

**MODEL VT**

**Threaded Ends**

**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:

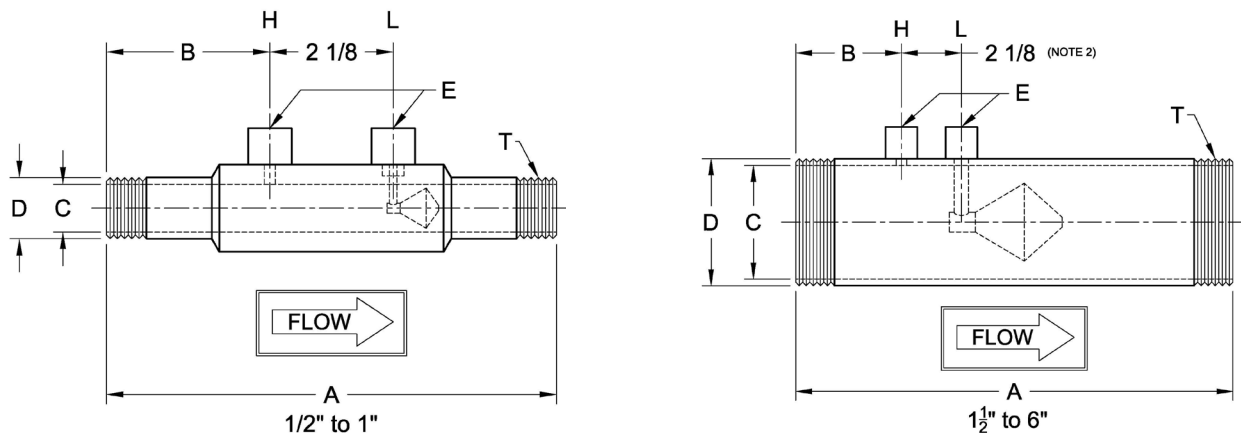
- Accuracy: up to ±0.5% of rate
- Repeatability: ±0.1%
- Turndown: 10:1
- Standard Betas: 0.45 through 0.85
- Headloss: Percentage of differential pressure produced varies with beta ratio.
- Installation: Typically 0-3 diameters upstream and 0-1 diameters downstream.



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 VT DIMENSIONS**



**DIMENSION TABLE**

Size	A (Note 1)		B		C-Stainless (Note 2)		C-Carbon (Note 2)		D		E (Note 2)	T
inch	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	NPT	NPT
1/2	7.75	197	2.81	71.4	0.622	15.8	-	-	0.84	21.3	1/4	1/2
3/4	7.75	197	2.81	71.4	0.824	20.9	-	-	1.05	26.7	1/4	3/4
1	7.75	197	2.81	71.4	1.049	26.64	-	-	1.315	33.4	1/4	1
1 1/2	9.75	248	2.88	73.2	1.645	41.78	-	-	1.9	48.3	1/4	1 1/2
2	11.63	295	3.31	84.1	2.104	53.44	-	-	2.375	60.3	1/2	2
2 1/2	11.50	292	3.25	82.6	2.504	63.60	-	-	2.875	73.0	1/2	2 1/2
3	13.50	343	3.25	82.6	3.104	78.84	-	-	3.5	88.9	1/2	3
4	15.50	394	3.75	95.3	4.090	103.8	-	-	4.5	114	1/2	4
6	21.50	546	4.00	102	6.065	154.1	6.065	154.1	6.625	168	1/2	6

1. Overall length (A) tolerance varies with line size: 1/2" to 1", ±0.01" (±0.3mm); 1 1/2" to 4", ±0.06" (±2mm); 6", ±0.12" (±4mm).
2. Typical values shown.
3. Wall pressure ports are required for vertical up flow applications.



**MODEL NUMBER CONFIGURATION VT**

Type	Size	Materials‡		Pipe Schedule		End Connections		Fittings		
<b>VT</b>										
	0A 1/2"	Q	S304/L	D	Std	02	Threaded	N	NPT	
	0B 3/4"	A	S316/L	R	30			S	Socket	
	01 1"	U	CS Pipe	E	40			F	Direct mount assembly	
	0C 1 1/2"		S304 Cone, Support, & Couplings		Q					60
	02 2"	F	CS Pipe, Flanges, & Couplings,	F	80			<div style="border: 1px solid black; padding: 2px; display: inline-block;">                     Several types of fittings                 </div>		
	0D 2 1/2"		316/L Cone & Supports		J					
	03 3"	V	CS Pipe	K	120					
	04 4"		316/L Cone, Supports, & Couplings		L					
	06 6"	G	LTCS Pipe, Flanges, & Couplings, S316/L Cone & Supports	G	160					
				P	XS					
				H	XXS					

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

Example: VT01QC02N V-Cone 1 inch line size, S304, bored to schedule 40, 1" threaded ends, 1/2" NPT fittings

**STANDARD PIPE SCHEDULES**

Stainless Steel		Carbon Steel	
Size	Std.	Size	Std.
1/2" to 4"	E	4"	E

**ABBREVIATIONS**

ASME	American Society of Mechanical Engineers
NPT	National pipe taper
SS	Stainless steel
CS	Carbon steel

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
- Radiographic Examination
- Positive Material Inspection
- Magnetic Particle Examination

REPRESENTED BY: