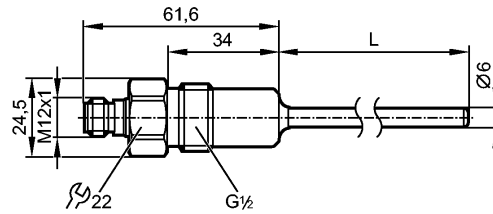


**TM4511**

TM-050KFER12- /US/

Temperature sensors



Made in Germany



**Product characteristics**

Temperature sensor for connection to a control monitor with a max. operating voltage of 32 V

Connector

Process connection: G $\frac{1}{2}$  with sealing cone

Installation length: 50 mm

Gold-plated contacts

Connection to control monitor TP / TR

Measuring range: -40...150 °C / -40...302 °F

Measuring element: 1 x Pt 100, to DIN EN 60751, class A

**Application**

Application liquids and gases

Minimum installation depth [mm] 15

**Electrical data**

Connection to control monitor TP / TR

Protection class III

**Measuring / setting range**

Measuring range [°C/°F] -40...150 / -40...302

**Accuracy / deviations**

Accuracy  $\pm (0.15 K + 0.002 \times |t|)$

**Reaction times**

Dynamic response T05 / T09 [s] 1 / 3 \*)

**Environment**

Pressure rating [bar] 160; \*\*)

Ambient temperature [°C] -25...80

Protection IP 68 / IP 69K

**Tests / approvals**

Shock resistance DIN EN 60068-2-2-27: 50 g (11 ms)

Vibration resistance DIN EN 60068-2-6: 10 g (10...2000 Hz)

MTTF [Years] 22831.05

**Mechanical data**

Process connection G $\frac{1}{2}$  with sealing cone

Materials (wetted parts) stainless steel 316L / 1.4404; surface characteristics: Ra < 0.8 / electropolished

Probe diameter [mm] 6

Probe length L [mm] 50

Installation length [mm] 50

Housing materials stainless steel 316L / 1.4404

Tightening torque [Nm] 30...50

**TM4511**

TM-050KFER12- /US/

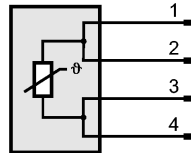
**Temperature sensors**

Weight	[kg]	0.136
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**Electrical connection**

Connection	M12 connector; Gold-plated contacts
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**Wiring**



**Remarks**

Remarks	<p>cULus - Class 2 source required                  *) according to DIN EN 60751                  **) only applies to the sensor; for installation in adapters the indications in the adapter data sheet shall apply                  The values for accuracy apply to flowing water.</p>
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Pack quantity	[piece]	1
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