

# (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: 00

- (4) Equipment: **Sensor SRV und SRD**
- (5) Manufacturer: **Rheonics GmbH**
- (6) Address: **Technopark 2  
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 26<sup>th</sup> 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 8332.00/19

- (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 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 Tx Ga**

TÜV Rheinland Zertifizierungsstelle für Explosionsschutz

Cologne, 2019-06-06

Dipl.-Ing. Christian Mehrhoff



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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: 00

(15)

#### Description of equipment

##### 15.1 Equipment and type:

SRV and SRD Sensor  
 SRV, SRV-FPC, SRD, and SRD-FPC

##### 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.

EX-relevant accessories include an impact shield to protect the cable connector at the rear of the sensor from damage when installed in an environment where it is not protected by surrounding objects. A slotted cage is available for protecting the fluid end of the sensor from damage by large particles (> 8mm) that may be carried by the fluid.

#### Technical Data

##### Electrical data:

The inductance of the coil is effectively reduced to  $L_i$  by its infallible resistance.

Parameter	Pt1000 circuit	Transducer Coil
$U_i$	9V	7.3V
$I_i$	5mA	730mA
$P_i$	41mW	1.3W
$C_i$	negligible	negligible
$L_i$	negligible	< 99.5uH

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Environmental data:

Ambient and fluid temperature Ta:

T6: Ta = -40°C....+70°C

T5: Ta = -40°C....+85°C

T4: Ta = -40°C....+120°C

T3: Ta = -40°C....+185°C

(16) Test-Report No. 557/Ex8332.00/19

(17) Special Conditions for safe use

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

T6: Ta = -40°C....+70°C

T5: Ta = -40°C....+85°C

T4: Ta = -40°C....+120°C

T3: Ta = -40°C....+185°C

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

(18) Basic Safety and Health Requirements

Covered by afore mentioned standard

TÜV Rheinland Zertifizierungsstelle für Explosionsschutz

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