



EU - Type Examination Certificate

- (1) **EU - Type Examination Certificate**
- (2) **Equipment or Protective Systems Intended for Use
in Potentially Explosive Atmospheres
(Directive 2014/34/EU)**

(3) EU - Type Examination Certificate number:

FTZÚ 17 ATEX 0154X

(4) Product: **Water in oil monitor EASZ 2Ex-Y**

(5) Manufacturer: **EESIFLO International Pte. Ltd.**

(6) Address: **No. 60 Kaki Bukit Place 02-19 Eunos Techpark, 415979 Singapore**

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

(8) The Physical-Technical Testing Institute, Notified Body number 1026, in accordance with Articles 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26.02.2014, 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 Report number:

17/0154 dated 15.01.2018

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

EN 60079-0:2012+A11:2013, EN 60079-1:2014, EN 60079-11:2012

(10) If the sign "X" is placed after the certificate number, it indicates that the product is subject to Specific Conditions of Use specified in the schedule to this certificate.

(11) This 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.

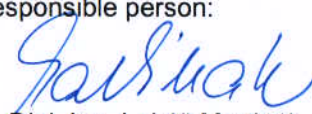
(12) The marking of the product shall include the following:

 **II 1/2G Ex db ia IIB T4 Ga/Gb or**

 **II 1/2G Ex db ia [ib Gb] IIB T4 Ga/Gb**

This certificate is valid till: **15.01.2023**

Responsible person:


Dipl. Ing. Lukáš Martinák
Head of Certification Body



Date of issue: 15.01.2018

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Physical-Technical Testing Institute
Ostrava - Radvanice

(13)

Schedule

(14) **EU - Type Examination Certificate No. FTZÚ 17 ATEX 0154X**

(15) Description of Product:

The product is intended for measuring of volume of water in other fluids. It consist from flameproof enclosure on which is screwed intrinsically safe part of flow sensor. The enclosure of intrinsically safe part of flow sensor is made from metal. Enclosures with sight glass type 8092WM is separately certified as empty flame proof enclosure, certificate SIRA 08ATEX1082U. The connection between flameproof enclosure compartment and sensor compartment is realized by bushing type LBSM 16208/0,25EL, certificate EPS 11 ATEX 1342X. Inside the flameproof enclosure are placed PCB's and display. Inside the intrinsically safe part of flow sensor is place one PCB, temperature sensor and capacitance sensor. Enclosure is equipped with 2 NPT 3/4" thread holes for installation of appropriate certified Ex equipment cable gland / Ex blanking elements. The product can be connected with normal circuits or with intrinsically safe circuits, see technical parameters. Variable symbol "Y" in the name of product can be L – low range sensor or F – full range sensor.

Technical parameters:

Equipment type EASZ 2Ex-Y, Ex marking: Ex db ia IIB T4 Ga/Gb.

Ta = -20°C to +60°C

Power supply pin CN2A op. CN2B (GND):

Um = 28 V; Un= 11 V to 28V, Max. input power 1W

Open collector pin CN3A op. CN3B:

Um = 28 V

RS485: pin CN9A+ CN9B op. GND:

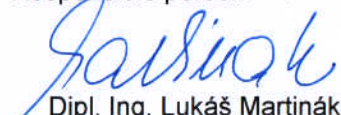
Um = 6 V

I_{loop}:

CN5A op. GND: Um = 28 V

CN5B op. GND: Um = 28 V

Responsible person:


Dipl. Ing. Lukáš Martinák
Head of Certification Body



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Physical-Technical Testing Institute
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Schedule

(14) **EU - Type Examination Certificate No. FTZÚ 17 ATEX 0154X**

Equipment type EASZ 2Ex-Y, Ex marking: Ex db ia [ib Gb] IIB T4 Ga/Gb.

Ta = -20°C to +60°C

Intrinsically safe parameters:

Power supply pin CN2A op. CN2B (GND):

Ui = 28 V, li = 250 mA, Ci = 0, Li = 0

Open collector pin CN3A op. CN3B:

Ui = 28 V, li = 50 mA, Ci = 0, Li = 0

RS485: pin CN9A+ CN9B op. GND:

Ui = 6 V, Ci = 9,42 µF, Li = 0, Uo = 5,88 V, Io = 0,6 A, Co = 580 nF, Lo = 350 µH

I_{loop}:

CN5A op. GND: Ui = 28 V, li = 50 mA, Li = 0, Ci = 0

CN5B op. GND: Uo = 28 V, Io = 300 mA, Co = 320 nF, Lo = 50 µH

(16) Report Number.: 17/0154

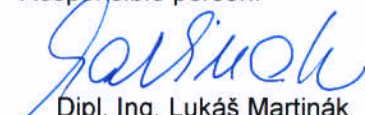
(17) Specific Conditions of Use:

1. Ambient temperature: $-20^{\circ}\text{C} \leq T_A \leq 60^{\circ}\text{C}$, Maximal temperature of measured medium is 90°C.
2. Supply and input/output circuits have to be connected only with intrinsically safe circuits for the equipment Ex marking: Ex db ia [ib Gb] IIB T4 Ga/Gb or only with circuits which are in accordance with standard IEC 60664-1 overvoltage category I/II for the equipment Ex marking: Ex db ia IIB T4 Ga/Gb. The combination is not possible.

(18) Essential Health and Safety Requirements:

Compliance with the Essential Health and Safety Requirements is covered by standards mentioned in clause (9) of this certificate.

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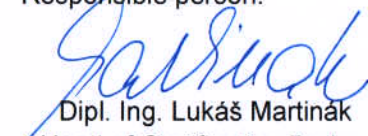
Schedule

(14) **EU - Type Examination Certificate No. FTZÚ 17 ATEX 0154X**

(19) Drawings and Documents:

Number:	Pages:	Revision:	Date:	Description:
-	30	-	12.01.2018	Installation and Operating Manual
Ex 01401-00-106	1	A	01.12.2017	Label
DTE201800774/A	2	A	12.01.2018	Description of product

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