

TPE-1001 Pressure Transducer P-E/P-I



The TPE-1001 is designed to operate as an interface device between pneumatic control components and building automation systems.

Pneumatic devices such as thermostats, transmitters and receiver-controllers can supply the 0-15 psi input signal to the TPE-1001. Any one of the three different outputs may be used to satisfy system requirements. Available outputs are 0-5 VDC, 0-10 VDC, or 0-20 mA. Only one output may be used per application.

It may be mounted in either a *deep* 2" x 4" handy box or on a surface such as a panel backplate. A deep box is required to accommodate the 3/16" (5 mm) diameter tubing connection.

TPE-1443 Series

Pressure Transducer



The KMC TPE-1443 series of pressure transducers incorporates a 100% solid-state piezoresistive silicon sensor featuring low hysteresis, excellent repeatability, and long-term stability. Signal conditioning and temperature compensation are performed by industrial quality, state-of-the-art integrated circuits to provide an accurate, linear, and high level output that does not require additional signal conditioning.

Up to three field-selectable input ranges are available in most models. The field selectable feature provides a single model that can be configured to cover all the input pressure ranges for any given application.

Two output ranges are field selectable, 0 to 5 VDC and 0 to 10 VDC. The output is fully protected from shorts to ground and connection to power supply.

The TPE-1443 can be powered from either a 12 to 35 VAC or 12 to 40 VDC power source. The TPE -1443 incorporates a rugged NEMA 4 fully gasketed, dust proof and splash proof enclosure. External mounting tabs and a 1/2" conduit connection make for easy installation. The removable terminal block, easy access to the zero and span trimmers, and jumpers also provide for easy installation and setup.

Specifications

Supply Voltage Supply Power Input Signal

Output Signal Output Accuracy Material Wire Size **Receiver Load**

Ambient Limits Operating Shipping Weight

24 VAC, +20%, -15% 0.5 VA 0 to 15 psi (103 kPa), 30 psi maximum (207 kPa) 0-5 VDC, 0-10 VDC, 0-20 mA ±3% Beige ABS, UL Flame Class 94HB 14 to 22 AWG recommended 500 Ω maximum, 0-20 mA 1000 Ω minimum, 0-5 / 0-10 VDC

40°F to 120°F (4°C to 49°C) -40°F to 140°F (-40°C to 60°) 2 ounces (57 grams)

Specifications

Supply Voltage	12-35 VAC or 12-40 VDC
Supply Current	10 mA, maximum
Output Signal	0-5 or 1-10 VDC, field selectable
Load Impedance	1 K ohm, minimum
Output Ranges	Field selectable:
TPE-1443-1	0–20, 0–10, 0–5 psig
TPE-1443-2	0–30, 0–15, 0–7.5 psig
TPE-1443-3	3–15 psig
TPE-1443-4	0–140, 0–70, 0–350 kPa
TPE-1443-5	0–200, 0–100, 0–50 kPa
TPE-1443-6	20–100 kPa
Maximum Pressure	40 psig (276 kPa)
Media Compatibility	Dry air or inert gases
Accuracy	±1% Full scale
Operating Range /	
Temperature Compensation	
	0°–180° F (-18° – 82° C)
	10–90% RH, non-condensing
Temperature Compensation Error	
	±0.025% per °F
	±0.03% per °C
Conformance	
EMC Standards	EN50082-1 (1992)
	EN55014 (1993)
	EN607301 (1992)
Ambient Limits	Operating: 5°-120°F (-21°-49°C)