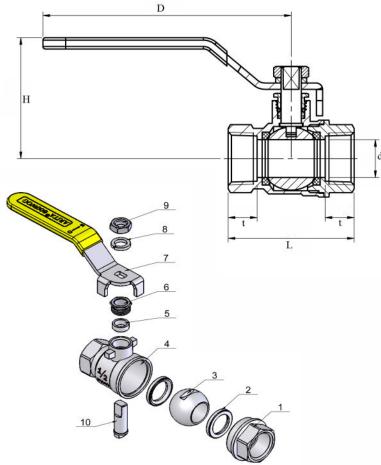
A R T 6 0 0 - X X X

PN 40 / Class 600 Full Bore Ball Valve







Materials

| NO. | COMPONENT | MATERIAL | | |
|-----|---------------|---------------|--|--|
| 1 | CAP | BRASS | | |
| 2 | SEAT | PTFE | | |
| 3 | BALL | CHROMED BRASS | | |
| 4 | BODY | BRASS | | |
| 5 | PACKING GLAND | PTFE | | |
| 6 | GLAND | BRASS | | |
| 7 | HANDLE | STEEL | | |
| 8 | SPRING WASHER | STEEL | | |
| 9 | HEX-NUT | STEEL | | |
| 10 | STEM | BRASS | | |

Features: This kind of ball valve can be used in equipment or pipe system to open or shut the passageway for controlling the flow of medium.

Application: Water, Oil & Gas

Working Temperature: 120 °C

Thread: BSPT (BS 21) or NPT (ANSI B 1.20.1)

Dimensions

| SIZE | INCH | 1/4 | 3/8 | 1/2 | 3/4 | 1 | 11/4 | 11/2 | 2 |
|---------|------|-----|-----|------|------|------|------|------|------|
| | MM | 8 | 10 | 15 | 20 | 25 | 32 | 40 | 50 |
| d (mm) | | 10 | 10 | 15 | 20 | 25 | 32 | 40 | 50 |
| H(mm) | | 40 | 41 | 48 | 52.5 | 63.2 | 74.5 | 83 | 92.5 |
| D(mm) | | 89 | 89 | 98.5 | 98.5 | 125 | 140 | 140 | 165 |
| L(mm) | | 40 | 40 | 50 | 54.5 | 66 | 75 | 91 | 103 |
| t(mm) | | 9.5 | 9.5 | 11.5 | 12 | 14.5 | 15.5 | 17.5 | 18 |
| Wt. (g) | | 124 | 126 | 182 | 308 | 452 | 602 | 936 | 1524 |

Maximum Working Pressure

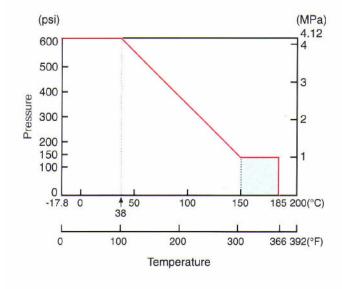
| | Working Pres | sure Non-Shock | Test Pressure | | |
|---------|-----------------|----------------------|---------------------|------------|--|
| Unit | Saturated Steam | Cold Water, Oil, Gas | Shell (Hydrostatic) | Seat (Air) | |
| psi | 150 | 600 | 900 | 80 | |
| MPa | 0.98 | 4.12 | 6.18 | 0.59 | |
| Bar | 9.8 | 41.2 | 61.8 | 5.9 | |
| kgf/cm² | 10 | 42 | 63 | 6 | |

Effective Length of Thread

mm (inch)

| SIZE | inch | 1/4 | 3/8 | 1/2 | 3/4 | 1 | 11/4 | 11/2 | 2 |
|------|------|------------|----------|-----------|-----------|-----------|-----------|-----------|-------------|
| SILL | mm | 8 | 10 | 15 | 20 | 25 | 32 | 40 | 50 |
| BRE | 3-AI | 7.5(0.295) | 8(0.315) | 10(0.394) | 11(0.433) | 12(0.472) | 13(0.512) | 14(0.552) | 16.5(0.650) |

P-T Rating



* Advisory Note:

Please be advise that applications in the shaded zone
will reduce the service life of the valve

A CAUTION

- Don't use valves for super-heated steam service. Refer to the maximum working pressure shown in the pressure-temperature rating.
- Don't use valves with intermediate opening positions. Pressurizing partly open valves will cause seat deformation, and internal fluid leakage.
- Don't apply any external force counterclockwise to the valve cap. It may affect the assembly of valve body to cap, and cause external fluid leakage.
- Don't apply an excessive force when threading pipes into valve bores. It will cause seat deformation, and operational difficulty. Adequate threading torques are given below:

| Valve Size | 1/4"~1/2" | 3/4 | 1" | 11/4" | 11/2 | 2 |
|---------------------------|-----------|-------|-------|-------|-------|-------|
| Threading Torque (N·m) | 20~30 | 40~50 | 50~60 | 60~70 | 70~80 | 80~90 |