



**TYPE APPROVAL CERTIFICATE**  
**No. ELE019423XG**

**This is to certify** that the product below is found to be in compliance with the applicable requirement of the RINA type approval system.

<i>Description</i>	<b>Temperature sensors</b>
<i>Type</i>	<b>TST310 series</b>
<i>Applicant</i>	<b>Endress + Hauser Wetzer GmbH + Co. KG Oberer Wang 1 87484 Nesselwang GERMANY</b>
<i>Manufacturer</i>	<b>Endress + Hauser Wetzer GmbH + Co. KG</b>
<i>Place of manufacture</i>	<b>Oberer Wang 1 87484 Nesselwang GERMANY</b>
<i>Reference standards</i>	<b>Rules for the classification of ships.- Part C - Machinery, systems and fire protection. - Ch.3, Sect. 6, Table 1.</b>

*Issued in* **HAMBURG** on **January 26, 2023**. *This Certificate is valid until* **January 25, 2028**

  
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**RINA Services S.p.A.**  
**Giuseppe Russo**

This certificate consists of this page and 1 enclosure

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TST310 series

### Product description:

The TST310 series are resistance thermometers for temperature measurement in gaseous or liquid media like air, water, oil and others.

### Main characteristics:

Diameter: 3 or 6mm,  
Sensor type: 1x Pt100 or 2x Pt100  
Housing material: stainless steel  
Process connection: thread or compression fitting  
Degree of protection: IP65

**Order code:** TST310-10, 20, 30, 40, 50, 60, 70, 80, 90

### **10 - Inset diameter, Calibration:**

A; B; 1; 2; 3; 4

### **20 - Insertion length NL:**

1; 2; 3; 4; 5; 7; 8 ....mm (max. 50000mm)

### **30 - Insert material:**

A; B; C

### **40 - RTD Class; Wiring:**

1A3; 1A4; 1B3; 1B4; 1C3; 1C4; 2A3; 2B2; 2B3; 2C3

### **50 - Process Connection:**

E; F; G; J

### **60 - Length extension L:**

1; 2; 3; 4; 8 ....mm (max. 10000mm)

### **70 - Wire; Sheath; Application:**

B; C; D; E;

### **80 - Connection cable:**

1

### **90 - Additional option:**

A; E; F; G; H; I; P; 3;

### Documents:

- DAS93505 Rev. H dated 24.11.10;  
- Technical Description Vers.01.00 dated 2011-08-30;  
- TI00085T/09/en/01.11;

### Test reports:

**KEMA Quality B.V.:** - KEMA01ATEX1169X Issue 4 dated March 27, 2009;

**Paconsult GmbH:** - 17-8672 dated 28 March 2017;

**Endress + Hauser:** - 970004027 dated 09.09.2013

### Remarks:

- The products fulfill EC-Code: EC31.  
- The equipment was tested during cold test with -70°C.

This Certificate supersede ELE065217XG/001.

**HAMBURG January 26, 2023**

