

(1) EU-TYPE EXAMINATION CERTIFICATE



- (2) Equipment and Protective Systems intended for use in Potentially Explosive Atmosphere - **Directive 2014/34/EU**
- (3) EU-Type Examination Certificate Number

TÜV 19 ATEX 8332 X

Issue: 03

- (4) Equipment: **Sensor SRV und SRD**
- (5) Manufacturer: **Rheonics GmbH**
- (6) Address: **Klosterstr. 19
8406 Winterthur - CH**

- (7) This product and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.
- (8) The TÜV Rheinland Zertifizierungsstelle für Explosionsschutz of TÜV Rheinland Industrie Service GmbH, Notified Body No. 0035 in accordance with Article 21 of the Council Directive 2014/34/EU of 26th February 2014, certifies this product which 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 atmosphere, given in Annex II to the Directive.

The examination and test results are recorded in the confidential report 557/Ex 8332.04/19

- (9) Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the schedule of this certificate, has been assessed by reference to:

EN IEC 60079-0: 2018

EN 60079-11: 2012

- (10) If the sign "X" is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use specified in the schedule to this certificate.
- (11) This EU-Type Examination Certificate relates only to the design and specification for construction of the equipment or protective system. It does not cover the process for actual manufacture or supply of the equipment or protective system, for which further requirements of the directive are applicable.
- (12) The marking of the equipment shall include the following:



II 1 G Ex ia IIC/IIB/IIA T6/T5/T4/T3/T2/T1 Ga

TÜV Rheinland Zertifizierungsstelle für Explosionsschutz

Cologne, 2024-01-23

Dipl.-Ing. Christian Mehrhoff



This EU-Type Examination Certificate without signature and stamp shall not be valid.
This EU-Type Examination Certificate may be circulated only without alteration. Extracts or alterations are subject to approval by the
TÜV Rheinland Industrie Service GmbH TÜV Rheinland Group Am Grauen Stein 51105 Köln
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(13) Annex

(14) **EU Type Examination Certificate**
TÜV 19 ATEX 8332 X Issue: 03

(15) Description of equipment

15.1 Equipment and type:

SRV and SRD Sensor

15.2 Description / Details of Change

General product information

SRV: A sensor to measure viscosity of a liquid in which its active end is immersed

SRD: A sensor to measure simultaneous density and viscosity of a liquid in which its active end is immersed.

The sensors are made in type of protection Ex ia and can be installed in hazardous gas atmospheres of up to zone 0. The sensors are available in different housing variants.

Technical Data

Electrical data:

IS Parameter	Transducer Coil + Pt1000 circuit	
	Gas group IIC:	Gas group IIB:
U _i	10V	10V
I _i	30mA	80mA
P _i	75mW	130mW
C _i	negligible	negligible
L _i	20mH	20mH

The sum of the output currents I_o of the supplying circuits shall not exceed the given I_i and the input circuits shall refer to the same ground.

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Environmental data:

	Ambient and fluid temperature range T_a
T class	Gas group IIC / IIB:
T6	-200°C....+70°C
T5	-200°C+85°C
T4	-200°C....+120°C
T3	-200°C+185°C
T2	-200°C+285°C
T1	-200°C+435°C

Details of Change:

- Change of the IS parameters and extend temperature range down to -200°C.
- Add temperature class T1 and T2.
- Removal of mandatory impact shield for protecting the fluid end of the sensor from damage.

(16) Test-Report No. 557/Ex8332.04/19

(17) Special Conditions for safe use

1. The max. ambient and fluid temperature T_a depends on the temperature class of the explosive atmosphere:

See environmental data

2. The sensor has to be included into the equipotential bonding system.

(18) Basic Safety and Health Requirements

Covered by afore mentioned standard

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