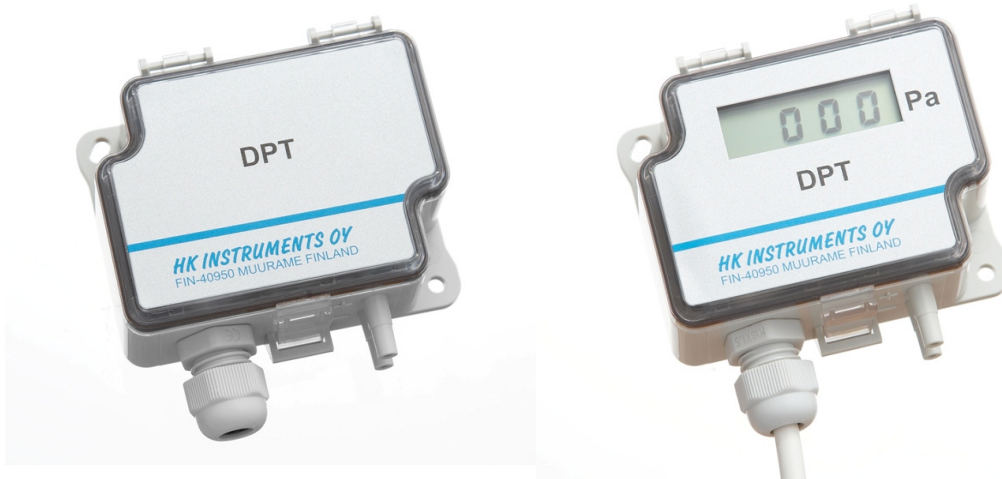


DIFFERENTIAL PRESSURE TRANSMITTER DPT-3wire



Model summary

Each device has 2 or 4 jumper selectable measuring ranges. Each device is individually temperature compensated.

2 range model - D for display - AZ for autozero element* - Q for square root output	Measuring range 1	Measuring range 2	Accuracy %/FS **) over operation temp. -10...+50°C range 1 and range 2	Long term stability typical 1 year	
				-AZ	without -AZ
DPT100 (-D -AZ -Q)	0...50 Pa	0...100 Pa	± 3%	≤ ± 1 Pa	≤ ± 8 Pa *)
DPT±100 (-D -AZ -Q)	-50...+50 Pa	-100...+100 Pa	± 1,5%	≤ ± 1 Pa	≤ ± 8 Pa *)
DPT250 (-D -AZ -Q)	0...100 Pa	0...250 Pa	± 1,5%	≤ ± 1 Pa	≤ ± 8 Pa *)
DPT500 (-D -AZ -Q)	0...250 Pa	0...500 Pa	± 1,5%	≤ ± 1 Pa	≤ ± 8 Pa
DPT1000 (-D -AZ -Q)	0...500 Pa	0...1000 Pa	± 1,5%	≤ ± 1 Pa	≤ ± 8 Pa
DPT2,5K (-D -AZ -Q)	0...1500 Pa	0...2500 Pa	± 1,5%	≤ ± 1 Pa	≤ ± 24 Pa
DPT5K (-D -AZ -Q)	0...2500 Pa	0...5000 Pa	± 1,5%	≤ ± 1 Pa	≤ ± 24 Pa

4 range model - R4 for 4 measuring range - D for display - AZ for autozero element* - Q for square root output	range 1	range 2	range 3	range 4	Accuracy %/FS **) over operation temp. -10...+50°C range 1...4	Long term stability typical 1 year	
						-AZ	without -AZ
DPT1000 -R4 (-D -AZ -Q)	250Pa	500 Pa	750 Pa	1000Pa	± 1,5%	≤ ± 1 Pa	≤ ± 8 Pa
DPT3000 -R4 (-D -AZ -Q)	750Pa	1500Pa	2250Pa	3000Pa	± 1,5%	≤ ± 1 Pa	≤ ± 24 Pa
DPT5000 -R4 (-D -AZ -Q)	1250Pa	2500Pa	3750Pa	5000Pa	± 1,5%	≤ ± 1 Pa	≤ ± 24 Pa

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

*) -AZ model recommended

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

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	
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 condition	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

Accessories

Standard accessories:

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

Optional accessories:

- Metallic duct connectors

Zero-point adjustment

Note! Supply voltage must be connected one hour before the 0-point adjustment is carried out.

- 1) Loose both tubes from the pressure inlets + and –
- 2) Push zero button until the red led turns ON.
- 3) Wait until LED turns off and then install tubes again to the pressure inlets

It is recommended to adjust the zero point every 12 months during normal operation

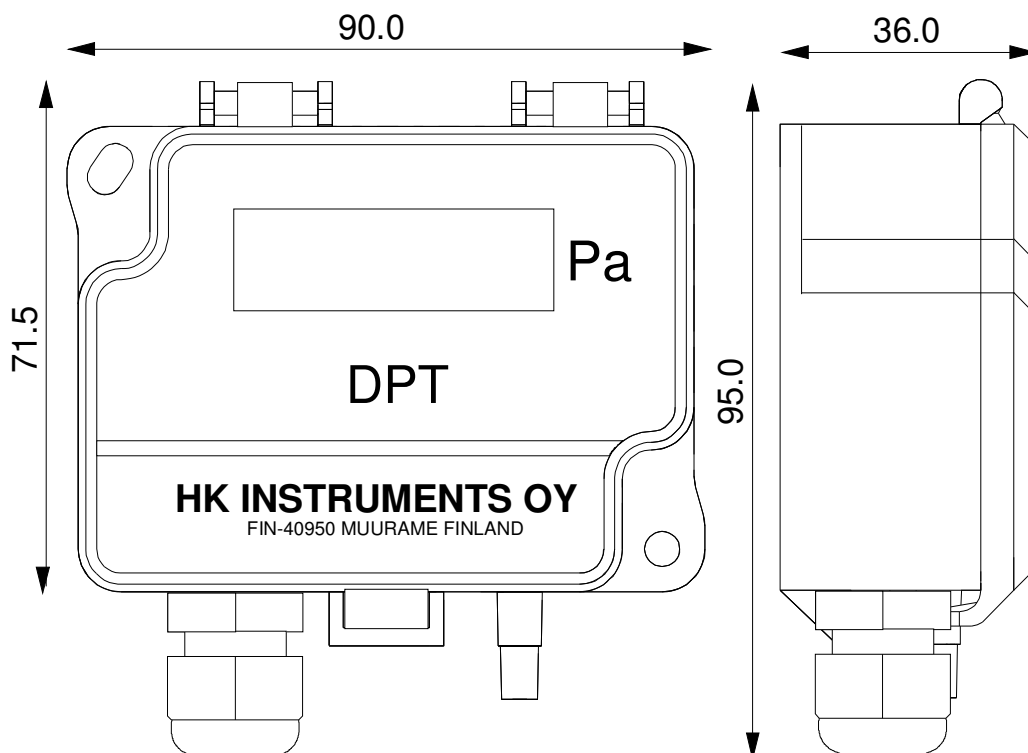
* If the transmitter is equipped with automatic zero element the manual push button adjustment is not required.

Optional auto zero element *

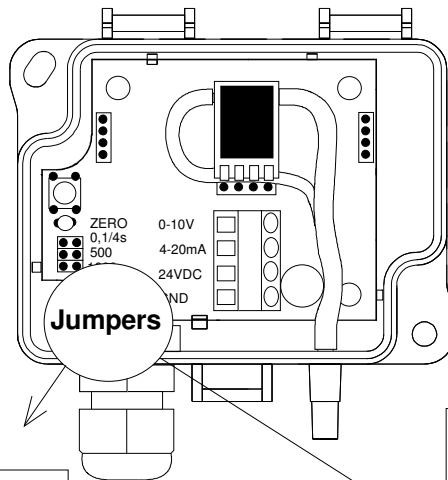
Optional auto zero element makes the DPT transmitter maintenance free for periodical push button zeroing. Element automatically adjusts the transmitters zero point from time to time, this eliminates the zero point long term drift of the piezoresistive sensing element.

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.

Dimensions



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

