IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION
IEC Certification System for Explosive Atmospheres

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

Certificate No.:	**IECEx TUN 04.0013**	Page 1 of 4	Certificate history:
Status:	**Current**	Issue No: 3	Issue 2 (2008-10-16) Issue 1 (2007-06-19) Issue 0 (2004-04-28)
Date of Issue:	2024-04-24		
Applicant:	**VEGA Grieshaber KG** Am Hohenstein 113 D-77761 Schiltach **Germany**		
Equipment:	**Signal conditioning instrument**		
Optional accessory:	VEGAMET 624, VEGAMET 625 and VEGASCAN 693		
Type of Protection:	**Intrinsic safety**		
Marking:	**[Ex ia Ma] I or** **[Ex ia Ga] IIC or** **[Ex ia Da] IIIC**		

Approved for issue on behalf of the IECEx Certification Body: **Anke Drews**

Position: **Deputy Head of IECEx Certification Body**

Signature:
(for printed version)

Date:
(for printed version)

1. This certificate and schedule may only be reproduced in full.
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Certificate issued by:

TÜV NORD CERT GmbH
Hanover Office
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Date of issue: 2024-04-24 Issue No: 3

Manufacturer: **VEGA Grieshaber KG**
Am Hohenstein 113
77761 Schiltach
Germany

Manufacturing locations: **VEGA Grieshaber KG**
Am Hohenstein 113
77761 Schiltach
Germany

VEGA India Level and Pressure Measurement Pvt. Ltd.
Plot No. 1
Gat No. 181
Village - Phulgaon
Tal. Haveli
Pune 412216
India

VEGA Americas, Inc.
3877 Mason Research Parkway
Ohio
Mason 45036
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 60079-11:2011 Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
Edition:6.0

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:

DE/TUN/ExTR08.0033/01

Quality Assessment Report:

DE/TUN/QAR06.0002/13

IECEx ATR: **File reference:**

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EQUIPMENT:
Equipment and systems covered by this Certificate are as follows:

Description:

The signal conditioning instruments type VEGAMET 624, VEGAMET 625 and VEGASCAN 693 are used for the intrinsically safe supply of two-wire sensors and for the safe galvanic separation of the intrinsically safe circuit from the non-intrinsically safe circuits.

The measuring values are converted into standardised outlet signals. The device consists of an electronic casing and a connection socket.

Refers to the Attachment to IECEx TUN 04.0013 issue No.3 for details.

SPECIFIC CONDITIONS OF USE: NO

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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)
Proof of conformity of the signal conditioning instrument VEGAMET 624, VEGAMET 625 and VEGASCAN 693 to IEC 60079-0:2017 and IEC 60079-11:2011.

The signal conditioning instrument VEGAMET MET624.CI*, VEGAMET MET625.CI* and VEGASCAN SCAN693.CI* are named VEGAMET 624, VEGAMET 625 and VEGASCAN 693 for this issue No.3

Annex:

Attachment to IECEx TUN 04.0013 issue No.3.pdf

General product information:
Description:
The signal conditioning instruments type VEGAMET 624, VEGAMET 625 and VEGASCAN 693 are used for the intrinsically safe supply of two-wire sensors and for the safe galvanic separation of the intrinsically safe circuit from the non-intrinsically safe circuits.
The measuring values are converted into standardised outlet signals. The device consists of an electronic casing and a connection socket.

Type code and Marking:

VEGAMET 624 VEGAMET 625 VEGASCAN 693	[Ex ia Ma] I or [Ex ia Ga] IIC or [Ex ia Da] IIIC

Electrical data:

Supply voltage (Connections KI17 and KI8)	For connection to non-intrinsically safe circuits with following maximum values: U = 24… 230 V a.c. (-15%...+10%) U = 24 ... 65 V d. c. (-15%...+10%) U_m = 253 V a.c. / 125 V d.c.
Signal circuit (Connections KI1 and KI2)	In type of protection Intrinsic Safety Ex ia I/IIC/IIB(IIIC) with following maximum values: U_o = 23.9 V I_o = 108 mA P_o = 645 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]	63	10	0.5	0.2	0.1
	C_o [µF]	1.8	2.6	3.4	4.3	4.7

Ex ia IIC	L_o [mH]	1.8	1	0.5	0.2	0.1
	C_o [µF]	0.051	0.068	0.088	0.12	0.126

Ex ia IIB (IIIC)	L_o [mH]	18	1	0.5	0.2	--
	C_o [µF]	0.58	0.65	0.77	0.94	--

Relay circuits (Relay output 1: connections Kl20, Kl21 and Kl22 Relay output 2: connections Kl23, Kl24 and Kl25 Relay output 3: connections Kl26, Kl27 and Kl28 Interference signal relay output 4: connections Kl6, Kl7 and Kl8)	For connection to non-intrinsically safe circuits with following maximum values per relay: a. c. current: 253 V; 2 A; 125 VA d. c. current: 60 V; 1 A; 54 W
Current output (Current output 1: Connections Kl11, Kl12 Current output 2: Connections Kl13, Kl14 Current output 3: Connections Kl15, Kl16)	For connection to non-intrinsically safe circuits with following maximum values: 0/4 ... 20 mA U_m = 253 V a.c.
Digital outputs	
RS232 connection (Bushing at the casing bottom part) Or Ethernet-connection (Bushing at the casing bottom part)	For connection to a RS232 interface U_m = 50 V For connection to an Ethernet interface U_m = 50 V
I²C bus connection (Bushing on the front plate)	For connection of the VEGACONNECT3

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 during operation: -20 °C ≤ Ta ≤ +60 °C

Details of change:
Proof of conformity of the signal conditioning instrument VEGAMET 624, VEGAMET 625 and VEGASCAN 693 to IEC 60079-0:2017 and IEC 60079-11:2011.
The signal conditioning instrument VEGAMET MET624.CI*, VEGAMET MET625.CI* and VEGASCAN SCAN693.CI* are named VEGAMET 624, VEGAMET 625 and VEGASCAN 693 for this issue No.3

Specific Conditions of Use:
None.