STAINESS STEEL PRESSURE TRANSDUCER

- Please read these instructions before you begin installation.

MODEL PX61

Pressure transmitters determine the pressures in liquids and gases and convert these pressures to an electrical signal. The PX61 features compact construction, an integral amplifier, large output signal and extensive medium compatibility. The design provides a 1/2% accurate, economical transmitter that can operate accurately over a wide temperature range with corrosion resistance.

OPERATION

The ceramic coated steel diaphragm sensing element deflects under pressure. This deflection is transmitted to a thick-film resistor network mounted on the ceramic layer which causes the connected pair of opposite resistances to either expand or contract. This produces a positive or negative resistance change proportional to the pressure. A constant voltage supply to the bridge followed by a differential amplifier converts the signal to a magnified proportional voltage output.

This is added to a temperature dependent reference voltage and electronically compensated for temperature drift. The signal is finally converted via a voltage controlled current source to a standard 4-20 mA signal.

TECHNICAL DATA

Wetted parts / Case
Stainless steel

Ambient/Medium temperature
0...+85^{o}C

Pressure Connection
1/4" NPT

Supply Voltage
12...30VDC (incl. peaks), 20 mA max. loading

Output 2-wire 4 to 20 mA, max load = U-12V/ 0.02A

Accuracy 1/2%

Errors load - < 0.15%, ambient temperature - 0.05%/^{o}C

Hysteresis 0.2% max, (linear characteristic)

Overload limit
200% full scale

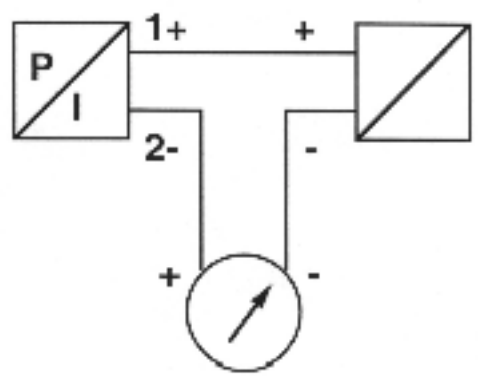
Enclosure IP65 (NEMA 4)

Response time
10 msec

Operating position
unrestricted

WIRING

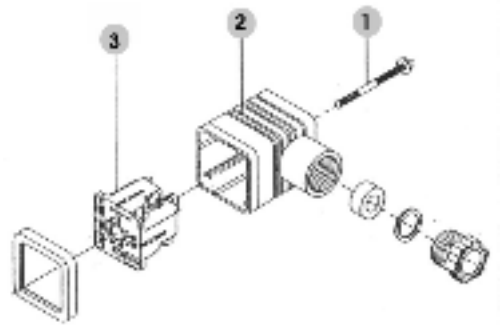
4341 12-30VDC



Receiving instrument

CAUTION

Always use a wrench on the stainless steel fitting to tighten the transmitter into the process. Using the body of the transmitter to tighten it by hand can cause permanent damage.



1. To open plug remove screw 1.
2. Insert a screw driver through the cable opening and lever the terminal block 3 out of the shell 2.
3. Thread the connection cable through the cable tie down screw, the metal washer, the rubber washer and the cable opening.
4. Connect the positive lead to terminal 1 & the negative lead to terminal 2.
5. The terminal block can be rotated inside the shell as desired to allow the cable to exit on the most convenient side.
6. Re-assemble the connector and screw to the body of the pressure transmitter.