

Marine & Offshore

Certificate number: 03200/G0 BV

File number: AP 1815 Product code: 3741H

This certificate is not valid when presented without the full attached schedule composed of 7 sections

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## TYPE APPROVAL CERTIFICATE

This certificate is issued to

# AUTRONICA FIRE AND SECURITY AS, div Tønsberg

Nøtterøy - NORWAY

for the type of product

## LEVEL TRANSMITTERS

Type: HL-8903 and HHL-8903.

Requirements:

BUREAU VERITAS Rules for the Classification of Steel Ships.

This certificate is issued to attest that Bureau Veritas Marine & Offshore did undertake the relevant approval procedures for the product identified above which was found to comply with the relevant requirements mentioned above.

This certificate is a renewal of certificate N° 03200/F0 BV expiring on 17/12/2017

This certificate will expire on: 17 Dec 2022

For Bureau Veritas Marine & Offshore, At BV OSLO, on 09 Aug 2017, Rune MARSTEIN

Rune Marstein



This certificate remains valid until the date stated above, unless cancelled or revoked, provided the conditions indicated in the subsequent page(s) are complied with and the product remains satisfactory in service. This certificate will not be valid if the applicant makes any changes or modifications to the approved product, which have not been notified to, and agreed in writing with Bureau Veritas Marine & Offshore. Should the specified regulations or standards be amended during the validity of this certificate, the product(s) is/are to be re-approved prior to it/they being placed on board vessels to which the amended regulations or standards apply. This certificate is issued within the scope of the General Conditions of Bureau Veritas Marine & Offshore available on the internet site www.veristar.com. Any Person not a party to the contract pursuant to which this document is delivered may not assert a claim against Bureau Veritas Marine & Offshore for any liability arising out of errors or omissions which may be contained in said document, or for errors of judgement, fault or negligence committed by personnel of the Society or of its Agents in establishment or issuance of this document, and in connection with any activities for which it may provide.

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# THE SCHEDULE OF APPROVAL

## 1. PRODUCT DESCRIPTION:

Level Alarm Sensor, fail-safe operating:

Type **HL-8903**: Type **HHL-8903**:

Single alarm point Dual alarm point

Standard float:

Max. pressure 45 bar

Alama assisah aansa sa matimaas

Min. density 0.42 Max. switching power 10VA

Alarm switch contact ratings:

Max. switching voltage 100 Vdc/100 Vac (peak)

Temperature:

Max. +130°C Min. -195°C

Protection index:

IP 68.

#### 2. DOCUMENTS AND DRAWINGS:

Catalogue specifications. Drawing A3-89021.

#### 3. TEST REPORTS:

Report 41206200 from DNV dated 20 June 1989.

#### **4. APPLICATION / LIMITATION:**

4.1 - BUREAU VERITAS Rules for the Classification of Steel Ships.

4.2 - Approval valid for ships intended to be granted with the following additional class notations: AUT-UMS, AUT-CCS, AUT-PORT and AUT-IMS.

#### **5. PRODUCTION SURVEY REQUIREMENTS:**

- 5.1 The Level Alarms HL-8903 and HHL-8903 are to be supplied by AUTRONICA FIRE AND SECURITY AS, div Tønsberg in compliance with the type described in this certificate.
- 5.2 This type of product is within the category HBV of Bureau Veritas Rule Note NR320 and as such does not require a BV product certificate.
- 5.3 AUTRONICA FIRE AND SECURITY AS, div Tønsberg has to make the necessary arrangements to have its works recognised by Bureau Veritas in compliance with the requirements of NR320 for HBV products.
- 5.4 For information, AUTRONICA FIRE AND SECURITY AS, div Tønsberg has declared to Bureau Veritas the following production site(s):

AUTRONICA FIRE AND SECURITY AS, div Tønsberg Stalsbergvn 3128 Nøtterøy NORWAY

#### **6. MARKING OF PRODUCT:**

- Maker's name or trade mark,
- Serial number of the units,
- Equipment type number or model identification under which it was type-tested.

#### 7. OTHERS:

- 7.1 It is AUTRONICA FIRE AND SECURITY AS, div Tønsberg responsibility to inform shipbuilders or their sub-contractors of the proper methods of fitting, use and general maintenance of the approved equipment and the conditions of this approval.
- 7.2 This certificate supersedes the Type Approval Certificate No. 03200/F0 BV issued on 17 Dec. 2012 by the Society.

\*\*\* END OF CERTIFICATE \*\*\*