

NIPPON KAIJI KYOKAI



TYPE APPROVAL CERTIFICATE FOR AUTOMATIC DEVICES AND EQUIPMENT

Certificate No. TA25021M

This is to certify that the undernoted product(s) has/have been approved in accordance with the requirements specified in Chapter 1, Part 7 of "Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use" and the relevant Society's Rules.

This certificate is issued to

Manufacturer:

Kongsberg Maritime AS

Place of Manufacturing:

Skonnertveien 1, NO-7005 Trondheim, Norway

Product description:

Pressure Transmitter

Model:

GT402 / 403 / 404 / 406

Approval No.:

02A027

Valid until:

29 September 2029

The details are described in the attached sheet(s).

Issued at Tokyo on 14 January 2025.

S. Oishi

General Manager

Machinery Department

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Attached sheet -1/2 to the Certificate No. TA25021M

Specification & documents:

1. Particulars:

Model	402	403	404	406
Measuring range	0.25 - 400 bar	0.6 - 40 bar	0.6 - 40 bar	0.5 - 50 bar
Output signal	4 to	20 mA with HA	4 to 20 mA	
Power supply	DC 24 V (12 to 32 V)			
Operating temp.	-45 °C to +85 °C			

2. Construction: Intrinsically Safe Type (Ex ia II C T5 Ga)

Model	GT402 / 403 / 404 / 406	
Max. input voltage, V _{max} .	28 V	
Max. input current, Imax.	150 mA	
Max. input power, Pmax.	0.85 W	
Internal capacitance, Cint.	30 nF	
Internal inductance, Lint.	negligible	

(Safety condition)

The transmitter may only be connected to safety barriers with linear resistive current limitation (characteristic), with output values corresponding to the input values stated under Safety Data of the above.

3. Component (Type) and reference drawing:

GT402: P-GT402/CE Rev.U GT403: P-GT403/CE Rev.R GT404: P-GT404/CE Rev.O GT406: P-GT406/CE Rev.C

4. Test report:

DNV Technical Report (Doc No. 2002-3224 Revision No.01, 2002-05-16)

DNV Technical Report (Doc No. 2006-3295 Revision No.01, 2006-06-08)

Nemko Test Report (Doc No. E15309.01, 2016-03-03) Nemko Test Report (Doc No. E16195.02, 2017-03-28)

Nemko Test Report (Doc No. E17118.01, 2024-10-04)

Nemko Declaration of GAP analysis CISPR 16-2-1 (2024-12-18)

Nemko Declaration of GAP analysis CISPR 16-2-3 (2024-12-18)

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Attached sheet -2/2 to the Certificate No. TA25021M

Test items & approval conditions:

1. Test items:

(Applied testing items are marked with X.)

ENVIRONMENTAL TESTS (IACS UR E10 Rev.9 basis)			
External examination			
Operation test and performance test			
Electric power supply failure test			
	Electric	X	
Power supply fluctuation test	Pneumatic and Hydraulic		
Insulation resistance test			
High voltage test			
Pressure test (Pneumatic and Hydraulic)			
Dry heat test (Temperature $85^{\circ}C \times 16$ hours)			
Damp heat test			
Vibration test (Acceleration $\pm 0.7 \text{g} \times 1.5 \text{ hours}$)			
Inclination test			
Cold test (Temperature -45° C × 16 hours)			
Salt mist test			
Electrostatic discharge immunity test			
Radiated radio frequency immunity test			
Conducted low frequency immunity test			
Conducted high frequency immunity test			
Burst / Fast transient immunity test			
Surge immunity test			
Radiated emission test			
Conducted emission test			
Flame retardant test			

2. Approval condition:

Nil