EU Type Examination Certificate CML 23ATEX1056X Issue 1

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

2 Equipment **A Range of Fibre-Optic Connectors**

3 Manufacturer **Hubbell Limited t/a Hawke International**

4 Address **Ashton Road**
Bredbury Park Industrial Estate
Bredbury
Stockport SK6 2QN
United Kingdom

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

6 Eurofins CML B.V., Chamber of Commerce No 67386717, 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 60079-28:2015	EN 60079-31:2014	

10 The equipment shall be marked with the following:

For CP/CR	For bulkhead/box mount version	with separately certified 'op is' source
Ⓔx II 2 G D	Ⓔx II 2 G D	Ⓔx II 2 G D
Ex op pr IIC T6 Gb	Ex [db eb] op pr IIC T6 Gb	Ex [op is] IIC T* Ga
Ex tb IIIC T85°C Db	Ex tb IIIC T85°C Db	Ex tb IIIC T85°C Db
Ta= -40°C to +60°C	Ta= -40°C to +60°C	Ta= -40°C to +60°C

L A Brisk
Assistant Certification Manager

11 Description

The Fibre-Ex Range of Fibre-Optic Connectors may be manufactured in brass, nickel plated brass, stainless steel, and each comprise a cylindrical body section which may take the form of a Type CP In-line Connector with male mating parts (plug), or a Type CR In-line Connector with female mating parts (socket).

The male and female parts are joined with a threaded collar which is fixed to the male half. When separated the connection chambers are closed with dust caps which are secured in the same manner. A locking grub screw is provided at the back of the threaded collar.

The cylindrical body sections house a 4 or 8 way plug & socket arrangement which may be keyed into a range of orientations. The plug and socket insert assemblies are mechanically supported from the rear.

An armour/braid clamping arrangement is provided within the rear of the in-line units. This arrangement has two reversible clamping cone options to accommodate armour/braid sizes from 0 to 1.25mm. In addition, the in-line connectors incorporate cable sealing mechanism at the rear.

An outer cable clamp arrangement may also be secured to the rear of the inline connectors with two hexagon socket grub screws.

A Type BR Bulkhead Connector with female mating parts (socket), intended for connection through the bulkhead or walls of flameproof or increased safety enclosures.

At the rear of the bulkhead units is an internal compression/cable sealing element and an M20 or M32 male entry thread. Alternative ½", ¾" or 1" NPT entry threads may be provided.

In this form the coding includes the marking [db eb] to indicate that it may interface with flameproof or increased safety enclosures, without negating the protection concepts.

The Range of connector consists of the following versions CP, CR and BR i.e. Connector Plug, Connector Receptacle and Bulkhead Receptacle respectively. The composition of each version is as follows:

- Cap (CP, CR and BR)
- Continuity Spring Clip (CR and BR)
- Insert Assembly
- O Ring Seals
- Shell
- Engaging nut (CP)
- Snap Ring (CP)
- Deluge Boot (CR and CP)
- Clamping Ring and Spigot (CR and CP)
- Middle nut (CR and CP)
- Back nut (CR and CP)
- Back nut and clamp (CR and CP)
- Compressor assembly (BR)
- Skid washer (BR)
- Flameproof seal (BR)
- Retainer (BR)
- GMC (Gland mounting Clamp) (CR and CP)

An alternative [“op is” or “op pr”] marking option to indicate acceptability for use with an external, separately certified ‘op is’ or ‘op pr’ a limited energy output. A range of temperature classes are permitted to match the energy limitations of the optical source.

Notes:

- Baseefa16ATEX0030X is superseded by this certificate.
- The product covered by Issue 0 of this certificate remains identical to that previously covered by Baseefa16ATEX0030X.
- Where Baseefa16ATEX0030X 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.

Variation 1

This variation introduces the following modification:

i. To recognise a change to the applicant’s and manufacturer’s name and address.

12 Certificate history and evaluation reports

Issue	Date	Associated Report	Notes
0	09 Jan 2024	R16173A/00	Issue of Prime Certificate
1	11 Dec 2024	R17479B/00	Issue 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 (Special Conditions)

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

i. Do not disconnect product when energised and in a hazardous area.
ii. In a hazardous area environment, the protective caps are to be fitted immediately on the socket side following separation when the product is energised.
iii. The bulkhead connector is not to be fitted to enclosures/equipment where the interface temperature may exceed 80°C.
iv. The cable shall be effectively clamped to prevent pulling and twisting (does not apply when fitted with rear clamping device or Hawke Gland Mounted Clamp (GMC)).
v. When used in dust environments the cable entry, or bulkhead mounting, shall be sealed in accordance with the installation code of practice to ensure that a minimum ingress protection of level IP6X is maintained.
vi. The Ex [op is] version of the equipment, shall only be supplied from separately certified optical source marked with coding to include “Ex op is”. The marked gas group and “T” rating shall match (or exceed) those marked on the optical source, as limited by the maximum specified radiated power/ irradiance levels (prescribed by Table 2 of EN 60079-28).
vii. An ignition hazard assessment shall be made to address any optical radiation.

Certificate Annex

Certificate Number	**CML 23ATEX1056X Issue 1**
Equipment	**A Range of Fibre-Optic Connectors**
Manufacturer	**Hubbell Limited t/a Hawke International**

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

Issue 0

Drawing No	Sheets	Rev	Approved Date	Title
620221	1 to 2	A	09 Jan 2024	FibreEx Schedule Drawing

Issue 1

None.