

# Check Valves

## Type 05411 - Check Valve



### Cryogenic-Check Valves, PN50

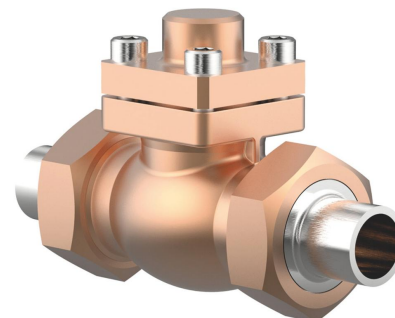
Bronze body and cap  
with spring, opening pressure ca. 0.1 bar  
"cleaned and degreased for oxygen service"

### Part No. 05411.X.0007

Completed with union type butt weld fittings for stainless steel pipes  
acc. to ISO 1127 or ASTM A312

Available options - on request only:

- Further pipe wall thicknesses

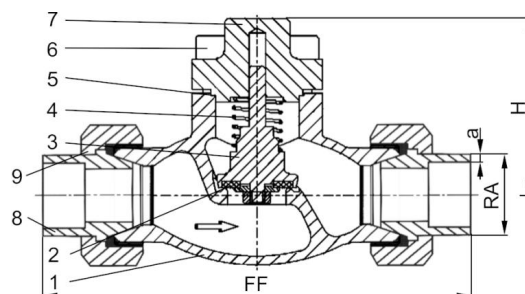


### Applications:

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          | CC491K                     | B 62 UNS C83600  |
| 2 Valve seal    | PTFE / Carbon filled (25%) |                  |
| 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 |
| 8 Weld fitting  | 1.4301                     | A 276 Grade 304  |
| 9 Union nut     | CC493K                     | B 505 UNS C93200 |



| Type 05411 - Standard design  | Technical data    |                               |       |       |       |       |       |       |       |
|-------------------------------|-------------------|-------------------------------|-------|-------|-------|-------|-------|-------|-------|
| Nominal size                  | DN                | 10                            | 10    | 20    | 20    | 32    | 32    | 40    | 50    |
| Dimension code                | .X.               | 1012                          | 1017  | 1521  | 2027  | 2533  | 3242  | 4048  | 5060  |
| Face-to-face dimension        | FF                | 137                           | 141   | 168   | 168   | 203   | 203   | 230   | 263   |
| Height                        | H                 | 71                            | 71    | 72    | 72    | 87    | 87    | 95    | 95    |
| Outside pipe-Ø ISO 1127       | RA                | 12.0                          | 17.2  | 21.3  | 26.9  | 33.7  | 42.4  | 48.3  | 60.3  |
| Wall thickness pipe ISO 1127  | a                 | 1.0                           | 2.3   | 2.6   | 2.0   | 3.2   | 2.0   | 3.6   | 3.6   |
| Outside pipe-Ø ASTM A312      | RA                | -                             | 17.15 | 21.34 | 26.67 | 33.40 | 42.16 | 48.26 | 60.33 |
| Wall thickness pipe ASTM A312 | a                 | dimensions acc. to S10 or S40 |       |       |       |       |       |       |       |
| Weight                        | ca. kg            | 0.9                           | 0.9   | 2.0   | 2.0   | 3.6   | 3.6   | 6.0   | 8.5   |
| Kvs-Value                     | m <sup>3</sup> /h | 1.6                           | 2.2   | 6.7   | 6.7   | 12.1  | 12.1  | 22.6  | 37.1  |
| Cv-Value                      | gal/min           | 1.9                           | 2.6   | 7.8   | 7.8   | 14.1  | 14.1  | 26.3  | 43.2  |

Dimensions in mm.