

FIELD MOUNTED LOOP POWERED INDICATOR

8080EL

- 4 TO 20 mA INPUT
- BACKLIT LCD GLASS DISPLAY WITH WIDE CHOICE OF ENGINEERING UNITS
- CHOICE OF COPPER-FREE ALUMINUM OR SS316 ENCLOSURE
- EXPLOSION PROOF CERTIFIED
- WALL OR PIPE MOUNTING
- 3 YEAR WARRANTY

Introduction

IME Model 8080EL 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 (3.5 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 8080EL 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/FM/CSA.

LED Display

The Model 8080EL can read from -19999 to 99999 with an accuracy of 0.1% ± 1 digit. A white backlight display allows the unit to be visible in the dark. A wide choice of engineering units, mA, μ s, ms, pH, °F, °C, PSI, mPa, bar, Kpa, mbar, Pa, % etc can be programmed using a USB port available. The main display is a 7 segment 5 digit display with a digit height of 8mm. An additional percentage(%) bargraph is available.

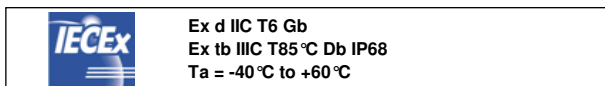
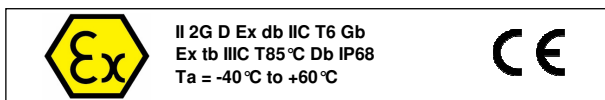
Mounting

The Model 8080EL 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.

Alarms

Optional two OPTO switch outputs, NPN output and PNP output.

Certification System



Functional Specifications

Indication Accuracy

0.1% of calibrated range ± 1 digit

Calibration

Via switches on the front panel

Display Height

8mm (0.3") high

Stability Over Time

0.1% of calibrated range ± 1 digit over 6 months

Response Time

Digital damping 0 to 100s (step 0.1 seconds)

Failure Mode

Failure will not affect the loop integrity

Voltage Drop

3.5V at 20mA

Operating Temperature

-20 °C to +70 °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

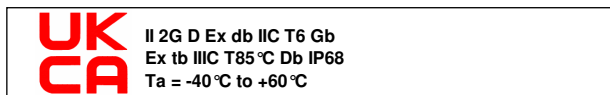
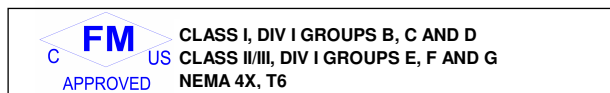
Hydrogenated Nitrile

Optional Accessories

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

Ordering Information

See Next Page



INTERNATIONAL METAL ENGINEERING

ORDERING INFORMATION FOR 8080EL

Model	Description					
8080EL	Field Mounted 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, NEMA 4X, 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)				

8080EL

A

02

E1

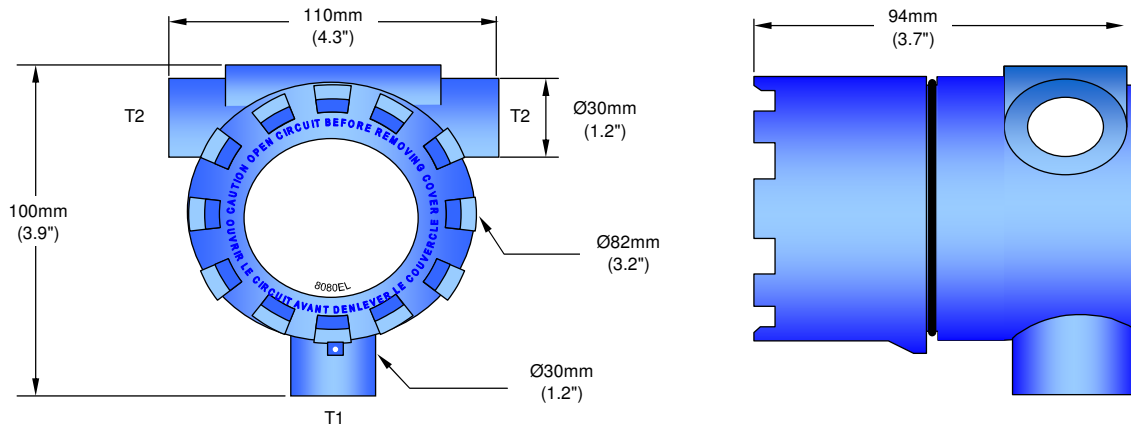
PM

02

← Typical Model Number

Note:

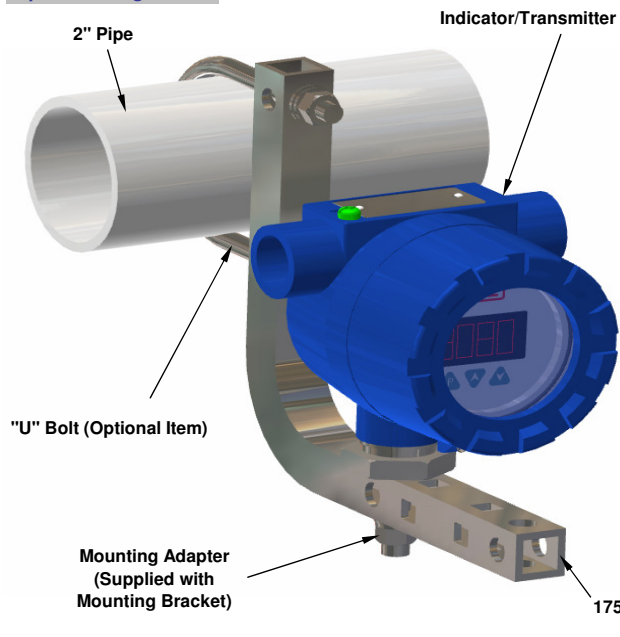
- 1 Ports with M16 x 2P thread are not through holes, they are for use with Model 175RC and 175PM Mounting Brackets only.
- 2 BSP threads are not approved by FM, CSA, ATEX & IECEx.
- 2 M20 threads are not approved by CSA.



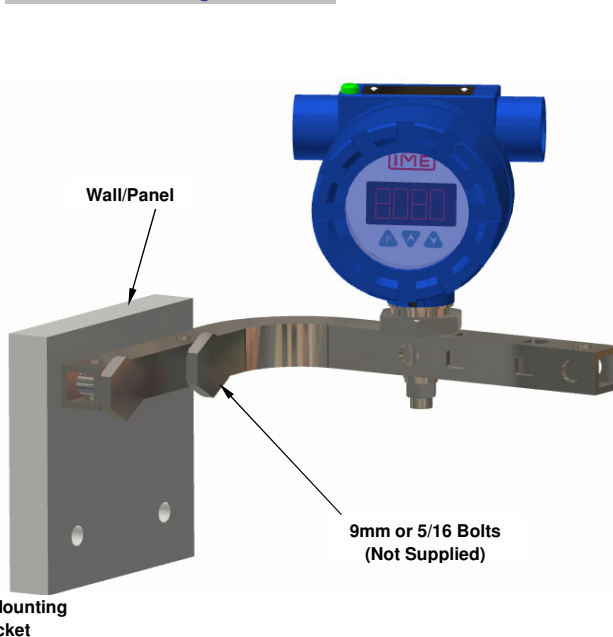
MOUNTING BRACKETS FOR INDICATORS AND TRANSMITTERS

Mounting Methods For Model 175RC

Pipe Mounting

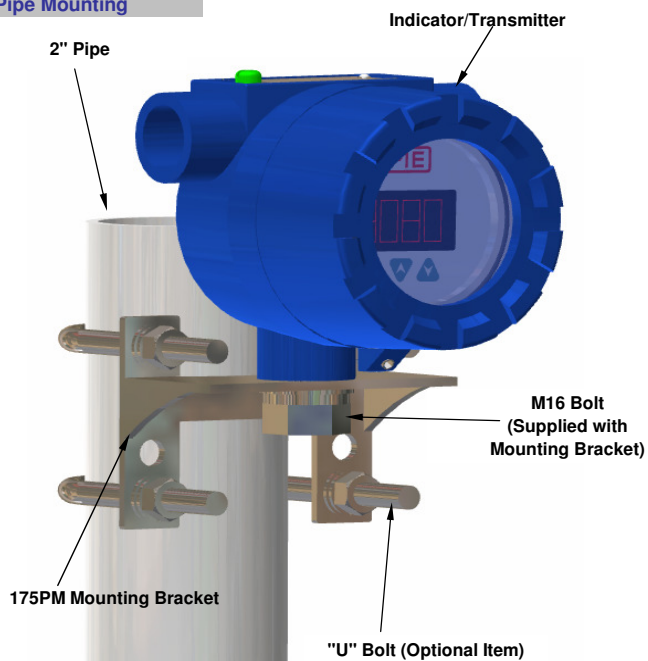


Wall / Panel Mounting

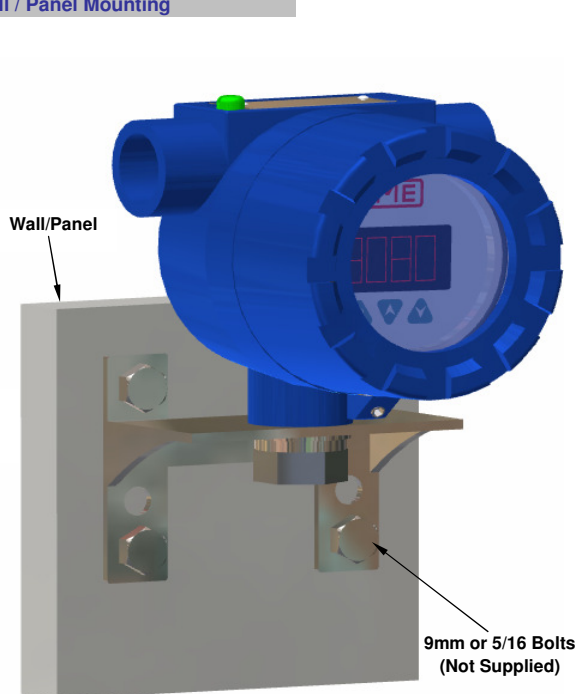


Mounting Methods For Model 175PM

Pipe Mounting



Wall / Panel Mounting

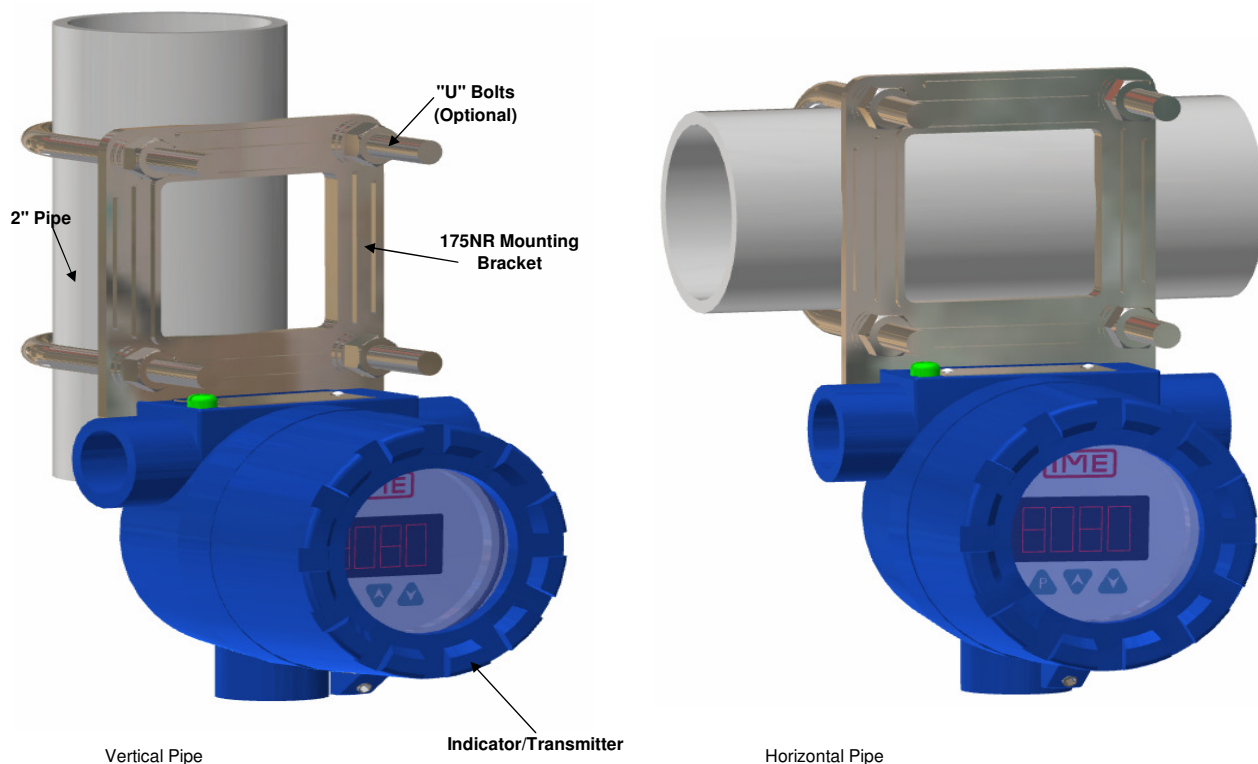


INTERNATIONAL METAL ENGINEERING

MOUNTING BRACKETS FOR INDICATORS AND TRANSMITTERS

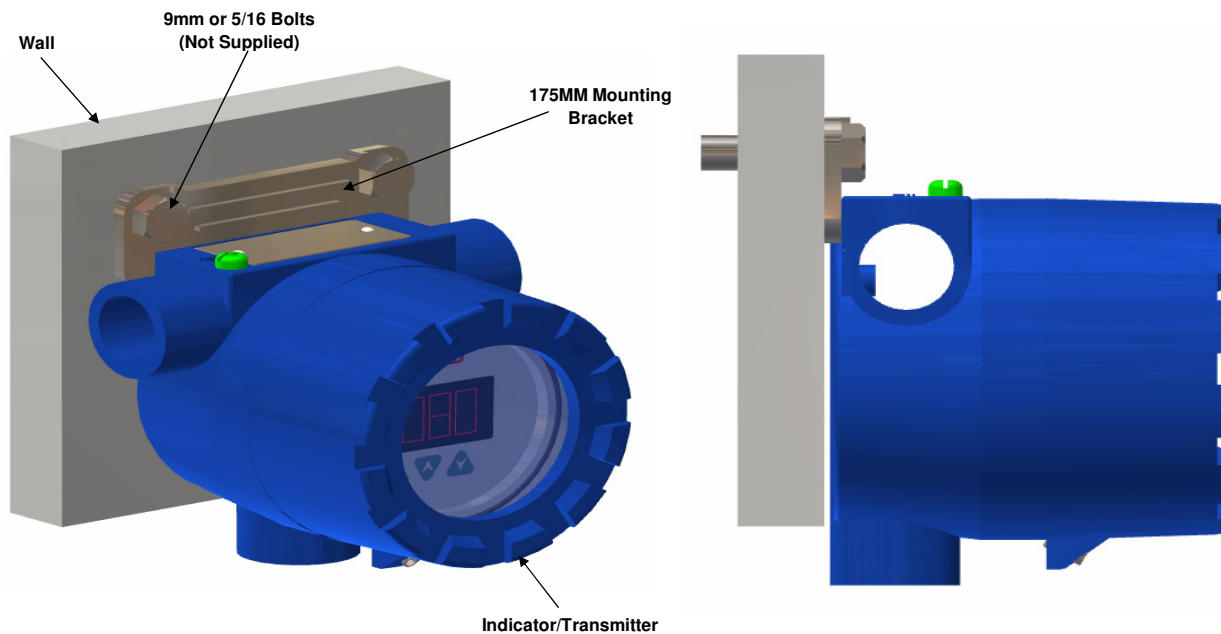
Mounting Methods For Model 175NR

Pipe Mounting



Mounting Methods For Model 175MM

Wall/Panel Mounting



Mounting Bracket

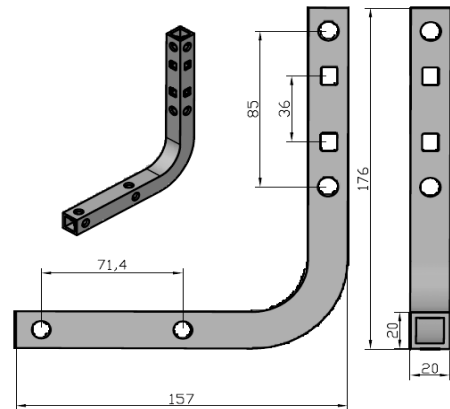
175RC

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

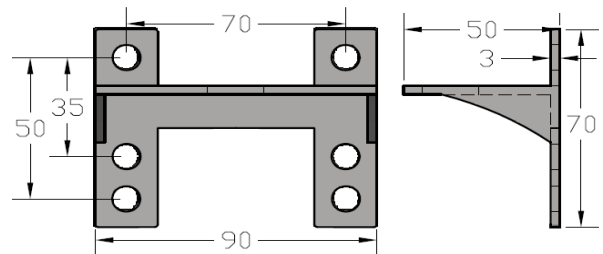
175PM

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

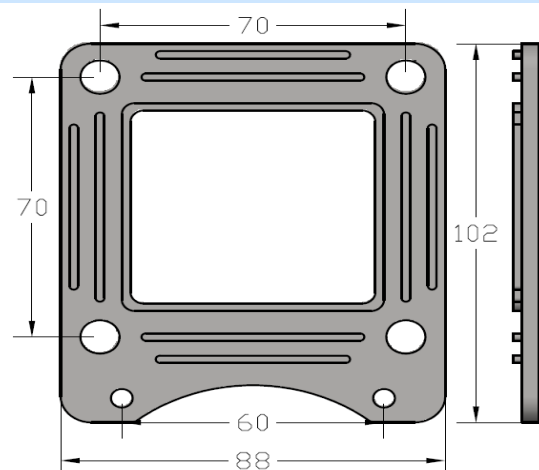
175NR

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.

