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

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 directly traceable to NIST. Certification of calibration is included with 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

- Chilled water, hot water, condenser water, and water/glycol/brine for HVAC
- Process water and 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
3/4" 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, 50V
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

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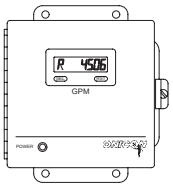
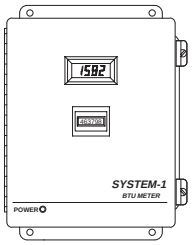
Also Available



Display Modules



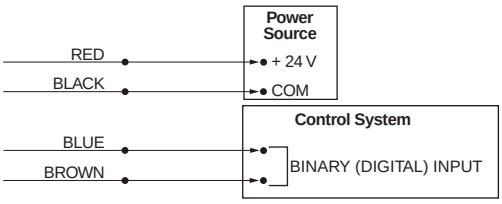
BTU Measurement Systems

F-1330 Wiring Information

WIRE COLOR CODE		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		

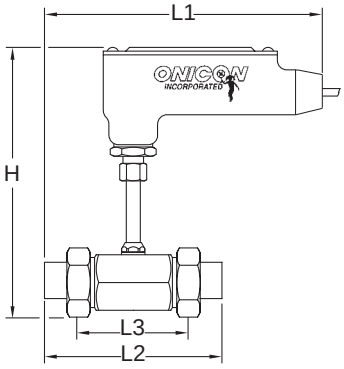
F-1330 Wiring Diagram

Flow Meter into Control System (No Display or BTU Meter)

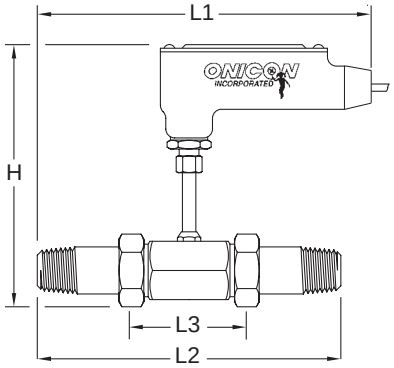


NOTE: 1. Black wire is common with the pipe ground (typically earth ground).
2. Frequency output required for ONICON display module or BTU meter, refer to wiring diagram for peripheral device.

Inline Flow Meter Dimensions



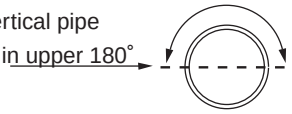
Sweat		Threaded
9"	L1	10¼"
5⅜"	L2	8⅝"
3¼"	L3	3¼"
8"	H	8"
2"	MAX WIDTH	2"



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 180° for horizontal pipe



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