



EXPLOSION PROTECTION CERTIFICATE OF CONFORMITY

Cert NO.GYJ17.1478X

This is to certify that the product

Variable Area flow meter

manufactured by **KROHNE Messtechnik GmbH**

(Address:Ludwig-Krohne Strasse 5,D-47058 Duisburg, Germany)

which model is **DK32 Series, DK34 Series**

Ex marking **Ex ia II C T1~T6 Gb**

product standard /

drawing number **ZZ 8144800100d**

has been inspected and certified by NEPSI, and that it conforms
to **GB 3836.1-2010,GB 3836.4-2010**

This Approval shall remain in force until **2022.11.22**

Remarks

- 1.Conditions for safe use are specified in the attachment to this certificate.
- 2.Symbol "X" placed after the certification number denotes specific conditions of use, which are specified in the attachment to this certificate.
- 3.Model designation is specified in the attachment to this certificate.
- 4.Intrinsic safety parameters specified in the attachment to this certificate.

Director



**National Supervision and Inspection Centre for
Explosion Protection and Safety of Instrumentation**

Issued Date **2017.11.23**

This Certificate is valid for products compatible with the documents and samples approved by NEPSI.

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National Supervision and Inspection Centre for Explosion Protection and Safety of Instrumentation

(GYJ17.1478X)

(Attachment I)

Attachment I (Translation)

Variable Area flow meter, type DK32 and DK34 series, manufactured by Krohne Messtechnik GmbH, have been approved in accordance with the following standards by National Supervision and Inspection Centre for Explosion Protection and Safety of Instrumentation (NEPSI):

GB3836.1-2010 Explosive atmospheres – Part 1: Equipment – General requirements

GB3836.4-2010 Explosive atmospheres – Part 4: Equipment protection by intrinsic safety “i”

Ex marking: Ex ia IIC T1~T6 Gb

Certificate number: GYJ17.1478X.

Approved type details to this certification are shown as below:

DK32 / **a** / **b** / **c** / HT / A-Ex

DK34 / **a** / **b** / **c** / HT / A-Ex

a code for pressure regulator, RE or RA;

b code for limit switch quantity, K1 or K2;

c code for electrical connector type, S or L.

The relations between the temperature class, the ambient temperature range and the maximum process temperature are as below:

Temp. class	Ambient temperature range (°C)	Maximum process temperature (°C)	
		DK32	DK34
T6	-20~+40	75	80
	-20~+50	70	70
	-20~+60	60	60
T5	-20~+40	100	100
	-20~+50	95	100
	-20~+60	85	90
T4	-20~+40	135	135
	-20~+50	130	135
	-20~+60	120	130
	-20~+90	90	90
T3~T1	-20~+40	135	150
	-20~+50	130	140
	-20~+60	120	130
	-20~+90	90	90



I . SPECIAL CONDITIONS FOR SAFE USE

When the code is S, friction on the surface of the plastic plug connector should be avoid in case there will cause the ignition by electrostatic accumulation.

II . SPECIAL REQUIREMENTS

2.1. Only be connected to the certified associated apparatus, the Flow meter could be used in the explosive atmosphere. The connection should be complied with the requirements of the manual of the associated apparatus and the position.

The maximum values for connection to a certified associated apparatus are shown in the table below:

Max. input Voltage U_i (V)	Max. input current I_i (mA)	Max. input power P_i (W)	Max. internal parameter	
			C_i (μ F)	L_i (mH)
16	25	64	0.15	0.15



2.2 Users are forbidden to change the configuration to ensure the explosion protection performance of the equipment. Any faults shall be settled with experts from the manufacturer.

2.3 During installation, operation and maintenance, users shall comply with the relevant requirements of the product instruction manual, GB3836.13-2013 "Explosive atmospheres-Part 13: Equipment repair, overhaul and reclamation", GB3836.15-2000 "Electrical apparatus for explosive gas atmospheres Part 15: Electrical installations in hazardous areas (other than mines)", GB3836.16-2006 "Electrical apparatus for explosive gas atmospheres Part 16: Inspection and maintenance of electrical installation (other than mines)" and GB50257-2014 "Code for construction and acceptance of electric device for explosion atmospheres and fire hazard electrical equipment installation engineering".

III . MANUFACTURER'S RESPONSIBILITY

3.1 The instruction manual shall include all the clauses mentioned above.

3.2 The manufacturer shall exactly conform to the documents approved by NEPSI.

3.3 The nameplate shall add the following:

3.3.1 Identification of NEPSI.

3.3.2 Certificate No.

National Supervision and Inspection Centre
For Explosion Protection and Safety of Instrumentation
 Nov. 23, 2017

