



Marine & Offshore

Certificate number: 22435/D0 BV

File number: AP 4047 Product code: 3843H

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

# PRESSURE SWITCH

9000 Series

Requirements:

Bureau Veritas Rules for the Classification of Steel Ships

EC Code: 33

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 will expire on: 17 Feb 2030

For Bureau Veritas Marine & Offshore, At BV HAMBURG, on 17 Feb 2025, Dirk Hoepfner

This certificate was created electronically and is valid without signature



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:

The **9000 series** are piston type pressure switches for marine applications.

## 1.1 - Main characteristics:

9000 Series

Pressure Range: 0.2...2 to 40... 400bar Rated Voltage: 250V AC / 24V DC

Operating Temperature: -10°C to 55°C

Electrical Connection: EN 175301-8013-A plug (DIN 43650)

Pressure Connection: G1/4" female thread DIN ISO 228-1or flange

Ingress Protection Index: IP 65

Housing material: stainless steel or aluminium

## 1.2 - Electrical ratings:

Туре	Silver contacts	Inductive load	Resistive load	<b>Gold-plated contacts</b>	Ex
9000 Series	250V AC 24V DC	2.5A 1.0A	10.0A 6.0A	N/A	N/A

#### 2. DOCUMENTS AND DRAWINGS:

- Data sheets: 923-1961 Rev. A dated 05.08.14; 923-1647 Index I dated 27.09.2018; 02/02 KDM-ENG 02/2
- Operating instructions: 923-1650 Index F dated 21.03.2018;

## 3. TEST REPORTS:

Institut für BFSV an der HAW Hamburg:

- 6761/09, dated 02.07.2009; 4945/02, dated 26.07.2002

BFSV Hamburg Institute of Packing GmbH:

- 0973/14 dated 17 October 2014

## 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.**
- 4.3 Bureau Veritas Environmental Category, EC Code: 33
- 4.4 Equipment covered by this Type Approval certificate has been tested according to requirements of IACS UR E10 rev 9
- 4.5 Bureau Veritas Rules Part C, Ch 1, Sec 10 apply for pressurized parts made of aluminium or aluminium alloys if they are used in piping systems for flammable liquids or fire-extinguishing systems.

# 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 and as such does not require a BV product certificate.
- 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.
- 5.4 For information, Barksdale GmbH has declared to Bureau Veritas the following production site:

Barksdale GmbH Dorn-Assenheimer Strasse 27 61203 Reichelsheim GERMANY

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

- Maker's name or trade mark
- Equipment type or model identification
- Date of manufacture and/or serial number

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## **7. OTHERS:**

- 7.1 It is the responsibility of **Barksdale GmbH** 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 N° 22435/C0 BV issued on 10 Dec 2019 by the Society.

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