

# TYPE APPROVAL CERTIFICATE

Certificate no.: **TAA00002VT**Revision No:

This is to certify:

that the Temperature Sensor

with type designation(s)

TW, TG, TS Series: 8, 21, 21v, 26, 26v

issued to

# Plöger Sensor GmbH

Hamburg, Germany

is found to comply with

DNV rules for classification - Ships, offshore units, and high speed and light craft

## **Application:**

Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV.

#### Location classes:

Temperature B Humidity B

Vibration B (see Application/Limitation)

EMC N/A Enclosure C (IP66)

Issued at Hamburg on 2025-09-26

This Certificate is valid until **2030-10-01**.

DNV local unit: **Hamburg – CMC North/East** 

Approval Engineer: Holger Jansen



for **DNV** 

This document has been digitally signed and will therefore not have handwritten signature

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This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid. The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to USD 300 000.



Job ID: **262.1-034257-2** Certificate no.: **TAA00002VT** 

Revision No: 1

## **Product description**

Diesel Exhaust Gas Thermocouple

Temperature range up to: 800 °C

Measuring sensor: 1 or 2 x NiCr-Ni Measuring sensor: 1 or 2 x Fe-CuNi

## Application/Limitation

The Type Approval covers hardware listed under Product description. When the hardware is used in applications to be classed by DNV, documentation for the actual application is to be submitted for approval by the manufacturer of the application system in each case. Reference is made to DNV Rules for Ships Pt.4 Ch.9 Control and Monitoring Systems.

Vibration test characteristic curve 3:

20 g for insertion length up to 150 mm

15 g for insertion length up to 200 mm (150 mm, Type 26)

10 g for insertion length up to 200 mm (Type 26)

#### Type Approval documentation

Test report: RMS no. 03-05/2000 (06.06.2000)

Drawing no.: S200-1(e), S200-2(e), S200-4(e) dated Nov. 2024

S230-1(e), S230-3(e) dated Nov. 2024

H100-1(e) dated Nov. 2024

Type Approval Assessment Report issued at Hamburg - CMC North/East on 2025-09-24

#### **Tests carried out**

Applicable tests according to Class Guidelines DNV-CG-0339, August 2021 (see Application/Limitation.)

# **Marking of product**

Туре

Technical data (as under "Product Desciption")

Serial Number

## Place of production

PLÖGER Sensor GmbH Feßlerstraße 3 22083 Hamburg, GERMANY

## Periodical assessment

The scope of the periodical assessment is to verify that the conditions stipulated for the type are complied with, and that no alterations are made to the product design or choice of systems, software versions, components and/or materials.

The main elements of the assessment are:

- Ensure that type approved documentation is available
- Inspection of factory samples, selected at random from the production line (where practicable)
- Review of production and inspection routines, including test records from product sample tests and control routines
- Ensuring that systems, software versions, components and/or materials used comply with typeapproved documents and/or referenced system, software, component and material specifications
- Review of possible changes in design of systems, software versions, components, materials and/or performance, and make sure that such changes do not affect the type approval given
- Ensuring traceability between manufacturer's product type marking and the type approval certificate

Periodical assessment is to be performed after 2 years and after 3.5 years. A renewal assessment will be performed at renewal of the certificate.

**END OF CERTIFICATE** 

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