

FORGED STEEL

BALL VALVE (Class-800)

INTRODUCTION

Leader Ball Valves are available in three-piece construction. It offers full flow with minimum turbulence and can balance or throttle fluids. Ball move from closed to full open in a quarter of a turn of the shaft and therefore referred to as quarter turn ball valve.

PRINCIPAL FEATURES

- Design Std.: BSEN ISO 17292.
- Pressure Temperature Rating as per ISO 5208 / API 598.
- Sturdy design for high pressure & temperature service.
- Three-piece constructions designed for easy online service.
- Floating Ball, line pressure forces the floating ball against the downstream seat to effect bubble-tight sealing.
- Mirror-finished Solid Stainless Steel Ball ensures bubble-tight sealing and lower operating torques.
- Premium quality RPTFE seats to resist high temperature than ordinary virgin PTFE.
- Inbuilt antistatic mechanisms to provide electrical continuity.
- Blowout proof stem design.
- Fire safe design as per API 607, feature secondary metal seats act in the event of a fire, after the soft-seat totally deform, the ball moves and touch the metal seat to form a leak-tight seal.
- Screwed Female Taper ends as per ASME B1.20.1 (NPT) / BS 21, Screwed Female Parallel ends as per ISO 228 / BS 21 available on request.
- Socket-weld / Butt Welded are available on request with 100mm Nipple on both the ends.
- Lever operated.
- Valves can be offered with electrical and Pneumatic actuators on request.
- Valves are available with IBR certification.

END CONNECTION

Screwed ends / Socket Weld.

WORKING PRESSURE

Maximum working pressure 69 Bar @ 38°C.
See Pressure / Temperature Chart at page No.38.

TEMPERATURE LIMITS

Maximum working temperature 175°C.
See Pressure / Temperature Chart at page No.38.



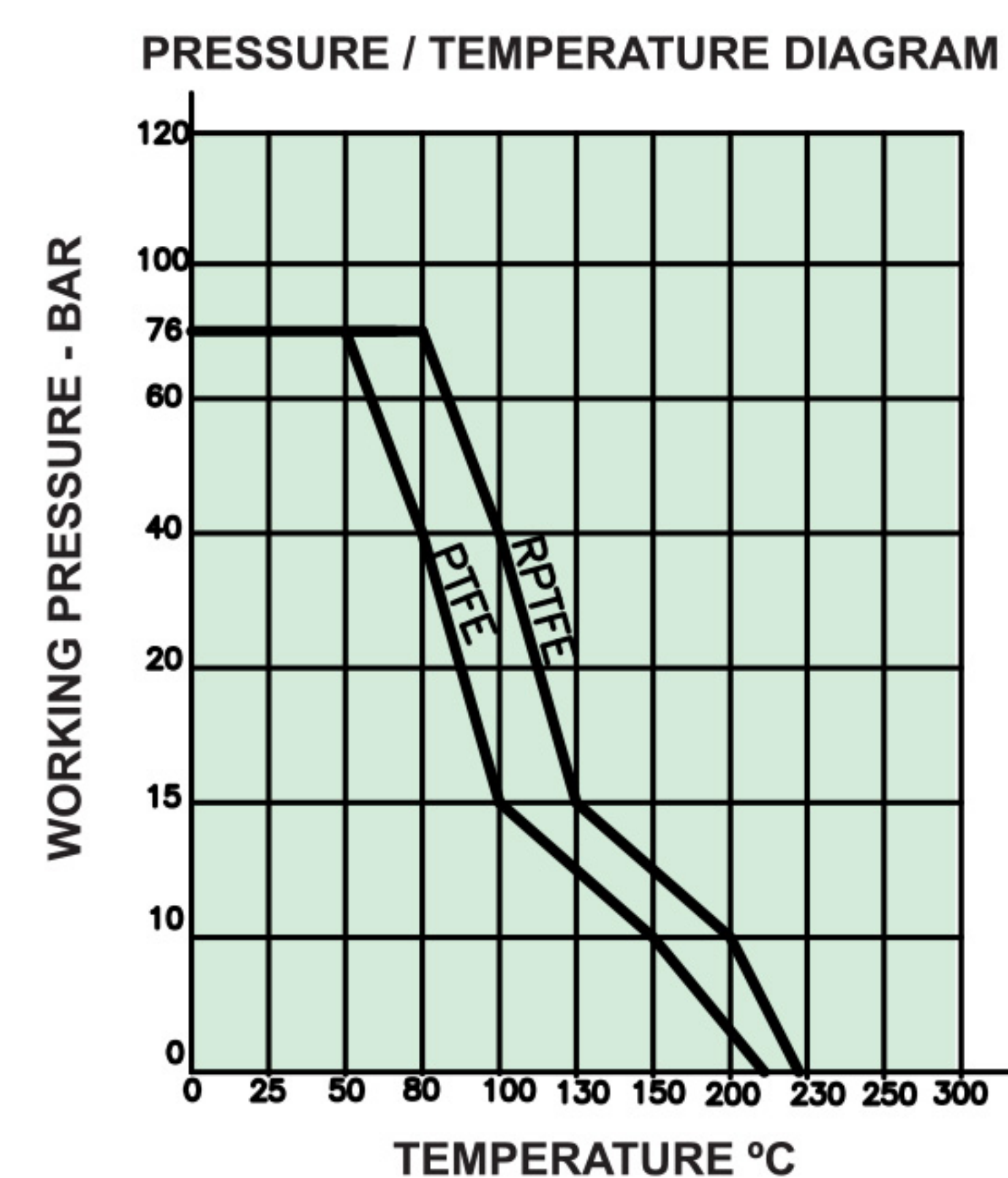
| | | |
|----------------------------|----------------------------|-----------|
| ■ Item Code: | FCS016, | FCS017 |
| ■ Bore Type: | Reduced Bore | Full Bore |
| ■ Pressure Rating: | CL-800, | CL-800 |
| ■ Testing Standard: | API-598, BSEN 12266 Part-1 | |
| ■ Size Range: | 15mm to 50mm | |
| ■ Product Standard: | BSEN ISO 17292 | |

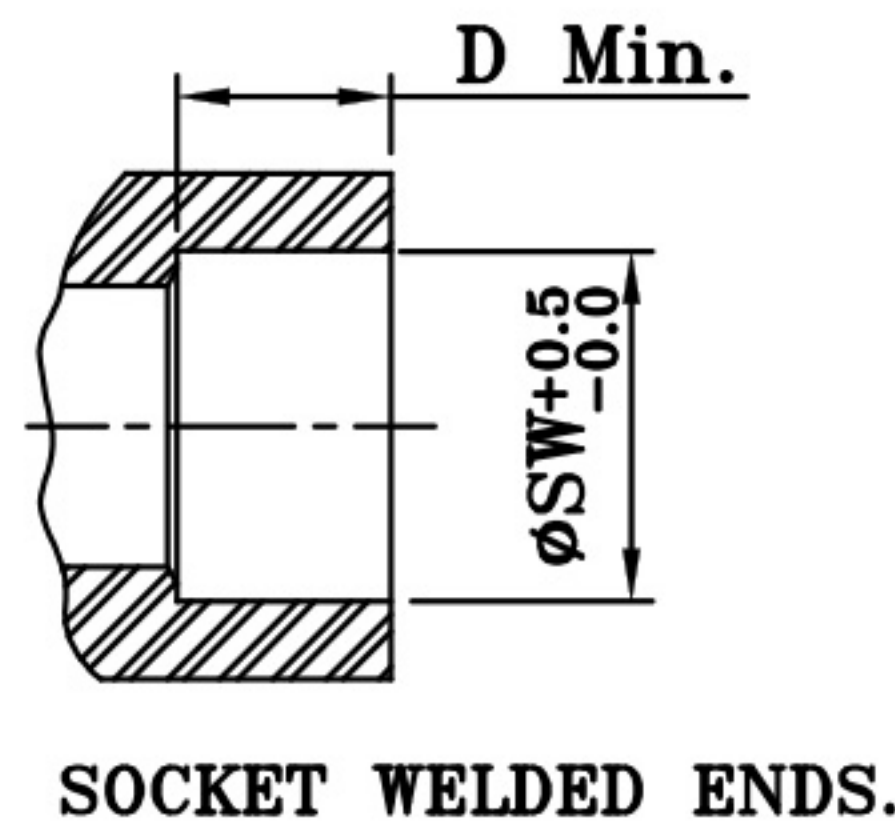
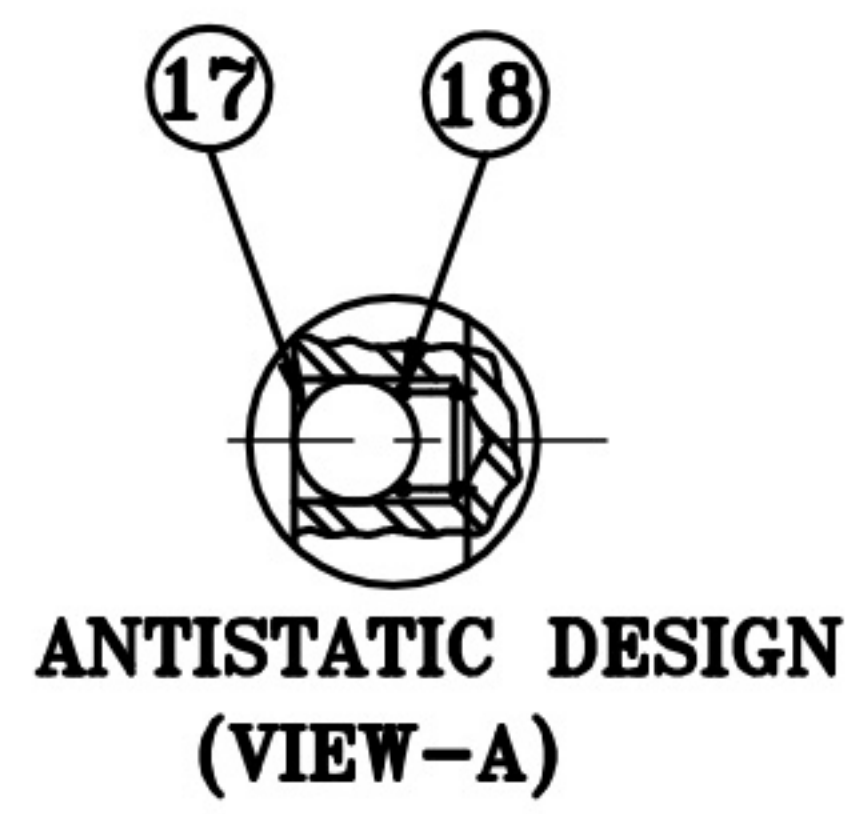
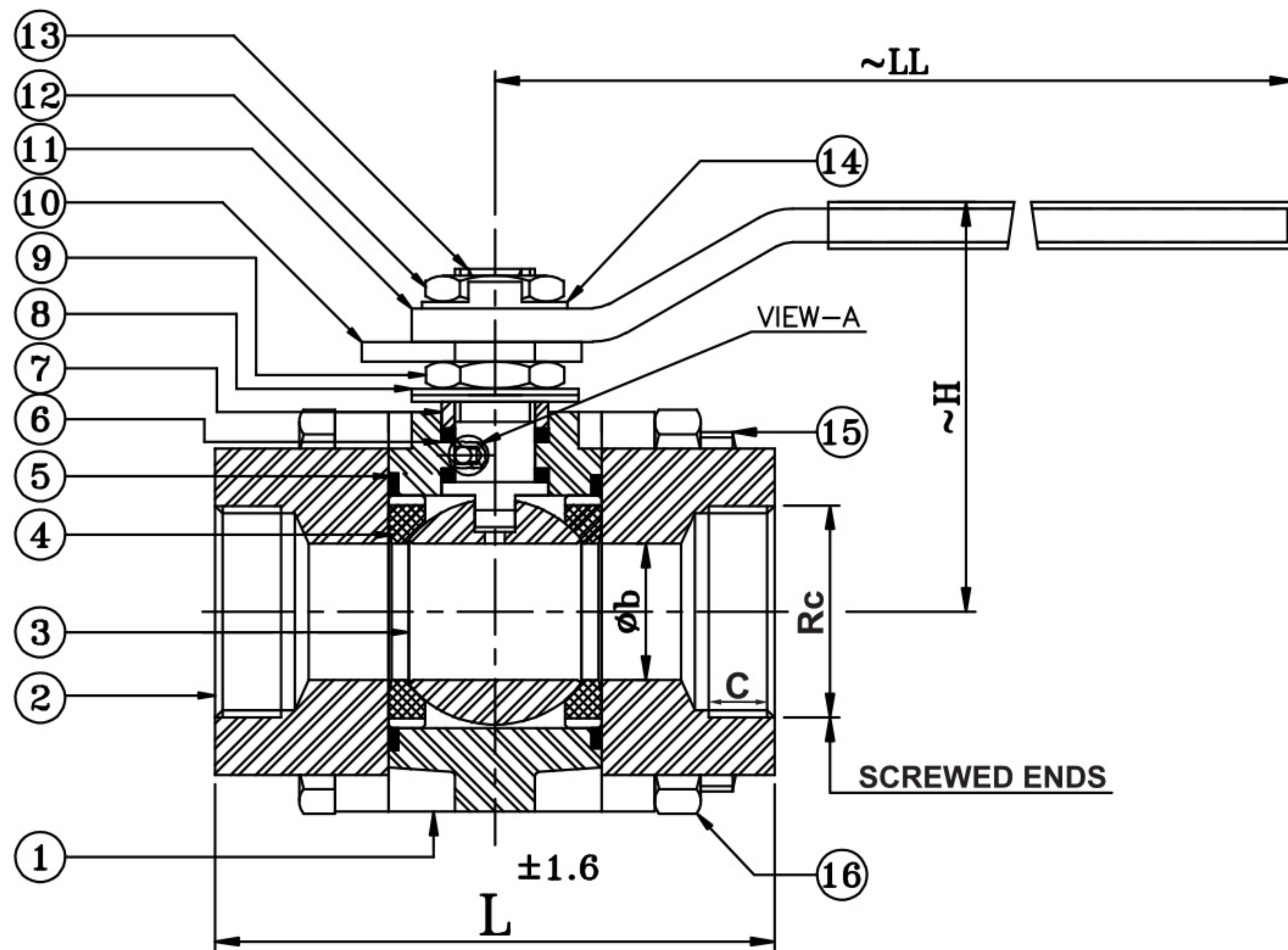
SUITABLE FOR

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

TEST PRESSURE (Hydrostatic)

| | |
|---------------|---------------|
| Rating | CL-800 |
| Body (Hyd.) | 207 Bar |
| Seat (Hyd.) | 76 Bar |
| Seat (Air) | 6.9 Bar |





DIMENSIONAL DATA CLASS-800 (REDUCED BORE)

| SIZE (mm) | 15 | 20 | 25 | 32 | 40 | 50 |
|-----------|------|------|------|--------|--------|------|
| L | 60 | 70 | 85 | 95 | 110 | 120 |
| Øb | 9.5 | 12.5 | 19 | 25 | 32 | 40 |
| ~H | 80 | 82 | 103 | 112 | 118 | 122 |
| C | 14.5 | 18 | 18 | 20 | 20 | 20 |
| Rc | 1/2" | 3/4" | 1" | 1-1/4" | 1-1/2" | 2" |
| ~LL | 165 | 165 | 180 | 180 | 230 | 272 |
| ØSW | 21.7 | 27 | 33.8 | 42.5 | 48.6 | 61.6 |
| D | 10 | 13 | 13 | 13 | 13 | 16 |

DIMENSIONAL DATA CLASS-800 (FULL BORE)

| SIZE (mm) | 15 | 20 | 25 | 32 | 40 | 50 |
|-----------|------|------|------|--------|--------|------|
| L | 70 | 85 | 95 | 110 | 120 | 140 |
| Øb | 12.5 | 19 | 25 | 32 | 40 | 50 |
| ~H | 82 | 103 | 112 | 118 | 125 | 125 |
| C | 14.5 | 16 | 19 | 20 | 23 | 23 |
| Rc | 1/2" | 3/4" | 1" | 1-1/4" | 1-1/2" | 2" |
| ~LL | 125 | 175 | 175 | 225 | 225 | 225 |
| ØSW | 21.7 | 27 | 33.8 | 42.5 | 48.6 | 61.6 |
| D | 11 | 14 | 14 | 14 | 14 | 17 |

MATERIAL SPECIFICATION

| P.No. | NAME OF PART | MATERIAL | SPECIFICATION |
|-------|---------------------|--|--|
| 1 | BODY | FORGED STEEL | ASTM A105 (*) |
| 2 | PIPE CONNECTOR | FORGED STEEL | ASTM A105 (*) |
| 3 | BALL | STAINLESS STEEL | ASTM A276 TYPE 304 / ASTM A351 Gr. CF8 |
| 4 | SEAT | PTFE / RPTFE | |
| 5 | BODY SEAL | PTFE / RPTFE / GRAFOIL | |
| 6 | STEM & GLAND SEAL | PTFE / RPTFE / GRAFOIL | |
| 7 | GLAND | STAINLESS STEEL | ASTM A276 TYPE 304 |
| 8 | BELLEVILLE WASHER | SPRING STEEL | ZINC PLATED |
| 9 | STEM NUT | STAINLESS STEEL | ASTM A276 TYPE 304 |
| 10 | STOPPER PLATE | CARBON STEEL | IS 2062 |
| 11 | LEVER (ZINC PLATED) | CARBON STEEL PLATE WITH PLASTIC SLEEVE | |
| 12 | LEVER NUT | STAINLESS STEEL | ASTM A276 TYPE 304 |
| 13 | STEM | STAINLESS STEEL | ASTM A276 TYPE 304 |
| 14 | LOCKING WASHER | CARBON STEEL | IS 2062 |
| 15 | BOLTS | ALLOY STEEL | IS 1367 CL-10.9 |
| 16 | NUTS | H.T. STEEL | IS 1367 CL-10.9 |
| 17 | ANTISTATIC BALL | STAINLESS STEEL | SS TYPE 316 |
| 18 | SPRING | STAINLESS STEEL | SS TYPE 316 |

(*) MATERIAL COMBINATION ALSO AVAILABLE IN F304, F316, F51.