



Translation

(1) **EU-Type Examination Certificate**

TUV NORD

(2) Equipment and protective systems intended for use in potentially explosive atmospheres, **Directive 2014/34/EU**



(3) **Certificate Number** TÜV 17 ATEX 199560 X **issue:** 00

(4) for the product: Capacitive level switch VEGACAP CP6*.GX/CK*****

(5) of the manufacturer: VEGA Grieshaber KG

(6) Address: Am Hohenstein 113, 77761 Schiltach

Order number: 8000471529

Date of issue: 2017-07-06

(7) The design of this product and any acceptable variation thereto are specified in the schedule to this EU-Type Examination Certificate and the documents therein referred to.

(8) The TÜV NORD CERT GmbH, Notified Body No. 0044, in accordance with Article 17 of the Directive 2014/34/EU of the European Parliament and the Council of 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 the confidential ATEX Assessment Report No. 17 203 199560.

(9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:
EN 60079-0:2012+A11:2013 EN 60079-11:2012 EN 60079-31:2014

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 for 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 equipment. These are not covered by this certificate.

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

⊕ Ex II 1/2 D, II 2 D Ex ia/tb, ia tb III C T65 °C ... T150 °C Da/Db, Db
II 1/2 D, II 2 D Ex ia/tb, ia tb III C T65 °C ... T200 °C Da/Db, Db

TÜV NORD CERT GmbH, Langemarckstraße 20, 45141 Essen, notified by the central office of the countries for safety engineering (ZLS), Ident. Nr. 0044, legal successor of the TÜV NORD CERT GmbH & Co. KG Ident. Nr. 0032

The deputy head of the notified body

Roder

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(13) **SCHEDULE**

(14) **EU-Type Examination Certificate No. TÜV 16 ATEX 199560 X issue 00**

(15) Description of product

The capacitive level switches type VEGACAP CP6*. GX/CK***** are used for monitoring or control of filling levels in explosion hazardous areas.

The apparatus may be operated in explosion hazardous dust atmospheres.

Mechanical basic execution of the electrodes:

Type	Electrodes
VEGACAP CP62	partly insulated rod electrode
VEGACAP CP63	fully insulated rod electrode
VEGACAP CP64	fully insulated rod electrode for viscous and adherent filling materials
VEGACAP CP65	partly insulated cable electrode
VEGACAP CP66	fully insulated cable electrode

Electrical data

Type VEGACAP CP 6*.GX**C** with built in electronics insert type CP60C Supply (Terminals 1,2)	AC 20 ... 253 V, 50/60 Hz or DC 20 ... 253 V, max. 1 W $U_m = 253$ V AC contactless switch
Output	<3mA
Standby current	max. 400 mA
load current	

Type VEGACAP CP 6*.GX**R** with built in electronics insert type CP60R Supply (Terminals 1,2)	AC 20 ... 253 V, 50/60 Hz or DC 20 ... 72 V $U_m = 253$ V AC 1...8 VA, max. 1.6 W
Power	max. AC 253 V, 3 A, 500 VA max. DC 253 V, 1 A, 41 W
Relay circuit (Terminals 3, 4, 5) (Terminals 6, 7, 8)	

Type VEGACAP CP 6*.GX**T** with built in electronics insert type CP60T Supply (terminals 1,4)	DC 10 ... 55 V $U_m = 253$ V AC max. 0.5 W
Power	max. 400 mA, DC 55 V
transistor output (Terminals 2, 3)	

Schedule to EU-Type Examination Certificate No. TÜV 17 ATEX 199560 X issue 00

<p>Type VEGACAP CP 6*. GX/CK**Z** with built in electronics insert type CP60Z Supply and signal circuit (terminals 1 [+], 2 [-] in the electronics compartment or in the terminal compartment regarding the double chamber enclosure version)</p>	<p>in type of protection Intrinsic Safety Ex ia IIC only for connection to a certified intrinsically safe circuit Maximum values: $U_i = 30 \text{ V}$ $I_i = 131 \text{ mA}$ $P_i = 983 \text{ mW}$ Characteristic line: linear The effective internal capacitances and inductances are negligibly small.</p>
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Thermal data

Permitted process temperature at the probe (EPL Da or Db)

with PTFE-insulation - 50°C ... + 150 °C

with PE/PA -insulation - 40°C ... + 80 °C

with PTFE-insulation

high temperature-version - 50°C ... + 200°C

Permitted ambient temperature range at the electronics enclosure (EPL Db) - 40°C ... + 60 °C

The capacitive level switch VEGACAP CP6*.GI ***** is marked with T65 °C for the max. permissible ambient temperature at the housing of $T_{amb, max.} = 60 \text{ °C}$ and a temperature of the medium at the measuring sensor of $T_{med} = 65 \text{ °C}$.

At higher temperatures of the medium at the measuring sensor of $T_{Med} = 65 \text{ °C}$, the max. surface temperature of the complete capacitive level switch is equal to T_{med} .

For zone 20 applications in the area of the sensor:

The measuring sensor is allowed to be operated in an explosion hazardous area, only if atmospheric conditions exist.

(temperature: -20 °C to +60 °C, pressure: 0.8 bar to 1.1 bar, air with normal oxygen content: typically 21 % v/v).

Observe manual of the manufacturer for additional hints.

Schedule to EU-Type Examination Certificate No. TÜV 17 ATEX 199560 X issue 00

(16) Drawings and documents are listed in the ATEX Assessment Report No. 17 203 199560

(17) Specific Conditions for Use

1. At the plastic parts of the capacitive level switches there is a danger of ignition by electrostatic discharge. Charge generating processes have to be avoided there.
2. The cable entries and blanking elements in the housing have to be suitably certified for an operating temperature range of -40 °C to 80 °C or the cable entries and blanking elements of the manufacturer have to be used.
3. At risks by pendulum or vibration the respective parts of the level switches have to be secured effectively against these dangers.
4. The max. surface temperature for higher temperatures $T_{med} = 65\text{ °C}$ has to be taken from the "Thermal data" mentioned above and from the manual of the manufacturer.

(18) Essential Health and Safety Requirements

no additional ones

- End of Certificate -