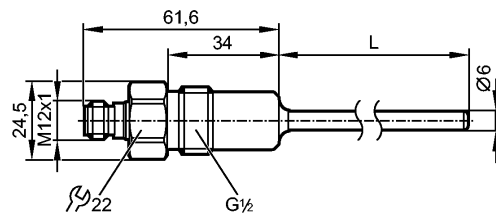


TM4511

TM-050KFER12- /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: 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
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
Storage temperature [°C]	-40...100
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 EL [mm]	50



TM4511

TM-050KFER12- /US/

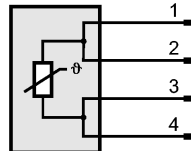
Temperature sensors

Housing materials		stainless steel 316L / 1.4404
Tightening torque	[Nm]	30...50
Weight	[kg]	0.136

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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