

CAST IRON

BUTTERFLY VALVE (WAFER)

INTRODUCTION

Leader Butterfly Valves are designed to meet the flow control requirement of plumbing, fire-fighting and HVAC application. The body seat is vulcanised in-situ onto the body and offers 100% bi-directional sealing. The wafer style body has universal design to fit between flanges of all almost all standards.

PRINCIPAL FEATURES

- Design Standard: BS 5155, EN 593, API 609 CAT. A.
- Wafer type design makes it compact and take lesser space.
- Dynamic sealing of concentric disc is obtained with vulcanised rubber seat at very low torque.
- High precision disc external profile for smooth operation & tight shut off sealing with low operating torque.
- Moulded rubber body seat is extending on to the contact faces ensures perfect sealing and eliminates the need for separate flange gaskets.
- Notch plate ensures the locking of the hand lever at different position in addition to open and closed position.
- Shaft sealing is ensured by double sealing of Bush and 'O' ring combination.
- Body castings made of superior FG 260 grade cast iron to ensure additional strength.
- Valve disc made of ductile iron with epoxy coating / SS304 offers high strength against pressure.
- Shaft made of martensitic stainless steel to ensure maximum strength and torsional rigidity.
- Two piece stem design which is precisely guided between the PTFE bush & Rubber 'O' Rings to prevent leakage, corrosion and stem seizure.
- Taper disc holder pins to ensure shock proof shaft to disc connection & suitability of replacement at field.
- Easy visual control of open / closed position marked on the notch plate.
- Operation mode manual, gear, electric, pneumatic.
- Available with locking arrangement on request.
- Temper Switch / supervisory limit switches option available on request.
- Top flange as per ISO 5211 to suit F Series flanges of Gears and Actuators.

END CONNECTION

Suitable for Clamping between flanges as per ASME B16.1 Class-125, ASME B16.5 Class-150, IS 6392, Table 17, IS 1538, BSEN 1092 PN25, BS:10 Table D, E, F, H.

UTILISATION & SERVICE

Best suited for water, HVAC, fire-fighting service.

WORKING PRESSURE & TEMPERATURE LIMITS

Maximum Working Pressure: 16 Bar.

Maximum Working temperature: 120°C.

See Pressure / Temperature Diagram.



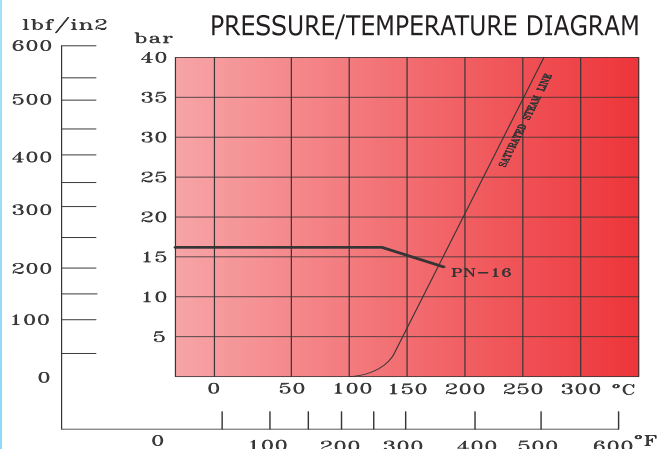
| | |
|---------------------|----------------------------------|
| ■ Item Code: | CI0027, CI0028 |
| ■ Disc: | Ductile Iron, SS(CF8) |
| ■ Pressure Rating: | PN-16 |
| ■ Testing Standard: | BSEN 12266 Part-1 |
| ■ Size Range: | 40mm to 400mm |
| ■ Product Standard: | BS 5155, EN 593, API 609 CAT. A. |

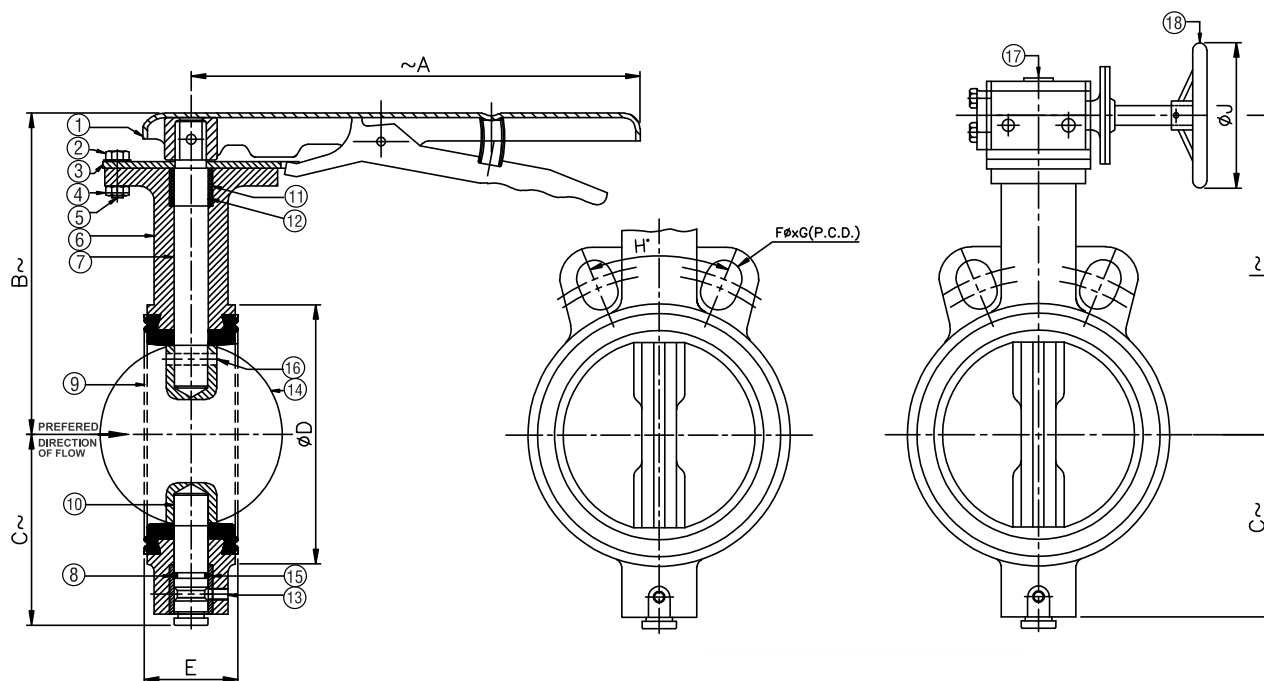
SUITABLE FOR

| | | | |
|-------|-----|-----|-------|
| Water | Oil | Air | Gases |
| ✓ | | | |

TEST PRESSURE (Hydrostatic)

| | |
|-------------|----------|
| Rating | PN-16 |
| Body (Hyd.) | 24 Bar |
| Seat (Hyd.) | 17.6 Bar |

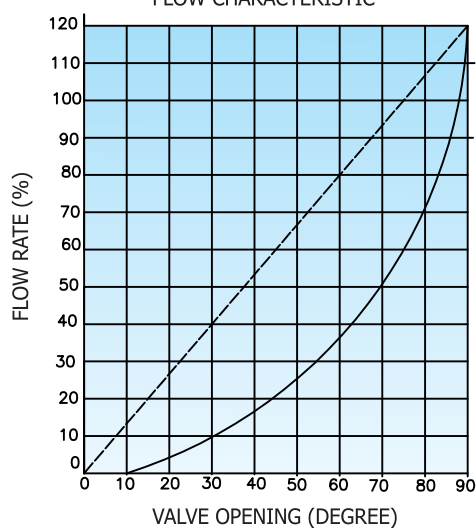




DIMENSIONAL DATA

| SIZE (mm) | 40 | 50 | 65 | 80 | 100 | 125 | 150 | 200 | 250 | 300 | 350 | 400 |
|-----------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|-------------------|
| ~A | 260 | 260 | 260 | 260 | 260 | 260 | 260 | 356 | 406 | 406 | - | - |
| B~ | 120 | 133 | 150 | 153 | 210 | 200 | 237 | 235 | 290 | 330 | - | - |
| C~ | 64 | 75 | 96 | 100 | 120 | 140 | 147 | 178 | 214 | 260 | 281 | 315 |
| ØD | 82 | 90 | 105 | 120 | 144 | 175 | 200 | 255 | 325 | 374 | 406 | 456 |
| E | 33 ^{±1} | 43 ^{±1} | 46 ^{±1} | 46 ^{±1} | 52 ^{±1} | 56 ^{±1} | 56 ^{±1} | 60 ^{±2} | 68 ^{±2} | 78 ^{±2} | 92 ^{±2} | 102 ^{±2} |
| FØ | 15.8 | 19 | 19 | 19 | 19 | 22.3 | 22.3 | 22.3 | 25.4 | 25.4 | 28.6 | 28.6 |
| G | 98.5 | 120.6 | 139.7 | 152.4 | 190.5 | 215.9 | 241.3 | 298.4 | 361.9 | 431.8 | 476.2 | 539.8 |
| I~ | - | - | - | - | - | - | 240 | 240 | 290 | 330 | 340 | 412 |
| ØJ | - | - | - | - | - | - | 200 | 200 | 250 | 250 | 300 | 500 |
| H° | 90° | 90° | 90° | 90° | 45° | 45° | 45° | 45° | 30° | 30° | 30° | 22.5° |

FLOW CHARACTERISTIC



MATERIAL SPECIFICATION

| P.No. | NAME OF PART | MATERIAL |
|-------|---------------|--|
| 1 | LEVER | 1-1/2" TO 6" M.S. SHEET (IS 2062 Gr.B) / C.C.S. (ASTM A216 Gr. WCB) / NODULAR IRON (B.S. 2789 Gr. 500/7) |
| 2 | SPRING WASHER | CARBON STEEL |
| 3 | COVER PLATE | M.S. SHEET |
| 4 | NUTS | C.S. (BS 4190) / ALLOY STEEL (ASTM A194 Gr.2H) |
| 5 | BOLTS | C.S. (BS 4190) / ALLOY STEEL (ASTM A193 Gr.B7) |
| 6 | BODY | C.I. (EN 1561 Gr. GJL 200) |
| 7 | UPPER STEM | S.S. (ASTM A276 TYPE 410) OR ITS EQ. |
| 8 | 'O' RING | BUNA-N / EPDM (SHORE HARDNESS 60°±4) |
| 9 | MOULDED LINER | BUNA-N / EPDM (SHORE HARDNESS 70°±4) |
| 10 | LOWER STEM | S.S. (ASTM A276 TYPE 410) OR ITS EQ. |
| 11 | BUSHING | HEAVY DUTY CORROSION RESISTANT TO ABSORB SIDE THRUST |
| 12 | WASHER | BUNA-N / EPDM (SHORE HARDNESS 60°±4) |
| 13 | GRUB SCREW | MILD STEEL |
| 14 | DISC | D.I. (ASTM A395) / S.S. (ASTM A351 Gr. CF8) |
| 15 | BUSH | PH. BRONZE / PTFE |
| 16 | TAPER PIN | STEEL (HARDENED) |
| 17 | GEAR BOX | C.I. (EN 1561 Gr. GJL 200) |
| 18 | HAND WHEEL | C.I. (EN 1561 Gr. GJL 200) / M.S. (IS 2062 Gr.B) |

Note : The above data is subject to change without notice due to our continuing product improvement program.