



DTL10/10(-D)

Differential pressure transmitter for air

Transmitter for differential pressure measurement of air and non-corrosive gases in air handling units, etc. A common application area is pressure control in ventilation systems.

The transmitter consists of a plastic sensor housing and a silicone LSR membrane. The differential pressure affects the membrane which is connected to the sensor element. The sensor element consists of a ceramic beam with thick film resistors. The properties of the ceramic material ensure that the transmitter has excellent long-term stability while simultaneously providing quick response times and good accuracy.

Display

The front of DTL10/10-D has an LCD display, showing the current pressure.

Mounting

The transmitter is normally mounted vertically with screws using the mounting holes in the back edge of the unit. There are also two mounting holes in the upper side of the sensor housing.

Connection set

A connection set consisting of tubing and pressure outlets can be ordered as an accessory to the transmitter. See overleaf.

Short facts about DTL10/10(-D)

- Output signal 0...10 V (settable to 4...20 mA for models with display)
- Quick mounting helps save time
- High level of accuracy and stability
- With or without display

DIP-switches

Models without a display have two DIP-switches which can be used for scalable pressure range setting.

Models with display have ten DIP-switches which can be used for scalable pressure range setting (proportional adjustment using a potentiometer), pressure units, pressure range characteristics, output signals, response curve (linear/root calculated) and display backlighting (off/5 min/on).

Models

Model	Display	Output signal
DTL10/10	-	0...10 V DC
DTL10/10-D	X	0...10 V DC (settable to 4...20 mA via DIP-switch)

Accessories

Connection set	Mounting kit with 2 m plastic tubing and 2 pressure outlets.
DTV connection	Metal pressure connecting nipple, 90° angle
Connection tube	Ø 6,2 mm, pressure outlet on P1 and P2

Technical data

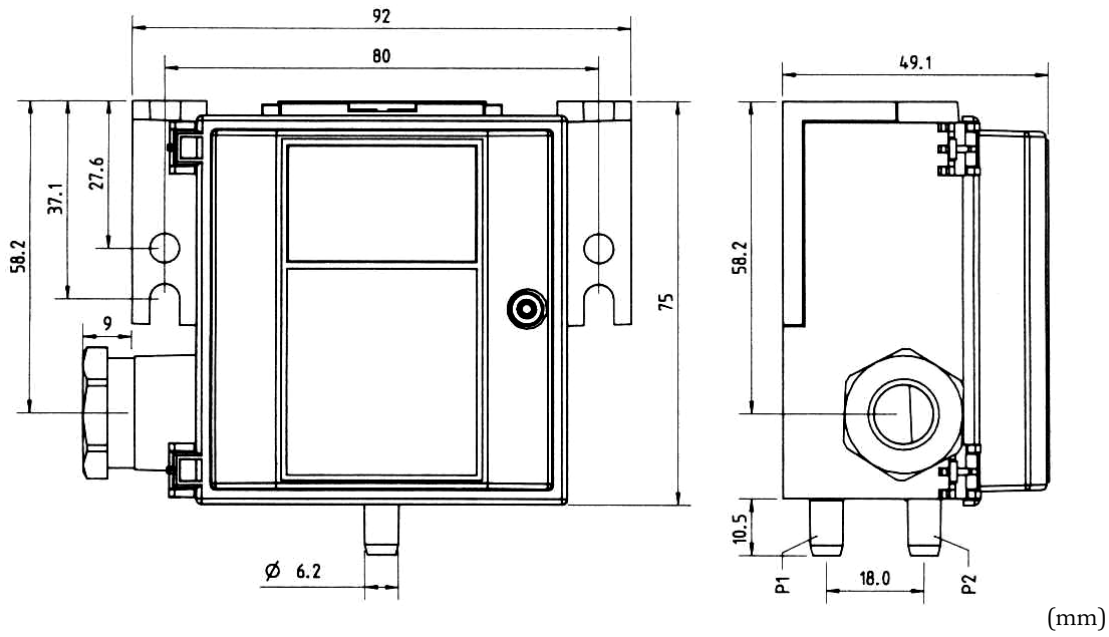
Supply voltage	24 V AC +15/-10 % or 18...33 V DC. (4...20 mA only 18...33 V DC)
Power consumption	10 mA (0...10 V), 20 mA (4...20 mA)
Measuring range	-100...100 Pa
Load impedance	> 10 kOhm (0...10 V)
Pressure connections	Nipples for 6,2 mm tubing
Cable connection	Screw connector. PG11-inlet
Cabling	Three-wire. A flexible cable is recommended.
Mounting position	The transmitter is mounted vertically on a wall or similar with the pressure connections pointing down.
Material	
sensor housing	Transparent plastic
membrane	LSR (silicone)
Protection class	IP54
Weight	0.1 kg
Accuracy	
linearity	< ±0.7 % fs
hysteresis	< ±1.0 % fs
Temperature dependency	< 0.04 % fs /°C (fs = fullscale measurement range of transmitter)
Ambient temperature	0...+70°C
Storage temperature	-10...+70°C
Dynamic response time	< 10 ms



EMC emissions & immunity standards: This product conforms to the requirements of the EMC Directive 2014/30/EU through product standard EN61326-2-3.

RoHS: This product conforms to the Directive 2011/65/EU of the European Parliament and of the Council.

Dimensions



(P1 and P2 = Pressure ports 1 and 2)

Wiring

DTL 0...10 V

- + Supply voltage 24 V AC / 18...33 V DC
- ↗ Output signal 0...10 V DC
- 0 System neutral

DTL 4-20 mA (two-wire connection)

- + Supply voltage 18...33 V DC
- ↗ Output signal 4...20 mA
- 0 Not connected

Head office Sweden

Phone: +46 31 720 02 00

Web: www.regincontrols.com

Mail: info@regin.se