

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 **Baseefa14ATEX0119X – Issue 9**  
Number:

3.1 In accordance with Article 41 of Directive 2014/34/EU, EC-Type Examination Certificates referring to 94/9/EC that were in existence prior to the date of application of 2014/34/EU (20 April 2016) may be referenced as if they were issued in accordance with Directive 2014/34/EU. Supplementary Certificates to such EC-Type Examination Certificates, and new issues of such certificates, may continue to bear the original certificate number issued prior to 20 April 2016.

4 Product: **Euroswitch Proximity Switches – Type No.s suffixed W (Wireable)**

5 Manufacturer: **Longvale Limited**

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

7 This re-issued certificate extends EC Type Examination Certificate No. **Baseefa14ATEX0119X** 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 60079-1:2014 EN 60079-31:2014**

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 2 GD Ex db IIC T6\* Gb, Ex tb IIIC T85°C\* Db (Ta -20°C to +70°C)\* IP66/67/68**

**\* alternative marking of T4/T135°C (Ta -60°C to +120°C) is permitted – see schedule**

SGS Fimko Oy Customer Reference No. **5323**

Project File No. **21/0380**

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Tuomas Hänninen  
SGS Fimko Oy

13 **Schedule**

14 **Certificate Number Baseefa14ATEX0119X – Issue 9**

15 **Description of Product**

The Euroswitch Proximity Switches (c/w terminal connection head) are manufactured in stainless steel and comprise a switch tube with a circular terminal enclosure on the top. The enclosure has a threaded cover that is locked with a M4 socket head grub screw. In this form the ES -\*\*\* type designation is suffixed W.

A cable entry boss threaded M20 or 1/2" NPT to accommodate a suitably certified cable gland is provided in the enclosure cover (suffix W). Alternatively a threaded entry boss may be provided on the side of the enclosure (suffix WL).

The unit is available with a range of switch tubes (55mm or 72mm long) which have an external M18 x1, or 5/8-18 UNF, thread for mounting/positioning the unit. These switch tubes contain a potted reed switch assembly to be operated by proximity to an external magnet. The reed switches may be provided in 20W, 60W ratings or alternatively 1A at 24Vdc or 0.9A at 110Vac.

Alternatively the unit is available in two flange mount options, designated CYL-B and CYL-C.

The terminal enclosure houses up to seven terminals for external connection (including earth) mounted to a printed circuit board.

An alternative construction which allows the terminal head to rotate relative to the switch tube, the rotation is then locked with a M4 socket head grub screw. In this form the type designation is suffixed WLR.

In addition to the standard length body tubes as noted above, the type WLR units may optionally be fitted with a 120mm long switch tube with an external 3/4-16 UNF thread and a plain probe type end.

An alternative internal switching assembly incorporating an integral magnet and designed to operate on proximity to ferrous metals. Units incorporating this ferrous switching have a FS-\*\*\* type designation (c/w the W suffix options as detailed above).

Alternative Temperature Class marking of T4 & T135°C at increased maximum ambient temperatures of up to 120°C, together with an optional reduction in the minimum ambient temperature down to -60°C for all of the above models.

Type ES-VDHA-450, 700 or 1035 Differential Pressure Switches.

These units are based on the 20W rated Type ES-\*\*\*\*- WLR Proximity Switches, with a magnetically linked differential pressure switch module replacing the threaded switch tube.

The pressure module may be rated up to 450 bar, 700 bar or 1035 bar as reflected in the designation coding, and are manufactured in either stainless steel (450 & 700 options) or titanium (1035 option).

The enclosures are certified IP66, IP67 and IP68 to a depth of 30 metres for 24 hours.

Part number matrix:

Switch Type/Description	XX	-	X	X	X	X	-	X
Euroswitch	ES	-					-	
Ferro switch	FS	-					-	
M18 x 1 x 80 cylindrical switch	ES only	-	3				-	
M18 x 1 x 55 cylindrical switch	ES only	-	4				-	
5/8" UNF x 92 cylindrical switch	ES only	-	5				-	
M18 x 1 x 80 cylindrical switch	ES only		6				-	
5/8" UNF x 110 cylindrical switch	ES only		7				-	
M18 x 1 x 110 cylindrical switch	ES only		8				-	

M18 x 1 x 80 cylindrical switch	FS only	-	A					
5/8" UNF x 92 cylindrical switch	FS only	-	B					
M18 x 1 x 92 cylindrical switch	FS only	-	C					
5/8" UNF x 110 cylindrical switch	FS only	-	D					
M18 x 1 x 110 cylindrical switch	FS only	-	E					
3/4"-16 UNFx 148 cylindrical switch	FS only	-	F					
Flange mount s/w x 108	FS only	-	CYL-B					
Flange mount s/w x 108	FS only	-	CYL-C					
ATEX Markings		-		0				
IECEX & ATEX Markings		-		3				
ATEX & IECEX Markings		-		A				
IECEX & UL/CSA Markings		-		B				
ATEX & UL/CSA Markings		-		C				
Multiple Certification Markings (Exd only)		-		D				
Other regional Exd certification		-		F - Z				
Stainless steel housing		-			2			
T6 Temperature Class		-				1		
T4/T6 Temperature Class		-				2		
Options (may be combined eg -D-WL)								
1A Switching (4000 series)	ES only	-						A
20W Reed (3000, 5000 series)	ES only	-						B
3A switching N/O (3000 series)	ES only	-						C
DPDT		-						D
Latching/bi-stable	ES only	-						F
5000 psi pressure resistant end cap		-						5K
10000 psi pressure resistant end cap		-						10K
Back wireable		-						W
Side wireable		-						WL
Rotatable side wireable		-						WLR
Twin entry rotatable side wireable		-						WLRT
Customer requests not affecting certification		-						(X...)
Customer specials								
Differential pressure switch - Stainless Steel	ES only	-	VDHA	-	450			
Differential pressure switch - Stainless Steel	ES only	-	VDHA	-	700			
Differential pressure switch - Titanium	ES only	-	VDHA	-	1035			

## 16 Report Number

See certificate history.

## 17 Specific Conditions of Use

- External earth bonding of the stainless steel enclosure may be achieved via the external mounting thread and/or the threaded cable entry.
- When used in dust atmospheres the separately certified cable gland arrangement shall maintain the IP6X rating of the enclosure.

3. The flameproof gap of the rotating terminal head (suffix WLR) is smaller than the maximum permitted by Table 2 of EN 60079-1. Consult the manufacturer for detail if required.
4. The flameproof gap between the rotating terminal head and sensor module of the Type ES-VDHA units is smaller than the maximum permitted by Table 2 of EN 60079-1. Consult the manufacturer for detail if required.
5. The 1035 bar rated pressure sensing/switching element is manufactured from titanium and must be physically protected from impact and friction (ignition hazard).

## 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
ENG004 <sup>i</sup>		7	01-11-21	Sample Marking For IECEx/Exd Wireable Euroswitch

Current drawings which remain unaffected by this issue:

Number	Sheet	Issue	Date	Description
70-507 <sup>v</sup>		B	11/02/2020	W Switch body - Metric
70-508 <sup>v</sup>		I	13/12/2019	Wireable W Head lid – M20
70-509 <sup>v</sup>		B	14/02/2020	W Switch body – Metric long
70-509A <sup>v</sup>		B	14/02/2020	W Switch body – Imperial long
70-510 <sup>v</sup>		B	11/02/2020	WL Switch body - Metric
70-511 <sup>v</sup>		I	13/12/2019	Wireable WL Head lid
70-513 <sup>v</sup>		B	11/02/2020	WL Switch body – Imperial
70-513A <sup>v</sup>		B	11/02/2020	WL Switch body – Metric
70-517 <sup>v</sup>		B	14/02/2020	W Switch body – Imperial
70-518 <sup>v</sup>		B	11/02/2020	WL Switch body – Imperial
70-520 <sup>iv</sup>		I	24/02/2019	WLR Head M20
70-536 <sup>v</sup>		B	11/02/2020	FS-F-WL Switch body
70-537 <sup>v</sup>		B	18/02/2020	FS-F-W-Switch body
70-542 <sup>v</sup>		B	11/02/2020	FS-B-WL Switch body – Special
70-552 <sup>i</sup>		C	24/02/2020	WLR Head NPT
70-569 <sup>i</sup>		B	24/02/2020	WLR Head M20 + Earth
70-570 <sup>i</sup>		B	24/02/2020	WLR Head NPT + Earth
70-571 <sup>i</sup>		B	24/02/2020	W Head

<b>Number</b>	<b>Sheet</b>	<b>Issue</b>	<b>Date</b>	<b>Description</b>
70-572 <sup>i</sup>		B	25/02/2020	WLRT Head M20
70-573 <sup>i</sup>		B	25/02/2020	WLRT Head (M20 + Earth)
70-574 <sup>i</sup>		B	25/02/2020	WLRT Head (NPT)
70-575 <sup>i</sup>		B	25/02/2020	WLRT Head (NPT + Earth)
70-576 <sup>i</sup>		B	25/02/2020	W Head 49.5
FL-201 <sup>vi</sup>		C	12/12/2019	Head body (NPT)
FL-202 <sup>vi</sup>		B	12/12/2019	FL Lid WL 49.5
FL-203 <sup>vi</sup>		C	26/02/2020	DPDT W Head lid (M20)
FL-204 <sup>vi</sup>		C	26/02/2020	DPDT W Head lid (NPT)
FL-205 <sup>vi</sup>		B	12/12/2019	W Head body 49.5
FL-206 <sup>iv</sup>		B	12/12/2019	Head body (M20)
GA-001 <sup>iv</sup>		C	02/03/2020	FS-B-D-W/WL/WLR Assy
GA-002 <sup>iv</sup>		C	03/03/2020	FS-C-D-W/WL/WLR Assy
GA-020 <sup>iv</sup>		B	03/03/2020	FS-CYL-Wireable GA
GA-022 <sup>v</sup>		D	04/03/2020	FS/ES Wireable GA : W/WL/WLR
GA-027 <sup>i</sup>		C	06/06/2020	FS/ES Wireable GA : WLRT
70-000 <sup>i</sup>		B	12/01/2018	FS Series SPDT Proximity Switch
70-011 <sup>iii</sup>		1	18/12/2013	Ferro Switch Cartridge Assembly
70-512 <sup>i</sup>		3	08/01/2014	Cable Entry Boss, M20
70-521 <sup>iv</sup>		H	10/01/2018	FS-A & C-Wireable Body Tube
70-522 <sup>iv</sup>		H	14/01/2018	FS-B-Wireable Body Tube
70-523 <sup>iv</sup>		1	28/01/2014	Tube Detail, FS-D-WLR (5/8UNFx72 Ext Thd)
70-524 <sup>iv</sup>		6	18/09/2014	Tube Detail, FS-F-WLR (3/4UNFx72 Ext Thd + 47 lg probe end)
70-525 <sup>iv</sup>		2	22/01/2014	PCB Mounting Plate, WLR
70-526 <sup>iv</sup>		2	02/04/2014	Body Detail, ES-VDHA-1035
70-528 <sup>i</sup>		1	22/01/2014	Tube Detail, FS-E-WLR (M18x72 Ext Thd)
70-530 <sup>i</sup>		1	28/01/2014	Cable Entry Boss, 1/2" NPT
70-531 <sup>iv</sup>		2	02/04/2014	Body Detail, ES-VDHA-700
70-532 <sup>iv</sup>		2	02/04/2014	Body Detail, ES-VDHA-450
70-539 <sup>i</sup>		A	16/01/2018	PCB Tray – WLRT
70-576 <sup>i</sup>		A	16/01/2018	W Head 49.5
70-585 <sup>i</sup>		A	19/02/2018	FS-CYL-WLR Body Tube
70-586 <sup>i</sup>		A	19/02/2018	FS-CYL-WLR Body Tube
70-609 <sup>iv</sup>		1	14/07/2014	Terminal PCB, WLR
70-610 <sup>iv</sup>		1	10/07/2014	Terminal PCB, WL
90-000 <sup>i</sup>		B	09/05/2017	FS Series DPDT Proximity Switch
90-503 <sup>i</sup>		E	03/01/2018	FS-B-D-WLR DPDT body
90-509 <sup>i</sup>		A	01/03/2017	PCB Tray FS-B-D or FS-C-D
90-510 <sup>i</sup>		E	04/01/2018	FS-C-D-WLR DPDT Body
ESCR001 <sup>iv</sup>		A	15.07.2016	Euroswitch certification cross reference
FA-53 <sup>iv</sup>		6	10/07/2014	General Assembly, ES-WL & FS-WL Series
FA-54 <sup>i</sup>		5	10/07/2014	General Assembly, ES-W & FS-W Series

Number	Sheet	Issue	Date	Description
FA-61 <sup>iv</sup>		2	10/07/2014	General Assembly, FS-WLR Series
FA-66 <sup>i</sup>		1	14/08/2014	General Assembly, ES-VDHA 450, 700, 1035
FL-312 <sup>i</sup>		C	28/02/2017	FL WL Wireable PCB 035
HSRS 1 <sup>iii</sup>		4	08.01.14	Reed Switch, Large, 60W
HSRS 2 <sup>iii</sup>		4	08.01.14	Reed Switch, Small, 20W
HSRS 3 <sup>ii</sup>		1	03/10/2014	Reed Switch, 1A
LID3 <sup>i</sup>		6	07/02/2014	Lid, Top Entry
LID4 <sup>i</sup>		4	07/02/2014	Lid, Plain
PCB 04 <sup>iii</sup>		3	07.01.14	PCB, Large Reed Switch Mounting
PCB 05 <sup>iii</sup>		3	07.01.14	PCB, Small Reed Switch Mounting
PCB 06 <sup>iii</sup>		4	07.01.14	PCB, Double Small Reed Switch Mounting
PCB039 <sup>i</sup>		A	10/01/2018	PCB039-WLR_4P_Screwdown
PCB040 <sup>i</sup>		A	16/01/2018	PCB040-WLRT_6P_Screwdown
SWM4 <sup>i</sup>		A	18/09/2019	Baseefa14ATEX0119X Wireable Part Number Matrix
WF000 <sup>i</sup>		A	01/03/2017	WAGO Terminal Block (236-406 + 236-745 Earth)
WF016 <sup>i</sup>		A	15/01/2018	Weidmuller 4P Terminal (999413000)
WF017 <sup>i</sup>		A	15/01/2018	LM 5.08/06/90 3.5SN or BX 9994150000
WJ035 <sup>i</sup>		A	08/03/2017	PTFE 26 AWG Single Core Leads

- i) These drawings are common to Baseefa14ATEX0119X, BAS21UKEX0754X and held with technical file associated with IECEx BAS 14.0056X.
- ii) These drawings are common to Baseefa14ATEX0119X, IECEx BAS 14.0056X, BAS21UKEX0754X, Baseefa14ATEX0256X, BAS21UKEX0756X and are held with the technical file associated with IECEx BAS 14.0121X, of which they are also common.
- iii) These drawings are common to Baseefa14ATEX0013X, IECEx BAS 14.0003X, Baseefa14ATEX0256X, IECEx BAS 14.0121X BAS21UKEX0756X, Baseefa14ATEX0119X, BAS21UKEX0754X and are held with the technical file associated with IECEx BAS 14.0056X of which they are also common.
- iv) These drawings are common to Baseefa14ATEX0119X, IECEx BAS 14.0056X, BAS21UKEX0754X Baseefa14ATEX0013X and are held with the technical file associated with IECEx BAS 14.0003X of which they are also common.
- v) These drawings are common to Baseefa14ATEX0013X & IECEx BAS 14.0003X and Baseefa14ATEX0119X, BAS21UKEX0754X and IECEx BAS 14.0056X, these drawing are held on the technical file associated with IECEx BAS 14.0056X, however they may also be held as applicable with IECEx BAS 14.0003X.
- vi) These drawings are common to IECEx BAS 14.0056X, BAS21UKEX0754X, Baseefa14ATEX0013X, IECEx BAS16.0034X, Baseefa16ATEX0049X, BAS21UKEX0758X and are held with the technical file associated with IECEx BAS 14.0003X of which they are also common.

## 20 Certificate History

Certificate No.	Date	Comments
Baseefa14ATEX0119X	23 July 2014	The release of the prime certificate. The associated test and assessment against the requirements of EN 60079-0:2012, EN 60079-1:2007 and EN 60079-31:2009 is recorded in Test Report GB/BAS/ExTR14/0119/00. Project File 14/0336

<b>Certificate No.</b>	<b>Date</b>	<b>Comments</b>
Baseefa14ATEX0119X/1	7 October 2014	To add the new model of Type ES-VDHA-450, 700 or 1035 Differential Switches. This issue also permits an alternative internal reed switch rated 1A at 24Vdc or 0.9A at 110Vac. Two addition conditions of use were applied to the certificate with this variation. The associated assessment is recorded in Test Report GB/BAS/ExTR14/0275/00. Project File 14/0748
Baseefa14ATEX0119X/2	21 January 2016	To permit the change of the cover thread from 1mm to 1.5mm, several minor drawing changes and to introduce a part numbering matrix. The associated assessment is recorded in Test Report GB/BAS/ExTR15.0353/00. Project File 15/0797.
Baseefa14ATEX0119X/3	9 August 2016	To permit selected switch types to be additionally marked with the Ex i markings covered by other certificates with an updated parts matrix. The associated assessment is recorded in Test Report GB/BAS/ExTR16.0201/00. Project File 16/0427.
Baseefa14ATEX0119X Issue 4	20 September 2016	This issue of the certificate incorporates previously issued primary & supplementary certificates into one certificate and permits the up issue of several associated drawings with no material changes. This issue also confirms compliance with EN 60079-0:2012+A11:2013. The associated assessment is recorded in Test Report GB/BAS/ExTR16.0252/00. Project File 16/0679.
Baseefa14ATEX0119X Issue 5	2 February 2018	To allow the option of a DPDT (Double Pole Double Throw) variant To allow the option to fit an external earth assembly To allow the option of twin side entries, 180° opposite from one another To allow the option of screw terminals To allow some drawings to be renumbered and/or retitled To allow an update to the part number matrix. Update to the latest standards The associated assessment is recorded in Test Report GB/BAS/ExTR18.0031/00. Project File 17/0229.
Baseefa14ATEX0119X Issue 6	18 April 2018	To allow alternative flange mount body styles To allow an update to the part number matrix. The associated assessment is recorded in Test Report GB/BAS/ExTR18.0082/00. Project File 18/0159
Baseefa14ATEX0119X Issue 7	22 October 2019	To allow for the inclusion of missing drawings To allow for the addition of new ES part numbers utilising existing 'FS' housings To allow modification to drawings dimensions To allow for drawing modifications that do not affect certification To allow for additional body designs FS-F-WL, FS-F-W and FS-B-WL The associated assessment is recorded in Test Report GB/BAS/ExTR19.0233/00. Project File 19/0465
Baseefa14ATEX0119X Issue 8	14 May 2021	To allow a minor change to the enclosure lid design allowing repositioning of the O-ring and locking screw. To assess the revised design for IP68 at 30m for 24 hours. The associated assessment is recorded in Test Report GB/BAS/ExTR19.0321/00. Project File 19/0675
Baseefa14ATEX0119X Issue 9	3 December 2021	To assess the equipment against EN IEC 60079-0:2018. SGS Baseefa certification report GB/BAS/ExTR21.0177/00 refers.
For drawings applicable to each issue, see original of that issue.		