



IECEX Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

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

Certificate No.: IECEX SIR 11.0152U

Issue No: 4

Certificate history:

Status: **Current**

Issue No. 4 (2017-11-21)

Issue No. 3 (2013-07-08)

Date of Issue: **2017-11-21**

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Issue No. 2 (2012-12-10)

Issue No. 1 (2012-08-28)

Issue No. 0 (2012-01-16)

Applicant: **Hawke International**
A Division of Hubbell Limited
A Member of the Hubbell Group of Companies
Oxford Street West
Ashton-Under-Lyne
Lancashire OL7 0NA
United Kingdom

Equipment: **Swivel Couplings**

Optional accessory:

Type of Protection: **Flameproof, Increased Safety and Dust**

Marking:

Ex db I Mb
Ex eb I Mb
Ex db IIC Gb
Ex eb IIC Gb
Ex tb IIIC Db
IP66

Approved for issue on behalf of the IECEX

Certification Body:

Position:

Signature:

(for printed version)

Date:

C Ellaby

Deputy Certification Manager

2017-11-21

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 the [Official IECEX Website](http://www.iecex.com).

Certificate issued by:

SIRA Certification Service
CSA Group
Unit 6, Hawarden Industrial Park
Hawarden, Deeside, CH5 3US
United Kingdom

sira
CERTIFICATION



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Manufacturer: **Hawke International**
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Additional Manufacturing location(s):

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 electrical apparatus 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 : 2011 Edition:6.0	Explosive atmospheres - Part 0: General requirements
IEC 60079-1 : 2014-06 Edition:7.0	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
IEC 60079-31 : 2013 Edition:2	Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"
IEC 60079-7 : 2015 Edition:5.0	Explosive atmospheres – Part 7: Equipment protection by increased safety "e"

*This Certificate **does not** indicate compliance with electrical 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 Report:

GB/SIR/ExTR12.0001/00	GB/SIR/ExTR12.0215/00	GB/SIR/ExTR12.0314/00
GB/SIR/ExTR13.0161/00	GB/SIR/ExTR17.0211/00	

Quality Assessment Report:

GB/BAS/QAR06.0061/02	GB/BAS/QAR06.0061/03	GB/BAS/QAR06.0061/04
GB/BAS/QAR06.0061/05	GB/BAS/QAR06.0061/06	



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

These metallic swivel unions are available as either inline or 90° elbow thread union fittings. They have a male thread on the front entry body and a female thread on the rear sleeve, sealing, in the form of a silicone O-ring, is provided between the two parts. Each union can be fitted with an anti-rotation device, lockstop, this retains the position of the union once it is installed.

Design options

- Type 490: Male to Female inline swivel union with lockstop
- Type 491: Male to Female inline swivel union
- Type 492: Male to Female elbow swivel union with lockstop
- Type 493: Male to Female elbow swivel union

Thread specifications

Standard thread forms

- M16, M20, M25, M32, M40, M50, M63, M7
- ½"NPT, ¾"NPT, 1"NPT, 1 ¼"NPT, 1 ½"NPT, 2"NPT, 2 ½"NPT, 3"NPT

Alternative thread forms

- NPSM ANSI/ASME B1.20.1:1983
- BSPT BS 21:1985
- BSPP BS EN ISO 228-1:2003; BS EN ISO 228-2:2003 'full form only'
- PG DIN 40430:1971
- ET BS 31:1940 Table 'A'

Materials

Aluminium, brass, steel or stainless steel (the unions may be plated)

SPECIFIC CONDITIONS OF USE: NO



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EQUIPMENT (continued):

Condition of Manufacture

1. Aluminium devices shall not be marked with any information indicating that they are suitable for Group I use.

Schedule of Limitations

1. These swivel unions shall not be used where the service temperature is outside the temperature range -60°C to $+100^{\circ}\text{C}$.
2. Blanking elements shall not be used with these swivel unions.
3. The M16 size swivel unions shall only be for Group I applications where there is a low risk of impact.
4. These swivel unions shall not be used for the direct inter-connection of enclosures.
5. These swivel unions shall not be used with conduit in Group I installations.
6. Only one swivel union shall be used with any single cable entry on the associated equipment.
7. When required, the front and rear threads of these unions shall be suitably sealed to maintain the ingress protection rating of the associated equipment to which they are attached e.g. if a union is fitted into (Ex tb) protection by enclosure equipment for use in explosive dust atmospheres and the front thread is not sealed using a washer, then, to maintain the required IP6X rating, the enclosure shall offer a minimum of 5 full threads of contact, in accordance with IEC 60079-31:2013 clause 5.1.2.



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

This issue recognises the following changes; refer to the certificate annex to view a comprehensive history:

1. To permit the use of alternate grades of brass and stainless steel as materials of manufacture.
2. Recognition of minor drawing modifications; these amendments are administrative or involve changes to components and design that do not affect the aspects of the product that are relevant to explosion safety.
3. Following appropriate assessment to demonstrate compliance with the latest technical knowledge, IEC 60079-1:2007 Ed.6, IEC 60079-7:2006 Ed.4 and IEC 60079-31:2008 Ed.1, were replaced by IEC 60079-1:2014 Ed.7, IEC 60079-7:2015 Ed.5 and IEC 60079-31:2013 Ed.2, the Schedule of Limitations and the markings were amended to recognise the new standards.
4. The product description was amended to include alternative thread forms that are available.

Annex:

[IECEX SIR 11 0152 Annex Iss 4.pdf](#)

Annex to: IECEx SIR 11.0152 Issue 4
Applicant: Hawke International
Apparatus: Type 49* Swivel Couplings



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

Issue 1 – this Issue introduced the following change:

- i. To allow the Type 49* Swivel Couplings entry bore to be modified.

Issue 2 – this Issue introduced the following changes:

- i. Replacement of 'clamping ring' elastomeric component part with a metallic 'clamping olive'.
- ii. Minor modification to the internal leading edge of the bore on the non-threaded end of the rear sleeve of the main body.

Issue 3 – this Issue introduced the following change

- i. The correction of drawing detail relating to maximum bore dimension of male component part sizes 1/2", 3/4", 1", 1 1/4", 1 1/2", 2" and 2 1/2" NPT.

Issue 4 – this Issue introduced the following change

- i. To permit the use of alternate grades of brass and stainless steel as materials of manufacture.
- ii. The recognition of minor drawing modifications; these amendments are administrative or involve changes to components and design that do not affect the aspects of the product that are relevant to explosion safety.
- iii. Following appropriate assessment to demonstrate compliance with the latest technical knowledge, IEC 60079-1:2007 Ed.6, IEC 60079-7:2006 Ed.4 and IEC 60079-31:2008 Ed.1, were replaced by IEC 60079-1:2014 Ed.7, IEC 60079-7:2015 Ed.5 and IEC 60079-31:2013 Ed.2, the Schedule of Limitations and the markings were amended to recognise the new standards.
- iv. The product description was amended to clarify the specification of the alternative types of thread forms that are available.