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



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



Ex d IIC T6 Gb Ex tb IIIC T85 °C Db IP68 Ta = -40 °C to +60 °C





Ex d IIC T6 Gb Ex tb IIIC T85 ℃ 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)

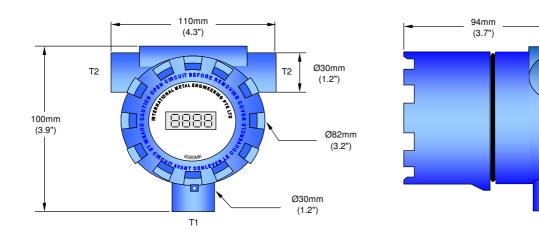
INTERNATIONAL METAL ENGINEERING

ORDERING INFORMATION FOR 8080MK

| Model | Description | Description | | | | | |
|--------|-------------|--|----------------------------|--------------|---|---|--|
| 8080MK | | eld Mounted LED Loop Powered Indicator | | | | | |
| | Code | Options, Housing | | | | | |
| | Α | Die cast Aluminum, Epoxy Coated | | | | | |
| | T | SS316, Electro Polished | | | | | |
| | <u> </u> | Code | Instrument Connection (T1) | | | Conduit Size (T2) | |
| | | 01 | M16 x 2P | (See note 1) | | 3/4" NPT | |
| | | 02 | M16 x 2P (See note 1) | | | ½" NPT | |
| | | 03 | M16 x 2P (See note 1) | | | M20 x 1.5P | |
| | | 04 | - | | | 3/4" NPT | |
| | | | ½" NPT | | | ½" NPT | |
| | | 06 | | | | M20 x 1.5P | |
| | | 07 | 3/4" NPT | | | 34" NPT | |
| | | 80 | 3/4" NPT | | | ½" NPT | |
| | | 09 | 3/4" NPT | | | M20 x 1.5P | |
| | 10 | | 1/2" BSP | | | 34" NPT | |
| | | 11 | | | | ½" NPT | |
| | | 12 | ½" BSP | | | M20 x 1.5P | |
| | 13 3 | | 3⁄4" NPT | | | None | |
| | | 14 | M20 x 1.5P | | | None | |
| | | 16 ½" BSP 17 ½" NPT | | " BSP | | None | |
| | | | | | None | | |
| | | 1 | Code | | Certification | | |
| | | | NN | None | | | |
| | | | E1 | ATEX / IE | TEX / IECEx Explosion Proof Certified, IP68, T6 | | |
| | | | | Code | Accessori | es | |
| | | | | RC | _ | RC Mounting Bracket (See note 1) | |
| | | | | PM | Model 175 | PM Mounting Bracket (See note 1) | |
| | | | | NR | Model 175 | NR Mounting Bracket | |
| | | | | MM | | MM Mounting Bracket | |
| | | | | 1 | 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) | |
| | | | | | | | |
| L+ | + | <u> </u> | + | + | <u> </u> | | |
| 8080MK | Α | 02 | E1 | PM | 02 | ← Typical Model Number | |

Note:

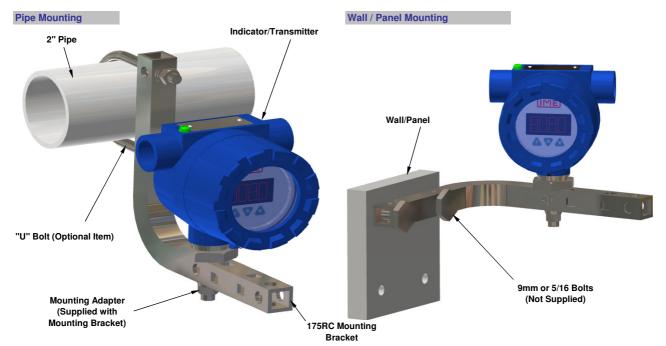
¹ Ports with M16 x 2P thread are not through holes, they are for use with Model 175RC and 175PM Mounting Brackets only.



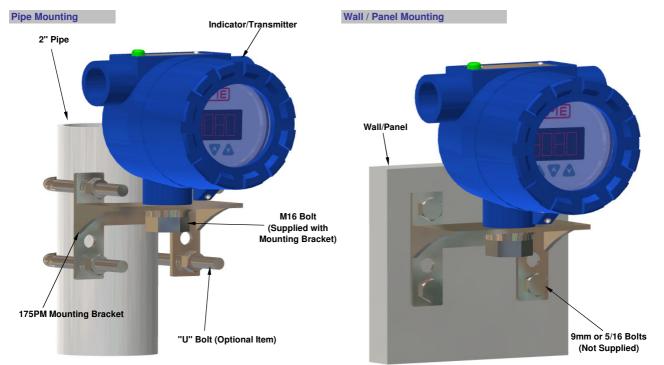
INTERNATIONAL METAL ENGINEERING

MOUNTING BRACKETS FOR INDICATORS AND TRANSMITTERS

Mounting Methods For Model 175RC



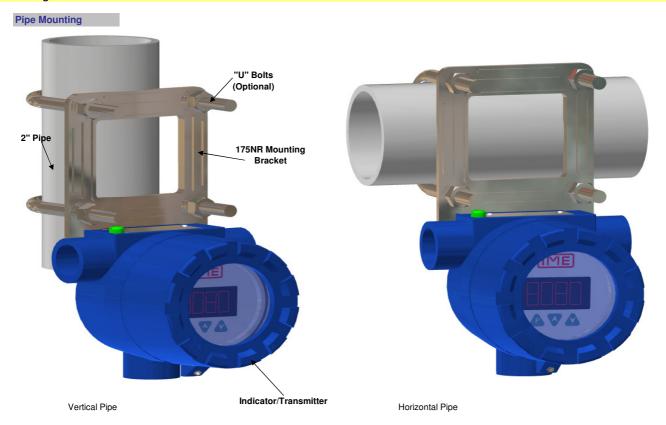
Mounting Methods For Model 175PM



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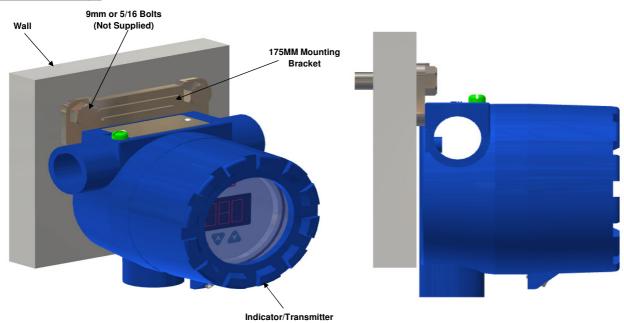
MOUNTING BRACKETS FOR INDICATORS AND TRANSMITTERS

Mounting Methods For Model 175NR



Mounting Methods For Model 175MM

Wall/Panel Mounting



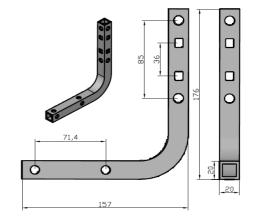
Mounting Bracket 175RC

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.



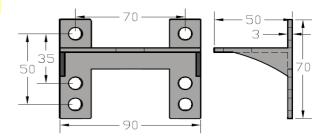
Mounting Bracket 175PM

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.



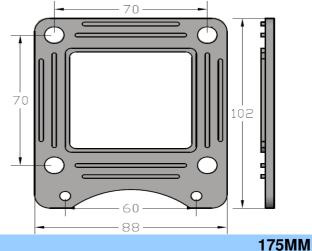
Mounting Bracket 175NR

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 symetrical, so it can be rotated 90 $^{\circ}$ to suit the viewing position of the Indicator/Transmitter.



Mounting Bracket

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.

