



IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: **IECEx KIWA 19.0015X** Page 1 of 3 Certificate history:

Status: **Current** Issue No: 0

Date of Issue: 2019-11-07

Applicant: **VEGA Grieshaber KG**
Am Hohenstein 113, 77761 Schiltach
Germany

Equipment: **Radar sensors types VEGAPULS 21, 31, C 21, C 22, C 23**

Optional accessory:

Type of Protection: **Ex ia**

Marking: VEGAPULS 21, 31:
Ex ia IIC T4 Ga or Ga/Gb
VEGAPULS C 21, C 22, C 23:
Ex ia IIC T4 Ga or Ga/Gb
Ex ia IIIC T134°C Da, Da/Db

Approved for issue on behalf of the IECEx
Certification Body:

Harry de Wild

Position:

Certification Officer

Signature:
(for printed version)

Date:

7 November 2019

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the Issuing body.
3. The Status and authenticity of this certificate may be verified by visiting www.iecex.com or use of this QR Code.



Certificate issued by:

Kiwa Nederland B.V. (Unit Kiwa ExVision)
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Box 137
erlands





IECEx Certificate of Conformity

Certificate No.: **IECEx KIWA 19.0015X**

Page 2 of 3

Date of issue: 2019-11-07

Issue No: 0

Manufacturer: **VEGA Grieshaber KG**
Am Hohenstein 113, 77761 Schiltach
Germany

Additional
manufacturing
locations: **VEGA Americas, Inc**
4241 Allendorf Drive
Cincinnati, Ohio 45209
United States of America

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended

STANDARDS :

The equipment and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards

IEC 60079-0:2017 Explosive atmospheres - Part 0: Equipment - General requirements
Edition:7.0

IEC 60079-11:2011 Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
Edition:6.0

IEC 60079-26:2014-10 Explosive atmospheres – Part 26: Equipment with Equipment Protection Level (EPL) Ga
Edition:3.0

This Certificate **does not** indicate compliance with safety and performance requirements other than those expressly included in the Standards listed above.

TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in:

Test Report

NL/KWA/EXTR19.0017/00

Quality Assessment Report:

DE/TUN/QAR06.0002/09



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Page 3 of 3

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EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

Radar sensors types VEGAPULS 21, 31, C 21, C 22, C 23 for use in explosive atmospheres caused by the presence of combustible gases or dusts, are used for monitoring and control of filling levels by means of microwave technology. The electronics, mounted in an plastic enclosure converts the reflected microwave echo, indicating the filling level, into an 2-wire 4...20mA HART signal. Operation and control of the sensor can either be through the wired connection or via smart phone and VEGA Tools-App (Bluetooth). The sensor is either equipped with a fixed cable (VEGAPULS C 21, C 22, C 23) of 5m, 10 m, 25m or selectable length with a G1", 1"NPT or R1" threaded connection or a 2 wire terminal (VEGAPULS 21, 31) via a M20x1.5 or ½" NPT cable entry.

VEGAPULS 21 and 31 are electrically identical where type 21 is equipped without a display module and a blind cover and type 31 is equipped with a display module and a windowed cover.

Ambient temperature range for VEGAPULS 21, 31: -40 °C to +70 °C

Ambient temperature range for VEGAPULS C 21, C 22, C 23: -40 °C to +80 °C

Process temperature range : -40 °C to +80 °C

Electrical Data

VEGAPULS C 21, C 22, C 23:

Supply and output circuit (+ (Brown wire), - (Blue wire)):

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:

UI = 30 V; II = 131 mA; PI = 983 mW; CI = 0.18 nF/m; LI = 0.65 µH/m

VEGAPULS 21, 31:

Supply and output circuit (+ (terminals 1), - (terminal 2)):

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

UI = 30 V; II = 131 mA; PI = 983 mW; CI ≈ 0 nF; LI ≈ 0 µH

SPECIFIC CONDITIONS OF USE: YES as shown below:

- For electrical and thermal data refer to equipment section.
- The equipment shall be installed and maintained such that hazards caused by electrostatic discharge are excluded.