

# Selectomite<sup>®</sup> 71 and 76 Series

3-way Ball Valves

Selectomite<sup>®</sup> 3-way ball valves use 180° operation for diverting flow from one line to another. The handle points to the side port in use; when perpendicular to the side ports, it indicates the shutoff position.



## **Typical Applications**

- Instrument air lines
- Sampling systems
- 2-way gauge readout of line pressure
- Manual cylinder actuation

## **Technical Data**

BODY MATERIAL*	316 stainless steel, brass, Monel®
OPERATING PRESSURE RANGE***	Moderate vacuum** to 6000 psig @ 70° F (414 bar @ 21° C)
OPERATING TEMPERATURE RANGE	7165 Series -40° F to +350° F (-40° C to +177° C) 7177 Series 0° F to +350° F (-18° C to +177° C) 7671, 7673 Series -40° F to +250° F (-40° C to +121° C)
ORIFICE SIZES	0.093" to 0.187" (2.4 to 4.8mm)
Cv FACTORS	0.15 to 0.57
END CONNECTIONS	%" to ½" Gyrolok® %" to ¼" NPT 3 to 8mm Gyrolok®

\* Consult factory for other materials

\*\* Moderate vacuum is 10<sup>-3</sup> to 20 torr. Pressure rating is for inlet through Port 3. For side loading (inlet at Port 1 or 2), see note under How to Order table for each series on page 21 and 22. For differential pressures up to 6000 psig, see Selectomite<sup>®</sup> 76 Series 3-way trunnion valves.

\*\*\* Depending on valve series.

#### **HOKE Incorporated**

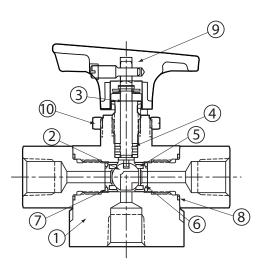
405 Centura Court • PO Box 4866 (29305)• Spartanburg, SC 29303 Phone (864) 574-7966 Fax (864) 587-5608 www.hoke.com • sales@hoke.com

## Features & Benefits

- Handle points to port in use or to closed position, providing a visual cue and improved safety.
- Dyna-Pak<sup>®</sup> packing provides a leak-tight seal with low operating torque in vacuum or high pressure applications, helping to prevent fugitive emissions.
- Dual encapsulated TFE seats and microfinished ball ensure a leak tight seal. This combination provides greater valve reliability.
- TFE seats and washers provide excellent corrosion resistance, providing the correct material for the application.
- A wide variety of HOKE Gyrolok<sup>®</sup> end fittings or pipe fittings provide the correct fitting option for the application.
- Special High Tolerance NPT Thread

# Selectomite® 71 and 76 Series

# Materials of Construction



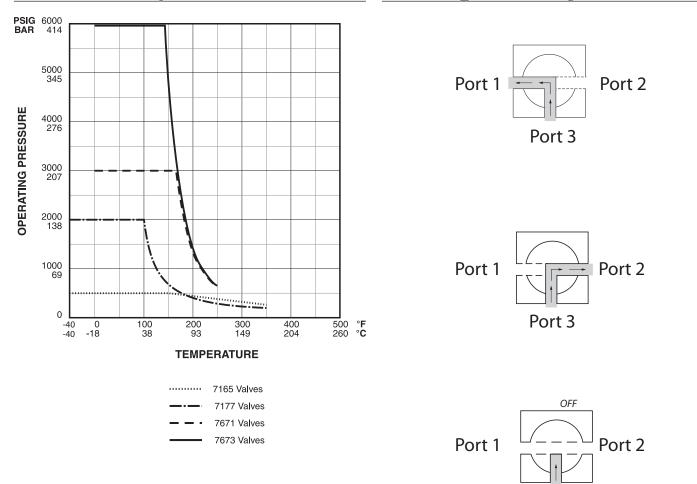
	DESCRIPTION	BRASS	316 STAINLESS STEEL	MONEL®
1	Body	Brass	316 stainless steel	Monel®
2	Ball	316 stainless steel	316 stainless steel	Monel®
3	Stem	316 stainless steel	316 stainless steel	Monel®
4	Stem packing	TFE/316 stainless steel wafers	TFE/316 stainless steel wafers	TFE/Monel <sup>®</sup> wafers
5	<b>Seats</b> 7165, 7177 Series 7671 Series 7673 Series	TFE Nylatron®	TFE  Nylatron®	TFE
6	Seat retainers	Brass	316 stainless steel	Monel®
7	Seat washers <sup>†</sup> 7177, 7673 Series 7165 Series 7671 Series	 TFE Buna-N	Viton® TFE	TFE
8	End fitting gaskets	TFE	TFE	TFE
9	Handle	Nylon	Nylon	Nylon
10	Panel mounting nut	Nickel-plated brass	316 stainless steel	Nickel-plated brass

† Other elastomers are available upon request. Contact your local distributor

Pressure vs. Temperature Curve

# Flow Diagrams 3-way valve

Port 3



# Selectomite® 71 and 76 Series

#### **Dimensions**

#### Selectomite® 7177 Series

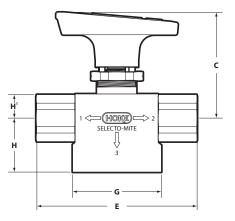
END CONNECTIONS		C	E	G	H	H1
⅓″ Gyrolok®	inch	127⁄64	21⁄8	11⁄4	123/32	23/64
	mm	36	73	32	44	9
⅛″ female NPT	inch	127⁄64	21⁄4	11⁄4	3⁄4	23/64
	mm	36	57	32	19	9
¼″ Gyrolok®	inch	127⁄64	33/32	11⁄4	1 <sup>13</sup> /16	23/64
	mm	36	78	32	46	9
3mm Gyrolok®	inch	127⁄64	21⁄8	11⁄4	123/32	23/64
	mm	36	73	32	44	9
6mm Gyrolok®	inch	127⁄64	33/32	11⁄4	1 <sup>13</sup> /16	23/64
	mm	36	78	32	46	9

#### **Panel mounting**

Panel hole: 19/32" (15.1mm) diameter Panel thickness: 3/16" (4.8mm) diameter

#### Selectomite® 7165, 7671, 7673 Series

END CONNECTIONS		C	E	G	H	H1
1/″ Currelet®	inch	115/16	37⁄16	13⁄4	2	7⁄16
⅓″ Gyrolok®	mm	49	87	44	51	11
¼″ Gyrolok®	inch	115/16	35⁄8	13⁄4	21/16	7⁄16
74 Gyrolok	mm	49	92	44	52	11
¼″ female NPT	inch	13⁄4	3	13⁄4	15/16	7⁄16
<sup>7</sup> 4 Temale NPT	mm	44	76	44	24	11
³⁄∞″ Gyrolok®	inch	115/16	31/8	13⁄4	23/16	7⁄16
% Gyrolok	mm	49	98	44	56	11
3mm Gyrolok®	inch	115/16	37⁄16	13⁄4	2	7⁄16
Smin Gyrolok*	mm	49	87	44	51	11
6mm Gyrolok®	inch	115/16	35⁄8	13⁄4	21/16	7⁄16
	mm	49	92	44	52	11
9mm Curalak®	inch	115/16	31/8	13⁄4	23/16	7⁄16
8mm Gyrolok®	mm	49	98	44	56	11



Dimensions for reference only, subject to change.

#### **Panel mounting**

Panel hole: 57/64" (22.6mm) diameter Panel thickness: 3/16" (4.8mm) diameter

# How to Order Standard Valves

Selectomite® 7165 Series Pressure to 500 psig (34 bar), TFE Seats—TFE Washers

	ORDER BY PART NUMBER				
END CONNECTIONS	BRASS	316 ST. STEEL	<b>MONEL</b> <sup>®</sup>	ORIFICE	Cv
⅓″ Gyrolok®	7165G2B	7165G2Y	_	0.093" (2.4mm)	0.15 <sup>‡</sup>
1⁄4″ Gyrolok®	7165G4B	7165G4Y	7165G4M	0.187″ (4.7mm)	0.57
1/4" female NPT	7165F4B	7165F4Y	7165F4M	0.187" (4.7mm)	0.57
³⁄₃″ Gyrolok®	7165G6B	7165G6Y	—	0.187″ (4.7mm)	0.57
1/2" Gyrolok®	7165G8B	7165G8Y	7165G8M	0.189" (4.8mm)	0.57
3mm Gyrolok®	—	7165G3YMM	—	0.093" (2.4mm)	0.15 <sup>‡</sup>
6mm Gyrolok®	—	7165G6YMM	—	0.187" (4.7mm)	0.57
8mm Gyrolok®	—	7165G8YMM	—	0.187″ (4.7mm)	0.57

NOTE: Maximum differential pressure between side ports is 500 psig (34 barg). # Orifice restricted by end connection.



# Selectomite® 71 and 76 Series

# How to Order Standard Valves (continued)



7177G2Y

#### Selectomite® 7177 Series Pressure to 2000 psig (138 bar)

TFE Seats—Viton<sup>®</sup> Washers

	ORDER BY PART NUMBER		
END CONNECTIONS	316 STAINLESS STEEL	ORIFICE	Cv
⅓″ Gyrolok®	7177G2Y	0.093" (2.4mm)	0.15 <sup>‡</sup>
⅓″ female NPT	7177F2Y	0.125" (3.2mm)	0.30
1⁄4″ Gyrolok®	7177G4Y	0.125" (3.2mm)	0.30
3mm Gyrolok®	7177G3YMM	0.125" (3.2mm)	0.15 <sup>‡</sup>
6mm Gyrolok®	7177G6YMM	0.093" (2.4mm)	0.15 <sup>‡</sup>

Note: Maximum differential pressure between side ports is 1500 psig (103 bar). ‡ Orifice restricted by end connection.

#### Selectomite® 7671 Series Pressure to 3000 psig (207 bar) Nylatron<sup>®</sup> Seats—Buna-N Washers

	ORDER BY PART NUMBER		
END CONNECTIONS	BRASS	ORIFICE	Cv
1⁄4″ Gyrolok®	7671G4B	0.187″ (4.7mm)	0.53
¼″ female NPT	7671F4B	0.187″ (4.7mm)	0.57
1⁄2″ Gyrolok®	7671G8B	0.188″ (4.8mm)	0.53

Note: Maximum differential pressure between side ports is 1500 psig (103 bar).



7673F4Y

#### Selectomite® 7673 Series Pressure to 6000 psig (414 bar) Nylatron<sup>®</sup> Seats—Viton<sup>®</sup> Washers

	ORDER BY PART NUMBER		
END CONNECTIONS	316 STAINLESS STEEL	ORIFICE	Cv
¼″ Gyrolok®	7673G4Y	0.187" (4.7mm)	0.57
1⁄4″ female NPT	7673F4Y	0.187″ (4.7mm)	0.57
³⁄₀″ Gyrolok®	7673G6Y	0.187" (4.7mm)	0.57
1⁄2″ Gyrolok®	7673G8Y	0.187″ (4.7mm)	0.66
6mm Gyrolok®	7673G6YMM	0.187" (4.7mm)	0.57

Note: Maximum differential pressure between side ports is 1500 psig (103 bar).

## **For Your Safety**

It is solely the responsibility of the system designer and user to select products suitable for their specific application requirements and to ensure proper installation, operation, and maintenance of these products. Material compatibility, product ratings and application details should be considered in the selection. Improper selection or use of products described herein can cause personal injury or property damage.

VCR® is a registered trademark of Cajon Co. Dow Corning® is a registered trademark of Dow Corning Corporation Nylatron® is a registered trademark of DSM Engineering Plastic Products Teflon® is a registered trademark of the DuPont Company Kalrez® and Viton® are registered trademarks of DuPont DOW Elastomers Dyneon™ is a trademark of Dyneon Elgiloy® is a registered trademark of Elgiloy Specialty Metals Gyrolok®, Dyna-Pak®, Rotoball®, Flomite®, Selectomite®, and Multimite® are registered trademarks of HOKE, Inc. Space Savers™, Ultramite™, and Vaculok™ are trademarks of HOKE, Inc. Rulon® is a registered trademark of Saint-Gobain Corporation Monel® and Iconel® are registered trademarks of Graf Tech International Ltd. PEEK™ is a trademark of Victrex PLC

www.dowcorning.com www.dsm.com www.dupont-dow.com

www.3m.com www.elgiloy.com www.hoke.com www.saint-gobain.com www.specialmetals.com www.gaftech.com www.victrex.com