



High Accuracy

Low Differential Pressure Sensor (TPDPT7 Range)

The TPDPT7 range of air differential pressure transmitters are designed for applications in ventilation/air conditioning systems, filter monitoring, fan speed control, air pressure monitoring & control and air leak detection systems. The transmitters employ a solid state temperature compensated pressure cell with microprocessor providing superior linearity, measurement accuracy and sensitivity.

The TPDPT7 incorporates zero pressure calibration at the touch of a button and provides multiple ranges with a +/- option that are defined from user selection switches. The TPDPT7/100 and TPDPT7/500 are available with outputs of 0-5V or 0-10V with 4.20mA and an optional LCD display. The standard sensor housing is IP51 with an option for IP65 and each sensor is provided with 2 metres of tube and 2 duct pilot fittings.

Specification

24V AC or DC Supply
 Multiple selectable ranges
 Fully Calibrated
 Temperature Compensated (-10°C to +60°C)
 Zero calibration push button
 Digital Self Dampening
 Outputs 0-5V or 0-10V with 4-20mA. With input protection
 Optional LCD display
 Display of selected range on LCD
 Display of actual pressure on LCD
 IP51 housing with IP65 housing optional.

Standard Specification

Type	TPDPT7/100	TPDPT7/500
Selectable Ranges	0-25Pa, 0-50Pa, 0-75Pa, 0-100Pa	0-100Pa, 0-200Pa, 0-300Pa, 0-400Pa, 0-500Pa
+/- Ranges Selection	Option Switch SW4	On Option Switch SW4 On
Supply	24Volts AC or DC +/- 15%	24Volts AC or DC +/- 15%
Power Consumption	10mA plus output load 35mA max	10mA plus output load 35mA max
Outputs	0-5V or 0-10V with 4-20mA	0-5V or 0-10V with 4-20mA
Accuracy (@25°C)	+/- 0.5% FSS typical	+/- 0.5% FSS typical
Non-Linearity/Hysteresis	+/- 0.5% FSS typical	+/- 0.5% FSS typical
Operating Temperature	-20 to + 70°C	-20 to + 70°C
Operating Humidity	0-80% non-condensing	0-80% non-condensing
Pressure Overload	50K Pa	50K Pa
Enclosure	Flame retardant ABS IP51 (optional IP65)	Flame retardant ABS IP51 (optional IP65)
Product Code	TPDPT7/100 (standard housing) TPDPT7/100/D (standard with display) TPDPT7/100/IP65 (IP65 housing)	TPDPT7/500 (standard housing) TPDPT7/500/D (standard with display) TPDPT7/500/IP65 (IP65 housing)

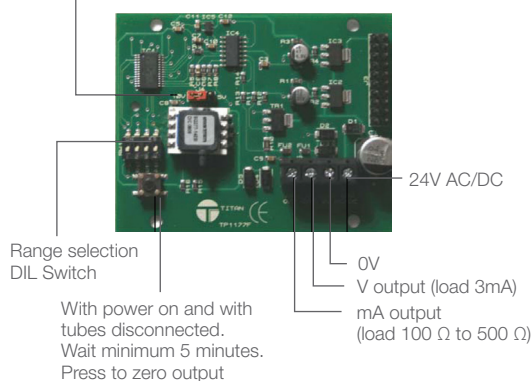
DIL Switch

TPDPT7/100			
Range	SW1	SW2	SW3
0-25Pa	Off	Off	Off
0-50Pa	On	Off	Off
0-75Pa	Off	On	Off
0-100Pa	Off	Off	On
For +/- ranges SW4 On			

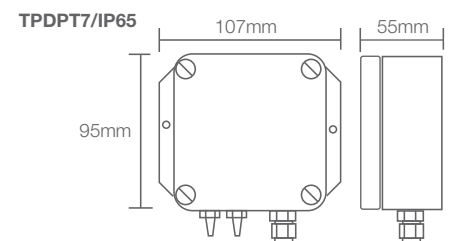
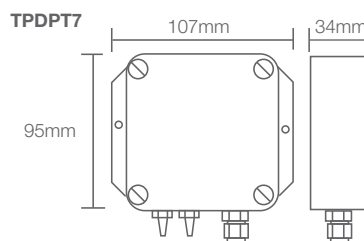
TPDPT7/500			
Range	SW1	SW2	SW3
0-100Pa	Off	Off	Off
0-200Pa	On	Off	Off
0-300Pa	Off	On	Off
0-400Pa	Off	Off	On
0-500Pa	On	On	On
For +/- ranges SW4 On			

Connections

Output Link Selection
 0-10V or 0-5V



Dimensions



Important

This is an IP65 rated enclosure
 DO NOT DRILL
 Use fixing holes providing

Notes: FSS is the full scale range of the sensor which covers from the stated lowest -minus value to the highest +plus value
 Non-linearity and Hysteresis is quoted as the best line fit for offset pressure, full scale pressure and 1/2 full scale pressure
 Pressure Overload is the maximum pressure which may be applied without causing damage to the sensing element