

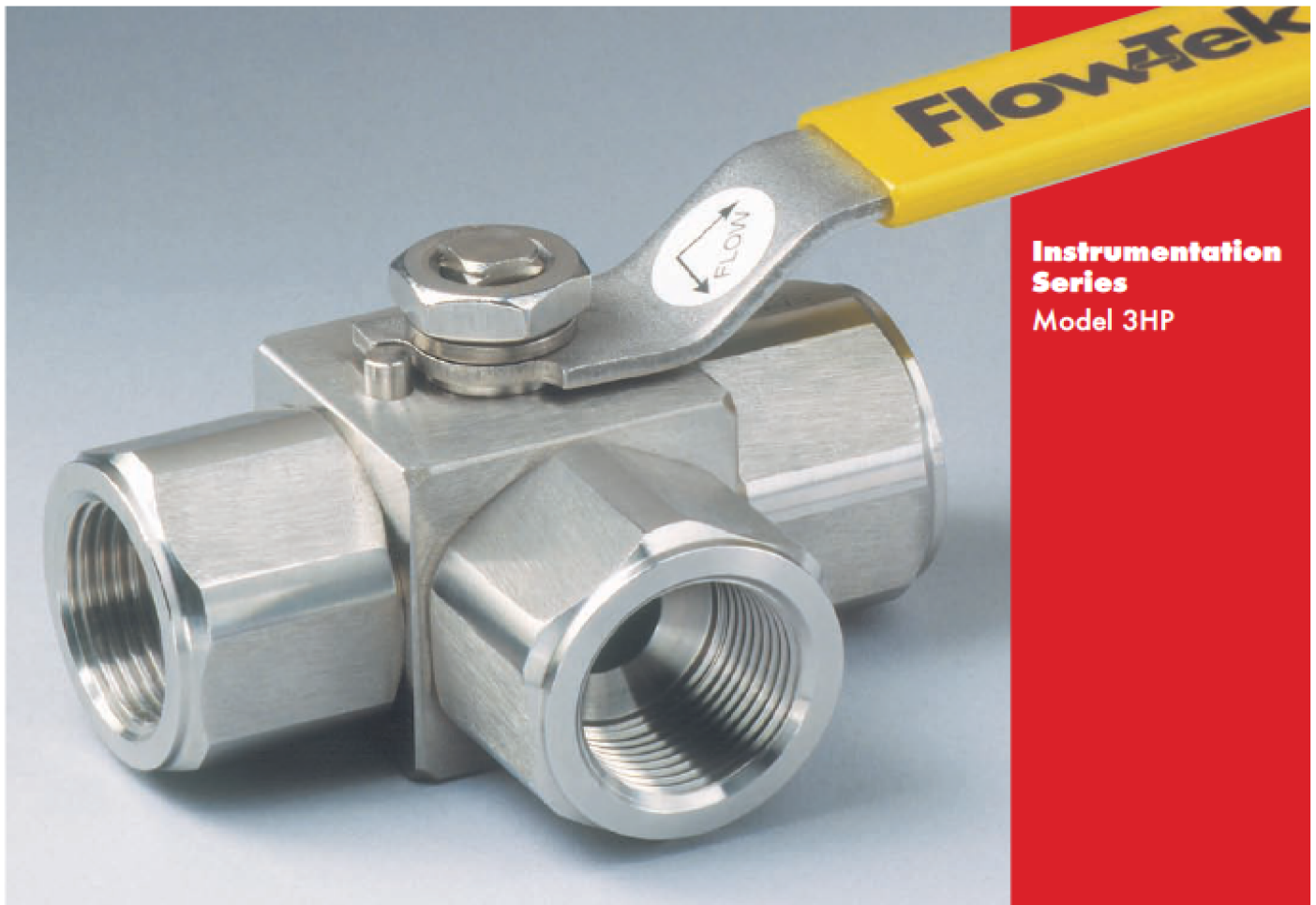
A
Bray
High
Performance
Company

FlowTek®

A Subsidiary of BRAY INTERNATIONAL, Inc.

3-Way Threaded Standard Port Ball Valves, 1/4" - 1"

For High Pressure Applications



Instrumentation Series

Model 3HP

Flow-Tek's Instrumentation Series 3-Way 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. Model 3HP is 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

ter turn operation at low operating torque. Additional advantages of the Instrumentation Series 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 Valves with actuator mounting to ISO 5211 specifications are also available as an option.

Pressure Rating: 6,000 psi



Pinned End Connections

End Connections

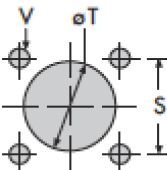
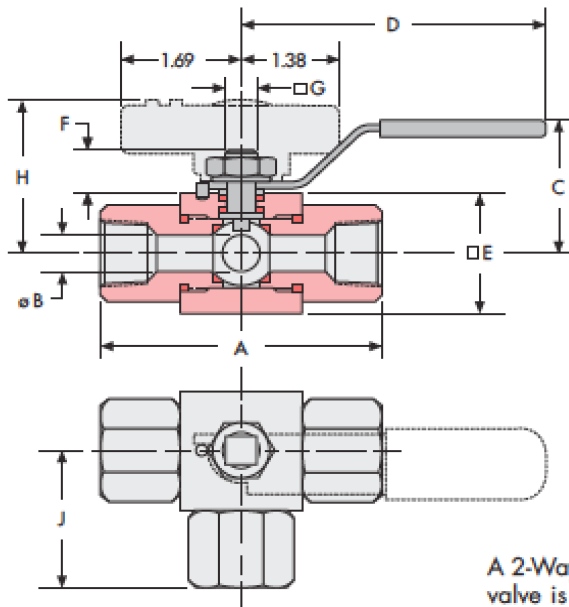
Standard: NPT

Optional: Compression
Fittings

Model 3HP DIMENSIONS

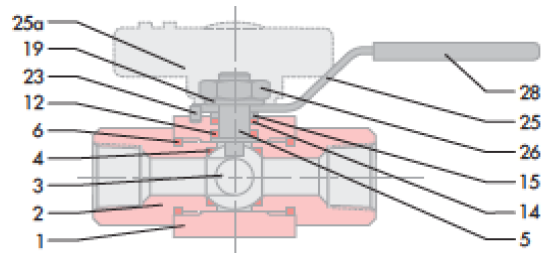
| Size ins mm | A | øB | C | D | □E | F | □G | H | J | S* | øT | V* | Torque Weight | |
|-------------------|-------------|--------------|------------|-------------|------------|------------|--------------|------------|--------------|------------|------------|----------------------|---------------|-------------|
| | | | | | | | | | | | | | in.-lbs nm | lbs. kg. |
| 1/4 8 | 2.79 71 | 0.39 10 | 1.77 45 | 4.52 115 | 1.26 32 | 0.63 16 | 0.33 8.5 | 1.92 49 | 1.40 35.6 | 1.02 26 | 1.18 30 | M4x0.236 M4x0.9mm | 150 17 | 1.1 0.5 |
| 3/8 10 | 3.03 77 | 0.39 10 | 1.77 45 | 4.52 115 | 1.26 32 | 0.63 16 | 0.33 8.5 | 1.92 49 | 1.30 33 | 1.02 26 | 1.18 30 | M4x0.236 M4x0.9mm | 150 17 | 1.2 0.5 |
| 1/2 15 | 3.34 85 | 0.39 10 | 1.77 45 | 4.52 115 | 1.26 32 | 0.63 16 | 0.33 8.5 | 1.92 49 | 1.60 40.6 | 1.02 26 | 1.18 30 | M4x0.236 M4x0.9mm | 150 17 | 1.3 0.6 |
| 3/4 20 | 3.54 90 | 0.50 12.7 | 1.96 50 | 4.52 115 | 1.49 38 | 0.59 15 | 0.33 8.5 | 2.04 52 | 1.80 45.7 | 1.02 26 | 1.18 30 | M4x0.236 M4x0.9mm | 220 25 | 1.8 0.8 |
| 1 25 | 4.37 111 | 0.78 20 | 2.36 60 | 6.49 165 | 1.96 50 | 1.06 27 | 0.49 12.5 | — | 1.50 38 | 1.57 40 | 1.57 40 | M5x0.315 M5x8mm | 300 34 | 3.8 1.7 |

ø Indicates round dimensions. □ Indicates square dimensions. *Option for actuator ready version to be specified when ordering.



For Optional Panel Mounting:
Verify the mounting dimensions before manufacturing mounting hardware.

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 | 2 |
| 5 | Stem | Stainless Steel 316 | 1 |
| 6 | Body Seal* | RPTFE | 2 |
| 12 | Thrust Washer* | RPTFE | 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 |

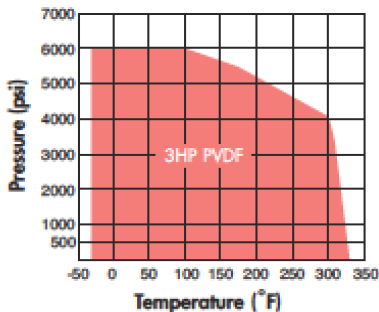
*Parts included in the repair kits.

Other body and seat materials are also available. Please contact your Flow-Tek representative for options.

C_v Model 3HP

| Size ins mm | 1/4 8 | 3/8 10 | 1/2 15 | 3/4 20 | 1 25 |
|-------------------|----------|-----------|-----------|-----------|---------|
| 90° | 5.3 | 5.3 | 5.3 | 8.6 | 21 |
| 180° | 7.5 | 7.5 | 7.5 | 12 | 32 |

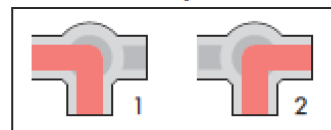
Pressure / Temperature



A 2-Way version of the Model 3HP valve is also available. Please see Flow-Tek brochure #HP/HX.

Flow Pattern

Standard Side Entry Flow Diversion



Optional flow patterns are available upon request.

All valves are factory tested under water in the Open and Closed position for bubble tight integrity before shipping. Bodies and seats are additionally tested to the following:

Shell: 9,000 psig
Seat: 1.1 x Rated Pressure