MAGNET-SCHULTZ

Your Specialists for electromagnetic Solutions



Media-separated solenoid valve

3
Product group

GPCS028

Function

- 2/2 NC
- Directly controlled
- For H₂O, Coolant, H₂ air, neutral gases
- Medium-isolated
- Nominal working pressure (NWP) up to 3 bara
- Maximum pressure (MAWP) up to 4 bara
- High switching life time

Construction

- Compact design
- Cartridge valve for assembly in valve block provided by customer
- Integrated filter at port 1 (input)
- Fastening by 2 diagonal drill holes on the solenoid base frame
- Electrical connection via plug TE Micro Quadlock 2-pole coding A
- Protection class according to DIN EN 60529 when properly installed IP6K7 / IP6K9K
- Serial mounting possible

Application examples

Purge/drain valve for fuel cells

Options

- Valve block
- Components with valves and sensors (water separator)
- Various electrical plug connections
- Other nominal widths
- Please contact us for application related solutions

Standards and approvals

• IATF 16949



Fig. 1: Type G PC S 028



Technical data

| G PC S 028 K69 | | V04 | V08 | V05 | V06 | V07 | |
|-----------------------------------------------------|-----------------|-------------------------------------------|-------|-------|-------|------|--|
| Function | 2/2 NC | | | | | | |
| Control | PWM > 1000 Hz | | | | | | |
| Rated voltage U _N | (V DC) | 12 (9 16) / 24 (20 32) | | | | | |
| Rated resistance R ₂₀ | (Ω) | 7.7 / 34 | | | | | |
| Max. attraction current A | (A) | 2.9 / 1.3 | | | | | |
| Holding current I _H | (A) | 0.4 / 0.2 | | | | | |
| Max. power consumption at holding current | (W) | 2.0 / 2.2 | | | | | |
| Insulation class | Н | | | | | | |
| Relative duty cycle | | S1 100% ED with holding current reduction | | | | n | |
| Reference temperature | (°C) | -25 +85 | | | | | |
| Leakage internal | ml/min (air) | <1 | | | | | |
| Leakage external ml/mi | n @ 8 bar (air) | <1 | | | | | |
| Switching service life (full strokes, regular opera | > 24 Mio. SSP | | | | | | |
| Nominal width | (mm) | 0,8 | 1,0 | 1,2 | 1,9 | 3,0 | |
| Kv at I _N | (m³/h) | 0,024 | 0,032 | 0,045 | 0,095 | 0,17 | |
| Rated working pressure (NWP) | (bara) | 3 | | | | | |
| Max. input pressure (MAWP) | (bara) | 4 | | | | | |
| Burst pressure | (bara) | > 6 | | | | | |
| Mesh width filter | (µm) | < 200 | | | | | |
| Circuit diagram | | | | | | | |
| Response time | (ms) | < 100 | | | | | |
| Weight | (kg) | ca. 0,15 | | | | | |
| Compliant to | | ELV directive (2000/53/EC) | | | | | |

Rated voltage

Nominal voltages are listed in above table and are also standard values. The possibility of winding adjustments to other nominal voltages can get checked on request.

The devices correspond to protection class III. Electrical equipment of protection class III may only be connected to low voltage systems (PELV, SELV)(IEC 60364-4-4-41).

Supply availability

The shown device is a basic device as a basis for customer-specific developments and designs. Samples and variants on request.

Information and remarks concerning European directives can be taken from the correspondent information sheet which is available under *Produktinfo.Magnet-Schultz.com*.

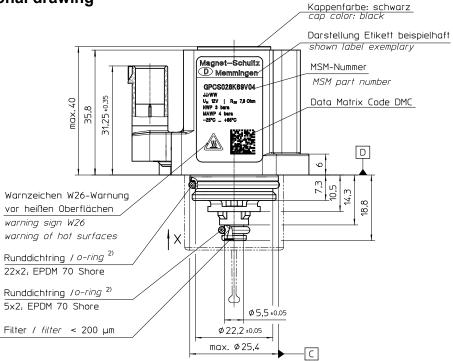
Please make sure that the described devices are suitable for your application. Our offers for these devices are based on the assumption of maximal 8 in an FMEA severity table, i. e. in case of malfunction of the device model as offered, there is, amongst others, no jeopardy to life or limb. Supplementary information concerning its proper installation can be taken also from the —Technical Explanation, the effective DIN VDE0580 as well as the relevant specifications.

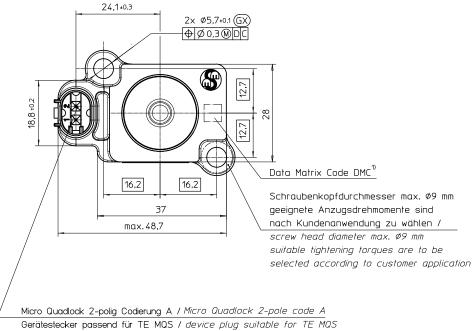
This part list is a document for technically qualified personnel.

This publication is for information purposes only and is not to be regarded as a binding representation of the products, unless this is expressly confirmed by us.



Dimensional drawing





- Stecker Female 2-polig / 1-reihig / plug female 2 pole / 1 row: 1-967644-1
- Einzeladerabdichtung / singel wire sealing (Isolationsdurchmesser / insulation diameter \$\phi_{1,4-2,1}\$ mm): 1-967067-1
- Pin (Aderquerschnitt / wire cross section 0,5-0,75 mm²): Silber / silver: 5-965906-6

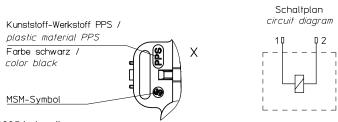


Fig. 2: Type G PC S 028 (Reference G01395 Index d)



Installation diagram

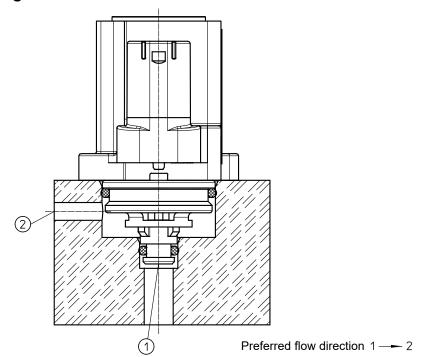


Fig. 3: Installation diagram Type G PC S 028 (Reference G01395 Index d)

Recommended cavity (sketch with recommended dimensions)

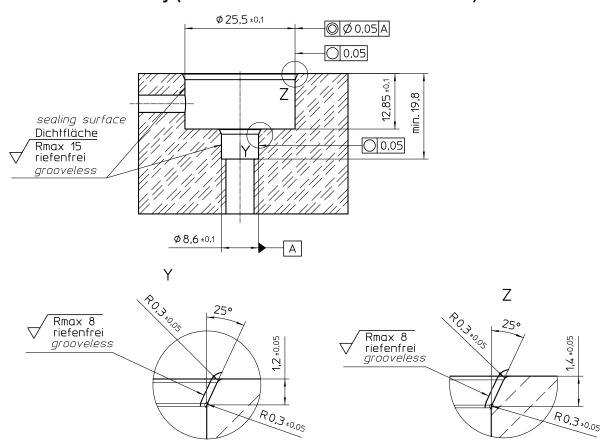


Fig. 4: Recommended cavity Type G PC S 028 (Reference G01395 Index d)



Type code

| Example | G PC S | 028 | K69 V04 | Nominal widthe | Material no. | |
|--------------------|--------|-----|---------|----------------|--------------------|----------------------|
| Туре | G PC S | | | | 12VDC | 24VDC 100%ED with |
| Size | | 028 | | | 100%ED with HSA | HSA |
| Code for execution | | | K69 V04 | 0,8 mm | G013950001 | G013950002 |
| | | | K69 V05 | 1,2 mm | G013951001 | G013951002 |
| | | | K69 V06 | 1,9 mm | G013952001 | G013952002 |
| | | | K69 V07 | 3,0 mm | G013953001 | G013953002 |
| | | | K69 V08 | 1,0 mm | G013967001 | G013967002 |

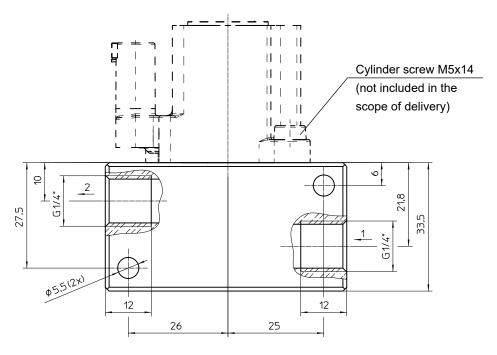
Example

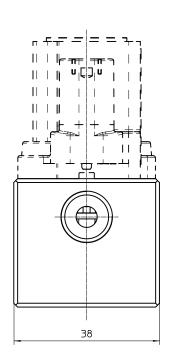
Type G PC S 028 K69 V04

Voltage == 12 V DC
Operating mode S1 / 100% / HSA
Material no. 1) G013950001

Accessories

Valve block E-G028-700T1





Order example valve block

Type E-G028-700T1 Material: EN AW-6082T6

¹⁾ optional specification

