

MEDIUM RANGE PTFE FLOW METERS


Incorporating traditional variable area precision glass technology, these rugged PTFE flow meters offer accurate and economical solutions to medium flow range measurements. These meters are designed with unique rotatable scales of dual air-water direct reading graduations showing SCFM and L/min (air), as well as GPM and LPM (water) markings.

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.

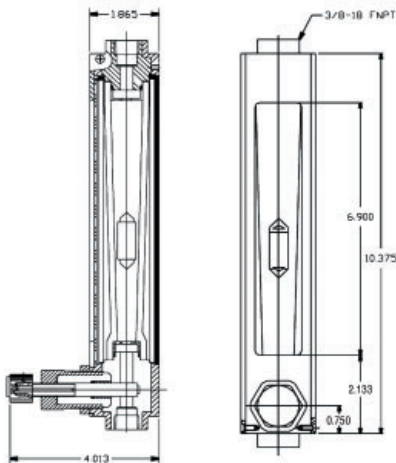
SPECIFICATIONS FOR PTFE FLOW METERS

TUBE SHIELDS:	Polycarbonate.
FLOW TUBES:	Heavy walled precision formed borosilicate glass.
FLOATS:	PTFE.
WETTED PARTS:	PTFE, PCTFE.
SEALS:	PTFE.
SCALES:	Rotatable, direct reading air, (SCFM-L/min) and water (GPM-LPM). Scale length is 127mm (nominal).
ACCURACY:	+5% of full scale.
MAXIMUM TEMPERATURE:	150 °F (65 °C.)
MAXIMUM PRESSURE:	100 PSIG (6.7) bars.
CONNECTIONS:	3/8" NPT female In-Line or horizontal rear.
LEAK INTEGRITY:	Individually leak tested and certified.

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



Dimensions In-Line Model



Dimensions Panel Mount Model

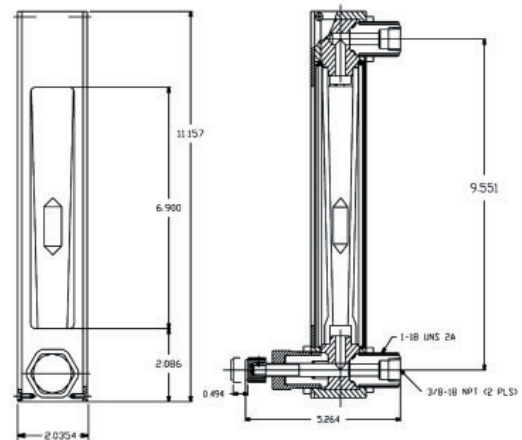


TABLE 28, MEDIUM RANGE PTFE FLOW METERS

MAXIMUM FLOW RANGES				IN-LINE MOUNT		PANEL MOUNT	
AIR		WATER		NO VALVE	VALVE	NO VALVE	VALVE
SCFM	SLPM	GPM	LPM	MODEL NO.	MODEL NO.	MODEL NO.	MODEL NO.
3.5	100	0.8	3.0	6AV9101TNI	6AV9101TVI	6AV9101TNP	6AV9101TVP
7.0	200	1.5	5.75	6AV9102TNI	6AV9102TVI	6AV9102TNP	6AV9102TVP
10.5	300	2.2	8.25	6AV9103TNI	6AV9103TVI	6AV9103TNP	6AV9103TVP
14.0	400	2.9	11.0	6AV9104TNI	6AV9104TVI	6AV9104TNP	6AV9104TVP
17.5	500	3.5	13.25	6AV9105TNI	6AV9105TVI	6AV9105TNP	6AV9105TVP
22.0	625	4.1	16.0	6AV9106TNI	6AV9106TVI	6AV9106TNP	6AV9106TVP

6AL PANEL MOUNT PTFE / PFA FLOW METERS

Incorporating the principles of traditional variable area flow technology, these rugged PTFE-PFA flow meters offer solutions for low to medium flow range measurements of highly corrosive or ultra-pure liquids.

PTFE PFA Flow Meters



FEATURES

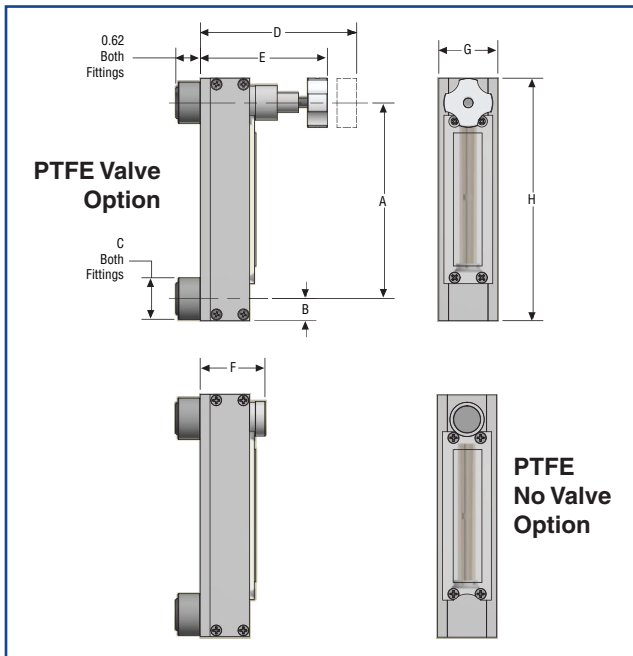
- ✓ Resistant to external, ambient corrosives.
- ✓ Panel mountable, by means of KYNAR® panel nuts.
- ✓ Leak Integrity 1 X 10⁻⁷ sccs Helium or better.
- ✓ Chemically inert wetted components constructed from PFA PTFE and PCTFE.
- ✓ Non-fluid contacting structurally rigid frame constructed from polypropylene and Kynar®.
- ✓ Overlapping flow ranges are available for water from 5 mL/min (0.00132 GPM) to 45 L/min (12 GPM).
- ✓ Supplied with or without built-in needle valves.

SPECIFICATIONS FOR PTFE PFA FLOW METERS

SCALES: Direct reading scales for liquids with 1.0 specific gravity.
ACCURACY: +5% of full scale.
MAX. TEMPERATURE: 250 °F (121 °C).
MAX PRESSURE: 100 PSIG (6.7 BARS).
FLOW TUBES: PFA.
FLOATS: PTFE (Sapphire Size for Models 6AL7101LN, 6AL7101LV).
WETTED PARTS: PFA (flow tubes) and PTFE (end fittings and floats) and PCTFE (guide rods).



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



DIMENSIONS FOR PTFE-PFA FLOW METERS									
METER SIZE	DIMENSIONAL CODING								SCALE LENGTH
	A	B	C	D	E	F	G	H	
C	4.97	0.56	1.06	3.42	3.22	1.65	1.50	6.16	75mm
D	4.97	0.56	1.25	4.72	4.32	1.95	1.75	6.16	75mm
E	8.72	0.88	1.75	4.64	4.14	2.25	2.25	10.47	125mm
F	8.47	1.00	1.75	6.00	5.06	2.80	2.50	10.47	125mm

*Dimensions are in inches, except as shown in [mm]; for certified dimensions contact the company.

TABLE 29, PTFE-PFA FLOW METERS FOR WATER (NO VALVE OPTION)

METER SIZE	MODEL NO.	MAXIMUM FLOW		BUILT-IN VALVE	CONNECTION
		mL/min	gph		
C	6AL7101LN	75	1.2	No	1/4" FNPT
	6AL7102LN	250	4.0	No	
	6AL7103LN	400	6.5	No	
	6AL7104LN	500	8.0	No	
METER SIZE	MODEL NO.	MAXIMUM FLOW		BUILT-IN VALVE	CONNECTION
		L/min	gph		
D	6AL7105LN	1.0	16.0	No	3/8" FNPT
	6AL7110LN	2.0	31.0	No	
	6AL7111LN	2.5	40.0	No	
	6AL7112LN	3.0	47.5	No	
	6AL7113LN	5.0	80.0	No	
METER SIZE	MODEL NO.	MAXIMUM FLOW		BUILT-IN VALVE	CONNECTION
		L/min	gpm		
E	6AL7120LN	13	3.4	No	1/2" FNPT
	6AL7121LN	20	5.25	No	
F	6AL7122LN	30	8.0	No	3/4" FNPT
	6AL7123LN	40	10.5	No	
	6AL7124LN	45	12.0	No	

TABLE 29-1, PTFE-PFA FLOW METERS FOR WATER (VALVE OPTION)

METER SIZE	MODEL NO.	MAXIMUM FLOW		BUILT-IN VALVE	CONNECTION
		mL/min	gph		
C	6AL7101LV	75	1.2	Yes	1/4" FNPT
	6AL7102LV	250	4.0	Yes	
	6AL7103LV	400	6.5	Yes	
	6AL7104LV	500	8.0	Yes	
METER SIZE	MODEL NO.	MAXIMUM FLOW		BUILT-IN VALVE	CONNECTION
		L/min	gph		
D	6AL7105LV	1.0	16.0	Yes	3/8" FNPT
	6AL7110LV	2.0	31.0	Yes	
	6AL7111LV	2.5	40.0	Yes	
	6AL7112LV	3.0	47.5	Yes	
	6AL7113LV	5.0	80.0	Yes	
METER SIZE	MODEL NO.	MAXIMUM FLOW		BUILT-IN VALVE	CONNECTION
		L/min	gpm		
E	6AL7120LV	13	3.4	Yes	1/2" FNPT
	6AL7121LV	20	5.25	Yes	
F	6AL7122LV	30	8.0	Yes	3/4" FNPT
	6AL7123LV	40	10.5	Yes	
	6AL7124LV	45	12.0	Yes	

SERIES 6AF IN-LINE PTFE FLOW METERS

TABLE 30, IN-LINE PTFE FLOW METER (NO VALVE OPTION)

MODEL NO.	MAXIMUM FLOW RATE		BUILT-IN VALVE	FITTINGS
	WATER (mL/min)	WATER (gph)		
6AF8101FN	125	2.0	No	1/4" FNPT
6AF8102FN	250	4.0	No	
6AF8103FN	400	6.5	No	
6AF8104FN	500	8.0	No	
MODEL NO.	MAXIMUM FLOW RATE		BUILT-IN VALVE	FITTINGS
WATER (L/min)	WATER (gph)			
6AF8105FN	1.0	16.0	No	3/8" FNPT
6AF8106FN	2.0	30.0	No	
6AF8107FN	2.5	40.0	No	
6AF8108FN	3.0	50.0	No	
6AF8109FN	5.0	80.0	No	
MODEL NO.	MAXIMUM FLOW RATE		BUILT-IN VALVE	FITTINGS
WATER (L/min)	WATER (gpm)			
6AF8120FN	13.0	3.5	No	1/2" FNPT
6AF8121FN	20.0	5.2	No	3/4" FNPT
6AF8122FN	30.0	8.0	No	
6AF8123FN	40.0	10.5	No	
6AF8124FN	45.0	12.0	No	

FEATURES

- ✓ Chemically inert wetted components.
- ✓ Removable protective shield.
- ✓ Individually leak tested.

Made entirely of PTFE, PFA, and PCTFE, the In-Line PTFE flow meter is excellent for high-purity applications or use with corrosive liquids.

Models are available with a standard valve to monitor and control flow or without a valve to just monitor flow. 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.



TABLE 30-1, F STYLE IN-LINE PTFE FLOW METER (VALVE OPTION)

MODEL NO	MAXIMUM FLOW RATE		BUILT-IN VALVE	FITTINGS
	WATER (mL/min)	WATER (gph)		
6AF8101FV	125	2.0	Yes	1/2" FNPT
6AF8102FV	250	4.0	Yes	
6AF8103FV	400	6.5	Yes	
6AF8104FV	500	8.0	Yes	
MODEL NO	MAXIMUM FLOW RATE		BUILT-IN VALVE	FITTINGS
WATER (L/min)	WATER (gph)			
6AF8105FV	1.0	16.0	Yes	3/4" FNPT
6AF8106FV	2.0	30.0	Yes	
6AF8107FV	2.5	40.0	Yes	
6AF8108FV	3.0	50.0	Yes	
6AF8109FV	5.0	80.0	Yes	
MODEL NO	MAXIMUM FLOW RATE		BUILT-IN VALVE	FITTINGS
WATER (L/min)	WATER (gpm)			
6AF8120FV	13.0	3.5	Yes	1/2" FNPT
6AF8121FV	20.0	5.2	Yes	3/4" FNPT
6AF8122FV	30.0	8.0	Yes	
6AF8123FV	40.0	10.5	Yes	
6AF8124FV	45.0	12.0	Yes	

SPECIFICATIONS

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

MATERIALS OF CONSTRUCTION

- TUBE SHIELDS:** Polycarbonate.
- FLOW TUBES:** PFA.
- FLOATS:** PTFE.
- WETTED PARTS:** PTFE end fittings, PCTFE guide rods.



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

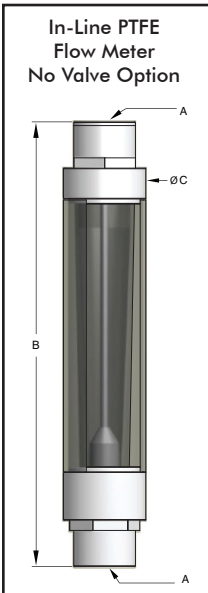


TABLE 30-2, 6AF STYLE IN-LINE PTFE FLOW METER DIMENSIONS NO VALVE OPTION

MODEL	A	B	C	D
6AF8101FN	1/4" FNPT	5.52" (140.2 mm)	1.25" (31.8 mm)	1.25" (31.8 mm)
6AF8102FN				
6AF8103FN				
6AF8104FN				
6AF8105FN	3/8" FNPT	5.52" (140.2 mm)	1.25" (31.8 mm)	1.25" (31.8 mm)
6AF8106FN				
6AF8107FN				
6AF8108FN				
6AF8109FN				
6AF8120FN	1/2" FNPT	10.81" (274.6 mm)	2.00" (50.8 mm)	2.00" (50.8 mm)
6AF8121FN				
6AF8122FN				
6AF8123FN	3/4" FNPT	10.81" (274.6 mm)	2.00" (50.8 mm)	2.00" (50.8 mm)
6AF8124FN				

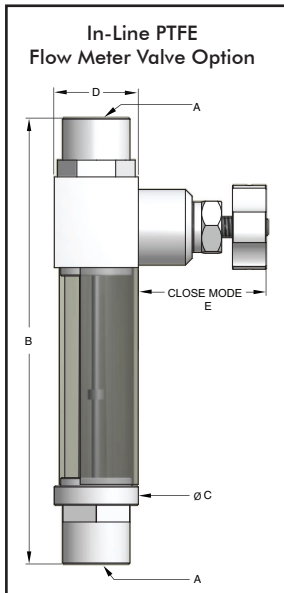


TABLE 30-3, 6AF STYLE IN-LINE PTFE FLOW METER DIMENSIONS VALVE OPTION

MODEL	A	B	C	D	E
6AF8101FV	1/4" FNPT	5.52" (140.2 mm)	1.25" (31.8 mm)	1.25" (31.8 mm)	1.88" (47.8 mm)
6AF8102FV					
6AF8103FV					
6AF8104FV					
6AF8105FV	3/8" FNPT	5.52" (140.2 mm)	1.25" (31.8 mm)	1.25" (31.8 mm)	1.88" (47.8 mm)
6AF8106FV					
6AF8107FV					
6AF8108FV					
6AF8109FV					
6AF8120FV	1/2" FNPT	10.81" (274.6 mm)	2.00" (50.8 mm)	2.00" (50.8 mm)	1.88" (47.8 mm)
6AF8121FV					
6AF8122FV					
6AF8123FV	3/4" FNPT	10.81" (274.6 mm)	2.00" (50.8 mm)	2.00" (50.8 mm)	1.88" (47.8 mm)
6AF8124FV					