ifm electronic

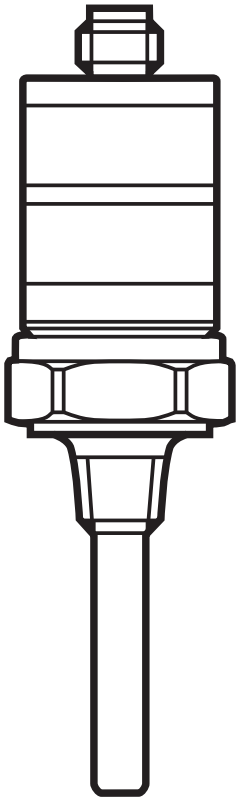
CE

Operating instructions
Electronic temperature sensor

efector600

TK7330

UK



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1 Functions and features

The unit detects the system temperature in machines and installations.

2 Function

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

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

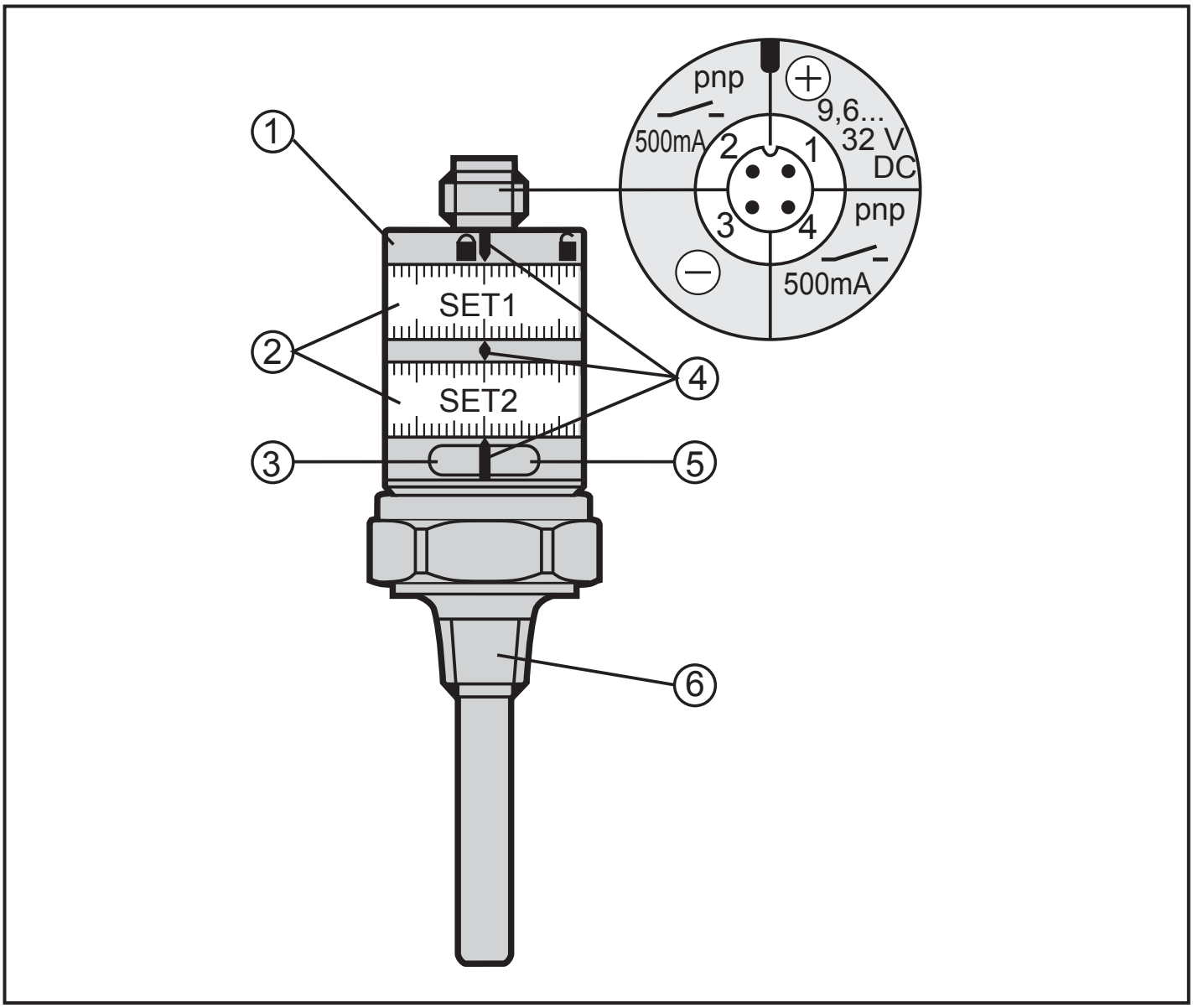
▶ Insert the unit in a ¼“ NPT process connection.
▶ Tighten firmly. Tightening torque: max. 25 Nm.

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.

4 Setting

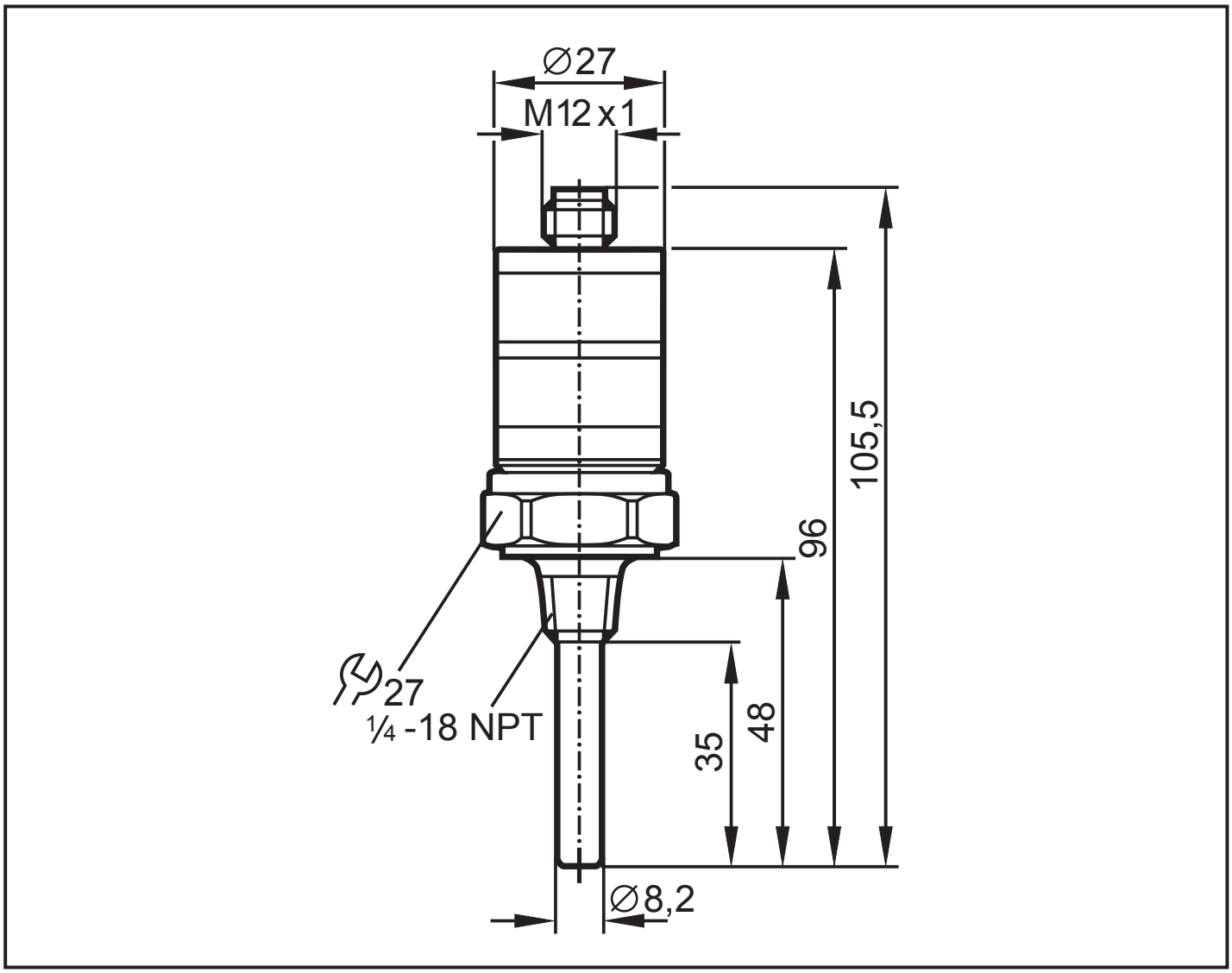


UK

1: locking ring
2: setting rings (manually adjustable after unlocking)
3: LED yellow: lights if OUT1 = ON, temperature ≥ [SET1]
4: setting marks
5: LED yellow: lights if OUT2 = ON, temperature ≥ [SET2]
6: process connection ¼“ NPT
Pin 4 = OUT1 / Pin 2 = OUT2

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

5 Scale drawing



Dimensions are in millimeters

6 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)
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

More information at www.ifm.com