VALVE DETAILS

- McCannalok High Performance Butterfly Valve
- Wafer | Lug | Double Flange
- NPS 2 to 66 | DN 50 to 1500
- ASME Class 150, 300, 600 | PN 10, 16, 25, 40, 63, 100
- Bray Series 40/42/44 Wafer or Series 41/43/45 Lug or Series 4A/4B Double Flanged or approved equal.

BODY

- Shall be one-piece wafer, lug or double flanged design with extended neck to allow for 2″ of piping insulation.
- Shall be designed per ASME B16.34.
- Flange hole drilling per international flange standard as specified.
- Body face-to-face per:
  - API 609 Category B
  - ASME B16.10
  - EN 558
  - ISO 5752
- Internal over-travel stop shall be provided to prevent over-travel of the disc and minimize possible seat damage.

DISC

- Shall be a one-piece design.
- Disc edge shall be hand polished for minimum torque and maximum sealing capability.

STEM

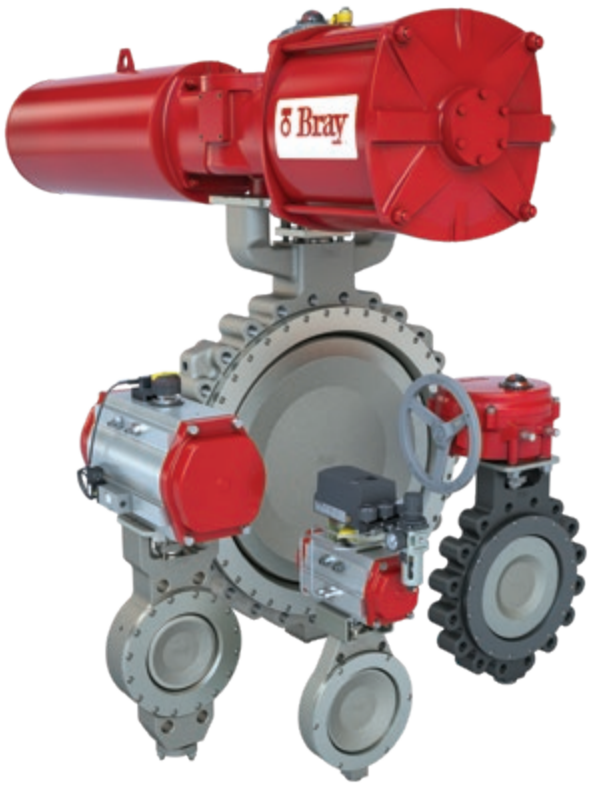
- Shall be one-piece design to maximize strength.
- Shall be blowout proof design with prevention ring located outside the pressure boundary. Design must fully conform to API 609.
- Available in multiple materials for varying strength requirements and corrosive environments.

SEAT

- Design shall consist of a resilient energizer totally encapsulated by the seat and isolated from all line media contact.
- Lug style design must allow for bidirectional sealing at full rated pressure with the downstream flange removed.
- Seat design must be pressure assisted, not pressure dependent.
- Seat retainer shall be full-faced and firmly attached by bolts located outside the sealing area to protect them from corrosion. Uninterrupted gasket sealing surface must be maintained for the full flange face.
- The seat assembly shall be locked in the body recess by the full-faced retainer.
- The seat shall be self-adjusting for wear and temperature changes.
- The seat shall provide tight shutoff after one million cycles.
- The seat shall be easily field replaceable.

PACKING AND BEARINGS

- Provided with top and bottom stem bearings consisting of a 316 stainless steel shell with a TFE/glass fabric liner bearing surface.
- Equipped with an externally adjustable stem packing system that allows packing adjustment without removing the actuator.



APPROVALS AND CERTIFICATIONS

- CE:
  - PED 2014/68/EU
- Fire Tested:
  - API 607
  - ISO 10497
- Fugitive Emissions Certification:
  - API 641
  - ISO 15848-1
  - TA-Luft VDI 2440
- ANSI/NSF 61/372
- SIL 3 Capable
- ABS Type Approval
- ATEX 2014/34/EU
- Bureau Veritas Type Approval
- China Classification Society (CCS) Type
- CRN
- DNV
- EC1935
- TR CU

VALVE ACTUATOR MOUNTING PAD

- ISO 5211

TESTING

- Manufactured, assembled, and tested in compliance with a written ISO 9001 quality assurance program.
- API 598 High and Low Pressure Bidirectional Tests
- EN 12266
- ISO 5208
- MSS SP 61

PRESSURE RATINGS

- ASME Class 150 | PN 10, PN 16
  - NPS 2 to 66 | DN 50 to 1500
  - 285 psi (20 bar)
- ASME Class 300 | PN 25, PN 40
  - NPS 2 to 54 | DN 50 to 1400
  - 740 psi (50 bar)
- ASME Class 600 | PN 63, PN 100
  - NPS 3 to 36 | DN 80 to 900
  - 1440 psi (100 bar)

DEAD-END SERVICE (LUG BODY ONLY WITH DOWNSTREAM FLANGE REMOVED)

- ASME Class 150 | PN 10, PN 16
  - NPS 2 to 66 | DN 50 to 1500
  - 285 psi (20 bar)
- ASME Class 300 | PN 25, PN 40
  - NPS 2 to 54 | DN 50 to 1400
  - 740 psi (50 bar)
- ASME Class 600 | PN 63, PN 100
  - NPS 3 to 36 | DN 80 to 900
  - 1440 psi (100 bar)