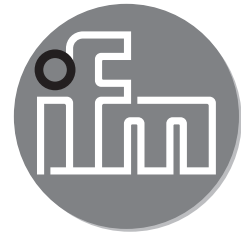


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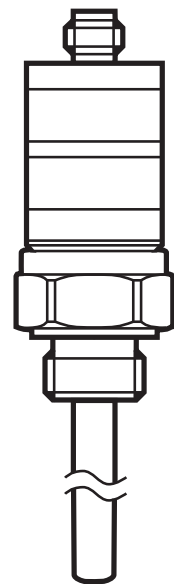
Operating instructions
Electronic temperature sensor

efector600[®]

TK7480

UK

704475 / 00 09 / 2008



1 Functions and features

The unit detects the system temperature in machines and installations.

2 Function

The unit generates 2 output signals: 1 x NO + 1 x NC with separately adjustable switch points [SET1] and [SET2].

OUT1	With rising temperature OUT1 closes when the set value [SET1] is reached.
	With falling temperature OUT1 opens, when the value [SET1] minus hysteresis is reached.
OUT2	With rising temperature OUT2 opens when the set value [SET2] is reached.
	With falling temperature OUT2 closes, when the value [SET2] minus hysteresis is reached.

The hysteresis is fixed. It is 5 K.

- Measuring range: -25...140°C / -13...284°F.
- Measuring element: Pt 1000 according to DIN EN 60751, class B

3 Installation



Before mounting and removing the unit: ensure that no medium can leak at the process connection.

- ▶ Insert the unit in a G $\frac{1}{2}$ NPT process connection.
- ▶ Tighten firmly. Tightening torque: max. 25 Nm.

4 Electrical connection

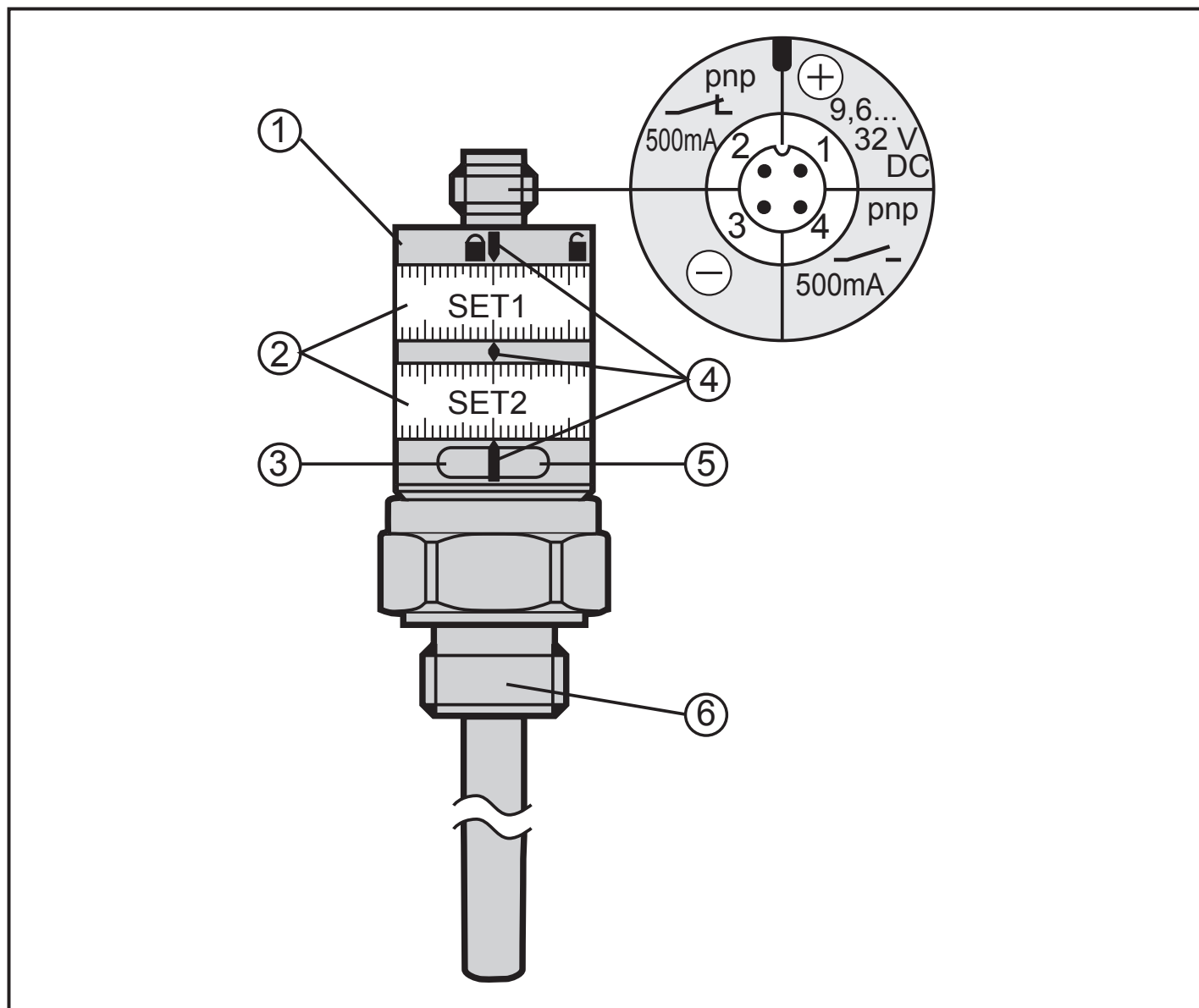


The unit must be connected by a qualified electrician.

The national and international regulations for the installation of electrical equipment must be adhered to.

- ▶ Disconnect power.
- ▶ Connect the unit as indicated on the type label.

5 Setting

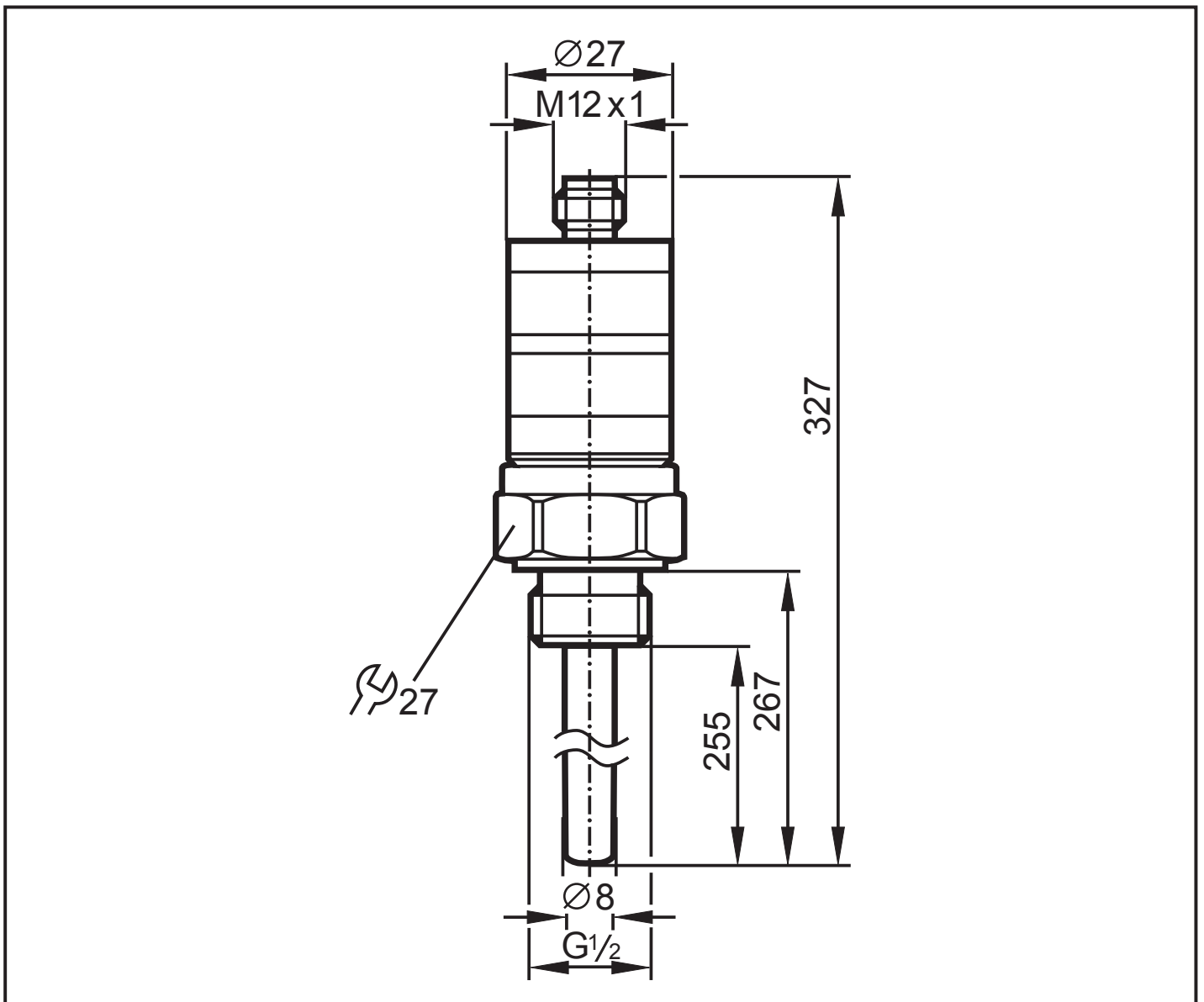


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- 1: locking ring
 - 2: setting rings (manually adjustable after unlocking)
 - 3: LED yellow: lights if OUT1 = ON, temperature \geq [SET1]
 - 4: setting marks
 - 5: LED yellow: lights if OUT2 = ON, temperature $<$ [SET2]
 - 6: process connection G $\frac{1}{2}$ A
- Pin 4 = OUT1 / Pin 2 = OUT2

To obtain the setting accuracy: Set both rings to the minimum value, then set the requested values.

6 Scale drawing



Dimensions are in millimeters

7 Technical data

Operating voltage [V].....	9.6...32 DC
Current rating [mA].....	500
Current consumption [mA].....	< 30
Measuring range [°C / °F].....	-25...140 / -13...284
Measuring element	1 x Pt1000 to DIN EN 60751, class B
Accuracy [K]	± 3 (setting accuracy)
Repeatability [K]	± 0.1
Response dynamics (to DIN EN 60751) [s].....	T05 = 1 / T09 = 3
Housing materials.....	stainless steel (316S12); PC (Makrolon); PBT, (Pocan); FPM (Viton)
Material (wetted parts)	stainless steel (316S12); FPM (Viton)
Operating temperature[°C]	-25 ...70
Storage temperature [°C]	-40 ...100
Permissible overload pressure [bar].....	300
Medium temperature [°C]	-25...125 (145 max. 1 h)
Protection rating	IP 67
Protection class	III
Shock resistance [g]	50 (DIN / IEC 68-2-27, 11 ms)
Vibration resistance [g].....	20 (DIN / EN 68-2-6, 10 - 2000 Hz)
EMC	
EN 61000-4-2 ESD:.....	4 / 8 KV
EN 61000-4-3 HF radiated:	10 V/m
EN 61000-4-4 Burst:.....	2 KV
EN 61000-4-6 HF conducted:.....	10 V

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More information at www.ifm.com