DNV-GL

Certificate No: **TAA000027H**Revision No:

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Pressure Switch

with type designation(s) **DPD1T, D1T, DPD2T, D2T Series**

Issued to

Barksdale GmbH

Reichelsheim (Wetterau), Hessen, Germany

is found to comply with

DNV GL rules for classification - Ships, offshore units, and high speed and light craft

Application:

Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV GL.

Location classes:

Temperature D
Humidity B
Vibration A
EMC B

Enclosure B/C* (IP65)

Issued at Hamburg on 2019-09-27

This Certificate is valid until **2024-04-25**.

DNV GL local station: Augsburg

Approval Engineer: Holger Jansen

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Digitally Signed By: Rinkel, Marco

for **DNV GL**

Location: Hamburg, on behalf of

Joannis Papanuskas Head of Section

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid. The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.

Revision: 2016-12



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Job Id: **262.1-030618-2** Certificate No: **TAA000027H**

Revision No: 1

Product description

Differential Pressure Switches DPD1T, DPD2T Series Pressure Switch D1T, D2T Series

Base configuration	Limit Switch	Adjustable range	
DPD1T	-H, -GH	3SS	2 mbar to 0,2 bar
or	or	18SS	30 mbar to 1,20 bar
DPD2T	-M, -GM	80SS	30 mbar to 5,5 bar
		150SS	100 mbar to 10,3 bar
	-H, -GH	3SS	2 mbar to 0,2 bar
	or	18SS	30 mbar to 1,24 bar
D1T	-M, -GM	80SS	30 mbar to 5,5 bar
or		150SS	100 mbar to 10,3 bar
D2T	-B	2SS-GL	1 mbar to 0.11 bar
		3SS-GL	2 mbar to 0,2 bar
		18SS-GL	30 mbar to 1,20 bar
		80SS-GL	30 mbar to 5,5 bar
		150SS-GL	100 mbar to 10,3 bar

Wetted parts: (1.4578, 17-7PH)

Output: 1 c/o-contact (D1T..), 2 c/o-contacts (D2T..)

Max. contact rating: 3A, 480Vac; 0.5A, 28Vdc "-H";

3A, 480Vac; 0.25A, 250Vdc "-M" 0.1A, 30Vac; 0.1A, 30Vdc "-GM" 1A, 125Vac, 1A, 24Vdc "-GH" 10A, 250Vac, 0.03A; 250Vdc "-B"

Application/Limitation

The Type Approval covers hardware listed under Product description. When the hardware is used in applications to be classed by DNV GL, documentation for the actual application is to be submitted for approval by the manufacturer of the application system in each case. Reference is made to DNV GL rules for classification of ships Pt.4 Ch.9 Control and monitoring systems.

Location classes: Enclosure Categorie "C*": applies only to types with painted housing

Type Approval documentation

Data sheets: D1T/D2T; 923-1484 Rev. I

DPD1T/DPD2T; 923-1490 Rev. H

Technical documentation 7.500 4.70

Drawings: 923-0309 Rev. G (pages 6, 11+12)
DNV Evaluation report 210570

Operating characteriscics HI-P Dia-Seal Piston Models, Dwg.-No. C98134

Test reports: RMS 1-12/93 page 1-26 and addendum 1-01/94 page 1-10

FH Hamburg Test Report No. U. 014-93-94 RST No. P50-19-0042-en, 2019-03-07 Environmental test report 081070 / 130171

VDE No. 19375-9000-4001/A1A

Type Approval Assessment Report 2019-02-11

Tests carried out

Applicable tests according to DNVGL-CG-0339, November 2016.

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Marking of product

The products to be marked with:

- Model name
- Manufacturer name
- Serial number

Periodical assessment

The scope of the periodical assessment is to verify that the conditions stipulated for the type are complied with, and that no alterations are made to the product design or choice of systems, software versions, components and/or materials.

The main elements of the assessment are:

- Ensure that type approved documentation is available
- Inspection of factory samples, selected at random from the production line (where practicable)
- Review of production and inspection routines, including test records from product sample tests and control routines
- Ensuring that systems, software versions, components and/or materials used comply with type approved documents and/or referenced system, software, component and material specifications
- Review of possible changes in design of systems, software versions, components, materials and/or performance, and make sure that such changes do not affect the type approval given
- Ensuring traceability between manufacturer's product type marking and the type approval certificate

Periodical assessment is to be performed after 2 years and after 3.5 years. A renewal assessment will be performed at renewal of the certificate.

END OF CERTIFICATE

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