Honeywell

E-Mon F-1200 Dual Turbine

SPECIFICATION DATA

DESCRIPTION

Insertion turbine flow meters are suitable for measuring electrically conducive water-based liquids. The F-1200 model provides a high-resolution frequency output for connection to a Display or BTU meter.

APPLICATIONS

- Chilled water, hot water, condenser water, and water/glycol/brine for HVAC
- Process water and water mixtures
- Domestic water

CALIBRATION

Every 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 - individually calibrated, “Percentage of Reading” 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.

Installation Flexibility - Patented dual turbine models deliver outstanding accuracy in short pipe runs.

Simplified Hot Tap Insertion Design - Standard on every insertion flow meter. Allows for insertion and removal by hand without system shutdown.

Table 1. Operating Range for Common Pipe Sizes

0.17 to 20 ft/s ±2% accuracy begins at 0.4 ft/s	
Pipe Size (Inches)	**Flow Rate (GPM)**
2 1/2	2.5 - 230
3	4 - 460
4	8 - 800
6	15 - 1800
8	26 - 3100
10	42 - 4900
12	60 - 7050
14	72 - 8600
16	98 - 11,400
18	120 - 14,600
20	150 - 18,100
24	230 - 26,500
30	360 - 41,900
36	510 - 60,900

GENERAL SPECIFICATIONS

Accuracy
±0.5% OF READING at calibrated velocity
±1% OF READING from 3 to 30 ft/s (10:1 range)
±2% OF READING from 0.4 to 20 ft/s (50:1 range)

Sensing Method
Electronic impedance sensing
(non-magnetic and non-photoelectric)

Pipe Size Range
2½" through 72" nominal

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
Meters operating above 250° F require 316 stainless steel construction option

Ambient Temperature Range
-5 to 160° F (-20 to 70° C)

Operating Pressure
400 PSI maximum

Pressure Drop
Less than 1 PSI at 20 ft/s in 2 ½" pipe, decreasing in larger pipes and lower velocities

Output Signal Provided:
Frequency Output
0-15 V peak pulse, typically less than 300 Hz

Material
Wetted metal components
Standard: Electroless nickel plated brass
Optional: 316 stainless steel

Electronics Enclosure
Standard: Weathertight aluminum enclosure
Optional: Submersible enclosure

Electrical Connections
3-wire minimum for frequency output
Standard: 10' of cable with ½" NPT conduit connection
Optional: Indoor DIN connector with 10' of plenum rated cable

F-1200 Wiring Information

Table 2.

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	Signal for Display or BTU meter
Diagnostic Signals		
Orange	Bottom turbine frequency	These signals are for diagnostic purposes - connect to local display or BTU Meter
White	Top turbine frequency	

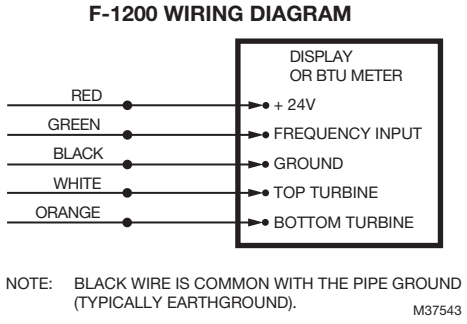

Fig. 1. F-1200 Wiring Diagram

Also available

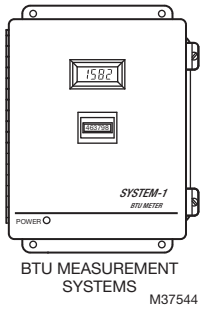

Fig. 2. BTU Measurement Systems.

Typical Meter Installation

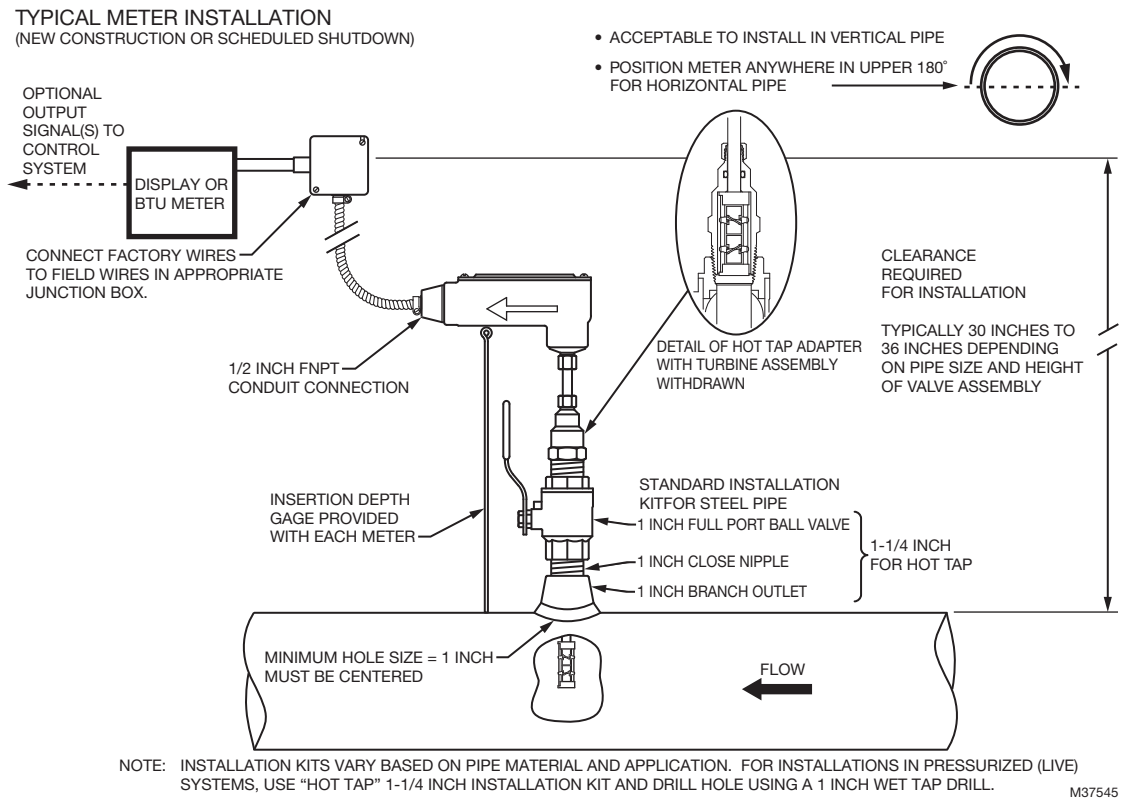

Fig. 3. Typical Meter Installation (New construction or scheduled shutdown).

Home and Building Technologies

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