BATTERY OPERATED DIGITAL TEMPERATURE INDICATOR

8080KN

- INPUT THERMOCOUPLE AND RTD
- 4 DIGIT LCD DISPLAY IN DEGREE C OR F
- RUGGED NEMA 4X ENCLOSURE
- CHOICE OF ALUMINUM OR SS316 ENCLOSURE
- DESIGNED TO REPLACE BIMETALLIC SENSORS
- EXPLOSION PROOF CERTIFIED

compared to the archaic bimetallic sensor.

3 YEAR WARRANTY



Introduction

IME Model 8080KN Battery Operated Digital Temperature Indicator accepts an input from a standard Type J or K Thermocouple or RTD and provides local indication of temperature in degree F or C. Designed specifically to replace Bimetallic Sensors, 8080KN becomes a universal instrument since only one instrument will indicate the entire useful range of the thermocouple. This eliminates having several bimetallic sensors where the dial range has to be predetermined. Operating costs are also drastically reduced since the temperature sensor can be easily replaced in case of failure, unlike a bimetallic sensor where the entire instrument has to be discarded. Furthermore

thermocouples are a lot more reliable, accurate and stable when

Description

IME Model 8080KN is designed for use in process industries where vibration, inclement weather and corrosive atmospheres prevail. The electronics are enclosed in a copper-free epoxy coated Aluminum housing and for more aggressive environments a SS316 housing is optionally available. The housing meets the requirements of NEMA 4X & IP66, and are also certified Explosion Proof by FM and CSA.

Mounting

A wide choice of stainless steel mounting brackets are available for mounting the Model 8080KN on either a 2" pipe or wall.

Certification System



CLASS I, DIV I GROUPS B, C AND D CLASS II/III, DIV I GROUPS E, F AND G NEMA 4X



CLASS I, DIV I GROUPS B, C AND D CLASS II, DIV I GROUPS E, F AND G CLASS III, NEMA 4X

Functional Specifications

Senso

Thermocouple Type J / K or RTD Pt100 Indication Accuracy

Better than 0.5 Degree C

Display Height

12.5mm (1/2") high

Display Units

°C or °F, switch selectable

Battery Life

Approx. 12 Months

Calibration

Single point calibration for enhanced accuracy

Operating Temperature

-20 to 60 °C for RTD Input

0 to 60 °C for Thermocouple Inputs

Weight

 $0.9\mbox{Kg}$ (2LBS) for Aluminum Unit and 1.4Kg (3LBS) for SS316 unit (Not including sensor)

Material of Construction for Enclosure

Epoxy Coated Copper-Free Aluminum or SS316 as specified

O Rings

Hydrogenated Nitrile

Optional Accessories

Mounting Brackets (IME Model 175NR, 175MM)

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Ordering Information

Model	Description					
8080KN	Field Mounted Battery Powered Temperature Indicator with 4 Digital LCD Display					
	Code Options, Housing					
	Α	Die-Cast Aluminum, Epoxy Coated				
	Т	SS316, Electro Polished				
		Code	Instrument Connection (T1) Condu			Conduit Connection (T2)
		13	3/4" NPT			None
		14	M20 x 1.5P			None
		16	½" BSP			None
		17	1/2" NPT			None
			Code	Certification		
			NN	None	None FM and CSA Explosion Proof Certified, NEMA 4X	
			E1	FM and CSA		
				Code	Accessories	
				NR	IME Model 175	NR Mounting Bracket
				MM	IME Model 175	MM Mounting Bracket
					Code	2 Inch "U" Bolt with Nuts and Washers
					00	None
					02	IME Model 17508, 2 Sets (For IME Model 175NR only)
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		-				
8080KN	Α	17	E1	NR	02	Typical Model Number

Note: 1) M20 X 1.5P Threads are not approved by CSA 2) 1/2" BPS Threads are not approved by FM and CSA

Enclosure Dimensions



