

Function: The PTS-08 is a flush diaphragm pressure transmitter suitable for both absolute and gauge pressure measurement. The PTS-08 uses a piezo-resistive measuring element with a stainless steel diaphragm and stainless steel housing. The transmitter can measure up to 600 Bar and be supplied with a mA or voltage output. The flush diaphragm makes the PTS-08 ideal for use where the media could congeal or solidify in a recessed port. Applications include: Food industry; Paint; Glues; Test Rigs - Industrial and Research; and many other Process Applications. Options on the PTS-08 include a higher media temperature version that can measure between -20 and +110°C



SPECIFICATIONS

Please note that the following are typical ranges. We also manufacture sensors to cater for other ranges and process connections, within limitations detailed below.

INPUTS:

Ranges

Gauge Pressure

Between 0 and 20 Bar
 Minimum span: 1/4 Bar
 Standard Ranges / Overload
 0.25 Bar / 0.5 Bar
 1.6 Bar / 3.2 Bar
 5 Bar / 7 Bar
 20 Bar / 30 Bar

Absolute Pressure

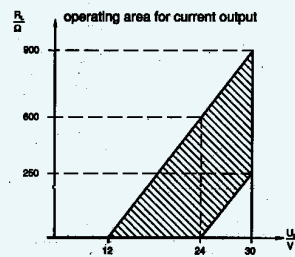
Between 0 and 600 Bar
 Minimum span: 0.1 Bar
 Standard Ranges / Overload
 0.1 Bar / 2.5 Bar
 0.5 Bar / 2.5 Bar
 1 Bar / 3 Bar
 5 Bar / 7 Bar
 10 Bar / 15 Bar
 20 Bar / 30 Bar
 50 Bar / 75 Bar
 100 Bar / 150 Bar
 200 Bar / 300 Bar
 600 Bar / 700 Bar

Other special ranges are available if required - please contact our internal sales department for further details

OUTPUTS:

Current

4 to 20mA (2 wire)
 0 to 20mA (3 wire)
 (Loading is supply voltage dependent - see chart below)
 Operating Area for Current output:



Load Resistance

Maximum load resistance is defined by:

$$R_{L\ MAX} = \frac{V_{SUPPLY} - 13V}{0.02A}$$

Voltage

0 to 10 Volt DC into >10K ohms

SUPPLY:

Power Supply Voltage

13 to 30 Volt DC

Allowable Ripple

10% @ 50Hz

Reverse Polarity Protection

Included as standard

Short Circuit Protection

Included as standard

PHYSICAL:

Electrical Connection

4 contact plug to DIN43650 (mating connector supplied with sensor)

Process Connection

G 3/4" male
 (Other process connections are available upon request - please contact our internal sales department for further details)

Housing Material

V2A (1.4305) stainless steel

Diaphragm Material

V4A (1.4435) stainless steel

GENERAL:

Linearity (% of full scale)

Gauge 0 to 1.9 Bar
 Worst Case: ±0.35%
 Typical: ±0.15%
 Gauge > 2 Bar and Absolute Full Range
 Worst Case: ±1%
 Typical: ±0.25%

Pressure Hysteresis and Repeatability

< ±0.1% of full scale

Temperature Coefficient

Low Pressure Ranges
 On Zero ±0.6% / Δ10°C
 On Span ±0.6% / Δ10°C
 Above 1 Bar
 On Zero ±0.2% / Δ10°C
 On Span ±0.1% / Δ10°C

Media Temperature

Standard: -10 to +85°C
 Option: -20 to +110°C

Operating Temperature

-10 to +85°C

Storage Temperature:

-25 to +90°C

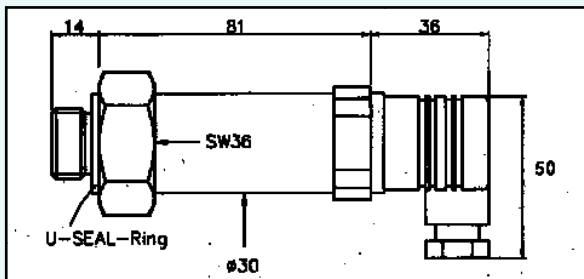
Protection Level

IP65

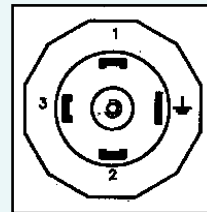
Weight

240 gms

MECHANICAL DETAILS



TERMINATION DETAILS



2 Wire	3 Wire
Pin 1 Supply +ve	Supply +ve
Pin 2 Output +ve	Common -ve
Pin 3 Unused	Output +ve
Pin 4 Earth	Earth

ORDERING DETAILS

- (a) Give identification code, i.e. PTS-08
 (b) Give details of input range, i.e. 0 to 200 Bar absolute

- (c) Give details of media temperature, i.e. -20 to +100°C
 (d) Give details of output type and range required, i.e. 4 to 20mA
 (e) Give details of pressure connection required if other than G3/4"

