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 16.0124X**

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Issue No: 5

Certificate history:
Issue 4 (2025-10-17)
Issue 3 (2023-08-01)
Issue 2 (2021-12-02)
Issue 1 (2020-01-09)
Issue 0 (2016-12-08)

Status: **Current**

Date of Issue: 2025-11-13

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

Equipment: **Euroswitch FL-A and LS-A**

Optional accessory:

Type of Protection: **Intrinsic Safety**

Marking: **Ex ia IIC T4 Ga (-60°C ≤ Ta +125°C)**
Ex ia III C T135°C IP66/67 Da (-60°C ≤ Ta +125°C)
or
Ex ia IIC T6 Ga (-20°C ≤ Ta +80°C)
Ex ia III C T85°C IP66/67 Da (-20°C ≤ Ta +80°C)

Approved for issue on behalf of the IECEx Certification Body: **D Brearley**

Position: **Lead Certification Engineer**

Signature: (for printed version)

Date: 13/11/2025
(for printed version)

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

IECEx Certificate of Conformity

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

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

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 60079-11:2011 Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
Edition:6.0

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/ExTR16.0339/00
GB/BAS/ExTR19.0344/00
GB/BAS/ExTR21.0203/00
GB/SGS/ExTR23.0014/00
GB/SGS/ExTR25.0096/00
GB/SGS/ExTR25.0145/00

Quality Assessment Report:

GB/SIR/QAR07.0013/17

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EQUIPMENT:
Equipment and systems covered by this Certificate are as follows:

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 provide a single threaded M20 or 1/2" NPT entry to accommodate a suitably certified cable gland.

The head may alternatively be manufactured from aluminium.

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:

U_i = 30V
I_i = 250mA
P_i = 1.3W

The manufacturer has controlled the capacitance and inductance of the cable. The capacitance and inductance per unit length are ≤ 120 pF/m and ≤ 0.7 µH/m respectively. Therefore, for a Group IIC atmosphere the cable length cannot exceed 550 m and 3,000 m for a Group IIIC atmosphere. The end-user should contact the manufacturer if cable lengths more than these are required.

For dual switch circuits the permitted cable length limit is reduced to 137 m for Group IIC atmospheres and 811 m for Group IIIC. The end-user should contact the manufacturer if cable lengths in excess of these are required.

For a complete part number breakdown, refer to certificate Annex.

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. 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.
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.
7. Aluminium head options must be protected from impact and friction when located in a Zone 0 area.
8. When used for Group III applications the non-metallic coating of the aluminium head version presents a potential electrostatic charging hazard – see instructions

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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

Variation 5.1

To introduce a new aluminium head and lid option.

ExTR: **GB/SGS/ExTR25.0096/00**	File Reference: **25/0276**

Annex:

IECEx BAS 16.0124X Annex Issue 3.pdf

Appendix A: Flow Switch / Level Switch Ex ia – Part Number Matrix

		-					-			-		-		-		-	
Flow Switch	FL	-	A				-			-		-		-		-	
Level Switch	LS	-	A				-			-		-		-		-	
IECE/ATEX/UKEX Markings		-		2			-			-		-		-		-	
Multiple Certification Markings (Ex ia only)		-		E			-			-		-		-		-	
Other Regional Exia Certification Markings		-		F - Z			-			-		-		-		-	
Stainless Steel 316L Housing		-			2		-			-		-		-		-	
T6/T85°C = -20°C to +80°C		-				1	-			-		-		-		-	
T4/T135°C = -60°C to +125°C		-				2	-			-		-		-		-	
1/2" BSPT (# = N for NPT option)		-					-	1	#	-		-		-		-	
3/4" BSPT (# = N for NPT option)		-					-	2	#	-		-		-		-	
1" BSPT (# = N for NPT option)		-					-	3	#	-		-		-		-	
1-1/4" BSPT (# = N for NPT option)		-					-	4	#	-		-		-		-	
1-1/2" BSPT (# = N for NPT option)		-					-	5	#	-		-		-		-	
2" BSPT (# = N for NPT option)		-					-	6	#	-		-		-		-	
2-1/2" BSPT (# = N for NPT option)		-					-	7	#	-		-		-		-	
No Tee Supplied (Process connection must be a 1)	FL Only	-					-			-	0	-		-		-	
Supplied with Stainless Steel 316 Equal Tee (as per Process Connection)	FL Only	-					-			-	2	-		-		-	
Supplied with 316SS cylindrical float (4" / 101mm Insertion Length)	LS Only	-					-			-	1	-		-		-	
Supplied with 316SS cylindrical float (5" / 127mm Insertion Length)	LS Only	-					-			-	2	-		-		-	
Supplied with 316SS cylindrical float (6 -1/2" / 165mm Insertion Length)	LS Only	-					-			-	3	-		-		-	
Custom Insertion Length - 6 5/8" to 14" / 168 to 356mm	LS Only	-					-			-	C..	-		-		-	
SPDT/SPCO		-					-			-		-	-	-		-	
DPDT/DPCO		-					-			-		-	D	-		-	
Silver Alloy (Standard)		-					-			-		-	-	-		-	
Gold Flashed		-					-			-		-	AU	-		-	
Back/Top Entry Wireable Terminal Head		-					-			-		-		-	W	-	
Side Entry Wireable Terminal Head		-					-			-		-		-	WL	-	
Side Entry Wireable Terminal Head - Rotatable		-					-			-		-		-	WLR	-	
Twin Side Entry Wireable Terminal Head - Rotatable		-					-			-		-		-	WLRT	-	
Twin Side (90°) Entry Wireable Terminal Head - Rotatable		-					-			-		-		-	WLRT90	-	
Triple Side Entry Wireable Terminal Head - Rotatable		-					-			-		-		-	WLRT3	-	
Back/Top Entry Wireable Terminal Head - Aluminium		-					-			-		-		-	WA	-	
Side Entry Wireable Terminal Head - Aluminium		-					-			-		-		-	WLA	-	
Side Entry Wireable Terminal Head - Rotatable - Aluminium		-					-			-		-		-	WLRA	-	
Twin Side Entry Wireable Terminal Head - Aluminium		-					-			-		-		-	WLTA	-	
Twin Side Entry Wireable Terminal Head - Rotatable - Aluminium		-					-			-		-		-	WLRTA	-	
1/2 NPT Conduit Entry		-					-			-		-		-		-	NPT
M20x1.5 Conduit Entry		-					-			-		-		-		-	M20
Customer Specific (Not Affecting Certification)		-					-			-		-		-		-	(X…)

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Issue 1

Approved by: M Powney/R S Sinclair
Date: 22/8/19