

CERTIFICATE

(1) EU-Type Examination

(2) **Equipment or protective systems intended for use in potentially explosive atmospheres - Directive 2014/34/EU**

(3) EU-Type Examination Certificate Number: **DEKRA 12ATEX0094** Issue Number: **4**

(4) Product: **Measuring System Type Portavo 90*X***

(5) Manufacturer: **Knick Elektronische Messgeräte GmbH & Co. KG**

(6) Address: **Beuckestraße 22, 14163 Berlin, Germany**

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

(8) DEKRA Certification B.V., Notified Body number 0344 in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this product 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.

The examination and test results are recorded in confidential test report mentioned in item (16).

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

EN IEC 60079-0 : 2018 + A11 : 2024

EN 60079-11 : 2012

except in respect of those requirements listed at item 18 of the Schedule.

(10) If the sign "X" is placed after the certificate number, it indicates that the product is subject to the Specific Conditions of Use specified in the schedule to this certificate.

(11) This EU-Type Examination Certificate relates only to the design and construction of the specified product. Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.

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



II 1 G Ex ia IIC T4/T3 Ga

Date of certification: 23 October 2025

DEKRA Certification B.V.

R. Schuller
Certification Manager



Throughout this document, a point is used as the decimal separator.

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(13) **SCHEDULE**

(14) **to EU-Type Examination Certificate DEKRA 12ATEX0094** Issue No. 4

(15) **Description**

The Measuring System Type Portavo 90*X* is a battery powered hand-help electrical equipment for pH, conductivity and temperature measurement for analog or digital sensors. The USB interface is only for use outside of the explosion hazardous area.

The ambient temperature range and temperature class depends on the batteries used as follows:

<u>Battery:</u>	<u>Ambient temperature range:</u>	<u>Temperature class:</u>
Duracell MN1500	-10 °C to +40 °C	T4
Energizer E91	-10 °C to +50 °C	T3
Power One 4106	-10 °C to +50 °C	T3
Panasonic Pro Power LR6	-10 °C to +50 °C	T3

Electrical data

Supply	Only the following batteries may be used: Duracell MN1500 Energizer E91 Power One 4106 Panasonic Pro Power LR6					
	in type of protection intrinsic safety Ex ia IIC, with the following maximum values:					
	U _o (V)	I _o (mA)	P _o (mW)	C _o (µF)	L _o (mH)	
pH-Measuring circuit (MEAS)	4.1	0.1	0.1	100	1000	Linear characteristic
Temperature measurement circuit (TEMP1, TEMP2)	4.1	4.4	4.6	99	1000	Linear characteristic
pH / Temperature measurement circuit (MEAS, TEMP1, TEMP2)	7.2	4.4	4.6	13.3	1000	Linear characteristic
Conductivity measurement circuit (MEAS)	7.2	36	36.9	13.4	27	Linear characteristic
Conductivity / Temperature measurement circuit (MEAS, TEMP1, TEMP2)	7.2	40.6	41.7	13.3	22	Linear characteristic
Memosens interface circuit (MS and/or MEAS)	4.6	113	130	96	2.8	Linear characteristic
USB Interface (micro USB-B)	U _m = 250 V					

Installation instructions

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

(16) **Report Number**

NL/DEK/ExTR12.0061/03

(17) **Specific conditions of use**

None.

(13) **SCHEDULE**

(14) **to EU-Type Examination Certificate DEKRA 12ATEX0094** Issue No. 4

(18) **Essential Health and Safety Requirements**

Covered by the standards listed at item (9).

(19) **Test documentation**

As listed in test report mentioned in item (16).