

# Peppers Cable Glands Limited

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## Cable Gland:- Type A2LCMF and A2LCFF



Including type No's:

A	*	L	C	*	*	F
	2			F	S	
	3			M	A	

A2LCMF and A2LCFF type glands provide a seal on the outer sheath of unarmoured cable and a conduit connection thread. A2LCMF type glands provide a male thread for connection and A2LCFF type glands provide a female thread for connection. A2LCMF and A2LCFF type glands maintain Flameproof Exd and Increased Safety Exe methods of explosion protection and IP66, IP68 to 25 metres. An 'O' ring IP entry thread seal is fitted as standard.

COMPLIANCE STANDARD	EN 60079-0, EN 60079-1, EN 60079-7, EN 61241-0, EN 61241-1, IEC 60079-0, IEC 60079-1, IEC 60079-7, IEC 61241-0 & IEC 61241-1		<p>A2LCMF</p> <p>A2LCFF</p>																			
CERTIFICATION	ATEX II 2 GD, E Exd IIC / E Exe II GOST R-Exd IIC/Exe II CSA Exd IIC/Exe II 4X IECEx Ex d IIC / Ex e II NEPSI Exd IIC / Exe II																					
CERTIFICATE	SIRA 01ATEX1272X - Ex Notified Body No. 0518 POCC GB MЛ14.B00030 CSA 1356011 IECEX SIR 07.0096X NEPSI GYJ06186X																					
GLAND MARKING (EXAMPLE)	MЛ14 Peppers GU15 3BT UK A2LCFFM20/20/M20 CA Sira 01ATEX1272X Ex II 2 GD EExd IIC/EEExe II IEC Ex SIR 07.0096X Exd IIC/Exe II/Ex tD A21 IP68																					
APPLICATION	<b>EExd Equipment</b> A2L**F type glands will only maintain Flameproof Exd integrity when used with cable that is substantially round and compact with extruded bedding. The cable shall be deemed to be effectively filled. Ref: IEC60079-14:2002 Section 10.4.2																					
	<table border="1"> <thead> <tr> <th>Gas Group</th> <th>Internal Ignition Source</th> <th>Enclosure Volume</th> <th>Which Zone</th> <th>Use A2L**F Gland</th> </tr> </thead> <tbody> <tr> <td>IIC, IIB, IIA</td> <td>NO</td> <td>Any</td> <td>Zone 1 or 2</td> <td>YES</td> </tr> <tr> <td>IIB, IIA</td> <td>YES</td> <td>Any</td> <td>Zone 2</td> <td>YES</td> </tr> <tr> <td>IIB, IIA</td> <td>YES</td> <td>2 litres or less</td> <td>Zone 1</td> <td>YES</td> </tr> </tbody> </table>		Gas Group	Internal Ignition Source	Enclosure Volume	Which Zone	Use A2L**F Gland	IIC, IIB, IIA	NO	Any	Zone 1 or 2	YES	IIB, IIA	YES	Any	Zone 2	YES	IIB, IIA	YES	2 litres or less	Zone 1	YES
Gas Group	Internal Ignition Source	Enclosure Volume	Which Zone	Use A2L**F Gland																		
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IIB, IIA	YES	Any	Zone 2	YES																		
IIB, IIA	YES	2 litres or less	Zone 1	YES																		
	<b>EExe Equipment</b> Gas Group II, Zones 1 and 2																					
	<b>Other Equipment</b> Ignitable Dust, Zones 21 and 22																					
INGRESS PROTECTION	IP66 and IP68 @ 25 metres, Enclosure Type 4X																					
MATERIALS	Brass CZ121 (A2L**F) 316 Stainless Steel (A2L**SF) Aluminium Alloy (A2L**AF)  Outer sheath seal material: Standard (A2L**F) Neoprene, black. Option (A3L**F) Silicone, white. Integral entry thread seal: Nitrile is supplied with neoprene outer seal version. Silicone is supplied with silicone outer seal version.																					
OPTIONS	THREADS	ISO Metric; NPT; NPS; ISO Pipe Thread (BSP Taper, BSP Parallel); PG																				
	SEALS	Extended operating temperature -60°C to +180°C, halogen free versions: Brass (A3L**F); 316 Stainless Steel (A3L**SF)																				
	PLATING	Zinc (ZP); Nickel (NP); Tin (TP); Electroless Nickel (EN)																				
OPERATING TEMPERATURES	Standard Seals -20°C to +85°C Silicone Seals - 60°C to +180°C																					

ACCESSORIES	Locknut - Brass (ACBLN); 316 Stainless Steel (ACSLN); Aluminium (ACALN) Earth Tag - Brass (ACBET), 316 Stainless Steel (ACSET); Aluminium (ACAET) IP Washer - Nylon (ACNSW); Red Fibre (ACFSW) Serrated Lock Washer - 316 Stainless Steel (ACSSW), Galvanised Steel (ACGSW)
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EXAMPLE PART NUMBER	Sample: <b>A2LCFF M20/ZP/20S/M20</b> <b>A2LCFF:</b> A*LCFF - Gland type (Female connection thread) and body material (Brass) *2**** - Seal material (Neoprene)  <b>M20</b> - Female connection thread <b>ZP</b> - Zinc plating <b>20s</b> - Gland size with regards to cable acceptance range <b>M20</b> - Entry thread
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Gland Size	Entry Threads		Entry Thread Length [B]	Max Across Corners [A]	Gland Seal Range		Conduit Connector	
	Metric	NPT/BSP			Cable Outer Sheath [D]		NPT	ISO
					Min	Max		
16	M20	1/2" or 3/4"	16	28.0	4.0	8.4	1/2" or 3/4"	M20
20s	M20	1/2" or 3/4"	16	28.0	7.2	11.7	1/2" or 3/4"	M20
20	M20	1/2" or 3/4"	16	33.0	9.6	14.0	1/2" or 3/4"	M20
25	M25	3/4" or 1"	16	41.4	13.5	20.0	3/4" or 1"	M25
32	M32	1" or 1 1/4"	16	50.6	19.5	26.3	1" or 1 1/4"	M32
40	M40	1 1/4" or 1 1/2"	16	60.5	23.0	32.2	1 1/4" or 1 1/2"	M40
50s	M50	1 1/2" or 2"	16	71.5	28.2	38.2	1 1/2" or 2"	M50
50	M50	2"	16	71.5	33.2	44.1	2"	M50
63s	M63	2" or 2 1/2"	19	88.0	39.3	50.1	2" or 2 1/2"	M63
63	M63	2 1/2"	19	88.0	46.7	56.0	2 1/2"	M63
75s	M75	2 1/2" or 3"	19	99.0	52.3	62.0	2 1/2" or 3"	M75
75	M75	3"	19	99.0	58.1	68.0	3"	M75

All Dimensions are in Millimetres

**NOTES:**

- Suitable only for fixed installations. The cable must be clamped near the gland to prevent pulling and twisting
- Gland Size does not necessarily equate to the entry thread size
- Integral entry thread seal option is not available for glands with tapered entry threads. IP washers can be supplied if required
- Please note that dimensions (A) and (B) may differ for glands with non-Metric entry threads. Please refer to our thread data tables for specific dimensions
- Unless otherwise stated ISO Metric entry threads have a 1.5mm pitch
- For Flameproof Exd applications the female thread into which the gland is to be fitted must comply with clause 5.3 of EN 50018:2000 (clause 5.3 IEC 79-1) and an engagement of at least 5 full threads must be achieved for parallel threads and should be achieved for tapered threads
- Where A2LF type glands are fitted into non-metallic Increased Safety Exe enclosures they must be included within the earth circuit of the system
- The user should seek expert advice if intending to combine flammable gases and combustible dusts in one environment/ installation
- Full assembly instructions are supplied with glands, the instructions must be read prior to installation and adhered to in full
- Other conduit connection threads eg PG, BSP are available upon request

<http://www.cableglands.com>