

Translation

(1) **2nd Supplement to the EC-Type Examination Certificate**

(2) Equipment and protective systems intended for use in potentially explosive atmospheres - Directive 94/9/EC Supplement accordant with Annex III number 6

(3) No. of EC-Type Examination Certificate: **DMT 01 ATEX E 151**

(4) Equipment: **Concentration-/Density-Transmitter type DT 301*-***_***_*******

(5) Manufacturer: **smar Equipamentos Industriais Ltda.**

(6) Address: **Av. Dr. Antonio Furlan Jr., 1028, 14170 -480 Sertaozinho-SP, Brazil**

(7) The design and construction of this equipment and any acceptable variation thereto are specified in the appendix to this supplement.

(8) The certification body of DEKRA EXAM GmbH, notified body no. 0158 in accordance with Article 9 of the Directive 94/9/EC of the European Parliament and the Council of 23 March 1994, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres, given in Annex II to the Directive. The examination and test results are recorded in the Test and Assessment Report BVS PP 01.2129 EG.

(9) The Essential Health and Safety Requirements are assured by compliance with:

EN 60079-0:2012 + A11:2013 General requirements
EN 60079-11:2012 Intrinsic safety "i"
EN 60079-26:2007 Equipment with equipment protection level (EPL) Ga

(10) If the sign "X" is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use specified in the appendix to this certificate.

(11) This supplement to the EC-Type Examination Certificate relates only to the design, examination and tests of the specified equipment in accordance to Directive 94/9/EC. Further requirements of the Directive apply to the manufacturing process and supply of this equipment. These are not covered by this certificate.

(12) The marking of the equipment shall include the following:

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

DEKRA EXAM GmbH
Bochum, dated 2015-04-10

Signed: Dr. Eickhoff

Certification body

Signed: Dr. Wittler

Special services unit



(13) Appendix to

(14) **2nd Supplement to the EC-Type Examination Certificate
DMT 01 ATEX E 151**

(15) 15.1 Subject and type

Concentration-/Density-Transmitter type DT 301*-*-*-***/**

Type code not changed

15.2 Description

The status of applied standards in the certificate has been subjected to update as listed in item (9)

Previous electronic assemblies of the pressure transmitter may be replaced optionally by versions subjected to minor change and in addition, may be enhanced with a new variant of main board and sensor board.

Safety-relevant constructive details and parameters remain unchanged.

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 | ≤ | 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 and Group I | 700 mW |
| 75 °C | T4 and Group I | 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: $-40\text{ °C} \leq T_a \leq +85\text{ °C}$

(16) Test and Assessment Report

BVS PP 01.2129 EG as of 2015-04-10

(17) Special conditions for safe use

None



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 EXAM GmbH
44809 Bochum, 2015-04-10
BVS-Scha/Mu A 20121108



Certification body



Special services unit

