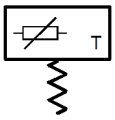
EGT 361...466: Average temperature sensor



EGT36* F101
EGT466 F101



How energy efficiency is improved

Precise determination of the mean temperature in air ducts

Features

- Passive measuring element
- Active along the entire length
- Measuring range: -30...70 °C
- Measuring element: nickel wire, with EGT 361/466 thin-film sensors are distributed over the entire length
- Copper conductors with plastic sheathing
- Connection via 2, 3 or 4 cables in connection box
- Scope of delivery: sensor, holder, connenction box, screws, cable bushing and installation instructions

Technical data

Power supply		
	Recommended measuring current	ca. 1mA
	Time constant in moving air (1 m/s)	30s (t_{50})
	Test voltage	1000 V=
Ambient conditions		
	Max. permissible operating pressure	50 mbar
	Permissible ambient temperature	–40...80 °C
Construction		
	Housing material	Polypropylen
	Connection cable	Length 0,5 m / 2 x 0,75 mm²
Standards and directives		
	Type of protection (connection box)	IP54 (EN 60529)
CE conformity according to	EMC Directive 2014/30/EU	EN 60730-1

Resistance values / characteristics

ℹ *The tolerance listed below applies only to the corresponding measuring element. The accuracy of the sensor depends on the cable length and the measuring element used.*

Measuring element	Standards	Nominal value at 0 °C	Tolerance at 0 °C
Ni1000	DIN 43760	1000 Ω	±0,4 K
Pt1000	DIN EN 60751	1000 Ω	±0,3 K

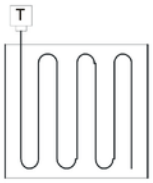
Overview of types

Type	Measuring element	Length L (m)	Number of holders	Weight (kg)
EGT 361 F101	Ni 1000	1,5	3	0,25
EGT 363 F101	Ni 1000	3	4	0,35
EGT 366 F101	Ni 1000	6	5	0,52
EGT 466 F101	Pt 1000	6	5	0,47

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Function

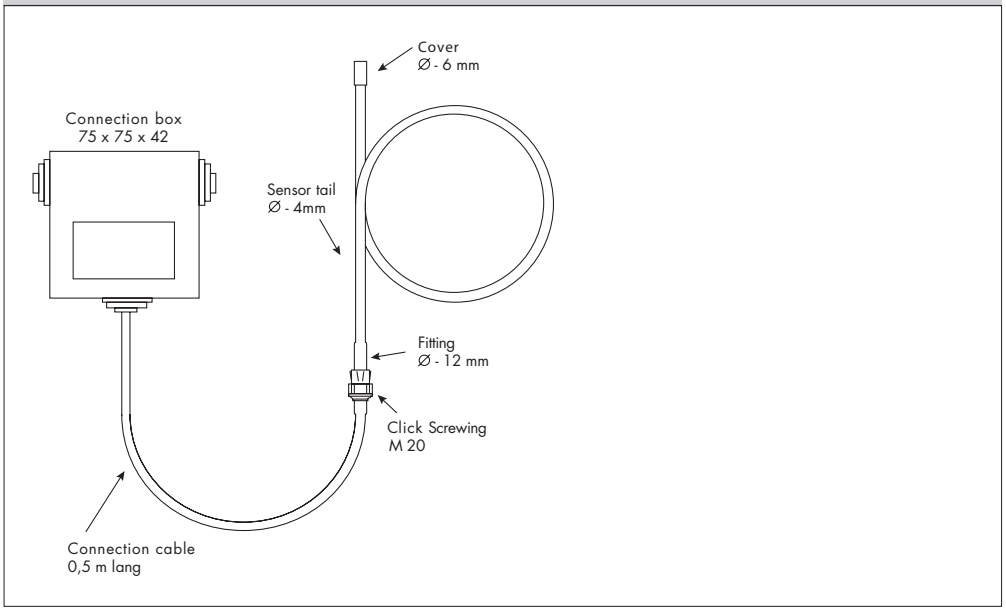
The resistance of the measuring element changes depending on the temperature. With the meander-shaped mounting over the entire area in the air duct, each temperature zone is taken into account for the measurement.



Engineering and fitting notes

The minimum bending radius is 25 mm. The measuring rod must not move through the air flow. move. Constant movements of the measuring rod can lead to the destruction of the measuring element. If necessary, attach the measuring rod with additional holders.

Dimension drawing



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