

# Mark HPX and HPAX Series

## Globe and Angle Style Control Valves

Excellent Pressure and Flow Control on steam, gasses and various liquid applications.

The HP Series Control Valves are high pressure globe and angle valves, designed for high-pressure applications in the process control industry.

They are equipped with metal seats, cage guiding and quick-change trim and push-down-to-close valve plug action. These valves use balanced valve plugs.

In the HPX2D and HPAX2 Series, a piston ring provides the seal between the cage and the balanced valve plug. In the HPX5T and HPAX5 Series that seal is provided by a pressure assisted seal ring.

### FEATURES

- Available in-line (2" – 6") or angle (2") designs
- Characterized flow options include equal percentage, modified equal percent and linear
- The Mark HPX/HPAX Series valves are ideal for high pressure applications in the process control industry
- Cage guiding allows the Mark HPX/HPAX to handle high pressure drops while providing greater plug stability
- Optional body and trim materials are available
- Quick change trim for easy maintenance
- Sour service capability: Optional NACE MRO175/ISO 15156-2009



Mark HPX Series Valve



Jordan Valve, a division of Richards Industries  
 3170 Wasson Road • Cincinnati, OH 45209  
 513.533.5600 • 800.543.7311 • 513.871.0105 (f)  
 info@richardsind.com • www.jordanvalve.com



Vinnova Exploration  
 sales@vinnova.asia  
 063-271-9119  
 www.vinnova.asia

## SPECIFICATIONS

**Sizes:** 2"-6" In-Line 2" Angle

**End Connections:**

- ASME class 900 through 2500
- Raised Face, Ring Type Joint, NPT, or welded flanges

**Body Materials:**

- LCC
- WCB
- WCC
- WC9
- C5
- Monel
- CF8M (SST)
- Additional materials may be available upon request.

**Trim Materials:**

- 316SST (standard)
- 416SST
- 17-4PH
- Alloy6-Co.Cr-A
- Cobalt
- 316SST/Tungsten Carbide

**Seats:**

- Metal

**Shutoff:**

- Class II and V

**Maximum Inlet Pressures and Temperatures:**

- The Maximum Inlet Pressure and Temperature is consistent with ASME Class per ASME 16.34.

**Maximum Pressure Drops:**

- All Valves are Capable of Full Rated Pressure Drops

**Flow Characteristics:**

- Quick opening
- Linear
- Equal percentage

**Trim Options:**

- Noise abatement
- Anti-cavitation

**Flow Direction:**

- Flow Down

**Valve Travel Indication:**

- Valves are Supplied with Visual Travel Indicator

## DIMENSIONAL DATA

### Body Dimensions

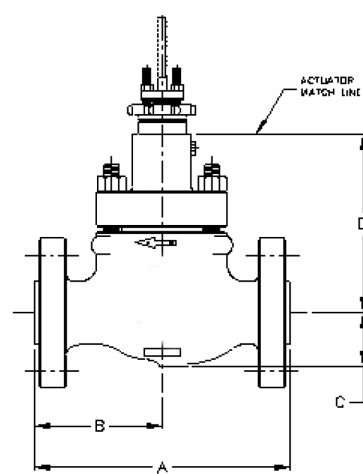
Valve Size Inches	Dimension A (Globe Valve)					Dimension B (Globe Valve)				
	ANSI Flange Rating					ANSI Flange Rating				
	Class 900		Class 1500		Class 2500	Class 900		Class 1500		Class 2500
	Raised Face (RF)	Ring Type Joint (RTJ)	Raised Face (RF)	Ring Type Joint (RTJ)	Ring Type Joint (RTJ)	Raised Face (RF)	Ring Type Joint (RTJ)	Raised Face (RF)	Ring Type Joint (RTJ)	Ring Type Joint (RTJ)
	Inches	Inches	Inches	Inches	Inches	Inches	Inches	Inches	Inches	Inches
2	14.75	14.88	14.75	14.88	16.38	7.38	7.44	7.38	7.44	8.19
3	17.38	17.50	18.12	18.25	---	8.69	8.75	9.06	9.12	---
4	20.12	20.25	20.88	21.00	---	9.00	9.06	9.38	9.44	---
6	28.12	28.25	30.25	30.50	---	A/2	A/2	A/2	A/2	---

Valve Size Inches	Dimension A (Angle Valve)	
	ANSI Class 900 and 1500	
	Raised Face (RF)	Ring Type Joint (RTJ)
	Inches	Inches
2	7.00	7.06

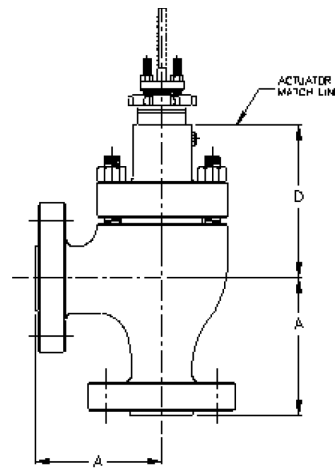
### Standard Bonnet Dimensions

Valve Size Inches	Standard Bonnet Dimensions (Globe Valve) Class 900 and 1500			Class 2500 (Globe Valve)		Class 2500 (Globe Valve)	Standard Bonnet Dimensions (Angle Valve)	
	Dimension C	Dimension D		Dimension D		C	Dimension D	
		Yoke Boss Diameters (Inches)				Inches	Yoke Boss Diameters (Inches)	
		2-13/16	3-9/16	2-13/16	3-9/16		2-13/16	3-9/16
2	3.05	10.31	10.56	11.91	11.91	3.31	8.94	9.19
3	4.75	12.69	12.25	---	---	---		
4	6.88	---	11.81	---	---	---		
6	9.75	---	14.38	---	---	---		



Flanged Mark HPX Globe Valve  
Yoke Boss Diameter

(2-13/16 (71mm) OR 3-9/16 (90mm) inch)



Flanged Mark HPX Angle Valve  
Yoke Boss Diameter

(2-13/16 (71mm) OR 3-9/16 (90mm) inch)

### Globe and Angle Valve Dimensions With Standard Bonnet

## MARK HPX &amp; HPAX SERIES GLOBE AND ANGLE STYLE CONTROL VALVES

## Approximate Shipping Weights: Valve and Bonnet Assembly

Valve Type	Valve Size (Inches)	Class	Pounds Flanged	Kilograms Flanged
Globe Valve	2	900 & 1500	158	72
	2	2500	229	104
	3	900	276	125
		1500	284	129
	4	900	507	230
		1500	548	249
	6	900	1127	511
		1500	1228	557
Angle Valve	2	900 & 1500	153	69

## Interpolation Table: Cv Coefficients for the Mark HPX

Percent Travel	HPX			
	2" km=0.86	3" km=0.84	4" km=0.73	6" km=0.67
10	0.5	0.6	3.1	3.9
20	1.0	1.2	7.4	13.3
30	3.3	4.2	13.9	23.1
40	7.5	11.3	23.4	36.2
50	13.3	23.0	37.9	63.0
60	19.8	37.6	60.1	105.0
70	26.4	53.2	90.6	156.0
80	32.0	69.5	123.0	217.0
90	36.2	85.3	147.0	280.0
100	41.0	92.7	165.0	319.0

## Shutoff Classifications per ANSI/FCI 70-2-1991

Valve Design	Port Diameter Inches (mm)	ANSI Leakage Class
HPX2D	1-7/8 (47.6) and smaller	II
	2-5/16 (58.7) to 3-5/8 (92.1)	II-Standard
HPAX5T	All	V-Standard