

Translation

EU-Type Examination Certificate Supplement 2

Equipment intended for use in potentially explosive atmospheres
Directive 2014/34/EU

EU-Type Examination Certificate Number: **BVS 13 ATEX E 020 X**

Product: **Flow measuring system type DOG-42***** and DOG-62*******

Manufacturer: **KOBOLD Messring GmbH**

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

This supplementary certificate extends EU-Type Examination Certificate No. BVS 13 ATEX E 020 X to apply to products designed and constructed in accordance with the specification set out in the appendix of the said certificate but having any acceptable variations specified in the appendix to this certificate and the documents referred to therein.

DEKRA Testing and Certification GmbH, Notified Body number 0158, 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 the confidential Report No. BVS PP 13.2048/EU.

The Essential Health and Safety Requirements are assured in consideration of

EN IEC 60079-0:2018

General requirements

EN 60079-11:2012

Intrinsic Safety "i"

If the sign "X" is placed after the certificate number, it indicates that the product is subject to the Special Conditions for Use specified in the appendix to this certificate.

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.

The marking of the product shall include the following:



**II (1)G [Ex ia Ga] IIC
II 1G Ex ia IIC T4 Ga**

for transmitter type DOG-42*** and DOG-62*****
for sensor type DOG-42***** and DOG-62*******

DEKRA Testing and Certification GmbH
Bochum, 2021-08-11

Signed: Jörg-Timm Kilisch

Managing Director

13 **Appendix**

14 **EU-Type Examination Certificate**

**BVS 13 ATEX E 020 X
Supplement 2**

15 **Product description**

15.1 **Subject and type**

Flow measuring device type DOG-42*****
consisting of one type transmitter DOG-42***** with one type sensor DOG-42*****
and
Flow measuring device type DOG-62*****
consisting of one type of transmitter DOG-62***** with one type of sensor DOG-62*****

15.2 **Description**

The flow measuring system is intended for flow measuring of gaseous media.

The flow measuring system consists of a type transmitter DOG-42***** with a type sensor DOG-42***** or of a type transmitter DOG-62***** with a type sensor DOG-62*****

The transmitter have to be mounted outside the hazardous area, both apparatus can be connected via an up to 100 m long cable.

Type Code

DOG	-	a	2	**	*	**	*	b	*	*
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All characters "*" are not relevant for explosion protection.

a State of aggregation of the medium

4 = for gases

6 = for damp gases

b Electronics

A = Frequency output, 230 VAC

D = Frequency output, 110 VAC

F = Frequency output, 24VAC

R = Frequency output, 24VDC

H = Totaliser, pulse output, analogue output, 230 VAC

I = Totaliser, pulse output, analogue output, 110 VAC

L = Totaliser, pulse output, analogue output, 24 VDC

N = Flow computer, pulse output, analogue output, 230 VAC

P = Flow computer, pulse output, analogue output, 110 VAC

Reason for the supplement:

- Additional variant type DOG-62***** is due to a special sensor especially for use with humid gases.
- The type code is extended.
- Update of documentation.
- Testing is no longer carried out according to the IEC 60079-26 standard.

15.3 Parameters

15.3.1 Type transmitter DOG-42***** and DOG-62*****

15.3.1.1 Mains circuit (terminals X100:2 and X100:4)

Nominal voltage		AC	230	V
	or	AC	110	V
	or	AC	24	V
Max. voltage	U _m	AC	253	V

15.3.1.2 Power supply (sensor) circuit (terminals X201:1 and X201:3), level of protection Ex ia IIC

Voltage	U _o	DC	8.6	V
Current	I _o		925	mA
Power	P _o		1.17	W
Trapezoid output characteristic				

15.3.1.3 Floating opto coupler output circuit (terminals X200:3 and X200:4), level of protection Ex ia IIC

Voltage	U _i	DC	30	V
Effective internal capacitance	C _i		negligible	
Effective internal inductance	L _i		negligible	

15.3.1.4 Ambient temperature range

T _a	-20 °C up to +60 °C
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15.3.2 Type sensor DOG-42***** and DOG-62*****

Ambient temperature range	T _a	-20 °C up to +60 °C
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16 Report Number

BVS PP 13.2048 EU, as of 2021-08-11

17 Special Conditions for Use

The sensor has to be mounted in areas where ignition hazard due to impact or friction will be excluded.

The sensor has to be mounted in areas where electrostatic charging / discharging hazard will be excluded.

The connecting cable has to be in a fixed installation if the ambient temperature is below -5 °C.

18 Essential Health and Safety Requirements

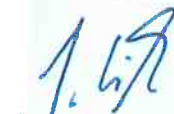
The Essential Health and Safety Requirements are covered by the standards listed under item 9.

19 Drawings and Documents

Drawings and documents are listed in the confidential report.

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 Testing and Certification GmbH
Bochum, 2021-08-11
BVS-AIh/Mu A20210176


Managing Director

Translation

EU-Type Examination Certificate Supplement 1

Change to Directive 2014/34/EU

**Equipment intended for use in potentially explosive atmospheres
Directive 2014/34/EU**

EU-Type Examination Certificate Number: **BVS 13 ATEX E 020 X**

Product: **Flow measuring system type DOG-4**

Manufacturer: **KOBOLD Messring GmbH**

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

This supplementary certificate extends EC-Type Examination Certificate No. BVS 13 ATEX E 020 X to apply to products designed and constructed in accordance with the specification set out in the appendix of the said certificate but having any acceptable variations specified in the appendix to this certificate and the documents referred to therein.

DEKRA EXAM GmbH, Notified Body number 0158, 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 the confidential Report No. BVS PP 13.2048 EU.

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

EN 60079-0:2012 + A11:2013	General requirements
EN 60079-11:2012	Intrinsic Safety "i"
EN 60079-26:2015	Equipment with equipment protection level (EPL) Ga

If the sign "X" is placed after the certificate number, it indicates that the product is subject to the Special Conditions for Use specified in the appendix to this certificate.

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.

The marking of the product shall include the following:



II (1) G [Ex ia Ga] IIC for type transmitter DOG-4
II 1 G Ex ia IIC T4 Ga for type sensor DOG-4

DEKRA EXAM GmbH
Bochum, 2016-10-31

Signed: Jörg Koch

Certifier

Signed: Dr. Michael Wittler

Approver



Page 1 of 3 of BVS 13 ATEX E 020 X / N1
This certificate may only be reproduced in its entirety and without any change.

DEKRA EXAM GmbH, Dinnendahlstrasse 9, 44809 Bochum, Germany,
telephone +49.234.3696-105, Fax +49.234.3696-110, zs-exam@dekra.com

13 Appendix

14 EU-Type Examination Certificate

BVS 13 ATEX E 020 X Supplement 1

15 Product description

15.1 Subject and type

Flow measuring system type DOG-4,
consisting of a type transmitter DOG-4 and a type sensor DOG-4

15.2 Description

The flow measuring system is intended for flow measuring of gaseous media.

The flow system consists of a transmitter which has to be mounted outside the hazardous area and a flow sensor; both apparatus can be connected via an up to 100 m long cable.

With this supplement the certificate is changed to Directive 2014/34/EU.

(Annotation: In accordance with Article 41 of Directive 2014/34/EU, EC-Type Examination Certificates referring to 94/9/EC that were in existence prior to the date of application of 2014/34/EU (20 April 2016) may be referenced as if they were issued in accordance with Directive 2014/34/EU. Supplementary Certificates to such EC-Type Examination Certificates, and new issues of such certificates, may continue to bear the original certificate number issued prior to 20 April 2016.)

Reason for the supplement:

Change to Directive 2014/34/EU

Two new variants with mains voltages 110 V and 24 V are possible

15.3 Parameters

15.3.1 Type transmitter DOG-4

15.3.1.1 Mains circuit (terminals X100:2 and X100:4)

Nominal voltage

	AC	230	V
or	AC	110	V
or	AC	24	V
max. voltage	AC	253	V

15.3.1.2 Power supply (sensor) circuit (terminals X201:1 and X201:3), level of protection Ex ia IIC

Voltage	U_o	DC	8.6	V
Current	I_o		925	mA
Power	P_o		1.17	W
trapezoid output characteristic				

15.3.1.3 Floating opto coupler output circuit (terminals X200:3 and X200:4), level of protection Ex ia IIC

Voltage	U_i	DC	30	V
Effective internal capacitance	C_i		negligible	
Effective internal inductance	L_i		negligible	

15.3.1.4 Ambient temperature range

T_a -20 °C up to +60 °C

15.3.2 Type sensor DOG-4

Ambient temperature range

T_a -20 °C up to +60 °C

16 **Report Number**

BVS PP 13.2048 EU, as of 2016-10-31

17 **Special Conditions for Use**

The sensor has to be mounted in areas where ignition hazard due to impact or friction will be excluded.

The sensor has to be mounted in areas where electrostatic charging/discharging hazard will be excluded.

The connecting cable has to be in a fixed installation if the ambient temperature is below -5 °C.

18 **Essential Health and Safety Requirements**

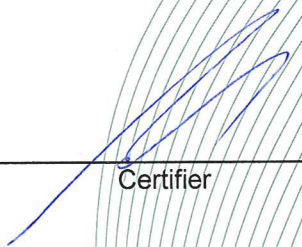
The Essential Health and Safety Requirements are covered by the standards listed under item 9.

19 **Drawings and Documents**

Drawings and documents are listed in the confidential report.

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
Bochum, dated 2016-10-31
BVS-Schu/Nu A 20160043



Certifier



Approver

Translation

(1) EC-Type Examination Certificate

- (2) Equipment and protective systems intended for use in potentially explosive atmospheres - Directive 94/9/EC
- (3) No. of EC-Type Examination Certificate: **BVS 13 ATEX E 020 X**
- (4) Equipment: **Flow measuring system type DOG-4**
- (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 type examination certificate.
- (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 13.2048 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 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 (1) G [Ex ia Ga] IIC for reader type DOG-4A

II 1 G Ex ia IIC T4 Ga for sensor type DOG-4S

DEKRA EXAM GmbH
Bochum, dated 22nd February 2013

Signed: Simanski

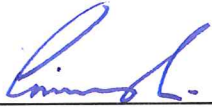
Certification body

Signed: Dr. Eickhoff

Special services unit

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, 22nd February 2013
BVS-Schu/Ma A 20120869

A handwritten signature in blue ink, appearing to be "L. Müller", written over a horizontal line.

Certification body

A handwritten signature in green ink, appearing to be "C. Kießling", written over a horizontal line.

Special services unit

(13) Appendix to

(14) **EC-Type Examination Certificate**
BVS 13 ATEX E 020 X

(15) 15.1 Subject and type

Flow measuring system type DOG-4,
consisting of a reader type DOG-4A and a sensor type DOG-4S

15.2 Description

The flow measuring system is intended for flow measuring of gaseous media.
The flow system consists of a reader which has to be mounted outside the hazardous area and a flow sensor; both apparatus can be connected via an up to 100 m long cable.

15.3 Parameters

15.3.1 Reader type DOG-4A

15.3.1.1 Mains circuit (terminals X100:2 and X100:4)

Nominal voltage	Um	AC	230	V
max. voltage		AC	253	V

15.3.1.2 Power supply (sensor) circuit (terminals X201:1 and X201:3), level of protection Ex ia IIC

Voltage	Uo	DC	8,6	V
Current	Io		925	mA
Power	Po		1.17	W

trapezoid output characteristic

15.3.1.3 Floating opto coupler output circuit (terminals X200:3 and X200:4),
level of protection Ex ia IIC

Voltage	Ui	DC	30	V
effective internal capacitance	Ci		negligible	
effective internal inductance	Li		negligible	

15.3.1.4 Ambient temperature range

Ta	-20 °C up to +60 °C
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15.3.2 Sensor type DOG-4S

Ambient temperature range	Ta	-20 °C up to +60 °C
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(16) Test and assessment report

BVS PP 13.2048 EG as of 22nd February 2013

(17) Special conditions for safe use

17.1 The sensor has to be mounted in areas where ignition hazard due to impact or friction will be excluded.

17.2 The sensor has to be mounted in areas where electrostatic charging/discharging hazard will be excluded.

17.3 The connecting cable has to be in a fixed installation if the ambient temperature is below -5 °C.