



# 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 15.0079U

Issue No: 3

Certificate history:

Issue No. 3 (2017-08-22)

Issue No. 2 (2016-10-20)

Issue No. 1 (2016-05-31)

Issue No. 0 (2015-09-02)

Status: **Current**

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Date of Issue: **2017-08-22**

Applicant: **Bifold Fluidpower Limited**  
Broadgate  
Oldham Broadway Business Park  
Chadderton  
Oldham  
Greater Manchester  
OL9 9X  
**United Kingdom**

Equipment: **Type EHPC Operator**  
*Optional accessory:*

Type of Protection: **Flameproof and Dust Protected**

Marking:  
**Ex db IIB Gb**  
**Ex tb III C Db**

*Approved for issue on behalf of the IECEX  
Certification Body:*

R S Sinclair

*Position:*

Technical Manager

*Signature:  
(for printed version)*

*Date:*

22. August 2017

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: **Bifold Fluidpower Limited**  
Broadgate  
Oldham Broadway Business Park  
Chadderton  
Oldham  
Greater Manchester  
OL9 9X  
**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:

<b>IEC 60079-0 : 2011</b> Edition:6.0	Explosive atmospheres - Part 0: General requirements
<b>IEC 60079-1 : 2014-06</b> Edition:7.0	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
<b>IEC 60079-31 : 2013</b> Edition:2	Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"

*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/ExTR15.0182/00 GB/BAS/ExTR16.0141/00 GB/BAS/ExTR16.0273/00  
GB/BAS/ExTR17.0125/00

#### Quality Assessment Report:

GB/BAS/QAR07.0038/06



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## Schedule

### EQUIPMENT:

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

The Type EHPC Operator comprises an M20 or M25 externally threaded adaptor for attachment into the wall of a flameproof enclosure. The resulting joint is a threaded flameproof joint in accordance with IEC 60079-1. A hole is machined in the centre of the adaptor, through which passes a shaft which provides operation between the inside and outside of the flameproof enclosure. The clearance between the shaft and the bore of the adaptor provides a cylindrical flameproof joint.

The EHPC operator is also designed for use in potentially explosive dust atmospheres in accordance with IEC 60079-31. The EHPC Operator has an ingress protection level of IP66 between the shaft and adaptor only.

### Schedule of limitations:-

1. The service temperature of the EHPC Operator is -40°C to +120°C.
2. When the EHPC Operator is installed in an Ex enclosure with a reference pressure of greater than 20 bar, further assessment and testing shall be undertaken.
3. The metal body of the EHPC Operator shall be earthed by installation.
4. When installed in an Ex certified enclosure a minimum of 5 full threads shall be engaged, with a depth of engagement of at least 8 mm
5. The flameproof joints are not to be repaired.

**SPECIFIC CONDITIONS OF USE: NO**



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

### Variation 3.1

To introduce two alternative variants of the Type EHPC Operator, the EHPC Operator 4 and the EHPC Operator 5.

### Variation 3.2

To tighten the dimensional tolerances of the adapter (locking piece) bore and the shaft diameter such that the maximum flamepath gap, the diametrical clearance, is now 0.10 mm.

### Variation 3.3

To note deletion of the EHPC Operator 3 from the certification, this includes deletion of the certification drawing 0-SC0014.

ExTR: **GB/BAS /ExTR17.0125/00**

File Reference: **17/0272**