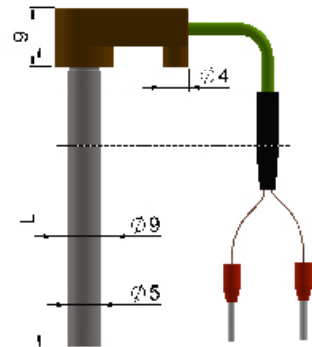
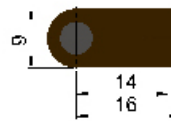
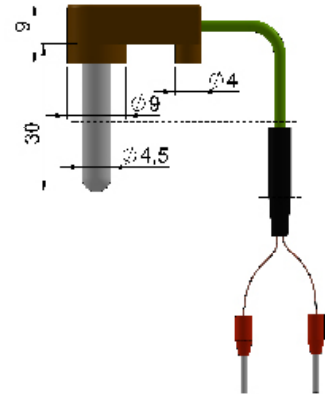
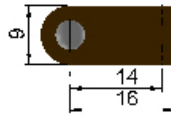


## Temperature sensors of machinery and device parts **TOPMK-1, TOPMK-2**

### Technical description

| Measuring range / sensing element  |              |         |
|--|--------------|---------|
| (-50 ÷ 100) °C   | <b>Pt100</b> | class B |
| Sheath   |              |         |
| – TOPMK-1 resistor ø4,5 mm uncovered<br>– TOPMK-2 covered resistor<br>– material: steel 1.4541<br>– diameter [mm]: ø5<br>– length L [mm]: 30÷100                   |              |         |
| Lead wire  |              |         |
| – Cu wire: 2, 3x0,22 mm <sup>2</sup> in teflon insulation and metal braided<br>– length L <sub>p</sub> =1,5m (standard)<br>– wires resistance Cu ~0,105 Ω/m=0,2 °C |              |         |
| Options  |              |         |
| – Pt500, Pt1000, Ni100, Ni1000 only TOPMK-2<br>– Pt100: class A (-30 ÷ 150) °C, class AA (0 ÷ 150) °C  |              |         |



#### Response time T05/T09

| Sensor type                | ø9      | ø11      |
|----------------------------|---------|----------|
| Pt                         | ≤33/≤95 | ≤40/≤120 |
| J, K<br>insulated junction | ≤22/≤62 | ≤27/≤90  |
| J, K<br>grounded junction  | ≤3/≤8   | ≤6/≤15   |

#### Resistors tolerance acc. to PN-EN 60751

| Class | Wire wound resistor |                   |
|-------|---------------------|-------------------|
|       | Range [°C]          | Tolerance [°C]    |
| AA    | (-50÷250)           | ±(0,1+0,0017· t ) |
| A     | (-100÷450)          | ±(0,15+0,002· t ) |
| B     | (-196÷600)          | ±(0,3+0,005· t )  |

### Ordering code

| Temperature sensor                | TOPMK | - ... - | ... - | ... - | ... - | ...   |
|-----------------------------------|-------|---------|-------|-------|-------|-------|
| Uncovered resistor                | 1     |         |       |       |       |       |
| Metal sheath ø5 mm                | 2     |         |       |       |       |       |
| Resistor class                    |       | A, B*   |       |       |       |       |
| Sheath length for TOPMK-2, L [mm] |       |         |       | 100*  |       |       |
| Measuring circuit                 |       |         |       |       | 2, 3  |       |
| Cable length L <sub>p</sub> [m]   |       |         |       |       |       | 1,5m* |

\* or others acc. to requirements

### Ordering example

**TOPMK-1-B-2-2m** sensor with Pt100, class B, 2-wire connection connection, uncovered resistor, lead wire length L<sub>p</sub>= 2m

**TOPMK-2-B-60-3-3m** sensor with Pt100, class B, 3-wire connection, sheath length L=60 mm, lead wire length L<sub>p</sub>= 3m