

1 **UK-TYPE EXAMINATION CERTIFICATE**

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

3 UK-Type Examination Certificate Number: **BAS21UKEX0756X**

4 Product: **Euroswitch Type ES & FS Proximity Switches**

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, 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), 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. **GB/BAS/ExTR21.0178/00**

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 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 :

⊕ II 2 GD Ex db IIC T6* Gb

Ex tb IIC T85°C* Db (-20°C ≤ Ta ≤ +70°C)* IP66/67

*** alternative markings of T4/T135°C (-60°C ≤ Ta ≤ +120°C) and**

T3/T200°C (-20°C ≤ Ta ≤ +175°C) are permitted – See Schedule

SGS Baseefa Customer Reference No. **5323**

Project File No. **21/0380**

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R S SINCLAIR
TECHNICAL MANAGER
On behalf of SGS Baseefa Limited

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Schedule

14

Certificate Number BAS21UKEX0756X

15 Description of Product

Type ES Proximity Switches

The Euroswitch Type ES Proximity Switches are manufactured in stainless steel or brass and comprise a variety of switch tube shapes and sizes, each containing a potted reed switch assembly and fitted with an integral cable or flying leads.

The potted reed switch assemblies are intended to be operated by proximity to an external magnet. The reed switches may be provided in 20W, 1A or 3A ratings.

The switch tubes are available in a range of lengths, from 55mm to 147mm long, and may have an external M18 x1, or 5/8-18 UNF or 3/4-16 UNF or 3/8" UNF thread for mounting/positioning the unit. Alternatively the tube bore may be in a rectangular block with through holes for mounting.

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

A range of integral cables/leads may be fitted dependant on the ambient temperature and conditions of use. A PG9, M20 or 1/2" NPT female thread may also be provided at the rear of the switch tube for the attachment of a suitable conduit (or other cable protection system).

Type FS Proximity Switches

The Euroswitch Type FS Proximity Switches feature an internal switch that contain a switch assembly operated by an internal magnet and are fitted with an integral cable or flying leads.

The potted switch assemblies are intended to be operated by proximity to a ferrous metal sheet or plate.

In this form, the Type FS Proximity Switches are rated up to 24Vdc/3A, 110Vac/4A or 240Vac/2A

An alternative rectangular potted switch unit, complete with an integral cable, designated a Type ES-SS (Safety Switch) and incorporating multiple reed switches rated at 24Vdc, 100mA

A Type ES or FS switch assembly (as the shown above), complete with an integral bushing/adaptor fitted (converting the entry thread to a cylindrical flamepath), for fitting to a terminal enclosure as detailed in IECEx certificate No. IECEx BAS 14.0059 (or Baseefa14ATEX0120)

Parts Number Matrix

Switch Type/Description	XX	-	X	X	X	X	-	X
Euroswitch	ES	-					-	
Ferro switch	FS	-					-	
Safety switch	ES	-					-	
90 x 30 x 23 rectangular switch	ES only	-	0				-	
80 x 20 x 25 rectangular switch	ES only		1				-	
55 x 20 x 25 rectangular switch	ES only	-	2				-	
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 92 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				-	
5/8" UNF x 71 cylindrical switch	ES only	-	9				-	
M18 x 1 x 71 cylindrical switch	ES only	-	10				-	

Switch Type/Description	XX	-	X	X	X	X	-	X
5/8" UNF x 81 cylindrical switch	ES only	-	11				-	
M18 x 1 x 81 cylindrical switch	ES only	-	12				-	
3/8" UNF x 100 cylindrical switch	ES only	-	13				-	
M12 x 1 x 100 cylindrical switch	ES only	-	14				-	
3/8" UNF x 86 cylindrical switc	ES only	-	15				-	
M12 x 1 x 86 cylindrical switch	ES only	-	16				-	
91 x 22 x 36 rectangular safety switch	ES only	-	SS				-	
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 UNF x 148 cylindrical switch	FS only	-	F				-	
5/8" UNF x 95 cylindrical switch	FS only	-	H				-	
M18 x 1 x 95 cylindrical switch	FS only	-	I				-	
5/8" UNF x 71 cylindrical switch	FS only	-	J				-	
M18 x 1 x 71 cylindrical switch	FS only	-	K				-	
5/8" UNF x 81 cylindrical switch	FS only	-	L				-	
M18 x 1 x 81 cylindrical switch	FS only	-	M				-	
3/8" UNF x 100 cylindrical switch	FS only	-	N				-	
M12 x 1 x 100 cylindrical switch	FS only	-	O				-	
3/8" UNF x 86 cylindrical switch	FS only		P				-	
M12 x 1 x 86 cylindrical switch	FS only		Q				-	
Flange mount s/w x 108	FS only	-	CYL-B				-	
Flange mount s/w x 108	FS only	-	CYL-C				-	
90 x 30 x 23 rectangular	FS only	-	Z				-	
ATEX Markings		-		0			-	
IECEX & ATEX Markings		-		3			-	
ATEX & IECEX Markings		-		A			-	
ATEX/IECEX & UL/CSA Markings		-		B			-	
ATEX & UL/CSA Markings		-		C			-	
Multiple Certification Markings (Exd only)		-		D			-	
Other regional Exd certification				F - Z				
Brass housing (rectangular only except SS)		-			1		-	
Stainless steel housing		-			2		-	
PVC cable		-				1	-	
PVC Leads						1L		
Polyolefin cable		-				2	-	
Teflon leads		-				4L	-	
Peek leads						5L	-	
Options (may be combined eg -DE)								
1A Switching (2000, 4000, 6000 series)	ES only	-					-	A
20W Reed (1000, 3000, 5000 series)	ES only	-					-	B
3A switching N/O (1000, 3000 series)	ES only	-					-	C
DPDT		-					-	D
Earth wire		-					-	E
Latching/bi-stable	ES only	-					-	F

Switch Type/Description	XX	-	X	X	X	X	-	X
5000 psi pressure resistant end cap		-					-	5K
10000 psi pressure resistant end cap		-					-	10K
Male adaptor thread M20 or 1/2"NPT or 3/4" NPT		-					-	(M), (N) or (N3)

Customer specials

80 x 20 x 25 rectangular switch 5m PVC cable	ES only	-	HLS-25d
80 x 20 x 25 rectangular switch 10m PVC cable	ES only	-	HLS-210d

16 Report Number

SGS Baseefa certification report GB/BAS/ExTR21.0178/00

17 Specific Conditions of Use

- External earth bonding of the metal enclosure may be achieved via the external threaded or bolted mounting facility and/or the threaded cable entry (when provided).
- The integral cables/conductors shall be physically protected from pulling, twisting and mechanical damage.
- The PG9 rear entry thread (where provided) does not meet the flameproof requirements and shall not be used for direct interface with flameproof enclosures.
- When used in dust atmospheres the threaded cable protection arrangement (where threads are provided) shall be further sealed to maintain the IP6X rating of the enclosure.

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
ENG001		12	01.11.21	Marking Detail for Exd Euroswitch

For all other drawings refer to Baseefa14ATEX0256X Issue 10 IECEx BAS 14.0121X Issue 10.

This drawing is common to Baseefa14ATEX0256X and IECEx BAS 14.0121X and is held with the latter.