

Check Valves

Type 05416 - Check Valve



Cryogenic-Check Valves, PN50 (DN150=PN40)

Stainless steel body and bronze cap
with spring, opening pressure ca. 0.1 bar
"cleaned and degreased for oxygen service"

Part No. 05416.X.000*

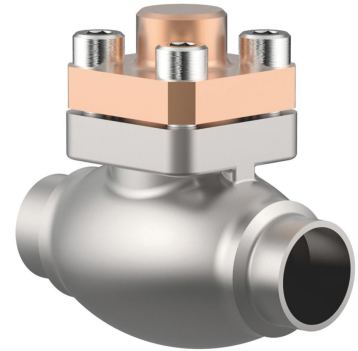
* Butt weld connection for stainless steel pipes acc. to ISO 1127 or ASTM A312

Part No. 05416.X.0004

Socket weld connection for stainless steel pipes acc. to ISO 1127 or ASTM A312

Available options - on request only:

· Welded stainless steel stubs acc. to ISO 1127 or ASTM A312 - length FF + 200mm

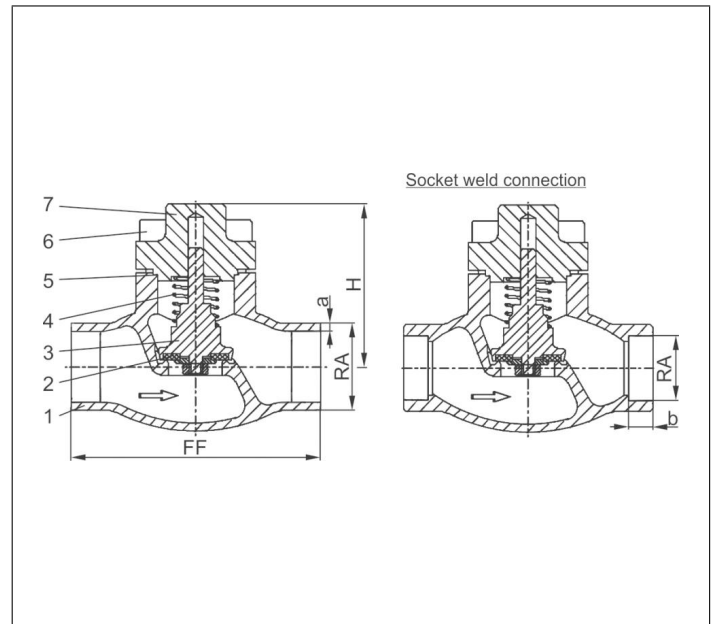


Applications:

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 | CW614N | B 283 UNS C38500 |
| 4 Spring | CW452K | B 159 UNS C51900 |
| 5 Bonnet gasket | PTFE | |
| 6 Bolts | 1.4301/A2 | A 194 B8 |
| 7 Cap | CC493K | B 505 UNS C93200 |



| Type 05416 - Standard design | Technical data | | | | | | | | | | | | | | |
|-------------------------------|-------------------|-------------------------------|-------|-------|-------|-------|------|-------|-------|-------|-------|-------|-------|-------|--|
| | DN | 10 | 15 | 15 | 20 | 25 | 32 | 40 | 40 | 50 | 65 | 80 | 100 | 150 | |
| Nominal size | .X. | 1012 | 1517 | 1521 | 2026 | 2533 | 3238 | 4042 | 4048 | 5060 | 657x | 8088 | 0114 | 0168 | |
| Dimension code | .X. | 1012 | 1517 | 1521 | 2026 | 2533 | 3238 | 4042 | 4048 | 5060 | 657x | 8088 | 0114 | 0168 | |
| Face-to-face dimension | FF | 70 | 85 | 85 | 100 | 115 | 115 | 130 | 130 | 155 | 205 | 245 | 280 | 400 | |
| Height | H | 71 | 71 | 71 | 72 | 75 | 87 | 95 | 95 | 92 | 125 | 150 | 166 | 215 | |
| Outside pipe-Ø ISO 1127 | RA | 12.0 | 17.2 | 21.3 | 26.9 | 33.7 | 38.0 | 42.4 | 48.3 | 60.3 | 76.1 | 88.9 | 114.3 | 168.3 | |
| Wall thickness pipe ISO 1127 | a | 1.0 | 1.6 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.9 | 3.2 | 6.0 | 7.1 | |
| Outside pipe-Ø ASTM A312 | RA | 13.72 | 17.15 | 21.34 | 26.67 | 33.40 | - | 42.16 | 48.26 | 60.33 | 73.03 | 88.90 | 114.3 | 168.3 | |
| Wall thickness pipe ASTM A312 | a | dimensions acc. to S10 or S40 | | | | | | | | | | | | | |
| Socket depth | b | 6 | 10 | 10 | 13 | 13 | - | 13 | 13 | 16 | 16 | 16 | 20 | 20 | |
| Weight | ca. kg | 0.7 | 0.95 | 1.0 | 1.3 | 1.6 | 2.4 | 3.9 | 3.9 | 5.7 | 9.6 | 14.6 | 20.0 | 51.0 | |
| Kvs-Value | m ³ /h | 1.6 | 3.8 | 4.3 | 6.7 | 11.5 | 14.0 | 20.6 | 22.6 | 37.1 | 71.1 | 104.0 | 170.0 | 350.0 | |
| Cv-Value | gal/min | 1.9 | 4.4 | 5.0 | 7.8 | 13.4 | 16.2 | 23.9 | 26.3 | 43.2 | 82.9 | 121.3 | 198.3 | 408.4 | |

Dimensions in mm. Leakage rates will be provided on request