

Physical Technical Testing Institute Ostrava – Radvanice



(1)

EC-Type Examination Certificate

(2)

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 No:

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



Date of issue: 26.05.2014

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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 or 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:

 $-30^{\circ}\text{C} \le \text{T}_{\text{a}} \le +70^{\circ}\text{C}$

(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:

Dipl. Ing. Lukáš Martinák Head of Certification Body AO 210
NB 1026

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Physical Technical Testing Institute Ostrava – Radvanice

(13)

Schedule

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

Mechanical body:	GRML-70-100 GRML-70-200 GRML-70-300 GRML-70-500 GRML-70-600 GRML-70-700	02.10.2013 02.10.2013 03.10.2013 03.10.2013 30.10.2013 30.10.2013
Drawings No.:	GRLM-70-SV-01 GRML-70-SZ-02 GRML-70-SZ-03 GRML-70-SZ-04 GRML-70-SZ-05 GRML-70-OS-01 GRML-70-OS-02 GRML-70-OS-03 GRML-70-OS-04 GRML-70-OS-05 GRML-70-OS-06 GRML-70-OS-07 GRML-70-OS-07 GRML-70-MO-01 GRML-70-MO-01 GRML-70-MO-03 GRML-70-MO-05 GRML-70-MO-05 GRML-70-MO-05 GRML-70-MO-05 GRML-70-MO-05 GRML-70-MO-05 GRML-70-MO-05 GRML-70-MO-05 GRML-70-MO-05 GRML-70-SS-01 GRML-70-SS-01 GRML-70-SS-03 GRML-70-SS-04 GRML-70-SS-05	23.10.2013 16.10.2013 16.10.2013 16.10.2013
	GRML-70-OD-01	16.10.2013

Responsible person:

Dipl. Ing. Lukáš Martinák Head of Certification Body



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