DTL04

Calorimetric Compact Flow Sensor for Air -Switching Output-

- **relay or transistor output**
- **measuring range: 0,1...15 m/s**
- **max. pressure: 10 bar**
- **max. temperature: 80 °C**
- **insignificant pressure loss**
- **no moving parts**
- **independent of nominal sizes, pressure and temperature**

Description:

The air flow sensor operate according to the proven calorimetric principle. A temperature-independent resistor at the sensor tip is electronically heated. The flowing air withdraws heat from it, which changes the resistance value. A second unheated resistor is used to measure the medium temperature.
The temperature difference of both resistors is proportional to the flow velocity and thus to the volume flow. The switching point of the DTL04 is easily adjusted by an built-in potentiometer.

Typical applications:

The DTL04 calorimetric flow sensors are characterised by their particularly good price-performance ratio. The devices are used wherever laminar air flows have to be monitored: For example in building services engineering, exhaust and supply air control, filter monitoring, compressor monitoring, leakage monitoring, cooling circuits etc.

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Models:

DTL04.R...	1 relay output
DTL04.T...	1 transistor output

Technical Data:

Measuring range	0,1...15 m/s
Relay output	1 N/O
current / capacity:	250 VAC, 5 A, 1,2 kVA
min. switching capacity:	10 mA, 5 VDC
function at flow:	relay picks up
display at flow:	yellow LED
Transistor output:	PNP, max. 150 mA
display at flow:	yellow LED
Operating voltage:	24 VAC/DC, +/- 5%
Power input:	1 VA
Temperature range:	
Environment:	–20 … +60 °C
Medium:	–10 … +80 °C
Temperature gradient:	15 K/min (optional 30 K/min)
Compression strength:	10 bar
Process connection:	PG 7 mounting flange G ½ reduction
Immersion depth:	50 mm 140 mm (optional)
Sensor material:	MS58 nickel plated (optional stainless steel)
Protection cl. (housing):	IP65
Protection cl. (sensor):	IP67
Accuracy*:	+/- 5 % F.S.
Reproducibility of the output signal:	+/- 3 %

* reference conditions: 20 °C, 48 % RH, 1016 mbar

Order Code:

Order number:	**DTL04.**	**R.**	**15.**	**1.**	**K.**	**0**

Calorimetric compact flow sensor for air – switching output-

Models:
R = relay output
T = transistor output

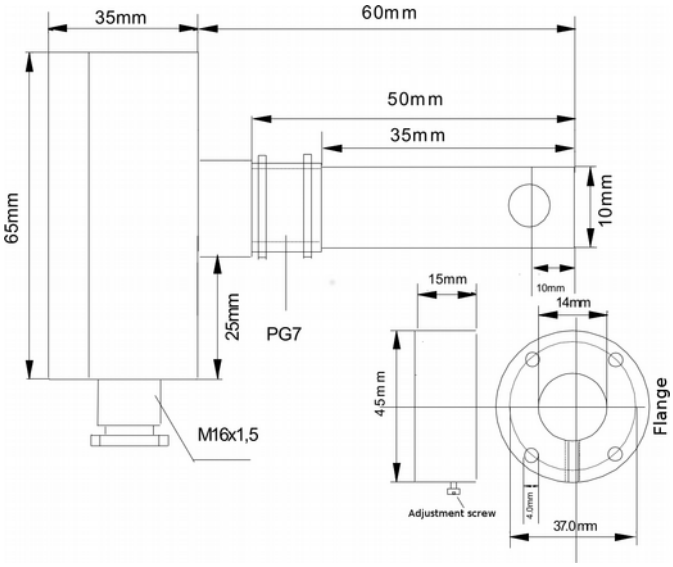
Measuring range:
15 = 0,1...15 m/s

Process connection:
1 = PG7 thread (standard)
2 = mounting flange
3 = G ½ reduction

Immersion depth:
K = ca. 50 mm (standard)
L = ca. 140 mm

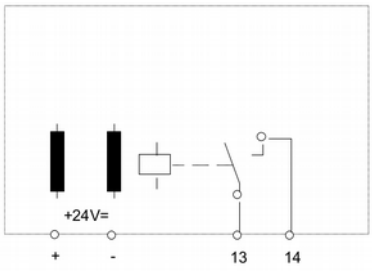
Options:
0 = without
9 = please specify in plain text

Dimensions:

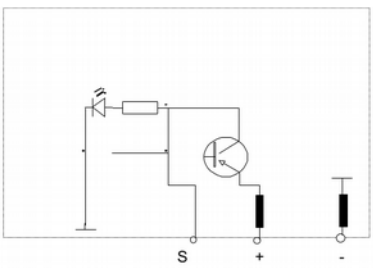


Electrical connection:

Relay:



Transistor:



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