

[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: **DEMKO 19 ATEX 2222X Rev. 2**

[4]

Product: **VEGABAR 28 (*)/ 29 (*)/ 38 (*)/ 39 (*) Pressure Transmitter**

[5]

Manufacturer: **VEGA Grieshaber KG**

[6]

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

[7]

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

[8]

UL International Demko A/S, notified body number 0539 in accordance with Article 17 of the 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 report no. **DK/ULD/ExTR19.0013/02.**

[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 60079-26:2015 EN 60079-31:2014

Where additional criteria beyond those given here have been used, they are listed at item 18 in the Schedule.

[10]

If the sign "X" is placed after the certificate number, it indicates that the product is subject to the "Specific Conditions of Use" listed under item 17 of this certificate.

[11]

This EU-Type Examination Certificate relates only to the technical design of the specified product in accordance to the Directive 2014/34/EU. Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by the certificate.

[12]

The marking of the product shall include the following (marking is provided in the Schedule as a part of item 15, if applicable):

II 1 G Ex ia IIC T4 Ga or
 II 1/2 G Ex ia IIC T4 Ga/Gb or
 II 2 G Ex ia IIC T4 Gb

Only for VEGABAR 28/29 with two-wire 4-20 mA current output in dust applications

II 1 D Ex ia ta IIIC T₂₀₀ XX°C Da
 II 1/2 D Ex ia/tb IIIC T₂₀₀ XX°C Da/Db
 II 2 D Ex ia tb IIIC T₂₀₀ XX°C Db
max surface temperature T₂₀₀ 100°C

Certification Manager

Thomas Wilson

This is to certify that the sample(s) of the Product described herein ("Certified Product") has been investigated and found in compliance with the Standard(s) indicated on this Certificate, in accordance with the ATEX Product Certification Program Requirements. This certificate and test results obtained apply only to the product sample(s) submitted by the Manufacturer. UL did not select the sample(s) or determine whether the sample(s) provided were representative of other manufactured product. UL has not established Follow-Up Service or other surveillance of the product. The Manufacturer is solely and fully responsible for conformity of all product to all applicable Standards, specifications, requirements or Directives. The test results may not be used, in whole or in part, in any other document without UL's prior written approval.

Date of issue: 2019-12-10

Re-issued: 2023-10-19

Notified Body

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Schedule

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[15]

Description of Product

The VEGABAR 28 (*)/ 29 (*)/ 38 (*)/ 39 (*) pressure transmitters with ceramic or metallic measuring cells. Measured products are gases, vapors and liquids. The equipment must be connected to an external intrinsic safety barrier with consider to the electrical ratings. The output is performing as a two-wire 4-20 mA current output. The metallic part of the enclosure is manufactured of stainless-steel type 316L.

The pressure transmitters can be mounted on reservoirs, pipelines and other units, at any position indoors and outdoors in wide range of environmental conditions. The sensors have no moving parts.

Safety relevant model coding of VEGABAR series:

The placeholder within brackets VEGABAR 28 (*)/ 29 (*)/ 38 (*)/ 39 (*) is reserved and considered as not safety relevant.

VEGABAR	a	b	(*)
	2	Housing with M12- or ISO4400- Connector or Cable outlet wire.	
	3	Housing with Display Unit and M12- or ISO4400- Connector.	
	8	Pressure transmitter with ceramic measuring cell	
	9	Pressure transmitter with metallic measuring cell	

Temperature range

The ambient temperature range is -40 °C to +70°C.

The relation between ambient temperature and the assigned temperature class is as follows:

Ambient temperature range	Temperature class
-40 °C to +70 °C	T4

Only for dust for VEGABAR 28 (*)/ 29 (*)/

Ambient temperature range	Temperature class
-40 °C to +70 °C	T ₂₀₀ XX°C max surface temperature: T ₂₀₀ 100°C

VEGABAR 28 (*)/ 29 (*)/ 38 (*)/ 39 (*) are pressure transmitters evaluated under the entity concept.

Electrical data:

VEGABAR 28 (*)/ 29 (*)/ 38 (*) / 39 (*)
Transmitter M12 (Pin 1, 3)- or ISO4400 (Pin 1, 2)- Plug or cable outlet wire:
4-20 mA two-wire superposed current output.

- U_i : 30 V
- I_i : 131 mA
- P_i : 0.983 W
- L_i : 5 µH
- C_i : 0

C_i and L_i do not include the capacitance/ inductance of cables to and from VEGABAR 28 (*)/ 29 (*)/ 38 (*)/ 39 (*)

Maximum cable length must be considered based on cable parameters:

- Li' = 0.55 µH/m;
- Ci'^{wire/wire} = 58 pF/m; and
- Ci'^{wires/shield} = 270 pF/m.

The optical radiation output of the product with respect to explosion protection, according to Annex II clause 1.3.1 of the Directive 2014/34/EU is based on Exception 1) to the scope of EN 60079-28:2015.

Routine tests

None

[16]

Descriptive Documents

The scheduled drawings are listed in the report no. provided under item no. [8] on page 1 of this EU-Type Examination Certificate.

[17]

Specific conditions of use:

- Effective earthing of the equipment shall be secured through the mounting on the process equipment.
- The equipment should not be mounted on process equipment, in which pressure can exceed the range of 0.8 – 1.1 bar.
- For installation and operation of the equipment, the specifications given to the process media temperatures in the operating instructions shall be complied with.

Only for VEGABAR 28/29 with two-wire 4-20 mA current output in dust applications

- Ambient temperature and Temperature Class – see instructions.



[13]

[14]

Schedule
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DEMKO 19 ATEX 2222X Rev. 2

[18]

Essential Health and Safety Requirements

The Essential Health and Safety Requirements (EHSRs) covered by the standards listed at item 9.

Additional information

The manufacturer shall inform the notified body concerning all modifications to the technical documentation as described in Annex III to Directive 2014/34/EU of the European Parliament and the Council of 26 February 2014.

