# CERTIFICATE

## (1) EC-Type Examination

(2) **Equipment and protective systems intended for use in potentially explosive atmospheres - Directive 94/9/EC**

(3) EC-Type Examination Certificate Number: **DEKRA 11ATEX0063 X** Issue Number: **1**

(4) Equipment: **Inductive Conductivity Sensor Model ISC40S series**

(5) Manufacturer: **Yokogawa Europe B.V. (YPA)**

(6) Address: **Euroweg 2, 3825 HD Amersfoort, The Netherlands**

(7) This equipment 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 9 of the Council Directive 94/9/EC of 23 March 1994, certifies that this equipment 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 test report number NL/DEK/ExTR11.0021/xx.

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

**EN 60079-0 : 2009** **EN 60079-11 : 2007** **EN 60079-26 : 2007**

(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 EC-Type Examination Certificate relates only to the design, examination and tests of the specified equipment according to the Directive 94/9/EC. Further requirements of the directive apply to the manufacturing process and supply of this equipment. These are not covered by this certificate.

(12) The marking of the equipment shall include the following:

**II 1 G Ex ia IIC T4...T6 Ga**

This certificate is issued on 16 December 2011 and, as far as applicable, shall be revised before the date of cessation of presumption of conformity of (one of) the standards mentioned above as communicated in the Official Journal of the European Union.

DEKRA Certification B.V.

C.G. van Es
Certification Manager





PRODUCTS RvA C 001

All testing, inspection, auditing and certification activities of the former KEMA Quality are an integral part of the DEKRA Certification Group

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(13) # SCHEDULE

(14) **to EC-Type Examination Certificate DEKRA 11ATEX0063 X** Issue No. **1**

(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.

**Electrical data**

Sensor output circuits (permanently connected cable):
in type of protection intrinsic safety Ex ia IIC, only for connection to a certified intrinsically safe circuit, with the following maximum values:
$U_i$ = 19,1 V; $I_i$ = 170 mA; $P_i$ = 0,8 W; $C_i$ = 0 nF; $L_i$ = 0 mH;

or for connection to the certified intrinsically safe Yokogawa Inductive Conductivity Transmitter Model FLXA21 series, Model ISC202S series or Model IC200S series.

The effective internal capacitance $C_i$ and the effective internal inductance $L_i$ of the sensors are depending only upon the properties and the length of the connected cable.

**Installation instructions**

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

(16) **Test Report**

No. NL/DEK/ExTR11.0021/xx.

(17) **Special conditions for safe 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 Inductive Conductivity Sensor Model ISC40S-GT series, because the external temperature element is made of Titanium, it must be installed such, that, even in the event of rare incidents, ignition sources due to impact and friction sparks are excluded.

For ambient temperature range see (15).

(18) **Essential Health and Safety Requirements**

Covered by the standards listed at (9).

(19) **Test documentation**

As listed in Test Report No. NL/DEK/ExTR11.0021/xx.