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Certificate No:

01-30008(E3)-02

Issue Date:

29/03/2021 28/03/2026

Expiry Date: Reference:

PRJ11100304545-1

## LLOYD'S REGISTER TYPE APPROVAL

Issued by: Lloyd's Register EMEA (Rotterdam Office)
Issued to: Roder Sensoren Technics B.V., Roden, The Netherlands
For: Temperature Sensors
Type: Series 150, 170 and 700

The undernoted documents have been reviewed for compliance with the requirements of the Lloyd's Register Type Approval System Procedure TA14 Version 04 (September 2020) and this Design Appraisal Document forms part of the Certificate.

## APPROVAL DOCUMENTATION

- Reviewed Type Approval Application Checklist dated 02-02-2021
- Reviewed PQA assessment form dated 15-03-2021
- LRQA ISO 9001:2015 certificate

## **TEST REPORTS**



#### **Henri Reekers**

Snr Electrical Surveyor To Lloyd's Register EMEA A member of the Lloyd's Register group

## Supplementary Type Approval Terms and Conditions

Type Approval certifies that a representative sample of the product(s) referred to herein has/have been found to meet the applicable design criteria for the use specified herein. It does not mean or imply approval for any other use, nor approval of any product(s) designed or manufactured otherwise than in strict conformity with the said representative sample.

Type Approval is based on the understanding that the manufacturer's recommendations and instructions and any relevant requirements of the Rules and Regulations are complied with.

Type Approval does not eliminate the need for normal inspection and survey procedures required by the Rules and Regulations. Lloyd's Register EMEA reserves the right to cancel or withdraw this Type Approval Certificate in accordance with the Lloyd's Register Type Approval System Procedure.

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# **Type Approval Certificate**

This is to certify that the undernoted product(s) has/have been tested with satisfactory results in accordance with the relevant requirements of the Lloyd's Register Type Approval System.

Manufacturer Roder Sensoren Technics B.V.

Address

Noordhoek 15, Roden, 9301 ZG, Netherlands

Type

**Temperature Sensor** 

Description

Series 150, 170 and 700

**Trade Name** 

Temperature sensors

**Application** 

Marine, Offshore and Industrial application for environmental categories ENV1, ENV2, ENV3 and ENV4 as defined in LR Type

Approval System, Test Specification No. 1, 2002

Ratings

Accuracy: < 1,5%

**Temperature Transmitters:** 

Series 150

Range:

Pt 100, 500, 1000

-60 to +600° C

Ni 100, 1000

-60 to +180° C

Thermo Couple J

-200 to +600° C

Thermo Couple K

-200 to +1200° C

Thermo Couple T

-200 to +400° C

Thermo Couple S

-50 to +1400° C



Henri Reekers

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## **Type Approval Certificate**

 Series 170
 Range:

 Pt 100, 500, 1000
 -60 to +600° C

 Ni 100, 1000
 -60 to +180° C

 Thermo Couple J
 -200 to +600° C

 Thermo Couple K
 -200 to +1200° C

 Thermo Couple T
 -200 to +400° C

 Thermo Couple S
 -50 to +1400° C

 Series 700
 Range:

 Pt 100, 500, 1000
 -60 to +600° C

 Ni 100, 1000
 -60 to +180° C

 Thermo Couple J
 -200 to +600° C

 Thermo Couple K
 -200 to +1200° C

 Thermo Couple T
 -200 to +400° C

 Thermo Couple S
 -50 to +1400° C

This certificate is not valid for equipment, the design, ratings or operating parameters of which have been varied from the specimen tested. The manufacturer should notify Lloyd's Register EMEA of any modification or changes to the equipment in order to obtain a valid Certificate.

Previous Version: 01/30008(E3)

The Design Appraisal Document PRJ11100304545/1 and its supplementary Type Approval Terms and Conditions form part of this Certificate.

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