[1] # TYPE EXAMINATION CERTIFICATE

[2] **Equipment or Protective System intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU**

[3] Type Examination Certificate Number: **UL 21 ATEX 2570X Rev. 0**

[4] Product: **Vibration Sensors HE200, HE205, HE250 and HE255**

[5] Manufacturer: **HAUBER-Elektronik GmbH**

[6] Address: **Fabrikstr. 6, 72622 Nürtingen, Germany**

[7] This equipment and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

[8] UL International Demko A/S 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 Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014.

The examination and test results are recorded in confidential report no **DK/ULD/ExTR20.0022/00.**

[9] Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN IEC 60079-0:2018 EN IEC 60079-7: 2015 +A1:2018 EN 60079-31:2014

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 Type examination certificate relates only to the design of the specified product, and not to specific items of product subsequently manufactured.

[12] The marking of the product shall include the following:

II 3 G Ex ec IIC T4 Gc

II 3 D Ex tc IIIC T135°C Dc

Certification Manager
Jan-Erik Storgaard

This is to certify that the sample(s) of the Product described herein ("Certified Product") has been investigated and found in compliance with the Standard(s) indicated on this Certificate, in accordance with the ATEX Product Certification Program Requirements. This certificate and test results obtained apply only to the product sample(s) submitted by the Manufacturer. UL did not select the sample(s) or determine whether the sample(s) provided were representative of other manufactured product. UL has not established Follow-Up Service or other surveillance of the product. The Manufacturer is solely and fully responsible for conformity of all product to all applicable Standards, specifications, requirements or Directives. The test results may not be used, in whole or in part, in any other document without UL's prior written approval

Date of issue: 2021-05-28

Certification Body UL International Demko A/S, Borupvang 5A, 2750 Ballerup, Denmark
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[13] [14]

Schedule
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[15] Description of Product

Vibration Sensors HE200, HE205, HE250 and HE255
Enclosed Type, Vibration Sensor, measuring and monitoring absolute bearing vibrations/temperature in machine.

HE200, HE205, HE250 or HE255, models HE200.02.xx.xx.xx.00.xxx, HE200.02.xx.xx.xx.01.xxx, HE205.02.xx.xx.xx.00.xxx, HE205.02.xx.xx.xx.01.xxx, HE250.02.xx.xx.xx.00.xxx, HE250.02.xx.xx.xx.01.xxx, HE255.02.xx.xx.xx.00.xxx and HE255.02.xx.xx.xx.01.xxx, where x is any number or character:

The HE200 vibration control is used for measuring and monitoring absolute bearing vibrations in machines. It has one analogue output and two potential-free switching contacts.
The HE205 vibration control is used for measuring and monitoring vibration acceleration in machines. It has one analogue output and two potential-free switching contacts with window function.
The HE250 vibration control is used for measuring and monitoring absolute bearing vibrations in machines and provides a bearing status parameter. It has two analogue outputs and two potential-free switching contacts.
The HE255 vibration control is used for measuring and monitoring vibration acceleration in machines and provides a bearing status parameter. It has two analogue outputs and two potential-free switching contacts with window function.

The optical radiation output of the product with respect to explosion protection, according to Annex II clause 1.3.1 of the Directive 2014/34/EU is covered in this certificate based on Exception 1.) and 5.) to the scope of EN 60079-28:2015.

Temperature range

The Vibration Sensors HE200, HE205, HE250 and HE255 are for mounting to process lines running adjacent to the enclosure. The temperature of the process line has a temperature range of -40°C to +125°C.

Coding		HE200.02.xx.xx.xx.00.xxx	HE200.02.xx.xx.xx.01.xxx	HE205.02.xx.xx.xx.00.xxx	HE205.02.xx.xx.xx.01.xxx	HE250.02.xx.xx.xx.00.xxx	HE250.02.xx.xx.xx.01.xxx	HE255.02.xx.xx.xx.00.xxx	HE255.02.xx.xx.xx.01.xxx
Measuring head temperature T_M Ambient temperature T_A	-40 °C ≤ T_M ≤ 85 °C -40 °C ≤ T_A ≤ 60 °C	x		x		x		x	
	-35 °C ≤ T_M ≤ 125 °C -35 °C ≤ T_A ≤ 60 °C		x		x		x		x
	-20 °C ≤ T_M ≤ 125 °C -20 °C ≤ T_A ≤ 60 °C								
II 3G Ex ec IIC T4 Gc II 3D Ex tc IIIC 135°C Dc UL 21 ATEX 2570X		x	x	x	x	x	x	x	x

Electrical data

24±10%Vdc, 100mA; Potential free switching contact 2 x 30Vdc/1.0A;
HE200, HE205 Series: Analog Output 1 x 4..20mA
HE250, HE255 Series: Analog Output 2 x 4..20mA

Routine tests

Routine tests according to EN 60079-1 cl. 16 are not required, as the enclosures have been successfully tested at four times the reference pressure.

[16] Descriptive Documents

The scheduled drawings are listed in the report no. provided under item no. [8] on page 1 of this Type Examination Certificate.

[17] Specific conditions of use:

- The ambient temperature range is between -40°C and +60°C. The measuring head service temperature range is between -40°C and +125°C. Model differences must be observed.

[18] Essential Health and Safety Requirements

The Essential Health and Safety Requirements (EHSRs) covered by the standards listed at item 9

Additional information

The Vibration Sensors HE200, HE205, HE250 and HE255 have in addition passed the tests for Ingress Protection to IP 66/67 in accordance with EN60529:1991+A1:2000+A2:2013.

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[14]

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The trademark  will be used as the company identifier on the marking label.

The manufacturer shall inform the notified body concerning all modifications to the technical documentation as described in Annex III to Directive 2014/34/EU of the European Parliament and the Council of 26 February 2014.