

### INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.:	IECEx PRE 18.0031X	Page 1 of 4	Certificate history:	
Status:	Current	Issue No: 1	Issue 0 (2018-12-07)	
Date of Issue:	2021-08-24			
Applicant:	NOVA SMAR S/A Dr.Antonio Furnan Jr 1028 Sertaozinho Brazil			
Equipment:	Pressure transmitter LD series.			
Optional accessory:				
Type of Protection:	Ex db			
Marking:	Ex db IIC T6 Gb Ta : -20°C to +60°C			
Approved for issue on behalf of the IECEx Certification Body:		Ståle Sandstad		
Position:		Certification Manager		
Signature: (for printed version)				
Date:				
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Certificate issued by:

DNV Product Assurance AS Veritasveien 3 Hovik 1363 Norway





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Manufacturer: NOVA SMAR S/A

Dr.Antonio Furnan Jr 1028

Sertaozinho **Brazil** 

Additional Baldota Control and Equipment Pvt. Ltd.

manufacturing R-895, MIDC Rabale locations: Navi Mumbai

Maharashtra IN-400 701

In all a

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

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 Reports:

NO/PRE/ExTR18.0025/00 NO/PRE/ExTR18.0025/01

**Quality Assessment Report:** 

NO/NEM/QAR08.0006/09



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#### **EQUIPMENT:**

Equipment and systems covered by this Certificate are as follows:

#### **Product description**

The Pressure Transmitter LD290 Series and LD300 Series use the same physical structure in terms of electronic boards and mechanical enclosures and consist in housing, lectronic circuit and sensor. To measure the applied pressure, the LD300 Series uses the differential capacitive sensor and the LD290 Series the gauge in-line capacitive sensor.

The model LD290 is a pure 4-20 mA transmitter, the models LD291 and LD301 offer digital communication based in HART®, the models LD292 and LD302 offer digital communication based in Foundation™ Fieldbus and the models LD293 and LD303 PROFIBUS PA.

The superior part is a Flameproof Housing, manufactured in AlSI316/CF-8M or SAE305 or SAE336/ANSI356, closed by removable screwed covers with M76 x 1,27 threads, with or without visor, and the cable entry for electronic circuits is mounted in the wall of the housing with options  $\frac{1}{2}$ "-14 NPT or M20x1,5.

Under the one cover, being equipped with an inspection glass, an alphanumeric LCD-display is arranged optionally; under the other cover, terminals for the signal-circuit are arranged. The inferior part is the sensor structure connected through a M46 x 1, 27 thread.

This certificate shall be considered in conjunction with Ex d requirements only.

#### Type designation

LD 290, 291, 292 & 293 LD 301, 302 & 303

#### **Electrical Data**

28 V DC, 12mA quiescent current consumption: 12 mA for Fieldbus/ Profibus protocol

#### **Degrees of protection (IP Code)**

IP66W and IP68W 10m for a period of 24 hours for IP68. Tested in a saturated solution of NaCl 5% w / w, at  $35^{\circ}$ C for a period of 200 h.

#### Ambient temperature:

-20°C to +60°C

#### SPECIFIC CONDITIONS OF USE: YES as shown below:

Repairs of the flameproof joints must be made in compliance with the structural specifications provided by the manufacturer. Repairs must not be made on the basis of values specified in tables 3 and 4 of EN/IEC 60079-1.



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**DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)** 

1) Update to IEC 60079-0:2017 version.