



Translation

(1) **EC TYPE-EXAMINATION CERTIFICATE**

(2) Equipment or Protective System intended for use in potentially explosive atmospheres - **Directive 94/9/EC**

(3) EC-Type Examination Certificate Number



TÜV 01 ATEX 1685

(4) Equipment: Waterpilot type FMX 167-...

(5) Manufacturer: Endress + Hauser GmbH + Co.

(6) Address: Hauptstraße 1
D-79689 Maulburg

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

(8) The TÜV Hannover/Sachsen-Anhalt e.V., TÜV CERT-Certification Body, notified body number N° 0032 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 N° 01PX26300.

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

EN 50 014:1997

EN 50 020:1994

(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 and construction of the specified equipment or protective system according to Directive 94/9/EC. Further requirements of this Directive apply to the manufacture and placing on the market of this equipment or protective system.

(12) The marking of the equipment or protective system must include the following:

 II 2 G EEx ia IIC T6

TÜV Hannover/Sachsen-Anhalt e.V.
TÜV CERT-Zertifizierungsstelle
Am TÜV 1
D-30519 Hannover

Hanover, 2001-03-14

Head of the
Certification Body





(13)

SCHEDULE

(14) **EC-TYPE EXAMINATION CERTIFICATE N° TÜV 01 ATEX 1685**

(15) Description of equipment

The Waterpilot type FMX 167-... is used for hydrostatic level measurement in hazardous explosive areas.

The permissible ambient temperature range is – 10 °C to + 70 °C.

Electrical data

Signal and supply circuit
(cable connection)

in type of protection "Intrinsic Safety" EEx ia IIC

for connection to certified intrinsically safe circuits only

Maximum values:

$$U_i = 30 \text{ V}$$

$$I_i = 133 \text{ mA}$$

$$P_i = 1 \text{ W}$$

$$C_{i \text{ Sensor}} \leq 3,5 \text{ nF}$$

$L_{i \text{ Sensor}}$ negligibly small

$$C'_{\text{Kabel}} \leq 180 \text{ pF/m}$$

$$L'_{\text{Kabel}} \leq 1 \text{ } \mu\text{H/m}$$

The internal capacitance is:

$$C_i = C_{i \text{ Sensor}} + C'_{\text{cable}}$$

The internal inductance is:

$$L_i = L_{i \text{ Sensor}} + L'_{\text{cable}}$$

(16) Test documents are listed in the test report No. 01PX26300.

(17) Special conditions for safe use

none

(18) Essential Health and Safety Requirements

no additional ones