Pressure &Level Instrumentation

# IIP-DISP

## PRESSURE TRANSMITTER WITH DISPLAY AND SWITCHES

- Rotatable Display and Housing
- Display Accuracy 0.1% +/- 1 digit
- Bright 4 digit LED Display
- 4 – 20 mA Output Option
- 1 or 2 PNP Alarm contacts
- Min / Max Value Memory
- Ex version available
- Cost Effective solution

## Description

The IIP-DISP is a combination of a pressure transmitter, an intelligent pressure switch and a digital display.

The unit can measure pressure ranges from 0.6 bar to 600 bar, display the actual value on a 4-digit LED display, output a 4-20mA signal and have 2 PNP alarm outputs.

The IIP-DISP uses a mechanically and chemically robust ceramic diaphragm making the unit suitable for most media types, an optional PVDF pressure port covers even more aggressive medium and there is a fat and oil free version for applications with oxygen.

The unit can be set up using the built-in front panel keys with access protection. Functions include configuration of the display, the setting and resetting of alarm points between

0 – 100% of the nominal input pressure, alarm hysteresis and switch on and switch off delay times.

An optional EX version is available for 4-20mA output only.

## Typical Applications

Typical applications include:

Pneumatic & hydraulic control
Process Control
Tank level measurement
Compressors / pumping
Heating & Ventilation
OEM machines

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## Pressure Specification

| | |
|---|---|
| Pressure Ranges | -1 -0, 0.6, 1, 1.6, 2.5, 4, 6,10,16,25,40,60,100,160,250,400,600 |
| Pressure Datum | Gauge or Absolute |
| Overpressure | 3, 3, 3, 7, 7, 12, 12, 25, 50, 50, 120, 120, 250,500,500,600,750 |

## Output specifications

| | | |
|---|---|---|
| **Analogue Output** | | |
| Standard | 2-wire 4 -20mA Vs = 18-41 Vdc | Ex-protection: Vs = 17 -28 Vdc |
| Optional | 3-wire 0-10V Vs = 15-36 Vdc | |
| Accuracy | IEC 60770 < +/- 0.5% FSO | BFSL: <+/- 0.25% FSO |
| Permissible Load | Current 2-wire: Rmax = ((Vs-Vsmin)/0.02)<br>Voltage 3-wire: Rmin = 10 k ohm | |
| Response Time | < 10mS | |
| **Contact Output** | | |
| Number, type | 1 or 2 independent PNP contacts | |
| Switching current | Standard: contact rating max. 125 mA,<br>Ex-protection: max. switching current 70mA | |
| Accuracy of contacts | IEC 60770 < +/- 0.5% FSO | BFSL: <+/- 0.25% FSO |
| Repeatability | < +/- 0.2% FSO | |
| Switching Frequency | Max 10 Hz | |
| Delay Time | 0 – 100 sec | |

## Display

| | |
|---|---|
| **Display** | |
| Type | 4-digit red LED display, digit height 7mm digit width 4.85mm (angle 10 deg) |
| Range | -1999 to + 9999 |
| Accuracy | 0.1% +/- 1 digit |
| Digital damping | 0.3 to 30 sec (programmable) |
| Measured value update | 0.0 to 10 sec (programmable) |

## Miscellaneous

| | |
|---|---|
| Weight | Approx 200 g |
| Vibration | 5 g RMS ( 20 to 2000 Hz) |
| Shock | 100 g / 11 mS |
| EMC Immunity | EN 50082-1 (< +/- 2% errors) |
| Thermal error for offset and span | <= +/- 0.2% FSO / 10K between -25 and 85 degC |
| Medium Temperature | -25 to 135 degC |
| Operating Temperature | -25 to 85 degC |