

Product Range

Butterfly Valve Type 567



List of Abbreviations

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

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

Dimensions

All dimensions are given in mm.

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Butterfly Valve Type 567 ABS

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Butterfly Valve Type 567 SYGEF Standard

| | |
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| - bare shaft | 47 |
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| - with electric actuator type 140 | 50 |
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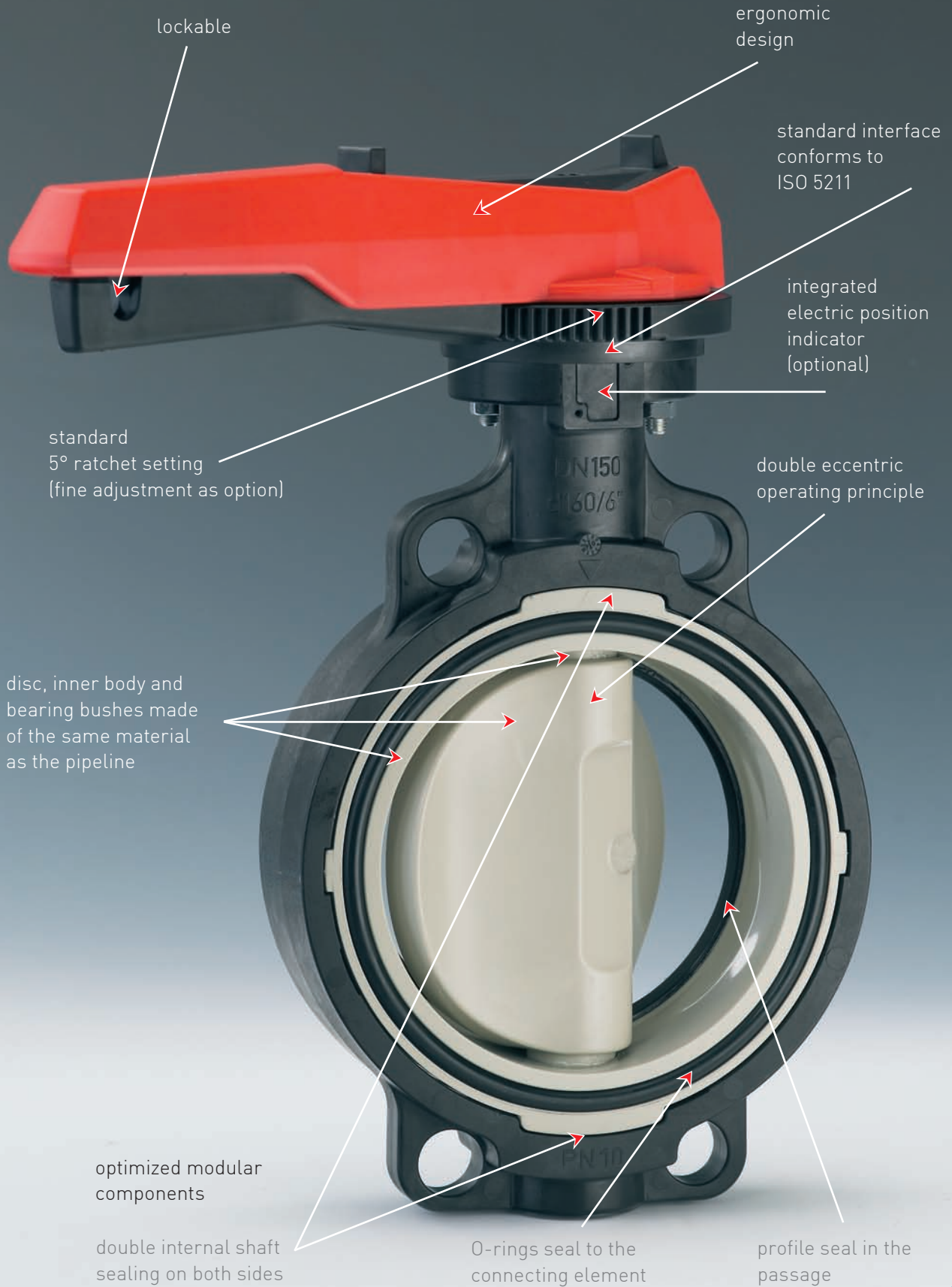
| | |
|----------------|----|
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| | |
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| | |
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| | |
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➤ A winner in every detail



One system - many options

Georg Fischer presents the new 567/568 type series of butterfly valves with a comprehensive range of products and a multitude of interesting combination possibilities.

We can offer you, for example, manual valves with hand lever or reduction gear. The program also includes pneumatically or electrically actuated valves from DN50 to DN300.

Our system's modular design principle allows you to exchange individual system components – fast, easily and at very little expense.

You also have a choice of materials: PVC-U, PVC-C, ABS, or b-PP-H and PVDF.

Our standard sealing materials are EPDM and FPM, but other materials are available on request.

All the customary installation pipe standards are supplied:

- metric: DIN, EN, ISO
- inch: BS, ASTM
- JIS (only wafer-type valves)

With this wide range of products to choose from you can always be sure of having the best possible solution for your application.

The new butterfly valves type 567/568 from Georg Fischer

Piping Systems conform to the following international standards:

prEN ISO 16136

Industrial valves – butterfly valves in thermoplastic materials ISO9393

Thermoplastic valves – pressure test methods and requirements EN558

Face-to-face length of butterfly valves corresponds to EN558

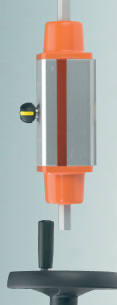
Approvals pending: DIBt, NSF61, TA Luft



Butterfly valve with electric actuator; optional manual override and electric position indicator



Butterfly valve with pneumatic actuator – double acting; optional manual override



Butterfly valve with pneumatic actuator – single acting



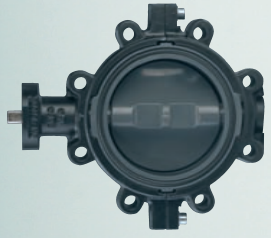
Butterfly valve with reduction gear



Butterfly valve with fine adjustment



Standard Wafer-type butterfly valve Type 567



Standard Lug-type butterfly valve/end installation Type 568

➤ Strong features for strong arguments

Now in the material
PVDF available
Higher nominal pressure
by improved design

standard interface
per ISO 5211

disc, inner body and
bearing bushes made
of the same material as
the pipeline.
Your benefit: better re-
sistance to corrosion

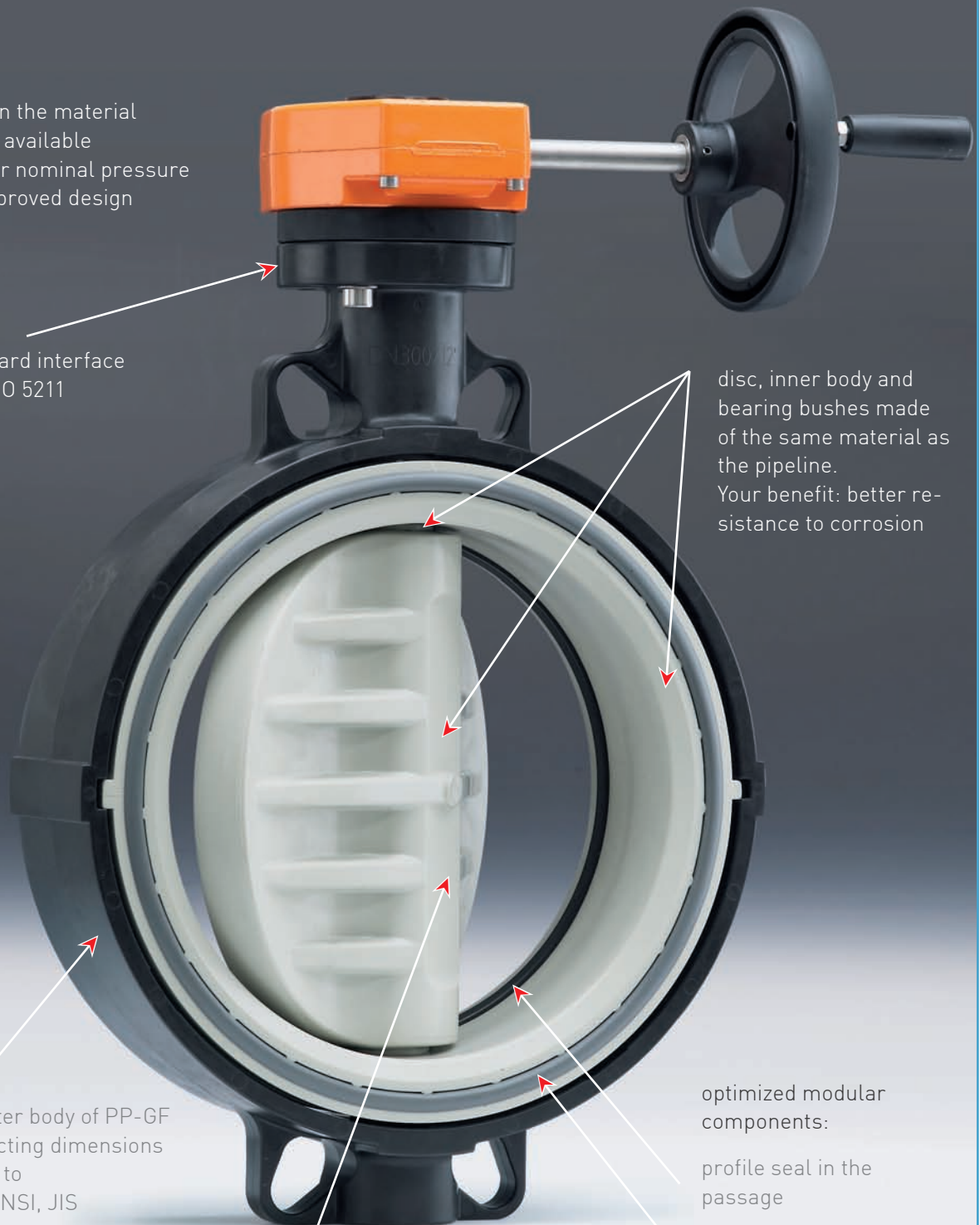
robust outer body of PP-GF
30; connecting dimensions
according to
ISO, BS, ANSI, JIS

optimized modular
components:

profile seal in the
passage

special seal to the
connecting element

double eccentric
operating principle



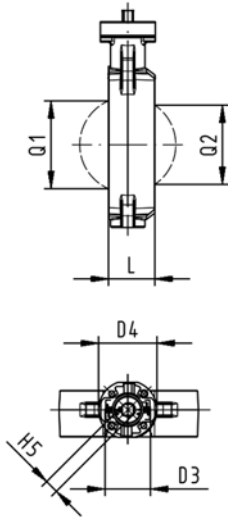
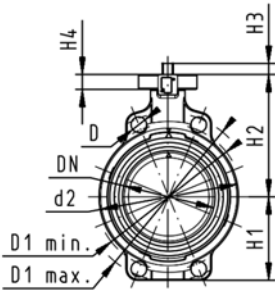
Butterfly valves PVC-U

Butterfly valve type 567 PVC-U Bare shaft



Model:

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



| d [mm] | DN [mm] | Inch | PN | kv-value ($\Delta p=1$ bar) [l/min] | EPDM Code | FPM Code |
|-----------|------------|------|----|--|--------------------|--------------------|
| 63 | 50 | 2 | 10 | 1470 | 161 567 802 | 161 567 822 |
| 75 | 65 | 2 ½ | 10 | 2200 | 161 567 803 | 161 567 823 |
| 90 | 80 | 3 | 10 | 3000 | 161 567 804 | 161 567 824 |
| 110 | 100 | 4 | 10 | 6500 | 161 567 805 | 161 567 825 |
| 140 | 125 | 5 | 10 | 11500 | 161 567 806 | 161 567 826 |
| 160 | 150 | 6 | 10 | 16600 | 161 567 807 | 161 567 827 |
| 225 | 200 | 8 | 10 | 39600 | 161 567 808 | 161 567 828 |
| 280 | 250 | 10 | 10 | 55200 | 161 567 809 | 161 567 829 |
| 315 | 300 | 12 | 10 | 80000 | 161 567 810 | 161 567 830 |

| d [mm] | D [mm] | D1 min. [mm] | D1 max. [mm] | d2 [mm] | D3 [mm] | D4 [mm] | H [mm] | H1 [mm] | H2 [mm] | H3 [mm] | H4 [mm] | H5 [mm] | L [mm] | Q1 [mm] |
|-----------|-----------|--------------------|--------------------|------------|------------|------------|-----------|------------|------------|------------|------------|------------|-----------|------------|
| 63 | 19 | 120.0 | 125.0 | 104 | 70 | 90 | 222 | 77 | 134 | 27 | 23 | 11 | 45 | 40 |
| 75 | 19 | 139.7 | 145.0 | 115 | 70 | 90 | 235 | 83 | 140 | 27 | 23 | 11 | 46 | 54 |
| 90 | 19 | 150.0 | 160.0 | 131 | 70 | 90 | 247 | 89 | 146 | 27 | 23 | 11 | 49 | 67 |
| 110 | 19 | 175.0 | 190.5 | 161 | 70 | 90 | 287 | 104 | 167 | 16 | 23 | 14 | 56 | 88 |
| 140 | 23 | 210.0 | 215.9 | 187 | 70 | 90 | 313 | 117 | 181 | 16 | 23 | 14 | 64 | 113 |
| 160 | 24 | 241.3 | 241.3 | 215 | 70 | 90 | 335 | 130 | 189 | 19 | 23 | 17 | 72 | 139 |
| 225 | 23 | 290.0 | 295.0 | 267 | 70 | 90 | 387 | 158 | 210 | 19 | 23 | 17 | 73 | 178 |
| 280 | 25 | 353.0 | 362.0 | 329 | 102 | 125 | 509 | 205 | 264 | 40 | 23 | 22 | 113 | 210 |
| 315 | 25 | 400.0 | 432.0 | 379 | 102 | 125 | 553 | 228 | 285 | 40 | 23 | 22 | 113 | 256 |

| d [mm] | Q2 [mm] |
|-----------|------------|
| 63 | |
| 75 | 35 |
| 90 | 50 |
| 110 | 74 |
| 140 | 97 |
| 160 | 123 |
| 225 | 169 |
| 280 | 207 |
| 315 | 253 |

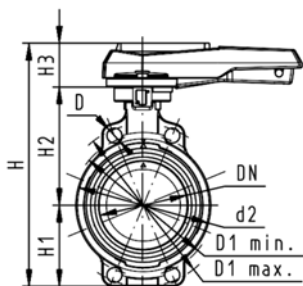


Butterfly valve type 567 PVC-U Hand lever with ratchet settings

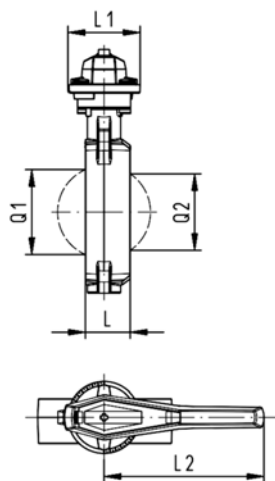


Model:

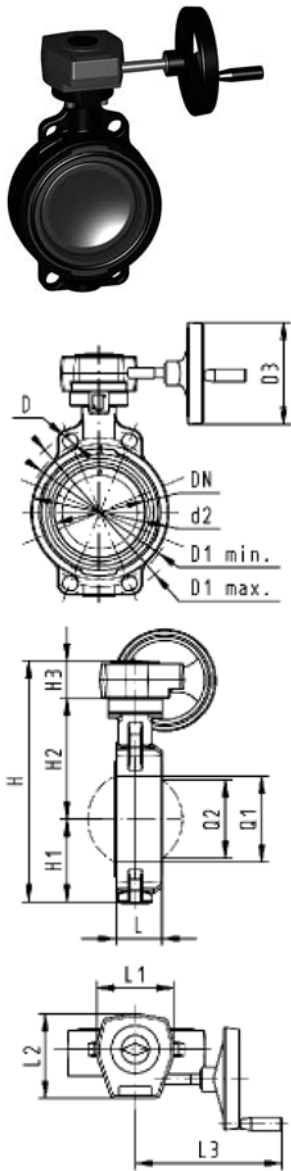
- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, ANSI/ASME B 16.5 Class 150, BS 1560: 1989, BS 4504, JIS B 2220
- Overall length according to EN 558-1, ISO 5752
- We recommend for the dimensions DN250 and DN300 only 6 bar maximum system pressure for the hand lever version



| d [mm] | DN [mm] | Inch | PN | kv-value ($\Delta p=1$ bar) [l/min] | EPDM Code | FPM Code |
|-----------|------------|------|----|--|--------------------|--------------------|
| 63 | 50 | 2 | 10 | 1470 | 161 567 002 | 161 567 022 |
| 75 | 65 | 2 ½ | 10 | 2200 | 161 567 003 | 161 567 023 |
| 90 | 80 | 3 | 10 | 3000 | 161 567 004 | 161 567 024 |
| 110 | 100 | 4 | 10 | 6500 | 161 567 005 | 161 567 025 |
| 140 | 125 | 5 | 10 | 11500 | 161 567 006 | 161 567 026 |
| 160 | 150 | 6 | 10 | 16600 | 161 567 007 | 161 567 027 |
| 225 | 200 | 8 | 10 | 39600 | 161 567 008 | 161 567 028 |
| 280 | 250 | 10 | 10 | 55200 | 161 567 009 | 161 567 029 |
| 315 | 300 | 12 | 10 | 80000 | 161 567 010 | 161 567 030 |



| d [mm] | D [mm] | D1 min. [mm] | D1 max. [mm] | d2 [mm] | H [mm] | H1 [mm] | H2 [mm] | H3 [mm] | L [mm] | L1 [mm] | L2 [mm] | Q1 [mm] | Q2 [mm] |
|-----------|-----------|--------------------|--------------------|------------|-----------|------------|------------|------------|-----------|------------|------------|------------|------------|
| 63 | 19 | 120.0 | 125.0 | 104 | 264 | 77 | 134 | 54 | 45 | 106 | 205 | 40 | |
| 75 | 19 | 139.7 | 145.0 | 115 | 277 | 83 | 140 | 54 | 46 | 106 | 205 | 54 | 35 |
| 90 | 19 | 150.0 | 160.0 | 131 | 289 | 89 | 146 | 54 | 49 | 106 | 205 | 67 | 50 |
| 110 | 19 | 175.0 | 190.5 | 161 | 325 | 104 | 167 | 55 | 56 | 106 | 255 | 88 | 74 |
| 140 | 23 | 210.0 | 215.9 | 187 | 352 | 117 | 181 | 55 | 64 | 106 | 255 | 113 | 97 |
| 160 | 24 | 241.3 | 241.3 | 215 | 373 | 130 | 189 | 55 | 72 | 106 | 255 | 139 | 123 |
| 225 | 23 | 290.0 | 295.0 | 267 | 435 | 158 | 210 | 67 | 73 | 140 | 408 | 178 | 169 |
| 280 | 25 | 353.0 | 362.0 | 329 | 554 | 205 | 264 | 85 | 113 | 149 | 408 | 210 | 207 |
| 315 | 25 | 400.0 | 432.0 | 379 | 598 | 228 | 285 | 85 | 113 | 149 | 408 | 256 | 253 |



Butterfly valve type 567 PVC-U Reduction gear with handwheel



Model:

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

| d [mm] | DN [mm] | Inch | PN | kv-value ($\Delta p=1$ bar) [l/min] | EPDM Code | FPM Code |
|-----------|------------|------|----|--|--------------------|--------------------|
| 63 | 50 | 2 | 10 | 1470 | 161 567 042 | 161 567 062 |
| 75 | 65 | 2 ½ | 10 | 2200 | 161 567 043 | 161 567 063 |
| 90 | 80 | 3 | 10 | 3000 | 161 567 044 | 161 567 064 |
| 110 | 100 | 4 | 10 | 6500 | 161 567 045 | 161 567 065 |
| 140 | 125 | 5 | 10 | 11500 | 161 567 046 | 161 567 066 |
| 160 | 150 | 6 | 10 | 16600 | 161 567 047 | 161 567 067 |
| 225 | 200 | 8 | 10 | 39600 | 161 567 048 | 161 567 068 |
| 280 | 250 | 10 | 10 | 55200 | 161 567 049 | 161 567 069 |
| 315 | 300 | 12 | 10 | 80000 | 161 567 050 | 161 567 070 |

| d [mm] | D [mm] | D1 min. [mm] | D1 max. [mm] | d2 [mm] | D3 [mm] | H [mm] | H1 [mm] | H2 [mm] | H3 [mm] | L [mm] | L1 [mm] | L2 [mm] | L3 [mm] | Q1 [mm] |
|-----------|-----------|--------------------|--------------------|------------|------------|-----------|------------|------------|------------|-----------|------------|------------|------------|------------|
| 63 | 19 | 120.0 | 125.0 | 104 | 160 | 278 | 77 | 134 | 60 | 45 | 120 | 132 | 236 | 40 |
| 75 | 19 | 139.7 | 145.0 | 115 | 160 | 291 | 83 | 140 | 60 | 46 | 120 | 132 | 236 | 54 |
| 90 | 19 | 150.0 | 160.0 | 131 | 160 | 303 | 89 | 146 | 60 | 49 | 120 | 132 | 236 | 67 |
| 110 | 19 | 175.0 | 190.5 | 160 | 160 | 339 | 104 | 167 | 60 | 56 | 120 | 132 | 236 | 88 |
| 140 | 23 | 210.0 | 215.9 | 187 | 160 | 365 | 117 | 181 | 60 | 64 | 120 | 132 | 236 | 113 |
| 160 | 24 | 241.3 | 241.3 | 215 | 160 | 387 | 130 | 189 | 60 | 72 | 120 | 132 | 236 | 139 |
| 225 | 23 | 290.0 | 295.0 | 267 | 160 | 436 | 158 | 210 | 60 | 73 | 120 | 132 | 236 | 178 |
| 280 | 25 | 353.0 | 362.0 | 329 | 160 | 529 | 205 | 264 | 60 | 113 | 134 | 151 | 261 | 210 |
| 315 | 25 | 400.0 | 432.0 | 379 | 160 | 573 | 228 | 285 | 60 | 113 | 134 | 151 | 261 | 256 |

| d [mm] | Q2 [mm] |
|-----------|------------|
| 63 | |
| 75 | 35 |
| 90 | 50 |
| 110 | 74 |
| 140 | 97 |
| 160 | 123 |
| 225 | 169 |
| 280 | 207 |
| 315 | 253 |

Butterfly valves PVC-U SF

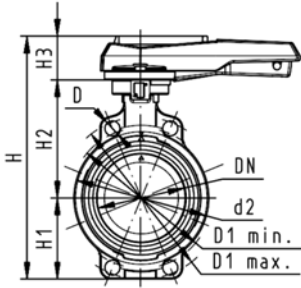
Butterfly valve type 567 PVC-U SF Hand lever with ratchet settings



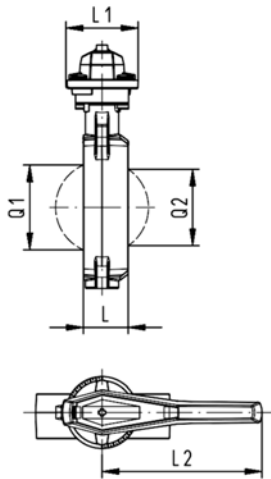
Model:

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

Available from second quarter 2006



| d [mm] | DN [mm] | Inch | PN | kv-value ($\Delta p=1$ bar) [l/min] | EPDM Code | FPM Code |
|-----------|------------|------|----|--|--------------------|--------------------|
| 63 | 50 | 2 | 10 | 1470 | 161 567 402 | 161 567 422 |
| 75 | 65 | 2 ½ | 10 | 2200 | 161 567 403 | 161 567 423 |
| 90 | 80 | 3 | 10 | 3000 | 161 567 404 | 161 567 424 |
| 110 | 100 | 4 | 10 | 6500 | 161 567 405 | 161 567 425 |
| 140 | 125 | 5 | 10 | 11500 | 161 567 406 | 161 567 426 |
| 160 | 150 | 6 | 10 | 16600 | 161 567 407 | 161 567 427 |
| 225 | 200 | 8 | 10 | 39600 | 161 567 408 | 161 567 428 |



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

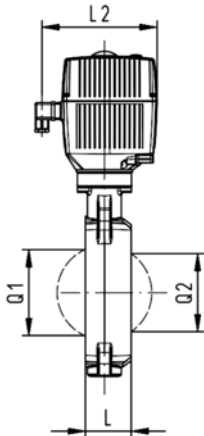
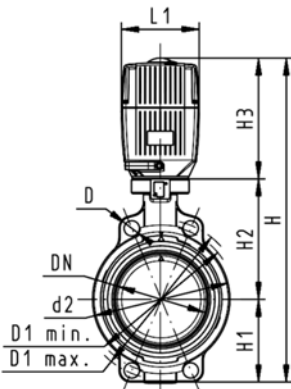
Butterfly valves electric PVC-U

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



Model:

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



| d [mm] | DN [mm] | Inch | PN | kv-value ($\Delta p=1$ bar) [l/min] | EPDM Code | FPM Code |
|-----------|------------|------|----|--|--------------|-------------|
| 63 | 50 | 2 | 10 | 1470 | 199 140 042 | 199 140 062 |
| 75 | 65 | 2 ½ | 10 | 2200 | 199 140 043 | 199 140 063 |
| 90 | 80 | 3 | 10 | 3000 | 199 140 044 | 199 140 064 |
| 110 | 100 | 4 | 10 | 6500 | 199 140 045 | 199 140 065 |
| 140 | 125 | 5 | 10 | 11500 | 199 140 046 | 199 140 066 |
| 160 | 150 | 6 | 10 | 16600 | 199 140 047 | 199 140 067 |
| 225 | 200 | 8 | 10 | 39600 | 199 140 048 | 199 140 068 |
| 280 | 250 | 10 | 6 | 55200 | 199 140 049 | 199 140 069 |

| d [mm] | Actuator unit type | D [mm] | D1 min. [mm] | D1 max. [mm] | d2 [mm] | H [mm] | H1 [mm] | H2 [mm] | H3 [mm] | L [mm] | L1 [mm] | L2 [mm] | Q1 [mm] |
|-----------|-----------------------|-----------|--------------------|--------------------|------------|-----------|------------|------------|------------|-----------|------------|------------|------------|
| 63 | EA-31 | 19 | 120.0 | 125.0 | 104 | 400 | 77 | 134 | 188 | 45 | 122 | 180 | 40 |
| 75 | EA-31 | 19 | 139.7 | 145.0 | 115 | 413 | 83 | 140 | 188 | 46 | 122 | 180 | 54 |
| 90 | EA-31 | 19 | 150.0 | 160.0 | 131 | 428 | 89 | 146 | 188 | 49 | 122 | 180 | 67 |
| 110 | EA-31 | 19 | 175.0 | 190.5 | 161 | 460 | 104 | 167 | 188 | 56 | 122 | 180 | 88 |
| 140 | EA-31 | 23 | 210.0 | 215.9 | 187 | 487 | 117 | 181 | 188 | 64 | 122 | 180 | 113 |
| 160 | EA-31 | 24 | 241.3 | 241.3 | 215 | 508 | 130 | 189 | 188 | 72 | 122 | 180 | 139 |
| 225 | EA-42 | 23 | 290.0 | 295.0 | 267 | 575 | 158 | 210 | 208 | 73 | 122 | 180 | 178 |
| 280 | EA-42 | 25 | 353.0 | 362.0 | 329 | 677 | 205 | 264 | 208 | 113 | 122 | 180 | 256 |

| d [mm] | Q2 [mm] |
|-----------|------------|
| 63 | |
| 75 | 35 |
| 90 | 50 |
| 110 | 74 |
| 140 | 97 |
| 160 | 123 |
| 225 | 169 |
| 280 | 207 |



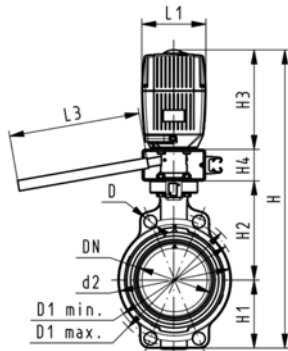
Butterfly valve type 140 PVC-U 100-230V With manual override



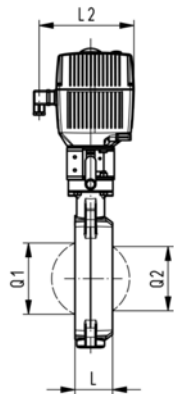
Model:

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

| d [mm] | DN [mm] | Inch | PN | kv-value ($\Delta p=1$ bar) [l/min] | EPDM Code | FPM Code |
|-----------|------------|------|----|--|--------------------|--------------------|
| 63 | 50 | 2 | 10 | 1470 | 199 140 002 | 199 140 022 |
| 75 | 65 | 2 ½ | 10 | 2200 | 199 140 003 | 199 140 023 |
| 90 | 80 | 3 | 10 | 3000 | 199 140 004 | 199 140 024 |
| 110 | 100 | 4 | 10 | 6500 | 199 140 005 | 199 140 025 |
| 140 | 125 | 5 | 10 | 11500 | 199 140 006 | 199 140 026 |
| 160 | 150 | 6 | 10 | 16600 | 199 140 007 | 199 140 027 |
| 225 | 200 | 8 | 10 | 39600 | 199 140 008 | 199 140 028 |



| d [mm] | Actuator unit type | D [mm] | D1 min. [mm] | D1 max. [mm] | d2 [mm] | H [mm] | H1 [mm] | H2 [mm] | H3 [mm] | H4 [mm] | L [mm] | L1 [mm] | L2 [mm] |
|-----------|-----------------------|-----------|--------------------|--------------------|------------|-----------|------------|------------|------------|------------|-----------|------------|------------|
| 63 | EA-31 | 19 | 120.0 | 125.0 | 104 | 460 | 77 | 134 | 188 | 60 | 45 | 122 | 180 |
| 75 | EA-31 | 19 | 139.7 | 145.0 | 115 | 473 | 83 | 140 | 188 | 60 | 46 | 122 | 180 |
| 90 | EA-31 | 19 | 150.0 | 160.0 | 131 | 488 | 89 | 146 | 188 | 60 | 49 | 122 | 180 |
| 110 | EA-31 | 19 | 175.0 | 190.5 | 161 | 520 | 104 | 167 | 188 | 60 | 56 | 122 | 180 |
| 140 | EA-31 | 23 | 210.0 | 215.9 | 187 | 547 | 117 | 181 | 188 | 60 | 64 | 122 | 180 |
| 160 | EA-31 | 24 | 241.3 | 241.3 | 215 | 568 | 130 | 189 | 188 | 60 | 72 | 122 | 180 |
| 225 | EA-42 | 23 | 290.0 | 295.0 | 267 | 635 | 158 | 210 | 208 | 60 | 73 | 122 | 180 |



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



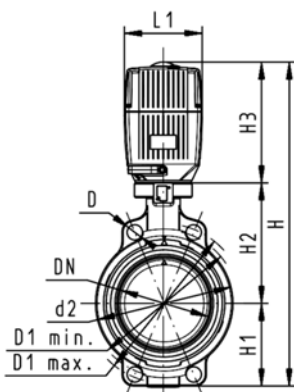
Butterfly valve type 140 PVC-U 24V Without manual override



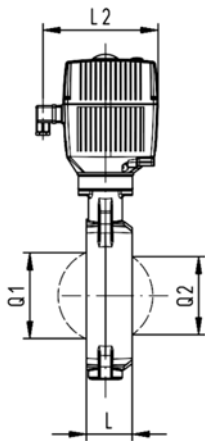
Model:

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

| d [mm] | DN [mm] | Inch | PN | kv-value ($\Delta p=1$ bar) [l/min] | EPDM Code | FPM Code |
|-----------|------------|------|----|--|--------------------|--------------------|
| 63 | 50 | 2 | 10 | 1470 | 199 140 122 | 199 140 142 |
| 75 | 65 | 2 ½ | 10 | 2200 | 199 140 123 | 199 140 143 |
| 90 | 80 | 3 | 10 | 3000 | 199 140 124 | 199 140 144 |
| 110 | 100 | 4 | 10 | 6500 | 199 140 125 | 199 140 145 |
| 140 | 125 | 5 | 10 | 11500 | 199 140 126 | 199 140 146 |
| 160 | 150 | 6 | 10 | 16600 | 199 140 127 | 199 140 147 |
| 225 | 200 | 8 | 10 | 39600 | 199 140 128 | 199 140 148 |
| 280 | 250 | 10 | 6 | 55200 | 199 140 129 | 199 140 149 |



| d [mm] | Actuator unit type | D [mm] | D1 min. [mm] | D1 max. [mm] | d2 [mm] | H [mm] | H1 [mm] | H2 [mm] | H3 [mm] | L [mm] | L1 [mm] | L2 [mm] | Q1 [mm] |
|-----------|-----------------------|-----------|--------------------|--------------------|------------|-----------|------------|------------|------------|-----------|------------|------------|------------|
| 63 | EA-31 | 19 | 120.0 | 125.0 | 104 | 400 | 77 | 134 | 188 | 45 | 122 | 180 | 40 |
| 75 | EA-31 | 19 | 139.7 | 145.0 | 115 | 413 | 83 | 140 | 188 | 46 | 122 | 180 | 54 |
| 90 | EA-31 | 19 | 150.0 | 160.0 | 131 | 428 | 89 | 146 | 188 | 49 | 122 | 180 | 67 |
| 110 | EA-31 | 19 | 175.0 | 190.5 | 161 | 460 | 104 | 167 | 188 | 56 | 122 | 180 | 88 |
| 140 | EA-31 | 23 | 210.0 | 215.9 | 187 | 487 | 117 | 181 | 188 | 64 | 122 | 180 | 113 |
| 160 | EA-31 | 24 | 241.3 | 241.3 | 215 | 508 | 130 | 189 | 188 | 72 | 122 | 180 | 139 |
| 225 | EA-42 | 23 | 290.0 | 295.0 | 267 | 575 | 158 | 210 | 208 | 73 | 122 | 180 | 178 |
| 280 | EA-42 | 25 | 353.0 | 362.0 | 329 | 677 | 205 | 264 | 208 | 113 | 122 | 180 | 256 |



| d [mm] | Q2 [mm] |
|-----------|------------|
| 63 | |
| 75 | 35 |
| 90 | 50 |
| 110 | 74 |
| 140 | 97 |
| 160 | 123 |
| 225 | 169 |
| 280 | 207 |

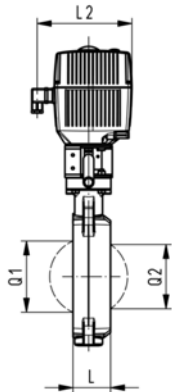
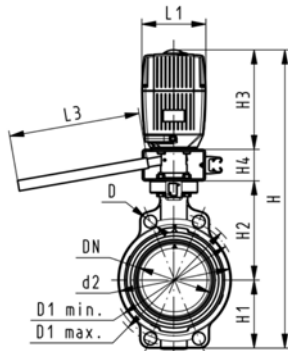


Butterfly valve type 140 PVC-U 24V With manual override



Model:

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



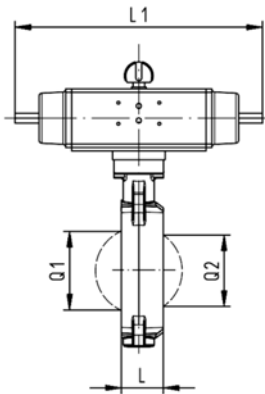
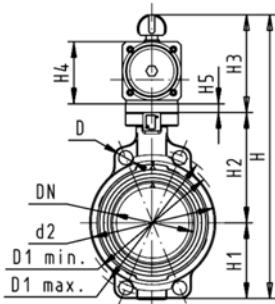
| d [mm] | DN [mm] | Inch | PN | kv-value ($\Delta p=1$ bar) [l/min] | EPDM Code | FPM Code |
|-----------|------------|------|----|--|--------------------|--------------------|
| 63 | 50 | 2 | 10 | 1470 | 199 140 082 | 199 140 102 |
| 75 | 65 | 2 ½ | 10 | 2200 | 199 140 083 | 199 140 103 |
| 90 | 80 | 3 | 10 | 3000 | 199 140 084 | 199 140 104 |
| 110 | 100 | 4 | 10 | 6500 | 199 140 085 | 199 140 105 |
| 140 | 125 | 5 | 10 | 11500 | 199 140 086 | 199 140 106 |
| 160 | 150 | 6 | 10 | 16600 | 199 140 087 | 199 140 107 |
| 225 | 200 | 8 | 10 | 39600 | 199 140 088 | 199 140 108 |

| d [mm] | Actuator unit type | D [mm] | D1 min. [mm] | D1 max. [mm] | d2 [mm] | H [mm] | H1 [mm] | H2 [mm] | H3 [mm] | H4 [mm] | L [mm] | L1 [mm] | L2 [mm] |
|-----------|-----------------------|-----------|--------------------|--------------------|------------|-----------|------------|------------|------------|------------|-----------|------------|------------|
| 63 | EA-31 | 19 | 120.0 | 125.0 | 104 | 460 | 77 | 134 | 188 | 60 | 45 | 122 | 180 |
| 75 | EA-31 | 19 | 139.7 | 145.0 | 115 | 473 | 83 | 140 | 188 | 60 | 46 | 122 | 180 |
| 90 | EA-31 | 19 | 150.0 | 160.0 | 131 | 488 | 89 | 146 | 188 | 60 | 49 | 122 | 180 |
| 110 | EA-31 | 19 | 175.0 | 190.5 | 161 | 520 | 104 | 167 | 188 | 60 | 56 | 122 | 180 |
| 140 | EA-31 | 23 | 210.0 | 215.9 | 187 | 547 | 117 | 181 | 188 | 60 | 64 | 122 | 180 |
| 160 | EA-31 | 24 | 241.3 | 241.3 | 215 | 568 | 130 | 189 | 188 | 60 | 72 | 122 | 180 |
| 225 | EA-42 | 23 | 290.0 | 295.0 | 267 | 635 | 158 | 210 | 208 | 60 | 73 | 122 | 180 |

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

Butterfly valves pneumatic PVC-U

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



Model:

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

| d [mm] | DN [mm] | Inch | PN | kv-value ($\Delta p=1$ bar) [l/min] | EPDM Code | FPM Code |
|-----------|------------|------|----|--|--------------------|--------------------|
| 63 | 50 | 2 | 10 | 1470 | 199 240 002 | 199 240 022 |
| 75 | 65 | 2 ½ | 10 | 2200 | 199 240 003 | 199 240 023 |
| 90 | 80 | 3 | 10 | 3000 | 199 240 004 | 199 240 024 |
| 110 | 100 | 4 | 10 | 6500 | 199 240 005 | 199 240 025 |
| 140 | 125 | 5 | 10 | 11500 | 199 240 006 | 199 240 026 |
| 160 | 150 | 6 | 10 | 16600 | 199 240 007 | 199 240 027 |
| 225 | 200 | 8 | 10 | 39600 | 199 240 008 | 199 240 028 |
| 280 | 250 | 10 | 10 | 55200 | 199 240 009 | 199 240 029 |
| 315 | 300 | 12 | 10 | 80000 | 199 240 010 | 199 240 030 |

| d [mm] | Actuator unit type | D [mm] | D1 min. [mm] | D1 max. [mm] | d2 [mm] | H [mm] | H1 [mm] | H2 [mm] | H3 [mm] | H4 [mm] | H5 [mm] | L [mm] | L1 [mm] |
|-----------|-----------------------|-----------|--------------------|--------------------|------------|-----------|------------|------------|------------|------------|------------|-----------|------------|
| 63 | PA-30 FC | 19 | 120.0 | 125.0 | 104 | 327 | 77 | 134 | 117 | 70 | 15 | 45 | 276 |
| 75 | PA-30 FC | 19 | 139.7 | 145.0 | 115 | 340 | 83 | 140 | 117 | 70 | 15 | 46 | 276 |
| 90 | PA-35 FC | 19 | 150.0 | 160.0 | 131 | 361 | 89 | 146 | 126 | 78 | 15 | 49 | 326 |
| 110 | PA-40 FC | 19 | 175.0 | 190.5 | 161 | 400 | 104 | 167 | 129 | 86 | | 56 | 370 |
| 140 | PA-45 FC | 23 | 210.0 | 215.9 | 187 | 436 | 117 | 181 | 139 | 96 | | 64 | 411 |
| 160 | PA-50 FC | 24 | 241.3 | 241.3 | 215 | 468 | 130 | 189 | 149 | 106 | | 72 | 423 |
| 225 | PA-55 FC | 23 | 290.0 | 295.0 | 267 | 529 | 158 | 210 | 161 | 118 | | 73 | 452 |
| 280 | PA-65 FC | 25 | 353.0 | 362.0 | 329 | 808 | 205 | 264 | 191 | 148 | | 113 | 648 |
| 315 | PA-70 FC | 25 | 400.0 | 432.0 | 379 | 866 | 228 | 285 | 196 | 157 | | 113 | 663 |

| d [mm] | L2 [mm] | Q1 [mm] | Q2 [mm] |
|-----------|------------|------------|------------|
| 63 | 65 | 40 | |
| 75 | 65 | 54 | 35 |
| 90 | 72 | 67 | 50 |
| 110 | 80 | 88 | 74 |
| 140 | 90 | 113 | 97 |
| 160 | 100 | 139 | 123 |
| 225 | 112 | 178 | 169 |
| 280 | 137 | 210 | 207 |
| 315 | 145 | 256 | 253 |



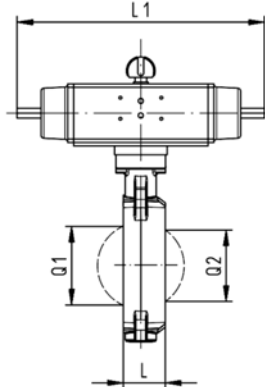
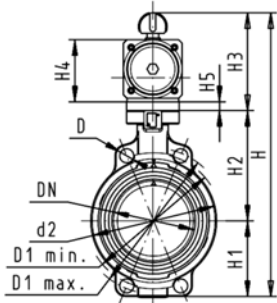
Butterfly valve type 240 PVC-U FO (Fail safe to open) Without manual override



Model:

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

| d [mm] | DN [mm] | Inch | PN | kv-value ($\Delta p=1$ bar) [l/min] | EPDM Code | FPM Code |
|-----------|------------|------|----|--|--------------------|--------------------|
| 63 | 50 | 2 | 10 | 1470 | 199 240 042 | 199 240 062 |
| 75 | 65 | 2 ½ | 10 | 2200 | 199 240 043 | 199 240 063 |
| 90 | 80 | 3 | 10 | 3000 | 199 240 044 | 199 240 064 |
| 110 | 100 | 4 | 10 | 6500 | 199 240 045 | 199 240 065 |
| 140 | 125 | 5 | 10 | 11500 | 199 240 046 | 199 240 066 |
| 160 | 150 | 6 | 10 | 16600 | 199 240 047 | 199 240 067 |
| 225 | 200 | 8 | 10 | 39600 | 199 240 048 | 199 240 068 |
| 280 | 250 | 10 | 10 | 55200 | 199 240 049 | 199 240 069 |
| 315 | 300 | 12 | 10 | 80000 | 199 240 050 | 199 240 070 |



| d [mm] | Actuator unit type | D [mm] | D1 min. [mm] | D1 max. [mm] | d2 [mm] | H [mm] | H1 [mm] | H2 [mm] | H3 [mm] | H4 [mm] | H5 [mm] | L [mm] | L1 [mm] |
|-----------|-----------------------|-----------|--------------------|--------------------|------------|-----------|------------|------------|------------|------------|------------|-----------|------------|
| 63 | PA-30 FO | 19 | 120.0 | 125.0 | 104 | 327 | 77 | 134 | 117 | 70 | 15 | 45 | 276 |
| 75 | PA-30 FO | 19 | 139.7 | 145.0 | 115 | 340 | 83 | 140 | 117 | 70 | 15 | 46 | 276 |
| 90 | PA-35 FO | 19 | 150.0 | 160.0 | 131 | 361 | 89 | 146 | 126 | 78 | 15 | 49 | 326 |
| 110 | PA-40 FO | 19 | 175.0 | 190.5 | 161 | 400 | 104 | 167 | 129 | 86 | | 56 | 370 |
| 140 | PA-45 FO | 23 | 210.0 | 215.9 | 187 | 436 | 117 | 181 | 139 | 96 | | 64 | 411 |
| 160 | PA-50 FO | 24 | 241.3 | 241.3 | 215 | 468 | 130 | 189 | 149 | 106 | | 72 | 423 |
| 225 | PA-55 FO | 23 | 290.0 | 295.0 | 267 | 529 | 158 | 210 | 161 | 118 | | 73 | 452 |
| 280 | PA-65 FO | 25 | 353.0 | 362.0 | 329 | 808 | 205 | 264 | 191 | 148 | | 113 | 648 |
| 315 | PA-70 FO | 25 | 400.0 | 432.0 | 379 | 866 | 228 | 285 | 196 | 157 | | 113 | 663 |

| d [mm] | L2 [mm] | Q1 [mm] | Q2 [mm] |
|-----------|------------|------------|------------|
| 63 | 65 | 40 | |
| 75 | 65 | 54 | 35 |
| 90 | 72 | 67 | 50 |
| 110 | 80 | 88 | 74 |
| 140 | 90 | 113 | 97 |
| 160 | 100 | 139 | 123 |
| 225 | 112 | 178 | 169 |
| 280 | 137 | 210 | 207 |
| 315 | 145 | 256 | 253 |

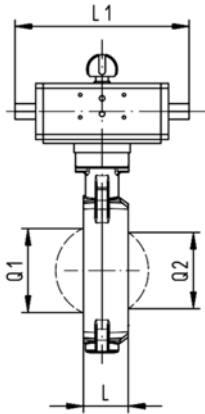
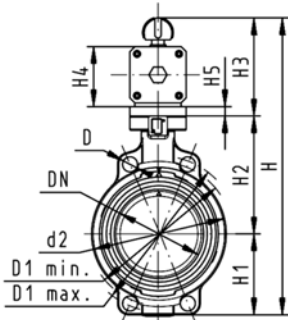


Butterfly valve type 240 PVC-U DA (Double acting) Without manual override



Model:

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



| d [mm] | DN [mm] | Inch | PN | kv-value ($\Delta p=1$ bar) [l/min] | EPDM Code | FPM Code |
|-----------|------------|------|----|--|--------------------|--------------------|
| 63 | 50 | 2 | 10 | 1470 | 199 240 082 | 199 240 102 |
| 75 | 65 | 2 ½ | 10 | 2200 | 199 240 083 | 199 240 103 |
| 90 | 80 | 3 | 10 | 3000 | 199 240 084 | 199 240 104 |
| 110 | 100 | 4 | 10 | 6500 | 199 240 085 | 199 240 105 |
| 140 | 125 | 5 | 10 | 11500 | 199 240 086 | 199 240 106 |
| 160 | 150 | 6 | 10 | 16600 | 199 240 087 | 199 240 107 |
| 225 | 200 | 8 | 10 | 39600 | 199 240 088 | 199 240 108 |
| 280 | 250 | 10 | 10 | 55200 | 199 240 089 | 199 240 109 |
| 315 | 300 | 12 | 10 | 80000 | 199 240 090 | 199 240 110 |

| d [mm] | Actuator unit type | D [mm] | D1 min. [mm] | D1 max. [mm] | d2 [mm] | H [mm] | H1 [mm] | H2 [mm] | H3 [mm] | H4 [mm] | H5 [mm] | L [mm] | L1 [mm] |
|-----------|-----------------------|-----------|--------------------|--------------------|------------|-----------|------------|------------|------------|------------|------------|-----------|------------|
| 63 | PA-35 DA | 19 | 120.0 | 125.0 | 104 | 317 | 77 | 134 | 107 | 60 | 15 | 45 | 177 |
| 75 | PA-35 DA | 19 | 139.7 | 145.0 | 115 | 330 | 83 | 140 | 107 | 60 | 15 | 46 | 177 |
| 90 | PA-40 DA | 19 | 150.0 | 160.0 | 131 | 348 | 89 | 146 | 113 | 66 | 15 | 49 | 190 |
| 110 | PA-45 DA | 19 | 175.0 | 190.5 | 161 | 372 | 104 | 167 | 102 | 71 | | 56 | 235 |
| 140 | PA-45 DA | 23 | 210.0 | 215.9 | 187 | 408 | 117 | 181 | 111 | 78 | | 64 | 235 |
| 160 | PA-55 DA | 24 | 241.3 | 241.3 | 215 | 448 | 130 | 189 | 129 | 86 | | 72 | 279 |
| 225 | PA-55 DA | 23 | 290.0 | 295.0 | 267 | 507 | 158 | 210 | 139 | 96 | | 73 | 279 |
| 280 | PA-65 DA | 25 | 353.0 | 362.0 | 329 | 748 | 205 | 264 | 161 | 118 | | 113 | 350 |
| 315 | PA-70 DA | 25 | 400.0 | 432.0 | 379 | 816 | 228 | 285 | 173 | 130 | | 113 | 381 |

| d [mm] | L2 [mm] | Q1 [mm] | Q2 [mm] |
|-----------|------------|------------|------------|
| 63 | 55 | 40 | |
| 75 | 55 | 54 | 35 |
| 90 | 60 | 67 | 50 |
| 110 | 65 | 88 | 74 |
| 140 | 72 | 113 | 97 |
| 160 | 80 | 139 | 123 |
| 225 | 90 | 178 | 169 |
| 280 | 112 | 210 | 207 |
| 315 | 125 | 256 | 253 |

Butterfly valves PVC-C

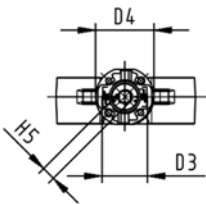
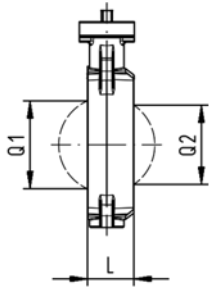
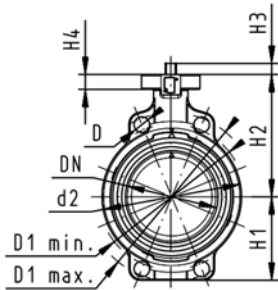
Butterfly valve type 567 PVC-C Bare shaft



Model:

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

* Available on request



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

| d [mm] | D [mm] | D1 min. [mm] | D1 max. [mm] | d2 [mm] | D3 [mm] | D4 [mm] | H [mm] | H1 [mm] | H2 [mm] | H3 [mm] | H4 [mm] | H5 [mm] | L [mm] | Q1 [mm] |
|-----------|-----------|--------------------|--------------------|------------|------------|------------|-----------|------------|------------|------------|------------|------------|-----------|------------|
| *63 | 19 | 120.0 | 125.0 | 104 | 70 | 90 | 222 | 77 | 134 | 27 | 23 | 11 | 45 | 40 |
| 75 | 19 | 139.7 | 145.0 | 115 | 70 | 90 | 235 | 83 | 140 | 27 | 23 | 11 | 46 | 54 |
| 90 | 19 | 150.0 | 160.0 | 131 | 70 | 90 | 247 | 89 | 146 | 27 | 23 | 11 | 49 | 67 |
| 110 | 19 | 175.0 | 190.5 | 161 | 70 | 90 | 287 | 104 | 167 | 16 | 23 | 14 | 56 | 88 |
| *140 | 23 | 210.0 | 215.9 | 187 | 70 | 90 | 313 | 117 | 181 | 16 | 23 | 14 | 64 | 113 |
| 160 | 24 | 241.3 | 241.3 | 215 | 70 | 90 | 335 | 130 | 189 | 19 | 23 | 17 | 72 | 139 |
| 225 | 23 | 290.0 | 295.0 | 267 | 70 | 90 | 387 | 158 | 210 | 19 | 23 | 17 | 73 | 178 |

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



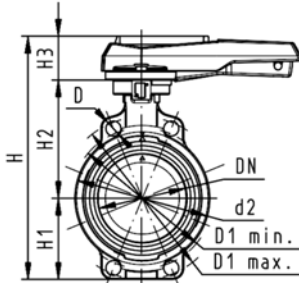
Butterfly valve type 567 PVC-C Hand lever with ratchet settings



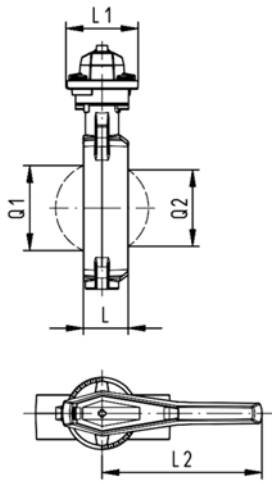
Model:

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

* Available on request



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



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



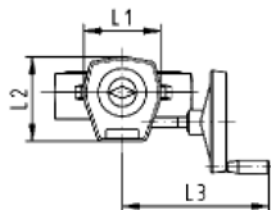
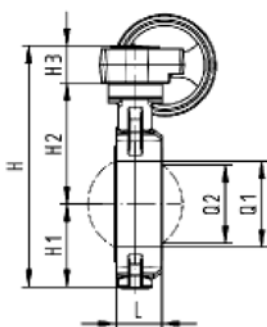
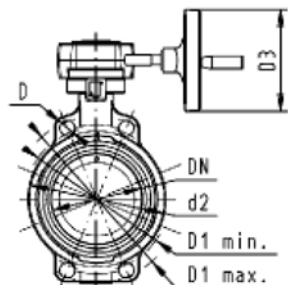
Butterfly valve type 567 PVC-C Reduction gear with handwheel



Model:

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

* Available on request



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

| d [mm] | D [mm] | D1 min. [mm] | D1 max. [mm] | d2 [mm] | D3 [mm] | H [mm] | H1 [mm] | H2 [mm] | H3 [mm] | L [mm] | L1 [mm] | L2 [mm] | L3 [mm] |
|-----------|-----------|--------------------|--------------------|------------|------------|-----------|------------|------------|------------|-----------|------------|------------|------------|
| *63 | 19 | 120.0 | 125.0 | 104 | 160 | 278 | 77 | 134 | 60 | 45 | 120 | 132 | 236 |
| 75 | 19 | 139.7 | 145.0 | 115 | 160 | 291 | 83 | 140 | 60 | 46 | 120 | 132 | 236 |
| 90 | 19 | 150.0 | 160.0 | 131 | 160 | 303 | 89 | 146 | 60 | 49 | 120 | 132 | 236 |
| 110 | 19 | 175.0 | 190.5 | 160 | 160 | 339 | 104 | 167 | 60 | 56 | 120 | 132 | 236 |
| *140 | 23 | 210.0 | 215.9 | 187 | 160 | 365 | 117 | 181 | 60 | 64 | 120 | 132 | 236 |
| 160 | 24 | 241.3 | 241.3 | 215 | 160 | 387 | 130 | 189 | 60 | 72 | 120 | 132 | 236 |
| 225 | 23 | 290.0 | 295.0 | 267 | 160 | 436 | 158 | 210 | 60 | 73 | 120 | 132 | 236 |

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

Butterfly valves electric PVC-C

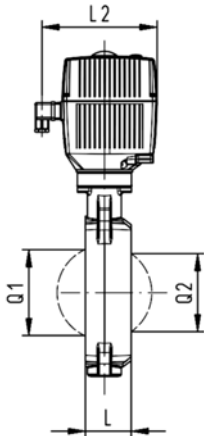
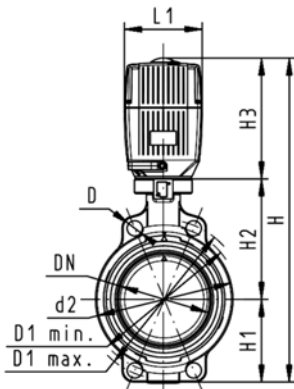
Butterfly valve type 140 PVC-C 100-230V Without manual override



Model:

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

* Available on request



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

| d [mm] | Actuator unit type | D [mm] | D1 min. [mm] | D1 max. [mm] | d2 [mm] | H [mm] | H1 [mm] | H2 [mm] | H3 [mm] | L [mm] | L1 [mm] | L2 [mm] |
|-----------|-----------------------|-----------|--------------------|--------------------|------------|-----------|------------|------------|------------|-----------|------------|------------|
| *63 | EA-31 | 19 | 120.0 | 125.0 | 104 | 400 | 77 | 134 | 188 | 45 | 122 | 180 |
| 75 | EA-31 | 19 | 139.7 | 145.0 | 115 | 413 | 83 | 140 | 188 | 46 | 122 | 180 |
| 90 | EA-31 | 19 | 150.0 | 160.0 | 131 | 428 | 89 | 146 | 188 | 49 | 122 | 180 |
| 110 | EA-31 | 19 | 175.0 | 190.5 | 161 | 460 | 104 | 167 | 188 | 56 | 122 | 180 |
| *140 | EA-31 | 23 | 210.0 | 215.9 | 187 | 487 | 117 | 181 | 188 | 64 | 122 | 180 |
| 160 | EA-31 | 24 | 241.3 | 241.3 | 215 | 508 | 130 | 189 | 188 | 72 | 122 | 180 |
| 225 | EA-42 | 23 | 290.0 | 295.0 | 267 | 575 | 158 | 210 | 208 | 73 | 122 | 180 |

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



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

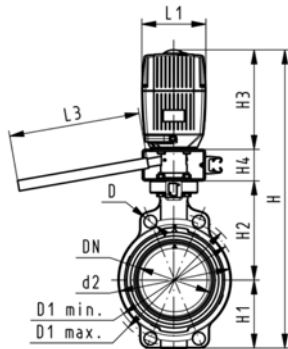


Model:

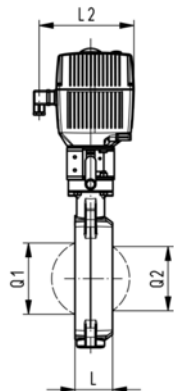
- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, ANSI/ASME B 16.5 Class 150, BS 1560: 1989, BS 4504, JIS B 2220
- Overall length according to EN 558-1, ISO 5752
- Voltage 100-230 V, 50-60 Hz
- Control time 15 s/90°<) EA31
- Control time 25s/90°<) EA42
- Control range 90°<)
- Actuator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

* Available on request

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



| d [mm] | Actuator unit type | D [mm] | D1 min. [mm] | D1 max. [mm] | d2 [mm] | H [mm] | H1 [mm] | H2 [mm] | H3 [mm] | H4 [mm] | L [mm] | L1 [mm] |
|-----------|-----------------------|-----------|--------------------|--------------------|------------|-----------|------------|------------|------------|------------|-----------|------------|
| *63 | EA-31 | 19 | 120.0 | 125.0 | 104 | 460 | 77 | 134 | 188 | 60 | 45 | 122 |
| 75 | EA-31 | 19 | 139.7 | 145.0 | 115 | 473 | 83 | 140 | 188 | 60 | 46 | 122 |
| 90 | EA-31 | 19 | 150.0 | 160.0 | 131 | 488 | 89 | 146 | 188 | 60 | 49 | 122 |
| 110 | EA-31 | 19 | 175.0 | 190.5 | 161 | 520 | 104 | 167 | 188 | 60 | 56 | 122 |
| *140 | EA-31 | 23 | 210.0 | 215.9 | 187 | 547 | 117 | 181 | 188 | 60 | 64 | 122 |
| 160 | EA-31 | 24 | 241.3 | 241.3 | 215 | 568 | 130 | 189 | 188 | 60 | 72 | 122 |
| 225 | EA-42 | 23 | 290.0 | 295.0 | 267 | 635 | 158 | 210 | 208 | 60 | 73 | 122 |



| d [mm] | L2 [mm] | L3 [mm] | Q1 [mm] | Q2 [mm] |
|-----------|------------|------------|------------|------------|
| *63 | 180 | 250 | 40 | |
| 75 | 180 | 250 | 54 | 35 |
| 90 | 180 | 250 | 67 | 50 |
| 110 | 180 | 250 | 88 | 74 |
| *140 | 180 | 250 | 113 | 97 |
| 160 | 180 | 250 | 139 | 123 |
| 225 | 180 | 250 | 178 | 169 |



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

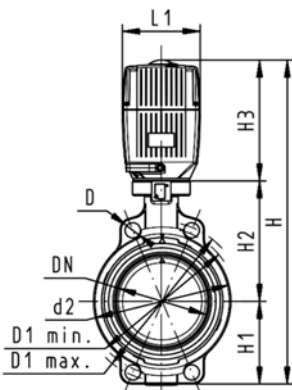


Model:

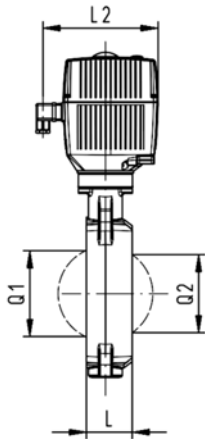
- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, ANSI/ASME B 16.5 Class 150, BS 1560: 1989, BS 4504, JIS B 2220
- Overall length according to EN 558-1, ISO 5752
- Voltage 24 V AC/DC
- Control time 15 s/90°<) EA31
- Control time 25s/90°<) EA42
- Control range 90°<)
- Actuator with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

* Available on request

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



| d [mm] | Actuator unit type | D [mm] | D1 min. [mm] | D1 max. [mm] | d2 [mm] | H [mm] | H1 [mm] | H2 [mm] | H3 [mm] | L [mm] | L1 [mm] | L2 [mm] |
|-----------|-----------------------|-----------|--------------------|--------------------|------------|-----------|------------|------------|------------|-----------|------------|------------|
| *63 | EA-31 | 19 | 120.0 | 125.0 | 104 | 400 | 77 | 134 | 188 | 45 | 122 | 180 |
| 75 | EA-31 | 19 | 139.7 | 145.0 | 115 | 413 | 83 | 140 | 188 | 46 | 122 | 180 |
| 90 | EA-31 | 19 | 150.0 | 160.0 | 131 | 428 | 89 | 146 | 188 | 49 | 122 | 180 |
| 110 | EA-31 | 19 | 175.0 | 190.5 | 161 | 460 | 104 | 167 | 188 | 56 | 122 | 180 |
| *140 | EA-31 | 23 | 210.0 | 215.9 | 187 | 487 | 117 | 181 | 188 | 64 | 122 | 180 |
| 160 | EA-31 | 24 | 241.3 | 241.3 | 215 | 508 | 130 | 189 | 188 | 72 | 122 | 180 |
| 225 | EA-42 | 23 | 290.0 | 295.0 | 267 | 575 | 158 | 210 | 208 | 73 | 122 | 180 |



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



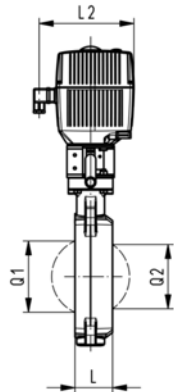
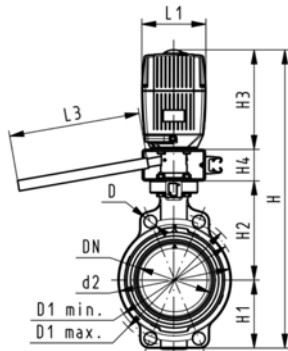
Butterfly valve type 140 PVC-C 24V With manual override



Model:

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

* Available on request



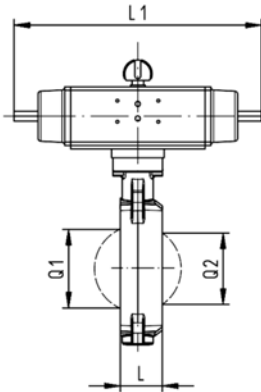
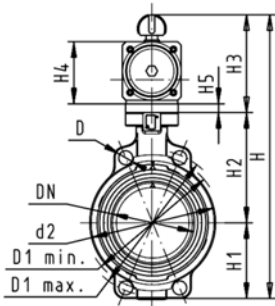
| d [mm] | DN [mm] | Inch | PN | kv-value ($\Delta p=1$ bar) [l/min] | EPDM Code | FPM Code |
|-----------|------------|------|----|--|--------------------|--------------------|
| *63 | 50 | 2 | 10 | 1470 | 199 140 242 | 199 140 262 |
| 75 | 65 | 2 ½ | 10 | 2200 | 199 140 243 | 199 140 263 |
| 90 | 80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

| d [mm] | Actuator unit type | D [mm] | D1 min. [mm] | D1 max. [mm] | d2 [mm] | H [mm] | H1 [mm] | H2 [mm] | H3 [mm] | H4 [mm] | L [mm] | L1 [mm] |
|-----------|-----------------------|-----------|--------------------|--------------------|------------|-----------|------------|------------|------------|------------|-----------|------------|
| *63 | EA-31 | 19 | 120.0 | 125.0 | 104 | 460 | 77 | 134 | 188 | 60 | 45 | 122 |
| 75 | EA-31 | 19 | 139.7 | 145.0 | 115 | 473 | 83 | 140 | 188 | 60 | 46 | 122 |
| 90 | EA-31 | 19 | 150.0 | 160.0 | 131 | 488 | 89 | 146 | 188 | 60 | 49 | 122 |
| 110 | EA-31 | 19 | 175.0 | 190.5 | 161 | 520 | 104 | 167 | 188 | 60 | 56 | 122 |
| *140 | EA-31 | 23 | 210.0 | 215.9 | 187 | 547 | 117 | 181 | 188 | 60 | 64 | 122 |
| 160 | EA-31 | 24 | 241.3 | 241.3 | 215 | 568 | 130 | 189 | 188 | 60 | 72 | 122 |
| 225 | EA-42 | 23 | 290.0 | 295.0 | 267 | 635 | 158 | 210 | 208 | 60 | 73 | 122 |

| d [mm] | L2 [mm] | L3 [mm] | Q1 [mm] | Q2 [mm] |
|-----------|------------|------------|------------|------------|
| *63 | 180 | 250 | 40 | |
| 75 | 180 | 250 | 54 | 35 |
| 90 | 180 | 250 | 67 | 50 |
| 110 | 180 | 250 | 88 | 74 |
| *140 | 180 | 250 | 113 | 97 |
| 160 | 180 | 250 | 139 | 123 |
| 225 | 180 | 250 | 178 | 169 |

Butterfly valves pneumatic PVC-C

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



Model:

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

* Available on request

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

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

| d [mm] | L1 [mm] | L2 [mm] | Q1 [mm] | Q2 [mm] |
|-----------|------------|------------|------------|------------|
| *63 | 276 | 65 | 40 | |
| 75 | 276 | 65 | 54 | 35 |
| 90 | 326 | 72 | 67 | 50 |
| 110 | 370 | 80 | 88 | 74 |
| *140 | 411 | 90 | 113 | 97 |
| 160 | 423 | 100 | 139 | 123 |
| 225 | 452 | 112 | 178 | 169 |



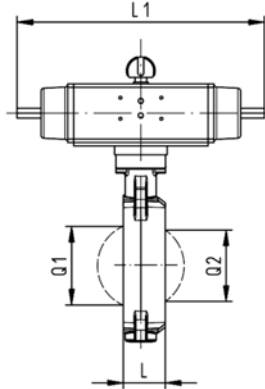
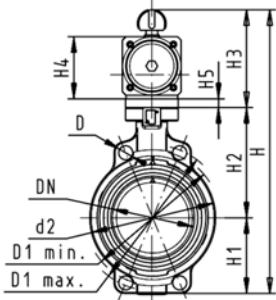
Butterfly valve type 240 PVC-C FO (Fail safe to open) Without manual override



Model:

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

* Available on request



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

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

| d [mm] | L1 [mm] | L2 [mm] | Q1 [mm] | Q2 [mm] |
|-----------|------------|------------|------------|------------|
| *63 | 276 | 65 | 40 | |
| 75 | 276 | 65 | 54 | 35 |
| 90 | 326 | 72 | 67 | 50 |
| 110 | 370 | 80 | 88 | 74 |
| *140 | 411 | 90 | 113 | 97 |
| 160 | 423 | 100 | 139 | 123 |
| 225 | 452 | 112 | 178 | 169 |



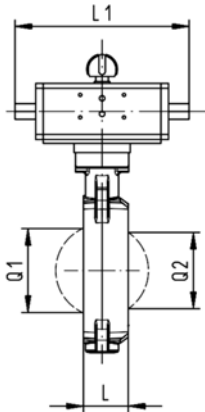
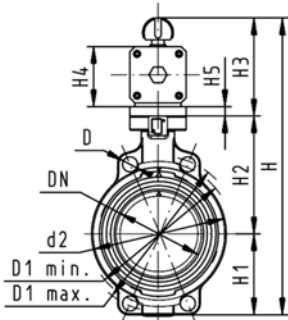
Butterfly valve type 240 PVC-C DA (Double acting) Without manual override



Model:

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

* Available on request



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

| d [mm] | Actuator unit type | D [mm] | D1 min. [mm] | D1 max. [mm] | d2 [mm] | H [mm] | H1 [mm] | H2 [mm] | H3 [mm] | H4 [mm] | H5 [mm] | L [mm] |
|-----------|-----------------------|-----------|--------------------|--------------------|------------|-----------|------------|------------|------------|------------|------------|-----------|
| *63 | PA-35 DA | 19 | 120.0 | 125.0 | 104 | 317 | 77 | 134 | 107 | 60 | 15 | 45 |
| 75 | PA-35 DA | 19 | 139.7 | 145.0 | 115 | 330 | 83 | 140 | 107 | 60 | 15 | 46 |
| 90 | PA-40 DA | 19 | 150.0 | 160.0 | 131 | 348 | 89 | 146 | 113 | 66 | 15 | 49 |
| 110 | PA-45 DA | 19 | 175.0 | 190.5 | 161 | 372 | 104 | 167 | 102 | 71 | | 56 |
| *140 | PA-45 DA | 23 | 210.0 | 215.9 | 187 | 408 | 117 | 181 | 111 | 78 | | 64 |
| 160 | PA-55 DA | 24 | 241.3 | 241.3 | 215 | 448 | 130 | 189 | 129 | 86 | | 72 |
| 225 | PA-55 DA | 23 | 290.0 | 295.0 | 267 | 507 | 158 | 210 | 139 | 96 | | 73 |

| d [mm] | L1 [mm] | L2 [mm] | Q1 [mm] | Q2 [mm] |
|-----------|------------|------------|------------|------------|
| *63 | 177 | 55 | 40 | |
| 75 | 177 | 55 | 54 | 35 |
| 90 | 190 | 60 | 67 | 50 |
| 110 | 235 | 65 | 88 | 74 |
| *140 | 235 | 72 | 113 | 97 |
| 160 | 279 | 80 | 139 | 123 |
| 225 | 279 | 90 | 178 | 169 |

Butterfly valves ABS

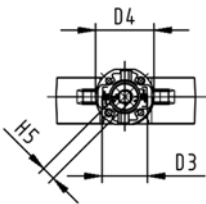
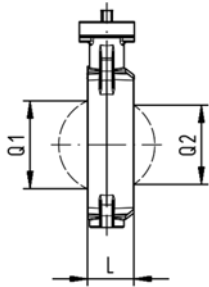
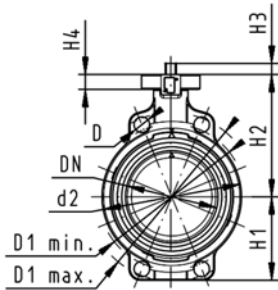
Butterfly valve type 567 ABS Bare shaft



Model:

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

* Available on request



| d [mm] | DN [mm] | Inch | PN | kv-value ($\Delta p=1$ bar) [l/min] | EPDM Code |
|-----------|------------|------|----|--|--------------------|
| *63 | 50 | 2 | 10 | 1470 | 169 567 802 |
| *75 | 65 | 2 ½ | 10 | 2200 | 169 567 803 |
| 90 | 80 | 3 | 10 | 3000 | 169 567 804 |
| 110 | 100 | 4 | 10 | 6500 | 169 567 805 |
| *140 | 125 | 5 | 10 | 11500 | 169 567 806 |
| 160 | 150 | 6 | 10 | 16600 | 169 567 807 |
| 225 | 200 | 8 | 10 | 39600 | 169 567 808 |

| d [mm] | D [mm] | D1 min. [mm] | D1 max. [mm] | d2 [mm] | D3 [mm] | D4 [mm] | H [mm] | H1 [mm] | H2 [mm] | H3 [mm] | H4 [mm] | H5 [mm] | L [mm] | Q1 [mm] |
|-----------|-----------|--------------------|--------------------|------------|------------|------------|-----------|------------|------------|------------|------------|------------|-----------|------------|
| *63 | 19 | 120.0 | 125.0 | 104 | 70 | 90 | 222 | 77 | 134 | 27 | 23 | 11 | 45 | 40 |
| *75 | 19 | 139.7 | 145.0 | 115 | 70 | 90 | 235 | 83 | 140 | 27 | 23 | 11 | 46 | 54 |
| 90 | 19 | 150.0 | 160.0 | 131 | 70 | 90 | 247 | 89 | 146 | 27 | 23 | 11 | 49 | 67 |
| 110 | 19 | 175.0 | 190.5 | 161 | 70 | 90 | 287 | 104 | 167 | 16 | 23 | 14 | 56 | 88 |
| *140 | 23 | 210.0 | 215.9 | 187 | 70 | 90 | 313 | 117 | 181 | 16 | 23 | 14 | 64 | 113 |
| 160 | 24 | 241.3 | 241.3 | 215 | 70 | 90 | 335 | 130 | 189 | 19 | 23 | 17 | 72 | 139 |
| 225 | 23 | 290.0 | 295.0 | 267 | 70 | 90 | 387 | 158 | 210 | 19 | 23 | 17 | 73 | 178 |

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



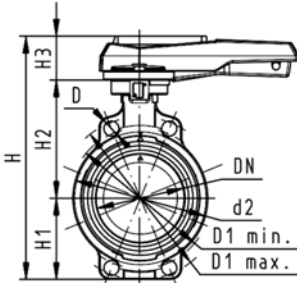
Butterfly valve type 567 ABS Hand lever with ratchet settings



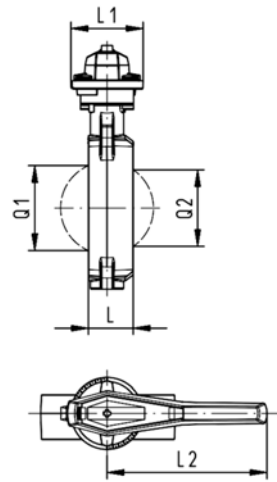
Model:

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

* Available on request



| d [mm] | DN [mm] | Inch | PN | kv-value ($\Delta p=1$ bar) [l/min] | EPDM Code |
|-----------|------------|------|----|--|--------------------|
| *63 | 50 | 2 | 10 | 1470 | 169 567 002 |
| *75 | 65 | 2 ½ | 10 | 2200 | 169 567 003 |
| 90 | 80 | 3 | 10 | 3000 | 169 567 004 |
| 110 | 100 | 4 | 10 | 6500 | 169 567 005 |
| *140 | 125 | 5 | 10 | 11500 | 169 567 006 |
| 160 | 150 | 6 | 10 | 16600 | 169 567 007 |
| 225 | 200 | 8 | 10 | 39600 | 169 567 008 |



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



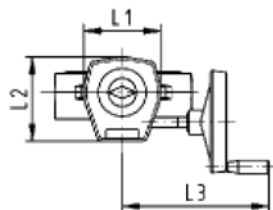
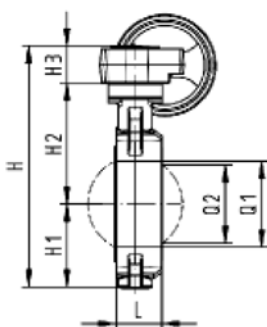
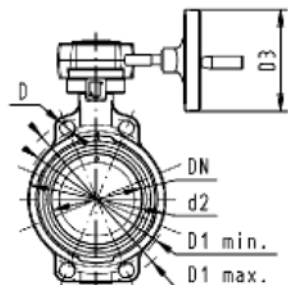
Butterfly valve type 567 ABS Reduction gear with handwheel



Model:

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

* Available on request



| d [mm] | DN [mm] | Inch | PN | kv-value ($\Delta p=1$ bar) [l/min] | EPDM Code |
|-----------|------------|------|----|--|--------------------|
| *63 | 50 | 2 | 10 | 1470 | 169 567 022 |
| *75 | 65 | 2 ½ | 10 | 2200 | 169 567 023 |
| 90 | 80 | 3 | 10 | 3000 | 169 567 024 |
| 110 | 100 | 4 | 10 | 6500 | 169 567 025 |
| *140 | 125 | 5 | 10 | 11500 | 169 567 026 |
| 160 | 150 | 6 | 10 | 16600 | 169 567 027 |
| 225 | 200 | 8 | 10 | 39600 | 169 567 028 |

| d [mm] | D [mm] | D1 min. [mm] | D1 max. [mm] | d2 [mm] | D3 [mm] | H [mm] | H1 [mm] | H2 [mm] | H3 [mm] | L [mm] | L1 [mm] | L2 [mm] | L3 [mm] |
|-----------|-----------|--------------------|--------------------|------------|------------|-----------|------------|------------|------------|-----------|------------|------------|------------|
| *63 | 19 | 120.0 | 125.0 | 104 | 160 | 278 | 77 | 134 | 60 | 45 | 120 | 132 | 236 |
| *75 | 19 | 139.7 | 145.0 | 115 | 160 | 291 | 83 | 140 | 60 | 46 | 120 | 132 | 236 |
| 90 | 19 | 150.0 | 160.0 | 131 | 160 | 303 | 89 | 146 | 60 | 49 | 120 | 132 | 236 |
| 110 | 19 | 175.0 | 190.5 | 160 | 160 | 339 | 104 | 167 | 60 | 56 | 120 | 132 | 236 |
| *140 | 23 | 210.0 | 215.9 | 187 | 160 | 365 | 117 | 181 | 60 | 64 | 120 | 132 | 236 |
| 160 | 24 | 241.3 | 241.3 | 215 | 160 | 387 | 130 | 189 | 60 | 72 | 120 | 132 | 236 |
| 225 | 23 | 290.0 | 295.0 | 267 | 160 | 436 | 158 | 210 | 60 | 73 | 120 | 132 | 236 |

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

Butterfly valves electric ABS

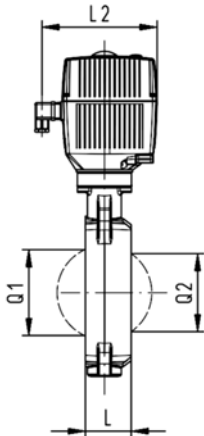
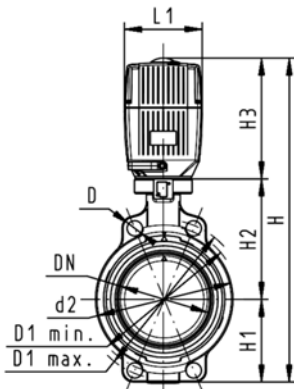
Butterfly valve type 140 ABS 100-230V Without manual override



Model:

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

* Available on request



| d [mm] | DN [mm] | Inch | PN | kv-value ($\Delta p=1$ bar) [l/min] | EPDM Code |
|-----------|------------|------|----|--|--------------------|
| *63 | 50 | 2 | 10 | 1470 | 199 140 502 |
| *75 | 65 | 2 ½ | 10 | 2200 | 199 140 503 |
| 90 | 80 | 3 | 10 | 3000 | 199 140 504 |
| 110 | 100 | 4 | 10 | 6500 | 199 140 505 |
| *140 | 125 | 5 | 10 | 11500 | 199 140 506 |
| 160 | 150 | 6 | 10 | 16600 | 199 140 507 |
| 225 | 200 | 8 | 10 | 39600 | 199 140 508 |

| d [mm] | Actuator unit type | D [mm] | D1 min. [mm] | D1 max. [mm] | d2 [mm] | H [mm] | H1 [mm] | H2 [mm] | H3 [mm] | L [mm] | L1 [mm] | L2 [mm] |
|-----------|-----------------------|-----------|--------------------|--------------------|------------|-----------|------------|------------|------------|-----------|------------|------------|
| *63 | EA-31 | 19 | 120.0 | 125.0 | 104 | 400 | 77 | 134 | 188 | 45 | 122 | 180 |
| *75 | EA-31 | 19 | 139.7 | 145.0 | 115 | 413 | 83 | 140 | 188 | 46 | 122 | 180 |
| 90 | EA-31 | 19 | 150.0 | 160.0 | 131 | 428 | 89 | 146 | 188 | 49 | 122 | 180 |
| 110 | EA-31 | 19 | 175.0 | 190.5 | 161 | 460 | 104 | 167 | 188 | 56 | 122 | 180 |
| *140 | EA-31 | 23 | 210.0 | 215.9 | 187 | 487 | 117 | 181 | 188 | 64 | 122 | 180 |
| 160 | EA-31 | 24 | 241.3 | 241.3 | 215 | 508 | 130 | 189 | 188 | 72 | 122 | 180 |
| 225 | EA-42 | 23 | 290.0 | 295.0 | 267 | 575 | 158 | 210 | 208 | 73 | 122 | 180 |

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



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

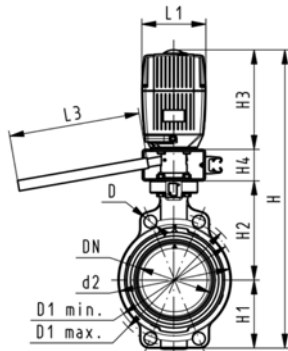


Model:

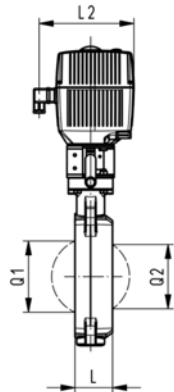
- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, ANSI/ASME B 16.5 Class 150, BS 1560: 1989, BS 4504, JIS B 2220
- Overall length according to EN 558-1, ISO 5752
- Voltage 100-230 V, 50-60 Hz
- Control time 15 s/90°<) EA31
- Control time 25s/90°<) EA42
- Control range 90°<)
- Actuator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

* Available on request

| d [mm] | DN [mm] | Inch | PN | kv-value ($\Delta p=1$ bar) [l/min] | EPDM Code |
|-----------|------------|------|----|--|--------------------|
| *63 | 50 | 2 | 10 | 1470 | 199 140 482 |
| *75 | 65 | 2 ½ | 10 | 2200 | 199 140 483 |
| 90 | 80 | 3 | 10 | 3000 | 199 140 484 |
| 110 | 100 | 4 | 10 | 6500 | 199 140 485 |
| *140 | 125 | 5 | 10 | 11500 | 199 140 486 |
| 160 | 150 | 6 | 10 | 16600 | 199 140 487 |
| 225 | 200 | 8 | 10 | 39600 | 199 140 488 |



| d [mm] | Actuator unit type | D [mm] | D1 min. [mm] | D1 max. [mm] | d2 [mm] | H [mm] | H1 [mm] | H2 [mm] | H3 [mm] | H4 [mm] | L [mm] | L1 [mm] |
|-----------|-----------------------|-----------|--------------------|--------------------|------------|-----------|------------|------------|------------|------------|-----------|------------|
| *63 | EA-31 | 19 | 120.0 | 125.0 | 104 | 460 | 77 | 134 | 188 | 60 | 45 | 122 |
| *75 | EA-31 | 19 | 139.7 | 145.0 | 115 | 473 | 83 | 140 | 188 | 60 | 46 | 122 |
| 90 | EA-31 | 19 | 150.0 | 160.0 | 131 | 488 | 89 | 146 | 188 | 60 | 49 | 122 |
| 110 | EA-31 | 19 | 175.0 | 190.5 | 161 | 520 | 104 | 167 | 188 | 60 | 56 | 122 |
| *140 | EA-31 | 23 | 210.0 | 215.9 | 187 | 547 | 117 | 181 | 188 | 60 | 64 | 122 |
| 160 | EA-31 | 24 | 241.3 | 241.3 | 215 | 568 | 130 | 189 | 188 | 60 | 72 | 122 |
| 225 | EA-42 | 23 | 290.0 | 295.0 | 267 | 635 | 158 | 210 | 208 | 60 | 73 | 122 |



| d [mm] | L2 [mm] | L3 [mm] | Q1 [mm] | Q2 [mm] |
|-----------|------------|------------|------------|------------|
| *63 | 180 | 250 | 40 | |
| *75 | 180 | 250 | 54 | 35 |
| 90 | 180 | 250 | 67 | 50 |
| 110 | 180 | 250 | 88 | 74 |
| *140 | 180 | 250 | 113 | 97 |
| 160 | 180 | 250 | 139 | 123 |
| 225 | 180 | 250 | 178 | 169 |



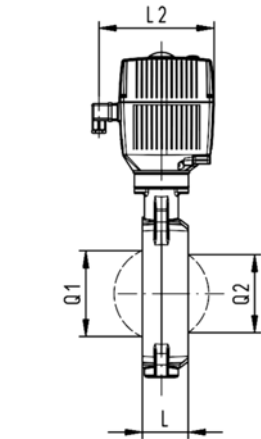
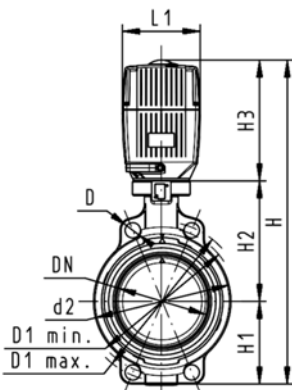
Butterfly valve type 140 ABS 24V Without manual override



Model:

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

* Available on request



| d [mm] | DN [mm] | Inch | PN | kv-value ($\Delta p=1$ bar) [l/min] | EPDM Code |
|-----------|------------|------|----|--|--------------------|
| *63 | 50 | 2 | 10 | 1470 | 199 140 542 |
| *75 | 65 | 2 ½ | 10 | 2200 | 199 140 543 |
| 90 | 80 | 3 | 10 | 3000 | 199 140 544 |
| 110 | 100 | 4 | 10 | 6500 | 199 140 545 |
| *140 | 125 | 5 | 10 | 11500 | 199 140 546 |
| 160 | 150 | 6 | 10 | 16600 | 199 140 547 |
| 225 | 200 | 8 | 10 | 39600 | 199 140 548 |

| d [mm] | Actuator unit type | D [mm] | D1 min. [mm] | D1 max. [mm] | d2 [mm] | H [mm] | H1 [mm] | H2 [mm] | H3 [mm] | L [mm] | L1 [mm] | L2 [mm] |
|-----------|-----------------------|-----------|--------------------|--------------------|------------|-----------|------------|------------|------------|-----------|------------|------------|
| *63 | EA-31 | 19 | 120.0 | 125.0 | 104 | 400 | 77 | 134 | 188 | 45 | 122 | 180 |
| *75 | EA-31 | 19 | 139.7 | 145.0 | 115 | 413 | 83 | 140 | 188 | 46 | 122 | 180 |
| 90 | EA-31 | 19 | 150.0 | 160.0 | 131 | 428 | 89 | 146 | 188 | 49 | 122 | 180 |
| 110 | EA-31 | 19 | 175.0 | 190.5 | 161 | 460 | 104 | 167 | 188 | 56 | 122 | 180 |
| *140 | EA-31 | 23 | 210.0 | 215.9 | 187 | 487 | 117 | 181 | 188 | 64 | 122 | 180 |
| 160 | EA-31 | 24 | 241.3 | 241.3 | 215 | 508 | 130 | 189 | 188 | 72 | 122 | 180 |
| 225 | EA-42 | 23 | 290.0 | 295.0 | 267 | 575 | 158 | 210 | 208 | 73 | 122 | 180 |

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



Butterfly valve type 140 ABS 24V With manual override

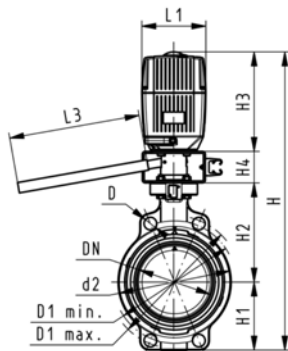


Model:

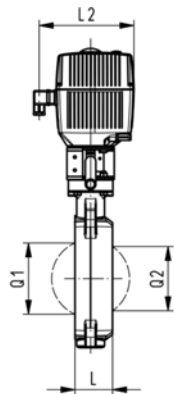
- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, ANSI/ASME B 16.5 Class 150, BS 1560: 1989, BS 4504, JIS B 2220
- Overall length according to EN 558-1, ISO 5752
- Voltage 24 V AC/DC
- Control time 15 s/90°<) EA31
- Control time 25s/90°<) EA42
- Control range 90°<)
- Actuator with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

* Available on request

| d [mm] | DN [mm] | Inch | PN | kv-value ($\Delta p=1$ bar) [l/min] | EPDM Code |
|-----------|------------|------|----|--|--------------------|
| *63 | 50 | 2 | 10 | 1470 | 199 140 522 |
| *75 | 65 | 2 ½ | 10 | 2200 | 199 140 523 |
| 90 | 80 | 3 | 10 | 3000 | 199 140 524 |
| 110 | 100 | 4 | 10 | 6500 | 199 140 525 |
| *140 | 125 | 5 | 10 | 11500 | 199 140 526 |
| 160 | 150 | 6 | 10 | 16600 | 199 140 527 |
| 225 | 200 | 8 | 10 | 39600 | 199 140 528 |



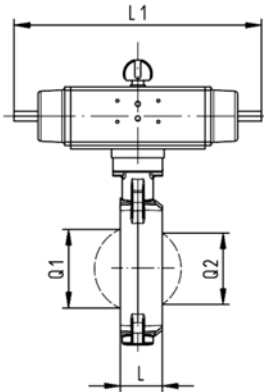
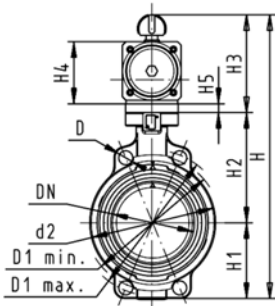
| d [mm] | Actuator unit type | D [mm] | D1 min. [mm] | D1 max. [mm] | d2 [mm] | H [mm] | H1 [mm] | H2 [mm] | H3 [mm] | H4 [mm] | L [mm] | L1 [mm] |
|-----------|-----------------------|-----------|--------------------|--------------------|------------|-----------|------------|------------|------------|------------|-----------|------------|
| *63 | EA-31 | 19 | 120.0 | 125.0 | 104 | 460 | 77 | 134 | 188 | 60 | 45 | 122 |
| *75 | EA-31 | 19 | 139.7 | 145.0 | 115 | 473 | 83 | 140 | 188 | 60 | 46 | 122 |
| 90 | EA-31 | 19 | 150.0 | 160.0 | 131 | 488 | 89 | 146 | 188 | 60 | 49 | 122 |
| 110 | EA-31 | 19 | 175.0 | 190.5 | 161 | 520 | 104 | 167 | 188 | 60 | 56 | 122 |
| *140 | EA-31 | 23 | 210.0 | 215.9 | 187 | 547 | 117 | 181 | 188 | 60 | 64 | 122 |
| 160 | EA-31 | 24 | 241.3 | 241.3 | 215 | 568 | 130 | 189 | 188 | 60 | 72 | 122 |
| 225 | EA-42 | 23 | 290.0 | 295.0 | 267 | 635 | 158 | 210 | 208 | 60 | 73 | 122 |



| d [mm] | L2 [mm] | L3 [mm] | Q1 [mm] | Q2 [mm] |
|-----------|------------|------------|------------|------------|
| *63 | 180 | 250 | 40 | |
| *75 | 180 | 250 | 54 | 35 |
| 90 | 180 | 250 | 67 | 50 |
| 110 | 180 | 250 | 88 | 74 |
| *140 | 180 | 250 | 113 | 97 |
| 160 | 180 | 250 | 139 | 123 |
| 225 | 180 | 250 | 178 | 169 |

Butterfly valves pneumatic ABS

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



Model:

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

* Available on request

| d [mm] | DN [mm] | Inch | PN | kv-value ($\Delta p=1$ bar) [l/min] | EPDM Code |
|-----------|------------|------|----|--|--------------------|
| *63 | 50 | 2 | 10 | 1470 | 199 240 402 |
| *75 | 65 | 2 ½ | 10 | 2200 | 199 240 403 |
| 90 | 80 | 3 | 10 | 3000 | 199 240 404 |
| 110 | 100 | 4 | 10 | 6500 | 199 240 405 |
| *140 | 125 | 5 | 10 | 11500 | 199 240 406 |
| 160 | 150 | 6 | 10 | 16600 | 199 240 407 |
| 225 | 200 | 8 | 10 | 39600 | 199 240 408 |

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

| d [mm] | L1 [mm] | L2 [mm] | Q1 [mm] | Q2 [mm] |
|-----------|------------|------------|------------|------------|
| *63 | 276 | 65 | 40 | |
| *75 | 276 | 65 | 54 | 35 |
| 90 | 326 | 72 | 67 | 50 |
| 110 | 370 | 80 | 88 | 74 |
| *140 | 411 | 90 | 113 | 97 |
| 160 | 423 | 100 | 139 | 123 |
| 225 | 452 | 112 | 178 | 169 |



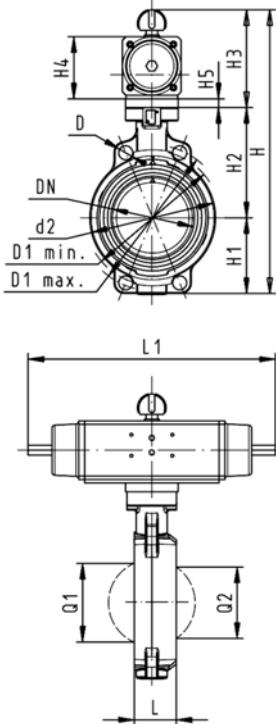
Butterfly valve type 240 ABS FO (Fail safe to open) Without manual override



Model:

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

* Available on request



| d [mm] | DN [mm] | Inch | PN | kv-value ($\Delta p=1$ bar) [l/min] | EPDM Code |
|-----------|------------|------|----|--|--------------------|
| *63 | 50 | 2 | 10 | 1470 | 199 240 422 |
| *75 | 65 | 2 ½ | 10 | 2200 | 199 240 423 |
| 90 | 80 | 3 | 10 | 3000 | 199 240 424 |
| 110 | 100 | 4 | 10 | 6500 | 199 240 425 |
| *140 | 125 | 5 | 10 | 11500 | 199 240 426 |
| 160 | 150 | 6 | 10 | 16600 | 199 240 427 |
| 225 | 200 | 8 | 10 | 39600 | 199 240 428 |

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

| d [mm] | L1 [mm] | L2 [mm] | Q1 [mm] | Q2 [mm] |
|-----------|------------|------------|------------|------------|
| *63 | 276 | 65 | 40 | |
| *75 | 276 | 65 | 54 | 35 |
| 90 | 326 | 72 | 67 | 50 |
| 110 | 370 | 80 | 88 | 74 |
| *140 | 411 | 90 | 113 | 97 |
| 160 | 423 | 100 | 139 | 123 |
| 225 | 452 | 112 | 178 | 169 |



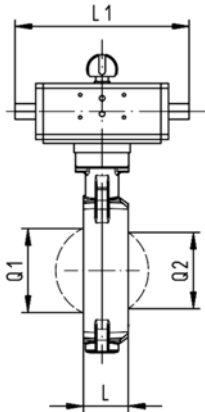
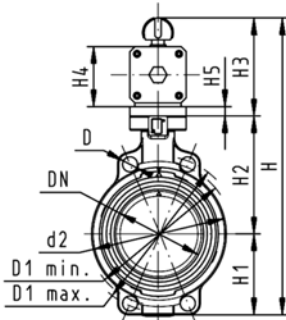
Butterfly valve type 240 ABS DA (Double acting) Without manual override



Model:

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

* Available on request



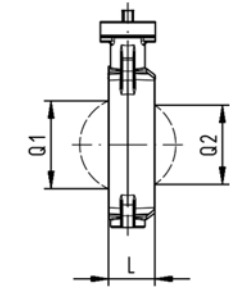
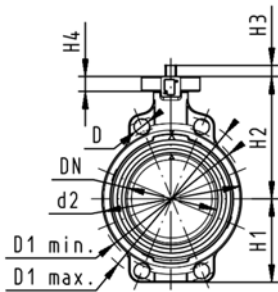
| d [mm] | DN [mm] | Inch | PN | kv-value ($\Delta p=1$ bar) [l/min] | EPDM Code |
|-----------|------------|------|----|--|--------------------|
| *63 | 50 | 2 | 10 | 1470 | 199 240 442 |
| *75 | 65 | 2 ½ | 10 | 2200 | 199 240 443 |
| 90 | 80 | 3 | 10 | 3000 | 199 240 444 |
| 110 | 100 | 4 | 10 | 6500 | 199 240 445 |
| *140 | 125 | 5 | 10 | 11500 | 199 240 446 |
| 160 | 150 | 6 | 10 | 16600 | 199 240 447 |
| 225 | 200 | 8 | 10 | 39600 | 199 240 448 |

| d [mm] | Actuator unit type | D [mm] | D1 min. [mm] | D1 max. [mm] | d2 [mm] | H [mm] | H1 [mm] | H2 [mm] | H3 [mm] | H4 [mm] | H5 [mm] | L [mm] |
|-----------|-----------------------|-----------|--------------------|--------------------|------------|-----------|------------|------------|------------|------------|------------|-----------|
| *63 | PA-35 DA | 19 | 120.0 | 125.0 | 104 | 317 | 77 | 134 | 107 | 60 | 15 | 45 |
| *75 | PA-35 DA | 19 | 139.7 | 145.0 | 115 | 330 | 83 | 140 | 107 | 60 | 15 | 46 |
| 90 | PA-40 DA | 19 | 150.0 | 160.0 | 131 | 348 | 89 | 146 | 113 | 66 | 15 | 49 |
| 110 | PA-45 DA | 19 | 175.0 | 190.5 | 161 | 372 | 104 | 167 | 102 | 71 | | 56 |
| *140 | PA-45 DA | 23 | 210.0 | 215.9 | 187 | 408 | 117 | 181 | 111 | 78 | | 64 |
| 160 | PA-55 DA | 24 | 241.3 | 241.3 | 215 | 448 | 130 | 189 | 129 | 86 | | 72 |
| 225 | PA-55 DA | 23 | 290.0 | 295.0 | 267 | 507 | 158 | 210 | 139 | 96 | | 73 |

| d [mm] | L1 [mm] | L2 [mm] | Q1 [mm] | Q2 [mm] |
|-----------|------------|------------|------------|------------|
| *63 | 177 | 55 | 40 | |
| *75 | 177 | 55 | 54 | 35 |
| 90 | 190 | 60 | 67 | 50 |
| 110 | 235 | 65 | 88 | 74 |
| *140 | 235 | 72 | 113 | 97 |
| 160 | 279 | 80 | 139 | 123 |
| 225 | 279 | 90 | 178 | 169 |

Butterfly valves PP-H

Butterfly valve type 567 PP-H Bare shaft



Model:

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

| d [mm] | DN [mm] | Inch | PN | kv-value ($\Delta p=1$ bar) [l/min] | EPDM Code | FPM Code |
|-----------|------------|------|----|--|--------------------|--------------------|
| 63 | 50 | 2 | 10 | 1470 | 167 567 802 | 167 567 822 |
| 75 | 65 | 2 ½ | 10 | 2200 | 167 567 803 | 167 567 823 |
| 90 | 80 | 3 | 10 | 3000 | 167 567 804 | 167 567 824 |
| 110 | 100 | 4 | 10 | 6500 | 167 567 805 | 167 567 825 |
| 140 | 125 | 5 | 10 | 11500 | 167 567 806 | 167 567 826 |
| 160 | 150 | 6 | 10 | 16600 | 167 567 807 | 167 567 827 |
| 225 | 200 | 8 | 10 | 39600 | 167 567 808 | 167 567 828 |
| 280 | 250 | 10 | 8 | 55200 | 167 567 809 | 167 567 829 |
| 315 | 300 | 12 | 8 | 80000 | 167 567 810 | 167 567 830 |

| d [mm] | D [mm] | D1 min. [mm] | D1 max. [mm] | d2 [mm] | D3 [mm] | D4 [mm] | H [mm] | H1 [mm] | H2 [mm] | H3 [mm] | H4 [mm] | H5 [mm] | L [mm] | Q1 [mm] |
|-----------|-----------|--------------------|--------------------|------------|------------|------------|-----------|------------|------------|------------|------------|------------|-----------|------------|
| 63 | 19 | 120.0 | 125.0 | 104 | 70 | 90 | 222 | 77 | 134 | 27 | 23 | 11 | 45 | 40 |
| 75 | 19 | 139.7 | 145.0 | 115 | 70 | 90 | 235 | 83 | 140 | 27 | 23 | 11 | 46 | 54 |
| 90 | 19 | 150.0 | 160.0 | 131 | 70 | 90 | 247 | 89 | 146 | 27 | 23 | 11 | 49 | 67 |
| 110 | 19 | 175.0 | 190.5 | 161 | 70 | 90 | 287 | 104 | 167 | 16 | 23 | 14 | 56 | 88 |
| 140 | 23 | 210.0 | 215.9 | 187 | 70 | 90 | 313 | 117 | 181 | 16 | 23 | 14 | 64 | 113 |
| 160 | 24 | 241.3 | 241.3 | 215 | 70 | 90 | 335 | 130 | 189 | 19 | 23 | 17 | 72 | 139 |
| 225 | 23 | 290.0 | 295.0 | 267 | 70 | 90 | 387 | 158 | 210 | 19 | 23 | 17 | 73 | 178 |
| 280 | 25 | 353.0 | 362.0 | 329 | 102 | 125 | 509 | 205 | 264 | 40 | 23 | 22 | 113 | 210 |
| 315 | 25 | 400.0 | 432.0 | 379 | 102 | 125 | 553 | 228 | 285 | 40 | 23 | 22 | 113 | 256 |

| d [mm] | Q2 [mm] |
|-----------|------------|
| 63 | |
| 75 | 35 |
| 90 | 50 |
| 110 | 74 |
| 140 | 97 |
| 160 | 123 |
| 225 | 169 |
| 280 | 207 |
| 315 | 253 |

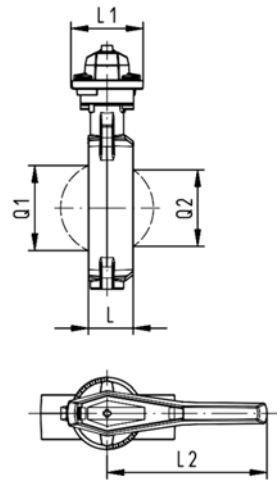
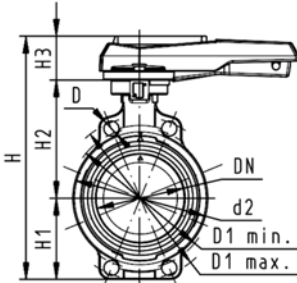


Butterfly valve type 567 PP-H Hand lever with ratchet settings



Model:

- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, ANSI/ASME B 16.5 Class 150, BS 1560: 1989, BS 4504, JIS B 2220
- Overall length according to EN 558-1, ISO 5752
- We recommend for the dimensions DN250 and DN300 only 6 bar maximum system pressure for the hand lever version



| d [mm] | DN [mm] | Inch | PN | kv-value ($\Delta p=1$ bar) [l/min] | EPDM Code | FPM Code |
|-----------|------------|------|----|--|--------------------|--------------------|
| 63 | 50 | 2 | 10 | 1470 | 167 567 002 | 167 567 022 |
| 75 | 65 | 2 ½ | 10 | 2200 | 167 567 003 | 167 567 023 |
| 90 | 80 | 3 | 10 | 3000 | 167 567 004 | 167 567 024 |
| 110 | 100 | 4 | 10 | 6500 | 167 567 005 | 167 567 025 |
| 140 | 125 | 5 | 10 | 11500 | 167 567 006 | 167 567 026 |
| 160 | 150 | 6 | 10 | 16600 | 167 567 007 | 167 567 027 |
| 225 | 200 | 8 | 10 | 39600 | 167 567 008 | 167 567 028 |
| 280 | 250 | 10 | 8 | 55200 | 167 567 009 | 167 567 029 |
| 315 | 300 | 12 | 8 | 80000 | 167 567 010 | 167 567 030 |

| d [mm] | D [mm] | D1 min. [mm] | D1 max. [mm] | d2 [mm] | H [mm] | H1 [mm] | H2 [mm] | H3 [mm] | L [mm] | L1 [mm] | L2 [mm] | Q1 [mm] | Q2 [mm] |
|-----------|-----------|--------------------|--------------------|------------|-----------|------------|------------|------------|-----------|------------|------------|------------|------------|
| 63 | 19 | 120.0 | 125.0 | 104 | 264 | 77 | 134 | 54 | 45 | 106 | 205 | 40 | |
| 75 | 19 | 139.7 | 145.0 | 115 | 277 | 83 | 140 | 54 | 46 | 106 | 205 | 54 | 35 |
| 90 | 19 | 150.0 | 160.0 | 131 | 289 | 89 | 146 | 54 | 49 | 106 | 205 | 67 | 50 |
| 110 | 19 | 175.0 | 190.5 | 161 | 325 | 104 | 167 | 55 | 56 | 106 | 255 | 88 | 74 |
| 140 | 23 | 210.0 | 215.9 | 187 | 352 | 117 | 181 | 55 | 64 | 106 | 255 | 113 | 97 |
| 160 | 24 | 241.3 | 241.3 | 215 | 373 | 130 | 189 | 55 | 72 | 106 | 255 | 139 | 123 |
| 225 | 23 | 290.0 | 295.0 | 267 | 435 | 158 | 210 | 67 | 73 | 140 | 408 | 178 | 169 |
| 280 | 25 | 353.0 | 362.0 | 329 | 554 | 205 | 264 | 85 | 113 | 149 | 408 | 210 | 207 |
| 315 | 25 | 400.0 | 432.0 | 379 | 598 | 228 | 285 | 85 | 113 | 149 | 408 | 256 | 253 |

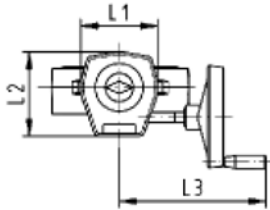
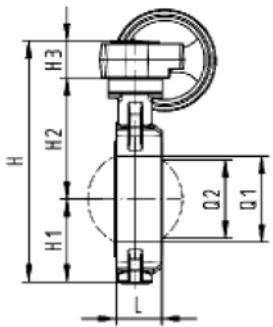
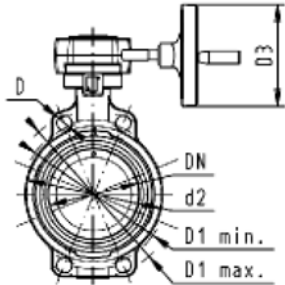


Butterfly valve type 567 PP-H Reduction gear with handwheel



Model:

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



| d [mm] | DN [mm] | Inch | PN | kv-value ($\Delta p=1$ bar) [l/min] | EPDM Code | FPM Code |
|-----------|------------|------|----|--|--------------------|--------------------|
| 63 | 50 | 2 | 10 | 1470 | 167 567 042 | 167 567 062 |
| 75 | 65 | 2 ½ | 10 | 2200 | 167 567 043 | 167 567 063 |
| 90 | 80 | 3 | 10 | 3000 | 167 567 044 | 167 567 064 |
| 110 | 100 | 4 | 10 | 6500 | 167 567 045 | 167 567 065 |
| 140 | 125 | 5 | 10 | 11500 | 167 567 046 | 167 567 066 |
| 160 | 150 | 6 | 10 | 16600 | 167 567 047 | 167 567 067 |
| 225 | 200 | 8 | 10 | 39600 | 167 567 048 | 167 567 068 |
| 280 | 250 | 10 | 8 | 55200 | 167 567 049 | 167 567 069 |
| 315 | 300 | 12 | 8 | 80000 | 167 567 050 | 167 567 070 |

| d [mm] | D [mm] | D1 min. [mm] | D1 max. [mm] | d2 [mm] | D3 [mm] | H [mm] | H1 [mm] | H2 [mm] | H3 [mm] | L [mm] | L1 [mm] | L2 [mm] | L3 [mm] | Q1 [mm] |
|-----------|-----------|--------------------|--------------------|------------|------------|-----------|------------|------------|------------|-----------|------------|------------|------------|------------|
| 63 | 19 | 120.0 | 125.0 | 104 | 160 | 278 | 77 | 134 | 60 | 45 | 120 | 132 | 236 | 40 |
| 75 | 19 | 139.7 | 145.0 | 115 | 160 | 291 | 83 | 140 | 60 | 46 | 120 | 132 | 236 | 54 |
| 90 | 19 | 150.0 | 160.0 | 131 | 160 | 303 | 89 | 146 | 60 | 49 | 120 | 132 | 236 | 67 |
| 110 | 19 | 175.0 | 190.5 | 160 | 160 | 339 | 104 | 167 | 60 | 56 | 120 | 132 | 236 | 88 |
| 140 | 23 | 210.0 | 215.9 | 187 | 160 | 365 | 117 | 181 | 60 | 64 | 120 | 132 | 236 | 113 |
| 160 | 24 | 241.3 | 241.3 | 215 | 160 | 387 | 130 | 189 | 60 | 72 | 120 | 132 | 236 | 139 |
| 225 | 23 | 290.0 | 295.0 | 267 | 160 | 436 | 158 | 210 | 60 | 73 | 120 | 132 | 236 | 178 |
| 280 | 25 | 353.0 | 362.0 | 329 | 160 | 529 | 205 | 264 | 60 | 113 | 134 | 151 | 261 | 210 |
| 315 | 25 | 400.0 | 432.0 | 379 | 160 | 573 | 228 | 285 | 60 | 113 | 134 | 151 | 261 | 256 |

| d [mm] | Q2 [mm] |
|-----------|------------|
| 63 | |
| 75 | 35 |
| 90 | 50 |
| 110 | 74 |
| 140 | 97 |
| 160 | 123 |
| 225 | 169 |
| 280 | 207 |
| 315 | 253 |

Butterfly valves PROGEF® SF



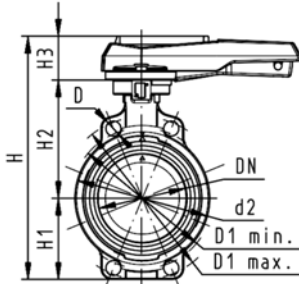
PROGEF® Plus silicone free Butterfly valve type 567 PP-H SF Hand lever with ratchet settings



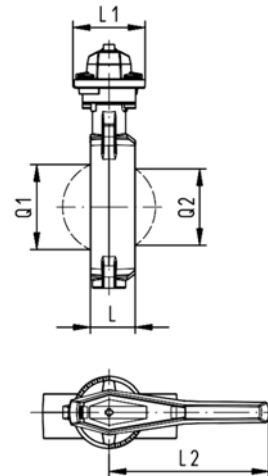
Model:

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

Available from second quarter 2006



| d [mm] | DN [mm] | Inch | PN | kv-value ($\Delta p=1$ bar) [l/min] | EPDM Code | FPM Code |
|-----------|------------|------|----|--|--------------------|--------------------|
| 63 | 50 | 2 | 10 | 1470 | 167 567 402 | 167 567 422 |
| 75 | 65 | 2 ½ | 10 | 2200 | 167 567 403 | 167 567 423 |
| 90 | 80 | 3 | 10 | 3000 | 167 567 404 | 167 567 424 |
| 110 | 100 | 4 | 10 | 6500 | 167 567 405 | 167 567 425 |
| 140 | 125 | 5 | 10 | 11500 | 167 567 406 | 167 567 426 |
| 160 | 150 | 6 | 10 | 16600 | 167 567 407 | 167 567 427 |
| 225 | 200 | 8 | 10 | 39600 | 167 567 408 | 167 567 428 |



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

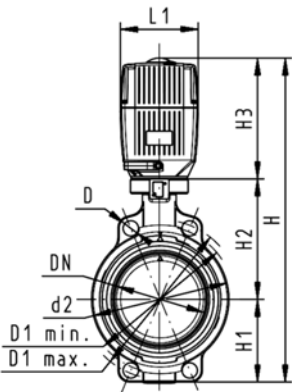
Butterfly valves electric PP-H

Butterfly valve type 140 PP-H 100-230V Without manual override



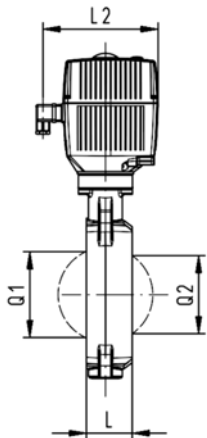
Model:

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



| d [mm] | DN [mm] | Inch | PN | kv-value ($\Delta p=1$ bar) [l/min] | EPDM Code | FPM Code |
|-----------|------------|------|----|--|--------------------|--------------------|
| 63 | 50 | 2 | 10 | 1470 | 199 140 362 | 199 140 382 |
| 75 | 65 | 2 ½ | 10 | 2200 | 199 140 363 | 199 140 383 |
| 90 | 80 | 3 | 10 | 3000 | 199 140 364 | 199 140 384 |
| 110 | 100 | 4 | 10 | 6500 | 199 140 365 | 199 140 385 |
| 140 | 125 | 5 | 10 | 11500 | 199 140 366 | 199 140 386 |
| 160 | 150 | 6 | 10 | 16600 | 199 140 367 | 199 140 387 |
| 225 | 200 | 8 | 10 | 39600 | 199 140 368 | 199 140 388 |
| 280 | 250 | 10 | 6 | 55200 | 199 140 369 | 199 140 389 |

| d [mm] | Actuator unit type | D [mm] | D1 min. [mm] | D1 max. [mm] | d2 [mm] | H [mm] | H1 [mm] | H2 [mm] | H3 [mm] | L [mm] | L1 [mm] | L2 [mm] | Q1 [mm] |
|-----------|-----------------------|-----------|--------------------|--------------------|------------|-----------|------------|------------|------------|-----------|------------|------------|------------|
| 63 | EA-31 | 19 | 120.0 | 125.0 | 104 | 400 | 77 | 134 | 188 | 45 | 122 | 180 | 40 |
| 75 | EA-31 | 19 | 139.7 | 145.0 | 115 | 413 | 83 | 140 | 188 | 46 | 122 | 180 | 54 |
| 90 | EA-31 | 19 | 150.0 | 160.0 | 131 | 428 | 89 | 146 | 188 | 49 | 122 | 180 | 67 |
| 110 | EA-31 | 19 | 175.0 | 190.5 | 161 | 460 | 104 | 167 | 188 | 56 | 122 | 180 | 88 |
| 140 | EA-31 | 23 | 210.0 | 215.9 | 187 | 487 | 117 | 181 | 188 | 64 | 122 | 180 | 113 |
| 160 | EA-31 | 24 | 241.3 | 241.3 | 215 | 508 | 130 | 189 | 188 | 72 | 122 | 180 | 139 |
| 225 | EA-42 | 23 | 290.0 | 295.0 | 267 | 575 | 158 | 210 | 208 | 73 | 122 | 180 | 178 |
| 280 | EA-42 | 25 | 353.0 | 362.0 | 329 | 677 | 205 | 264 | 208 | 113 | 122 | 180 | 256 |



| d [mm] | Q2 [mm] |
|-----------|------------|
| 63 | |
| 75 | 35 |
| 90 | 50 |
| 110 | 74 |
| 140 | 97 |
| 160 | 123 |
| 225 | 169 |
| 280 | 207 |

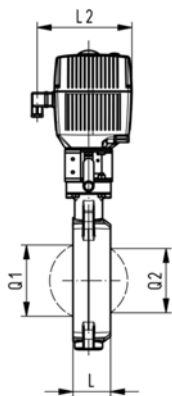
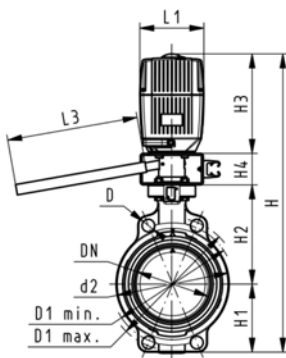


Butterfly valve type 140 PP-H 100-230V With manual override



Model:

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



| d [mm] | DN [mm] | Inch | PN | kv-value ($\Delta p=1$ bar) [l/min] | EPDM Code | FPM Code |
|-----------|------------|------|----|--|--------------------|--------------------|
| 63 | 50 | 2 | 10 | 1470 | 199 140 322 | 199 140 342 |
| 75 | 65 | 2 ½ | 10 | 2200 | 199 140 323 | 199 140 343 |
| 90 | 80 | 3 | 10 | 3000 | 199 140 324 | 199 140 344 |
| 110 | 100 | 4 | 10 | 6500 | 199 140 325 | 199 140 345 |
| 140 | 125 | 5 | 10 | 11500 | 199 140 326 | 199 140 346 |
| 160 | 150 | 6 | 10 | 16600 | 199 140 327 | 199 140 347 |
| 225 | 200 | 8 | 10 | 39600 | 199 140 328 | 199 140 348 |

| d [mm] | Actuator unit type | D [mm] | D1 min. [mm] | D1 max. [mm] | d2 [mm] | H [mm] | H1 [mm] | H2 [mm] | H3 [mm] | H4 [mm] | L [mm] | L1 [mm] | L2 [mm] |
|-----------|-----------------------|-----------|--------------------|--------------------|------------|-----------|------------|------------|------------|------------|-----------|------------|------------|
| 63 | EA-31 | 19 | 120.0 | 125.0 | 104 | 460 | 77 | 134 | 188 | 60 | 45 | 122 | 180 |
| 75 | EA-31 | 19 | 139.7 | 145.0 | 115 | 473 | 83 | 140 | 188 | 60 | 46 | 122 | 180 |
| 90 | EA-31 | 19 | 150.0 | 160.0 | 131 | 488 | 89 | 146 | 188 | 60 | 49 | 122 | 180 |
| 110 | EA-31 | 19 | 175.0 | 190.5 | 161 | 520 | 104 | 167 | 188 | 60 | 56 | 122 | 180 |
| 140 | EA-31 | 23 | 210.0 | 215.9 | 187 | 547 | 117 | 181 | 188 | 60 | 64 | 122 | 180 |
| 160 | EA-31 | 24 | 241.3 | 241.3 | 215 | 568 | 130 | 189 | 188 | 60 | 72 | 122 | 180 |
| 225 | EA-42 | 23 | 290.0 | 295.0 | 267 | 635 | 158 | 210 | 208 | 60 | 73 | 122 | 180 |

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



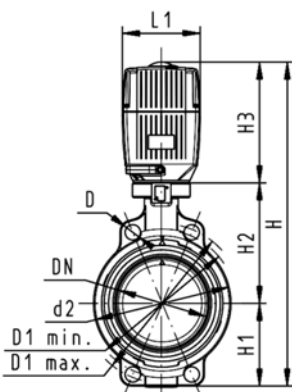
Butterfly valve type 140 PP-H 24V Without manual override



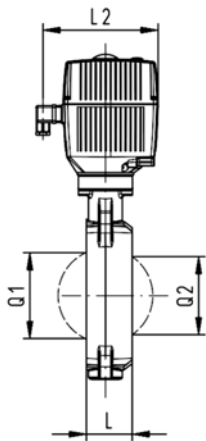
Model:

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

| d [mm] | DN [mm] | Inch | PN | kv-value ($\Delta p=1$ bar) [l/min] | EPDM Code | FPM Code |
|-----------|------------|------|----|--|--------------------|--------------------|
| 63 | 50 | 2 | 10 | 1470 | 199 140 442 | 199 140 462 |
| 75 | 65 | 2 ½ | 10 | 2200 | 199 140 443 | 199 140 463 |
| 90 | 80 | 3 | 10 | 3000 | 199 140 444 | 199 140 464 |
| 110 | 100 | 4 | 10 | 6500 | 199 140 445 | 199 140 465 |
| 140 | 125 | 5 | 10 | 11500 | 199 140 446 | 199 140 466 |
| 160 | 150 | 6 | 10 | 16600 | 199 140 447 | 199 140 467 |
| 225 | 200 | 8 | 10 | 39600 | 199 140 448 | 199 140 468 |
| 280 | 250 | 10 | 6 | 55200 | 199 140 449 | 199 140 469 |



| d [mm] | Actuator unit type | D [mm] | D1 min. [mm] | D1 max. [mm] | d2 [mm] | H [mm] | H1 [mm] | H2 [mm] | H3 [mm] | L [mm] | L1 [mm] | L2 [mm] | Q1 [mm] |
|-----------|-----------------------|-----------|--------------------|--------------------|------------|-----------|------------|------------|------------|-----------|------------|------------|------------|
| 63 | EA-31 | 19 | 120.0 | 125.0 | 104 | 400 | 77 | 134 | 188 | 45 | 122 | 180 | 40 |
| 75 | EA-31 | 19 | 139.7 | 145.0 | 115 | 413 | 83 | 140 | 188 | 46 | 122 | 180 | 54 |
| 90 | EA-31 | 19 | 150.0 | 160.0 | 131 | 428 | 89 | 146 | 188 | 49 | 122 | 180 | 67 |
| 110 | EA-31 | 19 | 175.0 | 190.5 | 161 | 460 | 104 | 167 | 188 | 56 | 122 | 180 | 88 |
| 140 | EA-31 | 23 | 210.0 | 215.9 | 187 | 487 | 117 | 181 | 188 | 64 | 122 | 180 | 113 |
| 160 | EA-31 | 24 | 241.3 | 241.3 | 215 | 508 | 130 | 189 | 188 | 72 | 122 | 180 | 139 |
| 225 | EA-42 | 23 | 290.0 | 295.0 | 267 | 575 | 158 | 210 | 208 | 73 | 122 | 180 | 178 |
| 280 | EA-42 | 25 | 353.0 | 362.0 | 329 | 677 | 205 | 264 | 208 | 113 | 122 | 180 | 256 |



| d [mm] | Q2 [mm] |
|-----------|------------|
| 63 | |
| 75 | 35 |
| 90 | 50 |
| 110 | 74 |
| 140 | 97 |
| 160 | 123 |
| 225 | 169 |
| 280 | 207 |

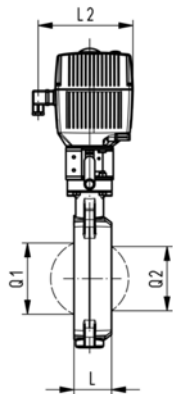
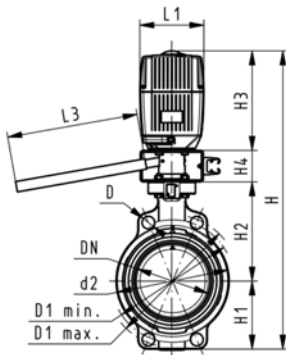


Butterfly valve type 140 PP-H 24V With manual override



Model:

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



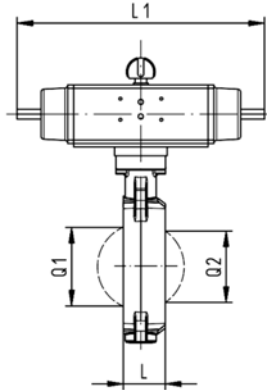
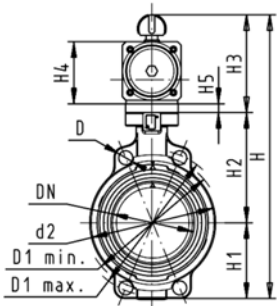
| d [mm] | DN [mm] | Inch | PN | kv-value ($\Delta p=1$ bar) [l/min] | EPDM Code | FPM Code |
|-----------|------------|------|----|--|--------------------|--------------------|
| 63 | 50 | 2 | 10 | 1470 | 199 140 402 | 199 140 422 |
| 75 | 65 | 2 ½ | 10 | 2200 | 199 140 403 | 199 140 423 |
| 90 | 80 | 3 | 10 | 3000 | 199 140 404 | 199 140 424 |
| 110 | 100 | 4 | 10 | 6500 | 199 140 405 | 199 140 425 |
| 140 | 125 | 5 | 10 | 11500 | 199 140 406 | 199 140 426 |
| 160 | 150 | 6 | 10 | 16600 | 199 140 407 | 199 140 427 |
| 225 | 200 | 8 | 10 | 39600 | 199 140 408 | 199 140 428 |

| d [mm] | Actuator unit type | D [mm] | D1 min. [mm] | D1 max. [mm] | d2 [mm] | H [mm] | H1 [mm] | H2 [mm] | H3 [mm] | H4 [mm] | L [mm] | L1 [mm] | L2 [mm] |
|-----------|-----------------------|-----------|--------------------|--------------------|------------|-----------|------------|------------|------------|------------|-----------|------------|------------|
| 63 | EA-31 | 19 | 120.0 | 125.0 | 104 | 460 | 77 | 134 | 188 | 60 | 45 | 122 | 180 |
| 75 | EA-31 | 19 | 139.7 | 145.0 | 115 | 473 | 83 | 140 | 188 | 60 | 46 | 122 | 180 |
| 90 | EA-31 | 19 | 150.0 | 160.0 | 131 | 488 | 89 | 146 | 188 | 60 | 49 | 122 | 180 |
| 110 | EA-31 | 19 | 175.0 | 190.5 | 161 | 520 | 104 | 167 | 188 | 60 | 56 | 122 | 180 |
| 140 | EA-31 | 23 | 210.0 | 215.9 | 187 | 547 | 117 | 181 | 188 | 60 | 64 | 122 | 180 |
| 160 | EA-31 | 24 | 241.3 | 241.3 | 215 | 568 | 130 | 189 | 188 | 60 | 72 | 122 | 180 |
| 225 | EA-42 | 23 | 290.0 | 295.0 | 267 | 635 | 158 | 210 | 208 | 60 | 73 | 122 | 180 |

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

Butterfly valves pneumatic PP-H

Butterfly valve type 240 PP-H FC (Fail safe to close) Without manual override



Model:

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

| d [mm] | DN [mm] | Inch | PN | kv-value ($\Delta p=1$ bar) [l/min] | EPDM Code | FPM Code |
|-----------|------------|------|----|--|--------------------|--------------------|
| 63 | 50 | 2 | 10 | 1470 | 199 240 282 | 199 240 302 |
| 75 | 65 | 2 ½ | 10 | 2200 | 199 240 283 | 199 240 303 |
| 90 | 80 | 3 | 10 | 3000 | 199 240 284 | 199 240 304 |
| 110 | 100 | 4 | 10 | 6500 | 199 240 285 | 199 240 305 |
| 140 | 125 | 5 | 10 | 11500 | 199 240 286 | 199 240 306 |
| 160 | 150 | 6 | 10 | 16600 | 199 240 287 | 199 240 307 |
| 225 | 200 | 8 | 10 | 39600 | 199 240 288 | 199 240 308 |
| 280 | 250 | 10 | 8 | 55200 | 199 240 289 | 199 240 309 |
| 315 | 300 | 12 | 8 | 80000 | 199 240 290 | 199 240 310 |

| d [mm] | Actuator unit type | D [mm] | D1 min. [mm] | D1 max. [mm] | d2 [mm] | H [mm] | H1 [mm] | H2 [mm] | H3 [mm] | H4 [mm] | H5 [mm] | L [mm] | L1 [mm] |
|-----------|-----------------------|-----------|--------------------|--------------------|------------|-----------|------------|------------|------------|------------|------------|-----------|------------|
| 63 | PA-30 FC | 19 | 120.0 | 125.0 | 104 | 327 | 77 | 134 | 117 | 70 | 15 | 45 | 276 |
| 75 | PA-30 FC | 19 | 139.7 | 145.0 | 115 | 340 | 83 | 140 | 117 | 70 | 15 | 46 | 276 |
| 90 | PA-35 FC | 19 | 150.0 | 160.0 | 131 | 361 | 89 | 146 | 126 | 78 | 15 | 49 | 326 |
| 110 | PA-40 FC | 19 | 175.0 | 190.5 | 161 | 400 | 104 | 167 | 129 | 86 | | 56 | 370 |
| 140 | PA-45 FC | 23 | 210.0 | 215.9 | 187 | 436 | 117 | 181 | 139 | 96 | | 64 | 411 |
| 160 | PA-50 FC | 24 | 241.3 | 241.3 | 215 | 468 | 130 | 189 | 149 | 106 | | 72 | 423 |
| 225 | PA-55 FC | 23 | 290.0 | 295.0 | 267 | 529 | 158 | 210 | 161 | 118 | | 73 | 452 |
| 280 | PA-65 FC | 25 | 353.0 | 362.0 | 329 | 808 | 205 | 264 | 191 | 148 | | 113 | 648 |
| 315 | PA-70 FC | 25 | 400.0 | 432.0 | 379 | 866 | 228 | 285 | 196 | 157 | | 113 | 663 |

| d [mm] | L2 [mm] | Q1 [mm] | Q2 [mm] |
|-----------|------------|------------|------------|
| 63 | 65 | 40 | |
| 75 | 65 | 54 | 35 |
| 90 | 72 | 67 | 50 |
| 110 | 80 | 88 | 74 |
| 140 | 90 | 113 | 97 |
| 160 | 100 | 139 | 123 |
| 225 | 112 | 178 | 169 |
| 280 | 137 | 210 | 207 |
| 315 | 145 | 256 | 253 |

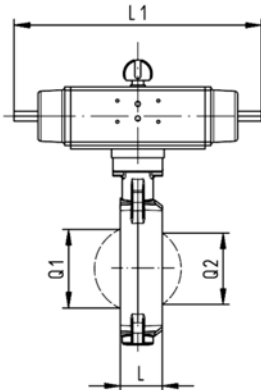
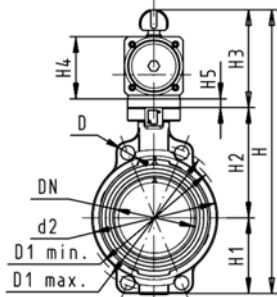


Butterfly valve type 240 PP-H FO (Fail safe to open) Without manual override



Model:

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



| d [mm] | DN [mm] | Inch | PN | kv-value ($\Delta p=1$ bar) [l/min] | EPDM Code | FPM Code |
|-----------|------------|------|----|--|--------------------|--------------------|
| 63 | 50 | 2 | 10 | 1470 | 199 240 322 | 199 240 342 |
| 75 | 65 | 2 ½ | 10 | 2200 | 199 240 323 | 199 240 343 |
| 90 | 80 | 3 | 10 | 3000 | 199 240 324 | 199 240 344 |
| 110 | 100 | 4 | 10 | 6500 | 199 240 325 | 199 240 345 |
| 140 | 125 | 5 | 10 | 11500 | 199 240 326 | 199 240 346 |
| 160 | 150 | 6 | 10 | 16600 | 199 240 327 | 199 240 347 |
| 225 | 200 | 8 | 10 | 39600 | 199 240 328 | 199 240 348 |
| 280 | 250 | 10 | 8 | 55200 | 199 240 329 | 199 240 349 |
| 315 | 300 | 12 | 8 | 80000 | 199 240 330 | 199 240 350 |

| d [mm] | Actuator unit type | D [mm] | D1 min. [mm] | D1 max. [mm] | d2 [mm] | H [mm] | H1 [mm] | H2 [mm] | H3 [mm] | H4 [mm] | H5 [mm] | L [mm] | L1 [mm] |
|-----------|-----------------------|-----------|--------------------|--------------------|------------|-----------|------------|------------|------------|------------|------------|-----------|------------|
| 63 | PA-30 FO | 19 | 120.0 | 125.0 | 104 | 327 | 77 | 134 | 117 | 70 | 15 | 45 | 276 |
| 75 | PA-30 FO | 19 | 139.7 | 145.0 | 115 | 340 | 83 | 140 | 117 | 70 | 15 | 46 | 276 |
| 90 | PA-35 FO | 19 | 150.0 | 160.0 | 131 | 361 | 89 | 146 | 126 | 78 | 15 | 49 | 326 |
| 110 | PA-40 FO | 19 | 175.0 | 190.5 | 161 | 400 | 104 | 167 | 129 | 86 | | 56 | 370 |
| 140 | PA-45 FO | 23 | 210.0 | 215.9 | 187 | 436 | 117 | 181 | 139 | 96 | | 64 | 411 |
| 160 | PA-50 FO | 24 | 241.3 | 241.3 | 215 | 468 | 130 | 189 | 149 | 106 | | 72 | 423 |
| 225 | PA-55 FO | 23 | 290.0 | 295.0 | 267 | 529 | 158 | 210 | 161 | 118 | | 73 | 452 |
| 280 | PA-65 FO | 25 | 353.0 | 362.0 | 329 | 808 | 205 | 264 | 191 | 148 | | 113 | 648 |
| 315 | PA-70 FO | 25 | 400.0 | 432.0 | 379 | 866 | 228 | 285 | 196 | 157 | | 113 | 663 |

| d [mm] | L2 [mm] | Q1 [mm] | Q2 [mm] |
|-----------|------------|------------|------------|
| 63 | 65 | 40 | |
| 75 | 65 | 54 | 35 |
| 90 | 72 | 67 | 50 |
| 110 | 80 | 88 | 74 |
| 140 | 90 | 113 | 97 |
| 160 | 100 | 139 | 123 |
| 225 | 112 | 178 | 169 |
| 280 | 137 | 210 | 207 |
| 315 | 145 | 256 | 253 |

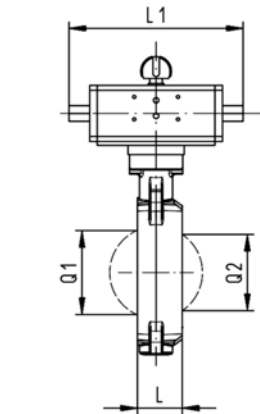
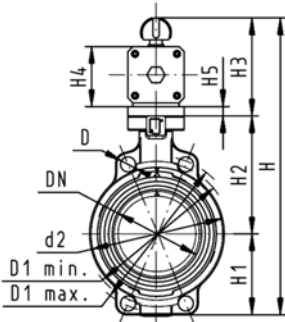


Butterfly valve type 240 PP-H DA (Double acting) Without manual override



Model:

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



| d [mm] | DN [mm] | Inch | PN | kv-value ($\Delta p=1$ bar) [l/min] | EPDM Code | FPM Code |
|-----------|------------|------|----|--|--------------------|--------------------|
| 63 | 50 | 2 | 10 | 1470 | 199 240 362 | 199 240 382 |
| 75 | 65 | 2 ½ | 10 | 2200 | 199 240 363 | 199 240 383 |
| 90 | 80 | 3 | 10 | 3000 | 199 240 364 | 199 240 384 |
| 110 | 100 | 4 | 10 | 6500 | 199 240 365 | 199 240 385 |
| 140 | 125 | 5 | 10 | 11500 | 199 240 366 | 199 240 386 |
| 160 | 150 | 6 | 10 | 16600 | 199 240 367 | 199 240 387 |
| 225 | 200 | 8 | 10 | 39600 | 199 240 368 | 199 240 388 |
| 280 | 250 | 10 | 8 | 55200 | 199 240 369 | 199 240 389 |
| 315 | 300 | 12 | 8 | 80000 | 199 240 370 | 199 240 390 |

| d [mm] | Actuator unit type | D [mm] | D1 min. [mm] | D1 max. [mm] | d2 [mm] | H [mm] | H1 [mm] | H2 [mm] | H3 [mm] | H4 [mm] | H5 [mm] | L [mm] | L1 [mm] |
|-----------|-----------------------|-----------|--------------------|--------------------|------------|-----------|------------|------------|------------|------------|------------|-----------|------------|
| 63 | PA-35 DA | 19 | 120.0 | 125.0 | 104 | 317 | 77 | 134 | 107 | 60 | 15 | 45 | 177 |
| 75 | PA-35 DA | 19 | 139.7 | 145.0 | 115 | 330 | 83 | 140 | 107 | 60 | 15 | 46 | 177 |
| 90 | PA-40 DA | 19 | 150.0 | 160.0 | 131 | 348 | 89 | 146 | 113 | 66 | 15 | 49 | 190 |
| 110 | PA-45 DA | 19 | 175.0 | 190.5 | 161 | 372 | 104 | 167 | 102 | 71 | | 56 | 235 |
| 140 | PA-45 DA | 23 | 210.0 | 215.9 | 187 | 408 | 117 | 181 | 111 | 78 | | 64 | 235 |
| 160 | PA-55 DA | 24 | 241.3 | 241.3 | 215 | 448 | 130 | 189 | 129 | 86 | | 72 | 279 |
| 225 | PA-55 DA | 23 | 290.0 | 295.0 | 267 | 507 | 158 | 210 | 139 | 96 | | 73 | 279 |
| 280 | PA-65 DA | 25 | 353.0 | 362.0 | 329 | 748 | 205 | 264 | 161 | 118 | | 113 | 350 |
| 315 | PA-70 DA | 25 | 400.0 | 432.0 | 379 | 816 | 228 | 285 | 173 | 130 | | 113 | 381 |

| d [mm] | L2 [mm] | Q1 [mm] | Q2 [mm] |
|-----------|------------|------------|------------|
| 63 | 55 | 40 | |
| 75 | 55 | 54 | 35 |
| 90 | 60 | 67 | 50 |
| 110 | 65 | 88 | 74 |
| 140 | 72 | 113 | 97 |
| 160 | 80 | 139 | 123 |
| 225 | 90 | 178 | 169 |
| 280 | 112 | 210 | 207 |
| 315 | 125 | 256 | 253 |

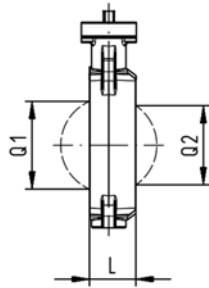
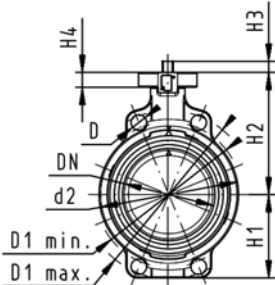
Butterfly valves SYGEF®

SYGEF® standard Butterfly valve type 567 PVDF Bare shaft



Model:

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



| d [mm] | DN [mm] | Inch | PN | kv-value ($\Delta p=1$ bar) [l/min] | FPM Code |
|-----------|------------|------|----|--|--------------------|
| 63 | 50 | 2 | 10 | 1470 | 175 567 822 |
| 75 | 65 | 2 ½ | 10 | 2200 | 175 567 823 |
| 90 | 80 | 3 | 10 | 3000 | 175 567 824 |
| 110 | 100 | 4 | 10 | 6500 | 175 567 825 |
| 140 | 125 | 5 | 10 | 11500 | 175 567 826 |
| 160 | 150 | 6 | 10 | 16600 | 175 567 827 |
| 225 | 200 | 8 | 10 | 39600 | 175 567 828 |

| d [mm] | D [mm] | D1 min. [mm] | D1 max. [mm] | d2 [mm] | D3 [mm] | D4 [mm] | H [mm] | H1 [mm] | H2 [mm] | H3 [mm] | H4 [mm] | H5 [mm] | L [mm] | Q1 [mm] |
|-----------|-----------|--------------------|--------------------|------------|------------|------------|-----------|------------|------------|------------|------------|------------|-----------|------------|
| 63 | 19 | 120.0 | 125.0 | 104 | 70 | 90 | 222 | 77 | 134 | 27 | 23 | 11 | 45 | 40 |
| 75 | 19 | 139.7 | 145.0 | 115 | 70 | 90 | 235 | 83 | 140 | 27 | 23 | 11 | 46 | 54 |
| 90 | 19 | 150.0 | 160.0 | 131 | 70 | 90 | 247 | 89 | 146 | 27 | 23 | 11 | 49 | 67 |
| 110 | 19 | 175.0 | 190.5 | 161 | 70 | 90 | 287 | 104 | 167 | 16 | 23 | 14 | 56 | 88 |
| 140 | 23 | 210.0 | 215.9 | 187 | 70 | 90 | 313 | 117 | 181 | 16 | 23 | 14 | 64 | 113 |
| 160 | 24 | 241.3 | 241.3 | 215 | 70 | 90 | 335 | 130 | 189 | 19 | 23 | 17 | 72 | 139 |
| 225 | 23 | 290.0 | 295.0 | 267 | 70 | 90 | 387 | 158 | 210 | 19 | 23 | 17 | 73 | 178 |

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

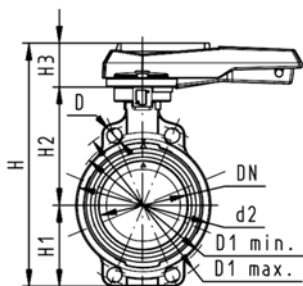


SYGEF® Standard Butterfly valve type 567 PVDF Hand lever with ratchet settings

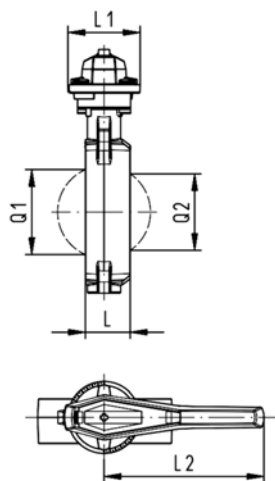


Model:

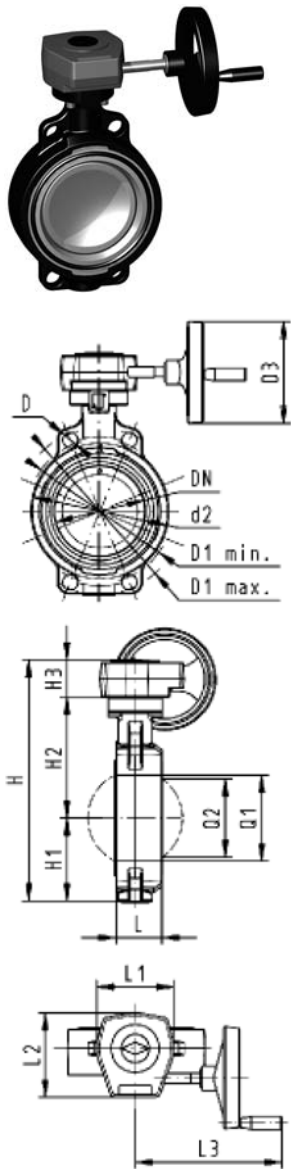
- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, ANSI/ASME B 16.5 Class 150, BS 1560: 1989, BS 4504, JIS B 2220
- Overall length according to EN 558-1, ISO 5752
- We recommend for the dimensions DN250 and DN300 only 6 bar maximum system pressure for the hand lever version



| d [mm] | DN [mm] | Inch | PN | kv-value ($\Delta p=1$ bar) [l/min] | FPM Code |
|-----------|------------|------|----|--|--------------------|
| 63 | 50 | 2 | 10 | 1470 | 175 567 002 |
| 75 | 65 | 2 ½ | 10 | 2200 | 175 567 003 |
| 90 | 80 | 3 | 10 | 3000 | 175 567 004 |
| 110 | 100 | 4 | 10 | 6500 | 175 567 005 |
| 140 | 125 | 5 | 10 | 11500 | 175 567 006 |
| 160 | 150 | 6 | 10 | 16600 | 175 567 007 |
| 225 | 200 | 8 | 10 | 39600 | 175 567 008 |



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



SYGEF® Standard Butterfly valve type 567 PVDF Reduction gear with handwheel



Model:

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

| d [mm] | DN [mm] | Inch | PN | kv-value ($\Delta p=1$ bar) [l/min] | FPM Code | | | | | | | | | | | |
|-----------|------------|------|----|--|--------------------|--|--|--|--|--|--|--|--|--|--|--|
| 63 | 50 | 2 | 10 | 1470 | 175 567 022 | | | | | | | | | | | |
| 75 | 65 | 2 ½ | 10 | 2200 | 175 567 023 | | | | | | | | | | | |
| 90 | 80 | 3 | 10 | 3000 | 175 567 024 | | | | | | | | | | | |
| 110 | 100 | 4 | 10 | 6500 | 175 567 025 | | | | | | | | | | | |
| 140 | 125 | 5 | 10 | 11500 | 175 567 026 | | | | | | | | | | | |
| 160 | 150 | 6 | 10 | 16600 | 175 567 027 | | | | | | | | | | | |
| 225 | 200 | 8 | 10 | 39600 | 175 567 028 | | | | | | | | | | | |

| d [mm] | D [mm] | D1 min. [mm] | D1 max. [mm] | d2 [mm] | D3 [mm] | H [mm] | H1 [mm] | H2 [mm] | H3 [mm] | L [mm] | L1 [mm] | L2 [mm] | L3 [mm] | Q1 [mm] |
|-----------|-----------|--------------------|--------------------|------------|------------|-----------|------------|------------|------------|-----------|------------|------------|------------|------------|
| 63 | 19 | 120.0 | 125.0 | 104 | 160 | 278 | 77 | 134 | 60 | 45 | 120 | 132 | 236 | 40 |
| 75 | 19 | 139.7 | 145.0 | 115 | 160 | 291 | 83 | 140 | 60 | 46 | 120 | 132 | 236 | 54 |
| 90 | 19 | 150.0 | 160.0 | 131 | 160 | 303 | 89 | 146 | 60 | 49 | 120 | 132 | 236 | 67 |
| 110 | 19 | 175.0 | 190.5 | 160 | 160 | 339 | 104 | 167 | 60 | 56 | 120 | 132 | 236 | 88 |
| 140 | 23 | 210.0 | 215.9 | 187 | 160 | 365 | 117 | 181 | 60 | 64 | 120 | 132 | 236 | 113 |
| 160 | 24 | 241.3 | 241.3 | 215 | 160 | 387 | 130 | 189 | 60 | 72 | 120 | 132 | 236 | 139 |
| 225 | 23 | 290.0 | 295.0 | 267 | 160 | 436 | 158 | 210 | 60 | 73 | 120 | 132 | 236 | 178 |

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

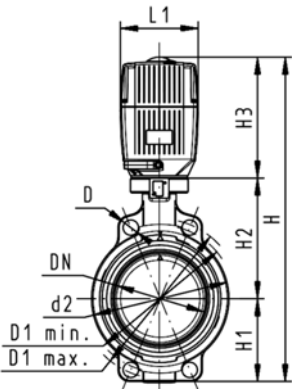
Butterfly valves electric SYGEF®

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



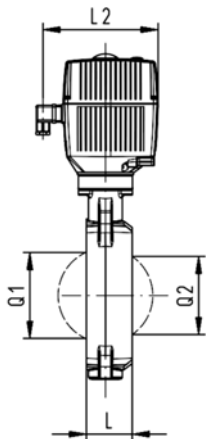
Model:

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



| d [mm] | DN [mm] | Inch | PN | kv-value ($\Delta p=1$ bar) [l/min] | FPM Code |
|-----------|------------|------|----|--|--------------------|
| 63 | 50 | 2 | 10 | 1470 | 199 140 582 |
| 75 | 65 | 2 ½ | 10 | 2200 | 199 140 583 |
| 90 | 80 | 3 | 10 | 3000 | 199 140 584 |
| 110 | 100 | 4 | 10 | 6500 | 199 140 585 |
| 140 | 125 | 5 | 10 | 11500 | 199 140 586 |
| 160 | 150 | 6 | 10 | 16600 | 199 140 587 |
| 225 | 200 | 8 | 10 | 39600 | 199 140 588 |
| 280 | 250 | 10 | 6 | 55200 | 199 140 589 |

| d [mm] | Actuator unit type | D [mm] | D1 min. [mm] | D1 max. [mm] | d2 [mm] | H [mm] | H1 [mm] | H2 [mm] | H3 [mm] | L [mm] | L1 [mm] | L2 [mm] | Q1 [mm] |
|-----------|-----------------------|-----------|--------------------|--------------------|------------|-----------|------------|------------|------------|-----------|------------|------------|------------|
| 63 | EA-31 | 19 | 120.0 | 125.0 | 104 | 400 | 77 | 134 | 188 | 45 | 122 | 180 | 40 |
| 75 | EA-31 | 19 | 139.7 | 145.0 | 115 | 413 | 83 | 140 | 188 | 46 | 122 | 180 | 54 |
| 90 | EA-31 | 19 | 150.0 | 160.0 | 131 | 428 | 89 | 146 | 188 | 49 | 122 | 180 | 67 |
| 110 | EA-31 | 19 | 175.0 | 190.5 | 161 | 460 | 104 | 167 | 188 | 56 | 122 | 180 | 88 |
| 140 | EA-31 | 23 | 210.0 | 215.9 | 187 | 487 | 117 | 181 | 188 | 64 | 122 | 180 | 113 |
| 160 | EA-31 | 24 | 241.3 | 241.3 | 215 | 508 | 130 | 189 | 188 | 72 | 122 | 180 | 139 |
| 225 | EA-42 | 23 | 290.0 | 295.0 | 267 | 575 | 158 | 210 | 208 | 73 | 122 | 180 | 178 |
| 280 | EA-42 | 25 | 353.0 | 362.0 | 329 | 677 | 205 | 264 | 208 | 113 | 122 | 180 | 256 |



| d [mm] | Q2 [mm] |
|-----------|------------|
| 63 | |
| 75 | 35 |
| 90 | 50 |
| 110 | 74 |
| 140 | 97 |
| 160 | 123 |
| 225 | 169 |
| 280 | 207 |

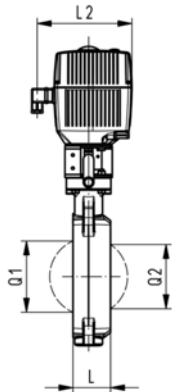
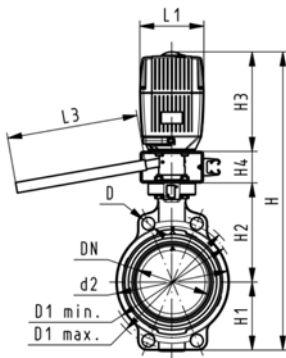


SYGEF® Standard Butterfly valve type 140 100-230V With manual override



Model:

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



| d [mm] | DN [mm] | Inch | PN | kv-value ($\Delta p=1$ bar) [l/min] | FPM Code |
|-----------|------------|------|----|--|--------------------|
| 63 | 50 | 2 | 10 | 1470 | 199 140 562 |
| 75 | 65 | 2 ½ | 10 | 2200 | 199 140 563 |
| 90 | 80 | 3 | 10 | 3000 | 199 140 564 |
| 110 | 100 | 4 | 10 | 6500 | 199 140 565 |
| 140 | 125 | 5 | 10 | 11500 | 199 140 566 |
| 160 | 150 | 6 | 10 | 16600 | 199 140 567 |
| 225 | 200 | 8 | 10 | 39600 | 199 140 568 |

| d [mm] | Actuator unit type | D [mm] | D1 min. [mm] | D1 max. [mm] | d2 [mm] | H [mm] | H1 [mm] | H2 [mm] | H3 [mm] | H4 [mm] | L [mm] | L1 [mm] | L2 [mm] |
|-----------|-----------------------|-----------|--------------------|--------------------|------------|-----------|------------|------------|------------|------------|-----------|------------|------------|
| 63 | EA-31 | 19 | 120.0 | 125.0 | 104 | 460 | 77 | 134 | 188 | 60 | 45 | 122 | 180 |
| 75 | EA-31 | 19 | 139.7 | 145.0 | 115 | 473 | 83 | 140 | 188 | 60 | 46 | 122 | 180 |
| 90 | EA-31 | 19 | 150.0 | 160.0 | 131 | 488 | 89 | 146 | 188 | 60 | 49 | 122 | 180 |
| 110 | EA-31 | 19 | 175.0 | 190.5 | 161 | 520 | 104 | 167 | 188 | 60 | 56 | 122 | 180 |
| 140 | EA-31 | 23 | 210.0 | 215.9 | 187 | 547 | 117 | 181 | 188 | 60 | 64 | 122 | 180 |
| 160 | EA-31 | 24 | 241.3 | 241.3 | 215 | 568 | 130 | 189 | 188 | 60 | 72 | 122 | 180 |
| 225 | EA-42 | 23 | 290.0 | 295.0 | 267 | 635 | 158 | 210 | 208 | 60 | 73 | 122 | 180 |

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

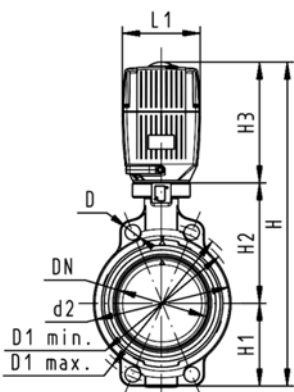


SYGEF® Standard Butterfly valve type 140 24V Without manual override



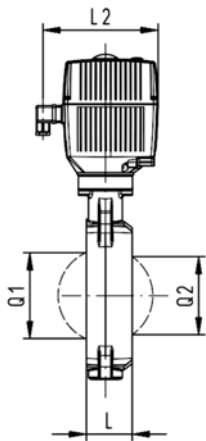
Model:

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



| d [mm] | DN [mm] | Inch | PN | kv-value ($\Delta p=1$ bar) [l/min] | FPM Code |
|-----------|------------|------|----|--|--------------------|
| 63 | 50 | 2 | 10 | 1470 | 199 140 622 |
| 75 | 65 | 2 ½ | 10 | 2200 | 199 140 623 |
| 90 | 80 | 3 | 10 | 3000 | 199 140 624 |
| 110 | 100 | 4 | 10 | 6500 | 199 140 625 |
| 140 | 125 | 5 | 10 | 11500 | 199 140 626 |
| 160 | 150 | 6 | 10 | 16600 | 199 140 627 |
| 225 | 200 | 8 | 10 | 39600 | 199 140 628 |
| 280 | 250 | 10 | 6 | 55200 | 199 140 629 |

| d [mm] | Actuator unit type | D [mm] | D1 min. [mm] | D1 max. [mm] | d2 [mm] | H [mm] | H1 [mm] | H2 [mm] | H3 [mm] | L [mm] | L1 [mm] | L2 [mm] | Q1 [mm] |
|-----------|-----------------------|-----------|--------------------|--------------------|------------|-----------|------------|------------|------------|-----------|------------|------------|------------|
| 63 | EA-31 | 19 | 120.0 | 125.0 | 104 | 400 | 77 | 134 | 188 | 45 | 122 | 180 | 40 |
| 75 | EA-31 | 19 | 139.7 | 145.0 | 115 | 413 | 83 | 140 | 188 | 46 | 122 | 180 | 54 |
| 90 | EA-31 | 19 | 150.0 | 160.0 | 131 | 428 | 89 | 146 | 188 | 49 | 122 | 180 | 67 |
| 110 | EA-31 | 19 | 175.0 | 190.5 | 161 | 460 | 104 | 167 | 188 | 56 | 122 | 180 | 88 |
| 140 | EA-31 | 23 | 210.0 | 215.9 | 187 | 487 | 117 | 181 | 188 | 64 | 122 | 180 | 113 |
| 160 | EA-31 | 24 | 241.3 | 241.3 | 215 | 508 | 130 | 189 | 188 | 72 | 122 | 180 | 139 |
| 225 | EA-42 | 23 | 290.0 | 295.0 | 267 | 575 | 158 | 210 | 208 | 73 | 122 | 180 | 178 |
| 280 | EA-42 | 25 | 353.0 | 362.0 | 329 | 677 | 205 | 264 | 208 | 113 | 122 | 180 | 256 |



| d [mm] | Q2 [mm] |
|-----------|------------|
| 63 | |
| 75 | 35 |
| 90 | 50 |
| 110 | 74 |
| 140 | 97 |
| 160 | 123 |
| 225 | 169 |
| 280 | 207 |

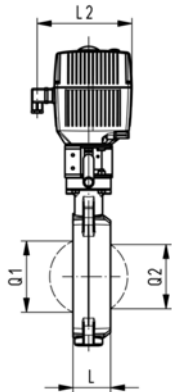
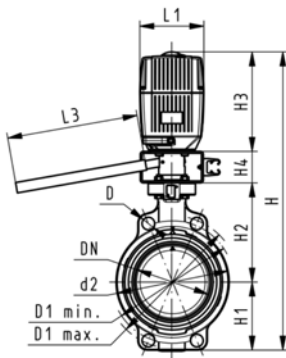


SYGEF® Standard Butterfly valve type 140 24V With manual override



Model:

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



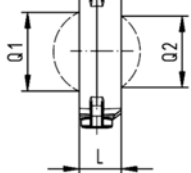
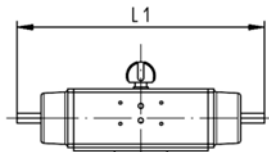
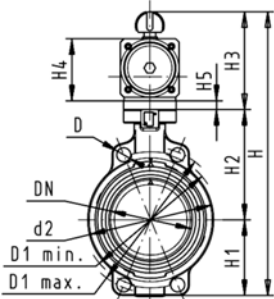
| d [mm] | DN [mm] | Inch | PN | kv-value ($\Delta p=1$ bar) [l/min] | FPM Code |
|-----------|------------|------|----|--|--------------------|
| 63 | 50 | 2 | 10 | 1470 | 199 140 602 |
| 75 | 65 | 2 ½ | 10 | 2200 | 199 140 603 |
| 90 | 80 | 3 | 10 | 3000 | 199 140 604 |
| 110 | 100 | 4 | 10 | 6500 | 199 140 605 |
| 140 | 125 | 5 | 10 | 11500 | 199 140 606 |
| 160 | 150 | 6 | 10 | 16600 | 199 140 607 |
| 225 | 200 | 8 | 10 | 39600 | 199 140 608 |

| d [mm] | Actuator unit type | D [mm] | D1 min. [mm] | D1 max. [mm] | d2 [mm] | H [mm] | H1 [mm] | H2 [mm] | H3 [mm] | H4 [mm] | L [mm] | L1 [mm] | L2 [mm] |
|-----------|-----------------------|-----------|--------------------|--------------------|------------|-----------|------------|------------|------------|------------|-----------|------------|------------|
| 63 | EA-31 | 19 | 120.0 | 125.0 | 104 | 460 | 77 | 134 | 188 | 60 | 45 | 122 | 180 |
| 75 | EA-31 | 19 | 139.7 | 145.0 | 115 | 473 | 83 | 140 | 188 | 60 | 46 | 122 | 180 |
| 90 | EA-31 | 19 | 150.0 | 160.0 | 131 | 488 | 89 | 146 | 188 | 60 | 49 | 122 | 180 |
| 110 | EA-31 | 19 | 175.0 | 190.5 | 161 | 520 | 104 | 167 | 188 | 60 | 56 | 122 | 180 |
| 140 | EA-31 | 23 | 210.0 | 215.9 | 187 | 547 | 117 | 181 | 188 | 60 | 64 | 122 | 180 |
| 160 | EA-31 | 24 | 241.3 | 241.3 | 215 | 568 | 130 | 189 | 188 | 60 | 72 | 122 | 180 |
| 225 | EA-42 | 23 | 290.0 | 295.0 | 267 | 635 | 158 | 210 | 208 | 60 | 73 | 122 | 180 |

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

Butterfly valves pneumatic SYGEF®

SYGEF® standard Butterfly valve type 240 Function FC (Fail safe to close) Without manual override



Model:

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

| d [mm] | DN [mm] | Inch | PN | kv-value ($\Delta p=1$ bar) [l/min] | FPM Code |
|-----------|------------|------|----|--|--------------------|
| 63 | 50 | 2 | 10 | 1470 | 199 240 462 |
| 75 | 65 | 2 ½ | 10 | 2200 | 199 240 463 |
| 90 | 80 | 3 | 10 | 3000 | 199 240 464 |
| 110 | 100 | 4 | 10 | 6500 | 199 240 465 |
| 140 | 125 | 5 | 10 | 11500 | 199 240 466 |
| 160 | 150 | 6 | 10 | 16600 | 199 240 467 |
| 225 | 200 | 8 | 10 | 39600 | 199 240 468 |
| 280 | 250 | 10 | 10 | 55200 | 199 240 469 |
| 315 | 300 | 12 | 10 | 80000 | 199 240 470 |

| d [mm] | Actuator unit type | D [mm] | D1 min. [mm] | D1 max. [mm] | d2 [mm] | H [mm] | H1 [mm] | H2 [mm] | H3 [mm] | H4 [mm] | H5 [mm] | L [mm] | L1 [mm] |
|-----------|-----------------------|-----------|--------------------|--------------------|------------|-----------|------------|------------|------------|------------|------------|-----------|------------|
| 63 | PA-30 FC | 19 | 120.0 | 125.0 | 104 | 327 | 77 | 134 | 117 | 70 | 15 | 45 | 276 |
| 75 | PA-30 FC | 19 | 139.7 | 145.0 | 115 | 340 | 83 | 140 | 117 | 70 | 15 | 46 | 276 |
| 90 | PA-35 FC | 19 | 150.0 | 160.0 | 131 | 361 | 89 | 146 | 126 | 78 | 15 | 49 | 326 |
| 110 | PA-40 FC | 19 | 175.0 | 190.5 | 161 | 400 | 104 | 167 | 129 | 86 | | 56 | 370 |
| 140 | PA-45 FC | 23 | 210.0 | 215.9 | 187 | 436 | 117 | 181 | 139 | 96 | | 64 | 411 |
| 160 | PA-50 FC | 24 | 241.3 | 241.3 | 215 | 468 | 130 | 189 | 149 | 106 | | 72 | 423 |
| 225 | PA-55 FC | 23 | 290.0 | 295.0 | 267 | 529 | 158 | 210 | 161 | 118 | | 73 | 452 |
| 280 | PA-65 FC | 25 | 353.0 | 362.0 | 329 | 808 | 205 | 264 | 191 | 148 | | 113 | 648 |
| 315 | PA-70 FC | 25 | 400.0 | 432.0 | 379 | 866 | 228 | 285 | 196 | 157 | | 113 | 663 |

| d [mm] | L2 [mm] | Q1 [mm] | Q2 [mm] |
|-----------|------------|------------|------------|
| 63 | 65 | 40 | |
| 75 | 65 | 54 | 35 |
| 90 | 72 | 67 | 50 |
| 110 | 80 | 88 | 74 |
| 140 | 90 | 113 | 97 |
| 160 | 100 | 139 | 123 |
| 225 | 112 | 178 | 169 |
| 280 | 137 | 210 | 207 |
| 315 | 145 | 256 | 253 |

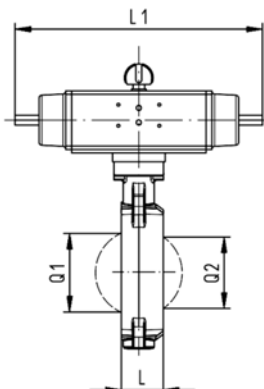
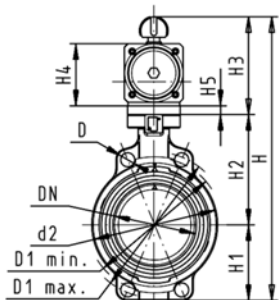


SYGEF® standard
Butterfly valve type 240
Function FO (Fail safe to open)
Without manual override



Model:

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



| d [mm] | DN [mm] | Inch | PN | kv-value ($\Delta p=1$ bar) [l/min] | FPM Code |
|-----------|------------|------|----|--|--------------------|
| 63 | 50 | 2 | 10 | 1470 | 199 240 482 |
| 75 | 65 | 2 ½ | 10 | 2200 | 199 240 483 |
| 90 | 80 | 3 | 10 | 3000 | 199 240 484 |
| 110 | 100 | 4 | 10 | 6500 | 199 240 485 |
| 140 | 125 | 5 | 10 | 11500 | 199 240 486 |
| 160 | 150 | 6 | 10 | 16600 | 199 240 487 |
| 225 | 200 | 8 | 10 | 39600 | 199 240 488 |
| 280 | 250 | 10 | 10 | 55200 | 199 240 489 |
| 315 | 300 | 12 | 10 | 80000 | 199 240 490 |

| d [mm] | Actuator unit type | D [mm] | D1 min. [mm] | D1 max. [mm] | d2 [mm] | H [mm] | H1 [mm] | H2 [mm] | H3 [mm] | H4 [mm] | H5 [mm] | L [mm] | L1 [mm] |
|-----------|-----------------------|-----------|--------------------|--------------------|------------|-----------|------------|------------|------------|------------|------------|-----------|------------|
| 63 | PA-30 FO | 19 | 120.0 | 125.0 | 104 | 327 | 77 | 134 | 117 | 70 | 15 | 45 | 276 |
| 75 | PA-30 FO | 19 | 139.7 | 145.0 | 115 | 340 | 83 | 140 | 117 | 70 | 15 | 46 | 276 |
| 90 | PA-35 FO | 19 | 150.0 | 160.0 | 131 | 361 | 89 | 146 | 126 | 78 | 15 | 49 | 326 |
| 110 | PA-40 FO | 19 | 175.0 | 190.5 | 161 | 400 | 104 | 167 | 129 | 86 | | 56 | 370 |
| 140 | PA-45 FO | 23 | 210.0 | 215.9 | 187 | 436 | 117 | 181 | 139 | 96 | | 64 | 411 |
| 160 | PA-50 FO | 24 | 241.3 | 241.3 | 215 | 468 | 130 | 189 | 149 | 106 | | 72 | 423 |
| 225 | PA-55 FO | 23 | 290.0 | 295.0 | 267 | 529 | 158 | 210 | 161 | 118 | | 73 | 452 |
| 280 | PA-65 FO | 25 | 353.0 | 362.0 | 329 | 808 | 205 | 264 | 191 | 148 | | 113 | 648 |
| 315 | PA-70 FO | 25 | 400.0 | 432.0 | 379 | 866 | 228 | 285 | 196 | 157 | | 113 | 663 |

| d [mm] | L2 [mm] | Q1 [mm] | Q2 [mm] |
|-----------|------------|------------|------------|
| 63 | 65 | 40 | |
| 75 | 65 | 54 | 35 |
| 90 | 72 | 67 | 50 |
| 110 | 80 | 88 | 74 |
| 140 | 90 | 113 | 97 |
| 160 | 100 | 139 | 123 |
| 225 | 112 | 178 | 169 |
| 280 | 137 | 210 | 207 |
| 315 | 145 | 256 | 253 |

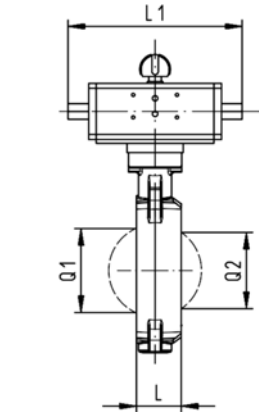
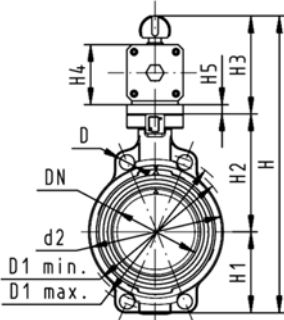


SYGEF® Standard Butterfly valve type 240 DA (Double acting) Without manual override



Model:

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



| d [mm] | DN [mm] | Inch | PN | kv-value ($\Delta p=1$ bar) [l/min] | FPM Code |
|-----------|------------|------|----|--|--------------------|
| 63 | 50 | 2 | 10 | 1470 | 199 240 502 |
| 75 | 65 | 2 ½ | 10 | 2200 | 199 240 503 |
| 90 | 80 | 3 | 10 | 3000 | 199 240 504 |
| 110 | 100 | 4 | 10 | 6500 | 199 240 505 |
| 140 | 125 | 5 | 10 | 11500 | 199 240 506 |
| 160 | 150 | 6 | 10 | 16600 | 199 240 507 |
| 225 | 200 | 8 | 10 | 39600 | 199 240 508 |
| 280 | 250 | 10 | 10 | 55200 | 199 240 509 |
| 315 | 300 | 12 | 10 | 80000 | 199 240 510 |

| d [mm] | Actuator unit type | D [mm] | D1 min. [mm] | D1 max. [mm] | d2 [mm] | H [mm] | H1 [mm] | H2 [mm] | H3 [mm] | H4 [mm] | H5 [mm] | L [mm] | L1 [mm] |
|-----------|-----------------------|-----------|--------------------|--------------------|------------|-----------|------------|------------|------------|------------|------------|-----------|------------|
| 63 | PA-35 DA | 19 | 120.0 | 125.0 | 104 | 317 | 77 | 134 | 107 | 60 | 15 | 45 | 177 |
| 75 | PA-35 DA | 19 | 139.7 | 145.0 | 115 | 330 | 83 | 140 | 107 | 60 | 15 | 46 | 177 |
| 90 | PA-40 DA | 19 | 150.0 | 160.0 | 131 | 348 | 89 | 146 | 113 | 66 | 15 | 49 | 190 |
| 110 | PA-45 DA | 19 | 175.0 | 190.5 | 161 | 372 | 104 | 167 | 102 | 71 | | 56 | 235 |
| 140 | PA-45 DA | 23 | 210.0 | 215.9 | 187 | 408 | 117 | 181 | 111 | 78 | | 64 | 235 |
| 160 | PA-55 DA | 24 | 241.3 | 241.3 | 215 | 448 | 130 | 189 | 129 | 86 | | 72 | 279 |
| 225 | PA-55 DA | 23 | 290.0 | 295.0 | 267 | 507 | 158 | 210 | 139 | 96 | | 73 | 279 |
| 280 | PA-65 DA | 25 | 353.0 | 362.0 | 329 | 748 | 205 | 264 | 161 | 118 | | 113 | 350 |
| 315 | PA-70 DA | 25 | 400.0 | 432.0 | 379 | 816 | 228 | 285 | 173 | 130 | | 113 | 381 |

| d [mm] | L2 [mm] | Q1 [mm] | Q2 [mm] |
|-----------|------------|------------|------------|
| 63 | 55 | 40 | |
| 75 | 55 | 54 | 35 |
| 90 | 60 | 67 | 50 |
| 110 | 65 | 88 | 74 |
| 140 | 72 | 113 | 97 |
| 160 | 80 | 139 | 123 |
| 225 | 90 | 178 | 169 |
| 280 | 112 | 210 | 207 |
| 315 | 125 | 256 | 253 |

Assembly parts for butterfly valves

Intermediate element Pneumatic type 240 / 241 / 242 Without manual override



| d | DN | Type | 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 | PA65 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 |

| Code |
|------|
|------|

| |
|-------------|
| 198 000 595 |
| 198 000 596 |
| 198 000 600 |
| 198 000 597 |
| 198 000 598 |
| 198 000 599 |

Intermediate element Electric type 140 / 141 / 142 Without manual override



| d | DN | Type | 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 |

| Code |
|------|
|------|

| |
|-------------|
| 198 000 601 |
| 198 000 602 |
| 198 000 603 |

**Intermediate element
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 |

**Intermediate element
Gear operated with handwheel 567 / 568**



| d | DN | 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 |

| Code |
|--|
| 198 000 621 198 000 622 |



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 |



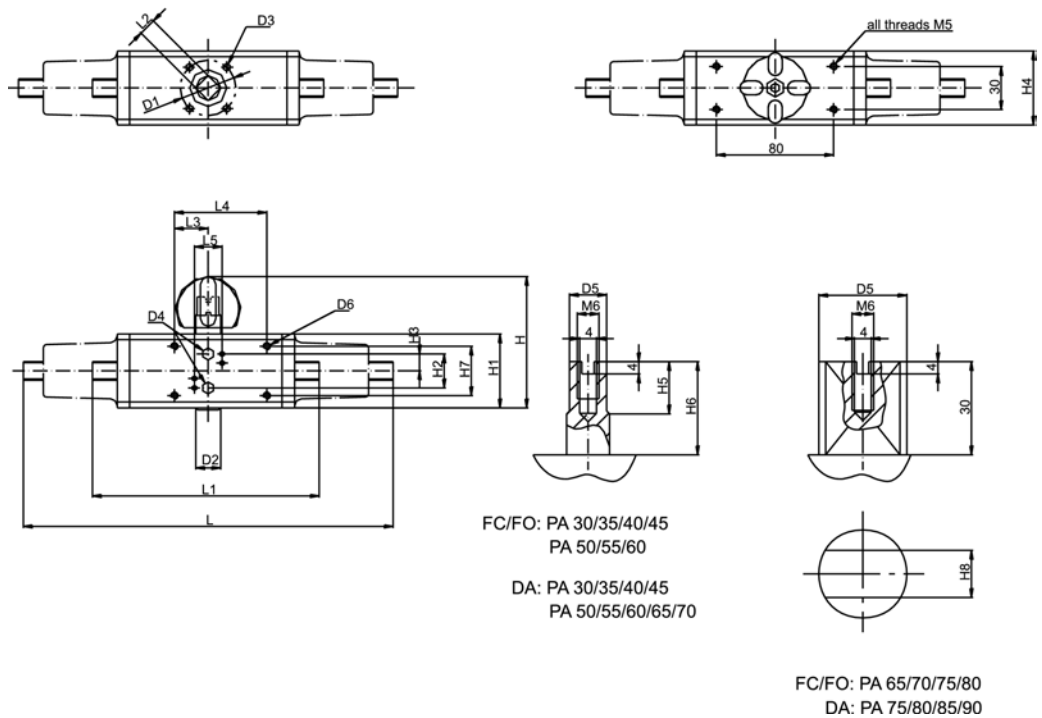
Pneumatic actuator type PA30 PA90 Fail safe to close/fail safe to open (FC/FO)

* Only valid for butterfly valve type 240, 241, 242 and ball valve type 230 - 235

| Type | hard anodized Code | nickel plated Code | hard anodized with stroke limiter Code |
|-------------|--------------------|--------------------|--|
| PA 30 FC/FO | 198 800 757 | 198 800 034 | - |
| *PA 30 FO | 198 811 025 | - | - |
| PA 35 FC/FO | 198 800 037 | 198 800 052 | - |
| *PA 35 FO | 198 811 026 | - | - |
| PA 40 FC/FO | 198 800 728 | 198 800 004 | 198 800 017 |
| *PA 40 FO | 198 811 027 | - | - |
| PA 45 FC/FO | 198 800 039 | 198 800 054 | - |
| *PA45 FO | 198 811 028 | - | - |
| PA 50 FC/FO | 198 800 729 | 198 800 005 | 198 800 018 |
| *PA50 FO | 198 811 029 | - | - |
| PA 55 FC/FO | 198 800 041 | 198 800 056 | - |
| *PA 55 FO | 198 811 030 | - | - |
| PA 60 FC/FO | 198 800 730 | 198 800 006 | 198 800 019 |
| PA 65 FC/FO | 198 800 043 | 198 800 058 | - |
| PA 70 FC/FO | 198 800 731 | 198 800 007 | 198 800 020 |
| PA 75 FC/FO | 198 800 045 | 198 800 060 | - |
| PA 80 FC/FO | 198 800 047 | 198 800 062 | - |

| Type | | D1 [mm] | D2 [mm] | D3[M] [mm] | D4 [inch] | D5 [mm] | L [mm] | L2 [mm] | L3 [mm] | L4 [mm] | L5 [mm] | H [mm] |
|-------------|-----|------------|------------|---------------|--------------|------------|-----------|------------|------------|------------|------------|-----------|
| PA 30 FC/FO | F04 | 42 | 30 | M5x9 | 1/8 | 10 | 276 | 11 | 35 | 70 | 32 | 102 |
| *PA 30 FO | F04 | 42 | 30 | M5x9 | 1/8 | 10 | 276 | 11 | 35 | 70 | 32 | 102 |
| PA 35 FC/FO | F05 | 50 | 35 | M6x11 | 1/8 | 12 | 326 | 14 | 35 | 70 | 32 | 111 |
| *PA 35 FO | F05 | 50 | 35 | M6x11 | 1/8 | 12 | 326 | 14 | 35 | 70 | 32 | 111 |
| PA 40 FC/FO | F05 | 50 | 35 | M6x11 | 1/8 | 12 | 370 | 14 | 35 | 70 | 32 | 129 |
| *PA 40 FO | F05 | 50 | 35 | M6x11 | 1/8 | 12 | 370 | 14 | 35 | 70 | 32 | 129 |
| PA 45 FC/FO | F07 | 70 | 55 | M8x15 | 1/8 | 15 | 411 | 17 | 35 | 70 | 32 | 139 |
| *PA45 FO | F07 | 70 | 55 | M8x15 | 1/8 | 15 | 411 | 17 | 35 | 70 | 32 | 139 |
| PA 50 FC/FO | F07 | 70 | 55 | M8x15 | 1/8 | 15 | 423 | 17 | 35 | 70 | 32 | 149 |
| *PA50 FO | F07 | 70 | 55 | M8x15 | 1/8 | 15 | 423 | 17 | 35 | 70 | 32 | 149 |
| PA 55 FC/FO | F10 | 102 | 70 | M10x17 | 1/8 | 19 | 452 | 22 | 35 | 70 | 32 | 161 |
| *PA 55 FO | F10 | 102 | 70 | M10x17 | 1/8 | 19 | 452 | 22 | 35 | 70 | 32 | 161 |
| PA 60 FC/FO | F10 | 102 | 70 | M10x17 | 1/8 | 19 | 503 | 22 | 35 | 70 | 32 | 173 |
| PA 65 FC/FO | F12 | 125 | 85 | M12x21 | 1/4 | | 648 | 27 | | | 32 | 191 |
| PA 70 FC/FO | F12 | 125 | 85 | M12x21 | 1/4 | | 663 | 27 | | | 32 | 196 |
| PA 75 FC/FO | F14 | 140 | 100 | M16x25 | 1/4 | | 824 | 36 | | | 32 | 229 |
| PA 80 FC/FO | F14 | 140 | 100 | M16x25 | 1/4 | | 918 | 36 | | | 32 | 241 |

| Type | H1 [mm] | H2 [mm] | H3 [mm] | H4 [mm] | H5 [mm] | H6 [mm] | H7 [mm] | H8 [mm] |
|-------------|------------|------------|------------|------------|------------|------------|------------|------------|
| PA 30 FC/FO | 70 | 21 | 18 | 65 | 13 | 20 | 36 | |
| *PA 30 FO | 70 | 21 | 18 | 65 | 13 | 20 | 36 | |
| PA 35 FC/FO | 78 | 21 | 18 | 72 | 13 | 20 | 36 | |
| *PA 35 FO | 78 | 21 | 18 | 72 | 13 | 20 | 36 | |
| PA 40 FC/FO | 86 | 25 | 21 | 80 | 13 | 30 | 36 | |
| *PA 40 FO | 86 | 25 | 21 | 80 | 13 | 30 | 36 | |
| PA 45 FC/FO | 96 | 25 | 21 | 90 | 16 | 30 | 36 | |
| *PA45 FO | 96 | 25 | 21 | 90 | 16 | 30 | 36 | |
| PA 50 FC/FO | 106 | 25 | 26 | 100 | 17 | 30 | 36 | |
| *PA50 FO | 106 | 25 | 26 | 100 | 17 | 30 | 36 | |
| PA 55 FC/FO | 118 | 25 | 25 | 112 | 19 | 30 | 36 | |
| *PA 55 FO | 118 | 25 | 25 | 112 | 19 | 30 | 36 | |
| PA 60 FC/FO | 130 | 25 | 32 | 124 | 19 | 30 | 36 | |
| PA 65 FC/FO | 148 | 24 | 34 | 137 | | | | 22 |
| PA 70 FC/FO | 153 | 24 | 38 | 145 | | | | 24 |
| PA 75 FC/FO | 186 | 24 | 43 | 166 | | | | 27 |
| PA 80 FC/FO | 198 | 24 | 44 | 180 | | | | 32 |

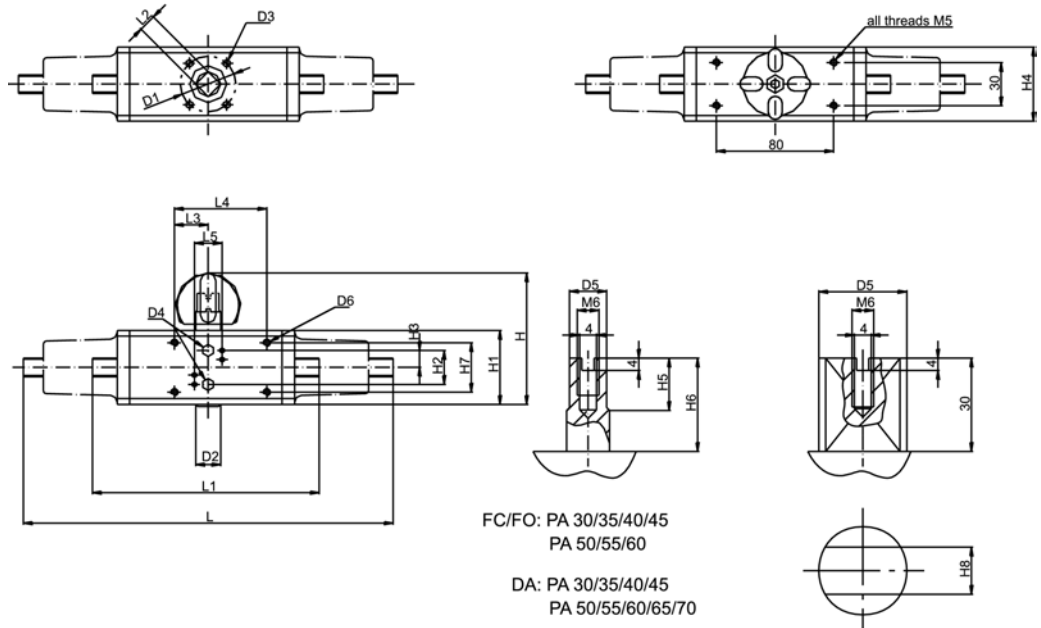


Pneumatic actuator type PA30 PA90 Double acting (DA)

| Type | hard anodized Code | | | | | | | | | | | | |
|----------|--------------------|--|--|--|--|--|--|--|--|--|--|--|--|
| PA 30 DA | 198 800 737 | | | | | | | | | | | | |
| PA 35 DA | 198 800 758 | | | | | | | | | | | | |
| PA 40 DA | 198 800 732 | | | | | | | | | | | | |
| PA 45 DA | 198 800 040 | | | | | | | | | | | | |
| PA 50 DA | 198 800 733 | | | | | | | | | | | | |
| PA 55 DA | 198 800 042 | | | | | | | | | | | | |
| PA 60 DA | 198 800 734 | | | | | | | | | | | | |
| PA 65 DA | 198 800 044 | | | | | | | | | | | | |
| PA 70 DA | 198 800 735 | | | | | | | | | | | | |
| PA 75 DA | 198 800 046 | | | | | | | | | | | | |
| PA 80 DA | 198 800 048 | | | | | | | | | | | | |
| PA 85 DA | 198 800 050 | | | | | | | | | | | | |
| PA 90 DA | 198 800 051 | | | | | | | | | | | | |

| Type | | D1 [mm] | D2 [mm] | D3[M] [mm] | D4 [inch] | D5 [mm] | L1 [mm] | L2 [mm] | L3 [mm] | L4 [mm] | L5 [mm] | H [mm] | H1 [mm] |
|----------|-----|------------|------------|---------------|--------------|------------|------------|------------|------------|------------|------------|-----------|------------|
| PA 30 DA | F03 | 36 | 25 | M5x9 | 1/8 | 9 | 177 | 9 | 35 | 70 | | 92 | 60 |
| PA 35 DA | F04 | 42 | 30 | M5x9 | 1/8 | 10 | 190 | 11 | 35 | 70 | | 98 | 66 |
| PA 40 DA | F04 | 42 | 30 | M5x9 | 1/8 | 10 | 198 | 11 | 35 | 70 | | 102 | 70 |
| PA 45 DA | F05 | 50 | 35 | M6x11 | 1/8 | 12 | 235 | 14 | 35 | 70 | | 111 | 78 |
| PA 50 DA | F05 | 50 | 35 | M6x11 | 1/8 | 12 | 250 | 14 | 35 | 70 | | 129 | 86 |
| PA 55 DA | F07 | 70 | 55 | M8x15 | 1/8 | 15 | 279 | 17 | 35 | 70 | | 139 | 96 |
| PA 60 DA | F07 | 70 | 55 | M8x15 | 1/8 | 15 | 341 | 17 | 35 | 70 | | 149 | 106 |
| PA 65 DA | F10 | 102 | 70 | M10x17 | 1/8 | 19 | 350 | 22 | 35 | 70 | | 161 | 118 |
| PA 70 DA | F10 | 102 | 70 | M10x17 | 1/8 | 19 | 381 | 22 | 35 | 70 | | 173 | 130 |
| PA 75 DA | F12 | 125 | 85 | M12x21 | 1/4 | | 416 | 27 | | | 32 | 191 | 148 |
| PA 80 DA | F12 | 125 | 85 | M12x21 | 1/4 | | 466 | 27 | | | 32 | 197 | 153 |
| PA 85 DA | F14 | 140 | 100 | M16x25 | 1/4 | | 555 | 36 | | | 32 | 229 | 186 |
| PA 90 DA | F14 | 140 | 100 | M16x25 | 1/4 | | 581 | 36 | | | 32 | 241 | 198 |

| Type | H2 [mm] | H3 [mm] | H4 [mm] | H5 [mm] | H6 [mm] | H7 [mm] | H8 [mm] |
|----------|------------|------------|------------|------------|------------|------------|------------|
| PA 30 DA | 25 | 12 | 55 | 10 | 20 | 36 | |
| PA 35 DA | 25 | 13 | 60 | 13 | 20 | 36 | |
| PA 40 DA | 21 | 18 | 65 | 13 | 20 | 36 | |
| PA 45 DA | 21 | 18 | 72 | 13 | 20 | 36 | |
| PA 50 DA | 25 | 21 | 80 | 13 | 30 | 36 | |
| PA 55 DA | 25 | 21 | 90 | 16 | 30 | 36 | |
| PA 60 DA | 25 | 26 | 100 | 17 | 30 | 36 | |
| PA 65 DA | 25 | 25 | 112 | 19 | 30 | 36 | |
| PA 70 DA | 25 | 32 | 124 | 19 | 30 | 36 | |
| PA 75 DA | 24 | 34 | 137 | | | | 22 |
| PA 80 DA | 24 | 38 | 145 | | | | 24 |
| PA 85 DA | 24 | 43 | 166 | | | | 27 |
| PA 90 DA | 24 | 44 | 180 | | | | 32 |



FC/FO: PA 30/35/40/45
PA 50/55/60
DA: PA 30/35/40/45
PA 50/55/60/65/70

FC/FO: PA 65/70/75/80
DA: PA 75/80/85/90



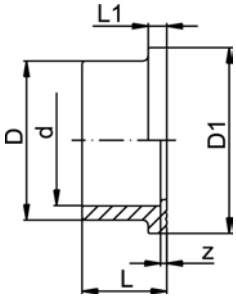
Hand lever with fine adjustment to type 567/568

| Size | DN-DN [mm] | Code |
|------|---------------|--------------------|
| 1 | 50 - 80 | 161 486 325 |
| 2 | 100 - 125 | 161 486 326 |
| 2 | - 150 | 161 486 327 |
| 3 | - 200 | 161 486 328 |

Flange Adaptor

Flange Adaptors, PVC-U

Jointing face flat, Combined Jointing face flat and serrated, metric



Model:

- Solvent cement socket metric
- d16 - d50: Jointing face flat
- d63 - d400: Combined Jointing face serrated and flat
- Gasket: Profile flange gasket EPDM No. 48 44 07, FPM No. 49 44 07
or
Flat gasket EPDM No. 48 40 03, FPM No. 49 40 03
Only use O-ring EPDM No. 48 41 01, FPM No. 49 41 01 in combination with counterpart Flange Adaptor No. 21 81 01
- Flange: PVC-U No. 21 70 00, PP with steel ring No. 27 70 02, Backing Flange PP-V for socket systems metric No. 27 70 04

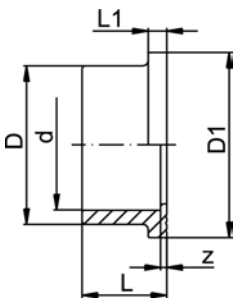
Note: The flat gasket affects the maximum allowable operating pressure!

| d [mm] | d [inch] | DN [mm] | PN | Code | z [mm] | D [mm] | D1 [mm] | L [mm] | L1 [mm] |
|-----------|-------------|------------|----|--------------------|-----------|-----------|------------|-----------|------------|
| 63 | | 50 | 16 | 721 790 111 | 3 | 77 | 90 | 41 | 9 |
| 75 | 2 ½ | 65 | 16 | 721 790 112 | 3 | 91 | 106 | 47 | 10 |
| 90 | | 80 | 16 | 721 790 113 | 5 | 108 | 125 | 56 | 11 |
| 110 | | 100 | 16 | 721 790 114 | 5 | 131 | 150 | 66 | 12 |
| 140 | 5 | 125 | 16 | 721 790 116 | 5 | 165 | 188 | 81 | 14 |
| 160 | | 150 | 16 | 721 790 117 | 5 | 188 | 213 | 91 | 16 |
| 225 | | 200 | 10 | 721 790 120 | 6 | 248 | 274 | 125 | 25 |
| 280 | | 250 | 10 | 721 790 122 | 5 | 308 | 329 | 151 | 23 |
| 315 | | 300 | 6 | 721 790 123 | 8 | 346 | 379 | 172 | 27 |

PVC-C

Flange adaptor PVC-C

Jointing face flat / serrated metric



Model:

- Solvent cement socket metric

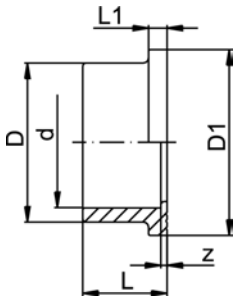
| d [mm] | DN [mm] | PN | Code | z [mm] | D [mm] | D1 [mm] | L [mm] | L1 [mm] |
|-----------|------------|----|--------------------|-----------|-----------|------------|-----------|------------|
| 75 | 65 | 16 | 723 790 112 | 3 | 91 | 106 | 47 | 10 |
| 90 | 80 | 16 | 723 790 113 | 5 | 108 | 125 | 56 | 11 |
| 110 | 100 | 16 | 723 790 114 | 5 | 131 | 150 | 66 | 12 |
| 160 | 150 | 16 | 723 790 117 | 5 | 188 | 213 | 91 | 16 |
| 225 | 200 | 10 | 723 790 120 | 6 | 248 | 274 | 125 | 25 |



ABS Flange adaptor ABS metric Jointing face flat / serrated metric

Model:

- Solvent cement socket metric



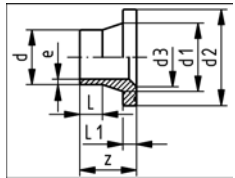
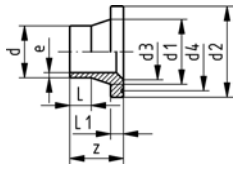
| d [mm] | DN [mm] | PN | Code | D [mm] | D1 [mm] | L [mm] | L1 [mm] | z [mm] |
|-----------|------------|----|--------------------|-----------|------------|-----------|------------|-----------|
| 90 | 80 | 10 | 729 790 113 | 108 | 125 | 56 | 11 | 5 |
| 110 | 100 | 10 | 729 790 114 | 131 | 150 | 66 | 12 | 5 |
| 160 | 150 | 10 | 729 790 117 | 188 | 213 | 91 | 16 | 5 |
| 225 | 200 | 10 | 729 790 120 | 248 | 274 | 125 | 25 | 6 |



PP-H Special flange adaptor PP-H S8,3/SDR17,6 Jointing face flat / serrated

Model:

- Conventional butt fusion according to DVS2207
- In connection with +GF+ butterfly valves, chamfered and ready for use



| d [mm] | DN [mm] | Code | D [mm] | D1 [mm] | L [mm] | L1 [mm] | L2 [mm] | e [mm] |
|-----------|------------|--------------------|-----------|------------|-----------|------------|------------|-----------|
| 63 | 50 | 727 798 536 | 75 | 102 | 50 | 14 | 18 | 3,6 |
| 75 | 65 | 727 798 412 | 89 | 122 | 80 | 16 | 43 | 4,3 |
| 90 | 80 | 727 798 413 | 105 | 138 | 80 | 17 | 41 | 5,1 |
| 110 | 100 | 727 798 414 | 125 | 158 | 80 | 18 | 40 | 6,3 |
| 140 | 125 | 727 798 541 | 155 | 188 | 80 | 18 | 34 | 8,0 |
| 160 | 150 | 727 798 842 | | | 41 | 18 | | 9,1 |
| 225 | 200 | 727 798 845 | | | 44 | 24 | | 12,8 |
| 280 | 250 | 727 798 847 | | | 45 | 25 | | 15,9 |
| 315 | 300 | 727 798 848 | | | 35 | 25 | | 17,9 |



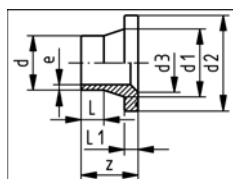
Special Flange Adaptors, PP-H S5/SDR11 Jointing Face, combination serrated / flat metric

Model:

- Conventional butt-welding according to DVS 2207 part 1
- IR = Infrared-(IR Plus®) compatible. Please choose fusion parameters: PP-H
- Suitable for butterfly valves
- Chamfered and ready for use
- Jointing faces flat/serrated

* Including spacer and O-Ring EPDM

¹ PP-R



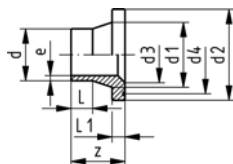
| d [mm] | DN [mm] | FM | Code | d1 [mm] | d2 [mm] | d3 [mm] | z [mm] | L [mm] | L1 [mm] | e [mm] |
|-----------|------------|----|--------------------|------------|------------|------------|-----------|-----------|------------|-----------|
| 75 | 65 | IR | 727 798 812 | 89 | 122 | 66 | 80 | 43 | 16 | 6,8 |
| 90 | 80 | IR | 727 798 813 | 105 | 138 | 78 | 80 | 41 | 17 | 8,2 |
| 110 | 100 | IR | 727 798 814 | 125 | 158 | 100 | 80 | 40 | 18 | 10,0 |
| 140 | 125 | IR | 727 798 816 | 155 | 188 | 127 | 89 | 39 | 25 | 12,7 |
| 160 | 150 | IR | 727 798 817 | 175 | 212 | 153 | 92 | 49 | 25 | 14,6 |
| 225 | 200 | IR | 727 798 820 | 235 | 268 | 204 | 100 | 55 | 32 | 20,5 |
| 280 | 250 | -- | 727 798 822 | 291 | 320 | 260 | 100 | 35 | 35 | 25,4 |
| 315 | 300 | -- | 727 798 823 | 335 | 370 | 309 | 100 | 25 | 35 | 28,6 |



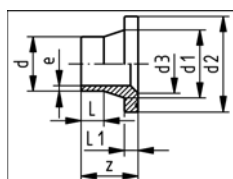
PE Special flange adaptor PE100 S8,3/SDR17,6 Jointing face flat / serrated

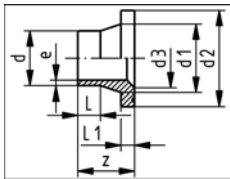
Model:

- Conventional butt fusion according to DVS2207
- In connection with +GF+ butterfly valves, chamfered and ready for use



| d [mm] | DN [mm] | Code | D [mm] | D1 [mm] | L [mm] | L1 [mm] | L2 [mm] | e [mm] |
|-----------|------------|--------------------|-----------|------------|-----------|------------|------------|-----------|
| 63 | 50 | 753 798 536 | 75 | 102 | 50 | 14 | 16 | 3,8 |
| 75 | 65 | 753 798 512 | 89 | 122 | 80 | 16 | 14 | 4,3 |
| 90 | 80 | 753 798 513 | 105 | 138 | 80 | 17 | 41 | 5,7 |
| 110 | 100 | 753 798 514 | 125 | 158 | 80 | 18 | 40 | 6,9 |
| 140 | 125 | 753 798 541 | 155 | 188 | 80 | 18 | 34 | 8,3 |
| 160 | 150 | 753 798 842 | | | 44 | 25 | | 9,1 |
| 225 | 200 | 753 798 845 | | | 36 | 32 | | 12,8 |





Special Flange Adaptors, PE100 S8,3/SDR17,6 Jointing Face, combination serrated / flat metric

Model:

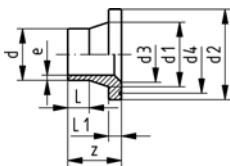
- Conventional butt-welding according to DVS 2207 part 1
- IR = Infrared-(IR Plus®) compatible. Please choose fusion parameters: PE100
- Suitable for butterfly valves
- Chamfered and ready for use

- No chamfers required.

d75-d140 Standard flange adaptor. In connection with +GF+ butterfly valves,

* Including spacer and O-Ring EPDM

| d [mm] | DN [mm] | FM | Code | d2 [mm] | d1 [mm] | d3 [mm] | z [mm] | L1 [mm] | L [mm] | e [mm] |
|-----------|------------|----|--------------------|------------|------------|------------|-----------|------------|-----------|-----------|
| 280 | 250 | -- | 753 798 847 | 320 | 291 | 260 | 100 | 25 | 45 | 15,9 |
| 315 | 300 | -- | 753 798 848 | 370 | 335 | 309 | 100 | 25 | 35 | 17,9 |



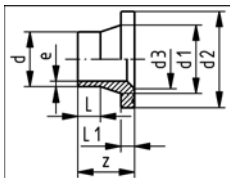
Special Flange Adaptors, PE100 S5/SDR11 Jointing Face, combination serrated / flat metric

Model:

- Conventional butt-welding according to DVS 2207 part 1
- IR = Infrared-(IR Plus®) compatible. Please choose fusion parameters: PE100
- Suitable for butterfly valves
- Chamfered and ready for use
- Jointing faces flat/serrated

*Including spacer and O-Ring EPDM

| d [mm] | DN [mm] | FM | Code | d1 [mm] | d2 [mm] | d3 [mm] | z [mm] | L [mm] | L1 [mm] | e [mm] |
|-----------|------------|----|--------------------|------------|------------|------------|-----------|-----------|------------|-----------|
| 75 | 65 | IR | 753 798 812 | 89 | 122 | 66 | 80 | 43 | 16 | 6,8 |
| 90 | 80 | IR | 753 798 813 | 105 | 138 | 78 | 80 | 41 | 17 | 8,2 |
| 110 | 100 | IR | 753 798 814 | 125 | 158 | 100 | 80 | 40 | 18 | 10,0 |
| 140 | 125 | IR | 753 798 816 | 155 | 188 | 127 | 89 | 42 | 25 | 12,7 |
| 160 | 150 | IR | 753 798 817 | 175 | 212 | 151 | 92 | 44 | 25 | 14,6 |
| 225 | 200 | IR | 753 798 820 | 235 | 268 | 203 | 100 | 37 | 32 | 20,5 |
| 280 | 250 | -- | 753 798 822 | 291 | 320 | 260 | 100 | 35 | 35 | 25,5 |
| 315 | 300 | -- | 753 798 823 | 335 | 370 | 309 | 100 | 25 | 35 | 28,7 |

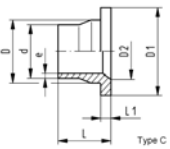
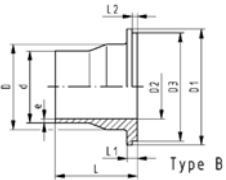
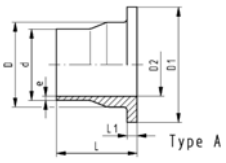




SYGEF® standard Flange adaptor PVDF Joining face flat / serrated

Model:

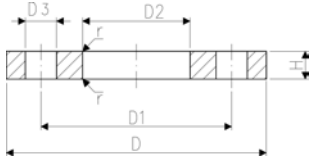
- In connection with +GF+ butterfly valves, chamfered and ready for use



| d [mm] | DN [mm] | PN | Code | D [mm] | D1 [mm] | D2 [mm] | D3 [mm] | e [mm] | L [mm] | L1 [mm] | L2 [mm] | Type |
|-----------|------------|----|--------------------|-----------|------------|------------|------------|-----------|-----------|------------|------------|------|
| 63 | 50 | 16 | 735 798 811 | 75 | 102 | 56 | | 3.0 | 72 | 9 | | A |
| 75 | 65 | 16 | 735 798 812 | 89 | 122 | 66 | | 3.6 | 80 | 10 | | A |
| 90 | 80 | 16 | 735 798 813 | 105 | 138 | 78 | 133 | 4.3 | 81 | 12 | 4 | B |
| 110 | 100 | 16 | 735 798 814 | 125 | 158 | 100 | | 5.3 | 81 | 13 | | C |
| 140 | 125 | 16 | 735 798 816 | 155 | 188 | 127 | | 6.7 | 90 | 16 | | C |
| 160 | 150 | 16 | 735 798 817 | 175 | 212 | 151 | | 7.7 | 93 | 17 | | C |
| 225 | 200 | 16 | 735 798 820 | 235 | 268 | 203 | | 10.8 | 102 | 22 | | C |

Flange

Backing Flanges, PVC-U metric



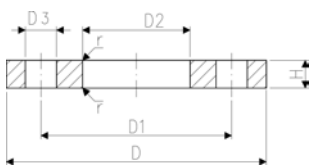
Model:

- For socket systems
- Connecting dimension: ISO 7005 PN10, EN 1092 PN10, DIN 2501 PN10
- Maximum medium- or ambient temperature 45 °C

* Connecting dimension: ISO 2536

| d [mm] | DN [mm] | Inch | PN | Code | D [mm] | D1 [mm] | D2 [mm] | D3 [mm] | H [mm] | r [mm] | AL | SC |
|-----------|------------|------|----|--------------------|-----------|------------|------------|------------|-----------|-----------|----|-----|
| 63 | 50 | 2 | 10 | 721 700 011 | 165 | 125 | 78 | 18 | 18 | 3 | 4 | M16 |
| 75 | 65 | 2 ½ | 10 | 721 700 012 | 185 | 145 | 92 | 18 | 19 | 3 | 4 | M16 |
| 90 | 80 | 3 | 10 | 721 700 013 | 200 | 160 | 110 | 18 | 20 | 3 | 8 | M16 |
| 110 | 100 | 4 | 10 | 721 700 014 | 220 | 180 | 133 | 18 | 22 | 3 | 8 | M16 |
| 140 | 125 | 5 | 10 | 721 700 016 | 250 | 210 | 167 | 18 | 26 | 4 | 8 | M16 |
| 160 | 150 | 6 | 10 | 721 700 017 | 285 | 240 | 190 | 22 | 28 | 4 | 8 | M20 |
| 225 | 200 | 8 | 10 | 721 700 020 | 340 | 295 | 250 | 22 | 32 | 4 | 8 | M20 |
| 280 | 250 | 10 | 6 | 721 700 137 | 395 | 350 | 310 | 22 | 36 | 4 | 12 | M20 |
| 315 | 300 | 12 | 6 | 721 700 138 | 445 | 400 | 348 | 22 | 36 | 4 | 12 | M20 |

Backing flange PVC-U Inch ASTM / ANSI



Model:

- For socket systems
- For Flange Adaptors BS (ANSI)
- Connecting dimension: ANSI/ASME B 16.5 class 150 (ASTM D 4024), BS EN 1759

* Only for use with metric flange adaptors

| d [mm] | DN [mm] | Inch | PN | Code | D [mm] | D1 [mm] | D2 [mm] | D3 [mm] | H [mm] | r [mm] | AL |
|-----------|------------|------|----|--------------------|-----------|------------|------------|------------|-----------|-----------|----|
| *110 | 50 | 2 | 10 | 721 702 211 | 165 | 121 | 78 | 19 | 18 | 3 | 4 |
| | 65 | 2 ½ | 10 | 721 702 212 | 185 | 140 | 92 | 19 | 19 | 3 | 4 |
| | 80 | 3 | 10 | 721 702 213 | 200 | 152 | 110 | 19 | 20 | 3 | 4 |
| | 100 | 4 | 10 | 721 702 214 | 220 | 190 | 138 | 19 | 22 | 3 | 8 |
| | 100 | 4 | 10 | 161 483 180 | 220 | 190 | 133 | 19 | 22 | 3 | 8 |
| | 125 | 5 | 10 | 721 702 216 | 250 | 216 | 167 | 22 | 26 | 4 | 8 |
| | 150 | 6 | 10 | 721 702 217 | 285 | 241 | 200 | 22 | 28 | 4 | 8 |
| | 200 | 8 | 10 | 721 702 220 | 340 | 298 | 250 | 22 | 32 | 4 | 8 |



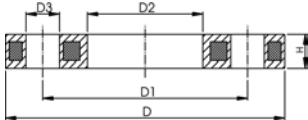
Backing Flanges, PP/Steel for Socket Systems metric

Model:

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

¹ Connecting dimension: ISO 2536 DN125

* Connecting dimension: ISO 2536



| d [mm] | d [inch] | DN [mm] | PN | Code | D [mm] | D1 [mm] | D2 [mm] | D3 [mm] | H [mm] | AL | SC |
|-----------|-------------|------------|----|--------------------|-----------|------------|------------|------------|-----------|----|-----|
| 63 | | 50 | 16 | 727 700 211 | 165 | 125 | 78 | 18 | 18 | 4 | M16 |
| 75 | | 65 | 16 | 727 700 212 | 185 | 145 | 92 | 18 | 18 | 4 | M16 |
| 90 | | 80 | 16 | 727 700 213 | 200 | 160 | 110 | 18 | 20 | 8 | M16 |
| 110 | | 100 | 16 | 727 700 214 | 220 | 180 | 133 | 18 | 20 | 8 | M16 |
| 140 | | 125 | 16 | 727 700 216 | 250 | 210 | 167 | 18 | 24 | 8 | M16 |
| 160 | 6 | 150 | 16 | 727 700 217 | 285 | 240 | 190 | 22 | 24 | 8 | M20 |
| 225 | | 200 | 16 | 727 700 220 | 340 | 295 | 250 | 22 | 27 | 8 | M20 |
| 280 | | 250 | 16 | 727 700 222 | 395 | 350 | 310 | 22 | 30 | 12 | M20 |
| 315 | | 300 | 16 | 727 700 223 | 445 | 400 | 348 | 22 | 34 | 12 | M20 |

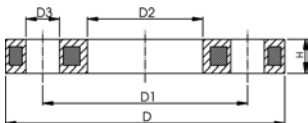


Backing flange PP/Steel For socket systems Inch/ANSI

Model:

- For socket systems
- For Flange Adaptors BS (ANSI)
- Material: PP (30 % glass-fibre reinforced) with steel ring
- Connecting dimension ANSI/ASME B 16.5 / ASTM D 4024

- DN100 and DN150: only for use with original metric flange adaptors



| d [mm] | DN [mm] | Inch | PN | Code | D [mm] | D1 [mm] | D2 [mm] | D3 [mm] | H [mm] | AL |
|-----------|------------|------|----|--------------------|-----------|------------|------------|------------|-----------|----|
| 63 | 50 | | 16 | 727 701 211 | 165 | | | | 18 | 4 |
| 75 | 65 | | 16 | 727 701 212 | 185 | | | | 18 | 4 |
| 90 | 80 | | 16 | 727 701 213 | 200 | | | | 20 | 4 |
| 110 | 100 | | 16 | 727 701 214 | 229 | | | | 20 | 8 |
| 200 | 200 | | 16 | 727 701 220 | 340 | | | | 27 | 8 |



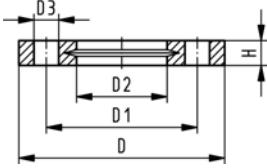
Backing Flanges, PP-V for Butt Fusion Systems metric

Model:

- Modern full-plastic flange PP-GF (30 % glass-fibre reinforced)
- With V-groove which applies force evenly on collar
- With integrated bolt retainers as an assembly aid
- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, BS 4504 PN 10



¹⁾ Suitable for socket- and butt fusion systems (no pictograph on flange)



| d [mm] | Inch | DN [mm] | PN | Code | D [mm] | D1 [mm] | D2 [mm] | D3 [mm] | H [mm] | AL | SC |
|-----------|------|------------|----|--------------------|-----------|------------|------------|------------|-----------|----|-----|
| 63 | | 50 | 16 | 727 700 411 | 165 | 125 | 78 | 18 | 24 | 4 | M16 |
| 75 | | 65 | 16 | 727 700 412 | 185 | 145 | 92 | 18 | 26 | 4 | M16 |
| 90 | | 80 | 16 | 727 700 513 | 200 | 160 | 108 | 18 | 27 | 8 | M16 |
| 125 | | 100 | 16 | 727 700 515 | 220 | 180 | 135 | 18 | 28 | 8 | M16 |
| 140 | | 125 | 16 | 727 700 516 | 250 | 210 | 158 | 18 | 30 | 8 | M16 |
| 160 | 6 | 150 | 16 | 727 700 517 | 285 | 241 | 178 | 22 | 32 | 8 | M20 |
| 225 | 9 | 200 | 16 | 727 700 520 | 340 | 295 | 238 | 22 | 34 | 8 | M20 |
| 280 | | 250 | 16 | 727 700 522 | 395 | 350 | 294 | 22 | 38 | 12 | M20 |
| 315 | | 300 | 16 | 727 700 523 | 445 | 400 | 338 | 22 | 42 | 12 | M20 |



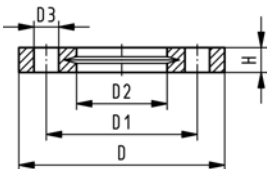
Backing Flanges, PP-V for Socket Systems metric

Model:

- Modern full-plastic flange PP-GF (30 % glass-fibre reinforced)
- With V-groove which applies force evenly on collar
- With integrated bolt retainers as an assembly aid
- Connecting dimension: ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, BS 4504 PN 10



¹⁾ Suitable for socket- and butt fusion systems (no pictograph on flange)



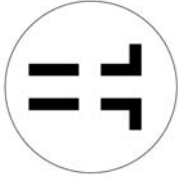
| d [mm] | Inch | DN [mm] | PN | Code | D [mm] | D1 [mm] | D2 [mm] | D3 [mm] | H [mm] | AL | SC |
|-----------|------|------------|----|--------------------|-----------|------------|------------|------------|-----------|----|-----|
| 63 | | 50 | 16 | 727 700 411 | 165 | 125 | 78 | 18 | 24 | 4 | M16 |
| 75 | | 65 | 16 | 727 700 412 | 185 | 145 | 92 | 18 | 26 | 4 | M16 |
| 90 | | 80 | 16 | 727 700 413 | 200 | 160 | 110 | 18 | 27 | 8 | M16 |
| 110 | | 100 | 16 | 727 700 414 | 220 | 180 | 133 | 18 | 28 | 8 | M16 |
| 140 | | 125 | 16 | 727 700 416 | 250 | 210 | 167 | 18 | 30 | 8 | M16 |
| 160 | 6 | 150 | 16 | 727 700 417 | 285 | 241 | 190 | 22 | 32 | 8 | M20 |
| 225 | 8 | 200 | 16 | 727 700 420 | 340 | 295 | 250 | 22 | 34 | 8 | M20 |
| 280 | | 250 | 16 | 727 700 422 | 395 | 350 | 310 | 22 | 38 | 12 | M20 |
| 315 | | 300 | 16 | 727 700 423 | 445 | 400 | 348 | 22 | 42 | 12 | M20 |



Backing Flanges, PP-V for Butt Fusion Systems Inch/ANSI

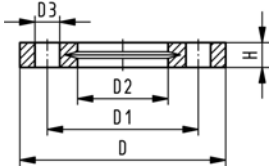
Model:

- Modern full-plastic flange PP-GF (30 % glass-fibre reinforced)
- With V-groove which applies force evenly on collar
- With integrated bolt-fixing as an assembly aid
- Connection dimensions according to ASME B16.5, ASTM D 4024; bolt circle class 150



1) Suitable for socket- and butt fusion systems (no pictograph on flange)

| Inch | DN [mm] | PN | Code | D [mm] | D1 [mm] | D2 [mm] | D3 [mm] | H [mm] | AL | SC |
|------|------------|----|--------------------|-----------|------------|------------|------------|-----------|----|-----|
| 1/2 | 50 | 16 | 727 701 411 | 165 | 121 | 78 | 19 | 24 | 4 | M16 |
| 1/2 | 65 | 16 | 727 701 412 | 185 | 140 | 92 | 19 | 26 | 4 | M16 |
| 3 | 80 | 16 | 727 701 513 | 200 | 152 | 108 | 19 | 27 | 4 | M16 |
| 4 | 100 | 16 | 727 701 514 | 229 | 190 | 128 | 19 | 28 | 8 | M16 |
| 6 | 150 | 16 | 727 700 517 | 285 | 241 | 178 | 22 | 32 | 8 | M20 |
| 9 | 200 | 16 | 727 700 520 | 340 | 295 | 238 | 22 | 34 | 8 | M20 |
| 10 | 250 | 16 | 727 701 522 | 406 | 362 | 294 | 26 | 38 | 12 | M20 |
| 12 | 300 | 16 | 727 701 523 | 483 | 432 | 338 | 26 | 42 | 12 | M20 |



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

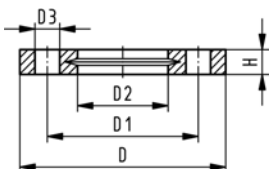
Model:

- Modern full-plastic flange PP-GF (30 % glass-fibre reinforced)
- With V-groove which applies force evenly on collar
- With integrated bolt-fixing as an assembly aid
- Connection dimensions according to ASME B16.5, ASTM D 4024; bolt circle class 150



1) Suitable for socket- and butt fusion systems (no pictograph on flange)

| Inch | DN [mm] | PN | Code | D [mm] | D1 [mm] | D2 [mm] | D3 [mm] | H [mm] | AL | SC |
|------|------------|----|--------------------|-----------|------------|------------|------------|-----------|----|-----|
| 1/2 | 50 | 16 | 727 701 411 | 165 | 121 | 78 | 19 | 24 | 4 | M16 |
| 1/2 | 65 | 16 | 727 701 412 | 185 | 140 | 92 | 19 | 26 | 4 | M16 |
| 3 | 80 | 16 | 727 701 413 | 200 | 152 | 110 | 19 | 27 | 4 | M16 |
| 4 | 100 | 16 | 727 701 414 | 229 | 190 | 133 | 19 | 28 | 8 | M16 |
| 6 | 150 | 16 | 727 700 417 | 285 | 241 | 190 | 22 | 32 | 8 | M20 |
| 8 | 200 | 16 | 727 700 420 | 340 | 295 | 250 | 22 | 34 | 8 | M20 |
| 10 | 250 | 16 | 727 701 422 | 406 | 362 | 310 | 26 | 38 | 12 | M20 |
| 12 | 300 | 16 | 727 701 423 | 483 | 432 | 348 | 26 | 42 | 12 | M20 |

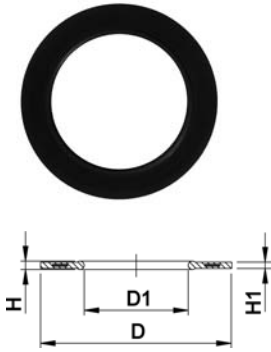


Seals

Profile Flange Gaskets, metric

Model:

- G-ST-P/K Profile
- Hardness: 70° Shore **EPDM**, 75° Shore **FPM**
- For Flange Adaptors
- For flange adaptors only in combination with butterfly valves



| d [mm] | EPDM Code | FPM Code | D [mm] | D1 [mm] | H [mm] | H1 [mm] |
|-----------|--------------|-------------|-----------|------------|-----------|------------|
| 50 | 748 440 105 | 749 440 105 | 92 | 50 | 4 | 3 |
| 63 | 748 440 106 | 749 440 106 | 107 | 63 | 5 | 4 |
| 75 | 748 440 107 | 749 440 107 | 127 | 75 | 5 | 4 |
| 90 | 748 440 108 | 749 440 108 | 142 | 90 | 5 | 4 |
| 110 | 748 440 109 | 749 440 109 | 162 | 110 | 6 | 5 |
| 140 | 748 440 111 | 749 440 111 | 192 | 140 | 6 | 5 |
| 160 | 748 440 112 | 749 440 112 | 218 | 160 | 8 | 6 |
| 225 | 748 440 115 | 749 440 115 | 273 | 225 | 8 | 6 |
| 280 | 748 440 117 | 749 440 117 | 328 | 280 | 8 | 6 |
| 315 | 748 440 118 | 749 440 118 | 378 | 315 | 8 | 6 |

Integrated Position Indicator

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



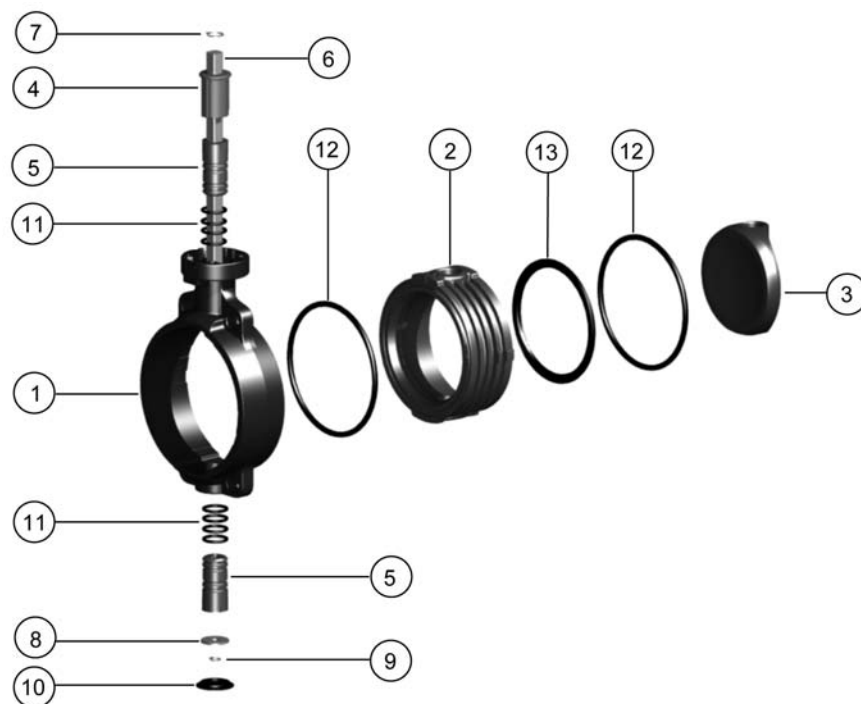
| Size | DN-DN [mm] | Code | |
|------|---------------|--------------------|--|
| 1 | 50 - 80 | 161 486 856 | |
| 2 | 100 - 125 | 161 486 302 | |
| 3 | 150 - 200 | 161 486 007 | |

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 | |

Spare parts for butterfly valve type 567 PVC-U Hand lever with index plate



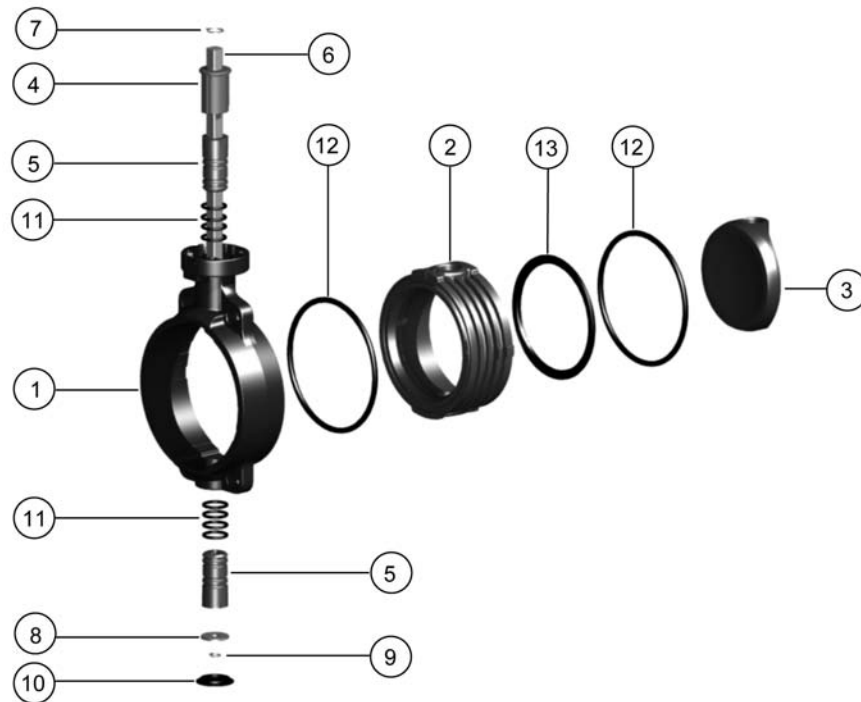
| No. | Article / Material | Pieces | d63 DN50 | d75 DN65 | d90 DN80 | d110 DN100 | d140 DN125 | d160 DN150 | d225 DN200 |
|-----|--|--------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| 3 | Disc PVC-U | 1 | 161 490 889 | 161 490 890 | 161 490 891 | 161 490 892 | 161 490 893 | 161 490 894 | 161 490 895 |
| 5 | Bearing bush Bush PVC-U | 2 | 161 486 886 | 161 486 886 | 161 486 886 | 161 486 887 | 161 486 887 | 161 486 888 | 161 486 888 |
| 11 | O-ring EPDM | | | | | | | | |
| 5 | Bearing bush Bush PVC-U | 2 | 161 486 892 | 161 486 892 | 161 486 892 | 161 486 893 | 161 486 893 | 161 486 894 | 161 486 894 |
| 11 | O-ring FPM | | | | | | | | |
| 2 | Inner body Body PVC-U | 1 | 161 486 861 | 161 486 862 | 161 486 863 | 161 486 864 | 161 486 865 | 161 486 866 | 161 486 867 |
| 13 | Profile seal EPDM | 1 | | | | | | | |
| 2 | Inner body Body PVC-U | 1 | 161 486 873 | 161 486 874 | 161 486 875 | 161 486 876 | 161 486 877 | 161 486 878 | 161 486 879 |
| 13 | Profile seal FPM | 1 | | | | | | | |
| 12 | Flange gasket EPDM | 2 | 161 486 959 | 161 486 960 | 161 486 961 | 161 486 962 | 161 486 963 | 161 486 964 | 161 486 965 |
| 12 | Flange gasket FPM | 2 | 161 486 979 | 161 486 980 | 161 486 981 | 161 486 982 | 161 486 983 | 161 486 984 | 161 486 985 |
| 4 | End stop PP Glasfiber Reinforced | 1 | 167 486 251 | 167 486 251 | 167 486 251 | 167 483 252 | 167 483 252 | 167 483 253 | 167 483 253 |
| 6 | Shaft set Shaft Chrom Steel 1.4301 AISI 304 | 1 | 161 486 899 | 161 486 900 | 161 486 901 | 161 486 902 | 161 486 903 | 161 486 904 | 161 486 905 |
| 7+9 | Retention ring | 2 | | | | | | | |
| 8 | Washer | 1 | | | | | | | |
| | Lever with index plate | 1 | 161 486 690 | 161 486 690 | 161 486 690 | 161 486 691 | 161 486 691 | 161 486 694 | 161 486 695 |

| No. | Article / Material | Pieces |
|-----|--------------------|--------|
|-----|--------------------|--------|

| d280 DN250 | d315 DN300 |
|------------|------------|
|------------|------------|

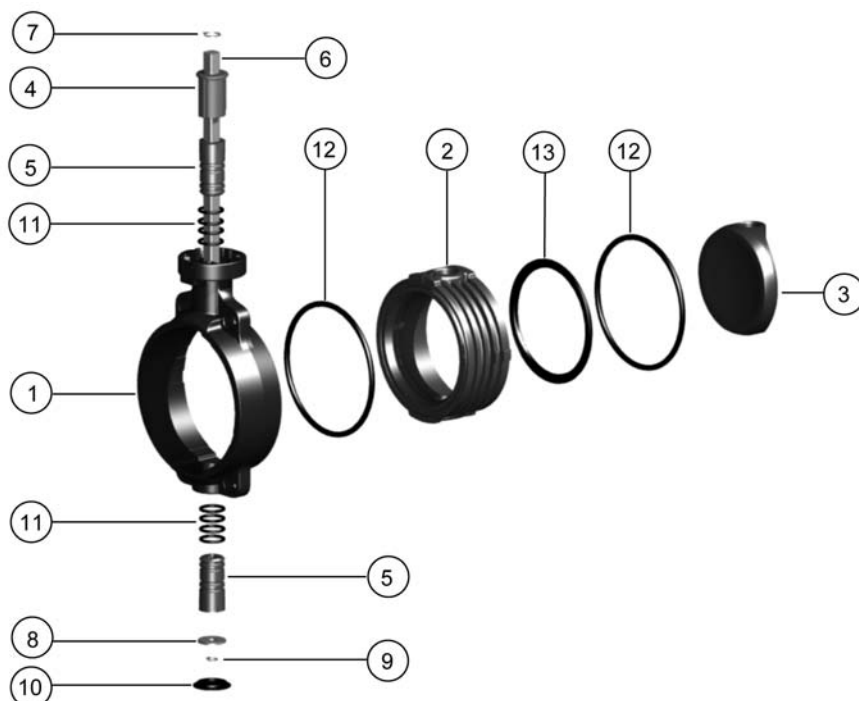
| No. | Article / Material | Pieces | d280 DN250 | d315 DN300 |
|---------------|--|-------------|-------------|-------------|
| 3 | Disc PVC-U | 1 | 161 490 896 | 161 490 897 |
| 5 11 | Bearing bush Bush PVC-U O-ring EPDM | 2 | 161 486 889 | 161 486 889 |
| 5 11 | Bearing bush Bush PVC-U O-ring FPM | 2 | 161 486 895 | 161 486 895 |
| 2 13 | Inner body Body PVC-U Profile seal EPDM | 1 1 | 161 486 868 | 161 486 869 |
| 2 13 | Inner body Body PVC-U Profile seal FPM | 1 1 | 161 486 880 | 161 486 881 |
| 12 | Flange gasket EPDM | 2 | 161 486 966 | 161 486 967 |
| 12 | Flange gasket FPM | 2 | 161 486 986 | 161 486 987 |
| 4 | End stop PP Glasfiber Reinforced | 1 | 167 483 254 | 167 483 254 |
| 6 7+9 8 | Shaft set Shaft Chrom Steel 1.4301 AISI 304 Retention ring Washer | 1 2 1 | 161 486 906 | 161 486 907 |
| | Lever with index plate | 1 | 161 486 696 | 161 486 696 |

Spare parts for butterfly valve type 567 PVC-C Hand lever with index plate



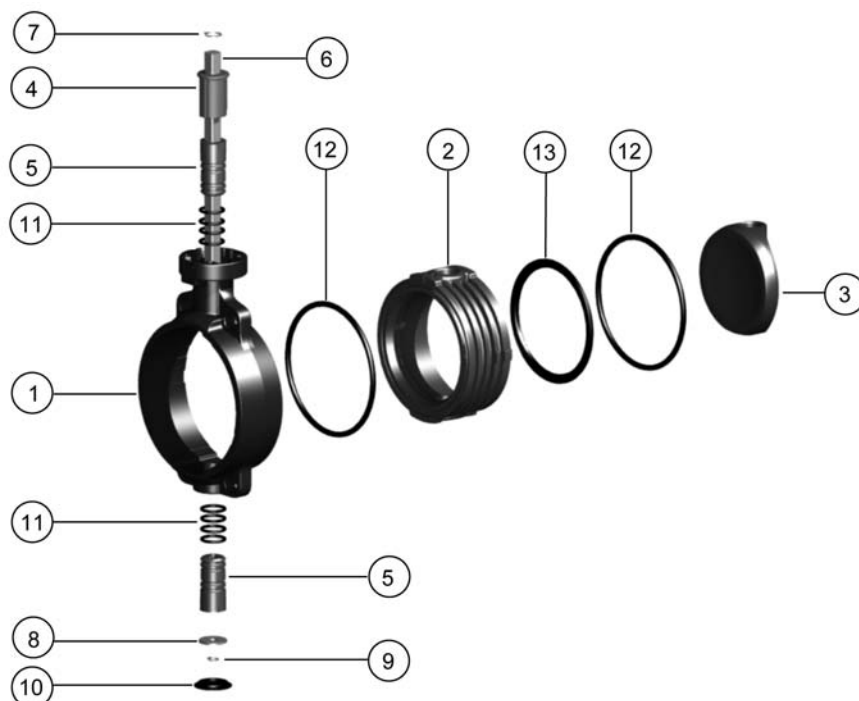
| No. | Article / Material | Pieces | d63 DN50 | d75 DN65 | d90 DN80 | d110 DN100 | d140 DN125 | d160 DN150 | d225 DN200 |
|-----|---|--------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| 3 | Disc PVC-C | 1 | 163 481 451 | 163 481 452 | 163 481 453 | 163 481 454 | 163 481 455 | 163 481 456 | 163 481 457 |
| 5 | Bearing bush | 2 | 163 481 576 | 163 481 576 | 163 481 576 | 163 481 577 | 163 481 577 | 163 481 578 | 163 481 578 |
| 11 | Bush PVC-C O-ring EPDM | | | | | | | | |
| 5 | Bearing bush | 2 | 163 481 582 | 163 481 582 | 163 481 582 | 163 481 583 | 163 481 583 | 163 481 584 | 163 481 584 |
| 11 | Bush PVC-C O-ring FPM | | | | | | | | |
| 2 | Inner body | 1 | 163 481 591 | 163 481 592 | 163 481 593 | 163 481 594 | 163 481 595 | 163 481 596 | 163 481 597 |
| 13 | Body PVC-C Profile seal EPDM | | | | | | | | |
| 2 | Inner body | 1 | 163 481 603 | 163 481 604 | 163 481 605 | 163 481 606 | 163 481 607 | 163 481 608 | 163 481 609 |
| 13 | Body PVC-C Profile seal FPM | | | | | | | | |
| 12 | Flange gasket EPDM | 2 | 161 486 959 | 161 486 960 | 161 486 961 | 161 486 962 | 161 486 963 | 161 486 964 | 161 486 965 |
| 12 | Flange gasket FPM | 2 | 161 486 979 | 161 486 980 | 161 486 981 | 161 486 982 | 161 486 983 | 161 486 984 | 161 486 985 |
| 4 | End stop PP Glasfiber Reinforced | 1 | 167 486 251 | 167 486 251 | 167 486 251 | 167 483 252 | 167 483 252 | 167 483 253 | 167 483 253 |
| 6 | Shaft set | 1 | 161 486 899 | 161 486 900 | 161 486 901 | 161 486 902 | 161 486 903 | 161 486 904 | 161 486 905 |
| 7+9 | Shaft Chrom Steel 1.4301 AISI 304 Retention ring | | 2 | | | | | | |
| 8 | Washer | 1 | | | | | | | |
| | Lever with index plate | 1 | 161 486 690 | 161 486 690 | 161 486 690 | 161 486 691 | 161 486 691 | 161 486 694 | 161 486 695 |

Spare parts for butterfly valve type 567 ABS Hand lever with index plate



| No. | Article / Material | Pieces | d63 DN50 | d75 DN65 | d90 DN80 | d110 DN100 | d140 DN125 | d160 DN150 | d225 DN200 |
|-----|---|--------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| 3 | Disc ABS | 1 | 169 480 951 | 169 480 952 | 169 480 953 | 169 480 954 | 169 480 955 | 169 480 956 | 169 480 957 |
| 5 | Bearing bush | 2 | 167 484 259 | 167 484 259 | 167 484 259 | 167 484 260 | 167 484 260 | 167 484 261 | 167 484 261 |
| 11 | Bush PP-H | | | | | | | | |
| 11 | O-ring EPDM | | | | | | | | |
| 5 | Bearing bush | 2 | 167 484 265 | 167 484 265 | 167 484 265 | 167 484 266 | 167 484 266 | 167 484 267 | 167 484 267 |
| 11 | Bush PP-H | | | | | | | | |
| 11 | O-ring FPM | | | | | | | | |
| 2 | Inner body | 1 | 169 481 067 | 169 481 068 | 169 481 069 | 169 481 070 | 169 481 071 | 169 481 072 | 169 481 073 |
| 13 | Body ABS | 1 | | | | | | | |
| 12 | Profile seal EPDM | 1 | | | | | | | |
| 12 | Flange gasket EPDM | 2 | 161 486 959 | 161 486 960 | 161 486 961 | 161 486 962 | 161 486 963 | 161 486 964 | 161 486 965 |
| 12 | Flange gasket FPM | 2 | 161 486 979 | 161 486 980 | 161 486 981 | 161 486 982 | 161 486 983 | 161 486 984 | 161 486 985 |
| 4 | End stop PP Glasfiber Reinforced | 1 | 167 486 251 | 167 486 251 | 167 486 251 | 167 483 252 | 167 483 252 | 167 483 253 | 167 483 253 |
| 6 | Shaft set | 1 | 161 486 899 | 161 486 900 | 161 486 901 | 161 486 902 | 161 486 903 | 161 486 904 | 161 486 905 |
| 7+9 | Shaft Chrom Steel 1.4301 AISI 304 | 2 | | | | | | | |
| 8 | Retention ring | 2 | | | | | | | |
| 8 | Washer | 1 | | | | | | | |
| | Lever with index plate | 1 | 161 486 690 | 161 486 690 | 161 486 690 | 161 486 691 | 161 486 691 | 161 486 694 | 161 486 695 |

Spare parts for butterfly valve type 567 PP-H Hand lever with index plate



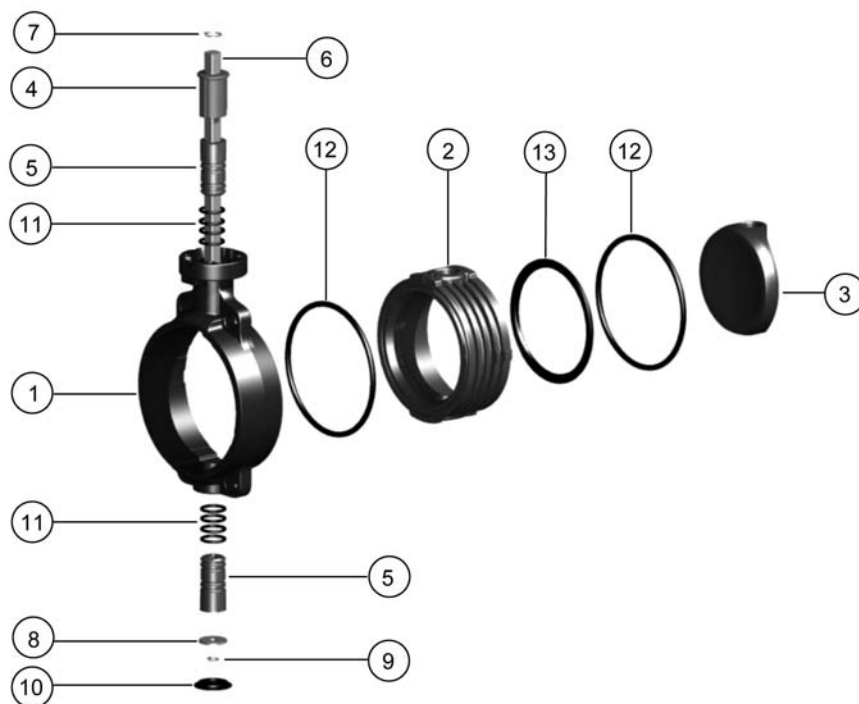
| No. | Article / Material | Pieces | d63 DN50 | d75 DN65 | d90 DN80 | d110 DN100 | d140 DN125 | d160 DN150 | d225 DN200 |
|-----|---|--------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| 3 | Disc PP-H | 1 | 167 483 226 | 167 483 227 | 167 483 228 | 167 483 229 | 167 483 230 | 167 483 231 | 167 483 232 |
| 5 | Bearing bush | 2 | 167 484 259 | 167 484 259 | 167 484 259 | 167 484 260 | 167 484 260 | 167 484 261 | 167 484 261 |
| 11 | Bush PP-H | | | | | | | | |
| | O-ring EPDM | | | | | | | | |
| 5 | Bearing bush | 2 | 167 484 265 | 167 484 265 | 167 484 265 | 167 484 266 | 167 484 266 | 167 484 267 | 167 484 267 |
| 11 | Bush PP-H | | | | | | | | |
| | O-ring FPM | | | | | | | | |
| 2 | Inner body | 1 | 167 484 271 | 167 484 272 | 167 484 273 | 167 484 274 | 167 484 275 | 167 484 276 | 167 484 277 |
| 13 | Body PP-H | | | | | | | | |
| | Profile seal EPDM | 1 | | | | | | | |
| 2 | Inner body | 1 | 167 484 286 | 167 484 287 | 167 484 288 | 167 484 289 | 167 484 290 | 167 484 291 | 167 484 292 |
| 13 | Body PP-H | | | | | | | | |
| | Profile seal FPM | 1 | | | | | | | |
| 12 | Flange gasket EPDM | 2 | 161 486 959 | 161 486 960 | 161 486 961 | 161 486 962 | 161 486 963 | 161 486 964 | 161 486 965 |
| 12 | Flange gasket FPM | 2 | 161 486 979 | 161 486 980 | 161 486 981 | 161 486 982 | 161 486 983 | 161 486 984 | 161 486 985 |
| 4 | End stop PP Glasfiber Reinforced | 1 | 167 486 251 | 167 486 251 | 167 486 251 | 167 483 252 | 167 483 252 | 167 483 253 | 167 483 253 |
| 6 | Shaft set | 1 | 161 486 899 | 161 486 900 | 161 486 901 | 161 486 902 | 161 486 903 | 161 486 904 | 161 486 905 |
| 7+9 | Shaft Chrom Steel 1.4301 AISI 304 | | | | | | | | |
| | Retention ring | 2 | | | | | | | |
| 8 | Washer | 1 | | | | | | | |
| | Lever with index plate | 1 | 161 486 690 | 161 486 690 | 161 486 690 | 161 486 691 | 161 486 691 | 161 486 694 | 161 486 695 |

| No. | Article / Material | Pieces |
|-----|--------------------|--------|
|-----|--------------------|--------|

| d280 DN250 | d315 DN300 |
|------------|------------|
|------------|------------|

| No. | Article / Material | Pieces | d280 DN250 | d315 DN300 |
|-----|-----------------------------------|--------|-------------|-------------|
| 3 | Disc PP-H | 1 | 167 483 233 | 167 483 234 |
| 5 | Bearing bush | 2 | 167 484 262 | 167 484 262 |
| 11 | Bush PP-H | | | |
| | O-ring EPDM | | | |
| 5 | Bearing bush | 2 | 167 484 268 | 167 484 268 |
| 11 | Bush PP-H | | | |
| | O-ring FPM | | | |
| 2 | Inner body | 1 | 167 484 278 | 167 484 279 |
| 13 | Body PP-H | | | |
| | Profile seal EPDM | 1 | | |
| 2 | Inner body | 1 | 167 484 293 | 167 484 294 |
| 13 | Body PP-H | | | |
| | Profile seal FPM | 1 | | |
| 12 | Flange gasket EPDM | 2 | 161 486 966 | 161 486 967 |
| 12 | Flange gasket FPM | 2 | 161 486 986 | 161 486 987 |
| 4 | End stop PP Glasfiber Reinforced | 1 | 167 483 254 | 167 483 254 |
| 6 | Shaft set | 1 | 161 486 906 | 161 486 907 |
| 7+9 | Shaft Chrom Steel 1.4301 AISI 304 | | | |
| | Retention ring | 2 | | |
| 8 | Washer | 1 | | |
| | Lever with index plate | 1 | 161 486 696 | 161 486 696 |

Spare parts for butterfly valve type 567 PVDF Hand lever with index plate



| No. | Article / Material | Pieces | d63 DN50 | d75 DN65 | d90 DN80 | d110 DN100 | d140 DN125 | d160 DN150 | d225 DN200 |
|-----|----------------------------------|--------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| 3 | Disc PVDF | 1 | 175 483 251 | 175 483 252 | 175 483 253 | 175 483 254 | 175 483 255 | 175 483 256 | 175 483 257 |
| 5 | Bearing bush | 2 | 175 483 426 | 175 483 426 | 175 483 426 | 175 483 427 | 175 483 427 | 175 483 428 | 175 483 428 |
| 11 | Bush PVDF | | | | | | | | |
| | O-ring FPM | | | | | | | | |
| 2 | Inner body | 1 | 175 483 413 | 175 483 414 | 175 483 415 | 175 483 416 | 175 483 417 | 175 483 418 | 175 483 419 |
| 13 | Body PVDF | | | | | | | | |
| | Profile seal FPM | 1 | | | | | | | |
| 12 | Flange gasket FPM | 2 | 161 486 979 | 161 486 980 | 161 486 981 | 161 486 982 | 161 486 983 | 161 486 984 | 161 486 985 |
| 4 | End stop PP Glasfiber Reinforced | 1 | 167 486 251 | 167 486 251 | 167 486 251 | 167 483 252 | 167 483 252 | 167 483 253 | 167 483 253 |
| 6 | Shaft set | 1 | 161 486 899 | 161 486 900 | 161 486 901 | 161 486 902 | 161 486 903 | 161 486 904 | 161 486 905 |
| 7+9 | Shaft Chrom Steel 1.4301 | | | | | | | | |
| | Retention ring | 2 | | | | | | | |
| 8 | Washer | 1 | | | | | | | |
| | Hand lever with index plate | 1 | 161 486 690 | 161 486 690 | 161 486 690 | 161 486 691 | 161 486 691 | 161 486 694 | 161 486 695 |
| | Lever | | | | | | | | |

| No. | Article / Material | Pieces | d280 DN250 | d315 DN300 |
|-----|--------------------|--------|-------------|-------------|
| 3 | Disc PVDF | 1 | 175 483 258 | 175 483 259 |
| 5 | Bearing bush | 2 | 175 483 429 | 175 483 429 |
| 11 | Bush PVDF | | | |
| | O-ring FPM | | | |
| 2 | Inner body | 1 | 175 483 420 | 175 483 421 |
| 13 | Body PVDF | | | |
| | Profile seal FPM | 1 | | |

| No. | Article / Material | Pieces | d280 DN250 | d315 DN300 |
|-----|--|--------|-------------|-------------|
| 12 | Flange gasket FPM | 2 | 161 486 986 | 161 486 987 |
| 4 | End stop PP Glasfiber Reinforced | 1 | 167 483 254 | 167 483 254 |
| 6 | Shaft set Shaft Chrom Steel 1.4301 AISI 304 | 1 | 161 486 906 | 161 486 907 |
| 7+9 | Retention ring | 2 | | |
| 8 | Washer | 1 | | |
| | Hand lever with index plate Lever | 1 | 161 486 696 | 161 486 696 |

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

1 General

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

2 Tenders

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

3 Scope of Delivery

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

4 Data and Documents

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

5 Confidentiality, Protection of Personal Data

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

6 Local Laws and Regulations, Export Controls

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

7 Price

- 7.1 Unless agreed otherwise, the prices shall be deemed quoted net ex works (according to Incoterms of the ICC, latest version) including standard packing. All supplementary costs such as the cost of carriage, insurance, export-, transit- and importlicences etc. shall be borne by the Purchaser. The Purchaser shall also bear the costs of all taxes, fees, duties etc. connected with the contract.
- 7.2 If the costs of packing, carriage, insurance, fees and other supplementary costs are included in the tender price or contract price or are referred to specifically in the tender or confirmation of order, Georg Fischer reserve the right to revise their prices accordingly should any change occur in the relevant tariffs.

8 Terms of Payment

- 8.1 The Purchaser shall make payment in the manner agreed by the parties without any deductions such as discounts, costs, taxes or dues.
- 8.2 The Purchaser may only withhold or off-set payments due against counter claims which are either expressly acknowledged by Georg Fischer or finally awarded to the Purchaser. In particular, payment shall still be made when unessential items are still out-standing provided that the Products already delivered are not rendered unusable as a result.

9 Retention of Title

- 9.1 The Products shall remain the property of Georg Fischer until the Purchaser shall have settled all claims, present and future, which Georg Fischer may have against him.
- 9.2 Should the Purchaser resell Products to which title is reserved, in the ordinary course of business, he shall hereby be deemed to have tacitly assigned to Georg Fischer the proceeds deriving from their sale together with all collateral rights, securities and reservations of title until all claims held by Georg Fischer shall have been settled. Until revoked by Georg Fischer, this assignment shall not preclude Purchaser's right to collect the assigned receivables.
- 9.3 To the extent the value of the Products to which title is reserved together with collateral securities exceeds Georg Fischer's claims against the Purchaser by more than 20%, Georg Fischer shall re-assign the above proceeds to Purchaser at his request.

10 Delivery

- 10.1 The term of delivery shall commence as soon as the contract has been entered into, all official formalities such as import and payment permits have been obtained and all essential technical issues have been settled. The term of delivery shall be deemed duly observed when, upon its expiry, the Products are ready for despatch.
- 10.2 Delivery is subject to the following conditions, i.e. the term of delivery shall be reasonably extended:
 - a) if Georg Fischer are not supplied in time with the information necessary for the execution of the contract or if subsequent changes causing delays are made by the Purchaser.
 - b) if Georg Fischer are prevented from performing the contract by force majeure. Force majeure shall equally be deemed to be any unforeseeable event beyond Georg Fischer's control which renders Georg Fischer's performance commercially unpractical or impossible, such as delayed or defective supplies from sub contractors labour disputes, governmental orders or regulations, shortages in materials or energy, serious disturbances in Georg Fischer's works, such as the total or partial destruction of plant and equipment or the breakdown of essential facilities, serious disruptions in transport facilities, e.g. impassable roads.
Should the effect of force majeure exceed a period of six months, either party may cancel the contract forthwith.
Georg Fischer shall not be liable for any damage or loss of any kind whatsoever resulting therefrom, any suspension or cancellation being without prejudice to Georg Fischer's right to recover all sums due in respect of consignments delivered and costs incurred to date.
 - c) if the Purchaser is in delay with the fulfilment of his obligations under the contract, in particular, if he does not adhere to the agreed conditions of payment or if he has failed to timely provide the agreed securities.
- 10.3 If for reasons attributable to Georg Fischer the agreed term of delivery or a reasonable extension thereof is exceeded, Georg Fischer shall not be deemed in default until the Purchaser has granted to Georg Fischer in writing a reasonable extension thereof of not less than one month which equally is not met.
The Purchaser shall then be entitled to the remedies provided at law, it being however understood that, subject to limitations of Art. 16, damage claims shall be limited to max. 10% of the price of the delayed delivery.
- 10.4 Part shipments shall be allowed and Georg Fischer shall be entitled to invoice for such partial deliveries.
- 10.5 If the Purchaser fails to take delivery within a reasonable time of Products notified as ready for despatch, Georg Fischer shall be entitled to store the Products at the Purchaser's expense and risk and to invoice them as delivered. If Purchaser fails to effect payment, Georg Fischer shall be entitled to dispose of the Products.
- 10.6 Should Purchaser cancel an order without justification and should Georg Fischer not insist on the performance of the contract, Georg Fischer shall be entitled to liquidated damages in the amount of 10% of the contract price, Georg Fischer's right to prove and claim higher damages remaining reserved. Purchaser shall be entitled to prove, that Georg Fischer has suffered no or a considerably lower damage.

11 Packing

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

12 Passing of Risk

- 12.1 The risk in the Products shall pass to the Purchaser as soon as they have left Georg Fischer's works (EX WORKS, Incoterms ICC, latest version), even if delivery is made carriage-paid, under similar clauses or including installation or when carriage is organized and managed by Georg Fischer.
- 12.2 If delivery is delayed for reasons beyond Georg Fischer's control, the risk shall pass to the Purchaser when he is notified that the Products are ready for despatch.

13 Carriage and Insurance

- 13.1 Unless agreed otherwise, the Purchaser shall bear the cost of carriage.
- 13.2 The Purchaser shall be responsible for transport insurance against damage of whatever kind. Even when such insurance is arranged by Georg Fischer it shall be deemed taken out by the order of and for the account of the Purchaser and at his risk.
- 13.3 Special requests regarding carriage and insurance shall be communicated to Georg Fischer in due time. Otherwise carriage shall be arranged by Georg Fischer at their discretion, but without responsibility, by the quickest and cheapest method possible.
In case of carriage-paid delivery transport arrangements shall be made by Georg Fischer. If the Purchaser specifies particular requirements, any extra costs involved shall be borne by him.
- 13.4 In the event of damage or loss of the Products during carriage the Purchaser shall mark the delivery documents accordingly and immediately have the damage ascertained by the carrier. Not readily ascertainable damages sustained during carriage shall be notified to the carrier within six days after receipt of the Products.

14 Inspection, Notification of Defects and Damages

- 14.1 The Products will be subject to normal inspection by Georg Fischer during manufacture. Additional tests required by the Purchaser shall be agreed upon in writing and shall be charged to the Purchaser.
- 14.2 It shall be a condition of Georg Fischer's obligation under the warranties stated hereinafter that Georg Fischer be notified in writing by the Purchaser of any purported defect immediately upon discovery. Notice concerning weight, numbers or apparent defects is to be given latest within 30 days from receipt of the Products, notice of other defects immediately latest within 7 working days after discovery, in any event within the agreed warranty period.
- 14.3 Purchaser shall not dispose of allegedly defective Products until all warranty and/or damage claims are finally settled. At its request, defective Products are to be placed at Georg Fischer's disposal.
- 14.4 At its request, Georg Fischer shall be given the opportunity to inspect the defect and/or damage, prior to commencement of remedial work, either itself or by third party experts.

15 Warranty

- 15.1 At the written request of the Purchaser, Georg Fischer undertake to repair or replace at their discretion, as quickly as possible and free of charge all Products supplied which demonstrably suffer from faulty design, materials or workman-ship or from faulty operating or installation instructions.
In order to protect employees from toxic or radioactive substances which may have been transported through defective parts returned to Georg Fischer's sales organisation, said parts must be accompanied by a Material Safety Disclosure Form. The form may be obtained from Georg Fischer's local sales company or via www.piping.georgfischer.com.
Replaced parts shall become property of Georg Fischer.
- 15.2 For Products which are manufactured to specifications, drawings or patterns supplied by the Purchaser, Georg Fischer's warranty shall be restricted to proper materials and workmanship.
- 15.3 The Purchaser shall be entitled to cancel the contract or to demand a reduction in the contract price if also a second attempt to repair or replace the Products has failed.
- 15.4 For Products or essential components manufactured by a third party and supplied by Georg Fischer under this contract, Georg Fischer's warranty is limited to the warranty provided by said third party.
- 15.5 This warranty shall not apply to damage resulting from normal wear and tear, improper storage and maintenance, failure to observe the operating instructions, overstressing or overloading, unsuitable operating media, unsuitable construction work or unsuitable building ground, improper repairs or alterations by the Purchaser or third parties, the use of other than original spare parts and other reasons beyond Georg Fischer's control.
- 15.6 No action or claim may be brought by the Purchaser on account of any alleged breach of warranty or any other obligation of Georg Fischer after the expiration of twelve (12) months from receipt of the Products by the end user or at the latest within eighteen (18) months of the Products being despatched by Georg Fischer.
- 15.7 In case of Products for use in domestic installations or in utilities
 - Georg Fischer will assume the costs of dismantling the defective Product and restoring the damaged object as well as, in case of negligence, all other direct damages caused by the defective Product (damage to property and injury to or death of persons) up to CHF 1 000 000 per occurrence.
 - the statute of limitations for warranty or damage claims - contrary to Section 15.6 - will be 5 years from the date of installation.

16 Limitation of Liability

- 16.1 All cases of breach of contract and the relevant consequences as well as all rights and claims on the part of the customer, irrespective of what ground they are based, are exhaustively covered by these general conditions of supply. In particular, any claims not expressly mentioned for damages, reduction of price, termination of or withdrawal from the contract are excluded. In no case whatsoever shall the customer be entitled to claim damages other than compensation for costs of remedying defects in the supplies. This in particular refers, but shall not be limited, to loss of production, loss of use, loss of orders, loss of profit and other direct or indirect or consequential damage. This exclusion of liability, however, does not apply to unlawful intent or gross negligence on the part of Georg Fischer and in case of strict liability under applicable product liability statutes, but does apply to unlawful intent or gross negligence of persons employed or appointed by Georg Fischer to perform any of its obligations.

17 Severability

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

18 Place of Performance and Jurisdiction

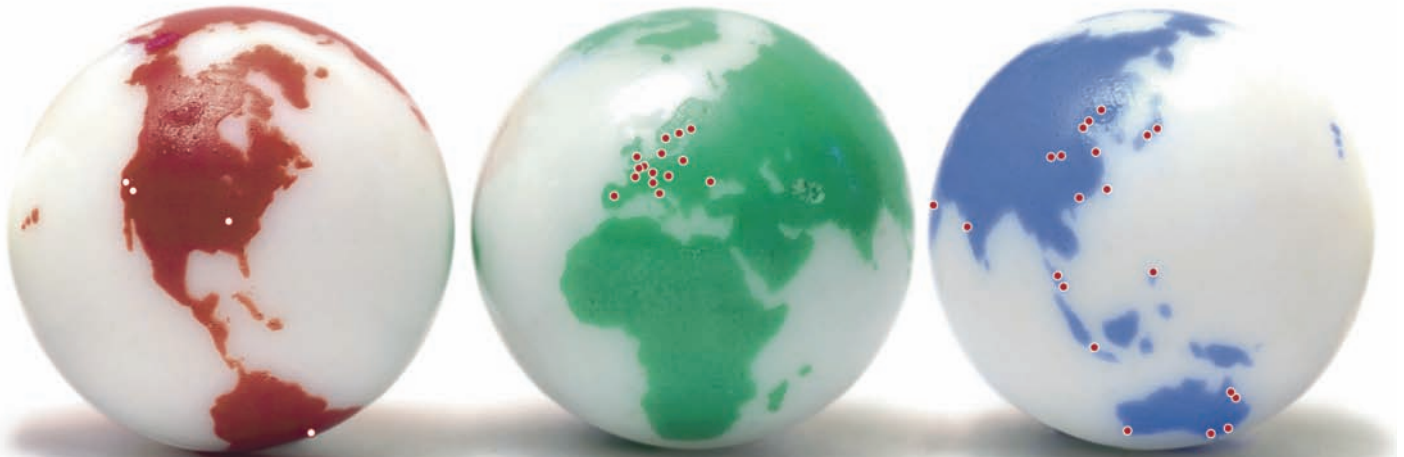
- 18.1 Place of performance for the Products shall be the Georg Fischer works from which the Products are despatched.
- 18.2 Any civil action based upon any alleged breach of this contract shall be filed and prosecuted exclusively in the courts of Schaffhausen, Switzerland.
Georg Fischer however reserves the right to file actions in any court having jurisdiction over controversies arising out of or in connection with the present contract.
- 18.3 The contract shall be governed by Swiss law without regard to conflict of law provisions that would require the application of another law.

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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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