Translation

(1) # EU-Type Examination Certificate

(2) Equipment and protective systems intended for use in potentially explosive atmospheres, **Directive 2014/34/EU**

(3) **Certificate Number** **TÜV 16 ATEX 179411 X** **Issue:** 01

(4) for the product: Signal conditioning instruments
VEGATOR 131 type TOR131.**S/X****
VEGATOR 132 type TOR132.*******

(5) of the manufacturer: **VEGA Grieshaber KG**

(6) Address: Am Hohenstein 113, 77761 Schiltach, Germany

Order number: 8003032503
Date of issue: 2022-08-19

(7) The design of this product and any acceptable variation thereto are specified in the schedule to this EU-Type Examination Certificate and the documents therein referred to.

(8) The TÜV NORD CERT GmbH, Notified Body No. 0044, in accordance with Article 17 of the Directive 2014/34/EU of the European Parliament and the Council of 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 the confidential ATEX Assessment Report No. 21 203 296777.

(9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:
EN IEC 60079-0:2018/AC:2020-02 **EN IEC 60079-7:2015/A1:2018** **EN 60079-11:2012**
EN IEC 60079-15:2019

except in respect of those requirements listed at item 18 of the schedule.

(10) If the sign ”X” is placed after the certificate number, it indicates that the product is subject to the Specific Conditions for 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 equipment. These are not covered by this certificate.

(12) The marking of the product shall include the following:

See “Type code and Marking”

TÜV NORD CERT GmbH, Am TÜV 1, 45307 Essen, notified by the central office of the countries for safety engineering (ZLS), Ident. Nr. 0044, legal successor of the TÜV NORD CERT GmbH & Co. KG Ident. Nr. 0032

The deputy of the head of the notified body

Digital unterschrieben
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(13) **S C H E D U L E**

(14) **EU-Type Examination Certificate No. TÜV 16 ATEX 179411 X** **Issue 01**

(15) **Description of product:**
The signal conditioning instruments VEGATOR 131 type TOR131.**S/X**** and VEGATOR 132 type TOR132.******* are used for the supply of passive, intrinsically safe conductive sensors of type EL e.g for level point detection and pump control and for the safe galvanic separation of the intrinsically safe circuits from all non-intrinsically safe circuits.

Type code and Marking:

VEGATOR 131 type TOR131.**S/X****	II 3 (1) G Ex ec nC [ia Ga] IIC T4 Gc II 3 G (1) D Ex ec nC [ia IIIC Da] IIC T4 Gc II 3 G (M1) Ex ec nC [ia I Ma] IIC T4 Gc
VEGATOR 132 type TOR132.*******	I (M1) [Ex ia Ma] I II (1) G [Ex ia Ga] IIC II (1) D [Ex ia Da] IIIC

Electrical data:

Supply (Terminals 16/17)	For connection to non-intrinsically safe circuits with the following maximum values: U_n = 24...230 V a.c (-15 … +10%) U_n = 24… 65 V d.c (-15 … +10%) U_m = 253 V a.c
Relay outputs (Terminals Relay 1: 10/11/12 Relay 2: 13/14/15)	For connection to non-intrinsically safe circuits with the following maximum values: U_n = 253 V a.c; I_n = 3 A U_n = 50 V d.c; I_n = 1 A
Signal circuits (Terminals 1/2/3, 4/5)	In type of protection intrinsic safety Ex ia I/IIC/IIB(IIIC) with following maximum values per circuit: U_o = 12.6 V I_o = 7.7 mA P_o = 24.3 mW Characteristic line: linear
Effective internal capacitance C_i	Negligibly small
Effective internal inductance L_i	Negligibly small

The maximum permissible values for the external inductance L_o and the external capacitance C_o can be taken from the following tables:

Ex ia I	L_o [mH]	100	20	10	0.5	0.2
	C_o [µF]	9.1	12	13	27	29

Ex ia IIC	L_o [mH]	100	50	10	0.5	0.05
	C_o [µF]	0.38	0.42	0.52	0.91	1.15

Ex ia IIB (IIIC)	L_o [mH]	100	50	10	2	0.2
	C_o [µF]	2.5	2.7	3.5	4.7	7.4

The intrinsically safe signal circuit is safe galvanically separated from the non-intrinsically safe circuits up to a peak value of the voltage of 375 V.

Thermal data:
Permissible ambient temperature range: -20 °C ≤ Ta ≤ +60 °C.

(16) Drawings and documents are listed in the ATEX Assessment Report No. 21 203 296777

(17) **Specific Conditions for Use:**

1. For EPL Gc applications the signal conditioning instruments VEGATOR 131 type TOR131.**S/X**** and VEGATOR 132 type TOR132.******* have to be installed in a suitable enclosure according to EN 60079-7 resp. EN 60079-15 in such a way that a degree of protection of at least IP54 is achieved.

2. For EPL Gc applications the signal conditioning instruments VEGATOR 131 type TOR131.**S/X**** and VEGATOR 132 type TOR132.******* have to be erected in such a way that a pollution degree 2 or less, according to EN 60664-1, is achieved.

3. For EPL Gc applications measures have to be taken, external to the signal conditioning instruments VEGATOR 131 type TOR131.**S/X**** and VEGATOR 132 type TOR132.*******, to provide a transient protection that ensures that the rated voltage, connected to the power supply terminals, is not exceeded by more than 40 %.

4. For EPL Gc applications the connecting and disconnecting of non-intrinsically safe circuits is only permitted in the absence of a potentially explosive atmosphere.

(18) **Essential Health and Safety Requirements:**
No additional ones.

- End of EU-Type Examination Certificate -

Translation

(1) EU-Type Examination Certificate

(2) Equipment and protective systems intended for use in potentially explosive atmospheres, **Directive 2014/34/EU**

(3) **Certificate Number** **TÜV 16 ATEX 179411** **issue:** 00

(4) for the product: Conductive signal conditioning instrument type
VEGATOR 131.AC/O/U*****
VEGATOR 132.AC/O/U*****

(5) of the manufacturer: VEGA Grieshaber KG

(6) Address: Am Hohenstein 113
77761 Schiltach
Germany

Order number: 8000459284

Date of issue: 2016-06-13

(7) The design of this product and any acceptable variation thereto are specified in the schedule to this EU-Type Examination Certificate and the documents therein referred to.

(8) The TÜV NORD CERT GmbH, Notified Body No. 0044, in accordance with Article 17 of the Directive 2014/34/EU of the European Parliament and the Council of 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 the confidential ATEX Assessment Report No. 16 203 179411.

(9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:
EN 60079-0:2012 EN 60079-11:2012
except in respect of those requirements listed at item 18 of the schedule.

(10) If the sign "X" is placed after the certificate number, it indicates that the product is subject to the Specific Conditions for 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 equipment. These are not covered by this certificate.

(12) The marking of the product shall include the following:

Ex II (1) G [Ex ia Ga] IIC, II (1) D [Ex ia Da] IIIC, I (M1) [Ex ia Ma] I

TÜV NORD CERT GmbH, Langemarckstraße 20, 45141 Essen, notified by the central office of the countries for safety engineering (ZLS), Ident. Nr. 0044, legal successor of the TÜV NORD CERT GmbH & Co. KG Ident. Nr. 0032

The head of the notified body

Schwedt

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(13) **SCHEDULE**

(14) **EU-Type Examination Certificate No. TÜV 16 ATEX 179411 issue 00**

(15) Description of product

The conductive signal conditioning instruments type
VEGATOR 131. AC/O/U*****
VEGATOR 132. AC/O/U*****
are used for the supply of passive, intrinsically safe conductive measuring EL type sensors for e. g. level point detection and pump control and the safe galvanic separation of the intrinsically safe circuits from all non-intrinsically safe circuits.

The permissible ambient temperature range is -20 °C ... +60 °C.

Electrical data

Supply Terminals 16/17)	U = 24 ... 230 V a. c. (-15%...+10%) U = 24 ... 65 V d. c.(-15%...+10%) U_m = 253 V a. c.
Signal circuits (Terminals 1/2/3, 4/5)	in type of protection „Intrinsic Safety" Ex ia IIC, IIB, I maximum cumulative values for both circuits: U_o = 12.6 V I_o = 7.7 mA P_o = 24.3 mW characteristic line: linear

Ex ia	IIC	IIB	I
max. permissible ext. inductance	1 mH	5 mH	10 mH
max. permissible ext. capacitance	0.730 µF	2.7 µF	4.3 µF

The maximum values of the table are also allowed to be used up to the permissible limits as concentrated capacitances and as concentrated inductances.

The values for IIC and IIB are also permissible for explosive dust atmospheres.

Relay outputs (Terminals 10/11/12, 13/14/15)	maximum values: 253 V a. c., 3A 50 V d. c., 1A

The intrinsically safe signal circuit is safe galvanically separated from the non-intrinsically safe circuits up to a peak value of the voltage of 375 V.

(16) Drawings and documents are listed in the ATEX Assessment Report No. 16 203 179411

(17) Specific Conditions for Use
none

(18) Essential Health and Safety Requirements
no additional ones

- End of Certificate -

Translation

(1) EU-Type Examination Certificate

(2) Equipment and protective systems intended for use in potentially explosive atmospheres, **Directive 2014/34/EU**

(3) **Certificate Number** **TÜV 16 ATEX 179411** **issue:** 00

(4) for the product: Conductive signal conditioning instrument type
VEGATOR 131.AC/O/U*****
VEGATOR 132.AC/O/U*****

(5) of the manufacturer: VEGA Grieshaber KG

(6) Address: Am Hohenstein 113
77761 Schiltach
Germany

Order number: 8000459284

Date of issue: 2016-06-13

(7) The design of this product and any acceptable variation thereto are specified in the schedule to this EU-Type Examination Certificate and the documents therein referred to.

(8) The TÜV NORD CERT GmbH, Notified Body No. 0044, in accordance with Article 17 of the Directive 2014/34/EU of the European Parliament and the Council of 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 the confidential ATEX Assessment Report No. 16 203 179411.

(9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:
EN 60079-0:2012 EN 60079-11:2012
except in respect of those requirements listed at item 18 of the schedule.

(10) If the sign "X" is placed after the certificate number, it indicates that the product is subject to the Specific Conditions for 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 equipment. These are not covered by this certificate.

(12) The marking of the product shall include the following:

Ex II (1) G [Ex ia Ga] IIC, II (1) D [Ex ia Da] IIIC, I (M1) [Ex ia Ma] I

TÜV NORD CERT GmbH, Langemarckstraße 20, 45141 Essen, notified by the central office of the countries for safety engineering (ZLS), Ident. Nr. 0044, legal successor of the TÜV NORD CERT GmbH & Co. KG Ident. Nr. 0032

The head of the notified body

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(13) **SCHEDULE**

(14) **EU-Type Examination Certificate No. TÜV 16 ATEX 179411 issue 00**

(15) Description of product

The conductive signal conditioning instruments type
VEGATOR 131. AC/O/U*****
VEGATOR 132. AC/O/U*****
are used for the supply of passive, intrinsically safe conductive measuring EL type sensors for e. g. level point detection and pump control and the safe galvanic separation of the intrinsically safe circuits from all non-intrinsically safe circuits.

The permissible ambient temperature range is -20 °C ... +60 °C.

Electrical data

Supply Terminals 16/17)	U = 24 ... 230 V a. c. (-15%...+10%) U = 24 ... 65 V d. c.(-15%...+10%) U_m = 253 V a. c.
Signal circuits (Terminals 1/2/3, 4/5)	in type of protection „Intrinsic Safety" Ex ia IIC, IIB, I maximum cumulative values for both circuits: U_o = 12.6 V I_o = 7.7 mA P_o = 24.3 mW characteristic line: linear

Ex ia	IIC	IIB	I
max. permissible ext. inductance	1 mH	5 mH	10 mH
max. permissible ext. capacitance	0.730 µF	2.7 µF	4.3 µF

The maximum values of the table are also allowed to be used up to the permissible limits as concentrated capacitances and as concentrated inductances.

The values for IIC and IIB are also permissible for explosive dust atmospheres.

Relay outputs (Terminals 10/11/12, 13/14/15)	maximum values: 253 V a. c., 3A 50 V d. c., 1A

The intrinsically safe signal circuit is safe galvanically separated from the non-intrinsically safe circuits up to a peak value of the voltage of 375 V.

(16) Drawings and documents are listed in the ATEX Assessment Report No. 16 203 179411

(17) Specific Conditions for Use
none

(18) Essential Health and Safety Requirements
no additional ones

- End of Certificate -

Translation

(1) Statement of Conformity

(2) Equipment and protective systems intended for use in potentially explosive atmospheres, **Directive 2014/34/EU**

(3) **Statement of Conformity Number:** **TÜV 16 ATEX 179410 X** **Issue:** 00

(4) for the product: Conductive signal conditioning instruments type
VEGATOR 131.AA*****
VEGATOR 132.AA*****

(5) of the manufacturer: VEGA Grieshaber KG

(6) Address: Am Hohenstein 113
77761 Schiltach
Germany

Order number: 8000459284

Date of issue: 2016-06-13

(7) The design of this product and any acceptable variation thereto are specified in the schedule to this Statement of Conformity and the documents therein referred to.

(8) The TÜV NORD CERT GmbH 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 the confidential ATEX Assessment Report No. 16 214 179410.

(9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:
EN 60079-0:2012 IEC 60079-7:2015 EN 60079-11:2012
EN 60079-15:2010
except in respect of those requirements listed at item 18 of the schedule.

(10) If the sign "X" is placed after the certificate number, it indicates that the product is subject to specific conditions for use specified in the schedule to this Statement of Conformity.

(11) This statement of conformity relates only to the design, examination and tests 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 equipment. These are not covered by this Statement of Conformity.

(12) The marking of the product must include the following:

Ex II 3 G Ex ec nC ic IIC T4 Gc

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Specialist Manager Explosion Protection

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(13) **SCHEDULE**

(14) **Statement of Conformity No. TÜV 16 ATEX 179410 X Issue 00**

(15) Description of product

The conductive signal conditioning instruments type
VEGATOR 131.AA*****
VEGATOR 132.AA*****
are used for the supply of passive, intrinsically safe conductive measuring EL type sensors for e. g. level point detection and pump control and the safe galvanic separation of the intrinsically safe circuits from all non-intrinsically safe circuits.

The permissible ambient temperature range is -20 °C ... +60 °C.

Regarding the intrinsically safe circuits, an EU-Type Examination Certificate TÜV 16 ATEX 179411 exists.

Electrical data

Supply Terminals 16/17)	U = 24 ... 230 V a. c. (-15%...+10%) U = 24 ... 65 V d. c.(-15%...+10%) U_m = 253 V a. c.
Signal circuits (Terminals 1/2/3, 4/5)	See EU-Type Examination Certificate TÜV 16 ATEX 179411
Relay outputs (Terminals 10/11/12, 13/14/15)	maximum values: 253 V a. c., 3A 50 V d. c., 1A

(16) Drawings and documents are listed in the ATEX Assessment Report No. 16 214 179410.

(17) Specific conditions of use

According to IEC 60079-7, section 4.10.1, the following is valid for this apparatus:
The apparatus has to be mounted in a housing tested according to IEC 60079-0, that meets the requirements of degree of protection IP54.
The apparatus may be installed in an area of not more than pollution degree 2.

(18) Essential Health and Safety Requirements

no additional ones

- End of Statement -