

ANSI B16.1 Slip-On, Raised Face Flanges - Class 125 or 250

DESCRIPTION AND GENERAL PERFORMANCE SPECIFICATIONS

The V-Cone® flowmeter is a patented, differential pressure type flow measurement device. A cone is positioned in the center of the pipe to increase the velocity of the flowing fluid and create a differential pressure. This pressure difference can be measured and used to accurately interpret flowrate. Two taps are provided on every V-Cone to allow sensing of the high and low pressures. A typical V-Cone application can follow these general performance specifications:

- Accuracy: up to $\pm 0.5\%$ of rate
- Repeatability: $\pm 0.1\%$
- Turndown: 10:1
- Standard Betas: 0.45 through 0.85
- Headloss: Percentage of differential pressure produced varies with beta ratio.
- Installation: Typically 0-3 diameters upstream and 0-1 diameters downstream.

Model VS Bulletins

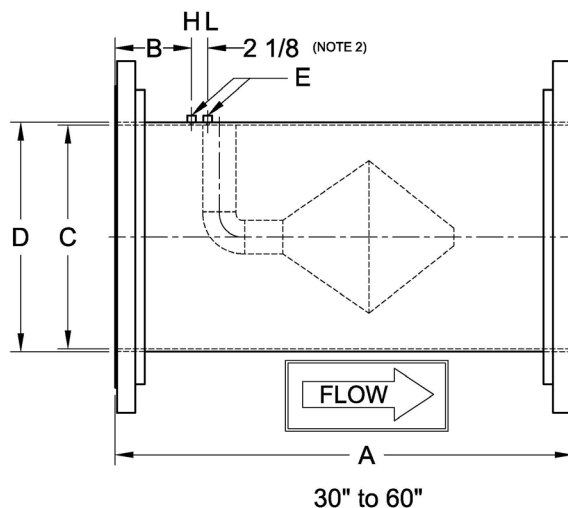
ANSI B16.5 Slip-on, RF Flanges
24509-32 Class 150 or 300
24509-34 Class 125 or 250



The V-Cone is manufactured under a quality management system that is certified to ISO 9001:2015.

* Each V-Cone is sized for the intended application. Specific performance ratings must be obtained through the sizing process.

MODEL VS_(x) DIMENSIONS



DIMENSION TABLE

Size	A (Note 1)		B		C-Stainless (Note 2)		C-Carbon (Note 2)		D		E (Note 2)
inch	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	NPT
30	60	1524	10	254.0	29.25	743.0	29.25	743.0	30	762	1/2
36	62	1524	10	254.0	35.25	895.4	35.25	895.4	36	914	1/2
48	78	1829	12	304.8	47.25	1200	47.25	1200	48	1219	1/2
60	96	2438	12	304.8	59.25	1505	59.25	1505	60	1524	1/2

1. Overall length (A) tolerance: 30" to 60", $\pm 0.25"$ ($\pm 7\text{mm}$).
2. Typical values shown.
3. Wall pressure ports are required for vertical up flow applications.



SPECIFICATION SHEET

MODEL NUMBER CONFIGURATION VS(x)

Type	Size		Materials‡		Pipe Schedule		End Connections		Fittings	
VS										
	30	30"	Q	S304/L	D	Std	30	CL 125 RF SO	N	NPT
	36	36"	A	S316/L	R	30	31	CL 250 RF SO	S	Socket
	48	48"	U	CS Pipe	E	40			F	Direct mount assembly
	60	60"		S304 Cone, Support, & Couplings	Q	60				
			F	CS Pipe, Flanges, & Couplings, 316/L Cone & Supports	F	80				
			V	CS Pipe 316/L Cone, Supports, & Couplings	K	120				
			G	LTCS Pipe, Flanges, & Couplings, S316/L Cone & Supports	L	140				
					G	160				
					P	XS				
					H	XXS				

Several types of fittings

‡Other materials can include:
HASTELLOY C-276
DUPLEX 2205
CHROMOLY P22/P11
MONEL K400/K500
CARBON STEELS
A350, A333, API5L, A106B
S321H
INCONEL 625

Example: VS30QD30N V-Cone 30" line size, S304/L STD Pipe, Cone & Supports, ANSI CL 125 RF Slip On flanges, 1/2" F-NPT Fittings

STANDARD PIPE SCHEDULES

Stainless Steel		Carbon Steel	
Size	Std.	Size	Std.
30" and up	D	30" and up	D

ABBREVIATIONS

ASME	American Society of Mechanical Engineers		
NPT	National pipe taper		
SS	Stainless steel	RF	Raised Face
CS	Carbon steel	SO	Slip On

Technical questions can be answered through a local representative or through our application engineers.

MANUFACTURING STANDARDS

McCrometer's welders and welding procedures are qualified in accordance with ASME Section IX. All meters are visually inspected for weld defects. Specific customer requirements can be complied with upon request.

The welding can be in accordance with:

- ASME Section VIII
- ASME B31.1
- ASME B31.3

Non-destructive testing can include:

- Hydrostatic Pressure Testing
- Penetrant Examination
- Positive Material Inspection
- Magnetic Particle Examination

REPRESENTED BY:



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