

Translation

(1) 1. Supplement to the EC-Type Examination Certificate

(2) Equipment and protective systems intended for use in potentially explosive atmospheres - Directive 94/9/EC Supplement accordant with Annex III number 6

(3) No. of EC-Type Examination Certificate: **BVS 03 ATEX E 119**

(4) Equipment: **Vibrating fork type NWS-***2E* ******

(5) Manufacturer: **KOBOLD Messring GmbH**

(6) Address: **Nordring 22-24, 65719 Hofheim/Ts., Germany**

(7) The design and construction of this equipment and any acceptable variation thereto are specified in the appendix to this supplement.

(8) The certification body of DEKRA EXAM GmbH, notified body no. 0158 in accordance with Article 9 of the Directive 94/9/EC of the European Parliament and the Council 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 the test and assessment report BVS PP 03.2083 EG.

(9) The Essential Health and Safety Requirements are assured by compliance with:

EN 60079-0:2012 General requirements

EN 60079-11:2012 Intrinsic safety „i“

EN 60079-26:2007 Equipment with equipment protection level (EPL) Ga

(10) If the sign "X" is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use specified in the appendix to this certificate.

(11) This supplement to the EC-Type Examination Certificate relates only to the design, examination and tests of the specified equipment in accordance to 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 shall include the following:

 **II 1G Ex ia IIC T6 Ga**

DEKRA EXAM GmbH
Bochum, dated 7th January 2013

Signed: Hans Christian Simanski

Certification body

Signed: Dr. Franz Eickhoff

Special services unit

(13) Appendix to

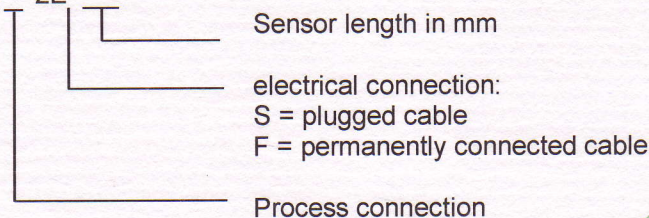
(14) **1. Supplement to the EC-Type Examination Certificate
BVS 03 ATEX E 119**

(15) 15.1 Subject and type

Vibrating fork type NWS-***2E* ****

Instead of the * in the complete denomination numerals and figures will be inserted which characterize different variations:

type NWS-***2E* ****



15.2 Description

The vibrating fork is used for measurement of liquid levels.

The electrical components of the sensor are completely encapsulated in a metal enclosure. The electrical connection is by a plugged cable (type NWS-***2ES ****) or a permanently connected cable (type NWS-***2EF ****).

The vibrating fork has to be protected from external physical impact.

For use in zone 0, the vibrating fork with plugged cable has to be installed in such a way, that electrostatic charging of the plug and cable can be excluded.

The vibrating fork can also be manufactured according to the documents listed in the test report; the vibrating fork has been slightly modified and assessed in accordance with the new standards.

15.3 Parameters

Maximum input voltage	Ui	DC	20	V
Maximum input current	Ii		100	mA
Maximum input power	Pi		1	W
Effective internal capacitance	Ci		8	nF
Effective internal inductance	Li		negligible	

For the connected cable, the following values have to be additionally regarded:

Capacitance per unit length	0,14	nF/m
Inductance per unit length	0,65	µH/m

Ambient temperature range Ta -40 °C up to +70 °C

The possible medium temperature and the allocation of the temperature class are shown in the following table:

Temperature class	T6	T5	T4	T3
Max. medium temperature	75 °C	90 °C	125 °C	150 °C

(16) Test and assessment report

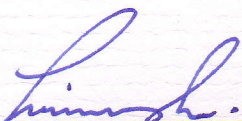
BVS PP 03.2083 EG as of 07.01.2013

(17) Special conditions for safe use Installation instructions

None

We confirm the correctness of the translation from the German original.
In the case of arbitration only the German wording shall be valid and binding.

DEKRA EXAM GmbH
44809 Bochum, 7th January 2013
BVS-/Le/Ma A 20120463



Certification body



Special services unit



Translation

EC-Type Examination Certificate

(1)

(2)

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

(3)

BVS 03 ATEX E 119

(4)

Equipment: Vibrating fork type NWS-*2E* ******

(5)

Manufacturer: KOBOLD Messring GmbH

(6)

Address: D 65719 Hofheim/Ts.

(7)

The design and construction of this equipment and any acceptable variation thereto are specified in the schedule to this type examination certificate.

(8)

The certification body of Deutsche Montan Technologie GmbH, notified body no. 0158 in accordance with Article 9 of the Directive 94/9/EC of the European Parliament and the Council 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 the test and assessment report BVS PP 03.2083 EG.

(9)

The Essential Health and Safety Requirements are assured by compliance with:

EN 50014:1997+A1-A2 General requirements
EN 50020:1994 Intrinsic safety 'i'
EN 50284:1999 Equipment Group II Category 1G

(10)

If the sign "X" is placed after the certificate number, it indicates that the equipment 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 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 shall include the following:



II 1G EEx ia IIC T6

Deutsche Montan Technologie GmbH

Bochum, dated 09. May 2003

Signed: Eickhoff

Signed: Arnold

DMT Certification body

Special services unit

(13)

Appendix to

(14)

EC-Type Examination Certificate

BVS 03 ATEX E 119

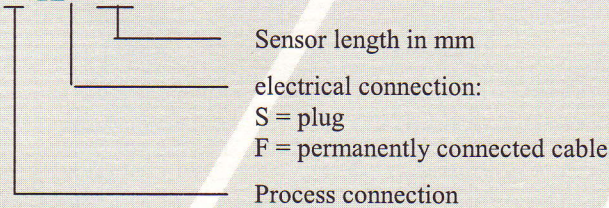
(15)

15.1 Subject and type

Vibrating fork type NWS-***2E* ****

Instead of the *** in the complete denomination numerals and figures will be inserted which characterize different variations:

type NWS-***2E* ****



15.2 Description

The vibrating fork is used for measurement of liquid level.

The electrical components of the sensor are completely encapsulated in a metal enclosure. The electrical connection is by a plug (type NWS-***2ES ****) or a permanently connected cable (type NWS-***2EF ****) with a length up to 1,5 m.

15.3 Parameters

Voltage	Ui	DC	20	V
Current	Ii		100	mA
Power	Pi		1	W
effective internal capacitance	Ci		8	nF
effective internal inductance	Li		negligible	
Ambient temperature range	Ta		-40 °C up to +70 °C	

The possible medium temperature and the allocation of the temperature class is shown in the following table:

Temperature class	T6	T5	T4	T3
max. medium temperature	75 °C	90 °C	125 °C	150 °C

(16)

Test and assessment report

BVS PP 03.2083 EG as of 09.05.2003

(17)

Special conditions for safe use

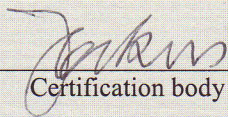
None



We confirm the correctness of the translation from the German original.
In the case of arbitration only the German wording shall be valid and binding.

44809 Bochum, 18. December 2003
BVS-Schu/Kw E2605/03

Deutsche Montan Technologie GmbH



Certification body



Special services unit