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 4	Certificate history:
Status:	**Current**	Issue No: 2	Issue 1 (2023-03-09) Issue 0 (2019-11-07)
Date of Issue:	2023-04-13		
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 T_{200} 134°C Da, Da/Db		

Approved for issue on behalf of the IECEx Certification Body: **Dave Magee**

Position: **Senior Director of Operations, Toronto**

Signature:
(for printed version)

Date:
(for printed version)

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:

CSA Group
178 Rexdale Blvd
Ontario M9W 1R3
a

CSA GROUP™

IECEx Certificate of Conformity

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

Date of issue: 2023-04-13

Issue No: 2

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

Manufacturing locations:

VEGA Grieshaber KG
Am Hohenstein 113, 77761 Schiltach
Germany

VEGA Americas, Inc.
3877 Mason Research Parkway
Ohio
Mason 45036
United States of America

India VEGA India Level and Pressure Measurement Pvt. Ltd.
Plot No. 1, Gat No. 181
Village - Phulgaon, Tal. Haveli
Pune 412216
India

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 Edition:7.0	Explosive atmospheres - Part 0: Equipment - General requirements
IEC 60079-11:2011 Edition:6.0	Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
IEC 60079-26:2014-10 Edition:3.0	Explosive atmospheres – Part 26: Equipment with Equipment Protection Level (EPL) Ga

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 Reports:

NL/KIWA/ExTR19.0017/00 NL/KIWA/ExTR19.0017/01 NL/KIWA/ExTR19.0017/02

Quality Assessment Report:

DE/TUN/QAR06.0002/12

IECEx Certificate of Conformity

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 ºC to +70 ºC
Ambient temperature range for VEGAPULS C 21, C 22, C 23: -40 ºC to +80 ºC
Process temperature range : -40 ºC to +80 ºC

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:

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

IECEx Certificate of Conformity

DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

Issue 1 – this Issue introduced the following changes:

1. Replacement of the current HART chip NCN5193 on SB1505-3 (IC213) and on SB1540-3 (IC213) to introduce an alternate adapter print with component “PULS-DAC-H”.
2. Replacement of IC214 from REF3125 to MAX6033C.”
3. Additional manufacturing location:
   VEGA India Level and Pressure Measurement Pvt. Ltd.
   Plot No. 1, Gat No. 181, Village - Phulgaon, Tal. Haveli
   Pune 412216, India
4. Change of manufacturing location:
   From: VEGA Americas, Inc, 4241 Allendorf Drive, Cincinnati, Ohio 45209, United States of America.
   To: VEGA Americas, Inc., 3877 Mason Research Parkway, Ohio, Mason 45036, United States of America
5. The report is to facilitate the transfer of certificates IECEx KIWA 19.0015X from Kiwa Nederland B.V., Unit Kiwa ExVision, Wilmersdorf 50, 7327 AC Apeldoorn, The Netherlands to CSA Group.

Issue 2 – this Issue introduced the following changes:

1. Introduce alternative enclosure design according to drawing 1016899 and 1018239.
2. Minor correction of label drawing for VEGAPULS C 21, C 22, C 23 to include layer depth subscript to T-Code.

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Certificate No.:	**IECEx KIWA 19.0015X**	Page 1 of 4	Certificate history:
Status:	**Current**	Issue No: 1	Issue 0 (2019-11-07)
Date of Issue:	2023-03-09		
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: **Dave Magee**

Position: **Senior Director of Operations, Toronto**

Signature:
(for printed version)

Date:
(for printed version)

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Certificate issued by:

CSA Group
178 Rexdale Blvd
Toronto Ontario M9W 1R3
Canada

IECEx Certificate of Conformity

Certificate No.: **IECEx KIWA 19.0015X** Page 2 of 4

Date of issue: 2023-03-09 Issue No: 1

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

Manufacturing locations:

VEGA Grieshaber KG
Am Hohenstein 113, 77761 Schiltach
Germany

VEGA Americas, Inc.
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Ohio
Mason 45036
United States of America

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Plot No. 1, Gat No. 181
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India

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DE/TUN/QAR06.0002/12

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Electrical Data

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SPECIFIC CONDITIONS OF USE: YES as shown below:

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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

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Certificate issued by:

Kiwa Nederland B.V. (Unit Kiwa ExVision)
Wilmersdorf 50
7327 AC Apeldoorn
Box 137
erlands

IECEx Certificate of Conformity

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

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

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