

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: **BAS21UKEX0665X – Issue 1**

4 Product: **Series 70 Micro Junction**

5 Manufacturer: **Topworx Incorporated**

6 Address: **3300 Fern Valley Road, Louisville, Kentucky, 40213 United States of America**

7 This product and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

8 SGS United Kingdom Ltd. (formerly SGS Baseefa Ltd.), Approved Body number 1180, in accordance with Regulations 42 and 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 a confidential report identified in the revision table at item 20.

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 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 1GD Ex ia IIC T6/T4/T3 Ga -40°C ≤ Tamb ≤ +50°C/+100°C/+150°C – See Schedule**

**Ex ia IIIC T200 85°C/T200 135°C/T200 200°C Da**

SGS Customer Reference No. **2191**

Project File No. **24/0043**

This document is issued by the Company subject to its General Conditions for Certification Services accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and the Supplementary Terms and Conditions accessible at <http://www.sgs.com/SGSBaseefa/Terms-and-Conditions.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained herein reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. It does not necessarily indicate that the equipment may be used in particular industries or circumstances. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, schedule included, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful, and offenders may be prosecuted to the fullest extent of the law.

**SGS United Kingdom Limited**  
**(formerly SGS Baseefa Ltd.)**

Rockhead Business Park, Staden Lane,  
Buxton, Derbyshire SK17 9RZ

Telephone +44 (0) 1298 766600 Fax +44 (0) 1298 766601

e-mail [sgs.buxton@sgs.com](mailto:sgs.buxton@sgs.com) web site [www.sgs.co.uk/sgsbaseefa](http://www.sgs.co.uk/sgsbaseefa)

Registered in England No. 1193985

Registered address: Rossmore Business Park, Ellesmere Port, Cheshire, CH65 3EN



**P OATES**  
**CERTIFICATION MANAGER**

On behalf of SGS United Kingdom Limited

13

**Schedule**

14

**Certificate Number BAS21UKEX0665X – Issue 1**

**15 Description of Product**

The **70 Series Micro Junction** is a magnetically operated proximity switch which is actuated by the presence of an external ferrous body. A single pole, double throw switch within the switch body.

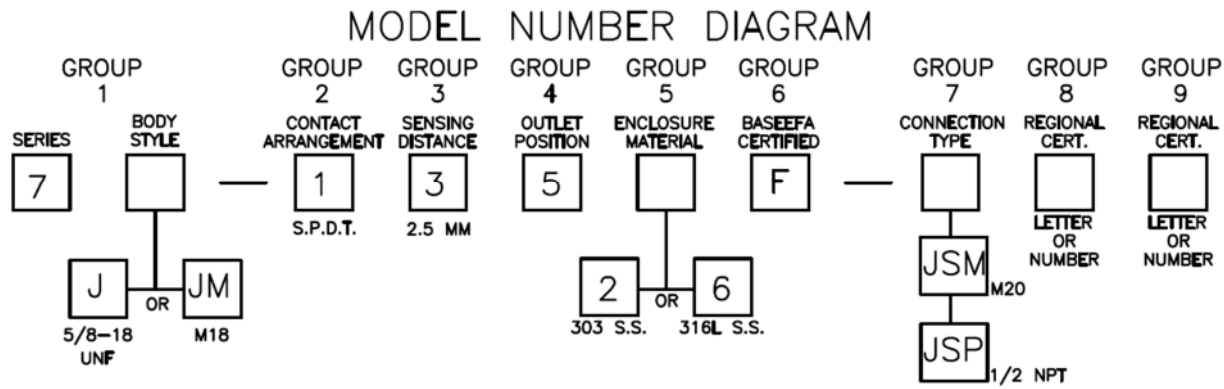
The proximity switches comprise a tubular stainless-steel enclosure in a variety of body styles, with differing external male threads and a thin section wall at the front end.

The rear end of the tubular enclosure is a hexagonal section with the terminals to the switches. The integral connection leads for the switches are connected to a terminal block allowing connections to be made via a user provided threaded cable gland of sufficient rating to ensure dust and gas exclusion in line with the enclosures IP66/68 rating.

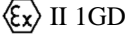


The switches are rated up to 30V, 0.25A and may be used to switch a circuit from a certified Ex ia IIC intrinsically safe source. All connections to the 70 Series Micro Junction must form part of the same intrinsically safe circuit. The circuit is capable of withstanding a 500V test to earth.

The 70 Series Micro Junction does not require a connection to earth for safety purposes, but an earth connection is provided which is directly connected to the metallic enclosure and must be used with care in any intrinsically safe system.

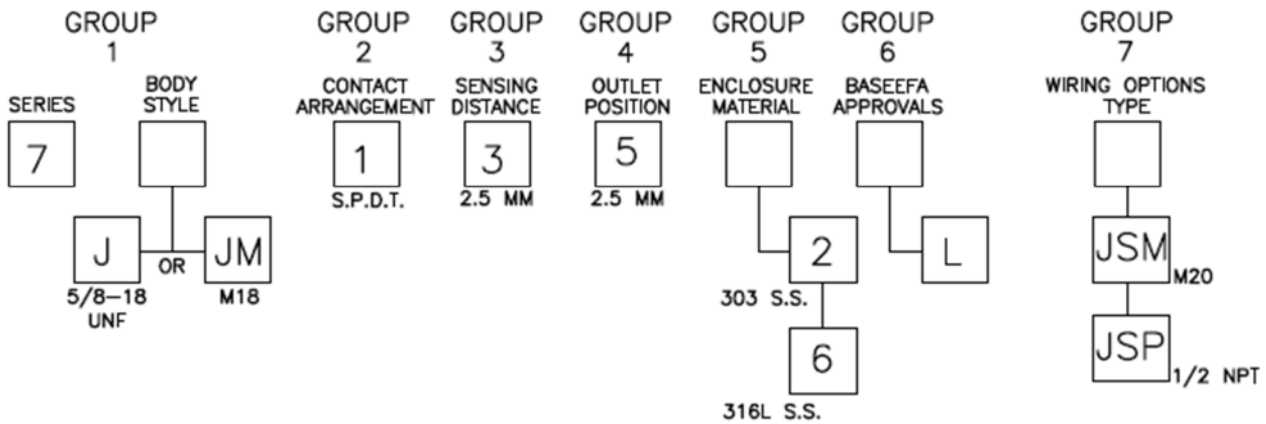
The switch model number is used to further describe each assembly as follows:



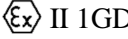
GROUP 6 of the Model Number (F, G or H) indicates the temperature classification, maximum surface temperature, and ambient temperature range of the equipment, which are as follows:

GROUP 6 Character	Certification Marking
F	 II 1GD Ex ia IIC T6 Ga (-40°C ≤ Ta ≤ +50°C) Ex ia IIIC T <sub>200</sub> 85°C Da (-40°C ≤ Ta ≤ +50°C)
G	 II 1GD Ex ia IIC T4 Ga (-40°C ≤ Ta ≤ +100°C) Ex ia IIIC T <sub>200</sub> 135°C Da (-40°C ≤ Ta ≤ +100°C)
H	 II 1GD Ex ia IIC T3 Ga (-40°C ≤ Ta ≤ +150°C) Ex ia IIIC T <sub>200</sub> 200°C Da (-40°C ≤ Ta ≤ +150°C)

### MODEL NUMBER DIAGRAM



With GROUP 6 having the marking ‘L’ to denote that the model is using the additional marking plate that carries third-party certification marks not ratified SGS. For those carrying this character the model nomenclature is not relied upon to define the certification parameters. However, the marking is presented differently as summarised in the following table.

GROUP 6 Character	Certification Marking
L	 II 1GD Ex ia IIC T6/T4/T3Ga Ex ia IIIC T <sub>200</sub> 85°C/ T <sub>200</sub> 135°C/ T <sub>200</sub> 200°C Da (-40°C ≤ Ta ≤ +50°C/+100°C/+150°C)

#### 16 Report Number

GB/SGS/ExTR24.0017/00

#### 17 Specific Conditions of Use

- The user must use an Equipment Certified Gland to maintain the ingress protection rating of the enclosure and ensure it is appropriate for the intended use.
- The 70 Series Micro Junction does not require a connection to earth for safety purposes, but an earth connection is provided which is directly connected to the metallic enclosure and must be used with care in any intrinsically safe system.
- All connections to the proximity switch must form part of the same intrinsically safe circuit.



**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
13	LVD type requirements
14	Overloading of equipment (protection relays, etc.)
21 (1)	External effects
21 (2)	Aggressive substances, etc.

**19 Drawings and Documents**

Other than for Issue 0, Drawings and Documents that are introduced at a new edition of the certificate are marked with an asterisk symbol:

Number	Sheet	Issue	Date	Description
CERT-ES-09593-1	1 of 1	AA	5/15/2023	*7J NAMEPLATE IECEX/NEC
CERT-ES-09234-1	1 of 1	AA	2022-05-08	UKEX 7J Micro Junction Intrinsically Safe (-40° to +50°C)
CERT-ES-09235-1	1 of 1	AA	2022-05-08	UKEX 7J Micro Junction Intrinsically Safe (-40° to +100°C)
CERT-ES-09236-1	1 of 1	AA	2022-05-08	UKEX 7J Micro Junction Intrinsically Safe (-40° to +150°C)

For all other drawings related to the construction of the equipment refer to Baseefa15ATEX0193X Issue 2

**20 Certificate History**

Certificate No.	Date	Comments
BAS21UKEX0665X	12 September 2023	<b>Prime Certificate</b> <b>Report Number: 21(C)0357/01 Project Number: 21/0357</b> <b>Original issue of the certificate</b>
BAS21UKEX0665X Issue 1	5 April 2024	This issue of the certificate permits the addition of alternative marking plate carrying third party certification in addition to the existing certification marks.  Report Number: GB/SGS/ExTR24.0017/00 Project Number: 24/0043

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