

CERTIFICATE

(1) EU-Type Examination

(2) **Equipment or protective systems intended for use in potentially explosive atmospheres - Directive 2014/34/EU**

(3) EU-Type Examination Certificate Number: **KEMA 09ATEX0084** Issue Number: **4**

(4) Product: **MFT B Series Mass Flow Transmitters**

(5) Manufacturer: **Kurz Instruments Inc.**

(6) Address: **2411 Garden Rd., Monterey, CA 93940, USA**

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

(8) DEKRA Certification B.V., Notified Body number 0344 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 test report number 212647600, issue 4.

(9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN 60079-0 : 2012+A1 : 2013

EN 60079-1 : 2007

(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 2 G Ex d IIB+H₂ T4, 150 °C (T3) Gb
II 2 G Ex d IIB+H₂ T4 or T3 Gb

(Electronics Enclosure)
(Sensing Element)

Date of certification: 9 november 2016

DEKRA Certification B.V.

L.G. van Schie
Certification Manager

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(13) **SCHEDULE**

(14) **to EU-Type Examination Certificate KEMA 09ATEX0084**

Issue No. 4

(15) **Description**

The Mass Flow Transmitter Models 454, 504, 524, 534 and 544 consist of a flow sensor in type of protection Ex d and an electronic transmitter in type of protection Ex d.

The electronics for measurement, control and communication in 4 – 20 mA, Profibus DP and Modbus signals is mounted in the electronics transmitter.

The flow transmitter may be directly mounted on the flow sensor or remotely mounted and connected to the remote flow sensor equipped with a termination enclosure using an acceptable wiring method for type of protection Ex d.

The degree of protection of the enclosure is IP66 according to EN 60529.

Type designation

454 FTB WGF a
I II III IV

Designation	Explanation	Value	Explanation
I	Type	454 504 524 534 544	Single point insertion Mass Flow Transmitter In-line flow transmitter In-line flow transmitter In-line flow transmitter In-line flow transmitter
II	Model Name	FTB PFTB WGF	Mass flow transmitters, B-Series Mass flow transmitters, B-Series, purge (type 454 only) Mass flow transmitters, B-Series, wet gas (type 454 only)
III	Options	WGF -	Wet gas measurement (type 454 only) None
IV	Probe	a b c d	Probe support diameter in 8 to 16 in (1/16 increments) Flow body diameter 6 in to 96 in (1/16 increments) Flow body throat diameter 6 in to 64 in (1/16 increments) Flow body throat diameter 6 in to 36 in

Thermal data

Ambient temperature at the electronics enclosure:

DC version: -40 °C to +65 °C for T4

AC version: -40 °C to +50 °C for T4

-40 °C to +65 °C for 150 °C (T3)

Ambient and process temperature at the flow sensor:

-40 °C to +45 °C for T4

-40 °C to +110 °C for T3

Electrical data

DC input: 24 Vdc, 1 A

AC input: 85 - 264 Vac, 50/60 Hz, 24 W

Output: 4 - 20 mA, RS-485, 24V AC/DC 0.5 A contacts

(13) **SCHEDULE**

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Installation instructions

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

Certified flameproof cable glands shall be used that are suitable for the application and correctly installed. With the use of conduit, a suitable certified sealing device such as a stopping box with setting compound shall be provided immediately at the entrance to the flameproof enclosure.

Unused openings shall be closed with suitable certified blanking elements.

(16) **Report Number**

No. 212647600, issue 4.

(17) **Specific conditions of use**

None.

(18) **Essential Health and Safety Requirements**

Covered by the standards listed at item (9).

(19) **Test documentation**

As listed in Report No. 212647600, issue 4.

(20) **Certificate history**

Issue 1 -	212647600	initial certificate
Issue 2 -	213863300	addition of new sensor board, 454WGF-a, revision of documentation, upgrade to latest EN standards
Issue 3 -	217896000	addition of 454FTB-WGF-a, revision of documentation, upgrade to latest EN standards
Issue 4 -	381714100	addition of new HART and profibus electronics boards