



1 **EU-TYPE EXAMINATION CERTIFICATE**

2 Component intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU

3 Certificate Number: **Sira 11ATEX1347U** Issue: **4**

4 Component: **Type 49* Swivel Couplings**

5 Applicant: **Hawke International
A Division of Hubbell Limited
A Member of the Hubbell Group of Companies**

6 Address: Oxford Street West
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7 This component and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.

8 Sira Certification Service, notified body number 0518 in accordance with Articles 17 and 21 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this component has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of a component 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 14.2.

9 Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the schedule to this certificate, has been assured by compliance with the following documents:

EN 60079-0:2012/A11:2013 EN 60079-1:2014 EN 60079-7:2015 EN 60079-31:2014

The above list of documents may detail standards that do not appear on the UKAS Scope of Accreditation, but have been added through Sira's flexible scope of accreditation, which is available on request.

10 The sign 'U' is placed after the certificate number to indicate that the product assessed is a component and may be subject to further assessment when incorporated into equipment. Any limitations of use are listed in the schedule to this certificate.

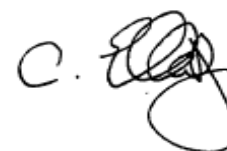
11 This EU-Type Examination Certificate relates only to the design and construction of the specified component. If applicable, further requirements of this Directive apply to the manufacture and supply of this component.

12 The marking of the component shall include the following:



I M2
II 2GD
Ex db I Mb
Ex eb I Mb
Ex db IIC Gb
Ex eb IIC Gb
Ex tb IIIC Db
IP66

Project Number 70108149



C Ellaby
Deputy Certification Manager

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13 DESCRIPTION OF COMPONENT

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, M75
1/2"NPT, 3/4"NPT, 1"NPT, 1 1/4"NPT, 1 1/2"NPT, 2"NPT, 2 1/2"NPT, 3"NPT

Alternative thread forms

The front threaded 'entry item' may be provided with alternative thread type and size (as marked on the product) to the standard metric and NPT thread form as detailed below. These are intended for use within existing installations only that incorporate thread types that are no longer permitted by the current edition of EN 60079-1, but comply with the requirements of EN 50018:2000.

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

Materials

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

Variation 1 - This variation introduced the following change:

- i. The entry bore of the Type 49* Swivel Couplings was modified.

Variation 2 - This variation 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.

Variation 3 - This variation 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.



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Variation 4 - This variation introduced the following change:

- i. To permit the use of alternative 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, EN 60079-0:2009, EN 60079-1:2007, EN 60079-7:2007 and EN 60079-31:2009, were replaced by EN 60079-0:2012/A11:2013, EN 60079-1:2014, EN 60079-7:2015 and EN 60079-31:2014, the Schedule of Limitations and the markings were amended to recognise the new standards.
- iv. The product description was also amended to clarify the specification of the alternative types of thread forms that are available.

14 DESCRIPTIVE DOCUMENTS

14.1 Drawings

Refer to Certificate Annexe.

14.2 Associated Sira Reports and Certificate History

Issue	Date	Report no.	Comment
0	16 January 2012	R25571A/00	The release of the prime certificate.
1	28 August 2012	R28633A/00	The introduction of Variation 1.
2	10 December 2012	R29552A/00	The introduction of Variation 2.
3	31 May 2013	R31050A/00	The introduction of Variation 3.
4	21 November 2017	R70108149A	This Issue covers the following changes: <ul style="list-style-type: none">• EC-Type Examination Certificate in accordance with 94/9/EC updated to EU-Type Examination Certificate in accordance with Directive 2014/34/EU. <i>(In accordance with Article 41 of Directive 2014/34/EU, EC-Type Examination Certificates referring to 94/9/EC that were in existence prior to the date of application of 2014/34/EU (20 April 2016) may be referenced as if they were issued in accordance with Directive 2014/34/EU. Variations to such EC-Type Examination Certificates may continue to bear the original certificate number issued prior to 20 April 2016.)</i>• The introduction of Variation 4.

15 SCHEDULE OF LIMITATIONS

- 15.1 These swivel unions shall not be used where the service temperature is outside the temperature range - 60°C to +100°C.
- 15.2 Blanking elements shall not be used with these swivel unions.
- 15.3 The M16 size swivel unions shall only be for Group I applications where there is a low risk of impact.
- 15.4 These swivel unions shall not to be used for the direct inter-connection of enclosures.
- 15.5 These swivel unions shall not be used with conduit in Group I installations.
- 15.6 Only one swivel union shall be used with any single cable entry on the associated equipment.

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Sira Certification Service

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- 15.7 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 EN 60079-31:2014 clause 5.1.2.
- 16 **ESSENTIAL HEALTH AND SAFETY REQUIREMENTS OF ANNEX II (EHSRs)**
The relevant EHSRs that are not addressed by the standards listed in this certificate have been identified and individually assessed in the reports listed in Section 14.2.
- 17 **CONDITIONS OF MANUFACTURE**
- 17.1 The use of this certificate is subject to the Regulations Applicable to Holders of Sira Certificates.
- 17.2 Holders of EU-Type Examination Certificates are required to comply with the conformity to type requirements defined in Article 13 of Directive 2014/34/EU.
- 17.3 Aluminium devices shall not be marked with any information indicating that they are suitable for Group I use.

Certificate Annexe



Certificate Number: Sira 11ATEX1347U
Component: 49* Swivel Couplings
Applicant: Hawke International, A Division of Hubbell Ltd,
A Member of the Hubbell Group of Companies

Issue 0

Drawing No.	Sheets	Rev.	Date (Sira Stamp)	Title
3015	1 of 1	A	20 Dec 11	Material specifications
3016	1 of 1	A	20 Dec 11	Thread specifications
490	1 of 1	A	20 Dec 11	Inline swivel with lockstop
491	1 of 1	A	20 Dec 11	Inline swivel
492	1 of 1	A	20 Dec 11	90° swivel with lockstop
493	1 of 1	A	20 Dec 11	90° swivel

Issue 1

Drawing No	Sheets	Rev.	Date (Sira stamp)	Title
491	1 of 1	B	22 Aug 12	Inline Swivel Coupling
493	1 of 1	B	22 Aug 12	90° Elbow Swivel

Issue 2

Drawing No.	Sheets	Rev.	Date (Sira stamp)	Title
490	1 of 1	B	30 Nov 12	Inline swivel with lockstop
492	1 of 1	B	30 Nov 12	90° swivel with lockstop

Issue 3

Drawing No.	Sheets	Rev.	Date (Sira stamp)	Title
490	1 of 1	C	29 May 13	Inline swivel with lockstop coupling
491	1 of 1	C	29 May 13	Inline swivel coupling
492	1 of 1	C	29 May 13	90° elbow swivel lockstop
493	1 of 1	C	29 May 13	90° elbow swivel

Issue 4

Drawing	Sheets	Rev.	Date (Sira Stamp)	Title
490	1 of 1	D	11 Sep 17	Inline swivel with lockstop coupling
491	1 of 1	D	11 Sep 17	Inline swivel coupling
492	1 of 1	D	11 Sep 17	90° elbow swivel lockstop
493	1 of 1	D	11 Sep 17	90° elbow swivel
3015	1 of 1	F	11 Sep 17	Material specification
3016	1 of 3	H	11 Sep 17	Thread specification - NPT
3016	2 of 3	G	11 Sep 17	Thread specification - metric
3016	3 of 3	F	11 Sep 17	Thread specification – other thread forms

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