



[1] **TYPE EXAMINATION CERTIFICATE**  
(Translation)

[2] **for electrical equipment of the Equipment Group II, Category 3**

[3] Type Examination Certificate Number: **IBExU12ATEXB027 X**

[4] Equipment: **Flow Sensor**  
Type SS 20.600 Ex

[5] Manufacturer: **SCHMIDT Technology GmbH**

[6] Address: **Feldbergstr. 1**  
**78112 St. Georgen / Schwarzwald**  
**GERMANY**

[7] The design of the equipment mentioned under [4] and any acceptable variation thereto are specified in the schedule to this Type Examination Certificate.

[8] IBExU Institut für Sicherheitstechnik GmbH certifies that the equipment mentioned under [4] has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of the equipment intended for use in potentially explosive atmospheres given in Annex II to the Directive.  
The test results are recorded in Test Report IB-11-4-013 of 18 December 2012.

[9] Compliance with the Essential Health and Safety Requirements has been assured by compliance with EN 60079 -0:2009, EN 60079-11:2012 and EN 60079-15:2010.

[10] If the sign "X" is placed after the certificate number and the marking under [12], it indicates that the equipment is subject to special conditions for safe use specified under [17] in the schedule to this Type Examination Certificate and in the Operating instruction.

[11] This Type Examination Certificate relates only to the design and construction of the specified equipment. Further requirements of this Directive apply to the manufacture and supply of this equipment.

[12] The marking of the equipment mentioned under [4] shall include the following:

**II 3G Ex nA ic IIC T4 Gc X**  
-20 °C ≤ T<sub>a</sub> ≤ +70 °C

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Freiberg, 18 December 2012

By order

(Dr. Wagner)

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- Stamp -

Certificates without signature and stamp are not valid. Certificates may only be duplicated completely and unchanged. In case of dispute, the German text shall prevail.

Schedule

[13] **Schedule**

[14] **to TYPE EXAMINATION CERTIFICATE IBExU12ATEXB027 X**

[15] **Description**

The flow sensor is of the stationary measuring flow rate and temperature of the gaseous media. The devices are intended for use in hazardous areas requiring Category 3G equipment provided. The sensor probe which is in contact with the medium is operated in an intrinsically safe circuit.

Technical data

Ambient temperature enclosure: -20 °C up to +70 °C  
Medium temperature sensor probe: -40 °C up to +120 °C  
Degree of protection of the enclosure: IP 65 in accordance with EN 60529  
Sensor: IP 67 in accordance with EN 60529

**Electrical data**

Rated voltage: 24 V DC ± 20 %  
Current consumption: ≤ 250 mA  
Current output: 4-20 mA  
Voltage output: 0-10 V  
Pulse output: 0-100 Hz  
 $U_{max}$  28.8 V DC  
 $I_{max}$  100 mA  
  
Relay output (contactless): 0-100 Hz  
 $U_{max}$  30 V DC/ 21.8 V AC  
 $I_{max}$  50 mA

[16] **Test Report**

The test results are recorded in the Test Report IB-11-4-013. The test documents are part of the Test Report and listed there.

**Summary of test results:**

The flow sensor type SS 20.600 Ex fulfills the requirements of explosion protection for electrical equipment of the Equipment Group II and Category 3G in type of protection "nA" non-sparking device with an internal current in type of protection Intrinsic safety "ic" for explosion group IIC an temperature class T4.

[17] **Special conditions for safe use**

- The internal intrinsically safe circuit is isolated up to 30 V from the case.
- There is a power supply for protection class III (SELV or PELV).

[18] **Essential health and safety requirements**

Confirmed by compliance of norms (see [9]).

By order

Freiberg, 18 December 2012



(Dr. Wagner)