

Globe Valves

Type 03351 - Globe Valve, DIN EN Flanges

Cryogenic-Globe and Globe/Check Valves, PN40

Stainless steel body and topwork,
"live loaded" gland packing
"cleaned and degreased for oxygen service"

Part No. 03351.X.0002

Part No. 03351.X.5002 Globe/Check Valve

Flanged connection acc. to DIN EN 1092-1 PN40

Available options - on request only:

- Valve with control disc (tapered design)
- Nominal sizes DN15, DN20 and DN150 with welding-neck flange



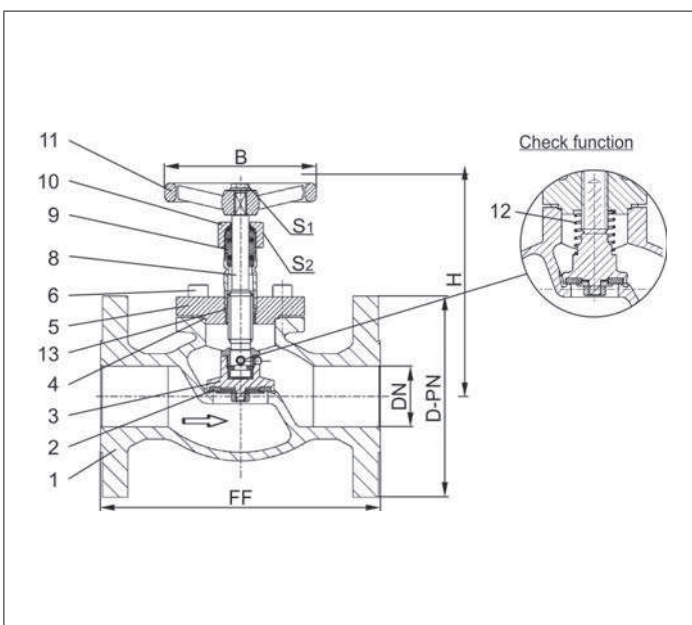
Applications:

Approved for air gases, vapours and cryogenic liquefied gases incl. LNG.

Working temperature: -196°C / -321°F (77K) up to +120°C / +248°F (393K)

Recommended working temperature: -60°C / -76°F (213K) up to +120°C / +248°F (393K)

| Materials | DIN EN | ASTM |
|-------------------------|----------------------------|------------------|
| 1 Body | 1.4308 | A 351 CF8 |
| 2 Valve seal up to DN50 | PTFE / Carbon filled (25%) | |
| 2a Valve seal from DN65 | PTFE | |
| 3 Disc | 1.4301 | A 276 Grade 304 |
| 4 Bonnet gasket | PTFE | |
| 5 Headpiece | 1.4301 | A 276 Grade 304 |
| 6 Bolts | 1.4301/A2 | A 194 B8 |
| 8 Stem | 1.4301 | A 276 Grade 304 |
| 9 Gland packing | Graphite / PTFE | |
| 10 Gland nut | 1.4305 | A 276 Grade 303 |
| 11 Handwheel | Aluminium alloy | |
| 12 Spring | 1.4310 | A 313 Grade 301 |
| 13 Bush | CW452K | B 159 UNS C51900 |



Standard marking acc. to Pressure Equipment Directive 97/23/EC (PED).



| Type 03351 - Standard design | | Technical data | | | | | |
|--|-------------------|----------------|------|------|------|-------|-------|
| Nominal size | DN | 25 | 40 | 50 | 65 | 80 | 100 |
| Dimension code - Flange EN 1092-1 PN40 | .X. | 0250 | 0400 | 0500 | 0650 | 0800 | 1000 |
| Flange-Ø | D-PN | 115 | 150 | 165 | 185 | 200 | 235 |
| Face-to-face dimension | FF | 160 | 200 | 230 | 290 | 310 | 350 |
| Height | H | 140 | 170 | 200 | 260 | 310 | 350 |
| Handwheel-Ø | B | 100 | 125 | 125 | 200 | 250 | 315 |
| Wrench size across flats | S ₁ | 10 | 13 | 13 | 13 | 13 | 13 |
| Wrench size across flats | S ₂ | 30 | 36 | 36 | 36 | 36 | 41 |
| Weight | ca. kg | 4.5 | 9.1 | 12.9 | 20.6 | 27.6 | 42.0 |
| Kvs-Value | m ³ /h | 11.5 | 22.6 | 37.1 | 71.1 | 104.0 | 170.0 |
| Cv-Value | gal/min | 13.4 | 26.3 | 43.2 | 82.7 | 120.9 | 195.2 |

Dimensions in mm.

Globe Valves

Type 03351 - Globe Valve, ANSI Flanges

Cryogenic-Globe and Globe/Check Valves, class 300

Stainless steel body and topwork,
"live loaded" gland packing
"cleaned and degreased for oxygen service"

Part No. 03351.X.0003

Part No. 03351.X.5003 Globe/Check Valve

Flanged connection acc. to ANSI B16.5 class 300

Available options - on request only:

- Valve with control disc (tapered design)
- Nominal sizes DN15, DN20 and DN150 with welding-neck flange



Applications:

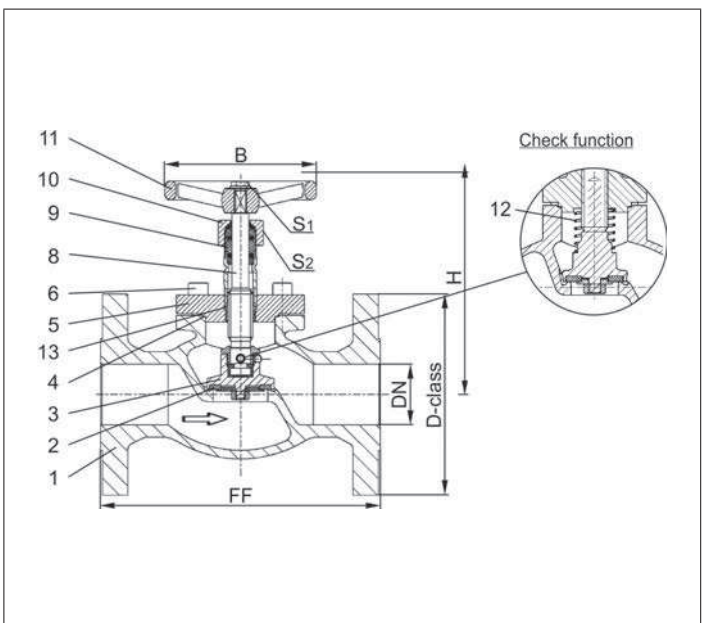
Approved for air gases, vapours and cryogenic liquefied gases incl. LNG.

Working temperature: -196°C / -321°F (77K) up to +120°C / +248°F (393K)

Recommended working temperature: -60°C / -76°F (213K) up to +120°C / +248°F (393K)

| Materials | DIN EN | ASTM |
|-------------------------|----------------------------|------------------|
| 1 Body | 1.4308 | A 351 CF8 |
| 2 Valve seal up to DN50 | PTFE / Carbon filled (25%) | |
| 2a Valve seal from DN65 | PTFE | |
| 3 Disc | 1.4301 | A 276 Grade 304 |
| 4 Bonnet gasket | PTFE | |
| 5 Headpiece | 1.4301 | A 276 Grade 304 |
| 6 Bolts | 1.4301/A2 | A 194 B8 |
| 8 Stem | 1.4301 | A 276 Grade 304 |
| 9 Gland packing | Graphite / PTFE | |
| 10 Gland nut | 1.4305 | A 276 Grade 303 |
| 11 Handwheel | Aluminium alloy | |
| 12 Spring | 1.4310 | A 313 Grade 301 |
| 13 Bush | CW452K | B 159 UNS C51900 |

Standard marking acc. to Pressure Equipment
Directive 97/23/EC (PED).



| Type 03351 - Standard design | Technical data | | | | | | |
|--|-------------------|-------|-------|------|-------|-------|-------|
| Nominal size | DN | 25 | 40 | 50 | 65 | 80 | 100 |
| Dimension code - Flange ANSI B16.5 class 300 | .X. | 1000 | 1400 | 2000 | 2400 | 3000 | 4000 |
| Flange-Ø | D-class | 123.9 | 155.4 | 165 | 190.5 | 209.5 | 254 |
| Face-to-face dimension | FF | 160 | 200 | 230 | 290 | 310 | 350 |
| Height | H | 140 | 170 | 200 | 260 | 310 | 350 |
| Handwheel-Ø | B | 100 | 125 | 125 | 200 | 250 | 315 |
| Wrench size across flats | S ₁ | 10 | 13 | 13 | 13 | 13 | 13 |
| Wrench size across flats | S ₂ | 30 | 36 | 36 | 36 | 36 | 41 |
| Weight | ca. kg | 4.5 | 9.1 | 12.9 | 20.6 | 27.6 | 42.0 |
| Kvs-Value | m ³ /h | 11.5 | 22.6 | 37.1 | 71.1 | 104.0 | 170.0 |
| Cv-Value | gal/min | 13.4 | 26.3 | 43.2 | 82.7 | 120.9 | 195.2 |

Dimensions in mm.

Globe Valves

Type 03341 - Globe Valve, DIN EN Flanges



Cryogenic-Globe and Globe/Check Valves, PN40

Stainless steel body and topwork,
"live loaded" gland packing
"cleaned and degreased for oxygen service"

Part No. 03341.X.0012 (H = 270mm)

Part No. 03341.X.0022 (H = 370mm)

Part No. 03341.X.5012 (H = 270mm) Globe/Check Valve

Part No. 03341.X.5022 (H = 370mm) Globe/Check Valve

Flanged connection acc. to DIN EN 1092-1 PN40

Available options - on request only:

- Extension H up to 900mm
- Valve with control disc (tapered design)
- Nominal sizes DN15, DN20 and DN150 with welding-neck flange



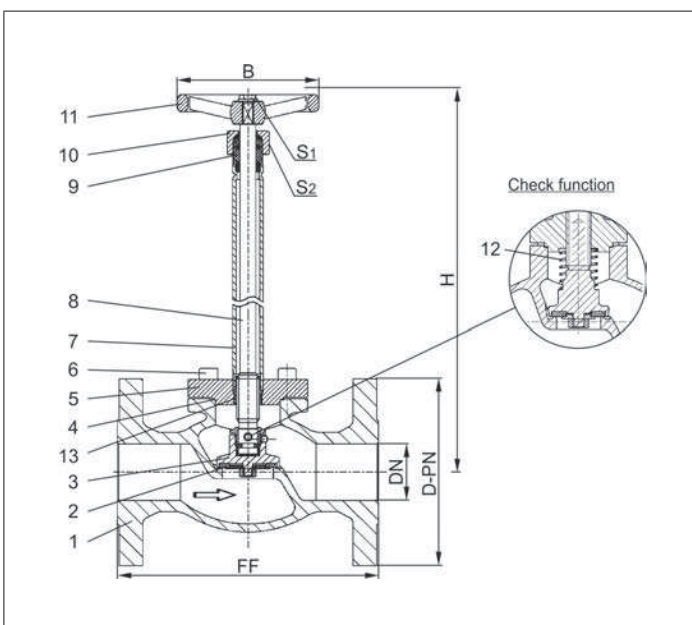
Applications:

Approved for air gases, vapours and cryogenic liquefied gases incl. LNG.

Working temperature: -196°C / -321°F (77K) up to +120°C / +248°F (393K)

| Materials | DIN EN | ASTM |
|-------------------------|----------------------------|------------------|
| 1 Body | 1.4308 | A 351 CF8 |
| 2 Valve seal up to DN50 | PTFE / Carbon filled (25%) | |
| 2a Valve seal from DN65 | PTFE | |
| 3 Disc | 1.4301 | A 276 Grade 304 |
| 4 Bonnet gasket | PTFE | |
| 5 Headpiece | 1.4301 | A 276 Grade 304 |
| 6 Bolts | 1.4301/A2 | A 194 B8 |
| 7 Elongation tube | 1.4541 | A 213 TP 321 |
| 8 Stem | 1.4301 | A 276 Grade 304 |
| 9 Gland packing | Graphite / PTFE | |
| 10 Gland nut | 1.4305 | A 276 Grade 303 |
| 11 Handwheel | Aluminium alloy | |
| 12 Spring | 1.4310 | A 313 Grade 301 |
| 13 Bush | CW452K | B 159 UNS C51900 |

Standard marking acc. to Pressure Equipment Directive 97/23/EC (PED).



| Type 03341 - Standard design | | Technical data | | | | | |
|--|-------------------|------------------|------|------|------|-------|-------|
| Nominal size | DN | 25 | 40 | 50 | 65 | 80 | 100 |
| Dimension code - Flange EN 1092-1 PN40 | .X. | 0250 | 0400 | 0500 | 0650 | 0800 | 1000 |
| Flange-Ø | D-PN | 115 | 150 | 165 | 185 | 200 | 235 |
| Face-to-face dimension | FF | 160 | 200 | 230 | 290 | 310 | 350 |
| Height | H | 270 mm or 370 mm | | | 400 | 400 | 400 |
| Handwheel-Ø | B | 100 | 125 | 125 | 200 | 250 | 315 |
| Wrench size across flats | S ₁ | 10 | 13 | 13 | 13 | 13 | 13 |
| Wrench size across flats | S ₂ | 30 | 36 | 36 | 36 | 36 | 41 |
| Weight | ca. kg | 4.9 | 9.7 | 13.3 | 21.1 | 28.0 | 43.2 |
| Kvs-Value | m ³ /h | 11.5 | 22.6 | 37.1 | 71.1 | 104.0 | 170.0 |
| Cv-Value | gal/min | 13.4 | 26.3 | 43.2 | 82.7 | 120.9 | 195.2 |

Dimensions in mm.

Globe Valves

Type 03341 - Globe Valve, ANSI Flanges



Cryogenic-Globe and Globe/Check Valves, class 300

Stainless steel body and topwork,
"live loaded" gland packing
"cleaned and degreased for oxygen service"

Part No. 03341.X.0013 (H = 270mm)

Part No. 03341.X.0023 (H = 370mm)

Part No. 03341.X.5013 (H = 270mm) Globe/Check Valve

Part No. 03341.X.5023 (H = 370mm) Globe/Check Valve

Flanged connection acc. to ANSI B16.5 class 300

Available options - on request only:

- Extension H up to 900mm
- Valve with control disc (tapered design)
- Nominal sizes DN15, DN20 and DN150 with welding-neck flange



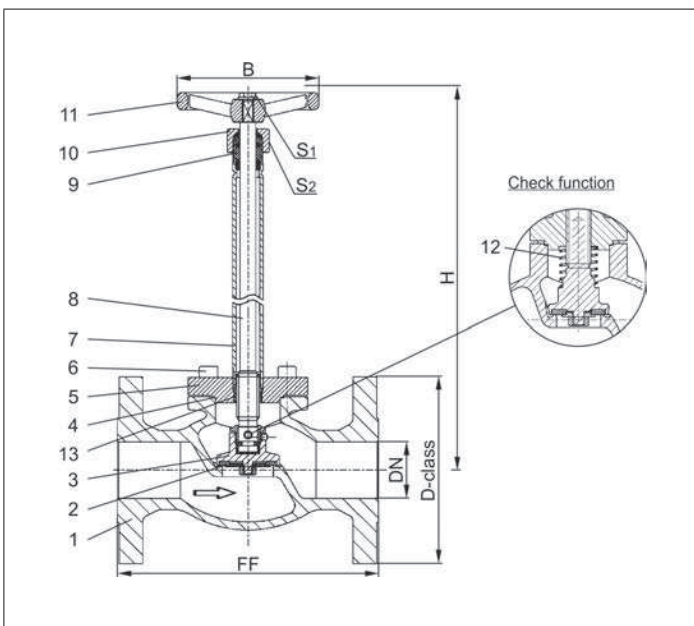
Applications:

Approved for air gases, vapours and cryogenic liquefied gases incl. LNG.

Working temperature: -196°C / -321°F (77K) up to +120°C / +248°F (393K)

| Materials | DIN EN | ASTM |
|-------------------------|----------------------------|------------------|
| 1 Body | 1.4308 | A 351 CF8 |
| 2 Valve seal up to DN50 | PTFE / Carbon filled (25%) | |
| 2a Valve seal from DN65 | PTFE | |
| 3 Disc | 1.4301 | A 276 Grade 304 |
| 4 Bonnet gasket | PTFE | |
| 5 Headpiece | 1.4301 | A 276 Grade 304 |
| 6 Bolts | 1.4301/A2 | A 194 B8 |
| 7 Elongation tube | 1.4541 | A 213 TP 321 |
| 8 Stem | 1.4301 | A 276 Grade 304 |
| 9 Gland packing | Graphite / PTFE | |
| 10 Gland nut | 1.4305 | A 276 Grade 303 |
| 11 Handwheel | Aluminium alloy | |
| 12 Spring | 1.4310 | A 313 Grade 301 |
| 13 Bush | CW452K | B 159 UNS C51900 |

Standard marking acc. to Pressure Equipment Directive 97/23/EC (PED).



| Type 03341 - Standard design | | Technical data | | | | | |
|--|-------------------|------------------|-------|------|-------|-------|-------|
| Nominal size | DN | 25 | 40 | 50 | 65 | 80 | 100 |
| Dimension code - Flange ANSI B16.5 class 300 | .X. | 1000 | 1400 | 2000 | 2400 | 3000 | 4000 |
| Flange-Ø | D-class | 123.9 | 155.4 | 165 | 190.5 | 209.5 | 254 |
| Face-to-face dimension | FF | 160 | 200 | 230 | 290 | 310 | 350 |
| Height | H | 270 mm or 370 mm | | | 400 | 400 | 400 |
| Handwheel-Ø | B | 100 | 125 | 125 | 200 | 250 | 315 |
| Wrench size across flats | S ₁ | 10 | 13 | 13 | 13 | 13 | 13 |
| Wrench size across flats | S ₂ | 30 | 36 | 36 | 36 | 36 | 41 |
| Weight | ca. kg | 4.9 | 9.7 | 13.3 | 21.1 | 28.0 | 43.2 |
| Kvs-Value | m ³ /h | 11.5 | 22.6 | 37.1 | 71.1 | 104.0 | 170.0 |
| Cv-Value | gal/min | 13.4 | 26.3 | 43.2 | 82.7 | 120.9 | 195.2 |

Dimensions in mm.

Globe Valves

Type 03252 - Bellow Sealed Globe Valve



Cryogenic-Bellow Sealed Globe Valve, PN40

Stainless steel body and topwork,
"live loaded" gland packing
"cleaned and degreased for oxygen service"

Part No. 03252.X.0022

Flanged connection acc. to DIN EN 1092-1 PN40

Available options - on request only:

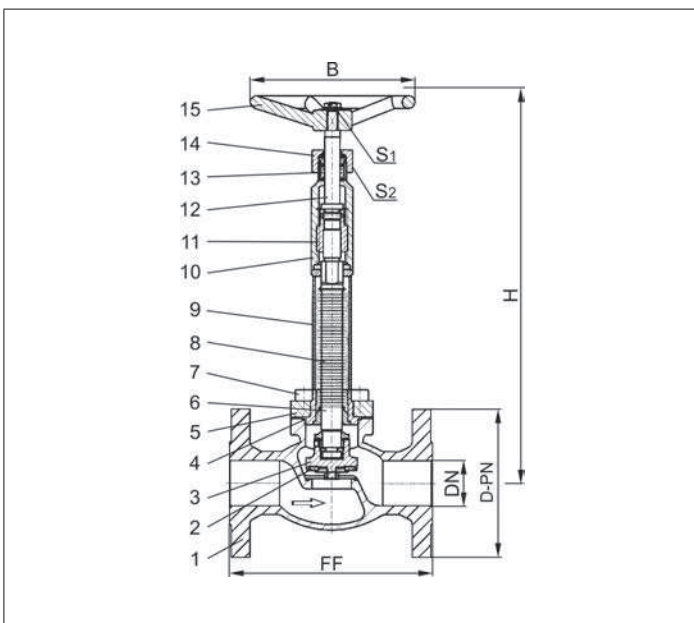
- Extension H up to 900mm
- Valve with control disc (tapered design)
- Nominal sizes DN15 and DN20 with welding-neck flange



Applications:

Approved for air gases, vapours and cryogenic liquefied gases incl. LNG.
Working temperature: -196°C / -321°F (77K) up to +120°C / +248°F (393K)
Leak rate: 10^{-6} mbar ltr / sec outside, 10^{-4} mbar ltr / sec seat

| Materials | DIN EN | ASTM |
|-------------------|----------------------------|-------------------|
| 1 Body | 1.4308 | A 351 CF8 |
| 2 Valve seal | PTFE / Carbon filled (25%) | |
| 3 Disc | 1.4301 | A 276 Grade 304 |
| 4 Bonnet gasket | PTFE | |
| 5 Headpiece | 1.4301 | A 276 Grade 304 |
| 6 Bellow stem | 1.4571 | A 276 Grade 316Ti |
| 7 Bolts | 1.4301/A2 | A 194 B8 |
| 8 Bellow | 1.4571 | A 276 Grade 316Ti |
| 9 Elongation tube | 1.4541 | A 213 TP 321 |
| 10 Upper part | 1.4301 | A 276 Grade 304 |
| 11 Bush | CW452K | B 159 UNS C51900 |
| 12 Stem | 1.4301 | A 276 Grade 304 |
| 13 Gland packing | Graphite / PTFE | |
| 14 Gland nut | 1.4305 | A 276 Grade 303 |
| 15 Handwheel | Aluminium alloy | |



Standard marking acc. to Pressure Equipment Directive 97/23/EC (PED).



| Type 03252 - Standard design | | Technical data | | |
|--|-------------------|----------------|------|------|
| Nominal size | DN | 25 | 40 | 50 |
| Dimension code - Flange EN 1092-1 PN40 | .X. | 0250 | 0400 | 0500 |
| Flange-Ø | D-PN | 115 | 150 | 165 |
| Face-to-face dimension | FF | 160 | 200 | 230 |
| Height | H | 380 | 380 | 380 |
| Handwheel-Ø | B | 150 | 150 | 150 |
| Wrench size across flats | S ₁ | 10 | 13 | 13 |
| Wrench size across flats | S ₂ | 30 | 36 | 36 |
| Weight | ca. kg | 5.2 | 10.1 | 13.8 |
| Kvs-Value | m ³ /h | 11.5 | 22.6 | 37.1 |
| Cv-Value | gal/min | 13.4 | 26.3 | 43.2 |

Dimensions in mm.

Globe Valves

Type 03252 - Bellow Sealed Globe Valve

Cryogenic-Bellow Sealed Globe Valve, class 300

Stainless steel body and topwork,
"live loaded" gland packing
"cleaned and degreased for oxygen service"

Part No. 03252.X.0023

Flanged connection acc. to ANSI B16.5 class 300

Available options - on request only:

- Extension H up to 900mm
- Valve with control disc (tapered design)
- Nominal sizes DN15 and DN20 with welding-neck flange

Applications:

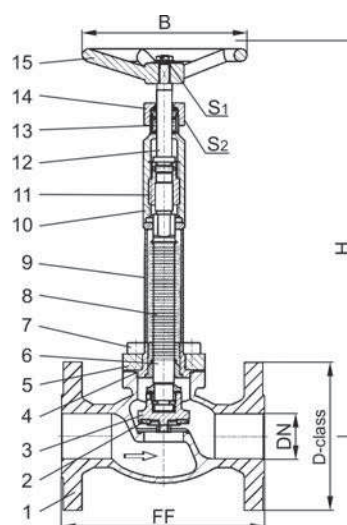
Approved for air gases, vapours and cryogenic liquefied gases incl. LNG.

Working temperature: -196°C / -321°F (77K) up to +120°C / +248°F (393K)

Leak rate: 10^{-6} mbar ltr / sec outside, 10^{-4} mbar ltr / sec seat

| Materials | DIN EN | ASTM |
|-------------------|----------------------------|-------------------|
| 1 Body | 1.4308 | A 351 CF8 |
| 2 Valve seal | PTFE / Carbon filled (25%) | |
| 3 Disc | 1.4301 | A 276 Grade 304 |
| 4 Bonnet gasket | PTFE | |
| 5 Headpiece | 1.4301 | A 276 Grade 304 |
| 6 Bellow stem | 1.4571 | A 276 Grade 316Ti |
| 7 Boltshrauben | 1.4301/A2 | A 194 B8 |
| 8 Bellow | 1.4571 | A 276 Grade 316Ti |
| 9 Elongation tube | 1.4541 | A 213 TP 321 |
| 10 Upper part | 1.4301 | A 276 Grade 304 |
| 11 Bush | CW452K | B 159 UNS C51900 |
| 12 Stem | 1.4301 | A 276 Grade 304 |
| 13 Gland packing | Graphite / PTFE | |
| 14 Gland nut | 1.4305 | A 276 Grade 303 |
| 15 Handwheel | Aluminium alloy | |

Standard marking acc. to Pressure Equipment Directive 97/23/EC (PED).



| Type 03252 - Standard design | | Technical data | | |
|--|-------------------|----------------|-------|------|
| Nominal size | DN | 25 | 40 | 50 |
| Dimension code - Flange ANSI B16.5 class 300 | .X. | 1000 | 1400 | 2000 |
| Flange-Ø | D-class | 123.9 | 155.4 | 165 |
| Face-to-face dimension | FF | 160 | 200 | 230 |
| Height | H | 380 | 380 | 380 |
| Handwheel-Ø | B | 150 | 150 | 150 |
| Wrench size across flats | S ₁ | 10 | 13 | 13 |
| Wrench size across flats | S ₂ | 30 | 36 | 36 |
| Weight | ca. kg | 5.2 | 10.1 | 13.8 |
| Kvs-Value | m ³ /h | 11.5 | 22.6 | 37.1 |
| Cv-Value | gal/min | 13.4 | 26.3 | 43.2 |

Dimensions in mm.