

- 1 Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres Regulations 2016
- 2 Certificate N°: **KBUK22.4132X** **Issue 0**
- 3 Manufacturer: Heinrichs Messtechnik GmbH
- 4 Address: Robert-Perthel-Str. 9
50739 Cologne
Germany
- 5 Products: **K09**
K12
K17 Glass-Tube Variable Area Flow-Meter
K32

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- 6 In accordance to Clause 9 of the *Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres Regulations 2016*, self-declaration, Heinrichs Messtechnik GmbH ensures in sole responsibility that the products concerned in this certificate of conformity satisfy the requirements of this Regulation. The internal production assessment procedure performed for the above mentioned products fulfils the obligations laid down in point 3 and 4 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.
- 7 The technical documentation has been submitted for 10 year depository to the Conformity Assessment Body; SGS Baseefa Limited (UK CAB number 1180)
- 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:

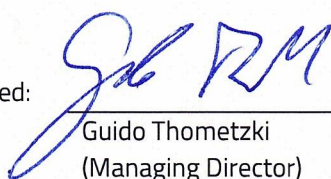

BS 1127-1:2019**BS 80079-36:2016**

- 10 The equipment marking shall include the following:

**II 2G Ex h IIC T5...T6 Gb****II 2d Ex h IIIC T85°C/T100°C Db**

Heinrichs Messtechnik GmbH
Cologne 01.05.2022

Signed:


Guido Thometzki
(Managing Director)
Joseph Burke
(Explosion Protection Representative)

11 Description

11.1 Product descriptions

The K-Serie of flow-meters are suitable for the flow-measurement of fluids or gases in piping 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 scaling

The devices may be fitted with electric limit switches.

11.2 Model Code:

KAA- B C D EE F G – H I J K L L M – N O P Q R S XXX

- A:** Meter Size
- B:** Process Connections
- C:** Process Connection Accessories
- D:** Valve Position
- E:** Measuring Range
- F:** Scaling
- G:** Glass Tube Sealing Gasket
- H:** Mounting
- I:** **Electrical equipment**
 0 = None
 M = Proximity Switch / Mono-Stabile
 B = Proximity Switch / Bi-Stabile
- J:** Number of Electrical Contacts
- K:** Terminal Box
- L:** Differential Pressure Regulator
- M:** **ATEX Approval**
 0 = None
 1 = ATEX II 2G / II 2D
- N:** Design
- O:** Tag Marking
- P:** Certificates
- Q:** Customer specified Tests
- R:** Calibration
- S:** Cleaning
- X:** Up to 6 further non-Ex relevant positions

Restrictions:
 $T_{amb} = -20 \dots 100 \text{ } ^\circ\text{C}$
 $T_{amb} = -20 \dots 70 \text{ } ^\circ\text{C}$
 $T_{amb} = -20 \dots 70 \text{ } ^\circ\text{C}$

11.3 Certificate history and evaluation reports

Issue N°.	Date	Associated Reports	Notes
0	01.05.2022	EE0097-3001X	Original document submission according to BS EN 80079-36:2016

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
-20 ... 80 °C	No	-20 ... 85 °C	T6	85 °C
-20 ... 80 °C	No	-20 ... 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 UKCA 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, do not rub the hood with a dry cloth.

12.4 The Polycarbonate glass tube protection hood of the K17 and K32 exceed the maximum permissible area specified in BS EN ISO 80079-36:2016 / 6.7.5 when installed in a gas group IIC potentially explosive atmosphere. Here it is to be ensured that electrostatic charge in dangerous quantities cannot occur.