

Incorporating the principles of traditional rotameter flow technology, these rugged PTFE flow meters offer solutions to low to medium flow range measurements of highly corrosive or ultra-pure liquids and gases.

Model L meters are constructed of inert materials: PTFE, FEP and PCTFE. The unique design construction brings about an inert, mechanically rigid flow meter line. Flow meters are also resistant to external, ambient corrosives. For the protection of personnel each flow meter is supplied with a safety shield.

Flow meters are supplied with or without built-in needle valves at the top for liquids, at the bottom for gases and they are panel mountable.

design features

- ✓ Constructed from PTFE, FEP and PCTFE.
- ✓ Overlapping flow ranges are available for water from 5 mL/min (0.00132 GPM) to 45 L/min (12 GPM) and air from 4 L/min (8.5 scfh) to 1000 L/min. (35 scfm).
- ✓ Individually leak tested.

PRINCIPLES OF OPERATION

A cylindrical float freely moving inside a tapered flow tube comprises the flow measurement element of PTFE flow meters. The translucent flow tube is installed vertically in-line in the liquid stream.

As flow takes place the float is propelled up inside the flow tube. The area between the float and the inside diameter of the flow tube gradually increases with increasing flow and correspondingly the pressure lifting the float decreases until the weight of the float and its buoyant force come to equilibrium. At equilibrium the top of the float is lined up with a scale graduation on the flow tube denoting a discrete rate of flow.

High Range PTFE meter with Valve



Low Range PTFE meter with Valve

LEAK INTEGRITY

Flow meters are individually tested on a Mass Spectrometer Leak Detector and certified to a leak integrity rating of 1×10^{-7} sccs Helium or better.



PTFE FLOW METERS FOR LIQUIDS AND GASES

Configure and Order Online: [Model L PTFE Flow Meters](#)

ORDERING INFORMATION					
L STYLE LIQUID METERS VALVE AT THE TOP					
METER SIZE	MODEL NUMBER		CONNECTION	MAXIMUM FLOW	
	BUILT IN VALVE	NO VALVE		[mL/min] WATER	[gph] WATER
C	L6C-L01-01-SA	L3C-L01-01-SA	1/4" FNPT	75	1.20
	L6C-L02-01-TF	L3C-L02-01-TF	1/4" FNPT	250	4.0
	L6C-L03-01-TF	L3C-L03-01-TF	1/4" FNPT	400	6.5
	L6C-L04-01-TF	L3C-L04-01-TF	1/4" FNPT	500	8.0
	L6C-L05-01-TF	L3C-L05-01-TF	1/4" FNPT	1000	16.0
METER SIZE	MODEL NUMBER		CONNECTION	MAXIMUM FLOW	
	BUILT IN VALVE	NO VALVE		[Lpm] WATER	[gph] WATER
D	L6D-L06-01-TF	L3D-L06-01-TF	3/8" FNPT	2.0	31.0
	L6D-L07-01-TF	L3D-L07-01-TF	3/8" FNPT	2.5	40.0
	L6D-L08-01-TF	L3D-L08-01-TF	3/8" FNPT	3.0	47.5
	L6D-L09-01-TF	L3D-L09-01-TF	3/8" FNPT	5.0	80.0
METER SIZE	MODEL NUMBER		CONNECTION	MAXIMUM FLOW	
	BUILT IN VALVE	NO VALVE		[L/min] WATER	[gpm] WATER
E	L6E-L10-01-TF	L3E-L10-01-TF	1/2" FNPT	13	3.4
	L6E-L11-01-TF	L3E-L11-01-TF	1/2" FNPT	20	5.25
F	L6F-L12-01-TF	L3F-L12-01-TF	3/4" FNPT	30	8.0
	L6F-L13-01-TF	L3F-L13-01-TF	3/4" FNPT	40	10.5
	L6F-L14-01-TF	L3F-L14-01-TF	3/4" FNPT	45	12.0
L STYLE GAS METERS VALVE AT THE BOTTOM					
METER SIZE	MODEL NUMBER		CONNECTION	MAXIMUM FLOW	
	BUILT IN VALVE	NO VALVE		[L/min] AIR	[scfh] AIR
M	L4M-L01-01-TF	L3M-L01-01-TF	1/4" FNPT	4	8.5
	L4M-L02-01-TF	L3M-L02-01-TF	1/4" FNPT	18	38
	L4M-L05-01-TF	L3M-L05-01-TF	1/4" FNPT	50	105
METER SIZE	MODEL NUMBER		CONNECTION	MAXIMUM FLOW	
	BUILT IN VALVE	NO VALVE		[L/min] AIR	[scfm] AIR
N	L4N-L06-01-TF	L3N-L06-01-TF	3/8" FNPT	100	3.5
	L4N-L07-01-TF	L3N-L07-01-TF	3/8" FNPT	200	7
	L4N-L09-01-TF	L3N-L09-01-TF	3/8" FNPT	250	8.8
METER SIZE	MODEL NUMBER		CONNECTION	MAXIMUM FLOW	
	BUILT IN VALVE	NO VALVE		[L/min] AIR	[scfm] AIR
P	L4P-L10-01-TF	L3P-L10-01-TF	1/2" FNPT	500	17.5
Q	L4Q-L12-01-TF	L4Q-L12-01-TF	3/4" FNPT	1000	35

SPECIFICATIONS

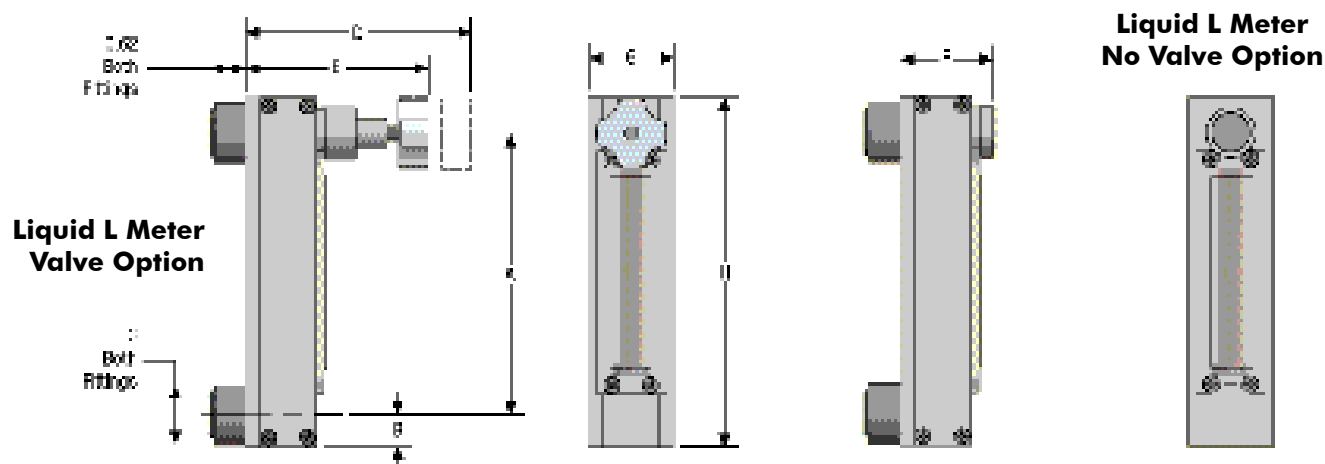
SCALES	Direct reading scales for liquids with 1.0 specific gravity and air.
ACCURACY	±5% of full scale.
MAXIMUM TEMPERATURE	250 °F (121 °C).
MAXIMUM PRESSURE	100 psig (6.7 bars).
LEAK INTEGRITY	Individually pressure and leak tested and certified to a rating of 1×10^{-7} sccs of Helium.

**MATERIALS OF CONSTRUCTION

FLOW TUBES	FEP.
FITTINGS	PTFE.
FLOATS	PTFE (Sapphire for size 01).
GUIDE RODS	PCTFE.

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

LIQUID L METER MOUNTING DIMENSIONS

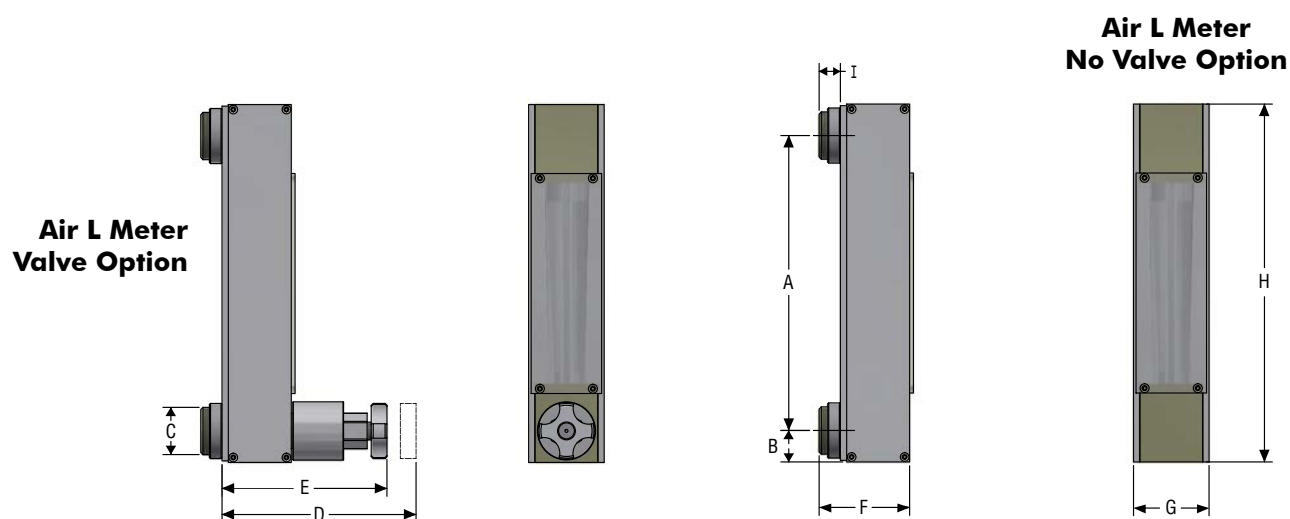


NOTE: Aalborg® reserves the right to change designs and dimensions at its sole discretion at any time without notice. For certified dimensions please contact Aalborg®.

DIMENSIONS FOR LIQUID L STYLE METERS

METER SIZE	A	B	C	D	E	F	G	H	SCALE LENGTH
C	4.97	0.56	0.812	3.42	3.22	1.65	1.50	6.16	75mm
D	4.97	0.56	1.00	4.72	4.32	1.95	1.75	6.16	75mm
E	8.72	0.88	1.50	4.64	4.14	2.25	2.25	10.47	125mm
F	8.47	1.00	1.50	6.00	5.06	2.80	2.50	10.47	125mm

AIR L METER MOUNTING DIMENSIONS



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DIMENSIONS FOR AIR L STYLE METERS

METER SIZE	A	B	C	D	E	F	G	H	I	SCALE LENGTH
M	4.6	0.63	0.81	3.66	3.36	2.25	1.65	5.85	0.68	75mm
N	4.6	0.63	1	3.09	3.43	2.25	1.65	5.85	0.68	75mm
P	9.37	1	1.5	6.09	5.24	2.88	2.4	11.37	0.68	125mm
Q	9.37	1	1.5	6.16	5.24	2.88	2.4	11.37	0.68	125mm