

Translation

(1) **EC-Type Examination Certificate**

TÜV NORD



(2) Equipment and protective systems intended for use in potentially explosive atmospheres, **Directive 94/9/EC**

(3) **Certificate Number** TÜV 06 ATEX 553233 X

(4) for the equipment: Level regulator type Little EX

(5) of the manufacturer: MATIC s.r.l.

(6) Address: Via delle fonti n. 8
I-50012 Scandicci (FI)

Order number: 8000 553233

Date of issue: 2006-09-27

- (7) This equipment or protective system and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.
- (8) The TÜV NORD CERT GmbH, notified body No. 0044 in accordance with Article 9 of the Council Directive of the EC of March 23, 1994 (94/9/EC), 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 the confidential report No. 06 YEX 553233.
- (9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN 50 014:1997+A1+A2

EN 50 020:2002

EN 50 284:1999

- (10) 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.
- (11) This EC-type examination certificate relates only to the design, examination and tests of the specified equipment in accordance to the Directive 94/9/EC. 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 or protective system must include the following:

 **II 1 G EEx ia IIC T6**

TÜV NORD CERT GmbH, Langemarckstraße 20, 45141 Essen, accredited by the central office of the countries for safety engineering (ZLS), Ident. Nr. 0044, legal successor of the TÜV NORD CERT GmbH & Co. KG Ident. Nr. 0032

The head of the certification body

Schwedt

Hanover office, Am TÜV 1, 30519 Hanover, Fon +49 (0)511 986 1455, Fax +49 (0)511 986 1590

This certificate may only be reproduced without any change, schedule included.
Excerpts or changes shall be allowed by the TÜV NORD CERT GmbH

(13) **SCHEDULE**

(14) **EC-Type Examination Certificate No. TÜV 06 ATEX 53233 X**

(15) Description of equipment

Together with a control circuitry mounted outside of the explosion hazardous area, the level regulator type Little EX is used for the control of pumps for filling or emptying of containers (e. g. cisterns tanks, shafts, reservoirs).

The level regulator type Little EX is connected to the control circuitry via associated electrical apparatus in type of protection Intrinsic Safety.

The level regulator type Little EX may be operated in explosion hazardous areas for category 1G apparatus at atmospheric conditions.

Electrical data

Signal circuit in type of protection Intrinsic Safety EEx ia IIC
 (Cable connection) only for connection to a certified intrinsically safe circuit
 maximum values:
 $U_i = 9.6 \text{ V}$
 $I_i = 21.4 \text{ mA}$

The effective internal capacitances and inductances in the housing of the level regulator switch are negligibly small.

Parameters of the connected cable with a length of l_{cable} :
 $C_i = 200 \text{ nF/km} \times l_{\text{cable}}$
 $L_i = 1 \text{ mH/km} \times l_{\text{cable}}$

(16) Test documents are listed in the test report No. 06 YEX 553233.

(17) Special conditions for safe use

1. At the plastic parts of the level regulator type Little EX is a danger of ignition by electrostatic discharges. The operator has to ascertain the suitability of this equipment for his use.
2. The level regulator type Little EX is allowed to be operated in an explosion hazardous area, that requires apparatus of the category 1, only if atmospheric conditions exist (Temperature from -20°C to 60°C, pressure from 0.8 bar to 1.1 bar).
3. If an opening is required in the boundary wall of the hazardous area, risks of flammable gas release and flame entrance have to be observed. The mechanical connection has to comply with EN 50284, 4.5 .

(18) Essential Health and Safety Requirements

no additional ones