



Translation

EU-Type Examination Certificate

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

EU-Type Examination Certificate Number: **BVS 20 ATEX E 013**

Product: **Dust monitor type FS710E-Ex / FSS750E-Ex**

Manufacturer: **Mütec Instruments GmbH**

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

This product and any acceptable variations thereto are specified in the appendix to this certificate and the documents referred to therein.

DEKRA Testing and Certification GmbH, Notified Body number 0158, 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 the confidential Report No. BVS PP 20.2013 EU.

The Essential Health and Safety Requirements are assured in consideration of:

EN IEC 60079-0:2018	General requirements
EN 60079-11:2012	Intrinsic Safety "i"
EN 60079-31:2014	Protection by Enclosure "t"

If the sign "X" is placed after the certificate number, it indicates that the product is subject to the Special Conditions for Use specified in the appendix to this certificate.

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.

The marking of the product shall include the following:

 **II 1/2D Ex ia ta/tb IIIC T200°C Da/Db**

DEKRA Testing and Certification GmbH
Bochum, 2020-02-19

Signed: Jörg-Timm Kilisch

Managing Director

13 **Appendix**

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15 **Product description**

15.1 **Subject and type**

Dust monitor type FS710E-Ex / FSS750E-Ex

15.2 **Description**

The sensors FS710E-Ex and FSS750E-Ex are used for qualitative monitoring of dust content in flowing gaseous media.

The probe consists of a separately certified electronic housing and a metal sensor bar connected to it, which is triboelectrically charged in the presence of dust. The thread on the sensor bar closes the process from the environment and is thus involved in the Zone separation. The electronics housing is suitable for use in Zone 21. The sensor bar is supplied with intrinsically safe power. The intrinsic safety is established within the instrument.

Listing of all components used referring to older standards

Subject and type	Certificate	Standards
Enclosure Limatherm	FTZU 03 ATEX 0074U	EN 60079-0:2012+A11:2013 EN 60079-1:2014 EN 60079-31:2014

15.3 **Parameters**

15.3.1 **Electrical data**

Supply circuit

Nominal voltage	DC	18..36	V
Nominal current		< 20	mA
U _m	AC/DC	250	V

Relais circuit

Nominal voltage	DC	18..36	V
Nominal current		< 20	mA
U _m	AC/DC	250	V

Calibration circuit

Nominal voltage	DC	18..36	V
Nominal current		< 20	mA
U _m	AC/DC	250	V

RS485-bus circuit

Nominal voltage	DC	18..36	V
Nominal current		< 20	mA
U _m	AC/DC	250	V

15.3.2 **Thermal data**

Ambient temperature	-10 ..	+70	°C
Max. process temperature		180	°C

Report Number

BVS PP 20.2013 EU, as of 2020-02-19

17 Special Conditions for Use

None

18 Essential Health and Safety Requirements

The Essential Health and Safety Requirements are covered by the standards listed under item 9.

19 Drawings and Documents

Drawings and documents are listed in the confidential report.

We confirm the correctness of the translation from the German original.
In the case of arbitration only the German wording shall be valid and binding.

DEKRA Testing and Certification GmbH
Bochum, 2020-02-19
BVS-Hor/Mu A 20180855



Managing Director