EU Type Examination Certificate CML 17ATEX3256X Issue 1

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

2 Equipment **SPMH*NE range of stopping plugs**

3 Manufacturer **Peppers Cable Glands Limited**

4 Address **Stanhope Road, Camberley,**
Surrey, GU15 3BT, UK

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, Hoogoorddreef 15, Amsterdam, 1101 BA, 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 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 60079-0:2012+A11:2013 EN 60079-7:2015 EN 60079-31:2014

10 The equipment shall be marked with the following:

Ex II 2 G
Ex eb IIC Gb

Ex II 1 D
Ex ta IIIC Da

R C Marshall
Certification Officer

11 Description

The SPMH*NE range of stopping plugs are non-metallic, mushroom head plugs. They comprise a single piece construction with cylindrical body that is threaded at one end with a male thread. They are intended to fill unused cable entries in increased safety (Ex e) and/or dust protection by enclosure (Ex t) equipment.

The products are manufactured with the following thread form options:

ISO Metric: M12 / M16 / M20 / M25 / M32 / M40 / M50 / M63 / M75

NPT and NPSM: ⅜" ½" / ¾" / 1" / 1 ¼" / 1 ½" / 2" / 2 ½"
(to ANSI/ASME B1.20.1:1983 (R2001))

BSPP: ⅜" ½" / ¾" / 1" / 1 ¼" / 1 ½" / 2" / 2 ½"
(to BS EN ISO 228-1)

BSPT: ⅜" ½" / ¾" / 1" / 1 ¼" / 1 ½" / 2" / 2 ½"
(to BS21:1985)

The stopping plugs are provided with O-ring seals fitted to male thread forms. The following materials are made available to suit the application:

- Nitrile O-ring
- Neoprene O-ring
- Silicone O-ring
- Fluorosilicone O-ring
- Viton O-ring
- EPDM O-ring

When installed in unthreaded clearance holes, the stopping plugs shall be secured with an appropriate locknut and installed in accordance with the manufacturer's instructions.

The stopping plugs, with parallel threads and fitted with sealing rings, when installed in accordance with the manufacturer's instructions, are capable of providing, with an enclosure on which they are fixed, an ingress protection rating of IP66 / IP68 to 100 metres for 7 days.

The stopping plugs, fitted with sealing rings and installed in clearance holes, when installed in accordance with the manufacturer's instructions, are capable of providing, with an enclosure on which they are fixed, an ingress protection rating of IP66 / IP68 to 100 metres for 7 days.

Variation 1

This variation introduces the following changes:

i. To permit minor changes to the design, resulting in increased material thickness.
ii. To transfer the CML UK certificate CML 17ATEX3256X to CML B.V.

Material of manufacture and marking

The product type reference is derived from the following options:

A-B-C-D-E-F

A **Product Type**

SPMH = Mushroom head stopping plug

B **IP Seal code**

1	=	Nitrile O-ring	(-25°C to +100°C)
2	=	Neoprene O-ring	(-25°C to +90°C)
3	=	Silicone O-ring	(-25°C to +130°C)
4	=	Fluorosilicone O-ring	(-25°C to +130°C)
5	=	Viton O-ring	(-20°C to +130°C)
6	=	EPDM O-ring	(-25°C to +110°C)

B **Material of manufacture**

N = Nylon

D **Certification order code**

E = Ex eb, Ex ta

E **Thread Size**

Metric	=	M12 / M16 / M20 / M25 / M32 / M40 / M50 / M63 / M75
NPT/ NPSM	=	⅜" ½"/ ¾"/ 1"/ 1 ¼"/ 1 ½"/ 2"/ 2 ½"
BSPT/ BSPP	=	⅜" ½"/ ¾"/ 1"/ 1 ¼"/ 1 ½"/ 2"/ 2 ½"

12 Certificate history and evaluation reports

Issue	Date	Associated report	Notes
0	22 Jan 2018	R2202A/00	Issue of prime certificate
1	11 Dec 2018	R12182A/00	Introduction of Variation 1

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

13 Conditions of manufacture

None.

14 Specific Conditions of Use (Conditions of Certification)

i. Where SPMH*NE stopping plugs are installed in protection by enclosure (Ex ta) equipment for use in explosive dust atmospheres providing threaded entries, only parallel threads may be used.

ii. Where SPMH*NE stopping plugs are installed in protection by enclosure (Ex ta) equipment for use in explosive dust atmospheres providing plain entries, they shall be fitted with a sealing ring and secured with a locknut, in accordance with IEC 60079-31:2013 clause 5.3.1.

iii. The SPMH*NE stopping plugs are suitable for use within a maximum operating temperature range of up to -25°C to +130°C. When fitted with seals the service temperature limitations in the description apply.

iv. When fitted in plain entries, they shall have a diameter no greater than 0.7 mm larger than the major diameter of the SPMH*NE stopping plug thread. The plug shall be held in position within the plain entry with a suitable locknut.

v. For sizes M50, M63, M75, 1 ½", 2" and 2 ½" – Under certain extreme circumstances, exposed stopping plugs may store an ignition-capable level of electrostatic charge. Therefore, the user/installer shall implement precautions to prevent the build-up of electrostatic charge, e.g. locate the equipment where a charge-generating mechanism (such as wind-blown dust) is unlikely to be present and clean with a damp cloth.

vi. The SPMH*NE stopping plugs of sizes M12, M16 and ⅜" are only suitable for use in areas of low risk of mechanical impact.

Certificate Annex

Certificate Number	**CML 17ATEX3256X**
Equipment	**SPMH*NE range of stopping plugs**
Manufacturer	**Pepper Cable Glands**

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

Issue 0

Drawing No	Sheets	Rev	Approved date	Title
PCG/ATX/NSP-1	1 of 1	1	19 Jan 2018	Metric stopping plug dimensions
PCG/ATX/NSP-2	1 of 1	1	19 Jan 2018	Non-metric stopping plug dimensions
PCG/ATX/PEXMP	1 of 1	2	19 Jan 2018	Marking plan
PCG/ATX/SPMHN	1 of 1	1	19 Jan 2018	Part numbering and marking system
PCG/ETOR	1 of 1	12	19 Jan 2018	O-ring details

Issue 1

Drawing No	Sheets	Rev	Approved date	Title
PCG/ATX/NSP-1	1 of 1	2	11 Dec 2018	SPMH*N Nylon Stopping Plug, Mushroom Head - Metric
PCG/ATX/NSP-2	1 of 1	2	11 Dec 2018	SPMH*N Nylon Stopping Plug, Mushroom Head – NPT, NPSM, BSPT, BSPP