





(1) **EC-Type Examination Certificate**

- (2) Equipment or protective system intended for use in potentially explosive atmospheres - **Directive 94/9/EC**
- (3) Examination certificate number: **SEV 14 ATEX 0107**
- (4) Equipment: Rotronic HygroFlex-EX
Types see page 2
- (5) Manufacturer: Rotronic AG
- (6) Address: Grindelstrasse 6, CH-8303 Bassersdorf
- (7) The equipment and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.
- (8) Electrosuisse SEV, notified body No. 1258 in accordance with article 9 of the Council Directive of the European Communities of 23 March 1994 (94/9/EC), certifies that this equipment has been found to comply with the essential health and safety requirements relating to the design and construction of equipment or protective systems intended for use in potentially explosive atmospheres given in Annex II to the Directive.
The results of the examination are recorded in confidential report no. 13-Ex-0052.01.
- (9) Compliance with the essential health and safety requirements has been assured by compliance with:
- | | | |
|-------------------------------|-----------------------|-----------------------|
| EN 60079-0:12 + A11:13 | EN 60079-11:12 | EN 60079-18:09 |
| EN 60079-26:07 | EN 60079-31:09 | EN 60079-7:07 |
- (10) If the sign «X» is placed after the certificate number, it indicates that the equipment or protective system is subjected to special conditions for safe use specified in the schedule to this certificate.
- (11) This examination certificate relates only to design and construction of the specified equipment in accordance with the directive 94/9/EC. Further requirements of this directive apply to the manufacturing process and the placing on the market of the equipment.
- (12) The marking of the equipment shall include the following:

	II 1/2G Ex eb ia mb IIC T5 Ga/Gb
	II 1/2D Ex ia tb IIIC T 80 °C Da/Db

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Product Certification




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(13)

Appendix

(14)

EC-Type Examination Certificate

(15) Description of the equipment

The Rotronic HygroFlex Ex device is a dual-channel meter for precise humidity and temperature measurement in an explosive atmosphere, where an ex classification is required. It consists of a measuring sensor and signal converter. The connected sensor is encapsulated in a stainless steel sensor tube and is designed for use in Zone 0/20. The transmitter itself is only designed for use in Zone 1/21 or Zone 2/22. The transmission signal is composed of two two-channel current loop interfaces, where the signal is formed in an accurate flow of each 4 to 20mA. Between the measurement circuit on the secondary side and the primary side is a galvanic separation.

Ratings: 20 ... 28 V DC resp.. 24 V DC +/- 15 %
Imax: 50 mA

Classification of installation and use: stationary
Ingress protection: IP66
Rated ambient temperature range (°C): Tamb = [-10 °C...+60 °C] with LCD
Tamb = [-40 °C...+60 °C] without LCD

Types:

HygroFlex Transmitter:

HF520-EX-WxxxDxxx
HF520-EX-WxxxXxxx
HF520-EX-DxxxDxxx
HF520-EX-DxxxXxxx

Sensors:

HC2-IMxxx-EX
HC2-IExxx-EX
HC2-SM-EX
HC2-LDPxxx-EX

(16) Test Report

13-Ex-0052.01

(17) Special conditions for safe use

None

(18) Fundamental essential health and safety requirements

Fulfilled by the standards applied.

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