

[1]

EU-TYPE EXAMINATION CERTIFICATE

[2] Directive 2014/34/EU of the European Parliament and of the Council of 26 February 2014

[3] EU-Type Examination Certificate Number: **Presafe 20 ATEX 61463X** **Issue 1**

[4] Product: **ROW (Remote Optical Watcher) oil detectors**

[5] Manufacturer: **LASER DIAGNOSTIC INSTRUMENTS AS**

[6] Address: **Kopliiranna 49
Tallinn 11713
Estonia**

[7] This product and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

[8] DNV Product Assurance AS, notified body number 2460, in accordance with Article 17 and Article 21 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres, given in Annex II to the Directive.

The examination and test results are recorded in confidential reports listed in item 16.

[9] Compliance with the Essential Health and Safety Requirements has been assured by compliance with: **EN IEC 60079-0:2018 and EN 60079-1:2014**

Where additional criteria beyond those given here have been used, they are listed at item 18 in the Schedule.

[10] If the sign "X" is placed after the certificate number, it indicates that the product is subject to the "Specific Conditions of Use" listed under item 17 of this certificate.

[11] This EU-TYPE EXAMINATION CERTIFICATE relates only to the design and construction of the specified product in accordance to the Directive 2014/34/EU. Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.

[12] The marking of the product shall include the following:

 **II 2 G Ex db IIC T6 Gb, T_{amb}: -30°C to +60°C**

Date of issue:
2024-01-08



Bjørn Spongsveen
For DNV Product Assurance AS
The Certificate has been digitally signed.
See www.dnv.com/digitalsignatures for info



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Schedule

[14]

EU-Type Examination Certificate No:

Presafe 20 ATEX 61463X

Issue 1

[15]

Description of Product

Remote Optical Watcher (ROW) is autonomous non-contact sensor for detection of oil on water protected with flameproof enclosure type of protection. The system is classified as a class 3B light emission hazard and radiates UV LED light (not within the scope of EN 60079-28:2015).

The system consists of a pulsed UV LED, receiving telescope, data control and processing electronics. The ROW is enclosed in a metallic enclosure made from stainless steel which consists of tube and two treaded covers (top and bottom flange). Bottom flange includes cemented glass window protected with guard.

The equipment is power supplied through the external cable which is certified as part of the product together with mounted Ex certified cable gland.

Type designation Type: ROW O23**Exd and O45**Exd

Applicable models: O2301E, O2302E, O4500E, O4501E and O4502E.

Electrical data:

Supply voltage

ROW O23**Exd: 10-30 VDC

ROW O45**Exd: 12 VDC

Routine tests:

Each enclosure has to be submitted to routine overpressure test (50.3 bar acc. Cl. 16 of EN 60079-1:2014).

[16]

Report No.: SC168600/01

Project No.: PRJN-168600-2019-PA-NOR

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Specific Conditions of Use

1. Equipment must only be placed in areas with low risk of mechanical danger (ref clause 26.4.2 in EN 60079-0:2018).
2. Flameproof joints dimensions specified in the drawings are different than the standard requirements. Min 7 threads must be engaged for all threaded flameproof joints.

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Essential Health and Safety Requirements

Met by compliance with the requirements mentioned in item 9.

[19] Drawings and documents

Number	Title	Rev.	Date
ROW.Ex.02.00.00.KJ	Housing	C	2023-11-22
ROW.Ex.02.00.01.KJ	Holder with Quartz	B	2023-11-22
ROW.Ex.02.00.01.M	Holder with Quartz	C	2023-11-22
ROW.Ex.02.01	Bottom Flange	D	2022-10-10
ROW.Ex.02.04	Ring	A	2019-09-11
ROW.Ex.02.09	Top Flange	B	2019-11-06
ROW.Ex.02.10.	Label	B	2023-12-12
ROW.Ex.02.17	Tube	D	2023-11-01
ROW.Ex.02.25	Flange	A	2019-11-04
ROW.Ex.02.29	Window Guard	A	2020-05-05
ROW.Ex.02.BR.01	Body Bracket	A	2020-05-04
ROW.Ex.02.BR.02	Sunshield with window guard	A	2020-05-05
ROW.Ex.02.BR.03	ATEX ROW Bracket	A	2020-04-22
ROW.Ex.100GR	Case	A	2019-12-19
ROW.Ex.265.25.	Support	A	2019-10-28
ROW EX GL	Gland with Cable	B	2020-05-15
ROW O 4500.Ex	Optikal Unit	B	2019-12-16
ROW O 2301B	Optikal Unit	C	2019-12-16

[20] Certificate History

Issue	Description	Issue date	Report no.
0	Original issue	2020-06-11	SC168600
1	-minor technical changes -changes in descriptive documentation	2024-01-08	SC168600/01

END OF CERTIFICATE