# Technical Information

## Model TES.03.05

### AUTOMOTIVE Sector

Temperature sensor for brakes purge

<table>
<thead>
<tr>
<th>Description</th>
<th>Temperature sensor thermocouple type &quot;K&quot; for brakes purge. Inconel 600 sheath diameter 1,5 mm, mineral oxide insulation, kapton conductor insulation, kapton insulation sheath and outer armor in AISI 304.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sensor Type</td>
<td>Thermocouple &quot;K&quot; type hot joint insulated</td>
</tr>
<tr>
<td>Sensor Number</td>
<td>1</td>
</tr>
<tr>
<td>Precision</td>
<td>Class 1 (special) according to EN60584</td>
</tr>
<tr>
<td>Working Temperature</td>
<td>-40 / +1100 °C</td>
</tr>
<tr>
<td>Short Time Temperature</td>
<td>+1010 °C</td>
</tr>
</tbody>
</table>
| Sensor Sheat | Material: INCONEL 600  
Diameter: 1,5 mm  
Lenght: 5 mm  
Internal insulation: mineral oxide  
* on request other length |
| Process Connection | M10x1 male fixed threaded fitting  
Material: AISI 304  
* on request other fitting |
| Cable | Diameter: 2,9 mm  
Lenght: 0,50 mt  
* on request other length  
CONDUCTORS  
number: 2  
section: 0,50 mm²  
type: strand  
material: thermocouple “K” type  
insulation: kapton  
Insulation sheath: kapton  
Internal sheath: none  
External amor: AISI 304  
COLOURING  
standard: ANSI  
conductors: red (+) ; yellow (-)  
sheath: yellow  
* on request other colouring |
### Electrical Connection
2 contacts mignon male connector

### Laser Marking
Thermo Engineering Logo  
Thermo Engineering P/N  
Customer P/N  
dd/mm/yy production

* on request other marking

### Tests
- Visual
- Dimensional
- Room temperature insulation resistance
- Electrical Continuity

* on request other test

### IP Grade
IP65 according to UNI EN 60529

### Room Temperature Insulation Resistance
According to IEC 1515 resistance > 1Ω @ 25 °C; between the terminals and the sheath with a test voltage of 500 VDC.

### Respons Time
- t<sub>50</sub>: 4 sec  
- t<sub>90</sub>: 10 sec

### Certifications
- Conformity Certificate  
- Conformity Certificate RoHS 2002/95/CE