

INTERNATIONAL ELECTROTECHNICAL COMMISSION **IEC Certification System for Explosive Atmospheres**

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: IECEx SIR 20.0011X Page 1 of 4 Certificate history:

Issue 1 (2021-10-05) Status: Current Issue No: 2 Issue 0 (2020-10-13)

Date of Issue: 2022-09-02

Applicant: VEGA Grieshaber KG

Am Hohenstein 113 77761 Schiltach Germany

VEGAPOINT 21, VEGAPOINT 23 and VEGAPOINT 31 Equipment:

Optional accessory:

Type of Protection: Dust Protection by Enclosure ta/tb or tb

Marking: Certification code plastic version:

> Ex ta/tb IIIC T₂₀₀ 130°C/T100°C Da/Db Ex tb IIIC T120°C/T100°C Db

Certification code stainless steel version:

Ex ta/tb IIIC T200 130°C/T110°C Da/Db

Ex tb IIIC T120°C/T110°C Db

Approved for issue on behalf of the IECEx

Certification Body:

Michelle Halliwell

Director Operations, UK & Industrial Europe

Position: Signature:

(for printed version)

(for printed version)

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 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 Testing UK Ltd Unit 6, Hawarden Industrial Park len. Deeside CH5 3US Kingdom







Certificate No.: IECEx SIR 20.0011X Page 2 of 4

Date of issue: 2022-09-02 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 4241 Allendorf Drive Cincinnati, Ohio 45209 United States of America

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 Explosive atmospheres - Part 0: Equipment - General requirements

Edition:7.0

IEC 60079-31:2013 Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"

Edition:2

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:

GB/CSAE/ExTR21.0106/00 GB/SIR/ExTR20.0182/00 GB/SIR/ExTR22.0128/00

Quality Assessment Report:

DE/TUN/QAR06.0002/11



Certificate No.: IECEx SIR 20.0011X Page 3 of 4

Date of issue: 2022-09-02 Issue No: 2

EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

The level switch series VEGAPOINT 21, VEGAPOINT 23 and VEGAPOINT 31 are for use in explosive dust atmospheres in type of protection "ta/tb", when installed in a suitable barrier between Zone 20 and 21 and in type of protection "tb". The sensor tip would be installed via the thread of the stainless-steel enclosure in Zone 20 or Zone 21 and the other part of the equipment would be in Zone 21.

They are used for detection of a product surface in contact with the sensor by means of frequency deviation method. The construction of VEGAPOINT 21 and 31 is identical. The sensors have a different software function. VEGAPOINT 23 has the difference to the other two models that the sensor tip is extended to a length between 64 mm up to 1,000 mm.

There are two different versions available: The "plastic version" and the stainless-steel version".

The enclosure of the plastic version is made of stainless steel with the exception of the non-metallic cover part, which contains the socket. This part is protected by a non-metallic protective cover. In addition, also the cap of the probe, which is in the process, is made of a non-metallic material.

The stainless-steel version is completely made of stainless steel with the exception of the cap of the probe and the compound of the socket. In addition, the stainless-steel version has no protective cover, which is just optional. The housing and connection part (cover) are welded together.

The VEGAPOINT 21, VEGAPOINT 23 and VEGAPOINT 31 are suitable for the following maximum ambient temperatures in relation to process temperatures. The process temperature range is -40 °C to +115 °C. The equipment has been separately tested against the requirements of IEC 60529 and it meets IP6X, IPX6, IPX8, IPX9.

Refer to the Annexe for Other important information

SPECIFIC CONDITIONS OF USE: YES as shown below:

- 1. The equipment incorporates different ambient and process temperature ranges, follow the instruction manual regarding temperature limitations.
- 2. If the socket is not connected to a plug it shall be protected from environmental influences.
- The sensor tip of the equipment shall be protected from UV light. The M12 socket of the stainless-steel version shall be protected from UV light.
- 4. Follow the instruction manual to avoid electrostatic charge of non-metallic enclosure materials.
- 5. The equipment shall be permanently connected to earth via the process connection.
- 6. The equipment was tested to the low risk of mechanical danger, special advises are given in the instruction manual.



Certificate No.: IECEx SIR 20.0011X Page 4 of 4

Date of issue: 2022-09-02 Issue No: 2

DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

Issue 1 – this Issue introduced the following changes:

- Replacement of the plastic material of the connection part, introduction of an alternative O-Ring material, new design and material of circlip and introduction of an alternative new protective cover material.
- 2. Introduction of model VEGAPOINT 23 to the certification.
- 3. IPX4 Tests for the connection part.

Issue 2 - this Issue introduced the following changes:

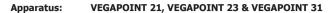
- 1. To add a ESD Diode.
- 2. Increased the working pressure from 25bar to 64bar only for the full metal version (stainless steel).

Annex:

IECEx SIR 20.0011X Annexe Issue 2.pdf

Annexe to: IECEx SIR 20.0011X Issue 2

Applicant: VEGA Grieshaber KG





The VEGAPOINT 21, VEGAPOINT 23 and VEGAPOINT 31 are suitable for the following maximum ambient temperatures in relation to process temperatures. The process temperature range is -40 °C to +115 °C. The equipment has been separately tested against the requirements of IEC 60529 and it meets IP6X, IPX6, IPX8, IPX9.

Plastic Version:

Process temperature	Maximum allowed ambient temperature
-40°C to 90°C	70°C
≤ 95°C	67°C
≤ 100°C	63°C
≤ 105°C	58°C
≤ 110°C	54°C
≤ 115°C	50°C

Stainless steel version:

Process temperature	Maximum allowed ambient temperature
-40 °C to 110 °C	70 °C
≤ 115 °C	68 °C

Assignment of maximum surface temperature

The equipment is marked with two maximum surface temperatures divided by a "/". The temperature before the "/" indicates the temperature applicable to the senor tip and the temperature behind the "/" indicates the temperature of the enclosure beyond the thread as per table below.

Version	Certification Code	Maximum surface temperature – Sensor tip	Maximum surface temperature – Enclosure (beyond the thread)
Plastic Version	Ex ta/tb	130°C	100°C
	Ex tb	120°C	100°C
Stainless steel	Ex ta/tb	130°C	110°C
version	Ex tb	120°C	110°C

Conditions of Manufacture

The Manufacturer shall comply with the following:

- 1. The manufacturer is responsible that the warning for potential electrostatic charge is covered with advises shown in the instruction manual of the equipment.
- 2. The ambient and process temperature ranges as in the product description shall be shown in the instruction manual of the equipment.

Date: 02 September 2022 Page 1 of 1



INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.:	IECEx SIR 20.0011X	Page 1 of 4	Certificate history:
			Issue 0 (2020-10-13)

Status: Current Issue No: 1

Date of Issue: 2021-10-05

Applicant: VEGA Grieshaber KG
Am Hohenstein 113
77761 Schiltach

Germany

Equipment: VEGAPOINT 21, VEGAPOINT 23 and VEGAPOINT 31

Optional accessory:

Type of Protection: Dust Protection by Enclosure ta/tb or tb

Marking: Certification code plastic version:

Ex ta/tb IIIC T₂₀₀ 130°C/T100°C Da/Db Ex tb IIIC T120°C/T100°C Db

Certification code stainless steel version:

Ex ta/tb IIIC T₂₀₀ 130°C/T110°C Da/Db

Ex tb IIIC T120°C/T110°C Db

Approved for issue on behalf of the IECEx Neil Jones

Certification Body:

Position: Certification Manager

Signature:

Date:

(for printed version)

(-------)

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Certificate issued by:

CSA Group Testing UK Ltd Unit 6, Hawarden Industrial Park Hawarden, Deeside CH5 3USKingdom







Certificate No.: IECEx SIR 20.0011X Page 2 of 4

Date of issue: 2021-10-05 Issue No: 1

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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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 60079-31:2013 Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"

This Certificate **does not** indicate compliance with safety and performance requirements other than those expressly included in the Standards listed above.

TEST & ASSESSMENT REPORTS:

 $A \, \text{sample}(s) \, \text{of the equipment listed has successfully met the examination and test requirements as recorded in:} \\$

Test Reports:

GB/CSAE/ExTR21.0106/00 GB/SIR/ExTR20.0182/00

Quality Assessment Report:

DE/TUN/QAR06.0002/10



Certificate No.: IECEx SIR 20.0011X Page 3 of 4

Date of issue: 2021-10-05 Issue No: 1

EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

The level switch series VEGAPOINT 21, VEGAPOINT 23 and VEGAPOINT 31 are for use in explosive dust atmospheres in type of protection "ta/tb", when installed in a suitable barrier between Zone 20 and 21 and in type of protection "tb". The sensor tip would be installed via the thread of the stainless-steel enclosure in Zone 20 or Zone 21 and the other part of the equipment would be in Zone 21.

They are used for detection of a product surface in contact with the sensor by means of frequency deviation method. The construction of VEGAPOINT 21 and 31 is identical. The sensors have a different software function. VEGAPOINT 23 has the difference to the other two models that the sensor tip is extended to a length between 64 mm up to 1,000 mm.

There are two different versions available: The "plastic version" and the stainless-steel version".

The enclosure of the plastic version is made of stainless steel with the exception of the non-metallic cover part, which contains the socket. This part is protected by a non-metallic protective cover. In addition, also the cap of the probe, which is in the process, is made of a non-metallic material.

The stainless-steel version is completely made of stainless steel with the exception of the cap of the probe and the compound of the socket. In addition, the stainless-steel version has no protective cover, which is just optional. The housing and connection part (cover) are welded together.

The VEGAPOINT 21, VEGAPOINT 23 and VEGAPOINT 31 are suitable for the following maximum ambient temperatures in relation to process temperatures. The process temperature range is -40 °C to +115 °C. The equipment has been separately tested against the requirements of IEC 60529 and it meets IP6X, IPX6, IPX8, IPX9.

Refer to the Annexe for Other important information

SPECIFIC CONDITIONS OF USE: YES as shown below:

- 1. The equipment incorporates different ambient and process temperature ranges, follow the instruction manual regarding temperature limitations.
- 2. If the socket is not connected to a plug it shall be protected from environmental influences.
- The sensor tip of the equipment shall be protected from UV light. The M12 socket of the stainless-steel version shall be protected from UV light.
- 4. Follow the instruction manual to avoid electrostatic charge of non-metallic enclosure materials.
- 5. The equipment shall be permanently connected to earth via the process connection.
- 6. The equipment was tested to the low risk of mechanical danger, special advises are given in the instruction manual.



Certificate No.: IECEx SIR 20.0011X Page 4 of 4

Date of issue: 2021-10-05 Issue No: 1

DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

Issue 1 – this Issue introduced the following changes:

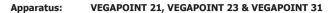
- Replacement of the plastic material of the connection part, introduction of an alternative O-Ring material, new design and material of circlip and introduction of an alternative new protective cover material.
- 2. Introduction of model VEGAPOINT 23 to the certification.
- 3. IPX4 Tests for the connection part.

Annex:

IECEx SIR 20.0011X Annexe Issue 1.pdf

Annexe to: IECEx SIR 20.0011X Issue 1

Applicant: VEGA Grieshaber KG





The VEGAPOINT 21, VEGAPOINT 23 and VEGAPOINT 31 are suitable for the following maximum ambient temperatures in relation to process temperatures. The process temperature range is -40 °C to +115 °C. The equipment has been separately tested against the requirements of IEC 60529 and it meets IP6X, IPX6, IPX8, IPX9.

Plastic Version:

Process temperature	Maximum allowed ambient temperature
-40°C to 90°C	70°C
≤ 95°C	67°C
≤ 100°C	63°C
≤ 105°C	58°C
≤ 110°C	54°C
≤ 115°C	50°C

Stainless steel version:

Process temperature	Maximum allowed ambient temperature
-40 °C to 110 °C	70 °C
≤ 115 °C	68 °C

Assignment of maximum surface temperature

The equipment is marked with two maximum surface temperatures divided by a "/". The temperature before the "/" indicates the temperature applicable to the senor tip and the temperature behind the "/" indicates the temperature of the enclosure beyond the thread as per table below.

Version	Certification Code	Maximum surface temperature – Sensor tip	Maximum surface temperature – Enclosure (beyond the thread)
Plastic Version	Ex ta/tb	130°C	100°C
	Ex tb	120°C	100°C
Stainless steel	Ex ta/tb	130°C	110°C
version	Ex tb	120°C	110°C

Conditions of Manufacture

The Manufacturer shall comply with the following:

- 1. The manufacturer is responsible that the warning for potential electrostatic charge is covered with advises shown in the instruction manual of the equipment.
- 2. The ambient and process temperature ranges as in the product description shall be shown in the instruction manual of the equipment.

Date: 05 October 2021 Page 1 of 1



INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.:	IECEx SIR 20.0011X	Page 1 of 3	Certificate history

Status: Current Issue No: 0

Date of Issue: 2020-10-13

Applicant: VEGA Grieshaber KG

Am Hohenstein 113 77761 Schiltach **Germany**

Equipment: VEGAPOINT 21 and VEGAPOINT 31

Optional accessory:

Type of Protection: Dust Protection by Enclosure ta/tb or tb

Marking: Certification code plastic version:
Ex ta/tb IIIC T₂₀₀ 130°C/T100°C Da/Db

Ex tb IIIC T120°C/T100°C Db

Certification code stainless steel version:

Ex ta/tb IIIC T200 130°C/T110°C Da/Db

Ex tb IIIC T120°C/T110°C Db

Approved for issue on behalf of the IECEx

Neil Jones

Certification Body:

Position: Certification Manager

Signature:

Date:

(for printed version)

(for printed version)

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Certificate issued by:

SIRA Certification Service
CSA Group
Unit 6, Hawarden Industrial Park
len, Deeside, CH5 3US
Kingdom









Certificate No.: IECEx SIR 20.0011X Page 2 of 3

Date of issue: 2020-10-13 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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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 60079-31:2013 Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"

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 Report:

GB/SIR/ExTR20.0182/00

Quality Assessment Report:

DE/TUN/QAR06.0002/09



Certificate No.: IECEx SIR 20.0011X Page 3 of 3

Date of issue: 2020-10-13 Issue No: 0

EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

The level switch series VEGAPOINT 21 and VEGAPOINT 31 are for use in explosive dust atmospheres in type of protection "ta/tb", when installed in a suitable barrier between Zone 20 and 21 and in type of protection "tb". The sensor tip would be installed via the thread of the stainless-steel enclosure in Zone 20 or Zone 21 and the other part of the equipment would be in Zone 21.

They are used for detection of a product surface in contact with the sensor by means of frequency deviation method. The construction of VEGAPOINT 21 and 31 is identical. The sensors have a different software function.

There are two different versions available: The "plastic version" and the stainless-steel version".

The enclosure of the plastic version is made of stainless steel with the exception of the non-metallic cover part, which contains the protective vent and the socket. This part is protected by a non-metallic protective cover. In addition, also the cap of the probe, which is in the process, is made of a non-metallic material.

The stainless-steel version is completely made of stainless steel with the exception of the cap of the probe and the compound of the socket. In addition, the stainless-steel version has no protective cover, which is just optional. The housing and connection part (cover) are welded together.

The VEGAPOINT 21 and VEGAPOINT 31 are suitable for the following maximum ambient temperatures in relation to process temperatures. The process temperature range is -40 °C to +115 °C.

Refer to the Annexe for Other important information

SPECIFIC CONDITIONS OF USE: YES as shown below:

- The equipment incorporates different ambient and process temperature ranges, follow the instruction manual regarding temperature limitations.
- 2. If the socket is not connected to a plug it shall be protected from environmental influences.
- The sensor tip of the equipment shall be protected from UV light. The M12 socket of the stainless-steel version shall be protected from UV light.
- 4. Follow the instruction manual to avoid electrostatic charge of non-metallic enclosure materials.
- 5. The equipment shall be permanently connected to earth via the process connection.
- 6. The equipment was tested to the low risk of mechanical danger, special advises are given in the instruction manual.

Annex:

IECEx SIR 20.0011X Annexe Issue 0.pdf

Annexe to: IECEx SIR 20.0011X Issue 0

Applicant: VEGA Grieshaber KG



Apparatus: VEGAPOINT 21 & VEGAPOINT 31

The VEGAPOINT 21 and VEGAPOINT 31 are suitable for the following maximum ambient temperatures in relation to process temperatures. The process temperature range is -40 °C to +115 °C.

Plastic Version:

Process temperature	Maximum allowed ambient temperature
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Stainless steel version:

Process temperature	Maximum allowed ambient temperature
-40 °C to 110 °C	70 °C
≤ 115 °C	68 °C

Assignment of maximum surface temperature

The equipment is marked with two maximum surface temperatures divided by a "/". The temperature before the "/" indicates the temperature applicable to the senor tip and the temperature behind the "/" indicates the temperature of the enclosure beyond the thread as per table below.

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	Ex tb	120°C	100°C
Stainless steel	Ex ta/tb	130°C	110°C
version	Ex tb	120°C	110°C

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Sira Certification Service

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Web: <u>www.csagroupuk.org</u>