

DIFFERENTIAL PRESSURE TRANSMITTERS DPT-DUAL SERIES

Field adjustable, multi-range differential pressure transmitter with two pressure sensors for air



DPT-Dual series differential pressure transmitters are engineered for building automation in the HVAC/R industry. Technologically advanced transmitter, measuring static and differential pressure from two different points, with field selectable units, range and output, all in a single device.

DPT-Dual series devices include:

- Multiple measurement units, field selectable via jumper, including: Pa, kPa, mbar, inchWC, mmWC.
- 8 field selectable measurement ranges, unidirectional or bi-directional, selectable via jumper (see Model Summary).
- Proportional output options including: voltage (2x 0...5/10 V), selectable via jumper.



DPT-Dual series device options offer:

- Backlit display

SIMILAR PRODUCTS

- DPT-2W series differential pressure transmitters with 4–20 mA 2-wire configuration
- 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 airflow transmitters

APPLICATIONS

DPT-Dual series devices are commonly used in HVAC/R systems for:

- fan, blower and filter monitoring
- pressure and flow monitoring
- valve and damper control

MODEL SUMMARY

Measurement ranges (Pa) (field selectable via jumper) (For optional units, see Specifications)	DPT-Dual-2500 ±100, 100, 250, 500 Pa 1000, 1500, 2000, 2500 Pa	DPT-Dual-7000 1000, 1500, 2000, 2500 Pa 3000, 4000, 5000, 7000 Pa
Description	Model	Model
Multi-range differential pressure transmitter with two pressure sensors	DPT-Dual-2500	DPT-Dual-7000
- with display	DPT-Dual-2500-D	DPT-Dual-7000-D

DIFFERENTIAL PRESSURE TRANSMITTERS

DPT-DUAL SERIES

SPECIFICATIONS

Performance

Accuracy (from applied pressure):

Model 2500:

Pressure < 125 Pa = 1 % + ± 2 Pa

Pressure > 125 Pa = 1 % + ± 1 Pa

Model 7000:

Pressure < 125 Pa = 1.5 % + ± 2 Pa

Pressure > 125 Pa = 1.5 % + ± 1 Pa

(including: general accuracy, linearity, hysteresis, long term stability, and repetition error)

Overpressure:

Proof pressure: 25 kPa

Burst pressure: 30 kPa

Zero point calibration:

Manual pushbutton

Response time:

4.0 s or 0.8 s, selectable via jumper

Technical Specifications

Media compatibility:

Dry air or non-aggressive gases

Measuring units:

Pa, kPa, mbar, inchWC, mmWC, selectable via jumper

Measuring element:

MEMS, no flow-through

Environment:

Operating temperature: -20...+50 °C

Temperature compensated range 0...+50°C

Storage temperature: -40...+70 °C

Humidity: 0 to 95 % rH, non condensing

Physical

Dimensions:

Case: 102.0 x 71.5 x 36.0 mm

Weight:

150 g, with accessories 290 g

Mounting:

2 each 4.3 mm screw holes, one slotted

Materials:

Case: ABS

Lid: PC

Pressure inlets: Brass

Duct connectors: ABS

Tubing: PVC

Protection standard:

IP54

Display (Optional)

2-line display (12 characters/line)

Line 1: active measurement, inlet A

Line 2: active measurement, inlet B

Electrical connections:

4 spring loaded terminals, max 1.5 mm²

Wire: 0.2-1.5 mm² (12-24 AWG)

Cable entry: M20

Pressure fittings:

Male \varnothing 5.0 mm and 6.3 mm

Electrical

Voltage:

Circuit: 3-wire (V Out, 24 V, GND)

Input: 24 VAC or VDC, ± 10 %

Output: 2x 0...5/10V (selectable via jumper)

Power consumption: <1.0 W

Resistance minimum: 1 k Ω

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-Dual-2500-D	DPT-Dual	Differential pressure transmitter with two pressure sensors	
		Highest available measurement range		
		-2500	0...2500 Pa	
		-7000	0...7000 Pa	
			Display	
		-D	With display	
			Without display	
Model	DPT-Dual	-2500	-D	