

TPE-1483 Series

Differential Pressure Transducers

DESCRIPTION AND APPLICATION

The KMC TPE-1483 series of pressure transducers incorporate a differential pressure transmitter with two remote sensors. They incorporate a rugged NEMA 4X and IP65 hinged and gasketed enclosure and five-foot (1.5 m) cables for the remote sensors.

They may be used with any liquid or gas that is compatible with 17-4 pH stainless steel.

Each model has four field-selectable input pressure ranges available (see the Models section below). The inputs are rated for an overload pressure of two times the maximum full scale range and a burst pressure of twenty times the maximum fullscale range.

Three output ranges are field-selectable (4 to 20 mA, 0 to 5 VDC, and 0 to 10 VDC), with High/Low port swapping, unidirectional (0 to full scale) or bidirectional (+/-) measurements, and slow-damping options for the most flexible application use. The output signal is factory-calibrated and temperature-compensated for the highest start-up accuracy.

The transducers are powered from a 24 VAC/VDC (nonisolated half-wave rectified) power source.

NOTE: This data sheet is for transmitters available starting in July 2019. For earlier (2008–2019) device (all-grey enclosure with no display) specifications, see Rev. D of this data sheet.



FEATURES

- Remote sensor, with cable
- Selectable pressure ranges and outputs
- LCD display for configuration of input pressure ranges, output type and range, surge damping time, unidirectional/ bidirectional measurements, and port swapping
- Push-button and remote zeroing terminal
- Weatherproof enclosure

MODELS

| MODEL NUMBER | INPUT PRESSURE RANGES (SELECTABLE) | REPLACES (DISCONTINUED MODEL) |
|---------------------|------------------------------------|-------------------------------|
| TPE-1483-1 0 | 0 to 5/10/25/50 psi | TPE-1483-1 |
| TPE-1483-2 0 | 0 to 10/20/50/100 psi | TPE-1483-2 |
| TPE-1483-3 0 | 0 to 50/100/250/500 psi | TPE-1483-3 |

DIMENSIONS AND MOUNTING



SPECIFICATIONS

| Supply Voltage | 24 VAC/VDC ± 10% (non-isolated half-wave rectified) |
|------------------------|---|
| Supply Current | 75 mA, maximum @ 24 VDC |
| Output Signal | 4 to 20 mA (sourcing), 0 to 5 VDC, or 0 to 10 VDC, field selectable |
| Output Drive | |
| Current | 500 ohms max. |
| Voltage | 10K ohms min. |
| Wiring Connection | 14 to 22 AWG screw terminal block |
| Protection Circuitry | Reverse voltage protected, transient protected |
| Pressure Ranges | See Models on page 1 |
| Line Pressure | Maximum is the highest of the selectable ranges on each model |
| Proof Pressure | Max. 2X highest range per model |
| Burst Pressure | Max. 20X highest range per model |
| Pressure Cycles | Over 100 million |
| LCD Display | 1.4 x 0.6" (35 x 15 mm), 2 lines by 8 characters |
| Accuracy | ± 1% full scale of selected range (range 4 is ± 2%) |
| Stability | ± 0.25% full scale typical (1 year) |
| Surge Damping | 1 to 60 seconds averaging (menu selectable) |
| Zero Adjust | Push-button and remote-input |
| Operating Environment | 32 to 122° F (0 to 50° C), 10 to 90% relative humidity, non-condensing |
| Sensor Operating Range | e -40 to 221° F (-40 to 105° C) |
| Media Compatibility | 17-4 PH stainless steel |
| Rem. Sensor Cable | FT-6 plenum rated |
| Pressure Fitting | 1/4-inch NPT male |
| Sensor Housing | IP67 |
| Enclosure | Polycarbonate, UL94-V0, IP65 (NEMA 4X), 4.43 W x 4.59 H x 2.11" D (112.5 x 116.5 x 53.7 mm) |
| Weight | 22.9 oz (650 g), including remote cables and sensors |
| Regulatory | CE and RoHS Compliant |
| Manufacturing | ISO 9001 registered quality system |

A CAUTION

Ensure that the maximum individual port pressure does not exceed the maximum pressure range of the unit.

Do not use this device:

- · In an explosive or hazardous environment
- With combustible or flammable gasses
- · As a safety or emergency stop device
- In any other application where failure of the product could result in personal injury

ACCESSORIES

| XEE-6111-040 | Single-hub transformer, 120 to 24 VAC, 40 VA |
|--------------|---|
| XEE-6112-040 | Dual-hub transformer, 120 to 24 VAC, 40 VA |

SUPPORT

Additional product and other resources are available on the web at **www.kmccontrols.com**.



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