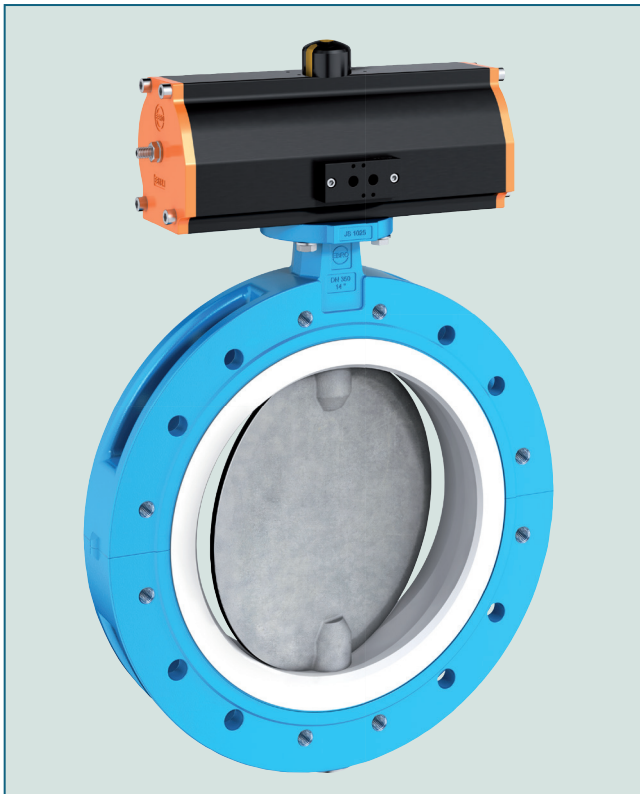


PTFE-LINED BUTTERFLY VALVE T 212-A



Double flanged PTFE-lined butterfly valve for shut-off and control services in the chemical industry.

TECHNICAL DATA

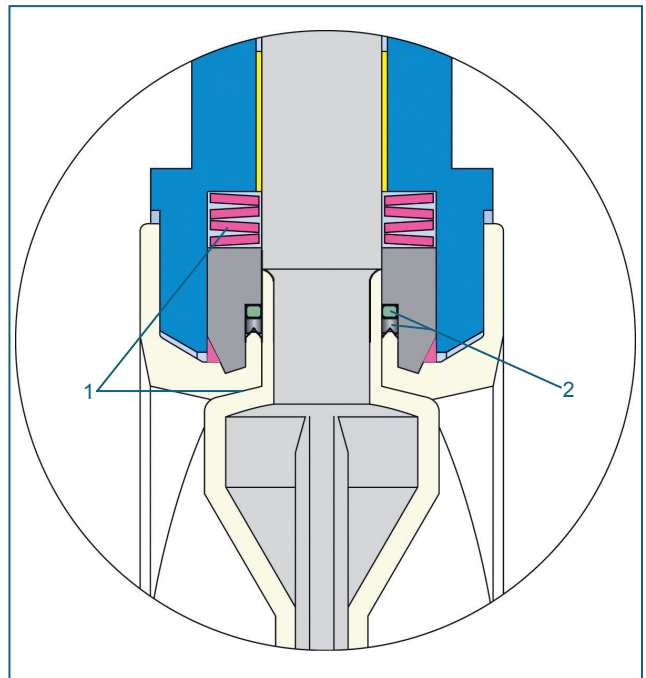
| | |
|------------------------|--|
| Nominal diameter: | DN 350 - DN 900 |
| Face-to-face: | EN 558 Series 20 ISO 5752 Series 20 API 609 Table 1 |
| Flange accommodation: | EN 1092 PN 10/16 ASME Class 150 ASME B16.47, Series A, Series B AS 4087 |
| Flange Surface Design: | EN 1092 Form A/B ASME RF, FF |
| Top flange: | EN ISO 5211 |
| Marking: | EN 19 |
| Tightness check: | EN 12266 (Leakage rate A) |
| Temperature range: | -40°C to +200°C (depending on nominal diameter and operation pressure) |
| Operating pressure: | max. 6 bar (10 bar for special version) |
| Vacuum: | DN 350 - 600 max. 200mbar absolut DN 700 - 900 max. 500mbar absolut (with silicon elastomer inserts) |

FEATURES

- PTFE-lined butterfly valve for chemically toxic and highly corrosive media
- Environmental protection via EBRO-Safety seal
- Splitted body design
- Isolation height according to plant prescription
- Can be installed in any desired position
- Maintenance-free
- Can be disassembled, material-specific recycling possible
- Material conform to FDA to EG 1935/2004
- Optional: Special design RWTÜV certified to TA-Air/ VDI 2440

GENERAL APPLICATIONS

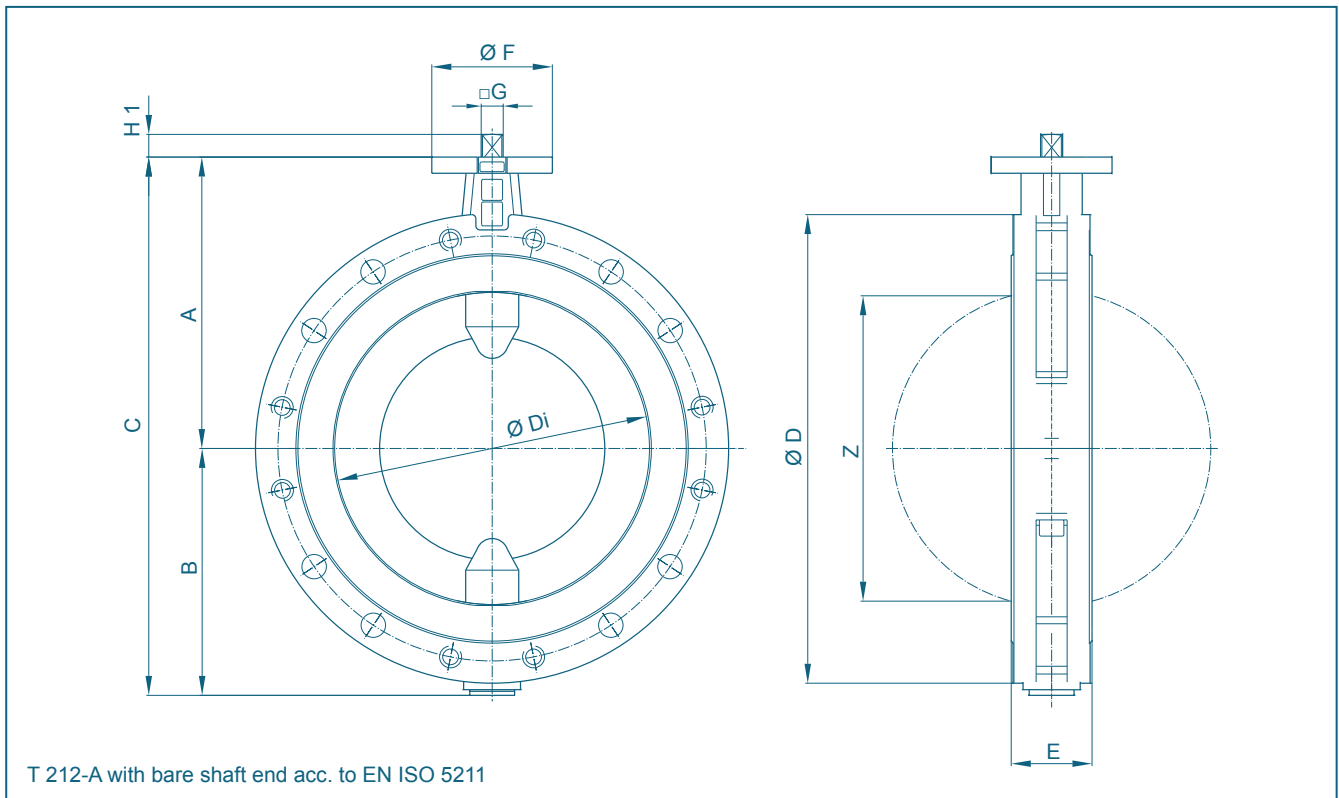
- Chemically highly corrosive and toxic media
- Purification plants
- Pharmaceutical industry
- Adhesives, paper industry, dissolver
- Paint manufacture and processing
- Food industry
- Chlorine production
- Processing of ore



Safety seal at both shaft ends:

- 1.Primary sealing by means of a belleville spring washer, transmitting prestress on the spherical segment area.
- 2.Secondary sealing of the shaft by means of PTFE-Chevron and o-ring.

PTFE-LINED BUTTERFLY VALVE T 212-A

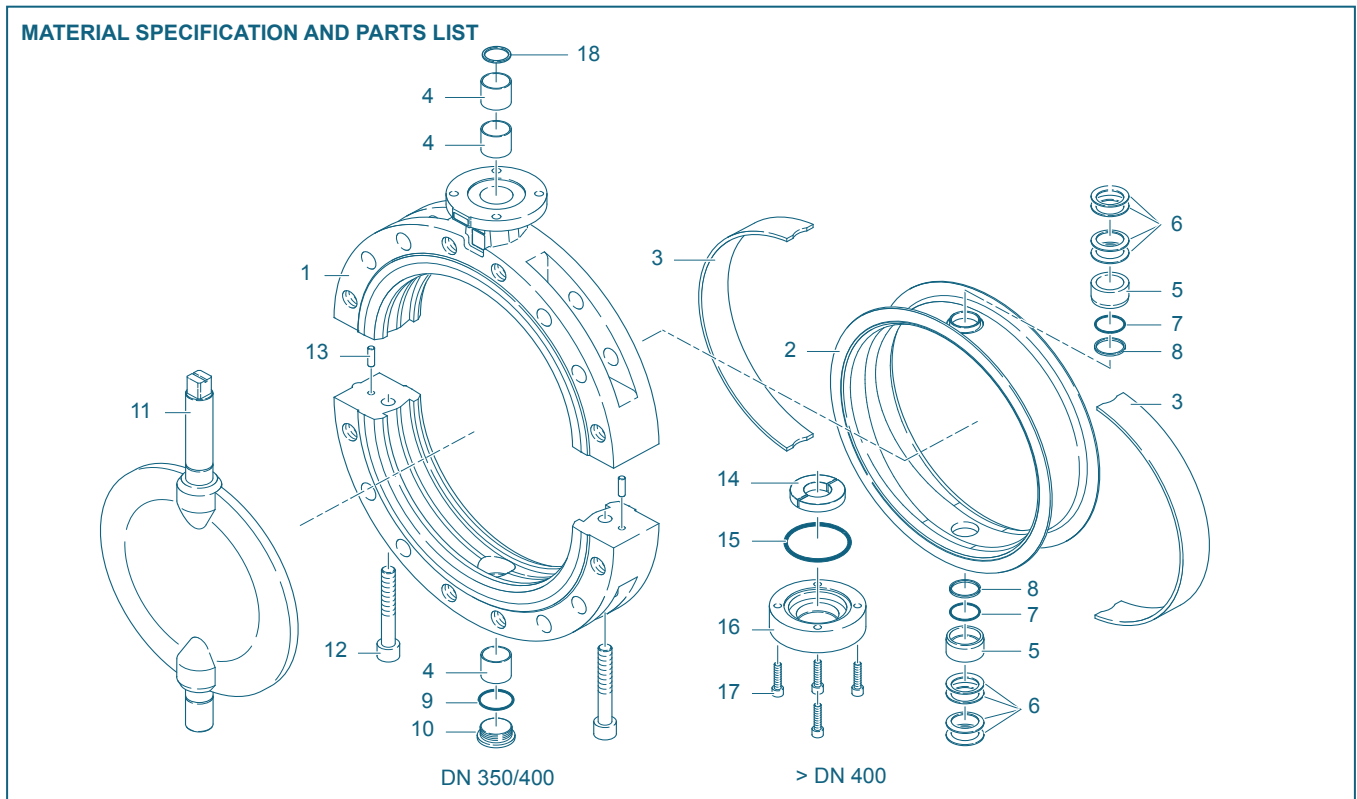


| DN [mm] | Size [in] | Dimensions [mm] | | | | | | | | | | | Weight [kg] |
|------------|--------------|-----------------|-----|------|------|-----|---------|-----|--------|----|----|-----|----------------|
| | | A | B | C | D | Di | E | F | Flange | G | H1 | Z | |
| 350 | 14 | 330 | 277 | 607 | 535 | 338 | 78(92)* | 150 | F12 | 27 | 29 | 327 | 68 |
| 400 | 16 | 360 | 305 | 665 | 580 | 389 | 102 | 150 | F12 | 27 | 29 | 377 | 95 |
| 450 | 18 | 397 | 363 | 760 | 639 | 437 | 114 | 175 | F14 | 36 | 38 | 423 | 130 |
| 500 | 20 | 437 | 390 | 827 | 715 | 490 | 127 | 175 | F14 | 36 | 38 | 475 | 170 |
| 600 | 24 | 498 | 462 | 960 | 830 | 579 | 154 | 210 | F16 | 46 | 48 | 560 | 270 |
| 700 | 28 | 580 | 496 | 1076 | 927 | 676 | 165 | 210 | F16 | 46 | 47 | 662 | 410 |
| 750 | 30 | 610 | 538 | 1148 | 985 | 724 | 165 | 298 | F25 | 55 | 56 | 712 | 465 |
| 800 | 32 | 630 | 563 | 1193 | 1060 | 770 | 190 | 298 | F25 | 55 | 56 | 759 | 570 |
| 900 | 36 | 696 | 640 | 1336 | 1170 | 881 | 203 | 298 | F25 | 55 | 56 | 859 | 750 |

* Face to face dim. acc. to EN 558 Tab. 20, 78mm
Face to face dim. acc. to EN 558 Tab. 25, 92mm

Subject to change without notice

PTFE-LINED BUTTERFLY VALVE T 212-A



| Pt. | Description | Material | Material-No. | ASTM | Pt. | Description | Material | Material-No. | ASTM |
|------------|---------------------------------|------------------------|--------------|-------|--------------|------------------------------------|------------------------|--------------|--|
| 1 | Body | | | | 11*** | Disc/Shaft (one-piece type) | | | |
| | Nodular Cast Iron | EN-JS 1025 | EN 1563 | A 395 | | St. Steel/St. Steel | X2CrNiMo22-5-3/ | 1.4462/ | Duplex |
| 2** | Seat | | | | | | X2CrNiMo 22-5-.3 | 1.4462 | |
| | PTFE | Polytetrafluorethylene | PTFE | | | St.Steel/PFA coated | X2CrNiMo22-5-3/ | 1.4462/ | Duplex/ |
| | M.-PTFE | Polytetrafluorethylene | modified | | | | St52.3-Perfluorakoxy | 1.0570-PFA | St./PFA |
| | Cond.-PTFE | Polytetrafluorethylene | conductive | | | St. Steel/PFA conductive | X2CrNiMo22-5-3/ | 1.4462/ | Duplex/ |
| 3** | Elastomer insert | | | | | | St52.3-Perfluorakoxy | 1.0570-PFA | conductive |
| | Silicon | Silicon rubber | MVQ | VMQ | 12 | Screw | | | |
| 4 | DU-bearing | | | | | Stainless Steel | A4-70 | | |
| | Steel / PTFE coated | | | | 13 | Set screw | | | |
| 5** | Thrust collar | | | | | Steel | 9SMnPb28K | 1.0718 | SAE12L14 |
| | Stainless Steel | X5CrNiMo17-12-2 | 1.4401 | 316 | 14 | Shaft retainer | | | |
| 6 | Belleville spring washer | | | | | Steel | St37-2 | | |
| | Stainless Steel | X12CrNi177 | 1.4568 | 631 | 15** | O-ring | | | |
| 7** | O-ring | | | | | FPM | Fluorocarbon rubber | FPM | FKM |
| | FPM | Fluorocarbon rubber | FPM | FKM | 16 | Cover plate | | | |
| 8** | Chevron seal | | | | | Steel | St37-2 | | |
| | PTFE | Polytetrafluorethylene | PTFE | PTFE | 17 | Screw | | | |
| 9 | Seal | | | | | Stainless Steel | A4-70 | | |
| | Stainless Steel | X5CrNi18-10 | 1.4301 | 304 | 18 | Wiper ring | | | |
| 10 | Plug screw DIN 908 | | | | | PTFE | Polytetrafluorethylene | PTFE | PTFE |
| | Stainless Steel | G-X5CrNiMo19-11-2 | 1.4408 | CF8M | | | | | Above-mentioned materials of the basic version, other materials upon request |

** recommended spare parts

*** recommended for coated discs

Subject to change without notice

PTFE-LINED BUTTERFLY VALVE T 212-A

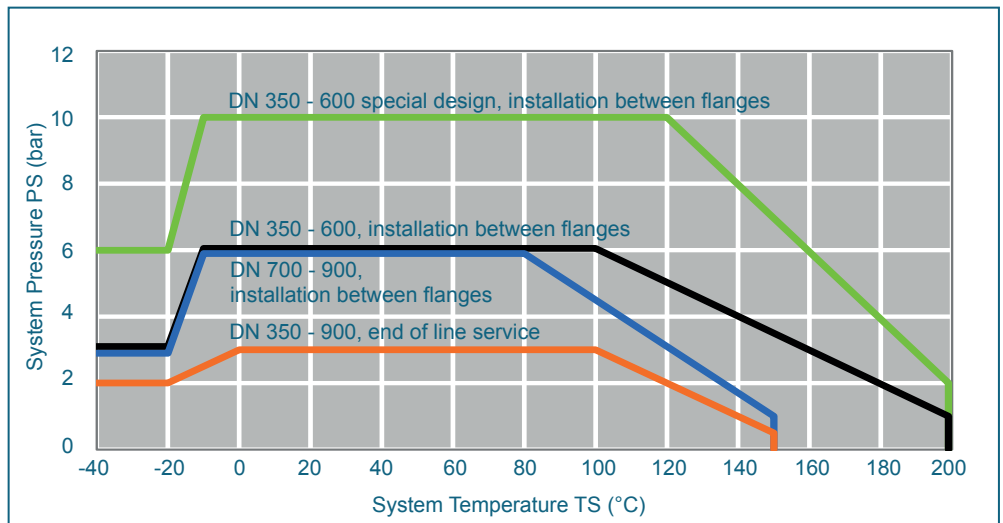
TORQUE

- The torque values specified (Md) are based on dry media and are measured with air at a temperature of 20 °C
- The values specified are based on the initial breakaway torque (disc disengages from seat, torque then drops)
- Dynamic torque specification available upon request

Regarding the dimensioning of actuators, please contact our engineers.

| DN [mm] | 350 | 400 | 450 | 500 | 600 | 700 | 750 | 800 | 900 |
|-----------|-----|-----|------|------|------|------|------|------|------|
| Size [in] | 14 | 16 | 18 | 20 | 24 | 28 | 30 | 32 | 36 |
| MD [Nm] | 720 | 980 | 1200 | 1500 | 2500 | 3000 | 3500 | 4500 | 6000 |

PRESSURE/TEMPERATURE DIAGRAM



Pressure-Temperature-Diagram for valves with Silicone elastomer inserts.

Other elastomer inlays on request

Vacuumservice for Sizes DN 350 - 600 to 200mbar absolut, depending on medium and temperature. Valve installation between flanges

Vacuumservice for Sizes DN 700 - 900 to 500mbar absolut, depending on medium and temperature. Valve installation between flanges

K_V-VALUES

- The K_V-value [m³ per hour] is the flow of water at a temperature of 5°C to 30°C (41°F to 86°F) at Δp of 1 bar
- The K_V-values specified are based on tests carried out by the Delfter Hydraulics Laboratories, the Netherlands
- Permissible velocity of flow
V_{max} 4,5 m/s for liquids,
V_{max} 70 m/s for gases
- The throttle function is linear at an angle 30° to 70°

For further values, please contact our engineers.

| DN [mm] | Size [in] | Opening angle α° | | | | | | | |
|-----------------------------|-----------|------------------|------|------|-------|-------|-------|-------|-------|
| | | 20° | 30° | 40° | 50° | 60° | 70° | 80° | 90° |
| K_V-values | | | | | | | | | |
| 350 | 14 | 482 | 464 | 1042 | 2126 | 3625 | 5449 | 7507 | 9708 |
| 400 | 16 | 627 | 603 | 1355 | 2765 | 4715 | 7088 | 9764 | 12627 |
| 450 | 18 | 790 | 761 | 1709 | 3488 | 5947 | 8939 | 12314 | 15925 |
| 500 | 20 | 973 | 936 | 2104 | 4293 | 7320 | 11003 | 15158 | 19602 |
| 600 | 24 | 1394 | 1342 | 3016 | 6153 | 10492 | 15769 | 21724 | 28094 |
| 700 | 28 | 1891 | 1820 | 4090 | 8345 | 14229 | 21388 | 29464 | 38104 |
| 750 | 30 | 2167 | 2084 | 4685 | 9560 | 16303 | 24507 | 33763 | 43664 |
| 800 | 32 | 2463 | 2369 | 5323 | 10863 | 18525 | 27847 | 38365 | 49615 |
| 900 | 36 | 3110 | 2991 | 6722 | 13718 | 23394 | 35166 | 48448 | 62655 |

Subject to change without notice