1 # UK-TYPE EXAMINATION CERTIFICATE

2 **Equipment or Protective System Intended for use in Potentially Explosive Atmospheres**
**UKSI 2016:1107 (as amended) – Schedule 3A, Part 1**

| | | |
|---|---|---|
| **3** | UK-Type Examination Certificate Number: | **BAS21UKEX0625X Issue 3** |
| **4** | Product: | **Euroswitch FL-A and LS-A** |
| **5** | Manufacturer: | **Longvale Limited** |
| **6** | Address: | **Lancaster Park, Needwood, Burton-upon-Trent, Staffordshire, DE13 9PD United Kingdom** |

**7** This product and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

**8** SGS Baseefa, Approved Body number 1180, in accordance with Regulations 42 and 43 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.

**8.1** The BAS prefix to the Certificate Number indicates that the certificate was issued by SGS Baseefa Ltd. prior to the change of entity to SGS United Kingdom Limited. Such certificates remain valid with their original number.

The examination and test results are recorded in a confidential report identified in the revision table at item 20.

**9** Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

**EN IEC 60079-0: 2018 EN 60079-11: 2012**

except in respect of those requirements listed at item 18 of the Schedule.

**10** If the sign "X" is placed after the certificate number, it indicates that the product is subject to the Specific Conditions of Use specified in the schedule to this certificate.

**11** 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 the product shall include the following:

Ex **See certificate schedule**

SGS Customer Reference No. **5323** Project File No. **25/0276**



**SGS United Kingdom Ltd.**
(Incorporating Baseefa Ltd.)
Rockhead Business Park, Staden Lane,
Buxton, Derbyshire SK17 9RZ
Telephone +44 (0) 1298 766600
e-mail baseefa@sgs.com web site www.sgs.co.uk/sgsbaseefa
Registered in England No. 01193985.
Registered address: Rossmore Business Park, Ellesmere Port, Cheshire, CH65 3EN

UKAS PRODUCT CERTIFICATION
0191

Authorised Signatory

13 # Schedule

14 ## Certificate Number BAS21UKEX0625X – Issue 3

### 15 Description of Product

The Euroswitch FL-A and LS-A are designed for the measurement of flow or level respectively.

The units are manufactured in stainless steel and comprise a switch body secured into a terminal head enclosure with a threaded cover. The switch body may be of fixed orientation (Type WL), or have a rotatable head (Type WLR). A cable entry boss is welded to the terminal head to provide a single threaded M20 or 1/2" NPT entry to accommodate a suitably certified cable gland.

The head may alternatively be manufactured from aluminium.

Alternatively, a single M20 or 1/2" NPT entry may be provided in the threaded cover of the fixed unit (Type W).

In all cases the cover is retained in position by means of a grub screw.

The terminal head houses up to 7 terminals (including 1 earth connection) depending on the switch type. These terminals are mounted on to a printed circuit board and are for the external connection to a separately certified intrinsically safe circuit.

The switch body contains up to 2 DPDT micro switches, which are activated via a magnet operated lever assembly in the lower half of the switch body. The switch is secured into the vessel/pipework via a BSPT thread on this body section.

Each set of switch contacts may be supplied from a separately certified intrinsically safe source and individually they have the following terminal parameters:

Ui = 30 V

Ii = 250 mA

Pi = 1.3 W

The manufacturer has controlled the capacitance and inductance of the cable. The capacitance and inductance per unit length are ≤ 120 pF/m and ≤ 0.7 µH/m respectively. Therefore, for a Group IIC atmosphere the cable length cannot exceed 550 m and 3,000 m for a Group IIIC atmosphere. The end-user should contact the manufacturer if cable lengths in excess of these are required.

For dual switch circuits the permitted cable length limit is reduced to 137 m for Group IIC atmospheres and 811 m for Group IIIC. The end-user should contact the manufacturer if cable lengths in excess of these are required.

Product Marking

| | | | |
|---|---|---|---|
| Ⓔx | II 1GD | Ex ia IIC T4 Ga | (-60°C ≤ Ta ≤ +125°C) |
| | | Ex ia IIIC T135°C Da | (-60°C ≤ Ta ≤ +125°C) |

Or

| | | | |
|---|---|---|---|
| Ⓔx | II 1GD | Ex ia IIC T6 Ga | (-20°C ≤ Ta ≤ +80°C) |
| | | Ex ia IIIC T85°C Da | (-20°C ≤ Ta ≤ +80°C) |

| | XX | - | X | X | X | X | - | X | | - | X | - | X | - | X | - | X |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Flow Switch | FL | - | A | | | | - | | | - | | - | | - | | - | |
| Level Switch | LS | - | A | | | | - | | | - | | - | | - | | - | |
| IECE/ATEX/UKEX Markings | | - | | 2 | | | - | | | - | | - | | - | | - | |
| Multiple Certification Markings (Ex ia only) | | - | | E | | | - | | | - | | - | | - | | - | |
| Other Regional Exia Certification Markings | | - | | F - Z | | | - | | | - | | - | | - | | - | |
| Stainless Steel 316L Housing | | - | | | 2 | | - | | | - | | - | | - | | - | |
| T6/T85°C = -20°C to +80°C | | - | | | | 1 | - | | | - | | - | | - | | - | |
| T4/T135°C = -60°C to +125°C | | - | | | | 2 | - | | | - | | - | | - | | - | |
| 1/2" BSPT (# = N for NPT option) | | - | | | | | - | 1 | # | - | | - | | - | | - | |
| 3/4" BSPT (# = N for NPT option) | | - | | | | | - | 2 | # | - | | - | | - | | - | |
| 1" BSPT (# = N for NPT option) | | - | | | | | - | 3 | # | - | | - | | - | | - | |
| 1-1/4" BSPT (# = N for NPT option) | | - | | | | | - | 4 | # | - | | - | | - | | - | |
| 1-1/2" BSPT (# = N for NPT option) | | - | | | | | - | 5 | # | - | | - | | - | | - | |
| 2" BSPT (# = N for NPT option) | | - | | | | | - | 6 | # | - | | - | | - | | - | |
| 2-1/2" BSPT (# = N for NPT option) | | - | | | | | - | 7 | # | - | | - | | - | | - | |
| No Tee Supplied (Process connection must be a 1) | FL Only | - | | | | | - | | | - | 0 | - | | - | | - | |
| Supplied with Stainless Steel 316 Equal Tee (as per Process Connection) | FL Only | - | | | | | - | | | - | 2 | - | | - | | - | |
| Supplied with 316SS cylindrical float (4" / 101mm Insertion Length) | LS Only | - | | | | | - | | | - | 1 | - | | - | | - | |
| Supplied with 316SS cylindrical float (5" / 127mm Insertion Length) | LS Only | - | | | | | - | | | - | 2 | - | | - | | - | |
| Supplied with 316SS cylindrical float (6 -1/2" / 165mm Insertion Length) | LS Only | - | | | | | - | | | - | 3 | - | | - | | - | |
| Custom Insertion Length - 6 5/8" to 14" / 168 to 356mm | LS Only | - | | | | | - | | | - | C.. | - | | - | | - | |
| SPDT/SPCO | | - | | | | | - | | | - | | - | - | - | | - | |
| DPDT/DPCO | | - | | | | | - | | | - | | - | D | - | | - | |
| Silver Alloy (Standard) | | - | | | | | - | | | - | | - | - | - | | - | |
| Gold Flashed | | - | | | | | - | | | - | | - | AU | - | | - | |
| Back/Top Entry Wireable Terminal Head | | - | | | | | - | | | - | | - | | - | W | - | |
| Side Entry Wireable Terminal Head | | - | | | | | - | | | - | | - | | - | WL | - | |
| Side Entry Wireable Terminal Head - Rotatable | | - | | | | | - | | | - | | - | | - | WLR | - | |
| Twin Side Entry Wireable Terminal Head - Rotatable | | - | | | | | - | | | - | | - | | - | WLRT | - | |
| Twin Side (90°) Entry Wireable Terminal Head - Rotatable | | - | | | | | - | | | - | | - | | - | WLRT90 | - | |
| Triple Side Entry Wireable Terminal Head - Rotatable | | - | | | | | - | | | - | | - | | - | WLRT3 | - | |
| Back/Top Entry Wireable Terminal Head - Aluminium | | - | | | | | - | | | - | | - | | - | WA | - | |
| Side Entry Wireable Terminal Head - Aluminium | | - | | | | | - | | | - | | - | | - | WLA | - | |
| Side Entry Wireable Terminal Head - Rotatable - Aluminium | | - | | | | | - | | | - | | - | | - | WLRA | - | |
| Twin Side Entry Wireable Terminal Head - Aluminium | | - | | | | | - | | | - | | - | | - | WLTA | - | |
| Twin Side Entry Wireable Terminal Head - Rotatable - Aluminium | | - | | | | | - | | | - | | - | | - | WLRTA | - | |
| 1/2 NPT Conduit Entry | | - | | | | | - | | | - | | - | | - | | - | NPT |
| M20x1.5 Conduit Entry | | - | | | | | - | | | - | | - | | - | | - | M20 |
| Customer Specific (Not Affecting Certification) | | - | | | | | - | | | - | | - | | - | | - | (X...) |

## 16 Report Number

See Item 20 – Certificate History

## 17 Specific Conditions of Use

1. External earth bonding of the stainless steel enclosure may be achieved via the external mounting thread and/or the threaded cable entry.
2. Metallic switches may pose an electrostatic risk if not earthed. This should be taken into account during installation.
3. Where a sensor has two sets of switching contacts, both sets of switching contacts may be considered to be separate intrinsically safe circuits. Where the two circuits are separate intrinsically safe circuits, the user shall ensure segregation of the external cabling between the two circuits is maintained during installation and either type A or type B cable as defined in clause 9.5.2 & 9.5.3 of IEC 60079-25:2010 is used.
4. It is the responsibility of the installation engineer to ensure that suitably rated cable and cable glands are used to install this equipment.
5. Only fasteners of type M4 x 0.7 6g socket set screw DIN913 type 316 stainless steel may be used for preventing rotation of the lid and/or WLR connection head in the installed position.
6. The process medium must not exceed the ambient temperature range of the equipment.
7. Aluminium head options must be protected from impact and friction when located in a Zone 0 area.
8. When used for Group III applications the non-metallic coating of the aluminium head version presents a potential electrostatic charging hazard – see instructions

## 18 Essential Health and Safety Requirements

In addition to the Essential Health and Safety Requirements (EHSRs) covered by the standards listed at item 9, the following are considered relevant to this product, and conformity is demonstrated in the report:

| Clause | Subject |
|---|---|
| 13 | LVD type requirements |
| 14 | Overloading of equipment (protection relays, etc.) |
| 21(1) | External effects |
| 21(2) | Aggressive substances, etc. |

## 19 Drawings and Documents

Other than for Issue 0, Drawings and Documents that are introduced at a new edition of the certificate are marked with an asterisk symbol:

| Number | Sheet | Issue | Date | Description |
|---|---|---|---|---|
| ENG011 | 1 of 1 | D | 21-11-2023 | Marking for Exia Euroswitch Flow Level Switch |

For all other drawings refer to Baseefa16ATEX0172X latest issue

## 20 Certificate History

| Certificate No. | Date | Comments |
|---|---|---|
| BAS21UKEX0625X | 29 November 2021 | The release of the prime certificate. The associated test and assessment against the requirements of EN IEC 60079-0: 2018 and EN 60079-11: 2012 is documented in IECEx ExTR GB/BAS/ExTR21.0203/00 and held with Project No. 21/0381. |
| BAS21UKEX0625X<br>Issue 1 | 21 July 2023 | The release of this new issue permits the use of an alternative housing construction that does not impact the intrinsically safe aspects of the equipment assessed previously. The certificate was issued to document that the ATEX certificate used for referenced had been re-issued with a new issue. The associated test and assessment is documented in IECEx ExTR GB/SGS/ExTR23.0014/00 and held with Project No. 23/0119. |
| BAS21UKEX0625X<br>Issue 2 | 30 September 2025 | This issue of the certificate permits the consolidation and simplification of scheduled drawing listed to prevent duplication and remove redundant drawing information. The certificate also permits minor changes to the equipment that do not impact the previous assessment.<br>Report Number: GB/SGS/ExTR25.0145/00<br>Project Number: 23/0305 |
| BAS21UKEX0625X<br>Issue 3 | 13 November 2025 | To Introduce a new aluminium head and lid option. Certification report GB/SGS/ExTR25.0096/00 refers. |
| For drawings applicable to each issue, see original of that issue. | | |