

[1] **EU-TYPE EXAMINATION CERTIFICATE - Translation**



[2] Equipment or protective systems  
intended for use in potentially explosive atmospheres, Directive 2014/34/EU

[3] EU-type examination certificate number **IBExU19ATEX1035** | Issue 0

[4] Product: **Valve solenoid**  
Type: GBKE 010 S01...

[5] Manufacturer: Magnet-Schultz GmbH & Co. KG

[6] Address: Allgäuer Straße 30  
87700 Memmingen  
GERMANY

[7] This product and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

[8] IBExU Institut für Sicherheitstechnik GmbH, Notified Body number 0637 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 test report IB-18-3-0159.

[9] Compliance with the essential health and safety requirements has been assured by compliance with:  
EN IEC 60079-0:2018      EN 60079-11:2012  
except in respect of those requirements listed at item [18] of the schedule.

[10] If the sign "X" is placed after the certificate number, it indicates that the product is subject to the specific conditions of use specified in the schedule to this certificate.

[11] 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.

[12] The marking of the product shall include the following:

**II 2G Ex ib IIC T4 Gb**  
**-5 °C ≤ T<sub>a</sub> ≤ +55 °C**

IBExU Institut für Sicherheitstechnik GmbH  
Fuchsmühlenweg 7  
09599 Freiberg, GERMANY

Tel: + 49 (0) 37 31 / 38 05 0  
Fax: + 49 (0) 37 31 / 38 05 10

By order

Dipl.-Ing. (FH) A. Henker



- Seal -  
(Notified Body number 0637)

Certificates without signature and seal are not valid. Certificates may only be duplicated completely and unchanged. In case of dispute, the German text shall prevail.

Freiberg, 2019-04-15

[13]

**Schedule**

[14]

**Certificate number IBExU19ATEX1035 | Issue 0**[15] **Description of product**

The valve solenoid type GBKE 010 S01... is applied as actuator for pneumatic applications in potentially explosive gas atmospheres of zone 1. The solenoid consists of a magnetic body and different types of valve parts (not relevant for explosion protection). The magnetic body is implemented in type of protection "i" (intrinsic safety). It contains a winding and two freewheeling diodes connected in parallel for limitation of interrupting transient overvoltage. Winding and diodes are completely over-molded by PPS for exclusion of explosive atmosphere. Electrical connection of the magnetic body is realized via an external plug and socket connector according to EN 61076-2-101 (model E). A suitable connection cable with mating connector must be provided by the user.

Technical data:

▪ Nominal input voltage	$U_N$	12 V DC or 24 V DC (depends on type)
▪ Maximum input voltage	$U_i$	30 V DC
▪ Maximum input current	$I_i$	200 mA
▪ Maximum input power	$P_i$	0.68 W
▪ Maximum internal inductance	$L_i$	negligible
▪ Maximum internal capacitance	$C_i$	negligible
▪ Duty cycle	ED	S1 (100 %)
▪ Ambient temperature	$T_a$	-5 °C...+55 °C

Multiple valve solenoids can be assembled on one valve manifold (see manufacturer's instructions for details).

[16] **Test report**

The test results are recorded in the confidential test report IB-18-3-0159 of 2019-04-11.  
The test documents are part of the test report and they are listed there.

*Summary of the test results*

The valve solenoid type GBKE 010 S01... complies with the requirements of explosion protection for electrical equipment of group II, category 2G, in type of protection intrinsic safety "i" for Group IIC, temperature class T4.

[17] **Specific conditions of use**

None

[18] **Essential health and safety requirements**

In addition to the essential health and safety requirements (EHSRs) covered by the standards listed at item [9], the following are considered relevant to this product, and conformity is demonstrated in the test report:

None

[19] **Drawings and Documents**

The documents are listed in the test report.

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