

Translation

EU-Type Examination Certificate Supplement 2

Change to Directive 2014/34/EU

Equipment intended for use in potentially explosive atmospheres
Directive 2014/34/EU

EU-Type Examination Certificate Number: **DMT 00 ATEX E 075**

Product: **Electronic transmitter type ES, ES-PPA or ES-FF**

Manufacturer: **Heinrichs Messtechnik GmbH**

Address: **Robert-Perthel-Straße 9, 50739 Köln, Germany**

This supplementary certificate extends EC-Type Examination Certificate No. DMT 00 ATEX E 075 to apply to products designed and constructed in accordance with the specification set out in the appendix of the said certificate but having any acceptable variations specified in the appendix to this certificate and the documents referred to therein.

DEKRA EXAM GmbH, Notified Body number 0158, in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in the confidential Report No. BVS PP 00.2071 EU.

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

EN 60079-0:2012 + A11:2013 General requirements
EN 60079-11:2012 Intrinsic Safety "i"

If the sign "X" is placed after the certificate number, it indicates that the product is subject to the Special Conditions for Use specified in the appendix to this certificate.

This EU-Type Examination Certificate relates only to the design and construction of the specified product. Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.

The marking of the product shall include the following:



II 2G Ex ia IIC T6 Gb

DEKRA EXAM GmbH
Bochum, 2016-10-25

Signed: Jörg Koch

Certifier

Signed: Dr. Michael Wittler

Approver

13 Appendix

14 EU-Type Examination Certificate

DMT 00 ATEX E 075 Supplement 2

15 Product description

15.1 Subject and type

Electronic transmitter type ES, ES-PPA or ES-FF

15.2 Description

With this supplement the certificate is changed to Directive 2014/34/EU.
(Annotation: In accordance with Article 41 of Directive 2014/34/EU, EC-Type Examination Certificates referring to 94/9/EC that were in existence prior to the date of application of 2014/34/EU (20 April 2016) may be referenced as if they were issued in accordance with Directive 2014/34/EU. Supplementary Certificates to such EC-Type Examination Certificates, and new issues of such certificates, may continue to bear the original certificate number issued prior to 20 April 2016.)

Reason for the supplement:

Change to Directive 2014/34/EU

The electronic transmitter has been assessed in acc. with the current standard versions.

The standard EN 60079-27 (FISCO) has not been mentioned anymore, because the requirements of this standard has been implemented into EN 60079-11.

The schematic and the enclosure have changed slightly.

Description of Product:

The electronic transmitter serves for the recording of the position or angular position of a magnet at variable-area flowmeters.

The completely encapsulated electronic device of the transmitter is mounted in a light alloy housing together with corresponding terminals for the connection of the intrinsically safe circuits. The transmitter is provided to be installed in a housing with a min. degree of protection IP 20.

15.3 Parameters

15.3.1 Type ES

15.3.1.1 Input circuit (terminals 1 and 2)

Voltage	U_i	DC	30	V
Current	I_i		150	mA
Power	P_i		1	W
Effective internal inductance	L_i		0.24	mH
Effective internal capacitance	C_i		16	nF

15.3.1.2 Binary outputs 1 and 2: potentially free optocoupler circuits (terminals 3 - 4 and 5 - 6), each

Voltage	U_i	DC	30	V
Current	I_i		20	mA
Power	P_i		100	mW
Effective internal inductance	L_i		4	μ H
Effective internal capacitance	C_i		16	nF

15.3.2 Type ES-PPA
Input circuit (terminals 7 and 8)

15.3.2.1 For use as field device in a fieldbus system in accordance with FISCO with
Voltage

U_i DC 17.5 V

15.3.2.2 Or for connection to a circuit with the following max. values

Voltage

U_i DC 32 V

Current

I_i 280 mA

Power

P_i 2 W

The effective internal values are:

Effective internal inductance

L_i < 10 μ H

Effective internal capacitance

C_i < 5 nF

15.3.3 Type ES-FF
Fieldbus circuit (terminals 9 and 10)

15.3.3.1 For use as field device in a fieldbus system in accordance with FISCO
Voltage

U_i DC 17.5 V

15.3.3.2 Or for connection to a circuit with the following max. values

Voltage

U_i DC 32 V

Current

I_i 280 mA

Power

P_i 2 W

The effective internal values are:

Effective internal inductance

L_i < 10 μ H

Effective internal capacitance

C_i < 5 nF

15.3.4 Ambient temperature range

T_a -40 °C up to +70 °C

16 Report Number

BVS PP 00.2071 EU, as of 2016-10-25

17 Special Conditions for Use

None

18 Essential Health and Safety Requirements

The Essential Health and Safety Requirements are covered by the standards listed under item 9.

19 Drawings and Documents

Drawings and documents are listed in the confidential report.

We confirm the correctness of the translation from the German original.
In the case of arbitration only the German wording shall be valid and binding.

DEKRA EXAM GmbH
Bochum, dated 2016-10-25
BVS-Ben/Schu/Nu A 20160417

Certifier

Approver