CERTIFICATE

(1) EU-Type Examination

- (2) Equipment or protective systems intended for use in potentially explosive atmospheres Directive 2014/34/EU
- (3) EU-Type Examination Certificate Number: **DEKRA 11ATEX0063 X** Issue Number: **2**
- (4) Product: Inductive Conductivity Sensor Model ISC40S series
- (5) Manufacturer: Yokogawa Process Analyzers Europe B.V. (YPA)
- (6) Address: Euroweg 2, 3825 HD Amersfoort, The Netherlands
- (7) This product and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.
- (8) DEKRA Certification B.V., Notified Body number 0344 in accordance with Article 17 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 test report number NU/DEK/ExTR11.0021/01.

(9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN IEC 60079-0: 2018 EN 60079-11: 2012

except in respect of those requirements listed at item 18 of 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 specified in the schedule to this certificate.
- (11) This EU-Type Examination Certificate relates only to the design and construction of the specified product. 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 1 G / Ex ia/IIC/T4...T6 Ga

Date of certification: 8 August 2021

DEKRA Certification B.V.

R. Schuller Certification Manager

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(13) **SCHEDULE**

(14) to EU-Type Examination Certificate DEKRA 11ATEX0063 X

Issue No. 2

(15) **Description**

Inductive Conductivity Sensor Model ISC40S series for connection to a certified associated Inductive Conductivity Transmitter which converts a measurement signal into an analogue or digital output signal.

Ambient and process temperature range:

- -30 °C to +40 °C for temperature class T6,
- -30 °C to +95 °C for temperature class T5,
- -30 °C to +130 °C for temperature class T4, depending on sensor material.

Type Designation

Model	Suffix Codes	Option Codes
ISC40S	-ab-cd-ef	/g

Explanation of Suffix Codes and Option Codes:

(Suffix/Option) Codes	Description	
ab	Sensor type and sensor body material	
	GG	General model, glass filled PEEK
	GR	Retractable model, glass filed PEEK
	GS	Shaft model, glass filled PEEK
	TG	General model, PFA
	TR	Retractable model, PFA
	TS	Shaft model, PFA
cd	Temperature sensor	
	T1	Pt1000
ef	Connection type	
	XX ¹	Permanently cable, XX defining the length in meters
	VP	VarioPin connector
g	Option	
	Note 2	Option specification not affecting intrinsic safety

Notes:

- 1) two alphanumeric characters (each of characters is from 0 to 9)
- 2) up to ten alphanumeric characters (each of characters is from A to Z, 0 to 9 or a hyphen)

Electrical data

Sensor output circuits:

in type of protection intrinsic safety Ex ia IIC, only for connection to a certified intrinsically safe circuit, with the following maximum values $U_i = 14.4 \text{ V}$; $I_i = 88 \text{ mA}$; $P_i = 0.32 \text{ W}$ and:

 $C_i = 150 \text{ nF}$; $L_i = 0.1 \text{ mH}$ (for permanently connected cable type),

 $C_i = 0 \text{ nF}$; $L_i = 0 \text{ mH}$ (for connector type),

or for connection to the certified intrinsically safe Yokogawa Inductive Conductivity Transmitter Model FLXA21 series, Model FLXA202 series or Model ISC202S series.

Installation instructions

The instructions provided with the product shall be followed in detail to assure safe operation.



(13) **SCHEDULE**

(14) to EU-Type Examination Certificate DEKRA 11ATEX0063 X

Issue No. 2

(16) Report Number

No. NL/DEK/ExTR11.0021/01.

(17) Specific conditions of use

The Sensor must be installed and used so, that dangers of ignition due to hazardous electrostatic charges cannot occur, especially in the case that the process medium is non-conductive.

For ambient temperature range see (15).

(18) Essential Health and Safety Requirements

Covered by the standards listed at item (9).

(19) Test documentation

As listed in Report No. NL/DEK/ExTR11.0021/01.

(20) Certificate history

Issue 1 - 214197400 initial certificate

Issue 2 - 225638800 update of certificate according to latest edition of standards,

minor constructional changes