



# 1 EU – Type Examination Certificate

2 Equipment or Protective System Intended for use in Potentially Explosive Atmospheres  
**Directive 2014/34/EU**

3 EU – Type Examination Certificate Number: **KIWA 19ATEX0027 X Issue: 1**

4 Product: **Radar sensors types VEGAPULS C 21, C 22, C 23**

5 Manufacturer: **VEGA Grieshaber KG**

6 Address: **Am Hohenstein 113, 77761 Schiltach  
Germany**

7 This product and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

8 Kiwa Nederland B.V., Notified Body number 0063 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 ATEX Assessment Report No. 180200754.

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 60079-18 : 2015 + A1 : 2017        EN 60079-31 : 2014**

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 2G                      Ex ib mb IIC T4 Gb  
2-wire 4-20 mA HART:  
II 1D,1/2D              Ex ta, ta/tb IIIC T<sub>200</sub> 121°C Da, Da/Db  
II 2D                      Ex tb IIIC T<sub>200</sub> 134°C Db  
4-wire Modbus:  
II 1D,1/2D              Ex ta, ta/tb IIIC T<sub>200</sub> 142°C Da, Da/Db  
II 2D                      Ex tb IIIC T<sub>200</sub> 155°C Db

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**Kiwa Nederland B.V.**

**Ron Scheepers**

**Management Director**

**Issue date:**

17 April 2020

**First issue:**

This certificate shall, as far as applicable, be revised before the date of cessation of presumption of conformity of (one of) the included standards above as communicated in the Official Journal of the European Union.

© Integral publication of this certificate in its entirety and without any change is allowed.



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2019-01)



## 13 SCHEDULE

### 14 EU – Type Examination Certificate KIWA 19ATEX0027 X Issue No. 1

#### 15.1 Description of Product

Radar sensors types VEGAPULS 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 or 4-wire Modbus 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 equipped with a fixed cable of 5m, 10 m, 25m or selectable length with a G1", 1"NPT or R1" threaded connection.

Ambient and process temperature range for Ex ib mb, Ex tb: -20 to 80 °C

Ambient and process temperature range for Ex ta, ta/tb: -20 to 67 °C

#### 15.2 Electrical Data

2-wire 4-20 mA HART:

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

$U_N = 12 \dots 35 \text{ V}, < 1\text{W}$

4-wire Modbus:

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

$U_N = 8 \dots 30 \text{ V}, < 1\text{W}$

#### 15.3 Instructions

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

#### 16 ATEX Assessment Report Number

180200754.

#### 17 Specific Conditions of Use

- For electrical and thermal data refer to 15.1 and 15.2.

- The equipment shall be installed and maintained such that hazards caused by electrostatic discharge are excluded and that there is a low risk of mechanical danger.

#### 18 Essential Health and Safety Requirements

All relevant Essential Health and Safety Requirements are covered by the standards listed at section 9.

#### 19 Drawings and Documents

As listed in ATEX Assessment Report No. 180200754.



