

Wafer type swing check valve



| | |
|------------------------|---|
| Size | 40mm-400mm (1½"-16") |
| Working pressure | 0.1mbar-16bar |
| Temperature range | -29° C ~200° C according to working condition , other temperatures on request |
| Design and Manufacture | API 594 |
| Face to Face | ASME B16.10 DIN EN558.1 JIS B2002 |
| Flange Ends | ASME B16.5 DIN 2532 JIS B2212 (150LB, 10K, PN10,PN16) |
| Visual Inspection | MSS Sp54 |
| Testing | API 598 DIN 3230 JIS B2003 |
| Pressure & Temperature | ASME B16.34 |
| Spark testing | 14kv |

■ **Valve characteristic**

The PFA lined swing check valve we designed comes with a retaining ring , which prevents the valve disc from falling off during transportation and installation , and also eliminates the need for pipeline flange as baffles with high integration. Free sealing can be achieved without any system pressure, and the valve disc can swing freely without jamming.

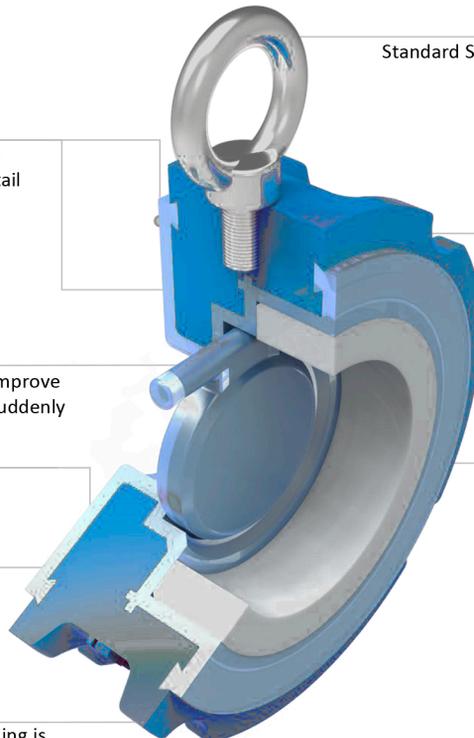
The PFA lining is tightly integrated with the valve body, and we choose the unique "dovetail groove" type. Its resistance to vacuum and thermal expansion is unmatched by other groove types.

The valve disc is lined with metal and PFA to improve strength while preventing disc rupture when suddenly closed.

Pure PTFE serves as a retaining ring, making it easy to replace and maintain when worn.

The minimum thickness of PFA is 3mm, and the part in contact with the fluid will be thicker to ensure a longer service life

Adopting a semi lug design, precise positioning is achieved when connecting bolts, making installation convenient and fast.



Standard SUS304 lifting ring for easy lifting between flanges.

Using epoxy resin spraying, with a thickness greater than 250um. Customers can customize different colors.

Through 14kv spark detection, it can be used in highly corrosive situations.

The inner wall is smooth and free from dead corners, stains, and residues, making it very suitable for medical, semiconductor, food hygiene and other equipment.

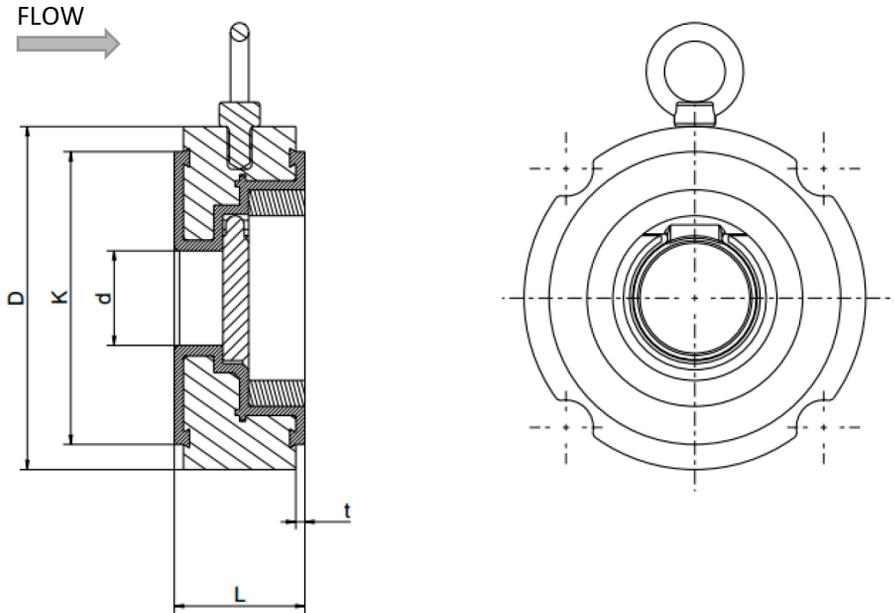
Explosion diagram



Material selection

| NO | Description | Qty. | Materials | Materials According to Norms | | |
|----|---------------|------|------------------------------|------------------------------|---------------|-----------------------|
| | | | | ASTM | JIS | DIN |
| 1 | BODY | 1 | Carbon Steel | A216-WCB | G5151 SCPH2 | GS-45(1.0446) |
| | | | Stainless Steel | A351-CF8 | G5121 SCS13A | G-X6CrNiMo1810 |
| | | | Ductile Iron | ASTM A395 | FCD400 | GGG-40 (0.7040) |
| 2 | BODY LINED | 1 | PFA/FEP/ETFE | | | |
| 3 | DISC | 1 | Carbon Steel+PFA/FEP/ETFE | A216-WCB | G5151 SCPH2 | GS-45(1.0446) |
| | | | Stainless Steel+PFA/FEP/ETFE | A351-CF8 | G5121 SCS13A | G-X6CrNiMo1810 |
| 4 | RETAINER RING | 1 | PTFE | -- | -- | -- |
| 5 | HAND RING | 1 | Stainless Steel | A182 F304 | G4303-SUSF304 | X5CrNi18 10 DIN1.4301 |
| 6 | NUT | 1 | Stainless Steel | A182 F304 | G4303-SUSF304 | X5CrNi18 10 DIN1.4301 |

Dimension



| DN | | SIZE (mm) | | | | | Weight |
|-----|----|-----------|-----|-----|-----|-----|--------|
| mm | in | L | d | K | D | t | [kg] |
| 40 | 1½ | 33 | 21 | 78 | 92 | 3.5 | 1.8 |
| 50 | 2 | 43 | 31 | 96 | 122 | 3.5 | 2.5 |
| 65 | 2½ | 46 | 43 | 115 | 132 | 3.5 | 3 |
| 80 | 3 | 46 | 52 | 126 | 144 | 3.5 | 4.5 |
| 100 | 4 | 52 | 68 | 151 | 170 | 3.5 | 6.5 |
| 125 | 5 | 56 | 85 | 182 | 203 | 3.5 | 8.2 |
| 150 | 6 | 56 | 107 | 212 | 233 | 3.5 | 10.5 |
| 200 | 8 | 60 | 147 | 262 | 290 | 4 | 16.8 |
| 250 | 10 | 68 | 188 | 322 | 350 | 4 | 28 |
| 300 | 12 | 78 | 233 | 372 | 400 | 4 | 42 |
| 350 | 14 | 78 | 275 | 415 | 460 | 4.5 | 60 |
| 400 | 16 | 102 | 305 | 476 | 525 | 4.5 | 99 |

