



CERTIFICATE NUMBER 19-HG1855581-PDA
EFFECTIVE DATE 28-Jun-2019
EXPIRATION DATE 27-Jun-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

DRAEGER SAFETY AG & CO. KG AA

located at

REVALSTRASSE 1, D-23560 LUEBECK, 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 Gas Detector


Model Pulsar 7x00 Series (OTR 00)**

This Product Design Assessment (PDA) Certificate remains valid until 27-Jun-2024 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


Efstratios Maliatsos
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)

DRAEGER SAFETY AG & CO. KG AA

REVALSTRASSE 1

D-23560 LUEBECK

Germany

Telephone: 0049 451 882 5193

Fax: 0049 451 882 7 5193

Email: info@draeger.com

Web: www.draeger.com

Tier: 2 - PDA Issued

Product: Gas Detector

Model: Pulsar 7x00 Series (OTR 00**)

Intended Service:

Stationary open path gas detector for Marine and Offshore Applications.

Description:

Open path gas transmitter for monitoring hydrocarbons in gas and vapor.

See Attached Document for more details.

Rating:

Power supply: 24 V DC (nominal)

Output: 4 to 20 mA (measuring), 3.5 mA (pre-warning), 3 mA (maintenance), 2 mA (beam block warning), <1 mA (fault).

Degree of Protection: IP66/67

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.

Comments:

The Manufacturer has provided a declaration about the control of, or the lack of Asbestos in this product.

Notes/Drawing/Documentation:

Drawings: SE23361_05, SE23364_01, SE24586_00

TREO Test Report No. 232-18, 2018-08-29

TREO Test Report No. 306-18, 2018-10-04

CEcert Test Report No. 416.350.2, 2017-03-01

PTB Test Report No. 2014_00016.5.1_3019, 2016-08-23

PTB Test Report No. 2014_00016.5.4_3019, 2016-08-23

IECEX PTB Certificate of Conformity 16.0021X, Issue 01, 2017-11-09

IECEX FMG Certificate of Conformity 17.0032, Issue 02, 2018-03-28

Pulsar 7000 series Datasheet, Revision: 0, Pages: 8

Terms of Validity:

This Product Design Assessment (PDA) Certificate 19-HG1855581-PDA, dated 28/Jun/2019 remains valid until 27/Jun/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.

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

DRAEGER SAFETY AG & CO. KG AA

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ABS Rules:

2019 Steel Vessel Rules 1-1-4/7.7, 1-1-A3, 1-1-A4, 4-8-3/1.11.1, 4-8-4/27, 4-9-8/Table 1, 5C-1-7/17.7, 5C-1-7/25.33, 5C-8-9/5.1, 5C-8-13/6, 5C-13-6/14

2019 Marine Vessel Rules 1-1-4/7.7, 1-1-A3, 1-1-A4, 4-8-3/1.11.1, 4-8-4/27, 4-9-9/Table 1, 5C-1-7/17.7, 5C-1-7/25.33, 5C-8-9/5.1, 5C-8-13/6, 5C-13-6/14

2019 Mobile Offshore Drilling Units 1-1-4/9.7, 1-1-A2, 1-1-A3

National:

NA

International:

IEC 60079-29-4: 2009

IEC 60079-0: 2011

IEC 60079-1: 2014

IEC 60079-11: 2011

IEC 60079-31: 2013

Government:

NA

EUMED:

NA

OTHERS:

NA