

Plug Valves

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plug valves



CRANE Instrumentation & Sampling, HOKE®
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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. When selecting products, the total system design must be considered to ensure safe, trouble-free performance. 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.

Contact your authorized HOKE® sales and service representative for information about additional sizes and special alloys.

SAFETY WARNING:

HOKE® products are designed for installation only by professional suitably qualified licensed system installers experienced in the applications and environments for which the products are intended. These products are intended for integration into a system. Where these products are to be used with flammable or hazardous media, precautions must be taken by the system designer and installer to ensure the safety of persons and property. Flammable or hazardous media pose risks associated with fire or explosion, as well as burning, poisoning or other injury or death to persons and/or destruction of property. The system designer and installer must provide for the capture and control of such substances from any vents in the product(s). The system installer must not permit any leakage or uncontrolled escape of hazardous or flammable substances. The system operator must be trained to follow appropriate precautions and must inspect and maintain the system and its components including the product(s) and at regular intervals in accordance with timescales recommended by the supplier to prevent unacceptable wear or failure.



7300 Series

Quarter-turn Plug Valves



The HOKE® 7300 Series Plug Valve provides full flow or leak-tight shut off with just a quarter turn. The 7300 is recommended for use in applications where instant on-off and visual flow indication is essential. Its safe, reliable top-loaded design allows throttling of fluids and thru-port rodding of the valve. The simple design provides easy maintenance and extends valve life.

Applications

- Low pressure air lines
- Test benches
- Chromatographs
- Control panels
- Instrument lines for on/off service
- Isolation valves
- Sampling lines
- Pilot plant instrumentation

Technical Data

BODY MATERIAL*	316 stainless steel, brass
MAXIMUM UNIDIRECTIONAL OPERATING PRESSURE	3000 psig (207 bar)
MAXIMUM REVERSE OPERATING PRESSURE	200 psig with vent
MAXIMUM OPERATING TEMPERATURE RANGE	1000 psig (69 bar)
ORIFICE SIZES	-20° to 400° F (-29° C to 205° C) with fluoroelastomer seals
Cv (MAXIMUM)	0.093 to 0.187 (2 to 5mm)
	0.74

* Other materials available upon request

Benefits

Safety

- Dual retaining rings prevent accidental plug removal when the handle is not in place

Full flow

- Straight through orifice

Ease of maintenance

- Straight through bore allows rodding through body

Visual indication of flow

- Handle shape indicates flow direction

Quick actuation

- 90° on/off-instant control

Multifunctional

- Throttling capabilities

Safety handle

- Oval trip-proof handle prevents inadvertent actuation

Ease of repair

- Plug and o-ring are easily replaced

Reliable

- All valves are factory tested

Ease of operation

- Low operating torque

Easy installation

- Available with GYROLOK® flareless tube fittings
- Special High Tolerance NPT Thread

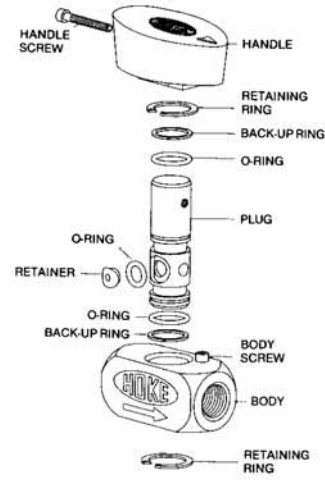
plug valves

7300 Series

Materials of Construction

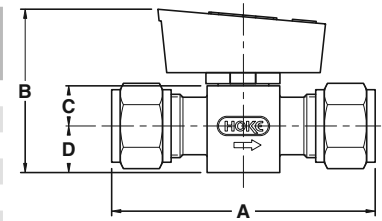
COMPONENT	316 STAINLESS STEEL	BRASS
Body	316 stainless steel	Brass
Plug	316 stainless steel	Brass
Plug coating	Fluoropolymer (black)	Fluoropolymer (green)
Handle	Nylon	Nylon
Retainer	PEEK™	PEEK™
O-rings*	Fluoroelastomer	Fluoroelastomer
Back-up rings	PTFE	PTFE
Retaining ring	Stainless steel	Stainless steel
Body screw	Stainless steel	Stainless steel
Handle screw	Stainless steel	Stainless steel
Lubricant	Fluorocarbon	Fluorocarbon

* Standard on 7312

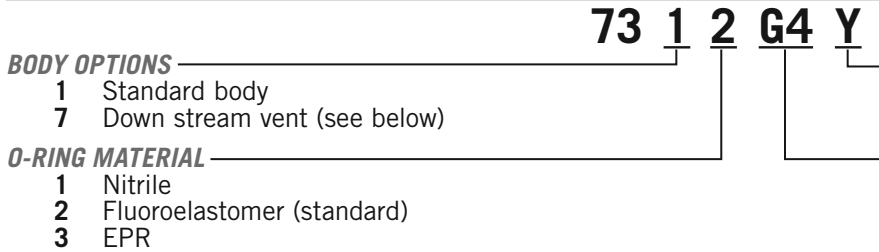


Dimensions (inches)

END CONNECTIONS	PART NUMBER		ORIFICE	Cv	A	B	C	D	BODY WIDTH
	BRASS	316 STAINLESS STEEL							
1/8 female NPT	7312F2B	7312F2Y	0.187	0.74	1.90	2	0.50	0.50	1
1/8 GYROLOK®	7312G2B	7312G2Y	0.093	0.12	2.20	2	0.50	0.50	1
1/4 female NPT	7312F4B	7312F4Y	0.187	0.74	2.10	2	0.50	0.50	1
1/4 GYROLOK®	7312G4B	7312G4Y	0.187	0.74	2.37	2	0.50	0.50	1
3/8 GYROLOK®	7312G6B	7312G6Y	0.187	0.74	2.50	2	0.50	0.50	1
1/2 GYROLOK®	—	7312G8Y	0.187	0.74	3.08	2	0.50	0.50	1



How to Order



BODY MATERIAL

- B Brass
- Y 316 stainless steel

END CONNECTIONS

- F2 1/8 female NPT
- F4 1/4 female NPT
- G2 1/8 GYROLOK®
- G4 1/4 GYROLOK®
- G6 3/8 GYROLOK®
- G8 1/2 GYROLOK® (316 stainless steel only)

Down Stream Vent

Down stream vent allows down stream pressure to be relieved to atmosphere through a small hole in the body. To order, select '7' under Body Options.

Repair Kits

- **SP7300K1** includes the fluoroelastomer o-rings, retainer, retaining rings, and PTFE back-up rings.
- **SP 300K2** includes the brass plug.
- **SP7300K3** includes the 316 stainless steel plug.

Lock-Out Kit 7300K2

Colored Handles

Colored handles provide a visual identification of valves used in various applications. Refer to the chart below for ordering information:

PART NUMBER	HANDLE COLOR
96159-030	Red
96159-031	Blue
96159-033	Green



7400 Series

Rising Stem Plug Valve



Benefits

Safety

- Back seating is standard

Straight through flow

- In the full open position, the unobstructed, straight through flow path provides maximum flow and rodability

Regulating capability

- A tapered plug and conical seat provide flow regulation and reliable shutoff with very low seating torque, similar to that of a needle valve

Helps reduce fugitive emissions

- Dyna-Pak® packing provides a leak-tight seal with low operating torque in deep vacuum or high pressure applications

Extended valve life

- Soft Delrin® seat can absorb solid contaminants and still provide leak-tight shutoff. Delrin® maintains its toughness and remains springy under a wide range of temperature conditions, enduring high fatigue and resisting both creep and corrosion

Dependability

- All valves are tested for bubble-tight leakage at both seat and packing
- Special High Tolerance NPT Thread

Typical Applications

- Lines which contain small solid impurities
- Instrumentation lines which contain viscous fluids or slurries
- Systems which require routine cleaning
- Systems which require flow regulation and full flow capabilities

Technical Data

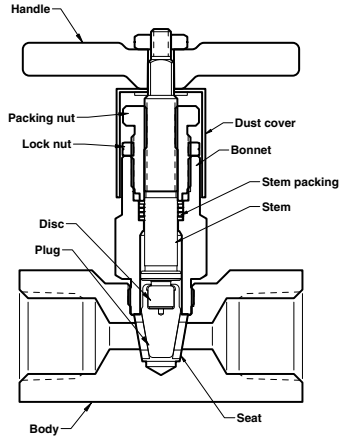
MAXIMUM OPERATING PRESSURE	6,000 psig @ 70° F (41.4 MPa @ 21° C)
OPERATING TEMPERATURE RANGE	-20° to 250° F (-29° C to 121° C)
ORIFICE SIZES	0.187 and 0.250
Cv FACTORS	0.83 and 1.20
END CONNECTIONS	¼ to ½ NPT

plug valves

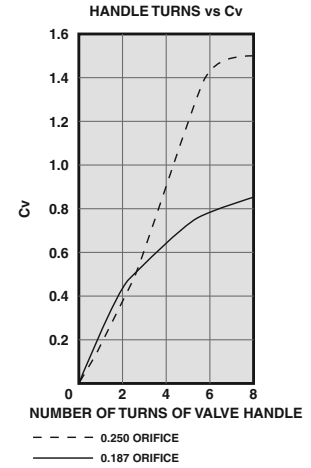
7400 Series

Materials of Construction

Body	316 stainless steel
Bonnet	316 stainless steel
Stem	17-4PH stainless steel
Disc	17-7 stainless steel
Plug	316 stainless steel
Seat	Delrin®
Stem packing	TFE/316 stainless steel
Packing nut	XM-28 stainless steel
Lock nut	316 stainless steel
Handle	316 stainless steel
Dust cover	Polyethylene



Flow Curve



Valve Ordering Chart

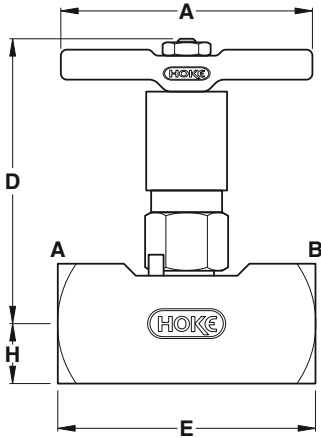


7451F4Y

END CONNECTIONS		ORDER BY PART NUMBER			
INLET	OUTLET	STANDARD	GAUGE PORTING	ORIFICE	Cv
¼ female NPT	¼ female NPT	7451F4Y	7471F4Y	0.187	0.83
½ female NPT	½ female NPT	7461F8Y	—	0.250	1.20
½ male NPT	½ female NPT	7461L8Y	—	0.250	1.20

Other end configurations, including GYROLOK®, are available. Please contact your local HOKE® distributor for details.

Dimensions Chart



INLET A	OUTLET B		D	E	F	H
¼ female NPT	¼ female NPT	inch	3½	2¼	2¾	½
		mm	82	57	67	13
¼ female NPT	¼ female NPT Gauge porting	inch	3½	2¾	2¾	½
		mm	82	73	67	13
½ female NPT	½ female NPT	inch	3½	2½	2¾	½
		mm	82	68	67	13
½ male NPT	½ female NPT	inch	3½	3½	2¾	½
		mm	82	89	67	13

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Delrin® is a registered trademark of DuPont.



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