



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

(2) Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres - **Directive 94/9/EC**



(3) EC-type-examination Certificate Number:

PTB 02 ATEX 2154

(4) Equipment: Valve solenoid, type 1259..

(5) Manufacturer: Nass Magnet GmbH

(6) Address: Eckenerstraße 4-6, 30179 Hannover, Germany

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

(8) The Physikalisch-Technische Bundesanstalt, notified body No. 0102 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 the confidential report PTB Ex 03-22254.

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

EN 50014:1997 + A1 + A2

EN 50020:1994

(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 in accordance 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:



II 2 G EEx ia IIC T6 oder T4

Zertifizierungsstelle Explosionsschutz

Braunschweig, April 01, 2003

By order:

Dr.-Ing. U. Gerlach



SCHEDULE

(13)

(14) **EC-TYPE-EXAMINATION CERTIFICATE PTB 02 ATEX 2154**

(15) Description of equipment

The valve solenoids are intended for installation and operation in hazardous areas. The coil is encapsulated in epoxy resin moulding compound. Diodes connected in parallel to the winding limit the breaking overvoltage. With use of a plug connector in accordance with DIN the degree of protection IP 65 will be met.

Electrical data

Supply

for connection to intrinsically safe circuits of category ia

Maximum values:

$$U_i \leq 28 \text{ V}$$

$$I_i \leq 115 \text{ mA}$$

$$P_i \leq 1,6 \text{ W}$$

The effective inductance and capacitance of the solenoid are negligibly low

$$L_i \approx 0$$

$$C_i \approx 0$$

With type 1259..., for temperature class T6, the ambient temperature shall not exceed the range from -40 °C up to + 50 °C. The maximum permissible medium temperature is 70 °C.

With type 1259..., for temperature class T4, the ambient temperature shall not exceed the range from -40 °C up to + 85 °C. The maximum permissible medium temperature is 80 °C.

(16) Test report PTB Ex 02-22254

(17) Special conditions for safe use

not applicable

(18) Essential health and safety requirements

met by compliance with the standards mentioned above

Zertifizierungsstelle Explosionsschutz

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