



# 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.

### 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

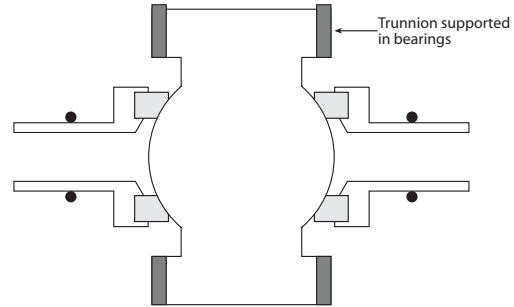
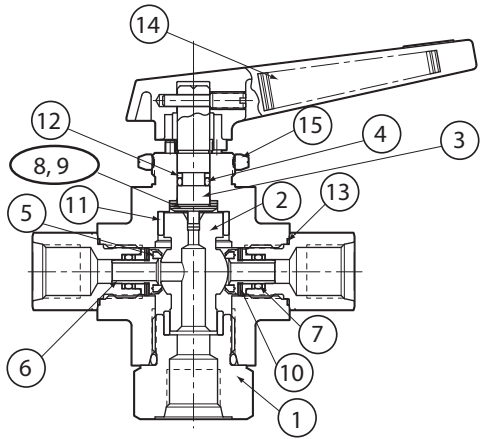
### HOKE Incorporated

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

ball valves

# Selectomite® 76 Series

## Materials of Construction



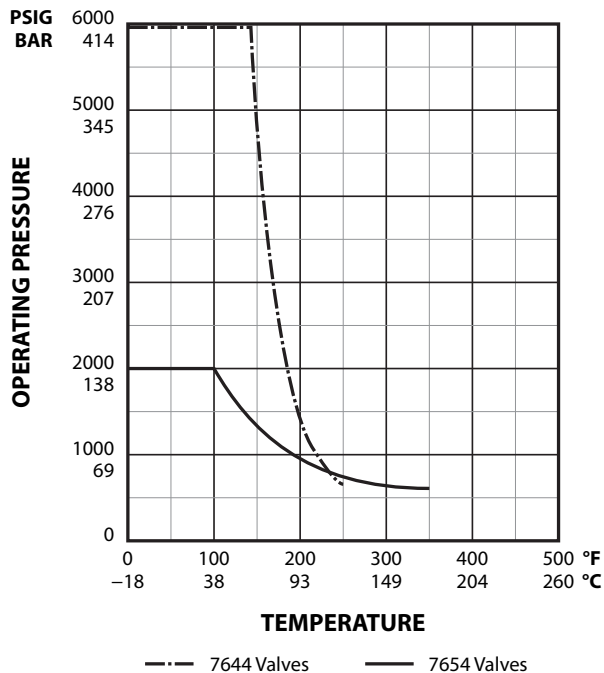
DESCRIPTION	MATERIAL
1 Body	316 stainless steel
2 Trunnion	316 stainless steel
3 Stem	316 stainless steel
4 Stem packing†	Viton®
5 Seats 7644 Series 7654 Series	Nylatron® TFE
6 Seat retainers	316 stainless steel
7 Seat washers†	Viton®
8 Thrust washer	Nylatron®
9 Spacer	316 stainless steel
10 Belleville 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.

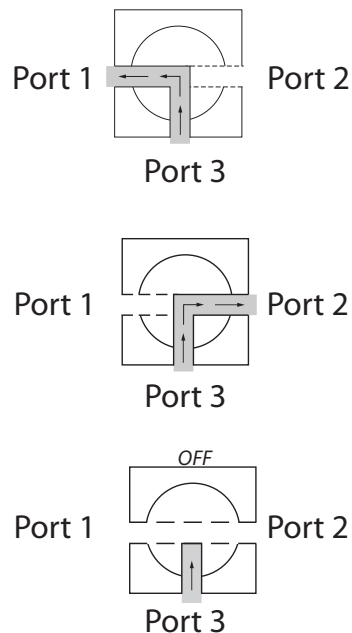
### Trunnion Design

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

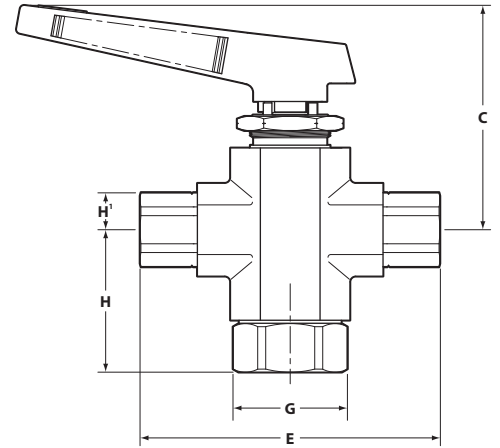
## Dimensions

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.

