

VG VF



Manual Balancing Valves
Steel Venturi

VG VF

The VG/VF uses a low-loss venturi to obtain a measurement accuracy of 3% F.S. The total pressure drop added to the pump head seldom exceeds one foot. The exact drop can be calculated using the formula on Form F199. Flow measurement can be obtained with a differential pressure meter reading across the venturi taps. The GPM can be calculated using the formula on Form F199. (See “Flow Measurement Test Kits”, Form F011 for the differential pressure meter kits).



Key features

- > **Low Loss Venturi**
Measure with 3% accuracy
- > **Flanged and Grooved Ends**

Technical description

Application
Hydronic Balancing

Functions
Flow Measurement

Accuracy
±3%

Design
Throat Signal - Piezo-ring
120° 3-Port Averaging

Flange
Standard Flange Class 150, ANSI B16.5
(300 Class available)

Instrument Valves
Ext. P/T ports are standard on Models VG
and VF

Pressure class
Standard: ANSI 150
For class 300: ANSI 300

Rating
VG: 400 psig at 250° F

Material
Body: Carbon Steel ASTM A-120
Insert: Carbon Steel

Model Information

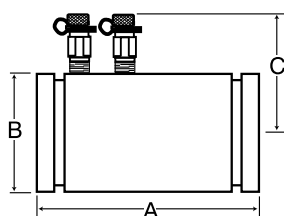
Model VG

Model VG includes a grooved venturi with standard extended pressure/temperature ports.

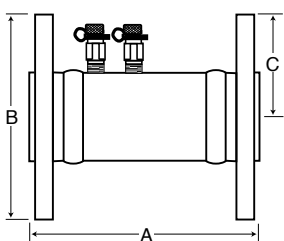
Model VF

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Articles



Model VG



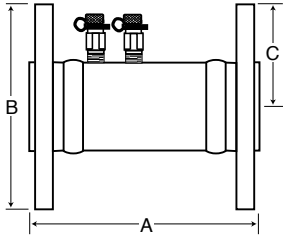
Model VF

Dimensions						Flow* Cv		Weights lb.
Model	Size (in.)	Connections	A (in.)	B (in.)	C (in.)	Low	High	
VG0200	2.0	Grooved End	8.4	2.4	4.1	83	130	3.3
VG0250	2.5	Grooved End	8.4	2.9	4.3	130	290	4.5
VG0300	3.0	Grooved End	8.0	3.5	4.6	270	550	5.5
VG0400	4.0	Grooved End	10.8	4.5	5.1	490	680	15.1
VG0500	5.0	Grooved End	11.3	5.6	5.7	660	1300	16.1
VG0600	6.0	Grooved End	11.8	6.7	6.2	1200	2400	19.8
VG0800	8.0	Grooved End	12.5	8.7	7.2	2100	4500	31.8
VG1000	10.0	Grooved End	13.5	10.8	8.3	3100	6600	49.6
VG1200	12.0	Grooved End	15.3	12.8	9.3	5400	8100	Consult Factory
VG1400	14.0	Grooved End	17.0	14.0	10.0	7400	9500	Consult Factory
VG1600	16.0	Grooved End	17.5	16.0	11.0	8700		Consult Factory

Model	Size	Connections	A	B	C	Low	High	lb.
VF0200	2.0	Flanged End	6.4	6.0	4.1	83	130	11.7
VF0250	2.5	Flanged End	6.4	7.0	4.4	130	290	18.2
VF0300	3.0	Flanged End	9.0	7.5	4.7	270	550	23.7
VF0400	4.0	Flanged End	11.7	9.0	5.2	490	680	33.8
VF0500	5.0	Flanged End	12.3	10.0	5.8	660	1300	43.0
VF0600	6.0	Flanged End	12.8	11.0	6.3	1200	2400	60.0
VF0800	8.0	Flanged End	13.5	13.5	7.3	2100	4500	88.0
VF1000	10.0	Flanged End	14.5	16.0	8.3	3100	6600	121
VF1200	12.0	Flanged End	16.2	19.0	9.5	5400	8100	184
VF1400	14.0	Flanged End	18.0	21.0	10.5	7400	9500	Consult Factory
VF1600	16.0	Flanged End	18.5	23.5	11.7	8700		Consult Factory

Notes

- (*) denotes L (low flow) or H (high flow).
- The 2" - 16" products are available in low and high beta ratios. The 16" product is available in low beta only (see Flow Charts, Venturi Selection F193 and F199).
- Venturi products made from fabricated materials may vary +1/16 inch per component.
- All weights and dimensions given are subject to change.



Model VF

Dimensions						Flow* Cv		Weights lb.
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VF3*0200	2	Flanged End	6.4	6.5	4.1	83	130	15.7
VF3*0250	2.5	Flanged End	6.4	7.5	4.4	130	290	22.2
VF3*0300	3	Flanged End	9	8.25	4.7	270	550	31.7
VF3*0400	4	Flanged End	11.7	10	5.2	490	680	54.8
VF3*0500	5	Flanged End	12.3	11	5.8	660	1300	71
VF3*0600	6	Flanged End	12.8	12.5	6.3	1200	2400	100
VF3*0800	8	Flanged End	13.5	15	7.3	2100	4500	144
VF3*1000	10	Flanged End	14.5	17.5	8.3	3100	6600	197
VF3*1200	12	Flanged End	16.2	20.5	9.5	5400	8100	286
VF3*1400	14	Flanged End	18	23	10.5	7400	9500	Consult Factory
VF3*1600	16	Flanged End	18.5	25.5	11.7	8700	-	Consult Factory

Notes

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Model Order Designation**Model Size**

12" Low Beta Ratio VF Shown

Option w/Locations

Metal ID Tag Shown

VFL1200 - MI

L = Low Flange Range

H = High Flange Range

Options Available**C2** 1/2" Accessory Port**MI** Metal ID Tag**C4** 1/4" Accessory Port**C3** 3/4" Accessory Port**C3** CPT Capillary Port/Tee**PI** Plastic ID Tag

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