



CERTIFICATE OF CONFORMITY

CERTIFICATE No.: HMT21.4164X



- 1 Equipment intended for use in potentially explosive atmospheres
Directive 2014/34/EU
- 2 Certificate N°: **HMT21.4164X** **Issue 0**
- 3 Manufacturer: Heinrichs Messtechnik GmbH
- 4 Address: Robert-Perthel-Str. 9
50739 Cologne
Germany
- 5 Products: **V31** Glass-Tube Variable Area Flow-Meter

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- 6 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.
- 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:



II 2G Ex h IIC T6 Gb

II 2d Ex h IIIC T85°C Db

Heinrichs Messtechnik GmbH
Cologne 17.02.2021

Signed:

Joseph Burke
(Explosion Protection Representative)

11 **Description**

11.1 **Product description**

The V31 is 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 or 2 mm scale.

The devices may be fitted with electrical limit switches. The switches must be certified or assessed for the prevailing installation environment.

11.2 **Model Code:**

V31*- AAAAAA – BBCCD – E F G H I – J K L L M N O P Q R XXX

- A:** Process Connections
- B:** Float Properties
- C:** Measuring Range
- D:** Medium
- E:** Glass Tube Sealing Gasket
- F:** Float Stopper
- G:** Union Nut Material
- H:** Shatter protection
- I:** Electrical equipment (Contacts)
 - 0 = None
 - 1 = 1x GSGA (NC)
 - 2 = 1x GSGB (NO)
 - 3 = 1x GSGW (SPDT)
 - 4 = 2x GSGA (NC)
 - 5 = 2x GSGB (NO)
- J:** Scale
- K:** Certificates
- L:** Calibration
- M:** Cleaning acc. factory standards
- N:** Pressure / Leakage test
- O:** Approvals
- P:** Marking Tags
- Q:** Supp. Equipment
- R:** Company Design
- X:** Up to 6 further non-Ex relevant positions

Restrictions:

- $T_{amb} = -20 \dots 80 \text{ } ^\circ\text{C}$
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11.3 Certificate and evaluation report history

Issue N°.	Date	Associated Reports	Notes
-	07.10.2010	HM-V31-ATEX-10-02-X	Original document submission, according to DIN EN 13463-1:2009, for a retention period of 10 years
0	19.10.2020		Extension of retention period for a further 5 years

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	Process Temperature	Temperature class Gas	Temperature Class Dust
-40 ... 80 °C	-40 ... 80 °C	T6	85 °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 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.
- 12.2 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.
- 12.3 The polycarbonate glass tube protection hood exceeds the maximum permissible surface 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.