

## Technical Information

**Model TES.03.04***AUTOMOTIVE Sector***Temperature sensor for oil and water**

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**Description** Temperature sensor thermocouple "K" type for oil and water.  
Inconel 600 sheath diameter 3,0 mm tapered to 1,6 mm, mineral oxide insulation, teflon PFA conductor insulation, teflon PFA insulation sheath and inner armor in tinned plated copper.

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**Sensor Type** Thermocouple "K" type hot joint insulated

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**Sensor Number** 1

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**Precision** Class 1 (special) according to EN60584

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**Working Temperature** -40 / +750 °C

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**Short Time Temperature** +800 °C

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**Sensor Sheat** Material: AISI 321  
Diameter: 3,0 mm  
Lenght: 60 mm  
Internal insulation: mineral oxide

**\* on request other lenght**

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**Process Connection** None

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**Cable** Diameter: 3,0 mm  
Lenght: 2500 mt

**\* on request other lenght**

CONDUCTORS  
number: 2  
section: 0,22 mm<sup>2</sup>  
type: strand  
material: thermocouple "K" type  
insulation: teflon PFA

Insulation sheath: teflon PFA  
Internal sheath: tinned plated copper  
External amor: none

COLOURING  
standard: ANSI  
conductors: red (+) ; yellow (-)  
sheath: yellow

**\* on request other colouring**

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**Electrical Connection** Bare outlet conductors L = 30 mm

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**Laser Marking**

Thermo Engineering Logo  
Thermo Engineering P/N  
Customer P/N  
dd/mm/yy production

**\* on request other marking**

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**Tests**

Visual  
Dimensional  
Room temperature insulation resistance  
Electrical Continuity

**\* on request other test**

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**Room Temperature Insulation Resistance**

According to IEC 1515 resistance > 1GΩ @ 25 °C; between the terminals and the sheath with a test voltage of 500 VDC.

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**Response Time**

t<sub>50</sub>: 4 sec  
t<sub>90</sub>: 10 sec

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**Certifications**

Conformity Certificate  
Conformity Certificate RoHS 2002/95/CE

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