



# 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](http://www.iecex.com)

Certificate No.: IECEx BAS 11.0077U issue No.:2

Status: Current

Certificate history:  
Issue No. 2 (2016-3-18)  
Issue No. 1 (2013-3-11)  
Issue No. 0 (2011-11-4)

Date of Issue: 2016-03-18 Page 1 of 4

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

Electrical Apparatus: Ex d Unions Type 481 and 482  
*Optional accessory:*


Type of Protection: Ex d Flameproof protection

Marking: Ex db IIC Gb (-60°C to + 80°C)

Approved for issue on behalf of the IECEx Certification Body: R S Sinclair

Position: Technical Manager

Signature:  
(for printed version)

  
22/3/16

Date:

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:

SGS Baseefa Limited  
Rockhead Business Park  
Staden Lane  
Buxton  
Derbyshire  
SK17 9RZ  
United Kingdom





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Manufacturer: **Hawke International**  
A Division of Hubbell Limited  
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Oxford Street West  
Ashton-under-Lyne  
Lancashire  
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United Kingdom

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** Explosive atmospheres - Part 0: General requirements

Edition: 6.0

**IEC 60079-1 : 2014-06** Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"

Edition: 7.0

*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/BAS/ExTR11.0163/00

GB/BAS/ExTR13.0065/00

GB/BAS/ExTR15.0232/00

#### Quality Assessment Report:

GB/BAS/QAR06.0061/05



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## Schedule

### EQUIPMENT:

*Equipment and systems covered by this certificate are as follows:*

The Type 481 and Type 482 threaded unions have thread sizes ranging from M16 to M75 and are intended for the inline connection into a flameproof enclosure or fitting having male or female threads.

The unions are manufactured from brass, steel or stainless steel and comprise three parts, two coaxial threaded parts either male to female (Type 481) or both female (Type 482), and an intermediate collar. The external plain section of the female threaded portion forms a cylindrical joint with the internal diameter of the collar. The second male or female threaded section screws into the rear of the collar and forces the female thread against the inner wall of the collar creating a plane joint which together with the cylindrical joint creates a spigot joint. The second threaded component is secured against removal or vibration by a locking set screw situated in the wall of the collar.

The threads may be NPT, or metric, or other equivalent parallel thread forms as detailed on the drawings.

The difference in thread sizes in any single union is no more than one size e.g. M16 to M20.

### Schedule of Limitations

1. This component must not be used with a certified piece of equipment unless the certificate for the equipment specifically includes for its use.
2. The overall cross sectional area of the conductors must not exceed 40% of the cross sectional area of the bore of the fitting when three or more non sheathed, insulated, single or multi-core conductors pass through the fitting unless tested and specified.

### CONDITIONS OF CERTIFICATION: NO



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

### Variation 2.1

To allow the update of the Male to Female and Female to Female Unions Type 481 and 482 as listed on the certificate IECEx BAS 11.0077U to comply with the latest edition of the following standards : IEC 60079-0:2011 Edition 6, IEC 60079-1:2014 Edition 7.

This includes an update to the markings as listed below:

Ex db IIC Gb (-60°C to + 80°C)

ExTR: GB/BAS/ExTR15.0232/00

File Reference: 15/0097