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# EU-TYPE EXAMINATION CERTIFICATE



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**Component intended for use in potentially explosive atmospheres  
Directive 2014/34/EU ANNEX III**

- [3] Certificate Number: **EPT 20 ATEX 3883 U** **issue 0**
- [4] Component: Explosion proof flexible conduit  
Series: NGd-II
- [5] Manufacturer: **Sunleem Technology Incorporated Company**
- [6] Address: No.15, Xihenggang Street, Yangchenghu Town, Xiangcheng District, Suzhou, Jiangsu, China. 215138
- [7] This component and its accepted variations are specified in the annex to this Certificate.
- [8] Eurofins Product Testing Italy S.r.l., Notified Body n. 0477 in accordance with Article 21 of the Directive 2014/34/EU of the European Parliament and of the Council of 26th February 2014, certifies that this component has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment intended for use in potentially explosive atmospheres given in Annex II of the Directive.  
The examination and test results are recorded in the confidential Report N° EPT.20.REL.01/2013063
- [9] Compliance with the essential health and safety requirements is assured through the verification of them and by compliance with the standard:
- EN IEC 60079-0:2018; EN60079-1:2014; EN60079-7:2015; EN60079-31:2014**
- [10] The symbol "U" placed after the certificate's number indicates that this certificate must not be understood as a certificate for equipment or protective systems. This certificate may be used as a basis for a certificate for the equipment or protective system.
- [11] This EU -TYPE EXAMINATION CERTIFICATE relates only to the design, the exam and the tests of the specified component. Further requirements of the Directive 2014/34/EU apply to the manufacture and supply of this component. These requirements are not object of this Certificate.
- [12] The component shall include the sign  and the following string:

**Models with NPT/ISO Metric thread:**

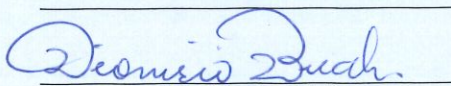
II 2 GD  
Ex db IIC Gb  
Ex eb IIC Gb  
Ex tb IIIC Db

**Models with parallel G thread:**

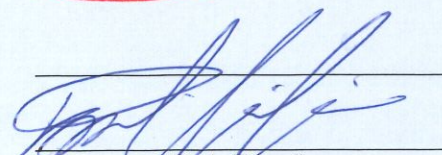
II 2 GD  
Ex eb IIC Gb  
Ex tb IIIC Db



Place and date of issue:

**Torino, 2020-07-27**


Dionisio Bucchieri  
Directive Responsible



Paolo Frisoglio  
Managing Director



**PRD N° 119B**  
Membro degli Accordi di Mutuo Riconoscimento EA, IAF e ILAC  
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This Certificate has 4 pages and it is reproducible only in its entirety. Conditions of validity are reported below.



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**[15] 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.

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.

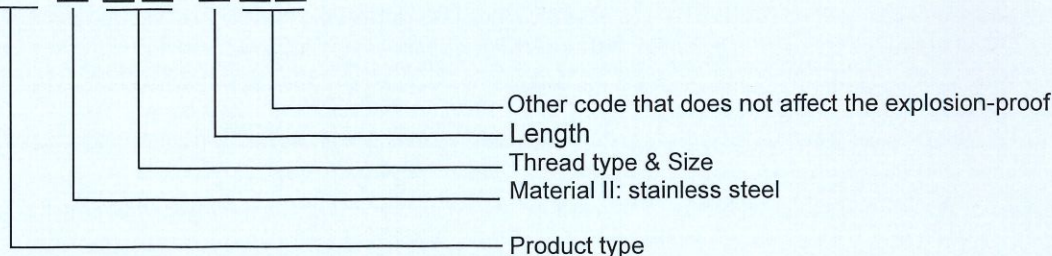
This component has an ingress protection rating of IP66 according to EN 60079-0 and EN 60529.

**Warning label**

WARNING – POTENTIAL ELECTROSTATIC CHARGING HAZARD – SEE INSTRUCTIONS

**Model reference: NGd-II series**

NGd -  -   X

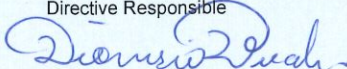

**Thread sizes:**

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


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[16] **Assessment Report n°EPT.20.REL.01/2013063**

This EU-Type Examination Certificate is released after the positive result of the conformity assessment of the Council Directive 2014/34/EU and to harmonized technical standards listed in this certificate performed by the Notified Body Eurofins Product Testing Italy S.r.l., and reported in the Assessment Report above cited.

[17] **Schedule of limitation**

- 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 EN 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 EN 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 EN 60529 and Cl.26.4.5 of EN 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 EN 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 EN 60079-0.
- The service temperature measured on the non-metallic parts of the flexible conduits according to Cl.26.5.1.2 of EN 60079-0 (when gaskets are placed on the terminal fittings of the conduit) shall not exceed the Ex component operating temperature limit range.

[18] **Essential Health and Safety Requirements**

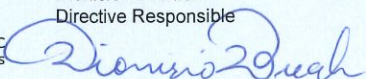
Assured by compliance with harmonized standards.



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**[19] Descriptive documents**

The equipment object of this Certificate are described by the following documents that are scheduled documents and therefore they cannot be modified without the explicit authorization of the Notified Body.

Title	Drawing No.	Rev.	Date
Drawing - NGd-II series Explosion-proof Flexible Conduit	2XLM 532 1014	1	2019.11.26
Drawing - External Threaded Adapter	8XLM 177 1269	1	2019.10.21
Drawing - Outer Sleeve(G2.5~G4)	8XLM 210 1138.7~9	1	2019.10.21
Drawing - Retaining Ring(G0.5~G2)	8XLM 210 1215.1~6	1	2019.10.21
Drawing - Flexible metallic conduit	8XLM 458 1003.1~9	1	2019.10.21
Drawing - Steel Wire Braid	8XLM 458 1004.1~9	1	2019.10.21
Drawing - Name Plate	8XLMW 865 028	1	2019.11.26
Drawing - Gasket for M thread	8XLMW.371.001	1	2019.01.26
Drawing - Gasket for NPT and G thread	8XLMW.371.003	1	2019.11.26
User manual	0XLMW.466 009	A.01	2019.10.21

**[20] Terms and conditions**

The product liability rests with the Manufacturer, his representative or, in the absence of a representative, with the importer, in accordance with the General Product Safety Directive 2001/95/EC.

The following conditions may render this certificate invalid:

- changes in the design or construction of the product;
- changes or amendments to the Directive;
- changes or amendments in the standards which form the basis for documenting compliance with the essential requirements of the 2014/34/EU Directive.

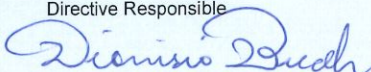
**[21] History**

This certificate is at its first issue.



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End of Certificate

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