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

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(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		AC	230	V
max. voltage	Um	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

15.3.2 Sensor type DOG-4S

Ambient temperature range Ta -20 °C up to +60 °C

(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.

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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

Certification body

Special services unit

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