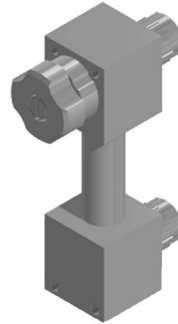


mini-Pathfinder Series variable area flowmeters provide stable and repeatable flow indication for ultra low, low and medium flow rates in aggressive and ultra pure applications. All the benefits and features of our Pathfinder flowmeters in a compact size.

Flow ranges from 2 - 20 ml/min. through 2800 - 6000 ml/min. in H₂O



mini-Pathfinder®

Accurate, Reliable and Repeatable Performance

- 100% functional testing including calibration for accuracy and pressure leak testing—superior performance
- PFA sight tube—media compatibility and improves float visibility
- Guide rod centers float—improved sensing accuracy
- Serialization—quality control tracking and custom configurations
- Patented valve provides stable and repeatable flow of process fluids—high resolution and improved linear flow adjustment
- Optional Sentinel® available for alarm or flow switch capability

Ultra Pure Construction

- Premium grade fluoropolymers and other high performance plastics—resist corrosion and prevent process contamination
- No exposed metal—eliminates metallic corrosion
- Cleanroom manufacturing and packaging—minimizes potential contamination
- Reduced foot print design

flowmeters

Operation

The mini-Pathfinder Series variable area flowmeters consist of a solid float inside a vertical tube. Fluid enters at the base of the tube causing the float to rise. As the float inside the tube rises, the area between the float and the tube wall increases. The upward or downward movement of the float corresponds to the rate of fluid flow in the tube. Gradations from 1 through 10, marked on the outside of the tube, allow the observer to reference the flow rate by the position of the float in the tube. Direct read scale labels are available. (*Consult factory*) Two flowmeter designs provide optimized performance for ultra low, low and medium flow.

Specifications

MATERIALS

- Wetted parts:
PTFE, PFA, TFM and CTFE
- Non-wetted parts:
PVDF and polypropylene

OPERATING

- Accuracy: $\pm 5\%$ full scale
- Maximum temp: 120°C (248°F)
- Maximum pressure: 100 psi

COMPATIBLE ACCESSORIES

- Sentinel® and Electronic Sentinel® Series optical float position sensors
- Snap ring float position indicators

Configuration Options

STYLE

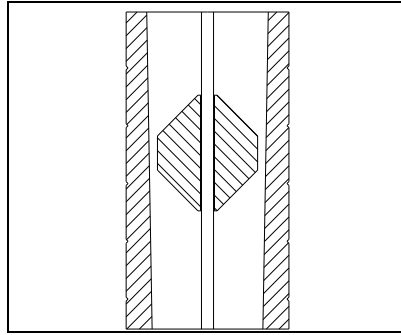
- Panel Mount

METERING VALVE

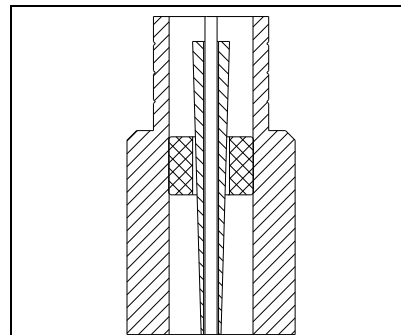
- With or without integral high resolution metering valve

CONNECTION SIZES

- 1/8", 1/4", 3/8" and 1/2"



Medium Flow



Low and Medium Flow — Tapered Float

Ordering Information

To order, select style, valve option, connection type and connection size from options below.

Complete Part Number = Style, Valve Option, Connection Type, Connection Size + Flow Range (Example: M11F3-00250)

MXXXX—FLOW RANGE

STYLE	
PANEL MOUNT	1
Consult factory for other configurations	
VALVE OPTION	
w/ valve	0
w/o valve	1
CONNECTION TYPE	
FLARE	F
PILLAR SUPER 300	S
FLOWELL 60 SERIES	L
CONNECTION SIZE	
1/8*	1
1/4	2
3/8	3
1/2**	4

*Not available on option "F"

**Not available on option "S"

FLOW RANGES

Ranges below are based on DI water at 23°C (73.4°F). Reference water flow chart supplied with each meter.
All floats are solid PTFE unless noted.

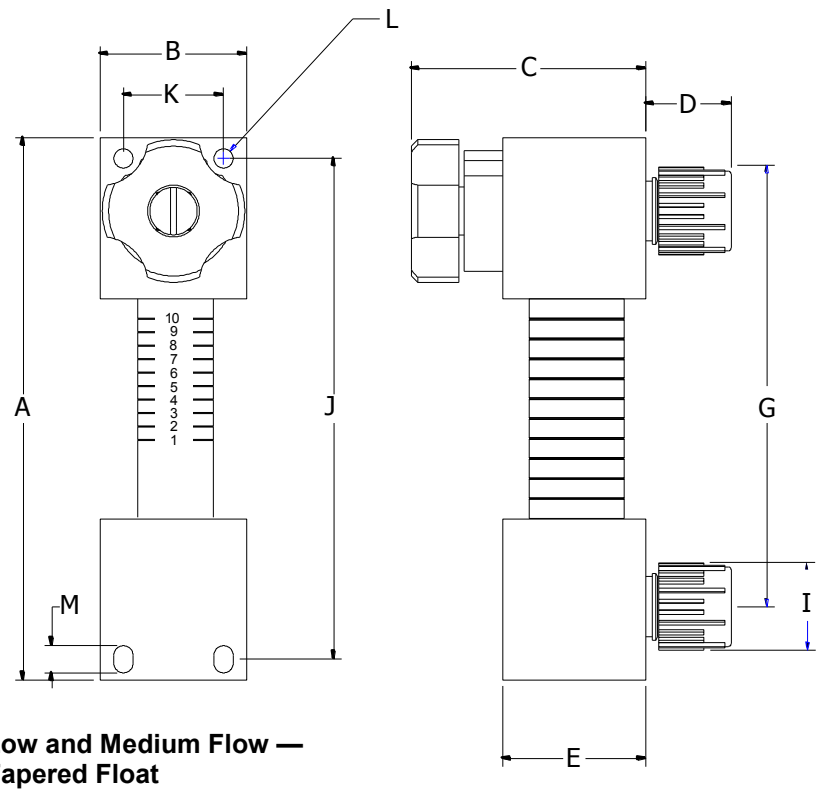
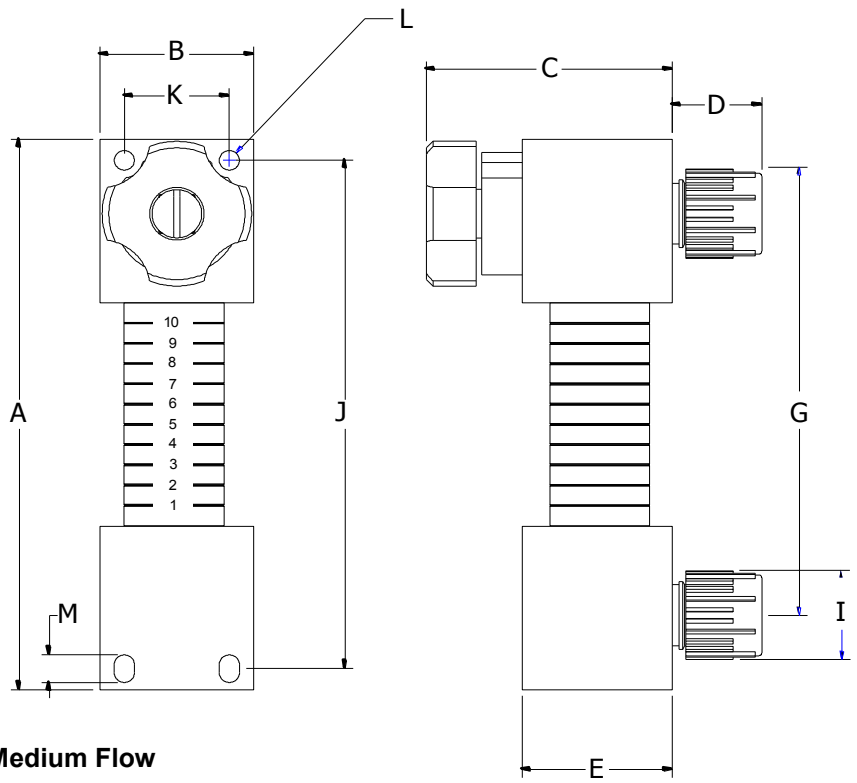
FLOW (ml/min.)	PART NUMBER	FLOW (ml/min.)	PART NUMBER	FLOW (ml/min.)	PART NUMBER
ULTRA LOW FLOW		MEDIUM FLOW		MEDIUM FLOW CONT.	
2 - 20	00020	35 - 400	004	185 - 3000	030 [■]
LOW & MEDIUM FLOW		65 - 450	0045	1000 - 3000	0300 [▲]
		90 - 500	005	540 - 3500	035 [■]
5 - 75	00075	150 - 600	006	1200 - 3500	0350 [▲]
5 - 125	00125	330 - 800	008	1000 - 4000	040 [■]
5 - 250	00250	90 - 1000	010	1550 - 4000	0400 [▲]
10 - 350	00350	220 - 1200	012	1300 - 4500	045 [■]
10 - 400	00400	350 - 1500	015	1350 - 4600	046 [■]
25 - 500	00500	135 - 1800	018	1760 - 5000	050 [■]
25 - 800	00800	260 - 1900	019	2100 - 5500	055 [■]
25 - 1000	01000	325 - 2000	020	2800 - 6000	060 [■]
40 - 1500	01500	450 - 2200	022		
110 - 2000	02000	700 - 2500	025		

[■]Fluoropolymer encapsulated stainless steel weighted float

[▲]1/8 & 1/4 port connections not recommended for these flow ranges

Installation Drawings

	Description	inches	mm
A	Height (Panel Mount)	4.26	108.2
B	Width	1.15	29.2
C	Valve Open	2.12	54.0
	Valve Closed	1.84	46.8
D	1/4" Flare	1.18	30.0
	3/8" Flare	1.25	31.8
	1/2" Flare	1.33	33.8
	1/8" Super 300	0.59	15.0
	1/4" Super 300	0.77	19.6
	3/8" Super 300	1.00	25.4
	1/8" Flowwell	0.69	17.5
	1/4" Flowwell	1.22	31.0
	3/8" Flowwell	1.54	39.0
	1/2" Flowwell	1.54	39.0
E	Depth	1.13	28.6
G	Flare Center to Center	3.11	79
I	Panel Hole Diameter	0.92	0.036
J	CL Mounting Holes Vert	3.94	0.155
K	CL Mounting Holes Horiz	0.79	0.03
L	Mounting Hole Diameter	0.15	0.006
M	Mounting Hole Slot Length	0.21	0.008



U.S. Patents: 5565631, 5549277, 5381826, 5078004 • Others pending
 Futurestar®, Pathfinder®, Odyssey®, Sentinel® and AutoValve® are registered trademarks of Futurestar Corp.
 Super 300 Type Pillar Fitting® is a trademark of NIPPON PILLAR PACKING CO., LTD.

