



(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 13 ATEX 0212X

(4) Product: **Radar lever meter type GRLM-70Xi (XiT)**

(5) Manufacturer: **Dinel s r.o.**

(6) Address: **U Tescomy 249, 760 01 Zlín, Czech Republic**

(7) This supplementary certificate extends EC - Type Examination Certificate No. FTZÚ 13 ATEX 0212X 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) In accordance with Article 41 of Directive 2014/34/EU, EC-Type Examination Certificates referring to 94/9/EC that were in existence prior to the date of application of 2014/34/EU (20.04.2016) may be referenced as if they were issued in accordance with Directive 2014/34/EU. Supplementary Certificates to such EC-Type Examination Certificates, and new issues of such certificates, may continue to bear the original certificate number issued prior to 20.04.2016.

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

EN IEC 60079-0:2018, EN 60079-11:2012

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

 **II 1/2G Ex ia IIB T5 Ga/Gb**

(12) This certificate is valid till: **31.07.2024**

Responsible person:


Dipl. Ing. Lukáš Martinák

Head of Certification Body



Date of issue: 31.07.2019

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Physical-Technical Testing Institute
Ostrava - Radvanice

(13) **Schedule**

(14) **Supplementary EU - Type Examination Certificate No. 1
to FTZÚ 13 ATEX 0212X**

(15) Description of the variation to the Product:

The subject of this supplementary certificate is:

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

This supplementary certificate describes the changes of enclosure and internal electronic parts of product. There were added new types of electrodes. There were added alternative cable glands. There was added a variant of internal electronic with LCD display. The validity of certificate was prolonged for next five years. Technical parameters of product remain unchanged. The list of modified or new documents is listed in the clause (19) of this supplement.

Technical parameters: remain unchanged

(16) Report Number.: 13/0212/1

(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 (10) of this supplementary certificate.

Responsible person:


Dipl. Ing. Lukáš Martinák
Head of Certification Body



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Physical-Technical Testing Institute
Ostrava - Radvanice

(13)

Schedule

(14) **Supplementary EU - Type Examination Certificate No. 1
to FTZÚ 13 ATEX 0212X**

(19) Drawings and Documents:

Number	Sheets	Date	Description
--	43	03.2019	User's manual
GRLM-70	16	03.2019	Technical conditions
GRLM-70Xi	4	03.2019	Production documentation
DM-70-SZ-01	1	23.07.2019	PCB DM-70-D
DM-70-SZ-02	1	23.07.2019	PCB DM-70-C
DM-70-OS-01	1	23.07.2019	PCB DM-70-D TOP
DM-70-OS-02	1	23.07.2019	PCB DM-70-D BOTTOM
DM-70-MO-01	1	23.07.2019	PCB DM-70-D TOP
DM-70-MO-02	1	23.07.2019	PCB DM-70-D BOTTOM
DM-70-SS-01	1	23.07.2019	PCB DM-70-D BOM
DM-70-OS-03	1	23.07.2019	PCB DM-70-C TOP
DM-70-OS-04	1	23.07.2019	PCB DM-70-C BOTTOM
DM-70-MO-03	1	23.07.2019	PCB DM-70-C TOP
DM-70-MO-04	1	23.07.2019	PCB DM-70-C BOTTOM
DM-70-SS-02	1	23.07.2019	PCB DM-70-C BOM
GRLM-70-SZ-02	1	23.07.2019	PCB GRLM-70-RF_v16
GRLM-70-OS-01	1	23.07.2019	PCB GRLM-70-RF_v16 TOP
GRLM-70-OS-02	1	23.07.2019	PCB GRLM-70-RF_v16 BOTTOM
GRLM-70-MO-01	1	23.07.2019	PCB GRLM-70-RF_v16 TOP
GRLM-70-MO-02	1	23.07.2019	PCB GRLM-70-RF_v16 BOTTOM
GRLM-70-SS-01	1	23.07.2019	PCB GRLM-70-RF_v16 BOM
GRLM-70-SZ-03	1	11.11.2014	PCB GRLM-70-TB_vx
GRLM-70-SS-02	1	11.11.2014	PCB GRLM-70-TB_vx BOM
GRLM-70-SZ-04	1	25.06.2018	PCB GRLM-70-P_v2
GRLM-70-SS-03	1	25.06.2018	PCB GRLM-70-P_v2 BOM
GRLM-70-SZ-05	1	06.02.2015	PCB GRLM-70-Z_vx
GRLM-70-SS-05	1	06.02.2016	PCB GRLM-70-Z_vx BOM
GRLM-70-100	1	24.07.2019	Assembly GRLM-70_-10(-00)
GRLM-70-200	1	24.07.2019	Assembly GRLM-70_-12(-11,-13)
GRLM-70-300	1	29.03.2019	Assembly GRLM-70_-20
GRLM-70-500	1	29.03.2019	Assembly GRLM-70_-30 (-33,-34,-35)
GRLM-70-600	1	29.03.2019	Assembly GRLM-70_-32
GRLM-70-700	1	20.10.2015	Assembly GRLM-70_T
CLM-36-32-310	1	11.11.2003	Insulation plug
CLM-36-32-309	1	11.11.2003	Insulation wrap
GRLM-70-OD-02	1	11.11.2014	Label

Responsible person:


Dipl. Ing. Lukáš Martinák
Head of Certification Body



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EC-Type Examination Certificate

- (1) **Equipment or Protective Systems Intended for Use
in Potentially Explosive Atmospheres
(Directive 94/9/EC)**

(3) EC-Type Examination Certificate Number:

FTZÚ 13 ATEX 0212X

(4) Equipment or protective system: **Radar level meter type GRLM-70Xi (XiT)**

(4) Manufacturer: **Dinel s.r.o.**

(5) Address: **U Tescomy 249, 760 01 Zlín, Czech Republic**

(6) This equipment or protective system and any of acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

(7) The Physical Technical Testing Institute, notified body number 1026 in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, certifies that this equipment or protective system has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in confidential Report N°:

13/0212 dated 26.05.2014

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

EN 60079-0:2012; EN 60079-11:2012; EN 60079-26:2007

(9) If the sign "X" is placed after the certificate number, it indicates that the equipment or protective system is subject to special conditions for safe use specified in the schedule to this certificate.

(10) This EC-Type Examination Certificate relates only to the design, examination and testing of the specified equipment or protective system in accordance to the Directive 94/9/EC. Further requirements of the Directive apply to the manufacturing process and supply of this equipment or protective system. These are not covered by this certificate.

(11) The marking of the equipment or protective system shall include the following:



II 1/2G Ex ia IIB T5 Ga/Gb

This EC-Type Examination Certificate is valid till: **26.05.2019**

Responsible person:

Dipl. Ing. Lukáš Martinák
Head of Certification Body



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Physical Technical Testing Institute
Ostrava – Radvanice

(13) **Schedule**

(14) **EC-Type Examination Certificate N° FTZÚ 13 ATEX 0212X**

(15) Description of Equipment or Protective System:

The radar level meter type GRLM-70Xi (XiT) consists of two main parts – level meter (body) and display module. It works on principle of electromagnetic wave transmission towards the liquid level where the wave is partially reflected back. The electromagnetic wave is guided by level meter electrode that could be made by rod or rope. The actual distance to the liquid level is indicated with display and current output 4 – 20 mA with HART communication.

Maximum input parameters:

$U_i = 30 \text{ V}$; $I_i = 132 \text{ mA}$; $P_i = 0,99 \text{ W}$; $C_i = 370 \text{ nF}$; $L_i = 0,9 \text{ mH}$

Ambient temperature: $-30^\circ\text{C} \leq T_a \leq +70^\circ\text{C}$

(16) Report No.: 13/0212

(17) Special conditions for safe use:

When the other approved supply unit is used, whose output parameters satisfy above mentioned output parameters, it is necessary to have a galvanic separation or, if supply unit without galvanic separation is used (Zener barriers), it is necessary provide potential equalization between sensor and point of barrier earthing.

(18) Essential Health and Safety Requirements:

Essential health and safety requirement of Directive 94/9/EC are covered by the standard mentioned in (9), according which the product was verified and in the manufacturer's instruction for use.

(19) List of Documentation:

Title:	Number:	Date:	Pages:
Technical conditions	GRLM	12/2013	12 pages
Production documentation	GRLM-70Xi	10/2013	5 pages
Instruction manual		10/2013	28 pages

Responsible person:

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(14) EC-Type Examination Certificate N° FTZÚ 13 ATEX 0212X

Mechanical body:	GRML-70-100	02.10.2013
	GRML-70-200	02.10.2013
	GRML-70-300	03.10.2013
	GRML-70-500	03.10.2013
	GRML-70-600	30.10.2013
	GRML-70-700	30.10.2013

Drawings No.:	GRML-70-SV-01	23.10.2013
	GRML-70-SZ-02	23.10.2013
	GRML-70-SZ-03	23.10.2013
	GRML-70-SZ-04	23.10.2013
	GRML-70-SZ-05	23.10.2013
	GRML-70-OS-01	23.10.2013
	GRML-70-OS-02	23.10.2013
	GRML-70-OS-03	23.10.2013
	GRML-70-OS-04	23.10.2013
	GRML-70-OS-05	23.10.2013
	GRML-70-OS-06	23.10.2013
	GRML-70-OS-07	23.10.2013
	GRML-70-OS-08	23.10.2013
	GRML-70-MO-01	23.10.2013
	GRML-70-MO-02	23.10.2013
	GRML-70-MO-03	23.10.2013
	GRML-70-MO-04	23.10.2013
	GRML-70-MO-05	23.10.2013
	GRML-70-MO-06	23.10.2013
	GRML-70-MO-07	23.10.2013
	GRML-70-MO-08	23.10.2013
	GRML-70-SS-01	16.10.2013
	GRML-70-SS-02	16.10.2013
	GRML-70-SS-03	16.10.2013
	GRML-70-SS-04	16.10.2013
	GRML-70-SS-05	16.10.2013
	GRML-70-OD-01	16.10.2013

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