EU Type Examination Certificate CML 19ATEX1368X Issue 0

1 Equipment intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU

2 Equipment **Type EX-50* and EX-55* Range of Cable Glands**

3 Manufacturer **Amphenol EEC, Inc.**

4 Address 1701 Birchwood Ave, Des Plaines, Illinois 60018, United States of America

5 The equipment is specified in the description of this certificate and the documents to which it refers.

6 CML B.V., Chamber of Commerce No 6738671, Koopvaardijweg 32, 4906CV Oosterhout, The Netherlands, Notified Body Number 2776, 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 equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in the confidential reports listed in Section 12.

7 If an 'X' suffix appears after the certificate number, it indicates that the equipment is subject to conditions of safe use (affecting correct installation or safe use). These are specified in Section 14.

8 This EU Type Examination certificate relates only to the design and construction of the specified equipment or component. Further requirements of Directive 2014/34/EU Article 13 apply to the manufacture of the equipment or component and are separately certified.

9 Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the confidential report, has been demonstrated through compliance with the following documents:

EN IEC 60079-0:2018 EN 60079-1:2014

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

10 The equipment shall be marked with the following:

Ex II 2 G Ex II 2 G Ex II 1 D

Ex db IIC Gb Ex eb IIC Gb Ex ta IIIC Da

A Snowdon

11 Description

These cable glands are intended for use with flat profile cables.

The EX-55 may be used with any cable type where sealing and retention is required by gripping the outer sheath (this includes armoured/screened/braided cables, the armour/screen/braid being clamped inside the terminating equipment).

The EX-50 model has an additional clamp to grip copper braid and woven steel wire armour, which seals and grips the inner and outer sheaths.

Construction materials are brass, mild steel or stainless steel. In all cases, the seal materials are silicone. Glands are available in the size range 20S, 20R and 20 with an M20 x 1.5 and M25 X 1.5 metric entry thread. Alternative equivalent size entry thread forms are available. The glands have an ingress protection rating of IP66 and IP68 (50 metres 7 days).

The EX-55F and EX-55M model series variant to the EX-55 series additionally provides, via an alternative cap component, male or female connection to solid rigid conduit or flexible metallic conduit The EX-55C model series variant to the EX-55 series additionally provides, via an alternative compression bush component, male connection to galvanised steel or stainless steel, unsheathed or protective sheathed, flexible metallic conduit.

The EX-50F and EX-50M model series variant to the EX-50 series additionally provide, via an alternative cap component, male or female connection to solid rigid conduit or flexible metallic conduit.

Type EX-55 / EX-55F and EX-55M Cable Glands

Gland Size	Standard Entry Threads		Outer Sheath Data			
	Metric	NPT	Min		Max	
			A	B	A	B
20S	M20	½”	6.3	4.0	11.7	7.0
20	M20	½”	10.3	5.6	13.5	9.0
20R	M20	½”	8.1	5.8	13.5	6.2
25	M25	¾”	10.6	4.0	16.2	7.0

Type EX-55C Cable Glands:

Gland Size	Standard Entry Threads		Outer Sheath and Conduit Data					
	Metric	NPT	Cable Sheath Data				Conduit Data	
			Min		Max		Typical Conduit ID	Max Conduit OD
			A	B	A	B		
20S-1	M20	½”	6.3	4.0	11.2	7.0	13.0	17.1
20S-2	M20	½”	6.3	4.0	11.7	7.0	15.0	19.3
20S-3	M20	½”	6.3	4.0	11.7	7.0	16.9	21.5
20-1	M20	½”	10.3	5.6	11.2	9.0	13.0	17.1
20-2	M20	½”	10.3	5.6	13.5	9.0	15.0	19.3
20-3	M20	½”	10.3	5.6	13.5	9.0	16.9	21.5
20R-1	M20	½”	8.1	5.8	11.2	6.2	13.0	17.1
20R-2	M20	½”	8.1	5.8	13.5	6.2	15.0	19.3
20R-3	M20	½”	8.1	5.8	13.5	6.2	16.9	21.5
25-1	M25	¾”	10.6	4.0	16.2	7.0	16.9	23.8
25-2	M25	¾”	10.6	4.0	16.2	7.0	18.7	24.8
25-3	M25	¾”	10.6	4.0	16.2	7.0	21.1	26.8
25-4	M25	¾”	10.6	4.0	16.2	7.0	20.7	27.8

Type EX-50 / EX-50F and EX-50M Cable Glands:

Gland Size	Standard Entry Threads		Inner Sheath Range				Outer Sheath Range				Armour Wire Dia.	
			Min		Max		Min		Max			
	Metric	NPT	A	B	A	B	A	B	A	B	Min	Max
20S	M20	½”	6.3	4.0	11.7	7.0	7.9	4.5	11.7	7.0	0.1	0.3
20	M20	½”	10.3	5.6	13.5	9.0	11.0	4.5	13.5	9.0	0.1	0.3
20R	M20	½”	8.1	5.8	13.5	6.2	10.7	5.4	16.1	8.3	0.1	0.3

Note: A = width and B = thickness

Notes:

Certificate Sira 05ATEX1121X / IECEx SIR 07.0106X is superseded by certificate CML 19ATEX1368X / IECEx CML 19.0110X.

The product covered by Issue 0 of this certificate remains identical to that previously covered by Sira 05ATEX1121X / IECEx SIR 07.0106X.

Where Sira 05ATEX1121X / IECEx SIR 07.0106X is specified in other product certification, or other technical specifications, this certificate reference for the product shall be used in its place; updating of the other product certificate or technical specification is not required.

12 Certificate history and evaluation reports

Issue	Date	Associated report	Notes
0	22 Apr 2021	R12631B/00	Issue of Prime Certificate

Note: Drawings that describe the equipment or component are listed in the Annex.

13 Conditions of Manufacture

None.

14 Specific Conditions of Use (Special Conditions)

The following conditions relate to safe installation and/or use of the equipment.

i. The EX-55, EX-55F, EX-55M, EX-55C, EX-50, EX-50F and EX-50M ranges of cable glands shall not be used in enclosures where the temperature, at the point of mounting, is outside the range of -60°C to +180°C.

ii. The EX-55, EX-55F, EX-55M, EX-55C, EX-50, EX-50F and EX-50M ranges of cable glands shall only be used for fixed installations, in addition, the cables shall be effectively clamped to prevent pulling or twisting.

iii. The EX-55, EX-55F, EX-55M, EX-55C, EX-50, EX-50F and EX-50M ranges of cable glands, when installed in accordance with the manufacturer's instructions and with an appropriate enclosure on which they are fixed, are capable of providing an ingress protection of IP66 and IP68 (50 metres 7 days).

iv. The threaded entry component threads without interface O-ring seals installed in an explosive dust atmosphere, within threaded entries, shall only be fitted into enclosures that have either:

- parallel entries that will ensure that a minimum of 5 full threads of contact will be maintained, this is in accordance with clause 5.1.2 of EN 60079-31:2014
- tapered entries that will ensure that a minimum of 3 ½ full threads of contact will be maintained, this is in accordance with clause 5.1.2 of EN 60079-31:2014

Certificate Annex

Certificate Number	CML 19ATEX1368X
Equipment	Type EX-50* and EX-55* Range of Cable Glands
Manufacturer	Amphenol EEC, Inc.

The following documents describe the equipment or component defined in this certificate:

Issue 0

Drawing No	Sheets	Rev	Approved date	Title
AMP/ATX/UF	1 of 1	7	22 Mar 2021	Trade Agent Label Drawing EX-55 Cable Gland Range
AMP/ATX/BF	1 of 1	7	22 Mar 2021	Trade Agent Label Drawing EX-50 Cable Gland Range