

DIFFERENTIAL PRESSURE TRANSMITTER DPT1000E / DPT5KE



Model summary

Each device has 2 jumper selectable measuring ranges. Each device is individually temperature compensated.

2 range model <i>- E for economic model</i> <i>- AZ for auto zero element</i> <i>- D for display</i>	Measuring range 1	Measuring range 2	Accuracy %/FS *) within operation temp. -10...+50°C range 1 and range 2	Long term stability <i>typical 1 year</i>
DPT1000E-AZ (-D)	0...500 Pa	0...1000 Pa	± 3%	≤ ± 1 Pa
DPT5KE-AZ (-D)	0...2500 Pa	0...5000 Pa	± 3%	≤ ± 1 Pa

*) %/FS from highest pressure range (including general accuracy, temperature drift, linearity, hysteresis and repetition error)

The DPT models "E" come always with auto zero element (-AZ).

The Differential Pressure Transmitter is delivered individually packed with standard accessories (see accessories).

Accessories

Standard accessories:

- 2 fixing screws
- 2 plastic duct connectors
- 2 m tube Ø 4 / 7 mm

Optional accessories:

- Metallic duct connectors

Technical data

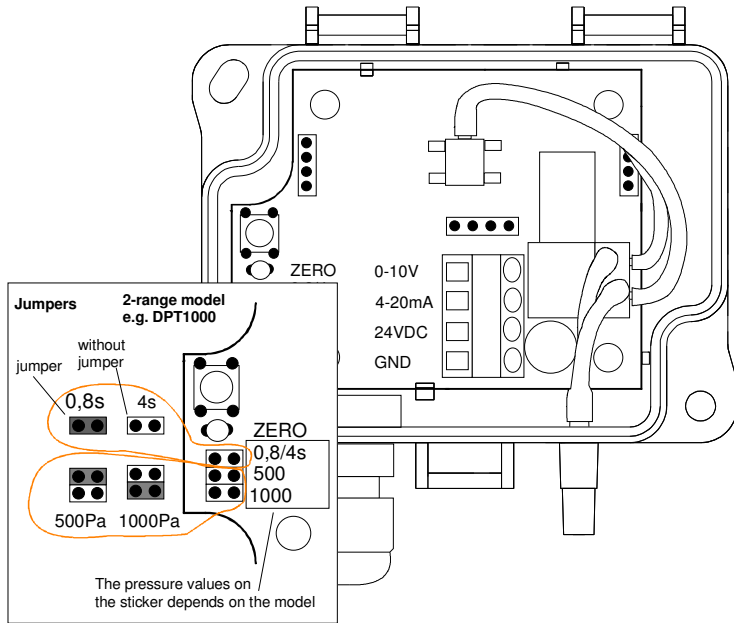
Response Time	0.8 / 4 s selectable by jumper	
Max. pressure	25 kPa	
Bursting pressure	50 kPa	
Suitable media	Air and non-aggressive gases and non-aggressive liquids (level detector).	
Measuring element	Piezoresistive	
Electrical interface (3-wire)	Supply voltage	24 VAC or VDC
	Max. tolerance	± 10%
	Power consumption	< 1.0 W (<1.5W with Iout 20mA)
	Output signal	0...10 VDC, Load R minimum 1kΩ or 4...20 mA, maximum load 500Ω
Materials	Housing	ABS
	Cover	ABS
	Pressure connections	ABS
	Duct connectors	ABS
	Tubing	PVC, soft
Connections	Electrical connections	4 screw terminals, max 1.5 mm ²
	Cable entry	M16
	Pressure connections	Male Ø 5,0 mm and 6,3 mm
Weight	150 grams, with accessories 290 grams	
Dimensions	90,0 x 71,5 x 36,0 mm	
General ambient conditions	Temperature range	
	Operation	-10...+50°C (-5...+50°C for -AZ model)
	Storage	-20...+70°C
	Ambient humidity	0 to 95% RH
Safety	Protection standard	IP54
	Conformance	Meets the requirements for CE marking: EMC directive 89/336/EEC Rohs Directive 2002/95/EY

Auto zero element

Auto zero element makes the DPT E transmitter maintenance free for periodical push button zeroing. Element automatically adjusts the transmitters zero point from time to time, this eliminates the zero point long term drift of the piezoresistive sensing element.

Zero point adjustment is carried out every 10 minutes. During zero point adjustment the output and display values will freeze to the latest measured value. The automatic zero point adjustment takes 4 seconds.

Installation



Electrical Connection:
0-10V Output 0...10 V
4-20mA Output 4...20 mA
24V Supply 24 VAC or VDC
GND Ground

Push button for zero
Zero: Push button zero

Dimensions

