# DTL06

## Calorimetric Flow Sensor for Air -Analogue Output-


- **analogue output 0...10 V**
- **measuring range: 0,1...30 m/s**
- **max. pressure: 10 bar**
- **max. temperature: 70 °C**
- **negligible pressure loss**
- **no moving parts**
- **independent of nominal diameter, pressure and temperature**

**Description:**

The air flow meters work according to the proven aclorimetric principle. A temperature-independent resistance 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 between the two resistances is proportional to the flow velocity and thus to the volume flow. The measured values of the DTL06 can be read off analogously by a voltage signal, which is simply set on site via a built-in potentiometer.

**Typical applications:**

The DTL06 calorimetric flowmeters are characterized by their particularly good price-perfomance ratio. The devices are used wherever laminar air flows have to be measured or monitored: For example in building services engineering, air supply, compressor monitoring, consumption measurement, leakage monitoring, cooling circuits, etc.

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## Models:

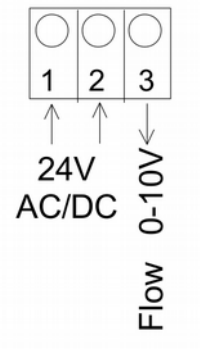
**DTL06.A...** Linear analogue output for flow

## Technical Data:

| | |
|---|---|
| **Measuring range:** | 0…30 m/s |
| **Analogue output:** | 0...10 V, (Ra = 10 kOhm) adjustable via potentiometer |
| **Accuracy of the output signal:** | +/- 10 % of measured value |
| **Reproducibility of the output signal:** | +/- 2 % of FS |
| **Operating voltage:** | 24 VAC/DC, +/- 5% |
| **Signal display operating voltage:** | green LED |
| **Power consumption max.** | 2 VA |
| **Temperature range:** | |
| **ambient** | –20 … +60 °C |
| **medium** | 0 … +70 °C |
| **Temperature gradient:** | 15 K/min |
| **Compression strength:** | 10 bar |
| **Process connection:** | PG 7<br>mounting flange<br>G ½ reduction |
| **Immersion depth:** | 130 mm |
| **Sensor material:** | brass 58 nickel plated |
| **Connection:** | 3 clamps, 2,5 mm² |
| **Protection class housing:** | IP54 |
| **Protection class sensor:** | IP67 |

* Reference conditions: 20 °C, 48 % r.h., 1016 mbar

## Electrical Connection:




## Order Code:

| **Order number:** | **DTL06.** | **A.** | **30.** | **1.** | **0** |
|---|---|---|---|---|---|

**Calorimetric flow sensor for air -analogue output-**

**Model:**
A = analogue output 0...10 V

**Measuring range:**
30 = 0,1…30 m/s

**Process connection:**
1 = PG7 thread
2 = mounting flange
3 = G ½ reduction

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

## Dimensions: