



(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:

**PTB 14 ATEX 1011 X**

**Issue: 2**

(4) Product: Cable gland type UNI Ex \* Dicht \*\*\*(\*)\*\*\*\*\*(\*) and  
 type UNI Ex Clamping \* Dicht \*\*\*\*\*

(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) The Physikalisch-Technische Bundesanstalt, notified body No. 0102 in accordance with Article 17 of the 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 PTB Ex 24-23151.

(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, EN 60079-31:2014**

(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 in accordance to the Directive 2014/34/EU. 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 2 G Ex eb IIC Gb**  
 **II 2 D Ex tb IIIC Db**

Konformitätsbewertungsstelle, Sektor Explosionsschutz

Braunschweig, February 24, 2024

On behalf of PTB:

*D. Markus*

Dr.-Ing. D. Markus  
 Direktor und Professor



(13)

## SCHEDULE

(14) **EU-Type Examination Certificate Number PTB 14 ATEX 1011 X, Issue: 2**

(15) Description of Product

The cable gland type UNI Ex \* Dicht \*\*\*(\*)\*\*\*\*\*(\*) and type UNI Ex Clamping \* Dicht \*\*\*\*\* made of brass, brass nickel-plated, brass lead-free or stainless steel, serves to introduce cables into electrical apparatus of the type of protection Increased Safety "eb" or Protection by Enclosure "tb". The cable gland consists of:

- pressure screw (UNI Ex \* Dicht \*\*\*(\*)\*\*\*\*\*(\*)
- pressure screw with clamping device (UNI Ex Clamping \* Dicht \*\*\*\*\*)
- double nipple with metric, Pg, inch and NPT connection thread in different length
- extended and reduced version and an O-ring (silicone or HNBR).
- sealing component out of TPE, for one hole, multiple holes, splitted or closed.

Accessories are lock nut, earthing cones and earthing cones with IRIS spring and hose connections.

The cable gland is installed in enclosures with through-holes or threaded holes. For through-holes, lock nuts are used.

### Technical data

|  |   |
|--|---|
| <b>UNI Ex * Dicht ***(*)*****(*)</b><br>Size of connection thread<br>(Remark: see list of sizes in the nomenclatures of the different variants in the documentation) | M12 to M80<br>PG 7 to PG 48<br>¼" to 3"<br>NPT 3/8" to NPT 2"                               |
| <b>Multiple sealing component</b><br><b>Bore diameter and distance</b>   | Bore diameter < 10 mm, distance 1 mm<br>Bore diameter > 10 mm, distance 2 mm                |
| Cable diameter   | 5 mm to 70 mm<br>(Remark: see nomenclatures of the different variants in the documentation) |
| <b>UNI Ex Clamping * Dicht *****</b><br>Size of connection thread  | M12 to M20<br>Pg 7 to Pg 13,5<br>¼" to ½"<br>NPT 3/8 "                                      |
| Suited for devices of equipment group II with mechanical risk level  | Depends on the size, see table below  |
| Mounted in enclosures with clearance holes<br>Plastic, wall thickness<br>Metal, wall thickness   | ≥ 2 mm<br>≥ 1 mm  |

sheet 2/6

EU-Type Examination Certificates without signature and official stamp shall not be valid. The certificates may be circulated only without alteration. Extracts or alterations are subject to approval by the Physikalisch-Technische Bundesanstalt. In case of dispute, the German text shall prevail.



**SCHEDULE TO EU-TYPE EXAMINATION CERTIFICATE PTB 14 ATEX 1011 X, Issue: 2**

|   |   |
|---|---|
| Mounted in enclosures with threaded holes |   |
| Plastic, wall thickness                   | ≥ 5 mm  |
| Metal, wall thickness                     | ≥ 3 mm  |
| Service temperature                       | -20 °C to +60 °C  |
| Ingress protection                        | IP66 and IP68 (5 bar, 30 min) in accordance with EN 60529 |

| UNI Ex * Dicht ***(*)*****(*)<br>Size, Connection thread and head thread |                  |          |                          | Torque            |             | Mechanical risk level |
|--|------------------|----------|--------------------------|-------------------|-------------|-----------------------|
| metric   | Pg               | Inch     | NPT                      | Connection thread | Head thread |                       |
| M 12   | Pg 7             | G 1/4"   |                          | 6 Nm              | 6 Nm        | Low                   |
| M 16   | Pg 9             | G 3/8"   |                          | 8 Nm              | 8 Nm        | Low                   |
| M 20   | Pg 11<br>Pg 13,5 | G 1/2"   | NPT 3/8"                 | 8 Nm              | 8 Nm        | Low                   |
| M 25 (22553d...)   | Pg 16            | G 3/4"   | NPT 1/2"                 | 8 Nm              | 8 Nm        | High                  |
| M 25 (22528d...)   |                  |          |                          | 10 Nm             | 10 Nm       | High                  |
| M 32   | Pg 21            | G 1"     | NPT 3/4"                 | 20 Nm             | 20 Nm       | High                  |
| M 40   | Pg 29            | G 1 1/4" | NPT 1"                   | 30 Nm             | 30 Nm       | High                  |
| M 50   | Pg 36<br>Pg 42   | G 1 1/2" | NPT 1 1/4"<br>NPT 1 1/2" | 30 Nm             | 30 Nm       | High                  |
| M 63   | Pg 48            | G 2      | NPT 2"                   | 30 Nm             | 30 Nm       | High                  |
| M75  |                  | G 2 1/2" |                          | 50 Nm             | 50 Nm       | High                  |
| M80  |                  | G 3"     |                          | 80 Nm             | 80 Nm       | High                  |

| UNI Ex Clamping * Dicht ***** |                  |        |          | Torque            |             |                 | Mechanical risk level |
|-------------------------------|------------------|--------|----------|-------------------|-------------|-----------------|-----------------------|
| metric                        | Pg               | Zoll   | Inch     | Connection thread | Head thread | Clamping device |                       |
| M 12                          | Pg 7             | G 1/4" |          | 6 Nm              | 6 Nm        | 1 Nm            | Low                   |
| M 16                          | Pg 9             | G 3/8" |          | 8 Nm              | 8 Nm        | 1 Nm            | Low                   |
| M 20                          | Pg 11<br>Pg 13,5 | G 1/2" | NPT 3/8" | 8 Nm              | 8 Nm        | 1 Nm            | Low                   |

**Nomenclature UNI Ex \* Dicht**

|        |   |       |   |   |   |   |   |   |    |    |    |    |    |
|--------|---|-------|---|---|---|---|---|---|----|----|----|----|----|
| UNI Ex | * | Dicht | * | * | * | * | * | * | *  | *  | *  | *  | *  |
| 1      | 2 | 3     | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |

|   |                                 |  |
|---|---------------------------------|--|
| 1 | Type designation                | UNI Ex   |
| 2 | Part of type designation        | e.g. HF, IRIS  |
| 3 | Part of type designation        | Dicht  |
| 4 | Type edition                    | (multiple metric, multiple PG)   |
| 5 | Type of thread                  | 4. Variant plastic hoses<br>6. Variant Metal protection hoses<br>1 = Pg / Inch, 2 = metric, 3 = NPT, 8 = metric long |
| 6 | Connecting thread (code number) | Pg- thread DIN 40430<br>49 = PG 7    53 = PG 16<br>50 = PG 9    54 = PG 21<br>51 = PG 11   55 = PG 29                |

**SCHEDULE TO EU-TYPE EXAMINATION CERTIFICATE PTB 14 ATEX 1011 X, Issue: 2**

|                        |  |  |                     |                        |                     |                        |                     |                        |                       |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |
|------------------------|--|--|---------------------|------------------------|---------------------|------------------------|---------------------|------------------------|-----------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
|                        |  | <p>52 = PG 13,5 56 = PG 36<br/>Metric ISO- thread EN 60423</p> <p>12 = M 12 32 = M 32<br/>16 = M 16 40 = M 40<br/>20 = M 20 50 = M 50<br/>25 = M 25</p> <p>Inch- thread DIN EN ISO 228-1</p> <p>014 = 1/4" 100 = 1"<br/>038 = 3/8" 114 = 1 1/4"<br/>012 = 1/2" 112 = 1 1/2"<br/>034 = 3/4"</p> <p>NPT- thread ANSI / ASME B1.20.1</p> <p>038 = NPT 3/8 012 = NPT 1/2<br/>034 = NPT 3/4 100 = NPT 1<br/>114 = NPT 1 1/4 200 = NPT 2</p>   |                     |                        |                     |                        |                     |                        |                       |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |
| 7                      | Head thread (code number)                      | <p><b>Pg-thread DIN 46320</b></p> <p>49 = PG 7 52 = PG 13,5 55 = PG 29<br/>50 = PG 9 53 = PG 16 56 = PG 36<br/>51 = PG 11 54 = PG 21</p>   |                     |                        |                     |                        |                     |                        |                       |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |
| 8                      | Material                                       | st = stainless steel, d = brass, nickel-plated, LF = brass, lead-free  |                     |                        |                     |                        |                     |                        |                       |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |
| 9                      | Kind of insert                                 | <p>m = multiple<br/>code of clamping part for hose connecting (e.g. 2316)</p>  |                     |                        |                     |                        |                     |                        |                       |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |
| 10                     | Cable diameter, cable dimension (code number): | <p><b>cable diameter (code number):</b></p> <table border="0"> <tr> <td>7 = 6,5 mm – 5,0 mm</td> <td>34 = 34,0 mm – 30,0 mm</td> </tr> <tr> <td>8 = 8,0 mm – 6,0 mm</td> <td>36 = 36,0 mm – 33,0 mm</td> </tr> <tr> <td>9 = 9,5 mm – 7,0 mm</td> <td>40 = 40,0 mm – 37,0 mm</td> </tr> <tr> <td>11 = 10,5 mm – 8,0 mm</td> <td>44 = 44,0 mm – 40,0 mm</td> </tr> <tr> <td>13 = 13,0 mm – 10,0 mm</td> <td>47 = 47,0 mm – 43,0 mm</td> </tr> <tr> <td>16 = 15,5 mm – 12,0 mm</td> <td>52 = 52,0 mm – 46,0 mm</td> </tr> <tr> <td>18 = 18,0 mm – 15,0 mm</td> <td>55 = 55,0 mm – 52,0 mm</td> </tr> <tr> <td>21 = 21,0 mm – 18,0 mm</td> <td>57 = 57,0 mm – 51,0 mm</td> </tr> <tr> <td>25 = 25,0 mm – 21,0 mm</td> <td>58 = 58,0 mm – 55,0 mm</td> </tr> <tr> <td>28 = 28,0 mm – 25,0 mm</td> <td>64 = 64,0 mm – 59,0 mm</td> </tr> <tr> <td>32 = 32,0 mm – 28,0 mm</td> <td>70 = 70,0 mm – 64,0 mm</td> </tr> </table> <p><b>Multiple</b><br/>1x1,5 mm, 2x3 mm, 3x4 mm, 4x6 mm<br/>5x6,5 mm, 6x2,5 mm, 6x10 mm,<br/>3x12 mm, 4x13 mm<br/>List of VDE-cores<br/>Sample with 3 holes:<br/>VDE E152im1x1,5/2x2/1x9</p> <p>Minimum bore diameter 1,0mm<br/>Maximum bore diameter 40,0mm</p> <p>The list is only an excerpt of the possible multiple sealing inserts.</p> | 7 = 6,5 mm – 5,0 mm | 34 = 34,0 mm – 30,0 mm | 8 = 8,0 mm – 6,0 mm | 36 = 36,0 mm – 33,0 mm | 9 = 9,5 mm – 7,0 mm | 40 = 40,0 mm – 37,0 mm | 11 = 10,5 mm – 8,0 mm | 44 = 44,0 mm – 40,0 mm | 13 = 13,0 mm – 10,0 mm | 47 = 47,0 mm – 43,0 mm | 16 = 15,5 mm – 12,0 mm | 52 = 52,0 mm – 46,0 mm | 18 = 18,0 mm – 15,0 mm | 55 = 55,0 mm – 52,0 mm | 21 = 21,0 mm – 18,0 mm | 57 = 57,0 mm – 51,0 mm | 25 = 25,0 mm – 21,0 mm | 58 = 58,0 mm – 55,0 mm | 28 = 28,0 mm – 25,0 mm | 64 = 64,0 mm – 59,0 mm | 32 = 32,0 mm – 28,0 mm | 70 = 70,0 mm – 64,0 mm |
| 7 = 6,5 mm – 5,0 mm    | 34 = 34,0 mm – 30,0 mm                         |  |                     |                        |                     |                        |                     |                        |                       |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |
| 8 = 8,0 mm – 6,0 mm    | 36 = 36,0 mm – 33,0 mm                         |  |                     |                        |                     |                        |                     |                        |                       |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |
| 9 = 9,5 mm – 7,0 mm    | 40 = 40,0 mm – 37,0 mm                         |  |                     |                        |                     |                        |                     |                        |                       |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |
| 11 = 10,5 mm – 8,0 mm  | 44 = 44,0 mm – 40,0 mm                         |  |                     |                        |                     |                        |                     |                        |                       |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |
| 13 = 13,0 mm – 10,0 mm | 47 = 47,0 mm – 43,0 mm                         |  |                     |                        |                     |                        |                     |                        |                       |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |
| 16 = 15,5 mm – 12,0 mm | 52 = 52,0 mm – 46,0 mm                         |  |                     |                        |                     |                        |                     |                        |                       |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |
| 18 = 18,0 mm – 15,0 mm | 55 = 55,0 mm – 52,0 mm                         |  |                     |                        |                     |                        |                     |                        |                       |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |
| 21 = 21,0 mm – 18,0 mm | 57 = 57,0 mm – 51,0 mm                         |  |                     |                        |                     |                        |                     |                        |                       |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |
| 25 = 25,0 mm – 21,0 mm | 58 = 58,0 mm – 55,0 mm                         |  |                     |                        |                     |                        |                     |                        |                       |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |
| 28 = 28,0 mm – 25,0 mm | 64 = 64,0 mm – 59,0 mm                         |  |                     |                        |                     |                        |                     |                        |                       |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |
| 32 = 32,0 mm – 28,0 mm | 70 = 70,0 mm – 64,0 mm                         |  |                     |                        |                     |                        |                     |                        |                       |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |

**SCHEDULE TO EU-TYPE EXAMINATION CERTIFICATE PTB 14 ATEX 1011 X, Issue: 2**

|   |                                 |                             |
|---|---------------------------------|-----------------------------|
| 11  | earthing cones                  | S00 to S23                  |
| 12  | splittable sealing insert       | geschl.                     |
| 13  | Explosion protected             | Type of protection, ex-12   |
| 14  | Additional letters for material | zu, V4A, bl, tri, /HT, SW24 |
| Remark: Variant numbers can be unoccupied |                                 |                             |

**Nomenclature UNI Ex Clamping \* Dicht**

| UNI Ex Clamping | * | Dicht | * | * | * | * | * | * | *  | *  | *  | *  |
|-----------------|---|-------|---|---|---|---|---|---|----|----|----|----|
| 1               | 2 | 3     | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |

|    |                                 |  |
|----|---------------------------------|--|
| 1  | Type designation                | UNI Ex Clamping  |
| 2  | Blank                           |  |
| 3  | Part of type designation        | Dicht  |
| 4  | Type of thread                  | M = metric   |
| 5  | Type of thread                  | 2 = metric   |
| 6  | Connecting thread (code number) | Metric ISO-thread EN 60423<br>12 = M 12    16 = M 16    20 = M 20  |
| 7  | Head thread (code number)       | Pg-thread DIN 46320<br>49 = PG 7    51 = PG 11<br>50 = PG 9    52 = PG 13,5  |
| 8  | Material                        | st = stainless steel, d = brass, nickel-plated, LF = brass, lead-free  |
| 9  | Kind of insert                  | Blank  |
| 10 | Cable diameter (code number):   | <b>cable diameter (code number):</b><br>7 = 6,5 mm – 5,0 mm<br>8 = 8,0 mm – 6,0 mm<br>9 = 9,5 mm – 7,0 mm<br>11 = 10,5 mm – 8,0 mm<br>13 = 13,0 mm – 10,0 mm |
| 11 | Blank                           | Blank  |
| 12 | Explosion protection            | ex = Ex e  |
| 13 | Additional letter for material  | V4A, bl, zu  |

Changes with respect to previous editions:

1. New material brass lead-free for the cable gland body.
2. Re-evaluation according to EN IEC 60079-0:2018 and EN IEC 60079-7:2014/A1:2018.

(16) Test Report PTB Ex24-23151

**SCHEDULE TO EU-TYPE EXAMINATION CERTIFICATE PTB 14 ATEX 1011 X, Issue: 2**

(17) Specific conditions of use

1. Unless the pressure screw with clamping device is used (Type Uni Ex \* Clamping Dicht), only permanently wired cables may be entered. The user shall provide additional clamping of the cable to ensure that pulling is not transmitted to the terminations.
2. Types suitable for a "low" risk of mechanical danger shall be mounted in such a way that they are mechanically protected against impact force.
3. Degree of protection is ensured only if the seals and cable entries are properly fitted. The manufacturer's instructions must be followed.

(18) Essential health and safety requirements

Met by compliance with the aforementioned standards.

Konformitätsbewertungsstelle, Sektor Explosionsschutz  
On behalf of PTB:

Braunschweig, February 22, 2024

  
Dr.-Ing. D. Markus  
Direktor und Professor

