

# 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
- Flow linear output (-Q)

The versatility of the DPT-2W series differential pressure transmitters ensures that the right product for your application is available.



### 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

	DPT-2W	
Measurement ranges (Pa) (field selectable via jumper)	±100, 100, 250, 500 Pa 1000, 1500, 2000, 2500 Pa	
Description	Model	Product code
Multi-range differential pressure transmitter	DPT-2W-2500-R8	104.007.005
-with display	DPT-2W-2500-R8-D	104.007.006
-with flow linear output	DPT-2W-2500-R8-Q	104.007.007
-with display and flow linear output	DPT-2W-2500-R8-D-Q	104.007.008

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### 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  
 Input: 10–35 VDC  
 Input (Current): 32 mA maximum  
 Output: 4–20 mA loop  
 Maximum load =  $\frac{\text{Supply} - 10 \text{ V}}{0,020 \text{ A}}$   
 Power consumption: <1.2 W

#### Conformance

Meets requirements for CE marking:  
 EMC Directive 2014/30/EU  
 RoHS Directive 2002/95/EC



### How to generate a model?

Example: DPT-2W-2500-R8-D	Product series					
	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		
				Output option		
				-Q	With flow linear output	
					Standard with pressure linear output	
Model	DPT	-2W	-2500	-R8	-D	