 163	199 140 183
90	80	3	10	199 140 164	199 140 184
110	100	4	10	199 140 165	199 140 185
140	125	5	10	199 140 166	199 140 186
160	150	6	10	199 140 167	199 140 187
225	200	8	10	199 140 168	199 140 188

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



Model:

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

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

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, 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	199 140 242	199 140 262	
75	65	2 ½	10	199 140 243	199 140 263	
90	80	3	10	199 140 244	199 140 264	
110	100	4	10	199 140 245	199 140 265	
140	125	5	10	199 140 246	199 140 266	
160	150	6	10	199 140 247	199 140 267	
225	200	8	10	199 140 248	199 140 268	

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, ISO 5752
- Interface F07 according to DIN/ISO 5211

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, 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	199 141 202	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



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

Model:

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

d [mm]	DN [mm]	Inch	PN	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

PVC-C metric



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

Model:

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

d [mm]	DN [mm]	Inch	PN	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



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

Model:

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

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

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, ISO 5752
- Interface F07 according to DIN/ISO 5211

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, 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	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



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

Model:

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

Inch	DN [mm]	d [mm]	PN	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

PVC-C metric



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

Model:

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

Inch	DN [mm]	d [mm]	PN	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



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

Model:

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

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

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, ISO 5752
- Interface F07 according to DIN/ISO 5211

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, ISO 5752
- Control range 90°<

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



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

Model:

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

d [mm]	DN [mm]	Inch	PN	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

PVC-C metric

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



Model:

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

d [mm]	DN [mm]	Inch	PN	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, ISO 5752
- Interface F07 according to DIN/ISO 5211

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, ISO 5752
- Control range 90°<

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



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

Model:

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

d [mm]	DN [mm]	Inch	PN	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

PVC-C metric



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

Model:

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

d [mm]	DN [mm]	Inch	PN	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, ISO 5752
- Interface F07 according to DIN/ISO 5211

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, ISO 5752
- Control range 90°<

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



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

Model:

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

Inch	DN [mm]	d [mm]	PN	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

PVC-C metric








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

Model:

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

Inch	DN [mm]	d [mm]	PN	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



DN10/15 - 50

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 diagram)

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



DN10/15 - 50

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 diagram)

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



DN10/15 - 50

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

Model:

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

Option:

- Individual configuration of the valve (see diagram)

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



DN10/15 - 50

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 diagram)

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



DN10/15 - 50

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)
- Control time: EA21: 5s/90°<, EA31: 15s/90°<

Option:

- Individual configuration of the valve (see diagram)

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



DN10/15 - 50

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 diagram)

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



DN10/15 - 50

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)
- Control time: EA21: 5s/90°<, EA31: 15s/90°<

Option:

- Individual configuration of the valve (see diagram)

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 diagram)

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

DN10/15 - 50

ABS metric



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



Model:

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

d [mm]	DN [mm]	PN	EPDM Code
16	10	10	199 185 162
20	15	10	199 185 163
25	20	10	199 185 164
32	25	10	199 185 165
40	32	10	199 185 166
50	40	10	199 185 167
63	50	10	199 185 168



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



Model:

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

d [mm]	DN [mm]	PN	EPDM Code
16	10	10	199 185 342
20	15	10	199 185 343
25	20	10	199 185 344
32	25	10	199 185 345
40	32	10	199 185 346
50	40	10	199 185 347
63	50	10	199 185 348

ABS metric



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



Model:

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

d [mm]	DN [mm]	PN	EPDM Code
16	10	10	199 185 172
20	15	10	199 185 173
25	20	10	199 185 174
32	25	10	199 185 175
40	32	10	199 185 176
50	40	10	199 185 177
63	50	10	199 185 178



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



Model:

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

d [mm]	DN [mm]	PN	EPDM Code
16	10	10	199 185 352
20	15	10	199 185 353
25	20	10	199 185 354
32	25	10	199 185 355
40	32	10	199 185 356
50	40	10	199 185 357
63	50	10	199 185 358

ABS metric



3-Way ball valve type 188 ABS Vertical/L-port 100-230V With manual emergency override With solvent cement sockets metric



Model:

- Vertical inlet solvent cement spigot metric
- Built on with electric actuator EA21
- Voltage 100-230 V, 50-60 Hz
- Control range 180°<)
- Basic position B-C opened, activated position A-C opened, see flow scheme
- Control time 10 s/180°<)
- Easy installation and removal using union on third outlet

d [mm]	DN [mm]	PN	EPDM Code
16	10	10	199 188 162
20	15	10	199 188 163
25	20	10	199 188 164
32	25	10	199 188 165
40	32	10	199 188 166
50	40	10	199 188 167
63	50	10	199 188 168



3-Way ball valve type 188 ABS Vertical/L-port 24V With manual emergency override With solvent cement sockets metric



Model:

- Vertical inlet solvent cement spigot metric
- Built on with electric actuator EA21
- Voltage 24 V AC/DC
- Control range 180°<)
- Basic position B-C opened, activated position A-C opened, see flow scheme
- Control time 10 s/180°<)
- Easy installation and removal using union on third outlet

d [mm]	DN [mm]	PN	EPDM Code
16	10	10	199 188 452
20	15	10	199 188 453
25	20	10	199 188 454
32	25	10	199 188 455
40	32	10	199 188 456
50	40	10	199 188 457
63	50	10	199 188 458

ABS metric

Ball valves pneumatic



DN10/15 - 50

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

Option:

- Individual configuration of the valve (see diagram)

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



DN10/15 - 50

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

Model:

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

Option:

- Individual configuration of the valve (see diagram)

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



DN10/15 - 50

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

Model:

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

Option:

- Individual configuration of the valve (see diagram)

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



DN10/15 - 50

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

Model:

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

Option:

- Individual configuration of the valve (see diagram)

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



DN10/15 - 50

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

Model:

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

Option:

- Individual configuration of the valve (see diagram)

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



DN10/15 - 50

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

Model:

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

Option:

- Individual configuration of the valve (see diagram)

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



DN10/15 - 50

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

Model:

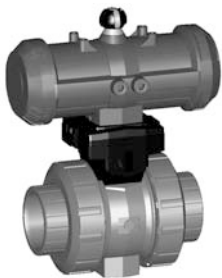
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90°<) 1-2 s
- Assignment of actuators: PA11 (DN10/15-25), PA21 (DN32-50), PA30 (DN65), PA40 (DN80), PA40 (DN100)

Option:

- Individual configuration of the valve (see diagram)



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



DN10/15 - 50

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 (DN10/15-25), PA21 (DN32-50)

Option:

- Individual configuration of the valve (see diagram)

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



DN10/15 - 50

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
- Assignment of actuators: PA11 (DN10/15-25), PA21 (DN32-50), PA30 (DN65), PA40 (DN80), PA40 (DN100)

Option:

- Individual configuration of the valve (see diagram)



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



DN10/15 - 50

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 (DN10/15-25), PA21 (DN32-50)

Option:

- Individual configuration of the valve (see diagram)

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



DN10/15 - 50

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
- Assignment of actuators: PA11 (DN10/15-25), PA21 (DN32-50), PA35 (DN65), PA40 (DN80), PA45 (DN100)

Option:

- Individual configuration of the valve (see diagram)



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



DN10/15 - 50

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 (DN10/15-25), PA21 (DN32-50)

Option:

- Individual configuration of the valve (see diagram)

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 285 ABS Horizontal/L-port Without manual override With solvent cement sockets metric



Model:

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

d [mm]	DN [mm]	PN	EPDM Code
16	10	10	199 285 162
20	15	10	199 285 163
25	20	10	199 285 164
32	25	10	199 285 165
40	32	10	199 285 166
50	40	10	199 285 167
63	50	10	199 285 168



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



Model:

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

d [mm]	DN [mm]	PN	EPDM Code
16	10	10	199 285 342
20	15	10	199 285 343
25	20	10	199 285 344
32	25	10	199 285 345
40	32	10	199 285 346
50	40	10	199 285 347
63	50	10	199 285 348

ABS metric



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



Model:

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

d [mm]	DN [mm]	PN	EPDM Code
16	10	10	199 285 172
20	15	10	199 285 173
25	20	10	199 285 174
32	25	10	199 285 175
40	32	10	199 285 176
50	40	10	199 285 177
63	50	10	199 285 178



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



Model:

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

d [mm]	DN [mm]	PN	EPDM Code
16	10	10	199 285 352
20	15	10	199 285 353
25	20	10	199 285 354
32	25	10	199 285 355
40	32	10	199 285 356
50	40	10	199 285 357
63	50	10	199 285 358

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	199 025 941	
25	20	10	199 025 942	
32	25	10	199 025 943	
40	32	10	199 025 944	
50	40	10	199 025 945	
63	50	10	199 025 946	



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 PP-V 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	199 025 947	
** 90	80	3	10	199 025 948	
110	100	4	6	199 025 949	

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 PP-V 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	6	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 PP-V 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	6	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, ISO 5752
- Interface F07 according to DIN/ISO 5211

d [mm]	DN [mm]	PN	EPDM Code
63	50	10	169 567 802
75	65	10	169 567 803
90	80	10	169 567 804
110	100	10	169 567 805
140	125	10	169 567 806
160	150	10	169 567 807
225	200	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, 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]	PN	EPDM Code
63	50	10	199 140 502
75	65	10	199 140 503
90	80	10	199 140 504
110	100	10	199 140 505
140	125	10	199 140 506
160	150	10	199 140 507
225	200	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, 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]	PN	EPDM Code
63	50	10	199 140 482
75	65	10	199 140 483
90	80	10	199 140 484
110	100	10	199 140 485
140	125	10	199 140 486
160	150	10	199 140 487
225	200	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, 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]	PN	EPDM Code
63	50	10	199 140 542
75	65	10	199 140 543
90	80	10	199 140 544
110	100	10	199 140 545
140	125	10	199 140 546
160	150	10	199 140 547
225	200	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, 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]	PN	EPDM Code	
63	50	10	199 140 522	
75	65	10	199 140 523	
90	80	10	199 140 524	
110	100	10	199 140 525	
140	125	10	199 140 526	
160	150	10	199 140 527	
225	200	10	199 140 528	

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, ISO 5752
- Interface F07 according to DIN/ISO 5211

d [mm]	DN [mm]	PN	EPDM Code
63	50	10	169 568 802
75	65	10	169 568 803
90	80	10	169 568 804
110	100	10	169 568 805
140	125	10	169 568 806
160	150	10	169 568 807
225	200	10	169 568 808



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, 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]	PN	EPDM Code
63	50	10	199 141 502
75	65	10	199 141 503
90	80	10	199 141 504
110	100	10	199 141 505
140	125	10	199 141 506
160	150	10	199 141 507
225	200	10	199 141 508



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, 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]	PN	EPDM Code
63	50	10	199 141 482
75	65	10	199 141 483
90	80	10	199 141 484
110	100	10	199 141 485
140	125	10	199 141 486
160	150	10	199 141 487
225	200	10	199 141 488

ABS metric



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, 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]	PN	EPDM Code
63	50	10	199 141 542
75	65	10	199 141 543
90	80	10	199 141 544
110	100	10	199 141 545
140	125	10	199 141 546
160	150	10	199 141 547
225	200	10	199 141 548



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, 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]	PN	EPDM Code
63	50	10	199 141 522
75	65	10	199 141 523
90	80	10	199 141 524
110	100	10	199 141 525
140	125	10	199 141 526
160	150	10	199 141 527
225	200	10	199 141 528

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, ISO 5752
- Interface F07 according to DIN/ISO 5211

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



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, 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
2	50	63	10	199 142 502
2 ½	65	75	10	199 142 503
3	80	90	10	199 142 504
4	100	110	10	199 142 505
5	125	140	10	199 142 506
6	150	160	10	199 142 507
8	200	225	10	199 142 508



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, 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
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

ABS metric



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, 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
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



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, 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
2	50	63	10	199 142 522
2 ½	65	75	10	199 142 523
3	80	90	10	199 142 524
4	100	110	10	199 142 525
5	125	140	10	199 142 526
6	150	160	10	199 142 527
8	200	225	10	199 142 528

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, ISO 5752
- Interface F07 according to DIN/ISO 5211

d [mm]	DN [mm]	PN	EPDM Code
63	50	10	169 567 802
75	65	10	169 567 803
90	80	10	169 567 804
110	100	10	169 567 805
140	125	10	169 567 806
160	150	10	169 567 807
225	200	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, ISO 5752
- Control range 90°<

d [mm]	DN [mm]	PN	EPDM Code
63	50	10	199 240 402
75	65	10	199 240 403
90	80	10	199 240 404
110	100	10	199 240 405
140	125	10	199 240 406
160	150	10	199 240 407
225	200	10	199 240 408



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, ISO 5752
- Control range 90°<

d [mm]	DN [mm]	PN	EPDM Code
63	50	10	199 240 422
75	65	10	199 240 423
90	80	10	199 240 424
110	100	10	199 240 425
140	125	10	199 240 426
160	150	10	199 240 427
225	200	10	199 240 428

ABS metric



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, ISO 5752
- Control range 90°<

d [mm]	DN [mm]	PN	EPDM Code	
63	50	10	199 240 442	
75	65	10	199 240 443	
90	80	10	199 240 444	
110	100	10	199 240 445	
140	125	10	199 240 446	
160	150	10	199 240 447	
225	200	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, ISO 5752
- Interface F07 according to DIN/ISO 5211

d [mm]	DN [mm]	PN	EPDM Code
63	50	10	169 568 802
75	65	10	169 568 803
90	80	10	169 568 804
110	100	10	169 568 805
140	125	10	169 568 806
160	150	10	169 568 807
225	200	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, ISO 5752
- Control range 90°<

d [mm]	DN [mm]	PN	EPDM Code
63	50	10	199 241 402
75	65	10	199 241 403
90	80	10	199 241 404
110	100	10	199 241 405
140	125	10	199 241 406
160	150	10	199 241 407
225	200	10	199 241 408



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, ISO 5752
- Control range 90°<

d [mm]	DN [mm]	PN	EPDM Code
63	50	10	199 241 422
75	65	10	199 241 423
90	80	10	199 241 424
110	100	10	199 241 425
140	125	10	199 241 426
160	150	10	199 241 427
225	200	10	199 241 428

ABS metric



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, ISO 5752
- Control range 90°<

d [mm]	DN [mm]	PN	EPDM Code	
63	50	10	199 241 442	
75	65	10	199 241 443	
90	80	10	199 241 444	
110	100	10	199 241 445	
140	125	10	199 241 446	
160	150	10	199 241 447	
225	200	10	199 241 448	

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, ISO 5752
- Interface F07 according to DIN/ISO 5211

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



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, ISO 5752
- Control range 90°<

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



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, ISO 5752
- Control range 90°<

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

ABS metric










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, ISO 5752
- Control range 90°<

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

PROGEF Standard metric

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PROGEF Standard metric

Ball valves electric



DN10/15 - 50

PROGEF Standard Ball valve type 107 100-230V With manual emergency override With fusion sockets metric

Model:

- Material: PP-H
- 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 diagram)

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



DN10/15 - 50

PROGEF Standard Ball valve type 107 100-230V With manual emergency override With socket fusion spigots metric

Model:

- Material: PP-H
- 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 diagram)

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

PROGEF Standard metric



DN10/15 - 50

PROGEF Standard Ball valve type 107 100-230V With manual emergency override With fixed flanges PP-H serrated metric

Model:

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

Option:

- Individual configuration of the valve (see diagram)

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



DN10/15 - 50

PROGEF Standard Ball valve type 107 24V With manual emergency override With fusion sockets metric

Model:

- Material: PP-H
- 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 diagram)

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

PROGEF Standard metric



DN10/15 - 50

PROGEF Standard Ball valve type 107 24V With manual emergency override With socket fusion spigots metric

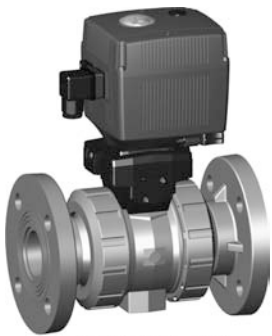
Model:

- Material: PP-H
- 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 diagram)

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



DN10/15 - 50

PROGEF Standard Ball valve type 107 24V With manual emergency override With fixed flanges PP-H serrated metric

Model:

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

Option:

- Individual configuration of the valve (see diagram)

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

PROGEF Standard metric



DN10/15 - 50

PROGEF Standard Ball valve type 131 100-230V With manual emergency override With fusion sockets metric

Model:

- Material: PP-H
- 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)
- Control time: EA21: 5s/90°<, EA31: 15s/90°<

Option:

- Individual configuration of the valve (see diagram)

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



PROGEF Standard Ball valve type 131 100-230V With manual emergency override With socket fusion spigots metric



DN10/15 - 50

Model:

- Material: PP-H
- 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)
- Control time: EA21: 5s/90°<, EA31: 15s/90°<

Option:

- Individual configuration of the valve (see diagram)

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



PROGEF Standard metric



DN10/15 - 50

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

Model:

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

Option:

- Individual configuration of the valve (see diagram)

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



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

Model:

- Material: PP-H
- 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)
- Control time: EA21: 5s/90°<, EA31: 15s/90°<
- Overall length according to EN 558
- Connecting dimension: ISO 7005, EN 1092, BS 4504, DIN 2501

Option:

- Individual configuration of the valve (see diagram)

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

PROGEF Standard metric



DN10/15 - 50

PROGEF Standard Ball valve type 131 100-230V With manual emergency override With butt fusion spigots IR-Plus SDR11 metric

Model:

- Material: PP-H
- 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)
- Control time: EA21: 5s/90°<, EA31: 15s/90°<

Option:

- Individual configuration of the valve (see diagram)



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



PROGEF Standard Ball valve type 131 100-230V With manual emergency override With butt fusion spigots SDR17.6 metric

Model:

- Material: PP-H
- 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)
- Control time: EA21: 5s/90°<, EA31: 15s/90°<

Option:

- Individual configuration of the valve (see diagram)

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

PROGEF Standard metric



DN10/15 - 50

PROGEF Standard Ball valve type 131 24V With manual emergency override With fusion sockets metric

Model:

- Material: PP-H
- 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)
- Control time: EA21: 5s/90°<, EA31: 15s/90°<

Option:

- Individual configuration of the valve (see diagram)

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	



DN10/15 - 50

PROGEF Standard Ball valve type 131 24V With manual emergency override With socket fusion spigots metric

Model:

- Material: PP-H
- 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)
- Control time: EA21: 5s/90°<, EA31: 15s/90°<

Option:

- Individual configuration of the valve (see diagram)

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	



PROGEF Standard metric



DN10/15 - 50

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

Model:

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

Option:

- Individual configuration of the valve (see diagram)

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



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

Model:

- Material: PP-H
- 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)
- Control time: EA21: 5s/90°<, EA31: 15s/90°<
- Overall length according to EN 558
- Connecting dimension: ISO 7005, EN 1092, BS 4504, DIN 2501

Option:

- Individual configuration of the valve (see diagram)

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

PROGEF Standard metric



DN10/15 - 50

PROGEF Standard Ball valve type 131 24V With manual emergency override With butt fusion spigots IR-Plus SDR11 metric

Model:

- Material: PP-H
- 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)
- Control time: EA21: 5s/90°<, EA31: 15s/90°<

Option:

- Individual configuration of the valve (see diagram)

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



PROGEF Standard Ball valve type 131 24V With manual emergency override With butt fusion spigots SDR17.6 metric

Model:

- Material: PP-H
- 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)
- Control time: EA21: 5s/90°<, EA31: 15s/90°<

Option:

- Individual configuration of the valve (see diagram)

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

PROGEF Standard metric



PROGEF Standard 3-Way ball valve type 186 Horizontal/L-port 100-230V With manual emergency override With fusion sockets metric



Model:

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

d [mm]	DN [mm]	PN	EPDM Code	FPM Code
16	10	10	199 186 022	199 186 032
20	15	10	199 186 023	199 186 033
25	20	10	199 186 024	199 186 034
32	25	10	199 186 025	199 186 035
40	32	10	199 186 026	199 186 036
50	40	10	199 186 027	199 186 037
63	50	10	199 186 028	199 186 038



PROGEF Standard 3-Way ball valve type 186 Horizontal/L-port 100-230V With manual emergency override With threaded sockets Rp reinforced



Model:

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

Rp [inch]	DN [mm]	PN	EPDM Code	FPM Code
3/8	10	10	199 186 122	199 186 132
1/2	15	10	199 186 123	199 186 133
3/4	20	10	199 186 124	199 186 134
1	25	10	199 186 125	199 186 135
1 1/4	32	10	199 186 126	199 186 136
1 1/2	40	10	199 186 127	199 186 137
2	50	10	199 186 128	199 186 138

PROGEF Standard metric



PROGEF Standard
3-Way ball valve type 186
Horizontal/L-port 100-230V
With manual emergency override
With socket fusion spigots metric



Model:

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

d [mm]	DN [mm]	PN	EPDM Code	FPM Code
16	10	10	199 186 002	199 186 012
20	15	10	199 186 003	199 186 013
25	20	10	199 186 004	199 186 014
32	25	10	199 186 005	199 186 015
40	32	10	199 186 006	199 186 016
50	40	10	199 186 007	199 186 017
63	50	10	199 186 008	199 186 018



PROGEF Standard
3-Way ball valve type 186
Horizontal/L-port 100-230V
With manual emergency override
With butt fusion spigots
IR-Plus SDR11 metric



Model:

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

d [mm]	DN [mm]	PN	EPDM Code	FPM Code
20	15	10	199 186 083	199 186 093
25	20	10	199 186 084	199 186 094
32	25	10	199 186 085	199 186 095
40	32	10	199 186 086	199 186 096
50	40	10	199 186 087	199 186 097
63	50	10	199 186 088	199 186 098

PROGEF Standard metric



PROGEF Standard 3-Way ball valve type 186 Horizontal/L-port 24V With manual emergency override With fusion sockets metric



Model:

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

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



PROGEF Standard 3-Way ball valve type 186 Horizontal/L-port 24V With manual emergency override With threaded sockets Rp reinforced



Model:

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

Rp [inch]	DN [mm]	PN	EPDM Code	FPM Code	
3/8	10	10	199 186 282	199 186 292	
1/2	15	10	199 186 283	199 186 293	
3/4	20	10	199 186 284	199 186 294	
1	25	10	199 186 285	199 186 295	
1 1/4	32	10	199 186 286	199 186 296	
1 1/2	40	10	199 186 287	199 186 297	
2	50	10	199 186 288	199 186 298	

PROGEF Standard metric



PROGEF Standard 3-Way ball valve type 186 Horizontal/L-port 24V With manual emergency override With socket fusion spigots metric



Model:

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

d [mm]	DN [mm]	PN	EPDM Code	FPM Code
16	10	10	199 186 162	199 186 172
20	15	10	199 186 163	199 186 173
25	20	10	199 186 164	199 186 174
32	25	10	199 186 165	199 186 175
40	32	10	199 186 166	199 186 176
50	40	10	199 186 167	199 186 177
63	50	10	199 186 168	199 186 178



PROGEF Standard 3-Way ball valve type 186 Horizontal/L-port 24V With manual emergency override With butt fusion spigots IR-Plus SDR11 metric



Model:

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

d [mm]	DN [mm]	PN	EPDM Code	FPM Code
20	15	10	199 186 243	199 186 253
25	20	10	199 186 244	199 186 254
32	25	10	199 186 245	199 186 255
40	32	10	199 186 246	199 186 256
50	40	10	199 186 247	199 186 257
63	50	10	199 186 248	199 186 258

PROGEF Standard metric



PROGEF Standard 3-Way ball valve type 186 Horizontal/T-port 100-230V With manual emergency override With fusion sockets metric



Model:

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

d [mm]	DN [mm]	PN	EPDM Code	FPM Code	
16	10	10	199 186 062	199 186 072	
20	15	10	199 186 063	199 186 073	
25	20	10	199 186 064	199 186 074	
32	25	10	199 186 065	199 186 075	
40	32	10	199 186 066	199 186 076	
50	40	10	199 186 067	199 186 077	
63	50	10	199 186 068	199 186 078	



PROGEF Standard 3-Way ball valve type 186 Horizontal/T-port 100-230V With manual emergency override With threaded sockets Rp reinforced



Model:

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

Rp [inch]	DN [mm]	PN	EPDM Code	FPM Code	
3/8	10	10	199 186 142	199 186 152	
1/2	15	10	199 186 143	199 186 153	
3/4	20	10	199 186 144	199 186 154	
1	25	10	199 186 145	199 186 155	
1 1/4	32	10	199 186 146	199 186 156	
1 1/2	40	10	199 186 147	199 186 157	
2	50	10	199 186 148	199 186 158	

PROGEF Standard metric



PROGEF Standard 3-Way ball valve type 186 Horizontal/T-port 100-230V With manual emergency override With socket fusion spigots metric



Model:

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

d [mm]	DN [mm]	PN	EPDM Code	FPM Code
16	10	10	199 186 042	199 186 052
20	15	10	199 186 043	199 186 053
25	20	10	199 186 044	199 186 054
32	25	10	199 186 045	199 186 055
40	32	10	199 186 046	199 186 056
50	40	10	199 186 047	199 186 057
63	50	10	199 186 048	199 186 058



PROGEF Standard 3-Way ball valve type 186 Horizontal/T-port 100-230V With manual emergency override With butt fusion spigots IR-Plus SDR11 metric



Model:

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

d [mm]	DN [mm]	PN	EPDM Code	FPM Code
20	15	10	199 186 103	199 186 113
25	20	10	199 186 104	199 186 114
32	25	10	199 186 105	199 186 115
40	32	10	199 186 106	199 186 116
50	40	10	199 186 107	199 186 117
63	50	10	199 186 108	199 186 118

PROGEF Standard metric



PROGEF Standard 3-Way ball valve type 186 Horizontal/T-port 24V With manual emergency override With fusion sockets metric



Model:

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

d [mm]	DN [mm]	PN	EPDM Code	FPM Code
16	10	10	199 186 222	199 186 232
20	15	10	199 186 223	199 186 233
25	20	10	199 186 224	199 186 234
32	25	10	199 186 225	199 186 235
40	32	10	199 186 226	199 186 236
50	40	10	199 186 227	199 186 237
63	50	10	199 186 228	199 186 238



PROGEF Standard 3-Way ball valve type 186 Horizontal/T-port 24V With manual emergency override With threaded sockets Rp reinforced



Model:

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

Rp [inch]	DN [mm]	PN	EPDM Code	FPM Code
3/8	10	10	199 186 302	199 186 312
1/2	15	10	199 186 303	199 186 313
3/4	20	10	199 186 304	199 186 314
1	25	10	199 186 305	199 186 315
1 1/4	32	10	199 186 306	199 186 316
1 1/2	40	10	199 186 307	199 186 317
2	50	10	199 186 308	199 186 318

PROGEF Standard metric



PROGEF Standard 3-Way ball valve type 186 Horizontal/T-port 24V With manual emergency override With socket fusion spigots metric



Model:

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

d [mm]	DN [mm]	PN	EPDM Code	FPM Code
16	10	10	199 186 202	199 186 212
20	15	10	199 186 203	199 186 213
25	20	10	199 186 204	199 186 214
32	25	10	199 186 205	199 186 215
40	32	10	199 186 206	199 186 216
50	40	10	199 186 207	199 186 217
63	50	10	199 186 208	199 186 218



PROGEF Standard 3-Way ball valve type 186 Horizontal/T-port 24V With manual emergency override With butt fusion spigots IR-Plus SDR11 metric



Model:

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

d [mm]	DN [mm]	PN	EPDM Code	FPM Code
20	15	10	199 186 263	199 186 273
25	20	10	199 186 264	199 186 274
32	25	10	199 186 265	199 186 275
40	32	10	199 186 266	199 186 276
50	40	10	199 186 267	199 186 277
63	50	10	199 186 268	199 186 278

PROGEF Standard metric

Ball valves pneumatic



DN10/15 - 50

PROGEF Standard Ball valve type 231 FC (Fail safe to close) With manual override With fusion sockets metric

Model:

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

Option:

- Individual configuration of the valve (see diagram)

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



DN10/15 - 50

PROGEF Standard Ball valve type 231 FC (Fail safe to close) With manual override With socket fusion spigots metric

Model:

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

Option:

- Individual configuration of the valve (see diagram)

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

PROGEF Standard metric



DN10/15 - 50

PROGEF Standard Ball valve type 231 FC (Fail safe to close) With manual override With fixed flanges PP-H serrated metric

Model:

- Material: PP-H
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- Control time 90°<) 1-2 s
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Overall length according to EN 558
- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504

Option:

- Individual configuration of the valve (see diagram)

d [mm]	DN [mm]	Inch	PN	EPDM Code	FPM Code
20	15	½	10	199 231 243	199 231 253
25	20	¾	10	199 231 244	199 231 254
32	25	1	10	199 231 245	199 231 255
40	32	1 ¼	10	199 231 246	199 231 256
50	40	1 ½	10	199 231 247	199 231 257
63	50	2	10	199 231 248	199 231 258

PROGEF Standard metric



DN10/15 - 50

PROGEF Standard Ball valve type 231 FO (Fail safe to open) With manual override With fusion sockets metric

Model:

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

Option:

- Individual configuration of the valve (see diagram)

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



DN10/15 - 50

PROGEF Standard Ball valve type 231 FO (Fail safe to open) With manual override With socket fusion spigots metric

Model:

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

Option:

- Individual configuration of the valve (see diagram)

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

PROGEF Standard metric



DN10/15 - 50

PROGEF Standard Ball valve type 231 FO (Fail safe to open) With manual override With fixed flanges PP-H serrated metric

Model:

- Material: PP-H
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- Control time 90°<) 1-2 s
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Overall length according to EN 558
- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504

Option:

- Individual configuration of the valve (see diagram)

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

PROGEF Standard metric



DN10/15 - 50

PROGEF Standard Ball valve type 231 DA (Double acting) With manual override With fusion sockets metric

Model:

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

Option:

- Individual configuration of the valve (see diagram)

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



DN10/15 - 50

PROGEF Standard Ball valve type 231 DA (Double acting) With manual override With socket fusion spigots metric

Model:

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

Option:

- Individual configuration of the valve (see diagram)

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

PROGEF Standard metric



DN10/15 - 50

PROGEF Standard Ball valve type 231 DA (Double acting) With manual override With fixed flanges PP-H serrated metric

Model:

- Material: PP-H
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- Control time 90°<) 1-2 s
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Overall length according to EN 558
- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504

Option:

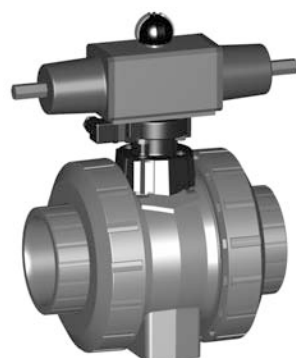
- Individual configuration of the valve (see diagram)

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

PROGEF Standard metric



DN10/15 - 50



PROGEF Standard Ball valve type 231 FC (Fail safe to close) Without manual override With fusion sockets metric

Model:

- Material: PP-H
- 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), PA40 (DN80), PA40 (DN100)

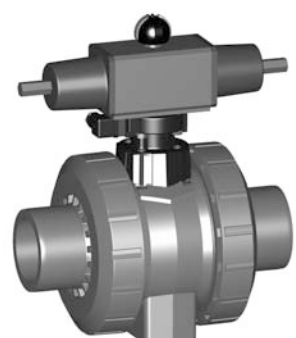
Option:

- Individual configuration of the valve (see diagram)

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



DN10/15 - 50



PROGEF Standard Ball valve type 231 FC (Fail safe to close) Without manual override With socket fusion spigots metric

Model:

- Material: PP-H
- 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), PA40 (DN80), PA40 (DN100)

Option:

- Individual configuration of the valve (see diagram)

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

PROGEF Standard metric



DN10/15 - 50

PROGEF Standard Ball valve type 231 FC (Fail safe to close) Without manual override With fixed flanges PP-H serrated metric

Model:

- Material: PP-H
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90°< 1-2 s
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- Overall length according to EN 558
- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504

Option:

- Individual configuration of the valve (see diagram)

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



PROGEF Standard Ball valve type 231 FC (Fail safe to close) Without manual override With backing flanges PP-st metric

Model:

- Material: PP-H
- 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), PA40 (DN80), PA40 (DN100)
- Overall length according to EN 558
- Connecting dimension: ISO 7005, EN 1092, BS 4504, DIN 2501

Option:

- Individual configuration of the valve (see diagram)

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

PROGEF Standard metric



DN10/15 - 50

PROGEF Standard Ball valve type 231 FC (Fail safe to close) Without manual override With butt fusion spigots IR-Plus SDR11 metric

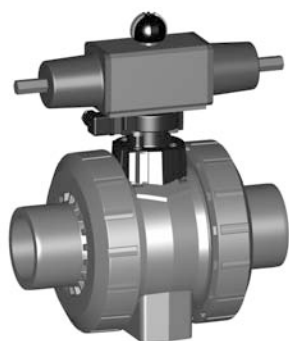
Model:

- Material: PP-H
- 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), PA40 (DN80), PA40 (DN100)

Option:

- Individual configuration of the valve (see diagram)

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	



PROGEF Standard Ball valve type 231 FC (Fail safe to close) Without manual override With butt fusion spigots SDR17.6 metric

Model:

- Material: PP-H
- 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), PA40 (DN80), PA40 (DN100)

Option:

- Individual configuration of the valve (see diagram)

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	

PROGEF Standard metric



DN10/15 - 50



PROGEF Standard Ball valve type 231 FO (Fail safe to open) Without manual override With fusion sockets metric

Model:

- Material: PP-H
- 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), PA40 (DN80), PA40 (DN100)

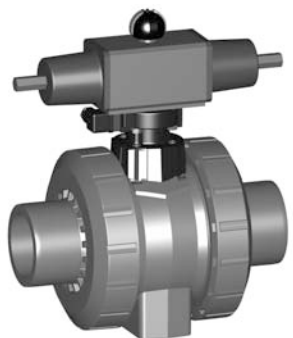
Option:

- Individual configuration of the valve (see diagram)

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	



DN10/15 - 50



PROGEF Standard Ball valve type 231 FO (Fail safe to open) Without manual override With socket fusion spigots metric

Model:

- Material: PP-H
- 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), PA40 (DN80), PA40 (DN100)

Option:

- Individual configuration of the valve (see diagram)

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	

PROGEF Standard metric



DN10/15 - 50

PROGEF Standard Ball valve type 231 FO (Fail safe to open) Without manual override With fixed flanges PP-H serrated metric

Model:

- Material: PP-H
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90°< 1-2 s
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- Overall length according to EN 558
- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504

Option:

- Individual configuration of the valve (see diagram)

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



PROGEF Standard Ball valve type 231 FO (Fail safe to open) Without manual override With backing flanges PP-st metric

Model:

- Material: PP-H
- 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), PA40 (DN80), PA40 (DN100)
- Overall length according to EN 558
- Connecting dimension: ISO 7005, EN 1092, BS 4504, DIN 2501

Option:

- Individual configuration of the valve (see diagram)

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

PROGEF Standard metric



DN10/15 - 50

PROGEF Standard Ball valve type 231 FO (Fail safe to open) Without manual override With butt fusion spigots IR-Plus SDR11 metric

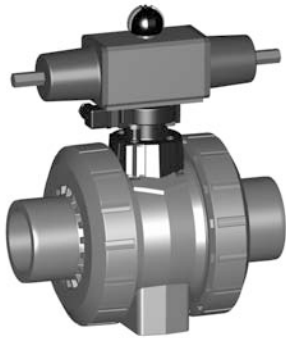
Model:

- Material: PP-H
- 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), PA40 (DN80), PA40 (DN100)

Option:

- Individual configuration of the valve (see diagram)

d [mm]	DN [mm]	PN	EPDM Code	FPM Code	



PROGEF Standard Ball valve type 231 FO (Fail safe to open) Without manual override With butt fusion spigots SDR17.6 metric

Model:

- Material: PP-H
- 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), PA40 (DN80), PA40 (DN100)

Option:

- Individual configuration of the valve (see diagram)

d [mm]	DN [mm]	PN	EPDM Code	FPM Code	
75	65	10	199 231 959	199 231 969	
90	80	10	199 231 960	199 231 970	
110	100	10	199 231 961	199 231 971	

PROGEF Standard metric



DN10/15 - 50

PROGEF Standard Ball valve type 231 DA (Double acting) Without manual override With fusion sockets metric

Model:

- Material: PP-H
- 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)

Option:

- Individual configuration of the valve (see diagram)



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



DN10/15 - 50

PROGEF Standard Ball valve type 231 DA (Double acting) Without manual override With socket fusion spigots metric

Model:

- Material: PP-H
- 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)

Option:

- Individual configuration of the valve (see diagram)



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

PROGEF Standard metric



DN10/15 - 50

PROGEF Standard Ball valve type 231 DA (Double acting) Without manual override With fixed flanges PP-H serrated metric

Model:

- Material: PP-H
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90°<) 1-2 s
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- Overall length according to EN 558
- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504

Option:

- Individual configuration of the valve (see diagram)

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



PROGEF Standard Ball valve type 231 DA (Double acting) Without manual override With backing flanges PP-st metric

Model:

- Material: PP-H
- 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)
- Overall length according to EN 558
- Connecting dimension: ISO 7005, EN 1092, BS 4504, DIN 2501

Option:

- Individual configuration of the valve (see diagram)

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

PROGEF Standard metric



DN10/15 - 50

PROGEF Standard Ball valve type 231 DA (Double acting) Without manual override With butt fusion spigots IR-Plus SDR11 metric

Model:

- Material: PP-H
- 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)

Option:

- Individual configuration of the valve (see diagram)



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	



PROGEF Standard Ball valve type 231 DA (Double acting) Without manual override With butt fusion spigots SDR17.6 metric

Model:

- Material: PP-H
- 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)

Option:

- Individual configuration of the valve (see diagram)

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	

PROGEF Standard metric



PROGEF Standard 3-Way ball valve type 286 Horizontal/L-port Without manual override With fusion sockets metric



Model:

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

d [mm]	DN [mm]	PN	EPDM Code	FPM Code
16	10	10	199 286 022	199 286 032
20	15	10	199 286 023	199 286 033
25	20	10	199 286 024	199 286 034
32	25	10	199 286 025	199 286 035
40	32	10	199 286 026	199 286 036
50	40	10	199 286 027	199 286 037
63	50	10	199 286 028	199 286 038



PROGEF Standard 3-Way ball valve type 286 Horizontal/L-port Without manual override With threaded sockets Rp reinforced



Model:

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

Rp [inch]	DN [mm]	PN	EPDM Code	FPM Code
3/8	10	10	199 286 122	199 286 132
1/2	15	10	199 286 123	199 286 133
3/4	20	10	199 286 124	199 286 134
1	25	10	199 286 125	199 286 135
1 1/4	32	10	199 286 126	199 286 136
1 1/2	40	10	199 286 127	199 286 137
2	50	10	199 286 128	199 286 138

PROGEF Standard metric



PROGEF Standard 3-Way ball valve type 286 Horizontal/L-port Without manual override With socket fusion spigots metric



Model:

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

d [mm]	DN [mm]	PN	EPDM Code	FPM Code
16	10	10	199 286 002	199 286 012
20	15	10	199 286 003	199 286 013
25	20	10	199 286 004	199 286 014
32	25	10	199 286 005	199 286 015
40	32	10	199 286 006	199 286 016
50	40	10	199 286 007	199 286 017
63	50	10	199 286 008	199 286 018



PROGEF Standard 3-Way ball valve type 286 Horizontal/L-port Without manual override With butt fusion spigots IR-Plus SDR11 metric



Model:

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

d [mm]	DN [mm]	PN	EPDM Code	FPM Code
20	15	10	199 286 083	199 286 093
25	20	10	199 286 084	199 286 094
32	25	10	199 286 085	199 286 095
40	32	10	199 286 086	199 286 096
50	40	10	199 286 087	199 286 097
63	50	10	199 286 088	199 286 098

PROGEF Standard metric



PROGEF Standard 3-Way ball valve type 286 Horizontal/L-port DA (Double acting) Without manual override With fusion sockets metric



Model:

- Material: PP-H
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- Basic position A-C opened, activated position B-C opened, see flow scheme
- Control time 90°<) 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	199 286 182	199 286 192
20	15	10	199 286 183	199 286 193
25	20	10	199 286 184	199 286 194
32	25	10	199 286 185	199 286 195
40	32	10	199 286 186	199 286 196
50	40	10	199 286 187	199 286 197
63	50	10	199 286 188	199 286 198



PROGEF Standard 3-Way ball valve type 286 Horizontal/L-port DA (Double acting) Without manual override With threaded sockets Rp reinforced



Model:

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

Rp [inch]	DN [mm]	PN	EPDM Code	FPM Code
3/8	10	10	199 286 282	199 286 292
1/2	15	10	199 286 283	199 286 293
3/4	20	10	199 286 284	199 286 294
1	25	10	199 286 285	199 286 295
1 1/4	32	10	199 286 286	199 286 296
1 1/2	40	10	199 286 287	199 286 297
2	50	10	199 286 288	199 286 298

PROGEF Standard metric



PROGEF Standard
3-Way ball valve type 286
Horizontal/L-port DA (Double acting)
Without manual override
With socket fusion spigots metric



Model:

- Material: PP-H
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- Basic position A-C opened, activated position B-C opened, see flow scheme
- Control time 90°<) 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	199 286 162	199 286 172
20	15	10	199 286 163	199 286 173
25	20	10	199 286 164	199 286 174
32	25	10	199 286 165	199 286 175
40	32	10	199 286 166	199 286 176
50	40	10	199 286 167	199 286 177
63	50	10	199 286 168	199 286 178



PROGEF Standard
3-Way ball valve type 286
Horizontal/L-port DA (Double acting)
Without manual override
With butt fusion spigots
IR-Plus SDR11 metric



Model:

- Material: PP-H
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- Basic position A-C opened, activated position B-C opened, see flow scheme
- Control time 90°<) 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	199 286 243	199 286 253
25	20	10	199 286 244	199 286 254
32	25	10	199 286 245	199 286 255
40	32	10	199 286 246	199 286 256
50	40	10	199 286 247	199 286 257
63	50	10	199 286 248	199 286 258

PROGEF Standard metric



PROGEF Standard 3-Way ball valve type 286 Horizontal/T-port Without manual override With fusion sockets metric



Model:

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

d [mm]	DN [mm]	PN	EPDM Code	FPM Code
16	10	10	199 286 062	199 286 072
20	15	10	199 286 063	199 286 073
25	20	10	199 286 064	199 286 074
32	25	10	199 286 065	199 286 075
40	32	10	199 286 066	199 286 076
50	40	10	199 286 067	199 286 077
63	50	10	199 286 068	199 286 078



PROGEF Standard 3-Way ball valve type 286 Horizontal/T-port Without manual override With threaded sockets Rp reinforced



Model:

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

Rp [inch]	DN [mm]	PN	EPDM Code	FPM Code
3/8	10	10	199 286 142	199 286 152
1/2	15	10	199 286 143	199 286 153
3/4	20	10	199 286 144	199 286 154
1	25	10	199 286 145	199 286 155
1 1/4	32	10	199 286 146	199 286 156
1 1/2	40	10	199 286 147	199 286 157
2	50	10	199 286 148	199 286 158

PROGEF Standard metric



PROGEF Standard 3-Way ball valve type 286 Horizontal/T-port Without manual override With socket fusion spigots metric



Model:

- Material: PP-H
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- Actuator fails safe to the closed position FC
- Basic position B-C opened, activated position A-B-C opened, see flow scheme
- Control time $90^\circ <$) 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	199 286 042	199 286 052
20	15	10	199 286 043	199 286 053
25	20	10	199 286 044	199 286 054
32	25	10	199 286 045	199 286 055
40	32	10	199 286 046	199 286 056
50	40	10	199 286 047	199 286 057
63	50	10	199 286 048	199 286 058



PROGEF Standard 3-Way ball valve type 286 Horizontal/T-port Without manual override With butt fusion spigots IR-Plus SDR11 metric



Model:

- Material: PP-H
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- Actuator fails safe to the closed position FC
- Basic position B-C opened, activated position A-B-C opened, see flow scheme
- Control time $90^\circ <$) 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	199 286 103	199 286 113
25	20	10	199 286 104	199 286 114
32	25	10	199 286 105	199 286 115
40	32	10	199 286 106	199 286 116
50	40	10	199 286 107	199 286 117
63	50	10	199 286 108	199 286 118

PROGEF Standard metric



PROGEF Standard 3-Way ball valve type 286 Horizontal/T-port DA (Double acting) Without manual override With fusion sockets metric



Model:

- Material: PP-H
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- Basic position A-B-C opened, activated position B-C opened, see flow scheme
- Control time 90°<) 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	199 286 222	199 286 232
20	15	10	199 286 223	199 286 233
25	20	10	199 286 224	199 286 234
32	25	10	199 286 225	199 286 235
40	32	10	199 286 226	199 286 236
50	40	10	199 286 227	199 286 237
63	50	10	199 286 228	199 286 238



PROGEF Standard 3-Way ball valve type 286 Horizontal/T-port DA (Double acting) Without manual override With threaded sockets Rp reinforced



Model:

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

Rp [inch]	DN [mm]	PN	EPDM Code	FPM Code
3/8	10	10	199 286 302	199 286 312
1/2	15	10	199 286 303	199 286 313
3/4	20	10	199 286 304	199 286 314
1	25	10	199 286 305	199 286 315
1 1/4	32	10	199 286 306	199 286 316
1 1/2	40	10	199 286 307	199 286 317
2	50	10	199 286 308	199 286 318

PROGEF Standard metric



PROGEF Standard 3-Way ball valve type 286 Horizontal/T-port DA (Double acting) Without manual override With socket fusion spigots metric



Model:

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

d [mm]	DN [mm]	PN	EPDM Code	FPM Code
16	10	10	199 286 202	199 286 212
20	15	10	199 286 203	199 286 213
25	20	10	199 286 204	199 286 214
32	25	10	199 286 205	199 286 215
40	32	10	199 286 206	199 286 216
50	40	10	199 286 207	199 286 217
63	50	10	199 286 208	199 286 218



PROGEF Standard 3-Way ball valve type 286 Horizontal/T-port DA (Double acting) Without manual override With butt fusion spigots IR-Plus SDR11 metric



Model:

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

d [mm]	DN [mm]	PN	EPDM Code	FPM Code
20	15	10	199 286 263	199 286 273
25	20	10	199 286 264	199 286 274
32	25	10	199 286 265	199 286 275
40	32	10	199 286 266	199 286 276
50	40	10	199 286 267	199 286 277
63	50	10	199 286 268	199 286 278

PROGEF Standard metric

Diaphragm valves pneumatic



PROGEF Standard Diaphragm valve type DIASTAR Eco FC (Fail safe to close) With socket fusion spigots metric

Model:

- Material: PP-H
- 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



PROGEF Standard Diaphragm valve type DIASTAR Eco FC (Fail safe to close) With butt fusion spigots IR metric

Model:

- Material: PP-H
- 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



PROGEF Standard Diaphragm valve type DIASTAR Eco FC (Fail safe to close) Unions with fusion sockets metric

Model:

- Material: PP-H
- 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

PROGEF Standard metric



PROGEF Standard Diaphragm valve type DIASTAR Eco FC (Fail safe to close) Unions with butt fusion spigots metric

Model:

- Material: PP-H
- Working pressure 6 bar **one side**

d [mm]	DN [mm]	PN	EPDM Code	
20	15	6	199 024 341	
25	20	6	199 024 342	
32	25	6	199 024 343	
40	32	6	199 024 344	
50	40	6	199 024 345	
63	50	6	199 024 346	



PROGEF Standard Diaphragm valve type DIASTAR Eco FC (Fail safe to close) With backing flanges PP-V metric

Model:

- Material: PP-H
- 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	199 024 371	
25	20	¾	6	199 024 372	
32	25	1	6	199 024 373	
40	32	1 ¼	6	199 024 374	
50	40	1 ½	6	199 024 375	
63	50	2	6	199 024 376	

PROGEF Standard metric



PROGEF Standard Diaphragm valve type DIASTAR Series 028 FC (Fail safe to close) With fusion spigots metric

Model:

- Material: PP-H
 - With position indicator / Working pressure: **one side**
- * PN: PTFE/EPDM

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



PROGEF Standard Diaphragm valve type DIASTAR Series 028 FC (Fail safe to close) With butt fusion spigots metric

Model:

- Material: PP-H
 - With position indicator / Working pressure: **one side**
- * PN: PTFE/EPDM

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



PROGEF Standard Diaphragm valve type DIASTAR Series 028 FC (Fail safe to close) Unions with butt fusion spigots metric

Model:

- Material: PP-H
 - With position indicator / Working pressure: **one side**
- * PN: PTFE/EPDM

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

PROGEF Standard metric



PROGEF Standard Diaphragm valve type DIASTAR Series 028 FC (Fail safe to close) Unions with fusion sockets metric

Model:

- Material: PP-H
- With position indicator / Working pressure: **one side**

* PN: PTFE/EPDM

d [mm]	DN [mm]	PN [bar]		EPDM Code	PTFE/EPDM Code
20	15	10 / 5	*	199 028 181	199 028 187
25	20	10 / 7	*	199 028 182	199 028 188
32	25	10 / 7	*	199 028 183	199 028 189
40	32	10 / 7	*	199 028 184	199 028 190
50	40	10 / 7	*	199 028 185	199 028 191
63	50	10 / 7	*	199 028 186	199 028 192



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

Model:

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

* PN: PTFE/EPDM

d [mm]	DN [mm]	Inch	PN [bar]		EPDM Code	PTFE/EPDM Code
20	15	½	10 / 5	*	199 028 261	199 028 291
25	20	¾	10 / 7	*	199 028 262	199 028 292
32	25	1	10 / 7	*	199 028 263	199 028 293
40	32	1 ¼	10 / 7	*	199 028 264	199 028 294
50	40	1 ½	10 / 7	*	199 028 265	199 028 295
63	50	2	10 / 7	*	199 028 266	199 028 296

PROGEF Standard metric



PROGEF Standard Diaphragm valve type DIASTAR Series 025 FC (Fail safe to close) With fusion spigots metric

Model:

- Material: PP-H
- 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



PROGEF Standard Diaphragm valve type DIASTAR Series 025 FC (Fail safe to close) With butt fusion spigots metric

Model:

- Material: PP-H
- 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



PROGEF Standard Diaphragm valve type DIASTAR Series 025 FC (Fail safe to close) Unions with butt fusion spigots metric

Model:

- Material: PP-H
- 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

PROGEF Standard metric



PROGEF Standard Diaphragm valve type DIASTAR Series 025 FC (Fail safe to close) Unions with fusion sockets metric

Model:

- Material: PP-H
- 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



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

Model:

- Material: PP-H
- 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



PROGEF Standard Diaphragm valve type DIASTAR Series 025 FC (Fail safe to close) With fixed flanges PP metric

Model:

- Material: PP-H
- 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	6	199 025 269	199 025 299
** 160	150	6	6	199 025 270	-

PROGEF Standard metric



PROGEF Standard Diaphragm valve type DIASTAR Series 025 FO (Fail safe to open) With fusion spigots metric

Model:

- Material: PP-H
- 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



PROGEF Standard Diaphragm valve type DIASTAR Series 025 FO (Fail safe to open) With butt fusion spigots metric

Model:

- Material: PP-H
- 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



PROGEF Standard Diaphragm valve type DIASTAR Series 025 FO (Fail safe to open) Unions with butt fusion spigots metric

Model:

- Material: PP-H
- 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

PROGEF Standard metric



PROGEF Standard Diaphragm valve type DIASTAR Series 025 FO (Fail safe to open) Unions with fusion sockets metric

Model:

- Material: PP-H
- 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	



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

Model:

- Material: PP-H
- 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	



PROGEF Standard Diaphragm valve type DIASTAR Series 025 FO (Fail safe to open) With fixed flanges PP metric

Model:

- Material: PP-H
- 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	199 025 277	199 025 307	
** 90	80	3	10	199 025 278	199 025 308	
110	100	4	6	199 025 279	199 025 309	
** 160	150	6	6	199 025 280	199 025 310	

PROGEF Standard metric



PROGEF Standard Diaphragm valve type DIASTAR Series 025 DA (Double acting) With fusion spigots metric

Model:

- Material: PP-H
- 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



PROGEF Standard Diaphragm valve type DIASTAR Series 025 DA (Double acting) With butt fusion spigots metric

Model:

- Material: PP-H
- 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



PROGEF Standard Diaphragm valve type DIASTAR Series 025 DA (Double acting) Unions with butt fusion spigots metric

Model:

- Material: PP-H
- 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

PROGEF Standard metric



PROGEF Standard Diaphragm valve type DIASTAR Series 025 DA (Double acting) Unions with fusion sockets metric

Model:

- Material: PP-H
- 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	



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

Model:

- Material: PP-H
- 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	



PROGEF Standard Diaphragm valve type DIASTAR Series 025 DA (Double acting) With fixed flanges PP metric

Model:

- Material: PP-H
- 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	199 025 287	199 025 317	
** 90	80	3	10	199 025 288	199 025 318	
110	100	4	6	199 025 289	199 025 319	
** 160	150	6	6	199 025 290	199 025 320	

PROGEF Standard metric



PROGEF Standard Diaphragm valve type DIASTAR Series 025 FC (Fail safe to close) ZERO STATIC with butt fusion spigots metric

Model:

- Material: PP-H
- 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	10	199 029 486	199 029 326
90	32	80	25	25	10	199 029 487	199 029 327
90	50	80	40	50	10	199 029 488	199 029 328
90	63	80	50	50	10	199 029 489	199 029 329
110	20	100	15	25	10	199 029 490	199 029 330
110	25	100	20	25	10	199 029 491	199 029 331
110	50	100	25	25	10	199 029 492	199 029 332
110	63	100	40	50	10	199 029 493	199 029 333
110	63	100	50	50	10	199 029 494	199 029 334

PROGEF Standard metric

Butterfly valves electric metric/ANSI/JIS



PROGEF Standard Butterfly valve type 567 Bare shaft

Model:

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



PROGEF Standard Butterfly valve type 140 100-230V Without manual override

Model:

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

d [mm]	DN [mm]	Inch	PN	EPDM Code	FPM Code
63	50	2	10	199 140 362	199 140 382
75	65	2 ½	10	199 140 363	199 140 383
90	80	3	10	199 140 364	199 140 384
110	100	4	10	199 140 365	199 140 385
140	125	5	10	199 140 366	199 140 386
160	150	6	10	199 140 367	199 140 387
225	200	8	10	199 140 368	199 140 388
280	250	10	6	199 140 369	199 140 389
315	300	12	4	199 140 370	199 140 390

PROGEF Standard metric



PROGEF Standard Butterfly valve type 140 100-230V With manual override

Model:

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

d [mm]	DN [mm]	Inch	PN	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



PROGEF Standard Butterfly valve type 140 24V Without manual override

Model:

- Material: PP-H
- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, ANSI/ASME B 16.5 Class 150, BS 1560: 1989, BS 4504, JIS B 2220
- Overall length according to EN 558, ISO 5752
- Voltage 24 V AC/DC
- Control time 15 s/90°<) EA31
- Control time 25s/90°<) EA42
- Control range 90°<)
- Actuator with integrated emergency manual override standard
- 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
315	300	12	4	199 140 450	199 140 470

PROGEF Standard metric

PROGEF Standard Butterfly valve type 140 24V With manual override



Model:

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

d [mm]	DN [mm]	Inch	PN	EPDM Code	FPM Code	
63	50	2	10	199 140 402	199 140 422	
75	65	2 ½	10	199 140 403	199 140 423	
90	80	3	10	199 140 404	199 140 424	
110	100	4	10	199 140 405	199 140 425	
140	125	5	10	199 140 406	199 140 426	
160	150	6	10	199 140 407	199 140 427	
225	200	8	10	199 140 408	199 140 428	

PROGEF Standard metric



PROGEF Standard Lugstyle butterfly valve type 568 Bare shaft

Model:

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

d [mm]	DN [mm]	Inch	PN	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



PROGEF Standard Lugstyle butterfly valve type 141 100-230V Without manual override

Model:

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

d [mm]	DN [mm]	Inch	PN	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

PROGEF Standard metric



PROGEF Standard Lugstyle butterfly valve type 141 100-230V With manual override

Model:

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

d [mm]	DN [mm]	Inch	PN	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



PROGEF Standard Lugstyle butterfly valve type 141 24V Without manual override

Model:

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

d [mm]	DN [mm]	Inch	PN	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

PROGEF Standard metric



PROGEF Standard Lugstyle butterfly valve type 141 24V With manual override

Model:

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

d [mm]	DN [mm]	Inch	PN	EPDM Code	FPM Code	
63	50	2	10	199 141 402	199 141 422	
75	65	2 ½	10	199 141 403	199 141 423	
90	80	3	10	199 141 404	199 141 424	
110	100	4	10	199 141 405	199 141 425	
140	125	5	10	199 141 406	199 141 426	
160	150	6	10	199 141 407	199 141 427	
225	200	8	10	199 141 408	199 141 428	

PROGEF Standard metric



PROGEF Standard Lugstyle butterfly valve type 568 Bare shaft

Model:

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

Inch	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



PROGEF Standard Lugstyle butterfly valve type 142 100-230V Without manual override

Model:

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

Inch	DN [mm]	d [mm]	PN	EPDM Code	FPM Code
2	50	63	10	199 142 362	199 142 382
2 ½	65	75	10	199 142 363	199 142 383
3	80	90	10	199 142 364	199 142 384
4	100	110	10	199 142 365	199 142 385
5	125	140	10	199 142 366	199 142 386
6	150	160	10	199 142 367	199 142 387
8	200	225	10	199 142 368	199 142 388

PROGEF Standard metric

PROGEF Standard Lugstyle butterfly valve type 142 100-230V With manual override



Model:

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

Inch	DN [mm]	d [mm]	PN	EPDM Code	FPM Code
2	50	63	10	199 142 322	199 142 342
2 ½	65	75	10	199 142 323	199 142 343
3	80	90	10	199 142 324	199 142 344
4	100	110	10	199 142 325	199 142 345
5	125	140	10	199 142 326	199 142 346
6	150	160	10	199 142 327	199 142 347
8	200	225	10	199 142 328	199 142 348



PROGEF Standard Lugstyle butterfly valve type 142 24V Without manual override

Model:

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

Inch	DN [mm]	d [mm]	PN	EPDM Code	FPM Code
2	50	63	10	199 142 442	199 142 462
2 ½	65	75	10	199 142 443	199 142 463
3	80	90	10	199 142 444	199 142 464
4	100	110	10	199 142 445	199 142 465
5	125	140	10	199 142 446	199 142 466
6	150	160	10	199 142 447	199 142 467
8	200	225	10	199 142 448	199 142 468

PROGEF Standard metric



PROGEF Standard Lugstyle butterfly valve type 142 24V With manual override

Model:

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

Inch	DN [mm]	d [mm]	PN	EPDM Code	FPM Code	
2	50	63	10	199 142 402	199 142 422	
2 ½	65	75	10	199 142 403	199 142 423	
3	80	90	10	199 142 404	199 142 424	
4	100	110	10	199 142 405	199 142 425	
5	125	140	10	199 142 406	199 142 426	
6	150	160	10	199 142 407	199 142 427	
8	200	225	10	199 142 408	199 142 428	

PROGEF Standard metric

Butterfly valves pneumatic metric/ANSI/JIS



PROGEF Standard Butterfly valve type 567 Bare shaft

Model:

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



PROGEF Standard Butterfly valve type 240 FC (Fail safe to close) Without manual override

Model:

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

d [mm]	DN [mm]	Inch	PN	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

PROGEF Standard metric



PROGEF Standard Butterfly valve type 240 FO (Fail safe to open) Without manual override

Model:

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

d [mm]	DN [mm]	Inch	PN	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



PROGEF Standard Butterfly valve type 240 DA (Double acting) Without manual override

Model:

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

d [mm]	DN [mm]	Inch	PN	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

PROGEF Standard metric



PROGEF Standard Lugstyle butterfly valve type 568 Bare shaft

Model:

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

d [mm]	DN [mm]	Inch	PN	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



PROGEF Standard Lugstyle butterfly valve type 241 FC (Fail safe to close) Without manual override

Model:

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

d [mm]	DN [mm]	Inch	PN	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



PROGEF Standard Lugstyle butterfly valve type 241 FO (Fail safe to open) Without manual override

Model:

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

d [mm]	DN [mm]	Inch	PN	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

PROGEF Standard metric



PROGEF Standard Lugstyle butterfly valve type 241 DA (Double acting) Without manual override

Model:

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

d [mm]	DN [mm]	Inch	PN	EPDM Code	FPM Code	
63	50	2	10	199 241 362	199 241 382	
75	65	2 ½	10	199 241 363	199 241 383	
90	80	3	10	199 241 364	199 241 384	
110	100	4	10	199 241 365	199 241 385	
140	125	5	10	199 241 366	199 241 386	
160	150	6	10	199 241 367	199 241 387	
225	200	8	10	199 241 368	199 241 388	

PROGEF Standard metric



PROGEF Standard Lugstyle butterfly valve type 568 Bare shaft

Model:

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

Inch	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	



PROGEF Standard Lugstyle butterfly valve type 242 FC (Fail safe to close) Without manual override

Model:

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

Inch	DN [mm]	d [mm]	PN	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	



PROGEF Standard Lugstyle butterfly valve type 242 FO (Fail safe to open) Without manual override

Model:

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

Inch	DN [mm]	d [mm]	PN	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	

PROGEF Standard metric



PROGEF Standard Lugstyle butterfly valve type 242 DA (Double acting) Without manual override

Model:

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

Inch	DN [mm]	d [mm]	PN	EPDM Code	FPM Code	
2	50	63	10	199 242 362	199 242 382	
2 ½	65	75	10	199 242 363	199 242 383	
3	80	90	10	199 242 364	199 242 384	
4	100	110	10	199 242 365	199 242 385	
5	125	140	10	199 242 366	199 242 386	
6	150	160	10	199 242 367	199 242 387	
8	200	225	10	199 242 368	199 242 388	

PROGEF Standard metric



PROGEF Standard Butterfly valve type 563 FC (Fail safe to close) Without manual override

Model:

- Material: PP-H
- Only useable for system pressure of max. 4 bar
- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, ANSI/ASME B 16.5 Class 150, BS 1560: 1989, BS 4504, JIS B 2220
- Overall length according to EN 558, ISO 5752
- Control range 90°<)

d [mm]	DN [mm]	Inch	PN	EPDM Code
63	50	2	4	167 563 242
75	65	2 ½	4	167 563 243
90	80	3	4	167 563 244
110	100	4	4	167 563 245
140	125	5	4	167 563 246
160	150	6	4	167 563 247
225	200	8	4	167 563 248
280	250	10	4	167 563 249
315	300	12	4	167 563 250



PROGEF Standard Butterfly valve type 563 DA (Double acting) Without manual override

Model:

- Material: PP-H
- Only useable for system pressure of max. 4 bar
- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, ANSI/ASME B 16.5 Class 150, BS 1560: 1989, BS 4504, JIS B 2220
- Overall length according to EN 558, ISO 5752
- Control range 90°<)

d [mm]	DN [mm]	Inch	PN	EPDM Code
63	50	2	4	167 563 202
75	65	2 ½	4	167 563 203
90	80	3	4	167 563 204
110	100	4	4	167 563 205
140	125	5	4	167 563 206
160	150	6	4	167 563 207
225	200	8	4	167 563 208
280	250	10	4	167 563 209
315	300	12	4	167 563 210

PROGEF Standard metric

Solenoid valves



PROGEF Standard
Solenoid valve type 166
Function A straight-through valve 2/2
ways
Nominal voltage 24V DC
With G 1/4 line connection



Model:

- Material: PP-H
- With manual override
- Electrical connection: cable plug
- Protection class IP 65

DN [mm]	D1_G [inch]	Function	PN [bar]	EPDM Code	FPM Code
3	1/4	A	0.0 - 8.0	199 166 000	199 166 005
4	1/4	A	0.0 - 4.0	199 166 001	199 166 006
5	1/4	A	0.0 - 3.0	199 166 002	199 166 007



PROGEF Standard
Solenoid valve type 166
Function A straight-through valve 2/2
ways
Nominal voltage 230V 50Hz ±10%
With G 1/4 line connection



Model:

- Material: PP-H
- With manual override
- Electrical connection: cable plug
- Protection class IP 65

DN [mm]	D1_G [inch]	Function	PN [bar]	EPDM Code	FPM Code
3	1/4	A	0.0 - 10.0	199 166 010	199 166 015
4	1/4	A	0.0 - 5.0	199 166 011	199 166 016
5	1/4	A	0.0 - 4.5	199 166 012	199 166 017



PROGEF Standard
Solenoid valve type 166
Function E mixing valve 3/2 ways
Nominal voltage 24V DC
With G 1/4 line connection



Model:

- Material: PP-H
- With manual override
- Electrical connection: cable plug
- Protection class IP 65

DN [mm]	D1_G [inch]	Function	PN [bar]	EPDM Code	FPM Code
3	1/4	E	0.0 - 4.0	199 166 150	199 166 155
4	1/4	E	0.0 - 2.0	199 166 151	199 166 156

PROGEF Standard metric



PROGEF Standard
Solenoid valve type 166
Function E mixing valve 3/2 ways
Nominal voltage 230V 50Hz ±10%
With G 1/4 line connection



Model:

- Material: PP-H
- With manual override
- Electrical connection: cable plug
- Protection class IP 65

DN [mm]	D1_G [inch]	Function	PN [bar]	EPDM Code	FPM Code	
3	1/4	E	0.0 - 6.0	199 166 160	199 166 165	
4	1/4	E	0.0 - 3.0	199 166 161	199 166 166	



PROGEF Standard
Solenoid valve type 166
Function F distribution valve 3/2 ways
Nominal voltage 24V DC
With G 1/4 line connection



Model:

- Material: PP-H
- With manual override
- Electrical connection: cable plug
- Protection class IP 65

DN [mm]	D1_G [inch]	Function	PN [bar]	EPDM Code	FPM Code	
4	1/4	F	0.0 - 4.0	199 166 201	199 166 206	



PROGEF Standard
Solenoid valve type 166
Function F distribution valve 3/2 ways
Nominal voltage 230V 50Hz ±10%
With G 1/4 line connection



Model:

- Material: PP-H
- With manual override
- Electrical connection: cable plug
- Protection class IP 65

DN [mm]	D1_G [inch]	Function	PN [bar]	EPDM Code	FPM Code	
4	1/4	F	0.0 - 5.0	199 166 211	199 166 216	

PROGEF Standard metric

Process control valves

PROGEF Standard Pressure reducing valve type V82 With fusion spigots metric



Model:

- Material: PP-H

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

PROGEF Standard Pressure reducing valve type V182 With fusion spigots metric



Model:

- Material: PP-H

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

PROGEF Standard Pressure reducing valve type V182 With butt fusion spigots IR metric



Model:

- Material: PP-H

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

PROGEF Standard metric



PROGEF Standard Pressure reducing valve type V782 With fusion spigots metric

Model:

- Material: PP-H

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



PROGEF Standard Pressure reducing valve type V782 With butt fusion spigots IR metric

Model:

- Material: PP-H

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



PROGEF Standard Pressure relief valve type V85 With fusion spigots metric

Model:

- Material: PP-H

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



PROGEF Standard Pressure relief valve type V185 With fusion spigots metric

Model:

- Material: PP-H

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

PROGEF Standard metric



PROGEF Standard Pressure relief valve type V185 With butt fusion spigots IR metric

Model:

- Material: PP-H

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



PROGEF Standard Pressure retaining valve type V86 With fusion spigots metric

Model:

- Material: PP-H

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



PROGEF Standard Pressure retaining valve type V186 With fusion spigots metric

Model:

- Material: PP-H

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

PROGEF Standard metric



PROGEF Standard Pressure retaining valve type V186 With butt fusion spigots IR metric

Model:

- Material: PP-H

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



PROGEF Standard Pressure retaining valve type V786 With fusion spigots metric

Model:

- Material: PP-H

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



PROGEF Standard Pressure retaining valve type V786 With butt fusion spigots IR metric

Model:

- Material: PP-H

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

PROGEF Standard metric



PROGEF Standard Gauge guard type Z700 With manometer 0-10 bar

Model:

- Material: PP-H

d [mm]	PTFE Code	
25	199 041 002	
32	199 041 003	



PROGEF Standard Gauge guard type Z700 With manometer 0-6 bar

Model:

- Material: PP-H

d [mm]	PTFE Code	
25	199 041 294	
32	199 041 295	



PROGEF Standard Gauge guard type Z701 Without manometer

Model:

- Material: PP-H

d [mm]	PTFE Code	
25	199 041 008	
32	199 041 009	



PROGEF Standard Ventilating and bleed valve type V91 With fusion spigots metric

Model:

- Material: PP-H

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	

PROGEF Standard metric



PROGEF Standard Ventilating valve type V95 With fusion spigots metric

Model:

- Material: PP-H

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



PROGEF Standard Throttle valve type V251 With fusion sockets metric

Model:

- Material: PP-H

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



PROGEF Standard Water jet suction pump type P20

Model:

- Material: 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



Diaphragm valves pneumatic

232

PROGEF® Natural metric

Diaphragm valves pneumatic



PROGEF Natural

Diaphragm valve type DIASTAR 028

Function FC (Fail safe to close)

With butt fusion spigots metric

Model:

- Material: PP-R unpigmented
- With position indicator / Working pressure: **one side**

* PN: PTFE/EPDM

d [mm]	DN [mm]	PN [bar]		EPDM Code	PTFE/EPDM Code	
20	15	10 / 5	*	199 028 521	199 028 551	
25	20	10 / 7	*	199 028 522	199 028 552	
32	25	10 / 7	*	199 028 523	199 028 553	
40	32	10 / 7	*	199 028 524	199 028 554	
50	40	10 / 7	*	199 028 525	199 028 555	
63	50	10 / 7	*	199 028 526	199 028 556	

PROGEF® Natural metric



PROGEF Natural Diaphragm valve type DIASTAR 025 Function FC (Fail safe to close) With butt fusion spigots metric

Model:

- Material: PP-R unpigmented
- 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

Model:

- Material: PP-R unpigmented
- 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

Model:

- Material: PP-R unpigmented
- 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® Natural metric










PROGEF Natural Diaphragm valve type DIASTAR 025 Function FC (Fail safe to close) ZERO STATIC with butt fusion spigots metric

Model:

- Material: PP-R unpigmented
- 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

SYGEF® standard metric

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SYGEF® standard metric

Ball valves electric



DN10/15 - 50

SYGEF Standard Ball valve type 107 100-230V With manual emergency override With fusion sockets metric

Model:

- Material: PVDF
- 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 diagram)

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



DN10/15 - 50

SYGEF Standard Ball valve type 107 100-230V With manual emergency override With socket fusion spigots metric

Model:

- Material: PVDF
- 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 diagram)

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



DN10/15 - 50

SYGEF Standard Ball valve type 107 100-230V With manual emergency override With fixed flanges PVDF serrated metric

Model:

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

Option:

- Individual configuration of the valve (see diagram)

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



DN10/15 - 50

SYGEF Standard Ball valve type 107 24V With manual emergency override With fusion sockets metric

Model:

- Material: PVDF
- 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 diagram)

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



DN10/15 - 50

SYGEF Standard Ball valve type 107 24V With manual emergency override With socket fusion spigots metric

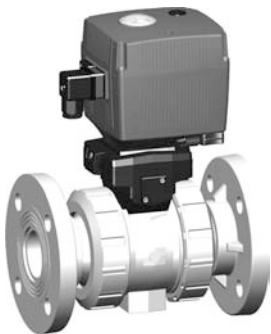
Model:

- Material: PVDF
- 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 diagram)

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



DN10/15 - 50

SYGEF Standard Ball valve type 107 24V With manual emergency override With fixed flanges PVDF serrated metric

Model:

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

Option:

- Individual configuration of the valve (see diagram)

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



DN10/15 - 50

SYGEF Standard Ball valve type 132 100-230V With manual emergency override With fusion sockets metric

Model:

- Material: PVDF
- 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 diagram)

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 socket fusion spigots metric

Model:

- Material: PVDF
- 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 diagram)

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:

- Material: PVDF
- 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 diagram)

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:

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

Option:

- Individual configuration of the valve (see diagram)

d [mm]	DN [mm]	Inch	PN	FPM Code
20	15	1/2	10	199 132 083
25	20	3/4	10	199 132 084
32	25	1	10	199 132 085
40	32	1 1/4	10	199 132 086
50	40	1 1/2	10	199 132 087
63	50	2	10	199 132 088

SYGEF® standard metric



DN10/15 - 50

SYGEF Standard Ball valve type 132 24V With manual emergency override With fusion sockets metric

Model:

- Material: PVDF
- 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 diagram)

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 socket fusion spigots metric

Model:

- Material: PVDF
- 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 diagram)

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

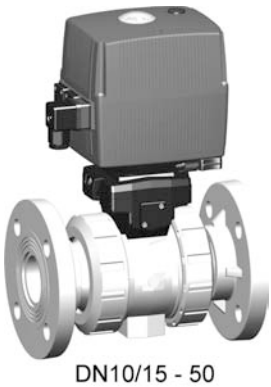
Model:

- Material: PVDF
- 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 diagram)

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:

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

Option:

- Individual configuration of the valve (see diagram)

d [mm]	DN [mm]	Inch	PN	FPM Code
20	15	1/2	10	199 132 093
25	20	3/4	10	199 132 094
32	25	1	10	199 132 095
40	32	1 1/4	10	199 132 096
50	40	1 1/2	10	199 132 097
63	50	2	10	199 132 098

SYGEF® standard metric



SYGEF Standard 3-Way ball valve type 187 Horizontal/L-port 100-230V With manual emergency override With fusion sockets metric



Model:

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

d [mm]	DN [mm]	PN	FPM Code
16	10	10	199 187 092
20	15	10	199 187 093
25	20	10	199 187 094
32	25	10	199 187 095
40	32	10	199 187 096
50	40	10	199 187 097
63	50	10	199 187 098



SYGEF Standard 3-Way ball valve type 187 Horizontal/L-port 100-230V With manual emergency override With threaded sockets NPT



Model:

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

NPT [inch]	DN [mm]	PN	FPM Code
3/8	10	10	199 187 242
1/2	15	10	199 187 243
3/4	20	10	199 187 244
1	25	10	199 187 245
1 1/4	32	10	199 187 246
1 1/2	40	10	199 187 247
2	50	10	199 187 248

SYGEF® standard metric



SYGEF Standard 3-Way ball valve type 187 Horizontal/L-port 100-230V With manual emergency override With socket fusion spigots metric



Model:

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

d [mm]	DN [mm]	PN	FPM Code	
16	10	10	199 187 012	
20	15	10	199 187 013	
25	20	10	199 187 014	
32	25	10	199 187 015	
40	32	10	199 187 016	
50	40	10	199 187 017	
63	50	10	199 187 018	



SYGEF Standard 3-Way ball valve type 187 Horizontal/L-port 100-230V With manual emergency override With butt fusion spigots IR-Plus metric



Model:

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

d [mm]	DN [mm]	PN	FPM Code	
20	15	10	199 187 053	
25	20	10	199 187 054	
32	25	10	199 187 055	
40	32	10	199 187 056	
50	40	10	199 187 057	
63	50	10	199 187 058	

SYGEF® standard metric



SYGEF Standard 3-Way ball valve type 187 Horizontal/L-port 24V With manual emergency override With fusion sockets metric



Model:

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

d [mm]	DN [mm]	PN	FPM Code
16	10	10	199 187 212
20	15	10	199 187 213
25	20	10	199 187 214
32	25	10	199 187 215
40	32	10	199 187 216
50	40	10	199 187 217
63	50	10	199 187 218



SYGEF Standard 3-Way ball valve type 187 Horizontal/L-port 24V With manual emergency override With threaded sockets NPT



Model:

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

NPT [inch]	DN [mm]	PN	FPM Code
3/8	10	10	199 187 262
1/2	15	10	199 187 263
3/4	20	10	199 187 264
1	25	10	199 187 265
1 1/4	32	10	199 187 266
1 1/2	40	10	199 187 267
2	50	10	199 187 268

SYGEF® standard metric



SYGEF Standard 3-Way ball valve type 187 Horizontal/L-port 24V With manual emergency override With socket fusion spigots metric



Model:

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

d [mm]	DN [mm]	PN	FPM Code
16	10	10	199 187 132
20	15	10	199 187 133
25	20	10	199 187 134
32	25	10	199 187 135
40	32	10	199 187 136
50	40	10	199 187 137
63	50	10	199 187 138



SYGEF Standard 3-Way ball valve type 187 Horizontal/L-port 24V With manual emergency override With butt fusion spigots IR-Plus metric



Model:

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

d [mm]	DN [mm]	PN	FPM Code
20	15	10	199 187 173
25	20	10	199 187 174
32	25	10	199 187 175
40	32	10	199 187 176
50	40	10	199 187 177
63	50	10	199 187 178

SYGEF® standard metric



SYGEF Standard 3-Way ball valve type 187 Horizontal/T-port 100-230V With manual emergency override With fusion sockets metric



Model:

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

d [mm]	DN [mm]	PN	FPM Code
16	10	10	199 187 112
20	15	10	199 187 113
25	20	10	199 187 114
32	25	10	199 187 115
40	32	10	199 187 116
50	40	10	199 187 117
63	50	10	199 187 118



SYGEF Standard 3-Way ball valve type 187 Horizontal/T-port 100-230V With manual emergency override With threaded sockets NPT



Model:

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

NPT [inch]	DN [mm]	PN	FPM Code
3/8	10	10	199 187 252
1/2	15	10	199 187 253
3/4	20	10	199 187 254
1	25	10	199 187 255
1 1/4	32	10	199 187 256
1 1/2	40	10	199 187 257
2	50	10	199 187 258

SYGEF® standard metric



SYGEF Standard 3-Way ball valve type 187 Horizontal/T-port 100-230V With manual emergency override With socket fusion spigots metric



Model:

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

d [mm]	DN [mm]	PN	FPM Code
16	10	10	199 187 032
20	15	10	199 187 033
25	20	10	199 187 034
32	25	10	199 187 035
40	32	10	199 187 036
50	40	10	199 187 037
63	50	10	199 187 038



SYGEF Standard 3-Way ball valve type 187 Horizontal/T-port 100-230V With manual emergency override With butt fusion spigots IR-Plus metric



Model:

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

d [mm]	DN [mm]	PN	FPM Code
20	15	10	199 187 073
25	20	10	199 187 074
32	25	10	199 187 075
40	32	10	199 187 076
50	40	10	199 187 077
63	50	10	199 187 078

SYGEF® standard metric



SYGEF Standard 3-Way ball valve type 187 Horizontal/T-port 24V With manual emergency override With fusion sockets metric



Model:

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

d [mm]	DN [mm]	PN	FPM Code
16	10	10	199 187 232
20	15	10	199 187 233
25	20	10	199 187 234
32	25	10	199 187 235
40	32	10	199 187 236
50	40	10	199 187 237
63	50	10	199 187 238



SYGEF Standard 3-Way ball valve type 187 Horizontal/T-port 24V With manual emergency override With threaded sockets NPT



Model:

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

NPT [inch]	DN [mm]	PN	FPM Code
3/8	10	10	199 187 272
1/2	15	10	199 187 273
3/4	20	10	199 187 274
1	25	10	199 187 275
1 1/4	32	10	199 187 276
1 1/2	40	10	199 187 277
2	50	10	199 187 278

SYGEF® standard metric



SYGEF Standard 3-Way ball valve type 187 Horizontal/T-port 24V With manual emergency override With socket fusion spigots metric



Model:

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

d [mm]	DN [mm]	PN	FPM Code	
16	10	10	199 187 152	
20	15	10	199 187 153	
25	20	10	199 187 154	
32	25	10	199 187 155	
40	32	10	199 187 156	
50	40	10	199 187 157	
63	50	10	199 187 158	



SYGEF Standard 3-Way ball valve type 187 Horizontal/T-port 24V With manual emergency override With butt fusion spigots IR-Plus metric



Model:

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

d [mm]	DN [mm]	PN	FPM Code	
20	15	10	199 187 193	
25	20	10	199 187 194	
32	25	10	199 187 195	
40	32	10	199 187 196	
50	40	10	199 187 197	
63	50	10	199 187 198	

SYGEF® standard metric

Ball valves pneumatic



DN10/15 - 50

SYGEF Standard
Ball valve type 232
Function FC (Fail safe to close)
With manual override
With fusion Sockets metric

Model:

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

Option:

- Individual configuration of the valve (see diagram)

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



DN10/15 - 50

SYGEF Standard
Ball valve type 232
Function FC (Fail safe to close)
With manual override
With socket fusion spigots metric

Model:

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

Option:

- Individual configuration of the valve (see diagram)

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



DN10/15 - 50

SYGEF Standard Ball valve type 232 Function FC (Fail safe to close) With manual override With butt fusion spigots IR-Plus metric

Model:

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

Option:

- Individual configuration of the valve (see diagram)

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



DN10/15 - 50

SYGEF Standard Ball valve type 232 Function FC (Fail safe to close) With manual override With fixed flanges PVDF serrated metric

Model:

- Material: PVDF
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- 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 diagram)

d [mm]	DN [mm]	Inch	PN	FPM Code
20	15	1/2	10	199 232 003
25	20	3/4	10	199 232 004
32	25	1	10	199 232 005
40	32	1 1/4	10	199 232 006
50	40	1 1/2	10	199 232 007
63	50	2	10	199 232 008

SYGEF® standard metric



DN10/15 - 50

SYGEF Standard Ball valve type 232 Function FO (Fail safe to open) With manual override With fusion sockets metric

Model:

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

Option:

- Individual configuration of the valve (see diagram)

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



DN10/15 - 50

SYGEF Standard Ball valve type 232 Function FO (Fail safe to open) With manual override With socket fusion spigots metric

Model:

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

Option:

- Individual configuration of the valve (see diagram)

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



DN10/15 - 50

SYGEF Standard Ball valve type 232 Function FO (Fail safe to open) With manual override With butt fusion spigots IR-Plus metric

Model:

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

Option:

- Individual configuration of the valve (see diagram)

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



DN10/15 - 50

SYGEF Standard Ball valve type 232 Function FO (Fail safe to open) With manual override With fixed flanges PVDF serrated metric

Model:

- Material: PVDF
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90°<) 1-2 s
- Overall length EN 558
- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504

Option:

- Individual configuration of the valve (see diagram)

d [mm]	DN [mm]	Inch	PN	FPM Code
20	15	1/2	10	199 232 023
25	20	3/4	10	199 232 024
32	25	1	10	199 232 025
40	32	1 1/4	10	199 232 026
50	40	1 1/2	10	199 232 027
63	50	2	10	199 232 028

SYGEF® standard metric



DN10/15 - 50

SYGEF Standard Ball valve type 232 Function DA (Double acting) With manual override With fusion sockets metric

Model:

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

Option:

- Individual configuration of the valve (see diagram)

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



DN10/15 - 50

SYGEF Standard Ball valve type 232 Function DA (Double acting) With manual override With socket fusion spigots metric

Model:

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

Option:

- Individual configuration of the valve (see diagram)

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



DN10/15 - 50

SYGEF Standard Ball valve type 232 Function DA (Double acting) With manual override With butt fusion spigots IR-Plus metric

Model:

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

Option:

- Individual configuration of the valve (see diagram)

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



DN10/15 - 50

SYGEF Standard Ball valve type 232 Function DA (Double acting) With manual override With fixed flanges PVDF serrated metric

Model:

- Material: PVDF
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90°<) 1-2 s
- Overall length EN 558
- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504

Option:

- Individual configuration of the valve (see diagram)

d [mm]	DN [mm]	Inch	PN	FPM Code
20	15	1/2	10	199 232 043
25	20	3/4	10	199 232 044
32	25	1	10	199 232 045
40	32	1 1/4	10	199 232 046
50	40	1 1/2	10	199 232 047
63	50	2	10	199 232 048

SYGEF® standard metric



DN10/15 - 50

SYGEF Standard Ball valve type 232 Function FC (Fail safe to close) Without manual override With fusion sockets metric

Model:

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

Option:

- Individual configuration of the valve (see diagram)

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



DN10/15 - 50

SYGEF Standard Ball valve type 232 Function FC (Fail safe to close) Without manual override With socket fusion spigots metric

Model:

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

Option:

- Individual configuration of the valve (see diagram)

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



DN10/15 - 50

SYGEF Standard Ball valve type 232 Function FC (Fail safe to close) Without manual override With butt fusion spigots IR-Plus metric

Model:

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

Option:

- Individual configuration of the valve (see diagram)

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	



DN10/15 - 50

SYGEF Standard Ball valve type 232 Function FC (Fail safe to close) Without manual override With fixed flanges PVDF serrated metric

Model:

- Material: PVDF
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90°<) 1-2 s
- Overall length EN 558
- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504

Option:

- Individual configuration of the valve (see diagram)

d [mm]	DN [mm]	Inch	PN	FPM Code	
20	15	1/2	10	199 232 063	
25	20	3/4	10	199 232 064	
32	25	1	10	199 232 065	
40	32	1 1/4	10	199 232 066	
50	40	1 1/2	10	199 232 067	
63	50	2	10	199 232 068	

SYGEF® standard metric



DN10/15 - 50

SYGEF Standard Ball valve type 232 Function FO (Fail safe to open) Without manual override With fusion sockets metric

Model:

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

Option:

- Individual configuration of the valve (see diagram)

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



DN10/15 - 50

SYGEF Standard Ball valve type 232 Function FO (Fail safe to open) Without manual override With socket fusion spigots metric

Model:

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

Option:

- Individual configuration of the valve (see diagram)

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



DN10/15 - 50

SYGEF Standard Ball valve type 232 Function FO (Fail safe to open) Without manual override With butt fusion spigots IR-Plus metric

Model:

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

Option:

- Individual configuration of the valve (see diagram)

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



DN10/15 - 50

SYGEF Standard Ball valve type 232 Function FO (Fail safe to open) Without manual override With fixed flanges PVDF serrated metric

Model:

- Material: PVDF
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90°<) 1-2 s
- Overall length EN 558
- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504

Option:

- Individual configuration of the valve (see diagram)

d [mm]	DN [mm]	Inch	PN	FPM Code
20	15	1/2	10	199 232 083
25	20	3/4	10	199 232 084
32	25	1	10	199 232 085
40	32	1 1/4	10	199 232 086
50	40	1 1/2	10	199 232 087
63	50	2	10	199 232 088

SYGEF® standard metric



DN10/15 - 50

SYGEF Standard Ball valve type 232 Function DA (Double acting) Without manual override With fusion sockets metric

Model:

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

Option:

- Individual configuration of the valve (see diagram)

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



DN10/15 - 50

SYGEF Standard Ball valve type 232 Function DA (Double acting) Without manual override With socket fusion spigots metric

Model:

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

Option:

- Individual configuration of the valve (see diagram)

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



DN10/15 - 50

SYGEF Standard Ball valve type 232 Function DA (Double acting) Without manual override With butt fusion spigots IR-Plus metric

Model:

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

Option:

- Individual configuration of the valve (see diagram)

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



DN10/15 - 50

SYGEF Standard Ball valve type 232 Function DA (Double acting) Without manual override With fixed flanges PVDF serrated metric

Model:

- Material: PVDF
- Built on with pneumatic actuator PA11 (DN10/15-25), PA21 (DN32-50)
- For easy installation and removal
- Integrated stainless steel mounting inserts
- Control time 90°<) 1-2 s
- Overall length EN 558
- Connecting dimensions: ISO 7005 / EN 1092 / DIN 2501 PN10 / BS4504

Option:

- Individual configuration of the valve (see diagram)

d [mm]	DN [mm]	Inch	PN	FPM Code
20	15	1/2	10	199 232 103
25	20	3/4	10	199 232 104
32	25	1	10	199 232 105
40	32	1 1/4	10	199 232 106
50	40	1 1/2	10	199 232 107
63	50	2	10	199 232 108

SYGEF® standard metric



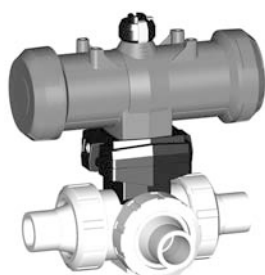
SYGEF Standard 3-Way ball valve type 287 Horizontal/L-port Without manual override With fusion sockets metric



Model:

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

d [mm]	DN [mm]	PN	FPM Code
16	10	10	199 287 092
20	15	10	199 287 093
25	20	10	199 287 094
32	25	10	199 287 095
40	32	10	199 287 096
50	40	10	199 287 097
63	50	10	199 287 098



SYGEF Standard 3-Way ball valve type 287 Horizontal/L-port Without manual override With socket fusion spigots metric



Model:

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

d [mm]	DN [mm]	PN	FPM Code
16	10	10	199 287 012
20	15	10	199 287 013
25	20	10	199 287 014
32	25	10	199 287 015
40	32	10	199 287 016
50	40	10	199 287 017
63	50	10	199 287 018

SYGEF® standard metric



SYGEF Standard 3-Way ball valve type 287 Horizontal/L-port Without manual override With butt fusion spigots IR-Plus metric



Model:

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

d [mm]	DN [mm]	PN	FPM Code
20	15	10	199 287 053
25	20	10	199 287 054
32	25	10	199 287 055
40	32	10	199 287 056
50	40	10	199 287 057
63	50	10	199 287 058



SYGEF Standard 3-Way ball valve type 287 Horizontal/L-port Without manual override With threaded sockets NPT



Model:

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

NPT [inch]	DN [mm]	PN	FPM Code
3/8	10	10	199 287 242
1/2	15	10	199 287 243
3/4	20	10	199 287 244
1	25	10	199 287 245
1 1/4	32	10	199 287 246
1 1/2	40	10	199 287 247
2	50	10	199 287 248

SYGEF® standard metric



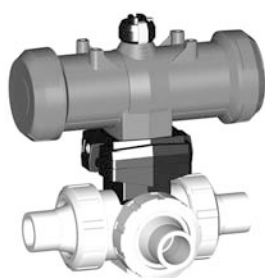
SYGEF Standard 3-Way ball valve type 287 Horizontal/L-port DA (Double acting) Without manual override With fusion sockets metric



Model:

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

d [mm]	DN [mm]	PN	FPM Code
16	10	10	199 287 212
20	15	10	199 287 213
25	20	10	199 287 214
32	25	10	199 287 215
40	32	10	199 287 216
50	40	10	199 287 217
63	50	10	199 287 218



SYGEF Standard 3-Way ball valve type 287 Horizontal/L-port DA (Double acting) Without manual override With socket fusion spigots metric



Model:

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

d [mm]	DN [mm]	PN	FPM Code
16	10	10	199 287 132
20	15	10	199 287 133
25	20	10	199 287 134
32	25	10	199 287 135
40	32	10	199 287 136
50	40	10	199 287 137
63	50	10	199 287 138

SYGEF® standard metric



SYGEF Standard
3-Way ball valve type 287
Horizontal/L-port DA (Double acting)
Without manual override
With butt fusion spigots IR-Plus metric



Model:

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

d [mm]	DN [mm]	PN	FPM Code
20	15	10	199 287 173
25	20	10	199 287 174
32	25	10	199 287 175
40	32	10	199 287 176
50	40	10	199 287 177
63	50	10	199 287 178



SYGEF Standard
3-Way ball valve type 287
Horizontal/L-port DA (Double acting)
Without manual override
With threaded sockets NPT



Model:

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

NPT [inch]	DN [mm]	PN	FPM Code
3/8	10	10	199 287 262
1/2	15	10	199 287 263
3/4	20	10	199 287 264
1	25	10	199 287 265
1 1/4	32	10	199 287 266
1 1/2	40	10	199 287 267
2	50	10	199 287 268

SYGEF® standard metric



SYGEF Standard 3-Way ball valve type 287 Horizontal/T-port Without manual override With fusion sockets metric



Model:

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

d [mm]	DN [mm]	PN	FPM Code
16	10	10	199 287 112
20	15	10	199 287 113
25	20	10	199 287 114
32	25	10	199 287 115
40	32	10	199 287 116
50	40	10	199 287 117
63	50	10	199 287 118



SYGEF Standard 3-Way ball valve type 287 Horizontal/T-port Without manual override With socket fusion spigots metric



Model:

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

d [mm]	DN [mm]	PN	FPM Code
16	10	10	199 287 032
20	15	10	199 287 033
25	20	10	199 287 034
32	25	10	199 287 035
40	32	10	199 287 036
50	40	10	199 287 037
63	50	10	199 287 038

SYGEF® standard metric



SYGEF Standard 3-Way ball valve type 287 Horizontal/T-port Without manual override With butt fusion spigots IR-Plus metric



Model:

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

d [mm]	DN [mm]	PN	FPM Code
20	15	10	199 287 073
25	20	10	199 287 074
32	25	10	199 287 075
40	32	10	199 287 076
50	40	10	199 287 077
63	50	10	199 287 078



SYGEF Standard 3-Way ball valve type 287 Horizontal/T-port Without manual override With threaded sockets NPT



Model:

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

NPT [inch]	DN [mm]	PN	FPM Code
3/8	10	10	199 287 252
1/2	15	10	199 287 253
3/4	20	10	199 287 254
1	25	10	199 287 255
1 1/4	32	10	199 287 256
1 1/2	40	10	199 287 257
2	50	10	199 287 258

SYGEF® standard metric



SYGEF Standard 3-Way ball valve type 287 Horizontal/T-port DA (Double acting) Without manual override With fusion sockets metric



Model:

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

d [mm]	DN [mm]	PN	FPM Code
16	10	10	199 287 232
20	15	10	199 287 233
25	20	10	199 287 234
32	25	10	199 287 235
40	32	10	199 287 236
50	40	10	199 287 237
63	50	10	199 287 238



SYGEF Standard 3-Way ball valve type 287 Horizontal/T-port DA (Double acting) Without manual override With socket fusion spigots metric



Model:

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

d [mm]	DN [mm]	PN	FPM Code
16	10	10	199 287 152
20	15	10	199 287 153
25	20	10	199 287 154
32	25	10	199 287 155
40	32	10	199 287 156
50	40	10	199 287 157
63	50	10	199 287 158

SYGEF® standard metric



SYGEF Standard
3-Way ball valve type 287
Horizontal/T-port DA (Double acting)
Without manual override
With butt fusion spigots IR-Plus metric



Model:

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

d [mm]	DN [mm]	PN	FPM Code
20	15	10	199 287 193
25	20	10	199 287 194
32	25	10	199 287 195
40	32	10	199 287 196
50	40	10	199 287 197
63	50	10	199 287 198



SYGEF Standard
3-Way ball valve type 287
Horizontal/T-port DA (Double acting)
Without manual override
With threaded sockets NPT



Model:

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

NPT [inch]	DN [mm]	PN	FPM Code
3/8	10	10	199 287 272
1/2	15	10	199 287 273
3/4	20	10	199 287 274
1	25	10	199 287 275
1 1/4	32	10	199 287 276
1 1/2	40	10	199 287 277
2	50	10	199 287 278

SYGEF® standard metric

Diaphragm valves pneumatic



SYGEF Standard Diaphragm valve type DIASTAR 028 Function FC (Fail safe to close) With fusion spigots metric

Model:

- Material: PVDF
- 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

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

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

Model:

- Material: PVDF
- 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:

- Material: PVDF
- 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

Model:

- Material: PVDF
- 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

Model:

- Material: PVDF
- 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

Model:

- Material: PVDF
- 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

Model:

- Material: PVDF
- 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:

- Material: PVDF
- 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:

- Material: PVDF
- 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	6	199 025 359

SYGEF® standard metric



SYGEF Standard Diaphragm valve type DIASTAR 025 Function FO (Fail safe to open) With fusion spigots metric

Model:

- Material: PVDF
- 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

Model:

- Material: PVDF
- 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

Model:

- Material: PVDF
- 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

Model:

- Material: PVDF
- 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:

- Material: PVDF
- 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:

- Material: PVDF
- 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	6	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

Model:

- Material: PVDF
- 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

Model:

- Material: PVDF
- 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

Model:

- Material: PVDF
- 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

Model:

- Material: PVDF
- 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:

- Material: PVDF
- 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:

- Material: PVDF
- 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	6	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 Bare shaft

Model:

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

Model with PTFE seal in DN250 and DN300 available from June 2009

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:

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

Model with PTFE seal in DN250 and DN300 available from June 2009

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:

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

d [mm]	DN [mm]	Inch	PN	FPM Code
63	50	2	10	199 140 562
75	65	2 ½	10	199 140 563
90	80	3	10	199 140 564
110	100	4	10	199 140 565
140	125	5	10	199 140 566
160	150	6	10	199 140 567
225	200	8	10	199 140 568



SYGEF Standard Butterfly valve type 140 24V Without manual override

Model:

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

Model with PTFE seal in DN250 and DN300 available from June 2009

d [mm]	DN [mm]	Inch	PN	FPM Code
63	50	2	10	199 140 622
75	65	2 ½	10	199 140 623
90	80	3	10	199 140 624
110	100	4	10	199 140 625
140	125	5	10	199 140 626
160	150	6	10	199 140 627
225	200	8	10	199 140 628
280	250	10	6	199 140 629

SYGEF® standard metric



SYGEF Standard Butterfly valve type 140 24V With manual override

Model:

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

d [mm]	DN [mm]	Inch	PN	FPM Code	
63	50	2	10	199 140 602	
75	65	2 ½	10	199 140 603	
90	80	3	10	199 140 604	
110	100	4	10	199 140 605	
140	125	5	10	199 140 606	
160	150	6	10	199 140 607	
225	200	8	10	199 140 608	

SYGEF® standard metric



SYGEF Standard Lugstyle butterfly valve type 568 Bare shaft

Model:

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

Model with PTFE seal in DN50 - DN80 on request

d [mm]	DN [mm]	Inch	PN	FPM Code
63	50	2	10	175 568 822
75	65	2 ½	10	175 568 823
90	80	3	10	175 568 824
110	100	4	10	175 568 825
140	125	5	10	175 568 826
160	150	6	10	175 568 827
225	200	8	10	175 568 828



SYGEF Standard Lugstyle butterfly valve type 141 100-230V Without manual override

Model:

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

Model with PTFE seal in DN50 - DN80 on request

d [mm]	DN [mm]	Inch	PN	FPM Code
63	50	2	10	199 141 582
75	65	2 ½	10	199 141 583
90	80	3	10	199 141 584
110	100	4	10	199 141 585
140	125	5	10	199 141 586
160	150	6	10	199 141 587
225	200	8	10	199 141 588

SYGEF® standard metric



SYGEF Standard Lugstyle butterfly valve type 141 100-230V With manual override

Model:

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

d [mm]	DN [mm]	Inch	PN	FPM Code
63	50	2	10	199 141 562
75	65	2 ½	10	199 141 563
90	80	3	10	199 141 564
110	100	4	10	199 141 565
140	125	5	10	199 141 566
160	150	6	10	199 141 567
225	200	8	10	199 141 568



SYGEF Standard Lugstyle butterfly valve type 141 24V Without manual override

Model:

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

Model with PTFE seal in DN50 - DN80 on request

d [mm]	DN [mm]	Inch	PN	FPM Code
63	50	2	10	199 141 622
75	65	2 ½	10	199 141 623
90	80	3	10	199 141 624
110	100	4	10	199 141 625
140	125	5	10	199 141 626
160	150	6	10	199 141 627
225	200	8	10	199 141 628

SYGEF® standard metric



SYGEF Standard Lugstyle butterfly valve type 141 24V With manual override

Model:

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

d [mm]	DN [mm]	Inch	PN	FPM Code	
63	50	2	10	199 141 602	
75	65	2 ½	10	199 141 603	
90	80	3	10	199 141 604	
110	100	4	10	199 141 605	
140	125	5	10	199 141 606	
160	150	6	10	199 141 607	
225	200	8	10	199 141 608	

SYGEF® standard metric



SYGEF Standard Lugstyle butterfly valve 568 ANSI Bare shaft

Model:

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

Model with PTFE seal in DN50 - DN80 on request

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:

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

Model with PTFE seal in DN50 - DN80 on request

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:

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

Inch	DN [mm]	d [mm]	PN	FPM Code
2	50	63	10	199 142 562
2 ½	65	75	10	199 142 563
3	80	90	10	199 142 564
4	100	110	10	199 142 565
5	125	140	10	199 142 566
6	150	160	10	199 142 567
8	200	225	10	199 142 568



SYGEF Standard Lugstyle butterfly valve type 142 24V ANSI Without manual override

Model:

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

Model with PTFE seal in DN50 - DN80 on request

Inch	DN [mm]	d [mm]	PN	FPM Code
2	50	63	10	199 142 622
2 ½	65	75	10	199 142 623
3	80	90	10	199 142 624
4	100	110	10	199 142 625
5	125	140	10	199 142 626
6	150	160	10	199 142 627
8	200	225	10	199 142 628

SYGEF® standard metric



SYGEF Standard Lugstyle butterfly valve type 142 24V ANSI With manual override

Model:

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

Inch	DN [mm]	d [mm]	PN	FPM Code	
2	50	63	10	199 142 602	
2 ½	65	75	10	199 142 603	
3	80	90	10	199 142 604	
4	100	110	10	199 142 605	
5	125	140	10	199 142 606	
6	150	160	10	199 142 607	
8	200	225	10	199 142 608	

SYGEF® standard metric

Butterfly valves pneumatic metric/ANSI/JIS



SYGEF Standard Butterfly valve type 567 Bare shaft

Model:

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

Model with PTFE seal in DN250 and DN300 available from June 2009

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:

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

Model with PTFE seal in DN250 and DN300 available from June 2009

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:

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

Model with PTFE seal in DN250 and DN300 available from June 2009

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:

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

Model with PTFE seal in DN250 and DN300 available from June 2009

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 Bare shaft

Model:

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

Model with PTFE seal in DN50 - DN80 on request

d [mm]	DN [mm]	Inch	PN	FPM Code
63	50	2	10	175 568 822
75	65	2 ½	10	175 568 823
90	80	3	10	175 568 824
110	100	4	10	175 568 825
140	125	5	10	175 568 826
160	150	6	10	175 568 827
225	200	8	10	175 568 828



SYGEF Standard Lugstyle butterfly valve type 241 FC (Fail safe to close) Without manual override

Model:

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

Model with PTFE seal in DN50 - DN80 on request

d [mm]	DN [mm]	Inch	PN	FPM Code
63	50	2	10	199 241 462
75	65	2 ½	10	199 241 463
90	80	3	10	199 241 464
110	100	4	10	199 241 465
140	125	5	10	199 241 466
160	150	6	10	199 241 467
225	200	8	10	199 241 468

SYGEF® standard metric



SYGEF Standard Lugstyle butterfly valve type 241 FO (Fail safe to open) Without manual override

Model:

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

Model with PTFE seal in DN50 - DN80 on request

d [mm]	DN [mm]	Inch	PN	FPM Code
63	50	2	10	199 241 482
75	65	2 ½	10	199 241 483
90	80	3	10	199 241 484
110	100	4	10	199 241 485
140	125	5	10	199 241 486
160	150	6	10	199 241 487
225	200	8	10	199 241 488



SYGEF Standard Lugstyle butterfly valve type 241 DA (Double acting) Without manual override

Model:

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

Model with PTFE seal in DN50 - DN80 on request

d [mm]	DN [mm]	Inch	PN	FPM Code
63	50	2	10	199 241 502
75	65	2 ½	10	199 241 503
90	80	3	10	199 241 504
110	100	4	10	199 241 505
140	125	5	10	199 241 506
160	150	6	10	199 241 507
225	200	8	10	199 241 508

SYGEF® standard metric



SYGEF Standard Lugstyle butterfly valve 568 ANSI Bare shaft

Model:

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

Model with PTFE seal in DN50 - DN80 on request

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:

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

Model with PTFE seal in DN50 - DN80 on request

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:

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

Model with PTFE seal in DN50 - DN80 on request

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:

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

Model with PTFE seal in DN50 - DN80 on request

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

Nominal voltage 230V 50 Hz

Function A straight-through valve 2/2 ways

With fusion sockets metric

Model:

- Material: PVDF
- With manual override
- Electrical connection: cable plug
- Protection class IP 65

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

Nominal voltage 115V 50 Hz

Function A straight-through valve 2/2 ways

With fusion sockets metric

Model:

- Material: PVDF
- With manual override
- Electrical connection: cable plug
- Protection class IP 65

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 metric



SYGEF Standard
Solenoid valve type 165
Nominal voltage 24V DC
Function A straight-through valve 2/2 ways
With fusion sockets metric

Model:

- Material: PVDF
- With manual override
- Electrical connection: cable plug
- Protection class IP 65

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-through valve 2/2
ways
Nominal voltage 24V DC
With G 1/4 line connection



Model:

- Material: PVDF
- With manual override
- Electrical connection: cable plug
- Protection class IP 65

DN [mm]	D1_G [inch]	Function	PN [bar]	FPM Code	
3	¼	A	0.0 - 8.0	199 166 505	
4	¼	A	0.0 - 4.0	199 166 506	
5	¼	A	0.0 - 3.0	199 166 507	



SYGEF Standard
Solenoid valve type 166
Function A straight-through valve 2/2
ways
Nominal voltage 230V 50Hz ±10%
With G 1/4 line connection



Model:

- Material: PVDF
- With manual override
- Electrical connection: cable plug
- Protection class IP 65

DN [mm]	D1_G [inch]	Function	PN [bar]	FPM Code	
3	¼	A	0.0 - 10.0	199 166 515	
4	¼	A	0.0 - 5.0	199 166 516	
5	¼	A	0.0 - 4.5	199 166 517	



SYGEF Standard
Solenoid valve type 166
Function E mixing valve 3/2 ways
Nominal voltage 24V DC
With G 1/4 line connection



Model:

- Material: PVDF
- With manual override
- Electrical connection: cable plug
- Protection class IP 65

DN [mm]	D1_G [inch]	Function	PN [bar]	FPM Code	
4	¼	E	0.0 - 2.0	199 166 656	

SYGEF® standard metric



SYGEF Standard
Solenoid valve type 166
Function E mixing valve 3/2 ways
Nominal voltage 230V 50Hz ±10%
With G 1/4 line connection



Model:

- Material: PVDF
- With manual override
- Electrical connection: cable plug
- Protection class IP 65

DN [mm]	D1_G [inch]	Function	PN [bar]	FPM Code	
4	1/4	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

- Model:**
- Material: PVDF

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

- Model:**
- Material: PVDF

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

- Model:**
- Material: PVDF

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 metric



SYGEF Standard Pressure relief valve type V85 With fusion spigots metric

Model:

- Material: PVDF

d [mm]	DN [mm]	Pressure range [bar]	PTFE Code
75	65	1.0 - 6	199 041 898



SYGEF Standard Pressure relief valve type V185 With fusion spigots metric

Model:

- Material: PVDF

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

Model:

- Material: PVDF

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

Model:

- Material: PVDF

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 metric



SYGEF Standard Pressure retaining valve type V786 With fusion spigots metric

Model:

- Material: PVDF

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

Model:

- Material: PVDF

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

Model:

- Material: PVDF

d [mm]	G [inch]	PTFE Code	
25	¼	199 041 296	
32	½	199 041 297	



SYGEF Standard Gauge guard type Z701 Without manometer

Model:

- Material: PVDF

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

Model:

- Material: PVDF

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

Model:

- Material: PVDF

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

Model:

- Material: PVDF

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

Model:

- Material: PVDF
- 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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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

Model:

- Material: PVDF-HP
- 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

Model:

- Material: PVDF-HP
- With position indicator / Working pressure: **one side**

d [mm]	DN [mm]	PN	PTFE/EPDM Code
20	15	5	199 028 391
25	20	7	199 028 392
32	25	7	199 028 393
40	32	7	199 028 394
50	40	7	199 028 395
63	50	7	199 028 396



SYGEF Plus

Diaphragm valve type DIASTAR 028

Function FC (Fail safe to close)

With backing flanges PP-V metric

Model:

- Material: PVDF-HP
- 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	199 028 441
25	20	¾	7	199 028 442
32	25	1	7	199 028 443
40	32	1 ¼	7	199 028 444
50	40	1 ½	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

Model:

- Material: PVDF-HP
- 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

Model:

- Material: PVDF-HP
- With position indicator / Working pressure: **both sides**

d [mm]	DN [mm]	PN	PTFE/EPDM Code
20	15	10	199 029 501
25	20	10	199 029 502
32	25	10	199 029 503
40	32	10	199 029 504
50	40	10	199 029 505
63	50	10	199 029 506



SYGEF Plus Diaphragm valve type DIASTAR 025 Function FC (Fail safe to close) With backing flanges PP-V metric

Model:

- Material: PVDF-HP
- 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:

- Material: PVDF-HP
- 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	6	199 025 449



SYGEF Plus Diaphragm valve type DIASTAR 025 Function FC (Fail safe to close) ZERO STATIC with butt fusion spigots metric

Model:

- Material: PVDF-HP
- 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

Model:

- Material: PVDF-HP
- 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

Model:

- Material: PVDF-HP
- With position indicator / Working pressure: **both sides**

d [mm]	DN [mm]	PN	PTFE/EPDM Code
20	15	10	199 029 511
25	20	10	199 029 512
32	25	10	199 029 513
40	32	10	199 029 514
50	40	10	199 029 515
63	50	10	199 029 516



SYGEF Plus Diaphragm valve type DIASTAR 025 Function FO (Fail safe to open) With backing flanges PP-V metric

Model:

- Material: PVDF-HP
- 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® Plus metric



SYGEF Plus Diaphragm valve type DIASTAR 025 Function FO (Fail safe to open) With fixed flanges PVDF metric

Model:

- Material: PVDF-HP
- 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	6	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

Model:

- Material: PVDF-HP
- 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	199 029 521
25	20	10	199 029 522
32	25	10	199 029 523
40	32	10	199 029 524
50	40	10	199 029 525
63	50	10	199 029 526



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	199 025 467	
** 90	80	3	10	199 025 468	
110	100	4	6	199 025 469	
** 160	150	6	6	199 025 470	

SYGEF® Plus metric

Process control valves



SYGEF Plus Pressure reducing valve type V82 With fusion spigots BCF

Model:
• Material: PVDF-HP

d [mm]	DN [mm]	Pressure range [bar]	PTFE Code
20	15	0.5 - 10	199 041 184
25	20	0.5 - 10	199 041 185
32	25	0.5 - 10	199 041 186
40	32	0.5 - 10	199 041 187
50	40	0.5 - 10	199 041 188
63	50	0.5 - 10	199 041 189



SYGEF Plus Pressure relief valve type V185 With butt fusion spigots metric IR

Model:
• Material: PVDF-HP

d [mm]	DN [mm]	Pressure range [bar]	PTFE Code
20	15	0.5 - 10	199 041 520
25	20	0.5 - 10	199 041 521
32	25	0.5 - 10	199 041 522
40	32	0.5 - 10	199 041 523
50	40	0.5 - 10	199 041 524
63	50	0.5 - 10	199 041 525



SYGEF Plus Pressure reducing valve type V782 With fusion spigots BCF

Model:
• Material: PVDF-HP

d [mm]	DN [mm]	Pressure range [bar]	PTFE Code
20	15	0.5 - 10	199 041 192
25	20	0.5 - 10	199 041 193
32	25	0.5 - 10	199 041 194
40	32	0.5 - 10	199 041 195
50	40	0.5 - 10	199 041 196

SYGEF® Plus metric



SYGEF Plus Pressure retaining valve type V786 With fusion spigots BCF

Model:

- Material: PVDF-HP

d [mm]	DN [mm]	Pressure range [bar]	PTFE Code	
20	15	0.5 - 10	199 041 198	
25	20	0.5 - 10	199 041 199	
32	25	0.5 - 10	199 041 200	
40	32	0.5 - 4	199 041 201	
50	40	0.5 - 4	199 041 202	



SYGEF Plus Pressure retaining valve type V186 With butt fusion spigots BCF IR

Model:

- Material: PVDF-HP

d [mm]	DN [mm]	Pressure range [bar]	PTFE Code	
20	15	0.5 - 10	199 041 395	
25	20	0.5 - 10	199 041 396	
32	25	0.5 - 10	199 041 397	
40	32	0.5 - 10	199 041 398	
50	40	0.5 - 10	199 041 399	
63	50	0.5 - 10	199 041 400	

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

Model:

- Material: PVDF-HP
- 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 butt fusion spigots metric HTR

Model:

- Material: PVDF-HP
- 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	199 029 771
25	20	10	199 029 772
32	25	10	199 029 773
40	32	10	199 029 774
50	40	10	199 029 775
63	50	10	199 029 776

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

Model:

- Material: PVDF-HP
- 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

Model:

- Material: PVDF-HP
- 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

Model:

- Material: PVDF-HP
- 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	199 029 781
25	20	10	199 029 782
32	25	10	199 029 783
40	32	10	199 029 784
50	40	10	199 029 785
63	50	10	199 029 786

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

Model:

- Material: PVDF-HP
- 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

Model:

- Material: PVDF-HP
- 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	199 029 791	
25	20	10	199 029 792	
32	25	10	199 029 793	
40	32	10	199 029 794	
50	40	10	199 029 795	
63	50	10	199 029 796	

Metal - butterfly valves

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Metal - butterfly valves

Metal - butterfly valves wafer metric/Inch/ASTM

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/ASTM



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/ASTM



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	199 037 130	199 037 143	199 037 330
75	65	2 ½	10	320	199 037 131	199 037 144	199 037 331
90	80	3	10	500	199 037 132	199 037 145	199 037 332
110	100	4	10	820	199 037 133	199 037 146	199 037 333
140	125	5	10	1300	199 037 134	199 037 147	199 037 334
160	150	6	10	1900	199 037 135	199 037 148	199 037 335
225	200	8	10	3330	199 037 136	199 037 149	199 037 336
* 280	250	10	6	5400	199 037 137	199 037 150	199 037 337
* 315	300	12	4	8000	199 037 138	199 037 151	199 037 338

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	199 037 343	199 037 530	199 037 543
75	65	2 ½	10	320	199 037 344	199 037 531	199 037 544
90	80	3	10	500	199 037 345	199 037 532	199 037 545
110	100	4	10	820	199 037 346	199 037 533	199 037 546
140	125	5	10	1300	199 037 347	199 037 534	199 037 547
160	150	6	10	1900	199 037 348	199 037 535	199 037 548
225	200	8	10	3330	199 037 349	199 037 536	199 037 549
* 280	250	10	6	5400	199 037 350	199 037 537	199 037 550
* 315	300	12	4	8000	199 037 351	199 037 538	199 037 551

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	199 038 130	199 038 330
75	65	2 ½	10	320	199 038 131	199 038 331
90	80	3	10	500	199 038 132	199 038 332
110	100	4	10	820	199 038 133	199 038 333
140	125	5	10	1300	199 038 134	199 038 334
160	150	6	10	1900	199 038 135	199 038 335
225	200	8	10	3330	199 038 136	199 038 336
* 280	250	10	6	5400	199 038 137	199 038 337
* 315	300	12	4	8000	199 038 138	199 038 338

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	198 803 049
110 - 110	100 - 100	4-5	198 803 050
140 - 140	125 - 125	6	198 803 051
160 - 225	150 - 200	8	198 803 052
280 - 315	250 - 300	10-12	198 806 645



Hand lever kit with fine adjustment For type 037M/038M

d-d [mm]	DN-DN [mm]	Inch	Code
63 - 90	50 - 80	2-3	198 803 384
110 - 110	100 - 100	4	198 803 385
140 - 140	125 - 125	5	198 803 386
160 - 225	150 - 200	6-8	198 803 387



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	198 151 341
110 - 110	100 - 100	4	198 151 342
140 - 140	125 - 125	5	198 151 343
160 - 225	150 - 200	6-8	198 151 344



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	198 806 690
110 - 140	100 - 125	4-5	198 806 691
160 - 225	150 - 200	6-8	198 806 692
225 - 315	200 - 300	8-12	198 806 693

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	198 000 411
110 - 140	100 - 125	4-5	EA 31	198 000 412
160 - 225	150 - 200	6-8	EA 42	198 000 315
- 280	- 250	10	EA 42	198 000 316

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 31	198 000 338
110 - 140	100 - 125	4-5	EA 42	198 000 339
160 - 225	150 - 200	6-8	EA 42	198 000 340
- 280	- 250	10	EA 50	-

Intermediate element to type 037P/038P

Without manual override

d [mm]	DN [mm]	Inch	Type of actuator	Code
63	50	2	PA30 FC/FO	198 000 382
63	50	2	PA35 DA	198 000 382
75	65	2 ½	PA30 FC/FO	198 000 382
75	65	2 ½	PA35 DA	198 000 382
90	80	3	PA35 FC/FO	198 000 383
90	80	3	PA35 DA	198 000 384
110	100	4	PA40 FC/FO	198 000 385
110	100	4	PA45 DA	198 000 385
140	125	5	PA45 FC/FO	198 000 386
140	125	5	PA45 DA	198 000 387
160	150	6	PA50 FC/FO	198 000 388
160	150	6	PA55 DA	198 000 388
225	200	8	PA60 FC/FO	198 000 389
225	200	8	PA60 DA	198 000 390
280	250	10	PA60 FC/FO	198 000 391
280	250	10	PA65 DA	198 000 391
315	300	12	PA70 FC/FO	198 000 392
315	300	12	PA70 DA	198 000 393

Metal - butterfly valves

Spare parts to metal butterfly valves

Bare shaft metal - butterfly valve type 037 Metric/Inch/ASTM



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



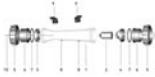
d [mm]	DN [mm]	Inch	Ductile iron (GGG40)/ Rilsan® coated Code	Stainless steel (ASTM A351 - CF8M - 1.4408) Code	Aluminium- bronze (ASTM B-148) Code
63	50	2	198 806 740	198 806 700	198 806 920
75	65	2 ½	198 806 741	198 806 701	198 806 921
90	80	3	198 806 742	198 806 702	198 806 922
110	100	4	198 806 743	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

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Variable area flow meters

Variable area flow meters

Variable area flow meter type 335 Float in PVDF without magnet With solvent cement sockets PVC-U metric



- * PVC-U transparent >DN40 available from Sept. 2009

Scale range [l/h]	d [mm]	DN [mm]	Taper tube in PVC-U transp. O-rings in EPDM Code	Taper tube in Polyamid O- rings in EPDM Code	Taper tube in Polysulfone O- rings in EPDM Code
50 - 500	32	25	198 335 000	198 335 020	198 335 040
100 - 1000	32	25	198 335 001	198 335 021	198 335 041
150 - 1500	40	32	198 335 002	198 335 022	198 335 042
250 - 2500	40	32	198 335 003	198 335 023	198 335 043
200 - 2000	50	40	198 335 004	198 335 024	198 335 044
300 - 3000	50	40	198 335 005	198 335 025	198 335 045
600 - 6000	50	40	198 335 006	198 335 026	198 335 046
600 - 6000	63	50	198335007*	198 335 027	198 335 047
1000 - 10000	63	50	198335008*	198 335 028	198 335 048
1500 - 15000	63	50	198335009*	198 335 029	198 335 049
2000 - 20000	75	65	198335010*	198 335 030	198 335 050
3000 - 30000	75	65	198335011*	198 335 031	198 335 051
8000 - 60000	75	65	198335012*	198 335 032	198 335 052

Variable area flow meter type 335 Float in PVDF with magnet With solvent cement sockets PVC-U metric



Model:

- Suitable limit switches see accessories for variable area flow meters
- * PVC-U transparent >DN40 available from Sept. 2009

Scale range [l/h]	d [mm]	DN [mm]	Taper tube in PVC-U transp. O-Rings in EPDM Code	Taper tube in Polyamid O- rings in EPDM Code	Taper tube in Polysulfone O- rings in EPDM Code
50 - 500	32	25	198 335 100	198 335 120	198 335 140
100 - 1000	32	25	198 335 101	198 335 121	198 335 141
150 - 1500	40	32	198 335 102	198 335 122	198 335 142
250 - 2500	40	32	198 335 103	198 335 123	198 335 143
200 - 2000	50	40	198 335 104	198 335 124	198 335 144
300 - 3000	50	40	198 335 105	198 335 125	198 335 145
600 - 6000	50	40	198 335 106	198 335 126	198 335 146
600 - 6000	63	50	198335107*	198 335 127	198 335 147
1000 - 10000	63	50	198335108*	198 335 128	198 335 148
1500 - 15000	63	50	198335109*	198 335 129	198 335 149
2000 - 20000	75	65	198335110*	198 335 130	198 335 150
3000 - 30000	75	65	198335111*	198 335 131	198 335 151
8000 - 60000	75	65	198335112*	198 335 132	198 335 152

Variable area flow meters



Variable area flow meter type 350 Float in PVDF with magnet With solvent cement sockets PVC-U metric



Model:

- Suitable limit switches see accessories for variable area flow meters
- * PVC-U transparent >DN40 available from Sept. 2009

Scale range [l/h]	d [mm]	DN [mm]	Taper tube in PVC-U transp. O-Rings in EPDM Code	Taper tube in Polyamid O- rings in EPDM Code	Taper tube in Polysulfone O- rings in EPDM Code
50 - 500	32	25	198 350 100	198 350 120	198 350 140
100 - 1000	32	25	198 350 101	198 350 121	198 350 141
150 - 1500	40	32	198 350 102	198 350 122	198 350 142
250 - 2500	40	32	198 350 103	198 350 123	198 350 143
200 - 2000	50	40	198 350 104	198 350 124	198 350 144
300 - 3000	50	40	198 350 105	198 350 125	198 350 145
600 - 6000	50	40	198 350 106	198 350 126	198 350 146
600 - 6000	63	50	198350107*	198 350 127	198 350 147
1000 - 10000	63	50	198350108*	198 350 128	198 350 148
1500 - 15000	63	50	198350109*	198 350 129	198 350 149
2000 - 20000	75	65	198350110*	198 350 130	198 350 150
3000 - 30000	75	65	198350111*	198 350 131	198 350 151
8000 - 60000	75	65	198350112*	198 350 132	198 350 152



Variable area flow meter type 350 Float in PVDF without magnet With solvent cement sockets PVC-U metric



- * PVC-U transparent >DN40 available from Sept. 2009

Scale range [l/h]	d [mm]	DN [mm]	Taper tube in PVC-U transp. O-rings in EPDM Code	Taper tube in Polyamid O- rings in EPDM Code	Taper tube in Polysulfone O- rings in EPDM Code
50 - 500	32	25	198 350 000	198 350 020	198 350 040
100 - 1000	32	25	198 350 001	198 350 021	198 350 041
150 - 1500	40	32	198 350 002	198 350 022	198 350 042
250 - 2500	40	32	198 350 003	198 350 023	198 350 043
200 - 2000	50	40	198 350 004	198 350 024	198 350 044
300 - 3000	50	40	198 350 005	198 350 025	198 350 045
600 - 6000	50	40	198 350 006	198 350 026	198 350 046
600 - 6000	63	50	198350007*	198 350 027	198 350 047
1000 - 10000	63	50	198350008*	198 350 028	198 350 048
1500 - 15000	63	50	198350009*	198 350 029	198 350 049
2000 - 20000	75	65	198350010*	198 350 030	198 350 050
3000 - 30000	75	65	198350011*	198 350 031	198 350 051
8000 - 60000	75	65	198350012*	198 350 032	198 350 052

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



Special version PVDF-HP Float in PTFE without magnet With fusion spigots BCF/IR

Type	d [mm]	DN [mm]	Scale range [l/h]	Scale range [gal/min]	Taper tube in Polysulfone O-rings in FPM Code
SK 70	32	25	68 - 204	0.3-0.9	198 807 209
SK 71	32	25	90 - 295	0.4-1.3	198 807 210
SK 73	32	25	136 - 795	0.6-3.5	198 807 202
SK 20	50	40	568 - 2273	2.5-10.0	198 807 203
SK 21	50	40	909 - 4091	4.0-18.0	198 807 204
SK 30	63	50	1000 - 8142	4.4-36.0	198 807 205
SK 31	63	50	1000 - 9091	4.4-40.0	198 807 206
SK 40	75	65	1848 - 11364	8.0-50.0	198 807 207
SK 41	75	65	2273 - 16364	10.0-72.0	198 807 208

Variable area flow meters

Special version PVDF Float in PVDF (red) without magnet

Dimension L and L1 only valid for socket connection
Dimension L2 describes taper tube length



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	198 806 466	198 803 905
SK 11	32	25	100 - 1000	198 806 467	198 803 906
SK 20	50	40	200 - 2000	198 806 468	198 803 907
SK 21	50	40	300 - 3000	198 806 469	198 803 908
SK 30	63	50	600 - 6000	198 806 470	198 803 909
SK 31	63	50	1200 - 12000	198 806 471	198 803 910
SK 40	75	65	2000 - 20000	-	198 803 911
SK 41	75	65	3000 - 30000	-	198 803 912

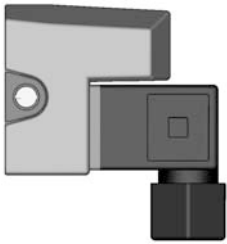
Variable area flow meters

Accessories



Accessories Limit contact (min/max.) For short version

Type	top Code	bottom Code	
SK500-730 GK 03 SK500-730 GK 04	198 801 878	198 801 879	



Accessories Limit contacts GK10/GK11 For type 335 and type 350

Model:

- For all dimensions type 335/350

Type	Code	
GK10 (min.) GK11 (max.)	198 335 960 198 335 961	

Variable area flow meters

Special scale for type 335/350 m³/h

d [mm]	DN [mm]	Scale range [m ³ /h]	Corresponds to water scale [l/h]	Code
32	25	0,05 - 0,5	50-500	198 335 655
32	25	0,1 - 1	100-1000	198 335 656
40	32	0,15 - 1,5	150-1500	198 335 657
40	32	0,25 - 2,5	250-2500	198 335 658
50	40	0,2 - 2,0	200-2000	198 335 659
50	40	0,3 - 3	300-3000	198 335 660
50	40	0,6 - 6	600-6000	198 335 661
63	50	0,6 - 6	600-6000	198 335 662
63	50	1 - 10	1000-10000	198 335 663
63	50	1,5 - 15	1500-15000	198 335 664
75	65	2 - 20	2000-20000	198 335 665
75	65	3 - 30	3000-30000	198 335 666
75	65	8 - 60	8000-60000	198 335 667

Special scale for type 335/350 Imp. GPM

d [mm]	DN [mm]	Scale range [gal/min]	Corresponds to water scale [l/h]	Code
32	25	0,183 - 1,83	50-500	198 335 670
32	25	0,366 - 3,66	100-1000	198 335 671
40	32	0,55 - 5,5	150-1500	198 335 672
40	32	0,916 - 9,16	250-2500	198 335 673
50	40	0,733 - 7,33	200-2000	198 335 674
50	40	1,09 - 10,9	300-3000	198 335 675
50	40	2,19 - 21,9	600-6000	198 335 676
63	50	2,2 - 22	600-6000	198 335 677
63	50	3,66 - 36,6	1000-10000	198 335 678
63	50	5,49 - 54,9	1500-15000	198 335 679
75	65	7,32 - 73,2	2000-20000	198 335 680
75	65	10,98 - 109,8	3000-30000	198 335 681
75	65	29,28 - 219,6	8000-60000	198 335 682

Special scale for type 335/350 US GPM

d [mm]	DN [mm]	Scale range [gal/min]	Corresponds to water scale [l/h]	Code
32	25	0,22 - 2,2	50-500	198 335 685
32	25	0,44 - 4,4	100-1000	198 335 686
40	32	0,66 - 6,6	150-1500	198 335 687
40	32	1,1 - 11	250-2500	198 335 688
50	40	0,66 - 6,6	200-2000	198 335 689
50	40	1,32 - 13,2	300-3000	198 335 690
50	40	2,64 - 26,4	600-6000	198 335 691
63	50	2,64 - 26,4	600-6000	198 335 692
63	50	4,40 - 44,02	1000-10000	198 335 693
63	50	6,60 - 66,04	1500-15000	198 335 694
75	65	8,80 - 88	2000-20000	198 335 695
75	65	13,20 - 132	3000-30000	198 335 696
75	65	35,2 - 264	8000-60000	198 335 697

Variable area flow meters

Special scale for type 335/350 Air/0bar/Nm³/h

d [mm]	DN [mm]	Scale range [m ³ /h]	Corresponds to water scale [l/h]	Code
32	25	1,5 - 14	50-500	198 350 655
32	25	2,5 - 29	100-1000	198 350 656
40	32	4 - 45	150-1500	198 350 657
40	32	7 - 79	250-2500	198 350 658
50	40	6 - 58	200-2000	198 350 659
50	40	9 - 108	300-3000	198 350 660
50	40	17 - 174	600-6000	198 350 661
63	50	17 - 175	600-6000	198 350 662
63	50	29 - 301	1000-10000	198 350 663
63	50	53 - 405	1500-15000	198 350 664
75	65	55 - 545	2000-20000	198 350 665
75	65	80 - 758	3000-30000	198 350 666
75	65	-	8000-60000	198 350 667

Special scale for type 335/350 HCl 30-33% l/h

d [mm]	DN [mm]	Scale range [l/h]	Corresponds to water scale [l/h]	Code
32	25	20 - 405	50-500	198 350 670
32	25	55 - 866	100-1000	198 350 671
40	32	90 - 1340	150-1500	198 350 672
40	32	165 - 2310	250-2500	198 350 673
50	40	115 - 1660	200-2000	198 350 674
50	40	190 - 3050	300-3000	198 350 675
50	40	420 - 4900	600-6000	198 350 676
63	50	430 - 5090	600-6000	198 350 677
63	50	750 - 9460	1000-10000	198 350 678
63	50	1415 - 11570	1500-15000	198 350 679
75	65	1500 - 17300	2000-20000	198 350 680
75	65	2175 - 24120	3000-30000	198 350 681
75	65	-	8000-60000	198 350 682

Special scale for type 335/350 NaOH 30% l/h

d [mm]	DN [mm]	Scale range [l/h]	Corresponds to water scale [l/h]	Code
32	25	4 - 226	50-500	198 350 685
32	25	15 - 600	100-1000	198 350 686
40	32	30 - 970	150-1500	198 350 687
40	32	70 - 1800	250-2500	198 350 688
50	40	35 - 1240	200-2000	198 350 689
50	40	75 - 2370	300-3000	198 350 690
50	40	230 - 4000	600-6000	198 350 691
63	50	240 - 470	600-6000	198 350 692
63	50	475 - 7340	1000-10000	198 350 693
63	50	1030 - 10330	1500-15000	198 350 694
75	65	915 - 11720	2000-20000	198 350 695
75	65	1195 - 16040	3000-30000	198 350 696
75	65	-	8000-60000	198 350 697

Variable area flow meters

Special scale for type 335/350 NaOH 50% l/h

d [mm]	DN [mm]	Scale range [l/h]	Corresponds to water scale [l/h]	Code
32	25	1 - 55	50-500	198 350 755
32	25	3 - 192	100-1000	198 350 756
40	32	6 - 365	150-1500	198 350 757
40	32	15 - 770	250-2500	198 350 758
50	40	8 - 520	200-2000	198 350 759
50	40	15 - 1170	300-3000	198 350 760
50	40	50 - 2270	600-6000	198 350 761
63	50	55 - 2300	600-6000	198 350 762
63	50	140 - 4340	1000-10000	198 350 763
63	50	420 - 5820	1500-15000	198 350 764
75	65	245 - 7590	2000-20000	198 350 765
75	65	400 - 11120	3000-30000	198 350 766
75	65	-	8000-60000	198 350 767

Special scale for short version Water l/h

Type	Scale range [l/h]	Code
SK 50 / 500	2,5 - 25	198 801 386
SK 51 / 510	5 - 50	198 801 387
SK 52 / 520	10 - 100	198 801 388
SK 60 / 600	8 - 80	198 801 389
SK 61 / 610	15 - 150	198 801 390
SK 62 / 620	20 - 200	198 801 391
SK 70 / 700	15 - 150	198 801 392
SK 71 / 710	30 - 300	198 801 393
SK 72 / 720	50 - 500	198 801 394
SK 73 / 730	100 - 1000	198 801 395

Special scale for short version US GPM

Type	Scale range [gal/min]	Code
SK 50 / 500	0,01 - 0,11	198 801 961
SK 51 / 510	0,02 - 0,22	198 801 962
SK 52 / 520	0,04 - 0,44	198 801 963
SK 60 / 600	0,03 - 0,35	198 801 964
SK 61 / 610	0,06 - 0,66	198 801 965
SK 62 / 620	0,08 - 0,88	198 801 966
SK 70 / 700	0,06 - 0,66	198 801 967
SK 71 / 710	0,13 - 1,32	198 801 968
SK 72 / 720	0,22 - 2,20	198 801 969
SK 73 / 730	0,44 - 4,40	198 801 970

Special scale for short version Air/0bar/Nm3/h

Type	Scale range [m³/h]	Code
SK 50 / 500	0,5 - 0,95	198 801 308
SK 51 / 510	0,5 - 1,9	198 801 309
SK 52 / 520	0,8 - 3,0	198 801 310
SK 60 / 600	0,6 - 2,8	198 801 311
SK 61 / 610	1,4 - 5,6	198 801 312
SK 62 / 620	1,5 - 7,0	198 801 313
SK 70 / 700	1,0 - 6,5	198 801 314
SK 71 / 710	1,5 - 11,0	198 801 315
SK 72 / 720	3,0 - 18,0	198 801 316
SK 73 / 730	6,0 - 30,0	198 801 317

Variable area flow meters

Special scale for short version HCl 30 - 33% l/h

Type	Scale range [l/h]	Code	
SK 50 / 500	2,5 - 20	198 806 511	
SK 51 / 510	5 - 40	198 806 512	
SK 52 / 520	10 - 85	198 806 513	
SK 60 / 600	8 - 70	198 806 514	
SK 61 / 610	15 - 125	198 806 515	
SK 62 / 620	20 - 170	198 806 516	
SK 70 / 700	5 - 125	198 806 517	
SK 71 / 710	30 - 260	198 806 518	
SK 72 / 720	50 - 425	198 806 519	
SK 73 / 730	100 - 850	198 806 520	

Special scale for short version NaOH 30% l/h

Type	Scale range [l/h]	Code	
SK 50 / 500	0.2 - 5	198 806 521	
SK 51 / 510	1 - 14	198 806 522	
SK 52 / 520	3 - 35	198 806 523	
SK 60 / 600	2 - 23	198 806 524	
SK 61 / 610	3 - 55	198 806 525	
SK 62 / 620	5 - 80	198 806 526	
SK 70 / 700	3 - 55	198 806 527	
SK 71 / 710	6 - 130	198 806 528	
SK 72 / 720	10 - 250	198 806 529	
SK 73 / 730	40 - 590	198 806 530	

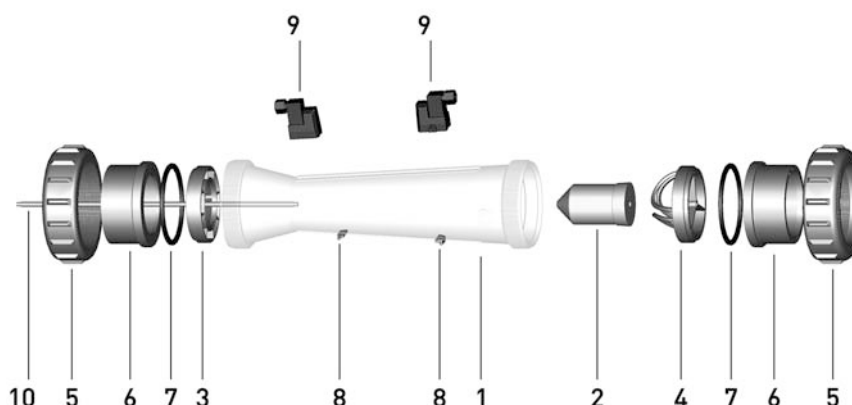
Special scale for short version NaOH 50% l/h

Type	Scale range [l/h]	Code	
SK 60 / 600	0,2 - 3,5	198 806 531	
SK 61 / 610	0,5 - 10	198 806 532	
SK 62 / 620	0,5 - 16	198 806 533	
SK 70 / 700	0,5 - 11	198 806 534	
SK 71 / 710	1 - 33	198 806 535	
SK 72 / 720	2 - 80	198 806 536	
SK 73 / 730	10 - 220	198 806 537	

Variable area flow meters

Spare parts

Variable area flow meter type 335



Taper tube with water scale (1)

- * PVC-U transparent >DN40 available from Sept. 2009



Scale range [l/h]	d [mm]	Inch	DN [mm]	PVC-U transparent Code	Polyamid Code	Polysulfon Code
50 - 500	32	1	25	198 335 055	198 335 070	198 335 085
100 - 1000	32	1	25	198 335 056	198 335 071	198 335 086
150 - 1500	40	1 ¼	32	198 335 057	198 335 072	198 335 087
250 - 2500	40	1 ¼	32	198 335 058	198 335 073	198 335 088
200 - 2000	50	1 ½	40	198 335 059	198 335 074	198 335 089
300 - 3000	50	1 ½	40	198 335 060	198 335 075	198 335 090
600 - 6000	50	1 ½	40	198 335 061	198 335 076	198 335 091
600 - 6000	63	2	50	198335062*	198 335 077	198 335 092
1000 - 10000	63	2	50	198335063*	198 335 078	198 335 093
1500 - 15000	63	2	50	198335064*	198 335 079	198 335 094
2000 - 20000	75	2 ½	65	198335065*	198 335 080	198 335 095
3000 - 30000	75	2 ½	65	198335066*	198 335 081	198 335 096
8000 - 60000	75	2 ½	65	198335067*	198 335 082	198 335 097

Taper tube without scale (1)

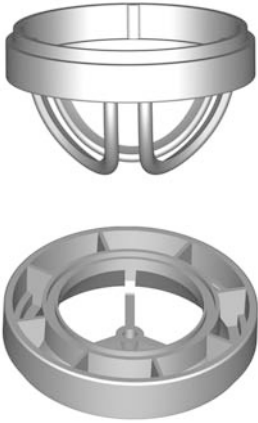
- * PVC-U transparent >DN40 available from Sept. 2009



Scale range [l/h]	d [mm]	Inch	DN [mm]	PVC-U transparent Code	Polyamid Code	Polysulfon Code
50 - 500	32	1	25	198 335 255	198 335 270	198 335 285
100 - 1000	32	1	25	198 335 256	198 335 271	198 335 286
150 - 1500	40	1 ¼	32	198 335 257	198 335 272	198 335 287
250 - 2500	40	1 ¼	32	198 335 258	198 335 273	198 335 288
200 - 2000	50	1 ½	40	198 335 259	198 335 274	198 335 289
300 - 3000	50	1 ½	40	198 335 260	198 335 275	198 335 290
600 - 6000	50	1 ½	40	198 335 261	198 335 276	198 335 291
600 - 6000	63	2	50	198335262*	198 335 277	198 335 292
1000 - 10000	63	2	50	198335263*	198 335 278	198 335 293
1500 - 15000	63	2	50	198335264*	198 335 279	198 335 294
2000 - 20000	75	2 ½	65	198335265*	198 335 280	198 335 295
3000 - 30000	75	2 ½	65	198335266*	198 335 281	198 335 296
8000 - 60000	75	2 ½	65	198335267*	198 335 282	198 335 297

Variable area flow meters

Insert PVDF (3,4)



Scale range [l/h]	d [mm]	Inch	DN [mm]	top (4) Code	bottom (3) Code
50 - 500	32	1	25	198 335 970	198 335 977
100 - 1000	32	1	25	198 335 970	198 335 977
150 - 1500	40	1 ¼	32	198 335 971	198 335 978
250 - 2500	40	1 ¼	32	198 335 971	198 335 978
200 - 2000	50	1 ½	40	198 335 972	198 335 979
300 - 3000	50	1 ½	40	198 335 972	198 335 979
600 - 6000	50	1 ½	40	198 335 972	198 335 979
600 - 6000	63	2	50	198 335 973	198 335 980
1000 - 10000	63	2	50	198 335 973	198 335 980
1500 - 15000	63	2	50	198 335 974	198 335 981
2000 - 20000	75	2 ½	65	198 335 975	198 335 981
3000 - 30000	75	2 ½	65	198 335 975	198 335 981
8000 - 60000	75	2 ½	65	198 335 975	198 335 981

Float PVDF (2)



Scale range [l/h]	d [mm]	Inch	DN [mm]	Without magnet Code	With magnet (bistabil) Code
50 - 500	32	1	25	198 335 455	198 335 470
100 - 1000	32	1	25	198 335 455	198 335 470
150 - 1500	40	1 ¼	32	198 335 455	198 335 470
250 - 2500	40	1 ¼	32	198 335 455	198 335 470
200 - 2000	50	1 ½	40	198 335 456	198 335 471
300 - 3000	50	1 ½	40	198 335 457	198 335 471
600 - 6000	50	1 ½	40	198 335 457	198 335 471
600 - 6000	63	2	50	198 335 457	198 335 471
1000 - 10000	63	2	50	198 335 457	198 335 471
1500 - 15000	63	2	50	198 335 458	198 335 472
2000 - 20000	75	2 ½	65	198 335 459	198 335 473
3000 - 30000	75	2 ½	65	198 335 459	198 335 473
8000 - 60000	75	2 ½	65	198 335 460	198 335 474

Guiding rod PEEK (10)



Model:

- Only for DN50 (1'500 - 15'000 l/h) and DN65 (all metering ranges)

Scale range [l/h]	d [mm]	Inch	DN [mm]	Guiding rod Code
1500 - 15000	63	2	50	198 335 985
2000 - 20000	75	2 ½	65	198 335 985
3000 - 30000	75	2 ½	65	198 335 985
8000 - 80000	75	2 ½	65	198 335 985

Insert guiding rod PVDF (for 10)

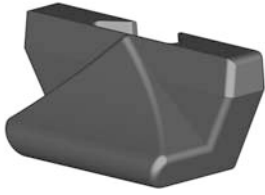


Model:

- Only for DN50 (1'500 - 15'000 l/h) and DN65 (all metering ranges)

Scale range [l/h]	d [mm]	Inch	DN [mm]	Insert guiding rod Code
1500 - 15000	63	2	50	198 335 986
2000 - 20000	75	2 ½	65	198 335 987
3000 - 30000	75	2 ½	65	198 335 987
8000 - 80000	75	2 ½	65	198 335 987

Variable area flow meters

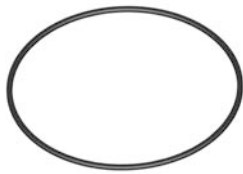


Flow value indicator PS (8)

Model:

- For all dimensions type 335/350

d [mm]	Inch	DN [mm]	Flow value indicator Code	
32	1	25	198 335 990	
40	1 ¼	32	198 335 990	
50	1 ½	40	198 335 990	
63	2	50	198 335 990	
75	2 ½	65	198 335 990	



O-rings (7)

d [mm]	Inch	DN [mm]	EPDM Code	FPM Code	
32	1	25	748 410 008	749 410 008	
40	1 ¼	32	748 410 009	749 410 009	
50	1 ½	40	748 410 010	749 410 010	
63	2	50	748 410 011	749 410 011	
75	2 ½	65	748 410 014	749 410 014	



Union nut (5)

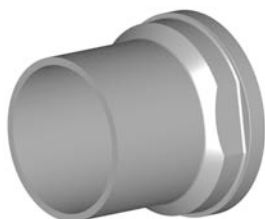
PVDF union nut not useable for the special version with taper tube in PVDF

d [mm]	Inch	DN [mm]	PVC-U Code	PVC-C Code	ABS Code	PP-H Code	PVDF Code	
32	1	25	721 690 008	723 690 008	729 690 408	727 690 408	735 690 408	
40	1 ¼	32	721 690 009	723 690 009	729 690 409	727 690 409	735 690 409	
50	1 ½	40	721 690 010	723 690 010	729 690 410	727 690 410	735 690 410	
63	2	50	721 690 011	723 690 011	729 690 411	727 690 411	735 690 411	
75	2 ½	65	198 806 423	-	-	198 806 421	198 806 422	



Union end / Socket (6)

d [mm]	Inch	DN [mm]	PVC-U Code	PVC-C Code	ABS Code	PP-H Code	PVDF Code	
32	1	25	721 600 108	723 600 108	729 600 108	727 600 108	735 600 108	
40	1 ¼	32	721 600 109	723 600 109	729 600 109	727 600 109	735 600 109	
50	1 ½	40	721 600 110	723 600 110	729 600 110	727 600 110	735 600 110	
63	2	50	721 600 111	723 600 111	729 600 111	727 600 111	735 600 111	
75	2 ½	65	721 600 112	723 600 112	729 600 162	700 253 866	-	

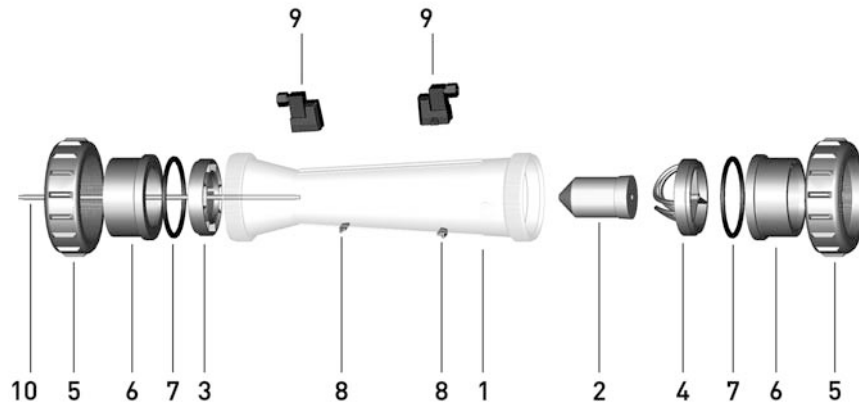


Union end / Spigot (6)

d [mm]	Inch	DN [mm]	PP-H Code	PVDF Code	
32	1	25	727 608 508	735 608 608	
40	1 ¼	32	727 608 509	735 608 609	
50	1 ½	40	727 608 510	735 608 610	
63	2	50	727 608 511	735 608 611	
75	2 ½	65	700 256 401	175 483 013	

Variable area flow meters

Variable area flow meter type 350



Taper tube with water scale (1)

- * PVC-U transparent >DN40 available from Sept. 2009



Scale range [l/h]	d [mm]	Inch	DN [mm]	PVC-U transparent Code	Polyamid Code	Polysulfon Code
50 - 500	32	1	25	198 350 055	198 350 070	198 350 085
100 - 1000	32	1	25	198 350 056	198 350 071	198 350 086
150 - 1500	40	1 ¼	32	198 350 057	198 350 072	198 350 087
250 - 2500	40	1 ¼	32	198 350 058	198 350 073	198 350 088
200 - 2000	50	1 ½	40	198 350 059	198 350 074	198 350 089
300 - 3000	50	1 ½	40	198 350 060	198 350 075	198 350 090
600 - 6000	50	1 ½	40	198 350 061	198 350 076	198 350 091
600 - 6000	63	2	50	198350062*	198 350 077	198 350 092
1000 - 10000	63	2	50	198350063*	198 350 078	198 350 093
1500 - 15000	63	2	50	198350064*	198 350 079	198 350 094
2000 - 20000	75	2 ½	65	198350065*	198 350 080	198 350 095
3000 - 30000	75	2 ½	65	198350066*	198 350 081	198 350 096
8000 - 60000	75	2 ½	65	198350067*	198 350 082	198 350 097

Taper tube without scale (1)

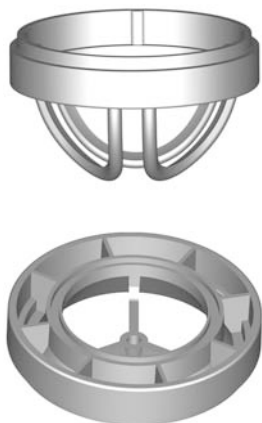
- * PVC-U transparent >DN40 available from Sept. 2009



Scale range [l/h]	d [mm]	Inch	DN [mm]	PVC-U transparent Code	Polyamid Code	Polysulfon Code
50 - 500	32	1	25	198 350 255	198 350 270	198 350 285
100 - 1000	32	1	25	198 350 256	198 350 271	198 350 286
150 - 1500	40	1 ¼	32	198 350 257	198 350 272	198 350 287
250 - 2500	40	1 ¼	32	198 350 258	198 350 273	198 350 288
200 - 2000	50	1 ½	40	198 350 259	198 350 274	198 350 289
300 - 3000	50	1 ½	40	198 350 260	198 350 275	198 350 290
600 - 6000	50	1 ½	40	198 350 261	198 350 276	198 350 291
600 - 6000	63	2	50	198350262*	198 350 277	198 350 292
1000 - 10000	63	2	50	198350263*	198 350 278	198 350 293
1500 - 15000	63	2	50	198350264*	198 350 279	198 350 294
2000 - 20000	75	2 ½	65	198350265*	198 350 280	198 350 295
3000 - 30000	75	2 ½	65	198350266*	198 350 281	198 350 296
8000 - 60000	75	2 ½	65	198350267*	198 350 282	198 350 297

Variable area flow meters

Insert PVDF (3,4)



Scale range [l/h]	d [mm]	Inch	DN [mm]	top (4) Code	bottom (3) Code
50 - 500	32	1	25	198 335 970	198 335 977
100 - 1000	32	1	25	198 335 970	198 335 977
150 - 1500	40	1 ¼	32	198 335 971	198 335 978
250 - 2500	40	1 ¼	32	198 335 971	198 335 978
200 - 2000	50	1 ½	40	198 335 972	198 335 979
300 - 3000	50	1 ½	40	198 335 972	198 335 979
600 - 6000	50	1 ½	40	198 335 972	198 335 979
600 - 6000	63	2	50	198 335 973	198 335 980
1000 - 10000	63	2	50	198 335 973	198 335 980
1500 - 15000	63	2	50	198 335 974	198 335 981
2000 - 20000	75	2 ½	65	198 335 975	198 335 981
3000 - 30000	75	2 ½	65	198 335 975	198 335 981
8000 - 60000	75	2 ½	65	198 335 975	198 335 981

Float PVDF (2)



Scale range [l/h]	d [mm]	Inch	DN [mm]	Without magnet Code	With magnet Code
50 - 500	32	1	25	198 335 455	198 335 470
100 - 1000	32	1	25	198 335 455	198 335 470
150 - 1500	40	1 ¼	32	198 335 455	198 335 470
250 - 2500	40	1 ¼	32	198 335 455	198 335 470
200 - 2000	50	1 ½	40	198 335 456	198 335 471
300 - 3000	50	1 ½	40	198 335 457	198 335 471
600 - 6000	50	1 ½	40	198 335 457	198 335 471
600 - 6000	63	2	50	198 335 457	198 335 471
1000 - 10000	63	2	50	198 335 457	198 335 471
1500 - 15000	63	2	50	198 335 458	198 335 472
2000 - 20000	75	2 ½	65	198 335 459	198 335 473
3000 - 30000	75	2 ½	65	198 335 459	198 335 473
8000 - 60000	75	2 ½	65	198 335 460	198 335 474

Guiding rod PEEK (10)



Model:

- Only for DN50 (1'500 - 15'000 l/h) and DN65 (all metering ranges)

Scale range [l/h]	d [mm]	Inch	DN [mm]	Guiding rod Code
1500 - 15000	63	2	50	198 350 980
2000 - 20000	75	2 ½	65	198 350 980
3000 - 30000	75	2 ½	65	198 350 980
8000 - 60000	75	2 ½	65	198 350 980

Insert guiding rod PVDF (for 10)

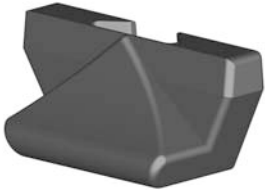


Model:

- Only for DN50 (1'500 - 15'000 l/h) and DN65 (all metering ranges)

Scale range [l/h]	d [mm]	Inch	DN [mm]	Insert guiding rod Code
1500 - 15000	63	2	50	198 335 986
2000 - 20000	75	2 ½	65	198 335 987
3000 - 30000	75	2 ½	65	198 335 987
8000 - 60000	75	2 ½	65	198 335 987

Variable area flow meters

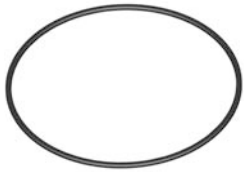


Flow value indicator PS (8)

Model:

- For all dimensions type 335/350

d [mm]	Inch	DN [mm]	Flow value indicator Code
32	1	25	198 335 990
40	1 ¼	32	198 335 990
50	1 ½	40	198 335 990
63	2	50	198 335 990
75	2 ½	65	198 335 990



O-rings (7)

d [mm]	Inch	DN [mm]	EPDM Code	FPM Code
32	1	25	748 410 008	749 410 008
40	1 ¼	32	748 410 009	749 410 009
50	1 ½	40	748 410 010	749 410 010
63	2	50	748 410 011	749 410 011
75	2 ½	65	748 410 014	749 410 014



Union nut (5)

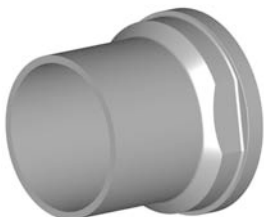
PVDF union nut not useable for the special version with taper tube in PVDF

d [mm]	Inch	DN [mm]	PVC-U Code	PVC-C Code	ABS Code	PP-H Code	PVDF Code
32	1	25	721 690 008	723 690 008	729 690 408	727 690 408	735 690 408
40	1 ¼	32	721 690 009	723 690 009	729 690 409	727 690 409	735 690 409
50	1 ½	40	721 690 010	723 690 010	729 690 410	727 690 410	735 690 410
63	2	50	721 690 011	723 690 011	729 690 411	727 690 411	735 690 411
75	2 ½	65	198 806 423	-	-	198 806 421	198 806 422



Union end / Socket (6)

d [mm]	Inch	DN [mm]	PVC-U Code	PVC-C Code	ABS Code	PP-H Code	PVDF Code
32	1	25	721 600 108	723 600 108	729 600 108	727 600 108	735 600 108
40	1 ¼	32	721 600 109	723 600 109	729 600 109	727 600 109	735 600 109
50	1 ½	40	721 600 110	723 600 110	729 600 110	727 600 110	735 600 110
63	2	50	721 600 111	723 600 111	729 600 111	727 600 111	735 600 111
75	2 ½	65	721 600 112	723 600 112	729 600 162	700 253 866	-



Union end / Spigot (6)

d [mm]	Inch	DN [mm]	PP-H Code	PVDF Code
32	1	25	727 608 508	735 608 608
40	1 ¼	32	727 608 509	735 608 609
50	1 ½	40	727 608 510	735 608 610
63	2	50	727 608 511	735 608 611
75	2 ½	65	700 256 401	175 483 013

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 bistable

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

Page



Control ball valve

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Control ball valve type 546 linear

Control ball valve



Linear ball valve type 546 in PVC-U

DN 15-50

With mounting inserts

Model:

- For easy installation and removal
- z-dimension, valve end and union nut are **not compatible** with type 346 (DN10/15-50) resp. type 370 (DN65-100)
- Ball seals PTFE
- Integrated stainless steel mounting inserts
- Lockable hand lever with ratchet settings
- Linear Ball available in DN15, DN25 and DN50
- Linear Ball makes a linear flow characteristic possible
- Opening scale printed on multifunctional modul

Option:

- Individual configuration of the valve (see diagram)

d [mm]	DN [mm]	EPDM Code	FPM Code	
20	15	800 017 580	800 026 280	
32	25	800 015 100	800 015 101	
63	50	800 026 279	800 026 281	



Linear ball valve type 546 in PP

DN 15-50

With mounting inserts

Model:

- For easy installation and removal
- z-dimension, valve end and union nut are **not compatible** with type 346 (DN10/15-50) resp. type 370 (DN65-100)
- Ball seals PTFE
- Integrated stainless steel mounting inserts
- Lockable hand lever with ratchet settings
- Linear Ball available in DN15, DN25 and DN50
- Linear Ball makes a linear flow characteristic possible
- Opening scale printed on multifunctional modul

Option:

- Individual configuration of the valve (see diagram)

d [mm]	DN [mm]	EPDM Code	FPM Code	
20	15	800 041 451	800 029 743	
32	25	800 032 193	800 041 452	
63	50	800 028 465	800 024 489	

Control ball valve type 546 linear



Linear ball valve type 546 in PVDF DN 15-50 With mounting inserts

Model:

- For easy installation and removal
- z-dimension, valve end and union nut are **not compatible** with type 346 (DN10/15-50) resp. type 370 (DN65-100)
- Ball seals PTFE
- Integrated stainless steel mounting inserts
- Lockable hand lever with ratchet settings
- Linear Ball available in DN15, DN25 and DN50
- Linear Ball makes a linear flow characteristic possible
- Opening scale printed on multifunctional modul

Option:

- Individual configuration of the valve (see diagram)

d [mm]	DN [mm]	FPM Code	
20	15	800 034 953	
32	25	800 028 253	
63	50	800 041 454	

Product Range

Selection

Materials	PVC-U	PP	PVDF	
Type of connection				
Socket	•	•	•	
Spigot	•	•	•	
Seal EPDM	•	•	•	
FPM	•	•	•	

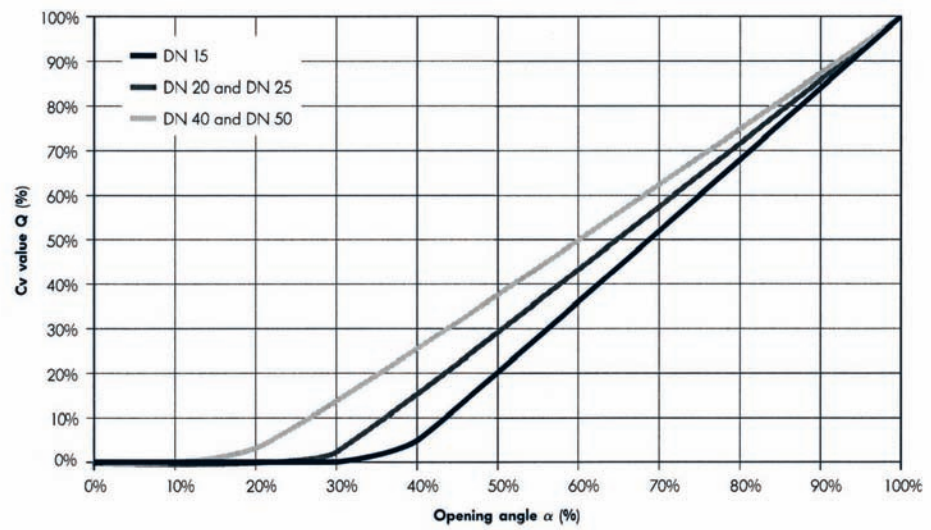
Type of Actuator

Type M = with manual lever


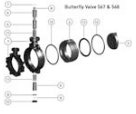
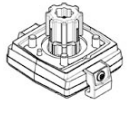






Type P = with pneumatic actuator FC with DSR 201 positioner

Type E = with electric actuator EA 21 with PE 25 positioner

Flow Diagram



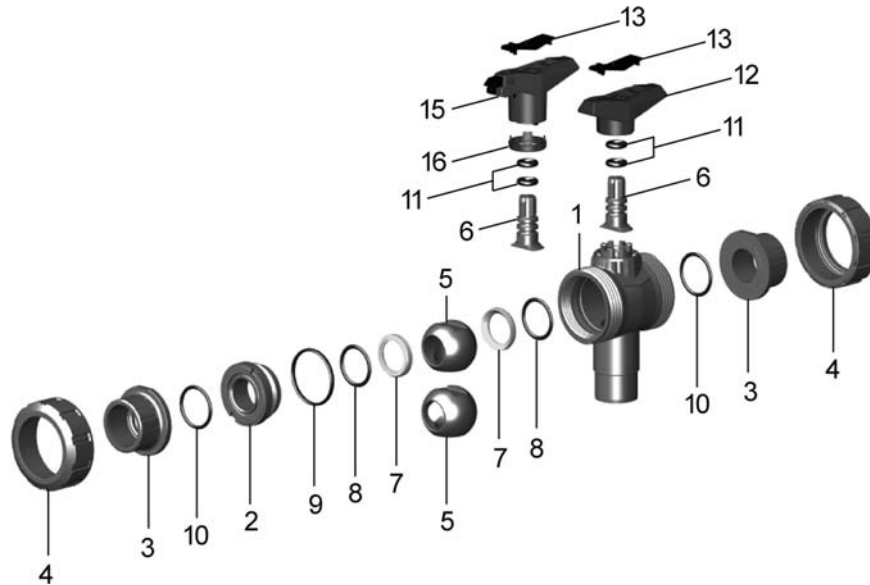
Accessories for actuated valves

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	Assembly parts-intermediate kits	398
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Accessories for actuated valves

Spare parts to ball valves

Spare parts ball valve type 543 vertical



Central part L-port

Model:

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

d [mm]	Inch	DN [mm]	PVC-U EPDM Code	PVC-U FPM Code	ABS EPDM Code
16	3/8	10	161 488 042	161 488 052	169 481 222
20	3/8	15	161 488 042	161 488 052	169 481 222
25	3/4	20	161 488 043	161 488 053	169 481 223
32	1	25	161 488 044	161 488 054	169 481 224
40	1 1/4	32	161 488 045	161 488 055	169 481 225
50	1 1/2	40	161 488 046	161 488 056	169 481 226
63	2	50	161 488 047	161 488 057	169 481 227



Central part diverter ball

Model:

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

d [mm]	Inch	DN [mm]	PVC-U EPDM Code	PVC-U FPM Code	ABS EPDM Code
16	3/8	10	161 488 062	161 488 072	169 481 232
20	1/2	15	161 488 062	161 488 072	169 481 232
25	3/4	20	161 488 063	161 488 073	169 481 233
32	1	25	161 488 064	161 488 074	169 481 234
40	1 1/4	32	161 488 065	161 488 075	169 481 235
50	1 1/2	40	161 488 066	161 488 076	169 481 236
63	2	50	161 488 067	161 488 077	169 481 237

Accessories for actuated valves

Ball set L-port

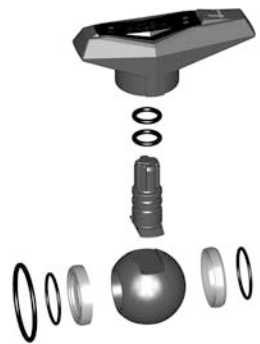


Model:

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

d [mm]	Inch	DN [mm]	PVC-U EPDM Code	PVC-U FPM Code	ABS EPDM Code	
16	3/8	10	161 488 202	161 488 212	169 481 302	
20	1/2	15	161 488 202	161 488 212	169 481 302	
25	3/4	20	161 488 203	161 488 213	169 481 303	
32	1	25	161 488 204	161 488 214	169 481 304	
40	1 1/4	32	161 488 205	161 488 215	169 481 305	
50	1 1/2	40	161 488 206	161 488 216	169 481 306	
63	2	50	161 488 207	161 488 217	169 481 307	

Ball set diverter ball



Model:

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

d [mm]	Inch	DN [mm]	PVC-U EPDM Code	PVC-U FPM Code	ABS EPDM Code	
16	3/8	10	161 488 222	161 488 232	169 481 312	
20	1/2	15	161 488 222	161 488 232	169 481 312	
25	3/4	20	161 488 223	161 488 233	169 481 313	
32	1	25	161 488 224	161 488 234	169 481 314	
40	1 1/4	32	161 488 225	161 488 235	169 481 315	
50	1 1/2	40	161 488 226	161 488 236	169 481 316	
63	2	50	161 488 227	161 488 237	169 481 317	

Lever



d [mm]	Inch	DN [mm]	Standard lever L-port red Code	Standard lever diverter ball red Code	Multifunctional-lever L-port red Code	Multifunctional-lever diverter ball red Code	
16	3/8	10	167 484 688	167 484 788	167 484 642	167 484 742	
20	1/2	15	167 484 688	167 484 788	167 484 642	167 484 742	
25	3/4	20	167 484 689	167 484 789	167 484 643	167 484 743	
32	1	25	167 484 690	167 484 790	167 484 644	167 484 744	
40	1 1/4	32	167 484 691	167 484 791	167 484 645	167 484 745	
50	1 1/2	40	167 484 692	167 484 792	167 484 646	167 484 746	
63	2	50	167 484 693	167 484 793	167 484 647	167 484 747	

Face seal



d [mm]	Inch	DN [mm]	EPDM Code	FPM Code	
16	3/8	10	748 410 059	749 410 059	
20	1/2	15	748 410 059	749 410 059	
25	3/4	20	748 410 106	749 410 106	
32	1	25	748 410 151	749 410 151	
40	1 1/4	32	748 410 062	749 410 062	
50	1 1/2	40	748 410 003	749 410 003	
63	2	50	748 410 231	749 410 231	

Accessories for actuated valves

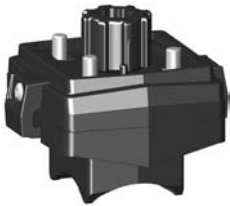


Seal set

Model:

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

d [mm]	Inch	DN [mm]	EPDM Code	FPM Code
16	3/8	10	161 486 400	161 486 410
20	1/2	15	161 486 400	161 486 410
25	3/4	20	161 486 401	161 486 411
32	1	25	161 486 402	161 486 412
40	1 1/4	32	161 486 403	161 486 413
50	1 1/2	40	161 486 404	161 486 414
63	2	50	161 486 405	161 486 415



Assembly kit

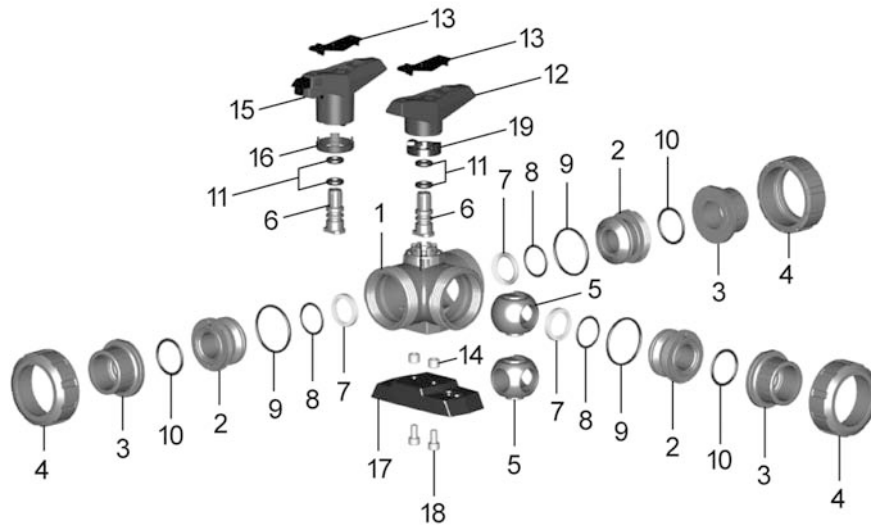
Model:

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

d [mm]	Inch [inch]	DN [mm]	Code
16 - 20	3/8 - 1/2	10 - 15	167 484 945
25 - 32	3/4 - 1	20 - 25	167 484 946
40 - 50	1 1/4 - 1 1/2	32 - 40	167 484 947
63	2	50	167 484 948

Accessories for actuated valves

Spare parts ball valve type 543 horizontal



Central part L-port

Model:

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

d [mm]	Inch	DN [mm]	PVC-U EPDM Code	PVC-U FPM Code	PVC-C EPDM Code	PVC-C FPM Code	ABS EPDM Code	
16	3/8	10	161 488 002	161 488 012	163 481 902	163 481 912	169 481 202	
20	1/2	15	161 488 002	161 488 012	163 481 902	163 481 912	169 481 202	
25	3/4	20	161 488 003	161 488 013	163 481 903	163 481 913	169 481 203	
32	1	25	161 488 004	161 488 014	163 481 904	163 481 914	169 481 204	
40	1 1/4	32	161 488 005	161 488 015	163 481 905	163 481 915	169 481 205	
50	1 1/2	40	161 488 006	161 488 016	163 481 906	163 481 916	169 481 206	
63	2	50	161 488 007	161 488 017	163 481 907	163 481 917	169 481 207	

d [mm]	Inch	DN [mm]	PP-H EPDM Code	PP-H FPM Code	PVDF FPM Code	
16	3/8	10	167 484 802	167 484 812	175 483 602	
20	1/2	15	167 484 802	167 484 812	175 483 602	
25	3/4	20	167 484 803	167 484 813	175 483 603	
32	1	25	167 484 804	167 484 814	175 483 604	
40	1 1/4	32	167 484 805	167 484 815	175 483 605	
50	1 1/2	40	167 484 806	167 484 816	175 483 606	
63	2	50	167 484 807	167 484 817	175 483 607	

Accessories for actuated valves



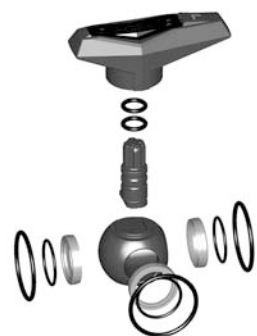
Central part T-port

Model:

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

d [mm]	Inch	DN [mm]	PVC-U EPDM Code	PVC-U FPM Code	PVC-C EPDM Code	PVC-C FPM Code	ABS EPDM Code
16	3/8	10	161 488 022	161 488 032	163 481 922	163 481 932	169 481 212
20	1/2	15	161 488 022	161 488 032	163 481 922	163 481 932	169 481 212
25	3/4	20	161 488 023	161 488 033	163 481 923	163 481 933	169 481 213
32	1	25	161 488 024	161 488 034	163 481 924	163 481 934	169 481 214
40	1 1/4	32	161 488 025	161 488 035	163 481 925	163 481 935	169 481 215
50	1 1/2	40	161 488 026	161 488 036	163 481 926	163 481 936	169 481 216
63	2	50	161 488 027	161 488 037	163 481 927	163 481 937	169 481 217

d [mm]	Inch	DN [mm]	PP-H EPDM Code	PP-H FPM Code	PVDF FPM Code
16	3/8	10	167 484 822	167 484 832	175 483 612
20	1/2	15	167 484 822	167 484 832	175 483 612
25	3/4	20	167 484 823	167 484 833	175 483 613
32	1	25	167 484 824	167 484 834	175 483 614
40	1 1/4	32	167 484 825	167 484 835	175 483 615
50	1 1/2	40	167 484 826	167 484 836	175 483 616
63	2	50	167 484 827	167 484 837	175 483 617



Ball set L-port

Model:

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

d [mm]	Inch	DN [mm]	PVC-U EPDM Code	PVC-U FPM Code	PVC-C EPDM Code	PVC-C FPM Code	ABS EPDM Code
16	3/8	10	161 488 162	161 488 172	163 481 982	163 481 992	169 481 282
20	1/2	15	161 488 162	161 488 172	163 481 982	163 481 992	169 481 282
25	3/4	20	161 488 163	161 488 173	163 481 983	163 481 993	169 481 283
32	1	25	161 488 164	161 488 174	163 481 984	163 481 994	169 481 284
40	1 1/4	32	161 488 165	161 488 175	163 481 985	163 481 995	169 481 285
50	1 1/2	40	161 488 166	161 488 176	163 481 986	163 481 996	169 481 286
63	2	50	161 488 167	161 488 177	163 481 987	163 481 997	169 481 287

d [mm]	Inch	DN [mm]	PP-H EPDM Code	PP-H FPM Code	PVDF FPM Code
16	3/8	10	167 484 882	167 484 892	175 483 642
20	1/2	15	167 484 882	167 484 892	175 483 642
25	3/4	20	167 484 883	167 484 893	175 483 643
32	1	25	167 484 884	167 484 894	175 483 644
40	1 1/4	32	167 484 885	167 484 895	175 483 645
50	1 1/2	40	167 484 886	167 484 896	175 483 646
63	2	50	167 484 887	167 484 897	175 483 647

Accessories for actuated valves

Ball set T-port



Model:

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

d [mm]	Inch	DN [mm]	PVC-U EPDM Code	PVC-U FPM Code	PVC-C EPDM Code	PVC-C FPM Code	ABS EPDM Code
16	3/8	10	161 488 182	161 488 192	163 482 002	163 482 012	169 481 292
20	1/2	15	161 488 182	161 488 192	163 482 002	163 482 012	169 481 292
25	3/4	20	161 488 183	161 488 193	163 482 003	163 482 013	169 481 293
32	1	25	161 488 184	161 488 194	163 482 004	163 482 014	169 481 294
40	1 1/4	32	161 488 185	161 488 195	163 482 005	163 482 015	169 481 295
50	1 1/2	40	161 488 186	161 488 196	163 482 006	163 482 016	169 481 296
63	2	50	161 488 187	161 488 197	163 482 007	163 482 017	169 481 297

d [mm]	Inch	DN [mm]	PP-H EPDM Code	PP-H FPM Code	PVDF FPM Code
16	3/8	10	167 484 902	167 484 912	175 483 652
20	1/2	15	167 484 902	167 484 912	175 483 652
25	3/4	20	167 484 903	167 484 913	175 483 653
32	1	25	167 484 904	167 484 914	175 483 654
40	1 1/4	32	167 484 905	167 484 915	175 483 655
50	1 1/2	40	167 484 906	167 484 916	175 483 656
63	2	50	167 484 907	167 484 917	175 483 657

Lever



d [mm]	Inch	DN [mm]	Standard lever L-port red Code	Standard lever L-port black Code	Standard lever T-port red Code	Standard lever T-port black Code
16	3/8	10	167 484 488	167 484 376	167 484 588	167 484 576
20	1/2	15	167 484 488	167 484 376	167 484 588	167 484 576
25	3/4	20	167 484 489	167 484 377	167 484 589	167 484 577
32	1	25	167 484 490	167 484 378	167 484 590	167 484 578
40	1 1/4	32	167 484 491	167 484 379	167 484 591	167 484 579
50	1 1/2	40	167 484 492	167 484 380	167 484 592	167 484 580
63	2	50	167 484 493	167 484 381	167 484 593	167 484 581

d [mm]	Inch	DN [mm]	Multifunctional-lever L-port red Code	Multifunctional-lever T-port red Code
16	3/8	10	167 484 442	167 484 542
20	1/2	15	167 484 442	167 484 542
25	3/4	20	167 484 443	167 484 543
32	1	25	167 484 444	167 484 544
40	1 1/4	32	167 484 445	167 484 545
50	1 1/2	40	167 484 446	167 484 546
63	2	50	167 484 447	167 484 547

Face seal



d [mm]	Inch	DN [mm]	EPDM Code	FPM Code
16	3/8	10	748 410 059	749 410 059
20	1/2	15	748 410 059	749 410 059
25	3/4	20	748 410 106	749 410 106
32	1	25	748 410 151	749 410 151
40	1 1/4	32	748 410 062	749 410 062
50	1 1/2	40	748 410 003	749 410 003
63	2	50	748 410 231	749 410 231

Accessories for actuated valves



Seal set

Model:

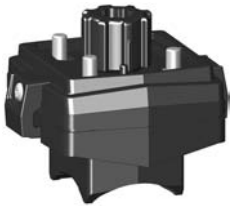
- Seal set consisting of: backing-, body-, face- and stem seal (8-11)

d [mm]	Inch	DN [mm]	EPDM Code	FPM Code
16	3/8	10	161 488 242	161 488 248
20	1/2	15	161 488 242	161 488 248
25	3/4	20	161 488 243	161 488 249
32	1	25	161 488 244	161 488 250
40	1 1/4	32	161 488 245	161 488 251
50	1 1/2	40	161 488 246	161 488 252
63	2	50	161 488 247	161 488 253



Turn limiter 90°

d [mm]	Inch	DN [mm]	Code
16	3/8	10	167 482 479
20	1/2	15	167 482 479
25	3/4	20	167 482 480
32	1	25	167 482 480
40	1 1/4	32	167 482 481
50	1 1/2	40	167 482 481
63	2	50	167 482 482



Assembly kit

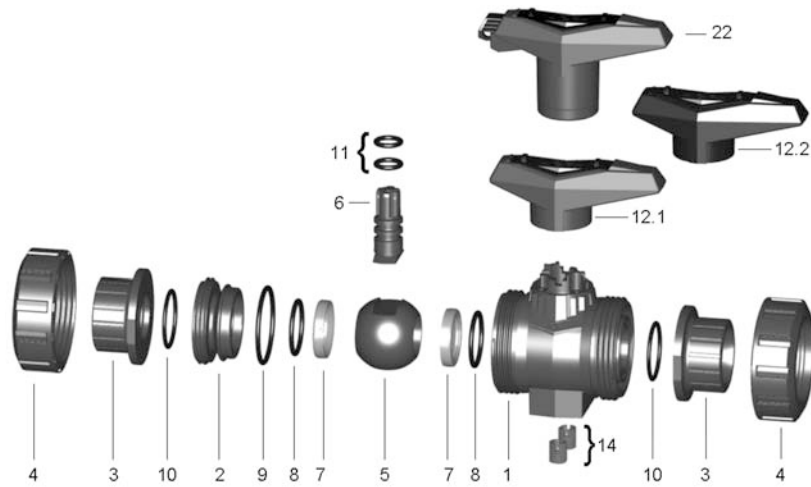
Model:

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

d [mm]	Inch [inch]	DN [mm]	Code
16 - 20	3/8 - 1/2	10 - 15	167 484 941
25 - 32	3/4 - 1	20 - 25	167 484 942
40 - 50	1 1/4 - 1 1/2	32 - 40	167 484 943
63	2	50	167 484 944

Accessories for actuated valves

Spare parts ball valve type 546



Central part

Model:

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

d [mm]	Inch	DN [mm]	PVC-U EPDM Code	PVC-U FPM Code	PVC-C EPDM Code	PVC-C FPM Code	ABS EPDM Code
16	3/8	10	161 486 151	161 486 163	163 481 251	163 481 263	169 480 751
20	1/2	15	161 486 151	161 486 163	163 481 251	163 481 263	169 480 751
25	3/4	20	161 486 152	161 486 164	163 481 252	163 481 264	169 480 752
32	1	25	161 486 153	161 486 165	163 481 253	163 481 265	169 480 753
40	1 1/4	32	161 486 154	161 486 166	163 481 254	163 481 266	169 480 754
50	1 1/2	40	161 486 155	161 486 167	163 481 255	163 481 267	169 480 755
63	2	50	161 486 156	161 486 168	163 481 256	163 481 268	169 480 756
75	2 1/2	65	161 486 157	161 486 169	163 481 257	163 481 269	169 480 757
90	3	80	161 486 158	161 486 170	163 481 258	163 481 270	169 480 758
110	4	100	161 486 159	161 486 171	163 481 259	163 481 271	169 480 759

d [mm]	Inch	DN [mm]	PP-H EPDM Code	PP-H FPM Code	PVDF FPM Code
16	3/8	10	167 482 876	167 482 888	175 482 963
20	1/2	15	167 482 876	167 482 888	175 482 963
25	3/4	20	167 482 877	167 482 889	175 482 964
32	1	25	167 482 878	167 482 890	175 482 965
40	1 1/4	32	167 482 879	167 482 891	175 482 966
50	1 1/2	40	167 482 880	167 482 892	175 482 967
63	2	50	167 482 881	167 482 893	175 482 968
75	2 1/2	65	167 482 882	167 482 894	-
90	3	80	167 482 883	167 482 895	-
110	4	100	167 482 884	167 482 896	-

Accessories for actuated valves

Ball set

Model:

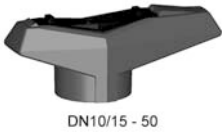
- Ball seals standard in PTFE
- Ball set consisting of: ball (5), stem (6), ball-, backing-, body- and stem seal (7-9,11)



d [mm]	Inch	DN [mm]	PVC-U EPDM Code	PVC-U FPM Code	PVC-C EPDM Code	PVC-C FPM Code	ABS EPDM Code
16	3/8	10	161 486 375	161 486 385	163 481 375	163 481 385	169 480 900
20	1/2	15	161 486 375	161 486 385	163 481 375	163 481 385	169 480 900
25	3/4	20	161 486 376	161 486 386	163 481 376	163 481 386	169 480 901
32	1	25	161 486 377	161 486 387	163 481 377	163 481 387	169 480 902
40	1 1/4	32	161 486 378	161 486 388	163 481 378	163 481 388	169 480 903
50	1 1/2	40	161 486 379	161 486 389	163 481 379	163 481 389	169 480 904
63	2	50	161 486 380	161 486 390	163 481 380	163 481 390	169 480 905
75	2 1/2	65	161 486 381	161 486 391	163 481 381	163 481 391	169 480 906
90	3	80	161 486 382	161 486 392	163 481 382	163 481 392	169 480 907
110	4	100	161 486 383	161 486 393	163 481 383	163 481 393	169 480 908

d [mm]	Inch	DN [mm]	PP-H EPDM Code	PP-H FPM Code	PVDF FPM Code
16	3/8	10	167 484 125	167 484 135	175 483 275
20	1/2	15	167 484 125	167 484 135	175 483 275
25	3/4	20	167 484 126	167 484 136	175 483 276
32	1	25	167 484 127	167 484 137	175 483 277
40	1 1/4	32	167 484 128	167 484 138	175 483 278
50	1 1/2	40	167 484 129	167 484 139	175 483 279
63	2	50	167 484 130	167 484 140	175 483 280
75	2 1/2	65	167 484 131	167 484 141	-
90	3	80	167 484 132	167 484 142	-
110	4	100	167 484 133	167 484 143	-

Lever



d [mm]	Inch	DN [mm]	Standard lever red Code	Standard lever black Code	Multifunctional lever Code
16	3/8	10	167 484 088	167 484 076	167 484 100
20	1/2	15	167 484 088	167 484 076	167 484 100
25	3/4	20	167 484 089	167 484 077	167 484 101
32	1	25	167 484 090	167 484 078	167 484 102
40	1 1/4	32	167 484 091	167 484 079	167 484 103
50	1 1/2	40	167 484 092	167 484 080	167 484 104
63	2	50	167 484 093	167 484 081	167 484 105
75	2 1/2	65	167 484 094	167 484 082	161 486 689
90	3	80	167 484 095	167 484 083	161 486 690
110	4	100	167 484 096	167 484 084	161 486 691

Face seal



d [mm]	Inch	DN [mm]	EPDM Code	FPM Code
16	3/8	10	748 410 059	749 410 059
20	1/2	15	748 410 059	749 410 059
25	3/4	20	748 410 106	749 410 106
32	1	25	748 410 151	749 410 151
40	1 1/4	32	748 410 062	749 410 062
50	1 1/2	40	748 410 003	749 410 003
63	2	50	748 410 231	749 410 231

Accessories for actuated valves

d [mm]	Inch	DN [mm]	EPDM Code	FPM Code
75	2 ½	65	748 410 119	749 410 119
90	3	80	748 410 023	749 410 023
110	4	100	748 410 254	749 410 254



Seal set

Model:

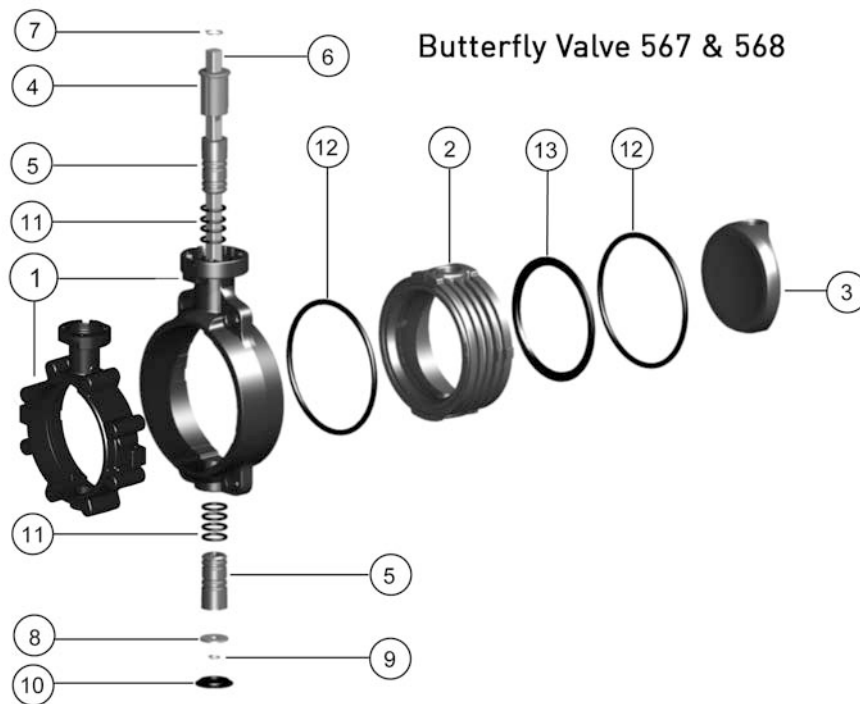
- Seal set consisting of: backing-, body-, face- and stem seal (8-11)

d [mm]	Inch	DN [mm]	EPDM Code	FPM Code
16	¾	10	161 486 400	161 486 410
20	½	15	161 486 400	161 486 410
25	¾	20	161 486 401	161 486 411
32	1	25	161 486 402	161 486 412
40	1 ¼	32	161 486 403	161 486 413
50	1 ½	40	161 486 404	161 486 414
63	2	50	161 486 405	161 486 415
75	2 ½	65	161 486 406	161 486 416
90	3	80	161 486 407	161 486 417
110	4	100	161 486 408	161 486 418

Accessories for actuated valves

Spare parts butterfly valves

Spare parts butterfly valve type 567/568



Inner body

Model:

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

d [mm]	Inch	DN [mm]	PVC-U EPDM Code	PVC-U FPM Code	PVC-C EPDM Code	PVC-C FPM Code	ABS EPDM Code
63	2	50	161 486 861	161 486 873	163 481 591	163 481 603	169 481 067
75	2 ½	65	161 486 862	161 486 874	163 481 592	163 481 604	169 481 068
90	3	80	161 486 863	161 486 875	163 481 593	163 481 605	169 481 069
110	4	100	161 486 864	161 486 876	163 481 594	163 481 606	169 481 070
140	5	125	161 486 865	161 486 877	163 481 595	163 481 607	169 481 071
160	6	150	161 486 866	161 486 878	163 481 596	163 481 608	169 481 072
225	8	200	161 486 867	161 486 879	163 481 597	163 481 609	169 481 073
280	10	250	161 486 868	161 486 880			
315	12	300	161 486 869	161 486 881			

d [mm]	Inch	DN [mm]	PP-H EPDM Code	PP-H FPM Code	PVDF FPM Code
63	2	50	167 484 271	167 484 286	175 483 413
75	2 ½	65	167 484 272	167 484 287	175 483 414
90	3	80	167 484 273	167 484 288	175 483 415
110	4	100	167 484 274	167 484 289	175 483 416
140	5	125	167 484 275	167 484 290	175 483 417
160	6	150	167 484 276	167 484 291	175 483 418
225	8	200	167 484 277	167 484 292	175 483 419
280	10	250	167 484 278	167 484 293	175 483 420
315	12	300	167 484 279	167 484 294	175 483 421

Accessories for actuated valves



Flange seal (12)

Model:

- included in delivery 2 pcs.

d [mm]	Inch	DN [mm]	EPDM Code	FPM Code
63	2	50	161 486 959	161 486 979
75	2 ½	65	161 486 960	161 486 980
90	3	80	161 486 961	161 486 981
110	4	100	161 486 962	161 486 982
125	5	125	161 486 963	161 486 983
160	6	150	161 486 964	161 486 984
225	8	200	161 486 965	161 486 985
280	10	250	161 486 966	161 486 986
315	12	300	161 486 967	161 486 987



Disc (3)

d [mm]	Inch	DN [mm]	PVC-U Code	PVC-C Code	ABS Code	PP-H Code	PVDF Code
63	2	50	161 490 889	163 481 451	169 480 951	167 483 226	175 483 251
75	2 ½	65	161 490 890	163 481 452	169 480 952	167 483 227	175 483 252
90	3	80	161 490 891	163 481 453	169 480 953	167 483 228	175 483 253
110	4	100	161 490 892	163 481 454	169 480 954	167 483 229	175 483 254
140	5	125	161 490 893	163 481 455	169 480 955	167 483 230	175 483 255
160	6	150	161 490 894	163 481 456	169 480 956	167 483 231	175 483 256
225	8	200	161 490 895	163 481 457	169 480 957	167 483 232	175 483 257
280	10	250	161 490 896			167 483 233	175 483 258
315	12	300	161 490 897			167 483 234	175 483 259



Bearing bush (5, 11)

Model:

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

d [mm]	Inch	DN [mm]	PVC-U EPDM Code	PVC-U FPM Code	PVC-C EPDM Code	PVC-C FPM Code	PP-H EPDM Code
63	2	50	161 486 886	161 486 892	163 481 576	163 481 582	167 484 259
75	2 ½	65	161 486 886	161 486 892	163 481 576	163 481 582	167 484 259
90	3	80	161 486 886	161 486 892	163 481 576	163 481 582	167 484 259
110	4	100	161 486 887	161 486 893	163 481 577	163 481 583	167 484 260
140	5	125	161 486 887	161 486 893	163 481 577	163 481 583	167 484 260
160	6	150	161 486 888	161 486 894	163 481 578	163 481 584	167 484 261
225	8	200	161 486 888	161 486 894	163 481 578	163 481 584	167 484 261
280	10	250	161 486 889	161 486 895			167 484 262
315	12	300	161 486 889	161 486 895			167 484 262

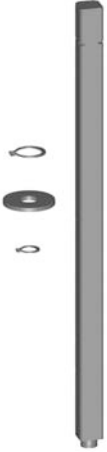
d [mm]	Inch	DN [mm]	PP-H FPM Code	PVDF FPM Code
63	2	50	167 484 265	175 483 426
75	2 ½	65	167 484 265	175 483 426
90	3	80	167 484 265	175 483 426
110	4	100	167 484 266	175 483 427
140	5	125	167 484 266	175 483 427
160	6	150	167 484 267	175 483 428
225	8	200	167 484 267	175 483 428
280	10	250	167 484 268	175 483 429
315	12	300	167 484 268	175 483 429

Accessories for actuated valves



End stop PP glasfiber reinforced (4)

d [mm]	Inch	DN [mm]	Code	
63	2	50	167 483 251	
75	2 ½	65	167 483 251	
90	3	80	167 483 251	
110	4	100	167 483 252	
140	5	125	167 483 252	
160	6	150	167 483 253	
225	8	200	167 483 253	
280	10	250	167 483 254	
315	12	300	167 483 254	



Shaft set

Model:

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

d [mm]	Inch	DN [mm]	Code	
63	2	50	161 486 899	
75	2 ½	65	161 486 900	
90	3	80	161 486 901	
110	4	100	161 486 902	
140	5	125	161 486 903	
160	6	150	161 486 904	
225	8	200	161 486 905	
280	10	250	161 486 906	
315	12	300	161 486 907	



Hand lever

d [mm]	Inch	DN [mm]	with index plate Code	with fine adjustment Code	
63	2	50	161 486 690	161 486 325	
75	2 ½	65	161 486 690	161 486 325	
90	3	80	161 486 690	161 486 325	
110	4	100	161 486 691	161 486 326	
140	5	125	161 486 691	161 486 326	
160	6	150	161 486 694	161 486 327	
225	8	200	161 486 695	161 486 328	
280	10	250	161 486 697		
315	12	300	161 486 697		

Accessories for actuated valves

Intermediate elements

Pneumatic type 240 / 241 / 242 Without manual override

d [mm]	DN [mm]	Type of actuator	Code
63	50	PA30 FC/FO	198 000 595
63	50	PA35 DA	198 000 595
75	65	PA30 FC/FO	198 000 595
75	65	PA35 DA	198 000 595
90	80	PA40 DA	198 000 595
90	80	PA35 FC/FO	198 000 596
110	100	PA40 FC/FO	198 000 600
110	100	PA45 DA	198 000 600
140	125	PA45 DA	198 000 600
140	125	PA45 FC/FO	198 000 597
160	150	PA55 DA	198 000 600
160	150	PA50 FC	198 000 599
225	200	PA55 FC/FO	198 000 598
225	200	PA55 DA	198 000 600
280	250	FA65 FC/FO	198 000 730
280	250	PA65 DA	198 000 731
315	300	PA70 FC/FO	198 000 730
315	300	PA70 DA	198 000 731

Electric type 140 / 141 / 142 Without manual override

d [mm]	DN [mm]	Type of actuator	Code
63	50	EA31	198 000 601
75	65	EA31	198 000 601
90	80	EA31	198 000 601
110	100	EA31	198 000 602
140	125	EA31	198 000 602
160	150	EA31	198 000 599
225	200	EA42	198 000 603
280	250	EA42	198 000 732
315	300	EA42	198 000 732

Electric type 140 / 141 / 142 With manual override

d-d [mm]	DN-DN [mm]	Type of actuator	Code
63 - 90	50 - 80	EA31	198 000 623
110 - 140	100 - 125	EA31	198 000 624
- 160	- 150	EA31	198 000 625
- 225	- 200	EA42	198 000 627

Gear operated with handwheel 567 / 568

d [mm]	DN [mm]	Code
63	50	198 000 621
75	65	198 000 621
90	80	198 000 621
110	100	198 000 622
140	125	198 000 622
160	150	198 000 599
225	200	198 000 599
280	250	198 000 732
315	300	198 000 732

Accessories for actuated valves

Reduction gear with handwheel



d [mm]	Inch	DN [mm]	Code
75	2 ½	65	161 482 408
90	3	80	161 482 408
110	4	100	161 482 408
125	4 ½	125	161 482 408
160	6	150	161 482 408
225	8	200	161 482 408
280	10	250	161 483 462
315	12	300	161 483 462



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



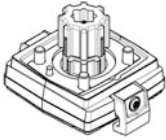
Integrated position indicator Electric NPN

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]	Inch [inch]	DN-DN [mm]	Code
16 - 20	3/8 - 1/2	10 - 15	198 150 556
25 - 32	3/4 - 1	20 - 25	198 150 557
40 - 50	1 1/4 - 1 1/2	32 - 40	198 150 558
- 63	- 2	- 50	198 150 559



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]	Inch [inch]	DN-DN [mm]	Code
16 - 20	3/8 - 1/2	10 - 15	167 482 680
25 - 32	3/4 - 1	20 - 25	167 482 681
40 - 50	1 1/4 - 1 1/2	32 - 40	167 482 682
- 63	2	- 50	167 482 683
75 - 90	2 1/2 - 3	65 - 80	167 482 684
- 110	4	- 100	167 482 685



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]	Inch [inch]	DN-DN [mm]	Code
16 - 20	3/8 - 1/2	10 - 15	167 482 626
25 - 32	3/4 - 1	20 - 25	167 482 627
40 - 50	1 1/4 - 1 1/2	32 - 40	167 482 628
- 63	2	- 50	167 482 629
75 - 90	2 1/2 - 3	65 - 80	167 482 630
- 110	4	- 100	167 482 631

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]	Inch [inch]	DN-DN [mm]	Code
16 - 20	3/8 - 1/2	10 - 15	167 482 635
25 - 32	3/4 - 1	20 - 25	167 482 636
40 - 50	1 1/4 - 1 1/2	32 - 40	167 482 637
- 63	2	- 50	167 482 638
75 - 90	2 1/2 - 3	65 - 80	167 482 639
- 110	4	- 100	167 482 640



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]	Inch [inch]	DN-DN [mm]	Code
16 - 20	3/8 - 1/2	10 - 15	167 482 671
25 - 32	3/4 - 1	20 - 25	167 482 672
40 - 50	1 1/4 - 1 1/2	32 - 40	167 482 673
- 63	2	- 50	167 482 674
75 - 90	2 1/2 - 3	65 - 80	167 482 675
- 110	4	- 100	167 482 676



DN10/15 - 50



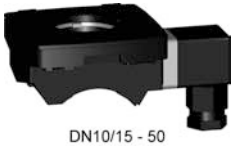
Multifunctional module (I06) PP-GF With inductive limit switches PNP

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]	Inch [inch]	DN-DN [mm]	Code
16 - 20	3/8 - 1/2	10 - 15	167 482 662
25 - 32	3/4 - 1	20 - 25	167 482 663
40 - 50	1 1/4 - 1 1/2	32 - 40	167 482 664
- 63	2	- 50	167 482 665
75 - 90	2 1/2 - 3	65 - 80	167 482 666
- 110	4	- 100	167 482 667

Accessories for actuated valves



DN10/15 - 50



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

Model:

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

d-d [mm]	Inch [inch]	DN-DN [mm]	Code	
16 - 20	$\frac{3}{8}$ - $\frac{1}{2}$	10 - 15	167 482 653	
25 - 32	$\frac{3}{4}$ - 1	20 - 25	167 482 654	
40 - 50	1 $\frac{1}{4}$ - 1 $\frac{1}{2}$	32 - 40	167 482 655	
- 63	2	- 50	167 482 656	
75 - 90	2 $\frac{1}{2}$ - 3	65 - 80	167 482 657	
- 110	4	- 100	167 482 658	

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	

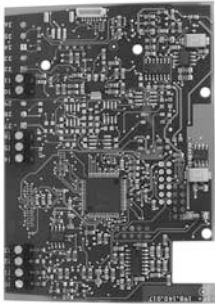


For electric actuators Type EA21/EA31/EA42 Position signalization

Model:

- Enables a 4... 20mA feedback signal
- 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	



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	

Accessories for actuated valves



For electric actuators Type EA21/EA31/EA42 Assembly kit for 4 limit switches

Model:

- Limit switches need to be ordered separately

Code	
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	



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 electric actuators
Type EA11/EA21/EA31/EA42
Limit switch kit with mechanical limit switches AgNi**

Voltage	Code	
250 V ~6 A	199 190 092	

Accessories for actuated valves

For pneumatic actuators type PA11 - PA90



Namur connecting plate

- PA30 - PA55 FC/FO, PA30 - PA65 DA

Code	
199 190 275	



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	



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	



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	



Limit switch box with 2 inductive auxiliary switches Namur Exi (intrinsically safe)

- Including namur mounting flange

Voltage	Code	
5-15 V	199 190 285	



Limit switch box with 2 auxiliary switches Eexd

- Including namur mounting flange

Voltage	Code	
250 V ~/5 A	199 190 286	

Accessories for actuated valves



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



- Connection: Plug

DN-DN [mm]	Inch [inch]	Type	Voltage	Code	
15 - 50	½ - 2	ER 52-1	250 V~ 6 A	199 190 305	
65 - 150	2 ½ - 6	ER 53-1	250 V~ 6 A	199 190 293	

Electric position indicator with 2 auxiliary switches With gold contact



- Connection: Plug

DN-DN [mm]	Inch [inch]	Type	Voltage	Code	
15 - 50	½ - 2	ER 52-2	4-30 V= 1-100 mA	199 190 306	
65 - 150	2 ½ - 6	ER 53-2	4-30 V= 1-100 mA	199 190 297	

Electric position indicator with 2 inductive switches NPN



- Connection: Plug

DN-DN [mm]	Inch [inch]	Type	Voltage	Code	
15 - 50	½ - 2	ER 52-3	5-30 V= 100 mA	199 190 307	
65 - 150	2 ½ - 6	ER 53-3	10-30 V= 100 mA	199 190 294	

Electric position indicator with 2 inductive switches PNP



- Connection: Plug

DN-DN [mm]	Inch [inch]	Type	Voltage	Code	
15 - 50	½ - 2	ER 52-4	5-30 V= 100 mA	199 190 308	
65 - 150	2 ½ - 6	ER 53-4	10-30 V= 100 mA	199 190 295	

Electric position indicator with 2 inductive switches Namur Exi (intrinsically safe)



- Connection: Plug

DN-DN [mm]	Inch [inch]	Type	Voltage	Code	
15 - 50	½ - 2	ER 52-5	8 V=	199 190 309	
65 - 150	2 ½ - 6	ER 53-5	8 V=	199 190 296	

Electric position indicator with 2 auxiliary switches Eexd



- Connection: Cable, 2 m

DN-DN [mm]	Inch [inch]	Type	Voltage	Code	
15 - 50	½ - 2	ER 52-6	250 V ~ 5 A	199 190 405	
65 - 150	2 ½ - 6	ER 53-6	250 V ~ 5 A	199 190 298	

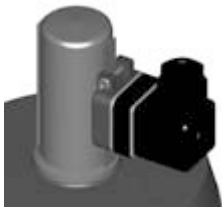
Accessories for actuated valves

Adapter complete



- For combination Electric Position Indicator / Lift limiter / Manual override

DN-DN [mm]	Type	Series 028 FC Code	Series 025 FC Code	Series 025 FO/DA Code
- 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



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 [mm]	Type	Series 028 FC Code	Series 025 FC/FO/DA Code
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



Limit contact to ER55

Code
198 804 875

For diaphragm valve type DIASTAR

Min./max. stroke limiter/manual override



DN-DN [mm]	Series 028 FC Code	Series 025 FC Code	Series 025 FO/DA Code
- 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

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



Ohne Zubehör

* für 20mm Welle: PA11/21; PA30-45 DA; PA30/35 FC/FO

** für 30mm Welle: PA >45 DA; PA >35 FC/FO

Type of actuator	Code	
PA11/21 (FC/FO); PA30/35 (FC/FO)	199 190 560	
PA >35 (FC/FO)	199 190 565	
PA11/21 (DA); PA30-45 (DA)	199 190 566	
PA >45 (DA)	199 190 567	

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 type ASIM 2010 For manual valves with integrated feedback



- Without accessories

Code	
199 190 568	



AS-Interface type ASIM 2400 For sensors with switching-output



- Without accessories

Code	
199 190 569	

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]	Compressed air connection P	Actuator connection	PN	NBR Code
24 V=	1.2	G 1/8	G 1/8	10	199 190 498
24 V, 50-60 Hz	1.2	G 1/8	G 1/8	10	199 190 499
110 V, 50-60 Hz	1.2	G 1/8	G 1/8	10	199 190 500
230 V, 50-60 Hz	1.2	G 1/8	G 1/8	10	199 190 501



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]	Compressed air connection P	Actuator connection	PN	NBR Code
24 V=	1.2	push-in	G 1/8	10	199 190 510
24 V, 50-60 Hz	1.2	push-in	G 1/8	10	199 190 511
110 V, 50-60 Hz	1.2	push-in	G 1/8	10	199 190 512
230 V, 50-60 Hz	1.2	push-in	G 1/8	10	199 190 513

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]	Compress ed air connectio n P	Actuator connectio n	PN	NBR Code
24 V=	1.2	NPT 1/8	G 1/8	10	199 190 546
24 V AC	1.2	NPT 1/8	G 1/8	10	199 190 561
110 V, 50-60 Hz	1.2	NPT 1/8	G 1/8	10	199 190 547



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	199 190 518
0-24 V	with LED	199 190 519
0-24 V	with LED and varistor	199 190 520
0-24 V	with rectifier LED and varistor	199 190 521
200-240 V	with LED	199 190 522
200-240 V	with LED and varistor	199 190 523



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]	Compress ed air connectio n P	Actuator connectio n	PN	NBR Code
24 V=	2.0	G 1/4	G 1/8	10	199 190 532
24 V, 50-60 Hz	2.0	G 1/4	G 1/8	10	199 190 533
110 V, 50-60 Hz	2.0	G 1/4	G 1/8	10	199 190 534
230 V, 50-60 Hz	2.0	G 1/4	G 1/8	10	199 190 535

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 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]	Compress ed air connectio n P	Actuator connectio n	PN	NBR Code
24 V= 110 V, 50-60 Hz	1.5 1.5	NPT 1/8 NPT 1/8	G 1/4 G 1/4	10 10	199 190 554 199 190 555

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	199 190 540
0-24 V	with LED	199 190 541
0-24 V	with LED and varistor	199 190 542
0-24 V	with rectifier LED and varistor	199 190 543
200-240 V	with LED	199 190 544
200-240 V	with LED and varistor	199 190 545

Accessories for actuated valves

Pilot valve type 5470

- 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

Pilot valve 4/2-ways

- 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

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

Pilot valve 3/2-5/2-ways



Voltage	DN [mm]	Inch	NBR Code
230 V, AC	5	1/8	199 190 360
110 V, AC	5	1/8	199 190 359
48 V, AC	5	1/8	199 190 361
24 V, AC	5	1/8	199 190 358
24 V, DC	5	1/8	199 190 357

Accessories for actuated valves

Accessories to type 5470 and type MNL532



NAMUR connector plate for type DIASTAR DN15-50 and PA11/21

Pos	DN [mm]	Series PA11/21 Code	Series 028 FC Code	Series 025 FC Code	Series 025 FO/DA Code	
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	

NAMUR connector plate for type PA10/PA20

DN-DN [mm]	Code	
10 - 50	700 646 818	

Accessories for actuated valves

Solenoid pilot valve type PV2000

- Version for 3/2-way and 5/2-way valves
- Electrical control over multiple and field bus connector

2 x 3/2-way valve

Model:

- lockable manual override



No	Voltage	Code	
1	24V/DC 100%	199 190 435	

1 x 5/2-way valve



No	Voltage	Code	
2	24 V/DC 100%	199 190 436	

Connection module with D-sub connector



No	Code	
3	199 190 424	

End module



No	Code	
4	199 190 426	

Connection module AS-interface



No	Code	
1	199 190 430	

Connection module profibus



No	Code	
1	199 190 431	

Connection module with bus interface



No	Code	
2	199 190 425	



Accessories for actuated valves

Accessories to type PV2000

Silencer 8mm

Code	
199 190 427	

Plug (white)

d [mm]	Code	
8	199 190 428	
6	199 190 429	

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

Spare parts solenoid valves

Spare parts solenoid valve type 157

coil set

Voltage	Function	EPDM Code	FPM Code
24V DC	A	198 808 000	198 808 006
24V DC	B	198 808 001	198 808 007
24V UC	A	198 808 002	198 808 008
24V UC	B	198 808 003	198 808 009
230V AC	A	198 808 004	198 808 010
230V AC	B	198 808 005	198 808 011

wear part set

	EPDM Code	FPM Code
e.g. o-rings	198 808 012	198 808 013

Spare parts solenoid valve type 160/161

coil set

24V UC Code	230 V UC Code	230 V/ 50Hz Code
198 808 014	198 808 015	198 808 016

spare part kit

Function	UC Code	50Hz Code
A	198 808 017	198 808 021
B	198 808 018	-
E	198 808 019	-
F	198 808 020	198 808 022

wear part set

d [mm]	DN [mm]	EPDM Code	FPM Code
16	10	198 808 023	198 808 026
20	15	198 808 024	198 808 027
25	20	198 808 025	198 808 028

Spare parts solenoid valve type 165

coil set

Voltage	EPDM Code	FPM Code
24V DC	198 808 029	198 808 032
230V AC	198 808 030	198 808 033
110V AC	198 808 031	198 808 034

Accessories for actuated valves

wear part set

d-d [mm]	DN-DN [mm]	EPDM Code	FPM Code
20 - 25	15 - 20	198 808 035	198 808 038
32 - 40	25 - 32	198 808 036	198 808 039
50 - 63	40 - 50	198 808 037	198 808 040

Spare parts solenoid valve type 166

coil set

Voltage	Function	EPDM Code	FPM Code
24V DC	A	198 808 041	198 808 047
230V AC	A	198 808 042	198 808 048
24V DC	C	198 808 043	-
24V UC	C	-	198 808 049
230V AC	C	198 808 044	198 808 050
24V DC	E	198 808 045	198 808 051
230V AC	E	198 808 046	198 808 052

wear part set

	EPDM Code	FPM Code
e.g. o-rings	198 808 053	198 808 054

Accessories for actuated valves

Assembly parts-intermediate kits

Retrofit ball valve bracket

For EA11/21 PA11/21 to ball valve 346

Type of actuator	d-d [mm]	Inch [inch]	DN-DN [mm]	Master gauge	Code
PA11	- 20	1/2	- 15	F04	198 000 608
PA11 / EA11/21	16 - 20	3/8 - 1/2	10 - 15	F05	198 000 580
PA11	- 25	3/4	- 20	F04	198 000 609
EA11/21	- 25	3/4	- 20	F05	198 000 604
PA11	- 32	1	- 25	F04	198 000 610
PA11 / EA11/21	- 32	1	- 25	F05	198 000 582
PA21 EA11/21	- 40	1 1/4	- 32	F05	198 000 605
PA21 EA11/21	- 50	1 1/2	- 40	F05	198 000 606
PA21 EA11/21	- 63	2	- 50	F05	198 000 607

Intermediate element to type 230-235 with manual override



DN-DN [mm]	Inch [inch]	Code
10 - 25	3/8 - 1	198 000 500
32 - 50	1 1/4 - 2	198 000 501

Accessories for actuated valves

Manual override ball valve type 546 DN65-DN100

DN	Pneumatic			Electric
	FC	FO	DA	
65	198 000 630	198 000 630	198 000 630	198 000 623
80	198 000 631	198 000 631	198 000 630	198 000 623
100	198 000 628	198 000 628	198 000 628	198 000 624

Manual override butterfly valve type 567/568 DN50-DN200

DN	Pneumatic		Electric
	FC	DA	
50	198 000 630	198 000 630	198 000 623
65	198 000 630	198 000 630	198 000 623
80	198 000 631	198 000 630	198 000 623
100	198 000 628	198 000 628	198 000 624
125	198 000 629	198 000 628	198 000 624
150	198 000 625	198 000 625	198 000 625
200	198 000 627	198 000 625	198 000 627

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~	198 150 180	
24 V= / ~	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~	198 150 182	
24 V= / ~	198 150 183	

Electric actuator type EA31



Note:

F07 (WS 17) per EN ISO 5211

Voltage	Code	
100-230 V~	198 150 184	
24 V= / ~	198 150 185	

Electric actuator type EA42



Note:

F07 (WS 22) per EN ISO 5211

Voltage	Code	
100-230 V~	198 150 186	
24 V= / ~	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]	Inch [inch]	Code	
PA 11 FC	10 - 25	3/8 - 1	198 150 127	
PA 21 FC	32 - 50	1 1/4 - 2	198 150 130	



Fail safe to open (FO)

Type	DN-DN [mm]	Inch [inch]	Code	
PA 11 FO	10 - 25	3/8 - 1	198 150 128	
PA 21 FO	32 - 50	1 1/4 - 2	198 150 131	



Double action (DA)

Type	DN-DN [mm]	Inch [inch]	Code	
PA 11 DA	10 - 25	3/8 - 1	198 150 129	
PA 21 DA	32 - 50	1 1/4 - 2	198 150 132	



Fail safe to close (FC) with stroke limiter

Type	DN-DN [mm]	Inch [inch]	Code	
PA 11 FC	10 - 25	3/8 - 1	198 150 144	
PA 21 FC	32 - 50	1 1/4 - 2	198 150 147	



Fail safe to open (FO) with stroke limiter

Type	DN-DN [mm]	Inch [inch]	Code	
PA 11 FO	10 - 25	3/8 - 1	198 150 145	
PA 21 FO	32 - 50	1 1/4 - 2	198 150 148	



Double action (DA) with stroke limiter

Type	DN-DN [mm]	Inch [inch]	Code	
PA 11 DA	10 - 25	3/8 - 1	198 150 146	
PA 21 DA	32 - 50	1 1/4 - 2	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	epoxy coated Code
PA 30 FC/FO	198 800 757	198 800 034	-	198 811 194
* PA 30 FO	198 811 025	-	-	-
PA 35 FC/FO	198 800 037	198 800 052	-	198 800 029
* PA 35 FO	198 811 026	-	-	-
PA 40 FC/FO	198 800 728	198 800 004	198 800 017	198 800 025
* 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	198 800 026
* PA50 FO	198 811 029	-	-	-
PA 55 FC/FO	198 800 041	198 800 056	-	198 811 190
* 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	198 800 028
PA 70 FO	198 811 198	-	-	-
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	epoxy coated 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	198 811 191
PA 60 DA	198 800 734	
PA 65 DA	198 800 044	
PA 70 DA	198 800 735	198 811 192
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	1/2	1	198 150 091	198 150 097
25	20	3/4	2	198 150 126	198 150 126
32	25	1	2	198 150 093	198 150 098
40	32	1 1/4	3	198 150 094	198 150 124
50	40	1 1/2	4	198 150 095	198 150 099
63	50	2	4	198 150 125	198 150 125

Series 025 FC



d [mm]	DN [mm]	Inch	Size	for EPDM Code	for PTFE/EPDM Code
20	15	1/2	2	198 150 087	198 150 962
25	20	3/4	2	198 150 963	198 150 963
32	25	1	3	198 150 088	198 150 964
40	32	1 1/4	4	198 150 965	198 150 965
50	40	1 1/2	5	198 150 089	198 150 966
63	50	2	5	198 150 090	198 150 967
75	65	2 1/2		198 150 736	198 150 736
90	80	3		198 150 737	198 150 737
110	100	4		198 150 738	198 150 738
160	150	6		198 150 739	

Series 025 FO



d [mm]	DN [mm]	Inch	Size	for PTFE/EPDM and EPDM Code
20	15	1/2	1	198 150 105
25	20	3/4	2	198 150 969
32	25	1	2	198 150 106
40	32	1 1/4	3	198 150 107
50	40	1 1/2	4	198 150 108
63	50	2	4	198 150 109
75	65	2 1/2		198 150 746
90	80	3		198 150 747
110	100	4		198 150 748
160	150	6		198 150 749

Series 025 DA



d [mm]	DN [mm]	Inch	Size	for EPDM Code	for PTFE/EPDM Code
20	15	1/2	1	198 150 100	198 150 100
25	20	3/4	2	198 150 975	198 150 975
32	25	1	2	198 150 101	198 150 101
40	32	1 1/4	3	198 150 102	198 150 102
50	40	1 1/2	4	198 150 103	198 150 103
63	50	2	4	198 150 104	198 150 104
75	65	2 1/2		198 150 756	198 150 756
90	80	3		198 150 757	198 150 757
110	100	4		198 150 758	198 150 758
160	150	6		198 150 759	198 150 759

Accessories for actuated valves

Controllers-PE70 / SRI986 / DSR100/101/201

Industrial controller type PE70

For ratio and single loop control



Model:

- Ratio control
- Continuous control
- 3-point control
- 2 sensor inputs
- L/W/H: 128/48/96

Type	Voltage	Code	
PE70-1	90..250 V ~	199 192 160	
PE70-2	24 V ~/ 18..30 V=	199 192 161	



For single loop only

Model:

- Continuous control
- 3-point control
- 1 sensor input
- L/W/H: 128/48/96

Type	Voltage	Code	
PE70-3	90..250 V ~	199 192 162	
PE70-4	24 V ~/ 18..30 V=	199 192 163	

Accessories for actuated valves

Electro-pneumatic positioner

Positioner type Eckardt SRI 986



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	Electr. pos. transformer with 4-20mA output Code	
2	199 190 350	199 190 351	199 190 395	

Positioner mounting flange for type DIASTAR



No	DN-DN [mm]	Series 028 FC Code	Series 025 FC Code	Series 025 FO Code	
3	- 15		199 190 372	199 190 372	
3	- 20	199 190 372	199 190 372	199 190 372	
3	- 25	199 190 372	199 190 373	199 190 373	
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	

Accessories for actuated valves

Digital electro-pneumatic positioner

- Other versions and accessories on request

Type DSR 100 / 101 / 201

- 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 [mm]	Series 028 FC Code	Series 025 FC Code	Series 025 FO Code
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

Attachment kit to type DSR 100

Without optical position indicator for Diastar DN 15-50



No	DN [mm]	Series 028 FC Code	Series 025 FC Code	Series 025 FO Code
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

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



Accessories for actuated valves

Diaphragm for pressure control valves

DN	V82		V85/86		V185/186	
	EPDM	PTFE	EPDM	PTFE	EPDM	PTFE
10/15	700 254 191	700 254 052	700 254 105	700 254 036	700 254 111	700 254 064
20/25	700 254 078	700 254 192	700 254 016	700 254 017	700 254 213	700 254 065
32/40	700 254 055	700 254 193	700 254 037	700 254 006		
50	700 254 194	700 254 008	700 254 018	700 254 198	700 254 214	700 254 066
65	700 254 000	700 254 060	700 254 011	700 254 019		
80	700 254 107	700 254 195	700 254 245	700 254 246		
100			700 254 020	700 254 021		

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

1 General

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

2 Tenders

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

3 Scope of Delivery

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

4 Data and Documents

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

5 Confidentiality, Protection of Personal Data

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

6 Local Laws and Regulations, Export Controls

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

7 Price

- 7.1 Unless agreed otherwise, the prices shall be deemed quoted net ex works (according to Incoterms of the ICC, latest version) including standard packing. All supplementary costs such as the cost of carriage, insurance, export-, transit- and import duties etc. shall be borne by the Purchaser. The Purchaser shall also bear the costs of all taxes, fees, duties etc. connected with the contract.
- 7.2 If the costs of packing, carriage, insurance, fees and other supplementary costs are included in the tender price or contract price or are referred to specifically in the tender or confirmation of order, Georg Fischer reserve the right to revise their prices accordingly should any change occur in the relevant tariffs.

8 Terms of Payment

- 8.1 The Purchaser shall make payment in the manner agreed by the parties without any deductions such as discounts, costs, taxes or dues.
- 8.2 The Purchaser may only withhold or off-set payments due against counter claims which are either expressly acknowledged by Georg Fischer or finally awarded to the Purchaser. In particular, payment shall still be made when unessential items are still out-standing provided that the Products already delivered are not rendered unusable as a result.

9 Retention of Title

- 9.1 The Products shall remain the property of Georg Fischer until the Purchaser shall have settled all claims, present and future, which Georg Fischer may have against him.
- 9.2 Should the Purchaser resell Products to which title is reserved, in the ordinary course of business, he shall hereby be deemed to have tacitly assigned to Georg Fischer the proceeds deriving from their sale together with all collateral rights, securities and reservations of title until all claims held by Georg Fischer shall have been settled. Until revoked by Georg Fischer, this assignment shall not preclude Purchaser's right to collect the assigned receivables.
- 9.3 To the extent the value of the Products to which title is reserved together with collateral securities exceeds Georg Fischer's claims against the Purchaser by more than 20%, Georg Fischer shall re-assign the above proceeds to Purchaser at his request.

10 Delivery

- 10.1 The term of delivery shall commence as soon as the contract has been entered into, all official formalities such as import and payment permits have been obtained and all essential technical issues have been settled. The term of delivery shall be deemed duly observed when, upon its expiry, the Products are ready for despatch.
- 10.2 Delivery is subject to the following conditions, i.e. the term of delivery shall be reasonably extended:
 - a) if Georg Fischer are not supplied in time with the information necessary for the execution of the contract or if subsequent changes causing delays are made by the Purchaser.
 - b) if Georg Fischer are prevented from performing the contract by force majeure. Force majeure shall equally be deemed to be any unforeseeable event beyond Georg Fischer's control which renders Georg Fischer's performance commercially unpractical or impossible, such as delayed or defective supplies from sub contractors labour disputes, governmental orders or regulations, shortages in materials or energy, serious disturbances in Georg Fischer's works, such as the total or partial destruction of plant and equipment or the breakdown of essential facilities, serious disruptions in transport facilities, e.g. impassable roads.
Should the effect of force majeure exceed a period of six months, either party may cancel the contract forthwith.
Georg Fischer shall not be liable for any damage or loss of any kind whatsoever resulting therefrom, any suspension or cancellation being without prejudice to Georg Fischer's right to recover all sums due in respect of consignments delivered and costs incurred to date.
 - c) if the Purchaser is in delay with the fulfilment of his obligations under the contract, in particular, if he does not adhere to the agreed conditions of payment or if he has failed to timely provide the agreed securities.
- 10.3 If for reasons attributable to Georg Fischer the agreed term of delivery or a reasonable extension thereof is exceeded, Georg Fischer shall not be deemed in default until the Purchaser has granted to Georg Fischer in writing a reasonable extension thereof of not less than one month which equally is not met.
The Purchaser shall then be entitled to the remedies provided at law, it being however understood that, subject to limitations of Art. 16, damage claims shall be limited to max. 10% of the price of the delayed delivery.
- 10.4 Part shipments shall be allowed and Georg Fischer shall be entitled to invoice for such partial deliveries.
- 10.5 If the Purchaser fails to take delivery within a reasonable time of Products notified as ready for despatch, Georg Fischer shall be entitled to store the Products at the Purchaser's expense and risk and to invoice them as delivered. If Purchaser fails to effect payment, Georg Fischer shall be entitled to dispose of the Products.
- 10.6 Should Purchaser cancel an order without justification and should Georg Fischer not insist on the performance of the contract, Georg Fischer shall be entitled to liquidated damages in the amount of 10% of the contract price, Georg Fischer's right to prove and claim higher damages remaining reserved. Purchaser shall be entitled to prove, that Georg Fischer has suffered no or a considerably lower damage.

11 Packing

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 to be given immediately upon discovery. Notice concerning weight, numbers or apparent defects is to be given latest within 30 days from receipt of the Products, notice of other defects immediately latest within 7 working days after discovery, in any event within the agreed warranty period.
- 14.3 Purchaser shall not dispose of allegedly defective Products until all warranty and/or damage claims are finally settled. At its request, defective Products are to be placed at Georg Fischer's disposal.
- 14.4 At its request, Georg Fischer shall be given the opportunity to inspect the defect and/or damage, prior to commencement of remedial work, either itself or by third party experts.

15 Warranty

- 15.1 At the written request of the Purchaser, Georg Fischer undertake to repair or replace at their discretion, as quickly as possible and free of charge all Products supplied which demonstrably suffer from faulty design, materials or workmanship or from faulty operating or installation instructions.
In order to protect employees from toxic or radioactive substances which may have been transported through defective parts returned to Georg Fischer's sales organisation, said parts must be accompanied by a Material Safety Disclosure Form. The form may be obtained from Georg Fischer's local sales company or via www.piping.georgfischer.com.
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, overstraining or overloading, unsuitable operating media, unsuitable construction work or unsuitable building ground, improper repairs or alterations by the Purchaser or third parties, the use of other than original spare parts and other reasons beyond Georg Fischer's control.
- 15.6 No action or claim may be brought by the Purchaser on account of any alleged breach of warranty or any other obligation of Georg Fischer after the expiration of twelve (12) months from receipt of the Products by the end user or at the latest within eighteen (18) months of the Products being despatched by Georg Fischer.
- 15.7 In case of Products for use in domestic installations or in utilities
 - Georg Fischer will assume the costs of dismantling the defective Product and restoring the damaged object as well as, in case of negligence, all other direct damages caused by the defective Product (damage to property and injury to or death of persons) up to CHF 1 000 000 per occurrence.
 - the statute of limitations for warranty or damage claims - contrary to Section 15.6 - will be 5 years from the date of installation.

16 Limitation of Liability

All cases of breach of contract and the relevant consequences as well as all rights and claims on the part of the customer, irrespective on what ground they are based, are exhaustively covered by these general conditions of supply. In particular, any claims not expressly mentioned for damages, reduction of price, termination of or withdrawal from the contract are excluded. In no case whatsoever shall the customer be entitled to claim damages other than compensation for costs of remedying defects in the supplies. This in particular refers, but shall not be limited, to loss of production, loss of use, loss of orders, loss of profit and other direct or indirect or consequential damage. This exclusion of liability, however, does not apply to unlawful intent or gross negligence on the part of Georg Fischer and in case of strict liability under applicable product liability statutes, but does apply to unlawful intent or gross negligence of persons employed or appointed by Georg Fischer to perform any of its obligations.

17 Severability

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

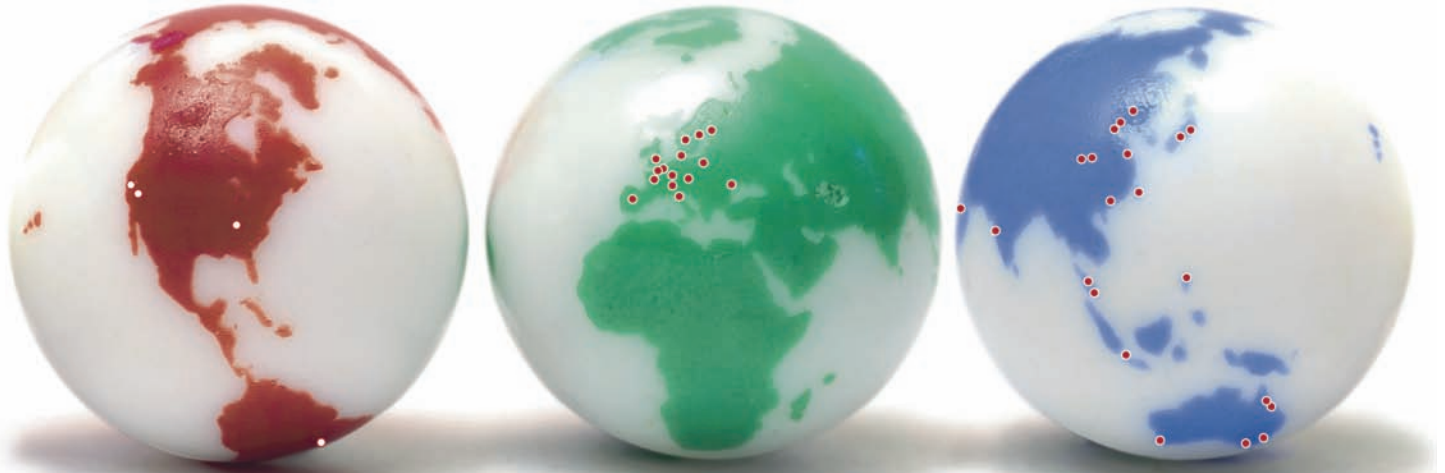
18 Place of Performance and Jurisdiction

- 18.1 Place of performance for the Products shall be the Georg Fischer works from which the Products are despatched.
- 18.2 Any civil action based upon any alleged breach of this contract shall be filed and prosecuted exclusively in the courts of Schaffhausen, Switzerland.
Georg Fischer however reserves the right to file actions in any court having jurisdiction over controversies arising out of or in connection with the present contract.
- 18.3 The contract shall be governed by Swiss law without regard to conflict of law provisions that would require the application of another law.

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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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