

## Turck Expands Line of Pressure Transmitters

MINNEAPOLIS, MN – Turck is now offering the PT1000 Pressure Transmitter, complete with UL, CE, and IP67 ratings. Designed for OEM equipment manufacturers and end users in a wide variety of industries, these transmitters complement the recently released PT2000 pressure transmitters.

The PT1000 excels at pressure ranges from vacuum to 60 psig – including previously unavailable ranges such as 250 mbar – and can also be scaled in absolute pressure ranges.

“This product can be scaled down to 250 mbar, which works well for liquid level applications,” said Rich Tallant, senior product manager for sensors. “It also allows us to improve our absolute pressure offering.”

Utilizing a ceramic pressure measuring cell, the PT1000 offers reliable thermal stability while allowing for lower pressure measurement ranges. The compact size and flexible, cost-effective design – along with multiple outputs, pressure ranges, a gel filled housing, and connector/wiring configurations – enhances the product’s versatility and enables the PT1000 to solve challenging applications.

### About Turck

Turck is a pioneer in automation technology, providing customers with a comprehensive line of quality and advanced technology products in a fast, flexible and accurate manner. With more than 4,000 people working in 28 countries, Turck has built global partnerships with customers based on engineering expertise, flexibility and our willingness to take on engineering challenges that others won’t. For more information, visit [www.turck.com](http://www.turck.com).



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# PT1000 Series Pressure Transmitters

The PT1000 series pressure transmitter offers excellent performance at an OEM price. The transmitter features a ceramic measuring cell that is well suited for general purpose pressure measurement applications. Features like a compact stainless steel housing, integral M12 connector, flexible process connections, and multiple pressure ranges ensure the product will fit the application.

- Ceramic measuring elements
- 316 stainless steel housing with Polyarylamide 50% GF electrical connector
- NPT, G (BSPP), and SAE-ORB process connections
- Gel filled housing
- Ranges up to 60 Bar



## Electrical Data

Operating Voltage (I2 & U3)	7 - 33 VDC
Operating Voltage (U1)	12 - 33 VDC
Operating Voltage (U2)	8 - 33 VDC
Operating Voltage (U6)	5 VDC regulated
Current Consumption (I2)	≤ 23 mA
Current Consumption (U1, U2, U3, U6)	≤ 7 mA
Analog Load (I2)	≤ supply voltage - 7 V / 0.02 A = Ω
Analog Load (U1, U2, U3, U6)	> 10 K Ω
Response Time	< 2 ms
Short Circuit/Reverse Polarity Protection	Yes/Yes

## Environmental Data

Ambient Temperature	-30 to 85 °C
Storage Temperature	-50 to 100 °C
Medium Temperature	-40 to 125 °C
Housing Materials	316 stainless steel/Polyarylamide 50% GF
Wetted Materials	316 stainless steel, FPM, AL <sub>2</sub> O <sub>3</sub> ceramic
Protection Type	IP 67
Shock Resistance	40 g for 6 ms, 1000x all 3 directions per IEC 68-2-29
Vibration Resistance	20 g, 15 - 2000 Hz, 15 - 25 Hz with amplitude μ 15 mm, 1 Octave/min. all 3 directions, 50 constant load per IEC 68-2-6

## Part Number Key

PT 010R - 10 01 - I2 - H1141

Pressure Transmitter

Electrical Connection

### Pressure Range and Scale

- 0.2V = -0.2 to 0.2 Bar (-2.9 to 2.9 PSIG)
- 1V = -1 to 1 Bar (-14.5 to 14.5 PSIG)
- 2V = -1 to 1.5 Bar (-14.5 to 21.75 PSIG)
- 3V = -1 to 2.5 Bar (-14.5 to 36.25 PSIG)
- 5V = -1 to 5 Bar (-14.5 to 72.5 PSIG)
- 9V = -1 to 9 Bar (-14.5 to 130.5 PSIG)
- 15V = -1 to 15 Bar (-14.5 to 217.5 PSIG)
- 24V = -1 to 24 Bar (-14.5 to 348 PSIG)
- 40V = -1 to 40 Bar (-14.5 to 580 PSIG)
- 15PSIV = -15 to 15 PSIG
- 45PSIV = -15 to 45 PSIG
- 85PSIV = -15 to 85 PSIG
- 130PSIV = -15 to 130 PSIG
- 185PSIV = -15 to 185 PSIG
- 285PSIV = -15 to 285 PSIG
- 485PSIV = -15 to 485 PSIG

### Relative Ranges

- 1VR = -1 to 0 Bar (-14.5 to 0 PSIG)
- 0.25R = 0 to 0.25 Bar (0 to 3.63 PSIG)
- 1R = 0 to 1 Bar (0 to 14.5 PSIG)
- 2R = 0 to 1.6 Bar (0 to 23.2 PSIG)
- 3R = 0 to 2.5 Bar (0 to 36.35 PSIG)
- 4R = 0 to 4 Bar (0 to 58 PSIG)
- 6R = 0 to 6 Bar (0 to 87 PSIG)
- 10R = 0 to 10 Bar (0 to 145 PSIG)
- 16R = 0 to 16 Bar (0 to 232 PSIG)
- 25R = 0 to 25 Bar (0 to 362.5 PSIG)
- 40R = 0 to 40 Bar (0 to 580 PSIG)
- 60R = 0 to 60 Bar (0 to 870 PSIG)
- 15PSIG = 0 to 15 PSIG
- 20PSIG = 0 to 20 PSIG
- 30PSIG = 0 to 30 PSIG
- 60PSIG = 0 to 60 PSIG
- 100PSIG = 0 to 100 PSIG
- 150PSIG = 0 to 150 PSIG
- 200PSIG = 0 to 200 PSIG
- 300PSIG = 0 to 300 PSIG
- 500PSIG = 0 to 500 PSIG
- 750PSIG = 0 to 750 PSIG

\*other ranges available upon request

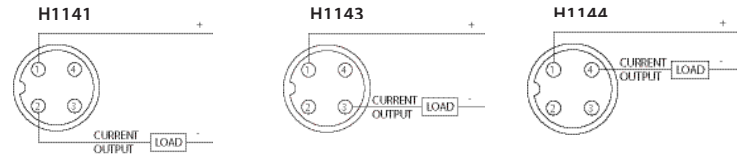
### Series

10 = Ceramic measuring cell

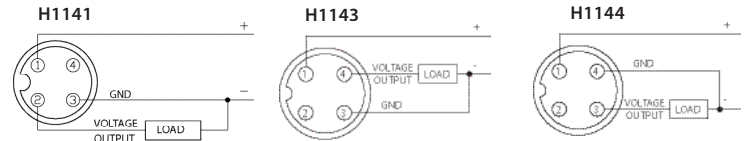
### Process Connection

- 01 = Female G 1/4
- 03 = Male NPT 1/4
- 04 = Male G 1/4
- 05 = Male 7/16 - 20 UNF (SAE-ORB)
- 14 = Male NPT 1/8
- 17 = Female NPT 1/2

### Current Output 2-wire



### Voltage Output 3-wire

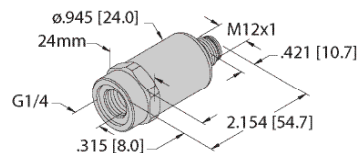


Mating Cordset: RK 4.4T-\* / S618

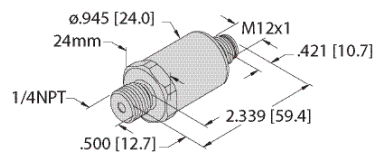
### Electrical Output

- I2 = 4 - 20 mA (2-wire)
- U1 = 0 - 10 VDC (3-wire)
- U2 = 1 - 6 VDC (3-wire)
- U3 = 0 - 5 VDC (3-wire)
- U6 = 0.5 - 4.5% (3-wire) [ratiometric]

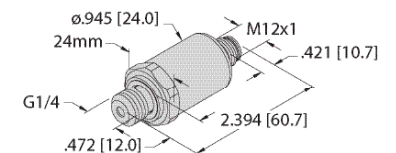
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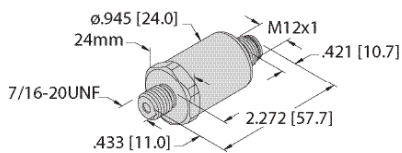
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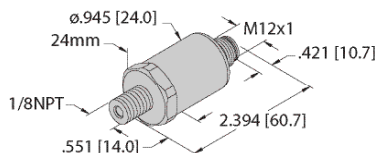
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PT...1014



PT...1017

