

CERTIFICATE

(1) UK Type Examination

(2) **Product or Protective System Intended for use in Potentially Explosive Atmospheres - UKSI 2016:1107 (as amended) – Schedule 3A, Part 1**

(3) UK Type Examination Certificate Number: **DEKRA 21UKEX0329** Issue Number: **0**

(4) Product: **Measuring head Model X100**

(5) Manufacturer: **Bronkhorst High-Tech B.V.**

(6) Address: **Nijverheidsstraat 1a, 7261 AK Ruurlo, the Netherlands**

(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 UK Ltd., Approved Body number 8505 in accordance with Regulation 42 of the Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres Regulations 2016, UKSI 2016:1107 (as amended), 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 Schedule 1 of the Regulations.

The examination and test results are recorded in confidential report EX22110011-001 Issue 0.

(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 to this certificate.

(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 UK Type Examination Certificate relates only to the design and construction of the specified product. Further requirements of the Regulations 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:

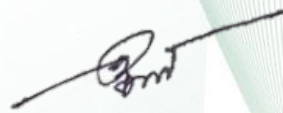


II 2 G Ex ib IIC T4 Gb

Date of certification: 03 February 2023

DEKRA Certification UK Ltd.




Abul Kashem
Certification Manager

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(13) **SCHEDULE**

(14) **to UK Type Examination Certificate DEKRA 21UKEX0329**

Issue No. **0**

(15) **Description**

The measuring head model X100 is used in the Bronkhorst High-Tech B.V. mass flow meter. The sensor is operating on a principle of heat transfer by sensing the ΔT along a heated section of a capillary tube.

Ambient temperature range $-10\text{ }^{\circ}\text{C}$ to $+70\text{ }^{\circ}\text{C}$.

Electrical data

Signal circuit (terminals 1 and 3):
in type of protection intrinsic safety Ex ib IIC, only for connection to a certified intrinsically safe circuit, with the following maximum values:
 $U_i = 28\text{ V}$; $I_i = 98\text{ mA}$; $P_i = 686\text{ mW}$; $C_i = 1\text{ nF}$; $L_i = 0,3\text{ mH}$.

Installation instructions

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

(16) **Report Number**

EX22110011-001 Issue 0.

(17) **Specific conditions of use**

None.

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

In addition to the Essential Health and Safety Requirements covered by the standards listed at item 9, all other requirements are demonstrated in the relevant reports.

(19) **Test documentation**

As listed in Report number EX22110011-001 Issue 0.