

# DESCRIPTION & SPEC

## INDUSTRIAL BALL VALVES

**neptronic®**

For 2 Way control of hot water or chilled water up to 50% Glycol & 15 PSI saturated steam.



### Description

The **Industrial Ball Valve Series** are actuated **Ball Valves** that provide digital or analog control of hot water, chilled water containing up to 50% glycol or 15 PSI steam. Each unit is comprised of a rotary actuator and linkage assembly coupled to the valve body that offers, high pressure differential Close-Off. The standard full port design is less restrictive providing high flow characteristics with low pressure drops.

Valve sizes range from 1/2 inch to 3 inches with a maximum valve body rating of 600 PSIG for a two way. These low profile, compact units can be installed with ease in the often tight, restricted areas found in unit ventilators, fan coils, terminal reheat coils and larger air handlers.

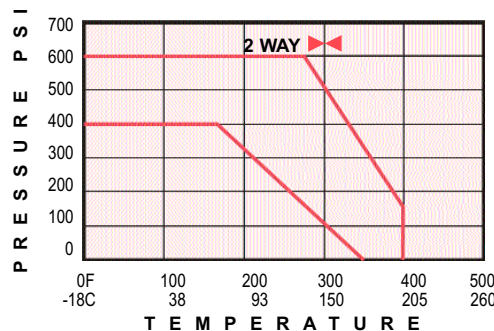


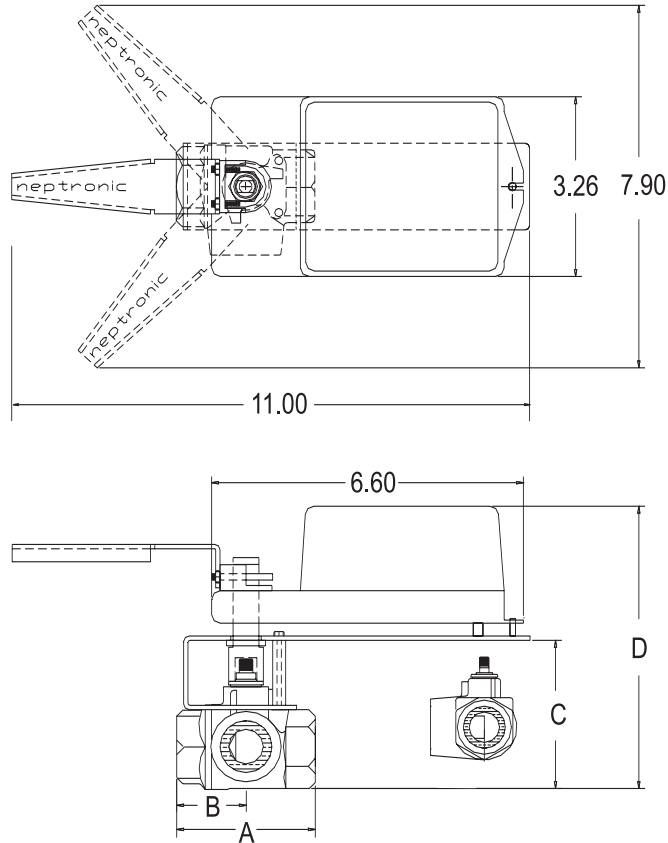
FIG. I PRESSURE vs. TEMPERATURE

### Specifications

|   |  |
|---|--|
| <b>Valve Flow Type:</b>                   | <b>2 Way:</b> Equal Percentage,  |
| <b>Service:</b>                           | Hot water, chilled water, glycol up to 50%, 15 PSIG, saturated steam. (Optional: 150 PSIG saturated steam) |
| <b>Static Pressure &amp; Temperature:</b> | (Refer to Fig. I)  |
| <b>Maximum Working Pressure:</b>          | <b>2 Way:</b> 600 PSIG WOG   |
| <b>Body:</b>                              | Bronze   |
| <b>Ball &amp; Stem:</b>                   | Stainless Steel  |
| <b>Stem Seals:</b>                        | Composite of reinforced Teflon & EPDM "O" rings  |
| <b>Seats:</b>                             | Reinforced Teflon  |
| <b>End Connections:</b>                   | Standard NPT Female  |



**BT/BM Actuated Valve Assembly**



**B SERIES**  
**2 WAY**  
**VALVE**  
**ASSEMBLY**

| SIZE | Cv | Kv | VALVE MODEL PREFIX | CLOSE OFF PSI | A    | B    | C    | D    |
|------|----|----|--------------------|---------------|------|------|------|------|
| 1/2" | 2  | 1  | SB A0020XS1        | 150           | 2.20 | 1.12 | 3.20 | 6.45 |
| 1/2" | 4  | 3  | SB A0040XS1        | 150           | 2.20 | 1.12 | 3.20 | 6.45 |
| 1/2" | 15 | 13 | FP A0150XS1        | 150           | 2.20 | 1.12 | 3.20 | 6.45 |
| 3/4" | 30 | 25 | SB B0300XS1        | 150           | 3.00 | 1.50 | 3.50 | 6.75 |

\* All dimensions are in Inches.



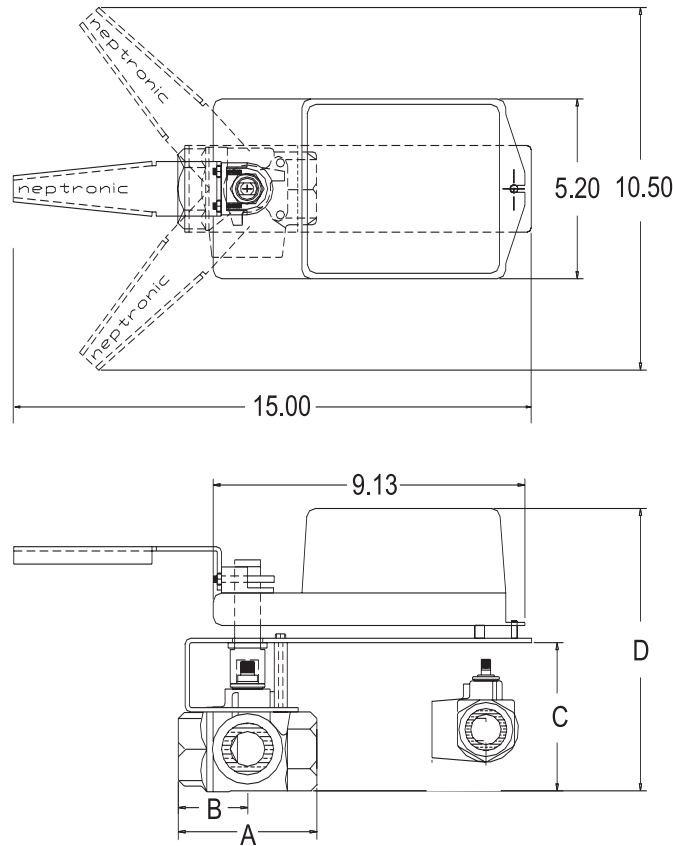
# DIMENSIONS - INDUSTRIAL BALL VALVES

## 3/4"- 1-1/2" TT/TM ACTUATOR VALVE ASSEMBLY

**neptronic®**



### TT/TM Actuated Valve Assembly



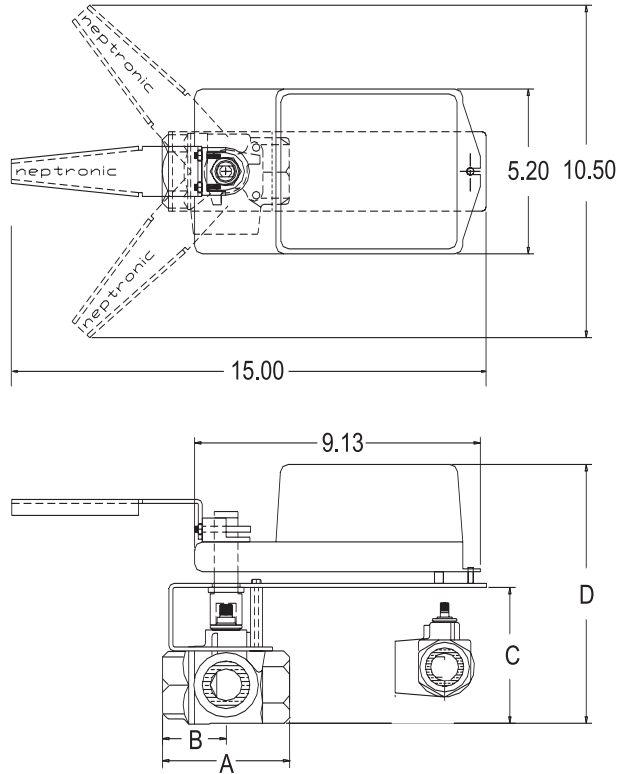

**T SERIES  
2 WAY  
VALVE  
ASSEMBLY**

| SIZE   | Cv  | Kv  | VALVE MODEL PREFIX | CLOSE OFF PSI | A    | B    | C    | D    |
|--------|-----|-----|--------------------|---------------|------|------|------|------|
| 3/4"   | 51  | 44  | FP B0510XS1        | 300           | 3.12 | 1.56 | 3.80 | 7.55 |
| 1"     | 43  | 37  | SB C0430XS1        | 300           | 3.37 | 1.68 | 4.00 | 7.75 |
| 1"     | 68  | 58  | FP C0680XS1        | 300           | 3.62 | 1.81 | 4.30 | 8.05 |
| 1-1/4" | 48  | 41  | SB D0480XS1        | 300           | 4.00 | 2.00 | 4.40 | 8.15 |
| 1-1/4" | 125 | 108 | FP D1250XS1        | 150           | 4.25 | 2.12 | 4.80 | 8.55 |
| 1-1/2" | 84  | 72  | SB E0840XS1        | 150           | 4.37 | 2.18 | 4.70 | 8.45 |

\* All dimensions are in Inches.



**RT/RM Actuated Valve Assembly**



**R SERIES  
2 WAY  
VALVE  
ASSEMBLY**

| SIZE   | Cv  | Kv  | VALVE MODEL PREFIX | CLOSE OFF PSI | A    | B    | C    | D     |
|--------|-----|-----|--------------------|---------------|------|------|------|-------|
| 1-1/2" | 177 | 153 | FP E1770XS1        | 300           | 4.75 | 2.37 | 5.30 | 9.05  |
| 2"     | 108 | 93  | SB F1080XS1        | 150           | 4.68 | 2.34 | 5.10 | 8.85  |
| 2"     | 389 | 336 | FP F3890XS1        | 150           | 5.37 | 2.65 | 5.90 | 9.65  |
| 2-1/2" | 503 | 435 | FP G5030XS1        | 75            | 6.50 | 3.25 | 7.00 | 10.75 |
| 3"     | 370 | 320 | SB H3700XS1        | 75            | 6.75 | 3.37 | 7.10 | 10.85 |

\* All dimensions are in Inches.