

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

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 mm²)

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