

FIELD MOUNTED LOOP POWERED INDICATOR

8080MK

- 4 TO 20 mA INPUT, LOOP POWERED
- 4 DIGIT LED DISPLAY IN ENGINEERING UNITS
- CHOICE OF COPPER-FREE ALUMINUM OR SS316 ENCLOSURE
- EXPLOSION PROOF CERTIFIED
- 3 YEAR WARRANTY



Introduction

IME Model 8080MK Loop Powered Digital Indicators allow the process variable from any 4~20 mA current source to be monitored. Since the unit derives its power from the loop, no additional power supply or wiring is needed. Because of its low voltage drop (5 Volts at 20mA), it can be incorporated into almost any 2 wire loop, where local indication of a process variable is needed, because the integral transmitter indicator is inaccessible to view or is at a different location.

Description

IME Model 8080MK Indicators are 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 housings meet the requirements of NEMA 4X & IP68, and are also certified Explosion Proof by ATEX/IECEx.

LED Meter

The Model 8080MK has 4 digit display and can be configured to read from 999 to 9999 with a 4~20 mA input signal. The decimal point location and engineering units can be adjusted using membrane switches, eliminating all potentiometric adjustments.

Mounting

The Model 8080MK can be wall mounted or mounted on a 2" pipe. For mounting the unit on a wall or 2" pipe, a wide choice of stainless steel mounting brackets are also available.

Certification System

	II 2G D Ex db IIC T6 Gb Ex tb IIIC T85°C Db IP68 Ta = -40 °C to +60 °C	
	Ex db IIC T6 Gb Ex tb IIIC T85°C Db IP68 Ta = -40 °C to +60 °C	

Functional Specifications

Indication Accuracy

0.1% of calibrated range ± 1 digit

Calibration

Via membrane switches on the front panel

Display Height

8mm (0.3") high

Stability Over Time

0.1% of calibrated range ± 1 digit over 6 months

Over Range Indication

Indication of "Err" on display

Response Time

Typically 20 ms

Failure Mode

Failure will not affect the loop integrity

Voltage Drop

5V at 20mA

Operating Temperature

-40 °C to +60 °C

Weight

0.9Kg (2 lbs) for Aluminum Unit and 1.4Kg (3 lbs) for SS316 Unit

Material of Construction of Enclosure

Epoxy coated Copper-Free Aluminum or SS316 as specified

O Rings

Buna N (Nitrile)

Optional Accessories

Mounting Brackets (Model 175PM, 175RC, 175NR, 175MM)

INTERNATIONAL METAL ENGINEERING

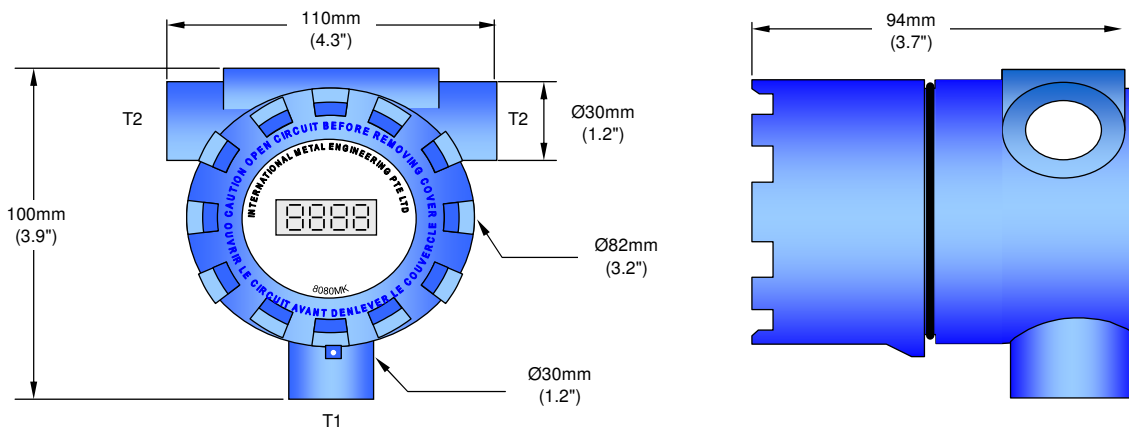
ORDERING INFORMATION FOR 8080MK

Model	Description					
8080MK	Field Mounted LED Loop Powered Indicator					
	Code	Options, Housing				
	A	Die cast Aluminum, Epoxy Coated				
	T	SS316, Electro Polished				
	Code	Instrument Connection (T1)		Conduit Size (T2)		
	01	M16 x 2P (See note 1)		¾" NPT		
	02	M16 x 2P (See note 1)		½" NPT		
	03	M16 x 2P (See note 1)		M20 x 1.5P		
	04	½" NPT		¾" NPT		
	05	½" NPT		½" NPT		
	06	½" NPT		M20 x 1.5P		
	07	¾" NPT		¾" NPT		
	08	¾" NPT		½" NPT		
	09	¾" NPT		M20 x 1.5P		
	10	½" BSP		¾" NPT		
	11	½" BSP		½" NPT		
	12	½" BSP		M20 x 1.5P		
	13	¾" NPT		None		
	14	M20 x 1.5P		None		
	16	½" BSP		None		
	17	½" NPT		None		
		Code	Certification			
		NN	None			
		E1	ATEX / IECEx Explosion Proof Certified, IP68, T6			
		Code	Accessories			
		RC	Model 175RC Mounting Bracket (See note 1)			
		PM	Model 175PM Mounting Bracket (See note 1)			
		NR	Model 175NR Mounting Bracket			
		MM	Model 175MM Mounting Bracket			
		Code	2 Inch "U" Bolt with Nuts and Washers			
		00	None			
		01	Model 17508, 1 Set (For Model 175RC)			
		02	Model 17508, 2 Sets (For Model 175PM & 175NR)			

8080MK	A	02	E1	PM	02	← Typical Model Number
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Note:

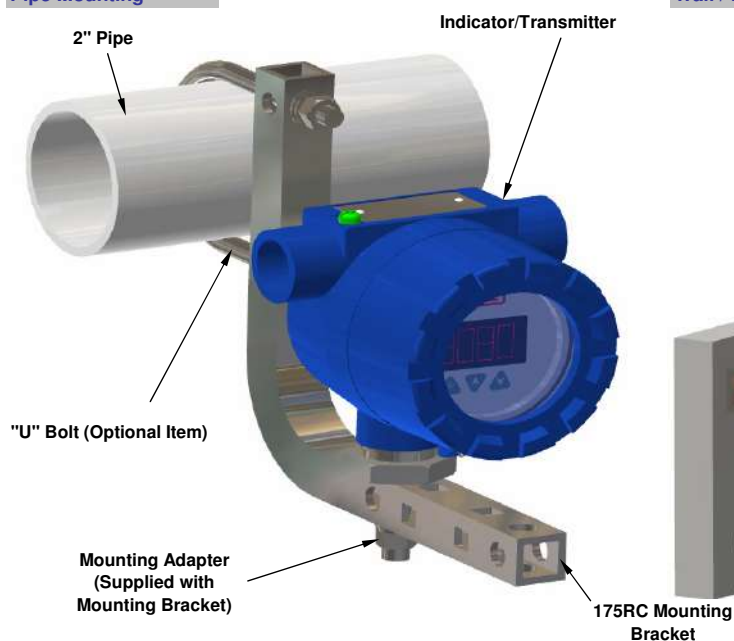
- 1 Ports with M16 x 2P thread are not through holes, they are for use with Model 175RC and 175PM Mounting Brackets only.
- 2 BSP threads are not approved by FM, CSA, ATEX & IECEx.



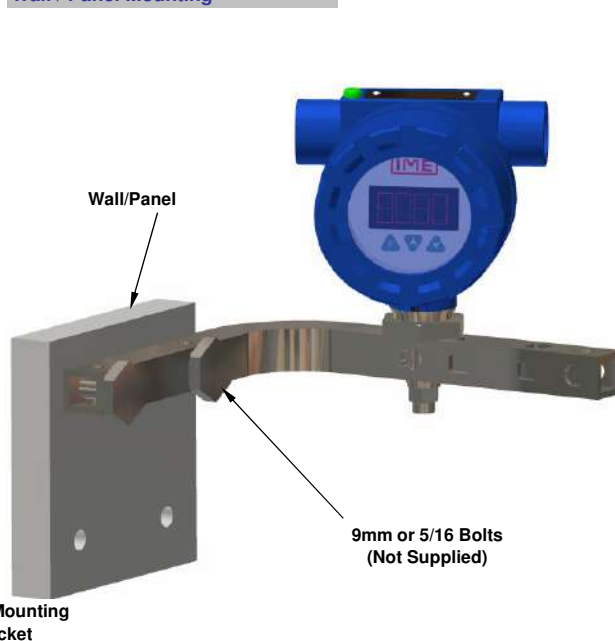
MOUNTING BRACKETS FOR INDICATORS AND TRANSMITTERS

Mounting Methods For Model 175RC

Pipe Mounting

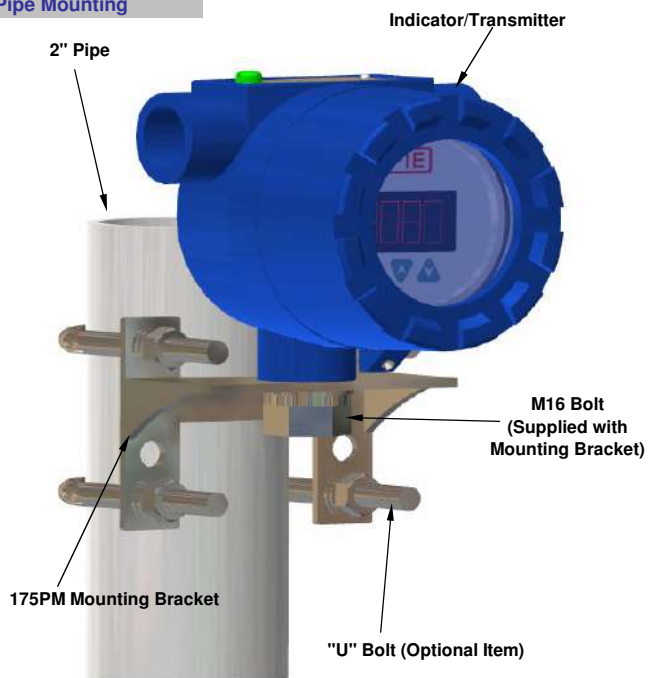


Wall / Panel Mounting

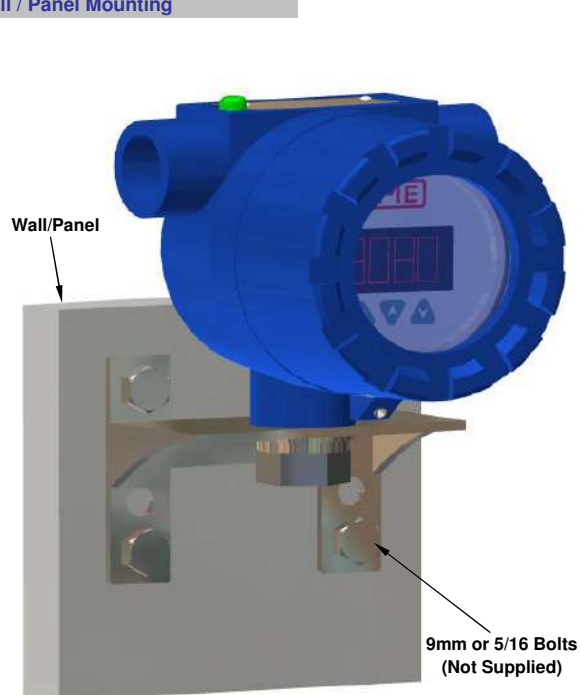


Mounting Methods For Model 175PM

Pipe Mounting



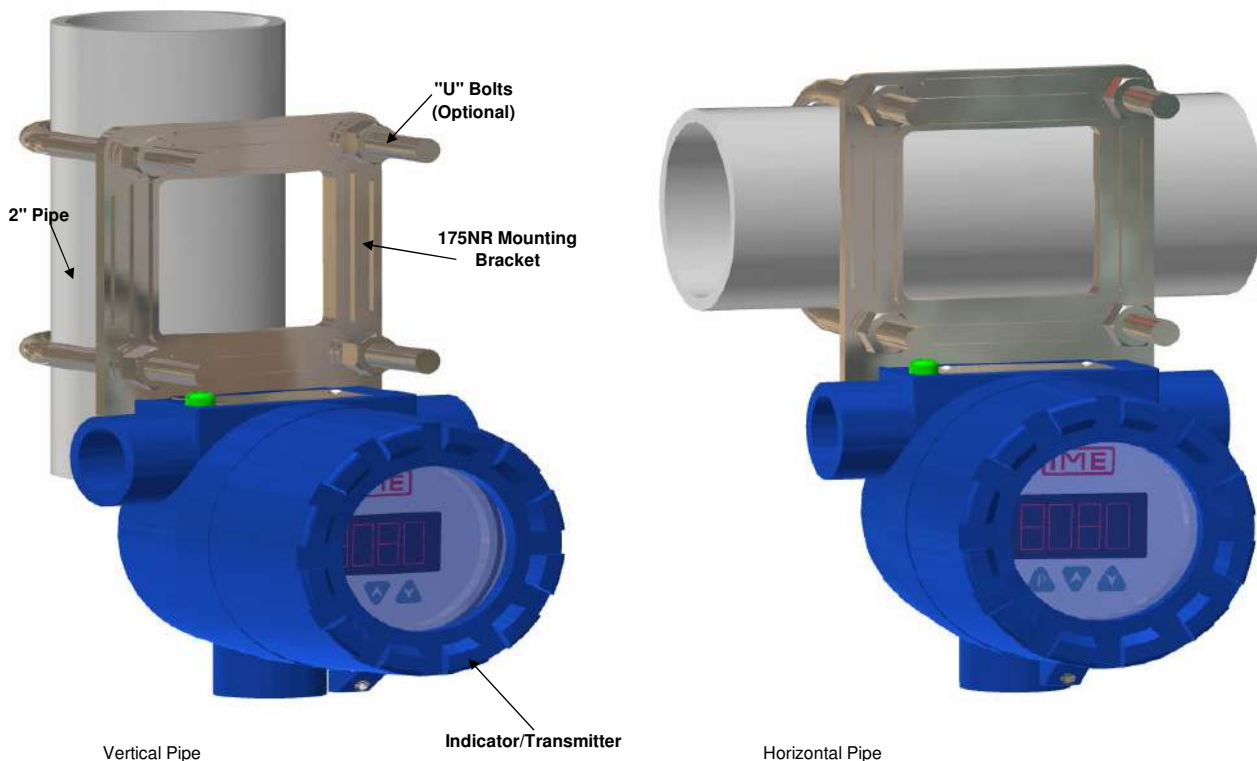
Wall / Panel Mounting



MOUNTING BRACKETS FOR INDICATORS AND TRANSMITTERS

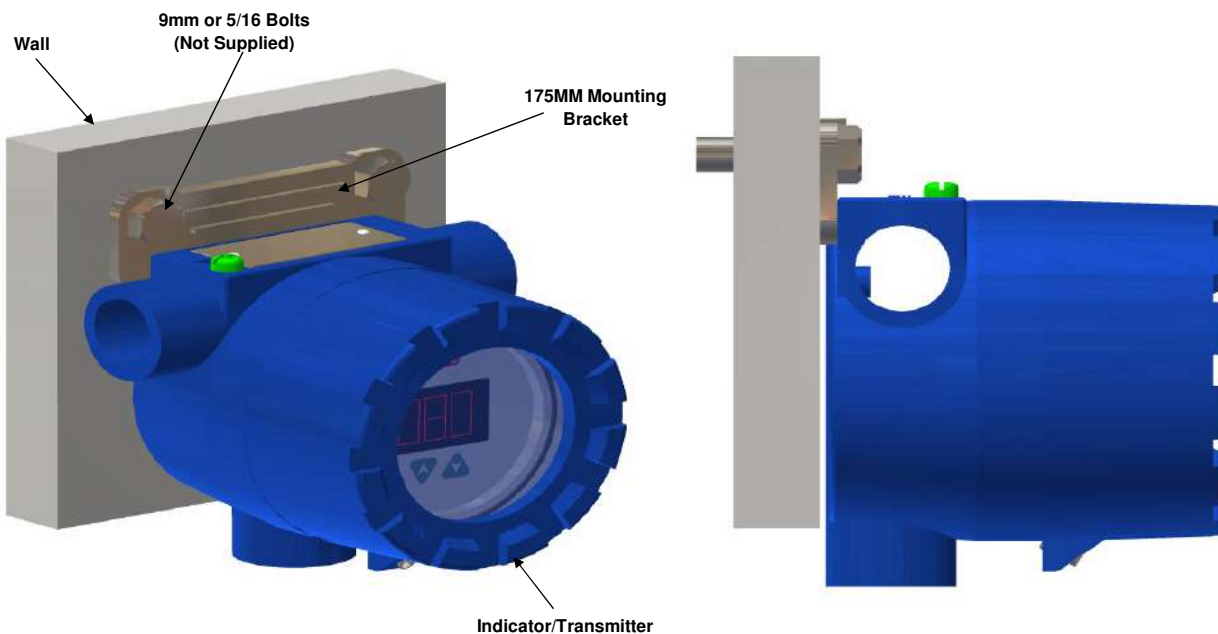
Mounting Methods For Model 175NR

Pipe Mounting



Mounting Methods For Model 175MM

Wall/Panel Mounting



Mounting Bracket

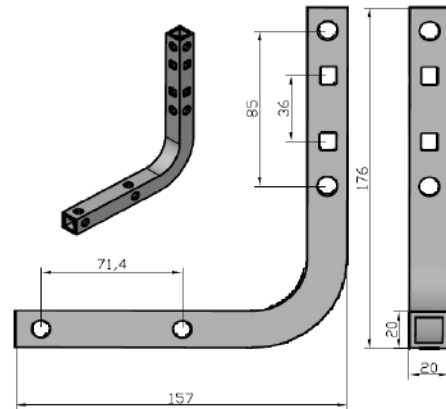
175RC

Introduction

This simple hollow square mounting bracket constructed out of SS316 Stainless Steel, can be used to mount a variety of field devices, either on a wall or panel or a 2" Pipe.

When mounting on a 2" pipe, a "U" Bolt is required, which can be supplied optionally.

IME Model 17508 consists of a complete assembly of a 2" U bolt along with the nuts and washers required.



Mounting Bracket

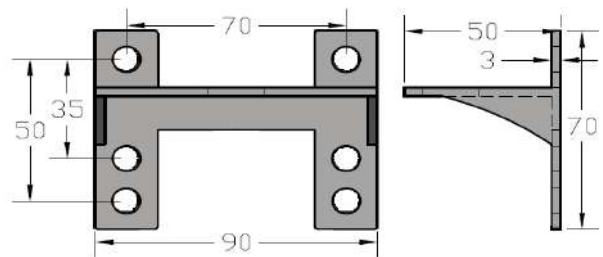
175PM

Introduction

This simple "L" Shape mounting bracket constructed out of SS316 Stainless Steel, can be used to mount a variety of field devices, either on a wall or panel or on a 2" pipe.

When mounting on a 2" pipe, a "U" Bolt is required, which can be supplied optionally.

IME Model 17508 consists of a complete assembly of a 2" U bolt along with the nuts and washers required.



Mounting Bracket

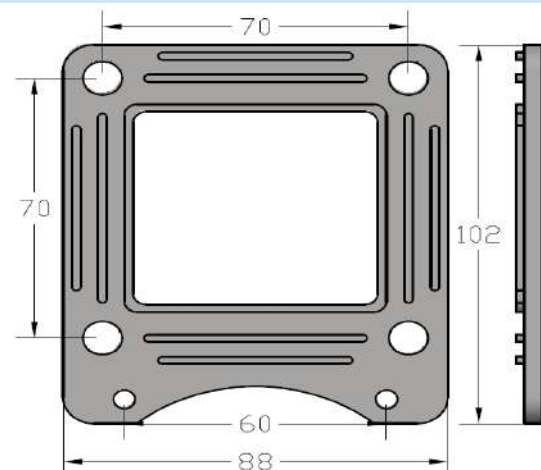
175NR

Introduction

IME MODEL 175NR is Stainless Steel Mounting Brackets made exclusively for IME MODEL 8080 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 175NR is symmetrical, so it can be rotated 90° to suit the viewing position of the Indicator/Transmitter.



Mounting Bracket

175MM

Introduction

IME MODEL 175MM is Stainless Steel Mounting Brackets made exclusively for IME MODEL 8080 Instrument Enclosure to mount on wall.

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

