An-Institut der TU Bergakademie Freiberg

[1] EU-TYPE EXAMINATION CERTIFICATE - Translation

[2] Equipment or protective systems intended for use in potentially explosive atmospheres, Directive 2014/34/EU



[3] EU-type examination certificate number IBExU24ATEX1050 X | Issue 0

[4] Product:

Cable gland

Type: blueglobe PC *******

[5] Manufacturer:

PFLITSCH GmbH & Co. KG

[6] Address:

Ernst-Pflitsch-Straße 1 42499 Hückeswagen

GERMANY

- [7] This product and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.
- [8] IBExU Institut für Sicherheitstechnik GmbH, notified body number 0637 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 test report IB-24-3-0068.

- [9] Compliance with the essential health and safety requirements has been assured by compliance with: EN IEC 60079-0:2018, EN IEC 60079-7:2015/A1:2018 and EN 60079-31:2014 except in respect of those requirements listed at item [18] of the schedule.
- [10] If the sign "X" is placed after the certificate number, it indicates that the product is subject to the specific conditions of use specified in the schedule to this certificate.
- [11] 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:

(a) II 2 G Ex eb IIC Gb
(b) II 1 D Ex ta IIIC Da

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By order

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Certificates without signature and seal are not valid. Certificates may only be duplicated completely and unchanged. In case of dispute, the German text shall prevail.

Freiberg, 2025-02-06

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[13] Schedule

[14] Certificate number IBExU24ATEX1050 X | Issue 0

[15] Description of product

[16] The cable gland type blueglobe PC ******* made of polycarbonate is used for the entry of a cable or line into explosion-protected electrical equipment of type of protection increased safety "e" and protection by enclosure "t".

Technical data:

Size of connection thread	blueglobe PC *******
Cable diameter	see table below
with Inlet	
without Inlet	HER THE STATE OF T
Suited for devices of equipment	
group II with mechanical risk level:	
high	M40
low	M16, M25, M20 and M32
For installing in devices with thread-	
ed holes	
Plastic, wall thickness	≥ 5.0 mm
Metal, wall thickness	≥ 3.0 mm
For installing in devices with through-	
holes	
Plastic, wall thickness	≥ 2.0 mm
Metal, wall thickness	≥ 1.0 mm
Service temperature range	-20 °C to +60 °C
Ingress protection	IP66 and IP68 (10 bar, 60 min) in acc. with
	EN IEC 60529

List of variants of types, with different sizes and technical parameters:

Thread size	Tightening torque double nipple	Tightening torque pressure screw	Cable diameter with Inlet	Cable diameter without Inlet
M16x1.5	4.0 Nm	2.5 Nm	7.0 - 6.0 mm	10.0 - 7.0 mm
M20x1.5	8.0 Nm	4.5 Nm	9.0 - 6.0 mm	14.0 - 9.0 mm
M25x1.5	10.0 Nm	6.0 Nm	16.0 - 12.5 mm	20.0 - 16.0 mm
M32x1.5	12.0 Nm	8.0 Nm	20.0 - 15.0 mm	25.0 - 20.0 mm
M40x1.5	14.0 Nm	10.0 Nm	26.0 - 20. <mark>0 mm</mark>	32.0 - 26.0 mm

The connection must be fully tightened.

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Type code:

blueglobe PC	*	*	*	*	*	*	*	*	*	*	*
1	2	3	4	5	6	7	8	9	10	11	12

1Type designationblueglobe PC2Part of type designationpg3Type of thread2 = metric, 8 = metric 15 mm long4Connecting thread (code number)Metric ISO- thread EN 6042316 = M 1620 = M 2025 = M 2532 = M 3240 = M 40PC = Polycarbonate (cable gland body grey)PCn = Polycarbonate (cable gland body black)PCa = Polycarbonate (double nipple black, pressure screw blue)6Option without inlet (type blueglobe PC)7Material sealing insertHT = silicone8Explosion protection:ex
Type of thread Connecting thread (code number) Metric ISO- thread EN 60423 16 = M 16
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Screw blue
6 Option without inlet (type blueglobe PC)
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7 Material sealing insert HT = silicone
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8 Explosion protection: ex
C Explosion protoction:
- Type of protection:
Ex eb and Ex ta
9 Additional letters for variants Not ex-relevant accessories such as dust protection
disk for transport = /BS
10 unoccupied unoccupied
11 unoccupied unoccupied
12 unoccupied unoccupied
Remark: Variant numbers can be unoccupied

Cable glands in Level of Protection "eb" are suitable for all applications requiring Level of Protection "ia". Therefore, the pressure screws are optionally available in grey / black and blue to differentiate between Ex e and Ex i applications, respectively.

[17] Test report

The test results are recorded in the confidential test report IB-24-3-0068 of 2025-01-09. The test documents are part of the test report and they are listed there.

Summary of the test results

The cable gland type blueglobe PC ******* fulfils the requirements of explosion protection of components for the Equipment group II and Equipment category 2 G, according to type of protection increased safety "eb" as well as for category 1 D in dust ignition protection by enclosure "ta".

[18] Specific conditions of use

- The cable gland is suitable for permanently installed cables and leads only. The user must ensure that appropriate measures are taken to provide strain relief.
- The permitted service temperature range is -20 °C to +60 °C.
- The degree of protection IP66/IP68 is only achieved if the seal and the cable glands are properly assembled. The manufacturer's instructions must be observed.
- Cable glands of size M16...M32 have been tested for low risk of mechanical hazards.

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[19] Essential health and safety requirements

In addition to the essential health and safety requirements (EHSRs) covered by the standards listed at item [9], the following are considered relevant to this product, and conformity is demonstrated in the test report: none

[20] Drawings and Documents

The documents are listed in the test report.

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By order

Dr.-Ing. P. Cimalla

Freiberg, 2025-02-06