

1 **EU - TYPE EXAMINATION CERTIFICATE**

2 **Equipment or Protective System Intended for use in Potentially Explosive Atmospheres  
Directive 2014/34/EU**

3 EU - Type Examination Certificate Number: **Baseefa16ATEX0172X**

4 Product: **Euroswitch FL-A and LS-A**

5 Manufacturer: **Longvale Limited**

6 Address: **Lancaster Park, Needwood, Burton-upon-Trent, Staffordshire, DE13 9PD**

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, Notified Body number 1180, in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, 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 Annex II to the Directive.

The examination and test results are recorded in confidential Report No. **GB/BAS/ExTR16.0399/00**

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

**EN 60079-0:2012+A11:2013 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 EU - TYPE EXAMINATION CERTIFICATE relates only to the design and construction of the specified product. Further requirements of the Directive 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 :

**⊕ II 1GD Ex ia IIC T4 Ga or Ex ia IIIC T135°C Da (-60°C ≤ Ta +125°C)**

**⊕ II 1GD Ex ia IIC T6 Ga or Ex ia IIIC T85°C Da (-20°C ≤ Ta +80°C)**

SGS Baseefa Customer Reference No. 5323

Project File No. 16/0737

This document is issued by the Company subject to its General Conditions for Certification Services accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and the Supplementary Terms and Conditions accessible at <http://www.sgs.com/SGSBaseefa/Terms-and-Conditions.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained herein reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. It does not necessarily indicate that the equipment may be used in particular industries or circumstances. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, schedule included, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

**SGS Baseefa Limited**

Rockhead Business Park, Staden Lane,  
Buxton, Derbyshire SK17 9RZ

Telephone +44 (0) 1298 766600 Fax +44 (0) 1298 766601

e-mail [baseefa@sgs.com](mailto:baseefa@sgs.com) web site [www.sgs.co.uk/baseefa](http://www.sgs.co.uk/baseefa)

Registered in England No. 4305578.

Registered address: Rossmore Business Park, Ellesmere Port, Cheshire, CH65 3EN



R S SINCLAIR  
TECHNICAL MANAGER

On behalf of SGS Baseefa Limited



13

## Schedule

14

Certificate Number Baseefa16ATEX0172X

### 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 providing a single threaded M20 or 1/2" NPT entry to accommodate a suitably certified cable gland.

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.

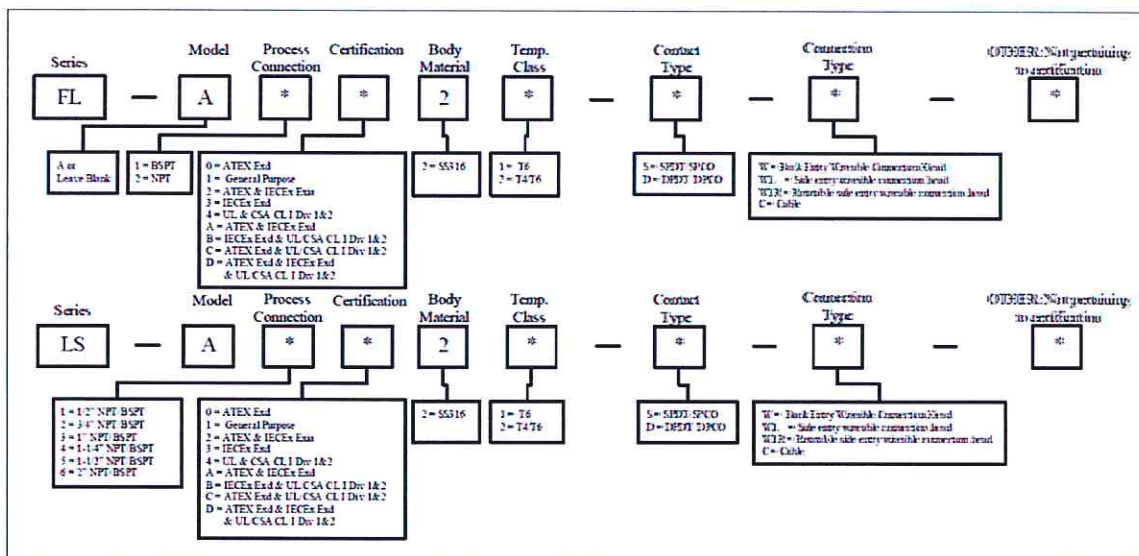
Each set of switch contacts may be supplied from a separately certified intrinsically safe source and individually they have the following terminal parameters:

$$U_i = 30V$$

$$I_i = 250mA$$

$$P_i = 1.3W$$

### PART NUMBERING OPTIONS



### 16 Report Number

GB/BAS/ExTR16.0399/00

## 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.

## 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  |
|--------|--|
| 1.2.7  | LVD type requirements                              |
| 1.2.8  | Overloading of equipment (protection relays, etc.) |
| 1.4.1  | External effects                                   |
| 1.4.2  | Aggressive substances, etc.                        |

## 19 Drawings and Documents

| Number           | Sheet  | Issue | Date     | Description                                       |
|------------------|--------|-------|----------|---|
| ★ 70-512BOSS     | 1 of 1 | 5     | 23/07/15 | 70-512 Boss For Side Entry Wireable Series Metric |
| ★ 70-515         | 1 of 1 | 4     | 23/07/15 | 70-515 Boss For Side Entry Wireable Series NPT    |
| ENG011           | 1 of 1 | A     | 24/11/16 | Marking For FLOW/LEVEL SWITCH FL-A / LS-A         |
| ★ GA FL-A-WL/WLR | 1 of 1 | A     | 24/03/16 | Flow / Level Switch WL/WLR                        |
| ★ FL_301         | 1 of 1 | A     | 22/03/16 | DPDT Microswitch Assembly                         |
| ★ FL-311         | 1 of 1 | C     | 23/03/16 | FL/FS DPDT-Wireable PCB 030                       |
| ★ FL-101         | 1 of 1 | A     | 17/03/16 | Flow Switch, Body                                 |
| ★ FL-102         | 1 of 1 | B     | 23/03/16 | Flow Switch, Piston                               |
| ★ FL-103         | 1 of 1 | B     | 23/03/16 | Paddle Holder                                     |
| ★ FL-105         | 1 of 1 | A     | 23/03/16 | Flow Switch, Shaft                                |
| ★ FL-107         | 1 of 1 | A     | 29/02/16 | Compression Spring 0.47N/mm                       |
| ★ FL-109         | 1 of 1 | B     | 21/03/16 | PCB Locknut                                       |
| ★ FL-117         | 1 of 1 | A     | 02/03/16 | FL_Paddle_267                                     |
| ★ FL-201         | 1 of 1 | A     | 17/03/16 | Head Body   |
| ★ FL-202         | 1 of 1 | A     | 17/03/16 | FL Lid  |
| ★ FL-203         | 1 of 1 | A     | 30/03/16 | DPDT W Head Lid (M20)                             |
| ★ FL-204         | 1 of 1 | A     | 30/03/16 | DPDT W Head Lid (NPT)                             |
| ★ FL-205         | 1 of 1 | A     | 24/03/16 | W Head Body                                       |



---

| Number   | Sheet  | Issue | Date     | Description     |
|----------|--------|-------|----------|-----------------|
| ★ LS-101 | 1 of 1 | A     | 24/03/16 | FLOAT (100x45)  |
| ★ LS_102 | 1 of 1 | A     | 24/03/16 | LS Float Holder |

All drawings are associated and held with IECEX BAS 16.0124X.

Drawings marked ★ are also associated with IECEX BAS 16.0034X & Baseefa16ATEX0049X.