

Translation

EU-Type Examination Certificate Supplement 3

Change to Directive 2014/34/EU

Equipment intended for use in potentially explosive atmospheres
Directive 2014/34/EU

EU-Type Examination Certificate Number: **DMT 01 ATEX E 059**

Product: **Pressure Transmitter type LD29* ***_**_*****

Manufacturer: **Nova Smar S/A**
(previous manufacturer name: **smar Equipamentos Industriais Ltda.**)

Address: **Av. Dr. Antonio Furlan Jr. 1028, 14170-480 Sertaozinho-SP, Brasil**

This supplementary certificate extends EC-Type Examination Certificate No. DMT 01 ATEX E 059 to apply to products designed and constructed in accordance with the specification set out in the appendix of the said certificate but having any acceptable variations specified in the appendix to this certificate and the documents referred to therein.

DEKRA Testing and Certification GmbH, Notified Body number 0158, 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.
The examination and test results are recorded in the confidential Report No. BVS PP 01.2056 EU.

The Essential Health and Safety Requirements are assured in consideration of:

EN IEC 60079-0:2018	General requirements
EN 60079-11:2012	Intrinsic Safety "i"
EN 60079-26:2015	Equipment with equipment protection level (EPL) Ga

Except in respect of those requirements listed under item 18 of the appendix.

If the sign "X" is placed after the certificate number, it indicates that the product is subject to the Special Conditions for Use specified in the appendix to this certificate.

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.

The marking of the product shall include the following:

 **II 1/2G Ex ia IIC T4/T5/T6 Ga/Gb**
I M1 Ex ia I Ma

DEKRA Testing and Certification GmbH
Bochum, 2019-04-23

Signed: Jörg-Timm Kilisch

Managing Director

13 **Appendix**
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15 **Product description**

15.1 **Subject and type**

Pressure Transmitter type LD29* ***-**-***
 a bcd-ef-ghi

Asterisk	Feature
a	General model code Pure 4 - 20 mA interface = LD290 HART communication = LD291
b	Code letter / number of measuring range
c	Code-no. or letter for mechanical details of diaphragm material and fill fluid
d	Code letter specifying process connection material
e	without LCD-indicator = 0 with LCD-indicator = 1
f	Code letter / number specifying type of process connection
g	Electrical connection 1/2-14 NPT = 0 other options according to manual = 1 / 2 / 3 / 4 / 5 M20x1.5 = A Pg 13.5 DIN = B
h	Code letter / number for Mounting Bracket
i	Optional items or blank for 'no optional items'

15.2 **Description**

With this supplement the certificate is changed to Directive 2014/34/EU.
 (Annotation: In accordance with Article 41 of Directive 2014/34/EU, EC-Type Examination Certificates referring to 94/9/EC that were in existence prior to the date of application of 2014/34/EU (20 April 2016) may be referenced as if they were issued in accordance with Directive 2014/34/EU. Supplementary Certificates to such EC-Type Examination Certificates, and new issues of such certificates, may continue to bear the original certificate number issued prior to 20 April 2016.)

Reason for the supplement

- Change to Directive 2014/34/EU
- Update of applied standards
- Minor changes of electrical circuitry.
- Previous manufacturer name smar Equipamentos Industriais Ltda changed to Nova Smar S/A.

Description of the product

The Pressure Transmitter type LD 29* ***-**-***, which serves for the transmission of pressure measuring data in certified intrinsically safe supply and signal circuits, comprises a tubular light alloy or stainless steel enclosure, which contains printed circuit boards with electronic components closed by means of screwed caps.

Under one cover, being equipped with a window, optionally an LCD-display is arranged; under the other cover, terminals for the intrinsically safe supply- and signal-circuit are arranged.

A cable entry for intrinsically safe circuits is mounted in the wall of the enclosure.

The wall of the enclosure is flanged to a cast steel enclosure, which comprises of a mechanical pressure gauge and printed circuit boards with electronic components, embedded in sealing compound.

Listing of all components used referring to older standards: Not applicable



15.3 Parameters

15.3.1 Supply- and signal circuit intended for connection to an intrinsically safe 4 to 20 mA current loop

Voltage	U_i	DC	28	V
Current	I_i		93	mA
Effective internal capacitance	C_i	\leq	5	nF
Effective internal inductance	L_i		negligible	

15.3.2 Maximum permissible power for certified intrinsically safe supply and signal circuits as a function of ambient temperature and temperature class

Max. ambient temperature T_a	Temperature class	Power P_i
85 °C	T4	700 mW
75 °C	T4	760 mW
44 °C	T5	760 mW
50 °C	T5	700 mW
55 °C	T5	650 mW
60 °C	T5	575 mW
65 °C	T5	500 mW
70 °C	T5	425 mW
40 °C	T6	575 mW

15.3.3 Ambient temperature range (with) without display: $(-10\text{ °C})\ 40\text{ °C} \leq T_a \leq (+60\text{ °C})\ +85\text{ °C}$

16 Report Number

BVS PP 01.2056 EU, as of 2019-04-23

17 Special Conditions for Use

None

18 Essential Health and Safety Requirements

The Essential Health and Safety Requirements are covered by the standards listed under item 9. For this product the standard EN IEC 60079-0:2018 is equivalent to the harmonized standard EN 60079-0:2012 + A11:2013 in terms of safety.

19 Drawings and Documents

Drawings and documents are listed in the confidential report.

We confirm the correctness of the translation from the German original. In the case of arbitration only the German wording shall be valid and binding.

DEKRA Testing and Certification GmbH
 Bochum, 2019-04-23
 BVS-Scha/Mu A 20180307


 Managing Director