

# DIFFERENTIAL PRESSURE TRANSMITTERS

## DPT-2W SERIES



Multi-range differential pressure transmitters with 4–20 mA 2-wire configuration

DPT-2W series differential pressure transmitters are engineered for building automation in the HVAC/R industry. The most technologically advanced transmitters on the market, measuring static and differential pressure, with field selectable range.

**DPT-2W series devices include:**

- 8 field selectable measurement ranges, unidirectional or bi-directional, selectable via jumper (see Model Summary)
- Pressure measurement in Pa
- 4–20 mA 2-wire current loop configuration

**DPT-2W series device options offer:**

- Display



### SIMILAR PRODUCTS

- DPT-R8 series 8-range differential pressure transmitters
- DPT-MOD series differential pressure transmitters with Modbus configuration
- DPI series electronic differential pressure switches
- PS series mechanical differential pressure switches
- DPT-Flow series air flow meters
- AVT series air velocity meters

### APPLICATIONS

DPT-2W series devices are commonly used in HVAC/R systems for:

- fan, blower and filter monitoring
- pressure and flow monitoring
- valve and damper control
- pressure monitoring in cleanrooms

### MODEL SUMMARY

	<b>DPT-2W</b>	
<b>Measurement ranges (Pa)</b> (field selectable via jumper)	±100, 100, 250, 500 Pa 1000, 1500, 2000, 2500 Pa	
<b>Description</b>	<b>Model</b>	<b>Product code</b>
Multi-range differential pressure transmitter	DPT-2W-2500-R8	104.007.005
-with display	DPT-2W-2500-R8-D	104.007.006

# DIFFERENTIAL PRESSURE TRANSMITTERS

## DPT-2W SERIES

### SPECIFICATIONS

#### Performance

**Accuracy:**  
±1.5 % FS over operation temperature range:  
-10...50 °C %/FS from highest pressure range (including: general accuracy, temperature drift, linearity, hysteresis, and repetition error)

**Long term stability:**  
Typical 1 year: ±8 Pa; DPT-2W-2500  
Thermal effects:  
**Temperature compensated across the full spectrum of capability.**

**Overpressure:**  
Proof pressure: 25 kPa  
Burst pressure: 30 kPa

**Zero point calibration:**  
Manual pushbutton

**Response time:**  
4.0 s or 0.8 s, selectable

#### Technical Specifications

**Media compatibility:**  
Dry air or non-aggressive gases

**Measuring units:**  
Pa

**Measuring element:**  
Piezoresistive

**Environment:**  
Operating temperature: -10...50 °C  
Storage temperature: -20...70 °C  
Humidity: 0 to 95 % rH, non condensing

#### Physical

**Dimensions:**  
Case: 90.0 x 95.0 x 36.0 mm

**Weight:**  
150 g

**Mounting:**  
2 each 4.3 mm screw holes, one slotted

**Materials:**  
Case: ABS  
Lid: PC  
Duct connectors: ABS  
Tubing: PVC

**Protection standard:**  
IP54

**Display: (Optional)**  
3 1/2 digit LCD display  
Size: 45.7 mm W x 12.7 mm H

**Electrical connections:**  
2 screw terminal block  
Wire: 12-24 AWG (0.2-1.5 mm<sup>2</sup>)

**Cable entry:**  
Strain relief: M16  
Conduit knockout: 16 mm

**Pressure fittings:**  
Male 5.0 mm and 6.3 mm

#### Electrical

**Voltage:**  
Circuit: 2-wire  
Supply: 10-35 VDC  
Supply (Current): 32 mA maximum  
Output: 4-20 mA loop  
Zero/Span output calibrated within ±0.08 mA  
Maximum load =  $\frac{\text{Supply} - 10\text{V}}{0,020\text{A}}$

Minimum load: 20 Ω  
Power consumption: <1.2 W

#### Conformance

Meets requirements for CE marking:  
EMC Directive 2014/30/EU  
RoHS Directive 2011/65/EU  
WEEE Directive 2012/19/EU

COMPANY WITH  
MANAGEMENT SYSTEM  
CERTIFIED BY DNV GL  
= ISO 9001 = ISO 14001 =



### HOW TO GENERATE A MODEL?

Example:	Product series				
DPT-2W-2500-R8-D	DPT	Differential pressure transmitter			
		Model type			
		-2W	2-wire configuration		
			Highest available measurement range		
		-2500	0...2500 Pa		
			Model type		
		-R8	Eight measurement ranges		
			Display		
		-D	With display		
			Without display		
Model	DPT	-2W	-2500	-R8	-D