

MSCV20 Control Valve

The MSCV20 is a rugged, compact, freezeless dump valve. The body can be installed so that the valve cage and plug are submerged into the process media giving the valve its freezeless characteristic. Typical installations include separators, scrubbers, and other production vessels.

The MSCV20's hammer union makes maintenance easy by allowing the topworks to be removed without taking the valve out of line.

Using the same trim set as the MSCV10 valve, the MSCV20 offers the versatility of multiple trim sizes and material options. A NACE option is also available for sour service.



Specifications

Connections:

1" Female NPT x 1" Female NPT,
2" Male NPT x 1" Female NPT

Body Type: Freezeless Angle Body Design

Trim Characteristic: Quick Open, Modified Percent
(Throttling)

Trim Size: 0.25", 0.375" (3/8"), 0.50"

Pressure Rating: 2250 psi

Temperature Range: -50° F to 200° F (-46° C to 93° C)

Shutoff: ANSI Class IV

Actuator Sizes: No. 35 (35 in² area), No. 70 (70 in² area)

Input Signal Ranges: 3-15 psi, 6-30 psi

Materials:

Body: A105 Steel, A350 LF2 (Low Temp Option)

Packing Plug: A105 Steel, Nickel Plated, A350 LF2 (Low
Temp Option)

Hammer Nut: A105 Steel, A350 LF2 (Low Temp Option)

Trim: 17/4 Stainless, Carbide (Optional)

Stem: 303 Stainless, 316 (Optional)

Actuator Housing: Carbon Steel

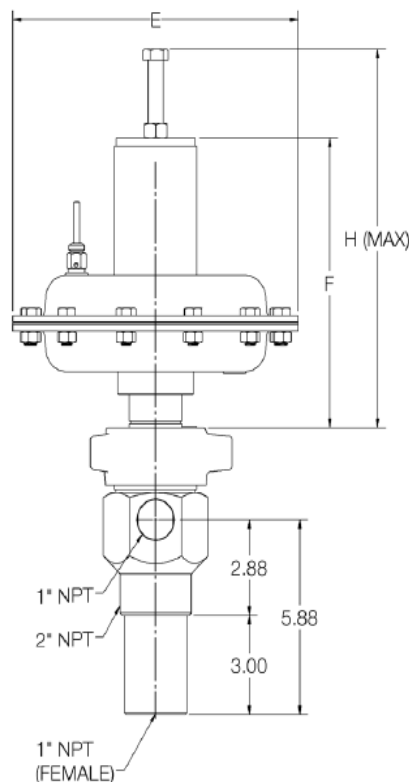
Approximate Weight:

With #35 Actuator: 25 lbs.

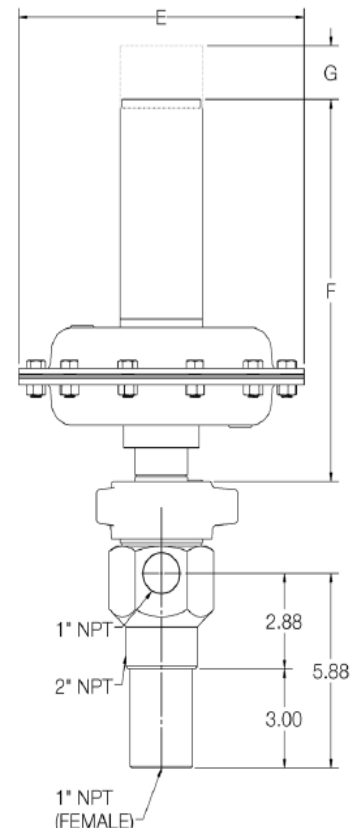
With #70 Actuator: 35 lbs.

Dimensions

Reverse Acting



Direct Acting





MSCV Values

CV Values at 100% Open		
Trim Size (in)	Trim Type	
	Quick Open	Throttling
0.25	1.4	1.3
0.375	2.0	1.9
0.50	2.3	2.2

Actuator Assembly Dimensions (in.)						
Actuator Size	Direct Acting			Reverse Acting		
	E	F	G	E	F	H
No. 35, 3-15	9.50	11.51	5.50	9.50	8.76	10.91
No. 35, 6-30	9.50	13.13	7.00	9.50	10.63	11.91
No. 70, 3-15	12.50	13.10	7.00	12.50	10.63	13.24
No. 70, 6-30	12.50	16.42	10.00	12.50	12.38	15.00

Shut-Off Pressures

Maximum Shut-Off Pressures for Direct Acting (Fail Open) Actuators

Trim Size (in.)	Flow Direction	Signal to No.35 Act.		Signal to No.70 Act.		Flow Direction	Signal to No.35 Act.		Signal to No.70 Act.	
		3-15 Spring	6-30 Spring	3-15 Spring	6-30 Spring		3-15 Spring	6-30 Spring	3-15 Spring	6-30 Spring
0.25	Up	4000	4000	4000	4000	Down	4000	4000	4000	4000
0.375		2700	4000	4000	4000		4000	4000	4000	4000
0.50		1370	2880	2540	4000		3800	4000	4000	4000

1. Controller supply must have at least 5 psi beyond the signal pressure required.

Maximum Shut Pressures for -Off Direct Acting (Fail Open) Actuators

[illegible]

How to Order

Example Model No. MSCV20-R33-CB-2Q

MSCV20 Series Dump Valve, No.35 Reverse Act, 3-15 Spring, Carbon Steel with Buna Seals, 0.25" Quick Open SST Trim

	MSCV20- R 3 3 - C B - 2 Q
Actuator D - Direct (Fail Open) R - Reverse (Fail Close)	
Actuator Size 3 - #35 (9") 7 - #70 (12")	
Spring 3 - 3-15 psi 6 - 6-30 psi 0 - Non-Adjustable (#35 Actuator Only)	
Materials C - Carbon Steel N - Carbon Steel NACE T - Stainless Steel L - Low Temp CS	
Seals B - Buna V - Viton® L - Low Temp Buna	
Trim Size 2 - 0.25" 3 - 0.375" (3/8") 4 - 0.50"	
Trim Type Q - Quick Open Stainless T - Throttling Stainless R - Quick Open Tungsten Carbide U - Throttling Tungsten Carbide	

Repair Kits Available



MARIA LOURDES CABALLERO 5319
COLONIA ANDRES CABALLERO
ESCOBEDO, NUEVO LEON 66080
Tel: 011528183983450
Fax: 011528183983153