

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 TPDPT7/2500 and TPDPT7/10000 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	TPDPT7/2500	TPDPT7/10000
Selectable Ranges	0-50Pa, 0-125Pa, 0-500Pa, 0-1000Pa, 0-1500Pa, 0-2000Pa, 0-2500Pa	0-5000Pa, 0-6000Pa, 0-7000Pa, 0-8000Pa, 0-10000Pa
+/- Ranges Selection	Option Switch SW4	No +/- selection on these ranges
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)	+/- 0.25% FSS typical	+/- 0.5% FSS typical
Non-Linearity/Hysteresis	+/- 0.25% 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	TPDPT7/2500 (standard housing) TPDPT7/2500/D (standard with display) TPDPT7/2500/IP65 (IP65 housing)	TPDPT7/10000 (standard housing) TPDPT7/10000/D (standard with display) TPDPT7/10000/IP65 (IP65 housing)

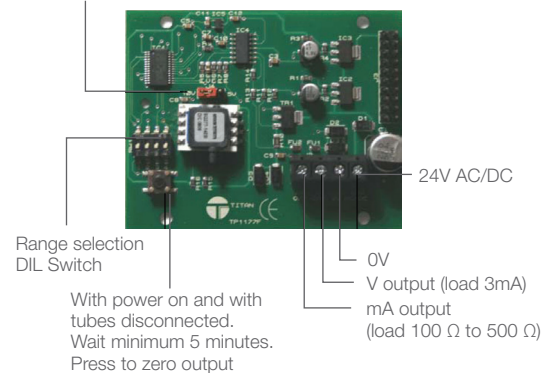
DIL Switch

TPDPT7/2500			
Range	SW1	SW2	SW3
0-50Pa	Off	Off	Off
0-125Pa	On	Off	Off
0-250Pa	Off	On	Off
0-500Pa	On	On	Off
0-1000Pa	Off	Off	On
0-1500Pa	On	Off	On
0-2000Pa	Off	On	On
0-2500Pa	On	On	On
For +/- ranges SW4 On			

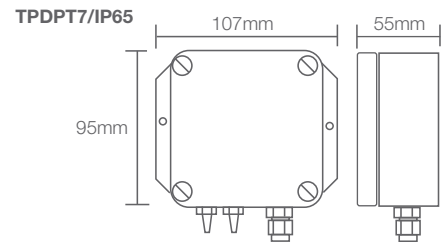
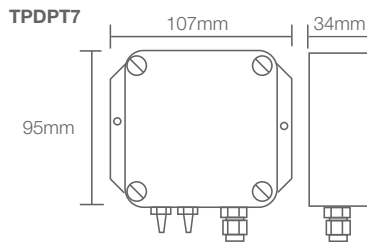
TPDPT7/10000			
Range	SW1	SW2	SW3
0-5000Pa	Off	Off	Off
0-6000Pa	On	Off	Off
0-7000Pa	Off	On	Off
0-8000Pa	On	On	Off
0-9000Pa	On	Off	On
0-10000Pa	Off	Off	On
No +/- selection on these ranges			

Connections

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



Dimensions



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