

Room Pressure Sensor with Display LX-PD-R-LCD

The differential pressure sensor LX-PD-R-LCD is suitable for technical rooms, featuring high level outputs, environmental protection, and temperature compensation.

- LCD display
- Alarm output
- Functional weather resistant ABS enclosure

Details

The differential pressure sensor for technical rooms can be used to measure positive, negative or differential pressure in the following ranges 0-30, ± 30 or 0-60, ± 60 or 0-125, ± 125 or 0-250, ± 250 Pascal. It combines precision high sensitivity silicon sensing capabilities and the latest ASIC technology with Dynamic Self Compensation to substantially reduce offset errors due to changes in temperature, stability to warm-up, long term instability and position sensitivity. It is ideal for monitoring pressure for air and other clean inert gas and is limited only to those media which will not attack silicon, nylon and epoxy adhesive.

The product features a selectable uni- or bi-directional pressure range and output signal types for the most flexible applications. An optional on-board relay output, which is field adjustable, allows for an alarm function.



Note: Since 2014 case color will be grey

Order Codes

LX-PD-R-LCD-30
 LX-PD-R-LCD-A-30 (with relay)
 LX-PD-R-LCD-60
 LX-PD-R-LCD-A-60 (with relay)
 LX-PD-R-LCD-125
 LX-PD-R-LCD-A-125 (with relay)
 LX-PD-R-LCD-250
 LX-PD-R-LCD-A-250 (with relay)

Technical Data

Pressure Ranges:	0-30, ± 30 or 0-60, ± 60 or 0-125, ± 125 or 0-250, ± 250 Pa
Calibration Accuracy:	$\pm 1\%$ F.S.O.
Measurement Types:	Differential (two ports)
Response Time:	0,5 ms maximum
Thermal Effects:	$< \pm 3\%$ over compensated range
Compensated Range:	10 – 50 °C (50 – 122 °F)
Over Pressure:	25 kPa
Operating Conditions:	0 – 70 °C (32 – 158 °F), 10 – 90% RH non-condensing
Media Compatibility:	Low Port: Dry gases only, media must be compatible with epoxy adhesive High Port: Wetted materials compatible with nylon housing, epoxy adhesive and silicon.
Power Supply (at transmitter):	13 – 28 Vac, 18 – 35 Vdc (non-isolated half-wave rectified)
Supply Current:	< 30 mA (without relay), or 50 mA (with relay option)
Input Voltage Effect:	Negligible over specified operating range
Protection Circuitry:	Reverse voltage protected and output limited
Output Signal:	4 – 20 mA (2-wire), 0 – 5 Vdc or 0 – 10 Vdc (3-wire), jumper selectable
Current Output Drive Capability:	550 ohms
Voltage Output Drive Capability:	10 Kohms minimum for 0 – 10 Vdc signal
Zero Adjustment:	Push button auto-zero
Wiring Connections:	Screw terminal block (14 to 22 AWG)
Pressure Connections:	Barbed ports for 4.33 mm (0.170") ID flexible tubing
Conduit Connection:	Access hole for 1/2" NPT conduit or cable gland
Optional LCD:	3.5 digit, 10 mm (0.4") digit height
Enclosure High:	Impact black ABS, plenum rated with optional gasket 116 mm W x 84 mm H x 53 mm D