IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION
IEC Certification System for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: **IECEx CML 17.0145X**

Page 1 of 4

Certificate history:

Issue 3 (2021-07-28)
Issue 2 (2020-10-02)
Issue 1 (2018-12-18)
Issue 0 (2018-01-22)

Status: **Current**

Issue No: 4

Date of Issue: 2021-10-21

Applicant: **Peppers Cable Glands Limited**
Stanhope Road
Camberley
Surrey
GU15 3BT
United Kingdom

Equipment: **SPMH*NE Range of non-metallic stopping plugs**

Optional accessory:

Type of Protection: **Increased Safety 'eb', dust protection by enclosure 'ta'**

Marking: Ex eb IIC Gb

Ex ta IIIC Da

Approved for issue on behalf of the IECEx Certification Body: **A Snowdon MIET**

Position: **Assistant Certification Manager**

Signature:
(for printed version)

Date:
(for printed version)

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting www.iecex.com or use of this QR Code.

Certificate issued by:

Eurofins E&E CML Limited
Unit 1, Newport Business Park
New Port Road
Ellesmere Port, CH65 4LZ
United Kingdom

IECEx Certificate of Conformity

Certificate No.: **IECEx CML 17.0145X**

Date of issue: 2021-10-21 Issue No: 4

Manufacturer: **Peppers Cable Glands Limited**
Stanhope Road
Camberley
Surrey
GU15 3BT
United Kingdom

Manufacturing locations:

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements.This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended

STANDARDS :
The equipment and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards

IEC 60079-0:2017 Explosive atmospheres - Part 0: Equipment - General requirements
Edition:7.0

IEC 60079-31:2013 Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"
Edition:2

IEC 60079-7:2017 Explosive atmospheres - Part 7: Equipment protection by increased safety "e"
Edition:5.1

This Certificate **does not** indicate compliance with safety and performance requirements other than those expressly included in the Standards listed above.

TEST & ASSESSMENT REPORTS:
A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in:

Test Reports:

GB/CML/ExTR17.0176/00 GB/CML/ExTR18.0303/00 GB/CML/ExTR21.0163/00
GB/CML/ExTR21.0248/00

Quality Assessment Reports:

GB/CML/QAR19.0022/00 GB/CML/QAR19.0022/01 GB/CML/QAR19.0022/02

IECEx Certificate of Conformity

EQUIPMENT:
Equipment and systems covered by this Certificate are as follows:

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.

Refer to Annex for full description.

SPECIFIC CONDITIONS OF USE: YES as shown below:
Refer to Annex for Specific Conditions of Use.

IECEx Certificate of Conformity

DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)
Issue 1

This issue introduces the following change:

1. To permit minor changes to the design, resulting in increased material thickness.

Issue 2

Addition of updated QAR

GB/CML/QAR 19.0022

No other changes

Issue 3

This issue introduces the following change:

1. Review and update of the certification to the latest standards. The standards have been updated to specify IEC 60079-0:2017 and IEC 60079-7:2017.

Issue 4

This issue introduces the following changes:

1. Removal of tolerance class 6g from the metric thread form.
2. Changes to tolerance dimensions.

Annex:

IECEx CML 17.0145X Certificate Annex Issue 4.pdf

Annexe to:	IECEx CML 17.0145X, Issue 4
Applicant:	Peppers Cable Glands Limited
Apparatus:	SPMH*NE range of non-metallic stopping plugs

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.

Eurofins E&E CML Limited
Newport Business Park
New Port Road
Ellesmere Port
CH65 4LZ

T +44 (0) 151 559 1160
E info@cmlex.com

www.cmlex.com

Company Reg No. 8554022 VAT No. GB163023642

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.

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"

Conditions of Manufacture

None.

Specific Conditions of Use

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

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.

Components covered by Ex Certificates issued to older editions of Standards

None.