



# 1 EU – Type Examination Certificate

2 Equipment or Protective System Intended for use in Potentially Explosive Atmospheres  
**Directive 2014/34/EU**

3 EU – Type Examination Certificate Number: **KIWA 20ATEX0029 X Issue: 1**

4 Product: **Microwave Mass Flow Sensors types MFS3000-T-ExD and MFS3000-K-ExD**

5 Manufacturer: **Mütec Instruments GmbH**

6 Address: **Bei den Kämpen 26, 21220 Seevetal  
Germany**

7 This product and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

8 Kiwa Nederland B.V., Notified Body number 0063 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 ATEX Assessment Report No. 191001113.

9 Compliance with the Essential Health and Safety Requirements has been assured by compliance with:  
**EN IEC 60079-0 : 2018 EN 60079-31 : 2014**

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 1/2 D Ex ta/tb IIIC T135 °C Da/Db

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**Kiwa Nederland B.V.**

Ron Scheepers  
Managing Director

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This certificate shall, as far as applicable, be revised before the date of cessation of presumption of conformity of (one of) the included standards above as communicated in the Official Journal of the European Union.

© Integral publication of this certificate in its entirety and without any change is allowed.

## 13 **SCHEDULE**

### 14 **EU – Type Examination Certificate KIWA 20ATEX0029 X Issue No. 1**

#### 15.1 **Description of Product**

Microwave Mass Flow Sensors types MFS3000-T-ExD and MFS3000-K-ExD are used to measure the flow of quantities of solids in metallic pipes. The electronics mounted in a stainless steel enclosure converts the reflected microwave echo, indicating the flow, into a RS-485 output signal.

Ambient temperature range: -10 °C to +65 °C

Process temperature range: -20 °C to +80 °C (MFS3000-K-ExD)

-20 °C to +100 °C (MFS3000-T-ExD)

#### 15.2 **Electrical Data**

Supply: 16 - 24 Vdc, 25 mA

Output: RS-485, 6 V, 50 mA

The mass flow sensor is for connection to flow transmitter MFT3000 only

#### 15.3 **Instructions**

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

#### 16 **ATEX Assessment Report Number**

191001113.

#### 17 **Specific Conditions of Use**

The mass flow sensor shall be installed and maintained such that hazards caused by electrostatic discharge are excluded.

#### 18 **Essential Health and Safety Requirements**

All relevant Essential Health and Safety Requirements are covered by the standards listed at section 9.

#### 19 **Drawings and Documents**

As listed in ATEX Assessment Report No. 191001113.