



General Purpose Ball Valves at a Glance

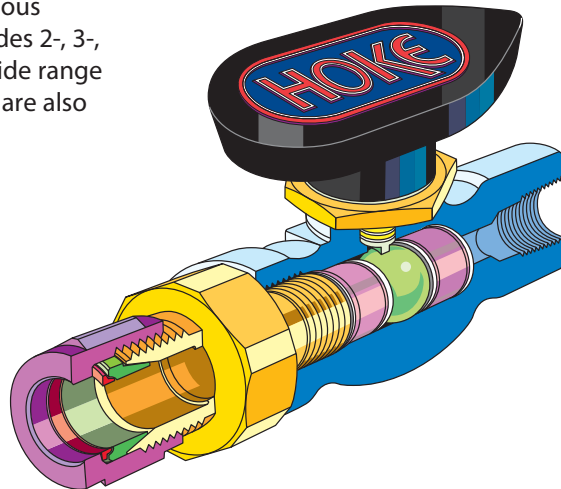
HOKE ball valves provide a wide range of capabilities for various applications. The HOKE general purpose ball valve line includes 2-, 3-, 4- and 5-way designs. Ball and trunnion designs provide a wide range of pressure capabilities. Gyrolok® and fixed end connections are also available.

Select a ball or trunnion valve for:

- simple operation
- visual indication of flow
- full porting for maximum flow
- rodability
- long cycle life

Choose a 2-way ball valve for quick, quarter-turn, on-off service. A 3-way ball valve employs 180° operation for diverting flow from one line to another. 4-way valves are dual switching valves, changing two flow paths at the same time. 5-way, or diverter, valves allow flow through any of four possible paths.

Before making your valve selection, be sure to consider the system pressure, operating temperature, required flow and materials of construction. If your application requires a valve not available in this catalog, contact your HOKE stocking distributor or the factory.



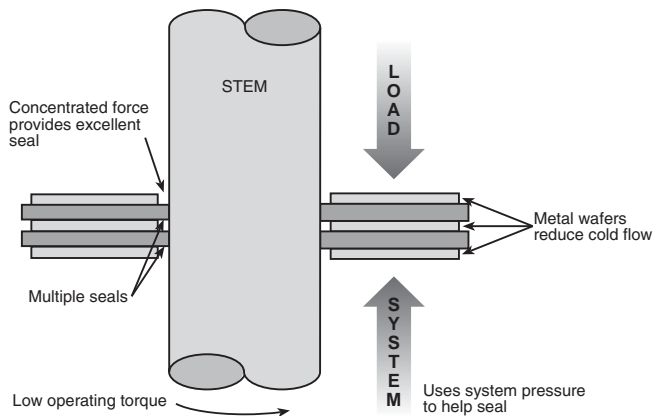
Dyna-Pak® Stem Packing System

Dyna-Pak® provides superior sealing performance while reducing maintenance costs. Consisting of alternate wafers of TFE and metal spacers, stem leakage is virtually eliminated while the problems associated with TFE cold flow are minimized.

As the packing nut is tightened, metal spacers squeeze the TFE wafers, driving the TFE into the stem. At the stem, forces are concentrated and the TFE wafers provide multiple line seals. In addition to squeezing the TFE wafers, the metal spacers help contain the TFE and drastically reduce its ability to creep.

Dyna-Pak® packing has the ability to:

- Utilize system pressure to increase effectiveness in eliminating leakage.
- Provide reduced operating torque.
- Help eliminate fugitive emissions.
- Reduce the need for frequent packing adjustments.
- Operate in temperatures from -65°F to $+450^{\circ}\text{F}$ (-54°C to $+232^{\circ}\text{C}$).









ball valves

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

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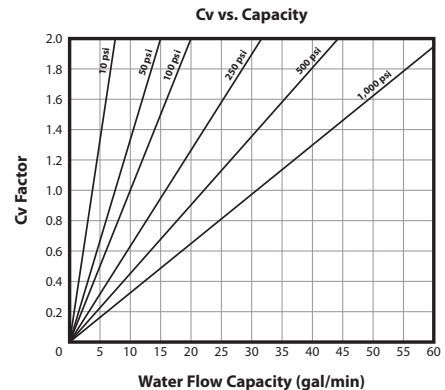
	SERIES	DESCRIPTION/APPLICATIONS	FEATURES	STANDARD BODY MATERIAL
2-WAY BALL VALVES				
	Flomite® 71 Series (pg. 4)	<ul style="list-style-type: none"> On-off service High pressure and temperature Long cycle life Corrosive fluids 	<ul style="list-style-type: none"> Dyna-Pak® packing Encapsulated seats Micro finished ball 	Brass 316 stainless steel Monel® Hastelloy® C-276
	Rotoball® 72 Series (pg. 9)	<ul style="list-style-type: none"> On-off service High cycle life High flow 	<ul style="list-style-type: none"> Encapsulated seats Blowout-proof stem Trip-proof handle 	Brass 316 stainless steel Monel®
WELDED END 2-WAY AND 3-WAY BALL VALVES				
	Ultramite™ 70 Series (pg. 12)	<ul style="list-style-type: none"> On-off service (2-Way valves) Switching & diverting (3-Way valves) High pressure High flow 	<ul style="list-style-type: none"> Fixed end fitting Trip-proof handle Floating ball design Dyna-Pak® packing 	Brass 316 stainless steel Monel®
3-WAY BALL AND TRUNNION VALVES				
	Selectomite® 71 and 76 Series Ball Valves (pg. 19)	<ul style="list-style-type: none"> Switching & diverting Corrosive fluids High cycle life 	<ul style="list-style-type: none"> Dyna-Pak® packing Encapsulated TFE seats 	Brass 316 stainless steel Monel®
	Selectomite® 76 Series Trunnion Valves (pg. 23)	<ul style="list-style-type: none"> High pressure switching High cycle life High pressure 	<ul style="list-style-type: none"> 3-Way trunnion design Spring-loaded seats Blowout-proof stem 	316 stainless steel
4- AND 5-WAY TRUNNION VALVES				
	Multimite® 79 Series (pg. 26)	<ul style="list-style-type: none"> 4-Way or 5-Way operation High cycle life High pressure 	<ul style="list-style-type: none"> 4- and 5-Way trunnion design Spring-loaded seats Blowout-proof stem 	316 stainless steel

Flow Capacity of HOKE Ball Valves

To determine the Cv or flow of a **liquid** @ 60° F (16° C):

$$Cv = \frac{GPM}{\sqrt{\frac{\Delta p}{S.G.}}} \quad \text{or} \quad GPM = Cv \sqrt{\frac{\Delta p}{S.G.}}$$

where: $p = p_1 - p_2$
 p_1 = inlet pressure in psia
 p_2 = outlet pressure in psia
 GPM = flow in gallons per minute
 S.G. = specific gravity of liquid where water = 1.0 @ 60° F (16° C)



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MAX. OPERATING PRESSURE @ 70° F (21° C)	OPERATING TEMP. RANGE	CV FLOW RANGE (VARIES W/ END CONN.)	ORIFICE SIZES	STANDARD END CONNECTIONS
2-WAY BALL VALVES				
6000 psig (414 bar)	-40° F to 480° F (-40° C to 249° C)	0.23 to 1.40	0.093" to 0.250" (2.4 mm to 6.4 mm)	1/8, 1/4, 3/8, 1/2 Gyrolok® tube fittings 1/4 Male NPT 1/4 Male NPT x 1/4 Female NPT 1/8, 1/4, 1/2 Female NPT 3, 6, 8, 10, 12 mm Gyrolok® tube fittings
5000 psig (345 bar)	-20° F to 350° F (-29° C to 177° C)	3.4	0.375" (9.5 mm)	1/2 Gyrolok® tube fittings 3/8, 1/2 Female NPT 12 mm Gyrolok® tube fittings
FIXED END 2-WAY AND 3-WAY BALL VALVES				
6000 psig (414 bar)	-40° F to 350° F (-40° C to 177° C)	0.15 to 3.4	0.23" to 0.375" (2.4 mm to 9.5 mm)	1/8, 1/4, 3/8 Gyrolok® tube fittings 1/4 Male NPT x 1/4 Female NPT 1/4, 3/8, 1/2 Female NPT
7065 Series: 500 psig (34.5 bar)	0° F to 350° F (-18° C to 177° C)	0.15 to 0.57	0.093" to 0.187"	1/8, 1/4, 3/8, 1/2 Gyrolok® tube fittings 1/4 Female NPT
3-WAY BALL AND TRUNNION VALVES				
6000 psig (414 bar)	-40° F to 350° F (-40° C to 177° C)	.015 to 0.57	0.125" to 0.187" (3.2 mm to 4.8 mm)	1/8, 1/4, 3/8 Gyrolok® tube fittings 1/8, 1/4 Female NPT 3, 6, 8 mm Gyrolok® tube fittings
6000 psig (414 bar)	0° F to 350° F (-18° C to 177° C)	0.56	0.187" (4.8 mm)	1/4, 3/8, 1/2 Gyrolok® tube fittings 1/4 Female NPT
4- AND 5- WAY TRUNNION VALVES				
6000 psig (414 bar)	0° F to 350° F (-18° C to 177° C)	0.47 to 0.66	0.166" to 0.187" (4.2 mm to 4.8 mm)	1/4 Gyrolok® tube fittings 1/4 Female NPT

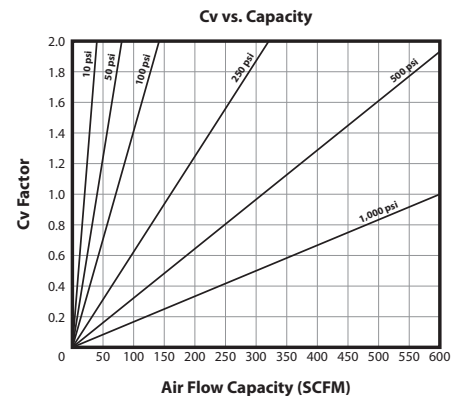
Flow Capacity of HOKE Ball Valves

To determine the Cv or flow of a **gas** @ 70° F (21° C):

$$Cv = \frac{SCFH}{1360} \sqrt{\frac{(\Delta p) (p_1)}{(460 + T) (S.G.)}} \quad \text{or} \quad SCFH = 1360 Cv \sqrt{\frac{(\Delta p) (p_1)}{(460 + T) (S.G.)}}$$

where:

- $\Delta p = p_1 - p_2$
- p_1 = inlet pressure in psia
- p_2 = outlet pressure in psia
- SCFH = flow in standard cubic feet per hour
- S.G. = specific gravity of gas where air = 1.0 @ 70° F (21° C) and 14.7 psia
- T = temperature in ° F



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.

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