Mining And Surface Certification (Pty) Ltd

2015/021934/07

THIS CERTIFICATE IS ISSUED AS AN I.A. CERTIFICATE IN TERMS OF THE MINE HEALTH AND SAFETY ACT, ACT NO 29 OF 1996 (AND REGULATIONS), THE OCCUPATIONAL HEALTH AND SAFETY ACT (ACT 85 OF 1993) AND REGULATION 17 OF THE ELECTRICAL MACHINERY REGULATIONS

IA CERTIFICATE	MASC S/21-9041X	**Issue**	0
Issue Date	10 December 2021	**Expiry Date**	10 December 2024
**** Based on Certificate No**	IECEx SIR 20.0011X	**Issue / Variations / Amendment**	1
Requested by	VEGA Grieshaber KG, Am Hohenstein 113, 77761 Schiltach, Germany		
Manufacturer	VEGA Grieshaber KG, Am Hohenstein 113, 77761 Schiltach, Germany		
Additional Manufacturing sites	VEGA Americas, Inc, 4241 Allendorf Drive, Cincinnati, Ohio 45209, United States of America		
Description	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. Refer to the Annex A for other important information		
Equipment	Level Switch series	**Type**	VEGAPOINT 21, VEGAPOINT 23 and VEGAPOINT 31

MARKING: **Original marking as per certificate ** remains applicable.** **IA number must be added.**	**Type:**	As above
	Ex 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
	IA Number:	MASC S/21-9041X (To be additionally marked on equipment)
	Warnings:	See Base Certificate ** (original marking must be applied)
Quality Assurance report (QAR) / Notification (QAN) Expiry date:		DE/TUN/QAR06.0002/10

Compliance:

The equipment as described above has been allocated the rating Explosion Protected 'as above' utilizing the SANS/IEC Standards:

- SANS (IEC) 60079-0: 2019 (2017) Equipment - General requirements
- SANS (IEC) 60079-31: (2014) Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"

Note: This certificate covers only the listed standards and does not imply compliance to any other standard, related or inferred. It is up to the manufacturer to ensure that the product complies to all relevant standards for the application.

Special conditions of safe use "X":

- Refer to Annex A below for more details.

Conditions of manufacture:

- Refer to Annex A below for more details.

Terine Orsmond
PROJECT MANAGER

Regardt Zeelie
TECHNICAL SPECIALIST

This certificate covers all units sold as long as the QAR/QAN remains valid.
According to the relevant requirements of the MHS Act and the OHS Act, production units of explosion protected equipment are required to comply with third party quality assurance (an approved mark scheme or batch testing by an accredited test laboratory).

Apparatus in hazardous locations is subject to the following provisions as applicable, which shall be adhered to:
SANS 10086 requirements;
Any conditions mentioned in the above certificate;
Any relevant requirements of the MHS Act;
Any restrictions and conditions enforced by the chief inspector of mines, principal inspector (Group I equipment) or chief inspector of factories (Group II equipment).

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ANNEX A

This document is based on and must be read in conjunction with certificate IECEx SIR 20.0011X

Description (According to Base Certificate) **

"Refer to description in Base Certificate ** (and any applicable schedules/issues/variations)."

Description

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.

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

Standard compliance

See Base Certificate ******

Special conditions of safe use ("X")

- 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 it shall be protected from environmental influences.

Mining And Surface Certification (Pty) Ltd Reg No: 2015/021934/07
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	• 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.
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.
Conditions of Certification	• This IA Certificate covers all units sold from the date of this document to the expiry date of this certificate. • As per ARP 0108 a maximum three yearly review is required on this IA Certificate (expiry is determined as per the QAR/QAN/QMS expiry date). • The apparatus must be additionally marked with the MASC marking details above. • This approval only covers the equipment as certified above and does not include any scheduled additions or variations / amendments / new issues to the certificate(s), made after the above date. • The equipment does not need to be re-tested when used on the conditions and with such restrictions as prescribed by the certificate on which this IA Certificate is based and any other conditions in this IA Certificate. • The certification on which this IA Certificate is based must remain valid. • The extent of the requirements in the ARP 0108 (or regulations), SANS 10108 and any other applicable regulations on the certification of the equipment must remain unchanged. • The Ex quality assurance notification/report for the equipment must remain valid.
Conclusion:	• From the above and the selective examination of the documentation, nothing contrary to the requirements of the applicable standards was found, provided that the equipment / component is used as described in the above document / certificate and according to the MASC conditions below. A MASC IA certificate is issued based on the work done as per the Base Certificate **. • The routine tests for production units according to the Base Certificate ** must be complied with (if applicable).

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