(Pty) Ltd

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GOVERNMENT APPROVED TEST LABORATORY

IN TERMS OF ARP 0108: "REGULATORY REQUIREMENTS FOR EXPLOSION PROTECTED APPARATUS"

IA CERTIFICATE

Date Issued:

13 Sep 2024 *Expiry date: 13 Sep 2027 Page 1 of 5

Issue: 3

Ex - Type Examination Certificate

Certificate Number: S-XPL/14.1870 X Equipment: Vibrating Level Switch

Model / Type: VEGASWING 61/63(*).GI ***

Applicant: Vega Instruments (Pty) Ltd

PO Box 692 Wilgeheuwels 1736

Manufacturer: VEGA Grieshaber KG

Serial No: All serial numbers imported between issued- and expire date and all serial

numbers covered by a valid report or acceptable product certification mark.

Supplied by

Vega Instruments (Pty) Ltd Identified by Inspection Authority Number

S-XPL/14.1870 X

And as described in the Explolabs file number XPL/15788/14.1870 is hereby certified "Explosion Protected (Refer to clause 1, for Ex Rating)", having been examined and inspected in accordance with the relevant requirements of the South African National Standards.

SANS 60079-0: 2019 Ed 6

IEC 60079-0: 2017 Ed 7

Explosive atmospheres Part 0: Equipment — General requirements

SANS 60079-26:2022 Ed 4

Explosive atmospheres - Part 26: Equipment with Separation Elements or combined Levels of Protection

IEC 60079-26:2021 Ed 4

Explosive atmospheres Part 31: Equipment dust ignition protection by

SANS 60079-31: 2014 Ed 2 IEC 60079-31: 2013 Ed 2

enclosure "t"

Risk of ignition provided:

| K | | | | | |
|---------------------------|---------------------|---|---|--|--|
| Columborate Series | Protection afforded | Equipment Protection Level (EPL) Group | Performance of protection | Conditions of operation | T class or Max Surface Temp (°C) |
| Column Territory Services | Very high | Da Group III | Two independent means of protection or safe even when two faults occur independently of each other | Equipment remains functioning in zones 20, 21 and 22 | See manual |
| Column Terrano Service | High | Db Group III | Suitable for normal operation and frequently occurring disturbances or equipment where faults are normally taken into account | Equipment remains functioning in zones 21 and 22 | |

This certificate supersedes all previous documents bearing the reference no XPL/15788/14.1870 Issue 2

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GENERAL

The marking of the Vibrating Level Switch shall include the following:

Ex ta/tb IIIC T* see manual Da/Db

Ex tb IIIC T* see manual Db

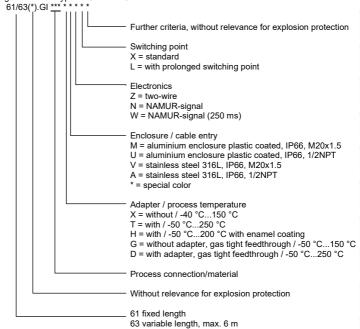
Description

The Vibrating Level Switch type VEGASWING is used for level monitoring, controlling and regulating in silos with dust generating material.

The probe of the Vibrating Level Switch vibrates at its mechanical resonant frequency. In case the probe is covered with material, the vibration is damped and a switch signal is generated.

General product information:

Vibrating level switch type VEGASWING



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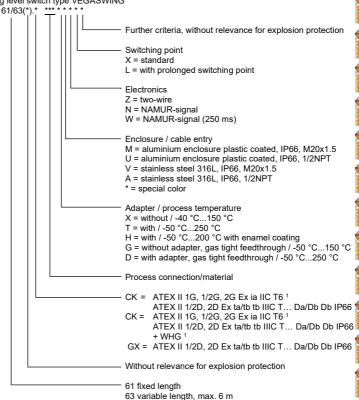
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General product information:

Vibrating level switch type VEGASWING



1 The assessment for use in explosive gas atmospheres and WHG is not part of this Test Report.

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Parameters

Electrical data

Type VEGASWING 61/63(*).GI *** * * Z * * and/or VEGASWING 6*.GX/CK*** * * Z * *

with electronics insert SW E60ZEX built in

Supply and signal circuit

in type of protection Intrinsic Safety Ex ia IIC only for connection to a certified intrinsically safe

circuit with the following maximum values: Ui = 29 V Ui = 24 V

li = 116 mA or li = 131 mA Pi = 841 mW Pi = 786 mW

effective internal capacitance negligible

negligible

effective internal inductivity

Type VEGASWING 61/63(*).GI *** * N/W * * and/or VEGASWING 61/63(*).GX/CK *** * * N/W * * with electronics insert SW E60NEX built in

Supply and signal circuit

in type of protection Intrinsic Safety Ex ia IIC only for connection to a certified intrinsically safe

circuit with the following maximum values: Ui = 20 V

li = 103 mA Pi = 516 mW

effective internal capacitance ne

negligible negligible •

effective internal inductivity

Thermal data

Permitted process temperature at the probe (EPL Da or Db)

Type VEGASWING 61/63(*).GI *** X * * * * -40 °C...+ 150 °C
Type VEGASWING 61/63(*).GI *** T * * * * -50 °C...+ 250 °C
Type VEGASWING 61/63(*).GI *** H * * * * -50 °C...+ 150 °C
Type VEGASWING 61/63(*).GI *** G * * * * * -50 °C...+ 150 °C
Type VEGASWING 61/63(*).GI *** D * * * * * -50 °C...+ 250 °C
And/or

Type VEGASWING 61/63(*).GX *** X * * * * -40 °C...+ 150 °C
Type VEGASWING 61/63(*).GX *** T * * * * -50 °C...+ 250 °C
Type VEGASWING 61/63(*).GX *** H * * * * -50 °C...+ 200 °C
Type VEGASWING 61/63(*).GX *** T * * * * * * -50 °C...+ 200 °C

Type VEGASWING 61/63(*).GX *** G *** 50 °C...+ 150 °C Type VEGASWING 61/63(*).GX *** D *** -50 °C...+ 250 °C

Max. surface temperature T at the probe Process temperature + 6K

Permitted ambient temperature at the electronics enclosure -40 °C...+ 60 °C

Maximum surface temperature at the electronics enclosure Ambient temperature +13K

Degrees of protection according to IEC/SANS 60529 IP66

Details of Certificate Changes

Update to current standards incl. assessment according to IEC 60079-26 Ed. 4 Distinction between product name and type code

Minor adaptation of drawings and documents

Based on the following documentation:

IECEx BVS 08.0010X Issue No. 3 and/or BVS 04 ATEX E 205 X Supplement 4

2. INSTALLATION INSTRUCTIONS

It is the manufacturer's responsibility to supply installation instructions with each unit offered for sale as required by IEC/SANS 60079-0 Clause 30.

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SPECIAL CONDITIONS FOR SAFE USE (denoted by "X" after certificate number) Intensive electrostatic charging for instance by the process has to be avoided.

In case of extremely ignitable dusts (MIE < 3 mJ) the equipment must not be used in areas where intensive charging processes are to be expected.

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SCHEDULE OF LIMITATIONS (denoted by "U" after certificate number) Not applicable.

CONDITIONS OF CERTIFICATION

All production units must be covered by a QAN (Quality Assurance Notification), Product Mark Scheme or batch evaluation.

MARKING

3.

The following (or similar) information have to be clearly and permanently marked on all units:

Supplier : Vega Instruments (Pty) Ltd : VEGA Grieshaber KG Manufacturer : Vibrating Level Switch Equipment

: VEGASWING 61/63(*).GI *** * * * * Model/Type

Serial No.

Ex Rating : Ex ta/tb IIIC T* see manual Da/Db

Ex tb IIIC T* see manual Db IA Certificate No : S-XPL/14.1870 X

This certification indicates compliance with R10.1 of the Mines Health and Safety Act and/or EMR 9(2) of the Occupational Health and Safety Act, provided that the apparatus is used as relevant in accordance with:

SANS 10086 and IEC/SANS 61241-14 requirements as applicable;

Any conditions mentioned in the above report;

Any relevant requirements and codes of practice enforced in terms of the Mine Health and Safety Act or Occupational Health and Safety Act iii) iv

Any restrictions and conditions enforced by the Chief Inspector of Mines or the Principal Inspector or the Chief Inspector: Occupational Health 🚵 and Safety.

A revision certificate replaces all previous version of the certificate.

* - Only covers equipment Imported between the "Issued" and "Expire" dates.

If and when your QAN (Quality Assurance Notification) Certificate for your equipment manufacturer expires during the valid period of the IA Certification (issued for your equipment) and a new certificate is not submitted the existing IA Certification will then be cancelled. It is thus the client's responsibility to always submit the updated and valid QAN certificate(s) to Explolabs (Pty) Ltd

Reviewed by:

C Lourens

Technical Specialist

JUVENS

EXPLOLABS EXPLOSION PREVENTION SERVICES

This report/certificate shall not be reproduced except in full without the written approval of the company Explolabs (Pty) Ltd shall not be liable for any losses or damages sustained on account of any failure or omission to properly perform our duties in terms of any contract undertaken by us. This disclaimer is immutable and automatically incorporated in any contract undertaken by us; notwithstanding anything to the contrary, save for the express written waiver of our managing director. By marking the equipment in accordance with the documentation/standard, the manufacturer attests on his own responsibility that the equipment has been constructed in accordance with the applicable requirements of the manufacturer attests on his own responsibility that the equipment has been constructed in accordance with the applicable requirements of the relevant standards and that the routine verifications and tests have been successfully completed and that the product complies with the documentation and standard(s). The contents of electronic reports/certificates cannot be guaranteed. Original certification documents will be kept on file at Explolabs (Pty) Ltd

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