



# Ordinary Location VEGAPULS 6X

FM21NCA0006

FM21NUS0007



Document ID: 66468



# VEGA



# CERTIFICATE OF CONFORMITY

1. ELECTRICAL EQUIPMENT PER CANADIAN REQUIREMENTS

- 2. Certificate No: **FM21NCA0006**
- 3. Equipment: **VEGAPULS 6X Series Level Transmitters**  
(Type Reference and Name)
- 4. Name of Listing Company: **Vega Grieshaber KG**
- 5. Address of Listing Company: **Am Hohenstein 113 Schiltach D-77761 Germany**

6. The examination and test results are recorded in confidential report number:

PR459775 dated 6<sup>th</sup> August 2021

7. FM Approvals LLC, certifies that the equipment described has been found to comply with the following Approval standards and other documents:

CSA C22.2 No. 0.4:2017, CSA C22.2 No. 0.5:2016, CAN/CSA C22.2 No. 61010-1:2012, CSA C22.2 No. 94.2:2015 & CAN/CSA C22.2 No. 60529:2016

8. This certificate relates to the design, examination and testing of the products specified herein. The FM Approvals surveillance audit program has further determined that the manufacturing processes and quality control procedures in place are satisfactory to manufacture the product as examined, tested and Approved.

Certificate issued by:

*J.E. Marquedant*

J/E. Marquedant  
VP, Manager - Electrical Systems

13 January 2023  
Date

To verify the availability of the Approved product, please refer to [www.approvalguide.com](http://www.approvalguide.com)

**THIS CERTIFICATE MAY ONLY BE REPRODUCED IN ITS ENTIRETY AND WITHOUT CHANGE**

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F 333 (Apr 21)



Page 1 of 3

**SCHEDULE**



to Canadian Certificate Of Conformity No: FM21NCA0006

9. Equipment Ratings:

suitable for use in ordinary (non-hazardous) locations, indoor and outdoor, Type 4X and/or Type 6P, with Degree of Protection IP66/IP67 or IP66/IP68.

10. Description of Equipment:

**General**

The VEGAPULS 6X Series (equipment) are level measurement transmitters based on the FMCW (frequency modulated continuous wave) measurement principle, an indirect method of distance measurement. The devices use high-frequency microwave signals in the GHz range to detect the distance between the sensor and the product surface level. The product is intended for use measuring liquids and bulk solids under various process conditions or with hygienic requirements.

**Construction**

The equipment consists of a single or double chamber enclosure made of Aluminum or 316L Stainless Steel. The enclosure includes one or two threaded covers with an optional display window, as well as a cylindrical hole on the bottom for connection to the sensor antenna. Terminals are provided for field wiring inside the enclosure, with NPT or metric entries for fitting of cable glands or other wiring means suitable in order to maintain the environmental Type and Degree of Protection "IP" ratings. The enclosures are separately FM Approved components for the manufacturer under FM18US0041U and FM18CA0020U.

The equipment enclosure contains an encapsulated electronics module in each chamber, along with an optional "PLICSCOM" display. The signal emitted by the electronics is guided within the sensor by either a plastic horn antenna or metal framed lens antenna. The antennae options include threaded types as well as flanges with optional PTFE plating, depending on the application and working pressures as well as applicable industry and area standards and regulations.

**Ratings**

The equipment is suitable for ambient temperatures of -40...+80°C. The equipment is suitable for various process pressures from -1 bar and up to +160 bar, depending on the antenna and material options in the model code, as detailed in the manufacturer's safety instructions.

The equipment electrical ratings depend on the Electronics model code:

<b>Electronics</b>	<b>Ratings</b>
B	90...253 VAC, 50/60 Hz, 4VA
I	9.6...48 VDC, 20...42 VAC, 50/60 Hz, 2.1 W, 4 VA
W	8...30 VDC, 0.52 W
(All Others)	12...35 VDC, 4...20 mA, 1 W

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**SCHEDULE**



to Canadian Certificate Of Conformity No: FM21NCA0006

**Model Code:**

**VEGAPULS PS6X(\*)-2-(\*)-W-a-b-c-d-e-f-g-h-i-j-(\*)-(\*)-(\*)-(\*). Level Transmitter**

a = Process fitting/Material: two-digit alphanumerical code for threaded connections, pipe connections and industrial flanges according to ASME, BS, DIN, EN, GOST, JIS and for other international, national and/or industrial standards

b = Antenna version: B, T, F, C, H, G, K, L, N or D

c = Additional equipment: X, K, V, 1 or N

d = Material/Seal/Process temperature: AA, AB, AC, AD, AE, AF, AG, AH, AJ, AK, AL, AT, AU, AV, AW, AX, AY, AZ, A2, A3, A4, A5, AM, AN, AP, AQ, AR, AS, A8, A6, A7, A1 or A9

e = Housing/Protection: A, H, 3, 9, D, S, 4, V, 5, 8 or W

f = Cable entry/Connection: M, S, T, K, U, V, L, 2, O, 6, D, 1, N, Q, J, P or 8

g = Display and operation: X, A, F, H, B, K or L

h = Electronics: H, A, 9, B, I or W

i = Explosion protection: (\*)X

j = SIL certified: (\*) or X (not verified by FM Approvals)

(\*) = Model code character(s) not relevant to FM Approval

Environmental ratings Type 4X and/or 6P, as well as Degree of Protection ratings IP66/67 or IP66/68, depend on Housing/Protection and Cable entry/Connection options. IPX8 is 2 meters or 10 meters, 30 minute duration.

**11. Test and Assessment Procedure and Conditions:**

This Certificate has been issued in accordance with FM Approvals Canadian Certification Requirements.

**12. Schedule Drawings**

A copy of the technical documentation has been kept by FM Approvals.

**13. Certificate History**

Details of the supplements to this certificate are described below:

Date	Description
6 <sup>th</sup> August 2021	Original Issue.
13 <sup>th</sup> January 2023	<p><b>Supplement 1:</b>                      Report Reference: PR463739 dated 13<sup>th</sup> January 2023.                      Description of the Change: Testing and evaluation conducted with satisfactory results. Additional options and construction for Antenna version, Material/Seal/Process temperature, Cable entry/Connection, and Electronics qualified. Technical documentation, certificate and listings updated accordingly.</p>

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F 333 (Apr 21)

Page 3 of 3

# CERTIFICATE OF CONFORMITY



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(Type Reference and Name) **Level Transmitters**
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**Germany**
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**FM Class 3810:2021, ANSI/UL 61010-1:2012, ANSI/UL 50E:2015 & ANSI/IEC 60529:2020**
8. This certificate relates to the design, examination and testing of the products specified herein. The FM Approvals surveillance audit program has further determined that the manufacturing processes and quality control procedures in place are satisfactory to manufacture the product as examined, tested and Approved.

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F 332 (Apr 21)

Page 1 of 3



**SCHEDULE**



to US Certificate Of Conformity No: FM21NUS0007

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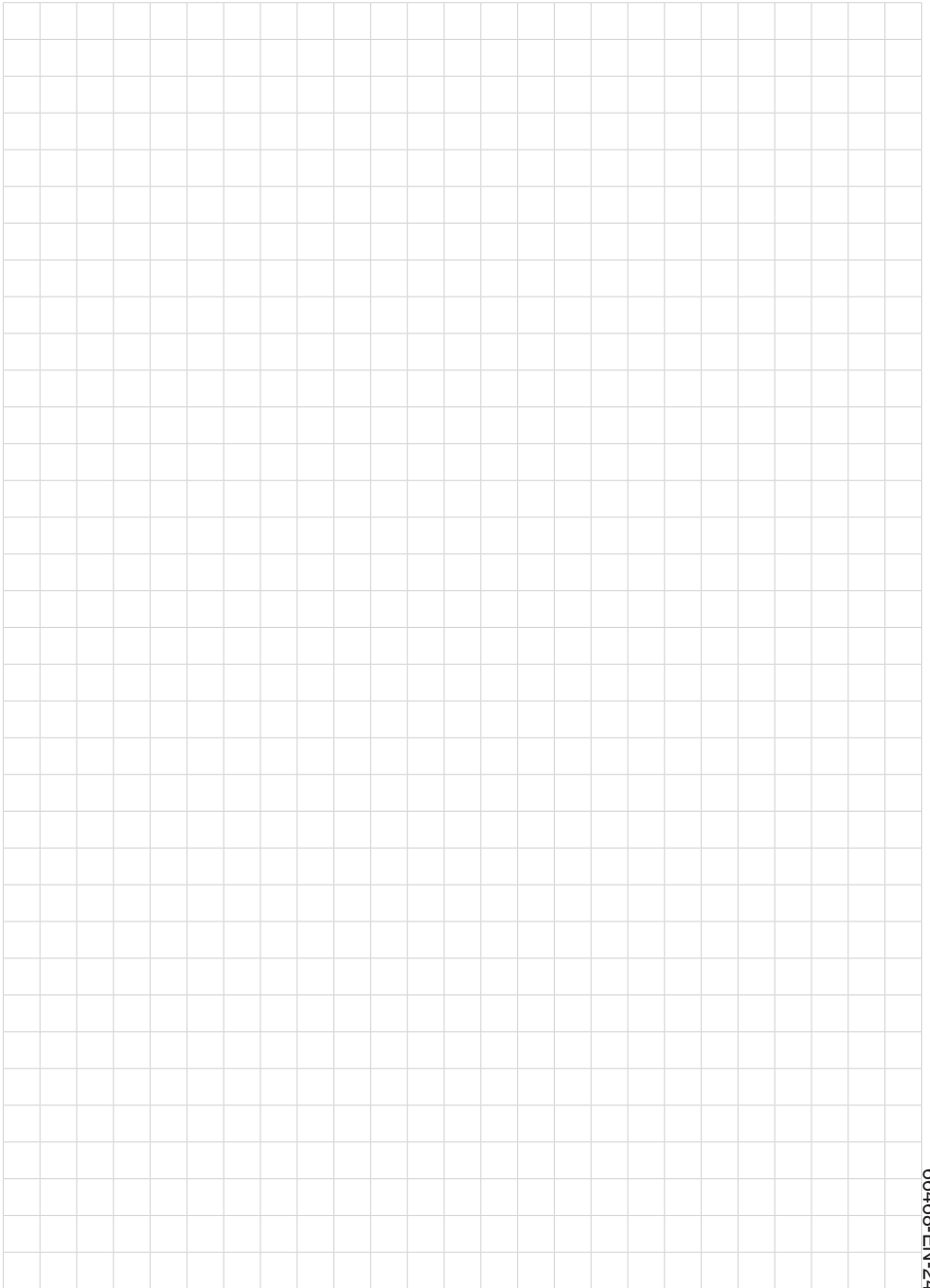
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F 332 (Apr 21)

Page 2 of 3









Printing date:

**VEGA**

All statements concerning scope of delivery, application, practical use and operating conditions of the sensors and processing systems correspond to the information available at the time of printing.

Subject to change without prior notice

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66468-EN-240111

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