

EX CERTIFICATE – ATEX

vibro-meter®

**KEMA 04 ATEX 1294 X
for
CA30x piezoelectric accelerometers**



Note: Although the Ex certificate may be included in more than one language, the liability of the notified body applies only on the text of the original copy of the certificate that it published.

Document reference KEMA 04 ATEX 1294 X
Edition 7 – March 2024

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- (13) **SCHEDULE**
- (14) to EU-Type Examination Certificate KEMA 04ATEX1294X Issue No. 6
- (15) **Description**
- Accelerometer Type 144-30-000-... is used for vibration monitoring of the equipment to which it is mounted.
A piezo electrical sensor converts mechanical forces (e.g. vibrations) into an electrical signal that is processed externally.
- Ambient temperature range:
-54 °C to +500 °C, for sensor and cable;
-54 °C to +500 °C, for high temperature VM connector;
-54 °C to +260 °C, for standard temperature VM connector;
-65 °C to +200 °C, for connector type M83723/98Y1020 or equivalent;
-65 °C to +150 °C, for LEMO connector type 0 or equivalent

The temperature class, depending on the ambient temperature, respectively depending on the process temperature, is listed in following table:

Temperature class	Ambient temperature, respectively process temperature
T6	≤ 75 °C
T5	≤ 90 °C
T4	≤ 125 °C
T3	≤ 190 °C
T2	≤ 290 °C
T1	≤ 440 °C

For an ambient temperature, respectively a process temperature over 440 °C, the temperature of the sensor exceeds that temperature by 10 K.

Electrical data

Output circuit (connector):
in type of protection intrinsic safety Ex ia IIC, only for connection to a certified intrinsically safe circuit, with following maximum values:
 $U_i = 28\text{ V}$; $I_i = 100\text{ mA}$ (linear characteristic); $I_t = 25\text{ mA}$ (non-linear characteristic); $P_i = 0.7\text{ W}$;
 $L_i = 0\text{ }\mu\text{H}$ + L_{cable} ; inductance of the integral cable is 1 $\mu\text{H / m}$
 $C_i = 2\text{ nF}$ + C_{cable} ; capacitance of the integral cable is 0.2 nF / m

Installation instructions

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

- (16) **Report Number**
- No. NL/DEK/EXTR23.0047700.
- (17) **Specific conditions of use**
- For ambient temperature range see (15).

CERTIFICATE

EU-Type Examination

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

(2) EU-Type Examination Certificate Number: KEMA 04ATEX1294X Issue Number: 6

(3) Product: Accelerometer Type 144-30-000-...

(4) Manufacturer: Meggitt SA

(5) Address: Route de Moncor 4, 1752 Villars-sur-Glâne, Switzerland

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

(7) 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.

(8) The examination and test results are recorded in confidential test report number NL/DEK/EXTR23.0047700.

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

EN IEC 60079-0 : 2018

EN 60079-11 : 2012

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 1 G Ex ia IIC T6...510 °C Ga

Date of certification: 28 February 2024

DEKRA Certification B.V.

R. Schuller
Certification Manager

Throughout this document, a point is used as the decimal separator.

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(13) **SCHEDULE**

(14) **to EU-Type Examination Certificate KEMA 04ATEX1294X** Issue No. **6**

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

Covered by the standards listed at item (9).

Test documentation

As listed in Report No. NL/DEKExTR23.0047/00.