Certificate

kiwa
Partner for progress

1 EC-Type Examination Certificate

2 Equipment and protective systems intended for use in potentially explosive atmospheres – Directive 94/9/EC

3 EC-Type Examination Certificate Number: **KIWA 15ATEX0049 X** **Issue: 1**

4 Equipment: **Level Transmitter, Types P-05D, P-10D and P-25D**

5 Manufacturer: **Hadro Techniek B.V.**

6 Address: **Westbaan 270, 2841 MC Moordrecht**
The Netherlands

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

8 Kiwa Nederland B.V., notified body number 0620 in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, certifies that this equipment 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 ATEX Assessment Report No. 150900542.

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

EN 60079-0 : 2012 + A11 **EN 60079-1 : 2014** **EN 60079-31 : 2014**

10 If the sign "X" is placed after the certificate number, it indicates that the equipment is subject to specific conditions of use, specified in the schedule to this certificate.

11 This EC-Type Examination Certificate relates only to the design, examination and tests of the specified equipment. Further requirements of the Directive apply to the manufacturing process and supply of this equipment. These are not covered by this certificate.

12 The marking of the equipment shall include the following:

II 2 G Ex db IIC T5 ... T1 Gb
II 2 D Ex tb IIIC T100 °C ... T350 °C Db

Kiwa Nederland B.V. **Issue date:** **First issue:**

21 January 2016 ---

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Certification Officer

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13 SCHEDULE

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15.1 Description

Level Transmitters Type P-05D, P-10D and P-25D are used to convert the level measurement signal of magnetically activated switches (reed chain) mounted in a measuring tube into an electrical output signal. The measuring tube is for mounting to a suitable process pipe with float.

Ambient temperature range -40 °C to +60 °C.

The degree of protection is IP66/IP68 (1 m / 24 hours) in accordance with EN 60529.

15.2 Electrical data

Reed chain with transmitter: max. 35 Vdc, 20 mA
Reed chain with terminals: 100 - 1800 Ω

15.3 Instructions

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

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No. 150900542.

17 Specific conditions of use

The flameproof joints are not intended to be repaired.

The relation between process temperature and temperature class / surface temperature is shown in the following table:

Process temperature	Temperature class (EPL Gb)	Maximum surface temperature (EPL Db)
-50 °C to -25 °C [1)]	T5	T100 °C
-24 °C to +135 °C	T4	T135 °C
+136 °C to +160 °C	T3	T160 °C
+161 °C to +200 °C [2)]	T3	T200 °C
+201 °C to +250 °C [3)]	T2	T250 °C
+251 °C to +300 °C [4)]	T2	T300 °C
+301 °C to +350 °C [4)]	T1	T350 °C

13 # SCHEDULE

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Notes:
1) protection between process pipe and reed chain: 1x Armaflex or PER
2) protection between process pipe and reed chain: 1 layer of glass fiber
3) protection between process pipe and reed chain: 2 layers of glass fiber
4) level gauge fully insulated with 2 layers of glass fiber and shielding plate between process pipe and reed chain

18 **Essential Health and Safety Requirements**

All relevant Essential Health and Safety Requirements are covered by the standards listed at section 9.

19 **Test documentation**

As listed in ATEX Assessment Report No. 150900542.