

1 **UK-TYPE EXAMINATION CERTIFICATE**

2 **Equipment or Protective System Intended for use in Potentially Explosive Atmospheres
UKSI 2016:1107 (as amended) – Schedule 3A, Part 1**

3 UK-Type Examination Certificate Number: **BAS21UKEX0056X**

4 Product: **A Range of Fibre-Optic Connectors**

5 Manufacturer: **Hawke International**

6 Address: **A Division of Hubbell Limited, A Member of the Hubbell Group of Companies,
Oxford Street West, Ashton-under-Lyne, Lancashire, OL7 0NA**

7 This product and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

8 SGS Baseefa, Approved Body number 1180, in accordance with Regulation 43 of the Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres Regulations 2016, UKSI 2016:1107 (as amended), certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Schedule 1 of the Regulations.

The examination and test results are recorded in confidential Report No. **21(C)0033**

9 Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

**EN 60079-0: 2012: +A11: 2013 EN 60079-1: 2014 EN IEC 60079-7: 2015: +A1: 2018
EN 60079-28: 2015 EN 60079-31: 2014**

except in respect of those requirements listed at item 18 of the Schedule.

10 If the sign “X” is placed after the certificate number, it indicates that the product is subject to the Specific Conditions of Use specified in the schedule to this certificate.

11 This UK-TYPE EXAMINATION CERTIFICATE relates only to the design and construction of the specified product. Further requirements of the Regulations apply to the manufacturing process and supply of this product. These are not covered by this certificate.

12 The marking of the product shall include the following:

⊕ II 2G Ex op pr IIC T6 Gb ⊕ II 2D Ex tb IIC T85°C Db (T_{amb} = -40°C to +60°C) IP66/67

**Alternative markings include (see schedule) Ex [dbeb] op pr IIC T6 Gb - for bulkhead/box mount version
Ex [op is] IIC T* Ga - with separately certified ‘op is’ source**

SGS Baseefa Customer Reference No. **0500**

Project File No. **21/0033**

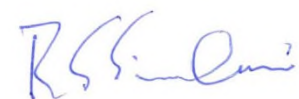
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R S SINCLAIR
TECHNICAL MANAGER
On behalf of SGS Baseefa Limited

13 **Schedule**

14 **Certificate Number BAS21UKEX0056X**

15 **Description of Product**

The Fibre[®] Range of Fibre-Optic Connectors may be manufactured in brass, steel, stainless steel or bronze, 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.

Variation 0.1

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 [dbeb] to indicate that it may interface with flameproof or increased safety enclosures, without negating the protection concepts.

Variation 0.2

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

16 **Report Number**

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17 **Specific Conditions of Use**

1. The protective caps shall be fitted immediately following separation.
2. The Type BR bulkhead connectors may be fitted to Ex d or Ex e enclosures where the interface temperature does not exceed 80°C. The integral cables shall be mechanically protected by the enclosure, or equally effective means.
3. The Type CP/CR In-line connectors are intended for use with resilient cables only, capable of withstanding axial loads in excess of 30N without damage.
4. When used in dust environments, or fitted to increased safety enclosures, the Type BR bulkhead mounting thread shall be sealed in accordance with the installation code of practice to ensure that an ingress protection level of IP6X is maintained.

5. Units coded Ex [op is] shall only be supplied from a 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).

18 Essential Health and Safety Requirements

In addition to the Essential Health and Safety Requirements (EHSRs) covered by the standards listed at item 9, the following are considered relevant to this product, and conformity is demonstrated in the report:

Clause	Subject
1.2.7	LVD type requirements
1.4.1	External effects
1.4.2	Aggressive substances

19 Drawings and Documents

Number	Sheet	Issue	Date	Description
7270	1 of 1	C	05/03/21	Range of Fibre-Optic Connectors

Baseefa16ATEX0030X
IECEX BAS 16.0032X