

# Hi-Pro Ball Valve

for up to 10,000 psi/689 bar operations

## Product Description

These high performance two piece bi-directional Ball Valves offer the user full cold working pressure ratings up to 10,000 psi (689 bar), giving 100% bubble tight shut off and continuous repeatable performance. The Ball Valves are suitable for the most demanding applications in the oil, gas and process control industries. All valves also meet the requirements of ANSI B31.1 for use in power plants.

By offering a true two piece design, body leakage paths are reduced to a minimum. With the added opportunity to select integral compression ends the user can eliminate the use of taper threads and thread sealant. This avoids system contamination, reduces leakage paths, installation costs, weight and space.

## Specifications

- 316 Stainless steel construction
- Maximum cold working pressure rating 6,000 psi (414 bar) with P.T.F.E. seats\*
- Temperature rating PTFE seats -54°C to +204°C (-65°F to +400°F) \*
- Maximum cold working pressure rating 10,000 psi (689 bar) with PEEK seats†
- Temperature rating PEEK seats -54°C to +232°C (-65°F to +450°F) \*
- Cv values - 10mm, 15mm, 20mm and 25mm

\* Always refer to P/T graph

† All B31.1 compliant valves are limited to a maximum working pressure of 6000psi (414 bar)

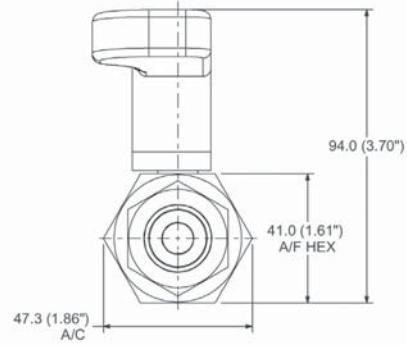
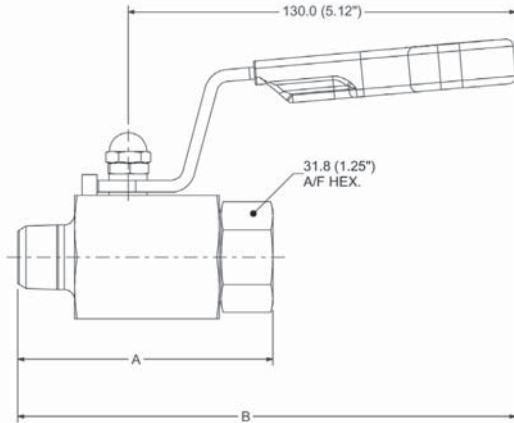


## Features

- Two piece body design - minimal leakage paths
- 4:1 Pressure boundary designed safety factor
- Designed to comply with requirements of ANSI/ASME B16.34 where applicable
- Bi-directional
- PEEK and PTFE standard ball seat materials
- PHflex seats available for 25mm bore
- PTFE and Graphoil gland packings
- Bubble tight shutoff
- Floating ball principal with dynamic response seats featuring inherent self relief
- Anti blowout stem
- Integral compression ends available eliminating taper threads and thread sealants
- Low torque operation
- Quarter turn positive stop handle with ergonomically designed protective sleeve
- Full hydrostatic and low pressure air tested
- Connector thread environmentally sealed
- Anti static
- Firesafe designed to meet API 607, BS6755 Pt2 (optional)

for up to Class 4500 (10,000 psi/689 bar) operations (10mm bore)

# Hi-Pro Ball Valve



## Standard range part numbers 10mm bore

| Part number | Part number | Inlet       | Outlet      | Dimensions   |              |
|-------------|-------------|-------------|-------------|--------------|--------------|
|             |             |             |             | A mm (inch)  | B mm (inch)  |
| Class 2500  | Class 4500  | Female      | Female      |              |              |
| HPBY*4FF    | HPBY*4FFHP  | 1/4" Female | 1/4" Female | 70.0 (2.76)  | 161.5 (6.36) |
| HPBY*6FF    | HPBY*6FFHP  | 3/8" Female | 3/8" Female | 71.0 (2.80)  | 162.0 (6.38) |
| HPBY*8FF    | HPBY*8FFHP  | 1/2" Female | 1/2" Female | 85.0 (3.35)  | 166.5 (6.56) |
|             |             | Male        | Female      |              |              |
| HPBY*4M4F   | HPBY*4M4FHP | 1/4" Male   | 1/4" Female | 70.0 (2.76)  | 161.5 (6.36) |
| HPBY*8M8F   | HPBY*8M8FHP | 1/2" Male   | 1/2" Female | 85.0 (3.35)  | 166.5 (6.56) |
|             |             | A-LOK®      | A-LOK®      |              |              |
| HPBY*4A     | —           | 1/4" A-LOK® | 1/4" A-LOK® | 95.0 (3.74)  | 165.5 (6.52) |
| HPBY*6A     | —           | 3/8" A-LOK® | 3/8" A-LOK® | 99.1 (3.90)  | 167.4 (6.59) |
| HPBY*8A     | —           | 1/2" A-LOK® | 1/2" A-LOK® | 104.7 (4.12) | 170.2 (6.70) |
| HPBY*M6A    | —           | 6mm A-LOK®  | 6mm A-LOK®  | 95.0 (3.74)  | 165.5 (6.52) |
| HPBY*M8A    | —           | 8mm A-LOK®  | 8mm A-LOK®  | 96.6 (3.80)  | 166.3 (6.55) |
| HPBY*M10A   | —           | 10mm A-LOK® | 10mm A-LOK® | 99.5 (3.92)  | 167.6 (6.60) |
| HPBY*M12A   | —           | 12mm A-LOK® | 12mm A-LOK® | 104.7 (4.12) | 170.2 (6.70) |

\*Insert material code - select from material matrix (B = Standard 316 Stainless Steel). For CPI™ change A to Z. "A" dimensions given for finger tight nuts. For compression ended valve pressure ratings consult tube ratings table. Combination ends are available.

**Standard product specification:** PTFE packing with PTFE seats, 10mm bore ball 6,000 psi (414 bar).

**Standard product specification:** PTFE packing with PEEK seats, 10mm bore ball 10,000 psi (689 bar).

## Cold working pressures (psi/bar) in accordance with ANSI/ASME B16.34

| Material                | *Insert | Class Rating |          |           |
|-------------------------|---------|--------------|----------|-----------|
|                         |         | 1500         | 2500     | 4500      |
| 316 Stainless steel std | B       | 3600/248     | 6000/414 | 10000/689 |
| Alloy 400               | D       |              | 5000/345 | 9000/620  |
| Duplex                  | E       | 3600/248     | 6000/414 | 10000/689 |
| Super Duplex            | F       |              | 6000/414 | 10000/689 |
| Hasteloy                | G       |              | 6000/414 | 10000/689 |
| 6Mo                     | K       |              | 6000/414 | 10000/689 |
| Alloy 625               | M       |              | 6000/414 | 10000/689 |

| Available options                                | Part number Suffix |
|--------------------------------------------------|--------------------|
| Graphoil packing                                 | 3                  |
| PEEK seats                                       | PK                 |
| Secured end connector                            | LC                 |
| Handle locking                                   | HL                 |
| Spanner actuation                                | SA                 |
| Panel mounting                                   | PM                 |
| Fire safe design - Graphoil packing (std)        | FS                 |
| NACE compliant materials**                       | NC                 |
| Retro-fit handle locking kit (for site assembly) | HPHLKIT            |
| PHlex seats                                      | PH                 |
| Base mounting holes (consult Parker)             | -                  |

Note: Heat Code Trace (HCT) material traceability certificates available on request \*\*Does not apply for A-LOK/CPI™ ended valves in 316 stainless steel.