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[1] # EU-TYPE EXAMINATION CERTIFICATE

[2] **Equipment or Protective System intended for use in potentially explosive atmospheres Directive 2014/34/EU**

[3] EU-Type Examination Certificate number:

CESI 18 ATEX 012 X

[4] Product: **Cable glands CGA, CGU, MCGU and CGA..LT series**

[5] Manufacturer: **Rose Systemtechnik GmbH (A Phoenix Mecano Company)**

[6] Address: **Erbeweg 13-15**
32457 Porta Westfalica
(Germany)

[7] This product and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

[8] CESI, notified body n. 0722 in accordance with Article 17 of the Directive 2014/34/EU of the

European Parliament and Council of 26 February 2014, certifies that this Product has been found to comply with the Essential Health and Safety Requirements relating to the design and

CESI S.p.A.
Testing & Certification Division
Business Area Certification
(Roberto Riccio)

[13] # Schedule

[14] **EU-TYPE EXAMINATION CERTIFICATE n. CESI 18 ATEX 012 X**

[15] **Description of equipment**

The series of cable glands with trade mark **Rose Systemtechnik GmbH** is composed by the following types: **CGU..**, **MCGU..**, **CGA..** and **CGA..LT..** cable glands.

The cable glands series **CGU..**, **MCGU..**, **CGA..** and **CGA..LT..** 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 **CGU..** and **MCGU..** 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 Standard types **CGA..** and **CGA..LT..** cable glands are suitable for steel wire armoured cables. They are comprised of a male body, lower sealing ring, grounding cone, swivel braid retainer, middle body, upper sealing ring and cap. When the middle body is screwed onto the male body the cable wire armour is clamped between

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Service temperature ranges:

Models with sealing rings made of Chloroprene rubber:
- 40 ÷ + 100 °C for types **CGA.., CGU..**;
- 40 ÷ + 80 °C for type **MCGU..**;
- 40 ÷ + 80 °C for type **CGA..LT..**

Models with sealing rings made of Silicon rubber:
- 60 ÷ + 130 °C for types **CGA.., CGU..**;
- 60 ÷ + 80 °C for type **MCGU..**;
- 60 ÷ + 80 °C for type **CGA..LT..**

CGA.. models made of Aluminium alloy: up to + 80 °C.

Types for **Group I** (mines) execution: up to + 80 °C.

Type	Exec.	Materials	Seals	Temperature
CGA..	Group I	Brass, Nickel plated brass, Stainless steel	Chloroprene	-40°C ÷ +80°C
			Silicon	-60°C ÷ +80°C
		Galvanised steel	*All seals*	-20°C ÷ +80°C
	Group IIC	Brass, Nickel plated brass, Stainless steel	Chloroprene	-40°C ÷ +100°C
			Silicon	-60°C ÷ +130°C
			Chloroprene	-40°C ÷ +80°C

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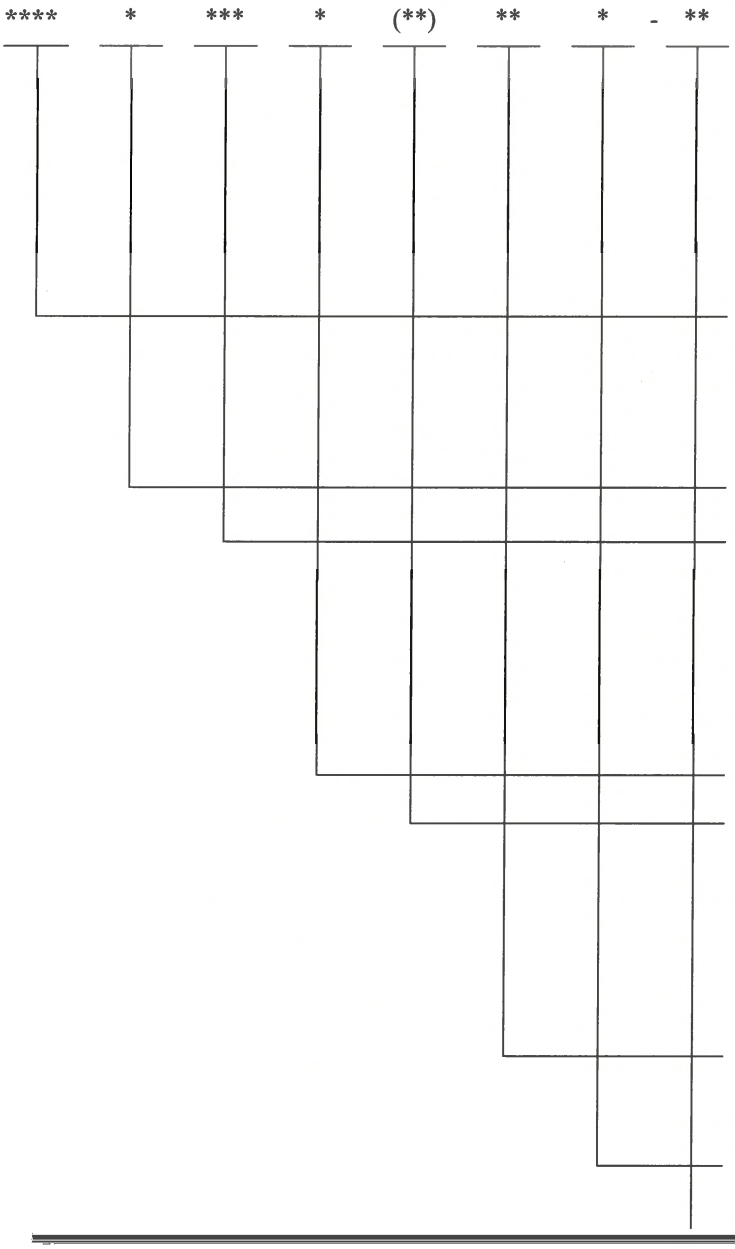
Identification of cable glands **CGA.., CGU.. and MCGU..** types:



Code that identifies the type:
- **CGA**: cable gland for armoured or shielded cable;
- **MCGU**: cable gland for non-armoured cable;
- **CGU**: cable gland for non-armoured cable.

Code that identifies the type *(**CGA..** only)*
- **Blank**: standard *(for armoured cables only)*
- **U**: universal *(for armoured or shielded cables)*
- **O**: offshore *(for shielded cables only)*

Size (*see Table 1, 2 and 3 and).*

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

Thread size (*see Table 1, 2 and 3*)

Manufacturing material:
- **A**: aluminium alloy *(**CGA..** type, M25 up to M75 sizes only)*
- **B**: brass
- **BN**: nickel-plated brass
- **X**: stainless steel
- **Z**: galvanized carbon steel

Seals material:
- **C**: Chloroprene (Neoprene)
- **S**: Silicon rubber

Flat washer:
- **Blank**: none

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Types and thread sizes of cable glands are listed on the followings Table 1, Table 2 and Table 3.

Table 1:

CGA..					
Cable glands		Thread size		Cable Dia. ranges (mm)	
Type	Size	NPT	ISO pitch 1.5	Inner sheath	Armour sheath
CGA	0S..	1/4"	M 12	2-4	3-5.5
CGA	SL..	1/4"	M 12	3-7.5	6-12
CGA	01S..	3/8"	M 16	3-8.5	6-12
CGA	01..	3/8"	M 16	6-12	8.5-16
CGA	1S	1/2"	M 20	3-8.5	6-12

Note: Aluminium alloy available from M25x1.5 (1/2"NPT) up to M75x1.5 (2"½NPT) sizes only.

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[14] **EU-TYPE EXAMINATION CERTIFICATE n. CESI 18 ATEX 012 X**

Table 2:

[13] **Schedule**

[14]

Table 3:

MCGU..				
Cable glands		Thread size		
Type	Size	NPT	ISO pitch 1.5	Cable Dia. ranges (mm)
MCGU	01M2..	3/8"	M 16	3-8.5
MCGU	01LM1..	3/8"	M 16	6-9
MCGU	01LM2..	3/8"	M 16	9-12
MCGU	1M1..	1/2"	M 20	6-9
MCGU	1M2..	1/2"	M 20	9-12
MCGU	1LM1..	1/2"	M 20	8.5-11.5
MCGU	1LM2..	1/2"	M 20	11.5-14.5
MCGU	2SM1..	3/4"	M 25	6-9
MCGU	2SM2..	3/4"	M 25	9-12

[13] **Schedule**

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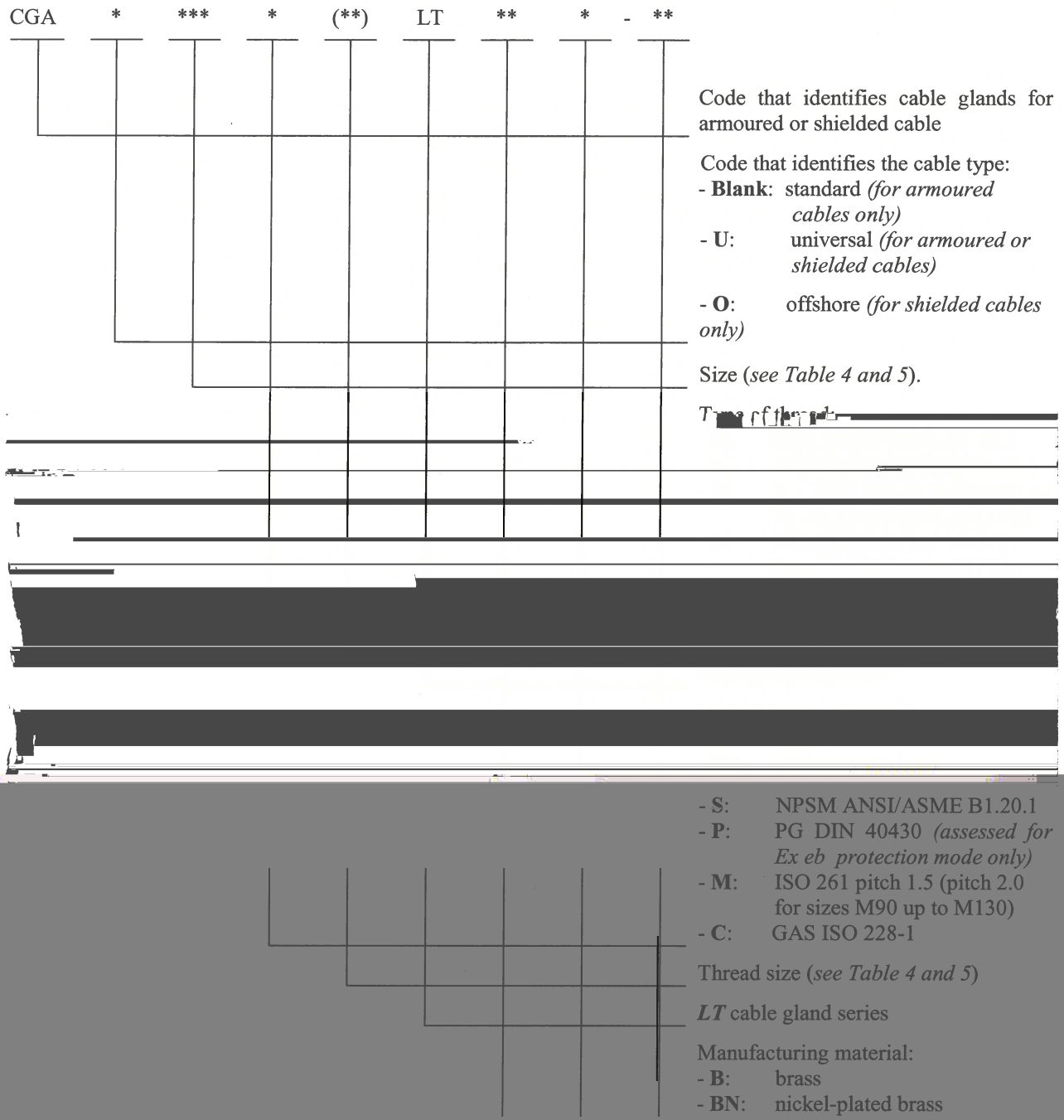
Identification of cable glands **CGA..LT..** type:



[13] # Schedule

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Table 4

CGA..LT.. and CGAU..LT..						
Cable glands		**Thread size**			**Cable Dia. ranges (mm)**	
Type	**Size**	**NPT**	**ISO pitch 1.5**	**ISO pitch 2.0**	**Inner sheath**	**Armour sheath**
CGA..LT	1	1/2"	M 20	-	8.5-14.5	12-20
CGA..LT	2X	3/4"	M 25	-	8.5-14.5	12-20
CGA..LT	2	3/4"	M 25	-	8.5-16	12-21
CGA..LT	3X	1"	M 32	-	8.5-16	12-21
CGA..LT	9	3" ½	-	M 90	70-82	78-90

[redacted]

[16] **Report n.** EX- B8004734.

Routine tests
None.

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[17] **Special conditions for safe use (X)**

- 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 GCA, GCA-LT and MCCH cable glands types have to be protected from hydraulic fluids, oils and

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[14] **EU-TYPE EXAMINATION CERTIFICATE n. CESI 18 ATEX 012 X**

Descriptive documents, follow:

- Drawing RA3-CGU (NPT) (1 sheet)	rev.00	dated	2017.10.26
- Drawing RA3-MCGU (M) (1 sheet)	rev.00	dated	2017.10.26
- Drawing RA3-MCGU (NPT) (1 sheet)	rev.00	dated	2017.10.26
- Drawing RA4-14-IEC.55 (1 sheet)	rev.00	dated	2017.10.26
Drawing RA4-14-IEC.56 (1 sheet)	rev.00	dated	2017.10.26
Drawing RA4-14-IEC.57 (1 sheet)	rev.00	dated	2017.10.26
Drawing RA3-14-IEC.61 (1 sheet)	rev.00	dated	2017.10.26
- Drawing RA3-14-IEC.62 (1 sheet)	rev.00	dated	2017.10.26
Drawing RA4-14-IEC.63 (1 sheet)	rev.00	dated	2017.10.26
Drawing RA3-14-IEC.64 (1 sheet)	rev.00	dated	2017.10.26
- Drawing RA4-14-IEC.65 (1 sheet)	rev.00	dated	2017.10.26
Drawing RA3-14-IEC.68 (1 sheet)	rev.00	dated	2017.10.26
- Drawing RA3-IEC.58 (1 sheet)	rev.00	dated	2017.10.26
- Drawing RA3-IEC.61 (1 sheet)	rev.00	dated	2017.10.26
- Drawing RA3-IEC.62 (1 sheet)	rev.00	dated	2017.10.26
- Drawing RA3-IEC.64 (1 sheet)	rev.00	dated	2017.10.26
- Drawing RA4-14-IEC.LT08 (1 sheet)	rev.00	dated	2017.10.26
- Drawing RA4-14-IEC.LT09 (1 sheet)	rev.00	dated	2017.10.26
- Drawing RA4-IEC.04 (1 sheet)	rev.00	dated	2017.10.26
Drawing RA4-IEC.06 (1 sheet)	rev.00	dated	2017.10.26
Drawing RA4-IEC.07 (1 sheet)	rev.00	dated	2017.10.26
- Drawing RA4-IEC.08 (1 sheet)	rev.00	dated	2017.10.26
Drawing RA4-IEC.09 (1 sheet)	rev.00	dated	2017.10.26
Drawing RA4-IEC.55 (1 sheet)	rev.00	dated	2017.10.26
Drawing RA4-IEC.56 (1 sheet)	rev.00	dated	2017.10.26
[redacted]			
Drawing RA4-IEC.57 (1 sheet)	rev.00	dated	2017.10.26
Drawing RA4-IEC.60 (1 sheet)	rev.00	dated	2017.10.26
[redacted]			