



# Selectomite® 76 Series

## 3-way Trunnion Valves

Developed for high pressure, side-loading applications, the 316 stainless steel trunnion is supported and held securely in position by two composite bearings. Encapsulated Nylatron® seats provide a positive seal, resulting in leak-tight sealing between all ports to 6000 psig differential, reducing operating torque and increasing cycle life. The handle points to the side port in use; when perpendicular to the side ports, it indicates the shutoff position.



### Typical Applications

- Compressed natural gas dispensing
- Instrument air lines
- Sampling systems
- 2-way gauge readout of line pressure
- Down hole control systems on offshore drilling platforms

### Features & Benefits

- Blowout-proof stem for added safety
- Trunnion design assures leak-tight sealing at full 6000 psig (414 bar) differential pressure for high pressure applications.
- Handle points to port in use or to closed position, providing a visual cue and improved safety.
- Encapsulated dual Nylatron® seats and Viton® stem seals ensure a leak tight seal. This combination provides greater valve reliability.
- Special High Tolerance NPT Thread

### Technical Data

<b>BODY MATERIAL*</b>	316 stainless steel, brass, Monel®
<b>MAXIMUM OPERATING PRESSURE @ 70° F (21° C)</b>	7644 Series 6000 psig(414 bar) 7654 Series 2000 psig(138 bar)
<b>OPERATING TEMPERATURE RANGE</b>	7644 Series 0° F to +250° F (-18° C to +121° C) 7654 Series 0° F to +350° F (-18° C to +177° C)
<b>ORIFICE SIZE</b>	0.187" (4.8mm)
<b>Cv FACTOR</b>	0.56
<b>END CONNECTIONS</b>	¼" to ¾" Gyrolok® ¼" female NPT

\* Consult factory for other materials

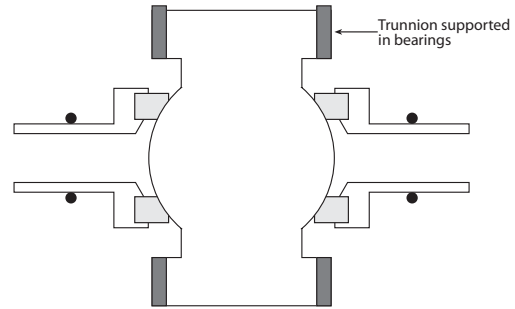
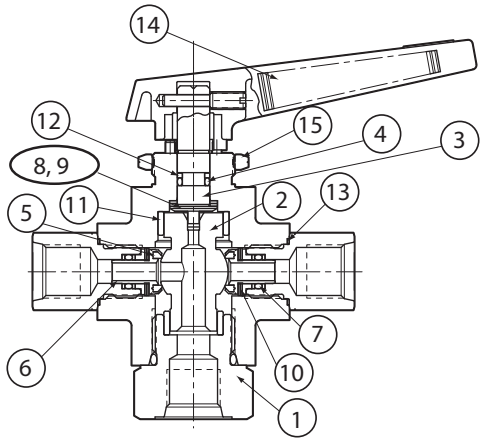
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ball valves

# Selectomite® 76 Series

## Materials of Construction



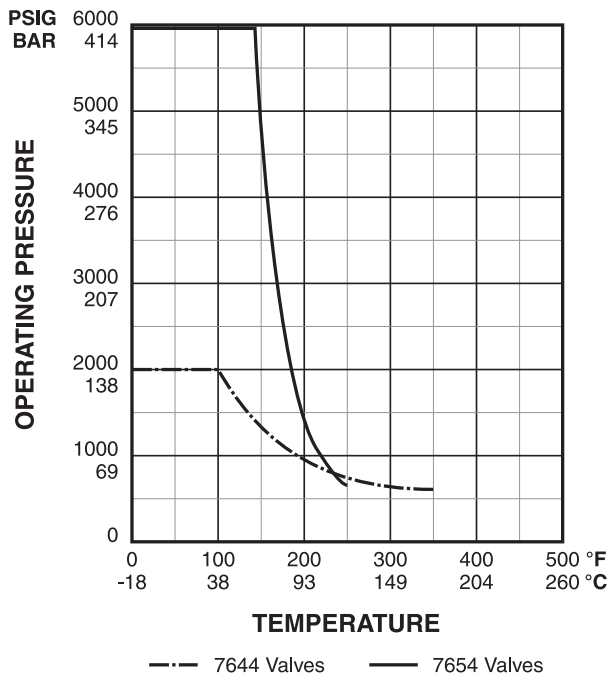
DESCRIPTION	MATERIAL
1 Body	316 stainless steel
2 Trunnion	316 stainless steel
3 Stem	316 stainless steel
4 Stem packing†	Viton®
5 Seats 7644 Series 7654 Series	Nylatron® TFE
6 Seat retainers	316 stainless steel
7 Seat washers†	Viton®
8 Thrust washer	Nylatron®
9 Spacer	316 stainless steel
10 Belleville washers	316 stainless steel
11 Bearings	Nylon/TFE
12 Backup ring	TFE
13 End fitting gaskets	TFE
14 Handle	Nylon
15 Panel mounting nut	316 stainless steel

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

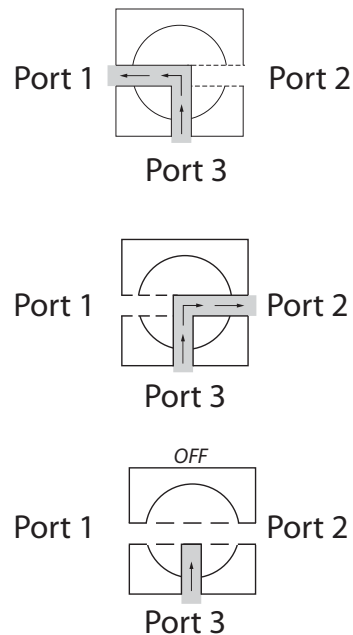
### Trunnion Design

While the floating ball is superior in 2-way and many 3-way designs, the trunnion is the preferred choice in 4- and 5-way valves and higher pressure 3-way valves because of the fluid dynamics. The design of the trunnion allows it to be secured in position with composite bearings, assuring a very precise relationship between the trunnion and seats. As a result, trunnion 3-, 4- and 5-way valves have few limitations on pressure ratings.

### Pressure vs. Temperature Curve



### Flow Diagrams 3-way valve



# Selectomite® 76 Series

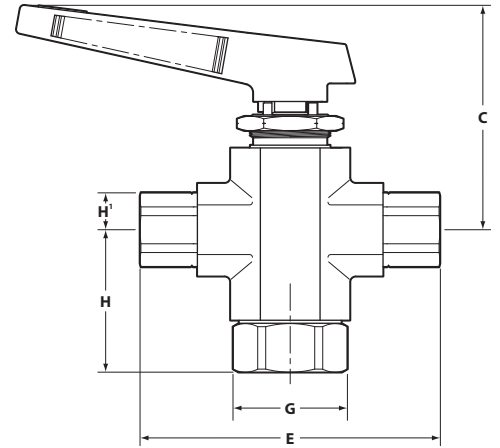
## Dimensions

END CONNECTIONS		C	E	G	H	H <sup>1</sup>
¼" Gyrolok®	inch	2½	4	1⅛	2¾	2 <sup>9</sup> / <sub>32</sub>
	mm	64	102	27	70	23
¼" female NPT	inch	2½	3 <sup>5</sup> / <sub>16</sub>	1⅛	1 <sup>9</sup> / <sub>16</sub>	2 <sup>9</sup> / <sub>32</sub>
	mm	64	84	27	40	23
⅜" Gyrolok®	inch	2½	4 <sup>1</sup> / <sub>16</sub>	1⅛	2 <sup>25</sup> / <sub>32</sub>	2 <sup>9</sup> / <sub>32</sub>
	mm	64	104	27	71	23

### Panel mounting

Panel hole = <sup>5</sup>/<sub>64</sub>" (22.6mm) diameter

Panel thickness = <sup>3</sup>/<sub>16</sub>" (4.8mm) diameter



## How to Order Standard Valves

**Selectomite® 7644 Series** Pressure to 6000 psig (414 bar)

Nylatron® Seats for service to 250° F (121° C)

END CONNECTIONS	ORDER BY PART NUMBER		
	316 STAINLESS STEEL	ORIFICE	Cv
¼" Gyrolok®	7644G4Y	0.187" (4.7mm)	0.56
¼" female NPT	7644F4Y	0.187" (4.7mm)	0.56
⅜" Gyrolok®	7644G6Y	0.187" (4.7mm)	0.56

**Selectomite® 7654 Series** Pressure to 2000 psig (138 bar)

TFE Seats for service to 350° F

END CONNECTIONS	ORDER BY PART NUMBER		
	316 STAINLESS STEEL	ORIFICE	Cv
¼" Gyrolok®	7654G4Y	0.187" (4.7mm)	0.56
¼" female NPT	7654F4Y	0.187" (4.7mm)	0.56



7644F4Y

## Ordering Options

### Electric and Pneumatic Actuators

For remote control of Selectomite® 76 Series valves, order an electric or pneumatic actuator. Electric actuators are supplied in either 115 VAC or 24 VDC with weatherproof or explosion-proof housings. Pneumatically actuated ball valves using HOKE's rack and pinion actuator can be used for both 90° and 180° double acting and spring return applications. Refer to HOKE's *Actuator Catalog* (79005) or contact your local factory-authorized distributor for more details.

### Spare Parts

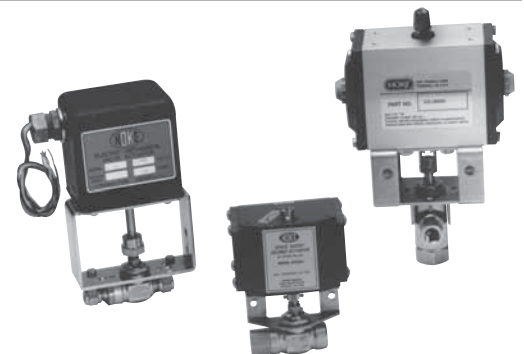
Spare parts and repair kits are available for all ball valves. Please contact your distributor for specific information.

### Cleaning and Testing

When ordering, please specify if oxygen cleaning or helium leak testing is required.

### Additional Sizes

Additional sizes and options are available on special request. Please consult your local HOKE distributor.



## ***For Your Safety***

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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.

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