[1]

UNITED KINGDOM CONFORMITY ASSESSMENT

UK-TYPE EXAMINATION CERTIFICATE

[2]

Product or Protective System Intended for use in Potentially Explosive Atmospheres
UKSI 2016:1107 (as amended by UKSI 2019:696) – Schedule 3A, Part 1

[3] UK-Type Examination Certificate No.: **UL22UKEX2278X Rev. 0**

[4] Product: VEGAPOINT 21, VEGAPOINT 23 & VEGAPOINT 31

[5] Manufacturer: VEGA Grieshaber KG

[6] Address: Am Hohenstein 113, 77761 Schiltach, 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 (UK) Ltd, Approved Body number 0843, in accordance with Regulation 44 of the Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres Regulations 2016, UKSI 2016:1107 (as amended by UKSI 2019:696), 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 Schedule 1 of the Regulations.
The examination and test results are recorded in the confidential report **UKRCC- 4790229873.4.1**

[9] Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN IEC 60079-0:2018 EN 60079-31:2014

Except in respect of those requirements listed at section 19 of the schedule to this certificate.

[10] If the sign "X" is placed after the certificate number, it indicates that the product is subject to specific conditions of use specified in the schedule to this certificate.

[11] This UK-TYPE EXAMINATION CERTIFICATE relates only to the design and construction of the specified product. Further requirements of the Regulations 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:

Certification code plastic version:

II 1/2D
Ex ta/tb IIIC T_{200}130°C/T100°C Da/Db

II 2D
Ex tb IIIC T120°C/T100°C Db

Certification code stainless steel version:

II 1/2D
Ex ta/tb IIIC T_{200}130 °C/T110°C Da/Db

II 2D
Ex tb IIIC T120°C/T110°C Db

Certification Manager
Andrew Moffat

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 UKEx 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 Regulations. 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: 2022-05-25

Approved Body UL International (UK) Ltd Unit 1-3 Horizon Kingsland Business Park Wade Road, Basingstoke RG24 8AH, UK
Phone : +44 (0)1256 312100

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Schedule
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[15] Description of Product

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.

Temperature range

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.

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

Plastic 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 version	Ex ta/tb	130°C	110°C
	Ex tb	120°C	110°C

Routine tests
None.

[16] Test Report No. (associated with this certificate issue)
ATEX Report numbers. R80040597A Rev 00; R80078902A Rev 01
IECEx EXTR number. GB/SIR/ExTR20.0182/00; GB/CSAE/ExTR21.0106/00
Test Report. C46831-00-00HG

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[17] Specific conditions of use:

- The equipment incorporates different ambient and process temperature ranges, follow the instruction manual regarding temperature limitations.
- If the socket is not connected to a plug then 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.
- Follow the instruction manual to avoid electrostatic charge of non-metallic enclosure materials.
- The equipment shall be permanently connected to earth via the process connection.
- The equipment was tested to the low risk of mechanical danger, special advises are given in the instruction manual.

[18] Conditions of certification:
None.

[19] Essential Health and Safety Requirements (Regulations Schedule 1)
In addition to the Essential Health and Safety Requirements covered by the standards listed at item 9, all other requirements are demonstrated in the relevant reports.

Additional information
The equipment has in addition passed the tests for Ingress Protection to IP6X, IPX6, IPX8, IPX9.in accordance with EN60529: 2013-08 edition 2.2.

The trademark VEGA will be used as the company identifier on the marking label.

The manufacturer shall inform the approved body concerning all modifications to the technical documentation as described in Annex III to UKSI 2016:1107 (as amended by UKSI 2019:696) – Schedule 3A, Part 1.

[20] Drawings and Documents

Title:	Drawing No.:	Rev. Level:	Date:	Date: (Stamp)
VEGAPOINT31&21 Ext/DIP overview device setup	GE4344	-	2021-04-12	2021-08-27
POINT23 overview M12x1 metal device setup up to 250mm DIP	GE4327	02	2021-08-20	2021-08-27
POINT23 overview M12x1 metal device setup 251mm and more DIP	GE4328	02	2021-08-20	2021-08-27
VEGAPOINT23 Ext/DIP details device setup up to 250mm	GE4357	-	2021-04-12	2021-08-27
VEGAPOINT23 Ext/DIP details device setup 251mm and more	GE4358	-	2021-04-12	2021-08-27
VEGAPOINT21_31_23 BoM Sheet 1-18	-	-	2021-04-07	2021-08-27
Technical description VEGAPOINT 31 & VEGAPOINT 21 & VEGAPOINT 23 Sheet 1-19	VEGAZW-6-50981	-	2021-08-26	2021-08-27
Component layout IMP20-SVAR	BB1591	1	2019-07-08	2021-08-27
Component layout IMP20-S64	BB1592	1	2019-07-05	2021-08-27
Component layout IMP20-S100	BB1593	1	2019-07-05	2021-08-27
Component layout IMP20-S150	BB1594	1	2019-07-05	2021-08-27
Component layout IMP20-S200	BB1595	1	2019-07-05	2021-08-27
Component layout IMP20-S250	BB1596	1	2019-07-05	2021-08-27
Component layout IMP20-S64A	BB1609	1	2019-08-05	2021-08-27
Component layout IMP20-S100A	BB1610	1	2019-08-06	2021-08-27
Component layout IMP20-S150A	BB1611	1	2019-08-06	2021-08-27
Component layout IMP20-S200A	BB1612	1	2019-08-06	2021-08-27
Component layout IMP20-S250A	BB1613	1	2019-08-06	2021-08-27

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Title:	Drawing No.:	Rev. Level:	Date:	Date: (Stamp)
IMP20-SVAR	SB1591	1	2019-03-05	2021-08-27
IMP20-S64	SB1592	1	2019-04-08	2021-08-27
IMP20-S100	SB1593	1	2019-04-08	2021-08-27
IMP20-S150	SB1594	1	2019-04-08	2021-08-27
IMP20-S200	SB1595	1	2019-04-08	2021-08-27
IMP20-S250	SB1596	1	2019-04-08	2021-08-27
IMP20-S64A	SB1609	1	2019-07-04	2021-08-27
IMP20-S100A	SB1610	1	2019-07-04	2021-08-27
IMP20-S150A	SB1611	1	2019-07-09	2021-08-27
IMP20-S200A	SB1612	1	2019-07-10	2021-08-27
IMP20-S250A	SB1613	1	2019-07-10	2021-08-27
Trace layout IMP20-SVAR	LP1591	1	2019-07-08	2021-08-27
Trace layout IMP20-S64	LP1592	1	2019-07-05	2021-08-27
Trace layout IMP20-S100 Sheet 1-2	LP1593	1	2019-07-05	2021-08-27
Trace layout IMP20-S150 Sheet 1-2	LP1594	1	2019-07-05	2021-08-27
Trace layout IMP20-S200 Sheet 1-2	LP1595	1	2019-07-05	2021-08-27
Trace layout IMP20-S250 Sheet 1-2	LP1596	1	2019-07-05	2021-08-27
Trace layout IMP20-S64A	LP1609	1	2019-07-05	2021-08-27
Trace layout IMP20-S100A Sheet 1-2	LP1610	1	2019-08-06	2021-08-27
Trace layout IMP20-S150A Sheet 1-2	LP1611	1	2019-08-06	2021-08-27
Trace layout IMP20-S200A Sheet 1-2	LP1612	1	2019-08-06	2021-08-27
Trace layout IMP20-S250A Sheet 1-2	LP1613	1	2019-08-06	2021-08-27
Product marking document VEGAPOINT 31/21/23 Ex t / DIP	VEGAZW-6-79972	00	2022-04-13	-
Safety Instructions ATEX / UKEX / IECEx / CSA VEGAPOINT 21, 23, 31 Page 1-12	62549	-	2022-04-21	-