

(1) **EC-TYPE EXAMINATION CERTIFICATE**

(2) **Equipment and protective systems intended for use in potentially explosive atmospheres - Directive 94/9/EC**

(3) EC-Type Examination Certificate Number: **KEMA 07ATEX0073 X** Issue Number: **4**

(4) Equipment: **Magnetic Flowmeter Transmitter Type 8732E and associated Junction Box**

(5) Manufacturer: **Rosemount Inc.**

(6) Address: **12001 Technology Drive, Eden Prairie, MN 55344-3659, USA**

(7) This equipment and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

(8) KEMA Quality B.V., notified body number 0344 in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres given in Annex II to the directive.

The examination and test results are recorded in confidential test report number 212911400.

(9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

**EN 60079-0 : 2006**  
**EN 60079-11 : 2007**  
**EN 61241-0 : 2006**

**EN 60079-1 : 2007**  
**EN 60079-26 : 2004**  
**EN 61241-1 : 2004**

**EN 60079-7 : 2007**  
**EN 60079-27 : 2006**

(10) If the sign "X" is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use specified in the schedule to this certificate.

(11) This EC-Type Examination Certificate relates only to the design, examination and tests of the specified equipment according to the Directive 94/9/EC. Further requirements of the directive apply to the manufacturing process and supply of this equipment. These are not covered by this certificate.

(12) The marking of the equipment shall include the following:



<b>II 2 G</b>	<b>Ex d IIB/IIC T6 or</b>
<b>II 2 G</b>	<b>Ex de IIB/IIC T6 or</b>
<b>II 2 (1) G</b>	<b>Ex de [ia] IIB/IIC T6 (Transmitter)</b>
<b>II 2 G</b>	<b>Ex e II T6 (Junctionbox)</b>
<b>II (1) G</b>	<b>[Ex ia] IIC</b>
<b>II 1 D</b>	<b>Ex tD A20 IP66 T100 °C</b>

This certificate is issued on January 21, 2010 and, as far as applicable, shall be revised before the date of cessation of presumption of conformity of (one of) the standards mentioned above as communicated in the Official Journal of the European Union.

KEMA Quality B.V.



C.G. van Es  
 Certification Manager



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(13) **SCHEDULE**

(14) **to EC-Type Examination Certificate KEMA 07ATEX0073 X** Issue No. 4

(15) **Description**

The Model 8732E Flowmeter Transmitter is used to convert the electrical signal from flowtubes into measurement signals or a Foundation Fieldbus or a Profibus signal and to provide the drive current for the field coils. The Transmitter may be provided with a Local Operator Interface (LOI). The transmitter consists of a dual compartment enclosure. The compartment with electronics is in type of protection flameproof enclosures "d", the terminal compartment in type of protection flameproof enclosures "d" or increased safety "e".

The Model 8732E Flowmeter Transmitter is intended for integral mounting to the Model 8711 or 8705 flowtubes. For remote mounting of flowtubes to the transmitter the associated junctionbox in type of protection increased safety "e" can be used.

Ambient temperature range:

- with Local Operator Interface: -20 °C to +60 °C
- without Local Operator Interface: -50 °C to +60 °C

**Electrical data**

Power supply: 250 Vac, 1 A, 40 VA or 42 Vdc, 1 A, 20 W maximum.

Model 8732E Flow Transmitter (Ex d and Ex de version):

4-20 mA output circuit: 30 V dc, 30 mA, 900 mW maximum.

Model 8732E Flow Transmitter (Ex de [ia] version) with active intrinsically safe circuits:

4-20 mA output circuit: In type of protection intrinsic safety Ex ia IIC, with the following maximum values:  
 $U_o = 23,1 \text{ V}$ ;  $I_o = 179,8 \text{ mA}$ ;  $P_o = 1,03 \text{ W}$ ;  $C_o = 137 \text{ nF}$ ;  $L_o = 600 \text{ }\mu\text{H}$ .

Pulse circuit: In type of protection intrinsic safety Ex ia IIC, with the following maximum values:  
 $U_o = 23,1 \text{ V}$ ;  $I_o = 12,7 \text{ mA}$ ;  $P_o = 73,1 \text{ mW}$ ;  $C_o = 135,6 \text{ nF}$ ;  $L_o = 198 \text{ mH}$ .

Model 8732E Flow Transmitter (Ex de [ia] version) with passive intrinsically safe circuits:

4-20 mA output circuit: In type of protection intrinsic safety Ex ia IIC, only for connection to a certified intrinsically safe circuit, with the following maximum values:  
 $U_i = 30 \text{ V}$ ;  $I_i = 300 \text{ mA}$ ;  $P_i = 1 \text{ W}$ ;  $C_i = 924 \text{ pF}$ ;  $L_i = 0 \text{ }\mu\text{H}$ ;  
 $U_o = 13,2 \text{ V}$ ;  $C_o = 1 \text{ }\mu\text{F}$ .

Pulse circuit: In type of protection intrinsic safety Ex ia IIC, only for connection to a certified intrinsically safe circuit, with the following maximum values:  
 $U_i = 30 \text{ V}$ ;  $I_i = 100 \text{ mA}$ ;  $P_i = 1 \text{ W}$ ;  $C_i = 4,4 \text{ nF}$ ;  $L_i = 1,3 \text{ mH}$ ;  
 $U_o = 13,02 \text{ V}$ ;  $I_o = 2,08 \text{ mA}$ ;  $P_o = 6,7 \text{ mW}$ ;  $C_o = 1 \text{ }\mu\text{F}$ ;  $L_o = 1 \text{ H}$ .

(13) **SCHEDULE**

(14) **to EC-Type Examination Certificate KEMA 07ATEX0073 X** Issue No. 4

Model 8732E Flow Transmitter (Ex de [ia] version) for connection to a Fieldbus system:

Digital output circuit: In type of protection intrinsic safety Ex ia IIC, only for connection to a certified intrinsically safe circuit or a circuit in accordance with FISCO, with the following maximum values:  
 $U_i = 30 \text{ V}$ ;  $I_i = 380 \text{ mA}$ ;  $P_i = 5,32 \text{ W}$ ;  $C_i = 924 \text{ pF}$ ;  $L_i = 0 \text{ } \mu\text{H}$ .

From the safety point of view the circuits shall be considered to be connected to earth. The intrinsically safe 4-20 mA output and pulse circuits are not infallibly galvanically isolated from each other.

**Installation instructions**

The manual provided with the equipment shall be followed in detail to assure safe operation.

**Routine tests**

Transformer T700 shall be subjected to a routine voltage test in accordance with clause 11.2 of EN 60079-11, with a test voltage of 1500 V ac during 1 minute (or 1800 V ac during 1 second) between the primary and secondary windings.

(16) **Test Report**

KEMA No. 212911400.

(17) **Special conditions for safe use**

Contact Rosemount Inc. for information on the dimensions of the flameproof joints. The property class of the security screws which attach the flowtube or junctionbox to the transmitter is A2-70 or A4-70 SST.

(18) **Essential Health and Safety Requirements**

Covered by compliance with the standards listed at (9).

(19) **Test documentation**

As listed in Test Report No. 212911400.