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|---------------|------------------|
| JOB NAME:     | CONTRACTOR:      |
| JOB LOCATION: | APPROVAL:        |
| ENGINEER:     | CONTRACTOR P.O.: |
| APPROVAL:     | REPRESENTATIVE:  |

## 8P0080

**250N DIRECT MOUNT,  
2-WAY BRASS, FULL PORT BALL VALVE  
W/ DOUBLE ACTING ACTUATOR**  
SIZES 1/4" TO 4"

## 8P0082

**250N DIRECT MOUNT,  
2-WAY BRASS, FULL PORT BALL VALVE  
W/ SPRING RETURN ACTUATOR**  
SIZES 1/4" TO 4"

### SPECIFICATIONS

The 8P0080/8P0082 series feature the 250N forged brass, full port, ISO direct mount ball valve with a chrome plated ball and a nickel plated stem. The 250N also features O-ring back energized seats for touch sealing both up and downstream. In addition, there is a double O-ring stem seal for high cyclic conditions. This series has the lowest break torque in the industry. The Valbia pneumatic actuator comes with a hard-anodized aluminum body, and powder coated end caps. In addition, all Valbia pneumatic actuators are standardly furnished with elevated temperature seals to 302F. The patented side loaded limit stops never enter the piston chamber eliminating extra possible leak paths.

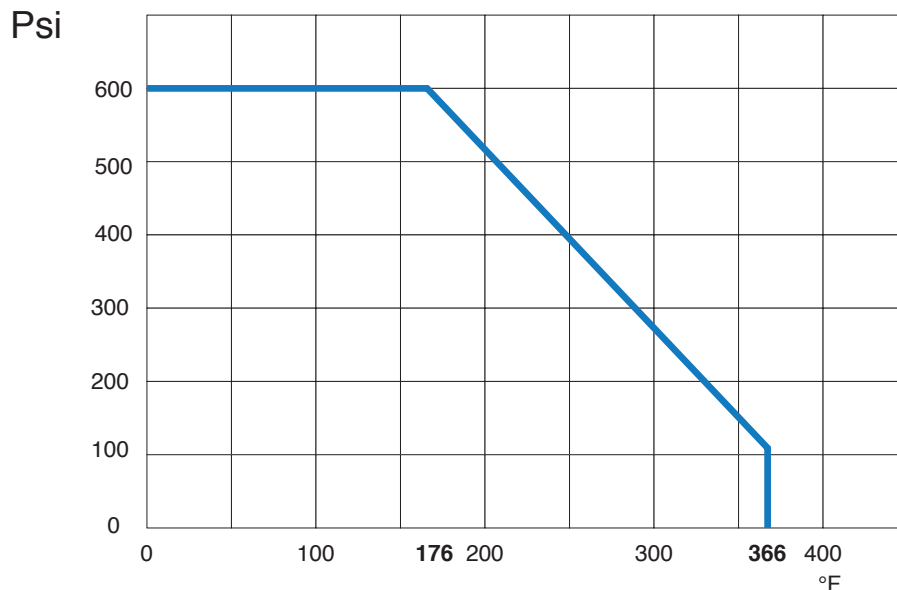
### ACTUATOR FEATURES

- Hard anodized extruded aluminum body
- Concentric spring sets
- Die cast aluminum end caps
- Solid steel barstock pinion (not casting)
- 0°-90° rotation adjustment cam
- 0°-90° rotation adjustment bolts
- POM piston guides
- Minimum air pressure rating: 80 psi
- Maximum air pressure rating: 116 psi
- Working temperature: -4°F - 302°F
- No lubrication maintenance required for the entire actuator lifetime
- 100% factory tested

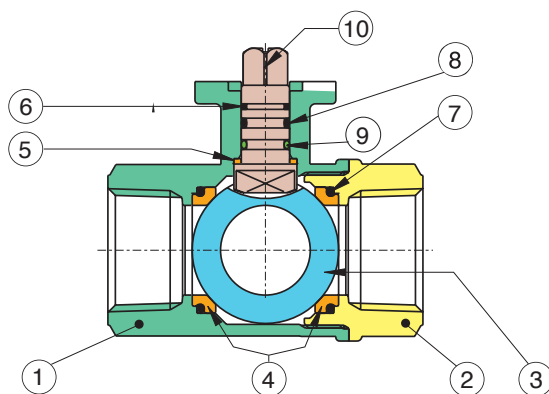
### VALVE FEATURES

- Brass
- Full Port, Sizes 1/4" to 4"
- ISO 5211 pad and square stem
- Pressure rating to 600 WOG
- Low torque design with back up O-ring seats
- Double O-ring stem seal design for extended cycle life
- 100% electronically tested in the open and closed position @ 80 Psi

### PRESSURE - TEMPERATURE CHART FOR SERIES 250N

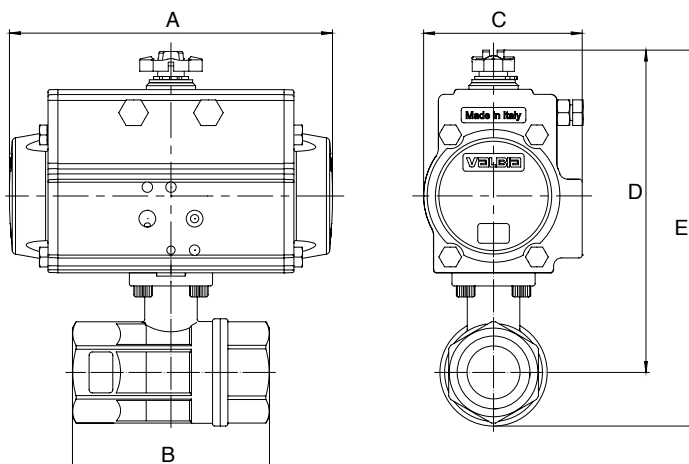


## BILL OF MATERIALS FOR 250N



| N POS | PART NAME      | MATERIAL                 | N PCS |
|-------|----------------|--------------------------|-------|
| 1     | BODY           | BRASS C38000             | 1     |
| 2     | END CONNECTION | BRASS C38000             | 1     |
| 3     | BALL           | CHROME PLATED BRASS BALL | 1     |
| 4     | BALL SEAT      | P.T.F.E.                 | 2     |
| 5     | THRUST WASHER  | P.T.F.E.                 | 1     |
| 6     | STEM SEAL      | P.T.F.E.                 | 1     |
| 7     | O-RING         | FKM (Viton®)             | 2     |
| 8     | O-RING         | EPDM                     | 1     |
| 9     | O-RING         | FKM (Viton®)             | 1     |
| 10    | STEM           | BRASS C38000             | 1     |

## DIMENSIONS



### 8P0080

250N W/ **DOUBLE ACTING** ACTUATOR

| Size   | A    | B    | C    | D     | E     | ACT. DA |
|--------|------|------|------|-------|-------|---------|
| 1/4"   | 4.33 | 2.64 | 1.77 | 3.86  | 4.53  | 32      |
| 3/8"   | 4.33 | 2.64 | 1.77 | 3.86  | 4.53  | 32      |
| 1/2"   | 4.33 | 2.64 | 1.77 | 3.86  | 4.53  | 32      |
| 3/4"   | 4.33 | 2.99 | 1.77 | 3.94  | 4.72  | 32      |
| 1"     | 4.33 | 3.35 | 1.77 | 4.37  | 5.31  | 32      |
| 1-1/4" | 4.33 | 3.66 | 1.77 | 4.49  | 5.67  | 32      |
| 1-1/2" | 5.51 | 4.13 | 2.80 | 6.54  | 7.99  | 52      |
| 2"     | 5.51 | 4.80 | 2.80 | 6.89  | 8.70  | 52      |
| 2-1/2" | 6.46 | 6.10 | 3.14 | 7.95  | 10.23 | 63      |
| 3"     | 6.46 | 6.89 | 3.17 | 8.31  | 10.98 | 63      |
| 4"     | 9.47 | 8.03 | 4.17 | 10.31 | 13.58 | 85      |

### 8P0082

250N W/ **SPRING RETURN** ACTUATOR

| Size   | A     | B    | C    | D     | E     | ACT. SR |
|--------|-------|------|------|-------|-------|---------|
| 1/4"   | 5.55  | 2.64 | 2.80 | 5.28  | 5.94  | 52      |
| 3/8"   | 5.55  | 2.64 | 2.80 | 5.28  | 5.94  | 52      |
| 1/2"   | 5.55  | 2.64 | 2.80 | 5.28  | 5.94  | 52      |
| 3/4"   | 5.55  | 2.99 | 2.80 | 5.35  | 6.14  | 52      |
| 1"     | 5.55  | 3.35 | 2.80 | 5.79  | 6.77  | 52      |
| 1-1/4" | 5.55  | 3.66 | 2.80 | 5.94  | 7.09  | 52      |
| 1-1/2" | 6.46  | 4.13 | 3.17 | 6.97  | 8.43  | 63      |
| 2"     | 6.46  | 4.80 | 3.17 | 7.32  | 9.13  | 63      |
| 2-1/2" | 9.47  | 6.10 | 4.17 | 9.21  | 11.46 | 85      |
| 3"     | 9.47  | 6.89 | 4.17 | 9.57  | 12.24 | 85      |
| 4"     | 10.83 | 8.03 | 4.84 | 10.83 | 14.09 | 100     |