

PBM FIRE RATED ANSI BALL VALVES

AN Series 6, 1/2" - 6"

DESIGN FEATURES:

- Fire Rated, tested to API-607
- Valves are rated for full vacuum.
- Valves are non-Adjust-O-Seal®
- Valve are a two-piece "split body" design.
- Upstream and downstream bubble-tight sealing capability allows valve body cleaning, purging, and draining.
- Stem assembly accommodates PBM Direct Mount Actuation for accurate alignment and increased cycling life.
- Valves meet B16.34 in appropriate materials and ends
- Optional Purge port and milled ball flats drain holes allow inline CIP to prevent clogging and plug formation.



| SPECIFICATIONS | Industrial Fire Rated ANSI Valves |
|--------------------------|---|
| Sizes | 1/2" - 6" Series 6 |
| Material | 316L, (ASTM A351 CF3M), Hastelloy® C276 and other ASME B16.34 materials |
| Temperatures | 20°F to 450°F depending on seat and seal material |
| End Connections | 150# & 300# RF Flange |
| Seats & Seals | White TFM™ standard, others available |
| Stem Packing Material | TFM™ and S-TEF® |
| Body Bolts & Nuts | B16.34 bolting |
| Maximum Working Pressure | up to 740 psig CWP depending on valve series, size and temperature |

| CV Values (gpm) | | | |
|-----------------|----------|-----------------------|-----------------------|
| Size | Cv (gpm) | Weight 150 # Class | Weight 300 # Class |
| 1/2" | 13 | 3.5 lbs. | 4.8 lbs. |
| 3/4" | 52 | 6.8 lbs. | 7.3 lbs. |
| 1" | 80 | 8 lbs. | 11 lbs. |
| 1-1/2" | 190 | 16 lbs. | 23 lbs. |
| 2" | 400 | 25 lbs. | 30 lbs. |
| 3" | 1,100 | 50 lbs. | 71 lbs. |
| 4" | 2,400 | 96 | 130 |
| 6" | 5,600 | 242* | CF |

*Valve approximate weight without handle

How To Order:

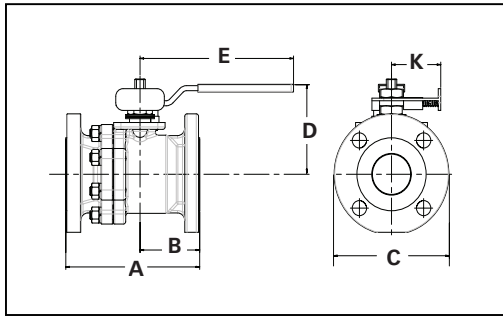
| PRODUCT (1-2) MATERIAL (3-4) | | SIZE (5) SERIES (6) | | ENDS (7-8) | | SEAT & SEAL (9) | | Purge Ports (10-11) | | BALL & STEM (12) | | OPERATOR (13-14) | | POLISH (15-16) | |
|---------------------------------|--------------------------|------------------------|--------|---------------|-------------------|--------------------|--|------------------------|---|---------------------|---------------------------|---------------------|-------------------------------------|-------------------|--|
| AN | H- Cast 316/ 316L S/S | C | 1/2" | 6 | L- 150# RF Flange | G | TFM Seats / Graphite Seals Viton O-Ring | -- | No Purge Port or Ball Option | - | Standard Ball and Stem | -- | W/ Standard Lever Handle | - | 125 Ra ID Standard |
| | C- Hastelloy C-276 | D | 3/4" | | M- 300# RF Flange | J | TFM Seats / Graphite Seals / VTFE Cav Fill / Viton O-Ring | - 8 | Self Flushing Ball | G | 17-4PH Stem | 02 | W/O Handle W/ Stem Actuator Prep | A | 20 Ra ID |
| | Y- Hastelloy C-22 | E | 1" | | | Z | TFM Seats / Graphite Seals EPR O-Ring | - V | Slotted V-Ball | | | 04 | Locking Lever Handle | C | 20 Ra ID / 32 Ra OD |
| | P- AL6XN | G | 1-1/2" | | | | | - W | 30° V-Ball | | | 08 | Gear Operator (Req'd for 6") | F | 20 Ra ID after Electro Polish |
| | | H | 2" | | | 2 | TFM Seats / Graphite Seals / VTFE Cav Fill / EPR O-Ring | - X | 45° V-Ball | | | 18 | Extended Handle (1/2" thru 4") | | |
| | | K | 3" | | | H | S-TEF® Seats / Graphite Seals / Viton O-Ring | - Y | 60° V-Ball | | | 20 | DA 80psig actuator | | |
| | | L | 4" | | | | | | Other Purge Port & Ball Options - Contact PBM | | | 27 | DA 60psig actuator | | More polish available - Contact PBM |
| | | M | 6" | | | 0 | S-TEF® Seats / Graphite Seals / EPR O-Ring | | | | | 34 | SR 80psig actuator | | |
| | | | | | | 9 | TFM® Seats / Seals Teflon Encaps. O-Rings | | | | | 41 | SR 60psig actuator | | |
| | | | | | | | | | Other Seat/seal options available - contact PBM | | | | | | |

Other operator options available -
Contact PBM

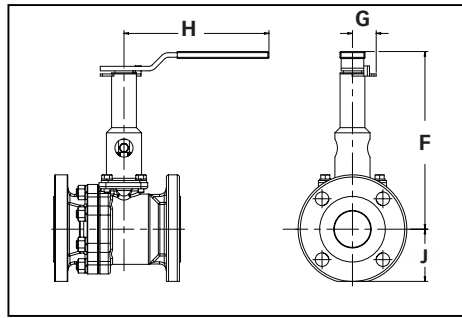
<http://pbmvalve.com/build-a-part-number>

PBM Fire Rated ANSI Ball Valves Manual

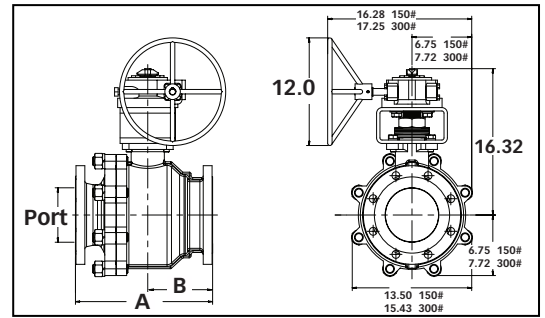
ANSI Valve with Locking Handle



ANSI Valve with Ext. Locking Handle



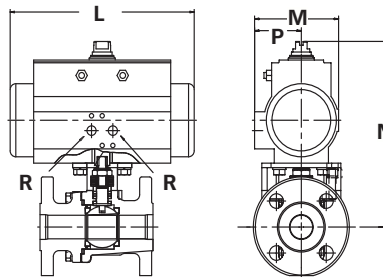
ANSI Valve with Gear Operator (6" only)



| Valve Size | Size Code | Port Dia. | A | | B | | C | | D | E | J | | Ext. Locking Handle | | | Locking Handle | | | |
|------------|-----------|-----------|----------------|-------|----------------------|------|-----------------|-------|------|-------|--------------------------------|----------------------------------|-------------------------|------|-------|----------------|-----|---|--------------------|
| | | | Overall Length | | \varnothing to End | | Flange Diameter | | | | \varnothing to Top of Handle | Handle Length from \varnothing | \varnothing to Bottom | | F | G | H | K | Hole Dia. for Lock |
| | | | 150# | 300# | 150# | 300# | 150# | 300# | | | | | 150# | 300# | | | | | |
| 1/2" | C | 0.5 | 4.25 | 5.50 | 1.85 | 2.52 | 3.50 | 3.75 | 2.66 | 4.15 | 1.62 | 1.75 | 7.19 | 1.00 | 5.09 | 1.62 | .25 | | |
| 3/4" | D | 0.75 | 4.62 | 6.00 | 2.12 | 2.90 | 3.88 | 4.62 | 2.78 | 4.15 | 1.80 | 2.15 | 7.34 | 1.00 | 5.09 | 1.62 | .25 | | |
| 1" | E | 1.00 | 5.00 | 6.50 | 2.25 | 3.15 | 4.25 | 4.88 | 3.09 | 5.06 | 2.06 | 2.38 | 7.63 | 1.00 | 5.09 | 2.08 | .28 | | |
| 1-1/2" | G | 1.50 | 6.50 | 7.50 | 2.68 | 3.18 | 5.00 | 6.12 | 4.16 | 8.03 | 2.38 | 3.00 | 9.50 | 1.31 | 8.00 | 2.58 | .38 | | |
| 2" | H | 2.00 | 7.00 | 8.50 | 3.12 | 3.84 | 6.00 | 6.50 | 4.46 | 8.03 | 2.88 | 3.12 | 9.81 | 1.31 | 8.00 | 2.58 | .38 | | |
| 3" | K | 3.00 | 8.00 | 11.12 | 3.57 | 5.19 | 7.50 | 8.25 | 7.00 | 12.06 | 3.50 | 4.00 | 11.69 | 1.50 | 12.06 | 3.47 | .38 | | |
| 4" | L | 4.00 | 9.00 | 12.00 | 3.84 | 5.34 | 9.00 | 10.00 | 7.39 | 24.06 | 4.38 | 4.75 | 13.03 | 3.50 | 24.06 | NA | NA | | |
| 6" | M | 6.07 | 15.50 | 15.88 | 7.33 | 7.70 | 11.00 | 12.50 | NA | NA | NA | NA | NA | NA | NA | NA | NA | | |

ACTUATED DIMENSIONS

Unit of Measure = inches
Dimensions based on actuators used with TFM™ seats.



| Size | 80 PSI Double Acting | | | | | 60 PSI Double Acting | | | | | 80 PSI Spring Return \varnothing to Bottom | | | | | 60 PSI Spring Return | | | | |
|--------|----------------------|------|-------|------|-----|----------------------|------|-------|------|-----|--|------|-------|------|-----|----------------------|-------|-------|------|-----|
| | L | M | N | P | R | L | M | N | P | R | L | M | N | P | R | L | M | N | P | R |
| 1/2" | 5.50 | 2.79 | 5.84 | 1.61 | 1/8 | 5.50 | 2.79 | 5.84 | 1.61 | 1/8 | 5.50 | 2.79 | 5.84 | 1.61 | 1/8 | 5.50 | 2.79 | 5.84 | 1.61 | 1/8 |
| 3/4" | 6.38 | 3.17 | 6.44 | 1.77 | 1/8 | 6.38 | 3.17 | 6.44 | 1.77 | 1/8 | 6.38 | 3.17 | 6.44 | 1.77 | 1/8 | 6.38 | 3.17 | 6.44 | 1.77 | 1/8 |
| 1" | 5.55 | 2.8 | 6.71 | 1.61 | 1/8 | 5.55 | 2.8 | 6.71 | 1.61 | 1/8 | 8.27 | 3.72 | 7.87 | 2.07 | 1/8 | 8.27 | 3.72 | 7.87 | 2.07 | 1/8 |
| 1-1/2" | 6.46 | 3.17 | 8.44 | 1.77 | 1/8 | 8.27 | 3.72 | 9.15 | 2.07 | 1/8 | 10.83 | 4.84 | 10.2 | 2.68 | 1/4 | 10.83 | 4.84 | 10.2 | 2.68 | 1/4 |
| 2" | 8.27 | 3.72 | 9.46 | 2.07 | 1/8 | 8.27 | 3.72 | 9.46 | 2.07 | 1/8 | 10.83 | 4.84 | 10.51 | 2.68 | 1/4 | 13.11 | 5.39 | 11.87 | 2.87 | 1/4 |
| 3" | 13.11 | 5.39 | 13.81 | 2.87 | 1/4 | 13.11 | 5.39 | 13.81 | 2.87 | 1/4 | 14.65 | 5.83 | 14.29 | 3.15 | 1/4 | 17.13 | 6.46 | 15.18 | 3.44 | 1/4 |
| 4" | 17.13 | 6.46 | 17.34 | 3.44 | 1/4 | 17.13 | 6.46 | 17.34 | 3.44 | 1/4 | 19.69 | 7.36 | 18.28 | 3.94 | 1/4 | 22.78 | 7.36 | 20.53 | 3.94 | 1/4 |
| 6" | 22.78 | 8.58 | 24.11 | 4.29 | 1/4 | 22.78 | 8.58 | 24.11 | 4.29 | 1/4 | 22.78 | 8.58 | 24.11 | 4.29 | 1/4 | 26.46 | 11.42 | 28.87 | 5.71 | 1/4 |



<http://www.pbmvalve.com/valves/ansi-ball-valve>

<http://pbmvalve.com/maintenance-instructions>

www.PBMValve.com

PBM, Inc. • 1070 Sandy Hill Road, Irwin, PA 15642

Phone: 800.967.4PBM • 724.863.0550

E-mail: info@pbmvalve.com

