

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 Number: **SGS19ATEX0050X – Issue 1**

4 Product: **A range of Level Switches (LS) and Flow Switches (FS)**

5 Manufacturer: **Gems Sensors and Controls**

6 Address: **1 Cowles Road, Plainville, CT 06062, USA**

7 This re-issued certificate extends EU Type Examination Certificate No. **SGS19ATEX0050X** 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.

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 60079-11:2012

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 1G Refer to Schedule**

SGS Fimko Oy Customer Reference No. **6887**

Project File No. **23/0198**

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Authorised Signatory for SGS Fimko Oy

13 **Schedule**

14 **Certificate Number SGS19ATEX0050X – Issue 1**

15 Description of Product

A range of Level Switches (LS) and Flow Switches (FS)

Level Switches:

LS-1700(E)-EXi, LS-1750(E)-EXi, LS-1800(E)-EXi, LS-1900(E)-EXi, LS-1950(E)-EXi
 LS-35565E-EXi, LS-2050(E)-EXi, LS-52100-EXi
 LS-240-3E-EXi, LS-400E-EXi, LS-800E-EXi and LS-270-E-EXi

Flow Switches

FS-200(E)-(A)-EXi, FS-400(E)-(A)-EXi, FS-925(E)-EXi, FS-926(E)-EXi, FS-10798(E)-EXi, FS-550(E)-EXi,

The switches are housed in metallic enclosures and incorporate up to five reed switches which may be independent or may have a common connection.

A range of connection options is provided.

The equipment is intended to be supplied by intrinsically safe barriers with total combined output parameters conforming to the parameters below

No attached cable:

U _i	=	28V	C _i	=	0
I _i	=	20mA	L _i	=	0
P _i	=	0.14W			

With 100m of cable:

U _i	=	28V	C _i	=	20nF
I _i	=	20mA	L _i	=	100µH
P _i	=	0.14W			

The equipment coding is:

Ex ia IIB / IIC T6...T2 Ga

Group IIB	Group IIC
Switches fitted with: <ul style="list-style-type: none"> • DIN Plug Connector S3 or S6. • Non Metallic Float. • Non Metallic Bellows. 	All other switches

Temperature Range	Temperature Class
-40°C ≤ Ta ≤ +80°C	T6
-40°C ≤ Ta ≤ +95°C	T5
-40°C ≤ Ta ≤ +130°C	T4
-40°C ≤ Ta ≤ +195°C	T3
-40°C ≤ Ta ≤ +200°C	T2

The marking will show at least one of the above temperature class markings, but for any particular temperature class, the marked temperature range may be reduced from that shown above.

16 Report Number

See Certificate History.

17 Specific Conditions of Use

1. When equipped with a terminal box in aluminium, this box shall be protected against potentially incendive impact or abrasion.
2. Where the equipment is supplied with an unterminated lead, this must be terminated in an enclosure providing degree of protection of at least IP20.
3. Users must refer to the certificate for electrical and temperature parameters.

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
1.4.1	External effects	The Purchaser should make the manufacturer aware of such issues. Covered in Instructions
1.4.2	Aggressive substances, etc.	The Purchaser should make the manufacturer aware of such issues. Covered in Instructions

19 Drawings and Documents

New drawings submitted for this issue of certificate:

None.

Current drawings which remain unaffected by this issue:

Number	Sheet	Issue	Date	Description
939-0155	1 of 1	D	13.06.19	7 way terminal block
939-0156	1 of 1	C	13.06.19	11 way terminal block
997-0386	1 of 1	C	07.08.19	Flow switch type FS-200(E)-(A)-Exi
997-0387	1 of 1	C	07.08.19	Flow switch type FS-400(E)-(A)-Exi
997-0388	1 of 1	C	07.08.19	Flow switch type FS-925(E)-Exi
997-0389	1 of 1	C	07.08.19	Flow switch type FS-926(E)-Exi
997-0390	1 of 1	C	07.08.19	Flow switch type FS-10798(E)-Exi
997-0391	1 of 1	C	07.08.19	Flow switch type FS-550E-Exi
997-0392	1 of 1	C	07.08.19	Level switch type LS-1700(E)-Exi
997-0393	1 of 1	C	07.08.19	Level switch type LS-1750E-Exi
997-0394	1 of 1	C	13.06.19	Level switch type LS-1800(E)-Exi
997-0395	1 of 1	C	13.06.19	Level switch type LS-1900(E)-Exi
997-0396	1 of 1	C	07.08.19	Level switch type LS-1950(E)-Exi
997-0397	1 of 1	D	07.08.19	Level switch type LS-35565E-Exi
997-0398	1 of 1	C	21.08.19	Level switch type LS-2050E-Exi
997-0399	1 of 1	C	07.08.19	Level switch type LS-52100E-Exi
997-0400	1 of 1	C	13.06.19	Level switch type LS-240-3E-Exi
997-0402	1 – 2	D	07.08.19	Level switch type LS-400E-Exi
997-0403	1 – 2	D	07.08.19	Level switch type LS-800E-Exi
997-0404	1 of 1	B	13.06.19	Level switch type LS-270E-Exi

20 Certificate History

Certificate No.	Date	Comments
SGS19ATEX0050X	23 October 2019	The release of the prime certificate. The associated test and assessment against the requirements of EN 60079-0:2012+A11:2013 and EN IEC 60079-0:2018 & EN 60079-11:2012 is documented in Test Report No. GB/BAS/ExTR18.0033/00, project number 18/0083.
SGS19ATEX0050X Issue 1	22 May 2023	This document permits existing information (for example on Schedule Drawings) to be replaced by the revised certificate holders name and address. No other changes may be made to the certified design. Project Number 23/0183.
For drawings applicable to each issue, see original of that issue.		