



[1] EU-TYPE EXAMINATION CERTIFICATE

[2] Equipment or Protective System intended for use in potentially explosive atmospheres - Directive 2014/34/EU – Annex III – MODULE B: EU-TYPE EXAMINATION

[3] EU-type Examination Certificate number: **IMQ 14 ATEX 012X**

[4] PRODUCT: **Metal cable glands for circular and flat cables**
TYPE/SERIES: **CG.NA****; CG.EM****; CG.CO****;
CG.NA****(axb); CG.EM****(axb); CG.CO****(axb)**

[5] MANUFACTURER: **Pepperl + Fuchs SE**

[6] ADDRESS: **Lilienthalstrasse 200 - 68307 Mannheim - Germany**

[7] This equipment and any acceptable variation thereto are specified in the annex to this certificate and the documents therein referred to.

[8] IMQ, notified body N° 0051, in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in Report No.: **AT21-0069024-01_B**

[9] Compliance with Essential Health and Safety Requirements, except in respect of those listed at item 18 of the annex, has been assured by compliance with:

EN IEC 60079-0:2018; EN 60079-1:2014; EN IEC 60079-7:2015+A1:2018; EN 60079-31:2014

[10] If the sign "X" is placed after the certificate number, it indicates that the equipment or protective system is subject to special conditions for safe use specified in the schedule to this certificate

[11] This EU-TYPE EXAMINATION CERTIFICATE relates only to the design and construction of the specified product. Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.

[12] The marking of the equipment or protective system shall include the following:

 **II 2GD** **Ex db IIC Gb**
Ex eb IIC Gb
Ex tb IIIC Db

THIS CERTIFICATE CANCELS AND REPLACES THE PREVIOUS ONE. IT INCLUDES 1 ANNEX.

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CURRENT ISSUE 2022/05/18
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EXPIRING DATE 2032/05/12

B.U. PRODUCT CONFORMITY ASSESSMENT
CERTIFICATION SECTOR - MANAGER

This Certificate may only be reproduced in its entirety and without any change. It is subject to the general rules for assessing conformity to community directives for which IMQ operates as notified body n° 0051 and to the special requirements for Directive 2014/34/EU (ATEX) "Equipment and protective systems for potentially explosive atmospheres" annex III - MODULE B - EU Type-examination.



PRD N° 005 B

Membro degli Accordi di Mutuo Riconoscimento EA, IAF e ILAC Signatory of EA, IAF and ILAC Mutual Recognition Agreements

[13] **Annex**

[14] EU-type Examination Certificate number: **IMQ 14 ATEX 012X**

[15] **Description of product:**

These cable glands are suitable for inserting cables into Ex eb or Ex db enclosures by means of threaded entries (Ex db or Ex eb) or through holes with counter locknut (suitable only for Ex eb) that the same enclosures are fitted with. The degree of the IP protection is IP66/68.

Moreover, cable glands category II 2GD, have one protection against the combustible dust risk. The cable glands can be used with intrinsically safe circuits.

The clamping cables must be realised on external of enclosure by appropriate clamps to guarantee the mechanical characteristics. Armour/screen/braid is clamped inside the terminating equipment according to the safety instructions.

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

To guarantee the IP 66/68 degree of protection the cable glands types CG.NA & CG.EM & CG.CO 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.

Materials ¹					
Series	Body materials	Sealing rings material	Flat washer materials	O-ring	Accessories
CG.NA	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 rubber , Viton	serrated washer dome plug
CG.CO	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 rubber , Viton	serrated washer dome plug
CG.EM	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 rubber , Viton	serrated washer dome plug
CG.NA (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 rubber , Viton	serrated washer
CG.CO (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 rubber , Viton	serrated washer
CG.EM (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 rubber , Viton	serrated washer

¹ Service temperature is related to material of sealing rings which cable glands body is made of, but can be additionally limited by material of at 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°C÷230°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.

[13] **Annex**

[14] EU-type Examination Certificate number: **IMQ 14 ATEX 012X**

[15.1] **Models/Series Identification:**

Type	TD ISO 965-3	D Clamping Range Ø min-max	S1+S2+S3	S1+S2	S1	Torque S1+S2+S3 [Nm]	Torque S1+S2 [Nm]	Torque S1 [Nm]
CG.NA.M8	M8x1.25	2,0-4,0	-	-	2-4	-	-	4
CG.NA.M12	M12x1.5	4,0-8,0	4-6	6-8	-	20	18	-
CG.NA.M12L	M12x1.5	3,0-8,0	-	3-6	6-8	-	25	18
CG.NA.M16S	M16x1.5	3,0-9,0	-	3-6	6-9	-	25	18
CG.NA.M16	M16x1.5	4,0-12,0	4-6	6-9	9-12	20	18	16
CG.NA.M20XS	M20x1.5	3,0-9,0	-	3-6	6-9	-	25	18
CG.NA.M20S	M20x1.5	4,0-12,0	4-6	6-9	9-12	20	18	16
CG.NA.M20	M20x1.5	10,0-16,0	10-12	12-14,5	14,5-16	25	22	18
CG.NA.M25XS	M25x1.5	4,0-12,0	4-6	6-9	9-12	20	18	16
CG.NA.M25S	M25x1.5	10,0-18,0	10-12	12-14,5	14,5-18	25	22	18
CG.NA.M25	M25x1.5	14,0-20,0	14-17	17-20	-	28	23	-
CG.NA.M32XS	M32x1.5	10,0-18,0	10-12	12-14,5	14,5-18	25	22	18
CG.NA.M32S	M32x1.5	14,0-24,0	14-17	17-20	20-24	28	23	20
CG.NA.M32	M32x1.5	22,0-28,0	22-24	24-27	27-28	56	50	35
CG.NA.M40XS	M40x1.5	14,0-24,0	14-17	17-20	20-24	28	23	20
CG.NA.M40S	M40x1.5	22,0-32,0	22-24	24-27	27-32	56	50	45
CG.NA.M40	M40x1.5	26,0-34,0	26-28	28-31	31-34	57	55	52
CG.NA.M50XS	M50x1.5	22,0-32,0	22-24	24-27	27-32	56	50	45
CG.NA.M50S	M50x1.5	26,0-35,0	26-28	28-31	31-35	57	55	52
CG.NA.M50	M50x1.5	35,0-44,0	35-38	38-41	41-44	190	155	140
CG.NA.M63XS	M63x1.5	26,0-35,0	26-28	28-31	31-35	57	55	52
CG.NA.2M63S	M63x2.0	26,0-35,0	26-28	28-31	31-35	57	55	52
CG.NA.M63S	M63x1.5	35,0-45,0	35-38	38-41	41-45	190	155	140
CG.NA.2M63	M63x2.0	35,0-45,0	35-38	38-41	41-45	190	155	140
CG.NA.M63A	M63x1.5	42,0-56,0	42-48	48-52	52-56	130	145	135
CG.NA.2M63L	M63x2.0	42,0-56,0	42-48	48-52	52-56	130	145	135
CG.NA.M63	M63x1.5	46,0-56,0	46-48	48-52	52-56	160	145	135
CG.NA.2M63XL	M63x2.0	46,0-56,0	46-48	48-52	52-45	160	145	135
CG.NA.M75XS	M75x1.5	35,0-45,0	35-38	38-41	41-45	190	155	140
CG.NA.2M75S	M75x2.0	35,0-45,0	35-38	38-41	41-45	190	155	140
CG.NA.M75S	M75x1.5	46,0-62,0	46-51	51-56	56-62	185	175	150
CG.NA.2M75	M75x2.0	46,0-62,0	46-51	51-56	56-62	185	175	150
CG.NA.M75	M75x1.5	60,0-69,0	60-65	65-69	-	123	118	-
CG.NA.2M75L	M75x2.0	60,0-69,0	60-65	65-69	-	123	118	-
CG.NA.M80	M80x1.5	60,0-71,0	60-65	65-70	70-71	123	118	110
CG.NA.2M80	M80x2.0	60,0-71,0	60-65	65-70	70-71	123	118	110
CG.NA.M90XS	M90x1.5	46,0-62,0	46-51	51-56	56-62	185	175	150
CG.NA.2M90S	M90x2.0	46,0-62,0	46-51	51-56	56-62	185	175	150
CG.NA.M90S	M90x1.5	60,0-75,0	60-65	65-70	70-75	123	118	110
CG.NA.2M90	M90x2.0	60,0-75,0	60-65	65-70	70-75	123	118	110
CG.NA.M90	M90x1.5	75,0-82,0	75-78	78-81	81-82	135	130	125
CG.NA.2M90L	M90x2.0	75,0-82,0	75-78	78-81	81-82	135	130	125
CG.NA.M100XS	M100x1.5	60,0-75,0	60-65	65-70	70-75	123	118	110
CG.NA.2M100S	M100x2.0	60,0-75,0	60-65	65-70	70-75	123	118	110
CG.NA.M100S	M100x1.5	75,0-85,0	75-78	78-81	81-85	135	130	125
CG.NA.2M100	M100x2.0	75,0-85,0	75-78	78-81	81-85	135	130	125
CG.NA.M110	M110x1.5	85,0-95,0	85-88	88-91	91-95	180	175	170
CG.NA.2M110	M110x2.0	85,0-95,0	85-88	88-91	91-95	180	175	170
CG.NA.M115S	M115x2.0	75,0-85,0	75-78	78-81	81-85	135	130	125
CG.NA.M115	M115x2.0	85,0-95,0	85-88	88-91	91-95	180	175	170
CG.NA.M115L	M115x2.0	95,0-105,0	95-98	98-101	101-105	450	450	450
CG.NA.M130	M130x2.0	105,0-115,0	105-108	108-111	111-115	526	500	535

[13] **Annex**

[14] EU-type Examination Certificate number: **IMQ 14 ATEX 012X**

Type	D Clamping Range Ø min-max	S1+S2+S3	S1+S2	S1	Torque S1+S2+S3 [Nm]	Torque S1+S2 [Nm]	Torque S1 [Nm]
CG.NA.NPT1/4	4,0-8,0	4-6	6-8	-	20	18	-
CG.NA.NPT1/4L	3,0-8,0	-	3-6	6-8	-	25	18
CG.NA.NPT3/8S	3,0-9,0	-	3-6	6-9	-	25	18
CG.NA.NPT3/8	4,0-12,0	4-6	6-9	9-12	20	18	16
CG.NA.NPT1/2XS	3,0-9,0	-	3-6	6-9	-	25	18
CG.NA.NPT1/2S	4,0-12,0	4-6	6-9	9-12	20	18	16
CG.NA.NPT1/2	10,0-16,0	10-12	12-14,5	14,5-16	25	22	18
CG.NA.NPT3/4XS	4,0-12,0	4-6	6-9	9-12	20	18	16
CG.NA.NPT3/4S	10,0-18,0	10-12	12-14,5	14,5-18	25	22	18
CG.NA.NPT3/4	14,0-20,0	14-17	17-20	-	28	23	-
CG.NA.NPT1XS	10,0-18,0	10-12	12-14,5	14,5-18	25	22	18
CG.NA.NPT1S	14,0-24,0	14-17	17-20	20-24	28	23	20
CG.NA.NPT1	22,0-26,0	22-24	24-26	-	56	50	-
CG.NA.NPT1-1/4XS	14,0-24,0	14-17	17-20	20-24	28	23	20
CG.NA.NPT1-1/4S	22,0-32,0	22-24	24-27	27-32	56	50	45
CG.NA.NPT1-1/4	26,0-34,0	26-28	28-31	31-34	57	55	52
CG.NA.NPT1-1/2XS	22,0-32,0	22-24	24-27	27-32	56	50	45
CG.NA.NPT1-1/2S	26,0-35,0	26-28	28-31	31-35	57	55	52
CG.NA.NPT1-1/2	35,0-41,0	35-38	38-41	-	190	155	-
CG.NA.NPT2XS	26,0-35,0	26-28	28-31	31-35	57	55	52
CG.NA.NPT2S	35,0-45,0	35-38	38-41	41-45	190	155	140
CG.NA.NPT2A	42,0-52,0	42-48	48-52	-	-	-	-
CG.NA.NPT2	46,0-52,0	46-48	48-52	-	160	145	-
CG.NA.NPT2-1/2XS	35,0-45,0	35-38	38-41	41-45	190	155	140
CG.NA.NPT2-1/2S	46,0-62,0	46-51	51-56	56-62	185	175	150
CG.NA.NPT2-1/2	60,0-64,0	60-64	-	-	123	-	-
CG.NA.NPT3XS	46,0-62,0	46-51	51-56	56-62	185	175	150
CG.NA.NPT3S	60,0-75,0	60-65	65-70	70-75	123	118	110
CG.NA.NPT3	75,0-79,5	75-78	78-79,5	-	135	130	-
CG.NA.NPT4XS	60,0-75,0	60-65	65-70	70-75	123	118	110
CG.NA.NPT4S	75,0-85,0	75-78	78-81	81-85	135	130	125
CG.NA.NPT4	85,0-95,0	85-88	88-91	91-95	180	175	170
CG.NA.NPT4L	95,0-101,0	95-98	98-101	-	450	450	-
CG.NA.NPT5	95,0-105,0	95-98	98-101	101-105	450	450	450
CG.NA.NPT5L	105,0-115,0	105-108	108-111	111-115	520	500	535

[13] **Annex**

[14] EU-type Examination Certificate number: **IMQ 14 ATEX 012X**

Type	TD ISO 965-3	D Clamping Range Ømin-max	S1+S2+S3	S1+S2	S1	Torque S1+S2+S3 [Nm]	Torque S1+S2 [Nm]	Torque S1 [Nm]
CG.EM.M16S	M16x1.5	4,0-8,0	-	4-6	6-8	-	25	18
CG.EM.M16	M16x1.5	4,0-8,0	-	4-6	6-8	-	25	18
CG.EM.M20	M20x1.5	4,0-12,0	4-6	6-9	9-12	20	18	16
CG.EM.M25	M25x1.5	10,0-18,0	10-12	12-14,5	14,5-18	25	22	18
CG.EM.M32	M32x1.5	14,0-24,0	14-17	17-20	20-24	28	23	20
CG.EM.M40	M40x1.5	22,0-32,0	22-24	24-27	27-32	56	50	45
CG.EM.M50	M50x1.5	26,0-35,0	26-28	28-31	31-35	57	55	52
CG.EM.M63	M63x1.5	35,0-45,0	35-38	38-41	41-45	190	155	140
CG.EM.2M63	M63x2.0	35,0-45,0	35-38	38-41	41-45	190	155	140
CG.EM.M75	M75x1.5	46,0-62,0	46-51	51-56	56-62	185	175	150
CG.EM.2M75	M75x2.0	46,0-62,0	46-51	51-56	56-62	185	175	150
CG.EM.M90	M90x1.5	60,0-75,0	60-65	65-70	70-75	123	118	110
CG.EM.2M90	M90x2.0	60,0-75,0	60-65	65-70	70-75	123	118	110
CG.EM.M100	M100x1.5	75,0-85,0	75-78	78-81	81-85	135	130	125
CG.EM.2M100	M100x2.0	75,0-85,0	75-78	78-81	81-85	135	130	125
CG.EM.M110	M110x1.5	85,0-95,0	85-88	88-91	91-95	180	175	170
CG.EM.2M110	M110x2.0	85,0-95,0	85-88	88-91	91-95	180	175	170

Type	TD ANSI ASME NPT B1.20.1	D Clamping Range Ømin-max	S1+S2+S3	S1+S2	S1	Torque S1+S2+S3 [Nm]	Torque S1+S2 [Nm]	Torque S1 [Nm]
CG.EM.NPT3/8S	3/8"	4,0-8,0	-	4-6	6-8	-	25	18
CG.EM.NPT3/8	3/8"	4,0-8,0	-	4-6	6-8	-	25	18
CG.EM.NPT1/2	1/2"	4,0-12,0	4-6	6-9	9-12	20	18	16
CG.EM.NPT3/4	3/4"	10,0-18,0	10-12	12-14,5	14,5-18	25	22	18
CG.EM.NPT1	1"	14,0-24,0	14-17	17-20	20-24	28	23	20
CG.EM.NPT1-1/4	1 1/4"	22,0-32,0	22-24	24-27	27-32	56	50	45
CG.EM.NPT1-1/2	1 1/2"	26,0-35,0	26-28	28-31	31-35	57	55	52
CG.EM.NPT2	2"	35,0-45,0	35-38	38-41	41-45	190	155	140
CG.EM.NPT2-1/2	2 1/2"	46,0-62,0	46-51	51-56	56-62	185	175	150
CG.EM.NPT3	3"	60,0-75,0	60-65	65-70	70-75	123	118	110
CG.EM.NPT4	4"	75,0-85,0	75-78	78-81	81-85	135	130	125
CG.EM.NPT4L	4"	85,0-95,0	85-88	88-91	91-95	180	175	170

Table 3.2: CG.CO.***

Model		Min-max cable Ø mm	Torque value [Nm]			Suitable for	
CG.CO.M***	CG.CO.NPT***		S1+S2+S3 triple sealing ring	S1+S2 double sealing ring	S1 single sealing ring	Ex db	Ex eb Ex tb
CG.CO.M12**	CG.CO.NPT1/4**	4-8	20	18	-	no	yes
CG.CO.M16S**	CG.CO.NPT3/8S**	3-9	-	25	18	yes	yes
CG.CO.M16**	CG.CO.NPT3/8**	4-12	20	18	16	yes	yes
CG.CO.M20S**	CG.CO.NPT1/2S**	3-9	-	25	18	yes	yes
CG.CO.M20**	CG.CO.NPT1/2**	4-12	20	18	16	yes	yes
CG.CO.M20L**	CG.CO.NPT1/2L**	10-16	25	22	18	yes	yes
CG.CO.M25**	CG.CO.NPT3/4**	10-18	25	22	18	yes	yes
CG.CO.M25L**	CG.CO.NPT3/4L**	14-20	28	23	-	yes	yes
CG.CO.M32**	CG.CO.NPT1**	14-24	28	23	20	yes	yes
CG.CO.M32L**	CG.CO.NPT1L**	22-28	56	50	35	yes	yes
CG.CO.M40**	CG.CO.NPT1-1/4**	22-32	56	50	45	yes	yes
CG.CO.M40L**	CG.CO.NPT1-1/4L**	26-34	57	55	52	yes	yes
CG.CO.M50**	CG.CO.NPT1-1/2**	26-35	57	55	52	yes	yes
CG.CO.M50L**	CG.CO.NPT1-1/2L**	35-44	190	155	140	yes	yes
CG.CO.M63**	CG.CO.NPT2**	35-45	190	155	140	yes	yes
CG.CO.M75**	CG.CO.NPT2-1/2**	46-59	185	175	150	yes	yes

[13] **Annex**

[14] EU-type Examination Certificate number: **IMQ 14 ATEX 012X**

Model		Sealing ring type (refer to table 6)	Torque value [Nm]	Suitable for	
				Ex db	Ex eb Ex tb
CG.NA.M20S** (axb)	CG.NA.NPT1/2S** (axb)	FxA1; FxB1; FxC1; FxD1; FxE1; FxG1	16	no	yes
CG.NA.M20** (axb)	CG.NA.NPT1/2** (axb)		16	no	yes
CG.NA.M20L** (axb)	CG.NA.NPT1/2L** (axb)		16	no	yes
CG.NA.M25S** (axb)	CG.NA.NPT3/4S* (axb)	FxA2; FxB2; FxC2; FxD2; FxE2; FxF2; FxG2; FxH2	18	no	yes
CG.NA.M25** (axb)	CG.NA.NPT3/4** (axb)		18	no	yes

Model		Sealing ring type (refer to table 6)	Torque value [Nm]	Suitable for	
				Ex db	Ex eb Ex tb
CG.CO.M20S** (axb)	CG.CO.NPT1/2S** (axb)	FxA1; FxB1; FxC1; FxD1; FxE1; FxG1	16	no	yes
CG.CO.M20** (axb)	CG.CO.NPT1/2** (axb)		16	no	yes
CG.CO.M20L** (axb)	CG.CO.NPT1/2L** (axb)		16	no	yes
CG.CO.M25S** (axb)	CG.CO.NPT3/4S** (axb)	FxA2; FxB2; FxC2; FxD2; FxE2; FxF2; FxG2; FxH2	18	no	yes
CG.CO.M25** (axb)	CG.CO.NPT3/4** (axb)		18	no	yes

Model		Sealing ring type (refer to table 6)	Torque value [Nm]	Suitable for	
				Ex db	Ex eb Ex tb
CG.EM.M20** (axb)	CG.EM.NPT1/2** (axb)	FxA1; FxB1; FxC1; FxD1; FxE1; FxG1	16	no	yes
CG.EM.M25** (axb)	CG.EM.NPT3/4** (axb)	FxA2; FxB2; FxC2; FxD2; FxE2; FxF2; FxG2; FxH2	18	no	yes

From size to size	Material	Mechanical risk
M12/PG7/PF 1/4"/NPT 1/4"	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

[13] **Annex**

[14] EU-type Examination Certificate number: **IMQ 14 ATEX 012X**

Key code

Identification of CG.NA, CG.EM, CG.CO Cable Glands						
CG.NA	1	2	3	4	5	<p>1 Thread type NPT : NPT ANSI ASME B1.20.1 M : Metric UNI ISO 261 1.5mm 2M : Metric UNI ISO 261 2mm P : PG DIN 40430 (Ex-e only) NPSM ANSI/ASME S : B1.20.1 C : GAS UNI ISO 228-1 G : GAS ISO 7/1 X : Gk (CEI EN 60079-1, Annex 1)</p> <p>2 Size According to related assembly table</p> <p>3 Body Material B : Brass BF : Brass leadfree (see item 10) BN : Nicked Plated Brass SS : Stainless Steel Z : Galvanized carbon Steel A : Aluminum</p> <p>4 Sealing Material C : Chloroprene S : Silicone</p> <p>5 Thread Length min. thread length (mm)</p>
CG.EM	1	2	3	4	5	
CG.CO	1	2	3	4	5	

[15.2] **Ratings:**

For minimal and maximal diameters of permitted cables and torque values, see drawings in revision status and date as listed in document DL-AT21-0069024-01_B.

[15.3] **Safety Ratings:**

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[13] **Annex**

[14] EU-type Examination Certificate number: **IMQ 14 ATEX 012X**

[15.4] **Ambient temperature and temperature classes:**

See table below:

In execution Ex db, Ex eb, Ex tb:	In execution Ex eb, Ex tb:
- from -40°C to +80°C with Neoprene sealing ring	-from -40°C to +80°C with Neoprene sealing ring
- from -60°C to +80°C with Silicon sealing ring	-from -60°C to +140°C with Silicon sealing ring

[15.5] **Degree of protection (IP code):**

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

[15.6] **Warnings:**

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[16] **Report:** AT21-0069024-01_B

[16.1] **Routine (factory) tests:**

The manufacturer shall carry out the routine test prescribed at clauses 27 of the EN 60079-0.

[16.2] **Conformity with the documentation:**

The manufacturer shall carry out the verifications or tests necessary to ensure that the product complies with the documentation.

Marking the equipment in accordance with Clause 29 of EN 60079-0, the manufacturer attests on his own responsibility that:

- the equipment has been constructed in accordance with the applicable requirements of the relevant standards in safety matters;
- the routine verifications and routine tests in 28.1 of EN 60079-0 have been successfully completed with positive results.

[16.3] **Installation conditions:**

Above referred equipment is foreseen to be installed in locations where there are environmental conditions, as clearly specified at clause 1, par. 2 of EN 60079-0.

Installation and use in atmospheric and environmental conditions that are out of above-mentioned intervals request special considerations and additional measures by the side of installer or user.

These should be specified to the manufacturer by the user.

It is not a required by applicable standard listed in [9] that the certification body confirm suitability for the adverse conditions.

Installation of equipment has to proceed according to EN 60079-14.

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.

Cable gland installation shall be done taking into account the temperature range declared for cable glands in relation to protection mode execution, versus the ambient temperature proper of installation.

Cable glands for circular cables can be supplied with tap, commercial called "dome plug", polyamide made, as accessory (BP.NA.*.PA) suitable to guarantee IP degree when installed according to manufacturer's instructions.

[13] Annex

[14] EU-type Examination Certificate number: **IMQ 14 ATEX 012X**

The cable glands series CG.NA ; CG.EM ; CG.CO are suitable for inserting circular cables into Ex d enclosures having threaded entries and Ex e or Ex tb enclosures having either threaded or plane entries. The cable glands series CG.NA (axb) ; CG.EM (axb) ; CG.CO (axb) are suitable for inserting flat cables into Ex e or Ex tb enclosures having either threaded or plane entries

[17] **Special Condition of use (X):**

The cable glands are only suitable for fixed installations. Cables shall be effectively clamped to prevent pulling or twisting.

When cable glands are installed with polyamide insert BP.NA.*.PA 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.

The cable glands in metric threads can be produced with TL9,0mm for Ex eb and Ex tb only. In order to guarantee Ex tb type of protection in installation, external Oring or Gasket shall be mounted. For nonthreaded enclosure, the locknut shall be fully engaged.

The minimum wall thickness shall be 1,5 mm for non threaded enclosures.

[18] **Essential Health and safety Requirements:**

This Certificate **does not** indicate compliance with electrical safety and performance requirements other than those expressly included in the Standards listed in [9].

This Certificate **does not** cover hazards coming from environmental conditions different from those clearly and precisely indicated and covered in clause 1 of EN 60079-0.

ESHR 1.2.7 According Annex VIII of the Directive

ESHR 1.4 Not verified.

ESHR 1.5 Not verified.

ESHR 3 Not applied.

In addition to the Essential Health and Safety Requirements (EHSRs) covered by the standards listed at [9], the following are considered relevant to this product, and conformity is demonstrated in the report:

N/A

[19] **Descriptive documents:**

DL-AT21-0069024-01_B, rev.0, dated 2022-01-26

[20] **Certification Validity Conditions:**

The use of this Certificate is subject to the Certification Scheme and to the Regulation applicable to holders of IMQ Certificates.

The validity of this certificate is subject to the condition that the manufacturer complies with the results of the document review and of the pertinent requirement if any included, recorded in the relevant copy of documentation as per 19.

One copy of the mentioned documentation is kept in IMQ file.

[13] **Annex**

[14] EU-type Examination Certificate number: **IMQ 14 ATEX 012X**

[21] **Variations**

Issue 0: 2014, October

Issue 1: 2016, April

- Standard updating to IEC 60079-1:2014, 7th Edition and IEC 60079-31:2013, 2nd edition
- Extended serie CG.EM.***** to M90 size
- New series CG.NA.***** (axb); CG.EM.***** (axb); CG.CO.***** (axb) for non circular (flat cables) for M20 and M25 threads, silicone sealing ring only (-60÷140°C), Ex e Ex tb execution only
- For Ex e Ex tb execution only: upgrade upper temperature for silicone sealing rings from 100 °C to 140 °C
- Dome plug in polyamide (RTI: 90 °C), black colour, for sizes M12 ... M63. They can be used when S1+S2+S3 are in place only.
- Insert PA gasket (RTI/TI: 85°C) and metal (carbon steel or stainless steel) serrated washer.
- Change in code: threads length added.

Issue 2: 2017, May

- Standard updating to IEC 60079-7:2015, Edition 5.0.
- New sizes M115 and M130 were added to CG.NA type cable glands.
- New sizes M100 and M110 were added to CG.EM type cable glands.
- Viton O-Ring was added for Ex db, Ex eb, Ex tb execution.
- Templates and headings were changed in technical tables.
- To CG.NA type cable glands additional sizes derived from previous ones: same body but threads of next bigger size.
- Green dome plug option is added.

Issue 3: 2022, May

- The applicant's name had been changed from Pepperl+Fuchs GMBH to Pepperl+Fuchs SE;
- Standard updating to EN IEC 60079-0:2018; EN IEC 60079-7:2015+A1:2018;
- Alternative thread pitch has been added as x2,0 to CG.NA and CG.EM types for cylindrical threads for sizes equal or larger than M63.
- New sizes have been added to the existing models CG.NA, CG.EM
- Alternative brass and alternative aluminium alloys added
- Alternative thread length TL9,0mm have been added to all cable gland types (CG.NA & CG.EM & CG.CO) in Metric threads, for Ex eb and Ex tb execution only.