• INLINE FLOW METER •
MODEL F-1330 TURBINE
SCALED OUTPUT

ONICON INCORPORATED

Made in the USA

DESCRIPTION

ONICON inline turbine flow meters are suitable for measuring electrically conductive water-based liquids. The F-1330 model provides a scaled binary (digital) dry contact output signal where each pulse equals a specific unit volume, an ideal choice for totalized flow applications.

CALIBRATION

Every ONICON flow meter is wet calibrated in our flow laboratory against primary volumetric standards that are directly traceable to N.I.S.T. A certificate of calibration accompanies every meter.

FEATURES

Unmatched Price vs. Performance - Custom calibrated, highly accurate instrumentation at very competitive prices.

Excellent Long-term Reliability - Patented electronic sensing is resistant to scale and particulate matter. Low mass turbines with engineered jewel bearing systems provide a mechanical system that virtually does not wear.

Industry Leading Two-year "No-fault" Warranty - Reduces start-up costs with extended coverage to include accidental installation damage (miswiring, etc.) Certain exclusions apply. See our complete warranty statement for details.

APPLICATIONS

- Closed loop chilled water, hot water, condenser water & water/glycol/brine solutions for HVAC
- Process water & water mixtures
- Domestic water

GENERAL SPECIFICATIONS

ACCURACY
± 0.5% of reading at calibrated velocity
± 2% of reading from 0.8 to 38 GPM (50:1 range)
SENSING METHOD
Electronic impedance sensing
(non-magnetic and non-photoelectric)
PROCESS CONNECTIONS
Threaded or sweat union fittings ¾" or 1"
SUPPLY VOLTAGE
24 ± 4 V AC/DC at 30 mA
LIQUID TEMPERATURE RANGE
Standard: 180° F continuous, 200° F peak
High Temp: 280° F continuous, 300° F peak
AMBIENT TEMPERATURE RANGE
-5° to 160° F (-20° to 70° C)
OPERATING PRESSURE
400 PSI maximum
PRESSURE DROP
3 PSI at maximum flow rate
OUTPUT SIGNALS PROVIDED
Scaled Contact Output
Isolated solid state dry contact
Contact rating: 100 mA, 50 V
Contact duration:
50 ms or 300 ms, jumper selectable
Frequency Output
0 – 15 V peak pulse, typically less than 300 Hz
MATERIAL
Brass housing and stem
Sapphire bearings and tungsten carbide shaft
ELECTRONICS ENCLOSURE
Weathertight aluminum enclosure
ELECTRICAL CONNECTIONS
4-wire minimum for scaled switch output
Standard: 10' of cable with ½" NPT conduit connection
Optional: Indoor DIN connector with 10' of plenum rated cable

1500 North Belcher Road, Clearwater, FL 33765 • Tel (727) 447-6140 • Fax (727) 442-5699
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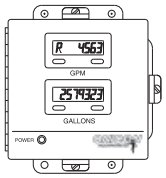
ALSO AVAILABLE



Display Modules

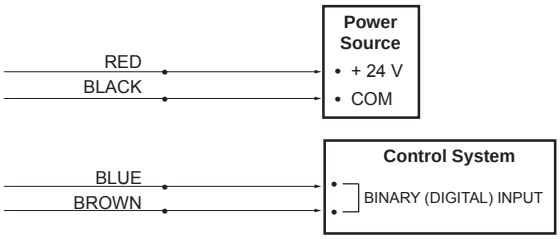
Btu Measurement Systems

F-1330 Wiring Information

WIRE COLOR	DESCRIPTION	NOTES
RED	(+) 24 V AC/DC supply voltage, 30 mA	Connect to power supply positive.
BLACK	(-) Common ground (Common with pipe ground)	Connect to power supply negative.
GREEN	(+) Frequency output signal: 0-15 V peak pulse	Required when meter is connected to local display or Btu meter.
BLUE	Dry contact switch output	Scaled to provide one pulse per desired unit volume.
BROWN		

F-1330 Wiring Diagram

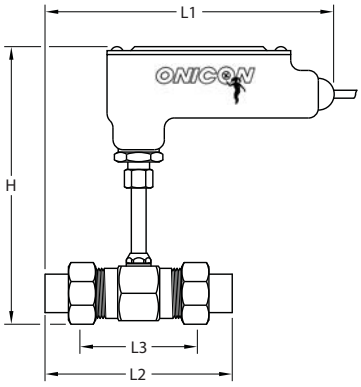
Flow meter into control system (no display or Btu meter)



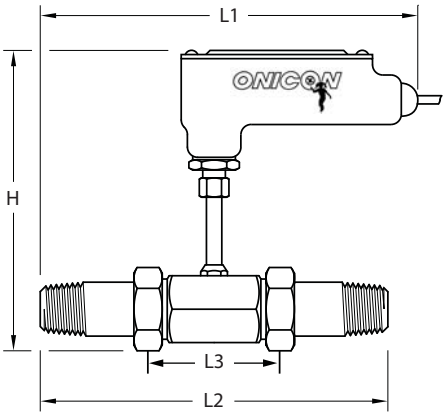
NOTE:

1. ***Black wire is common with the pipe ground (typically earth ground).***
2. ***Frequency output required for ONICON display module or Btu meter, refer to wiring diagram for peripheral device.***

Inline Flow Meter Dimensions



Sweat ←		→ Threaded
9”	L1	10 ¼”
5 ⅜”	L2	8 ⅝”
3 ¼”	L3	3 ¼”
8”	H	8”
2”	MAX WIDTH	2”



Typical Meter Installation

(New construction or scheduled shutdown)

- Flush piping system thoroughly before installing meter
- Acceptable to install in vertical pipe
- Position meter anywhere in upper 240° for horizontal pipe

- Connections: 3/4" or 1", male NPT threaded or sweat

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