Physical-Technical Testing Institute
Ostrava - Radvanice

(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 19 ATEX 0111X

(4) Product: **Smart Pressure Transmitter type D21, Smart Differential Pressure Transmitters type D31, D35, D34, D47, D48, Smart Level Probe type D45, Smart Level Transmitter type D46**

(5) Manufacturer: **Delta Mobrey Ltd**

(6) Address: **Riverside Business Park, Dogflud Way, Farnham, Surrey,GU9 7SS, UK**

(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:

19/0111 dated 18.10.2019

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

EN 60079-0:2012+A11:2013, EN 60079-11:2012, EN 50303:2000

(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:

Ex II 1/2G	Ex ia IIC T4/T5 Ga/Gb	
Ex II 1/2G	Ex ia IIB T4/T5 Ga/Gb	version with PTFE-shielded cable
Ex I M1	Ex ia I Ma	version with enclosure ss316
Ex II 1D	Ex ia IIIC T105°C Da	

This certificate is valid till: **31.01.2022**

Responsible person:

Dipl. Ing. Lukáš Martinák
Head of Certification Body

PHYSICAL-TECHNICAL TESTING INSTITUTE FYZIKÁLNĚ-TECHNICKÝ ZKUŠEBNÍ ÚSTAV FTZÚ Ex AO 210 NB 1026

Date of issue: 18.10.2019

Physical-Technical Testing Institute, s.p., Pikartská 1337/7, 716 07 Ostrava - Radvanice, Czech Republic
tel +420 595 223 111, fax +420 596 232 672, ftzu@ftzu.cz, www.ftzu.cz

(13) **Schedule**

(14) **EU - Type Examination Certificate No. FTZÚ 19 ATEX 0111X**

(15) Description of Product:

Smart Pressure Transmitter type D21, Smart Differential Pressure Transmitters type D31, D34, D35, D47, D48, Smart Level Probe type D45, Smart Level Transmitter type D46 are designed to convert process pressure measurements into a 4 to 20 mA current signal. The apparatus comprises a sensor, several printed circuit boards and liquid crystal display all housed in a light alloy enclosure or stainless steel enclosure. One of the housing cover contains a window. External connections are made via an integral terminal block.

The Transmitters in housing with light alloy and stainless steel can be used in gas, and combustible dust atmospheres in Group II and III, but only with stainless steel housing in Group I applications.

Intrinsically safe input power supply parameters:
Linear power supply output characteristic:
Ui = 30 V; Ii = 0.1 A; Pi = 0.75 W; temperature class T5

Trapezoidal power supply output characteristic:
Ui = 24 V; Ii = 50 mA; Pi = 0.7 W; temperature class T5

Rectangular power supply output characteristic:
Ui = 24 V; Ii = 25 mA, Pi = 0.6 W; temperature class T5
Ui = 24 V; Ii = 50 mA, Pi = 1.2 W; temperature class T4

Intrinsically safe parameters
Ci = 2.5 nF; Li = 18 µH,

Range of permissible ambient temperature: Ta = -50°C to +80° (for Group II)
Range of permissible ambient temperature: Ta = -40°C to +80° (for Group I and Group III)

(16) Report Number.: 19/0111

Responsible person:

Dipl. Ing. Lukáš Martinák
Head of Certification Body

PHYSICAL-TECHNICAL TESTING INSTITUTE FYZIKÁLNĚ TECHNICKÝ ZKUŠEBNÍ ÚSTAV FTZÚ Ex AO 210 NB 1026

Date of issue: 18.10.2019

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(13) **Schedule**

(14) # EU - Type Examination Certificate No. FTZÚ 19 ATEX 0111X

(17) Specific Conditions of Use:

1. Versions of transmitter with surge arrester marked on plate „SA", do not meet the requirements of Section 10.3 of the standard EN 60079-11:2012 (500Vrms). This must be taken into account when installing the equipment.
2. Under certain extreme circumstances in dust explosive atmospheres, the device with painting of aluminum enclosure and with plastic labels and with elements of diaphragm seals covered by PTFE may store an ignition-capable level of electrostatic charge. The device shall not be installed in a location where the external conditions are conducive to the build-up of electrostatic charge.
3. If the diaphragm seal contains titan parts, it must be protected against mechanical drops.
4. Galvanically separated part of apparatus placed into measuring head is electrically connected with mass of enclosure. It should be taken into account when installing the apparatus with remote measuring head on cable.

(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.

(19) Drawings and Documents:

Title / Drawing No.	Sheets:	Date:	Nr. of Pages:
D31-C611-TA	1, 2, 3	09.2019	3
IOM-D21-D31-EX	--	09.2019	20

Responsible person:

Dipl. Ing. Lukáš Martinák
Head of Certification Body

PHYSICAL-TECHNICAL TESTING INSTITUTE FYZIKÁLNĚ TECHNICKÝ ZKUŠEBNÍ ÚSTAV FTZÚ Ex AO 210 NB 1026

Date of issue: 18.10.2019

Physical-Technical Testing Institute, s.p., Pikartská 1337/7, 716 07 Ostrava - Radvanice, Czech Republic
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Physical-Technical Testing Institute
Ostrava - Radvanice

(1) Supplementary EU - Type Examination Certificate No.1

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

(3) EU - Type Examination Certificate number:

FTZÚ 19 ATEX 0111X

(4) Product: **Smart Pressure Transmitter type D21, Smart Differential Pressure Transmitters type D31, D35, D34, D47, D48, Smart Level Probe type D45, Smart Level Transmitter type D46**

(5) Manufacturer: **Delta Mobrey Ltd**

(6) Address: **Riverside Business Park, Dogflud Way, Farnham, Surrey,GU9 7SS, UK**

(7) This supplementary certificate extends EU - Type Examination Certificate No. FTZÚ 19 ATEX 0111X to apply to products designed and constructed in accordance with the specification set out in the Schedule of the said certificate but having any variations specified in the Schedule attached 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, as modified by this supplementary certificate, 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.

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

EN 60079-0:2012+A11:2013, EN 60079-11:2012, EN 50303:2000

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

Ex II 1/2G	Ex ia IIC T4/T5 Ga/Gb	
Ex II 1/2G	Ex ia IIB T4/T5 Ga/Gb	version with PTFE-shilelded cable
Ex I M1	Ex ia I Ma	version with enclosure ss316
Ex II 1D	Ex ia IIIC T105°C Da	

(12) This certificate is valid till: **31.07.2022**

Responsible person:

Dipl. Ing. Lukáš Martinák
Head of Certification Body

PHYSICAL-TECHNICAL TESTING INSTITUTE FYZIKÁLNĚ TECHNICKÝ ZKUŠEBNÍ ÚSTAV FTZÚ Ex AO 210 NB 1026

Date of issue: 31.01.2022

Physical-Technical Testing Institute, s.p., Pikartská 1337/7, 716 00 Ostrava - Radvanice, Czech Republic
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(13) **Schedule**

(14) # Supplementary EU - Type Examination Certificate No. 1 to FTZÚ 19 ATEX 0111X

(15) Description of the variation to the Product:

The subject of this supplementary certificate is:

- Extension of certificate validity.

Technical parameters and construction of the products mentioned above in clause (4) remain unchanged.

The validity of certificate was extended for next six months until 31.07.2022.

(16) Report Number: 19/0111/1

(17) Specific Conditions of Use:

None additional to those listed previously.

(18) Essential Health and Safety Requirements:

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

Responsible person:

Dipl. Ing. Lukáš Martinák
Head of Certification Body

PHYSICAL-TECHNICAL TESTING INSTITUTE FYZIKÁLNĚ TECHNICKÝ ZKUŠEBNÍ ÚSTAV FTZÚ Ex AO 210 NB 1026

Date of issue: 31.01.2022

Physical-Technical Testing Institute, s.p., Pikartská 1337/7, 716 00 Ostrava - Radvanice, Czech Republic
tel.: +420 595 223 111, +420 604 203 525, e-mail: ftzu@ftzu.cz, www.ftzu.cz

Physical-Technical Testing Institute
Ostrava - Radvanice

(1) Supplementary EU - Type Examination Certificate No.2

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

(3) EU - Type Examination Certificate number:

FTZÚ 19 ATEX 0111X

(4) Product: **Smart Pressure Transmitter type D21, Smart Differential Pressure Transmitters type D31, D35, D34, D47, D48, Smart Level Probe type D45, Smart Level Transmitter type D46**

(5) Manufacturer: **Delta Mobrey Ltd.**

(6) Address: **Riverside Business Park, Dogflud Way, Farnham, Surrey,GU9 7SS, UK**

(7) This supplementary certificate extends EU - Type Examination Certificate No. FTZÚ 19 ATEX 0111X to apply to products designed and constructed in accordance with the specification set out in the Schedule of the said certificate but having any variations specified in the Schedule attached 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, as modified by this supplementary certificate, 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.

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

EN IEC 60079-0:2018; EN 60079-11:2012; EN 50303:2000

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

	II 1/2G Ex ia IIC T4/T5 Ga/Gb	version with PTFE-shilelded cable
Ex	**II 1/2G Ex ia IIB T4/T5 Ga/Gb**	version with PTFE covered separator
	I M1 Ex ia I Ma	version with enclosure ss316
	II 1D Ex ia IIIC T115°C Da	

(12) This certificate is valid till: **31.08.2027**

Responsible person:

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Dipl. Ing. Lukáš Martinák
Head of Certification Body

PHYSICAL-TECHNICAL TESTING INSTITUTE FYZIKÁLNĚ TECHNICKÝ ZKUŠEBNÍ ÚSTAV FTZÚ Ex

Date of issue: 01.08.2022

Physical-Technical Testing Institute, s.p., Pikartská 1337/7, 716 07 Ostrava - Radvanice, Czech Republic
tel.: +420 595 223 111, +420 604 203 525, e-mail: ftzu@ftzu.cz, www.ftzu.cz

(13) **Schedule**

(14) # Supplementary EU - Type Examination Certificate No. 2 to FTZÚ 19 ATEX 0111X

(15) Description of the variation to the Product:

The subject of this supplementary certificate is:

- Modification of certified apparatus;
- Modification of apparatus marking;
- Evaluation according to the newest standards;
- Prolongation of certificate validity.

This supplementary certificate describes changes of the Product:

- Mechanical modification of metal enclosure.
- The surface temperature in dust explosive atmosphere is changed to 115°C.
- Formerly marking ⟨Ex⟩ II 1D Ex ia IIIC T105°C Da is changed to ⟨Ex⟩ II 1D Ex ia IIIC T115°C Da.
- Changed or upgraded some PCBs and components.
- Change of "mass" mounting technology from screwed to solder.
- Minor mechanical changes in construction of pressure heads.
- There are minor change in used electrical components and mechanical parts.
- Added the possibility of 0,35 mm PTFE foil on separating membrane, only for Group IIB.
- Introduction of the cable in a Teflon tube braided with steel sheathing.
- Introduced 5x7 steel sheathed cable.
- Updating and correction of documentation.

Technical parameters and construction of the products mentioned above in clause (4) remain unchanged.

(16) Report Number: 19/0111/2

(17) Specific Conditions of Use (modified):

1. Versions of transmitter with surge arrester marked on plate "SA", do not meet the requirements of Section 10.3 of the standard EN 60079-11:2012 (500 Vrms). This must be taken into account when installing the equipment.
2. Under certain extreme circumstances in dust explosive atmospheres, the device with painting of enclosure and with plastic tables and with elements of diaphragm seals covered by PTFE may store an ignition-capable level of electrostatic charge. The device shall not be installed in a location where the external conditions are conducive to the build-up of electrostatic charge.
3. If the diaphragm seal contains titan parts, it must be protected against mechanical drops.
4. Galvanically separated part of apparatus placed into measuring head is electrically connected with mass of enclosure. It should be taken into account when installing the apparatus with remote measuring head on cable.

Responsible person:

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Dipl. Ing. Lukáš Martinák
Head of Certification Body

PHYSICAL-TECHNICAL TESTING INSTITUTE FYZIKÁLNĚ TECHNICKÝ ZKUŠEBNÍ ÚSTAV FTZÚ Ex NB 1024

Date of issue: 01.08.2022

Physical-Technical Testing Institute, s.p., Pikartská 1337/7, 716 07 Ostrava - Radvanice, Czech Republic
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(13) **Schedule**

(14) # Supplementary EU - Type Examination Certificate No. 2 to FTZÚ 19 ATEX 0111X

(18) Essential Health and Safety Requirements:

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

(19) Drawings and Documents:

Number	Sheets	Date	Description
D31-C611-TA	1A	07.2022	Marking label
IOM-D21-D31-EX D-D	1-20	06.2022	User Manual

Responsible person:

v z.

Dipl. Ing. Lukáš Martinák
Head of Certification Body

PHYSICAL-TECHNICAL TESTING INSTITUTE FYZIKÁLNĚ TECHNICKÝ ZKUŠEBNÍ ÚSTAV FTZÚ Ex NB 1026

Date of issue: 01.08.2022

Physical-Technical Testing Institute, s.p., Pikartská 1337/7, 716 07 Ostrava - Radvanice, Czech Republic
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