



# EXPLOSION PROTECTION CERTIFICATE OF CONFORMITY

Cert No. GYJ071196X

This is to certify that the product

Vortex frequency flowmeter

manufactured by

Krohne Messtechnik GmbH & Co.KG

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

which model is

OPTISWIRL 4070 C

Ex marking

Ex dia[ia] II CT6

product standard /

drawing number ZZP8159050100

has been inspected and certified by NEPSI, and that it conforms

to GB3836.1-2000, GB3836.2-2000, GB3836.4-2000

This Approval shall remain in force until 2012.05.29

Remarks

- 1.The type and parameter see the attachment to this certificate.
2. The sign "X" indicates that the equipment is subject to special conditions for safe use. Special conditions for safe use specified in the attachment to this certificate.

Director

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

Issued Date 2007.05.30



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

(GYJ071196X)

(Attachment I)

## Attachment I to GYJ071196X

(translation)

### 1. Description

OPTISWIRL 4070 C Vortex frequency flowmeter, manufactured by Krohne Messtechnik GmbH & Co.KG, has been certified by National Supervision and Inspection Center for Explosion Protection and Safety of Instrumentation (NEPSI). The product accords with following standards:

GB3836.1-2000 "Electrical apparatus for explosive gas atmospheres- Part 1: General requirements"

GB3836.2-2000 " Electrical apparatus for explosive gas atmospheres- Part 2: Flameproof enclosure 'd'"

GB3836.4-2000 " Electrical apparatus for explosive gas atmospheres- Part 4: Intrinsic safety 'i'"

The Ex marking is Ex dia[ia] II CT6, its certificate number is GYJ071196X.

### 2. Conditions for Safe Use

2.1 The ambient temperature range is from -25°C to +60°C.

2.2 The safety parameters of the vortex flowmeter are as following:

A/A+ & B/B+ :  $U_i=30V$ ;  $I_i=100mA$ ;  $P_i=1W$ ;  $C_i=15nF$ ;  $L_i \approx 0$

2.3 The parameters are described in instruction manual.

2.4 The sign "X" indicates that the equipment is subject to special conditions for safe use:

2.4.1 The flowmeter shall be included in the equipotential bonding system of the hazardous area.

2.4.2 Opening the enclosure inside the hazardous area is only permissible in a de-energized state and with keeping a subsequent waiting time 1 minute (warning label).

2.5 The user shall not change the configuration in order to maintain/ensure the explosion protection performance of the equipment. Any change may impair safety.



2.6 For installation, use and maintenance of the flow meter, the end user shall observe the instruction manual and the following standards:

GB50257-1996 "Code for construction and acceptance of electric device for explosion atmospheres and fire hazard electrical equipment installation engineering".

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)".

GB3836.16-2000 "Electrical apparatus for explosive gas atmospheres- Part 16:Inspection and maintenance of electrical installation (other than mines)".

### 3. Manufacturer's Responsibility

3.1 Conditions for safe use, as specified above, should be included in the operating instructions.

3.2 Manufacturing should be done according to the documentation approved by NEPSI.

3.3 Marking should show the following

3.3.1 NEPSI logo 

3.3.2 Type of explosion protection

3.3.3 Certificate number

3.3.4 Ambient temperature range

3.3.5 Safety parameters

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

2007.05.30