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 – Issue 5**
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 re-issued certificate extends EU Type Examination Certificate No. **Baseefa16ATEX0172X** to apply to product designed and constructed in accordance with the specification set out in the Schedule of the said certificate but having any variations specified in the Schedule attached to this certificate and the documents therein referred to.

8 SGS Fimko Oy, Notified Body number 0598, 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.

8.1 The original certificate was issued by SGS Baseefa Ltd (UK Notified Body 1180). It, and any supplements previously issued by SGS Baseefa Ltd have been transferred to the supervision of SGS Fimko Oy (EU Notified Body 0598). The original certificate number is retained.

The examination and test results are recorded in confidential Report No. **See certificate history.**

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 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 :

See Certificate Schedule

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

SGS Fimko Oy
Takomotie 8
FI-00380 Helsinki, Finland
Telephone +358 9 696 361
www.sgs.com
Business ID 0634247-4 Member of the SGS Group (SGS SA)

FINAS
Finnish Accreditation Service
S003 (EN ISO/IEC 17065)

Mikko Välimäki
SGS Fimko Oy

13 # Schedule

14 ## Certificate Number Baseefa16ATEX0172X – Issue 5

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 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
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

New drawings submitted for this issue of certificate:

Number	Sheet	Issue	Date	Description
SD017		B	09/09/2025	Lid – Cast
GA-082		B	12/09/2025	FL/LS W/ 26mm Entry Alu Head
SD015-1		B	12/09/2025	Head – Cast Aluminium
SWM11		C	25/09/2025	FS/LS Flow/Level Switch Ex ia Part Number Matrix

Current drawings which remain unaffected by this issue:

Number	Sheet	Issue	Date	Description
GA096	1 of 1	A	26/06/2025	FL/LS/PS Switch WIREABLE
SD011-2	1 of 1	A	19/06/2025	HEAD - 26mm Bottom Entry
SD012-1	1 of 2	A2	20/06/2025	BODY
SD013	1 of 1	A	05/12/2024	LID
SD020	1 to 2	A	23/01/2024	PCBs
SD023	1 of 1	A	23/01/2024	LEADS
SD024	1 to 2	A	21/08/2024	CABLES
SD026	1 of 1	A	01/10/2024	NON METALLIC COMPONENTS
SD028	1 of 1	A	23/01/2024	MIRCOSWITCH ASSEMBLY
70-512	1 of 1	A	08/07/2022	SIDE ENTRY BOSS – M20
70-515	1 of 1	A	08/07/2022	SIDE ENTRY BOSS – ½" NPT
ENG011	1 of 1	D	21-11-2023	MARKING FOR Exia EUROSWITCH FLOW / LEVEL SWITCH

20 Certificate History

Certificate No.	Date	Comments
Baseefa16ATEX0172X	08 December 2016	The release of the prime certificate. The associated test and assessment against the requirements of EN 60079-0: 2012 + A11: 2013 and EN 60079-11: 2012 is documented in IECEx ExTR GB/BAS/ExTR16.0339/00 and held with Project No. 16/0737.
Baseefa16ATEX0172X/1	09 January 2020	To permit the part number matrix to be amended to a new format and an amendment to the product description to incorporate the New Product Matrix. The test and assessment is recorded in IECEx ExTR GB/BAS/ExTR19.0344/00 and held with Project No. 19/0708.
Baseefa16ATEX0172X Issue 2	29 November 2021	This issue of the certificate incorporates previously issued primary and supplementary certificates into one certificate and confirms the current design meets the requirements of EN IEC 60079-0: 2018 including the revision of the equipment marking in accordance with these standards. The test and assessment is recorded in IECEx ExTR GB/BAS/ExTR21.0203/00 and held with Project No. 21/0381.
Baseefa16ATEX0172X Issue 3	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 associated test and assessment is documented in IECEx ExTR GB/SGS/ExTR23.0014/00 and held with Project No. 21/0381
Baseefa16ATEX0172X Issue 4	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. Report Number: GB/SGS/ExTR25.0145/00 Project Number: 23/0305
Baseefa16ATEX0172X Issue 5	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.		