Rotameters

Please see the following pages for more information on Variable Area Flow Meters

- Rib-guided or fluted metering tubes facilitate stable, accurate readings.
- Magnifier lens in front shield enhances reading resolution.
- Easy-to-install flow tubes.
- "Non-rotating" adapter feature glass flow tubes are prevented from turning during the tightening phase of the assembly procedure.

Stainless Steel 150mm Flow Meter

Single Tube Glass Flow Meters

Designed for low flow rates, these single tube flow meters are precision instruments embodying the inherent simplicity, versatility and economy of the classical variable area meter. They are particularly suitable for metering carrier gases in chromatography, in manufacturing processes, liquid and gas measurements in laboratories, pilot plants, flow and level indicating and controlling gases.

Shipped completely assembled, flow meters include standard mounting fittings in a choice of materials, side plates, thick protective front shield and back plate, with or without control valves.

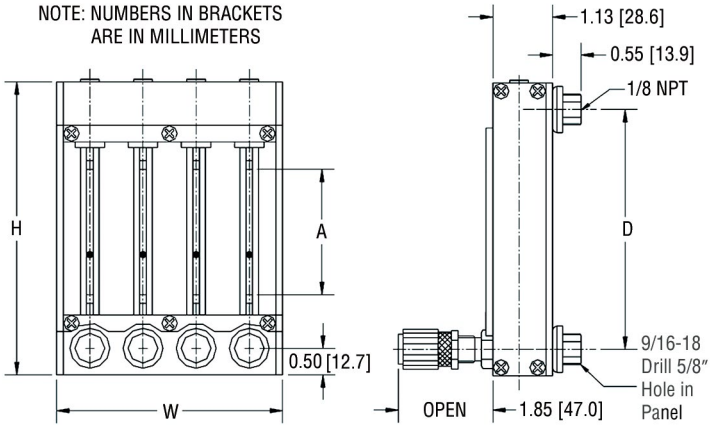
Single Tube PTFE Glass Flow Meters

The PTFE glass flow meter is designed for use with corrosive gases and liquids and for applications where contamination free flow passages are required. Fluids contact only PTFE, PCTFE and borosilicate glass.

The unique design combines the rigidity of an aluminum structural frame with the desirable chemical inertness of PTFE components. Uses standard 65mm and 150mm flow tubes. Meters are equipped with built-in PTFE needle valves with Kel-F® valve spindles. Valves may be positioned either at inlet or outlet side of flow meter.

65mm - 150mm PTFE Flow Meter

NOTE: NUMBERS IN BRACKETS ARE IN MILLIMETERS



DIMENSIONS FOR P STYLE METERS								
SCALE LENGTH (A)	ALL P METERS		WIDTH (W)					
	HEIGHT (H)	CENTER TO CENTER (D)	1 TUBE	2 TUBE	3 TUBE	4 TUBE	5 TUBE	6 TUBE
65mm	5.500	4.500	1.250	2.250	3.250	4.250	5.250	6.250
150mm	9.813	8.813	1.250	2.250	3.250	4.250	5.250	6.250

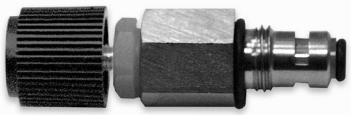
SPECIFICATIONS FOR SINGLE TUBE FLOW METERS

USEFUL FLOW RANGE: 10:1 minimum with one float and better than 20:1 with combination of two floats installed in meters.
STANDARD ACCURACY: ±2% of full scale (mm), 5% of full scale (direct reading).
CALIBRATED ACCURACY: ±1% of full scale.
REPEATABILITY: ±0.25%.
MAX. OPERATION PRESSURE: 200 psig/13.8 bars (PTFE 60 psig/4.13 bars).
MAX. OPERATION TEMPERATURE: 250 °F/121 °C (PTFE 150 °F/66 °C).
FLOW TUBES: Heavy walled borosilicate glass.
FLOATS: Glass, Sapphire, 316 Stainless Steel, Carboloy® and Tantalum.
CHOICE OF MOUNTING FITTINGS IN CONTACT WITH FLUIDS:
A) Aluminum, black anodized.
B) Brass, chrome plated.
C) 316 Stainless Steel.
SIDE PANELS: Aluminum, black anodized.
FRONT SHIELD: Lexan® with longitudinal magnifier lens for enhanced reading resolution.
BACK PLATE: 1/8" thick white acrylics.
O-RINGS AND PACKING: Buna-N® O-rings in aluminum/ brass model. FKM O-rings in stainless steel meters. ***OPTIONAL:*** FKM PTFE FFKM and EPR.
CONNECTIONS 1/8" NPT female inlet and outlet connections. ***OPTIONAL:*** 1/4" FNPT, hose and compression fittings are available.

⚠ *The selection of materials of construction, is the responsibility of the customer. The company accepts no liability.*

Prices are subject to change without notice.

Multi-tube Flow Meters also Available!



CV™ Valve Cartridge

Available in three ranges, CV™ valves represent a relatively inexpensive option

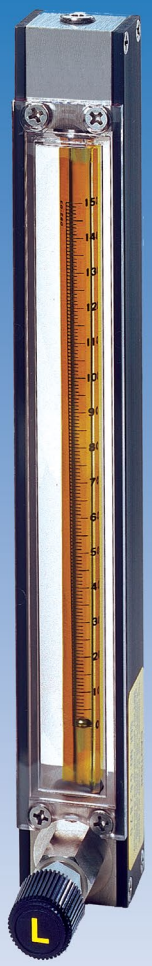
TABLE 20, CV™ VALVE FLOW CAPACITIES 10 PSIG (69KPA) INLET PRESSURE, ATMOSPHERIC EXHAUST				
MODEL NO.	AIR std. mL/min	WATER std. mL/min	ORIFICE [IN]	CV
CVL	5000	350	0.052	0.03
CVM	20000	1200	0.082	0.10
CVH	60000	3500	0.120	0.30

Tripod Base Available! See Bottom of Page 16 & 19

CV™ Valve Cartridges are designed for adjusting flow rates in applications where high resolution metering regulation is not essential.

The simple construction of CV™ valves incorporate a Valve Spindle with conical ends and compound angles for optimal resolution. The VALVE NEEDLE turns as it travels into or out of the VALVE ORIFICE. In conjunction with the cylindrical cross section, the conical front tip of the VALVE SPINDLE increases or decreases the annular flow area. The cartridge serves as a bubble-tight "shut-off" valve when the tip of the VALVE SPINDLE comes into a stop position against the VALVE ORIFICE.

Calibrations for other gases available



Brass 150mm Flow Meter with CV™ valve

TABLE 20-1, STANDARD 150MM FLOW METERS WITH CARTRIDGE VALVE [CV™]							
MAXIMUM FLOW RATE					FRAME MATERIAL FLOW TUBE		
AIR		WATER		FLOAT MATERIAL	ALUMINUM	BRASS	STAINLESS STEEL
mL/min	scfh	mL/min	gph		MODEL NO.	MODEL NO.	MODEL NO.
11.6	0.024	N/A		Glass	6AP0101C1	6AP1101C1	6AP2101C1
18.3	0.038			Sapphire	6AP0102C1	6AP1102C1	6AP2102C1
34	0.07			316 S.S.	6AP0103C1	6AP1103C1	6AP2103C1
62.8	0.13			Carboloy®	6AP0104C1	6AP1104C1	6AP2104C1
46.6	0.098	0.50	0.007	Glass	6AP0105C1	6AP1105C1	6AP2105C1
73.1	0.154	0.99	0.015	Sapphire	6AP0106C1	6AP1106C1	6AP2106C1
138.3	0.293	2.36	0.037	316 S.S.	6AP0107C1	6AP1107C1	6AP2107C1
239.1	0.506	4.60	0.072	Carboloy®	6AP0108C1	6AP1108C1	6AP2108C1
92	0.195	0.9	0.013	Glass	6AP0109C1	6AP1109C1	6AP2109C1
141	0.297	1.9	0.030	Sapphire	6AP0110C1	6AP1110C1	6AP2110C1
264	0.559	4.7	0.075	316 S.S.	6AP0111C1	6AP1111C1	6AP2111C1
444	0.962	8.5	0.135	Carboloy®	6AP0112C1	6AP1112C1	6AP2112C1
370.6	0.784	5.71	0.090	Glass	6AP0113C1	6AP1113C1	6AP2113C1
513.3	1.087	10.00	0.158	Sapphire	6AP0114C1	6AP1114C1	6AP2114C1
816.0	1.729	19.2	0.301	316 S.S.	6AP0115C1	6AP1115C1	6AP2115C1
1216.9	2.579	31.6	0.500	Carboloy®	6AP0116C1	6AP1116C1	6AP2116C1
817	1.731	15.2	0.240	Glass	6AP0117C1	6AP1117C1	6AP2117C1
1093	2.316	24.9	0.394	Sapphire	6AP0118C1	6AP1118C1	6AP2118C1
1665	3.528	44.3	0.702	316 S.S.	6AP0119C1	6AP1119C1	6AP2119C1
2405	5.096	69.0	1.094	Carboloy®	6AP0120C1	6AP1120C1	6AP2120C1
2214	4.690	49.9	0.792	Glass	6AP0121C1	6AP1121C1	6AP2121C1
2975	6.300	77.7	1.234	Sapphire	6AP0122C1	6AP1122C1	6AP2122C1
4494	9.520	132.5	2.092	316 S.S.	6AP0123C1	6AP1123C1	6AP2123C1
6467	13.70	203.2	3.218	Carboloy®	6AP0124C1	6AP1124C1	6AP2124C1
3780	8.00	89	1.471	Glass	6AP0125C1	6AP1125C1	6AP2125C1
4942	10.47	134	2.124	Sapphire	6AP0126C1	6AP1126C1	6AP2126C1
7720	16.35	226	3.582	316 S.S.	6AP0127C1	6AP1127C1	6AP2127C1
10780	22.84	343	5.437	Carboloy®	6AP0128C1	6AP1128C1	6AP2128C1
8555	18.12	200	3.170	Glass	6AP0129C1	6AP1129C1	6AP2129C1
11140	23.60	301	4.771	Sapphire	6AP0130C1	6AP1130C1	6AP2130C1
16493	34.94	498	7.893	316 S.S.	6AP0131C1	6AP1131C1	6AP2131C1
23001	48.73	736	11.67	Carboloy®	6AP0132C1	6AP1132C1	6AP2132C1
23105	48.95	579	9.177	Glass	6AP0133C1	6AP1133C1	6AP2133C1
29410	62.30	833	13.2	Sapphire	6AP0134C1	6AP1134C1	6AP2134C1
42860	90.80	1339	21.22	316 S.S.	6AP0135C1	6AP1135C1	6AP2135C1
60212	127.5	1972	31.26	Carboloy®	6AP0136C1	6AP1136C1	6AP2136C1

For Materials of Construction see page 15