



NIPPON KAIJI KYOKAI

TYPE APPROVAL CERTIFICATE FOR AUTOMATIC DEVICES AND EQUIPMENT

Certificate No. TA19534M

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:	Haakon VII gt.4, 7005 Trondheim, Norway
Product description:	Pressure Transmitter
Model:	GT402 / 403 / 404 / 405 / 420 / 422 / 423

Approval No.:	02A027
Valid until:	29 September 2024

This certificate is subject to the conditions specified in the attached sheet(s).

Issued at Tokyo on 19 September 2019.

T. Shimada
General Manager
Machinery Department

Note: The manufacturer, if desired, is requested to apply to the Society for renewal prior to the expiration date.

Specification & documents:

1. Particulars: Power supply: DC24V
2. Construction: Intrinsically Safe Type (EEx ia II C T5)

	GT402 / 403 / 404 / 420 / 422 / 423	GT405
Max. input voltage, V_{max} .	28 V	28 V
Max. input current, I_{max} .	150 mA	93 mA
Max. input power, P_{max} .	0.85 W	0.75 W
Internal capacitance, C_{int} .	22 nF	6 nF
Internal inductance, L_{int} .	4 μ H	105 μ H

(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. Ambient temp. / Measuring range: -45 - 85°C / 0 - 600bar
4. Component (Type) and reference drawing:

Component (Type)	Drawing
GT402 / 403 / 404	P-GT402/CE, Rev. O P-GT403/CE, Rev. O P-GT404/CE, Rev. K Nemko report 02ATEX119X, Issue 4 DNV report 2002-3224 (Revision No.01) DNV report 2006-3295 (Revision No.01)
GT405 / 420 / 422 / 423	P-GT405/CE, Rev. D P-GT42X/CE, Rev. C Electrosuisse report SEV 09 ATEX 0138 X Nemko report 203951/4 (2012-06-13) Kongsberg Maritime statement (17.10.2012) Declaration of conformance (02.07.2012)

- To be continued -

Test items & approval conditions:

1. Test items:

(Applied testing items are marked with X.)

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

2. Approval condition:

Nil

- The End -