Translation

(1) # EC-TYPE EXAMINATION CERTIFICATE

(2) Equipment and protective systems intended for use in potentially explosive atmospheres - **Directive 94/9/EC**

(3) EC-Type Examination Certificate Number

TÜV 03 ATEX 2269

(4) Equipment: Signal conditioning instrument type VEGAMET 624EX,VEGAMET 625X and VEGASCAN 693X

(5) Manufacturer: VEGA Grieshaber KG

(6) Address: Am Hohenstein 113
D-77761 Schiltach

(7) This equipment or protective system and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.

(8) The TÜV NORD CERT GmbH & Co. KG, TÜV CERT-Certification Body, notified body number N° 0032 in accordance with Article 9 of the Council Directive of the EC of March 23, 1994 (94/9/EC), certifies that this equipment or protective system has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in the confidential report N° 03 YEX 550901.

(9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN 50 014: 1997+A1+A2 **EN 50 020: 2002**

(10) If the sign "X" is placed after the certificate number, it indicates that the equipment or protective system is subject to special conditions for safe use specified in the schedule to this certificate.

(11) This EC-type examination certificate relates only to the design, examination and tests of the specified equipment in accordance to the Directive 94/9/EC. Further requirements of the Directive apply to the manufacturing process and supply of this equipment. These are not covered by this certificate.

(12) The marking of the equipment or protective system must include the following:

II (1) GD [EEx ia] IIC

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TÜV CERT-Certification Body
Am TÜV 1
D-30519 Hannover
Tel.: 0511 986-1470
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Hanover, 2003-10-15

i.V.

Head of the
Certification Body

TÜV NORD CERT

(13) **SCHEDULE**

(14) EC-TYPE EXAMINATION CERTIFICATE N° TÜV 03 ATEX 2269

(15) Description of equipment

The signal conditioning instruments type VEGAMET 624EX, VEGAMET 625X and VEGASCAN 693X 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.

The maximum permissible ambient temperature is 60°C.

Electrical data

Supply voltage ..... U = 20 ... 253 V a. c. , U = 20 ... 72 V d. c.
(Connections KI17, KI18) U_m = 253 V a. c./125 V d. c.

Signal circuit ..... in type of protection „Intrinsic Safety" EEx ia IIC
(Connections KI1, KI2): resp. EEx ia IIB

Maximum values:
U_o = 23,9 V
I_o = 114 mA
P_o = 680 mW
Characteristic line: linear

EEx ia	IIC		IIB	
max. permissible ext. inductance	0,2 mH	0,5 mH	0,5 mH	1,0 mH
max. permissible ext. capacitance	110 nF	83 nF	550 nF	470 nF

The effective inner capacitances and inductances are negligibly small.
The maximum values of the table are also allowed to be used up to the permissible limits as coexistent concentrated capacitances and as concentrated inductances.

Relay circuits ..... Maximum values:
(Relay output 1: a. c. current: 253 V, 2 A, 125 VA
Connections KI20, KI21, KI22 d. c. current: 60 V, 1 A, 54 W
Relay output 2:
Connections KI23, KI24, KI25
Relay output 3:
Connections KI26, KI27, KI28
Relay outlet for interference signalisation:
Connections KI6, KI7, KI8)

BA 02 03.02

Current outputs	0/4 ... 20 mA
(Current output 1:	U_m = 253 V
Connections KI11, KI12	
Current output 2:	
Connections KI13, KI14	
Current output 3:	
Connections KI15, KI16)	

Digital outputs

RS232 connection	for connection to a RS232 interface
(bushing	U_m = 50 V
at the casing bottom part)	
or	
Ethernet-connection	for connection to an Ethernet interface
(bushing	U_m = 50 V
at the casing bottom part)	
I^2C bus connection	for connection of the VEGACONNECT3 according to
(Bushing on the front plate)	EC type examination certificate PTB 01 ATEX 2007 X

The intrinsically safe signal circuit is safe galvanically separated from the non-intrinsically safe circuits up to a peak crest value of the voltage of 375 V.

(16) The test documents are listed in the test report no. 03 YEX 550901.

(17) Special conditions for safe use

none

(18) Essential Health and Safety Requirements

no additional ones

TÜV NORD

Translation

1. SUPPLEMENT

to Certificate No.	**TÜV 03 ATEX 2269**
Equipment:	Signal conditioning instrument type VEGAMET 624EX, VEGAMET 625EX, VEGASCAN 693EX
Manufacturer:	VEGA Grieshaber KG
Address:	Am Hohenstein 113 D-77761 Schiltach
Order number:	8000553686
Date of issue:	2007-06-19

The signal conditioning instruments type VEGAMET 624EX, VEGAMET 625EX and VEGASCAN 693EX 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.

The changes refer to the PC-boards, the components and the electrical data.

Signal circuit (Connections Kl1, Kl2)	in type of protection „Intrinsic Safety" Ex ia IIC resp. Ex ia IIB					
	Maximum values: U_o = 23.9 V I_o = 108 mA P_o = 645 mW Characteristic line: linear					
Ex ia	IIC			IIB		
max. permissible ext. inductance	0.5 mH	0.3 mH	0.2 mH	2.0 mH	1.0 mH	0.5 mH
max. permissible ext. capacitance	84 nF	100 nF	120 nF	430 nF	470 nF	560 nF
	The effective inner capacitances and inductances are negligibly small					
	The maximum values of the table are also allowed to be used up to the permissible limits as coexistent concentrated capacitances and as concentrated inductances.					

All other details remain unchanged.

The equipment incl. of this supplement meets the requirements of these standards:

EN 60079-0:2004 EN 50 020:2002

(16) The test documents are listed in the test report No. 07203553686.

(17) Special conditions for safe use

none

(18) Essential Health and Safety Requirements

no additional ones

TÜV NORD CERT GmbH, Langemarckstraße 20, 45141 Essen, accredited by the central office of the countries for safety engineering (ZLS), Ident. Nr. 0044, legal successor of the TÜV NORD CERT GmbH & Co. KG Ident. Nr. 0032

The head of the certification body

Schwedt

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TÜV NORD

Translation

2. SUPPLEMENT

to Certificate No.	**TÜV 03 ATEX 2269**
Equipment:	Signal conditioning instrument type VEGAMET MET624.C**, VEGAMET MET625.C** and VEGASCAN SCAN693.C**
Manufacturer:	VEGA Grieshaber KG
Address:	Am Hohenstein 113 D-77761 Schiltach
Order number:	8000554578
Date of issue:	2008-10-14

The signal conditioning instruments type VEGAMET MET624.C**, VEGAMET MET625.C** and VEGASCAN SCAN693.C** 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.

The changes refer to the type designation mentioned above and the marking of the apparatus as well as the electrical data; no technical changes where carried out.

Marking:
II (1) G [Ex ia] IIC
II (1) D [Ex iaD]
I (M1) [Ex ia] I

Electrical data

Signal circuit (Connections KI1, KI2)	in type of protection „Intrinsic Safety" Ex ia IIC resp. Ex ia IIB resp. Ex ia I		
	Maximum values: U_o = 23.9 V I_o = 108 mA P_o = 645 mW Characteristic line: linear		
Ex ia	Group IIC		
max. permissible ext. inductance	0.5 mH	0,3 mH	0.2 mH
max. permissible ext. capacitance	84 nF	100 nF	120 nF
Ex ia	Group IIB		
max. permissible ext. inductance	2.0 mH	2.0 mH	2.0 mH
max. permissible ext. capacitance	430 nF	430 nF	430 nF
Ex ia	Group I		
max. permissible ext. inductance	10 mH		0.2 mH
max. permissible ext. capacitance	960 nF		1200 nF
The effective internal capacitances and inductances are negligibly small.			
The maximum values of the tables are also allowed to be used up to the permissible limits as coexistent concentrated capacitances and as concentrated inductances.			

The intrinsically safe signal circuit is also allowed to be connected to apparatus in explosion hazardous areas caused by dust.
Then, the signal circuit may be executed in type of protection intrinsic safety Ex ia IIC or Ex ia IIB.

All other details remain unchanged.

The equipment according to this supplement meets the requirements of these standards:

EN 60079-0:2006 EN 60079-11:2007 EN 60079-26:2004 EN 61241-11:2006

(16) The test documents are listed in the test report No. 08 203 554578.

(17) Special conditions for safe use

none

(18) Essential Health and Safety Requirements

no additional ones

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