

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

	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

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

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