# HK INSTRUMENTS USER-FRIENDLY MEASURING DEVICES

# DIFFERENTIAL PRESSURE TRANSMITTERS DPT-2W SERIES

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

5 YEAR WARRANTY



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 bidirectional, 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		
<b>Measurement ranges (Pa)</b> (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 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 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  $\pm 0.08$  mA

 Maximum load =
 Supply - 10 V

 0,020 A

 Minimum load: 20  $\Omega$ 

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?**

	-	_	-			
Product series						
DPT	Differential pressure transmitter					
	Model typ	ре				
			2-wire configuration			
	Highest available measurement range					
		-2500	2500 02500 Pa			
		Model t	Model type			
			-R8	Eight measurement ranges		
		Display				
			-D	With display		
					Without display	
DPT	-2W	-2500	-R8	-D		
	Product series DPT DPT	Product series       DPT     Differenti       Model typ     -2W       -2W     -2W	Product series         DPT       Differential pressure         Model type       -2W         -2W       2-wire co         Highest a       -2500         DPT       -2W       -2500	Product series         DPT       Differential pressure transmitter         Model type         -2W       2-wire configuration         Highest available m         -2W       2-sine configuration         Highest available m         -2500       02500         Model to         -2W       -2500      2500         DPT       -2W       -2500      8	Product series         DPT       Differential pressure transmitter         Model type         -2W       2-wire configuration         Highest available measureme         -2500       02500 Pa         Model type         -2500       02500 Pa         Model type         -28W       -2500       02500 Pa         Dept       -2W         DPT       -2W       -2500       -R8       Eight model type         DPT       -2W       -2500       -R8       -D	