## **MAGNET-SCHULTZ**

Your Specialists for electromagnetic Solutions



# Media-separated solenoid valve

3
Product group

**GPCS028** 

#### **Function**

- 2/2 NC
- Directly controlled
- For H<sub>2</sub>O, Coolant, H<sub>2</sub> 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**

- 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 <sub>N</sub>	(V DC)	12 (9 16) / 24 (20 32)					
Rated resistance R <sub>20</sub>	(Ω)	7.7 / 34					
Rated current I <sub>N</sub>	(A)	2.9 / 1.3					
Holding current I <sub>H</sub>	(A)	0.4 / 0.2					
Rated power P <sub>20</sub>	(W)	2.0 / 2.2					
Insulation class		Н					
Relative duty cycle		S1 100% ED with holding current reduction					
Reference temperature	(°C)	-25 +85					
Leakage internal	ml/min (air)	<1					
Leakage external	ml/min @ 8 bar (air)	<1					
Switching service life (full strokes, reg	> 24 Mio. SSP						
Nominal width	(mm)	0,8	1,0	1,2	1,9	3,0	
Kv at I <sub>N</sub>	(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		2 					
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 be only connected to low voltage systems (PELV, SELV)(IEC 60364-4-4-1).

#### 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*.

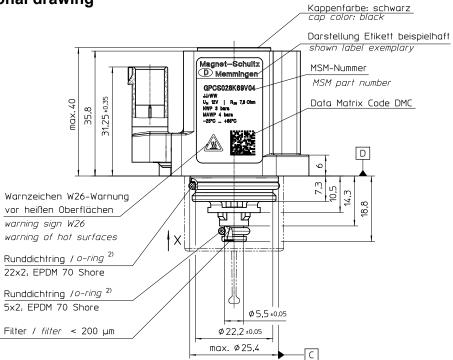
Please make sure that the described devices are suitable for your application. Our offers for these devices are based on the assumption of maximal 8 in an FMEA severity table, i. e. in case of malfunction of the device model as offered, there is, amongst others, no jeopardy of life or limb. Supplementary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

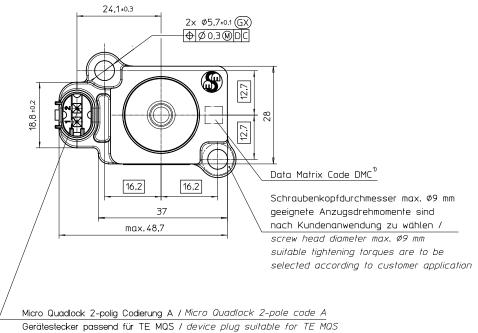
This part list is a document for technically qualified personnel.

The present publication is for informational purposes only and shall not be construed as mandatory illustration of the products unless otherwise confirmed expressively.



# Dimensional drawing





- Stecker Female 2-polig / 1-reihig / plug female 2 pole / 1 row: 1-967644-1
- Einzeladerabdichtung / singel wire sealing (Isolationsdurchmesser / insulation diameter Ø1,4-2,1 mm): 1-967067-1
- Pin (Aderquerschnitt / wire cross section 0,5-0,75  $\rm mm^2$  ): Silber / silver : 5-965906-6

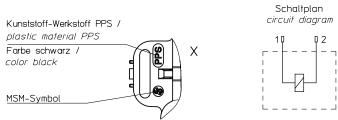


Fig. 2: Type G PC S 028 (Reference G01395 Index d)



#### **Installation diagram**

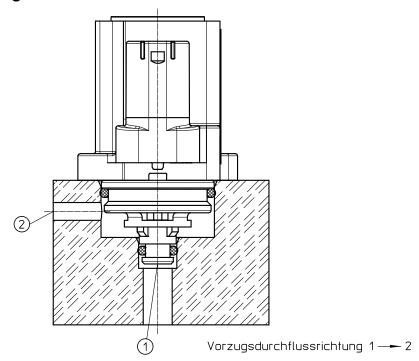


Fig. 3: Installation diagram Type G PC S 028 (Reference G01395 Index d)

## Recommended cavity (sketch with recommended dimensions)

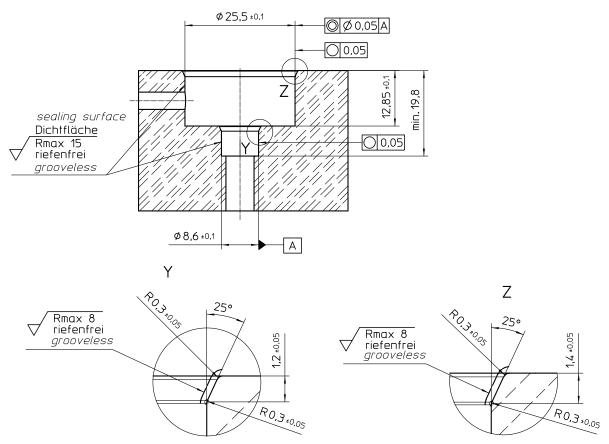


Fig. 4: Recommended cavity Type G PC S 028 (Reference G01395 Index d)



## Type code

Example	G PC S	028	K69 V04	Nominal widthe	Material no.	
Туре	G PC S				12VDC	24VDC
Size		028			100%ED with HSA	100%ED with 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

1) optional specification

