



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 **Ex COMPONENT CERTIFICATE**

Certificate No.: **IECEx EUT 20.0016U** Page 1 of 3 [Certificate history:](#)

Status: **Current** Issue No: 0

Date of Issue: 2020-07-27

Applicant: **Sunleem Technology Incorporated Company**
No.15 Xihenggang Street
Yangchenghu Town
Xiangcheng District
Suzhou, Jiangsu, China. 215138
China

Ex Component: Explosion proof flexible conduit NGd-II Series

This component is NOT intended to be used alone and requires additional consideration when incorporated into other equipment or systems for use in explosive atmospheres (refer to IEC 60079-0).

Type of Protection: **Flameproof enclosure "d"; Increased safety "e"; Dust-tight enclosure "t"**

Marking: Models with NPT or ISO Metric thread:
Ex db IIC Gb
Ex eb IIC Gb
Ex tb IIIC Db

Models with parallel G thread:
Ex eb IIC Gb
Ex tb IIIC Db

Approved for issue on behalf of the IECEx
Certification Body:

Dionisio Bucchieri

Position:

Head of IECEx Certification Body

Signature:
(for printed version)

Date:

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:

Eurofins Product Testing Italy S.r.l.
Via Cuorgnè
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Italy



Product Testing



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Page 2 of 3

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Manufacturer: **Sunleem Technology Incorporated Company**
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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

IEC 60079-7:2015 Explosive atmospheres – Part 7: Equipment protection by increased safety "e"
Edition:5.0

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 Report:

[IT/EUT/ExTR20.0016/00](#)

Quality Assessment Report:

[DE/TUR/QAR18.0015/00](#)



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Certificate No.: **IECEx EUT 20.0016U**

Page 3 of 3

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Ex Component(s) covered by this certificate is described below:

NGd-II series explosion-proof flexible conduits whose total length is 500mm, 700mm, 1000mm or customized according to the users' needs are Ex components, which are intended to be installed with enclosure of Ex component having type of protection Ex db (only for ISO Metric or NPT threads), Ex eb or Ex tb. The flexible conduits are used to mechanically protect insulated conductors and/or multicore cables that pass through them.

The conduit is mainly made of a corrugated flexible metallic hose with fittings soldered at the two ends; the corrugated hose surface is protected by an additional steel wire braid. All metallic parts of the conduit are realized in stainless steel 304. Thread sizes are from paralleled type M20 to M100, tapered NPT 1/2" to NPT 4". The parallel type G1/2" to G4" is marked according to the increased safety "eb" and dust tight "tb" types of protection.

This component has an ingress protection rating of IP66 according to IEC 60079-0 and IEC 60529.

SCHEDULE OF LIMITATIONS:

- The flameproof joints are not intended to be repaired.
- Potential electrostatic charging hazard – see instructions.
- The operating temperature range is -55°C ~ +65°C.
- The flexible conduits shall be installed on a certified Ex Equipment or Component forming a well-defined Ex equipment configuration.
- Determination of the explosion pressure (reference pressure) in accordance with Cl.15.2.2, overpressure test in accordance with Cl. 15.2.3 and test for non-transmission of an internal ignition in accordance with Cl.15.3 of IEC 60079-1 shall be carried when at least "db" type of protection is required during the complete equipment assessment.
- Routine overpressure test shall be carried according to Cl.16.1 of IEC 60079-1 for at least 10s at a pressure test value equals to 1.5 times the reference pressure measured according Cl.15.2.2 when at least "db" type of protection is required during the complete equipment assessment.
- IP Rating determination in accordance with IEC 60529 and Cl.26.4.5 of IEC 60079-0 shall be additionally carried when at least "eb" and/or "tb" types of protection are required during the complete equipment assessment. If gaskets are used to maintain the degree of protection between the flexible conduit fittings and the wall of the enclosure on which those are installed, the requirements specified in Cl.7 of IEC 60079-0 shall be additionally observed and the equipment shall be tested according to the "test of enclosure" test sequence as required by Cl.26.4 of IEC 60079-0.
- The service temperature measured on the non-metallic parts of the flexible conduits according to Cl.26.5.1.2 of IEC 60079-0 (when gaskets are placed on the terminal fittings of the conduit) shall not exceed the Ex component operating temperature limit range.

Annex:

[Annex to CoC IECEx EUT 20.0016 U Issue N. 0_Sunleem NGD II series conduit 20200727.pdf](#)



Annex to certificate: IECEx EUT 20.0016 U Issue N. 0 of 2020-07-27

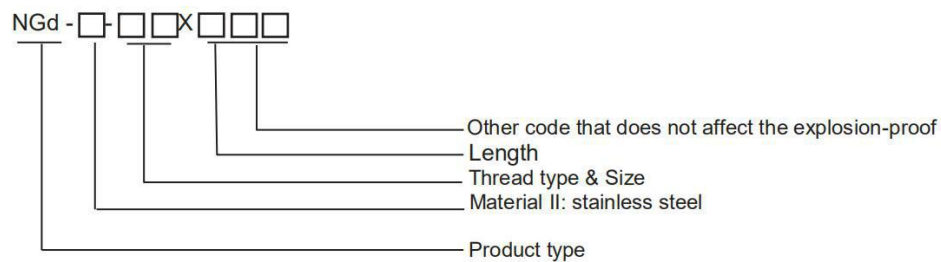
Component description

NGd-II series explosion-proof flexible conduits whose total length is 500mm, 700mm, 1000mm or customized according to the users' needs are Ex components, which are intended to be installed with enclosure of Ex component having type of protection Ex db (only for ISO Metric or NPT threads), Ex eb or Ex tb. The flexible conduits are used to mechanically protect insulated conductors and/or multicore cables that pass through them.

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This component has an ingress protection rating of IP66 according to IEC 60079-0 and IEC 60529.

Model reference: NGd-II series



Thread sizes:

No	Thread sizes		
	G (parallel)	NPT (tapered)	Metric (parallel)
1	G1/2"	NPT 1/2"	M20X1.5
2	G3/4"	NPT 3/4"	M25X1.5
3	G1"	NPT 1"	M32X1.5
4	G1 1/4"	NPT 1 1/4"	M40X1.5
5	G1 1/2"	NPT 1 1/2"	M50X1.5
6	G2"	NPT 2"	M63X1.5
7	G2 1/2"	NPT 2 1/2"	M75X1.5
8	G3"	NPT 3"	M90X1.5
9	G4"	NPT 4"	M100X1.5

**Size information table:**

Model	Inner Diameter (mm)	Thread	Length (mm)
NGd-II×500	14	G1/2 NPT 1/2 M20	500
NGd-II×700	14		700
NGd-II×1000	14		1000
NGd-II×500	18	G3/4 NPT 3/4 M25	500
NGd-II×700	18		700
NGd-II×1000	18		1000
NGd-II×500	23	G1 NPT1 M32	500
NGd-II×700	23		700
NGd-II×1000	23		1000
NGd-II×500	28	G1 ¼ NPT 1 ¼ M40	500
NGd-II×700	28		700
NGd-II×1000	28		1000
NGd-II×500	34	G1 ½ NPT 1 ½ M50	500
NGd-II×700	34		700
NGd-II×1000	34		1000
NGd-II×500	45	G2 NPT2 M63	500
NGd-II×700	45		700
NGd-II×1000	45		1000
NGd-II×700	60	G2 ½ NPT 2 ½ M75	700
NGd-II×1000	60		1000
NGd-II×700	75	G3 NPT3 M90	700
NGd-II×1000	75		1000
NGd-II×700	91	M100	700
NGd-II×1000	91		1000
NGd-II×700	95	G4 NPT4	700
NGd-II×1000	95		1000

Warning label

WARNING – POTENTIAL ELECTROSTATIC CHARGING HAZARD – SEE INSTRUCTIONS

Routine tests

None