

Loop Powered Indicator

Model 210



Features

- No external power required
- Large, easily read LCD display
- Intrinsically safe approved
- Field or panel mounting
- Watertight to IP67 (Nema 4X)
- Field scalable
- Self-adhesive engineering unit labels
- CE Compliant



Overview

The 210 Loop Powered Indicator measures the current of a 4-20mA loop and provides a digital display of the process variable directly in engineering units. The indicator is powered by the 4-20mA loop and requires no external power.

Two potentiometers inside the instrument enable the Span and Zero to be scaled and a DIP switch enables the decimal point position to be selected.

Field mounting by design

The 210 indicator is fully watertight to IP67 (Nema 4X) standards. It is designed for field mounting with a wall mount bracket supplied as standard. A pipe mount bracket is optionally available.

For use in hazardous areas the Model 210i is ATEX certified, and CSA_{US/C} certified for both the USA & Canada.

Large LCD for easy reading

The 210 incorporates a large, easily read, 4½ digit display. The measurement resolution is 3½ digits and a trailing "0" can be switch selected for applications requiring 4½ digits.

Each indicator is supplied with a sheet of self-adhesive engineering unit labels. A recess, adjacent to the display, is provided for the correct label to be placed.

Applications include the display of flow rate, temperature, pressure and a wide range of other signals transmitted over a 4-20mA interface.

Specifications



General

Input Current

Range: 4-20mA dc.
 Maximum: 100mA dc.
 Minimum: 3.8mA dc.

Loop Voltage Drop

210i: 6.4 Volts at 20mA.
 210 & 610: 3.8 Volts at 20mA.

Display: 17.8mm (0.7") high 3½ digit LCD with trailing zero (4½ digits) and decimal points switch selectable.

Display Update Rate: 0.5s.

Under-range Indication: < -999 displays as "-1".

Over-range Indication: > +1999 displays as "1".

Calibration Range

Zero (4mA): Adjustable from -1999 to 1000.

Span (20mA): Adjustable from 200 to 19990.

Note: Span and Zero are adjusted by 10 turn potentiometers in 3 ranges.

Accuracy: ±0.2% of span counts, ±1 count.

Operating Temperature: -10 to 70°C.

Engineering Units: Self-adhesive labels are provided for the following units: Hz, litres/m, litres/hr, litres, gal/m, gal/h, gallons, kg/m, kg/hr, kgs, lbs/m, lbs/hr, °F, °C, Watts, Bar, kPa, psi.

Protection: IP67 (Nema 4X) watertight.

Cable Entry: By cable glands.

Mounting

Standard: Wall mount bracket supplied.

Optional: Pipe mounting - a galvanised metal bracket enables the 210 to be attached to a 2" vertical or horizontal pipe.

Materials: The enclosure is an ABS and polycarbonate mixture.

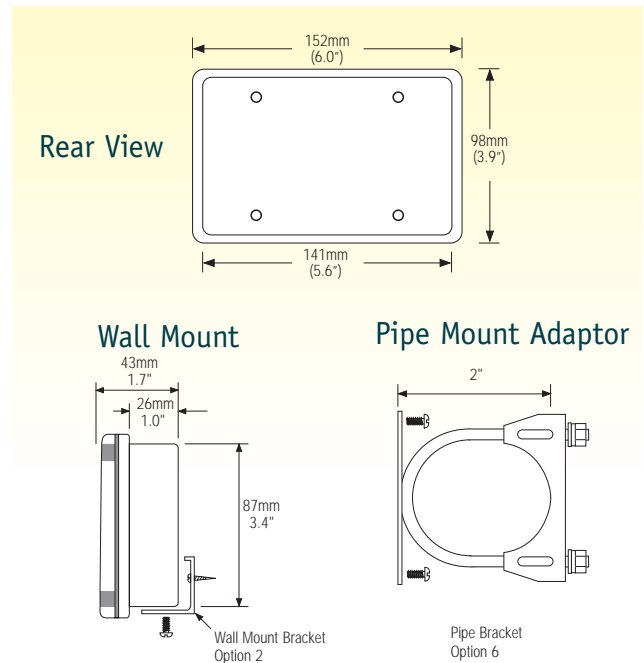
Hazardous Area Approval

- ▶ ATEX Approval II 2G EEx ia IIB T6.
- ▶ CSA_{US/IC} Approval LR104840-4. Class 1, Groups A, B, C & D.

Input Parameters: U_i = 28V
 I_i = 93mA
 P_i = 650mW

Input capacitance and inductance are negligible.

Dimensional Diagrams



Product Codes

Product Codes			
210	•		Loop Powered Indicator
Intrinsic Safety	i		Intrinsically safe Not intrinsically safe
Enclosure and Mounting	0 2 6		Wall Mounting (no gland holes) Wall Mounting (Standard glands) Pipe Mount
Hazardous Approvals		C M S	CSA US and Canadian Approval ATEX Approval SAA Australian Approval No Approvals

Important: Specifications are subject to change without notice.



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