

# Installation Manual for A2FMH Cable Gland

## A2FMH Series of Flameproof and Increased Safety Cable Glands for Unarmoured Cables

### Please read all instructions carefully before beginning the installation

CABTEK A2FMH type Cable Glands are for Indoor and Outdoor use in the appropriate Hazardous areas with unarmoured cable. The seal on the outer jacket and give environmental protection to IP66/67. They are suitable for normal industrial environmental of temperature, humidity and vibration.

Cable Glands are made of Brass CW614N/SS 316L assembled with VMQ Silicone Rubber and Nylon Substrate.

Material Compatibility under chemical corrosion or attack by aggressive substance must be considered before installation.

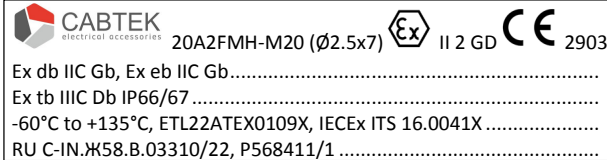
Cable Gland confirm to following Standards for Group II, Category-2 for Zone 1, 2, 21 & 22 for ambient temperature range -60°C to +135°C.

Standards Applied: EN IEC 60079-0:2018

EN/IEC 60079-1:2014

EN/IEC 60079-31:2014/2013

### Ex marking on A2FMH type Cable Glands:



20A2FMH-M20 (Ø2.5x7) II 2 GD CE 2903

Ex db IIC Gb, Ex eb IIC Gb.....  
 Ex tb IIIC Db IP66/67 .....  
 -60°C to +135°C, ETL22ATEX0109X, IECEx ITS 16.0041X .....  
 RU C-IN.Ж58.B.03310/22, P568411/1 .....

### Installation Guide:

1. Installation must be carried out by a competent electrician, skilled in cable gland installation.
2. Installation should not be carried out under live conditions.
3. Once installed do not dismantle except for occasional inspection. If necessary, dismantle by reverting the installation instruction. The gland is not serviceable and spare parts are not supplied separately.
4. Parts of glands are not interchangeable with any other design. If manufacturer's parts are mixed, certification will be invalidated.
5. The female thread in the enclosure must comply with relevant standard and do not damage threads on assemblies.
6. The glands should only be used with substantially round and compact cables with correct tools.
7. Installation should only be performed by a competent person using the correct torque tools. Spanners should be used for tightening. Read all instructions before beginning installation.

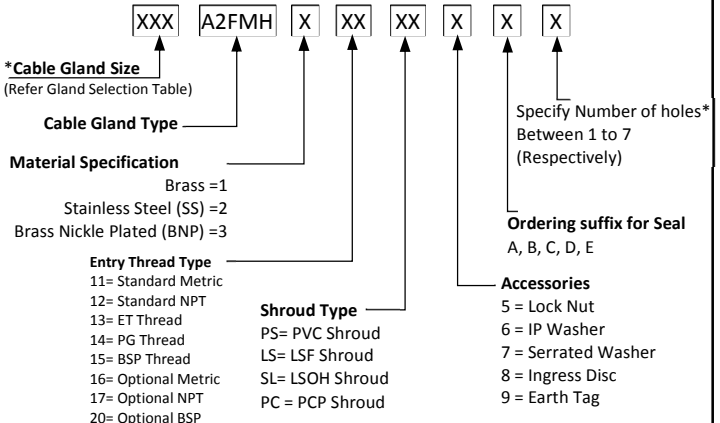
8. Any modification which differs from the condition as delivered is not permitted.
9. Accessories are available from CABTEK, as optional extras, to assist with fixing, sealing and earthing, Locknut, Earth Tag, Serrated Washer, Entry Thread seal (IP), Shroud.

### Special Condition of Safe Use of Cable Glands:

1. Cable Glands are only suitable for fixed installations.
2. Cable must be effectively clamped from pulling and twisting.
3. Cable Glands shall not be used in enclosure where the temperatures at the point of entry /mounting are outside the range of ambient temperatures as detailed in general description.
4. The glands should only be used with substantially round cables and tightened to the rated torque with torque wrenches.
5. Install in accordance with requirements of EN60079-14.
6. The cable glands are provided with a sealing ring with an axial sealing height of at least 5 mm. With reference to the clearance groove, the end-user should ensure that at least five complete turns of the connector thread are made. In order to guarantee a screw depth of 8 mm, the enclosure should have a wall thickness of min. 10mm; if <10 mm, then if necessary, use a washer when cable entries are attached to the pressure-resistant enclosure.
7. In the case of NPT connecting threads, the end-user must ensure that the necessary IP protection is guaranteed; this can be done using a suitable thread sealing agent.
8. Installation should not be carried out under live conditions.

### CABLE GLAND ORDERING DETAILS:

Product Code for Ordering Purpose



**Cable Gland Size**  
(Refer Gland Selection Table)

**Cable Gland Type**

**Material Specification**  
 Brass =1  
 Stainless Steel (SS) =2  
 Brass Nickel Plated (BNP) =3

**Entry Thread Type**  
 11= Standard Metric  
 12= Standard NPT  
 13= ET Thread  
 14= PG Thread  
 15= BSP Thread  
 16= Optional Metric  
 17= Optional NPT  
 20= Optional BSP

**Shroud Type**  
 PS= PVC Shroud  
 LS= LSF Shroud  
 SL= LSOH Shroud  
 PC= PCP Shroud

**Ordering suffix for Seal**  
 A, B, C, D, E

**Accessories**  
 5 = Lock Nut  
 6 = IP Washer  
 7 = Serrated Washer  
 8 = Ingress Disc  
 9 = Earth Tag

**Specify Number of holes\*  
 Between 1 to 7  
 (Respectively)**

For example:  
 20A2FMH311P56A7 = A2FMH-20-M20 BNP Cable Gland with PVC Shroud, IP Washer & Seal A with 7 holes  
 20A2FMH311P5569A7 = A2FMH-20-M20 BNP Cable Gland PS Kit\* with Seal A with 7 holes.  
 (\*Kit includes PVC Shroud(PS), Lock Nut(5), IP Washer(6) & Tag(9))

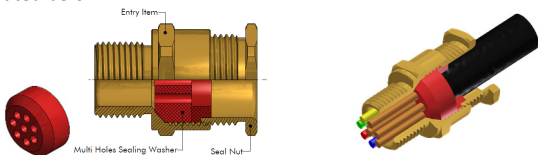
For cable gland technical details like Cable Gland Size, Cable diameter, thread and torque details given as below.

Cable Gland Size	Standard Entry Thread "C"				Thread Length "D"	Entry Thread "C"			Multi Hole Seal Detail			Assembly Length			Torque (Nm)
	Metric	NPT/BSP	ET	PG		Metric	NPT/BSP	Cable Ø (X)	Ordering Suffix for Seal	Number of Holes **	A/F	A/C	Compressed Length "E"	Uncompressed Length "E"	
16	M16x1.5	3/8"	5/8"	PG9	15	M20x1.5	1/2"	1.5	A	1 to 6	24.0	26.20	19.50	27.50	40.00
	M16x1.5	3/8"	5/8"	PG9	15	M20x1.5	1/2"	2.0	B	1 to 6	24.0	26.20	19.50	27.50	40.00
20s*	M20x1.5	1/2"	3/4"	PG13.5	15	M25x1.5	3/4"	3.7	C	1 to 2	24.0	26.20	19.50	27.50	40.00
	M20x1.5	1/2"	3/4"	PG16	15	M25x1.5	3/4"	2.5	A	1 to 7	27.0	29.50	19.80	27.80	40.00
20	M20x1.5	1/2"	3/4"	PG16	15	M25x1.5	3/4"	3.0	B	1 to 7	27.0	29.50	19.80	27.80	40.00
	M20x1.5	1/2"	3/4"	PG16	15	M25x1.5	3/4"	3.6	C	1 to 7	27.0	29.50	19.80	27.80	40.00
	M20x1.5	1/2"	3/4"	PG16	15	M25x1.5	3/4"	4.0	D	1 to 7	27.0	29.50	19.80	27.80	40.00
	M20x1.5	1/2"	3/4"	PG16	15	M25x1.5	3/4"	4.7	E	1 to 2	27.0	29.50	19.80	27.80	40.00
25	M25x1.5	3/4"	1"	PG21	15	M32x1.5	1"	2.5	A	1 to 7	36.0	39.20	25.80	35.80	45.00
	M25x1.5	3/4"	1"	PG21	15	M32x1.5	1"	3.0	B	1 to 7	36.0	39.20	27.90	37.90	45.00
	M25x1.5	3/4"	1"	PG21	15	M32x1.5	1"	3.6	C	1 to 7	36.0	39.20	25.80	35.80	45.00
	M25x1.5	3/4"	1"	PG21	15	M32x1.5	1"	4.0	D	1 to 7	36.0	39.20	27.90	37.90	45.00
32	M32x1.5	1"	1.1/4"	PG29	15	M40x1.5	1 1/4"	2.5	A	1 to 7	41.0	45.00	27.90	37.90	55.00
	M32x1.5	1"	1.1/4"	PG29	15	M40x1.5	1 1/4"	3.0	B	1 to 7	41.0	45.00	27.90	37.90	55.00
	M32x1.5	1"	1.1/4"	PG29	15	M40x1.5	1 1/4"	3.6	C	1 to 7	41.0	45.00	27.90	37.90	55.00
	M32x1.5	1"	1.1/4"	PG29	15	M40x1.5	1 1/4"	4.0	D	1 to 7	41.0	45.00	27.90	37.90	55.00

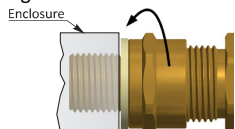
\*\* For Number of Holes, put a suffix (Between 1 to 7) to the end of 'Ordering Suffix for Seal' in Ordering Code for purchase respectively.  
 \* Seal will be supplied with Haircut between holes & seal OD as shown.

### INSTALLATION INSTRUCTIONS FOR CABLE GLAND TYPES A2FMH

1. It is not necessary to separate components of the cable gland any further than illustrated below.



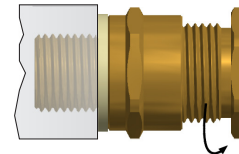
2. Fit the gland into the equipment and fully tighten the entry item. Thread seal will engage when fully tightened.



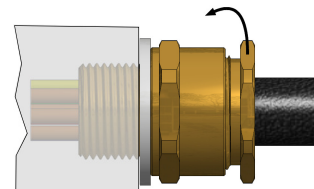
3. Determine the conductor length required to suite the equipment and prepare the cable accordingly. Remove the Outer sheath of cable as per requirement to see the insulated conductors.



- 4 Check the seal in the entry component and it is in a relaxed state by loosening the outer seal nut.



- 5 Insert Cable through the cable gland. Position Cable correctly. Then tighten the outer seal nut by hand into the entry item until heavy resistance is felt or seal grip the outer sheath Of cable. Then tighten the seal nut with torque wrench. For correct torque see Gland selection table.



### Warning:

Please study carefully these instructions before installation. These glands should not be used in any application other than those mentioned here, unless CABTEK states in writing that the product is suitable for such application. CABTEK will not take any responsibility for any damage, injury or other consequential loss caused where the glands are not installed or used according to installation instructions. This leaflet is not intended to advice on the selection of cable glands. Installation must be carried out by a competent electrician, skilled in cable gland installation. Installation should not be carried out under live conditions.

### Customer Care:

For any more information regarding please send your query to us by mail or telephone number

Tel.: + 91-76006 16887, 94277 71205

Email: info@aksharbrassind.com, Website: www.aksharbrassind.com