DPT-2W - 2-wire differential pressure transmitter

DPT-2W 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 measurement range.

DPT-2W devices include:

- 8 field selectable measurement ranges, unidirectional or bidirectional, selectable with jumpers
- Pressure measurement (Pa)
- 4...20 mA 2-wire current loop connection

Device options:

- Display (-D models)

Applications

DPT-2W 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

Similar products

- DPT-R8 differential pressure transmitters with 8 ranges
- DPT-MOD differential pressure transmitters with Modbus configuration
- DPI electronic differential pressure switches
- PS mechanical differential pressure switches
- DPT-Flow air flow meters
- AVT air velocity meters

Model summary

	Model	Product number	Description
	DPT-2W-250-R8	104.004.008	2-wire differential pressure transmitter, 0...250 Pa

	Model	Product number	Description
	DPT-2W-250-R8-D	104.004.009	2-wire differential pressure transmitter with display, 0...250 Pa
	DPT-2W-2500-R8	104.007.005	2-wire differential pressure transmitter, 0...2500 Pa
	DPT-2W-2500-R8-D	104.007.006	2-wire differential pressure transmitter with display, 0...2500 Pa
	DPT-2W-7000-R8	104.015.004	2-wire differential pressure transmitter, 0...7000 Pa
	DPT-2W-7000-R8-D	104.015.002	2-wire differential pressure transmitter with display, 0...7000 Pa

Technical specifications

Property	Value
Supply	10...35 Vdc
Pressure measurement ranges	
-250 models	±25 / ±50 / ±100 / ±150 / 0...25 / 0...50 / 0...100 / *0...250 Pa
-2500 models	±100 / 0...100 / 0...250 / 0...500 / 0...1000 / 0...1500 / 0...2000 / *0...2500 Pa
-7000 models	0...750 / 0...1000 / 0...1250 / 0...2250 / 0...2500 / 0...3750 / 0...5000 / *0...7000 Pa
Accuracy (temperature compensated)	±1.5 % + 2 Pa from value
Overpressure	
Proof pressure	25 kPa
Burst pressure	30 kPa
Long term stability	
-250 and -2500 models	typ. -8…8 Pa / year
-7000 models	typ. -22…22 Pa / year
Response time	*0.8 s / 4 s
Zeroing	Manually by push button
Sensor	MEMS, no flow-through
Output	
Signal	4...20 mA, >20 Ω
Accuracy	typ. ±0.04 mA at 25 °C, load 100 Ω
Display (-D models)	3 1/2 digit display
Operating conditions	
Temperature	-10...50 °C
Humidity	0...95 %rH (non-condensing)
Wire	0.2...1.5 mm^2 (24...16 AWG)
Housing	
Materials	ABS and PC plastic
Protection class	IP54

Property	Value	
Cable gland	M16	
Mounting	2 x Ø4.3 mm screw holes, one slotted	
Dimensions (w x h x d)	90 x 95 x 36 mm	
Weight	150 g	
Storage temperature	-40...70 °C	
Conformance	CE	UKCA
EMC	2014/30/EU	S.I. 2016 No. 1091
RoHS	2011/65/EU	S.I. 2012 No. 3032
WEEE	2012/19/EU	S.I. 2013 No. 3113
	* factory setting	