

Instruction Sheet

PA-00329
August 2010

PT5 Pressure Transmitter

PT5 Pressure Transmitter

General Information and Technical Data

Pressure Transmitters convert a pressure into a linear electrical output signal.



| Type | Range psi | MWP: Max. Working Pressure | PT: Max. Test Pressure |
|---------|--------------|----------------------------------|------------------------------|
| PT5-07M | -12 ... 102 | 363 psi | 399 psi |
| PT5-18M | 0 ... 261 | 479 psi | 522 psi |
| PT5-30M | 0 ... 435 | 479 psi | 522 psi |

- All pressures are gauge pressure
- Supply voltage: 7..30V DC, class 2
- Permissible noise & ripple: $< 1 V_{p-p}$
- Dimensions (in) see Fig. 3
- CE marked per 2004/108/EEC, EN61326 (certificate upon request)
- Protection (EN 60529) IP65 (with connector PT4-Mxx)

Safety instructions

- Read installation instructions thoroughly. Failure to comply can result in device failure, system damage or personal injury.
- Intended for use by people having the appropriate knowledge and skill. Before attempting to install the PT4 make sure pressure in system is brought to and remains at atmospheric pressure.
- Do not exceed the specified voltages and pressures.
- Do not use any other fluid media without prior approval of Emerson.
- Must comply with local electrical regulations when wiring.
- Electronic devices are subject to electro magnetic interference. Ensure that all components in the system are sufficiently protected.

Mounting

- Mounting position: as desired. In order to prevent ice buildup and or condensation on the PT5 when connected to the suction pipe, it is sometimes useful to extend the connection using a nominal 8 in piece of 1/4" copper tube from the main suction pipe (Fig. 4).
- Do not exceed max. torque of 11 ft/lbs (132 ft/lbs) for tightening of PT5 to pressure connection.
- After completion of installation, a test pressure must be carried out as follows:
 - According to EN378 for systems which must comply with European pressure equipment directive 97/23/EC
 - To maximum working pressure of system for other applications.

Wiring (figures 1 & 2)

For proper wiring use cable assembly (PT4-Mxx). Allow enough space on top of pressure transmitter to mount plug and fasten screw. The plug can be mounted on pressure transmitter only in one position (1).

Legends of Figures 1 and 2:

- (WH) - white wire: 4 ... 20 mA output to controller
- (BN) - brown wire: connect with controller 24V
- (4) is wider for orientation; do not connect
- (5) Controller

Cable Color Code and Pin Connection

| Part | Supply, +24Vdc | Signal, 4-20mA |
|------------------------------------|-------------------|-------------------|
| PT4-Mxx (Plug/Cable) | Brown wire | White wire |
| PT4-Lxx (Plug/Cable) | Brown wire | White wire |
| PT3 (Transmitter with fixed cable) | Brown wire | White wire |

Note 1: In case electrical connection cable is extended beyond 20 ft, system signal noise and EMC must be verified by installer for proper operation.

Note 2: Signal line should not be installed parallel with power lines to avoid electrical interference.

Figure 1

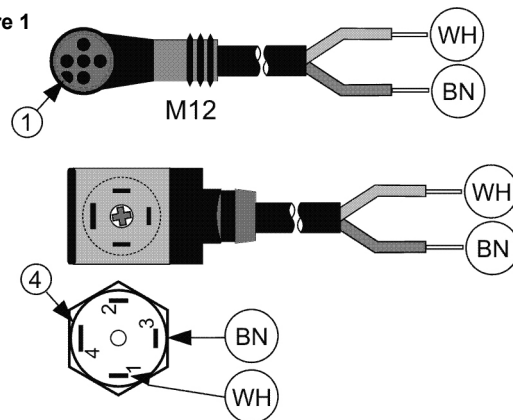


Figure 2

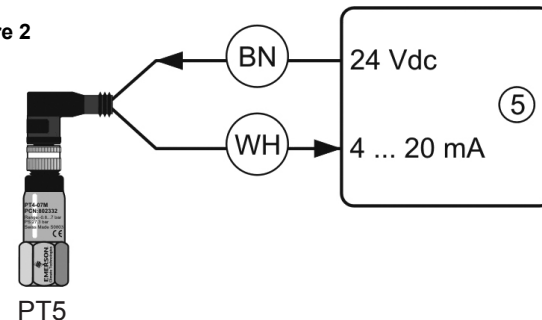


Figure 3

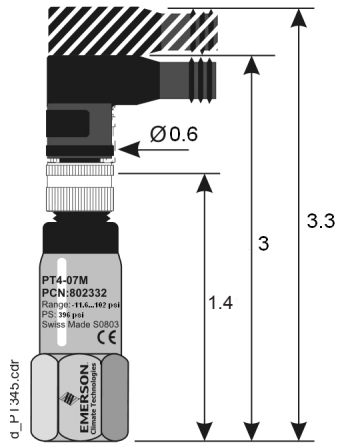


Figure 4

