

BEIJING JOINT FLOW SYSTEM CO.





HIGH PERFORMANCE BUTTERFLY VALVE

The High Performance Butterfly Valve brings low cost and light weight to high pressure water, oil, steam, gas and slurry applications in heating, ventilating and air conditioning, power generation, hydrocarbon processing, water and waste water treatment, and marine and commercial shipbuilding industries.

All valves shall be capable of bi-directional, drip tight service to rated pressure, conforming to the design standards of API 609/ASME B16.34.

BODY

High quality, one piece casting provides consistent uniformity. The valve body shall be constructed of carbon steel, stainless steel or alloy steel, available in Wafer, Lug and Flange style.

DISC

Be made of Stainless Steel and engineered to allow for quick release from the seat.

STEM

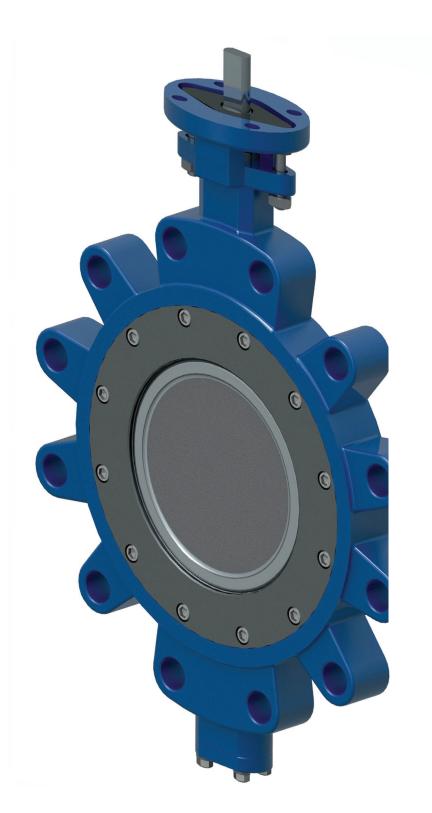
Be manufactured of high strength Stainless Steel to provide maximum strength and stability for high torque applications, specially with blow out proof design.

SEAT

An advanced seat design that provides a bidirectional interference and pressure assisted seal, available with Soft Seat (PTFE/RPTFE), Metal Seat (Laminated/Integral solid metal) and Fire Safe Seat (primary Soft Seat with secondary Metal Seat).

RETAINING RING

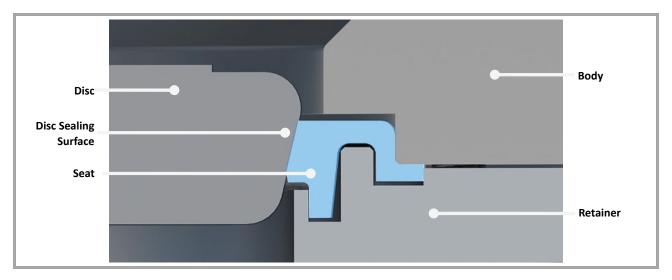
Retains seat in valve, protects seat from abrasion and erosion.





HIGH PERFORMANCE BUTTERFLY VALVE

STANDARD FEATURE

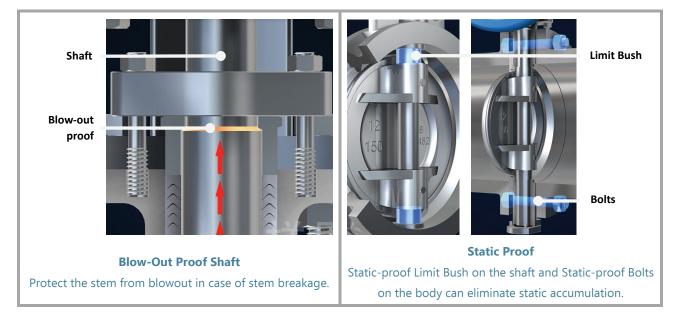


Spherical or Tapered Disc Sealing Surface

- Spherical or Tapered sealing surface on Disc provides better sealing capability.
- Lowers the operate torque because of less friction between the seat and disc.

Blow-Out Proof Seat

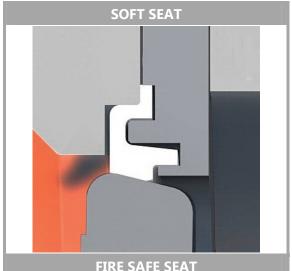
- The butterfly valves have a unique seat and seat retainer design to minimize the seat movement.
- The seat retainer is bolted to the body, the retainer plate holds the seat in the seat pocket and hence a seat blow-out is avoided.



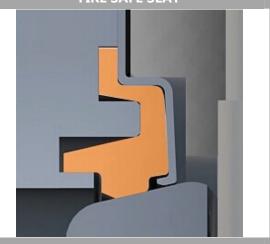


HIGH PERFORMANCE BUTTERFLY VALVE

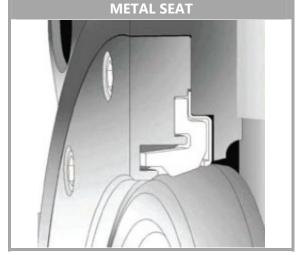
SEAT TYPES



- Advanced trim structure enables bi-direction sealing.
- Anti-blowout seat and seat retainer allow full differential pressure at any disc position.
- Available in PTFE or RPTFE.



- Double seated design with primary soft seat backed up by the secondary metal seat and functions in both directions.
- Metal seat functions as primary seat in case of fire providing a bi-direction sealing.
- Extended range of applications due to a wide variety of seat materials for primary and secondary seals.
- Fully fire tested according to API-607 and API-6FA.

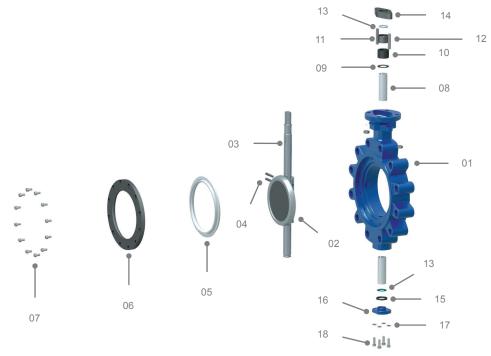


- Available in Laminated Sealing Ring or Integral Solid Sealing Ring to enhance the strength of the sealing edge of the disc.
- Designed to reduced seat movement and retain elasticity of the metal seat to prevent loss of sealing capacity in high temperature and high pressure applications.
- Fully fire tested according to API-6FA.



HIGH PERFORMANCE BUTTERFLY VALVE

PARTS LIST AND MATERIAL



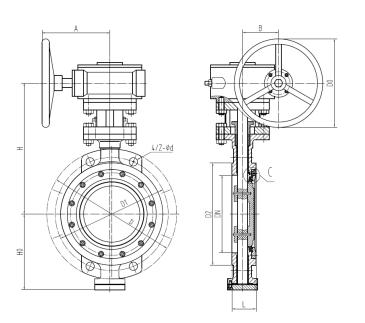
| No. | Parts Name | Material |
|-----|------------------|--|
| 1 | Body | Carbon Steel/Stainless Steel/Alloy Steel |
| 2 | Disc | Stainless Steel |
| 3 | Shaft | Stainless Steel |
| 4 | Taper Pin | Stainless Steel |
| 5.1 | Seat (Soft) | PTFE/RPTFE |
| 5.2 | Seat (Metal) | Laminated Sealing Ring/Integral Solid Sealing Ring |
| 5.3 | Seat (Fire Safe) | PTFE/RPTFE + Metal Seat |
| 6 | Retaining Ring | Carbon Steel/Stainless Steel/Alloy Steel |
| 7 | Screw | Carbon Steel/Stainless Steel/Alloy Steel |
| 8 | Bearing | Bronze/Stainless Steel |
| 9 | Washer | Carbon Steel/Stainless Steel/Alloy Steel |
| 10 | Packing | NBR/EPDM/PTFE/VITON/Graphite |
| 11 | Packing Gland | Carbon Steel/Stainless Steel/Alloy Steel |
| 12 | Gland Bolt | Carbon Steel/Stainless Steel/Alloy Steel |
| 13 | Stem Retainer | Carbon Steel/Stainless Steel/Alloy Steel |
| 14 | Gland Flange | Carbon Steel/Stainless Steel/Alloy Steel |
| 15 | Cap Packing | NBR/EPDM/PTFE/VITON/Graphite |
| 16 | Сар | Carbon Steel/Stainless Steel/Alloy Steel |
| 17 | Washer | Carbon Steel/Stainless Steel/Alloy Steel |
| 18 | Screw | Carbon Steel/Stainless Steel/Alloy Steel |

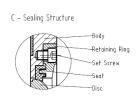
^{*}More material specifications are available on request.



HIGH PERFORMANCE BUTTERFLY VALVE

DIMENSION (Wafer type)





| DN | NPS | | L | | H₀ | н | A | В | D ₀ | Est. Weight |
|------|--------|---------|---------|---------|------|------|-----|-----|----------------|-------------|
| (mm) | (inch) | (150lb) | (300lb) | (600lb) | | | | | | (kg) |
| 50 | 2 | 43 | 43 | | 65 | 180 | 180 | 50 | 150 | 8 |
| 80 | 3 | 48 | 48 | 54 | 85 | 205 | 180 | 50 | 150 | 14 |
| 100 | 4 | 54 | 54 | 64 | 95 | 235 | 180 | 50 | 150 | 17 |
| 150 | 6 | 57 | 59 | 78 | 125 | 275 | 185 | 63 | 305 | 26 |
| 200 | 8 | 64 | 73 | 102 | 145 | 305 | 185 | 63 | 305 | 35 |
| 250 | 10 | 71 | 83 | 117 | 200 | 350 | 215 | 80 | 305 | 42 |
| 300 | 12 | 81 | 92 | 140 | 215 | 400 | 215 | 80 | 406 | 68 |
| 350 | 14 | 92 | 117 | 155 | 255 | 460 | 215 | 80 | 406 | 121 |
| 400 | 16 | 102 | 133 | 178 | 315 | 475 | 245 | 125 | 300 | 136 |
| 450 | 18 | 114 | 149 | 200 | 381 | 550 | 245 | 125 | 300 | 198 |
| 500 | 20 | 127 | 159 | 216 | 420 | 600 | 245 | 125 | 300 | 216 |
| 600 | 24 | 154 | 181 | 232 | 489 | 680 | 390 | 242 | 400 | 467 |
| 700 | 28 | 165 | | | 502 | 815 | 390 | 242 | 5000 | 650 |
| 800 | 32 | 190 | | | 975 | 920 | 420 | 262 | 400 | 950 |
| 900 | 36 | 203 | | | 1075 | 1020 | 420 | 262 | 400 | 1239 |
| 1000 | 40 | 216 | | | 1175 | 1120 | 550 | 325 | 500 | 1785 |
| 1200 | 48 | 254 | | | 1405 | 1340 | 550 | 325 | 500 | 1956 |

^{*}Face to face dimensions (L) herein are according to API 609/ASME B16.10.

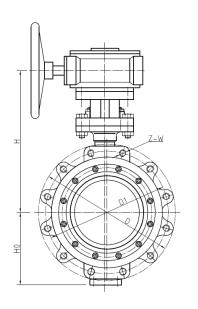
^{*}Flange dimensions (D, D₁, D₂, Z-d) refer to Catalogue of Accessory: Series 8 – Flange.

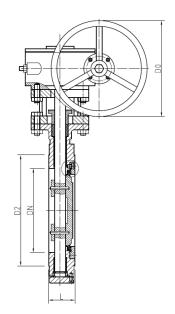
^{*}More dimension specifications are available on request.

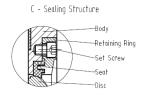


HIGH PERFORMANCE BUTTERFLY VALVE

DIMENSION (Lug type)







| DN | NPS | | L | | H₀ | н | A | В | D ₀ | Est. Weight |
|------|--------|---------|---------|---------|------|------|-----|-----|----------------|-------------|
| (mm) | (inch) | (150lb) | (300lb) | (600lb) | | | | | | (kg) |
| 50 | 2 | 43 | 43 | | 65 | 180 | 180 | 50 | 150 | 20 |
| 80 | 3 | 48 | 48 | 54 | 85 | 205 | 180 | 50 | 150 | 30 |
| 100 | 4 | 54 | 54 | 64 | 95 | 235 | 180 | 50 | 150 | 38 |
| 150 | 6 | 57 | 59 | 78 | 125 | 275 | 185 | 63 | 305 | 48 |
| 200 | 8 | 64 | 73 | 102 | 145 | 305 | 185 | 63 | 305 | 90 |
| 250 | 10 | 71 | 83 | 117 | 200 | 350 | 215 | 80 | 305 | 114 |
| 300 | 12 | 81 | 92 | 140 | 215 | 400 | 215 | 80 | 406 | 148 |
| 350 | 14 | 92 | 117 | 155 | 255 | 460 | 215 | 80 | 406 | 183 |
| 400 | 16 | 102 | 133 | 178 | 315 | 475 | 245 | 125 | 300 | 215 |
| 450 | 18 | 114 | 149 | 200 | 381 | 550 | 245 | 125 | 300 | 266 |
| 500 | 20 | 127 | 159 | 216 | 420 | 600 | 245 | 125 | 300 | 337 |
| 600 | 24 | 154 | 181 | 232 | 489 | 680 | 390 | 242 | 400 | 511 |
| 700 | 28 | 165 | | | 502 | 815 | 390 | 242 | 5000 | 905 |
| 800 | 32 | 190 | | | 975 | 920 | 420 | 262 | 400 | 1221 |
| 900 | 36 | 203 | | | 1075 | 1020 | 420 | 262 | 400 | 1576 |
| 1000 | 40 | 216 | | | 1175 | 1120 | 550 | 325 | 500 | 2090 |
| 1200 | 48 | 254 | | | 1405 | 1340 | 550 | 325 | 500 | 2227 |

^{*}Face to face dimensions (L) herein are according to API 609/ASME B16.10.

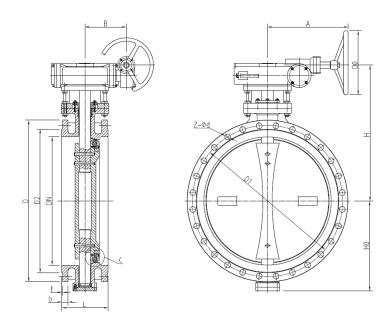
^{*}Flange dimensions (D, D_1 , D_2 , Z-d) refer to Catalogue of Accessory: Series 8 – Flange.

^{*}More dimension specifications are available on request.



HIGH PERFORMANCE BUTTERFLY VALVE

DIMENSION (Flange Type)



| | I | | 1 | I | 1 | I | | |
|---------|------------|-----|----------------|------|-----|-----|----------------|------------------|
| DN (mm) | NPS (inch) | L | H ₀ | н | A | В | D ₀ | Est. Weight (kg) |
| 100 | 4 | 127 | 120 | 230 | 180 | 50 | 150 | 45 |
| 150 | 6 | 140 | 180 | 275 | 185 | 63 | 305 | 80 |
| 200 | 8 | 152 | 200 | 313 | 185 | 63 | 305 | 100 |
| 250 | 10 | 165 | 260 | 313 | 215 | 80 | 305 | 121 |
| 300 | 12 | 178 | 290 | 420 | 215 | 80 | 406 | 159 |
| 350 | 14 | 190 | 320 | 450 | 215 | 80 | 406 | 222 |
| 400 | 16 | 216 | 352 | 480 | 245 | 125 | 300 | 237 |
| 450 | 18 | 222 | 390 | 543 | 245 | 125 | 300 | 271 |
| 500 | 20 | 229 | 425 | 585 | 245 | 125 | 300 | 300 |
| 600 | 24 | 267 | 485 | 643 | 390 | 202 | 400 | 381 |
| 700 | 28 | 292 | 540 | 737 | 390 | 202 | 500 | 651 |
| 800 | 32 | 318 | 605 | 885 | 427 | 262 | 400 | 792 |
| 900 | 36 | 330 | 665 | 975 | 427 | 262 | 400 | 1034 |
| 1000 | 40 | 410 | 705 | 1130 | 550 | 325 | 500 | 1334 |
| 1200 | 48 | 470 | 850 | 1150 | 550 | 325 | 500 | 1953 |

^{*}Face to face dimensions (L) herein are according to API 609/ASME B16.10.

^{*}Flange dimensions (D, D $_1$, D $_2$, Z-d, b, f) refer to Catalogue of Accessory: Series 8 – Flange.

^{*}More dimension specifications are available on request.