RoHS COMPLIANT

TEMPERATURE PRODUCTS

DT-8300EX Digital Thermometer

Features

- Explosion Proof FM approval
- Works with thermocouple or RTD
- Battery powered or loop power version
- 4 digit LCD display in F or C Rugged NEMA 4X, IP68 enclosure
- 2 year battery life
- One unit can read all temperature ranges

Description

The AMETEK DT-8300EX Digital Thermometer is a battery operated digital thermometer that accepts input from a standard Type J or K thermocouple or RTD, and provides local indication of temperature in degrees C or F. This unit has explosion proof FM approvals. A 4-2mA DC loop power version is available with the same features.

The unit is designed to replace analog bimetallic thermometers, reducing inventory costs because one unit can provide readings from -58°F to 1832°F (-50°C to 1000°C). No need to stock multiple ranges of bimetallic thermometers. Operating costs are also reduced because if there is a failure the lower cost temperature sensor (RTD or thermocouple) can be replaced without having to replace the entire unit like has to be done for a bimetallic thermometer. Also, a thermocouple or RTD is more reliable, accurate, and stable then a bimetallic thermometer.

The DT-8300EX is designed for use in process industries, where vibration, inclement weather, and corrosive atmospheres are present. The electronics are enclosed in copper-free, epoxy coated, aluminum housings. The housing is FM explosion proof certified and meets NEMA 4X and IP68 rating standards.

Mounting

The DT-8300EX can be remotely mounted or mounted directly on the thermowell / nipple assembly. For mounting the unit on a wall or 2" pipe, we offer stainless steel mounting brackets.

Specifications

Thermocouple Type	J / K or RTD Pt100
Indication Accuracy	±1ºC / 1.8°F
Display Height	0.50 in (13 mm)
Display Units	°C or °F Switch Selectable
Battery Life	Approximately 24 Months (batteries not supplied)
Calibration	Single Point Calibration for Enhanced Accuracy
Operating Temperature RTD Pt100:	-4°F to 140°F (-20°C to 60°C)
Thermocouple Type J/K:	32°F to 140°F (0°C to 60°C)
Weight	2 lb (1 kg) for Aluminum Unit *(not including sensor)*
Housing (NEMA 4X)	Epoxy Coated Copper-Free Aluminum SST housing optional, please contact usg.sales@ametek.com
O Rings	Buna N (Nitrile)
Window	Tempered Glass
Screen Resolution	4 Digits

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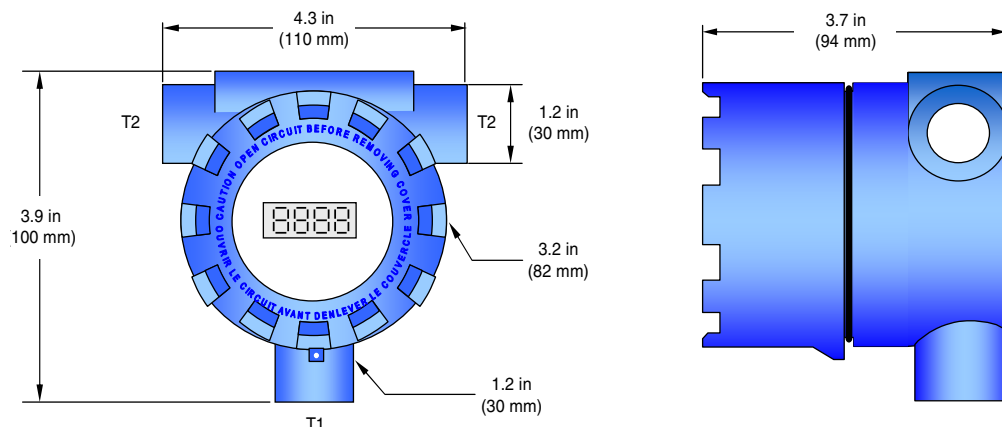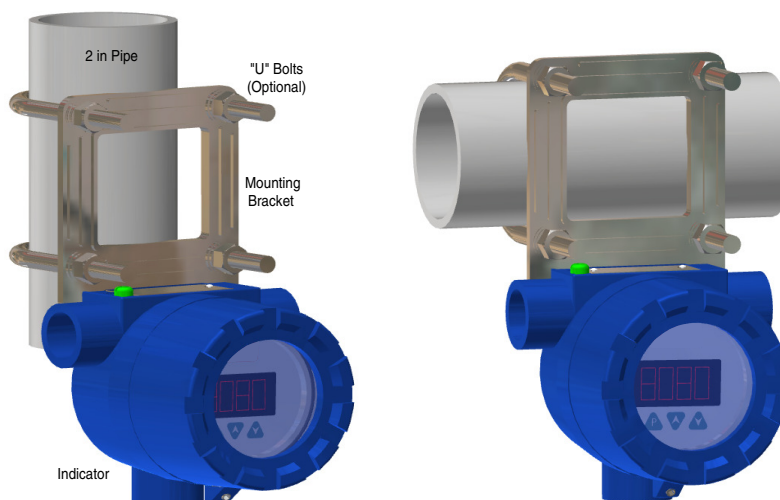| Spec. #	Model #	Description
173484	DT-8300EX-BT	Aluminum Housing / 0.50 in (13 mm) instrument X 0.50 in (13 mm) Conduit Connection / -58°F to 1832°F (-50°C to 1000°C) Battery Powered
173492	DT-8300EX	Aluminum Housing / 0.50 in (13 mm) instrument X 0.50 in (13 mm) Conduit Connection / -58°F to 1832°F (-50°C to 1000°C) Line Powered
H620157	H-175NR	SST Wall / Pipe Mounting Bracket with U-clamp
H620158	H-175MM	SST Wall Mount Bracket

Printed in the U.S.A. DT-8300EX Data Sheet 6-5-15

Specifications are subject to change without notice. Visit our Web site for the most up-to-date information.

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TEMPERATURE PRODUCTS

DT-8300EX Digital Thermometer

Dimensions

4.3 in (110 mm)

T2   T2

1.2 in (30 mm)

3.9 in (100 mm)

3.2 in (82 mm)

1.2 in (30 mm)

T1

3.7 in (94 mm)

Mounting Bracket H620157 on a Vertical or Horizontal Pipe

2 in Pipe

"U" Bolts (Optional)

Mounting Bracket

Indicator

- The H620157 is a Stainless Steel Mounting Bracket with U-clamp is made for the Model DT-8300EX Instrument Enclosure to mount on a 2" Pipe.

- This Bracket is available for customers who require all 3 ports on the enclosure for other purposes.

- The H620157 is symmetrical, so it can be rotated 90° to suit the viewing position of the Indicator.

- The H620158 is a stainless steel wall mount bracket.

2.8 in (70 mm)

1.3 in (32 mm)

2.4 in (60 mm)

3.5 in (80 mm)

H620158

2.8 in (70 mm)

2.8 in (70 mm)

4 in (102 mm)

2.4 in (60 mm)

3.5 in (88 mm)

H620157

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