

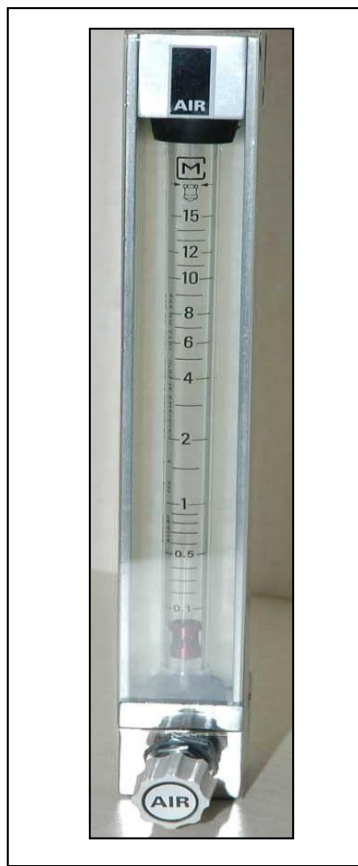
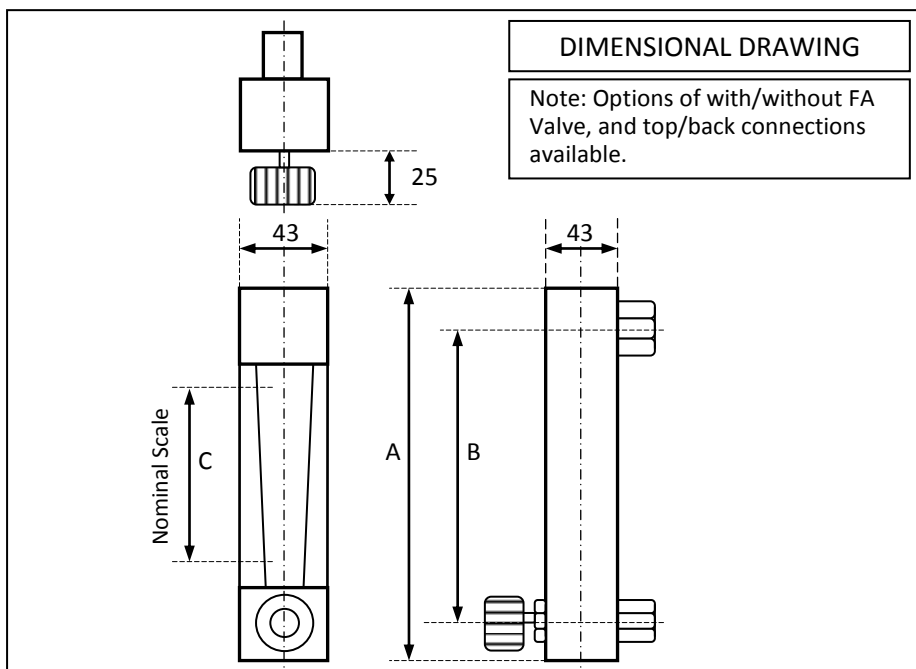
CMF Purge type VA Flowmeters

DESIGN FEATURES

- Ten to one rangeability
- Heavy wall, precision bore, borosilicate glass metering tubes with contrasting background
- Scales fused on metering tubes or scales with conversion chart
- Tube sealed on compression gaskets by threaded seal
- Easy removable tubes without disconnecting the instrument
- Metal side plates and plastic front and back window

DESCRIPTION

The CM series of flowmeters provide an economical means of flow rate indication and control for general use, and laboratory applications. The instruments are ideal for common applications like purging services, cooling water flow indication, bearing lubrication, carrier gas flow rate indication, fuel flow indication, in chromatography and atomic absorption and indication and control of doping gas in electronic crystal growing furnaces.



Model	Connection	A	B	C
CMF-1	1/8" BSP	173	137	60
CMF-2	1/8" BSP	223	187	90
CMF-3	1/8" BSP	303	267	150
CMF-4	1/8" BSP	373	337	230

OPTIONAL FEATURES/EQUIPMENT

❖ FA Needle Valve

Provides a greater number of turns affording greater precision control with higher resolution. The valve provides positive shut-off. The valves can be installed at the inlet or the outlet fitting of the flowmeter.

❖ Panel Mounting : Flush mounting bezel

The instrument can be equipped with an Aluminum or plastic bezel for flush panel mounting. (See drawing)

❖ Panel mounting : Threaded adaptors

Can be supplied with mounting nuts for front panel mounting. (See drawing)

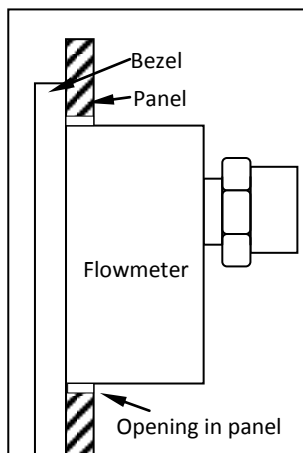
❖ Table model

Can be supplied with a base for use in laboratory or research area. The base comes with leveling screws and a bulls eye spirit level for easy leveling on the table.

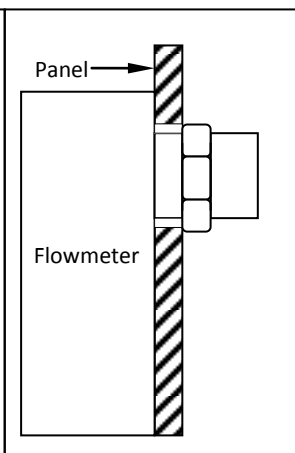
❖ Fitting & connection materials

Options of SS 304, SS 316, brass available

Bezel Mounting



Threaded Adaptor



SPECIFICATIONS	Construction Data
<p><i>Scale length :</i> model CMF -1 : 60 mm model CMF -2 : 90 mm model CMF -3 : 150 mm model CMF -4 : 230 mm</p> <p><i>Accuracy :</i> model CMF -1 : $\pm 10\%$ F.S., Optional $\pm 5\%$ F.S model CMF -2 : $\pm 10\%$ F.S., Optional $\pm 5\%$ F.S model CMF -3 : $\pm 5\%$ F.S., Optional $\pm 2\%$ F.S model CMF -4 : $\pm 5\%$ F.S., Optional $\pm 2\%$ F.S</p> <p><i>Repeatability : $\pm 0.5\%$</i> <i>Rangeability : 10:1</i> <i>Maximum operating pressure : 1400 kPa (14 bar)</i> <i>Maximum operating temperature : 120°C</i></p>	<ul style="list-style-type: none"> ❖ <i>Fitting material:</i> 316 SS standard (see options) ❖ <i>Connection material:</i> 316 SS standard (see options) ❖ <i>Connection types :</i> ❖ Standard 1/8" BSP ❖ Optional : <ul style="list-style-type: none"> - 1/8" NPT, 1/4" NPT, 1/4" BSP - 1/8" tube compression FESTO type - 1/4" tube compression FESTO type - 1/4" I.D. Hose (barbed nipple) ❖ <i>Sideplate material:</i> Anodized aluminium ❖ <i>Metering tube material :</i> Borosilicate glass ❖ <i>Float material:</i> Glass, Aluminum, 316 SS, ❖ <i>Float stop material:</i> Teflon, PA ❖ <i>Tube packing material :</i> Viton, Neoprene ❖ <i>O-Ring material:</i> Viton, Neoprene

Flowmeter selection

Capacity table for flowmeter selection								
Tube CODE	Tube size D x L mm	Scale Length (Nominal) mm	Float type					
			(1) Aluminium Conical Hollow	(2) SS-304/316 conical Hollow	(3) SS-304/316 Ball	(4) PVC/Teflon Ball	(5) Glass Ball	(6) SS-304/316 conical
			Min- Max LPM Air	Min- Max LPM Air	Min- Max LPM Air	Min- Max LPM Air	Min- Max LPM Air	Min- Max LPH Water
101	10100	60	0.01 - 0.1	0.02 - 0.2	0.02 - 0.2	0.005-0.05	0.01 - 0.1	0.05 - 0.5
102			0.05 - 0.5	0.1 - 1	0.1 - 1	0.02 - 0.2	0.05 - 0.5	0.1 - 2
103	10150	90	0.05 - 0.5	0.1 - 1	0.1 - 1	0.02 - 0.2	0.05 - 0.5	0.2 - 2
104			0.1 - 1	0.2 - 2	0.2 - 2	0.05 - 0.5	0.1 - 1	0.4 - 4
105	10230	150	0.1 - 1	0.2 - 2	0.2 - 2	0.05 - 0.5	0.1 - 1	0.2 - 2
106			0.2 - 2	0.4 - 4	0.4 - 4	0.1 - 1	0.2 - 2	0.8 - 8
151	15150	90	0.2 - 2	0.4 - 4	0.4 - 4	0.1 - 1	0.2 - 2	0.8 - 8
152			0.5 - 5	1 - 10	1 - 10	0.3 - 3	0.5 - 5	2 - 20
153	15230	150	0.5 - 5	1 - 10	1 - 10	0.3 - 3	0.5 - 5	2 - 20
154			1 - 10	2 - 20	2 - 20	0.5 - 5	1 - 10	4 - 40
155	15300	230	1 - 10	2 - 20	2 - 20	0.5 - 5	1 - 10	4 - 40
156			1 - 15	3 - 30	3 - 30	1 - 10	1 - 15	6 - 60

Ordering Information

Base Model	CMF-1	See Dimensional drawing										
	CMF-2											
	CMF-3											
	CMF-4											
Construction		1	304 SS (standard)									
Material		2	316 SS									
		3	Brass									
Tube Type		XXX	To be selected from Capacity Table									
Float Material		X	To be selected from Capacity Table									
Scale Type		A	mm scale + calibration curve									
		B	Direct reading-specific fluid, unit									
		C	Direct reading-air (l/h)									
		D	Direct reading-water (l/h)									
		E	Direct reading-air (SCFH)									
		F	Direct reading-water (GPH)									
Accuracy		10	10% FS		See specification							
		05	5% FS									
		02	2% FS									
Connections		C1	1/8" BSP (standard)									
		C2	1/8" tube compression – FESTO Type									
		C3	3/4" tube compression – FESTO Type									
		C4	Barbed nipple for 1/4" in ID pipe									
		C5	1/8" NPT									
		C6	1/4" NPT									
		C7	1/4" BSP									
FA Valve		0	No FA valve									
		1	Valve at inlet									
		2	Valve at outlet									
Alarm		0	No alarm									
		1	With alarm									
Mounting		1	Bezel									
		2	Threaded adaptor									
		3	Table model									
Entry (Inlet)		1	Bottom entry									
		2	Back entry									
Exit (Outlet)		1	Top entry									
		2	Back entry									
Designation →	CMF-X	X	XXX	X	X	XX	CX	X	X	X		