CV64
CONTROL VALVE

Beaumont Manufacturing and Distribution Company

The CV64 is a control valve built to master the toughest high-pressure applications. Designed with a robust globe valve body, it is perfect for precise pneumatic control of pressure and flow. The CV64 is a powerhouse in oil and gas production, offering exceptional throttling and on/off control for separators, scrubbers, and processing equipment. Its unique design minimizes buildup from gritty or sticky media, ensuring consistent performance and reduces maintenance. Choose the CV64 for a reliable, long-lasting solution that stands up to the most demanding challenges.



FEATURES

- **Safe Bonnet / Valve Body Connection**
- **Heavy-Duty Guiding**
- **Quad-O compliant Packing System with BMD Super Red**
- **Quick-Change Valve Plug**
- **Standard construction NACE compatable**
- **Severe Service Capability with Tungsten Carbide Trim**
- **Easy Installation**
- **Easy Maintenance**
- **Standard Trim for Throttling or On-Off Service**
- **Low Temperature Materials**

VALVE SPECIFICATIONS

Size:
- 2" NPT & Flanged

Weight
- 87 lbs (39 kg)

Maximum Inlet Pressure:
- 4250 psig (NPT)
- 150, 300, 600 Class (Flanged)

Shutoff Classification per ANSI/FCI 70-2 :
- Class IV

Flow Characteristic:
- Equal percentage

Flow Direction:
- Flow up

Port Diameters:
- 0.25 - 1.25 in.

Actuator Configurations:
- Reverse (Fail Close)
- Direct (Fail Open)

Valve Plug Travel:
- 0.75 inch(19 mm)

Material Temperature Capabilities:
Valve Body Assembly
- Standard Bonnet O-Ring: -40 to 275°F (-40 to 135°C)
- Optional Bonnet Viton™ O-Ring: -10 to 400°F (-23 to 204°C)

MATERIALS

Valve Body and Bonnet:
- ASME SA 352 LCC

Valve Plug and Seat:
- 17-4, Tungsten Carbide (Optional)

Valve Stem:
- S20910

O-Rings:
- Standard: HNBR
- Optional: Viton™

Packing:
- BMD Super Red

Packing Springs:
- X-750

Packing Retainer:
- 316 SST

Actuator Diaphragm:
- Chloroprene

Actuator Spring Housing:
- Painted steel

Seat Ring Gasket:
- 316 SST

PRESSURE RATINGS

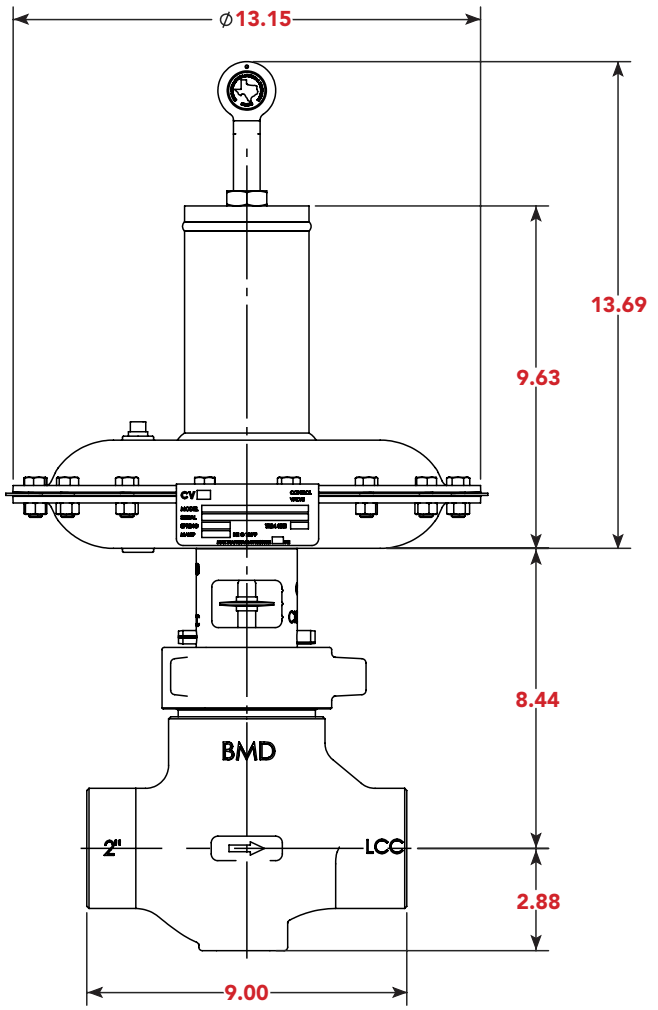
MAXIMUM SHUTOFF PRESSURE DROPS FOR REVERSE ACTUATOR (FAIL CLOSE)

INPUT SIGNAL TO ACTUATOR		0 to 18 Psig (0 to 1.2 Bar)		0 to 20 Psig (0 to 1.4 Bar)		0 to 30 Psig (0 to 2.0 Bar)		0 to 33 Psig (0 to 2.3 Bar)		0 to 35 Psig (0 to 2.4 Bar)		0 to 50 Psig (0 to 50 Psig)	
SPRING		Light Rate				Heavy Rate							
INITIAL SPRING SETTING		9 Psig (0.77 Bar)		9 Psig (0.77 Bar)		12.4 Psig (0.85 Bar)		15.3 Psig (1.05 Bar)		17.1 Psig (1.18 Bar)		17.1 Psig (1.18 Bar)	
PORT DIAMETER													
Inches	mm	Psi	Bar	Psi	Bar	Psi	Bar	Psi	Bar	Psi	Bar	Psi	Bar
0.25	6.4	4000	276	4000	276	4250	293	4250	293	4250	293	4250	293
0.375	9.5	4000	276	4000	276	4250	293	4250	293	4250	293	4250	293
0.5	12.7	2630	181	2630	181	3180	219	4180	288	4250	293	4250	293
0.75	19.1	1100	76	1100	76	1340	92	1785	123	2080	143	2080	143
1	25.4	570	39	570	39	715	49	965	67	1130	78	1130	78
1.25	31.8	220	15	220	15	430	30	590	41	700	48	700	48

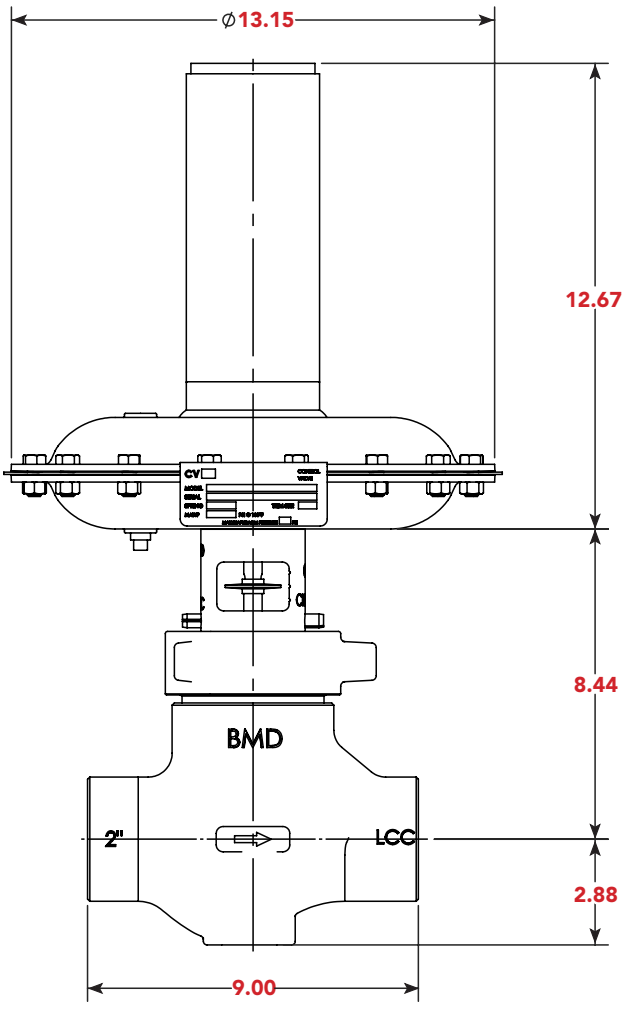
MAXIMUM SHUTOFF PRESSURE DROPS FOR DIRECT (FAIL OPEN)

INPUT SIGNAL TO ACTUATOR		0 to 18 Psig (0 to 1.2 Bar)		0 to 20 Psig (0 to 1.4 Bar)		0 to 30 Psig (0 to 2.0 Bar)		0 to 33 Psig (0 to 2.3 Bar)		0 to 35 Psig (0 to 2.4 Bar)		0 to 50 Psig (0 to 50 Psig)	
SPRING		Light Rate				Heavy Rate							
INITIAL SPRING SETTING		3.4 Psig (0.23 Bar)		3.4 Psig (0.23 Bar)		4.0 Psig (0.28 Bar)		4.0 Psig (2.8 Bar)		4.0 Psig (2.8 Bar)		4.0 Psig (2.8 Bar)	
PORT DIAMETER													
Inches	mm	Psi	Bar	Psi	Bar	Psi	Bar	Psi	Bar	Psi	Bar	Psi	Bar
0.25	6.4	4250	293	4250	293	4250	293	4250	293	4250	293	4250	293
0.375	9.5	4250	293	4250	293	4250	293	4250	293	4250	293	4250	293
0.5	12.7	2715	187	3380	233	4250	293	4250	293	4250	293	4250	293
0.75	19.1	1135	78	1430	99	2130	147	2575	178	2875	198	4250	293
1	25.4	600	41	765	53	1160	80	1410	97	1575	109	2830	195
1.25	31.8	355	24	465	32	715	49	875	60	985	68	1785	123

DIMENSIONS REVERSE (FAIL CLOSED)



DIMENSIONS DIRECT (FAIL OPEN)



CV VALUES

PORT DIAMETER		FLOW COEFFICIENT	Valve Opening (% Travel)										
Inches	mm		5	10	20	30	40	50	60	70	80	90	100
.25	6.4	Cv	0.0679	0.0858	0.122	0.167	0.231	0.325	0.458	0.646	0.905	1.25	1.76
.375	9.5	Cv	0.114	0.132	0.205	0.298	0.426	0.590	0.834	1.21	1.75	2.45	3.53
.50	12.7	Cv	0.186	0.244	0.359	0.540	0.784	1.09	1.52	2.25	3.20	4.49	6.27
.75	19.1	Cv	0.305	0.367	0.583	0.892	1.31	2.02	3.14	5.18	8.01	10.6	13.4
1.0	25.4	Cv	0.734	0.922	1.35	1.79	2.38	3.65	5.50	9.04	13.6	17.3	21.6
1.25	31.8	Cv	1.08	1.22	1.65	2.26	3.24	5.14	8.90	15.2	22.6	26.9	33.2

HOW TO ORDER

EXAMPLE MODEL NO. ***CV64-2N50RH-L-2T***

CV64 SERIES DUMP VALVE, 2" GLOBE BODY, NPT CONNECTION, THREADED CLASS 50, REVERSE ACTUATOR, HEAVY SPRING, LOW TEMP BUNA STANDARD SEALS, 1/4" QUICK OPEN SST TRIM, AND STAILNESS STEEL THROTTLING TRIM

C V 6 4 - 2 N 5 0 R H - L - 2 T

SERIES

BODY SIZE
2 - 2" Globe

CONNECTION
N - NPT (FEMALE) **F** - Flanged

CLASS
50 - Threaded (4250 psi) **10** - 150 **30** - 300 **60** - 600

ACTUATOR
D - Direct **R** - Reverse

SPRING
H - Heavy **L** - Light

SEALS
L - Low Temp Buna (Std.) **V** - Viton

TRIM SIZE
2 - .25" **4** - .50" **8** - 1"
3 - .375" **6** - .75" **10** - 1.25"

TRIM TYPE
T - Throttling Stainless **U** - Throttling Tungsten Carbide

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