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

IA CERTIFICATE	MASC S/25-8100X	**Issue**	0		
Issue Date	27 March 2025	**Expiry Date**	27 March 2028		
**** Based on Certificate No**	IECEx IMQ 15.0001X	**Issue / Variations / Amendment**	4		
Requested by	**Pepperl+Fuchs (Pty) Ltd** 8 Glen Eagle Office Park, Koorsboom Ave, Glen Marais, Kempton Park, 1619 , South Africa				
Manufacturer	**Pepperl+Fuchs SE** Lilienthalstrasse 200, 68307 Mannheim, Germany				
Description	The polyamide cable glands series CG.P * * * . * * PA .*.* are used to introduce permanently circular cables into enclosure. Plugs series SP.PE.* *.PA.*.* are used to close unused cable entry of an enclosure. Cable glands and plugs are suitable for electrical equipment either with type of protection Ex-e or type of protection Ex-t. Cable glands should be also used for intrinsically safe circuits Ex-i. Cable glands CG.P * DS *. * * PA .*.* are provided with double (S1+S2) sealing rings. Cable glands can be supplied with tap, polyamide made, as accessory (BP.P*.**.PA.*), suitable to guarantee IP degree when installed according to manufacturer's instructions. See **Base certificate Annex for full details.				
Equipment	Polyamide cable glands for circular cables	**Type**	CG.P * * * . * * PA .*.*; Polyamide plugs, series SP.PE.* *.PA.*.*		
MARKING: **Original marking as per certificate ** remains applicable.** **IA number must be added.**	**Type:** **Ex Marking:** **IA Number:** **Warnings:**	Polyamide cable glands for circular cables, series CG.P * * * . * * PA .*.*; Polyamide plugs, series SP.PE.* *.PA.*.* Ex eb IIC Gb Ex tb III C Db IP66/68 MASC S/25-8100X (To be additionally marked on equipment) See Base Certificate ** (original marking must be applied)			
Quality Assurance report (QAR) / Notification (QAN):		DE/PTB/QAR06.0015/22			

Compliance:

The equipment as described above has been allocated the rating Explosion Protected 'as above' utilizing the SANS/IEC Standards:

- SANS (IEC) 60079-0: 2019 Equipment - General requirements
- SANS (IEC) 60079-7: 2019 Equipment protection by increased safety "e"
- SANS (IEC) 60079-31: 2014 Equipment dust ignition protection by enclosure "t"

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.

Specific conditions of use "X":

- Refer to Annex A below for more details.

Conditions of manufacture:

- Refer to Annex A below for more details.

S. JORDAAN
TECHNICAL SPECIALIST

N. VILOJEN
TECHNICAL OFFICER

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).

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).

Mining And Surface Certification (Pty) Ltd
Unit 5 Lelyta Park, 45 Jurg Avenue, Hennopspark, Ext 87
Centurion 0157

IA CERTIFICATE: MASC S/25-8100X
Equipment: Polyamide cable glands for circular cables
(Expiry date: 27 March 2028)

ANNEX A

This document is based on and must be read in conjunction with certificate IECEx IMQ 15.0001X.	
Description (According to Base Certificate) **	
"Refer to description in Base Certificate ** (and any applicable schedules/issues/variations)."	
Standard compliance	See Base Certificate ******
Specific conditions of 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. • For gas installations (only for cable glands with M50/PG42/PF 1 ½"/NPT 1 ½" threads and following) and dust installations: Warning. Potential electrostatic charging hazard - See instructions. Clean only with antistatic clothes. • When cable glands are installed with polyamide insert BP.P*.**.PA.*, mechanical risk has to be taken into account, depending on cable gland and insert tap. When insert tap is removed in order to install the proper cable, the integrity of sealing rings has 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)
Conditions of manufacture	• None.
Conditions of Certification	• This IA Certificate covers all units sold from the date of this document to the expiry date of this certificate. • As per ARP 0108: 2018 / NCoP 2398: 2022 (as applicable) a maximum three yearly review is required on this IA Certificate (expiry is determined as per the QAR/QAN/QMS expiry date). • The apparatus must be additionally marked with the MASC marking details above. • 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. • 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. • The certification on which this IA Certificate is based must remain valid. • The extent of the requirements in the ARP 0108:2018 / NCoP 2398: 2022 (as applicable), SANS 10108 and any other applicable regulations on the certification of the equipment must remain unchanged. • The Ex-quality assurance notification/report for the equipment must remain valid.
Conclusion:	• 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 **. • The routine tests for production units according to the Base Certificate ** must be complied with (if applicable).

Mining And Surface Certification (Pty) Ltd Reg No: 2015/021934/07
Directors: Roelof Viljoen & Francoius du Toit
Unit #5, Lelyta Park, 45 Jurg Avenue, Hennopspark Ext 87, Centurion, 0157
P.O. Box 14344, Clubview, 0014
Tel: 012 653 2959 ◊ Fax: 086 605 8568
e-mail: **info@masc-ex.co.za**

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

Certificate No.:	**IECEx IMQ 15.0001X**	Page 1 of 4	Certificate history:
Status:	**Current**	Issue No: 4	Issue 3 (2021-02-05) Issue 2 (2017-09-22) Issue 1 (2015-11-03) Issue 0 (2015-04-02)
Date of Issue:	2022-06-01		
Applicant:	**Pepperl+Fuchs SE** Lilienthalstrasse 200 68307 Mannheim **Germany**		
Equipment:	**Polyamide cable glands for circular cables, series CG.P * * * . * * PA .*.*; Polyamide plugs, series SP.PE.* *.PA.*.***		
Optional accessory:			
Type of Protection:	**Ex eb; Ex tb**		
Marking:	Ex eb IIC Gb Ex tb III C Db IP66/68		

Approved for issue on behalf of the IECEx Certification Body: **Mr. Mauro CASARI**

Position: **IMQ ExCB Manager**

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 or use of this QR Code.

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 15.0001X**

Date of issue: 2022-06-01

Issue No: 4

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

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

Pepperl+Fuchs SE
Bussmatten 10-12
77815 Buehl/Baden
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 60079-31:2013 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 Report:

IT/IMQ/ExTR15.0002/04

Quality Assessment Report:

DE/PTB/QAR06.0015/18

IECEx Certificate of Conformity

EQUIPMENT:
Equipment and systems covered by this Certificate are as follows:

The polyamide cable glands series CG.P * * * . * * PA .*.* are used to introduce permanently circular cables into enclosure.
Plugs series SP.PE.* *.PA.*.* are used to close unused cable entry of an enclosure.
Cable glands and plugs are suitable for electrical equipment either with type of protection Ex-e or type of protection Ex-t. Cable glands should be also used for intrinsically safe circuits Ex-i.
Cable glands CG.P * DS *. * * PA .*.* are provided with double (S1+S2) sealing rings.
Cable glands can be supplied with tap, polyamide made, as accessory (BP.P*.**.PA.*), suitable to guarantee IP degree when installed according to manufacturer's instructions.

Full details in Annex to Certificate.

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 cable gland installation shall be done according to safety manufacturer instructions to maintain degree of protection.
- For gas installations (only for cable glands with M50/PG42/PF 1 ½"/NPT 1 ½" threads and following) and dust installations: Warning. Potential electrostatic charging hazard - See instructions. Clean only with antistatic clothes.
- When cable glands are installed with polyamide insert BP.P*.**.PA.*, mechanical risk have to be taken into account, depending on cable gland and insert tap. 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)

IECEx Certificate of Conformity

DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

Issue 4
Standard update to IEC 60079-0:2017 and IEC 60079-7:2017 Ed. 5.1

Issue 3
New legal form

Issue 2
Standard update to IEC 60079-7:2015 Ed. 5
Change of key code
Introduction of new colour (green) for protection tap BP.P*.**.PA.*
Extension to -60°C for all cable glands sizes fitted with silicone sealing rings

Issue 1
Standard update to IEC 60079-31:2013 ed. 2
Introductions of alternative of blue cap. Change of related key code, according to Table 2. The blue cap versions of cable glands are used for Ex i circuits
Introductions of alternative models serie CG.P * 1 . * PA .*.* and CG.P * DS 1 . * * PA .* . * with bigger cap

Annex:

IECEx IMQ 15.0001X issue No. 4 Annex.pdf

General description

The polyamide cable glands series CG.P * * * . * * PA .*.* are used to introduce permanently circular cables into enclosure.

Plugs series SP.PE.* *.PA.*.* are used to close unused cable entry of an enclosure.

Cable glands and plugs are suitable for electrical equipment either with type of protection Ex e or type of protection Ex t. Cable glands should be also used for intrinsically safe circuits Ex i.

Cable glands CG.P * DS *. * * PA .*.* are provided with double (S1+S2) sealing rings.

Cable glands can be supplied with tap, polyamide made, as accessory (BP.P*.**.PA.*), suitable to guarantee IP degree when installed according to manufacturer's instructions.

Details on sealing rings material, flat washer (placed between the body and the cover of enclosures) materials and limitations are listed in Table 1.

Protection degree: IP66/68 (IPX8: 5 bar, 30 min)

Table 1: materials and service temperatures

Series	Service temperature [1]	Sealing rings material	Flat washer materials	OR materials	Mechanical risk
CG.P_,	-30 ÷ +70 °C	NBR	chloroprene (neoprene) silicone KLINGERSIL® C-4400 EPDM rubber NBR	chloroprene (neoprene) silicone EPDM rubber	High (7J)
	-40 ÷ +70 °C	chloroprene (neoprene)			
	-60 ÷ +70 °C	silicone			
CG.P_1,	-30 ÷ +70 °C	NBR	chloroprene (neoprene) silicone KLINGERSIL® C-4400 EPDM rubber NBR	chloroprene (neoprene) silicone EPDM rubber	High (7J)
	-40 ÷ +70 °C	chloroprene (neoprene)			
	-60 ÷ +70 °C	silicone			
CG.P_DS,	-30 ÷ +70 °C	NBR	chloroprene (neoprene) silicone KLINGERSIL® C-4400 EPDM rubber NBR	chloroprene (neoprene) silicone EPDM rubber	High (7J)
	-40 ÷ +70 °C	chloroprene (neoprene)			
	-60 ÷ +70 °C [2]	silicone			
CG.P_DS1,	-30 ÷ +70 °C	NBR	chloroprene (neoprene) silicone KLINGERSIL® C-4400 EPDM rubber NBR	chloroprene (neoprene) silicone EPDM rubber	High (7J)
	-40 ÷ +70 °C	chloroprene (neoprene)			
	-60 ÷ +70 °C	silicone			
SP.PE	-30 ÷ +70 °C	-	NBR	-	High (7J)
	-40 ÷ +70 °C		chloroprene (neoprene) EPDM rubber		
	-60 ÷ +70 °C		silicone		
	-60 ÷ +70 °C		KLINGERSIL® C-4400		

Notes
[1] Service temperature is related to material of sealing rings and polyamide which cable glands body is made of, but can be additionally limited by material of flat washer/OR material temperature limitations: chloroprene (-40÷100 °C); silicone (-60÷180 °C); EPDM rubber (-40÷110 °C); KLINGERSIL® C-4400 fiber (-50÷130 °C). The use of these materials in flat washer/OR has to be taken into account in determination of lower limit of service temperature of cable glands.
[2] When blue caps are used and/or BP.-. protection tap is used, the service temperature is -40÷70 °C. Low mechanical risk (4J).

Conditions of use

- 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.
- For gas installations (only for cable glands with M50/PG42/PF 1 ½"/NPT 1 ½" threads and following) and dust installations: Warning. Potential electrostatic charging hazard - See instructions. Clean only with antistatic clothes.
- When cable glands are installed with polyamide insert BP.P*.**.PA.*, mechanical risk have to be taken into account, depending on cable gland and insert tap. 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).

Design options

Model and torque table for CG.P * * . * * PA .*.*				
Model		**Min-max cable [mm]**	**Torque value [Nm]**	**Mechanical risk**
CG.P*.M12.PA.*.10	CG.P*1.M12.PA.*.10	4-6.5	2	
CG.P*.M12.PA.*.15	CG.P*1.M12.PA.*.15	4-6.5	2	
CG.P*.M16S.PA.*.10	CG.P*1.M16S.PA.*.10	5-8	4	
CG.P*.M16S.PA.*.15	CG.P*1.M16S.PA.*.15	5-8	4	
CG.P*.M16.PA.*.10	CG.P*1.M16.PA.*.10	6-10	4	
CG.P*.M16.PA.*.15	CG.P*1.M16.PA.*.15	6-10	4	
CG.P*.M20S.PA.*.10	CG.P*1.M20S.PA.*.10	6-10	2.5	
CG.P*.M20.PA.*.10	CG.P*1.M20.PA.*.10	7-12	5	
CG.P*.M20.PA.*.15	CG.P*1.M20.PA.*.15	7-12	5	
CG.P*.M20L.PA.*.10	CG.P*1.M20L.PA.*.10	7-13	4.5	
CG.P*.M20XL.PA.*.10	CG.P*1.M20XL.PA.*.10	11-14	5.5	
CG.P*.M20XL.PA.*.15	CG.P*1.M20XL.PA.*.15	11-14	5.5	
CG.P*.M25S.PA.*.10	CG.P*1.M25S.PA.*.10	11-14	5.5	
CG.P*.M25S.PA.*.15	CG.P*1.M25S.PA.*.15	11-14	5.5	High (7J)
CG.P*.M25.PA.*.10	CG.P*1.M25.PA.*.10	12-17	5	
CG.P*.M25.PA.*.15	CG.P*1.M25.PA.*.15	12-17	5	
CG.P*.M25L.PA.*.10	CG.P*1.M25L.PA.*.10	14-18	8	
CG.P*.M25L.PA.*.15	CG.P*1.M25L.PA.*.15	14-18	8	
CG.P*.M32S.PA.*.10	CG.P*1.M32S.PA.*.10	14-18	8	
CG.P*.M32.PA.*.10	CG.P*1.M32.PA.*.10	16-21	6	
CG.P*.M32.PA.*.15	CG.P*1.M32.PA.*.15	16-21	6	
CG.P*.M32L.PA.*.15	CG.P*1.M32L.PA.*.15	19-25	9	
CG.P*.M40.PA.*.10	CG.P*1.M40.PA.*.10	20-28	5	
CG.P*.M40.PA.*.15	CG.P*1.M40.PA.*.15	20-28	5	
CG.P*.M40L.PA.*.18	CG.P*1.M40L.PA.*.18	23-32	17.5	
CG.P*.M50.PA.*.18	CG.P*1.M50.PA.*.18	31-38	22	
CG.P*.M63.PA.*.18	CG.P*1.M63.PA.*.18	35-44	24	
CG.P*.NPT3/8.PA.*.10	CG.P*1.NPT3/8.PA.*.10	6-10	4	
CG.P*.NPT1/2S.PA.*.10	CG.P*1.NPT1/2S.PA.*.10	6-10	2.5	
CG.P*.NPT1/2.PA.*.10	CG.P*1.NPT1/2.PA.*.10	7-12	5	
CG.P*.NPT1/2XL.PA.*.10	CG.P*1.NPT1/2XL.PA.*.10	11-14	5.5	
CG.P*.NPT3/4L.PA.*.10	CG.P*1.NPT3/4L.PA.*.10	14-18	8	High (7J)
CG.P*.NPT1L.PA.*.15	CG.P*1.NPT1L.PA.*.15	19-25	9	
CG.P*.NPT1-1/4L.PA.*.18	CG.P*1.NPT1-1/4L.PA.*.18	23-32	17.5	
CG.P*.NPT1-1/2.PA.*.18	CG.P*1.NPT1-1/2.PA.*.18	31-38	22	
CG.P*.NPT2.PA.*.18	CG.P*1.NPT2.PA.*.18	35-44	24	

CG.P*.PG7.PA.*.10	CG.P*1.PG7.PA.*.10	4-6.5	2	High (7J)
CG.P*.PG9S.PA.*.10	CG.P*1.PG9S.PA.*.10	5-8	4	
CG.P*.PG11.PA.*.10	CG.P*1.PG11.PA.*.10	6-10	4	
CG.P*.PG13-1/2.PA.*.10	CG.P*1.PG13-1/2.PA.*.10	7-12	5	
CG.P*.PG16XL.PA.*.10	CG.P*1.PG16XL.PA.*.10	11-14	5.5	
CG.P*.PG21L.PA.*.10	CG.P*1.PG21L.PA.*.10	14-18	8	
CG.P*.PG29L.PA.*.15	CG.P*1.PG29L.PA.*.15	19-25	9	
CG.P*.PG36L.PA.*.18	CG.P*1.PG36L.PA.*.18	23-32	17.5	
CG.P*.PG42.PA.*.18	CG.P*1.PG42.PA.*.18	31-38	22	
CG.P*.PG48.PA.*.18	CG.P*1.PG48.PA.*.18	35-44	24	
CG.P*.PF3/8.PA.*.10	CG.P*1.PF3/8.PA.*.10	6-10	4	High (7J)
CG.P*.PF1/2S.PA.*.10	CG.P*1.PF1/2S.PA.*.10	6-10	2.5	
CG.P*.PF1/2.PA.*.10	CG.P*1.PF1/2.PA.*.10	7-12	5	
CG.P*.PF1/2XL.PA.*.10	CG.P*1.PF1/2XL.PA.*.10	11-14	5.5	
CG.P*.PF3/4L.PA.*.10	CG.P*1.PF3/4L.PA.*.10	14-18	8	
CG.P*.PF1L.PA.*.15	CG.P*1.PF1L.PA.*.15	19-25	9	

Model and torque table for CG.P * DS * . * * PA .*.*						
Model		Min-max cable [mm]		Torque value [Nm]		Mechanical risk
		S1+S2	S1	S1+S2	S1	
CG.P*DS.M12.PA.*.10	CG.P*DS1.M12.PA.*.10	3-4	4-6.5	1	2	High (7J)
CG.P*DS.M12.PA.*.15	CG.P*DS1.M12.PA.*.15	3-4	4-6.5	1	2	
CG.P*DS.M16S.PA.*.10	CG.P*DS1.M16S.PA.*.10	4-5	5-8	3.5	4	High (7J)
CG.P*DS.M16S.PA.*.15	CG.P*DS1.M16S.PA.*.15	4-5	5-8	3.5	4	
CG.P*DS.M16.PA.*.10	CG.P*DS1.M16.PA.*.10	4-7	6-10	3.5	4	
CG.P*DS.M16.PA.*.15	CG.P*DS1.M16.PA.*.15	4-7	6-10	3.5	4	
CG.P*DS.M20S.PA.*.10	CG.P*DS1.M20S.PA.*.10	4-7	6-10	3.2	2.5	
CG.P*DS.M20.PA.*.10	CG.P*DS1.M20.PA.*.10	6-8.5	7-12	5	5	
CG.P*DS.M20.PA.*.15	CG.P*DS1.M20.PA.*.15	6-8.5	7-12	5	5	
CG.P*DS.M20L.PA.*.10	CG.P*DS1.M20L.PA.*.10	4-7	7-13	3.5	4.5	
CG.P*DS.M20XL.PA.*.10	CG.P*DS1.M20XL.PA.*.10	8-12	11-14	5.5	5.5	
CG.P*DS.M20XL.PA.*.15	CG.P*DS1.M20XL.PA.*.15	8-12	11-14	5.5	5.5	
CG.P*DS.M25S.PA.*.10	CG.P*DS1.M25S.PA.*.10	8-12	11-14	5.5	5.5	
CG.P*DS.M25S.PA.*.15	CG.P*DS1.M25S.PA.*.15	8-12	11-14	5.5	5.5	
CG.P*DS.M25.PA.*.10	CG.P*DS1.M25.PA.*.10	9-13	12-17	5	5	
CG.P*DS.M25.PA.*.15	CG.P*DS1.M25.PA.*.15	9-13	12-17	5	5	
CG.P*DS.M25L.PA.*.10	CG.P*DS1.M25L.PA.*.10	10-14	14-18	5.5	8	
CG.P*DS.M25L.PA.*.15	CG.P*DS1.M25L.PA.*.15	10-14	14-18	5.5	8	
CG.P*DS.M32S.PA.*.10	CG.P*DS1.M32S.PA.*.10	10-14	14-18	5.5	8	High (7J)
CG.P*DS.M32.PA.*.10	CG.P*DS1.M32.PA.*.10	12-16	16-21	4.5	6	
CG.P*DS.M32.PA.*.15	CG.P*DS1.M32.PA.*.15	12-16	16-21	4.5	6	
CG.P*DS.M32L.PA.*.15	CG.P*DS1.M32L.PA.*.15	14-20	19-25	8	9	
CG.P*DS.M40.PA.*.10	CG.P*DS1.M40.PA.*.10	17-21	20-28	5	5	
CG.P*DS.M40.PA.*.15	CG.P*DS1.M40.PA.*.15	17-21	20-28	5	5	
CG.P*DS.M40L.PA.*.18	CG.P*DS1.M40L.PA.*.18	21-26	23-32	15	17.5	
CG.P*DS.M50.PA.*.18	CG.P*DS1.M50.PA.*.18	22-31	31-38	18	22	
CG.P*DS.M63.PA.*.18	CG.P*DS1.M63.PA.*.18	28-35	35-44	22	24	
CG.P*DS.NPT3/8.PA.*.10	CG.P*DS1.NPT3/8.PA.*.10	4-7	6-10	3.5	4	High (7J)
CG.P*DS.NPT1/2S.PA.*.10	CG.P*DS1.NPT1/2S.PA.*.10	4-7	6-10	3.2	2.5	
CG.P*DS.NPT1/2.PA.*.10	CG.P*DS1.NPT1/2.PA.*.10	6-8.5	7-12	5	5	
CG.P*DS.NPT1/2XL.PA.*.10	CG.P*DS1.NPT1/2XL.PA.*.10	8-12	11-14	5.5	5.5	
CG.P*DS.NPT3/4L.PA.*.10	CG.P*DS1.NPT3/4L.PA.*.10	10-14	14-18	5.5	8	
CG.P*DS.NPT1L.PA.*.15	CG.P*DS1.NPT1L.PA.*.15	14-20	19-25	8	9	High (7J)
CG.P*DS.NPT1-1/4L.PA.*.18	CG.P*DS1.NPT1-1/4L.PA.*.18	21-26	23-32	15	17.5	
CG.P*DS.NPT1-1/2L.PA.*.18	CG.P*DS1.NPT1-1/2L.PA.*.18	22-31	31-38	18	22	
CG.P*DS.NPT2.PA.*.18	CG.P*DS1.NPT2.PA.*.18	28-35	35-44	22	24	
CG.P*DS.PG7.PA.*.10	CG.P*DS1.PG7.PA.*.10	3-4	4-6.5	1	2	High (7J)
CG.P*DS.PG9S.PA.*.10	CG.P*DS1.PG9S.PA.*.10	4-5	5-8	3.5	4	High (7J)

CG.P*DS.PG11.PA.*.10	CG.P*DS1.PG11.PA.*.10	4-7	6-10	3.5	4	
CG.P*DS.PG13-1/2.PA.*.10	CG.P*DS1.PG13-1/2.PA.*.10	6-8.5	7-12	5	5	
CG.P*DS.PG16XL.PA.*.10	CG.P*DS1.PG16XL.PA.*.10	8-12	11-14	5.5	5.5	
CG.P*DS.PG21L.PA.*.10	CG.P*DS1.PG21L.PA.*.10	10-14	14-18	5.5	8	
CG.P*DS.PG29L.PA.*.15	CG.P*DS1.PG29L.PA.*.15	14-20	19-25	8	9	
CG.P*DS.PG36L.PA.*.18	CG.P*DS1.PG36L.PA.*.18	21-26	23-32	15	17.5	High (7J)
CG.P*DS.PG42.PA.*.18	CG.P*DS1.PG42.PA.*.18	22-31	31-38	18	22	
CG.P*DS.PG48.PA.*.18	CG.P*DS1.PG48.PA.*.18	28-35	35-44	22	24	
CG.P*DS.PF3/8.PA.*.10	CG.P*DS1.PF3/8.PA.*.10	4-7	6-10	3.5	4	
CG.P*DS.PF1/2S.PA.*.10	CG.P*DS1.PF1/2S.PA.*.10	4-7	6-10	3.2	2.5	
CG.P*DS.PF1/2.PA.*.10	CG.P*DS1.PF1/2.PA.*.10	6-8.5	7-12	5	5	High (7J)
CG.P*DS.PF1/2XL.PA.*.10	CG.P*DS1.PF1/2XL.PA.*.10	8-12	11-14	5.5	5.5	
CG.P*DS.PF3/4L.PA.*.10	CG.P*DS1.PF3/4L.PA.*.10	10-14	14-18	5.5	8	
CG.P*DS.PF1L.PA.*.15	CG.P*DS1.PF1L.PA.*.15	14-20	19-25	8	9	High (7J)

Model and torque table for SP.PE

Model						Torque value [Nm]
SP.PE.M12.PA.C.10	M12	SP.PE.NPT1/4.PA.C.10	NPT 1/4"	SP.PE.PF1/4.PA.C.10	PF 1/4"	1.5±0.2
SP.PE.M16.PA.C.11	M16	-	-	SP.PE.PF3/8.PA.C.11	PF 3/8"	1.5±0.5
SP.PE.M16.PA.C.12	M16	-	-	SP.PE.PF3/8.PA.C.12	PF 3/8"	1.5±0.5
SP.PE.M16.PA.C.15	M16	SP.PE.NPT3/8.PA.C.15	NPT 3/8"	SP.PE.PF3/8.PA.C.15	PF 3/8"	1.5±0.5
SP.PE.M20.PA.C.11	M20	-	-	SP.PE.PF1/2.PA.C.11	PF 1/2"	2.0±0.5
SP.PE.M20.PA.C.12	M20	-	-	SP.PE.PF1/2.PA.C.12	PF 1/2"	2.0±0.5
SP.PE.M20.PA.C.15	M20	SP.PE.NPT1/2.PA.C.15	NPT 1/2"	SP.PE.PF1/2.PA.C.15	PF 1/2"	2.0±0.5
SP.PE.M25.PA.C.10	M25	-	-	SP.PE.PF3/4.PA.C.10	PF 3/4"	2.5±0.5
SP.PE.M25.PA.C.15	M25	SP.PE.NPT3/4.PA.C.15	NPT 3/4"	SP.PE.PF3/4.PA.C.15	PF 3/4"	2.5±0.5
SP.PE.M32.PA.C.15	M32	SP.PE.NPT1.PA.C.15	NPT 1"	SP.PE.PF1.PA.C.15	PF 1"	4.0±1.0
SP.PE.M40.PA.C.18	M40	SP.PE.NPT1-1/4.PA.C.18	NPT 1 1/4"	SP.PE.PF1-1/4.PA.C.18	PF 1 1/4"	6.0±1.0
SP.PE.M50.PA.C.18	M50	SP.PE.NPT1-1/2.PA.C.18	NPT 1 1/2"	SP.PE.PF1-1/2.PA.C.18	PF 1 1/2"	8.0±1.5
SP.PE.M63.PA.C.18	M63	SP.PE.NPT2.PA.C.18	NPT 2"	SP.PE.PF2.PA.C.18	PF 2"	10.0±1.5
-		-	-			-
-		-	-			-

Model		Torque value [Nm]	Mechanical risk
SP.PE.PG7.PA.C.10	PG7	1.5±0.2	High (7J)
SP.PE.PG9.PA.C.11	PG9	1.5±0.5	
SP.PE.PG9.PA.C.12	PG9	1.5±0.5	
SP.PE.PG9.PA.C.15	PG9	1.5±0.5	
SP.PE.PG11.PA.C.11	PG11	1.5±0.5	
SP.PE.PG13.5.PA.C.11	PG13.5	2.0±0.5	
SP.PE.PG13.5.PA.C.12	PG13.5	2.0±0.5	
SP.PE.PG13.5.PA.C.15	PG13.5	2.0±0.5	
SP.PE.PG16.PA.C.11	PG16	2.0±0.5	
SP.PE.PG21.PA.C.10	PG21	2.5±0.5	
SP.PE.PG21.PA.C.15	PG21	2.5±0.5	
SP.PE.PG29.PA.C.15	PG29	4.0±1.0	
SP.PE.PG36.PA.C.18	PG36	6.0±1.0	
SP.PE.PG42.PA.C.18	PG42	8.0±1.5	
SP.PE.PG48.PA.C.18	PG48	10.0±1.5	

Model and torque table for BP..

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

Key code:

Identification of Polyamide Cable Glands												
CG.P	1	2	3	4	5	PA	6	7	1	The color of the cap	E	Black cap
											I	Blue cap
									2	Type of Seal of the gland	None	Single seal
											DS	Double seal
									3	Type of the cap	None	Normal cap
											1	Big cap
									4	Thread type	NPT	NPT ANSI ASME B1.20.1
											M	Metric UNI ISO 261
											PG	PG DIN 40430 (Ex-e only)
											PF	GAS UNI ISO 228-1
									5	Size and dimension		according to related tables
									6	Sealing material	C	Chloroprene
											S	Silicone
											N	NBR
									7	Thread Length		min. thread length (mm)

Identification of Polyamide Blindplugs								
SP.PE	1	2	PA	3	4	1	Thread type	NPT : NPT ANSI ASME B1.20.1
								M : Metric UNI ISO 261
								PG : PG DIN 40430 (Ex-e only)
								PF : GAS UNI ISO 228-1
						2	Size and dimension	according to related tables
						3	Sealing material	C : Chloroprene
								S : Silicone
								N : NBR
						4	Thread Length	min. thread length (mm)

Identification of Protection tap								
BP.P	1	2	3	PA	4	1	Type of tap	None : Single seal
								DS : Double seal
						2	Thread type of cable gland which the tap is mounted on	M : Metric UNI ISO 261
						3	Size and dimentsion	according to related tables
						4	Color	BK : Black
								GN : Green