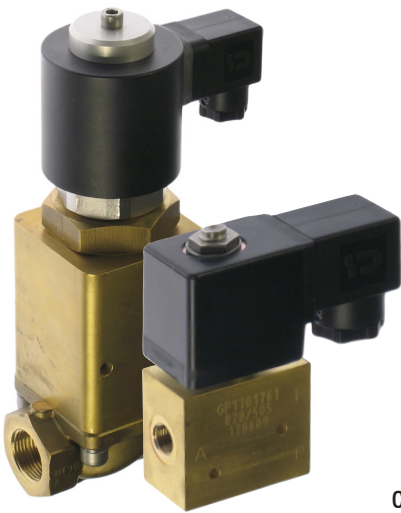


## 3/2-WAY SOLENOID VALVE, DIRECT OPERATED SEAT VALVE (POPPET DESIGN)



## Description:

- 3/2-way valve
- valve in poppet design
- direct operated
- female thread acc. to ISO228
- duty cycle 100% (VDE0580)
- installation position with upright solenoid
- connector plug acc. to EN 175301-803 or terminal box (depending on the solenoid design)

## Range of application:

- viscosity 22mm<sup>2</sup>/s
- medium temperature -10°C up to +80°C
- ambient temperature: -10°C up to +35°C
- working pressure from 0bar
- no pressure difference required
- IP65 (with a professionally installed connector socket) according to DIN 40050
- for hot and cold water, oil and air
- Universal valve - each port can be pressurized

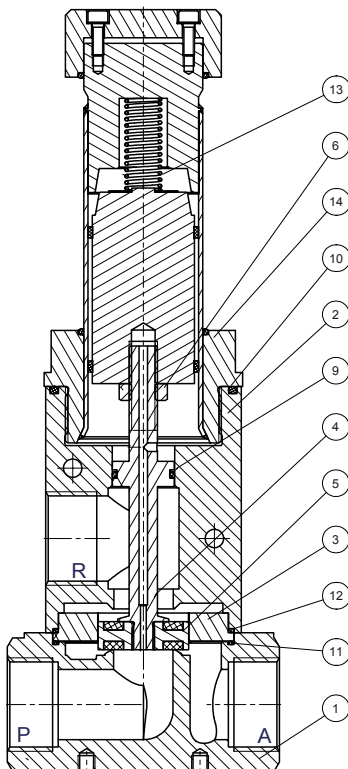
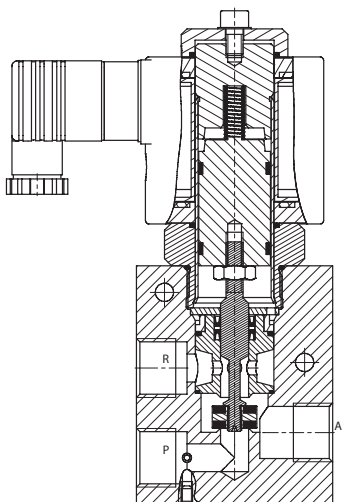
## Comments:

**Voltage tolerance +10% / -10%** at maximum pressure and standard ambient temperature. Please note the **flow direction** (marked with arrow on the body) during installation.

The design is up to the nominal size G 1/2 "designed as a block body (in the photo at the front). Larger nominal sizes consist of a body with adapter (in the photo at the back).

Other voltage, coil power or sealing on request! These can be found in the catalog under "spare parts and accessories". Included is the **connector socket GS02 (28x28mm)**. Further connector sockets can be found in the catalog under square parts and accessories. **Higher protection class** than IP65 is possible with special coils and connector sockets.

**Threads according to EN 228:** It describes the threaded connection of a parallel male thread with a parallel female thread and is marked with "G".



pos.	part	brass		stainless steel		optional material	
1	body	brass	A	1.4571 (up to G1/2") 1.4581 (from G3/4")	O	red brass	B
2	connecting piece						
3	guiding star						
5	valve disk (sealing)	NBR	B	NBR	B	FKM* EPDM* PTFE*	V E T
9-12	O-rings plunger	NBR 1.4104		NBR 1.4104			

## wear parts (can vary depending on the valve design):

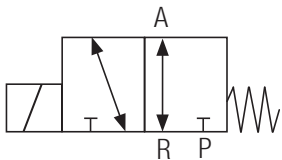
- Pos. 5: valve disk
- Pos. 4: spindle
- Pos. 9-12: O-rings
- Pos. 13: spring
- Pos. 14: tube
- groove ring
- plunger
- solenoid
- connector plug or terminal box

An overview of the complete material key can be found in the catalog at the beginning of the chapter of the respective product group. \*Other medium temperature for optional sealing possible!

## Optionen:

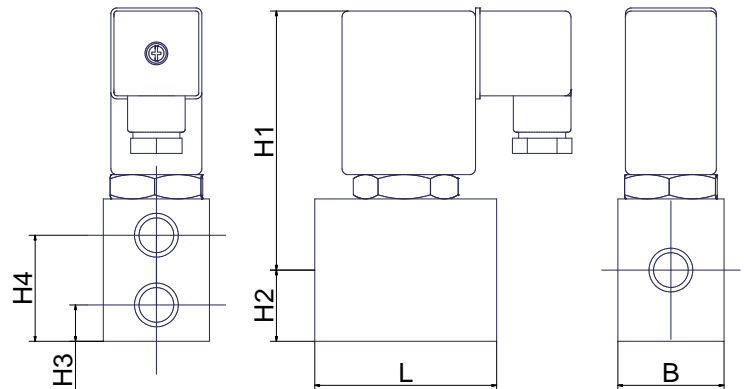
- NO: opened in rest position
- HA: manual override
- OF: free of oil and grease
- CV: Gehäuse chemisch vernickelt
- BU: free of non-ferrous metal
- NPT: pipe thread ANSI B 1.20.1
- EX: explosion protection acc. to ATEX:  
Ex II 2G EEx em II T4  
Ex II 2G EEx dII cT6
- PS: positioning indicator
- AA: sealed plunger spot
- HB: Halbautomatik

## 3/2-WAY SOLENOID VALVE, DIRECT OPERATED SEAT VALVE (POPPET DESIGN)



Function UN (mutually flow through)

All inputs A, R and P can be pressurized.  
The functions NC, NO, mix and distribute possible.



Representation of the dimensional drawing based on the design up to 1/2 ". The dimensioning for the larger designs is identical.

match code	size [inch]	nominal size [mm]	working pressure [bar]		L [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	B [mm]	weight [kg]	CV** [m <sup>3</sup> /h]
			min.	max. AC / DC								
GMV7300-02xx60-G04-x	1/4	6	0	8	55	79,5	23,5	12,4	35,5	30	0,6	0,5
GMV7300-02xx110-G08-x	1/4	11	0	10	70	155	25	16	48	40	3	0,8
GMV7300-03xx110-G08-x	3/8	11	0	10	70	155	25	16	48	40	3	1
GMV7300-04xx110-G08-x	1/2	11	0	10	70	155	25	16	48	40	3	1,2
GMV7300-05xx220-G09-x	3/4	22	0	10	95	217	23	23	80,5	70	6,2	5,3
GMV7300-06xx220-G09-x	1	22	0	10	95	217	23	23	80,5	70	6,2	5,3
GMV7300-07xx320-G10-x	1 1/4	32	0	10	132	277	33	33	117	100	16	21
GMV7300-08xx320-G10-x	1 1/2	32	0	10	132	277	33	33	117	100	16	21
GMV7300-09xx400-G11-x	2	40	0	8	160	390	40	40	142	112	30	29

\*\*CV value: The nominal flow rate CVs acc. to VDI/VDE 2173 shows the water quantity in cubic meter per hour with the valve fully opened,  $\Delta p=1$  and the water temperature between 5°C and 30°C.

\*\*\*solenoid power for AC: listed are the pick-up power and the holding power.

#### Notes:

For contaminated fluids, the stem of a strainer is recommended. When the magnetic coil (DC) is at operating temperature, the power consumption for physical reasons is reduced by up to 30%.

#### Danger:

Explosion-proof magnets reduce the permissible temperature ranges.

#### solenoid power:

Type	AC***	DC
G04	43VA / 24VA	18,5W
G08	with separate rectifier	30W
G09		46W
G10		100W
G11		150W



#### Order information:

1: type: GMV7300

2: connection size: 02-09 (see table)

#### 3: materials:

- 1. digit: body material  
A=brass  
O=stainless steel  
B=red brass
- 2. Stelle: digit  
B=NBR (standard)  
V=FKM  
E=EPDM  
T=PTFE

4. digit: nominal size in 1/10mm (s. table)

#### 5: operation:

- 1. digit (3 digits): specification solenoid type (see table / options)
- 2. Stelle: Angabe der Spannung:  
0: 230V AC  
1: 24V DC  
2: 110V AC (auf Anfrage)  
Other voltage on request.

#### 6: options (siehe „options“)

Please ask for field specifications that are not listed in this data sheet.

Before installation please consider the installation and maintenance manual, especially the safety indications!

## Heating and power of solenoid coils

default solenoid valves are designed for continuous operation (100% ED = power-on time) under normal operating conditions. The pulling force of a solenoid coil is basically influenced by three elements:

- the self-heating of the magnet coil
- the medium temperature
- the ambient temperature

Solenoid coils are by default designed for a maximum ambient temperature of +35 °C. This specification applies for the maximum allowable operating pressure specified in the data sheet of the corresponding valve, 100% duty cycle and a medium temperature of +80 °C.

A higher ambient temperature is possible, when lower values are applied for the other influencing parameters. When the max. operation pressure and max. ambient temperature of +50 °C is given the medium temperature is not allowed to be higher than max. +50 °C. In addition to that, deviations from the default design temperature range are possible, e.g. when temperature coils or other constructive measures are used. Please contact the MIT headquarters to discuss the specific application.

More precise specifications and technical data with regard to the operating conditions can be found in the data sheets of the solenoid coils and the solenoid valve regarded. Please observe that the surface temperature of a permanently loaded coil can amount up to +120 °C, solely by the self-heating of the coil. The power consumption of our default solenoid valves was calculated to DIN VDE 05820 for a coil temperature of +20 °C.