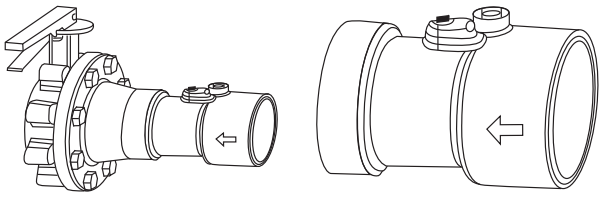
Bell & Gossett
xylem

Submittal
A-614C

Job		Representative			
Unit tag:		Order number:		Date:	
Engineer:		Submitted by:		Date:	
Contractor:		Approved by:		Date:	



Model MVW and Model VW

Flange x weld Venturi with butterfly valve combination and weld x weld Venturi

Description

The Bell & Gossett VW Venturi flow tube weld x weld style is a carbon steel Venturi flow measurement section with weld end inlet and outlet connections. The model MVW is a carbon steel Venturi flow measurement section connected with lug type butterfly valve++ for throttling with weld inlet and flanged outlet end connections. Butterfly valve connects to 150 lb. ANSI flanges and comes with 10 position memory stop and EPDM liner standard. Venturi on both model VW and model MVW includes two ¼" accessory taps.

++Suitable for dead-end service

Construction

Venturi body: Carbon steel

Butterfly valve body: Nodular cast steel (ASTM: A536 65-45-12)

Disc: Aluminum/Bronze

Stem: Stainless steel

Liner: EPDM

Maximum working pressure: 150 psi (1,034 kPa)

Temperature range: -4°F (-20°C) to 250°F (121°C) without butterfly valve; -4°F (-20°C) to 212°F(100°C) with butterfly valve

Schedule

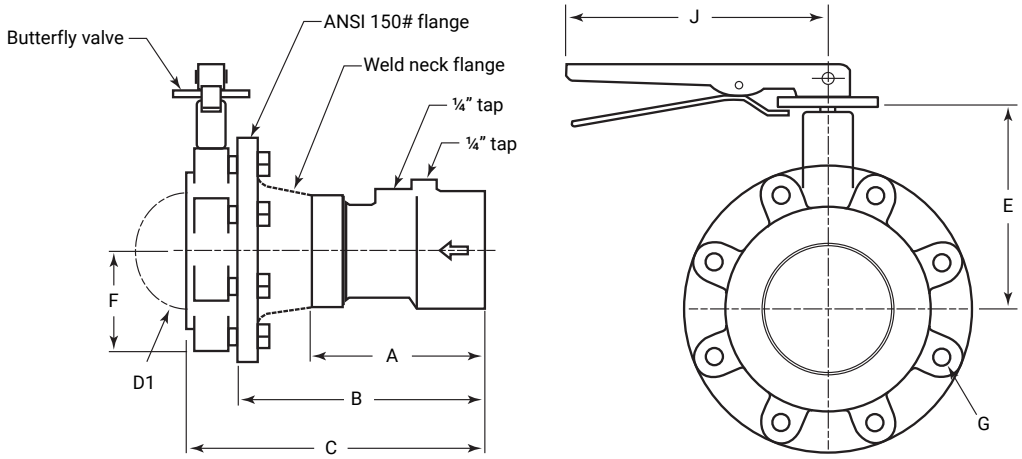
Model number (without butterfly valve)	Tagging information	Quantity
VW-2-1/2L		
VW-2-1/2H		
VW-3L		
VW-3H		
VW-4L		
VW-4H		
VW-5		
VW-6		
VW-8		
VW-10		
VW-12		

Schedule

Model number (with butterfly valve)	Tagging information	Quantity
MVW-2-1/2L		
MVW-2-1/2H		
MVW-3L		
MVW-3H		
MVW-4L		
MVW-4H		
MVW-5		
MVW-6		
MVW-8		
MVW-10		
MVW-12		

Note: All MVW Models (models with butterfly valves) are supplied with mating bolts kit for 150 lb flanges.

Model VW and Model MVW Venturi with butterfly valve



Dimensions and weights

Size (mm)	Model no.	Dimensions* in inches (mm)								Lower flow GPM (L/m)	Upper flow GPM (L/m)	Flow factor GPM (L/m)	Model VW Approx. wt. lbs. (kg)	Model MVW Approx. wt. lbs. (kg)
		A**	B	C	D1	E	F	G	J					
2 ½" (63.5)	VW-2-½L	5.2 (132)	8.0 (203)	12.6 (320)	2.5 (64)	6.9 (175)	3.5 (89)	5/8"	10.5 (267)	20 (75)	140 (530)	147 (556)	4 (1.8)	36 (16.3)
	MVW-2-1/2L	5.2 (132)	8.0 (203)	12.6 (320)	2.5 (64)	6.9 (175)	3.5 (89)	5/8"	10.5 (267)	20 (75)	140 (530)	147 (556)	4 (1.8)	36 (16.3)
	VW-2-½H	5.2 (132)	8.0 (203)	12.6 (320)	2.5 (64)	6.9 (175)	3.5 (89)	5/8"	10.5 (267)	60 (227)	320 (1,211)	319 (1,208)	4 (1.8)	36 (16.3)
	MVW-2-½H	5.2 (132)	8.0 (203)	12.6 (320)	2.5 (64)	6.9 (175)	3.5 (89)	5/8"	10.5 (267)	60 (227)	320 (1,211)	319 (1,208)	4 (1.8)	36 (16.3)
3" (76.2)	VW-3L	5.5 (140)	8.4 (213)	12.9 (328)	3.1 (79)	7.1 (180)	3.8 (97)	5/8"	10.5 (267)	30 (114)	220 (833)	227 (859)	8 (3.6)	39 (17.7)
	MVW-3L	5.5 (140)	8.4 (213)	12.9 (328)	3.1 (79)	7.1 (180)	3.8 (97)	5/8"	10.5 (267)	30 (114)	220 (833)	227 (859)	8 (3.6)	39 (17.7)
	VW-3H	5.5 (140)	8.4 (213)	12.9 (328)	3.1 (79)	7.1 (180)	3.8 (97)	5/8"	10.5 (267)	80 (303)	530 (2,006)	578 (2,188)	8 (3.6)	39 (17.7)
	MVW-3H	5.5 (140)	8.4 (213)	12.9 (328)	3.1 (79)	7.1 (180)	3.8 (97)	5/8"	10.5 (267)	80 (303)	530 (2,006)	578 (2,188)	8 (3.6)	39 (17.7)
4" (101.6)	VW-4L	6.2 (157)	9.3 (236)	14.3 (363)	4.0 (102)	7.9 (201)	4.5 (114)	5/8"	10.5 (267)	80 (303)	600 (2,271)	611 (2,313)	8 (3.6)	58 (26.3)
	MVW-4L	6.2 (157)	9.3 (236)	14.3 (363)	4.0 (102)	7.9 (201)	4.5 (114)	5/8"	10.5 (267)	80 (303)	600 (2,271)	611 (2,313)	8 (3.6)	58 (26.3)
	VW-4H	6.2 (157)	9.3 (236)	14.3 (363)	4.0 (102)	7.9 (201)	4.5 (114)	5/8"	10.5 (267)	140 (530)	1,000 (3,785)	1,029 (3,895)	8 (3.6)	58 (26.3)
	MVW-4H	6.2 (157)	9.3 (236)	14.3 (363)	4.0 (102)	7.9 (201)	4.5 (114)	5/8"	10.5 (267)	140 (530)	1,000 (3,785)	1,029 (3,895)	8 (3.6)	58 (26.3)
5" (127.0)	VW-5	6.3 (160)	9.9 (252)	15.5 (394)	4.8 (122)	8.4 (213)	5.0 (127)	3/4"	10.5 (267)	160 (605)	1,250 (4,732)	1,267 (4,796)	15 (6.8)	75 (34.0)
	MVW-5	6.3 (160)	9.9 (252)	15.5 (394)	4.8 (122)	8.4 (213)	5.0 (127)	3/4"	10.5 (267)	160 (605)	1,250 (4,732)	1,267 (4,796)	15 (6.8)	75 (34.0)
6" (152.4)	VW-6	7.3 (160)	11.3 (387)	17.0 (432)	6.1 (155)	8.9 (226)	5.5 (140)	3/4"	10.5 (267)	200 (757)	1,500 (5,678)	1,551 (5,871)	22 (10.0)	95 (43.1)
	MVW-6	7.3 (160)	11.3 (387)	17.0 (432)	6.1 (155)	8.9 (226)	5.5 (140)	3/4"	10.5 (267)	200 (757)	1,500 (5,678)	1,551 (5,871)	22 (10.0)	95 (43.1)
8" (203.2)	VW-8	8.7 (221)	12.8 (325)	19.3 (490)	8.0 (203)	10.2 (259)	6.9 (175)	3/4"	***	450 (1,703)	2,800 (10,600)	2,824 (10,690)	34 (15.4)	173 (78.5)
	MVW-8	8.7 (221)	12.8 (325)	19.3 (490)	8.0 (203)	10.2 (259)	6.9 (175)	3/4"	***	450 (1,703)	2,800 (10,600)	2,824 (10,690)	34 (15.4)	173 (78.5)
10" (254.0)	VW-10	12.3 (312)	16.4 (417)	22.9 (582)	9.8 (249)	11.5 (292)	8.0 (203)	7/8"	***	600 (2,271)	4,150 (15,710)	4,164 (15,762)	94 (42.6)	303 (137.4)
	MVW-10	12.3 (312)	16.4 (417)	22.9 (582)	9.8 (249)	11.5 (292)	8.0 (203)	7/8"	***	600 (2,271)	4,150 (15,710)	4,164 (15,762)	94 (42.6)	303 (137.4)
12" (304.8)	VW-12	17.0 (432)	21.5 (546)	29.0 (737)	12.2 (310)	13.3 (338)	9.5 (241)	7/8"	***	950 (3,596)	9,700 (36,718)	9,670 (36,605)	110 (50.0)	350 (159.8)
	MVW-12	17.0 (432)	21.5 (546)	29.0 (737)	12.2 (310)	13.3 (338)	9.5 (241)	7/8"	***	950 (3,596)	9,700 (36,718)	9,670 (36,605)	110 (50.0)	350 (159.8)

* All dimensions +/- 0.125 (3.2 mm) tolerance. Dimensions are subject to change. Not to be used for construction purposes unless certified.

** Dimension A is for Model VG (without butterfly valve)

*** Denotes gear operated valve

CF**** Consult factory

Bell & Gossett Model MV - Manual Venturi balance chart

Differential pressure measured across the Venturi

Model VW and Model MVW Venturi with butterfly valve

GPM	LPM	2 ½" L Venturi			2 ½" H Venturi			3" L Venturi			3" H Venturi			4" L Venturi			4" H Venturi		
		ΔP (in. W.C.)	ΔP (PSID)	CV	ΔP (in. W.C.)	ΔP (PSID)	CV	ΔP (in. W.C.)	ΔP (PSID)	CV	ΔP (in. W.C.)	ΔP (PSID)	CV	ΔP (in. W.C.)	ΔP (PSID)	CV	ΔP (in. W.C.)	ΔP (PSID)	CV
30	113.6	12.5	0.45	45	2.6	0.09	97	5.2	0.19	69									
40	151.4	22.2	0.80	45	4.7	0.17	97	9.3	0.34	69									
50	189.3	34.6	1.3	45	7.4	0.27	97	14.5	0.52	69	2.2	0.08	176						
60	227.1	49.9	1.8	45	10.6	0.38	97	20.9	0.76	69	3.2	0.12	126	2.9	0.10	186			
70	265	67.9	2.5	45	14.4	0.52	97	28.5	10.3	69	4.4	0.16	176	3.9	0.14	186			
80	302.8	88.6	3.2	45	18.8	0.68	97	37.2	1.3	69	5.7	0.21	176	5.1	0.18	186			
90	340.7	112	4.0	45	23.8	0.86	97	47	1.7	69	7.3	0.26	176	6.5	0.23	186	2.3	0.08	313
100	378.5	139	5.0	45	29.4	1.1	97	58.1	2.1	69	9	0.33	176	8	0.29	186	2.8	0.10	313
110	416.4	168	6.1	45	35.6	1.3	97	70.3	2.5	69	10.8	0.39	176	9.7	0.35	186	3.4	0.12	313
120	454.2	199	7.2	45	42.4	1.5	97	83.6	3.0	69	12.9	0.47	176	11.5	0.42	186	4.1	0.15	313
130	492.1	234	8.5	45	49.7	1.8	97	98.2	3.5	69	15.1	0.55	176	13.5	0.49	186	4.8	0.17	313
140	530	271	9.8	45	57.6	2.1	97	114	4.1	69	17.6	0.64	176	15.7	0.57	186	5.5	0.20	313
150	567.8				66.2	2.4	97	131	4.7	69	20.2	0.73	176	18	0.65	186	6.4	0.23	313
160	606				75.3	2.7	97	149	5.4	69	22.9	0.83	176	20.5	0.74	186	7.2	0.26	313
170	644				85	3.1	97	168	6.1	69	25.9	0.94	176	23.2	0.94	186	8.2	0.30	313
180	681				95.3	3.4	97	188	6.8	69	29	1.05	176	26	0.94	186	9.2	0.33	313
190	719				106	3.8	97	210	7.6	69	32.3	1.2	176	28.9	1.04	186	10.2	0.37	313
200	757				118	4.3	97	232	8.4	69	35.8	1.3	176	32.1	1.2	186	11.3	0.41	313
210	795				130	4.7	97	256	9.2	69	39.5	1.4	176	35.4	1.3	186	12.5	0.45	313
220	833				142	5.1	97	281	10.2	69	43.4	1.6	176	38.8	1.4	186	13.7	0.49	313
230	871				156	5.6	97				47.4	1.7	176	42.4	1.5	186	15	0.54	313
240	908				169	6.1	97				51.6	1.9	176	46.2	1.7	186	16.3	0.59	313
250	946				184	6.6	97				56	2.0	176	50.1	1.8	186	17.7	0.64	313
260	984				199	7.2	97				60.6	2.2	176	54.2	2.0	186	19.1	0.69	313
270	1022				214	7.7	97				65.3	2.4	176	58.4	2.1	186	20.6	0.74	313
280	1060				231	8.3	97				70.2	2.5	176	62.9	2.3	186	22.2	0.80	313
290	1098				247	8.9	97				75.3	2.7	176	67.4	2.4	186	23.8	0.86	313
300	1136				265	9.6	97				80.6	2.9	176	72.2	2.6	186	25.4	0.92	313
310	1173				283	10.2	97				86.1	3.1	176	77	2.8	186	27.2	0.98	313
320	1211				301	10.9	97				91.7	3.3	176	82.1	3.0	186	28.9	1.04	313
330	1249										97.6	3.5	176	87.3	3.2	186	30.8	1.1	313
340	1287										104	3.8	175	92.7	3.3	186	32.7	1.2	313
350	1325										110	4.0	176	98	3.5	186	34.6	1.3	313
360	1363										116	4.2	176	104	3.8	186	36.6	1.3	313
370	1401										123	4.4	176	110	4.0	186	38.7	1.4	313
380	1438										129	4.7	176	116	4.2	186	40.8	1.5	313
390	1476										136	4.9	176	122	4.4	186	43	1.6	313
400	1514										143	5.2	176	128	4.6	186	45.2	1.6	313
410	1552										151	5.5	176	135	4.9	186	47.5	1.7	313
420	1590										158	5.7	176	141	5.1	186	49.9	1.8	313
430	1628										166	6.0	176	148	5.3	186	52.3	1.9	313
440	1666										173	6.3	176	155	5.6	186	54.7	2.0	313
450	1703										181	6.5	176	162	5.9	186	57.2	2.1	313
460	1741										190	6.9	176	170	6.1	186	59.8	2.2	313
470	1779										198	7.2	176	177	6.4	186	62.4	2.3	313

Bell & Gossett Model MV - Manual Venturi balance chart **(continued)**

Differential pressure measured across the Venturi

Model VW and Model MVW Venturi with butterfly valve

GPM	LPM	2 ½" L Venturi			2 ½" H Venturi			3" L Venturi			3" H Venturi			4" L Venturi			4" H Venturi		
		ΔP (in. W.C.)	ΔP (PSID)	CV	ΔP (in. W.C.)	ΔP (PSID)	CV	ΔP (in. W.C.)	ΔP (PSID)	CV	ΔP (in. W.C.)	ΔP (PSID)	CV	ΔP (in. W.C.)	ΔP (PSID)	CV	ΔP (in. W.C.)	ΔP (PSID)	CV
480	1817										206	7.4	176	185	6.7	186	65.1	2.4	313
490	1855										215	7.8	176	192	6.9	186	67.9	2.5	313
500	1893										224	8.1	176	200	7.2	186	70.7	2.6	313
510	1931										233	8.4	176	209	7.6	186	73.5	2.7	313
520	1968										242	8.7	176	217	7.8	186	76.4	2.8	313
540	2044										261	9.4	176	234	8.5	186	82.4	3.0	313
560	2120										281	10.2	176	251	9.1	186	88.6	3.2	313
580	2196										301	10.9	176	270	9.8	186	95.1	3.4	313
600	2271													289	10.4	186	101.8	3.7	313
620	2347																109	3.9	313
640	2423																116	4.2	313
660	2498																123	4.4	313
680	2574																131	4.7	313
700	2650																139	5.0	312
720	2725																147	5.3	312
740	2801																155	5.6	313
760	2877																163	5.9	313
780	2953																172	6.2	313
800	3028																181	6.5	313
820	3104																190	6.9	313
840	3180																199	7.2	313
860	3255																209	7.6	313
880	3331																219	7.9	313
900	3407																229	8.3	313
950	3596																255	9.2	313
1000	3785																283	10.2	313

$$\Delta P \text{ (in. W.C.)} = \left(\frac{\text{GPM x } 17.3}{FF}\right)^2$$

Accuracy

+/- 1% between 10" W.C. and 70" W.C.

+/- 3% between 5" W.C. and 150" W.C.

+/- 5% less than 5" W.C.

+/- 5% greater than 150" W.C.

Flow factor (FF)

2 ½" L _____ 147

2 ½" H _____ 319

3" L _____ 227

3" H _____ 578

4" L _____ 611

4" H _____ 1029

Bell & Gossett Model MV - Manual Venturi balance chart

Differential pressure measured across the Venturi

Model VW and Model MVW Venturi with butterfly valve

GPM	LPM	5" Venturi			6" Venturi		
		ΔP (in. W.C.)	ΔP (PSID)	CV	ΔP (in. W.C.)	ΔP (PSID)	CV
110	416	2.3	0.08	385			
120	454	2.7	0.10	385			
130	492	3.2	0.12	385	2.1	0.08	472
140	530	3.7	0.13	385	2.4	0.09	472
150	568	4.2	0.15	385	2.8	0.10	472
160	606	4.8	0.17	385	3.2	0.12	472
170	644	5.4	0.20	385	3.6	0.13	472
180	681	6	0.22	385	4	0.14	472
190	719	6.7	0.24	385	4.5	0.16	472
200	757	7.5	0.27	385	5	0.18	472
210	795	8.2	0.30	385	5.5	0.20	472
220	833	9	0.33	385	6	0.22	472
230	871	9.9	0.36	385	6.6	0.24	472
240	908	10.7	0.39	385	7.2	0.26	472
250	946	11.7	0.42	385	7.8	0.28	472
260	984	12.6	0.46	385	8.4	0.30	472
270	1022	13.6	0.49	385	9.1	0.33	472
280	1060	14.6	0.53	385	9.8	0.35	472
290	1098	15.7	0.57	385	10.5	0.38	472
300	1136	16.8	0.61	385	11.2	0.40	472
310	1173	17.9	0.65	385	12	0.43	472
320	1211	19.1	0.69	385	12.7	0.46	472
330	1249	20.3	0.73	385	13.5	0.49	472
340	1287	21.6	0.78	385	14.4	0.52	472
350	1325	22.8	0.82	385	15.2	0.55	472
360	1363	24.2	0.87	385	16.1	0.58	472
370	1401	25.5	0.92	385	17	0.61	472
380	1438	26.9	0.97	385	18	0.65	472
390	1476	28.4	1.03	385	18.9	0.68	472
400	1514	29.8	1.1	385	19.9	0.72	472
410	1552	31.3	1.1	385	20.9	0.76	472
420	1590	32.9	1.2	385	21.9	0.79	472
430	1628	34.5	1.2	385	23	0.83	472
440	1666	36.1	1.3	385	24.1	0.87	472
450	1703	37.8	1.4	385	25.2	0.91	472
460	1741	39.5	1.4	385	26.3	0.95	472
470	1779	41..2	1.5	385	27.5	0.99	472
480	1817	43	1.6	385	28.7	1.04	472
490	1855	44.8	1.6	385	29.9	1.1	472
500	1893	46.6	1.7	385	31.1	1.1	472
510	1931	48.5	1.8	385	32.4	1.2	472
520	1968	50.4	1.8	385	33.6	1.2	472
540	2044	54.4	2.0	385	36.3	1.3	472
560	2120	58.5	2.1	385	39	1.4	472
580	2196	62.7	2.3	385	41.9	1.5	472

GPM	LPM	8" Venturi			10" Venturi			12" Venturi		
		ΔP (in. W.C.)	ΔP (PSID)	CV	ΔP (in. W.C.)	ΔP (PSID)	CV	ΔP (in. W.C.)	ΔP (PSID)	CV
520	1968	10.1	0.36	859	4.7	0.17	1266			
540	2044	10.9	0.39	859	5	0.18	1266			
560	2120	11.8	0.43	859	5.4	0.20	1266			
580	2196	12.6	0.46	859	5.8	0.21	1266			
600	2271	13.5	0.49	859	6.2	0.22	1266			
620	2347	14.4	0.52	859	6.6	0.24	1266			
640	2423	15.4	0.56	859	7.1	0.26	1266			
660	2498	16.3	0.59	859	7.5	0.27	1266			
680	2574	17.4	0.63	859	8	0.29	1266			
700	2650	18.4	0.66	859	8.5	0.31	1266			
720	2725	19.5	0.70	859	8.9	0.32	1266			
740	2801	20.6	0.74	859	9.5	0.34	1266			
760	2877	21.7	0.78	859	10	0.36	1266			
780	2953	22.8	0.82	859	10.5	0.38	1266			
800	3028	24	0.87	859	11	0.40	1266			
820	3104	25.2	0.91	859	11.6	0.42	1266			
840	3180	26.5	0.96	859	12.2	0.44	1266			
860	3255	27.8	1.00	859	12.8	0.46	1266			
880	3331	29.1	1.1	859	13.4	0.48	1266			
900	3407	30.4	1.1	859	14	0.51	1266			
950	3596	33.9	1.2	859	15.6	0.56	1266	2.9	0.105	559
1000	3785	37.5	1.4	859	17.3	0.63	1266	3.2	0.116	559
1050	3975	41.4	1.5	859	19	0.69	1266	3.5	0.126	559
1100	4164	45.4	1.6	859	20.9	0.76	1266	3.9	0.141	559
1150	4353	49.6	1.8	859	22.8	0.82	1266	4.2	0.152	559
1200	4542	54	2.0	859	24.9	0.90	1266	4.6	0.166	559
1250	4732	58.6	2.1	859	27	0.98	1266	5	0.181	559
1300	4921	63.4	2.3	859	29.2	1.05	1266	5.4	0.195	559
1350	5110	68.4	2.5	859	31.5	1.14	1266	5.8	0.21	559
1400	5300	73.6	2.7	859	33.8	1.2	1266	6.3	0.228	559
1450	5489	78.9	2.9	859	36.3	1.3	1266	6.7	0.242	559
1500	5678	84.4	3.0	859	38.8	1.4	1266	7.2	0.26	559
1550	5867	90.2	3.3	859	41.5	1.5	1266	7.7	0.278	559
1600	6057	96.1	3.5	859	44.2	1.6	1266	8.2	0.296	559
1650	6246	102.2	3.7	859	47	1.7	1266	8.7	0.314	559
1700	6435	108.5	3.9	859	49.9	1.8	1266	9.2	0.332	559
1750	6624	114.9	4.2	859	52.9	1.9	1266	9.8	0.354	559
1800	6814	121.6	4.4	859	55.9	2.0	1266	10.4	0.376	559
1850	7003	128.4	4.6	859	59.1	2.1	1266	11	0.397	559
1900	7192	135.5	4.9	859	62.3	2.3	1266	11.6	0.419	559
1950	7382	142.7	5.2	859	65.6	2.4	1266	12.2	0.441	559
2000	7571	150.1	5.4	859	69	2.5	1266	12.8	0.462	559
2050	7760	157.7	5.7	859	72.5	2.6	1266	13.5	0.488	559
2100	7949	165.5	6.0	859	76.1	2.7	1266	14.1	0.509	559
2150	8139	173.5	6.3	859	79.8	2.9	1266	14.8	0.535	559

Bell & Gossett Model MV - Manual Venturi balance chart **(continued)**

Differential pressure measured across the Venturi

Model VW and Model MVW Venturi with butterfly valve

GPM	LPM	5" Venturi			6" Venturi		
		ΔP (in. W.C.)	ΔP (PSID)	CV	ΔP (in. W.C.)	ΔP (PSID)	CV
600	2271	67.1	2.4	385	44.8	1.6	472
620	2347	72	2.6	385	47.8	1.7	472
640	2423	76	2.7	385	51	1.8	472
660	2498	81	2.9	385	54.2	2.0	472
680	2574	86	3.1	385	57.5	2.1	472
700	2650	91	3.3	385	61	2.2	472
720	2725	97	3.5	385	64.5	2.3	472
740	2801	102	3.7	385	68.1	2.5	472
760	2877	108	3.9	385	71.9	2.6	472
780	2953	113	4.1	385	75.7	2.7	472
800	3028	119	4.3	385	79.6	2.9	472
820	3104	125	4.5	385	83.7	3.0	472
840	3180	132	4.8	385	87.8	3.2	472
860	3255	138	5.0	385	92	3.3	472
880	3331	144	5..2	385	96.3	3.5	472
900	3407	151	5.5	385	101	3.6	472
950	3596	168	6.1	385	112	4.0	472
1000	3785	186	6.7	385	124	4.5	472
1050	3975	206	7.4	385	137	4.9	472
1100	4164	226	8.2	385	151	5.5	472
1150	4353	247	8.9	385	165	6.0	472
1200	4542	268	9.7	385	179	6.5	472
1250	4732	291	10.5	385	194	7.0	472
1300	4921				210	7.6	472
1350	5110				227	8.2	472
1400	5300				244	8.8	472
1450	5489				261.6	9.5	472
1500	5678				280	10.1	472

GPM	LPM	8" Venturi			10" Venturi			12" Venturi		
		ΔP (in. W.C.)	ΔP (PSID)	CV	ΔP (in. W.C.)	ΔP (PSID)	CV	ΔP (in. W.C.)	ΔP (PSID)	CV
2200	8328	181.6	6.6	859	83.5	3.0	1266	15.5	0.56	559
2250	8517	190	6.9	859	87.4	3.2	1266	16.2	0.585	559
2300	8706	198.5	7.2	859	91.3	3.3	1266	16.9	0.611	559
2350	8896	207.3	7.5	859	95..3	3.4	1266	17.7	0.639	559
2400	9085	216..2	7.8	859	99.4	3.6	1266	18.4	0.665	559
2450	9274	225.3	8.1	859	103.6	3.7	1266	19.2	0.694	559
2500	9464	234.6	8.5	859	107.9	3.9	1266	20	0.723	559
2550	9653	244	8.8	859	112.2	4.1	1266	20.8	0.751	559
2600	9842	253.7	9.2	859	116.7	4.2	1266	21.6	0.78	559
2650	10031	263.5	9.5	859	121.2	4.4	1266	22.5	0.813	559
2700	10221	273.6	9.9	859	125.8	4.5	1266	23.3	0.842	559
2750	10410	283.8	10.3	859	130.5	4.7	1266	24.2	0.874	559
2800	10599	294.2	10.6	859	135.3	4.9	1266	25.1	0.907	559
2850	10788	304.8	11.0	859	140.2	5.1	1266	26	0.939	559
2900	10978	315.6	11.4	859	145.2	5.2	1266	26.9	0.972	559
2950	11167	326.6	11.8	859	150.2	5.4	1266	27.9	1.008	559
3000	11356				155.4	5.6	1266	28.8	1.04	559
3050	11545				160.6	5.8	1266	29.8	1.077	559
3100	11735				165.9	6.0	1266	30.8	1.113	559
3150	11924				171.3	6.2	1266	31.8	1.149	559
3200	12113				176.8	6.4	1266	32.8	1.185	559
3250	12303				182.3	6.6	1266	33.8	1.221	559
3300	12492				188	6.8	1266	34.9	1.261	559
3350	12681				193.7	7.0	1266	35.9	1.297	559
3400	12870				199.5	7.2	1266	37	1.337	559
3450	13060				205.5	7.4	1266	38.1	1.376	559
3500	13249				211.4	7.6	1266	39.2	1.416	559
3550	13438				217.5	7.9	1266	40.3	1.456	559

Bell & Gossett Model MV - Manual Venturi balance chart **(continued)**

Differential pressure measured across the Venturi

Model VW and Model MVW Venturi with butterfly valve

GPM	LPM	10" Venturi			12" Venturi		
		ΔP (in. W.C.)	ΔP (PSID)	CV	ΔP (in. W.C.)	ΔP (PSID)	CV
3600	13627	223.7	8.082	1266	41.5	1.499	2941
3650	13817	230	8.309	1266	42.6	1.539	2941
3700	14006	236.3	8.537	1266	43.8	1.582	2941
3750	14195	242.7	8.768	1266	45	1.626	2941
3800	14385	249.3	9.007	1266	46.2	1.669	2941
3850	14574	255.9	9.245	1266	47.4	1.712	2941
3900	14763	262.5	9.483	1266	48.7	1.759	2941
3950	14952	269.3	9.729	1266	49.9	1.803	2941
4000	15142	276.2	9.978	1266	51.2	1.85	2941
4050	15331	283.1	10.23	1266	52.5	1.897	2941
4100	15520	290.2	10.48	1266	53.8	1.944	2941
4150	15709	297.3	10.74	1266	55.1	1.991	2941
4200	15899				56.5	2.041	2941
4250	16088				57.8	2.088	2941
4300	16277				59.2	2.139	2941
4350	16466				60.6	2.189	2941
4400	16656				62	2.24	2941
4450	16845				63.4	2.29	2941
4500	17034				64.8	2.341	2941
4550	17224				66.3	2.395	2941
4600	17413				67.7	2.446	2941
4650	17602				69.2	2.5	2941
4700	17791				70.7	2.554	2941
4800	18170				73.7	2.663	2941
4850	18359				75.3	2.72	2941
4900	18458				76.8	2.775	2941
4950	18738				78.4	2.832	2941
5000	18927				80	2.89	2941
5050	19116				81.6	2.948	2941

GPM	LPM	10" Venturi			12" Venturi		
		ΔP (in. W.C.)	ΔP (PSID)	CV	ΔP (in. W.C.)	ΔP (PSID)	CV
5100	19306				83.2	3.006	2941
5150	19495				84.9	3.067	2941
5200	19684				86.5	3.125	2941
5250	19873				88.2	3.186	2941
5300	20063				89.9	3.248	2941
5350	20252				91.6	3.309	2941
5400	20441				93.3	3.371	2941
5500	20820				96.8	3.497	2941
5700	21577				104	3.757	2941
5900	22334				111.4	4.025	2941
6100	23091				119.1	4.303	2941
6300	23848				127	4.588	2941
6500	24605				135.2	4.884	2941
6700	25362				143.7	5.191	2941
6900	26119				152.4	5.506	2941
7100	26876				161.3	5.827	2941
7300	27633				170.6	6.163	2941
7500	28391				180	6.503	2941
7700	29148				189.8	6.857	2941
7900	29905				199.8	7.218	2941
8100	30662				210	7.587	2941
8300	31419				220.5	7.966	2941
8500	32176				231.2	8.353	2941
8700	32933				242.3	8.754	2941
8900	33690				253.5	9.158	2941
9100	34447				265	9.574	2941
9300	35204				276.8	10	2941
9500	35961				288.9	10.44	2941
9700	36718				301.1	10.88	2941

$$\Delta P \text{ (in. W.C.)} = \left(\frac{\text{GPM x } 17.3}{FF}\right)^2$$

Accuracy

+/- 1% between 10" W.C. and 70" W.C.

+/- 3% between 5" W.C. and 150" W.C.

+/- 5% less than 5" W.C.

+/- 5% greater than 150" W.C.

Flow factor (FF)

5"	1,267
6"	1,551
8"	2,824
10"	4,164
12"	9,670

Learn more about Venturi valves

Xylem
8200 N. Austin Avenue
Morton Grove, IL 60053

Tel: (847) 966–3700
Fax: (847) 965–8379
xylem.com/bellgossett

This information is subject to revision without notice. Users are responsible for evaluating suitability for specific applications. Xylem makes no implied warranties including without limitation warranties as to fitness for a particular purpose. Xylem makes no representation regarding the completeness or accuracy of this information and is not liable for any direct or indirect damages arising from or relating to this information or its use.

© 2026 Xylem Inc. or its affiliate. All rights reserved. Xylem and Bell & Gossett are registered trademarks of Xylem Inc. or one of its subsidiaries. All other trademarks or registered trademarks are the property of their respective owners.

A-614C May 2026