



CERTIFICATE NUMBER 19-HG1816972-PDA
EFFECTIVE DATE 16-January-2019
EXPIRATION DATE 15-January-2024
ABS TECHNICAL OFFICE
Hamburg Engineering Department

CERTIFICATE OF

Product Design Assessment

This is to certify that a representative of this Bureau did, at the request of

UAD SERVICE + VERTRIEBS UG

located at

Alter Hafen Nord 216, D-18069 Rostock, Germany

assess design plans and data for the below listed product. This assessment is a representation by the Bureau as to the degree of compliance the design exhibits with applicable sections of the Rules. This assessment does not waive unit certification or classification procedures required by ABS Rules for products to be installed in ABS classed vessels or facilities. This certificate, by itself, does not reflect that the product is Type Approved. The scope and limitations of this assessment are detailed on the pages attached to this certificate.

Product Float Operated Magnetic Level Switch

Model LS A1, LS A2, LS A3, LS A4

This Product Design Assessment (PDA) Certificate remains valid until expiration date or until the Rules and/or Standards used in the assessment are revised or until there is a design modification warranting design reassessment (whichever occurs first).

Acceptance of product is limited to the "Intended Service" details prescribed in the certificate and as per applicable Rules and Standards.

This Certificate is valid for installation of the listed product on ABS units which exist or are under contract for construction on or previous to the effective date of the ABS Rules and standards applied at the time of PDA issuance. Use of the Product for non-ABS units is subject to agreement between the manufacturer and intended client.

American Bureau of Shipping

Ulf Numirski
Engineer/Consultant

NOTE: This certificate evidences compliance with one or more of the Rules, Guides, standards or other criteria of ABS or a statutory, industrial or manufacturer's standards. It is issued solely for the use of ABS, its committees, its clients or other authorized entities. Any significant changes to the aforementioned product without approval from ABS will result in this certificate becoming null and void. This certificate is governed by ABS Rules 1-1-A3/5.9 Terms and Conditions of the Request for Product Type Approval and Agreement (2010).

UAD SERVICE + VERTRIEBS UG (HB)

ALTER HAFEN NORD 216

D-18069 ROSTOCK

Germany

Telephone:

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Tier: 2 - PDA Issued

Product: Float Operated Magnetic Level Switch

Model: LS A1, LS A2, LS A3, LS A4

Intended Service:

Liquid level gauging.

Description:

LS A1: with test button, without connecting cable.

LS A2: with test button and with connecting cable.

LS A3: without test button and without connecting cable.

LS A4: without test button, with connecting cable.

Housing made of RG5 or RG10. Float made of stainless steel 1.4571.

Microswitch types: D43X, D44X, D45X.

All models also available in EExd version: II 2G Ex d IIC T6 Gb (IBExU13ATEX1069 X).

All models also available in -G version with bended linkage of max. 760 mm length.

Accessories: Protection bellows SB1 (EPDM) and SB2 (NBR).

Rating:

Rated Pressure: 42 bar.

Operating Temperature: -40°C to 125°C.

Contact Ratings: D43X: 250V, 6(2)A; D44X: 250V, 10(3)A; D45X: 250V, 15(7)A.

Degree of Protection: IP 65, IP 68 (11 m).

Service Restriction:

- Unit Certification is not required for this product. If the manufacturer or purchaser request an ABS Certificate for compliance with a specification or standard, the specification or standard, including inspection standards and tolerances, must be clearly defined.
- If the tank level switches are installed at tank locations where they are subject to a static head of liquid they are to be arranged such that they may be removed without emptying the tank.
- For passenger vessels the level switches are not to be installed on oil tanks where they require tank wall penetration below tank top.

Comments:

- Each particular installation is to be approved in conjunction with the relevant system and tank arrangement.
- ATEX certified equipment is not to be installed in hazardous areas on U.S. vessels unless it can be proven to have been tested to the applicable IEC 60079 series standards by an independent laboratory accepted by the U.S. Coast Guard. USCG notice 01-12 (February 7, 2012).
- The Manufacturer has provided a declaration about the control of, or the lack of Asbestos in this product.

Notes/Drawing/Documentation:

Drawing No. 01, Housing LSA, Revision: -, Pages: 1

Drawing No. 02, Housing LSG, Revision: -, Pages: 1

Drawing No. 03, Data Sheet, LSG, Revision: -, Pages: 1

Drawing No. 04, Data Sheet, LSA, Revision: -, Pages: 1

Drawing No. IBExU13ATEX1069 X, Ex Certificate, Revision: -, Pages: 2

Terms of Validity:

This Product Design Assessment (PDA) Certificate 19-HG1816972-PDA, dated 16/Jan/2019 remains valid until 15/Jan/2024 or until the Rules or specifications used in the assessment are revised (whichever occurs first).

This PDA is intended for a product to be installed on an ABS classed vessel, MODU or facility which is in existence or under contract for construction on the date of the ABS Rules or specifications used to evaluate the Product.

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Tier: 2 - PDA Issued

Use of the Product on an ABS classed vessel, MODU or facility which is contracted after the validity date of the ABS Rules and specifications used to evaluate the Product, will require re-evaluation of the PDA.

Use of the Product for non ABS classed vessels, MODUs or facilities is to be to an agreement between the manufacturer and intended client.

STANDARDS

ABS Rules:

2019 ABS Rules for Conditions of Classification - Marine Vessels 1-1-4/7.7, 1-1-A3, 1-1-A4, 4-6-2/9.11.3, 4-6-4/13.5.6(b), 4-6-4/15.3.4(b), 4-8-3/1.7, 4-8-3/1.11, 4-8-3/1.17, 4-8-3/13.1, 4-9-9/13

National:

NA

International:

NA

Government:

NA

EUMED:

NA

OTHERS:

NA