

DIFFERENTIAL PRESSURE TRANSMITTER DPT-3wire EIGHT RANGE MODEL



Model summary

Each device has 8 jumper selectable measuring ranges. Each device is individually temperature compensated.

Model: **DPT2500 - R8 (-D -AZ)**
 DPT7000 - R8 (-D -AZ)

- R8 for 8 measuring range
- D for display
- AZ for autozero element

long term stability typical 1 year
≤ ± 1 Pa with AZ,
≤ ± 8 Pa without AZ; model 2500
≤ ± 24 Pa without AZ; model 7000

Model 2500	Model 7000
-100...+100 Pa	0...1000 Pa
0...100 Pa	0...1500 Pa
0...250 Pa	0...2000 Pa
0...500 Pa	0...2500 Pa
0...1000 Pa	0...3000 Pa
0...1500 Pa	0...4000 Pa
0...2000 Pa	0...5000 Pa
0...2500 Pa	0...7000 Pa

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

For pricing information contact Omni Instruments by phone on +44 845 9000 601 or via email at info@omni.uk.com

Technical data

Response Time	0.8 / 4 s selectable by push button (see instructions below)	
Bursting pressure	30 kPa (model 2500) 80 kPa (Model 7000)	
Suitable media	Air and non-aggressive gases	
Measuring element	Piezoresistive	
Accuracy from range	±1,5% or (±6Pa <250 Pa) (including: general accuracy, temperature drift, linearity, hysteresis and repetition error)	
Electrical interface	Supply voltage 24 VAC or VDC	
(3-wire)	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	PC
	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

For pricing information contact Omni Instruments by phone on +44 845 9000 601 or via email at info@omni.uk.com

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 > 4 seconds and 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

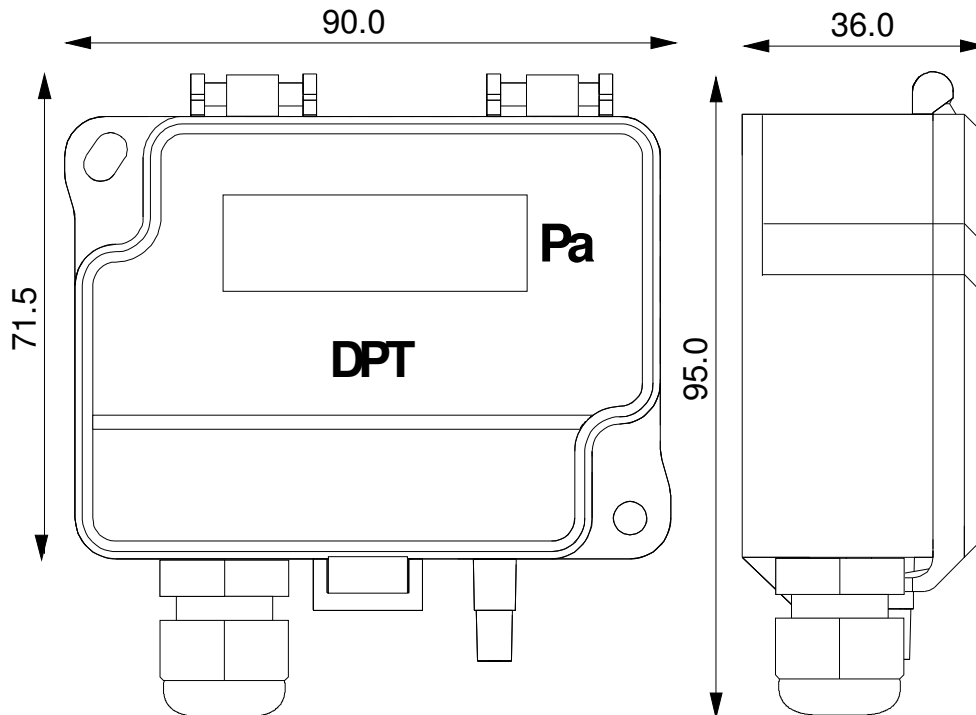
* If the transmitter is equipped with automatic zero element the manual push button adjustment is not required.

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.

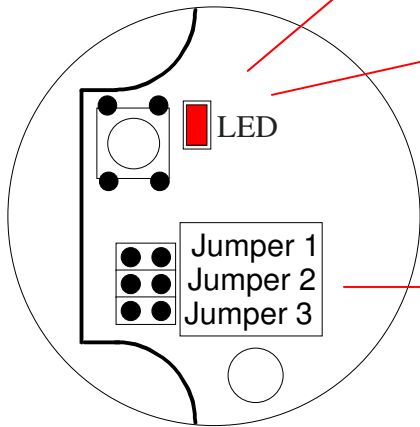
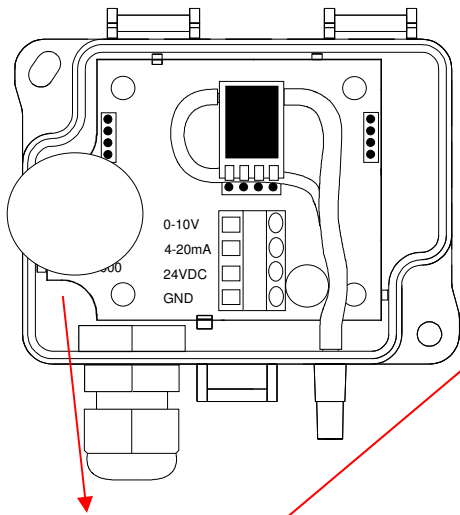
Zero point adjustment is carried out every 10 minutes. During zero point adjustment the output and display values will freeze to the latest measured value. The automatic zero point adjustment takes 4 seconds.

Dimensions

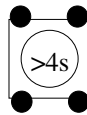


For pricing information contact Omni Instruments by phone on +44 845 9000 601 or via email at info@omni.uk.com

Installation

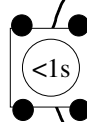


ZEROING: press the button over 4 seconds

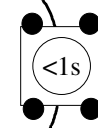


LED: long blink...
Zeroing

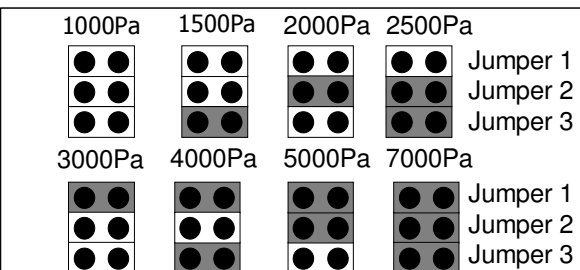
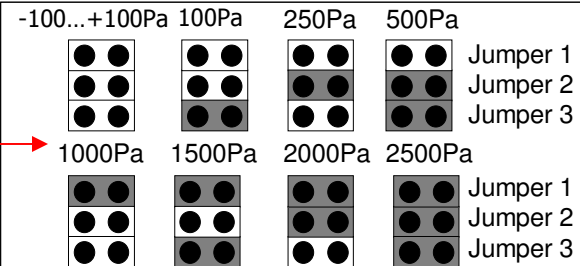
RESPONSE TIME CHANGE: press the button shortly



LED: 3 x short blink means
0,8s selected



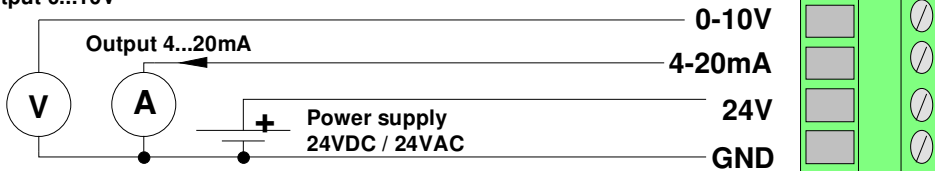
LED 2 x long blink means
4s selected



Electrical Connection:

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

Output 0...10V



For pricing information contact Omni Instruments by phone on +44 845 9000 601 or via email at info@omni.uk.com