

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: **Baseefa15ATEX0193X – Issue 2**

4 Product: **Series 70 Micro Junction**

5 Manufacturer: **Topworx Incorporated**

6 Address: **3300 Fern Valley Road, Louisville, Kentucky 40213 USA**

7 This re-issued certificate extends EU Type Examination Certificate No. **Baseefa15ATEX0193X** 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.

8.1 The original certificate was issued by SGS Baseefa Ltd (UK Notified Body 1180). It, and any supplements previously issued by SGS Baseefa Ltd have been transferred to the supervision of SGS Fimko Oy (EU Notified Body 0598). The original certificate number is retained.

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 EN60079-11:2012

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 :

Ex ia IIC T6/T4/T3 Ga -40°C ≤ T_{amb} ≤ +50°C/+100°C/+150°C – See Schedule
Ex ia IIIIC T₂₀₀85°C/T₂₀₀135°C/T₂₀₀200°C Da

SGS Fimko Oy Customer Reference No. **2191**

Project File No. **24/0043**

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Schedule

14

Certificate Number Baseefa15ATEX0193X – Issue 2

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.

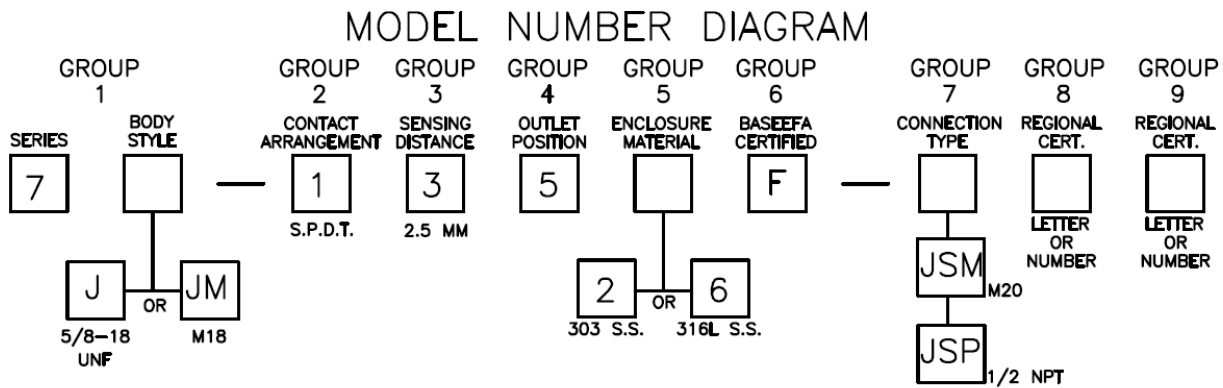
The proximity switches comprise a tubular stainless steel enclosure in a variety of body styles, with differing external male threads and a thin section wall at the front end.

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.

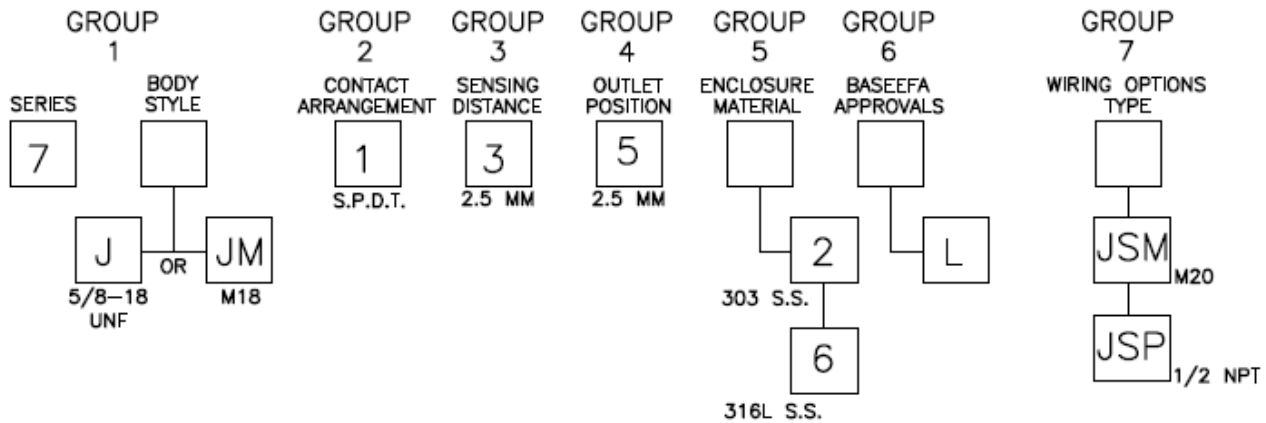
The switch model number is used to further describe each assembly as follows:




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 ₂₀₀ 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 ₂₀₀ 135°C Da (-40°C ≤ Ta ≤ +100°C)
H	 II 1GD Ex ia IIC T3 Ga (-40°C ≤ Ta ≤ +150°C) Ex ia IIIC T ₂₀₀ 200°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 ₂₀₀ 85°C/ T ₂₀₀ 135°C/ T ₂₀₀ 200°C Da (-40°C ≤ Ta ≤ +50°C/+100°C/+150°C)

16 Report Number

See certificate history

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
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

New drawings submitted for this issue of certificate:

Number	Sheet	Issue	Date	Description
CERT-ES-09593-1 ^{*1}	1 of 1	AA	5/15/2023	7J NAMEPLATE IECEX/NEC

Current drawings which remain unaffected by this issue:

Number	Sheet	Issue	Date	Description
ES-03782-1 ^{*2}	1 to 4	AC	2021-02-03	PRINTED CIRCUIT BOARD 70 MICRO SERIES JUNCTION
CERT-ES-03777-1 ^{*3}	1 of 1	5	10/21/15	ASSEMBLY
CERT-ES-05400-1 ^{*4}	1 of 1	3	3/17/2021	STENCIL, ARTWORK
CERT-ES-05401-1 ^{*4}	1 of 1	3	3/17/2021	STENCIL, ARTWORK
CERT-ES-05402-1 ^{*4}	1 of 1	3	3/15/2021	STENCIL, ARTWORK

Note *1 – Held with IECEX BAS 15.0136X Issue 3 and associated with Baseefa15ATEX0193X Issue 2.

Note *2 – Held with IECEX BAS 15.0136X Issue 2, and associated with IECEX BAS 13.0086X Issue 5, Baseefa15ATEX0193X Issue 1 & Baseefa14ATEX0236X/4.

Note *3 – Held with IECEX BAS 15.0136X Issue 0 and associated with Baseefa15ATEX0193X (prime).

Note *4 – Held with IECEX BAS 15.0136X Issue 2 and associated with Baseefa15ATEX0193X Issue 1.

20 Certificate History

Certificate No.	Date	Comments
Baseefa15ATEX0193X	23 January 2016	The release of the prime certificate. The associated test and assessment against the requirements of EN 60079-0:2012 +A11:2013 & EN 60079-11:2012 is documented in Test Report No. GB/BAS/ExTR15.0298/00 for project 15/0319.
Baseefa15ATEX0193X Issue 1	31 March 2021	This issue of the certificate incorporates the primary & this supplementary certificate into one certificate, permits a change of PCB material, and confirms the current design meets the requirements of EN IEC 60079-0:2018. See report GB/BAS/ExTR21.0042/00 for project 20/0556.

Certificate No.	Date	Comments
Baseefa15ATEX0193X Issue 2	5 April 2024	This issue of the certificate permits the addition of an alternative marking plate carrying third party certification in addition to the accepted marking. The assessment for this issue is held in the report GB/SGS/ExTR24.0017/00 and held with Project No. 24/0043.
For drawings applicable to each issue, see original of that issue.		