



CERTIFICATE NUMBER	23-2480571-PDA
EFFECTIVE DATE	16-Nov-2023
EXPIRY DATE	15-Nov-2028
ABS TECHNICAL OFFICE	Busan Engineering Services

CERTIFICATE OF Product Design Assessment

This is to certify that a representative of this Bureau did, at the request of

KONGSBERG MARITIME AS, TRONDHEIM

located at

**SKONNERTVEGEN 1, 7053 RANHEIM, P.O. BOX 2434 ,
TRONDHEIM, Norway, 7005**

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: Pressure Transmitter
Model: GT402, GT403, GT404 and GT 406
Endorsements:
Tier: 3 - Type Approved, unit certification not required

This Product Design Assessment (PDA) Certificate remains valid until 15/Nov/2028 or until the Rules and/or Standards used in the assessment are revised or until there is a design modification warranting design reassessment (whichever occurs first).

Acceptance of product is limited to the "Intended Service" details prescribed in the certificate and as per applicable Rules and Standards.

This Certificate is valid for installation of the listed product on ABS units which exist or are under contract for construction on or previous to the effective date of the ABS Rules and standards applied at the time of PDA issuance. Use of the Product for non-ABS units is subject to agreement between the manufacturer and intended client.

American Bureau Of Shipping


Seong-Ju Kang, Engineer/Consultant

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 ABS Rules 1-1-A3/5.9 Terms and Conditions of the Request for Product Type Approval and Agreement (2010)

KONGSBERG MARITIME AS, TRONDHEIM

SKONNERTVEGEN 1

7053 RANHEIM

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Web: www.kongsberg.com

Tier: 3 - Type Approved, unit certification not required

Product: Pressure Transmitter
Model: GT402, GT403, GT404 and GT 406
Endorsements:

Intended Service:
Marine and Offshore Applications

Description:
A two wire 4-20mA sensor. Developed for level measurement in cargo, ballast, oil, service and fresh water tanks as well as tanks containing media, which are not hostile to ceramic. It can be used for pressure applications, atmospheric, ullage and pressure line.

Rating:

1. Power supply: 12-32 VDC (all models)
2. Operating Temperature: -45 to 85
3. Measuring range:
 - GT402: 0.25 to 400 bar
 - GT403: 0.6 to 40 bar
 - GT404: 0.6 to 40 bar
 - GT406: 0.5 to 50 bar
4. IP Ratings:
 - GT402: IP56 for gauge, IP66/67
 - GT403: IP68
 - GT404: IP56 for gauge, IP66/67
 - GT406: IP20
5. Ex classification: Ex ia IIC T5 (all models)

Service Restriction:

1. Unit Certification is not required for this product.
2. 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:

1. The Manufacturer has provided a declaration about the control of, or the lack of asbestos in this product.
2. Application and use are to be in accordance with the manufacturer's instructions.

Notes/Drawing/Documentation:
This Product Design Assessment is based on as follows:

1. Manufacturer document
 - a) Drawings
 - Doc. ID. 424746 Software revision history (Rev.1)-pressure transmitters
 - Doc. ID. 470566 Engraving for GT4-- series Production drawing (Rev. C)
 - Doc. ID. GT-1369 Pressure transmitter GT402, GT404 (Rev. M)
 - Doc. ID. GT-1317 Pressure transmitter type GT403 (Rev. J)
 - Doc. ID. GT-1801 Pressure Transmitter GT406 (Rev. 1)
 - GT402 Pressure Transmitter
 - GT403 Pressure Transmitter
 - GT404 Pressure Transmitter
 - GT406 Pressure Transmitter

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2. Test Reports

a) Nemko test reports

- Report No. E16195.2(E16195.01), EMC & Environmental Test Report - GT300 Series, GT400 Series (issue date 28 Mar. 2017).

- Report No. E17118.11, EMC & Environmental Test Report - GLA-300, GLA-310, GLH-320 and GT406 (issue date 22 Sep. 2017).

b) KONGSBERG test report

- High Pressure Test Report witnessed by DNV (dated 5 April 2022).

3. Ex Certificates

- IECEx Certificate No. IECEx PRE 20.0103X(GT-series Pressure Transmitters).

- DNV-GL EU-Type EX. Certificate No. Presafe 20 ATEX 08383X (Pressure transmitter).

Terms of Validity:

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STANDARDS

ABS Rules:

The Rules applicable to this assessment are:

- 2023 Marine Vessels Rules: 1-1-4/7.7, 1-1-A3 & A4, 4-8-3/1.7, 4-8-4/27.5.1, 4-9-9/13, 4-9-9/15.7 Table 1

- 2023 Facilities on Offshore Installations: 1-1-4/9.7, 1-1/A2, 1-1/A3

- 2023 Mobile Offshore Units Rules: 1-1-4/9.7, 1-1-A2, 1-1-A3, 4-3-1/11, 6-1-1/9

- 2023 Steel Barge Rules: 1-1-4/7.9, 1-1-A3 & A4

- 2023 Steel Vessels for Service on Rivers and Intracoastal Waterways: 1-1-4/7.7, 1-1-A3 & A4

- 2023 High Speed Crafts: 1-1-4/11.9, 1-1-A2 & A3

National:

BS EN 61000-6-4:2019,

BS EN 61000-6-2:2019,

EN 60945 (2002)+Cor1:2008

International:

IEC 60533:2015,

IACS UR E10 Rev.6 (2014)

Government:

NA

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EUMED:

NA

OTHERS:

NA