IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION
IEC Certification Scheme for Explosive Atmospheres

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

Certificate No.:	IECEx BVS 16.0006X	Issue No: 1	Certificate history: Issue No. 1 (2019-07-01) Issue No. 0 (2016-02-11)
Status:	**Current**	Page 1 of 5	
Date of Issue:	**2019-07-01**		

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

Equipment: **Ex blanking elements "Ex d" and "Ex t" type *.*****
Optional accessory:

Type of Protection: **Equipment protection by flameproof enclosures "d", Equipment dust ignition protection by enclosure "t"**

Marking:
Ex db IIC Gb
Ex ta IIIC Da

Approved for issue on behalf of the IECEx Certification Body: Jörg Koch

Position: Head of Certification Body

Signature:
(for printed version)

Date: 1.7.19

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting the Official IECEx Website.

Certificate issued by:

DEKRA Testing and Certification GmbH
Certification Body
Dinnendahlstrasse 9
44809 Bochum
Germany

DEKRA
On the safe side.

IECEx Certificate of Conformity

Certificate No:	IECEx BVS 16.0006X	Issue No: 1
Date of Issue:	**2019-07-01**	Page 2 of 5
Manufacturer:	**VEGA Grieshaber KG** Am Hohenstein 113 77761 Schiltach **Germany**	

Additional Manufacturing location(s):

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 apparatus 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 Edition:7.0	Explosive atmospheres - Part 0: Equipment - General requirements
IEC 60079-1 : 2014-06 Edition:7.0	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
IEC 60079-31 : 2013 Edition:2	Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"

*This Certificate **does not** indicate compliance with electrical 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/BVS/ExTR16.0010/01

Quality Assessment Report:

DE/TUN/QAR06.0002/08

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Certificate No: IECEx BVS 16.0006X Issue No: 1

Date of Issue: **2019-07-01** Page 3 of 5

Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

Subject and Type

Ex blanking elements "Ex d" and "Ex t" type *.*****

Description

The Ex blanking elements type *.***** are manufactured from brass (nickel plated) or stainless steel. These devices are designed for blanking off unused threaded entries in enclosures, as appropriate for the type of protection. The blanking elements are manufactured in two different designs: blanking elements with a hexagonal head and blanking elements with a hexagon socket. The sizes and forms are shown in the following table:

Type	Thread type	Material	Design
2.35000	M20 x 1.5	Stainless steel	hexagonal head
2.27370	M20 x 1.5	Brass nickel-plated	hexagonal head
2.45535	M16 x 1.5	Stainless steel	hexagonal head
2.45536	M16 x 1.5	Brass nickel-plated	hexagonal head
2.30690	1/2 NPT	Stainless steel	hexagon socket
2.22084	1/2 NPT	Brass nickel-plated	hexagon socket
2.45537	3/8 NPT	Stainless steel	hexagon socket
2.45538	3/8 NPT	Brass nickel-plated	hexagon socket

SPECIFIC CONDITIONS OF USE: YES as shown below:

- The maximum service temperature for Ex equipment blanking element type *.***** in type of protection Ex db is -60 °C to +100 °C.
- The maximum service temperature for Ex equipment blanking element type *.***** in type of protection Ex ta with NBR P 584, RF sealing is -40°C to +100 °C.
- The maximum service temperature for Ex equipment blanking element type *.***** in type of protection Ex ta with NBR 70 sealing is -40°C to +80 °C.
- A non-metallic sealing ring shall be used on all units with metric threads to provide ingress protection of IP6X.
- Maximum permitted reference pressure of the enclosures in type of protection Flameproof Enclosure "d" is 60 bar.
- For the installation of the metric blanking elements in an enclosure in type of protection Flameproof Enclosure "d" a depth of engagement ≥ 8 mm must be ensured regarding to the undercut.

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Date of Issue: **2019-07-01** Page 4 of 5

EQUIPMENT (continued):

Parameters

Size of thread	M20 x 1.5	M16 x 1.5	3/8 - 18 NPT	1/2 - 14 NPT
Quality of thread	6g	6g	--	--
Thread length	12.8	12.8	11	13
Thread engaged	>8	>8	>5	>5

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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above):

- Extension of the service temperature range
- Update to the current version of the standard

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Certificate No.:	IECEx BVS 16.0006X	issue No.:0	Certificate history:
Status:	**Current**		
Date of Issue:	**2016-02-11**	Page 1 of 4	

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

Electrical Apparatus: **Ex blanking elements "Ex d" and "Ex t" type *.*****
Optional accessory:

Type of Protection: **Equipment protection by flameproof enclosures "d", Equipment dust ignition protection by enclosure "t"**

Marking: Ex db IIC Gb
Ex ta IIIC Da

Approved for issue on behalf of the IECEx Certification Body: H.-Ch. Simanski

Position: Head of Certification Body

Signature:
(for printed version)

Date: 11.2.2016

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3. The Status and authenticity of this certificate may be verified by visiting the Official IECEx Website.

Certificate issued by:

DEKRA EXAM GmbH
Dinnendahlstrasse 9
44809 Bochum
Germany

DEKRA
DEKRA EXAM GmbH

IECEx Certificate of Conformity

Certificate No.: IECEx BVS 16.0006X

Date of Issue: **2016-02-11** Issue No.: **0**

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

Additional Manufacturing location (s):

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 electrical apparatus 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 : 2011 Edition: 6.0	Explosive atmospheres - Part 0: General requirements
IEC 60079-1 : 2014-06 Edition: 7.0	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
IEC 60079-31 : 2013 Edition: 2	Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"

*This Certificate **does not** indicate compliance with electrical 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/BVS/ExTR16.0010/00

Quality Assessment Report:

DE/TUN/QAR06.0002/06

IECEx Certificate of Conformity

Certificate No.: IECEx BVS 16.0006X

Date of Issue: **2016-02-11** Issue No.: **0**

Schedule

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

Subject and Type

Ex blanking elements "Ex d" and "Ex t" type *.*****

Description

The Ex blanking elements type *.***** are manufactured from brass (nickel plated) or stainless steel. These devices are designed for blanking off unused threaded entries in enclosures, as appropriate for the type of protection. The blanking elements are manufactured in two different designs: blanking elements with a hexagonal head and blanking elements with a hexagon socket. The sizes and forms are shown in the following table:

Type	Thread type	Material	Design
2.35000	M20 x 1.5	Stainless steel	hexagonal head
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2.30690	1/2 NPT	Stainless steel	hexagon socket
2.22084	1/2 NPT	Brass nickel-plated	hexagon socket
2.45537	3/8 NPT	Stainless steel	hexagon socket
2.45538	3/8 NPT	Brass nickel-plated	hexagon socket

CONDITIONS OF CERTIFICATION: YES as shown below:

- The service temperature is limited to -50 °C to +80 °C.
- A non-metallic sealing ring shall be used on all units with metric threads to provide ingress protection of IP6X.
- Maximum permitted reference pressure of the enclosures in type of protection Flameproof Enclosure 'd' is 60 bar.
- For the installation of the metric blanking elements in an enclosure in type of protection Flameproof Enclosure 'd' a depth of engagement ≥ 8 mm must be ensured regarding to the undercut.

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Certificate No.: IECEx BVS 16.0006X

Date of Issue: **2016-02-11** Issue No.: **0**

EQUIPMENT(continued):

Parameters

Size of thread	M20 x 1.5	M16 x 1.5	3/8 - 18	1/2 - 14
Quality of thread	6g	6g	--	--
Thread length	12.8	12.8	11	13
Thread engaged	> 8	> 8	> 5	> 5