



# Mining And Surface Certification (Pty) Ltd

2015/021934/07

THIS CERTIFICATE IS ISSUED AS AN I.A. CERTIFICATE IN TERMS OF THE MINE HEALTH AND SAFETY ACT, ACT NO 29 OF 1996 (AND REGULATIONS), THE OCCUPATIONAL HEALTH AND SAFETY ACT (ACT 85 OF 1993) AND REGULATION 17 OF THE ELECTRICAL MACHINERY REGULATIONS

<b>IA CERTIFICATE</b>	MASC MS/17-2357X	<b>Issue</b>	2
<b>Issue Date</b>	27 March 2023	<b>Expiry Date</b>	27 March 2026
<b>** Based on Certificate No</b>	IECEx CES 14.0022X	<b>Issue / Variations / Amendment</b>	3
<b>Requested by</b>	Pepperl+Fuchs (Pty) Ltd, 8 Glen Eagle Office Park, Koorsboom Ave, Glen Marais, Kempton Park, 1619, South Africa		
<b>Manufacturer</b>	Pepperl+Fuchs SE, Lillienthalstrasse 200, 68307 Mannheim, Germany		
<b>Description</b>	The cable glands series CG.AR,CG.AR2,CR.AR2LT,CG.CR,CG.MI andCG.AR2L are suitable for inserting circular cables into Ex dbenclosures having threaded entries and Ex eb or Ex tb enclosures having either threaded or plane entries. Attachment of the glands to an enclosure is by means of the male threaded portion on the male body. An elastomeric inner sealing ring is used in each gland type to facilitate sealing between the cable and gland body and to clamp the cable to prevent pulling or twisting forces being transmitted to the conductor connections. Ingress protection of IP66/68 (50 m for 30 min.) is maintained when the glands are installed in accordance with the manufacturer's instructions. For full description refer to the base certificate.		
<b>Equipment</b>	Cable Glands	<b>Type</b>	CG.AR., CG.AR2., CR.AR2LT., CG.CR., CG.MI., CG.AR2L..
<b>MARKING:</b> Original marking as per certificate ** remains applicable. <b>IA number must be added.</b>	<b>Type:</b>	Cable Glands, series CG.AR., CG.AR2., CR.AR2LT., CG.CR., CG.MI., CG.AR2L..	
	<b>Ex Marking:</b>	Ex db I Mb and Ex eb I Mb (CG.MI and CG.AR2L) Ex db IIC Gb and Ex be IIC Gb (All types) Ex tb IIC Db IP66/68	
	<b>IA Number:</b> <b>Warnings:</b>	MASC MS/17-2357X See Base Certificate ** (original marking must be applied)	
<b>Quality Assurance report (QAR) / Notification (QAN) Expiry date:</b>	DE/PTB/QAR06.0015/18		
<b>Compliance:</b>	The equipment as described above has been allocated the rating <u>Explosion Protected 'as above'</u> utilizing the SANS/IEC Standards: <ul style="list-style-type: none"> <li>SANS (IEC) 60079-0: 2019 Equipment – General requirements</li> <li>SANS (IEC) 60079-1: 2015 Equipment – Protected by flameproof enclosure "d".</li> <li>SANS (IEC) 60079-31: 2014 Equipment – Dust ignition protection by enclosure "t".</li> <li>SANS (IEC) 60079-7: 2019 Equipment – Protection by increased safety "e".</li> </ul> <i>Note: This certificate covers only the listed standards and does not imply compliance to any other standard, related or inferred. It is up to the manufacturer to ensure that the product complies to all relevant standards for the application.</i>		
<b>Special conditions of safe use "X":</b>	<ul style="list-style-type: none"> <li>Refer to Annex A below for more details.</li> </ul>		
<b>Conditions of manufacture:</b>	<ul style="list-style-type: none"> <li>Refer to Annex A below for more details.</li> </ul>		
 <b>C. WELTHAGEN</b> <b>TECHNICAL SPECIALIST</b>		 <b>S. JORDAAN</b> <b>TECHNICAL OFFICER</b>	
<small>This certificate covers all units sold as long as the QAR/QAN remains valid. According to the relevant requirements of the MHS Act and the OHS Act, production units of explosion protected equipment are required to comply with third party quality assurance (an approved mark scheme or batch testing by an accredited test laboratory).</small>			

Apparatus in hazardous locations is subject to the following provisions as applicable, which shall be adhered to:  
 SANS 10086 requirements;  
 Any conditions mentioned in the above certificate;  
 Any relevant requirements of the MHS Act;  
 Any restrictions and conditions enforced by the chief inspector of mines, principal inspector (Group I equipment) or chief inspector of factories (Group II equipment).

This certificate may only be reproduced in full  
 The certificate is not transferable and remains the property of the issuing body.

# IA CERTIFICATE: MASC MS/17-2357X

**Equipment: Cable Glands, series CG.AR., CG.AR2., CR.AR2LT., CG.CR.,  
CG.MI., CG.AR2L.  
(Expiry date: 27 March 2026)**

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## ANNEX A

This document is based on and must be read in conjunction with certificate IECEx CES 14.0022X	
<b>Description (According to Base Certificate) **</b>	
"Refer to description in Base Certificate ** (and any applicable schedules/issues/variatioins)."	
<b>Standard compliance</b>	See Base Certificate **
<b>Special conditions of safe use ("X")</b>	<ul style="list-style-type: none"> <li>• The coupling of the cable glands with the enclosures shall be made as indicated by the manufacturer in the documents annexed to this certificate in order to respect the type of protection of the electrical apparatus on which cable glands are mounted.</li> <li>• The cable glands shall be mounted at the electrical apparatus in such a way that accidental rotation and loosening will be prevented.</li> <li>• The CG.AR2L and CG.MI cable gland types have to be protected from hydraulic fluids, oils and greases when applied for Group I (mines) applications.</li> <li>• The cable gland types CG.AR2L from M20x1.5 up to M90x1.5 sizes and cable gland types of CG.MI all sizes only are admitted for Group I applications.</li> <li>• The CG.AR2L cable gland types M20x1.5 sizes with clamping range Ø3.0+8.5 are admitted for Group II applications only.</li> <li>• The CG.MI cable gland types M16x1.5 sizes are not admitted for Group I applications.</li> <li>• The CG.AR2 and CG.AR2L cable gland types made of Aluminium alloy are not admitted for Group I applications and are available from M25x1.5 up to M75x1.5 sizes only.</li> <li>• The CG.AR cable glands type are only suitable for fixed installations. The cables must be effectively clamped to prevent pulling and twisting.</li> <li>• The cable glands shall be installed in such a way that the temperature at the mounting point will remain within the service temperature ranges accordingly to the marking.</li> <li>• The degree of protection IP 66/68 according to the IEC 60529 standard will be guaranteed for the cable glands if the holes into which cable glands are mounted are suitably sealed. To this scope the correct positioning of the gaskets (for cylindrical threads) or the application of sealant on the threads (for tapered threads), shall be done as indicated in the manufacturer instruction.</li> </ul>
<b>Conditions of manufacture</b>	<ul style="list-style-type: none"> <li>• None.</li> </ul>
<b>Conditions of Certification</b>	<ul style="list-style-type: none"> <li>• This IA Certificate covers all units sold from the date of this document to the expiry date of this certificate.</li> <li>• As per ARP 0108 a maximum three yearly review is required on this IA Certificate (expiry is determined as per the QAR/QAN/QMS expiry date).</li> <li>• The apparatus must be additionally marked with the MASC marking details above.</li> <li>• This approval only covers the equipment as certified above and does not include any scheduled additions or variations / amendments / new issues to the certificate(s), made after the above date.</li> <li>• The equipment does not need to be re-tested when used on the conditions and with such restrictions as prescribed by the certificate on which this IA Certificate is based and any other conditions in this IA Certificate.</li> <li>• The certification on which this IA Certificate is based must remain valid.</li> <li>• The extent of the requirements in the ARP 0108 (or regulations), SANS 10108 and any other applicable regulations on the certification of the equipment must remain unchanged.</li> <li>• The Ex-quality assurance notification/report for the equipment must remain valid.</li> </ul>
<b>Conclusion:</b>	<ul style="list-style-type: none"> <li>• From the above and the selective examination of the documentation, nothing contrary to the requirements of the applicable standards was found, provided that the equipment / component is used as described in the above document / certificate and according to the MASC conditions below. A MASC IA certificate is issued based on the work done as per the Base Certificate **.</li> <li>• The routine tests for production units according to the Base Certificate ** must be complied with (if applicable).</li> </ul>

This document is issued based on Mining And Surface Certification's Standard Contract terms and conditions available on request.

While every endeavour is made to ensure that a test / assessment / inspection is representative and accurately performed, and that a report / certificate is accurate in the quoted results and conclusions drawn from the test / assessment / inspection, MASC or its directors/employees shall in no way be liable for any error made in carrying out the test / assessment or for any erroneous statement, whether in fact or in opinion, contained in a report / certificate issued pursuant to a test / assessment / inspection.

MASC takes no responsibility for any non-conformances, exclusions, or any results / assessments / inspections not in compliance with the standards. By marking the equipment in accordance with the documentation / standard, the manufacturer / applicant attests on his own responsibility that the equipment / installation has been designed and constructed in accordance with the applicable requirements of the relevant standards and documentation, that the routine verifications / routine tests have been correctly completed and the equipment / installation complies with the documentation and standard(s).

This document is only for use and application in South Africa. It is issued based on National interpretations and accepted practices.

This document may only be reproduced in full.

This certificate is not transferable and remains the property of the issuing body.

This document will not be supported by MASC for certification purposes outside the borders of South Africa.

Mining And Surface Certification (Pty) Ltd Reg No: 2015/021934/07  
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# IECEX Certificate of Conformity

## INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres

for rules and details of the IECEx Scheme visit [www.iecex.com](http://www.iecex.com)

Certificate No.: **IECEX CES 14.0022X** Page 1 of 4 Certificate history:  
Status: **Current** Issue No: 3 [Issue 2 \(2021-05-24\)](#)  
Date of Issue: 2022-03-28 [Issue 1 \(2015-05-08\)](#)  
[Issue 0 \(2014-07-07\)](#)  
Applicant: **Pepperl+Fuchs SE**  
Lilienthalstrasse 200  
68307 Mannheim  
Germany  
Equipment: **Cable Glands, series CG.AR., CG.AR2., CR.AR2LT., CG.CR., CG.MI., CG.AR2L..**  
Optional accessory:  
Type of Protection: **Flameproof enclosures 'd'; increased safety 'e'; Dust ignition protection 't'**  
Marking: **Ex db I Mb and Ex eb I Mb** (CG.MI and CG.AR2L)  
**Ex db IIC Gb and Ex eb IIC Gb** (All types)  
**Ex tb IIIC Db**  
**IP66/68**

Approved for issue on behalf of the IECEx  
Certification Body:

**Mirko BALAZ**

Position:

**Deputy Head of IECEx CB**

Signature:  
(for printed version)

Date:  
(for printed version)

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 [www.iecex.com](http://www.iecex.com) or use of this QR Code.



Certificate issued by:

**CESI**  
Centro Elettrotecnico  
Sperimentale Italiano S.p.A.  
Via Rubattino 54  
20134 Milano  
Italy

**CESI**



# IECEX Certificate of Conformity

Certificate No.: **IECEX CES 14.0022X**

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Date of issue: 2022-03-28

Issue No: 3

Manufacturer: **Pepperl+Fuchs SE**  
Lilienthalstrasse 200  
68307 Mannheim  
Germany

Manufacturing locations: **Pepperl+Fuchs SE**  
Lilienthalstrasse 200  
68307 Mannheim  
Germany

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 equipment 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](#) Explosive atmospheres - Part 0: Equipment - General requirements  
Edition:7.0

[IEC 60079-1:2014-06](#) Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"  
Edition:7.0

[IEC 60079-31:2013](#) Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"  
Edition:2

[IEC 60079-7:2017](#) Explosive atmospheres - Part 7: Equipment protection by increased safety "e"  
Edition:5.1

This Certificate **does not** indicate compliance with 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 Reports:

[IT/CES/ExTR14.0022/00](#)  
[IT/CES/ExTR15.0007/01](#)

[IT/CES/ExTR14.0023/00](#)  
[IT/CES/ExTR21.0005/00](#)

[IT/CES/ExTR15.0007/00](#)

Quality Assessment Report:

[DE/PTB/QAR06.0015/18](#)



# IECEx Certificate of Conformity

Certificate No.: **IECEx CES 14.0022X**

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Date of issue: 2022-03-28

Issue No: 3

## EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

The cable glands with trade mark **Pepperl+Fuchs SE**, series **CG.AR**, **CG.AR2**, **CR.AR2LT**, **CG.CR**, **CG.MI** and **CG.AR2L** are suitable for inserting circular cables into Ex db enclosures having threaded entries and Ex eb or Ex tb enclosures having either threaded or plane entries.

Attachment of the glands to an enclosure is by means of the male threaded portion on the male body. An elastomeric inner sealing ring is used in each gland type to facilitate sealing between the cable and gland body and to clamp the cable to prevent pulling or twisting forces being transmitted to the conductor connections. Ingress protection of IP66/68 (50 m for 30 min.) is maintained when the glands are installed in accordance with the manufacturer's instructions.

The types **CG.AR2**, **CR.AR2LT** and the type **CG.AR** cable glands are suitable for steel wire armoured cables, while the type **CG.AR2L** is suitable for lead sheathed armoured cables only.

The types **CG.CR** and **CG.MI** glands are designed for non-armoured cables and are comprised of a male body, inner sealing ring, pressure ring and cap. When the cap is screwed onto the male body, the pressure ring comprises the lower sealing ring onto the outer sheath of the cable and realizes the clamping.

The cable glands should be also used for intrinsically safe circuits Ex-i. In this case, these cable glands should have a part painted light blue.

The cable glands characteristics are further described in the Annexe of this certificate.

## SPECIFIC CONDITIONS OF USE: YES as shown below:

- The coupling of the cable glands with the enclosures shall be made as indicated by the manufacturer in the documents annexed to this certificate in order to respect the type of protection of the electrical apparatus on which cable glands are mounted.
- The cable glands shall be mounted at the electrical apparatus in such a way that accidental rotation and loosening will be prevented.
- The **CG.AR2L** and **CG.MI** cable gland types have to be protected from hydraulic fluids, oils and greases when applied for Group I (mines) applications.
- The cable gland types **CG.AR2L** from M20x1.5 up to M90x1.5 sizes and cable gland types of **CG.MI** all sizes only are admitted for Group I applications.
- The **CG.AR2L** cable gland types M20x1.5 sizes with clamping range  $\varnothing 3.0 \div 8.5$  are admitted for Group II applications only.
- The **CG.MI** cable gland types M16x1.5 sizes are not admitted for Group I applications.
- The **CG.AR2** and **CG.AR2L** cable gland types made of Aluminium alloy are not admitted for Group I applications and are available from M25x1.5 up to M75x1.5 sizes only.
- The **CG.AR** cable glands type are only suitable for fixed installations. The cables must be effectively clamped to prevent pulling and twisting.
- The cable glands shall be installed in such a way that the temperature at the mounting point will remain within the service temperature ranges accordingly to the marking.
- The degree of protection IP 66/68 according to the IEC 60529 standard will be guaranteed for the cable glands if the holes into which cable glands are mounted are suitably sealed. To this scope the correct positioning of the gaskets (for cylindrical threads) or the application of sealant on the threads (for tapered threads), shall be done as indicated in the manufacturer instruction.



# IECEX Certificate of Conformity

Certificate No.: **IECEX CES 14.0022X**

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Date of issue: 2022-03-28

Issue No: 3

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

### Variation 3.

#### Variation 3.1.

The certified cable glands **CG.AR**, **CG.AR2**, **CR.AR2LT** and **CG.CR** previously assessed in compliance to IEC 60079-0:2011, IEC 60079-1:2007, IEC 60079-7:2006 and IEC 60079-31:2008, has been re-assessed on the basis of the Standards IEC 60079-0:2017, IEC 60079-1:2014, IEC 60079-7:2017 and IEC 60079-31:2013.

#### Variation 3.2.

The new types **CG.AR2L** and **CG.MI** have been added in execution for Group I (only sizes from M20x1.5 up to M90x1.5), Group II and Group III.

#### Variation 3.3.

The following construction materials have been added:

- Galvanized carbon steel: for all types and sizes, in execution for Group I (types **CG.AR2L** and **CG.MI**), Group II and Group III.
- Aluminum alloy: only for types **CG.AR2** and **CG.AR2L**, sizes from M25x1.5 up to M75x1.5 or from 3/4" up to 2 1/2" NPT, in execution for Group II and Group III.

#### Variation 3.4.

Extension of Tamb up to -50 °C for models supplied with Fiber washers.

#### Variation 3.5.

The following dimensions and clamping ranges have been added:

Cable gland code	Thread size	Cable gland code	Thread size	Inner sheath	Armour sheath
-	-	<b>CG.AR2.M12</b>	M12x1.5	3-7.5	6-12
<b>CG.AR2.NPT1/4</b>	1/4"NPT	-	-	3-8	6-12
<b>CG.AR2LT.NPT3-1/2</b>	3 1/2"NPT	<b>CG.AR2LT.M90</b>	M90x2.0	70-82	78-90
<b>CG.AR2LT.NPT4S</b>	4"NPT	<b>CG.AR2LT.M100</b>	M100x2.0	80-92	88-100
<b>CG.AR2LT.NPT4</b>	4"NPT	<b>CG.AR2LT.M110</b>	M110x2.0	90-101	98-110
<b>CG.AR2LT.NPT5</b>	5"NPT	<b>CG.AR2LT.M130</b>	M130x2.0	100-115	109-123

#### Variation 3.6.

Editorial corrections on the following Cable gland codes:

Cable gland code	Thread size	Cable gland code	Thread size	Inner sheath	Armour sheath
<b>CG.AR2LT.NPT3/4S</b>	3/4"NPT	<b>CG.AR2LT.M25S</b>	M25x1.5	8.5-14.5	12-20
<b>CG.AR2LT.NPT1</b>	1"NPT	<b>CG.AR2LT.M32</b>	M32x1.5	8.5-16	12-21

#### Variation 3.7.

Dimensional corrections were applied to the drawings PA3-CG.AR2 and PA3-CG.AR2LT.

## Annex:

[PEPPERL+FUCHS SE - IECEx CES 14.0022X Issue 3 - ANNEX - Cable glands - CG.xx.pdf](#)



Prot: C2004251

**Annex to certificate:**

**Applicant:**

**Electrical Apparatus:**

## IECEx Certificate of Conformity

**CESI**

**IECEx CES 14.0022X Issue No: 3 of 2022-03-28**

**Pepperl+Fuchs SE**

**Lilienthalstraße 200, 68307 Mannheim - Germany**

**Cable Glands, series CG.AR., CG.AR2., CR.AR2LT.,  
CG.CR., CG.MI., CG.AR2L..**

### Description of product

The cable glands series **CG.AR**, **CG.AR2**, **CR.AR2LT**, **CG.CR**, **CG.MI** and **CG.AR2L** are suitable for inserting circular cables into Ex db enclosures having threaded entries and Ex eb or Ex tb enclosures having either threaded or plane entries.

Attachment of the glands to an enclosure is by means of the male threaded portion on the male body. An elastomeric inner sealing ring is used in each gland type to facilitate sealing between the cable and gland body and to clamp the cable to prevent pulling or twisting forces being transmitted to the conductor connections. Ingress protection of IP66/68 (50 m for 30 min.) is maintained when the glands are installed in accordance with the manufacturer's instructions.

The types **CG.AR2**, **CR.AR2LT** and the type **CG.AR** cable glands are suitable for steel wire armoured cables, while the type of **CG.AR2L** is suitable for lead sheathed armoured cables only.

They are comprised of a male body, lower sealing ring, grounding cone, swivel braid retainer, middle body, upper sealing ring and cap. For type **CG.AR2L** only are used a further contact spring and a metal washer to ground the lead sheath. When the middle body is screwed onto the male body the cable wire armour is clamped between the swivel braid retainer and the grounding cone and the lower sealing ring is compressed onto the inner sheath of the cable. Sealing of the cable outer sheath is facilitated by the upper sealing ring which is compressed onto the outer sheath when the cap is screwed onto the middle body.

For types **CG.AR2** and **CR.AR2LT** cable glands the armour reduction ring is used. With this additional ring, they can be used for shielded cables. When the armour reduction ring is taken out, then they can be used for armoured cables.

The types **CG.CR** and **CG.MI** glands are designed for non-armoured cables and are comprised of a male body, inner sealing ring, pressure ring and cap. When the cap is screwed onto the male body, the pressure ring comprises the lower sealing ring onto the outer sheath of the cable and realizes the clamping.

Only the types of **CG.AR2L** (from M20x1.5 up to M90x1.5 sizes and with the exclusion of Aluminium alloy), and **CG.MI** type (M16x1.5 sizes excluded) are for Group I (mines) executions. While all the cable gland types **CG.AR**, **CG.AR2**, **CR.AR2LT**, **CG.CR**, **CG.MI** and **CG.AR2L** are for Group IIC and Group IIIC. The cable glands should be also used for intrinsically safe circuits Ex i and should have a part painted in light blue.

The **CG.AR2** cable glands series standard threads types are NPT ANSI/ASME B1.20.1 from 1/4" up to 3"½ and cylindrical ISO Metric 965/1 and ISO 965/3 from M12x1.5 up to M110x1.5.

The **CG.AR2L** cable glands series standard thread types are NPT ANSI/ASME B1.20.1 from 1/2" up to 3" and cylindrical ISO Metric 965/1 and ISO 965/3 from M20x1.5 up to M90x1.5.

The **CG.CR** and **CG.MI** cable glands series standard thread types are NPT ANSI/ASME B1.20.1 from 3/8" up to 3" and cylindrical ISO Metric 965/1 and ISO 965/3 from M16x1.5 up to M90x1.5.

For **CR.AR2LT** cable glands series standard thread types are cylindrical ISO Metric 965/1 and ISO 965/3 from M20x1.5 up to M130x2 and tapered threads type NPT ANSI/ASME B1.20.1 from 1/2" up to 5".

For **CG.AR** cable glands series standard thread types are cylindrical ISO Metric 965/1 and ISO 965/3 from M16x1.5 up to M63x1.5 and tapered threads type NPT ANSI/ASME B1.20.1 from 3/8" up to 2".



Prot: C2004251

**Annex to certificate:**

**Applicant:**

**Electrical Apparatus:**

## IECEX Certificate of Conformity

**CESI**

**IECEX CES 14.0022X Issue No: 3** of 2022-03-28

**Pepperl+Fuchs SE**

**Lilienthalstraße 200, 68307 Mannheim - Germany**

**Cable Glands, series CG.AR., CG.AR2., CR.AR2LT.,  
CG.CR., CG.MI., CG.AR2L..**

Alternative available cylindrical threads are GAS ISO 228/1, NPSM ANSI/ASME B1.20.1 and type PG DIN 40430. Thread type PG DIN 40430 can be used for "Ex eb" execution only.

To guarantee the IP 66/68 degree of protection the cable gland types **CG.AR**, **CG.AR2**, **CR.AR2LT**, **CG.CR**, **CG.MI** and **CG.AR2L** with cylindrical threads have a sealing edge machined for fitting an O-ring, alternatively it is available a flat washer, while for all other threads the IP 66/68 degree of protection is achieved with sealant put at least on two complete threads engaged of the threaded coupling.

The cable glands are generally made in Brass. The following alternative materials can be supplied on demand:

- Nickel-plated Brass.
- Stainless steel.
- Galvanized carbon steel.
- Aluminium alloy (types **CG.AR2** e **CG.AR2L** and sizes from M25x1.5 up to M75x1.5 only).

In addition, the cable glands can be supplied with an anti-tearing nut, only if specifically required by the purchaser.

### Constructional characteristics

Degree of protection (IEC 60529): IP 66/68 (50 m for 30 min.).

Service temperature ranges:

For series **CG.AR2**, **CG.AR2L** and **CG.CR**

- from - 40°C to + 100°C for sealing rings made of Chloroprene.
- from - 60°C to + 130°C for sealing rings made of Silicon rubber.

For series **CG.AR**

- from - 40°C to + 80°C for sealing rings made of Chloroprene.
- from - 60°C to + 100°C for sealing rings made of Silicon rubber.

For series **CG.MI** and **CR.AR2LT**

- from - 40°C to + 80°C for sealing rings made of Chloroprene.
- from - 60°C to + 80°C for sealing rings made of Silicon rubber.

All types of cable glands supplied with fiber flat washers are restricted to the temperature range from -50°C up to +80°C.

Models made of Galvanized carbon steel: up to - 20 °C.

Models **CG.AR2** and **CG.AR2L** made of Aluminium alloy: up to + 80 °C.

Models **CG.MI** and **CG.AR2L** for Group I applications: up to + 80 °C.





Prot: C2004251

**Annex to certificate:**  
**Applicant:**

**Electrical Apparatus:**

## IECEX Certificate of Conformity



**IECEX CES 14.0022X Issue No: 3** of 2022-03-28  
**Pepperl+Fuchs SE**  
**Lilienthalstraße 200, 68307 Mannheim - Germany**  
**Cable Glands, series CG.AR., CG.AR2., CR.AR2LT.,**  
**CG.CR., CG.MI., CG.AR2L..**

The cable gland types, installation Group, manufacturer materials and ambient temperature ranges are reported in the table below:

Type	Exec.	Materials	Seals	Ambient Temp.
CG.AR	Group IIC Group IIIC	Brass, Nickel plated brass, Stainless steel	Chloroprene	-40°C ÷ +80°C
			Silicon	-60°C ÷ +100°C
		Galvanised steel	Chloroprene	-20°C ÷ +80°C
			Silicon	-20°C ÷ +100°C
CG.AR2	Group IIC Group IIIC	Brass, Nickel plated brass, Stainless steel	Chloroprene	-40°C ÷ +100°C
			Silicon	-60°C ÷ +130°C
		Aluminium alloy	Chloroprene	-40°C ÷ +80°C
			Silicon	-60°C ÷ +80°C
		Galvanised steel	Chloroprene	-20°C ÷ +100°C
			Silicon	-20°C ÷ +130°C
CR.AR2LT	Group IIC Group IIIC	Brass, Nickel plated brass, Stainless steel	Chloroprene	-40°C ÷ +80°C
			Silicon	-60°C ÷ +80°C
		Galvanised steel	<i>All seals</i>	-20°C ÷ +80°C
CG.CR	Group IIC Group IIIC	Brass, Nickel plated brass, Stainless steel	Chloroprene	-40°C ÷ +100°C
			Silicon	-60°C ÷ +130°C
		Galvanised steel	Chloroprene	-20°C ÷ +100°C
			Silicon	-20°C ÷ +130°C
CG.MI	Group I Group IIC Group IIIC	Brass, Nickel plated brass, Stainless steel	Chloroprene	-40°C ÷ +80°C
			Silicon	-60°C ÷ +80°C
		Galvanised steel	<i>All seals</i>	-20°C ÷ +80°C
CG.AR2L	Group I	Brass, Nickel plated brass, Stainless steel	Chloroprene	-40°C ÷ +80°C
			Silicon	-60°C ÷ +80°C
		Galvanised steel	<i>All seals</i>	-20°C ÷ +80°C
	Group IIC Group IIIC	Brass, Nickel plated brass, Stainless steel	Chloroprene	-40°C ÷ +100°C
			Silicon	-60°C ÷ +130°C
		Aluminium alloy	Chloroprene	-40°C ÷ +80°C
			Silicon	-60°C ÷ +80°C
		Galvanised steel	Chloroprene	-20°C ÷ +100°C
Silicon	-20°C ÷ +130°C			

Restricted use to the ambient temperature range of **-50°C÷+80°C** for all types whit fiber flat washers.



Prot: C2004251

# IECEX Certificate of Conformity

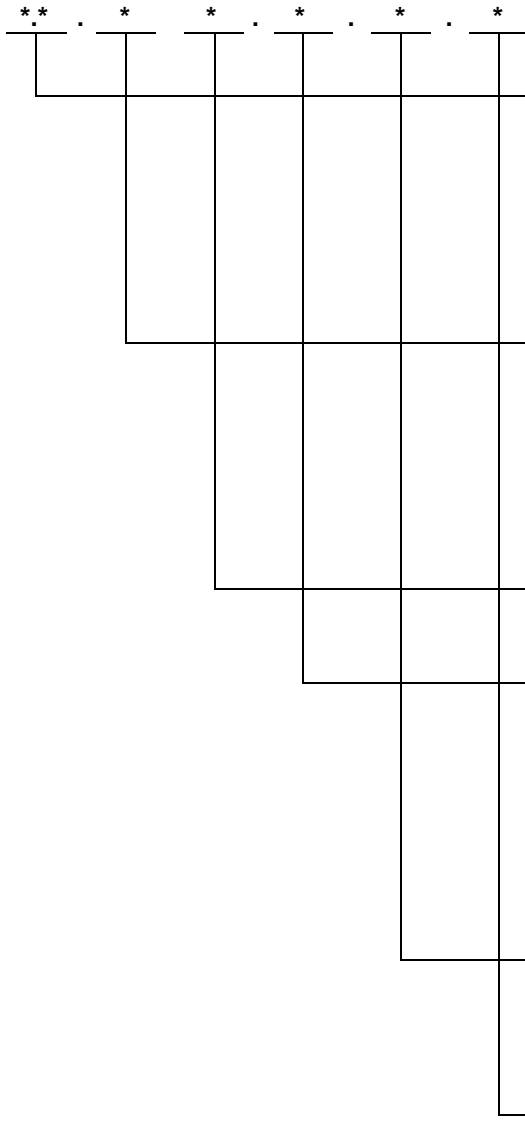


**Annex to certificate:**  
**Applicant:**

**IECEX CES 14.0022X Issue No: 3** of 2022-03-28  
**Pepperl+Fuchs SE**  
**Lilienthalstraße 200, 68307 Mannheim - Germany**  
**Cable Glands, series CG.AR., CG.AR2., CR.AR2LT.,**  
**CG.CR., CG.MI., CG.AR2L..**

**Electrical Apparatus:**

Identification of cable gland types **CG.AR**, **CG.AR2**, **CR.AR2LT**, **CG.CR**, **CG.MI** and **CG.AR2L**:



Code that identifies the type:

- **CG.AR**: cable gland for armoured or shielded cables
- **CG.AR2**: cable gland for armoured or shielded cables
- **CR.AR2LT**: cable gland for armoured or shielded cables
- **CG.CR**: cable gland for non-armoured cables
- **CG.MI**: cable gland for non-armoured cables
- **CG.AR2L**: for lead sheathed armoured cables

Type of thread:

- **M**: ISO 261 pitch 1.5
- **NPT**: NPT ANSI/ASME B1.20.1
- **S**: NPSM ANSI/ASME B1.20.1
- **PG**: PG DIN 40430 (*assessed for Ex eb protection mode only*)
- **PF**: GAS ISO 228-1

Thread size  
(see Tables 1 ÷ 6)

Manufacturing material:

- **A**: Aluminium alloy (*only for types **CG.AR2** and **CG.AR2L**, sizes from M25 up to M75*)
- **B**: brass
- **BF**: Brass leadfree
- **BN**: nickel-plated brass
- **SS**: stainless steel
- **Z**: galvanized carbon steel

Seals material:

- **Blank**: with flat washer in Fiber
- **C**: with flat washer in Chloroprene (Neoprene)
- **S**: with flat washer in Silicon rubber

Thread Length:  
min. thread length (mm)

Types and thread sizes of cable glands are listed on the followings [Table 1](#), [Table 2](#), [Table 3](#), [Table 4](#), [Table 5](#) and [Table 6](#). For alternative threads "PG", "PF" and "S", the "M" – Metric sizes apply.



Prot: C2004251

Annex to certificate:

Applicant:

Electrical Apparatus:

## IECEX Certificate of Conformity



IECEX CES 14.0022X Issue No: 3 of 2022-03-28

Pepperl+Fuchs SE

Lilienthalstraße 200, 68307 Mannheim - Germany

Cable Glands, series CG.AR., CG.AR2., CR.AR2LT.,  
CG.CR., CG.MI., CG.AR2L..

Table 1: CG.AR2

Cable gland code	Thread size	Cable gland code	Thread size	Cable Dia. ranges (mm)	
				Inner sheath	Armour sheath
-	-	CG.AR2.M12	M12x1.5	3-7.5	6-12
CG.AR2.NPT1/4	1/4"NPT	-	-	3-8	6-12
CG.AR2.NPT3/8S	3/8"NPT	CG.AR2.M16S	M16x1.5	3-8.5	6-12
CG.AR2.NPT3/8	3/8"NPT	CG.AR2.M16	M16x1.5	6-12	8.5-16
CG.AR2.NPT1/2S	1/2"NPT	CG.AR2.M20S	M20x1.5	3-8.5	6-12
CG.AR2.NPT1/2	1/2"NPT	CG.AR2.M20	M20x1.5	6-12	8.5-16
CG.AR2.NPT1/2L	1/2"NPT	CG.AR2.M20L	M20x1.5	8.5-14.5	12-20
CG.AR2.NPT3/4XS	3/4"NPT	CG.AR2.M25XS	M25x1.5	3-8.5	6-12
CG.AR2.NPT3/4S	3/4"NPT	CG.AR2.M25S	M25x1.5	6-12	8.5-16
CG.AR2.NPT3/4	3/4"NPT	CG.AR2.M25	M25x1.5	8.5-16	12-21
CG.AR2.NPT3/4L	3/4"NPT	CG.AR2.M25L	M25x1.5	12-20	16-26
CG.AR2.NPT1XS	1"NPT	CG.AR2.M32XS	M32x1.5	6-12	8.5-16
CG.AR2.NPT1S	1"NPT	CG.AR2.M32S	M32x1.5	12-20	16-26
CG.AR2.NPT1	1"NPT	CG.AR2.M32	M32x1.5	15-26	20-33
CG.AR2.NPT1-1/4XS	1 1/4"NPT	CG.AR2.M40XS	M40x1.5	12-20	16-26
CG.AR2.NPT1-1/4S	1 1/4"NPT	CG.AR2.M40S	M40x1.5	15-26	20-33
CG.AR2.NPT1-1/4	1 1/4"NPT	CG.AR2.M40	M40x1.5	20-32	29-41
CG.AR2.NPT1-1/2XS	1 1/2"NPT	CG.AR2.M50XS	M50x1.5	15-26	20-33
CG.AR2.NPT1-1/2XM	1 1/2"NPT	CG.AR2.M50XM	M50x1.5	20-32	29-41
CG.AR2.NPT1-1/2S	1 1/2"NPT	CG.AR2.M50S	M50x1.5	22-35	33-48
CG.AR2.NPT1-1/2	1 1/2"NPT	CG.AR2.M50	M50x1.5	27-41	36-52
CG.AR2.NPT2XS	2"NPT	CG.AR2.M63XS	M63x1.5	22-35	33-48
CG.AR2.NPT2XM	2"NPT	CG.AR2.M63XM	M63x1.5	27-41	36-52
CG.AR2.NPT2S	2"NPT	CG.AR2.M63S	M63x1.5	35-45	43-57
CG.AR2.NPT2	2"NPT	CG.AR2.M63	M63x1.5	40-52	47-60
CG.AR2.NPT2-1/2XS	2 1/2"NPT	CG.AR2.M75XS	M75x1.5	35-45	43-57
CG.AR2.NPT2-1/2S	2 1/2"NPT	CG.AR2.M75S	M75x1.5	40-52	47-60
CG.AR2.NPT2-1/2	2 1/2"NPT	CG.AR2.M75	M75x1.5	45-60	54-70
CG.AR2.NPT3XS	3"NPT	CG.AR2.M90XS	M90x1.5	40-52	47-60
CG.AR2.NPT3S	3"NPT	CG.AR2.M90S	M90x1.5	45-60	54-70
CG.AR2.NPT3	3"NPT	CG.AR2.M90	M90x1.5	60-72	63-80
CG.AR2.NPT3-1/2S	3 1/2"NPT	CG.AR2.M110S	M110x1.5	45-60	54-70
CG.AR2.NPT3-1/2	3 1/2"NPT	CG.AR2.M110	M110x1.5	60-72	63-80

Note: Aluminium alloy available from M25x1.5 (1/2"NPT) up to M75x1.5 (2 1/2"NPT) sizes only.



Prot: C2004251

**Annex to certificate:**  
**Applicant:**

**Electrical Apparatus:**

## IECEX Certificate of Conformity



**IECEX CES 14.0022X Issue No: 3 of 2022-03-28**  
**Pepperl+Fuchs SE**  
**Lilienthalstraße 200, 68307 Mannheim - Germany**  
**Cable Glands, series CG.AR., CG.AR2., CR.AR2LT.,**  
**CG.CR., CG.MI., CG.AR2L..**

**Table 2: CG.AR**

Cable gland code	Thread size	Cable gland code	Thread size	Cable Dia. ranges (mm)	
				Inner sheath	Armour sheath
<b>CG.AR.NPT3/8</b>	3/8"NPT	<b>CG.AR.M16</b>	M16x1.5	6-11	8-15
<b>CG.AR.NPT1/2</b>	1/2"NPT	<b>CG.AR.M20</b>	M20x1.5	6-11	8-15
<b>CG.AR.NPT1/2L</b>	1/2"NPT	<b>CG.AR.M20L</b>	M20x1.5	10-15.5	13.5-21
<b>CG.AR.NPT3/4S</b>	3/4"NPT	<b>CG.AR.M25S</b>	M25x1.5	6-11	8-15
<b>CG.AR.NPT3/4</b>	3/4"NPT	<b>CG.AR.M25</b>	M25x1.5	10-15.5	13.5-21
<b>CG.AR.NPT3/4L</b>	3/4"NPT	<b>CG.AR.M25L</b>	M25x1.5	13.5-20.5	18-27
<b>CG.AR.NPT1</b>	1"NPT	<b>CG.AR.M32</b>	M32x1.5	13.5-21	18-27
<b>CG.AR.NPT1L</b>	1"NPT	<b>CG.AR.M32L</b>	M32x1.5	18-27	23-33
<b>CG.AR.NPT1-1/4</b>	1 1/4"NPT	<b>CG.AR.M40</b>	M40x1.5	23-33	29-41
<b>CG.AR.NPT1-1/2</b>	1 1/2"NPT	<b>CG.AR.M50</b>	M50x1.5	29-41	35-48
<b>CG.AR.NPT2</b>	2"NPT	<b>CG.AR.M63</b>	M63x1.5	35-48	42-56

**Table 3: CG.CR**

Cable gland code	Thread size	Cable gland code	Thread size	Cable Dia. ranges (mm)
<b>CG.CR.NPT3/8</b>	3/8"NPT	<b>CG.CR.M16</b>	M16x1,5	3-8,5
<b>CG.CR.NPT3/8L</b>	3/8"NPT	<b>CG.CR.M16L</b>	M16x1,5	6-12
<b>CG.CR.NPT1/2</b>	1/2"NPT	<b>CG.CR.M20</b>	M20x1,5	6-12
<b>CG.CR.NPT1/2L</b>	1/2"NPT	<b>CG.CR.M20L</b>	M20x1,5	12-14,5
<b>CG.CR.NPT3/4S</b>	3/4"NPT	<b>CG.CR.M25S</b>	M25x1,5	6-12
<b>CG.CR.NPT3/4</b>	3/4"NPT	<b>CG.CR.M25</b>	M25x1,5	12-16
<b>CG.CR.NPT3/4L</b>	3/4"NPT	<b>CG.CR.M25L</b>	M25x1,5	12-20
<b>CG.CR.NPT1S</b>	1"NPT	<b>CG.CR.M32S</b>	M32x1,5	12-20
<b>CG.CR.NPT1</b>	1"NPT	<b>CG.CR.M32</b>	M32x1,5	15-26
<b>CG.CR.NPT1-1/4S</b>	1 1/4"NPT	<b>CG.CR.M40S</b>	M40x1,5	15-26
<b>CG.CR.NPT1-1/4</b>	1 1/4"NPT	<b>CG.CR.M40</b>	M40x1,5	20-32
<b>CG.CR.NPT1-1/2S</b>	1 1/2"NPT	<b>CG.CR.M50S</b>	M50x1,5	22-35
<b>CG.CR.NPT1-1/2</b>	1 1/2"NPT	<b>CG.CR.M50</b>	M50x1,5	27-41
<b>CG.CR.NPT2S</b>	2"NPT	<b>CG.CR.M63S</b>	M63x1,5	35-45
<b>CG.CR.NPT2</b>	2"NPT	<b>CG.CR.M63</b>	M63x1,5	40-52
<b>CG.CR.NPT2-1/2S</b>	2 1/2"NPT	<b>CG.CR.M75S</b>	M75x1,5	40-52
<b>CG.CR.NPT2-1/2</b>	2 1/2"NPT	<b>CG.CR.M75</b>	M75x1,5	45-60
<b>CG.CR.NPT3S</b>	3"NPT	<b>CG.CR.M90S</b>	M90x1,5	45-60
<b>CG.CR.NPT3</b>	3"NPT	<b>CG.CR.M90</b>	M90x1,5	60-72



Prot: C2004251

**Annex to certificate:**  
**Applicant:**

**Electrical Apparatus:**

## IECEX Certificate of Conformity



**IECEX CES 14.0022X Issue No: 3 of 2022-03-28**  
**Pepperl+Fuchs SE**  
**Lilienthalstraße 200, 68307 Mannheim - Germany**  
**Cable Glands, series CG.AR., CG.AR2., CR.AR2LT.,**  
**CG.CR., CG.MI., CG.AR2L..**

**Table 4: CG.MI**

Cable gland code	Thread size	Cable gland code	Thread size	Cable Dia. ranges (mm)
<b>CG.MI.NPT3/8S</b>	3/8"NPT	<b>CG.MI.M16S</b>	M16x1,5	3-8.5
<b>CG.MI.NPT3/8</b>	3/8"NPT	<b>CG.MI.M16</b>	M16x1,5	6-9
<b>CG.MI.NPT3/8</b>	3/8"NPT	<b>CG.MI.M16L</b>	M16x1,5	9-12
<b>CG.MI.NPT1/2S</b>	1/2"NPT	<b>CG.MI.M20XS</b>	M20x1,5	6-9
<b>CG.MI.NPT1/2S</b>	1/2"NPT	<b>CG.MI.M20S</b>	M20x1,5	9-12
<b>CG.MI.NPT1/2L</b>	1/2"NPT	<b>CG.MI.M20</b>	M20x1,5	8.5-11.5
<b>CG.MI.NPT1/2L</b>	1/2"NPT	<b>CG.MI.M20L</b>	M20x1,5	11.5-14.5
<b>CG.MI.NPT3/4XS</b>	3/4"NPT	<b>CG.MI.M25XS</b>	M25x1,5	6-9
<b>CG.MI.NPT3/4XS</b>	3/4"NPT	<b>CG.MI.M25S</b>	M25x1,5	9-12
<b>CG.MI.NPT3/4</b>	3/4"NPT	<b>CG.MI.M25</b>	M25x1,5	8.5-12.5
<b>CG.MI.NPT3/4</b>	3/4"NPT	<b>CG.MI.M25L</b>	M25x1,5	12.5-16
<b>CG.MI.NPT3/4XL</b>	3/4"NPT	<b>CG.MI.M25XL</b>	M25x1,5	12-16
<b>CG.MI.NPT3/4XL</b>	3/4"NPT	<b>CG.MI.M25XXL</b>	M25x1,5	16-20
<b>CG.MI.NPT1S</b>	1"NPT	<b>CG.MI.M32S</b>	M32x1,5	12-16
<b>CG.MI.NPT1S</b>	1"NPT	<b>CG.MI.M32</b>	M32x1,5	16-20
<b>CG.MI.NPT1L</b>	1"NPT	<b>CG.MI.M32L</b>	M32x1,5	15-20
<b>CG.MI.NPT1L</b>	1"NPT	<b>CG.MI.M32XL</b>	M32x1,5	20-26
<b>CG.MI.NPT1-1/4S</b>	1 1/4"NPT	<b>CG.MI.M40S</b>	M40x1,5	15-20
<b>CG.MI.NPT1-1/4S</b>	1 1/4"NPT	<b>CG.MI.M40</b>	M40x1,5	20-26
<b>CG.MI.NPT1-1/4L</b>	1 1/4"NPT	<b>CG.MI.M40L</b>	M40x1,5	20-26
<b>CG.MI.NPT1-1/4L</b>	1 1/4"NPT	<b>CG.MI.M40XL</b>	M40x1,5	26-32
<b>CG.MI.NPT1-1/2S</b>	1 1/2"NPT	<b>CG.MI.M50S</b>	M50x1,5	22-28
<b>CG.MI.NPT1-1/2S</b>	1 1/2"NPT	<b>CG.MI.M50</b>	M50x1,5	28-35
<b>CG.MI.NPT1-1/2L</b>	1 1/2"NPT	<b>CG.MI.M50L</b>	M50x1,5	27-34
<b>CG.MI.NPT1-1/2L</b>	1 1/2"NPT	<b>CG.MI.M50XL</b>	M50x1,5	34-41
<b>CG.MI.NPT2S</b>	2"NPT	<b>CG.MI.M63S</b>	M63x1,5	35-40
<b>CG.MI.NPT2S</b>	2"NPT	<b>CG.MI.M63</b>	M63x1,5	40-45
<b>CG.MI.NPT2L</b>	2"NPT	<b>CG.MI.M63L</b>	M63x1,5	40-46
<b>CG.MI.NPT2L</b>	2"NPT	<b>CG.MI.M63XL</b>	M63x1,5	46-52
<b>CG.MI.NPT2-1/2S</b>	2 1/2"NPT	<b>CG.MI.M75S</b>	M75x1,5	40-46
<b>CG.MI.NPT2-1/2S</b>	2 1/2"NPT	<b>CG.MI.M75</b>	M75x1,5	46-52
<b>CG.MI.NPT2-1/2L</b>	2 1/2"NPT	<b>CG.MI.M75L</b>	M75x1,5	45-52
<b>CG.MI.NPT2-1/2L</b>	2 1/2"NPT	<b>CG.MI.M75XL</b>	M75x1,5	52-60
<b>CG.MI.NPT3S</b>	3"NPT	<b>CG.MI.M90S</b>	M90x1,5	45-52
<b>CG.MI.NPT3S</b>	3"NPT	<b>CG.MI.M90</b>	M90x1,5	52-60
<b>CG.MI.NPT3L</b>	3"NPT	<b>CG.MI.M90L</b>	M90x1,5	60-66
<b>CG.MI.NPT3L</b>	3"NPT	<b>CG.MI.M90XL</b>	M90x1,5	66-72



Prot: C2004251

Annex to certificate:

Applicant:

Electrical Apparatus:

## IECEX Certificate of Conformity



IECEX CES 14.0022X Issue No: 3 of 2022-03-28

Pepperl+Fuchs SE

Lilienthalstraße 200, 68307 Mannheim - Germany

Cable Glands, series CG.AR., CG.AR2., CR.AR2LT.,  
CG.CR., CG.MI., CG.AR2L..

Table 5: CG.AR2L

Cable gland code	Thread size	Cable gland code	Thread size	Cable Dia. ranges (mm)	
				Inner sheath	Armour sheath
CG.AR2L.NPT1/2S	1/2"NPT	CG.AR2L.M20S	M20x1.5	3-8	6-12
CG.AR2L.NPT1/2	1/2"NPT	CG.AR2L.M20	M20x1.5	6-11.5	8.5-16
CG.AR2L.NPT1/2L	1/2"NPT	CG.AR2L.M20L	M20x1.5	8.5-14	12-20
CG.AR2L.NPT3/4S	3/4"NPT	CG.AR2L.M25S	M25x1.5	3-8	6-12
CG.AR2L.NPT3/4	3/4"NPT	CG.AR2L.M25	M25x1.5	6-11.5	8.5-16
CG.AR2L.NPT3/4L	3/4"NPT	CG.AR2L.M25L	M25x1.5	8.5-15	12-21
CG.AR2L.NPT3/4XL	3/4"NPT	CG.AR2L.M25XL	M25x1.5	12-19	16-26
CG.AR2L.NPT1S	1"NPT	CG.AR2L.M32S	M32x1.5	6-11.5	8.5-16
CG.AR2L.NPT1	1"NPT	CG.AR2L.M32	M32x1.5	12-19	16-26
CG.AR2L.NPT1L	1"NPT	CG.AR2L.M32L	M32x1.5	15-25	20-33
CG.AR2L.NPT1-1/4S	1 1/4"NPT	CG.AR2L.M40S	M40x1.5	12-19	16-26
CG.AR2L.NPT1-1/4	1 1/4"NPT	CG.AR2L.M40	M40x1.5	15-25	20-33
CG.AR2L.NPT1-1/4L	1 1/4"NPT	CG.AR2L.M40L	M40x1.5	20-31	29-41
CG.AR2L.NPT1-1/2S	1 1/2"NPT	CG.AR2L.M50S	M50x1.5	15-25	20-33
CG.AR2L.NPT1-1/2	1 1/2"NPT	CG.AR2L.M50	M50x1.5	20-31	29-41
CG.AR2L.NPT1-1/2L	1 1/2"NPT	CG.AR2L.M50L	M50x1.5	22-34	33-48
CG.AR2L.NPT1-1/2XL	1 1/2"NPT	CG.AR2L.M50XL	M50x1.5	27-40	36-52
CG.AR2L.NPT2XS	2"NPT	-	-	22-34	33-48
-	-	CG.AR2L.M63XS	M63x1.5	22-35	33-48
CG.AR2L.NPT2S	2"NPT	CG.AR2L.M63S	M63x1.5	27-40	36-52
CG.AR2L.NPT2	2"NPT	CG.AR2L.M63	M63x1.5	35-44	43-57
CG.AR2L.NPT2L	2"NPT	CG.AR2L.M63L	M63x1.5	40-50	47-60
CG.AR2L.NPT2XL	2"NPT	-	-	45-50	54-70
-	-	CG.AR2L.M63XL	M63x1.5	45-56	54-70
CG.AR2L.NPT2-1/2S	2 1/2"NPT	CG.AR2L.M75S	M75x1.5	35-44	43-57
CG.AR2L.NPT2-1/2	2 1/2"NPT	CG.AR2L.M75	M75x1.5	40-50	47-60
CG.AR2L.NPT2-1/2L	2 1/2"NPT	CG.AR2L.M75L	M75x1.5	45-58	54-70
CG.AR2L.NPT3S	3"NPT	CG.AR2L.M90S	M90x1.5	40-50	47-60
CG.AR2L.NPT3	3"NPT	CG.AR2L.M90	M90x1.5	45-58	54-70
CG.AR2L.NPT3L	3"NPT	CG.AR2L.M90L	M90x1.5	60-70	63-80

**Note:** Aluminium alloy available from M25x1.5 (1/2"NPT) up to M75x1.5 (2 1/2"NPT) sizes only.



Prot: C2004251

**Annex to certificate:**

**Applicant:**

**Electrical Apparatus:**

## IECEX Certificate of Conformity



IECEX CES 14.0022X Issue No: 3 of 2022-03-28

Pepperl+Fuchs SE

Lilienthalstraße 200, 68307 Mannheim - Germany

Cable Glands, series CG.AR., CG.AR2., CR.AR2LT.,  
CG.CR., CG.MI., CG.AR2L..

Table 6: CR.AR2LT

Cable gland code	Thread size	Cable gland code	Thread size	Cable Dia. ranges (mm)	
				Inner sheath	Armour sheath
<b>CG.AR2LT.NPT1/2</b>	1/2"NPT	<b>CG.AR2LT.M20</b>	M20x1,5	8.5-14.5	12-20
<b>CG.AR2LT.NPT3/4S</b>	3/4"NPT	<b>CG.AR2LT.M25S</b>	M25x1,5	8.5-14.5	12-20
<b>CG.AR2LT.NPT3/4</b>	3/4"NPT	<b>CG.AR2LT.M25</b>	M25x1,5	8.5-16	12-21
<b>CG.AR2LT.NPT1</b>	1"NPT	<b>CG.AR2LT.M32</b>	M32x1,5	8.5-16	12-21
<b>CG.AR2LT.NPT3-1/2</b>	3" 1/2"NPT	<b>CG.AR2LT.M90</b>	M90x2,0	70-82	78-90
<b>CG.AR2LT.NPT4S</b>	4"NPT	<b>CG.AR2LT.M100</b>	M100x2,0	80-92	88-100
<b>CG.AR2LT.NPT4</b>	4"NPT	<b>CG.AR2LT.M110</b>	M110x2,0	90-101	98-110
<b>CG.AR2LT.NPT5</b>	5"NPT	<b>CG.AR2LT.M130</b>	M130x2.0	100-115	109-123