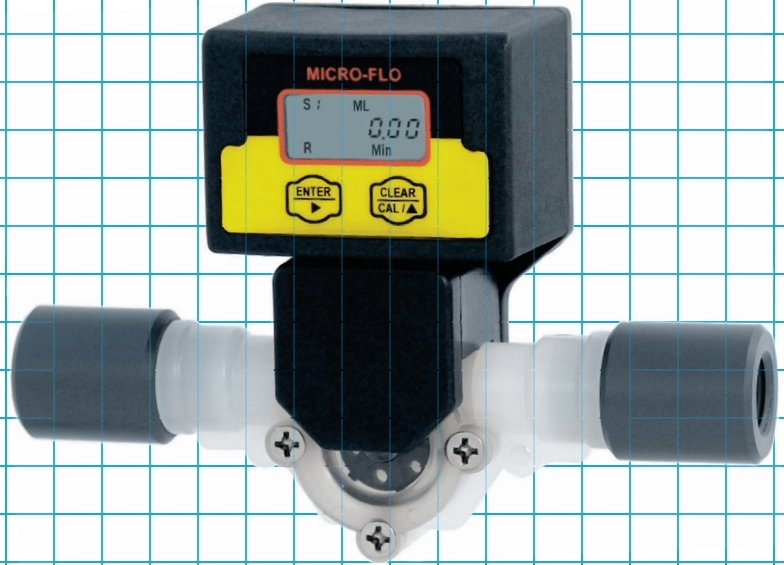


# MICRO-FLO

Pipe Thread or  
Tubing Connections

Rate & Total display

On-Sensor or  
Panel Mounted Display



### Features:

- High accuracy digital paddlewheel technology.
- 1/8", 1/4" or 1/2" NPT, 1/4" OD or 3/8" OD Tubing sizes.
- Flow rates from 30 to 7000 milliliters per minute.
- 5 model variations:
  - FS = Sensor mounted display
  - FP = Panel mounted display (includes 25' cable)
  - FV = No display. Sensor only. 5vdc current sinking output
  - FX = No electronic sensor. Visual indicator only.
  - FA = Analog Output. Rate & Total. Sensor Mounted Display
- 6 digit LCD, up to 4 decimal positions.
- Displays both rate of flow and total accumulated flow.
- Open collector alarm set point.
- User selectable or custom programmable scale factors.
  - Flow units: Gallons, Liters, Ounces, milliliters
  - Time units: Minutes, Hours, Days
- Volumetric field calibration programming system.
- Non-volatile programming and accumulated flow memory.
- Total reset function can be disabled.
- Opaque PVDF chemical resistant lens.
- Weather resistant Valox<sup>®</sup> PBT enclosure. NEMA 4X
- LCD is not recommended for direct sunlight applications.

### Specifications:

Max. Working Pressure: ..... 150 psig (10 bar) @ 70° F (21° C)  
 Max. Fluid Temperature: ..... 200° F (93° C) @ 0 PSI  
 Full scale accuracy ..... +/- 6%

Input Power requirement: .... 9 - 28 VDC  
 Optional AC/DC transformers available  
 Sensor type: ..... Infra-red light beam  
 Sensor only output: ..... 5V DC digital square wave (3-wire)  
 Sensor output cable: ..... 3-wire shielded cable, 6ft  
 Enclosure: ..... NEMA type 4X, (IP56)  
 Approximate shipping wt: ... 1 lb. (.45 kg)

### Materials of Construction:

Body, Paddle, Axle material: ..... PVDF  
 Connector material:  
 1 = .500" ID hose barb, PVC  
 2 = .500" Male NPT, PVC  
 3 = .500" Female NPT, PVC  
 4 = .250" OD tubing connection, Polypropylene  
 5 = .125" Female NPT, PVC  
 6 = .375" OD tubing connection, PVDF  
 7 = .250" Female NPT, PVC

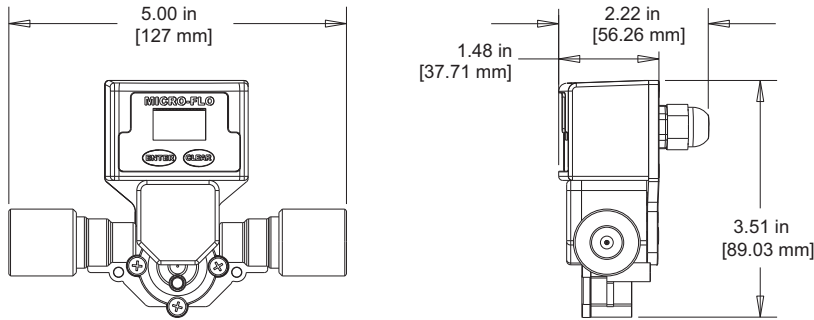
Viewing lens material: ..... Opaque PVDF  
 O-ring seals: ..... Viton (Optional EP)  
 Compression seal to pump: ..... PVC

### Installation Requirements:

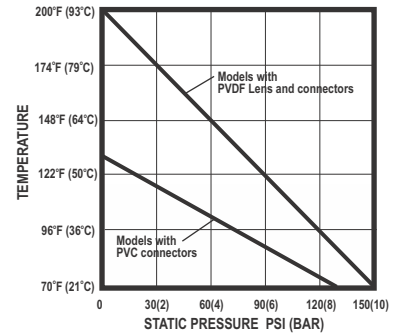
#### Mounting location

- The meter is designed to withstand outdoor conditions. A cool, dry location, where the unit can be easily serviced is recommended.
- The meter can be mounted on horizontal or vertical runs of pipe. The paddle axle must remain horizontal +/- 10°.
- The meter can accurately measure flow from either direction.
- The meter can only be used with fluids that can pass infra-red light.

### Dimensions:



### Maximum Temperature vs. Pressure



### Model Number Matrix:

#### METER FUNCTION

FS = Flow rate and Totalizing, On-sensor mounting  
 FP = Flow rate and Totalizing, Remote panel mounting  
 FV = Flow sensor only (no display)  
 FX = Flow indicator only (no electronics)  
 FA = Analog Output, Rate & Total, Sensor Mounted Display

#### POWER SUPPLY

1 = Transformer U.S. 115VAC/15VDC  
 2 = Transformer E.U. 220VAC/15VDC  
 3 = Transformer U.S. 230VAC/15VDC  
 None = No selection (customer supplied)

#### FLOW RANGE SELECTION

10 = 30-300 ml/min  
 20 = 100-1000 ml/min  
 30 = 200-2000 ml/min  
 40 = 300-3000 ml/min  
 50 = 500-5000 ml/min  
 60 = 700-7000 ml/min



#### O-RING SEAL SELECTION

V = Viton  
 E = EPDM

#### CONNECTOR SELECTION

1 = .500" ID hose barb, PVC  
 2 = .500" Male NPT, PVC  
 3 = .500" Female NPT, PVC  
 4 = .250" OD tubing connection, Polypropylene  
 5 = .125" Female NPT, PVC  
 6 = .375" OD tubing connection, PVDF  
 7 = .250" Female NPT, PVC

#### LENS MATERIAL SELECTION

1 = Opaque PVDF

### Pipe Size, Flow Range and Model Options:

#### 115V Models with 1/4" F/NPT connections

Operating Flow Range		FS Models (Sensor Mount)	FP Models (Panel Mount)	FV Models (Sensor Only)	FX Models (Indicator Only)	FA Models (Indicator Only)
OZ/MIN	ML/MIN	Model Number	Model Number	Model Number	Model Number	Model Number
1 to 10	30 to 300	FS1-101-7V	FP1-101-7V	FV1-101-7V	FX-101-7V	FA1-101-7V
3.5 to 35	100 to 1000	FS1-201-7V	FP1-201-7V	FV1-201-7V	FX-201-7V	FA1-201-7V
7 to 70	200 to 2000	FS1-301-7V	FP1-301-7V	FV1-301-7V	FX-301-7V	FA1-301-7V
10 to 100	300 to 3000	FS1-401-7V	FP1-401-7V	FV1-401-7V	FX-401-7V	FA1-401-7V
17 to 170	500 to 5000	FS1-501-7V	FP1-501-7V	FV1-501-7V	FX-501-7V	FA1-501-7V
24 to 240	700 to 7000	FS1-601-7V	FP1-601-7V	FV1-601-7V	FX-601-7V	FA1-601-7V

#### 115V Models with 1/8" F/NPT connections

Operating Flow Range		FS Models (Sensor Mount)	FP Models (Panel Mount)	FV Models (Sensor Only)	FX Models (Indicator Only)	FA Models (Indicator Only)
OZ/MIN	ML/MIN	Model Number	Model Number	Model Number	Model Number	Model Number
1 to 10	30 to 300	FS1-101-5V	FP1-101-5V	FV1-101-5V	FX-101-5V	FA1-101-5V
3.5 to 35	100 to 1000	FS1-201-5V	FP1-201-5V	FV1-201-5V	FX-201-5V	FA1-201-5V
7 to 70	200 to 2000	FS1-301-5V	FP1-301-5V	FV1-301-5V	FX-301-5V	FA1-301-5V
10 to 100	300 to 3000	FS1-401-5V	FP1-401-5V	FV1-401-5V	FX-401-5V	FA1-401-5V
17 to 170	500 to 5000	FS1-501-5V	FP1-501-5V	FV1-501-5V	FX-501-5V	FA1-501-5V
24 to 240	700 to 7000	FS1-601-5V	FP1-601-5V	FV1-601-5V	FX-601-5V	FA1-601-5V

#### 115V Models with 3/8" OD Tubing connections

Operating Flow Range		FS Models (Sensor Mount)	FP Models (Panel Mount)	FV Models (Sensor Only)	FX Models (Indicator Only)	FA Models (Indicator Only)
OZ/MIN	ML/MIN	Model Number	Model Number	Model Number	Model Number	Model Number
1 to 10	30 to 300	FS1-101-6V	FP1-101-6V	FV1-101-6V	FX-101-6V	FA1-101-6V
3.5 to 35	100 to 1000	FS1-201-6V	FP1-201-6V	FV1-201-6V	FX-201-6V	FA1-201-6V
7 to 70	200 to 2000	FS1-301-6V	FP1-301-6V	FV1-301-6V	FX-301-6V	FA1-301-6V
10 to 100	300 to 3000	FS1-401-6V	FP1-401-6V	FV1-401-6V	FX-401-6V	FA1-401-6V
17 to 170	500 to 5000	FS1-501-6V	FP1-501-6V	FV1-501-6V	FX-501-6V	FA1-501-6V
24 to 240	700 to 7000	FS1-601-6V	FP1-601-6V	FV1-601-6V	FX-601-6V	FA1-601-6V