

UNITED KINGDOM CONFORMITY ASSESSMENT

1 UK TYPE EXAMINATION CERTIFICATE

2 Component intended for use in a Product or Protective System for use in Potentially Explosive Atmospheres

UKSI 2016:1107 (as amended) - Schedule 3A, Part 1

3 Certificate Number: CSAE 22UKEX1440U Issue: C

4 Product: Flexible Fitting, Series EKJ, ECF, and EKJSS

5 Manufacturer: Killark, Div. of Hubbell Inc. (Delaware)

6 Address: 2112 Fenton Logistics Park Blvd.

Fenton

Missouri 63026

USA

- 7 This product and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.
- CSA Group Testing UK Limited, Approved Body number 0518, in accordance with Regulation 42 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 the confidential reports listed in Section 14.2.
- 9 Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN IEC 60079-0:2018

EN 60079-1:2014

EN 60079-31:2014

Except in respect of those requirements listed at Section 16 of the schedule to this certificate. The above standards may not appear on the UKAS Scope of Accreditation, but have been added through flexible scope of accreditation, which is available on request.

- The sign "U" placed after the certificate number indicates that this certificate must not be mistaken for a certificate intended for an equipment or protective system. This partial certification may be used as the basis for certification of an equipment or protective system. Any limitations are listed in Section 15.
- 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 this product shall be in accordance with Regulation 41 and include the following:



II 2 G D Ex db IIC Gb Ex tb IIIC Db IP66

Name: M Halliwell

Title: Director of Operations





SCHEDULE

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13 DESCRIPTION OF PRODUCT

The Flexible Fitting Series EKJ, ECF or EKJSS are ranges of conduit assemblies intended for the passage of cabling between flameproof enclosures. Each assembly consists of a length of flexible, metal tubing supplied in variable lengths. This tubing is fabricated into a helical, convoluted form with an outer wire braid and a non-metallic inner liner, the metallic parts being bronze or stainless steel. A threaded connection is attached to each end of the conduit tubing, these connection fittings have either a male or female NPT thread form, are manufactured from brass or stainless steel and are attached by soldering or braze welding; see table below.

| Series | Conduit Tubing | | | End Fitting | | |
|--------|----------------|-----------------|------------|----------------|-------------|-----------------|
| | Size | Material | Method of | Thread Size | Thread form | Material |
| | | | Attachment | | | |
| ECF | 1/2" | Bronze | Solder | ½" – NPT-14 | Female | Brass |
| ECF | 3/4" | Bronze | Solder | ¾" – NPT-14 | Female | Brass |
| ECF | 1″ | Bronze | Solder | 1" - NPT-11.5 | Female | Brass |
| EKJ | 11/4" | Bronze | Solder | 1¼" – NPT-11.5 | Female | Brass |
| EKJ | 11/2" | Bronze | Solder | 1½" – NPT-11.5 | Female | Brass |
| EKJ | 2" | Bronze | Solder | 2" - NPT-11.5 | Female | Brass |
| EKJSS | 1/2" | Stainless steel | Braze weld | ½" – NPT-14 | Male | Stainless steel |
| EKJSS | 3/4" | Stainless steel | Braze weld | 3⁄4" – NPT-14 | Male | Stainless steel |
| EKJSS | 1″ | Stainless steel | Braze weld | 1" - NPT-11.5 | Male | Stainless steel |
| EKJSS | 11/4" | Stainless steel | Braze weld | 1¼" – NPT-11.5 | Male | Stainless steel |
| EKJSS | 11/2" | Stainless steel | Braze weld | 1½" – NPT-11.5 | Male | Stainless steel |
| EKJSS | 2" | Stainless steel | Braze weld | 2" - NPT-11.5 | Male | Stainless steel |

Typical nomenclature

EKJ # ## SS Ex

Where:

EKJ = Series designation (ECF or EKJ)

 $\# = \text{Conduit size } (1 - \frac{1}{2}^{"}, 2 - \frac{3}{4}^{"}, 3 - 1^{"}, 4 - \frac{1}{4}^{"}, 5 - \frac{1}{2}^{"} \text{ or } 6 - 2^{"})$

= Length of conduit in inches (variable lengths)

SS = Stainless steel construction

Ex = ATEX and UKEX certification

14 DESCRIPTIVE DOCUMENTS

14.1 Drawings

Refer to Certificate Annexe.

14.2 Associated Reports and Certificate History

| Issue | Date | Report number | Comment |
|-------|---------------|---------------|---------------------------------------|
| 0 | 30 March 2023 | R80152177A | The release of the prime certificate. |





SCHEDULE

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15 SCHEDULE OF LIMITATIONS

- 15.1 Each Flexible Fitting Series EKJ, ECF and EKJSS conduit assembly shall be provided with a suitable UKEX certified conduit sealing device at the point where it connects to the associated flameproof equipment.
- 15.2 Each Flexible Fitting Series EKJ, ECF and EKJSS conduit assembly is capable of meeting a degree of ingress protection of IP66. This condition will only be met when each end is fitted in the appropriate manner to the associated suitably certified conduit sealing device having an ingress protection rating of IP66.
- 15.3 The temperature range in which the conduit assembly shall be used is limited to -20°C to +150°C.
- 15.4 The user shall ensure that appropriate earthing arrangements are provided for the conduit assembly.
- 16 ESSENTIAL HEALTH AND SAFETY REQUIREMENTS (REGULATIONS SCHEDULE 1)
 In addition to the Essential Health and Safety Requirements covered by the standards listed in Section 9, all other requirements are demonstrated in the relevant reports.
- 17 PRODUCTION CONTROL
- 17.1 Holders of this certificate are required to comply with production control requirements defined in Schedule 3A, as applicable, and CSA Group Testing UK Regulations for Certificate Holders.
- 17.2 All completed conduit assemblies, Series EKJ, ECF & EKJSS, shall be subjected to a routine overpressure test at 2000 kPa for a period of at least 10 seconds. There shall be no damage or permanent deformation and there shall be no leakage through the walls of any of the parts.





Certificate Annexe

Certificate Number: CSAE22UKEX1440U

Flexible Fitting, Series EKJ, ECF, and EKJSS Product:

Manufacturer: Killark, Div. of Hubbell Inc. (Delaware)

Issue 0

| Drawing | Sheets | Rev. | Date (Stamp) | Title |
|---------|--------|------|--------------|--|
| B-22561 | 1 of 1 | В | 22 Feb 16 | 1/2" – Fitting S/S |
| B-22562 | 1 of 1 | В | 22 Feb 16 | ³ / ₄ " – Fitting S/S |
| B-22563 | 1 of 1 | В | 22 Feb 16 | 1" – Fitting S/S |
| B-22564 | 1 of 1 | В | 22 Feb 16 | 1¼" – Fitting S/S |
| B-22565 | 1 of 1 | В | 22 Feb 16 | 1½" – Fitting S/S |
| B-22566 | 1 of 1 | В | 22 Feb 16 | 2" – Fitting S/S |
| B-22567 | 1 of 1 | Α | 22 Feb 16 | 1/2" – Fitting - Brass |
| B-22568 | 1 of 1 | Α | 22 Feb 16 | ³ ⁄ ₄ " – Fitting - Brass |
| B-22569 | 1 of 1 | Α | 22 Feb 16 | 1" – Fitting - Brass |
| B-22570 | 1 of 1 | Α | 22 Feb 16 | 1¼" – Fitting - Brass |
| B-22571 | 1 of 1 | Α | 22 Feb 16 | 1½" – Fitting - Brass |
| B-22572 | 1 of 1 | Α | 22 Feb 16 | 2" – Fitting - Brass |
| C-22573 | 1 of 1 | D | 04 Aug 21 | EKJ-SS Flex Coupling Layout |
| B-22587 | 1 of 2 | Ε | 05 Mar 23 | 22587 Nameplate for Flexible Coupling |
| B-22587 | 2 of 2 | В | 05 Mar 23 | 22587 Nameplate for Flexible Coupling |
| C-22574 | 1 of 1 | В | 17 Mar 23 | ECF Series – Size 1 to 3 Brass/Bronze Flex Coupling Layout |
| C-22575 | 1 of 1 | В | 17 Mar 23 | EKJ Series – Size 4 to 6 Brass/Bronze Flex Coupling Layout |

