

Silicone unsulated

# PRECIOUS METAL TESTING THERMOCOUPLES TYPE S AND R

Thermoelements are produced from the Platinum alloy and rhodium of the highest quality. We offer type S and R and manufacture two models of each type. All the four models of the sensors are designed to be as all-purpose as possible. Hot junction is closed in the ceramic pipe Al203 of high purity. Outside pipe diameter is 6 mm, measuring part length is 640 mm. Due to a relatively small diameter and the right choice of length this sensor can be calibrated by fixed point method MST-90 (in fixed point cells). Cables were made from the anaerobic copper of high purity to provide great integrity and measuring accuracy.

### Main advantages:

- high stability
- Uncertainty of calibration about 0,23 °C
- There are two designs available: with the reference junction and without it (bare ends

## thermocouple cable length 650 mm Silicone insulated extension cable (Cu) length 1500 mm 110 mm ceramic protection tube AI\_03 80 mm Ø8 mm 650 mm reference iunction, 230 mm stainless steel Ø6 mm

Ø6 mm

TAB. DATASHEET	
Measuring range	0 °C to 1085 °C
Туре	PtRh10-Pt (type S) and PtRh13-Pt (type R)
Fixed point method calibration (in fixed point cells)	in FP of Zinc (419,527 °C), in FP of Aluminium (660,323 °C) in FP of Copper (1084,62 °C)
Ceramic sheath of the junction (working part)	Ø 6 mm x 640 mm (details shown in the drawing)
Sheath dimensions	Ø 6 mm x 230 mm (details shown in the drawing)
Handle	Plastic, max. operating temperature 80 $^{\circ}\text{C}$
Long term stability (one year)	$\pm$ 0,5 °C (depends mostly on the usage)
depth	At least 400 mm is reccomended

### Available types:

- 13-x-01-G Temperature sensor type S or R with the reference junction and bare ends
- 13-x-01-Wm Temperature sensor type S or R with the reference junction and a miniature compensated male connector Cu-Cu
- 13-x-01-Wm Temperature sensor type S or R with the reference junction and a standard compensated male connector Cu-Cu
- 13-x-02-G Temperature sensor type S or R without the reference junction, ended with bare ends
- 13-x-02-Wm Temperature sensor type S or R without the reference junction, ended with a miniature compensated male connector S/R type \*)
- 13-x-02-Wm Temperature sensor type S or R without the reference junction, ended with a standard compensated
  male connector S/R type \*)

### TAB. ORDERING CODE:

How to order: Please specify the type of the temperature sensor: replace 'x' with 'S' or 'R'

<sup>\*)</sup> for versions without the junction, thermocouple cable is 1500 mm long