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
Enviroment:
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^2)
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 = $\frac{\text{Supply - 10 V}}{\text{0,020 A}}$

Conformance

Meets requirements for CE marking:
EMC Directive 2004/108/EC
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	