CCG CABLE TERMINATIONS

A2F-H

Ex db I/IIC, Ex eb I/IIC, Ex tb IIIC, Ex nR IIC

COMPRESSION GLAND for Unarmoured Cable

Features and Benefits

- For Group I, II, III, Zone 1, 2, 21 and 22 hazardous areas.
- Fitted with specially formulated elastomeric displacement seal, for superior cable retention, explosion protection and IP rating.
- A hose tail provides for clamping a protective hose over the cable.
- Precision manufactured from high-quality brass (Marine Grade Electroless Nickel Plated™) available in stainless steel 316/316L on request.
- Complete with thread sealing gasket.

100m IP68

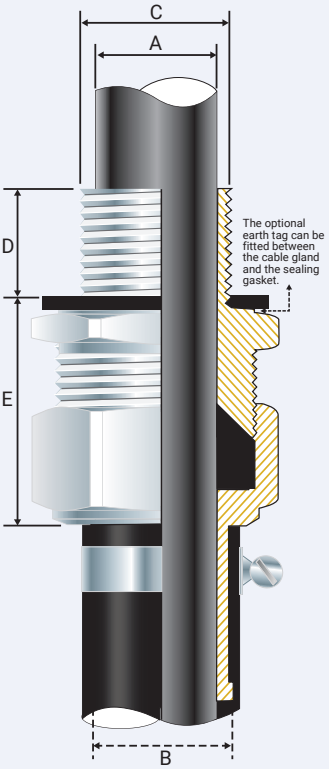
Ex 30 BAR SEAL

Technical Data

Type:	A2F-H
Gland Material:	Brass (Marine Grade Electroless Nickel Plated™), Stainless Steel 316/316L
Seal Material:	Standard Thermoset Elastomer or Extreme Temperature Seals
Seal Gasket Material:	HDPE, Nylon 66 or PTFE
Cable Type:	Unarmoured
Sealing Area:	Outer Sheath
Optional Accessories:	Adaptor, Reducer, Earth Tag, Locknut, Serrated Washer and Shroud
Note:	The installer should ensure that the materials are suitable for the installation environment.

Standards and Certifications

Equipment Protection Levels:	IECEx: Ex d I Mb/ IIC Gb, Ex e I Mb/IIC Gb, Ex nR IIC Gc, Ex tb IIIC Db ATEX: Ⓔx I M2, II 2 GD, II 3G, Ex db I Mb/ IIC Gb, Ex eb I Mb/IIC Gb, Ex nR IIC Gc, Ex tb IIIC Db TR CU: 1Ex d IIC Gb X / PB Ex d I Mb X / 1Ex e IIC Gb X / РП Ex e I Mc X / 2Ex nR IIC Gc X / Ex tb IIIC Db X	
Continuous Operating Temp:	Standard Seals: -60°C to +95°C/100°C (HDPE/Nylon Sealing Gasket) Extreme Temp. Seals: -60°C to +160°C (PTFE Sealing Gasket)	
Conformance:	Standard:	Certificate:
IEC/BS EN	IEC/BS EN 62444, 6121	CML 14CA364
IECEx	IEC 60079 Parts 0, 1, 7, 15, 31 IEC 60079 Parts 0, 1, 7, 15, 31	IECEx MSC 20.0002 IECEx ITA 12.0014X
ATEX	EN 60079 Parts 0, 1, 7, 31 EN 60079 Parts 0, 15	CML 16ATEX1001X CML 16ATEX4002X
INMETRO (Brazil)	ABNT NBR IEC 60079 Parts 0, 1, 7, 15, 31	TÜV 15.0483X
TR CU (Russia)	ГОСТ Р М3К 60079-0, 7, 1 5, 31 and ГОСТ IEC 60079-1	RU C-ZA.ME92.B.00690
SANS	SANS 60079 Parts 0, 1, 7, 15, 31	MASC MS/13-028X
IP66/68 100m - Parallel	IEC 60529	CML 15Y728
IP65/66 - Tapered	IEC 60529	
Deluge Protection	DTS-01	CML 14CA370-2
Corrosion Protection	ASTM B117-11, BS EN ISO 3231	EXOVA N968667



PATENTED

Conditions for Safe Use - X

- The cable glands shall only be used where the temperature, at the point of entry, is between -60°C and +95°C (standard seal & HDPE sealing gasket), +100°C (standard seal and Nylon sealing gasket) or +160°C (extreme temp. seal & PTFE sealing gasket) depending on seal and gasket used.
- According to IEC 60079-14, 10.6.2: An Ex d gland will only maintain Ex d integrity when used with substantially round, compact and filled cable. If not a CCG VORTEx® or QuickStop-Ex® barrier gland should be used.

Product Code	Gland Size Reference	Metric Entry Thread		NPT Entry Thread		Cable Detail		Maximum Length 'E'	Spigot/ Hose Tail 'B'	Hexagonal Detail		Install. Torque Value Nm
		'C'	Min 'D'	'C'	Min 'D'	Min 'A'	Max 'A'			Max 'Flats'	Max 'Crns'	
044900-16	00-16ss	M16x1.5	15	-	15	3.0	8.5	63.0	19.0	24.0	27.0	32.5
044900	00-20ss	M20x1.5	15	½/¾	15	3.0	8.5	63.0	19.0	24.0	27.0	32.5
0449-0	0-20s	M20x1.5	15	½/¾	15	7.0	12.0	63.0	19.0	24.0	27.0	32.5
044901	1-20	M20x1.5	15	½/¾	15	11.0	14.5	77.0	19.0	27.0	30.0	32.5
044922	2s-25s	M25x1.5	15	¾/1	15/19	11.5	17.5	77.5	25.4	35.0	39.0	47.5
044902	2-25	M25x1.5	15	¾/1	15/19	15.0	20.0	77.5	25.4	35.0	39.0	47.5
044933	3s-32s	M32x1.5	15	1/1¼	19	16.0	22.0	91.0	31.8	42.0	47.0	55.0
044903	3-32	M32x1.5	15	1/1¼	19	20.0	26.5	91.0	31.8	42.0	47.0	55.0
044944	4s-40s	M40x1.5	15	1¼/1½	19/21	22.0	31.5	109.0	38.1	52.0	59.0	65.0
044904	4-40	M40x1.5	15	1¼/1½	19/21	26.0	34.0	109.0	38.1	52.0	59.0	65.0
044955	5s-50s	M50x1.5	15	1½/2	21	29.0	38.0	136.0	50.8	65.0	73.0	82.5
044905	5-50	M50x1.5	15	1½/2	21	34.0	44.5	136.0	50.8	65.0	730	82.5
044966	6s-63s	M63x1.5	15	2/2½	21/30	38.0	50.0	161.0	63.5	80.0	90.0	97.5
044906	6-63	M63x1.5	15	2/2½	21/30	44.5	56.5	161.0	63.5	80.0	90.0	97.5
044977	7s-75s	M75x1.5	15	2½/3	30/32	50.0	62.0	181.0	76.0	96.0	108.0	115.5
044907	7-75	M75x1.5	15	2½/3	30/32	56.0	67.5	181.0	76.0	96.0	108.0	115.5

All dimensions except NPT are in mm. Intermediate thread sizes are available on request.

FITTING INSTRUCTIONS
Metric Illustration

CCG CABLE TERMINATIONS

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ENCLOSURES AND EQUIPMENT TO WHICH CABLE GLANDS ARE FITTED:-

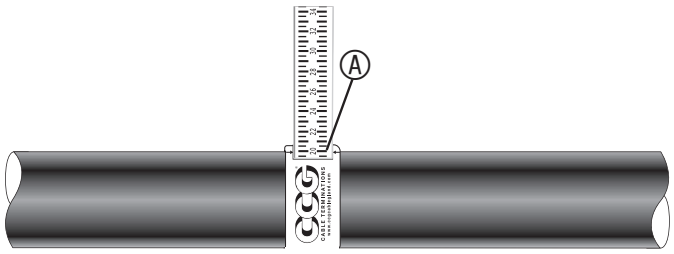
- Must be made from materials which are compatible with the cable gland materials.
- Have a sealing area around the cable gland entry point with a surface roughness < Ra 6.3 µm.
- Have entries that are perpendicular to the enclosure face in the area where the cable gland will seal to within 2.5°.
- Are sealed using the supplied sealing gasket (parallel threads) or by fully tightening into a threaded entry (tapered threads). Note that for tapered threads the IP rating can be improved to IP68 with the use of a suitable thread sealant.

MUST HAVE THREADED ENTRIES

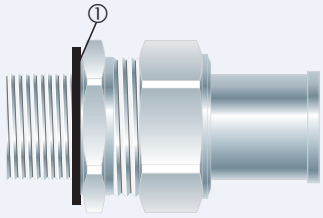
- The same thread size as the cable gland. (Thread adapters should be used to correct any mismatch).
- With a thread tolerance of metric class '6H' or equivalent.
- Where the thread length is a minimum of 10mm for Ex d applications or 3mm for all other applications

OR CLEARANCE HOLES (not Ex d)

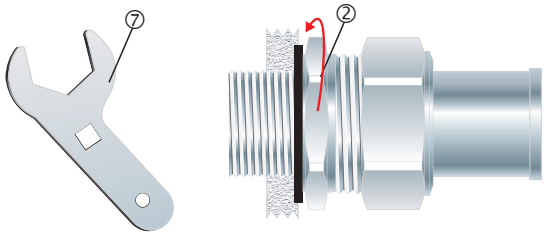
- Where the hole size is the thread nominal size with a tolerance of +0.1 to +0.7mm. (e.g. the clearance hole for an M20 thread will have a diameter between 20.1mm and 20.7mm).
- Through material that is between 1mm and 12mm thick. (Thicker materials can be accommodated using glands with extended entry threads.)



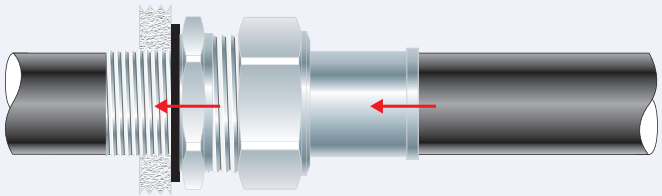
1. For accurate sizing, use a CCG Dimension Tape Ⓐ on the outer cable sheath.



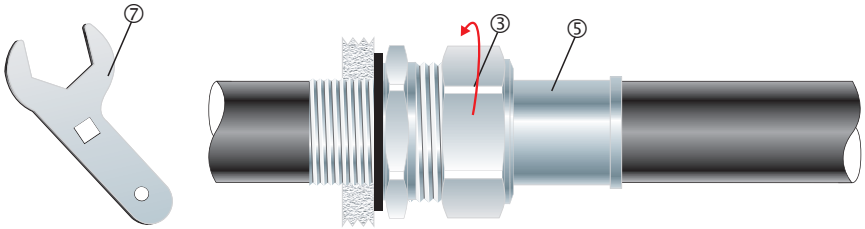
2. To maintain IP66/68 ensure the gasket ① is in place.



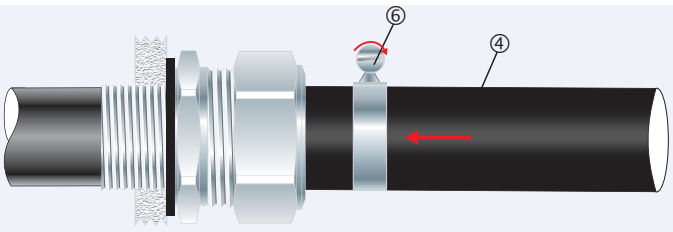
3. Screw the gland unit into the apparatus and tighten the inner ② to the installation torque using a CCG Spanner ⑧.



4. Pass the cable end through the gland assembly.



5. Tighten the outer nut ③ to produce an additional seal and grip on the cable the installation torque using a CCG Spanner ⑦.



6. Slide the protective hose ④ over the hose tail ⑤ and tighten the hose clamp ⑤.