



# EXPLOSION PROTECTION CERTIFICATE OF CONFORMITY

Cert NO.GYJ12.1132

This is to certify that the product

**Variable Areas Flowmeter**

manufactured by **KROHNE Messtechnik GmbH**

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

which model is **Ha/b/M10/-EEx**

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

product standard /

drawing number **ZZ 1100270100a, ZZ 1100280100a, ZZ 1100290100a**

has been inspected and certified by NEPSI, and that it conforms  
to **GB 3836.1-2010,GB 3836.2-2010**

This Approval shall remain in force until **2017.07.04**

**Remarks** 1.Conditions for safe use are specified in the attachment to this certificate.  
2.Model designation is specified in the attachment to this certificate.

**Director**

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

**Issued Date 2012.07.05**

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

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# 国家级仪器仪表防爆安全监督检验站

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

(GYJ12.1132)

(Attachment I)

### Attachment IGYJ12.1132

Variable areas flowmeter typed H□/□/M10/-EEEx, manufactured by Krohne Messtechnik GmbH has been certified National Supervision and Inspection Center for Explosion Protection and Safety of Instrumentation (NEPSI).

Variable areas flowmeter accords with following standards:

GB 3836.1-2010 "Explosive atmospheres Part 1: Equipment-General requirements"

GB 3836.2-2010 "Explosive atmospheres Part2: Equipment protection by flameproof enclosures 'd'"

Variable areas flowmeter has the Ex-marking Ex d IIC T1~T6 Gb.

Following products are covered by this certificate.

H a / b / M10 / -EEEx

a: 54, 250, 250C

b: RR, HC, Ti, PTFE

#### 1. Condition for safe use

1.1 The external earth connection facility shall be connected reliably.

1.2 The relation among temperature class, ambient temperature and maximum temperature of process medium is as following.

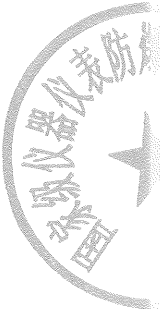
Temperature code	Ambient temperature	Maximum temperature of process medium °C		
		Line 70°C	Line 80°C	Line 90°C
T6	(-40~+60) °C	85	85	85
T5	(-40~+50) °C	100	100	100
	(-40~+60) °C	85	100	100
T4	(-40~+50) °C	135	135	135
	(-40~+60) °C	85	135	135
T1~T3	(-40~+40) °C	180	200	200
	(-40~+50) °C	135	190	200
	(-40~+60) °C	85	145	200

1.3 Observe the warning "delay X mins before opening", the relation between X and temperature class is as following.

Temperature class	X
T5, T6	8
T1~T4	0

1.4 Cable gland and blanking plug, certified to GB 3836.1-2010 and GB 3836.2-2010 with Ex marking Ex d IIC Gb shall be used. The engaged threads shall be no less than 5.


1.5 End user is not permitted to change any components insides.

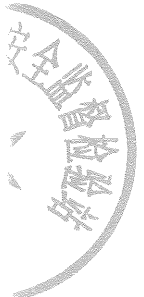


- 1.6 When installation, use and maintenance of Variable areas flowmeter, observe following standards.
- GB3836.13-1997“Electrical apparatus for explosive gas atmospheres Part 13:Repair and overhaul for apparatus used in explosive gas atmospheres”
- GB3836.15-2000“Electrical apparatus for explosive gas atmospheres Part 15:Electrical installations in hazardous area (other than mines)”
- GB 3836.16-2006 “Electrical apparatus for explosive gas atmospheres – Part 16: Inspection and maintenance of electrical installation in hazardous areas (other than mines)
- GB 50257:1996 ”Code for construction and acceptance of electric device for explosion atmospheres and fire hazard electrical equipment installation engineering”

## 2. Manufacturer’s Responsibility

- 2.1 Special condition for safe use specified above should be included in the instruction manual.
- 2.2 Manufacturing should be done according to the documentation approved by NEPSI.
- 2.3 Any modification with influence on the type of protection should be submitted to NEPSI before application.
- 2.4 Following items should be added to the nameplate

- a) NEPSI log 
- b) Ex marking
- c) Number of certificate
- d) Ambient temperature range
- e) Waring “ Delay X mins before opening”



**National Supervision and Inspection Center  
for Explosion Protection and Safety of Instrumentation**  
July 5, 2012