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1 **UK-TYPE EXAMINATION CERTIFICATE**

2 Equipment or Protective System Intended for use in Potentially Explosive Atmospheres UKSI 2016:1107 (as amended by UKSI 2019:696) - Schedule 3A, Part 1

BAS21UKEX0625X - Issue 1 3 **UK-Type** Examination Certificate Number:

Euroswitch FL-A and LS-A 4 Product:

5 Manufacturer: **Longvale Limited**

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

United Kingdom

7 This re-issued certificate extends UK-Type Examination Certificate No. BAS21UKEX0625X 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 Baseefa, Approved Body number 1180, in accordance with Regulation 43 of the Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres Regulations 2016, UKSI 2016:1107 (as amended by UKSI 2019:696), 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.

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 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:
 - **(a)** II 1GD Ex ia IIC T4 Ga or Ex ia IIIC T135°C Da (-60°C ≤ Ta +125°C)
 - **②** 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. 23/0119

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SGS Baseefa Limited

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TECHNICAL MANAGER On behalf of SGS Baseefa Limited



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Schedule Schedule

Certificate Number BAS21UKEX0625X – Issue 1

15 Description of Product

14

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:

 $\begin{array}{ll} U_i = & 30V \\ I_i = & 250mA \\ P_i = & 1.3W \end{array}$

Flow Switch Ex ia – Part Number Matrix

	FL	-	X	X	X	X	-	X	-	X	-	X	-	X
Series	Flow Switch	-	A				-		-		-		-	
	IECEx and ATEX Markings	-		2			-		-		-		-	·
Certification	Multiple Certification Markings (Ex d Only)	-		Е			-		-		-		-	
	Other regional Ex ia certification	-		F-Z			-		-		-		-	
Housing Material	Stainless Steel 316L	-			2		-		-		-		-	·



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Certified	T6/T85°C = -20 °C to +80 °C	-			1	-		-		-		-	
Temp.	$T4/T135^{\circ}C = -20^{\circ}C$ to $+125^{\circ}C$	-			2	-		-		-		-	
				1/2 "				_		_		_	
			Tee Connection	BSPT (NPT Optional)	-		1						
				3/4 " BSPT (NPT Optional)	-	-	2	-		-		-	
	1 " BSPT (NPT Optional)	-				-	3	-		-		-	
	1 – ¼ "BSPT (NPT Optional)	-				-	4	-		-		-	
	1 − ½ "BSPT (NPT Optional)	-				-	5	-		-		-	
	2 " BSPT (NPT Optional)	-				-	6	-		-		-	
	2 – ½ "BSPT (NPT Optional)	-				-	7	-		-		-	
	No tee supplied (Tee connection must be a 1)	-				-		-	0	-		-	
Tee Options	Supplied with Stainless Steel 316 Equal Tee (as per Tee Connection)	-				-		-	2	-		-	
	SPDT/SPCO	_				_		_		_	_	_	
	DPDT/DPCO	_				-		-		_	D	-	
Contact Type	Silver Alloy (Standard)	-				-		-		-	-	-	
	Gold Flashed	-				-		-		-	AU	-	
Connection	Wireable Connection Head – Top Entry ½ " NPT	-				-		-		-		_	W-NPT
Options	Wireable Connection Head – Side Entry ½ " NPT	-				-		-		-		-	WL- NPT



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	Wireable Connection Head – Side Entry - Rotatable ½" NPT								-		-	-		-	WLR- NPT
	Wireable Connection Head – Top Entry - M20x1.5								-		-	-		-	W-M20
	Wireable Connection Head – Side Entry – M20x1.5								-		-	-		-	WL- M20
	Wireable Connection Head – Side Entry - Rotatable M20x1.5								-		-	-		-	WLR- M20
	Customer Specific (not affecting - certification)								-		-	-		-	(X)
		Lev	el S	witch	Ex ia -	- Part l	Numbe	r Ma	<u>trix</u>						
		LS	-	X	X	X	X	_	X	-	X	-	X -		X
Series	Level Switch – Horizontal Mount		-	A				-		-		-	-		
	IECEx and ATEX Marking	rc	_		2			_				_	_		
Certification	Multiple Certification Markings (Ex d Only)	33	-		E			-		-		-	-		
Other regional Ex ia certification			-		F-Z			-		-		-	-		
Housing Material	Stainless Steel 316L		-			2		-		-		-	-		
Certified	T6/T85°C = -20 °C to +80	°C	-				1	-		-		-	-		
Temp.	$T4/T135^{\circ}C = -20^{\circ}C$ to $+125^{\circ}C$		-				2	-		-		-	-		
	½ "BSPT (NPT Optional)		_					_	1	_		_	_		
	34 " BSPT (NPT Optional)		_					_	2	_		_	_		
	1 " BSPT (NPT Optional)		_					_	3	_		_	_		
Process	1 – ¼ "BSPT (NPT Optional)		-					-	4	-		-	-		
Connection	1 – ½ " BSPT (NPT Optional)		-					-	5	-		-	-		
	2 " BSPT (NPT Optional)		-					-	6	-		-	-		
	2 – ½ "BSPT (NPT Optional)		-					-	7	-		-	-		



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	C	-		-	
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-		-	D	-	
-		-	-	-	
-		-	AU	-	
-		-		-	W-NPT
-		-		-	WL-NPT
-		-		-	WLR-NPT
-		-		-	W-M20
		_		-	WL-M20
-					
-		-		-	WLR-M20
		- - - -			

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.



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

19 Drawings and Documents

No new drawings submitted for this issue of certificate:

Current drawings which remain unaffected by this issue:

Number	Sheet	Issue	Date	Description
ENG011	1 of 1	C	28-10-2021	Marking For Exia Euroswitch Flow/Level Switch
For all other drawings refer	to Baseef			

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 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 reissued 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.						
For drawings applicable to eac	r drawings applicable to each issue, see original of that issue.							