

CERTIFICATE OF CONFORMITY

CERTIFICATE No.: HMT21.4132X



1 Equipment intended for use in potentially explosive atmospheres
Directive 2014/34/EU

2 Certificate N°:

HMT21.4132X

Issue 1

3 Manufacturer:

Heinrichs Messtechnik GmbH

4 Address:

Robert-Perthel-Str. 9

50739 Cologne

Germany

5 Products:

K09

K12

Glass-Tube Variable Area Flow-Meter

K32

Tel.: +49 221 49 708-0 www.heinrichs.eu info@heinrichs.eu

In accordance to Annex VIII of the Directive 2014/34/EU, *Module A: Internal Production Control*, Heinrichs Messtechnik GmbH ensures in sole responsibility that the products concerned in this certificate of conformity satisfy the requirements of this Directive. The internal production assessment procedure performed for the

above mentioned products fulfils the obligations laid down in points 2, 3 and 4 of Annex VIII and are compliant to the Essential Health and Safety Requirements relating to the design and construction of product intended for use in potentially explosive atmospheres.

or use in potentially explosive atmospheres.

7 The technical documentation has been submitted for 5 year depository to the EU notified body; DEKRA Testing and Certification GmbH (Notified Body number 0158)

8 The 'X' suffix after the certificate number indicates that the equipment is subject to conditions of safe use. These are specified in section 14

9 Compliance with the Essential Health and Safety Requirements has been demonstrated through compliance with the following documents:

EN 1127-1:2019

EN 80079-36:2016

10 The equipment marking shall include the following:

 $\langle E_{\rm X} \rangle$

II 2G Ex h IIC T5...T6 Gb

II 2d Ex h IIIC T85°C/T100°C Db

Heinrichs Messtechnik GmbH Cologne 17.01.2022

Signed:

Guido Thometzki (Managing Director) Joseph Burke

(Explosion Protection Representative)



11 Description

11.1 Product descriptions

The K09, K12, K17 and K32 are suitable for the flow-measurement of fluids or gases in pipe systems.

The momentary flow volume or mass is indicated pro time unit on a scale printed on to the glass measuring tube. Alternatively, the measuring tube is available with a percent scale.

The devices may be fitted with electrical limit switches.

11.2 Model Code:

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KAA*-BCDEEFG-HIJKLLM-NOPQRS XXX
     Meter Size
  B:
         Process Connections
      C:
            Process Connection accessories
         D:
                Valve Position
            E:
                  Measuring Range
               F:
                      Scaling
                  G:
                          Glass Tube Sealing Gasket
                      H:
                            Mounting
                         l:
                               Electrical equipment (Contacts)
                                                                                           Restrictions:
                               0 = None
                                                                                           <u>T<sub>amb</sub></u> = -20 ... 100 °C
                               M = Inductive ring switch / Mono-stabile
                                                                                           T_{amb} = -20...70 \, ^{\circ}C
                               B = Inductive ring switch / Bi-stabile
                                                                                           <u>T<sub>amb</sub></u> = -20 ... 70 °C
                                  Number of Electrical Contacts
                            J:
                               K:
                                      Terminal Box
                                  L:
                                         Differential Pressure Regulator
                                     M:
                                             ATEX Approval
                                         N:
                                               Design
                                                  Tag Marking
                                             0:
                                                     Certifications
                                               P:
                                                        Customer specified Tests
                                                           Calibration
                                                     R:
                                                        S:
                                                              Cleaning
                                                                 Up to 6 further non-Ex
                                                           X:
                                                                 relevant positions
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11.3 Certificate and evaluation report history

Issue Nº.	Date	Associated Reports	Notes	
0	29.03.2010	HM-K09-32-ATEX-	Original document submission, according to	
		10-01-X	DIN EN 13463-1:2009, for a retention period of	
			10 years	
	06.04.2020		Extension of retention period for a further 5 years	
1	15.04.2020	HM-K09-32-ATEX-	Supplement to the existing submission with	
		10-02-X	regards to the 2014/34/EU directive	

11.4 Temperatures

The equipment's temperature class, surface temperature and equipment protection levels are dependent upon the ambient and process temperatures as follows:

Ambient Temperature	Indicating unit arm extension	Process Temperature	Temperature class Gas	Temperature Class Dust
-40 85 °C	No	-40 85 °C	Т6	85 °C
-40 100 °C	No	-40 100 °C	T5	100 °C

With the addition of electrical equipment, a further restriction of the maximum ambient and process temperature may be required. Refer to the EU Type Approval of the relevant electrical component and the meter operating manual for further information for the determination of the prevailing temperature class.

12 Specific Conditions of Use

- 12.1 The flow meters temperature Class, assigned maximum surface temperature and maximum ambient temperature are dependent on the maximum process temperature applied by the end-user as well as any installed supplementary electrical equipment.
 - When the maximum process temperature is determined by the end-user, the temperature class, assigned maximum surface temperature and maximum ambient temperature shall be determined by the end-user depending on the prevailing process temperature and installed electrical equipment.
- 12.2 By the measurement of non-conductive medium, the earthing of the equipment is essential to ensure a build-up of static electricity within the meter is suppressed.
- 12.3 When installed and operated in potentially explosive dust environments, the device must be cleaned regularly in order to avoid deposits exceeding 5 mm. Clean with a damp cloth.
- 12.4 The polycarbonate glass tube protection hood exceeds the maximum permissible area specified in DIN EN ISO 80079-36:2016 / 6.7.5. When installed in potentially explosive atmospheres, it is to be ensured that electrostatic charge in dangerous quantities cannot occur.
 - Do not rub the hood with a dry cloth