


EC-Type Examination Certificate

- [2] EQUIPMENT OR PROTECTIVE SYSTEM INTENDED FOR USE IN POTENTIALLY EXPLOSIVE ATMOSPHERES DIRECTIVE 94/9/EC
- [3] **EC-Type Examination Certificate Number:** Presafe 15 ATEX 6670 X Issue 0
- [4] **Equipment or Protective System:** Flameproof enclosures for sensors on cylinders, accumulators and dampers
- [5] **Applicant – Manufacturer or Authorized representative:** Servi AS-Rissa
- [6] **Address:** 7100 Rissa
Norway
- [7] This equipment or protective system and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.
- [8] DNV Nemko Presafe AS, notified body number 2460 in accordance with Article 9 of Council Directive 94/9/EC of 23 March 1994, certifies that this equipment or protective system has been found to comply with the Essential Health and Safety requirements relating to the design and construction of equipment and protective systems 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 section 16.
- [9] Compliance with the Essential Health and Safety Requirements has been assured by compliance with: EN 60079-0:2012 and EN60079-1:2007.
- [10] If the sign “X” is placed after the certificate number, it indicates that the equipment or protective system is subject to specific conditions of use specified in the schedule to this certificate.
- [11] This EC-TYPE EXAMINATION CERTIFICATE relates only to the design, examination and tests of the specified equipment or protective system in accordance to the directive 94/9/EC. Further requirements of the Directive apply to the manufacturing process and supply of this equipment or protective system. These are not covered by this certificate.
- [12] The marking of the equipment or protective system shall include the following:

 II -/2 G Ex d IIB T4 Gb, T_{amb} -20°C to +60°C

Asle Kaastad
For DNV Nemko Presafe AS
Information on electronic signature www.presafe.com



Date of issue: 2016-04-04

This certificate may only be reproduced in its entirety and without any change, schedule included.

[13]

Schedule

[14] **EC-TYPE EXAMINATION CERTIFICATE No.:** Presafe 15 ATEX 6670 X Issue 0

[15] Description of Equipment or Protective System

The equipment consists of three types of flameproof enclosures for sensors on cylinders, accumulators and dampers, "Area1", "Area 2" and "Area 3". The enclosures made from carbon steel are used to protect various types of sensors or switches on cylinders, accumulators and dampers.

Equipment is delivered equipped with proper cables and certified cable glands.

Parts are fixed together by means of special fasteners (fastening screws), minimum yield strength is 630 N/mm².

The housing type "Area 1" can vary in length up to 2 meters and diameter up to 320 mm. The length/diameter ratio must always be less than 6.25. The type "Area 2" can vary in length up to 170 mm inside length. The wall thickness must be at least 5 mm for "Area1" types, and 8 mm for "Area 2" types. The depth of engagement of the gland threads must be ≥ 8 mm.

The protection depends on that the measuring side of the sensors in "Area1", "Area2" and "Area 3" are mounted in a safe zone, i.e. in oil or other fluid as intended with maximum temperature up to +80°C.

The free end of the permanently connected cable shall be protected by type of protection listed in clause 1 of 60079-0.

Type designation

"Area1", "Area 2" and "Area 3".

Electrical Data

Voltage: 36V DC

Ambient temperature:

-20°C to +60°C

Routine tests

Every enclosure of type "Area1" must be over pressure tested according to EN 60079-1 clause 16, while for the types "Area 2" and "Area 3" it is not required if welding isn't used for enclosure construction. The pressure for type "Area1" is at 11.3 bar and for types "Area 2" and 2, "Area 3" is at least 10.1 bar .

[16] **Report No.:** D0001521

[17] Specific Conditions of Use

Repairs of the "Area 2" flameproof joints must be made in compliance with the structural specifications provided by the manufacturer. Repairs must not be made on the basis of values specified in tables 1 and 2 of IEC 60079-1.

The cable and cable gland are suitable only for fixed applications and the cable must be effectively clamped and cleated to prevent pulling and twisting.

[18] Essential Health and Safety Requirements

See part 9 of this certificate

[19] Descriptive Documents

Number	Title	Rev.	Date
04575	ASSEMBLY DRAWING	J	2015-06-23
04939	CAP	D	2015-09-02
D003763	MUFFE M20x1,5	A	2012-02-22
D009767	ATEX SENSORKAPPE	A	2015-08-05
D0011272	SKILT for AREA 2	-	2015-10-25
D0011273	SKILT for AREA 1	-	2015-10-25
D0011274	SKILT for AREA 3	-	2015-10-25

[20] Certificate History

Issue	Description	Issue date	Report no.
0	Original issue	2016-04-04	D0001521

END OF CERTIFICATE