Translation

(1) # EU-Type Examination Certificate

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

(3) **Certificate Number** **TÜV 17 ATEX 199562 X** **issue:** 00

(4) for the product: Capacitive continuous level measurement sensors VEGACAL CL6*.GX/CK***X/H****

(5) of the manufacturer: VEGA Grieshaber KG

(6) Address: Am Hohenstein 113, 77761 Schiltach

Order number: 8000471535

Date of issue: 2017-07-19

(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 199562.

(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:

II 1/2 D, II 2 D Ex ia/tb, ia tb IIIC T65 °C ... T150 °C Da/Db, Db
II 1/2 D, II 2 D Ex ia/tb, ia tb IIIC 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 head of the notified body

Meyer

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(13) **SCHEDULE**

(14) **EU-Type Examination Certificate No. TÜV 16 ATEX 199562 X issue 00**

(15) Description of product

The capacitive continuous level measurement sensors type VEGACAL CL6*.GX/CK ***X/H**** 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
VEGACAL CL62	partly insulated rod electrode
VEGACAL CL63	fully insulated rod electrode
VEGACAL CL64	fully insulated rod electrode for viscous and adherent filling materials
VEGACAL CL65	partly insulated cable electrode
VEGACAL CL66	fully insulated cable electrode

Electrical data

Type VEGACAL CL6*. GX/CK ***X**

Supply and signal circuit (Terminals KI1[+], KI2[-] in the housing for the electronics resp., in the execution with the 2 chamber housing, in the terminal housing)	in type of protection „Intrinsic Safety" Ex ia IIC only for connection to a certified intrinsically safe circuit maximum values: U_i = 30 V I_i = 131 mA P_i = 983 mW characteristic line: linear effective internal capacitance: 3 nF The effective internal inductances are negligibly small. In execution with 2 chamber housing and electronics PLICSZEKX: effective internal capacitance: 3 nF effective internal inductance: 5 µH

Type VEGACAL CL6*. GX/CK ***H**

Supply and signal circuit (Terminals KI1[+], KI2[-] in the housing for the electronics resp., in the execution with the 2 chamber housing, in the terminal housing)	in type of protection „Intrinsic Safety" Ex ia IIC only for connection to a certified intrinsically safe circuit maximum values: U_i = 30 V I_i = 131 mA P_i = 983 mW characteristic line: linear The effective internal capacitances and inductances are negligibly small.

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	In execution with 2 chamber housing and electronics PLICSZEKX: The effective internal capacitances are negligibly small. effective internal inductance: 5 µH

Type VEGACAL CL6*. GX/CK ***H/X****

Operation and indication circuit (Terminals 5, 6, 7, 8 in the housing for the electronics resp., in the execution with the 2 chamber housing, in the terminal housing)	in type of protection „Intrinsic Safety" Ex ia IIC only for connection to the intrinsically safe circuit of the belonging external VEGA indication unit type VEGADIS61/81 The interconnection of the both intrinsically safe circuits was taken into account. maximum values of the connection cable: C_o = 2.4 µF L_o = 160 µH
Operation and indication module circuit (Spring contacts in the housing for the electronics)	in type of protection „Intrinsic Safety" Ex ia IIC only for connection to the VEGA operation and indication module (PLICSCOM)

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 continuous level measurement sensor VEGACAL CL6*.GX/CK***X/H**** is marked with T65 °C for
the max. permissible ambient temperature at the housing of $T_{amb, max.}$ = 60 °C
and a temperature of the medium at the measuring sensor of T_{med} = 65 °C.

At higher temperatures of the medium at the measuring sensor of T_{Med} = 65 °C, the max. surface temperature of the complete capacitive continuous level measurement sensors 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.

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(16) Drawings and documents are listed in the ATEX Assessment Report No. 17 203 199562

(17) Specific Conditions for Use

1. At the plastic parts of the capacitive continuous level measurement sensor 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 °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 -