



V CORN FLOWMETER

V CORN Flow Meter AIVCF 25



DESCRIPTION

The principal theory behind the V-Cone flow meter is Bernoulli's theorem for energy conservation in a closed pipe. According to this theorem, for a constant flow, the pressure in a pipe is inversely proportional to the square of the velocity; as the velocity increases, the pressure decreases. For example, as fluid approaches the V-Cone meter, it has a pressure of P1. As the fluid velocity increases at the constricted area of the V-Cone, the pressure drops to P2, as illustrated in the image below. Both P1 and P2 are measured at the V-Cone's taps using various differential pressure transducers. The ΔP created by a V-Cone will increase and decrease exponentially with the flow velocity. As the constriction takes up more pipe cross-sectional area, more differential pressure will be made at the same flow rates.

SPECIFICATIONS

Media	Liquide / Gas /Steam
Line Size	25 ~ 300 mm
Body material	S.S.304, S.S.316
Accuracy	$\pm 0.5\%$ of rate (certain fluids and Reynolds number applications require specific calibrations to achieve this value)
Connection	Flanged, threaded, Others on request
Head Loss	Varies with beta ratio and DP
Standard Beta Ratio	0.45 to 0.80
Installation Requirement	Typically 0-3 diameters upstream and 0-1 diameters downstream of the cone are required, depending on fittings or valves in the adjacent pipeline.
Pressure Range	up to 20 bar [Customize Option Available]
Electronics	Direct Mount or Remote Mount
Power	24VDC /230VAC
Display	LCD
Output	4 - 20mA, RS485 Modbus RTU [Optional]
Temperature Range	Up to 350'C

**Model Selection**

AVCF25	X	X	X	X	X					
Body MOC										
S.S 304	4									
S.S.316	6									
Line Size										
Line Size in mm		x	x	x						
Connection										
ANSI Flange					A					
DN Flange					D					
Thread [20mm to 50mm]					H					
Try Clamp [20 mm to 80 mm]					T					
Power										
24 VDC						D				
230VAC @ 50Hz						A				
Analogue output										
None							N			
4-20mA							4			
Communication										
None								N		
RS485 Modbus RTU								R		
Max. Temperature										
80'C										T1
150'C										T2
350'C										T3

