

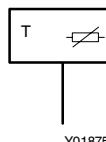
EGT 346...348: Stem-type temperature sensor

For measuring the temperature in ventilation systems or, with the LW 7 protective tube, in pipes and containers.

Housing cover yellow-black of flame-resistant thermoplastic. Nickel thin-film sensor as per DIN 43760; immersion stem of copper ø6,5 mm (without protective tube); active length 15 mm; connection terminals for 2x 1,5 mm² of solid or fine-strand wire; cable inlet with cable screw fitting Pg 11



T09124



Y01875

| Type | Stem mm | Nominal value at 0°C | Measuring range °C | Weight kg |
|--------------|---------|----------------------|--------------------|-----------|
| EGT 346 F021 | 120 | 200 Ω | -30...130 | 0,07 |
| EGT 346 F101 | 120 | 1000 Ω | -30...130 | 0,07 |
| EGT 347 F021 | 225 | 200 Ω | -30...130 | 0,08 |
| EGT 347 F101 | 225 | 1000 Ω | -30...130 | 0,08 |
| EGT 348 F021 | 450 | 200 Ω | -30...130 | 0,10 |
| EGT 348 F101 | 450 | 1000 Ω | -30...130 | 0,10 |

| | | | |
|---|-------------------------|---------------------------------------|--------------------------------|
| Resistance values as per DIN 43760 | DIN 43760 | Max. temp. at head 80 °C | |
| Tolerance at 0 °C | ± 0,4 K | Degree of protection IP 42 (EN 60529) | |
| Mean temp. coefficient | 0,00618 K ⁻¹ | | |
| Self-warming (in air) | 0,25 K/mW | | |
| Time characteristic: | | | |
| in air, without prot. tube | Dead time | Time const. | Wiring diagram A01632 |
| still | 18 s | 330 s | Dimension drawing M08527 |
| moving (3 m/s) | 9 s | 60 s | Fitting instructions MV 505497 |
| in water, with prot. tube ¹⁾ | Dead time | Time const. | |
| still | 7 s | 28 s | |
| moving (0,4 m/s) | 6 s | 27 s | |

Accessories

0364439 ... Protective tube LW 7, brass; see chapter 39

0226811 ... Protective tube LW 7, inox; see chapter 39

0368840 000* Holder for fitting stem on wall

0368839 000* Holder for fitting stem in air duct

0313220 001 Heat-conducting paste, in a tube of 20 g

0313346 001* Module 0-10 V for Ni1000; 24 V~; [MV 505513](#); A08091, IP 00 (IP 42 when fitted in housing) 4 temp. ranges: -50...0 °C; -50...50 °C; 0...50 °C; 0...100 °C

*) Dimension drawing or wiring diagram are available under the same number

1) With heat-conducting paste

Operation

The resistance value of the Ni measuring resistor changes with respect to temperature. The temperature coefficient is always positive, i.e. the resistance value increases as the temperature rises. See table of values (DIN 43760) and curve. The elements are exchangeable (within the limits of the pre-scribed tolerances)

Further details on the accessories

The module evaluates the signal of an Ni1000 measuring resistor and converts it into an output signal of 0...10 V. The module is fitted in the sensor housing.

| | | | |
|--------------------------------|-----------------------------|----------------------|------------------------------------|
| Input | temperature sensor Ni1000 | Output | 0...10 V, load > 5 kΩ |
| Measuring range can be changed | -50...0 °C | Ambient temperature | -30...80 °C |
| | -50...50 °C | Degree of protection | IP 00 (IP 42 fitted in housing) |
| | 0...50 °C (factory setting) | Auxiliary supply | 24 V~ ± 20% |
| Error | 0...100 °C | | |
| | max. 1 °C zero-point error | | |
| | max. 1 °C span error | | |

Additional technical data

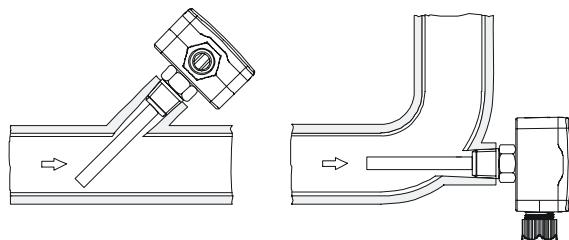
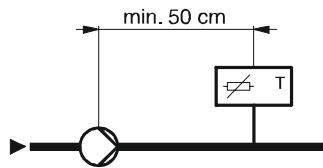
Complies with:-
EMC directive 2004/108/EC

EN 61000-6-1/ EN 61000-6-2
EN 61000-6-3/ EN 61000-6-4

Engineering and fitting note

In water:

For use in pipes and containers, the detector must be fitted into a protective tube (LW 7) using the holder. The detector can be adjusted so as to account for different thicknesses of pipe insulation. It should be fitted against the direction of flow.

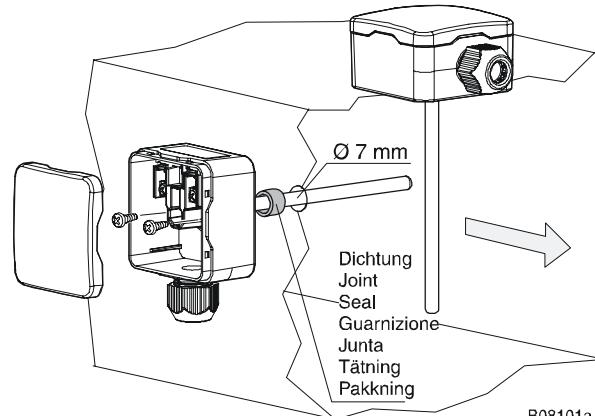


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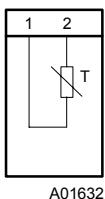
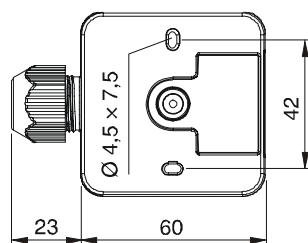
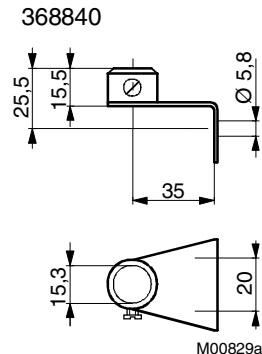
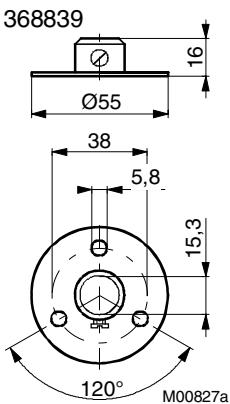
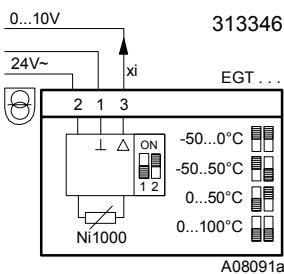
In air ducts:

The detector is fitted directly onto the insulation or onto the wall of the air duct.

Using the stem holder (accessory no. 0368839) and the clamping ring (accessory no. 0313282) the insertion depth can be adjusted.



B08101a

Wiring diagram**Dimension drawing****Accessories**

| Typ | L |
|----------|-----|
| EGT . 46 | 120 |
| EGT . 47 | 225 |
| EGT . 48 | 450 |

