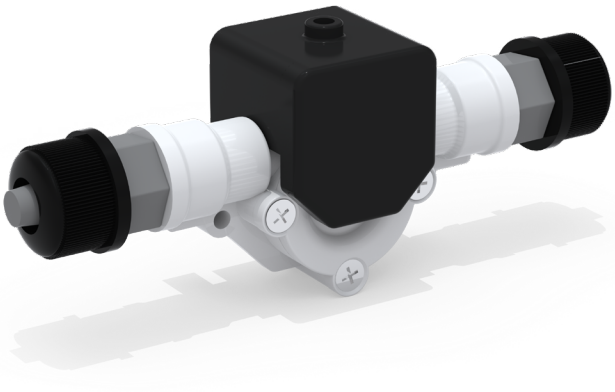
Blue-White®

MICRO-FLO

Paddlewheel Flow Verification Sensor



Features

- High accuracy digital paddlewheel technology
- Hall Effect Pulse Output
- Indentifies “no-flow” conditions due to clogged injectors, empty tanks, or lost prime
- Easy connection to piping or tubing
- PVC or PVDF adapters available
- Simple 3-wire connection the pump flow verification (FVS) input

NEMA 4X

Highlights

Flow range
.48 - 110.9 GPH (11.4 - 2600 GPD)
.03 - 7.00 LPM (30 -7,000 ml/M)

Pressures up to
150 PSI
(10 bar)

Max. fluid temp.
130/200 ˚F at 0 PSI
(60/93 ˚C)

Body material
PVDF

Connector Sizes
⅛”, ¼”, ½” F/NPT
½” M/NPT, ½” Hose Barb
3/8” OD, 1/4” OD Tubing Conn.

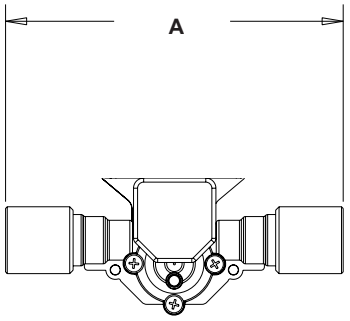
Warranty
1 Year

For more help and information regarding **Micro-Flo**, please visit www.blue-white.com or scan this QR code.

Engineering Specifications

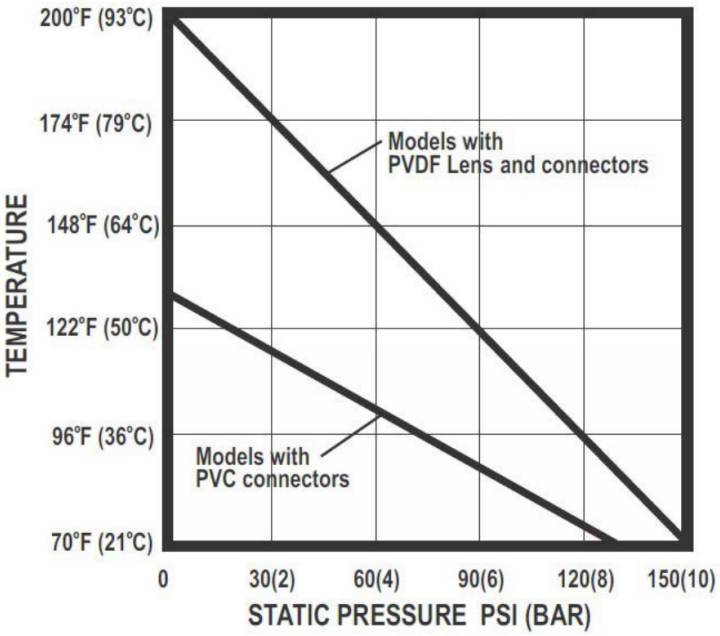
Maximum Working Pressure	150 PSI (10 bar) @ 70 °F (21 °C)
Maximum Fluid Temperature	200 °F (93.3 °C) @ 0 PSI
	130 °F (60 °C) @ 0 PSI (with PVC connectors)
	NOTE: Refer to Pressure/Temperaure graph for specific ratings.
Maximum Ambient Temperature	14 °F to 110 °F/ -10 °C to 43 °C
Maximum Pressure Drop	up to 10 PSI (on 30, 40, 50, 60 flow range models) up to 20 PSI (on 20 flow range model)* up to 50 PSI (on 10 flow range model)*
Full Scale Accuracy	+/- 6%
Power Requirement	9 - 28 VDC (optional transformer available)
Sensor Type	Infra-red light beam
Sensor output	5V CD digital square wave (3 wire)
Sensor cable	3-wire shielded cable, 6ft
Approximate Shipping Weight	1 lb. (.45 kg)
Enclosure	NEMA 4X (IP56)
RoHS Compliant	Yes
	* Consult factory for assistance with 10 and 20 flow models.

Dimensions



Dim	Inch	cm
A	5.0”	12.7

Maximum Temperature vs. Pressure



Materials of Construction

Saddle material:	PVDF
Molded In-Line Body:	PVDF
Sensor, paddlewheel, axle:	PVDF
Sensor O-ring seals:	FKM (optional EP)
Viewing Lens:	Opaque PVDF
Connector Material:	1 = .5” ID Hose Barb, PVC
	2 = .5” Male NPT, PVC
	3 = .5” Female NPT, PVC
	4 = .25” OD Tubing Connection, Polypropylene
	5 = .125” Female NPT, PVC
	6 = .375” OD Tubing Connection, PVDF
	7 = .250” Female NPT, PVC
Enclosure:	Valox/PVC/ABS
Foot Strainer:	PVDF

Installation Notes:

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

Performance

Flow Range

Model	Oz/Min	mL/Min	GPH	GPD
10	1 - 10	30 - 300	.48 - 4.8	11.4 - 114
20	3.5 - 35	100 - 1000	1.6 - 15.6	38.0 - 380
30	7 - 70	200 - 2000	3.2 - 31.7	76.0 - 760
40	10 - 100	300 - 3000	4.8 - 47.5	114 - 1140
50	17 - 170	500 - 5000	7.9 - 79.2	190 - 1900
60	24 - 240	700 - 7000	11.1 - 110.9	266 - 2660

Model Number Matrix

FV	1	-	10	1	-	1	V	Sample Model Number

Meter Function
FV = Flow sensor only (no display)

Power Supply
1 = Transformer U.S. 115VAC/15VDC
2 = Transformer E.U. 220VAC/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

* Consult factory for assistance on 10 and 20 flow models (review pressure drop, fluid viscosity, and particulate size)

O-ring Seal Selection
V = FKM
E = EP

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

5300 Business Drive, Huntington Beach, CA 92649
TEL 714-893-8529 | FAX 714-894-9492 | www.blue-white.com | sales@blue-white.com

ISO 9001:2015 CERTIFIED
SINCE Quality 1957
MADE IN THE USA