



Absolute and Gauge Pressure Transmitter

PTC-01

Function: The PTC-01 is an all stainless steel IP65 universal low cost two/three wire gauge and absolute pressure transmitter. Measuring ranges from 0 to 1 Bar up to 0 to 400 Bar are available. This rugged, small transmitter, which has a ceramic measuring element, benefits from a low hysteresis and can withstand a considerable overload. Applications include: Hydraulic facilities; Test Rigs - Industrial and Research; Compressor Controls; and other Process Applications.

SPECIFICATIONS

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

INPUTS:

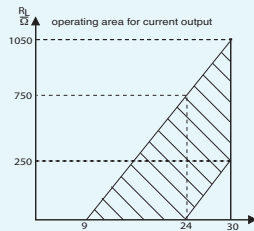
Ranges

Between 0 and 400 Bar
Standard / Overload / Burst

Standard Ranges (Bar)	Overload (Bar)	Burst Pressure
1 Bar	5	7
1.6 Bar	5	7
2.5 Bar	12	20
4 Bar	12	20
6 Bar	25	40
10 Bar	25	40
16 Bar	50	80
25 Bar	50	80
40 Bar	120	200
60 Bar	250	400
100 Bar	400	500
160 Bar	600	800
400 Bar	600	800

OUTPUTS:

Current (Two Wire)
4 to 20mA
(Loading is supply voltage dependent - see chart below)



Load Resistance
Maximum load resistance is defined by:

$$R_{L\text{ MAX}} = \frac{V_{\text{SUPPLY}} - 9V}{0.02A}$$

Voltage (Three Wire)
0 to 10 Volt DC

SUPPLY:

Power Supply Voltage
9 to 30 Volt DC (4 to 20mA)
14 to 30 Volt DC (0 to 10V)

Allowable Ripple
10% @ 50Hz

Reverse Polarity Protection & Short Circuit Protection
Included as standard

PHYSICAL:

Electrical Connection
a) 4 contact MPM (Miniature Hirschman) plug, or
b) M12 Connector - (mating connector supplied with sensor)

Process Connection
G1/4" male or 1/4NPT Male

Housing Material
V2A (1.4505)

Diaphragm Material
Ceramic Al₂O₃

GENERAL:

Linearity
<1% of full scale

Pressure Hysteresis and Repeatability
<0.3% of full scale

Temperature Coefficient (Worst Case)
On Zero <0.3% / Δ10°C
On Span <0.2% / Δ10°C

Media Temperature
-10 to + 85°C

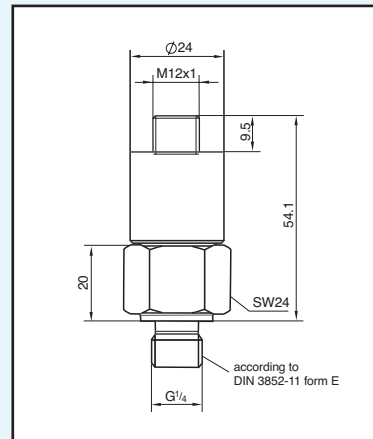
Operating Temperature
-10 to + 85°C

Storage Temperature
-25 to + 85°C

Protection Level
IP65

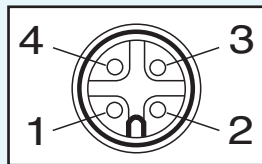
Weight
95 gms

MECHANICAL DETAILS



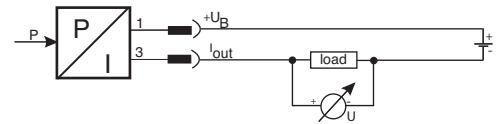
TERMINATION DETAILS

Pin occupancy M12-connector

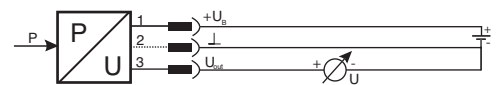


Pin 1 Supply +ve
Pin 2 Ground (0 to 10V)
Pin 3 Output +ve

Electrical connection for 2-wire



Electrical connection for 3-wire



ORDERING DETAILS

(a) Give identification code, i.e. PTC-01
(b) Give details of input range, i.e. 0 to 10 Bar Absolute

(c) Give details of output required, i.e. 4 to 20mA
(d) Give details of process connection required, i.e. G1/4"

(e) Give details of electrical connection required, i.e. M12 connector

