

Certificate number: 07176/D0 BV

File number: AP 2990 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

Barksdale GmbH

Reichelsheim - GERMANY

for the type of product

LEVEL TRANSMITTERS

Level Switches
Type: UNS.. series

Requirements:

Bureau Veritas Rules for the Classification of Steel Ships.

This certificate is issued to attest that BUREAU VERITAS did undertake the relevant approval procedures for the product identified above which was found to comply with the relevant requirements mentioned above.

This certificate will expire on: 04 Feb 2019

For BUREAU VERITAS,
At BV HAMBURG, on 04 Feb 2014,
Dirk Hoepfner





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. 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 lit/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 Division 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 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 Sensors - Magnetic Level Switches comprising:

Series	Type	Remarks
Multi Level	UNS-1000-S-VA(-MS)/xx	Brakets spacing: 500 mm max. IP67
	UNS-2000(-2100-Ex)-S-VA/xx	Max. length 1500mm with protection tube or 1000mm without protection tube Guide tubes longer than 1500 mm (1000 mm) to be fixed by an additional holder The distance between fixing points must not exceed 2500mm (2000mm) Degree of protection: IP67
Bilge Float	UNS-S-VA(-MS)/xx UNS90-S-VA/xx	Bilge Float UNS-S-VA/SBx-VA52/xx(-UAD-LSB), Bilge Guards Reed contact rating n/o, n/c: 250V AC/DC, 3A, 100VA/W 230V AC/DC, 2A, 40VA/W Bilge Guard Reed contact rating c/o: 250V AC/DC, 1A, 60VA/W
Bilge Guard	UNS-S-VA/xx UNS-VA/SBy UNS-S-VA/SBy	Degree of protection: UNS-S- Other IP54 IP67

xx = Mechanical mounting, Electrical connection, Float type, etc...

2. DOCUMENTS AND DRAWINGS:

- Specification UNIMESS Version 01.1997; UNIMESS design drawings; 12/04 UNS US 04/1 Note: Documents filed in AP 2990.

3. TEST REPORTS:

RMS: - 8-09/95 dated 05 October 1995.

PTB: - PTB Nr. Ex-95.D.2010 dated 02.02.1995.

ISSeP: - ISSeP08ATEX016X/1 dated 22.02.2013.

4. APPLICATION / LIMITATION:

- 4.1 Bureau Veritas Rules and Regulations 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.
- 4.3 Bureau Veritas Environmental Category, EC Code: 31.
- 4.4 May not be used for flammable oil tanks in passenger ships where penetration below tank top would be necessary.

5. PRODUCTION SURVEY REQUIREMENTS:

- 5.1 The above mentioned products are to be supplied by **Barksdale GmbH** 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.
- 5.3 Barksdale GmbH has to make the necessary arrangements to have its works recognised by Bureau Veritas in compliance with the requirements of NR320 for HBV products:

Barksdale GmbH Dorn-Assenheimer Strasse 27 61203 Reichelsheim GERMANY

5.4 - Equipment is to be supplied with manual(s) for installation, use and maintenance.

6. MARKING OF PRODUCT:

- Maker's name or trade mark.
- Equipment type or model identification.
- Date of manufacture and/or serial number.
- Ex marking, as relevant

y = 4 or 5

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7. OTHERS:
7.1 - This approval is given on the understanding that the Society reserves the right to require check tests to be carried out on the units at any time and that **Barksdale GmbH - GERMANY**, will accept full responsibility for informing shipbuilders, ship owners or their sub-contractors of the proper methods of use and general maintenance of the units and the conditions of this approval.

7.2 - This certificate supersedes the Type Approval Certificate N° 07176/C0 BV issued on 13 Aug 2008 by the Society.

*** END OF CERTIFICATE ***