



IECEX Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.:	IECEX TUN 13.0030X	Page 1 of 4	<u>Certificate history:</u>
Status:	Current	Issue No: 5	Issue 4 (2017-09-21)
Date of Issue:	2024-01-10		Issue 3 (2017-01-13)
Applicant:	Kongsberg Maritime AS Trondheim Skonnertvegen 1 7053 Ranheim Norway		Issue 2 (2016-09-16)
Equipment:	Electronic level switch GL-7B/*		Issue 1 (2015-08-04)
Optional accessory:			Issue 0 (2014-01-06)
Type of Protection:	Intrinsic safety		
Marking:	Ex ia IIC T5...T4 Ga		

Approved for issue on behalf of the IECEx
Certification Body:

Anke Drews

Position:

Deputy Head of IECEx Certification Body

Signature:
(for printed version)

Date:
(for printed version)

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting www.iecex.com or use of this QR Code.



Certificate issued by:

TÜV NORD CERT GmbH
Hanover Office
Am TÜV 1, 30519 Hannover
Germany





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Manufacturer: **Kongsberg Maritime AS Trondheim**
Skonnertvegen 1
7053 Ranheim
Norway

Manufacturing locations: **Kongsberg Maritime AS Trondheim**
Skonnertvegen 1
7053 Ranheim
Norway

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended

STANDARDS :

The equipment and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards

[IEC 60079-0:2017](#) Explosive atmospheres - Part 0: Equipment - General requirements
Edition:7.0

[IEC 60079-11:2011](#) Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
Edition:6.0

This Certificate **does not** indicate compliance with safety and performance requirements other than those expressly included in the Standards listed above.

TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in:

Test Report:

[DE/TUN/ExTR13.0045/05](#)

Quality Assessment Report:

[NO/PRE/QAR18.0016/03](#)



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EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

The GL-7B/ * is an electronic level switch for monitoring liquid levels in cargo tanks. The device is an intrinsically safe level switch, supplied by a safety barrier (two barriers for the two-channel-type).

Type key:

GL-7B/ *

* = 1: Simple switch

* = 2: Double switch

Technical data:

Level of protection Ex ia IIC
Only for connection to certified
intrinsically safe circuits.
Maximum values per circuit:
 $U_i = 28 \text{ V}$
 $I_i = 150 \text{ mA}$
 $P_i = 850 \text{ mW}$
Supply
Terminals 1, 2
and 101, 102
Effective internal capacity
 $C_i = 21.2 \text{ nF}$
Effective internal inductance L_i
= negligibly small
Characteristic line of the
supply: linear

Permissible range of ambient temperature:

-45 °C to +85 °C for temperature class T4

-45 °C to +70 °C for temperature class T5

SPECIFIC CONDITIONS OF USE: YES as shown below:

1. While filling or emptying the non-metallic sensor tips must be protected against direct flow by positioning or mechanical barriers.
2. For the installation of intrinsically safe circuits according to EPL Ga, section 16.3 of IEC 60079-14:2013 shall be observed.



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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

Standard update.

Added grounding symbol in the installation drawing.

Annex:

[Attachment to IECEx TUN 13.0030X Issue 05.pdf](#)

General product information:

The GL-7B/* is an electronic level switch for monitoring liquid levels in cargo tanks. The device is an intrinsically safe level switch, supplied by a safety barrier (two barriers for the two-channel-type).

Type key:

GL-7B/*

* = 1: Simple switch

* = 2: Double switch

Electrical data:

Supply
Terminals 1, 2 and 101, 102

Level of protection Ex ia IIC

Only for connection to certified intrinsically safe circuits.

Maximum values per circuit:

$U_i = 28 \text{ V}$

$I_i = 150 \text{ mA}$

$P_i = 850 \text{ mW}$

Effective internal capacity $C_i = 21.2 \text{ nF}$

Effective internal inductance $L_i = \text{negligibly small}$

Characteristic line of the supply: linear

Permissible range of ambient temperature: $-45 \text{ }^\circ\text{C}$ to $+85 \text{ }^\circ\text{C}$ for temperature class T4
 $-45 \text{ }^\circ\text{C}$ to $+70 \text{ }^\circ\text{C}$ for temperature class T5

Details of change (applicable only when revising an existing ExTR package):

Added grounding symbol in the installation drawing.

Specific Conditions of Use:

1. While filling or emptying the non-metallic sensor tips must be protected against direct flow by positioning or mechanical barriers.
2. For the installation of intrinsically safe circuits according to EPL Ga, section 16.3 of IEC 60079-14:2013 shall be observed.