

# Threaded resistance thermometer For shipbuilding industry Models TR291, TR292

WIKA data sheet TE 69.20



## Applications

- Machine building, plant and vessel construction
- For liquid media, i.e. water, oil
- For gaseous media, i.e. air, gas, vapour

## Special features

- Robust
- Medium temperature up to 600 °C
- Versions:
  - Model TR291: measuring insert replaceable
  - Model TR292: measuring insert fixed mounted
- GL and LR approval



Fig. left: Resistance thermometer model TR291

Fig. right: Resistance thermometer model TR292

## Description

Resistance thermometers of this series are designed for screw-fitting directly into the process, mainly in vessels and pipelines. They are suitable for liquids and gases up to 600 °C. At the same time process pressures up to 50 bar and flow rates up to 25 m/s are permissible.

The replaceable measuring insert on the model TR291 enables inspection, measuring equipment monitoring or, when servicing is necessary, replacement while the plant is running.

Insertion length, process connection, thermowell design, connection head and sensor can each be selected to suit the respective application.

## Sensor

### Sensor tolerance value per DIN EN 60751

- Class B
- Class A (-50 ... +450 °C; not with 2-wire connection)

The combination of a 2-wire connection with Class A is not permissible, because the lead resistance of the measuring insert overrides the higher sensor accuracy.

For detailed specifications for Pt100 sensors, see Technical Information IN 00.17 at [www.wika.com](http://www.wika.com).

## Neck

### Material

Stainless steel 1.4571

### Neck length $M_H$

50, 100, 150 mm  
others on request

## Process connection

### Mode of connection

Threaded connection

### Material

Stainless steel 1.4571

### Thread

G ¼ B, G ½ B, G ¾ B  
others on request

## Thermowell

### Design

From solid body material

### Material

Stainless steel 1.4571

### Diameter

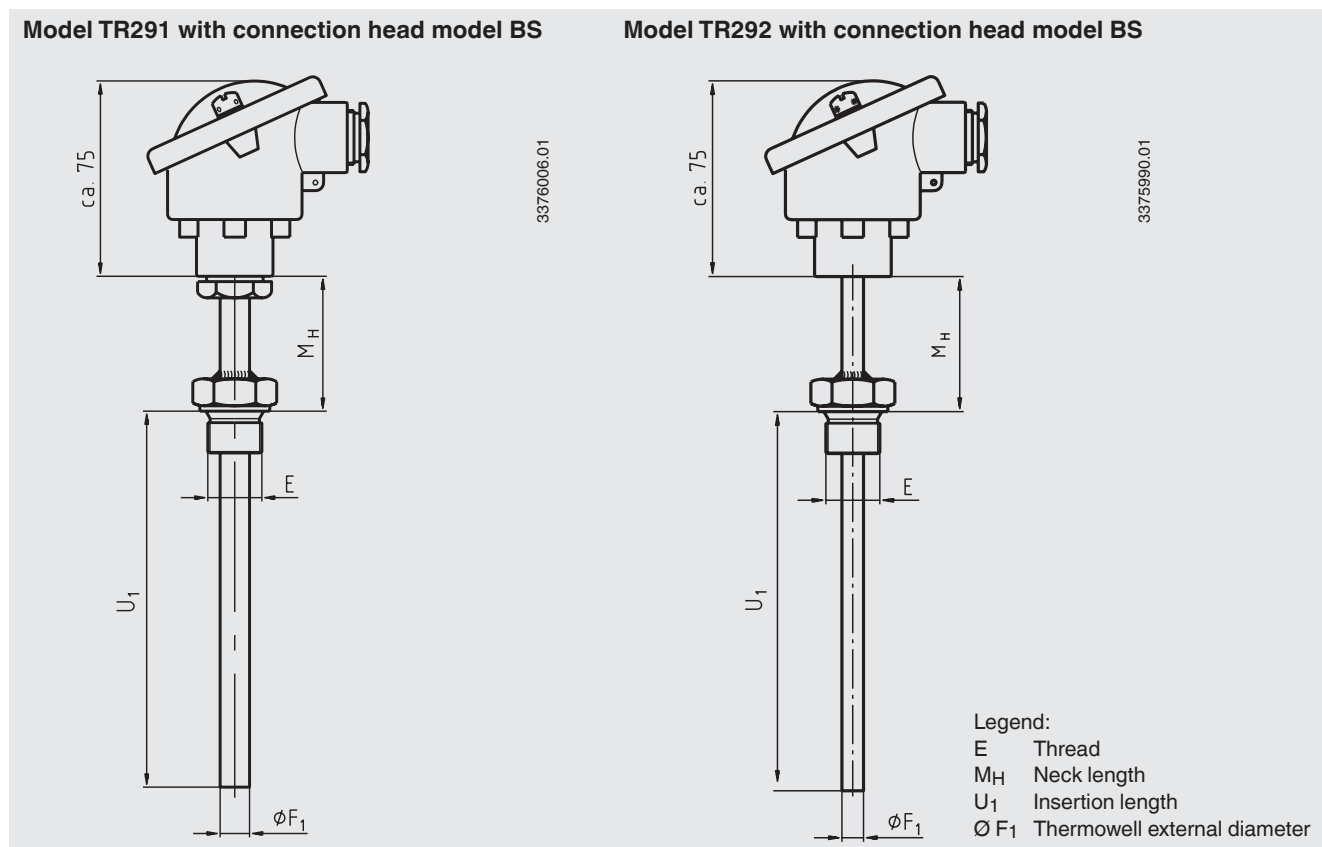
8, 9, 11, 15 mm  
others on request

### Insertion length

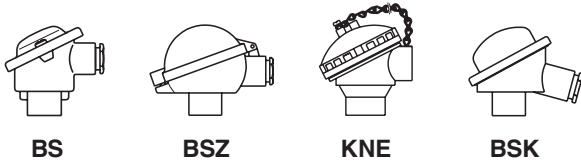
100, 150, 200, 250, 300 mm

other versions on request

## Dimensions in mm



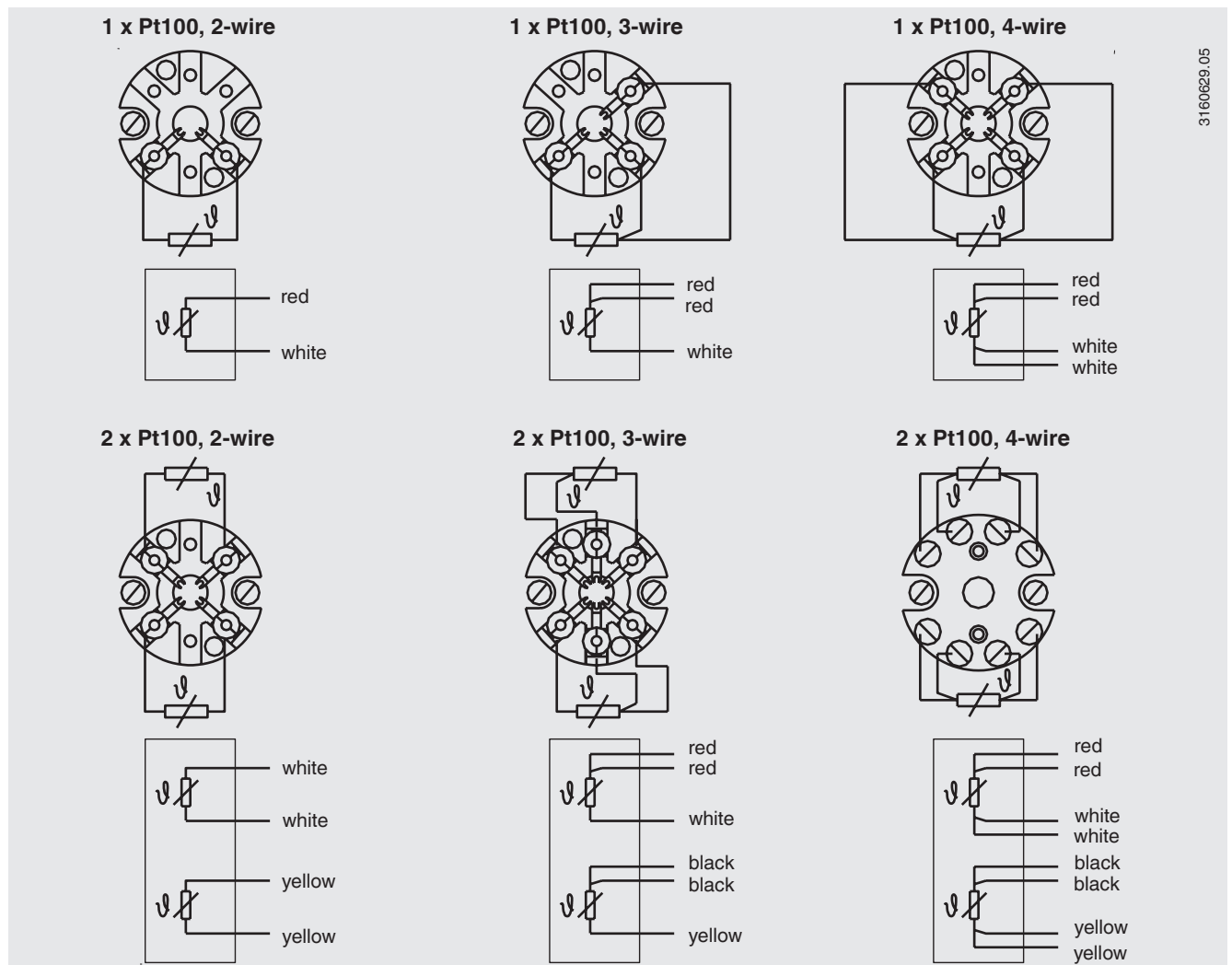
## Connection head



Model	Material	Cable entry	Ingress protection	Cap	Surface finish
BS	Aluminium	M20 x 1.5	IP 54	Cap with 2 screws	Epoxy coated
BSZ	Aluminium	M20 x 1.5	IP 65	Hinged cover with cylinder head screw	Epoxy coated
KNE	Aluminium	M20 x 1.5	IP 65	Screw cover	Epoxy coated
BSK	Plastic	M20 x 1.5	IP 54	Screw cover	not coated

1) Cable gland, metal

## Electrical connection



## Ordering information

Model / Sensor type and number of sensors / Sensor connection method / Tolerance value / Process connection / Thermowell outer diameter  $F_1$  / Neck length  $M_H$  / Insertion length  $U_1$  / Connection head

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