

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.

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

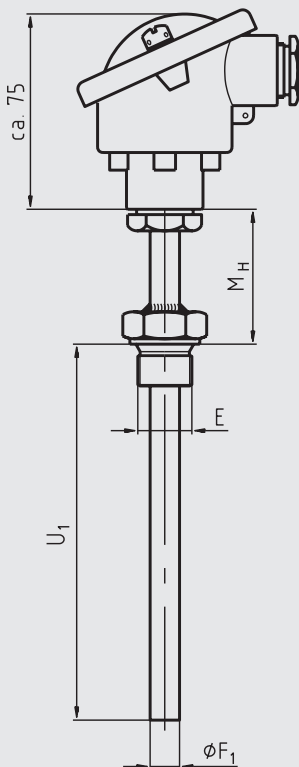
Insertion length

100, 150, 200, 250, 300 mm

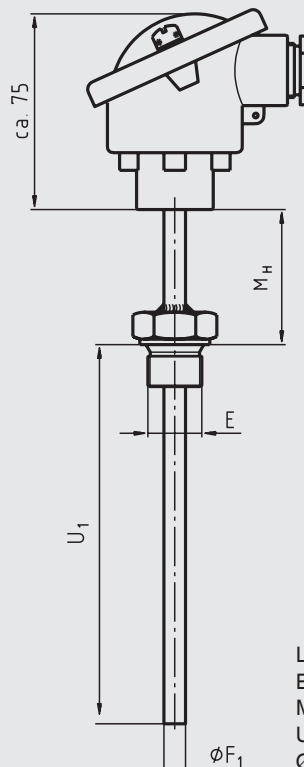
other versions on request

Dimensions in mm

Model TR291 with connection head model BS



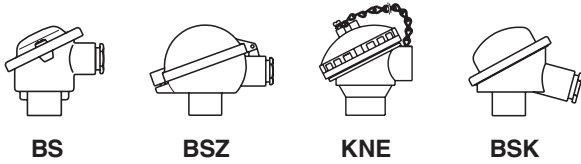
Model TR292 with connection head model BS



Legend:

- E Thread
- M_H Neck length
- U_1 Insertion length
- ϕF_1 Thermowell external diameter

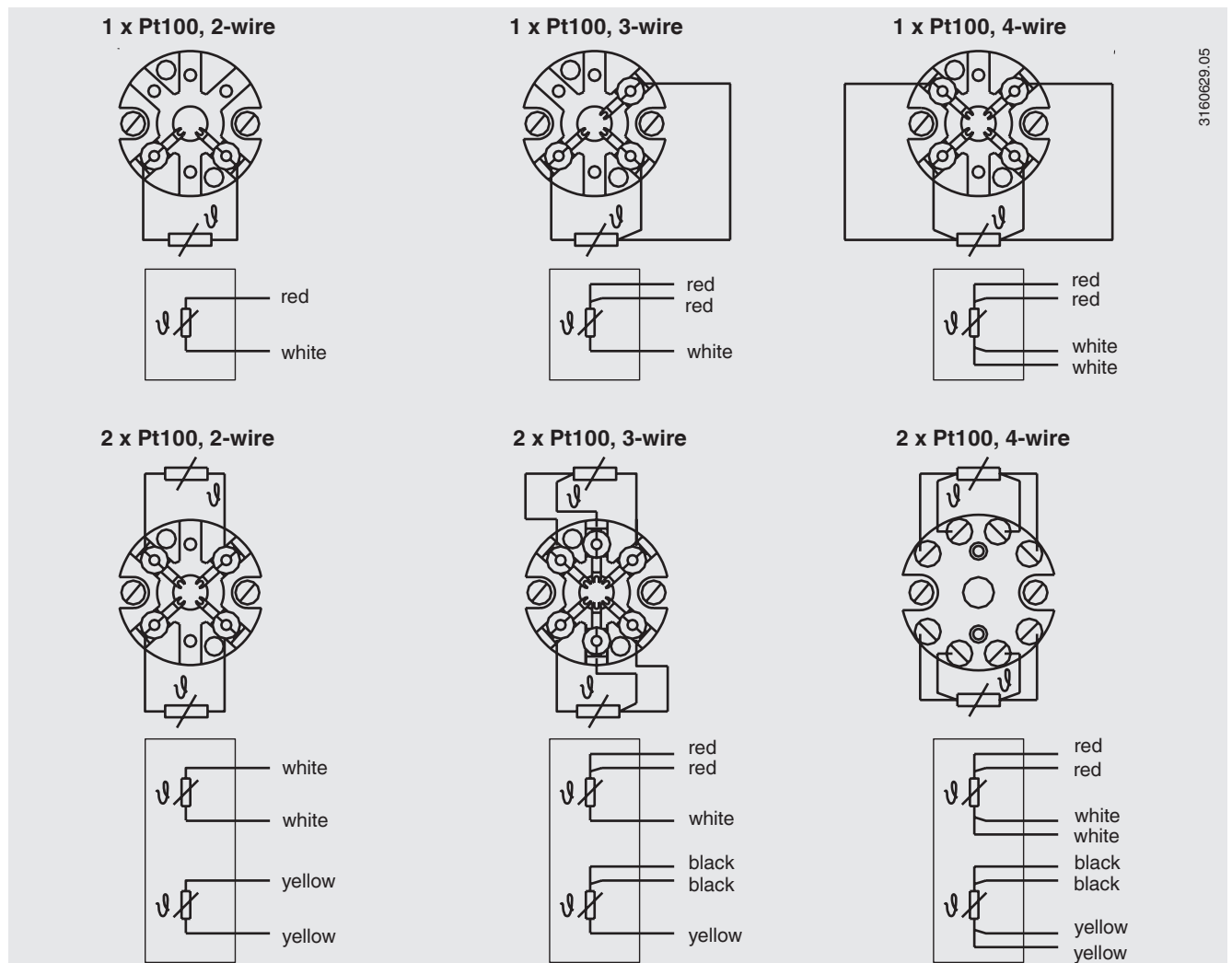
Connection head



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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WIKAI Alexander Wiegand SE & Co. KG
Alexander-Wiegand-Straße 30
63911 Klingenberg/Germany
Tel. (+49) 9372/132-0
Fax (+49) 9372/132-406
E-mail info@wika.de
www.wika.de