

## PTFE LINED BUTTERFLY VALVE

The 2-Cx lined butterfly valve features a state-of-the-art design which provides excellent shutoff protection and high flow rates with an exceptionally long service life. It has been specifically engineered to meet the stringent demands of the Chemical Industry.

### MEDIA

- > Chlorine
- > Chlorine Dioxide
- > Hydriodic Acid
- > Hydrobromic Acid
- > Hydrochloric Acid
- > Hydrofluoric Acid
- > Hydrofluorsilicic Acid
- > Hydrogen Chloride
- > Hydrogen Cyanide
- > Nitric Acid
- > Sodium Chlorate
- > Sodium Chlorite
- > Sodium Hypochlorite
- > Sulfuric Acid



### SPECIFICATIONS

|                                                                  |                             |                   |
|------------------------------------------------------------------|-----------------------------|-------------------|
| <b>Size Range<sup>1</sup></b>                                    | DN 50 to 600                |                   |
|                                                                  | NPS 2 to 24                 |                   |
| <b>Temperature Range</b>                                         | -20°C to 200°C              |                   |
|                                                                  | 0°F to 392°F                |                   |
| <b>Maximum Operating Pressure (Bidirectional)</b>                | DN 50 to 600:               | 10 bar            |
|                                                                  | NPS 2 to 24:                | 150 psi           |
| <b>Maximum Operating Pressure (Dead End Service<sup>2</sup>)</b> | DN 50 to 300:               | 5 bar             |
|                                                                  | DN 350 to 600:              | 3 bar             |
|                                                                  | NPS 2 to 12:                | 75 psi            |
|                                                                  | NPS 14 to 24:               | 50 psi            |
| <b>Body Style<sup>3</sup></b>                                    | Series 22-Cx:               | Two-piece wafer   |
|                                                                  | Series 23-Cx:               | Two-piece lug     |
| <b>Tightness Test</b>                                            | EN 12266-1 Rate A   API 598 |                   |
| <b>Velocity Limits (On-Off Service)</b>                          | Fluids:                     | 9 m/s   30 ft/s   |
|                                                                  | Gases:                      | 54 m/s   180 ft/s |

#### NOTES

1 Other sizes on request.

2 Lug body only.

3 Series 23-Cx DN 600 body style is double flange only.

### CERTIFICATIONS & APPROVALS

|                           |                    |
|---------------------------|--------------------|
| <b>Certifications</b>     | CE: PED 2014/68/EU |
|                           | SIL 3 capable      |
| <b>Fugitive Emissions</b> | ISO 15848-1        |
|                           | TA-Luft 2021       |
| <b>Approvals</b>          | ATEX 2014/34/EU    |
|                           | CRN                |

### MATERIAL OPTIONS<sup>1</sup>

|                       |                                           |
|-----------------------|-------------------------------------------|
| <b>Body</b>           | Ductile Iron, Low Temperature (EN 5.3103) |
|                       | Ductile Iron (ASTM A395)                  |
| <b>Disc</b>           | Stainless Steel (PTFE-lined)              |
|                       | Stainless Steel (MPTFE-lined)             |
| <b>Stem</b>           | Stainless Steel                           |
| <b>Seat</b>           | PTFE                                      |
|                       | MPTFE                                     |
|                       | Conductive PTFE                           |
| <b>Seat Energizer</b> | FKM                                       |
| <b>Body Fasteners</b> | A4-70                                     |
|                       | A193 Gr. B7                               |

#### NOTES

1 Other materials are available on request.

### DESIGN STANDARDS

|                          |                                                    |
|--------------------------|----------------------------------------------------|
| <b>Valve Design</b>      | EN 12569   EN 593   NE 167<br>API 609   MSS SP-155 |
| <b>Material Standard</b> | EN 16668   AD2000 W0                               |
| <b>Food Contact</b>      | EC 1935                                            |
| <b>Marking</b>           | EN 19   DIN EN IEC 61406   DIN 91406               |
| <b>Top Flange</b>        | ISO 5211                                           |
| <b>Flange Drilling</b>   | EN 1092-1 PN 10   ASME B16.5 CI 125/150            |
| <b>Face-to-Face</b>      | EN 558 Series 20   API 609                         |
| <b>Testing Standard</b>  | EN 12266-1 & 2   API 598                           |
| <b>AutoID/ID Link</b>    | DIN 91406/IEC 61406                                |

- 1 ANTI-STATIC:** Electrostatic discharge through anti-static design. (Grounding device and top flange drilling only in NE 167 design).
- 2 STEM DESIGN:** The high-strength stem design includes blowout-proof functionality for safe operation and exceptional service life.
- 3 STEM BUSHING:** Non-corrosive, heavy duty acetal bushing absorbs actuator side thrust.
- 4 DIGITAL TAG:** Each valve is uniquely and easily identifiable by simply scanning the QR Code on the product identification tag in accordance to IEC 61406.
- 5 BEARINGS:** PTFE impregnated steel bearings precisely align the upper and lower stem.
- 6 STEM SEAL SYSTEM:** The live-loaded, self-adjusting packing design features a primary and secondary sealing principle to comply with the most stringent fugitive emission requirements.
- 7 SEAT:** The unique fluoropolymer (minimum 3 mm thick) seat features a geometry that lowers seating and unseating torque while reducing wear on the contacting parts.
- 8 SEAT ENERGIZER:** A resilient seat energizer extends completely around the seat, including the disc hub providing uniform force sufficient for zero-leakage.
- 9 DISC:** The disc is encapsulated in fluoropolymer material (minimum 3 mm thick) for superior sealing against the most aggressive media.

