



## 1. S U P P L E M E N T

according to Directive 94/9/EC Annex III.6

### to EC-TYPE-EXAMINATION CERTIFICATE PTB 11 ATEX 2005

(Translation)

Equipment: FLUX-Liquid Flow Meter type FM.../.../...

Marking:  II 2 G Ex ia IIB T6 Gb

Manufacturer: FLUX-GERÄTE GMBH

Address: Talweg 12, 75433 Maulbronn, Deutschland

#### Description of supplements and modifications

The Flux-Liquid Flow Meter type FM.../.../... is a part of a flow measuring system and consists of the electronic system with enclosure. The Flux-Liquid Flow Meter serves for detection and display of the quantity of flowing media. The surface of the electronic enclosure of the Flux-Liquid Flow Meter complies with the requirements of electrostatic safety for equipment of Group IIB.

With this supplement an adjustment to the new state of the standards for electrical equipment for potentially explosive atmospheres is accomplished. The standard base is changed and reads in future:

EN 60079-0:2012

EN 60079-11:2012

Due to the changed standard, the labeling does not change.

The electrical data are determined new:

#### Electrical data

Internal supply

3 V (DC); for voltage supply approved battery type:  
VARTA Mangandioxid / Lithium, type 6032;  
IEC Design CR2032  
changing of battery only permissible outside the hazardous area.

Measuring input STA/STO  
(terminal X1-9, X1-7)

in type of protection Intrinsic Safety Ex ia IIC/IIB;  
maximum values:

Sheet 1/3

EC-type-examination Certificates without signature and official stamp shall not be valid. The certificates may be circulated only without alteration. Extracts or alterations are subject to approval by the Physikalisch-Technische Bundesanstalt.  
In case of dispute, the German text shall prevail.

## 1. SUPPLEMENT TO EC-TYPE-EXAMINATION CERTIFICATE PTB 11 ATEX 2005

	$U_o = 6.7 \text{ V}$ $I_o = 14 \text{ mA}$ $P_o = 24 \text{ mW}$ linear characteristic $C_i$ negligible small $L_i$ negligible small
Measuring input IMPULS (terminal X1-9, X1-6 or X2-1, X2-2)	in type of protection Intrinsic Safety Ex ia IIC/IIB; maximum values: $U_i = 13.5 \text{ V}$ $C_i$ negligible small $L_i$ negligible small
Output OK (terminal X1-5, GND)	in type of protection Intrinsic Safety Ex ia IIC/IIB; maximum values: $U_i = 13.5 \text{ V}$ $C_i$ negligible small $L_i$ negligible small
Output g S1/MVEN (terminal X1-4, GND)	in type of protection Intrinsic Safety Ex ia IIC/IIB; maximum values: $U_i = 13.5 \text{ V}$ $C_i$ negligible small $L_i$ negligible small
Output ERROR (terminal X1-3, GND)	in type of protection Intrinsic Safety Ex ia IIC/IIB; maximum values: $U_i = 13.5 \text{ V}$ $C_i$ negligible small $L_i$ negligible small
Output S2/KRIECH (terminal X1-2, GND)	in type of protection Intrinsic Safety Ex ia IIC/IIB; maximum values: $U_i = 13.5 \text{ V}$ $C_i$ negligible small $L_i$ negligible small
Output Impulse route (terminal X1-1, GND)	in type of protection Intrinsic Safety Ex ia IIC/IIB; maximum values: $U_i = 13.5 \text{ V}$ $C_i$ negligible small $L_i$ negligible small

For safety aspects, the output circuits are to be regarded as connected with each other.



Physikalisch-Technische Bundesanstalt  
Braunschweig und Berlin  
Nationales Metrologieinstitut



## 1. SUPPLEMENT TO EC-TYPE-EXAMINATION CERTIFICATE PTB 11 ATEX 2005

Test report: PTB Ex 15-25043

Konformitätsbewertungsstelle, Sektor Explosionsschutz  
On behalf of PTB:

Dr.-Ing. U. Johannsmeyer  
Direktor und Professor

Braunschweig, May 11, 2015



Sheet 3/3

EC-type-examination Certificates without signature and official stamp shall not be valid. The certificates may be circulated only without alteration. Extracts or alterations are subject to approval by the Physikalisch-Technische Bundesanstalt.  
In case of dispute, the German text shall prevail.

Physikalisch-Technische Bundesanstalt • Bundesallee 100 • 38116 Braunschweig • GERMANY