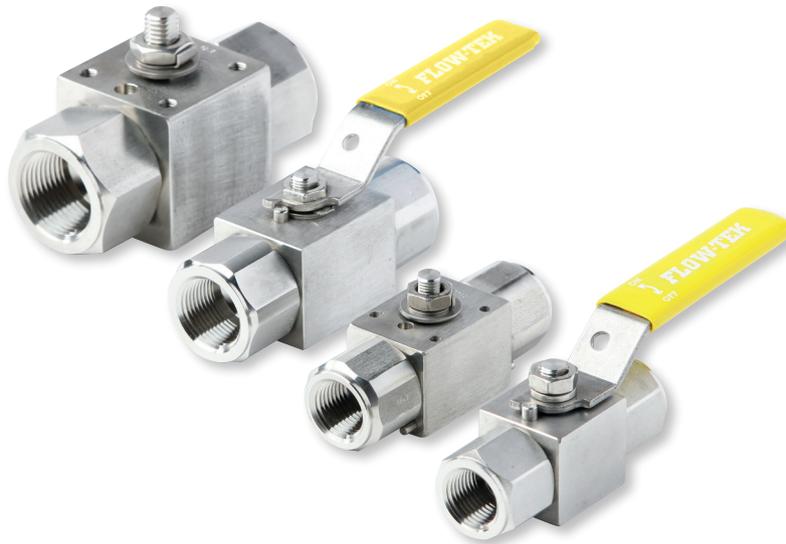


# FLOW-TEK MODEL HP | HX INSTRUMENTATION SERIES Threaded Standard Port Ball Valves



Flow-Tek's Instrumentation Series ball valves offer rugged reliability for high pressure and instrumentation applications. The valves feature three piece bodies designed for flexibility of installation and ease of maintenance. Both models HP and HX are constructed as standard with 316 stainless steel bodies manufactured to NACE specifications. Other body materials are available such as Duplex

SS, Hastelloy®, Monel and Titanium. All bodies are marked with a heat code for full material traceability.

A floating ball design provides a positive, bubble tight shut off with smooth quarter turn operation at low operating torque. Additional Instrumentation Series advantages include a choice of lever or pointer handles, travel limit stop pins and

replaceable seats and seals. Locking kits which secure the valve in a desired position are also available.

Safety features include an internally loaded blow-out proof stem and end connections that are pinned to prevent inadvertent loosening or disassembly. Actuator Mounting: Model HP and HX valves are available with actuator mounting drilling as an option.

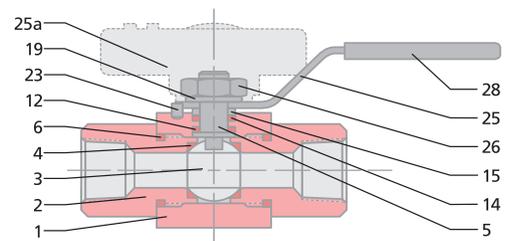
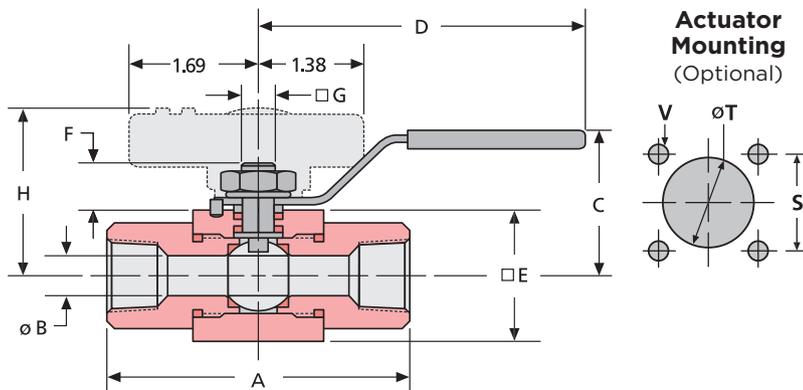
| Model | Size                       | Pressure Rating | Temperature Range                  | End Connections                                 | Body Material   |
|-------|----------------------------|-----------------|------------------------------------|-------------------------------------------------|-----------------|
| HP    | 1/4" to 1"<br>8 to 25 mm   | 6,000 psi       | -40°F to +280°F<br>-40°C to +138°C | Standard: NPT<br>Optional: Compression Fittings | Stainless Steel |
| HX    | 1/4" to 1/2"<br>8 to 15 mm | 10,000 psi      | -29°F to +500°F<br>-34°C to +260°C |                                                 |                 |



| Dimensions Model HP |     |         |     |     |     |      |     |       |     | Actuator Mounting |     |          | Cv     | Torque    | Weight |
|---------------------|-----|---------|-----|-----|-----|------|-----|-------|-----|-------------------|-----|----------|--------|-----------|--------|
| Size in mm          | A   | ∅B Port | C   | D   | □E  | F    | ∅G  | Flats | H   | S                 | ∅T  | V        | US GPM | lb-in N m | lb Kg  |
| 1/4                 | 2.8 | 0.39    | 1.8 | 4.5 | 1.3 | 0.6  | .38 | .28   | 1.9 | 1.0               | 1.2 | M4 x 0.2 | 7.5    | 45        | 1      |
| 8                   | 71  | 10      | 45  | 115 | 32  | 16   | 9.5 | 7     | 49  | 26                | 30  | M4 x 6   |        | 5.1       | .46    |
| 3/8                 | 3.0 | 0.39    | 1.8 | 4.5 | 1.3 | 0.6  | .38 | .28   | 1.9 | 1.0               | 1.2 | M4 x 0.2 | 7.5    | 45        | 1      |
| 10                  | 77  | 10      | 45  | 115 | 32  | 16   | 9.5 | 7     | 49  | 26                | 30  | M4 x 6   |        | 5.1       | .47    |
| 1/2                 | 3.3 | 0.39    | 1.8 | 4.5 | 1.3 | 0.6  | .38 | .28   | 1.9 | 1.0               | 1.2 | M4 x 0.2 | 7.5    | 45        | 1.5    |
| 12.7                | 85  | 10      | 45  | 115 | 32  | 16   | 9.5 | 7     | 49  | 26                | 30  | M4 x 6   |        | 5.1       | .68    |
| 3/4                 | 3.5 | 0.50    | 2.0 | 4.5 | 1.5 | 0.59 | .50 | .36   | 2.1 | 1.0               | 1.2 | M4 x 0.2 | 12     | 75        | 1.9    |
| 19                  | 90  | 12.7    | 50  | 115 | 38  | 15   | 12  | 9     | 52  | 26                | 30  | M4 x 6   |        | 8.5       | .85    |
| 1                   | 4.4 | 0.79    | 2.4 | 6.5 | 2.0 | 1.1  | .50 | .36   | —   | 1.6               | 1.6 | M5 x 0.3 | 32     | 180       | 3.43   |
| 25                  | 111 | 20      | 60  | 165 | 50  | 27   | 12  | 9     | —   | 40                | 40  | M5 x 8   |        | 20.3      | 1.56   |

| Dimensions Model HX |     |         |     |     |     |      |     |       |     | Actuator Mounting |     |          | Cv     | Torque    | Weight |
|---------------------|-----|---------|-----|-----|-----|------|-----|-------|-----|-------------------|-----|----------|--------|-----------|--------|
| Size in mm          | A   | ∅B Port | C   | D   | □E  | F    | ∅G  | Flats | H   | S                 | ∅T  | V        | US GPM | lb-in N m | lb Kg  |
| 1/4                 | 3.2 | 0.39    | 1.8 | 4.5 | 1.3 | 0.6  | .38 | .28   | 1.9 | 1.0               | 1.2 | M4 x 0.2 | 7.5    | 50        | 1      |
| 8                   | 81  | 10      | 45  | 115 | 32  | 16   | 9.5 | 7     | 49  | 26                | 30  | M4 x 6   |        | 5.6       | .46    |
| 3/8                 | 3.4 | 0.39    | 1.8 | 4.5 | 1.3 | 0.59 | .38 | .28   | 1.9 | 1.0               | 1.2 | M4 x 0.2 | 7.5    | 50        | 1      |
| 10                  | 87  | 10      | 45  | 115 | 32  | 15   | 9.5 | 7     | 49  | 26                | 30  | M4 x 6   |        | 5.6       | .47    |
| 1/2                 | 3.7 | 0.39    | 1.8 | 4.5 | 1.3 | 0.6  | .38 | .28   | 1.9 | 1.0               | 1.2 | M4 x 0.2 | 7.5    | 50        | 1.5    |
| 12.7                | 95  | 10      | 45  | 115 | 32  | 16   | 9.5 | 7     | 49  | 26                | 30  | M4 x 6   |        | 5.6       | .68    |

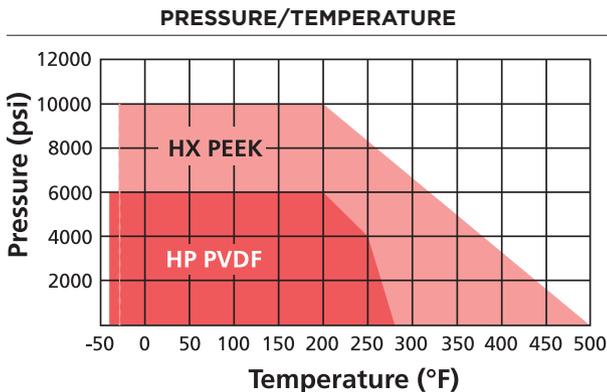
∅ Indicates round dimensions. □ Indicates square dimensions  
**Note:** Optional actuator mounting drilling must be specified when ordering.



### COMPONENTS & MATERIALS

| Item | Name           | Material            | Qty. |
|------|----------------|---------------------|------|
| 1    | Body           | Stainless Steel 316 | 1    |
| 2    | End Connector  | Stainless Steel 316 | 2    |
| 3    | Ball           | Stainless Steel 316 | 1    |
| 4    | Seat*          | PVDF / PEEK*        | 2    |
| 5    | Stem           | Stainless Steel 316 | 1    |
| 6    | Body Seal*     | PTFE                | 2    |
| 12   | Thrust Washer* | RPTFE / PVDF*       | 1    |
| 14   | Stem Packing*  | RPTFE               | 1    |
| 15   | Packing Gland  | Stainless Steel     | 1    |
| 19   | Lock Washer    | Stainless Steel     | 2    |
| 23   | Stop Pin       | Stainless Steel     | 1    |
| 25   | Lever Handle   | Stainless Steel     | 1    |
| 25a  | Pointer Handle | Mazak 3             | 1    |
| 26   | Lock Nut       | Stainless Steel     | 1    |
| 28   | Handle Sleeve  | Vinyl               | 1    |

• Model HP Seat: PVDF, Thrust Washer: RPTFE  
 Model HX Seat: PEEK, Thrust Washer: PVDF  
 \*Parts included in the repair kits.



A 3-way version of the Model HP valve is also available.  
 Please see Flow-Tek brochure 3HP.

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