

CERTIFICATE

(1) EU-Type Examination

(2) **Equipment or protective systems intended for use in potentially explosive atmospheres - Directive 2014/34/EU**

(3) EU-Type Examination Certificate Number: **DEKRA 11ATEX0197 X** Issue Number: **5**

(4) Product: **Pressure Gauges and Thermometers with Limit Switch Control (LSC)**

(5) Manufacturer: **ARMANO Messtechnik GmbH**

(6) Address: **Manometerstrasse 5, Am Gewerbepark 9
D-46487, Wesel-Ginderich D-08344, Beierfeld
Germany Germany**

(7) This product and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

(8) DEKRA Certification B.V., Notified Body number 0344 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 confidential test report number NL/DEK/ExTR11.0081/04.

(9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN 60079-0 : 2012 + A11 : 2013

EN 60079-11 : 2011

except in respect of those requirements listed at item 18 of the Schedule.

(10) If the sign "X" is placed after the certificate number, it indicates that the product is subject to the Specific Conditions of Use specified in the schedule to this certificate.

(11) 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.

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



**II 2 G Ex ia IIC T6, T5, T4 Gb
II 2 D Ex ia IIIC T95°C, T135°C Db**

Date of certification: 6 June 2023

DEKRA Certification B.V.

R. Schuller
Certification Manager



(13) **SCHEDULE**

(14) **to EU-Type Examination Certificate DEKRA 11ATEX0197 X**

Issue No. 5

(15) **Description**

Thermometer Types TSCh..., TGeICh..., TF... and TRCh..., Bourdon Tube Pressure Gauge Types Rch..., RQ... and RSCh..., Diaphragm Pressure Gauge with horizontal and vertical diaphragm Types Pch... and PSCh... and Double/Differential Pressure Gauge Type DiRZCh... serve for the measurement of temperature respectively pressure. The measurement mechanism is purely a mechanical system. The instruments are provided with one to four separately certified proximity switches.

Apparatus equipped with proximity sensors Hans Turck type Si2-K08-Y1

Ambient temperature range: -25°C to 70 °C for T6
-25°C to 85 °C for T5
-25°C to 100 °C for T4
-25°C to 70 °C for T95 °C (dust application)

Apparatus equipped with proximity sensors Pepperl+Fuchs type SJ3,5-...-N...

Ambient temperature range: -25°C to 30 °C for T6
-25°C to 45 °C for T5
-25°C to 74 °C for T4
-25°C to 74 °C for T135 °C (dust application)

Apparatus equipped with proximity sensors Pepperl+Fuchs type SJ2-N

Ambient temperature range: -25°C to 30 °C for T6
-25°C to 45 °C for T5
-25°C to 57 °C for T4
-25°C to 57 °C for T135 °C (dust application)

Apparatus equipped with proximity sensors Pepperl+Fuchs type SJ...S(1)N...

Ambient temperature range: -25°C to 30 °C for T6
-25°C to 45 °C for T5
-25°C to 57 °C for T4
-25°C to 57 °C for T135 °C (dust application)

Electrical data

Switch circuit (terminals 1, 2, resp. 3, 4 resp. 5, 6 resp. 7, 8):

in type of protection intrinsic safety Ex ia IIC or Ex ia IIIC, only for connection to certified intrinsically safe circuits, with following maximum values:

Apparatus equipped with proximity sensors Hans Turck type Si2-K08-Y1:

$U_i = 20 \text{ V}$; $I_i = 60 \text{ mA}$; $P_i = 130 \text{ mW}$; $C_i = 250 \text{ nF}$; $L_i = 350 \text{ }\mu\text{H}$.

Apparatus equipped with proximity sensors Pepperl+Fuchs type SJ3,5-...-N...:

$U_i = 16 \text{ V}$; $I_i = 76 \text{ mA}$; $P_i = 242 \text{ mW}$; $C_i = 50 \text{ nF}$; $L_i = 250 \text{ }\mu\text{H}$.

Apparatus equipped with proximity sensors Pepperl+Fuchs type SJ2-N:

$U_i = 16 \text{ V}$; $I_i = 76 \text{ mA}$; $P_i = 242 \text{ mW}$; $C_i = 30 \text{ nF}$; $L_i = 100 \text{ }\mu\text{H}$.

Apparatus equipped with proximity sensors Pepperl+Fuchs type SJ...S(1)N...:

$U_i = 16 \text{ V}$; $I_i = 76 \text{ mA}$; $P_i = 242 \text{ mW}$; $C_i = 30 \text{ nF}$; $L_i = 100 \text{ }\mu\text{H}$.

The switch circuits are infallibly isolated from each other.

(13) **SCHEDULE**

(14) **to EU-Type Examination Certificate DEKRA 11ATEX0197 X**

Issue No. 5

Installation instructions

The instructions provided with the product shall be followed in detail to assure safe operation.

(16) **Report Number**

No. NL/DEK/ExTR11.0081/04.

(17) **Specific conditions of use**

For types with a window made of plastic:

When used in an area requiring the use of equipment with EPL Gb, electrostatic discharge of the window shall be avoided.

When used in an area requiring the use of equipment with EPL Db, propagating brush discharges of the window shall be avoided.

(18) **Essential Health and Safety Requirements**

Covered by the standards listed at item (9).

(19) **Test documentation**

As listed in Report No. NL/DEK/ExTR11.0081/04.

(20) **Certificate history**

Issue 1 -	214618800	initial certificate
Issue 2 -	222156000	Addition of type with plastic window Evaluation according to latest edition of the standard Specific conditions of use added for type with plastic window
Issue 3 -	223138800	Name change of manufacturer
Issue 4 -	226530000	Addition of the slot sensor Type SJ2-N
Issue 5 -	227631300	Minor constructional changes