

Loop Powered Indicators Model 5105

WIKA data sheet PI-5105-01



Applications

- Any process value measurement
- Continuous process applications
- Use in any 4-20mA loop
- Heating & Ventilation
- Weighing measurement

Special Features

- High Accuracy
- Low Voltage Drop
- Protection against forward and reverse current
- 54 Engineering Units with alphanumeric LCD
- Numeric LED
- Wide Display
- -9999 to 19999 Counts
- Positive and Negative Slope Calibration

Description

Model 5105 Loop Powered Indicator is designed to be powered on with loop current and without any additional power source. The instrument is a 2-wire indicator for 4–20mA process signals to display any process value. Process variable parameters such as pressure, temperature, flow, level, weight, volume, frequency & percentage can be shown on the display. The display can be set to show upto 19999 counts when “No Unit” option is selected during calibration.

The micro-controller based design facilitates a high accuracy, flexible user friendly digital calibration, very



‘F2’ FLAMEPROOF ENCLOSURE



‘GH’ WEATHERPROOF ENCLOSURE

low loop voltage drop, multiple engineering units selection with a wide calibration range of –9999 to 19999 counts. The display is a 1 × 8 character LCD which can display both numerals and alphabets for easy readability.

The instrument is housed and offered as Flameproof / Weatherproof models.

General Specifications

LCD MODEL

Input

4-20mA, Loop Powered

Protection

200 mA max. Forward; 1000 mA max. Reverse

Loop Voltage drop

2V max. forward, 1.2V max. reverse

Range

-999 to 9999 counts WITH Engineering Units – 4 digits

-9999 to 19999 WITHOUT Engineering Units – 5 digits

Accuracy

±0.1% FSR ±1 count

Span Slope

Positive or Negative

Engineering Unit options

54 Engineering Units of Pressure, Temperature, Level, Volume, Flow, Weight, Frequency and Percentage are available for selection.

Settings & Adjustment

Push Button – MENU, UP, DOWN

Display

1 × 8 dot matrix, Character height of 12 mm

Decimal Point

Manually selected during calibration as below format

1. No decimal point (xxxx or xxxxx)
2. Between Units & Tens (xxx.x or xxx.x)
3. Between Tens & Hundreds (xx.xx or xxx.xx)
4. Between Hundreds and Thousands (x.xxx or xx.xxx)
5. Between Thousands and Ten Thousands (only x.xxxx)

LED MODEL

Input

4-20mA, Loop Powered

Protection

200 mA max. Forward; 1000 mA max. Reverse

Loop Voltage drop

4V max. forward, 1.2V max. reverse

Range

-1999 to 9999 counts with 4 digits

Accuracy

±0.1% FSR ±1 count

Span Slope

Positive or Negative

Engineering Unit options

Cannot be displayed as the display is 7-segment numeric LED

Settings & Adjustment

Push Button – MENU, UP, DOWN

Display

4 digit, 7 segment, 0.56" LED, Red / Orange colour

Decimal Point

Manually selected during calibration as below format

1. No Decimal pint (xxxx)
2. Between units & Tens (xxx.x)
3. Between Tens & Hundreds (xx.xx)
4. Between Hundreds and Thouands (x.xxx)

LCD & LED MODEL

Electrical Connections

GH : 4-pin DIN connector, PG7 cable entry

F2 : Screw clamp terminals,
1/2" NPTF cable entry

Enclosure

GH : Cast Aluminium Housing -
Weatherproof, IP:65

F2 : Style GR cast Aluminium Housing -
Flameproof, IP:66, Gr.IIC IS / IEC 60079

Mounting

Surface / Wall (or) 2" Pipe

Overall dimension

GH : 115 x 81 x 60 mm

F2 : 118 x 127 x 104 mm

Approximate Weight

GH : 380 gms approx.

F2 : 1080 gms approx.

Ambient Temp. Limits

0°C to 60°C

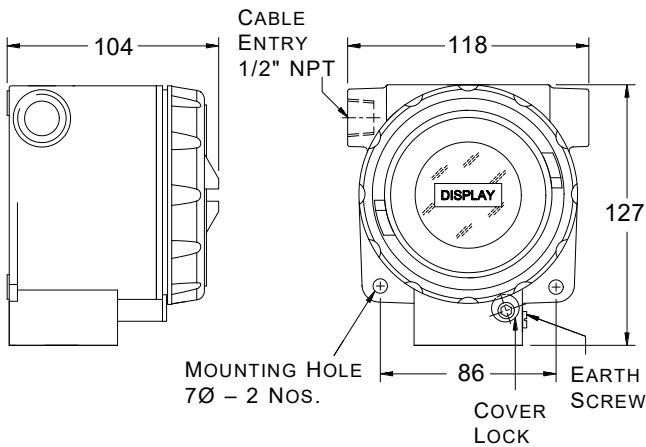
Ordering Matrix

	□	□	□	□	□
BASIC MODEL					
Loop powered indicator _____	5105				
Connector head _____	5105W				
ENCLOSURE					
Flameproof _____		F2			
Weatherproof _____		GH			
DISPLAY					
LED _____				B	
LCD _____				C	
MOUNTING					
Online _____					Z
Wall _____					W
2" Pipe _____					2
BRACKET MATERIAL (For Mounting Code 'C' only)					
Not applicable _____					0
Powder coated Mild Steel _____					C
316 Stainless Steel _____					2

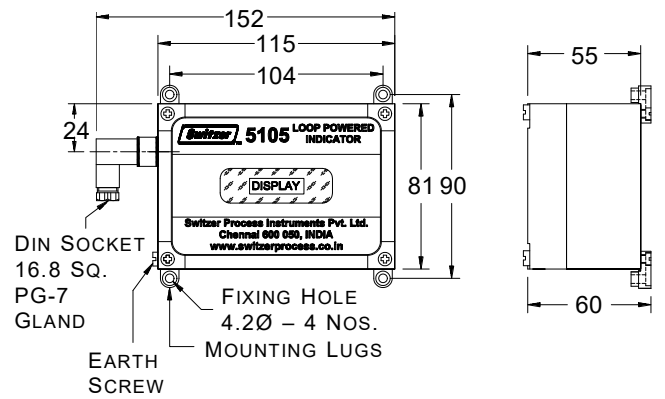
Mounting Dimensions in mm

SURFACE / WALL MOUNTING

'F2' Flameproof Enclosure



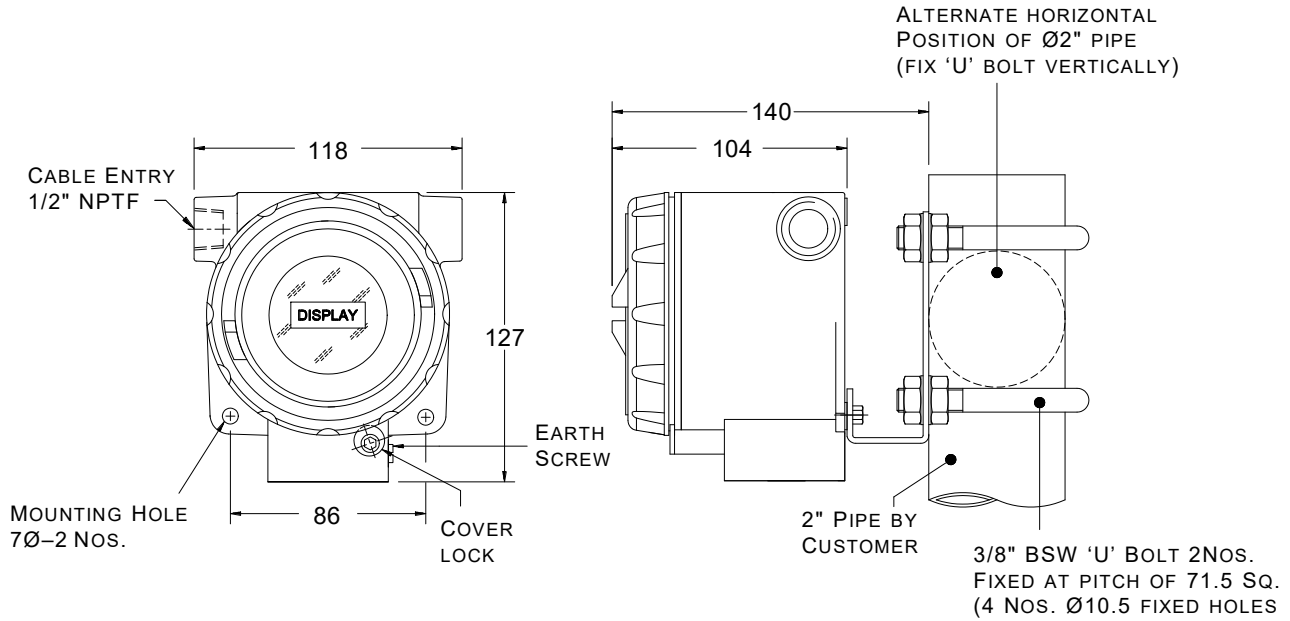
'GH' Weatherproof Enclosure



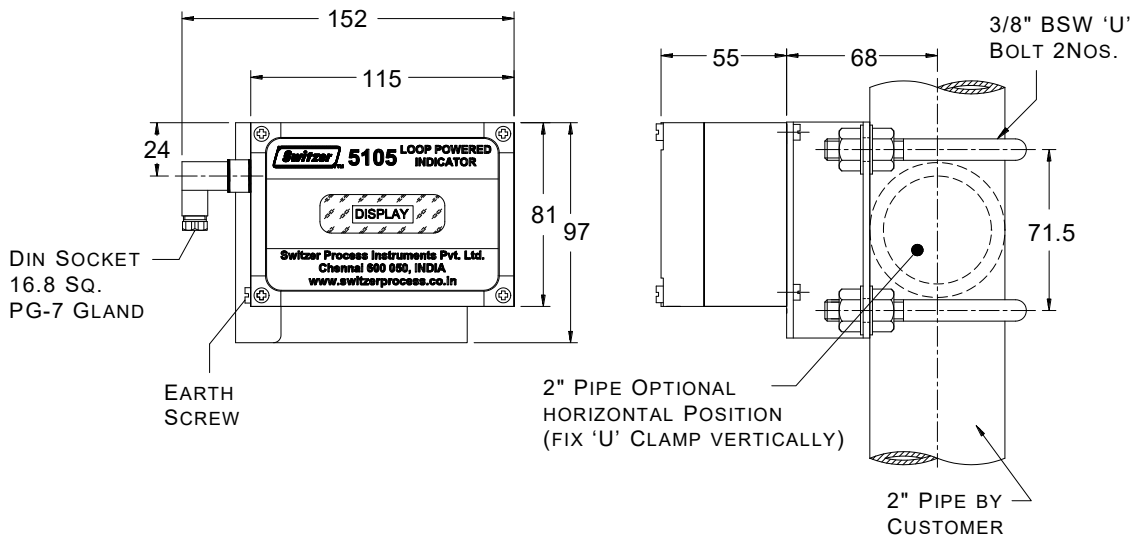
Mounting Dimensions in mm

PIPE MOUNTING

'F2' Flameproof Enclosure



'GH' Weatherproof Enclosure



The specifications given in this document represent the state of engineering at the time of publishing. We reserve the right to make modifications to the specifications and materials.



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