

# Pressure Transmitter PT4

Technical Bulletin

## General Information

PT4 Pressure Transmitters convert a pressure into a linear electrical 4...20 mA output signal suitable for controlling simple compressor and fan switching to the more sophisticated application of superheat modulation of Electronic Control Valves. With competitive performance to price characteristics and an easy to install pre-fabricated M12 cable assembly, PT4 transmitters are the designers choice for all heat pump, refrigeration and air conditioning applications.

## Features

- Piezo-based-sensor with output signal 4...20 mA and 2-wire connection for the precise operation of superheat, compressor or fan control systems
- Fully hermetic
- Calibrated for specific temperature and pressure ranges
- Easy install M12 electrical connection with pre-assembled cable assemblies available in various lengths
- Vibration, shock and pulsation resistant
- Protection class IP67 with mounted Plug and Cable Assembly



Pressure Transmitter PT4-xxM

Plug and Cable Assembly

## Selection table Pressure Transmitter

Type	Part No.		Pressure range for signal output (bar)*	Output signal	Medium temperature range	Max. working pressure PS (bar)*	Burst pressure (bar)*	Pressure Connection
	Single pack	Multipack 20 pcs						
PT4-07M	802332	802332M	-0.8...7	4...20 mA	-50...+135°C	25	150	7/16" – 20 UNF (with Schrader valve opener)
PT4-18M	802333	802333M	0...18			33		
PT4-30M	802334	802334M	0...30			33		
PT4-50M	802335	802335M	0...50			50		

Note: \*) Gauge/relative pressure

## Selection table Plug and Cable Assembly

Type	Part No.		Length**	Temperature range	Description***
	Single pack	Multipack 20 pcs			
PT4-M15	804803	804803M	1.5 m	-50...+80°C static application -25...+80°C mobile application	<p>Pin 1 = BN (brown) Pin 2 = WH (white)</p>
PT4-M30	804804	804804M	3.0 m		
PT4-M60	804805	804805M	6.0 m		

Note: \*\*) Longer length of the electrical connection cable beyond 6.0 m must be verified by user in term of output signal as well as EMC within installed system.

\*\*\*) The electrical plug can be mounted on pressure transmitter only in one position (Ⓜ).

# Pressure Transmitter PT4

## Technical Data

Supply voltage Nominal Range (polarity protected)	24 VDC 8...32 VDC
Permissible noise & ripple Influence of supply voltage	< 1 V <sub>p-p</sub> < 0,02 %FS/V
Operating current	4...20 mA output Maximum ≤ 24 mA
Load resistance	$R_L \leq \frac{U_b - 8.0V}{0.02A}$
Response time	1 ms
Weight (without plug and cable ass.)	~ 40 g
Temperatures Transport and storage Operating ambient housing Medium	-40...+85°C -40...+80°C -50...+135°C

Sensor lifetime PT4 -07 /-18 /-30 /-50	≥ 10 Million pressure cycles at full stroke at 25°C
Electrical connection PT4-Mxx Cable Assembly	M12 connection pre-fabricated with various cable lengths
Medium compatibility	A1 group refrigerants
Marking	UL (E258370) <b>CE</b>
Protection class (acc. to EN 60529)	IP67 with mounted Plug and Cable Assembly
Vibration at 10 ... 2000 Hz	max. 4 g
Materials: Housing, pressure connector and diaphragm with medium contact	Stainless steel 1.4435 / AISI 316L

## Accuracy performance

Type	Total error****	Temperature range
PT4-07M	≤ ±1% FS	-40...+80°C
PT4-18M	≤ ±1% FS	-20...+80°C
PT4-30M	≤ ±1% FS ≤ ±2% FS Typically ≤ ±2% FS	0...+40°C -20...+60°C -40...+80°C
PT4-50M	≤ ±1% FS ≤ ±2% FS Typically ≤ ±2% FS	0...+40°C -20...+60°C -30...+80°C

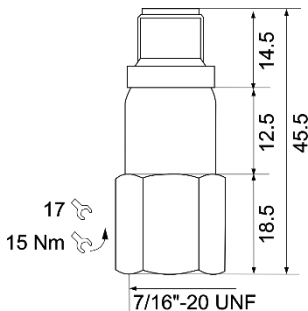
### Note:

\*\*\*\*) Total error includes non-linearity, hysteresis, repeatability as well as offset and span drift due to the temperature changes.

%FS is related to Percentage of Full sensor Scale.

## Dimensions (mm)

### Pressure Transmitter PT4-xxM



### Cable Assembly PT4-Mxx

