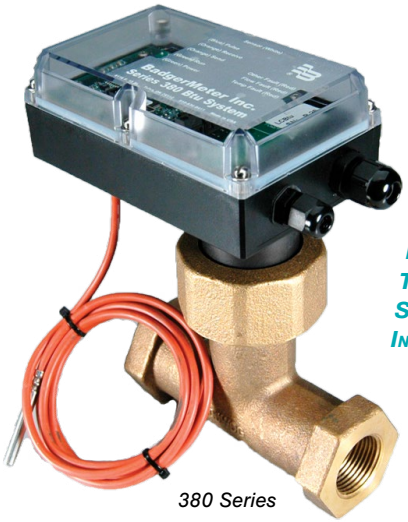
Tee Meter, BTU System

380 Series



380 Series

Meter and Temperature Sensors All In One Piece!

SPECIFICATIONS

1 Year Warranty

Input Power	12-35VDC/12-28VAC, 200mA
Communication	Modbus RTU, BACnet MSTP
Output	Scaled pulse, open drain
Flow Calculation Accuracy	±2% of flow rate within range; ±5% repeatability
Temperature Sensors	Meets IEC751 Class B
Flow Range	1 to 15 FPS
MATERIALS	
Housing	Polycarbonate
Flow Sensor	PEEK
Potting Material	Polyurethane
Tee Material	Bronze
ENVIRONMENTAL	
Fluid Temperature	Cold Service: -20° to 60°C (-4° to 140°F); Hot Service: 4° to 125°C (39° to 257°F)
Ambient Temperature	-20° to 65°C (-4° to 149°F)

Measures Temperature And Flow Rate And Calculates Energy

FEATURES

- *Rugged, compact design with two temperature probes*
- *316 SS impeller with tungsten carbide shaft*
- *PEEK sensor tip*
- *Cast bronze tee*
- *Minimal connections...simplify installation, saving time and cost*
- *Integration of flow and temperature sensors with metering components...single solution for BTU metering*
- *BACnet and Modbus protocols are standard features... easy integration with existing control systems*
- *Multiple size options...installation flexibility*

DESCRIPTION

Series 380 BTU System provides a low-cost system for metering cold or hot systems. The 380 measures flow and temperature differential to accurately calculate energy. With BACnet, Modbus RS-485, or scaled pulse output, it can interface with many existing control systems.

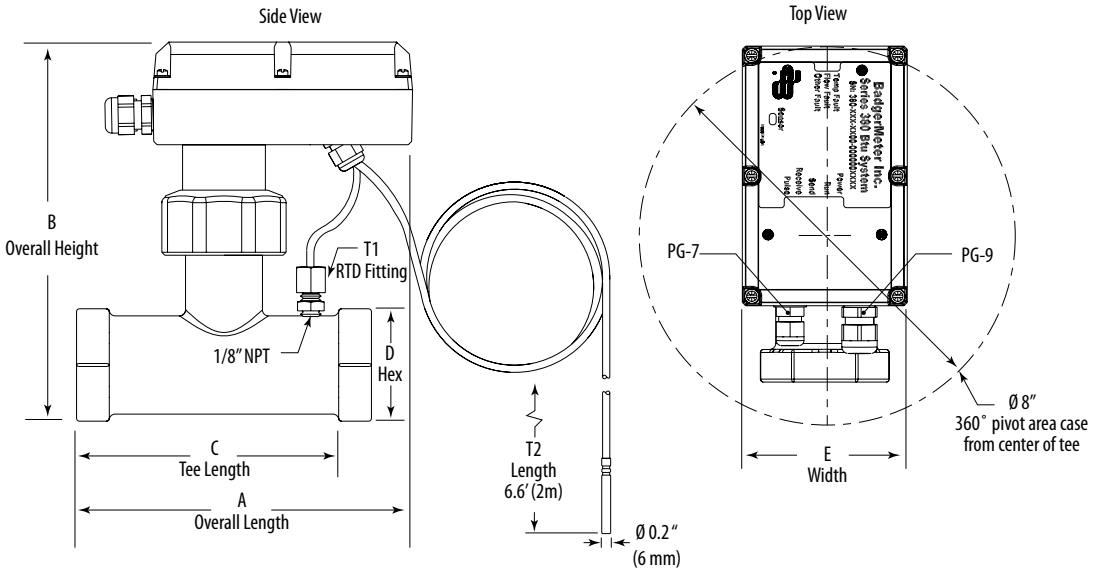
The rugged design incorporates an impeller flow sensor and two temperature probes, one mounted in the flow sensor tee and the other on either the supply or return line, depending on the application.

Commissioning can be done in the field via a computer connection or set up at the factory. Setup includes energy measurement units, measurement method, communication protocol, pulse output control, fluid density, and specific heat parameters (requires re-usable programming cable and software, see Ordering Information).

APPLICATIONS

- *Energy management and data systems*

DIMENSIONAL DRAWINGS



TEE/NPT Size	A	B	C	D	E
2" (51 mm)	7.9" (201 mm)	8.5" (216 mm)	7.8" (197 mm)	3.3" (84 mm)	3.5" (89 mm)
1.5" (38 mm)	7.3" (185 mm)	8.3" (209 mm)	6.7" (170 mm)	2.75" (70 mm)	3.5" (89 mm)
1.25" (32 mm)	7.1" (180 mm)	8.1" (204 mm)	6.2" (158 mm)	2.4" (60 mm)	3.5" (89 mm)
1" (25.4 mm)	6.7" (170 mm)	7.9" (201 mm)	5.4" (137 mm)	2" (51 mm)	3.5" (89 mm)
0.75" (19 mm)	6.7" (170 mm)	7.9" (201 mm)	5.4" (137 mm)	2" (51 mm)	3.5" (89 mm)

ORDERING INFORMATION

MODEL	MANUF. PART #	DESCRIPTION	MAX. GAL/MIN (GPM)
U001-0098	380007000-1200*. **	BTU system, cold service, ¾" tee NPT, with pulse, Modbus and BACNet outputs	25
U001-0099	380010000-1200*. **	BTU system, cold service, 1" tee NPT, with pulse, Modbus and BACNet outputs	40
U001-0100	380012000-1200*. **	BTU system, cold service, 1 ¼" tee NPT, with pulse, Modbus and BACNet outputs	70
U001-0101	380015000-1200*. **	BTU system, cold service, 1 ½" tee NPT, with pulse, Modbus and BACNet outputs	95
U001-0102	380020000-1200*. **	BTU system, cold service, 2" tee NPT, with pulse, Modbus and BACNet outputs	150
U001-0103	380107000-2202**	BTU system, hot service, ¾" tee NPT, with pulse, Modbus and BACNet outputs	25
U001-0104	380110000-2202**	BTU system, hot service, 1" tee NPT, with pulse, Modbus and BACNet outputs	40
U001-0105	380112000-2202**	BTU system, hot service, 1 ¼" tee NPT, with pulse, Modbus and BACNet outputs	70
U001-0106	380115000-2202**	BTU system, hot service, 1 ½" tee NPT, with pulse, Modbus and BACNet outputs	95
U001-0107	380120000-2202**	BTU system, hot service, 2" tee NPT, with pulse, Modbus and BACNet outputs	150
U001-0114	A304-1M***	Programming Cable with CD for 380 Series	n/a

** Consult factory for availability information.*
*** Requires programming accessory.*
**** Required to program 380 Series BTU meters (reusable). Standard USB type A to mini-B cable included. Software available from manufacturer's website, www.badgermeter.com*