# HK INSTRUMENTS 1td

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### **DIFFERENTIAL PRESSURE TRANSMITTER DPT-2wire**





### **Model summary**

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

| 2 range model - D for display - Q for square root output | Measuring range 1 | Measuring range 2 | Accuracy %/FS **) over operation temp10+50°C range 1 and range 2 | Long term stability<br>typical 1 year |
|--|-------------------|-------------------|--|---------------------------------------|
| DPT100-2W (-D -Q)  | 050 Pa            | 0100 Pa           | ± 3%   | ≤ ± 3 Pa                              |
| DPT±100-2W (-D -Q)                                       | -50+50 Pa         | -100+100 Pa       | ± 1,5%   | ≤ ± 3 Pa                              |
| DPT250-2W (-D -Q)  | 0100 Pa           | 0250 Pa           | ± 1,5%   | ≤ ± 3 Pa                              |
| DPT500-2W (-D -Q)  | 0250 Pa           | 0500 Pa           | ± 1,5%   | ≤ ± 8 Pa                              |
| DPT1000-2W (-D -Q)                                       | 0500 Pa           | 01000 Pa          | ± 1,5%   | ≤ ± 8 Pa                              |
| DPT2,5K-2W (-D -Q)                                       | 01500 Pa          | 02500 Pa          | ± 1,5%   | ≤ ± 24 Pa                             |
| DPT5K-2W (-D -Q)   | 02500 Pa          | 05000 Pa          | ± 1,5%   | ≤ ± 24 Pa                             |

| 4 range model - R4 for 4 measuring range - D for display - Q for square root output | range<br>1 | range<br>2 | range<br>3 | range<br>4 | Accuracy %/FS **) over operation temp10+50°C range 14 | Long term stability<br>typical 1 year |
|---|------------|------------|------------|------------|---|---------------------------------------|
| DPT1000-2W-R4 (-D -Q)   | 250Pa      | 500 Pa     | 750 Pa     | 1000Pa     | ± 1,5%  | ≤ ± 8 Pa                              |
| DPT3000-2W-R4 (-D -Q))  | 750Pa      | 1500Pa     | 2250Pa     | 3000Pa     | ± 1,5%  | ≤ ± 24 Pa                             |
| DPT5000-2W-R4 (-D -Q)   | 1250Pa     | 2500Pa     | 3750Pa     | 5000Pa     | ± 1,5%  | ≤ ± 24 Pa                             |

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

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

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### **Technical data**

**Response Time** 0.8 / 4 s selectable by jumper

25 kPa Max. pressure **Bursting pressure** 50 kPa

Suitable media Air and non-aggressive gases

**Measuring element** Piezoresistive

**Electrical interface** 

(2-wire)

Supply voltage 10...35 V DC Max. supply current 32 mA Output signal 4...20 mA 32 mA Max. output current

Supply - 10VMaximum load 0,020A

**Materials** 

Housing **ABS** Cover Pressure connections **ABS** Duct connectors **ABS** Tubing PVC, soft

**Connections** Electrical connections 2 screw terminals, max 1,5 mm<sup>2</sup>

Cable entry

Pressure connections Male  $\varnothing$  5,0 mm and 6,3 mm

M16

**ABS** 

**General ambient conditions** Temperature range

> -10...+50°C Operation Storage -20...+70°C 0 to 95% RH Ambient humidity

Weight 150 grams, with accessories 290 grams

**Dimensions** 90,0 x 71,5 x 36,0 mm

**Safety** Protection standard IP54

> Meets the requirements for CE marking: Conformance

EMC directive 89/336/EEC Rohs Directive 2002/95/EY

#### **Accessories** Standard accessories:

2 fixing screws

2 plastic duct connectors 2 m tube  $\varnothing$  4 / 7 mm

### Optional accessories:

Metallic duct connectors

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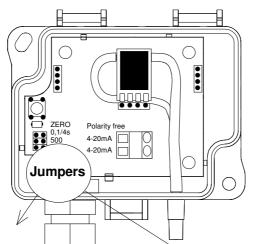
### **Zero-point adjustment**

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.

### **Installation**



#### **Electrical Connection:**

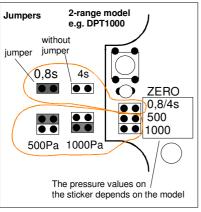
Polarity free power supply

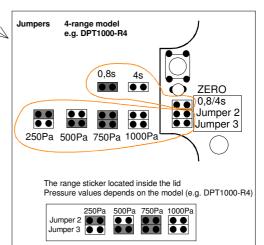
1 Current loop + or -

2 Current loop + or -

#### **Push button for zero**

Zero: Push button zero





## HK INSTRUMENTS M

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### **Dimensions**

