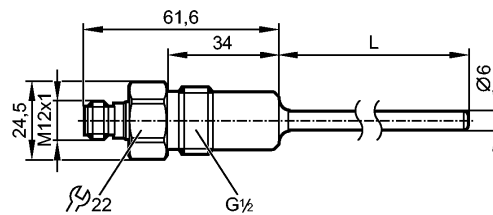


**TM4541**

TM-150KFER12- /US/

Temperature sensors



L = probe length (corresponds to installation length EL)



**Product characteristics**

Temperature sensor for connection to a control monitor with a max. operating voltage of 32 V
Quick disconnect
Process connection: G $\frac{1}{2}$ with sealing cone
Installation length EL: 150 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
Pressure rating [bar]	160; only applies to the sensor; for installation in adapters the indications in the adapter data sheet shall apply
Minimum installation depth [mm]	15

**Electrical data**

Connection to control monitor	TP / TR
Protection class	III

**Measuring / setting range**

Measuring range	-40...150 °C	-40...302 °F
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**Accuracy / deviations**

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

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

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	5 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]	150
Installation length EL [mm]	150
Housing materials	stainless steel 316L / 1.4404

**TM4541**

TM-150KFER12- /US/

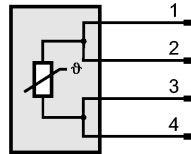
**Temperature sensors**

Tightening torque	[Nm]	30...50
Weight	[kg]	0.147

**Electrical connection**

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



**Remarks**

Remarks	cULus - Class 2 source required *) according to DIN EN 60751 The values for accuracy apply to flowing water.
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Pack quantity	[piece]	1
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