# Mark EW Series

# Globe Style Control Valves

# Mark EWD, EWS & EWT

The Mark EW valve bodies are single port, globe-style bodies with cage guiding, clamped seat rings and push-down-to-close valve plug action. Providing excellent pressure and flow control on steam, gasses, and various liquid processes.

This series features large end connections and expanded internal flow cavities. The series is available  $8\times6$ ,  $10\times8$ ,  $12\times6$  and  $12\times8$ ,  $16\times12$ ,  $20\times16$ ,  $24\times16$ , and  $24\times20$ -inch sizes. The first number refers to the line size, and the second refers to the trim and bonnet size.

There are three body configurations in this design series:

**The Mark EWD Series** is intended for general control applications over a wide variety of temperatures and pressure drops. This design has balanced valve plug with metal-to-metal seating.

**The Mark EWS Series** is intended for applications requiring better shutoff capabilities than those suitable for the EWD. This valve uses an unbalanced valve plug with metal-to-metal seating, or optional metal-to-TFE seating.

**The Mark EWT Series** is suitable for applications with stringent shutoff requirements. This valve uses a balanced valve plug with metal-to-TFE seating, or metal-to-metal seating for use in higher temperatures.



#### **F**EATURES

- Characterized flow options including equal percentage, linear, and quick opening
- Available in a variety of body and trim materials, the Mark EW Series is suitable for a variety of applications including liquids, gasses or steam
- Anti-Cavitation trim and Noise Abatement trim available
- Sour service capability: Optional NACE MRO175/ISO 15156-2009
- Tight shutoff



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#### **SPECIFICATIONS**

**Sizes:** 8x6, 10x8, 12x6, 12x8, 16x12, 20x16, 24x16, 24x20

#### **End Connections:**

- ASME Class 150 through 900
- Raised Face, Ring Type Joint, and welded flanges

#### **Body Materials:**

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

#### **Trim Materials:**

#### Standard:

• 316 Stainless Steel

#### **Optional Material:**

- Alloy 6
- Cobalt
- Tungsten Carbide

#### Seats:

- Metal
- TFF

#### **Shutoff:**

Mark EWD: Class II, III & IV
Mark EWS: Class IV, V & VI
Mark EWT: Class IV & V

#### **Maximum Inlet Pressures and Temperatures:**

#### All Mark EWD, EWS, and EWT Series:

 Do not exceed conditions specified when valve was ordered. Valve is configured in accordance with Class 300, 600 or 900 pressure temperature ratings per ANSI B16.34-latest

#### **Class 600:**

• Some flanged Class 600 bodies in 316 SST do not comply with ASME B16.34. Consult Jordan Valve

#### **Maximum Pressure Drops:**

#### Class 900:

 Class 900 Size 8 x 6 Mark EWD, EWS, and EWT Series Valves are limited to Class 600 pressure drops and temperature limits.

#### Flow Characteristics:

- Linear
- Quick Opening
- Equal Percentage
- Noise Abatement
- Anti-Cavitation

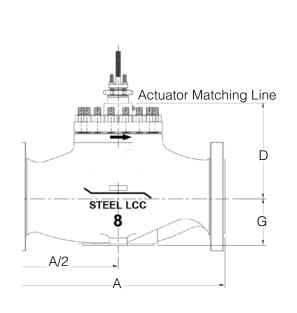
#### Flow Direction:

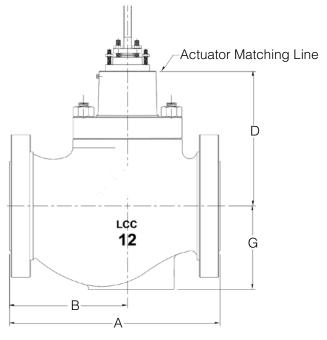
- Mark EWS: Normally Up
- Mark EWD and EWT: Normally Down

**Valve Travel Indication:** Valves are supplied with Visual Travel Indicator

## **D**IMENSIONS

# **Typical Dimension for Mark EWD Series Valve Bodies**





Dim	ANSI Class		8 x 6		12 x 6		12 x 8	
Dim.			in.	mm	in.	mm	in.	mm
	300	RF	22.38	568	30.50	775	30.50	775
		RTJ	23.00	584	31.12	791	31.12	791
А	600	RF	24.00	610	32.25	819	32.25	819
		RTJ	24.12	613	32.38	822	32.38	822
	900	RF	36.00	914			35.50	902
		RTJ	36.12	917			39.62	1006
В	300	RF					18.25	164
		RTJ					18.56	471
	600	RF					19.12	486
		RTJ					19.19	487
	900	RF					19.88	505
		RTJ					19.94	506
	300		13.00 <sup>A</sup>	330 <sup>A</sup>	15.69	399		
	300		13.00*					
D	600							
	900		18.25 <sup>A</sup>	464 <sup>A</sup>			23.63 <sup>A</sup>	600 <sup>A</sup>
	900		(16.13) <sup>B</sup>	(410) <sup>B</sup>			(22.94) <sup>B</sup>	(583) <sup>B</sup>
_	300/600		7.20	183	10.00	254	14.00	530
G	900		7.80	198			14.00	

A – 1 OR 1-1/4" VSC, PLAIN BONNET

B - 3/4" VSC, PLAIN BONNET

C - FOR OTHER TRIM COMBINATIONS CONTACT A JORDAN VALVE SALES REP.

For Larger Sizes, contact factory

## **Approximate Weights**

		Body Size, Inches							
End Cor	8 x 6		10 x 8		12 x 6		12 x 8		
		Lb	Kg	Lb	Kg	Lb	Kg	Lb	Kg
Class 300 (Flanged Only)		625	284	1102	500	1102	500	1440	653
	Flanged	680	308	1590	721	1590	721	1890	857
Class 600	Butt welding	600	272	1160	526	1160	526	3300	1497
	Flanged	1350	612					3000	1361
Class 900	Butt welding	1000	454					2850	1293

For larger sizes, contact factory

#### **Shutoff Classifications**

Body Design	Seating	Shutoff Class	Max. Leakage		
		II (Optional)	0.5% of valve capacity at full travel		
EWD	Metal	III (Optional)	0.1% of valve capacity at full travel		
		IV (Standard)	0.01% of valve capacity at full travel		
EWS		IV (Optional)	0.01% of valve capacity at full travel		
	Metal (Standard)	V	0.0005 mL/min. per in. of port diameter per psi (5 x 10-12m3 per sec. per mm of port diameter per bar) drop		
	TFE	VI	Less than 4 bubbles (0.60 mL per min. to 45 bubbles (6,75 mL) per min. depending on port diameter		
EWT	TFE (Standard)	V	0.0005 mL/min. per in. of port diameter per psi (5 x 10-12m3 per sec. per mm of port diameter per bar) drop		
	Metal	IV	0.01% of valve capacity at full travel		







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