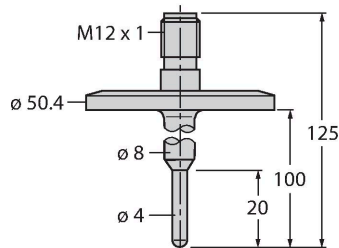


# TP-504A-TRI1.5-H1141-L100/S3645

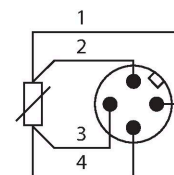
## Temperature Detection – Probe



### Features

- Pt 100 probe according to DIN EN 60751
- Resistant to vibrations and shocks
- Connectable to TS, TTM, IM34, BL20, BL67
- Max. temperature connector: 120°C
- Connection mode: 4-wire connection
- Process connection Tri-Clamp 1 1/2"

### Wiring diagram



### Functional principle

Resistance thermometers are used for the detection and monitoring of temperatures to optimize and control a process. Typical applications are in machine and plant construction as well as in the process industry. The core element of the temperature probe is a temperature-dependent resistor.

### Technical data

Type	TP-504A-TRI1.5-H1141-L100/S3645
ID	100048143
Special version	S6345 corresponds to: Roughness of media-contacting surfaces $R_a < 0.4 \mu\text{m}$ (electropolished)
<b>Temperature range</b>	
Measuring range	-50...120 °C
Measuring range	-58...248 °F
Accuracy	$\pm 0.15 \text{ K} + 0.002 \cdot  t $ (-30...300 °C)
Self-heating	0.4 K/mW at 0 °C
Measuring element	Pt-100 probe, DIN EN 60751, class A, connection mode: 4-wire connection
Response time	$t_{0.5} = 3 \text{ s} / t_{0.9} = 10 \text{ s}$ in water at 0.2 m/s
Immersion depth (L)	100 mm
Outer diameter	8 mm
Protection type and class	IP67
<b>Environmental conditions</b>	
Ambient temperature	-40...+120 °C
<b>Mechanical data</b>	
Housing material	Stainless steel, 1.4404 (AISI 316L)
Sensor material	Stainless steel, 1.4404 (AISI 316L), $R_a \leq 0.8 \mu\text{m}$
Process connection	Tri-Clamp 1 1/2"
Pressure resistance	40 bar
Electrical connection	Connector, M12 x 1

## Technical data

Reference conditions acc. to IEC 61298-1	
Temperature	15...+25 °C
Atmospheric pressure	860...1060 hPa abs.
Humidity	45...75 % rel.
Auxiliary power	24 VDC
Tests/approvals	
Approvals	cULus
UL registration number	E345414
MTTF	2283 years acc. to SN 29500 (Ed. 99) 20 °C

## Accessories

Dimension drawing	Type	ID	
	WKC4.4T-2/TEL	6625025	Connection cable, M12 female connector, angled, 4-pin, cable length: 2 m, jacket material: PVC, black; cULus approval
	RKC4.4T-2/TEL	6625013	Connection cable, M12 female connector, straight, 4-pin, cable length: 2 m, jacket material: PVC, black; cULus approval
	RKC4.4T-2/TXL	6625503	Connection cable, M12 female connector, straight, 4-pin, cable length: 2 m, jacket material: PUR, black; cULus approval
	WKC4.4T-2/TXL	6625515	Connection cable, M12 female connector, angled, 4-pin, cable length: 2 m, jacket material: PUR, black; cULus approval