

Venturi Valves

Field Adjustable - for all HVAC Systems

Bell & Gossett Venturi valves provide balance, ease of commissioning, and shut-off for use in a wide range of HVAC systems. The venturi design provides efficient and accurate flow balancing with minimal pressure loss. The ball/butterfly valve provides complete shut-off capability for use when servicing a section of your system. Offered in a wide range of sizes and end connections, Bell & Gossett Venturi valves can be the perfect solution for your entire system.

Venturi with Ball Valve

Brass venturi flow measurement section with integrated ball valve for small HVAC system applications.

- Calibrated full port ball valve
- Sizes from ½" to 2"
- Flow range from 0.3 GPM to 75 GPM
- Memory stop for re-setting valve after Isolation/shut-off
- Integrated P/T ports for easy ΔP measurement
- Union-ended tailpieces for quick installation



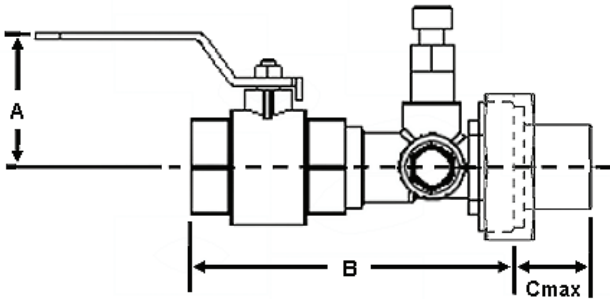
Venturi with or without Butterfly Valve

Steel venturi flow measurement section with or without butterfly valve for large system applications.

- Available with flange, groove, or weld end connections
- Sizes from 2½" to 12"
- Flow range from 20 GPM to 9,700 GPM
- Integrated 2" P/T ports for easy ΔP measurement
- Flow accuracy as fine as +/- 1%
- Butterfly valve includes 10 position memory stop



Model MV - Venturi with Ball Valve Dimension Information



Body: C37700 Brass
Ball: Chrome Plated Brass
Ball Seat: PTFE
O-Rings: EPDM
Handle: Chrome Plated Steel w/ Vinyl Cover
Stem: Explosion Proof
Max. Working Pressure: 400 psig (2,758 kPa)
Temperature Range: -4°F (-20°C) to 250°F (121°C)
Accuracy:

+/- 1% between 0.36 psi & 2.53 psi ΔP
 +/- 3% between 0.18 & 0.36 psi and 2.53 & 5.42 psi ΔP
 +/- 5% for ΔP < 0.18 psi and > 5.42 psi

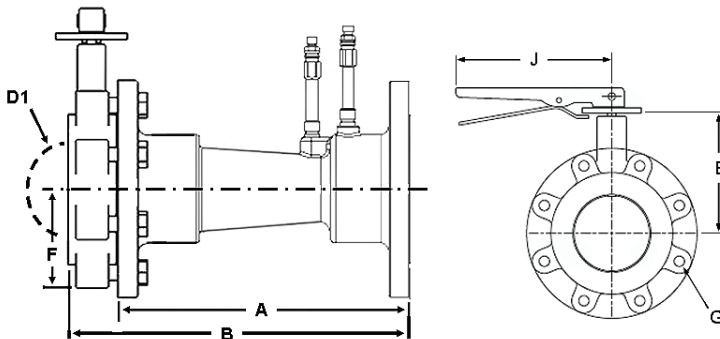
See Submittal A-606.40A for full pressure drop information

SIZE	DIMENSIONS* in inches (mm)		
	A	B	Cmax
1/2"	1.30 (33)	4.98 (126)	1.55 (39)
3/4"	1.50 (38)	5.40 (137)	1.55 (39)
1"	1.80 (46)	5.80 (147)	2.00 (51)
1 1/4"	2.05 (52)	6.60 (168)	2.00 (51)
1 1/2"	2.48 (63)	7.60 (193)	2.52 (64)
2"	2.64 (67)	9.90 (251)	3.14 (80)

*Dimensions not to be used for construction purposes

SIZE	FLOW INFORMATION in GPM (L/m)		
	Lower Flow Rate	Upper Flow Rate	Flow Factor (FF)
1/2"L	0.3 (1.14)	0.9 (3.41)	1.8 (6.81)
1/2"H	1.0 (3.80)	4.8 (18.18)	5.0 (18.93)
3/4"UL	0.3 (1.14)	0.9 (3.41)	1.8 (6.81)
3/4"L	1.0 (3.80)	2.8 (10.60)	5.0 (18.93)
3/4"H	3.0 (11.40)	9.0 (34.09)	10.2 (38.61)
1"	2.8 (10.61)	15.0 (56.82)	16.3 (61.70)
1 1/4"	5.4 (20.46)	26.0 (98.49)	29.0 (109.78)
1 1/2"	12.0 (45.46)	40.0 (151.52)	43.0 (162.77)
2"	22.0 (83.33)	75.0 (289.09)	79.0 (299.05)

Model MVF & VF - Venturi with and without Butterfly Valve Dimension Information



Venturi Body: Carbon Steel
Butterfly Valve Body: Nodular Cast Steel
Disc: Aluminum/Bronze
Stem: Stainless Steel
Liner: EPDM
Max. Working Pressure: 150 psig (1,034 kPa)
Temperature Range:
 -4°F (-20°C) to 230°F (111°C) w/o Butterfly Valve
 -4°F (-20°C) to 212°F (100°C) w/ Butterfly Valve
Accuracy:

+/- 1% for ΔP between 0.36 psi & 2.53 psi
 +/- 3% for ΔP between 0.18 & 0.36 psi and
 2.53 & 5.42 psi
 +/- 5% for ΔP < 0.18 psi and > 5.42 psi

See Submittal A-612C for full pressure drop information

SIZE	DIMENSIONS* in inches (mm)						
	A	B	D1	E	F	G	J
2 1/2"	11.71 (297)	13.51 (343)	2.5 (64)	6.9 (175)	3.5 (89)	5/8"	10.5 (267)
3"	12 (305)	13.8 (351)	3.1 (79)	7.1 (180)	3.8 (97)	5/8"	10.5 (267)
4"	12.65 (321)	14.56 (370)	4.0 (102)	7.9 (201)	4.5 (114)	5/8"	10.5 (267)
5"	13.7 (348)	15.8 (401)	4.8 (122)	8.4 (213)	5.0 (127)	3/4"	10.5 (267)
6"	13.75 (349)	15.95 (405)	6.1 (155)	8.9 (226)	5.5 (140)	3/4"	10.5 (267)
8"	16.54 (420)	18.94 (481)	8.0 (203)	10.2 (259)	6.9 (175)	3/4"	***
10"	20.8 (528)	23.4 (594)	9.8 (249)	11.5 (292)	8.0 (203)	7/8"	***
12"	20.88 (530)	23.88 (607)	12.2 (310)	13.3 (338)	9.5 (241)	7/8"	***

*Dimensions not to be used for construction purposes

*** Denotes gear operated valve.

Venturi models also available in groove x groove and weld x weld configurations. Venturi w/ Butterfly models also available in groove x flange and weld x flange models. See submittals A-613 and A-614 for more information about these products.

SIZE	FLOW INFORMATION in GPM (L/m)		
	Lower Flow Rate	Upper Flow Rate	Flow Factor (FF)
2 1/2"L	20 (76)	140 (530)	147 (556)
2 1/2"H	60 (227)	320 (1,211)	319 (1,208)
3"L	30 (114)	220 (76)	227 (860)
3"H	80 (303)	580 (2,196)	578 (2,189)
4"L	80 (303)	600 (2,271)	611 (2,314)
4"H	140 (530)	1,000 (3,785)	1,029 (3,898)
5"	160 (606)	1,250 (4,732)	1,267 (4,799)
6"	200 (757)	1,500 (5,678)	1,551 (5,875)
8"	450 (1,703)	2,800 (10,600)	2,824 (10,690)
10"	600 (2,271)	4,150 (15,710)	4,164 (15,762)
12"	950 (3,596)	9,700 (36,718)	9,670 (36,605)

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Let's Solve Water

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