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Translation

# **EU-Type Examination Certificate Supplement 1**

Change to Directive 2014/34/EU

- 2 Equipment intended for use in potentially explosive atmospheres Directive 2014/34/EU
- 3 EU-Type Examination Certificate Number: BVS 16 ATEX E 006 X
- 4 Product: Ex blanking elements "Ex d" and "Ex t" type \*.\*\*\*\*\*
- 5 Manufacturer: VEGA Grieshaber KG
- 6 Address: Am Hohenstein 113, 77761 Schiltach, Germany
- This supplementary certificate extends EC-Type Examination Certificate No. BVS 16 ATEX E 006 X to apply to products designed and constructed in accordance with the specification set out in the appendix of the said certificate but having any acceptable variations specified in the appendix to this certificate and the documents referred to therein.
- DEKRA Testing and Certification GmbH, Notified Body number 0158, in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products 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 No. BVS PP 16 2015 EU.
- The Essential Health and Safety Requirements are assured in consideration of

EN IEC 60079-0:2018 EN 60079-1:2014 EN 60079-31:2014 General requirements
Flameproof enclosure "d"
Protection by Enclosure "t"

Except in respect of those requirements listed under item 18 of the appendix

- 10 If the sign "X" is placed after the certificate number, it indicates that the product is subject to the Special Conditions for Use specified in the appendix to this certificate.
- This EU-Type Examination Certificate relates only to the design and construction of the specified product. Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.
- 12 The marking of the product shall include the following:



II 2G Ex db IIC Gb II 1D Ex ta IIIC Da

DEKRA Testing and Certification GmbH Bochum, 2019-06-18

Signed: Jörg-Timm Kilisch

Managing Director



Page 1 of 3 of BVS 16 ATEX E 006 X / N1
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Appendix

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14 EU-Type Examination Certificate

BVS 16 ATEX E 006 X Supplement 1

15 Product description

15.1 Subject and type

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

# 15.2 Description

With this supplement the certificate is changed to Directive 2014/34/EU.

(Annotation: In accordance with Article 41 of Directive 2014/34/EU, EC-Type Examination
Certificates referring to 94/9/EC that were in existence prior to the date of application of
2014/34/EU (20 April 2016) may be referenced as if they were issued in accordance with Directive
2014/34/EU. Supplementary Certificates to such EC-Type Examination Certificates, and new
issues of such certificates, may continue to bear the original certificate number issued prior to 20
April 2016.)

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	

#### Reasons for the supplement:

- Change to Directive 2014/34/EU
- Extension of the service temperature range
- Update to the current version of the standard

#### 15.3 Parameters

Size of thread	M20 x 1.5	M16 x 1.5	3/8 - 18 NPT	1/2 - 14 NPT
Quality of thread	6g	69		1677/70/05/77/ <del>12</del>
Thread length	12.8	12.8	11	13
Thread engaged	> 8	> 8	> 5	> 5



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BVS PP 16.2015 EU, as of 2019-06-18

- 17 Special Conditions for Use
- 17.1 The maximum service temperature for Ex equipment blanking element type \*.\*\*\*\*\* in type of protection Ex db is -60 °C to +100 °C.
- 17.2 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.
- 17.3 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.
- 17.4 A non-metallic sealing ring shall be used on all units with metric threads to provide ingress protection of IP6X
- 17.5 Maximum permitted reference pressure of the enclosures in type of protection Flameproof Enclosure "d" is 60 bar.
- 17.6 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.
- 18 Essential Health and Safety Requirements

The Essential Health and Safety Requirements are covered by the standards listed under item 9. For this product the standard EN IEC 60079-0:2018 is equivalent to the harmonized standard EN 60079-0:2012 + A11:2013 in terms of safety.

19 Drawings and Documents

Drawings and documents are listed in the confidential report.

We confirm the correctness of the translation from the German original./// In the case of arbitration only the German wording shall be valid and binding

> DEKRA Testing and Certification GmbH Bochum, 2019-06-18 BVS-Pe/Mu A20180569

> > Managing Director



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# Translation

# **EC-Type Examination Certificate**

- (2)Equipment and protective systems intended for use in potentially explosive atmospheres - Directive 94/9/EC
- **BVS 16 ATEX E 006 X** No. of EC-Type Examination Certificate: (3)
- (4) Ex blanking elements "Ex d" and "Ex t" type \*.\*\*\*\*\* Equipment:
- Manufacturer: (5)

VEGA Grieshaber KG

(6)Address: Am Hohenstein 113, 77761 Schiltach, Germany

- The design and construction of this equipment and any acceptable variation thereto are specified in (7)the appendix to this type examination certificate.
- The certification body of DEKRA EXAM GmbH, notified body no 0158 in accordance with Article 9 of (8) the Directive 94/9/EC of the European Parliament and the Council of 23 March 1994, certifies that this equipment 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 Test and Assessment Report BVS PP 16:2015 EG
- The Essential Health and Safety Requirements are assured by compliance with: (9)

EN 60079-1:2014

EN 60079-31:2014

EN 60079-0:2012 + A11:2013 General requirements Flameproof enclosure "d" Protection by enclosure "t"

- (10) If the sign "X" is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use specified in the appendix to this certificate.
- This EC-Type Examination Certificate relates only to the design, examination and tests of the specified equipment in accordance to 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 shall include the following:



II 2G Ex db IIC Gb II 1D Ex ta IIIC Da

DEKRA EXAM GmbH Bochum, dated 2016-02-02

Signed: Simanski

Signed: Dr. Eickhoff

Certification body

Special services unit

DAKKS Alterhaterungsstelle to 25, 12050-03-00

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# (14) EC-Type Examination Certificate BVS 16 ATEX E 006 X

#### (15) 15.1 Subject and type

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

#### 15.2 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	

#### 15.3 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/	////// <del>/</del> /	///////////////////////////////////////
Thread length	//////12.8/	/////12.8/	///////////////////////////////////////	///////////////////////////////////////
Thread engaged ////	////////>/8/	//////>/8/	///////////////////////////////////////	///////>5

### (16) Test and Assessment Report

BVS PP 16.2015 EG as of 2016-02-02

#### (17) Special conditions for safe use

- 17.1 The service temperature is limited to -50 °C to +80 °C
- 17.2 A non-metallic sealing ring shall be used on all units with metric threads to provide ingress protection of IP6X.
- 17.3 Maximum permitted reference pressure of the enclosures in type of protection Flameproof Enclosure 'd' is 60 bar.
- 17.4 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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Certification body

Special services unit



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