

# 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: **KEMA 01ATEX1172** Issue Number: **6**

(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 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/ExTR14.0004/02.

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

**EN 60079-0 : 2012 + A11**

**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 2 G Ex ib IIC T4 Gb**

Date of certification: 20 December 2016

DEKRA Certification B.V.

R. Schuller  
Certification Manager

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(13) **SCHEDULE**

(14) **to EU-Type Examination Certificate KEMA 01ATEX1172**

Issue No. 6

(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  $\Delta T$  along a heated section of a capillary tube.

Ambient temperature range -10 °C to +70 °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**

No. NL/DEK/ExTR14.0004/02.

(17) **Specific conditions of use**

None.

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

Covered by the standards listed at item (9).

(19) **Test documentation**

As listed in Report No. NL/DEK/ExTR14.0004/02.

(20) **Certificate history**

Issue 1 - 212709500	initial certificate
Issue 2 - 213288400	assessment to new editions of standards
Issue 3 - 215112500	assessment to new editions of standards
Issue 4 - 216515100	assessment to new editions of standards
Issue 5 - 216515100	changes of components
Issue 6 - 216515100	minor constructional changes and additional enclosure