



IECEX Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: IECEx PTB 08.0023 Issue No: 2 Certificate history:
Status: **Current** Page 1 of 5 [Issue No. 2 \(2016-10-11\)](#)
Date of Issue: **2016-10-11** [Issue No. 1 \(2013-07-24\)](#)
Applicant: **nass magnet GmbH** [Issue No. 0 \(2008-07-01\)](#)
Eckenerstr. 4-6
30179 Hannover
Germany
Equipment: **Solenoids in Solenoid operator, types 1259..**
Optional accessory:
Type of Protection: **Intrinsic Safety "I"**
Marking: Ex ia IIC/IIB T6/T4 Gb

Approved for issue on behalf of the IECEx
Certification Body:

Dr. Ing. F. Lienesch

Position:

Head of department "Explosion Protection in Sensor Technology and
Instrumentation"

Signature:
(for printed version)

Date:

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting the [Official IECEx Website](#).

Certificate issued by:

Physikalisch-Technische Bundesanstalt (PTB)
Bundesallee 100
38116 Braunschweig
Germany





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Manufacturer: **nass magnet GmbH**
Eckenerstr. 4-6
30179 Hannover
Germany

Additional Manufacturing location(s):

nass magnet Hungaria Kft.

Henger Utca 2
8200 Veszprem
Hungary

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended.

STANDARDS:

The electrical apparatus and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards:

IEC 60079-0 : 2011 Explosive atmospheres - Part 0: General requirements
Edition:6.0

IEC 60079-11 : 2011 Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
Edition:6.0

*This Certificate **does not** indicate compliance with electrical safety and performance requirements other than those expressly included in the Standards listed above.*

TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in

Test Report:

[DE/PTB/ExTR08.0029/02](#)

Quality Assessment Report:

[DE/PTB/QAR08.0002/03](#)



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

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 or ISO the degree of ingress protection IP 65 will be met.

Electrical data

Supply: Only for connection to certified intrinsically safety circuits, category ia IIC
with the following maximum values:

$U_i = 28 \text{ V}$
 $I_i = 115 \text{ mA}$
 $P_i = 1.6 \text{ W}$
 $L_i \approx 0$
 $C_i \approx 0$

Only for connection to certified intrinsically safety circuits, category ia IIB
with the following maximum values:

$U_i = 32 \text{ V}$
 $I_i = 195 \text{ mA}$
 $P_i = 1.6 \text{ W}$
 $L_i \approx 0$
 $C_i \approx 0$

CONDITIONS OF CERTIFICATION: NO



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EQUIPMENT (continued):

For relationship between type and marking as well as the permissible electrical and thermal maximum values, reference is made to the following tables:

type 1259 /.. through type 1259 49 /..	temperature class	Ui / li /Pi	permissible range of the ambient temperature
Ex ia IIC Gb	T6	28 V / 115 mA / 1.6 W	-40 ...+ 50 °C
Ex ia IIB Gb	T6	32 V / 195 mA / 1.6 W	-40 ...+ 50 °C

type 1259 /.. through type 1259 49 /..	temperature class	Ui / li /Pi	permissible range of the ambient temperature
Ex ia IIC Gb	T4	28 V / 115 mA / 1.6 W	-40 ...+ 85 °C
Ex ia IIB Gb	T4	32 V / 195 mA / 1.6 W	-40 ...+ 85 °C

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.



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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above):

The EPL Ga changed to EPL Gb according to the requirements of IEC 60079-0.
Maximum value for Power Pi = 1.6 W added.