IEP ENERGY PETROLEUM INSTITUTE

IEP ATEX

# Supplement Nr: 2

(1) # EU-Type Examination Certificate

**(2) Equipment or Protective Systems Intended for use in Potentially Explosive Atmospheres**

**Directive 2014/34/EU**

**(3)** EU – Type Examination Certificate Number: **IEP 21 ATEX 0967X**

**(4)** Product: **Cable Glands MCNA Series ; Brand GLAKOR**

**(5)** Applicant Name: **Delvalle Global Solutions, SLU**

**(6)** Address: **Paso el Prao 6, 01320 Oyón, Álava, SPAIN**

**(7)** This product and any of acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

**(8)** The IEP Uluslararası Enerji Petrol Gözetim, Sertifikasyon ve Teknik Hizmetler Organizasyonu Tic. Ltd. Sti., notified body number 2284 in accordance with Article 17 of the Directive 2014/34/EU of 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 confidential Report Nr: IEP.Rp.Ex.10-1973 date 24.06.2021.

**(9)** Compliance with Essential Health and safety requirements has been assured by compliance with;

**EN IEC 60079-0:2018, EN 60079-1:2014, EN 60079-7:2015, EN 60079-31:2014**

**(10)** If the sign " X " is placed after the certificate number, it indicates that the product is subject to Specified Conditions of Safe 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 equipment or protective system shall include the following:

**I M2 Ex db I Mb / I M2 Ex eb I Mb**
**II 2G Ex db IIC Gb / II 2G Ex eb II Gb**
**II 2D Ex tb IIIC Db**

**Responsible Person :**

Nurettin Terzioglu
Head of Certification Body

**Supplement Date of Issue : 21.06.2022**

**IEP Uluslararası Enerji Petrol Göz., Sertifikasyon ve Teknik Hiz. Org. Tic. Ltd. Sti.**
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**(13)** Schedule

**(14)** Certificate Nr: **IEP 21 ATEX 0967X**

**(15)** Technical Details: **MCNAX series Unarmour Cable Gland Details, IP 66/68**

| Cable Gland Size | Entry Thread | | | | d type GL mm | e type GL mm | Cable outer sheath Ø mm | |
|---|---|---|---|---|---|---|---|---|
| | METRIC | NPT | PG | GAS | | | Min. | Max. |
| 12 | M12x1,5 | ¼' | PG7 | ¼' | 15 | 6 | 3,0 | 6,5 |
| 16 | M16x1,5 | ⅜' | PG9 | ⅜' | 15 | 7 | 4,0 | 8,0 |
| 20 | M20x1,5 | ½' | PG13,5 | ½' | 15 | 8 | 6,0 | 12,0 |
| 25 | M25x1,5 | ¾' | PG 21 | ¾ | 15 | 8 | 10,0 | 14,0 |
| 25 | M25sx1,5 | ¾' | PG16 | ¾' | 15 | 8 | 10,0 | 14,0 |
| 32 | M32x1,5 | 1' | PG 21 | 1' | 15 | 9 | 13,0 | 18,0 |
| 40 | M40x1,5 | 1 ¼' | PG21 | 1 ¼' | 15 | 9 | 18,0 | 25,0 |
| 50 | M50x1,5 | 1 ½' | PG29 | 1 ½' | 15 | 9 | 22,0 | 32,0 |
| 63s | M63x1,5 | 2' | PG36 | 2' | 15 | 14 | 34,0 | 44,0 |
| 63 | M63x1,5 | 2' | PG48 | 2' | 15 | 15 | 45,0 | 55,0 |
| 75s | M75x1,5 | 2 ½' | - | 2 ½' | 20 | 20 | 45,0 | 55,0 |
| 75 | M75sx1,5 | 2 ½' | - | 2 ½' | 20 | 20 | 50,0 | 63,0 |
| 80 | M80x2,0 | 3' | - | 3' | 20 | 20 | 50,0 | 63,0 |
| 90 | M90x2,0 | 3' | - | 3' | 20 | 20 | 60,0 | 70,0 |
| 100 | M100x2,0 | - | - | - | 20 | 20 | 70,0 | 80,0 |
| 115 | M115x2,0 | - | - | - | 20 | 20 | 80,0 | 90,0 |
| 130 | M130x2,0 | - | - | - | 20 | 20 | 90,0 | 100,0 |

**MCNA series Unarmour Cable Gland Details, IP 66/68**

| Cable Gland Size | Entry Thread | | | | d type GL mm | e type GL mm | Cable outer sheath Ø mm | |
|---|---|---|---|---|---|---|---|---|
| | METRIC | NPT | PG | GAS | | | Min. | Max. |
| 16 | M16x1,5 | ½' | PG9 | ½' | 15 | 7 | 6,1 | 11,6 |
| 20s | M20x1,5 | ½' | - | ½' | 15 | 8 | 6,1 | 13,2 |
| 20 | M20x1,5 | ½' | PG13,5 | ½' | 15 | 8 | 9,5 | 15,9 |
| 25 | M25x1,5 | ¾' | PG16 | ¾' | 15 | 8 | 12,5 | 20,5 |
| 32 | M32x1,5 | 1' | PG21 | 1' | 15 | 9 | 18,2 | 26,2 |
| 40 | M40x1,5 | 1 ¼' | PG29 | 1 ¼' | 15 | 9 | 23,7 | 33,9 |
| 50 | M50x1,5 | 1 ½' | PG36 | 1 ½' | 15 | 9 | 27,9 | 40,4 |
| 63s | M63x1,5 | 2' | - | 2' | 15 | 15 | 40,4 | 51 |
| 63 | M63x1,5 | 2 ½' | PG48 | 2 ½' | 15 | 15 | 47,2 | 55,9 |
| 75s | M75sx1,5 | 2 ½' | - | 2 ½' | 15 | 15 | 52,8 | 59 |
| 75 | M75x1,5 | 3' | - | 3' | 15 | 15 | 59,1 | 67,9 |
| 90 | M90x2,0 | 3' | - | 3' | 20 | 20 | 60 | 70 |
| 100 | M100x2,0 | - | - | - | 20 | 20 | 70 | 80 |
| 115 | M115x2,0 | - | - | - | 20 | 20 | 80 | 90 |
| 130 | M130x2,0 | - | - | - | 20 | 20 | 90 | 100 |

**Responsible Person:**

Nurettin Terzioglu
Head of Certification Body

**IEP Uluslararası Enerji Petrol Gözetim, Sertifikasyon ve Teknik Hizmetler Organizasyon Ticaret Limited Sirketi**
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**(16)** Certificate Nr: **IEP 21 ATEX 0967X**

**(17)** Description of Equipment

Cable Gland Series Type MCNA made from according to brass, stainless steel and aluminum. The ranges of cable glands are metallic and intended to terminate circular unarmoured and braided cables (as defined type designations) into a threaded entry point within associated flameproof, increased safety or dust tight enclosures (as defined by their coding). Cable sealing ring, rubber washer is made from silicone rubber. Climbing ring is made from PA V0.

The MCNA type range of cable glands are intended to terminate tape cables into enclosures without compromising the explosion protection provided by the enclosures in accordance with relevant codes of practice. They consist of a male-threaded front entry component, a front seal, a main body component, a rear seal, an actuating nut and a rear running coupling. The front entry component is intended to screw into an entry point of its associated enclosure. The seals are compressed onto the cable when the body component and actuating nut are tightened. Continuity diaphragm and skid washer is fitted behind the front seal.

Cable Gland Series Type MCNA has been evaluate in the contents of IP 66/68 with by cable.

**Materials of Manufacture:**
Brass to EN12168:1998 Grade CuZn39Pb (CW614N)
Mild steel to EN 10088-3:2005 Grade 220M07Pb
Stainless steel to EN 10088-3:2005 Grade 316S11, 316S13, 316S31 or 316S33
Aluminum alloy not inferior to grade 6082 to EN755,1-3:1996 or LM25 to EN 1676:2010 (Not Group I)

**Temperature of isolation:**

| | |
|---|---|
| NBR sealing ring | : ( -30 ; + 120 ) °C |
| Neoprene sealing ring | : ( -40 ; + 100 ) °C |
| Silicon sealing ring | : ( -60 ; + 180 ) °C |

**(18)** List of documentation;

Cable Gland series Type MCNA operating manual date 11.05.2021 [8 pages]

| **Drawing Nr ;** | **Drawing Name ;** | **Date ;** |
|---|---|---|
| MCNA -000 | Exploded picture | 18.12.2013 |
| MCNA -000 | Dimensions | 15.11.2013 |
| MCNA -001 | Metric thread washer | 01.03.2013 |
| MCNA -002 | Metric thread washer | 01.03.2013 |
| MCNA -003 | Metric thread sizes | 01.03.2013 |
| MCNA -004 | Metric thread sealing sizes | 01.03.2013 |
| MCNA -005 | Metric thread body sizes | 01.03.2013 |
| MCNA -006 | Union dimensions | 01.03.2013 |
| MCNA -007 | Seal fitting sizes | 01.03.2013 |
| MCNA -008 | Fitting lid sizes | 01.03.2013 |
| MCNA -009 | Body sizes | 01.03.2013 |

**Responsible Person:**

Nurettin Terzioglu
Head of Certification Body

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| Drawing Nr ; | Drawing Name ; | Date ; |
|---|---|---|
| MCNA-010 | Gas thread size | 01.03.2013 |
| MCNA-011 | Gas threaded upper cap | 01.03.2013 |
| MCNA-012 | Gas threaded cap | 01.03.2013 |
| MCNA-013 | Gas threaded gasket | 01.03.2013 |
| MCNA-014 | Gas threaded body | 01.03.2013 |
| MCNA-015 | NPT threaded upper gasket | 01.03.2013 |
| MCNA-016 | NPT threaded cover | 01.03.2013 |
| MCNA-017 | NPT threaded gasket | 01.03.2013 |
| MCNA-018 | NPT threaded body | 01.03.2013 |
| MCNA-019 | PG threaded O-ring | 01.03.2013 |
| MCNA-020 | PG threaded cover | 01.03.2013 |
| MCNA-021 | PG threaded gasket | 01.03.2013 |
| MCNA-022 | PG threaded body | 01.03.2013 |
| MCNA-023 | PG threaded upper gasket | 01.03.2013 |
| MCNA-024 | NPT threaded body | 08.12.2015 |
| MCNA-025 | Metric threaded body | 04.12.2015 |
| MCNA-026 | Gas threaded body | 14.12.2015 |
| MCNA-027 | PG threaded body | 04.12.2015 |
| MCNA-514 | Bellows seal | 03.09.2013 |
| MCNA-515 | Metric threaded body | 23.08.2013 |
| MCNA-516 | PG threaded body | 23.08.2013 |
| MCNA -517 | Gas threaded body | 23.08.2013 |
| MCNA-518 | Cover part | 12.08.2013 |
| MCNA-526 | Sealing pressure washer | 01.11.2013 |
| MCNA-527 | Washer | 05.11.2013 |
| MCNA -528 | Sealing pressure washer | 01.11.2013 |
| MCNA -529 | NPT threaded body | 23.08.2013 |
| MCNA -530 | Inner/ Outer taper dimensions | 27.11.2019 |

Cable Gland Series Type MCNA are indicated in the piece list Table 1 and date 11.05.2021.

This certificate is in the contents of standards that mentioned in item [ 9 ] It has been accepted that Cable Gland series Type MCNA are manufactured according to the producer instructions and the standards mentioned above.

**SPECIAL CONDITIONS FOR SAFE USE (X):** The cable glands are only suitable for fixed installations. Cables shall be effectively clamped to prevent pulling or twisting. The cable gland installation shall be done according to safety manufacturer instructions to maintain degree of protection of the exproof equipment. The parts should be applied as per user manual guide. The control must be done by the ATEX trained staff periodically according to the EN 60079-17. There is assembly instruction on the User Manuel Guide.

**Certificate History:**

| Supplement N° | Issue Date | Summary Description of Variation |
|---|---|---|
| 02 | 21.06.2022 | Definition |
| 01 | 10.05.2022 | Drawing name addition |
| 00 | 03.08.2021 | First issue of certificate |

**Responsible Person :**

Nurettin Terzioglu
Head of Certification Body

ENERGY PETROLEUM INSTITUTE IEP ATEX NB 2284 INSPECTION & CERTIFICATION

**Supplement Date of Issue : 21.06.2022**