



# IECEX Certificate of Conformity

## INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

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

Certificate No.: IECEx IMQ 18.0005X

Issue No: 0

Certificate history:

Issue No. 0 (2018-08-28)

Status: **Current**

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Date of Issue: **2018-08-28**

Applicant: **Rose Systemtechnik GmbH**  
Erbeweg 13-15  
D-32457 PORTA WESTFALICA  
**Germany**

Equipment: **Metal cable glands for circular and flat cables**

Optional accessory: *Series CGU...; CGRC.....; CGFCS...; CGEMC...; CGLTCS...; CGLTC45...; CGLTC90...; CGRCS.....; CGU...(axb); CGRC.....(axb); CGFCS..(axb); CGEMC..(axb); CGLTCS...(axb); CGLTC45...(axb); CGLTC90..(axb); CGRCS.....(axb)*

Type of Protection: **Ex db; Ex eb; Ex tb**

Marking:

Ex db IIC Gb

Ex eb IIC Gb

Ex tb IIIC Db

Approved for issue on behalf of the IECEx  
Certification Body:

Mr. Mauro CASARI

Position:

IMQ ExCB Manager

Signature:  
(for printed version)

Date:

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 the [Official IECEx Website](http://www.iecex.com).

Certificate issued by:

**Istituto Italiano del Marchio di Qualità S.p.A**  
Via Quintiliano 43  
20138 Milano  
Italy





# IECEX Certificate of Conformity

Certificate No: IECEX IMQ 18.0005X Issue No: 0  
Date of Issue: 2018-08-28 Page 2 of 3  
Manufacturer: **Rose Systemtechnik GmbH**  
Erbeweg 13-15  
D-32457 PORTA WESTFALICA  
Germany

Additional Manufacturing location(s):

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 apparatus 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 : 2011** Explosive atmospheres - Part 0: General requirements  
Edition:6.0  
**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 : 2015** Explosive atmospheres – Part 7: Equipment protection by increased safety "e"  
Edition:5.0

*This Certificate **does not** indicate compliance with electrical 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 Report:

[IT/IMQ/ExTR18.0005/00](#)

Quality Assessment Report:

[DE/EPS/QAR17.0003/07](#)

[DE/EPS/QAR17.0003/08](#)



# IECEX Certificate of Conformity

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## Schedule

### EQUIPMENT:

*Equipment and systems covered by this certificate are as follows:*

The cable glands series CGU...; CGRC.....; CGFCS...; CGEMC...; CGLTCS...; CGLTC45...; CGLTC90...; CGRCS.....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.

The cable glands series CGU...(axb); CGRC.....(axb); CGFCS... (axb); CGEMC... (axb); CGLTCS...(axb); CGLTC45...(axb); CGLTC90.. (axb); CGRCS.....(axb) are suitable for inserting flat cables into Ex eb or Ex tb enclosures having either threaded or plane entries.

Cable glands are suitable for not-armoured cables, and are made of metal body (aluminium; stainless steel; brass; galvanized steel; nickel-plated brass). Sealing rings are made of silicon or neoprene (chloroprene) for all types, as detailed in Annex.

The degree of the IP protection is IP66/68

Cable glands are suitable for electrical equipment either with type of protection Ex db, Ex eb or type of protection Ex tb, suitability for each model is shown in following tables. Cable glands with type of protection "db" and "eb" can be also used for wiring of intrinsically safe circuits. These cable glands have a light blue painted part.

Cable glands for circular cables can be supplied with tap, commercial called "dome plug", polyamide made, as accessory (PDPX.-.-., available in black, green, blue color), suitable to guarantee IP degree when installed according to manufacturer's instructions. Details in Annex.

Cable glands are intended for use with any cable type where sealing and retention as well as the type of protection is ensured by gripping the outer sheath of cable according to IEC 60079-14.

Proper details to the use on installation and use of cable glands are listed in Safety, Maintenance and Mounting Instructions (RM01 rev.0 dated 2017.11.14).

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

- The cable glands are only suitable for fixed installations. Cables shall be effectively clamped to prevent pulling or twisting
- The coupling of the cable glands to the enclosure and torque values of cap clamping 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 gland installation shall be done according to safety manufacturer instructions to maintain degree of protection.  
The cable gland installation shall be done in such a way that the temperature at the mounting point will remain within the service temperature ranges declared in this certificate.
- When cable glands are installed with polyamide insert PDP.-.-21, mechanical risk have to be taken into account, depending on cable gland and insert tap. The upper operating temperature is limited to 70 °C. When insert tap is removed in order to install the proper cable, the integrity of sealing rings have to be checked, in order to guarantee the correct tightness. If necessary, sealing rings have to be replaced with new ones (original spare parts only). Precautions shall be taken in order to guarantee protection against risk of mechanical damage is provided, when insert taps are suitable for low mechanical risk (4J) only.
- Cable glands for non circular cables shall be fitted with proper cables, suitable for sealing ring, according to manufacturer's instruction.

### Annex:

[IECEX IMQ 18.0005X issue No. 0 Annex.pdf](#)

Annex to: IECEx IMQ 18.0005X issue No. 0  
Applicant: Rose Systemtechnik GmbH  
Apparatus: Metal cable glands for circular and flat cables series  
CGU...; CGRC.....; CGFCS...; CGEMC...; CGLTCS...;  
CGLTC45...; CGLTC90...; CGRCS.....;  
CGU...(axb); CGRC.....(axb); CGFCS.. (axb);  
CGEMC.. (axb); CGLTCS...(axb); CGLTC45...(axb);  
CGLTC90.. (axb); CGRCS.....(axb)



## General description

The cable glands series CGU...; CGRC.....; CGFCS...; CGEMC...; CGLTCS...; CGLTC45...; CGLTC90...; CGRCS.....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.

The cable glands series CGU...(axb); CGRC.....(axb); CGFCS.. (axb); CGEMC.. (axb); CGLTCS...(axb); CGLTC45...(axb); CGLTC90.. (axb); CGRCS.....(axb) are suitable for inserting flat cables into Ex eb or Ex tb enclosures having either threaded or plane entries.

Cable glands are suitable for not-armoured cables, and are made of metal body (aluminium; stainless steel; brass; galvanized steel; nickel-plated brass). Sealing rings are made of silicon or neoprene (chloroprene) for all types, as detailed in Table 2.

The degree of the IP protection is IP66/68

Cable glands are suitable for electrical equipment either with type of protection Ex db, Ex eb or type of protection Ex tb, suitability for each model is shown in following tables. Cable glands with type of protection “db” and “eb” can be also used for wiring of intrinsically safe circuits. These cable glands have a light blue painted part.

Cable glands for circular cables can be supplied with tap, commercial called “dome plug”, polyamide made, as accessory (PDPX.-.-, available in black, green, blue color), suitable to guarantee IP degree when installed according to manufacturer’s instructions. Details in Table 5.

Cable glands are intended for use with any cable type where sealing and retention as well as the type of protection is ensured by gripping the outer sheath of cable according to IEC 60079-14.

Proper details to the use on installation and use of cable glands are listed in Safety, Maintenance and Mounting Instructions (RM01 rev.0 dated 2017.11.14).

**Annex to:** IECEx IMQ 18.0005X issue No. 0  
**Applicant:** Rose Systemtechnik GmbH  
**Apparatus:** Metal cable glands for circular and flat cables series  
CGU...; CGRC.....; CGFCS...; CGEMC...; CGLTCS...;  
CGLTC45...; CGLTC90...; CGRCS.....;  
CGU...(axb); CGRC.....(axb); CGFCS..(axb);  
CGEMC..(axb); CGLTCS...(axb); CGLTC45...(axb);  
CGLTC90..(axb); CGRCS.....(axb)



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## Conditions of use

- The cable glands are only suitable for fixed installations. Cables shall be effectively clamped to prevent pulling or twisting
- The coupling of the cable glands to the enclosure and torque values of cap clamping 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 gland installation shall be done according to safety manufacturer instructions to maintain degree of protection.
- The cable gland installation shall be done in such a way that the temperature at the mounting point will remain within the service temperature ranges declared in this certificate.
- When cable glands are installed with polyamide insert PDP-.-21, mechanical risk have to be taken into account, depending on cable gland and insert tap. The upper operating temperature is limited to 70 °C. When insert tap is removed in order to install the proper cable, the integrity of sealing rings have to be checked, in order to guarantee the correct tightness. If necessary, sealing rings have to be replaced with new ones (original spare parts only). Precautions shall be taken in order to guarantee protection against risk of mechanical damage is provided, when insert taps are suitable for low mechanical risk (4J) only.
- Cable glands for non circular cables shall be fitted with proper cables, suitable for sealing ring, according to manufacturer's instruction.

**Annex to:** IECEx IMQ 18.0005X issue No. 0  
**Applicant:** Rose Systemtechnik GmbH  
**Apparatus:** Metal cable glands for circular and flat cables series  
CGU...; CGRC.....; CGFCS...; CGEMC...; CGLTCS...;  
CGLTC45...; CGLTC90...; CGRCS.....;  
CGU...(axb); CGRC.....(axb); CGFCS..(axb);  
CGEMC..(axb); CGLTCS...(axb); CGLTC45...(axb);  
CGLTC90..(axb); CGRCS.....(axb)



## Design options

Serie:	Ex eb – Ex tb execution	Ex db execution
CGU...	neoprene sealing ring: -40°C + +80°C silicon sealing ring: -60°C + +140°C	neoprene sealing ring: -40°C + +80°C silicon sealing ring: -60°C + +80°C
CGRC.....		
CGFCS..		
CGEMC...		
CGLTCS...		
CGLTC45...		
CGLTC90...		
CGRCS.....		
CGU...(axb)		
CGRC...(axb)		
CGFCS...(axb)	silicone sealing ring: -60°C + +140°C	Not available for flat cables.
CGEMC...(axb)		
CGLTCS...(axb)		
CGLTC45...(axb)		
CGLTC90...(axb)		
CGRCS...(axb)		

Series	Body materials	Sealing rings material	Flat washer materials	O-ring	Accessories
CGU...	stainless steel; brass ; aluminium; nickel plated brass; galvanized steel	chloroprene (neoprene) silicone	chloroprene (neoprene), silicone, EPDM rubber, fiber KLINGERSIL® C-4400, PA washer	neoprene silicone EPDM, Viton	serrated washer dome plug
CGRC.....	stainless steel; brass ; aluminium; nickel plated brass; galvanized steel	chloroprene (neoprene) silicone	chloroprene (neoprene), silicone, EPDM rubber, fiber KLINGERSIL® C-4400, PA washer	neoprene silicone EPDM, Viton	serrated washer dome plug
CGFCS...	stainless steel; brass ; aluminium; nickel plated brass; galvanized steel	chloroprene (neoprene) silicone	chloroprene (neoprene), silicone, EPDM rubber, fiber KLINGERSIL® C-4400, PA washer	neoprene silicone EPDM, Viton	serrated washer dome plug
CGEMC...	stainless steel; brass ; aluminium; nickel plated brass; galvanized steel	chloroprene (neoprene) silicone	chloroprene (neoprene), silicone, EPDM rubber, fiber KLINGERSIL® C-4400, PA washer	neoprene silicone EPDM, Viton	serrated washer dome plug
CGLTCS...	stainless steel; brass ; aluminium; nickel plated brass; galvanized steel	chloroprene (neoprene) silicone	chloroprene (neoprene), silicone, EPDM rubber, fiber KLINGERSIL® C-4400, PA washer	neoprene silicone EPDM, Viton	serrated washer dome plug
CGLTC45...	stainless steel; brass ; aluminium; nickel plated brass; galvanized steel	chloroprene (neoprene) silicone	chloroprene (neoprene), silicone, EPDM rubber, fiber KLINGERSIL® C-4400, PA washer	neoprene silicone EPDM, Viton	serrated washer dome plug
CGLTC90...	stainless steel; brass ; aluminium; nickel plated brass; galvanized steel	chloroprene (neoprene) silicone	chloroprene (neoprene), silicone, EPDM rubber, fiber KLINGERSIL® C-4400, PA washer	neoprene silicone EPDM, Viton	serrated washer dome plug
CGRCS.....	stainless steel; brass ; aluminium; nickel plated brass; galvanized steel	chloroprene (neoprene) silicone	chloroprene (neoprene), silicone, EPDM rubber, fiber KLINGERSIL® C-4400, PA washer	neoprene silicone EPDM, Viton	serrated washer dome plug
CGU...(axb)	stainless steel; brass ; aluminium; nickel plated brass; galvanized steel	silicone	chloroprene (neoprene), silicone, EPDM rubber, fiber KLINGERSIL® C-4400, PA washer	neoprene silicone EPDM, Viton	serrated washer
CGRC...(axb)	stainless steel; brass ; aluminium; nickel plated brass; galvanized steel	silicone	chloroprene (neoprene), silicone, EPDM rubber, fiber KLINGERSIL® C-4400, PA washer	neoprene silicone EPDM, Viton	serrated washer
CGFCS...(axb)	stainless steel; brass ; aluminium; nickel plated brass; galvanized steel	silicone	chloroprene (neoprene), silicone, EPDM rubber, fiber KLINGERSIL® C-4400, PA washer	neoprene silicone EPDM, Viton	serrated washer
CGEMC...(axb)	stainless steel; brass ; aluminium; nickel plated brass; galvanized steel	silicone	chloroprene (neoprene), silicone, EPDM rubber, fiber KLINGERSIL® C-4400, PA washer	neoprene silicone EPDM, Viton	serrated washer
CGLTCS...(axb)	stainless steel; brass ; aluminium; nickel plated brass; galvanized steel	silicone	chloroprene (neoprene), silicone, EPDM rubber, fiber KLINGERSIL® C-4400, PA washer	neoprene silicone EPDM, Viton	serrated washer
CGLTC45...(axb)	stainless steel; brass ; aluminium; nickel plated brass; galvanized steel	silicone	chloroprene (neoprene), silicone, EPDM rubber, fiber KLINGERSIL® C-4400, PA washer	neoprene silicone EPDM, Viton	serrated washer
CGLTC90...(axb)	stainless steel; brass ; aluminium; nickel plated brass; galvanized steel	silicone	chloroprene (neoprene), silicone, EPDM rubber, fiber KLINGERSIL® C-4400, PA washer	neoprene silicone EPDM, Viton	serrated washer
CGRCS...(axb)	stainless steel; brass ; aluminium; nickel plated brass; galvanized steel	silicone	chloroprene (neoprene), silicone, EPDM rubber, fiber KLINGERSIL® C-4400, PA washer	neoprene silicone EPDM, Viton	serrated washer

<sup>1</sup> Service temperature is related to material of sealing rings which cable glands body is made of, but can be additionally limited by material of flat washer/OR/accessories material temperature limitations: chloroprene (-40+100 °C); silicone (-60+180 °C); EPDM rubber (-40+110 °C); KLINGERSIL® C-4400 fiber (-50+130 °C); NBR (-40+100 °C), PA (-60+65 °C); Viton (-17+210 °C). The use of these materials has to be taken into account in determination of lower and upper limit of service temperature of cable glands.

Annex to: IECEx IMQ 18.0005X issue No. 0

Applicant: Rose Systemtechnik GmbH

Apparatus: Metal cable glands for circular and flat cables series  
CGU...; CGRC.....; CGFCS...; CGEMC...; CGLTCS...;  
CGLTC45...; CGLTC90...; CGRCS.....;



CGU...(axb); CGRC.....(axb); CGFCS..(axb);  
CGEMC..(axb); CGLTCS...(axb); CGLTC45...(axb);  
CGLTC90..(axb); CGRCS.....(axb)

Key code:

CGU	(1)	(2)	(3)	(4)	(5)	(6)	(1): size, according to related table
CGFCS	(1)	(2)	(3)	(4)	(5)	(6)	(2): thread type: "N" – NPT ANSI ASME B1.20.1 "M" – Metric ISO pitch 1,5 (ISO 965/1 and ISO 965/3) "P" – PG DIN 40430 (Ex e only) "C" – GAS UNI ISO 228/1 "S" – N.P.S.M. "G" – GAS UNI ISO 7/1 "K" – GAS Gk UNI 6125 (for Ex e only)
CGEMC	(1)	(2)	(3)	(4)	(5)	(6)	
CGLTCS	(1)	(2)	(3)	(4)	(5)	(6)	
CGLTC45	(1)	(2)	(3)	(4)	(5)	(6)	
CGLTC90	(1)	(2)	(3)	(4)	(5)	(6)	(3): body material: "B" – brass "X" – stainless steel "A" – aluminium "BN" - Nickel Plated Brass "Z" - Galvanized Steel  (4): Sealing material: "C" - Chloroprene "S" - Silicon  (5): Flat washer material: Blank -None "WC" – Chloroprene "WS" - Silicon "WF" - Fiber "WE" - EPDM "WP" - Polyamide  (6): Sealing hole type Blank – Circular sealing ring hole dimensions (axb) – Flat sealing ring hole dimensions

Annex to: IECEx IMQ 18.0005X issue No. 0

Applicant: Rose Systemtechnik GmbH

Apparatus: Metal cable glands for circular and flat cables series  
CGU...; CGRC.....; CGFCS...; CGEMC...; CGLTCS...;  
CGLTC45...; CGLTC90...; CGRCS.....;  
CGU...(axb); CGRC.....(axb); CGFCS..(axb);  
CGEMC..(axb); CGLTCS...(axb); CGLTC45...(axb);  
CGLTC90..(axb); CGRCS.....(axb)



CGRC (1) (2) (3) (4) (5) (6) (7) (8)	(1): male size, according to related table (2): male thread type: "N" – NPT ANSI ASME B1.20.1 "M" – Metric ISO pitch 1,5 (ISO 965/1 and ISO 965/3) (3): female size, according to related table (4): female thread type: "N" – NPT ANSI ASME B1.20.1 "M" – Metric ISO pitch 1,5 (ISO 965/1 and ISO 965/3)
CGRCS (1) (2) (3) (4) (5) (6) (7) (8)	(5): body material: "B" – brass "X" – stainless steel "A" – aluminium "BN" - Nickel Plated Brass "Z" - Galvanized Steel (6): Sealing material: "C" - Chloroprene "S" - Silicon (7): Flat washer material: Blank -None "WC" – Chloroprene "WS" - Silicon "WF" - Fiber "WE" - EPDM "WP" - Polyamide (8): Sealing hole type Blank – Circular sealing ring hole dimensios (axb) – Flat sealing ring hole dimensions



Annex to: IECEx IMQ 18.0005X issue No. 0

Applicant: Rose Systemtechnik GmbH

Apparatus: Metal cable glands for circular and flat cables series  
CGU...; CGRC.....; CGFCS...; CGEMC...; CGLTCS...;  
CGLTC45...; CGLTC90...; CGRCS.....;



CGU...(axb); CGRC.....(axb); CGFCS..(axb);  
CGEMC..(axb); CGLTCS...(axb); CGLTC45...(axb);  
CGLTC90..(axb); CGRCS.....(axb)

## Cable gland sizes:

Model	Min-max cable Ø mm	Torque value [Nm]			Suitable for	
		S1+S2+S3 triple sealing ring	S1+S2 double sealing ring	S1 single sealing ring	Ex db	Ex eb Ex tb
CGU 0XS..	2-4	-	-	4	no	yes
CGU 0S..	4-8	20	18	-	no	yes
CGU 0..	3-8	-	25	18	yes	yes
CGU01S..	3-9	-	25	18	yes	yes
CGU 01..	4-12	20	18	16	yes	yes
CGU 1S..	3-9	-	25	18	yes	yes
CGU 1..	4-12	20	18	16	yes	yes
CGU 12..	10-16	25	22	18	yes	yes
CGU 2S..	4-12	20	18	16	yes	yes
CGU 2..	10-18	25	22	18	yes	yes
CGU 23..	14-20	28	23	-	yes	yes
CGU 3S..	10-18	25	22	18	yes	yes
CGU 3..	14-24	28	23	20	yes	yes
CGU 34..	22-28	56	50	35	yes	yes
CGU 4S..	14-24	28	23	20	yes	yes
CGU 4..	22-32	56	50	45	yes	yes
CGU 45..	26-34	57	55	52	yes	yes
CGU 5S..	22-32	56	50	45	yes	yes
CGU 5..	26-35	57	55	52	yes	yes
CGU 56..	35-44	190	155	140	yes	yes
CGU 6S..	26-35	57	55	52	yes	yes
CGU 6..	35-45	190	155	140	yes	yes
CGU 67..	46-56	160	145	135	yes	yes
CGU 7S..	35-45	190	155	140	yes	yes
CGU 7..	46-62	185	175	150	yes	yes
CGU 78..	60-69	123	118	-	yes	yes
CGU 8S..	46-62	185	175	150	yes	yes
CGU 8..	60-75	123	118	110	yes	yes
CGU 810..	75-82	135	130	125	yes	yes
CGU 10S..	60-75	123	118	110	yes	yes
CGU 10..	75-85	135	130	125	yes	yes
CGU 11..	85-95	180	175	170	yes	yes
CGU 115XS..	75-85	135	130	125	yes	yes
CGU 115S..	85-95	180	175	170	yes	yes
CGU 115..	95-105	450	450	450	yes	yes
CGU 13..	105-115	526	500	535	yes	yes

\* metric threads cable glands sizes are shown; models with other threads, as detailed in Key Code, are available. Full list is shown in drawings listed to Certificate

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Apparatus: Metal cable glands for circular and flat cables series  
CGU...; CGRC.....; CGFCS...; CGEMC...; CGLTCS...;  
CGLTC45...; CGLTC90...; CGRCS.....;



CGU...(axb); CGRC.....(axb); CGFCS..(axb);  
CGEMC..(axb); CGLTCS...(axb); CGLTC45...(axb);  
CGLTC90..(axb); CGRCS.....(axb)

Table 3.2*: CGRC .....; CGRCS .....							
Model	Min-max cable Ø mm	Torque value [Nm]			Suitable for		
		S1+S2+S3 triple sealing ring	S1+S2 double sealing ring	S1 single sealing ring	Ex db	Ex eb Ex tb	
CGRC 0S.0S..	-	4-8	20	18	-	no	yes
CGRC 0S.01..	-	4-8	20	18	-	no	yes
CGRC 01.0S..	-	4-8	20	18	16	yes	yes
CGRC 01.12..	CGRCS 01.12..	4-12	20	18	16	yes	yes
CGRC 12.01..	CGRCS 12.01..	4-12	25	22	18	yes	yes
CGRC 1.1..	CGRCS 1.1..	4-12	20	18	16	yes	yes
CGRC 12.12..	CGRCS 12.12..	10-16	25	22	18	yes	yes
CGRC 12.23..	CGRCS 12.23..	10-16	25	22	18	yes	yes
CGRC 23.12..	CGRCS 23.12..	10-16	25	22	18	yes	yes
CGRC 2.2..	CGRCS 2.2..	10-18	25	22	18	yes	yes
CGRC 23.23..	CGRCS 23.23..	14-20	28	23	-	yes	yes
CGRC 23.34..	CGRCS 23.34..	14-20	28	23	-	yes	yes
CGRC 34.23..	CGRCS 34.23..	14-20	28	23	-	yes	yes
CGRC 3.3..	CGRCS 3.3..	14-24	28	23	20	yes	yes
CGRC 34.34..	CGRCS 34.34..	22-28	56	50	35	yes	yes
CGRC 34.45..	CGRCS 34.45..	22-28	56	50	35	yes	yes
CGRC 45.34..	CGRCS 45.34..	22-28	56	50	35	yes	yes
CGRC 4.4..	CGRCS 4.4..	22-32	56	50	45	yes	yes
CGRC 45.45..	CGRCS 45.45..	26-34	57	55	52	yes	yes
CGRC 45.56..	CGRCS 45.56..	26-34	57	55	52	yes	yes
CGRC 5.5..	CGRCS 5.5..	26-35	57	55	52	yes	yes
CGRC 5.45..	CGRCS 5.45..	26-34	57	55	52	yes	yes
CGRC 56.56..	CGRCS 56.56..	35-44	190	155	140	yes	yes
CGRC 56.67..	CGRCS 56.67..	35-44	190	155	140	yes	yes
CGRC 67.56..	CGRCS 67.56..	35-44	190	155	140	yes	yes
CGRC 6.6..	CGRCS 6.6..	35-45	190	155	140	yes	yes
CGRC 67.67..	CGRCS 67.67..	46-56	160	145	135	yes	yes
CGRC 67.78..	CGRCS 67.78..	46-56	160	145	135	yes	yes
CGRC 78.67..	CGRCS 78.67..	46-56	160	145	135	yes	yes
CGRC 7.7..	CGRCS 7.7..	46-62	185	175	150	yes	yes
CGRC 78.78..	CGRCS 78.78..	60-70	123	118	-	yes	yes
CGRC 78.810..	CGRCS 78.810..	60-70	123	118	-	yes	yes
CGRC 810.78..	CGRCS 810.78..	60-70	135	130	-	yes	yes
CGRC 8.8..	CGRCS 8.8..	60-75	123	118	110	yes	yes
CGRC 810.810..	CGRCS 810.810..	75-82	135	130	125	yes	yes
CGRC 810.10..	CGRCS 810.10..	75-82	135	130	125	yes	yes
CGRC 10.10..	CGRCS 10.10..	75-85	135	130	125	yes	yes
CGRC 10.810..	CGRCS 10.810..	75-82	135	130	125	yes	yes
CGRC 11.10..	CGRCS 11.10..	75-85	135	130	125	yes	yes
CGRC 11.11..	CGRCS 11.11..	85-95	180	175	170	yes	yes

\* metric threads cable glands sizes are shown; models with other threads, as detailed in Key Code, are available. Full list is shown in drawings listed to Certificate

Annex to: IECEx IMQ 18.0005X issue No. 0

Applicant: Rose Systemtechnik GmbH

Apparatus: Metal cable glands for circular and flat cables series  
CGU...; CGRC.....; CGFCS...; CGEMC...; CGLTCS...;  
CGLTC45...; CGLTC90...; CGRCS.....;  
CGU...(axb); CGRC.....(axb); CGFCS..(axb);  
CGEMC..(axb); CGLTCS...(axb); CGLTC45...(axb);  
CGLTC90..(axb); CGRCS.....(axb)



Table 3.3*: CGFCS ...						
Model	Min-max cable Ø mm	Torque value [Nm]			Suitable for	
		S1+S2+S3 triple sealing ring	S1+S2 double sealing ring	S1 single sealing ring	Ex db	Ex eb Ex tb
CGFCS 0S..	4-8	20	18	-	no	yes
CGFCS 01S..	3-9	-	25	18	yes	yes
CGFCS 01..	4-12	20	18	16	yes	yes
CGFCS 1S..	3-9	-	25	18	yes	yes
CGFCS 1..	4-12	20	18	16	yes	yes
CGFCS 12..	10-16	25	22	18	yes	yes
CGFCS 2..	10-18	25	22	18	yes	yes
CGFCS 23..	14-20	28	23	-	yes	yes
CGFCS 3..	14-24	28	23	20	yes	yes
CGFCS 34..	22-28	56	50	35	yes	yes
CGFCS 4..	22-32	56	50	45	yes	yes
CGFCS 45..	26-34	57	55	52	yes	yes
CGFCS 5..	26-35	57	55	52	yes	yes
CGFCS 56..	35-44	190	155	140	yes	yes
CGFCS 6..	35-45	190	155	140	yes	yes
CGFCS 7..	46-59	185	175	150	yes	yes

Table 3.4*: CGEMC ...						
Model	Min-max cable Ø mm	Torque value [Nm]			Suitable for	
		S1+S2+S3 triple sealing ring	S1+S2 double sealing ring	S1 single sealing ring	Ex db	Ex eb Ex tb
CGEMC 01S..	4-8	-	25	18	yes	yes
CGEMC 01..	4-8	-	25	18	yes	yes
CGEMC 1..	4-12	20	18	16	yes	yes
CGEMC 2..	10-18	25	22	18	yes	yes
CGEMC 3..	14-24	28	23	20	yes	yes
CGEMC 4..	22-32	56	50	45	yes	yes
CGEMC 5..	26-35	57	55	52	yes	yes
CGEMC 6..	35-45	190	155	140	yes	yes
CGEMC 7..	46-62	185	175	150	yes	yes
CGEMC 8..	60-75	123	118	110	yes	yes
CGEMC 10..	75-85	135	130	125	yes	yes
CGEMC 11..	85-95	180	175	170	yes	yes

Table 3.5*: CGLTC90 ...; CGLTCS ...; CGLTC45 ...								
Model			Min-max cable Ø mm	Torque value [Nm]			Suitable for	
				S1+S2+S3 triple sealing ring	S1+S2 double sealing ring	S1 single sealing ring	Ex db	Ex eb Ex tb
CGLTC90 02..	CGLTCS 02..	CGLTC45 02..	4-8	20	18	-	no	yes
CGLTC90 01..	CGLTCS 01..	CGLTC45 01..	4-12	20	18	16	yes	yes
CGLTC90 1S..	CGLTCS 1S..	CGLTC45 1S..	4-10	20	18	15	yes	yes
CGLTC90 1..	CGLTCS 1..	CGLTC45 1..	4-12	20	18	15	yes	yes
CGLTC90 2..	CGLTCS 2..	CGLTC45 2..	10-18	25	22	18	yes	yes
CGLTC90 3..	CGLTCS 3..	CGLTC45 3..	14-24	28	23	20	yes	yes
CGLTC90 4..	CGLTCS 4..	CGLTC45 4..	22-32	56	50	45	yes	yes
CGLTC90 5..	CGLTCS 5..	CGLTC45 5..	26-35	57	55	52	yes	yes

\* metric threads cable glands sizes are shown; models with other threads, as detailed in Key Code, are available. Full list is shown in drawings listed to Certificate

Annex to: IECEx IMQ 18.0005X issue No. 0

Applicant: Rose Systemtechnik GmbH

Apparatus: Metal cable glands for circular and flat cables series  
CGU...; CGRC.....; CGFCS...; CGEMC...; CGLTCS...;  
CGLTC45...; CGLTC90...; CGRCS.....;



CGU...(axb); CGRC.....(axb); CGFCS..(axb);  
CGEMC..(axb); CGLTCS...(axb); CGLTC45...(axb);  
CGLTC90..(axb); CGRCS.....(axb)

Table 4.1*: CGU ...(axb)				
Model	Sealing ring type (refer to table 6)	Torque value [Nm]	Suitable for	
			Ex db	Ex eb Ex tb
CGU 1S..(axb)	FxA1; FxB1; FxC1; FxD1; FxE1; FxG1	16	no	yes
CGU 1..(axb)		16	no	yes
CGU 12..(axb)		16	no	yes
CGU 2..(axb)	FxA2; FxB2; FxC2; FxD2; FxE2; FxF2; FxG2; FxH2	18	no	yes
CGU 23..(axb)		18	no	yes

Table 4.2*: CGRC ...(axb); CGRCS ...(axb)					
Model		Sealing ring type (refer to table 6)	Torque value [Nm]	Suitable for	
				Ex db	Ex eb Ex tb
CGRC 12.01..(axb)	CGRCS 12.01..(axb)	FxA1; FxB1; FxC1; FxD1; FxE1; FxG1	16	no	yes
CGRC 1.1..(axb)	CGRCS 1.1..(axb)		16	no	yes
CGRC 12.12..(axb)	CGRCS 12.12..(axb)		16	no	yes
CGRC 12.23..(axb)	CGRCS 12.23..(axb)		16	no	yes
CGRC 23.12..(axb)	CGRCS 23.12..(axb)	FxA2; FxB2; FxC2; FxD2; FxE2; FxF2; FxG2; FxH2	18	no	yes
CGRC 2.2..(axb)	CGRCS 2.2..(axb)		18	no	yes
CGRC 23.23..(axb)	CGRCS 23.23..(axb)		18	no	yes
CGRC 23.34..(axb)	CGRCS 23.34..(axb)		18	no	yes

Table 4.3*: CGFCS ...(axb)				
Model	Sealing ring type (refer to table 6)	Torque value [Nm]	Suitable for	
			Ex db	Ex eb Ex tb
CGFCS 1S..(axb)	FxA1; FxB1; FxC1; FxD1; FxE1; FxG1	16	no	yes
CGFCS 1..(axb)		16	no	yes
CGFCS 12..(axb)		16	no	yes
CGFCS 2..(axb)	FxA2; FxB2; FxC2; FxD2; FxE2; FxF2; FxG2; FxH2	18	no	yes
CGFCS 23..(axb)		18	no	yes

\* metric threads cable glands sizes are shown; models with other threads, as detailed in Key Code, are available. Full list is shown in drawings listed to Certificate

Table 4.4*: CGEMC ...(axb)				
Model	Sealing ring type (refer to table 6)	Torque value [Nm]	Suitable for	
			Ex db	Ex eb Ex tb
CGEMC 1..(axb)	FxA1; FxB1; FxC1; FxD1; FxE1; FxG1	16	no	yes
CGEMC 2..(axb)	FxA2; FxB2; FxC2; FxD2; FxE2; FxF2; FxG2; FxH2	18	no	yes

Table 4.5*: CGLTC90 ...(axb); CGLTCS ...(axb); CGLTC45 ...(axb)						
Model			Sealing ring type (refer to table 6)	Torque value [Nm]	Suitable for	
					Ex db	Ex eb Ex tb
CGLTC90 1S..(axb)	CGLTCS 1S..(axb)	CGLTC45 1S..(axb)	FxA1; FxB1; FxC1; FxD1; FxE1; FxG1	16	no	yes
CGLTC90 1..(axb)	CGLTCS 1..(axb)	CGLTC45 1..(axb)		16	no	yes
CGLTC90 2..(axb)	CGLTCS 2..(axb)	CGLTC45 2..(axb)	FxA2; FxB2; FxC2; FxD2; FxE2; FxF2; FxG2; FxH2	18	no	yes

\* metric threads cable glands sizes are shown; models with other threads, as detailed in Key Code, are available. Full list is shown in drawings listed to Certificate

Annex to: IECEx IMQ 18.0005X issue No. 0

Applicant: Rose Systemtechnik GmbH

Apparatus: Metal cable glands for circular and flat cables series  
CGU...; CGRC.....; CGFCS...; CGEMC...; CGLTCS...;  
CGLTC45...; CGLTC90...; CGRCS.....;



CGU...(axb); CGRC.....(axb); CGFCS..(axb);  
CGEMC..(axb); CGLTCS...(axb); CGLTC45...(axb);  
CGLTC90..(axb); CGRCS.....(axb)

From size ...	... to size	Material	Mechanical risk
M12/PG7/PF 1/4"/ NPT1/4"	M32/PG21/PF 1"/ NPT 1"	polyamide	High (7J)
M32/PG21/PF 1"/ NPT 1"	M63/PG48/PF 2"/ NPT 2"		High (7J) at T $\geq$ -40°C Low (4J) at T<-40°C

Sealing ring type	Sealing ring dimensions [mm x mm]	Cable min [mm x mm]	Cable max [mm x mm]	Sealing ring type	Sealing ring dimensions [mm x mm]	Cable min [mm x mm]	Cable max [mm x mm]
FxA1	5 x 12,2	5 x 10	5,75 x 12,2	FxA2	5 x 12,8	5 x 10,4	5,5 x 14
FxB1	6 x 8,5	5,75 x 8,5	6 x 10	FxB2	6 x 8,5	5,75 x 8,5	6 x 10
FxC1	5,5 x 11,7	5,3 x 11,3	5,5 x 11,7	FxC2	5,5 x 11,7	5,3 x 11,3	5,5 x 11,7
FxD1	6 x 12,2	5,3 x 11,3	6,5 x 14,5	FxD2	6 x 14	5,5 x 12	6,5 x 14,5
FxE1	6,3 x 10,8	5,3 x 11,3	6,3 x 10,8	FxE2	9,1 x 12,3	7 x 10	9,1 x 12,3
FxG1	6,7 x 12,7	6,5 x 10	6,8 x 12,7	FxF2	7,35 x 13,4	5,6 x 10	9 x 14
-	-	-	-	FxG2	6,8 x 15,3	6,5 x 14,8	6,8 x 15,3
-	-	-	-	FxH2	5,5 x 10,7	5,2 x 10	7 x 12