



IECEX Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.:	IECEX BAS 14.0056X	Page 1 of 4	<u>Certificate history:</u>
Status:	Current	Issue No: 9	Issue 8 (2021-05-24)
Date of Issue:	2021-12-06		Issue 7 (2019-12-16)
Applicant:	Longvale Limited Lancaster Park Needwood Burton-upon-Trent Staffordshire DE13 9PD United Kingdom		Issue 6 (2018-04-18)
Equipment:	Euroswitch Proximity Switches – Type No.s suffixed W (wireable)		Issue 5 (2018-02-15)
Optional accessory:			Issue 4 (2016-09-20)
Type of Protection:	Flameproof & Dust (by Enclosure)		Issue 3 (2016-08-01)
Marking:	Ex db IIC T6* Gb Ex tb IIIC T85°C* Db (-20°C ≤ Ta ≤ +70°C)* IP66/67/68 *alternative marking of T4/T135°C (-60°C ≤ Ta ≤ +120°C) is permitted – See schedule		Issue 2 (2016-01-20)
			Issue 1 (2014-10-07)
			Issue 0 (2014-07-24)

Approved for issue on behalf of the IECEx
Certification Body:

R S Sinclair

Position:

Technical Manager

Signature:
(for printed version)

Date:

6/12/21

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting www.iecex.com or use of this QR Code.



Certificate issued by:

SGS Baseefa Limited
Rockhead Business Park
Staden Lane
Buxton, Derbyshire, SK17 9RZ
United Kingdom





IECEX Certificate of Conformity

Certificate No.: **IECEX BAS 14.0056X**

Page 2 of 4

Date of issue: 2021-12-06

Issue No: 9

Manufacturer: **Longvale Limited**
Lancaster Park
Needwood
Burton-upon-Trent
Staffordshire
DE13 9PD
United Kingdom

Additional
manufacturing
locations:

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended

STANDARDS :

The equipment and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards

[IEC 60079-0:2017](#) Explosive atmospheres - Part 0: Equipment - General requirements
Edition:7.0

[IEC 60079-1:2014-06](#) Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
Edition:7.0

[IEC 60079-31:2013](#) Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"
Edition:2

This Certificate **does not** indicate compliance with safety and performance requirements other than those expressly included in the Standards listed above.

TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in:

Test Reports:

[GB/BAS/ExTR14.0119/00](#)
[GB/BAS/ExTR16.0252/00](#)
[GB/BAS/ExTR19.0233/00](#)

[GB/BAS/ExTR14.0275/00](#)
[GB/BAS/ExTR18.0031/00](#)
[GB/BAS/ExTR19.0321/00](#)

[GB/BAS/ExTR15.0353/00](#)
[GB/BAS/ExTR18.0082/00](#)
[GB/BAS/ExTR21.0177/00](#)

Quality Assessment Report:

[GB/SIR/QAR07.0013/12](#)



IECEX Certificate of Conformity

Certificate No.: **IECEX BAS 14.0056X**

Page 3 of 4

Date of issue: 2021-12-06

Issue No: 9

EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

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 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 meters for 24 hours.

See annex for further information.

SPECIFIC CONDITIONS OF USE: YES as shown below:

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 flameproof gap of the rotating terminal head (suffix WLR) is smaller than the maximum permitted by Table 2 of IEC60079-1. 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 IEC60079-1. Consult the manufacturer for detail if required.
5. The 1035bar rated pressure sensing/switching element is manufactured from titanium and must be physically protected from impact and friction (ignition hazard).



IECEX Certificate of Conformity

Certificate No.: **IECEX BAS 14.0056X**

Page 4 of 4

Date of issue: 2021-12-06

Issue No: 9

DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

Variation 9.1

To assess the equipment against IEC 60079-0:2017 Edition 7.0.

ExTR: **GB/BAS/ExTR21.0177/00**

File Reference: **21/0380**

Annex:

[IECEX BAS 14.0056X Annex 3.pdf](#)

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
Earth		-					-	E
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...)

SGS Baseefa Limited
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ANNEX to IECEx BAS 14.0056X

Issue No. 3

Date: 16th December 2019

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