



CERTIFICATE NUMBER

06-HG205123-2-PDA

DATE

06 September 2011

ABS TECHNICAL OFFICE

Hamburg Engineering Services

CERTIFICATE OF DESIGN ASSESSMENT

This is to Certify that a representative of this Bureau did, at the request of
TRAFAG AG - MAENNEDORF

assess design plans and data for the below listed product. This assessment is a representation by the Bureau as to the degree of compliance the design exhibits with applicable sections of the Rules. This assessment does not waive unit certification or classification procedures required by ABS Rules for products to be installed in ABS classed vessels or facilities. This certificate, by itself, does not reflect that the product is Type Approved. The scope and limitations of this assessment are detailed on the pages attached to this certificate.

PRODUCT: **Temperature Transmitter**

MODEL: **"NAVITRAG T" 8100**

This Product Design Assessment (PDA) Certificate 06-HG205123-2-PDA, dated 06/Sep/2011 remains valid until 05/Sep/2016 or until the Rules or specifications used in the assessment are revised (whichever occurs first).

This PDA is intended for a product to be installed on an ABS classed vessel, MODU or facility which is in existence or under contract for construction on the date of the ABS Rules or specifications used to evaluate the Product.

Use of the Product on an ABS classed vessel, MODU or facility which is contracted after the validity date of the ABS Rules and specifications used to evaluate the Product, will require re-evaluation of the PDA.

Use of the Product for non ABS classed vessels, MODUs or facilities is to be to an agreement between the manufacturer and intended client.

AMERICAN BUREAU OF SHIPPING

Michael R. V. Zech
Engineer

NOTE: This certificate evidences compliance with one or more of the Rules, Guides, standards or other criteria of ABS or a statutory, industrial or manufacturer's standards. It is issued solely for the use of ABS, its committees, its clients or other authorized entities. Any significant changes to the aforementioned product without approval from ABS will result in this certificate becoming null and void. This certificate is governed by the terms and conditions as contained in ABS Rules 1-1-A3/5.9 Terms and Conditions of the Request for Product Type Approval and Agreement (2010).

TRAFAG AG

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Web: www.trafag.com

MA Certificate No. 06-MF752038-X

Product: Temperature Transmitter

Model: "NAVITRAG T" 8100

Intended Service:

Temperature control, alarm and monitoring functions for marine applications.

Description:

2-wire temperature transmitter with PT100 sensor.

Ratings:

Measuring ranges: -50°C to 550°C.

Power supply voltage: 9 V...32 V DC, Nominal voltage: 24 V DC.

Output signal: 4...20 mA DC.

Ambient temperature: -40°C to 85°C.

Degree of Protection: IP 65, IEC 60529

Service Restrictions:

Unit Certification is not required for this product. If the manufacturer or purchaser request an ABS Certificate for compliance with a specification or standard, the specification or standard, including inspection standards and tolerances, must be clearly defined.

Comments:

Not Applicable.

Notes / Drawings / Documentation:

This Product Design Assessment (PDA) is valid only for products intended for use on ABS classed vessels, MODUs or facilities which are in existence or under contract for construction on the date of the ABS Rules used to evaluate the Product.

Term of Validity:

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This PDA is intended for a product to be installed on an ABS classed vessel, MODU or facility which is in existence or under contract for construction on the date of the ABS Rules or specifications used to evaluate the Product.

Use of the Product on an ABS classed vessel, MODU or facility which is contracted after the validity date of the ABS Rules and specifications used to evaluate the Product, will require re-evaluation of the PDA.

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STANDARDS**ABS Rules:**

20011 Steel Vessel Rules 1-1-4/7.7, 1-1-A3, 4-8-3/1.7, 4-8-3/1.11, 4-8-3/1.17, 4-9-7/13.1

National:

NA

International:

N.A.

Government Authority:

TRAFAG AG

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NA

EUMED:

NA

Others:

NA