

EU-TYPE EXAMINATION CERTIFICATE

- [2] EQUIPMENT OR PROTECTIVE SYSTEM INTENDED FOR USE IN POTENTIALLY EXPLOSIVE ATMOSPHERES DIRECTIVE 2014/34/EU
- [3] EU-Type Examination Certificate Number: **Presafe 20 ATEX 08383X** **Issue 0**
- [4] Product: **Pressure transmitter**
- [5] Manufacturer: **Kongsberg Maritime AS**
- [6] Address: **Skonnertvegen 1
7053 Ranheim
Norway**
- [7] This product and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.
- [8] DNV GL Presafe AS, notified body number 2460, in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Annex II to the Directive.
- The examination and test results are recorded in confidential reports listed in section 16.
- [9] Compliance with the Essential Health and Safety Requirements has been assured by compliance with:
EN IEC 60079-0:2018 and EN 60079-11:2012
- [10] If the sign "X" is placed after the certificate number, it indicates that the product is subject to the Specific Conditions of Use specified in the schedule to this certificate.
- [11] This EU - TYPE EXAMINATION CERTIFICATE relates only to the design and construction of the specified product. Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.
- [12] The marking of the product shall include the following:

 **II 1 G Ex ia IIC T5 Ga Ta= -45°C to +85°C**

Date of issue:
2020-11-25



Asle Kaastad
For DNV GL Presafe AS
The Certificate has been digitally signed.
See www.dnvgl.com/digitalsignatures for info



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[13]

Schedule

[14] **EU-Type Examination Certificate No:**

Presafe 20 ATEX 08383X

Issue 0

[15] **Description of Product**

The certificate covers the GT-series Pressure Transmitters mentioned in the table below for conversion of a pressure into an electrical 4-20mA current loop signal. The pressure transmitters comprise a pressure sensing element and electronic boards enclosed and encapsulated in a cylindrical metallic enclosure.

Type designation

Name	Type	Range	Signal range, Output	Material	Connection/design
GT402	Gauge, sealed gauge, absolute	Up to 600 bar	4-20mA, 2-wires with HART	Body of AISI 316 and wetted parts in AISI316 and Titanium	Connection box with lid and cable gland. Threaded process connection ISO 228-G1/2A. IP66/67
GT403	Sealed gauge, absolute	Up to 600 bar	4-20mA, 2-wires with HART	Body and wetted parts in AISI 316 and Titanium.	Watertight flanged connection with PUR cable. Threaded process connection ISO 228-G1/2A. IP68-6bar. GT403can have cable up to 60meters of type PUR-cable with following data: Maximum internal capacitance: Ci = 120nF/km Maximum internal inductance: Li = 1.7mH/km
GT404	Gauge, sealed gauge, absolute	Up to 40 bar	4-20mA, 2-wires with HART	Body of AISI 316 and wetted parts in AISI316, Titanium and Hastelloy	Connection box with lid and cable gland. Flanged process connection with large diaphragm facing cargo. IP66/67
GT420	Differential	Up to 25 bar	4-20mA 2 wires with HART	Body of Stainless Steel and wetted parts in AISI316	Standard DIN power connector. Threaded process connection ISO 228-G1/2A. IP66
GT422	Differential	Up to 25 bar	4-20mA 2 wires with HART	Body of Stainless Steel and wetted parts in AISI316	Connection box with lid and cable gland. Threaded process connection ISO 228-G1/2A. IP66/67
GT423	Differential	Up to 25 bar	4-20mA 2 wires with HART	Body of Stainless Steel and wetted parts in AISI316	Watertight flanged connection with PUR cable. Threaded process connection ISO 228-G1/2A. IP68-6bar. GT423 can have cable up to 60meters of type PUR-cable with following data: Maximum internal capacitance: Ci = 120nF/km Maximum internal inductance: Li = 1.7mH/km
GT406	Gauge, sealed gauge, absolute	Up to 10 bar	4-20mA 2 wires with HART	Body of AISI 316 and wetted parts in AISI316	Threaded process connection ISO 228-G1/4A. Threaded process connection ISO 228-G1/2A. IP20

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Safety parameters

Maximum input voltage.	U_i:	28V
Maximum input current.	I_i:	150mA
Maximum input power.	P_i:	0,85W
Maximum internal capacitance.	C_i:	30nF
Maximum internal inductance.	L_i:	neg.

Degrees of protection (IP Code)

Ref. table above

Ambient temperature:

-45°C to +85°C

Routine tests

None

[16] **Report No.:** 198855
Project No.: PRJN-198855-2020-PA-NOR

[17] Specific Conditions of Use

- 1) The stated input values U_i, I_i, P_i are to be regarded as individual maximum values. It is a precondition that the diode safety barrier in the supply circuit has a linear resistive output characteristic.
- 2) When installing titanium sensors special caution must be taken to avoid ignition hazard due to impact or friction.
- 3) GT403 and GT423 are delivered with a cable end up 60meters of type PUR-cable with up to 102μH inductance and up to 7,2nF capacitance. The inductance and capacitance of the cable length the comes with the transmitter shall be added to L_i:neg. and C_i:30nF of the transmitter listed on page 3 under Safety parameters.

[18] Essential Health and Safety Requirements

Essential Health and Safety Requirements (EHSRs) are covered by the standards listed at item 9

[19] **Drawings and documents**

Number	Title	Rev.	Date
E-2635	Lasertagging GT4xx/-- Detail drawing	N	24.11.2020
GT-1311	Pressure transmitters type series GT4xx/- Installation in hazardous area external connection diagram	N	29.10.2020
GT-1312	Pressure transmitters type GT402-- Dimensional sketch	J	02.11.2020
GT-1313	Pressure transmitters type GT403-- Dimensional sketch	J	02.11.2020
GT-1314	Pressure transmitters type GT404-- Dimensional sketch	J	02.11.2020
GT-1316	Pressure transmitter GT402 Assembly drawing	K	22.10.2019
GT-1317	Pressure transmitter type GT403--AISI 316 og titan gr. Assembly drawing	J	13.09.2016
GT-1373	Pressure transmitter type GT404 Assembly drawing	D	02.02.2011
7212-312.900	GTB-16 PCB-spec	A	18.10.2016
7212-312.901	GTB-16 BOM	A	20.10.2016
7212-312-000	GTB-16 Layout drawing	C	15.01.2020
7212-322.900	GTB-17 PCB-spec	A	18.10.2016
7212-322.901	GTB-17 BOM	A	20.10.2016
7212-322-000	GTB-17 Layout drawing	B	30.01.2018
GT-2101	Pressure transmitters type GT420-- Dimensional sketch	C	02.11.2020
GT-2103	Pressure transmitters type GT422-- Dimensional sketch	C	02.11.2020
GT-2104	Pressure transmitters type GT423-- Dimensional sketch	C	02.11.2020
GT-2105	Pressure transmitters type GT420-- Assembly drawing	C	13.09.2016
GT-2106	Pressure transmitters type GT422-- Assembly drawing	C	03.10.2016
GT-2107	Pressure transmitters type GT423-- Assembly drawing	C	13.09.2016
GT-1800	Pressure transmitters type GT406-- Outline drawing	C	02.11.2020
GT-1801	Pressure transmitters type GT406--Assembly drawing	A	05.12.2016
GT-2142	Schematics drawing transmitter card (7212-505.000)	A	19.05.2016
GT-2143	Schematics drawing CPU card (7212-504.000)	A	19.05.2016
7212-504.900	PCB spec. CPU card	A	10.09.2016
7212-504.000	Layout drawing CPU card	B	05.07.2017
7212-504.901	BOM CPU card	C	13.09.2017
7212-505.900	PCB specification transmitter card	A	10.09.2016
7212-505.000	Layout drawing transmitter card	A	01.11.2016
7212-505.901	BOM transmitter card	C	04.09.2019

[20] **Certificate History**

Issue	Description	Issue date	Report no.
0	Original issue	2020-11-25	198855

END OF CERTIFICATE