



# DIFFERENTIAL AIR PRESSURE **TRANSMITTER**

### **TPDPT8 FEATURES**

- No Long Term Drift
- No Temperature Shift
- Multiple selectable ranges
- Fully calibrated
- +/- Range Selection
- LCD Display option / IP65 enclosure option





TPDPT8/D

TPDPT8/IP65

The TPDPT8 range of Air Differential Pressure sensors are designed to offer increased accuracy and stability within HVAC applications such as ventilation systems, fume cupboards, operating theatres, fan speed control, air pressure monitoring and leak detection systems.

The TPDPT8 sensors incorporate zero pressure calibration at the touch of a button and provide multiple ranges with a +/- option that are defined from user selection switches.

The TPDPT8/2500 is 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.

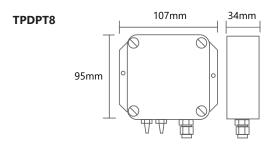
## **SPECIFICATION**

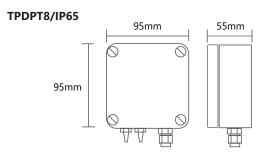
| Selectable Ranges for TPDPT8/2500: | +/- 0-1000Pa, 0-1500Pa, 0-2000Pa, 0-2500Pa   |
|------------------------------------|--|
| Power Supply:                      | 24V AC/DC +/-15%   |
| Power Consumption:                 | Standard: 100mA (max)<br>With Display: 130mA (max)   |
| Outputs:                           | 0-5V, 0-10V with 4-20mA  |
| Accuracy @ 25°C                    | +/- 1.5% FSS typical   |
| Non-Linearity/Hysteresis           | +/- 0.25% FSS typical  |
| Operating Temperature:             | -20 to +70°C   |
| Operating Humidity:                | 0-80% Non-condensing   |
| Pressure Overload:                 | 50K Pa   |
| Enclosure:                         | Flame Retardant ABS IP51<br>(IP65 option available)  |
| Part Codes:                        | TPDPT8/2500 (Standard)<br>TPDPT8/2500/IP65 (IP65 Option)<br>TPDPT8/2500/D (Display Option) |





### **DIMENSIONS**





Important

This is an IP65 rated enclosure DO NOT DRILL - use fixing holes provided

#### RANGE SELECTION Switch 1 and 2 are not used

#### **Pressure Measurement Selection**

| +/- Selection          | SW3 |  |
|------------------------|-----|--|
| Positive               | ON  |  |
| Positivie and negative | OFF |  |

DIL switch 3 is for the selection of positive (only) OR positive and negative measurement of the selected pressure ranges.

#### **Pressure Range Selection**

| •          |     |     |
|------------|-----|-----|
| Pressure   | SW4 | SW5 |
| +/- 1000Pa | ON  | ON  |
| +/- 1500Pa | OFF | ON  |
| +/- 2000Pa | ON  | OFF |
| +/- 2500Pa | OFF | OFF |

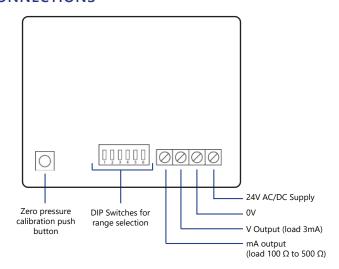
DIL switches 4 and 5 will be used to select up to four ranges.

#### **Signal Output Selection**

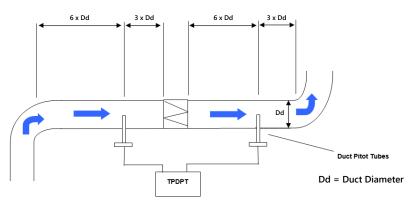
| Signal Ouput<br>Voltage | SW6 |
|-------------------------|-----|
| 0-10 V                  | ON  |
| 0-5 V                   | OFF |

DIL switch 6 is used to configure the signal output voltage range.

### **CONNECTIONS**



### **INSTALLATION**



The accuracy of the measurement can be affected by duct air turbulence and air stratification. The above installation guide is just a general recommendation and it is the installer's responsibility to ensure there is no excessive air turbulence or stratification.

For large ducts you may require a multi-point measurement probe.

For further install and setup information please contact technical @titanproducts.com

#### Note:

- 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

• This product is for use on dry gases applications only

