

## BRAY RECOMMENDED SPECIFICATIONS

## Series 22/23 Resilient Seated Valve

## Valve Type:

Bray Series 22 wafer or Series 23 lug or approved equal.

## Body:

- Shall be two-piece wafer or lug design with extended neck to allow for 2" piping Insulation.
- Flange locating holes shall be provided on wafer bodies to allow for quick and precise alignment during valve installation.
- PTFE impregnated steel bearing shall be provided in the upper and lower valve journal for precision alignment of the upper and lower stem.
- Reinforced PTFE gaskets shall be placed between body halves to eliminate potential leak path and contamination from environmental conditions.
- Body bolts shall be 316 Stainless Steel.

#### Disc:

- Disc edge and hub on metal discs shall be spherically machined and hand polished for minimum torque and maximum sealing capability.
- PTFE and PFA discs shall have 1/8" (3mm) minimum thickness of encapsulated over the following metals: 2"-12" (25mm-300mm) Valves encapsulated over 316 Stainless Steel 14"-24" (350mm-600mm) Valves encapsulated over 17-4PH Stainless Steel
- Disc materials are to be fully certified and marked accordingly for traceability.

### Stem:

- Shall be of two-piece design.
- No part of the stem shall be exposed to the line media.
- Disc to stem connection shall be an internal double "D" design with no possible leak paths in disc-to-stem connection. External disc-to-stem connections such as disc screws or pins are not allowed.
- Stem shall be mechanically retained in body neck for blowout proof protection and no part of the stem shall be exposed to line media.
- Stem materials are to be fully certified and marked accordingly for traceability.



#### Seat:

- Shall be designed to reduce seating/unseating torque and reduce wear on the contacting parts.
- Materials shall be pure, virgin PTFE, Conductive PTFE or UHMWPE with 1/8" (3mm) minimum thickness.
- Seat materials are to be fully certified and marked accordingly for traceability.
- The design shall include a resilient seat energizer extending completely around the seat including the disc hub area to provide uniform force sufficient for tight shut-off.
- The seat shall totally encapsulate the body isolating it from the line media and no flange gaskets shall be required.

#### Testing:

 Valve shall be tested to 110% of the rated pressure.



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#### **Pressure Ratings:**

Valve shall be rated for bubble-tight shut-off at pressure rating shown below.

Bi-directional Service (With downstream flanges and disc in closed position):

### All Series 22 and Series 23 Valves:

• 2"-24" (50mm-600mm) 150 psi (10.3 Bar)

Dead-End Service (No downstream flanges and disc in closed position):

#### All Series 23 Valves:

- 2"-12" (50mm-300mm) 75 psi (5.2 Bar)
- 14"-24" (350mm-600mm) 50 psi (3.4 Bar)

### **Approvals & Certifications:**

- CE/PED Certification
- SIL Certification
- ABS Certification
- Bureau Veritas Certification
- DNV