

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 18ATEX0041 X** Issue Number: **0**

(4) Product: **Capacitive Level Switch Capanivo CN 7100, Type AY.A...**

(5) Manufacturer: **UWT GmbH**

(6) Address: **Westendstrasse 5, 87488 Betzigau, Germany**

(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 222481300-1, issue 0.

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

EN IEC 60079-0 : 2018

EN 60079-11 : 2012

EN 60079-26 : 2015

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 TX Ga
II 1/2 G Ex ia IIC TX Ga/Gb
II 1 D Ex ia IIIC TX Da
II 1/2 D Ex ia IIIC TX Da/Db

Date of certification: 10 February 2020

DEKRA Certification B.V.

R. Schuller
Certification Manager



(13) **SCHEDULE**

(14) **to EU-Type Examination Certificate DEKRA 18ATEX0041 X**

Issue No. **0**

(15) **Description**

Capacitive Level Switch Capanivo CN 7100 provides the detection of the level limit of a liquid or a solid medium. The output is a current signal (4 or 20 mA) and a solid state switch output. The apparatus is either provided with a plastic enclosure with connection terminals or with a metal enclosure and an integral cable with a length of 1,5 m. Optionally a longer cable with a capacitance of 0,3 nF/m is available.

Types AY1A... (Integral Cable version) provide a degree of protection of IP65 in accordance with EN 60529.

Types AY2A... (Enclosure version) provide a degree of protection of IP68 (85 kPa for 30 min) in accordance with EN 60529.

Nomenclature

Type code: CN 7100 pos.1, ..., pos.33

Position:	Selection	Description
1	A	CN 7100
2	Y	ATEX
3	1	Integral cable version
	2	Enclosure version
4	A	2-wire 4/20 mA with solid state switch
5	A	PPS sensor material
	B	PVDF sensor material
7	*	Stainless steel process connection
30	*	Stainless steel tag

Other positions: not relevant for ATEX

Thermal data

The relation between temperature class, ambient temperature range and maximum process medium temperature is shown in the following table:

Ambient temperature range	Max. process medium temperature	Temperature class (EPL Ga or Gb)	Surface temperature (EPL Da or Db)
-30 °C to +45 °C	-30 °C to +45 °C	T6	T ₂₀₀ 95 °C
-30 °C to +85 °C	-30 °C to +85 °C	T4	T ₂₀₀ 135 °C

Note:

1. With optional FFKM wetted seal the minimum temperature is limited to -20 °C.

(13) **SCHEDULE**

(14) **to EU-Type Examination Certificate DEKRA 18ATEX0041 X**

Issue No. **0**

Electrical data

Supply and output circuit (terminals 1 and 2 or red and black wires):

in type of protection intrinsic safety Ex ia IIC or Ex ia IIIC, only for connection to a certified intrinsically safe circuit, with the following maximum values:

$U_i = 30 \text{ V}$; $I_i = 120 \text{ mA}$; $P_i = 0,8 \text{ W}$; $L_i = 1,3 \text{ mH}$; $C_i = 2,1 \text{ nF}$;

for an integral cable with a length of more than 1,5 m, a capacitance of 0,3 nF/m shall be added to C_i .

Alarm output circuit (terminals 4 and 5 or white wires):

in type of protection intrinsic safety Ex ia IIC or Ex ia IIIC, only for connection to a certified intrinsically safe circuit, with the following maximum values:

$U_i = 30 \text{ V}$; $I_i = 200 \text{ mA}$; $P_i = 350 \text{ mW}$; $L_i = 0 \text{ mH}$; $C_i = 0 \text{ nF}$;

for an integral cable with a length of more than 1,5 m, a capacitance of 0,3 nF/m shall be added to C_i .

The supply and current output circuit is infallibly galvanic isolated from the switch output circuit.

Installation instructions

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

(16) **Report Number**

No. 222481300-1, issue 0.

(17) **Specific conditions of use**

The allowed ambient and process temperature ranges are depending on the required surface temperature or temperature class, see details in manual.

The user shall ensure that the equipment is not installed in a location where it may be subjected to external conditions which might cause a build-up of electrostatic charge on non-conducting surfaces.

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

Covered by the standards listed at item (9).

(19) **Test documentation**

As listed in Report No. 222481300-1, issue 0.

(20) **Certificate history**

Issue 0 - 222481300 initial certificate