

UK-TYPE EXAMINATION CERTIFICATE

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

UK-Type Examination Certificate Number: **BAS21UKEX0754X – Issue 1**

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

Manufacturer: **Longvale Limited**

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

This re-issued certificate extends UK-Type Examination Certificate No. BAS21UKEX0754X 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.

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**

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.

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.

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.

The marking of the product shall include the following :

Ex 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 Baseefa Customer Reference No. **5323**

Project File No. **23/0118**

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TECHNICAL MANAGER

On behalf of SGS Baseefa Limited

13 Schedule

14 Certificate Number BAS21UKEX0754X – Issue 1

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 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 cylindrial 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 cylindrial 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

1. External earth bonding of the stainless-steel enclosure may be achieved via the external mounting thread and/or the threaded cable entry.
2. When used in dust atmospheres the separately certified cable gland arrangement shall maintain the IP6X rating of the enclosure.
3. The flame paths must not be repaired.
4. 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:

Clause	Subject	Compliance
13	LVD type requirements	Standards require manufacturer's declaration, supplied.
14	Overloading of equipment (protection relays, etc.)	Covered by installation rules and manufacturer's instructions
21(1)	External effects	The Purchaser should make the manufacturer aware of such issues. Covered in Instructions
21(2)	Aggressive substances, etc.	The Purchaser should make the manufacturer aware of such issues. Covered in Instructions

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
ENG004	7		01-11-21	Sample Marking for IECEx/Exd Wireable Euroswitch

For all other drawings refer to Baseefa14ATEX0119X latest issue

20 Certificate History

Certificate No.	Date	Comments
BAS21UKEX0754X	3 December 2021	The release of the prime certificate. The associated test and assessment against the requirements of EN IEC 60079-0:2018, EN 60079-1:2014 and EN 60079-31:2014 is documented in Test Report GB/BAS/ExTR21.0177/00.
BAS21UKEX0754X - Issue 1	25 July 2023	To accommodate a one-piece construction against the currently welded construction SGS certification report GB/SGS/ExTR23.0031/00 refers.

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