

## 2/2-WAY SOLENOID VALVE, PILOT-OPERATED IN PISTON DESIGN FOR STEAM APPLICATIONS

**Description:**

- 2/2-way valve
- piston design
- pilot-operated
- female thread acc. to ISO228
- duty cycle 100% (VDE0580)
- any installation position, upright solenoid position recommended
- close muting
- high flow rate

**Range of application:**

- viscosity 40mm<sup>2</sup>/s
- medium temperature -10°C up to +200°C
- ambient temperature: -10°C up to +50°C
- working pressure: 0.1 - 10 bar
- The minimum pressure is necessary for pressure difference
- IP65 (with a professionally installed connector socket) according to DIN40050 --> DIN EN 60529
- for hot water and steam

**Comments:**

Only minor solenoid force is required, because a pilot hole uses the pressure difference.

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

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

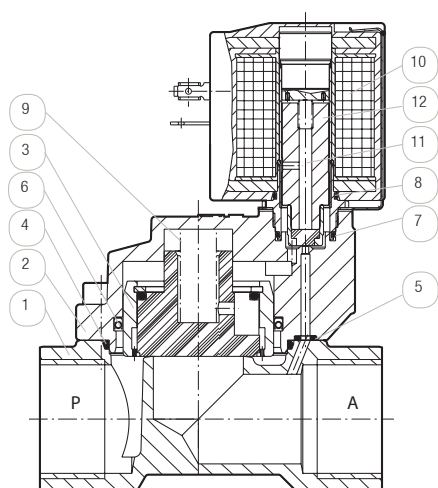
**Threads according to EN 228:** It describes the threaded connection of a parallel male thread with a parallel female thread and is marked with "G".

**References:**

For contaminated fluids insertion of a strainer is recommended

At operating state temperature the input power of a coil decreases by up to ca. 30% due to physical reasons.

**Attention!** The conditions imposed on the Ex approvals lead to reduction of the permissible standard temperature ranges in the cases of explosion protected solenoids.



pos.	part	brass		optional material
1	body	CW617N	A	-
2	cover	CW617N		-
3	valve piston including sealing	PTFE	T	-
4	sealing ring	FPM/PTFE		-
5	o-ring	FPM/PTFE		-
6	lip seal	FPM/PTFE		-
7	o-ring	FPM/PTFE		-
8	o-ring	FPM/PTFE		-

**wear parts:**

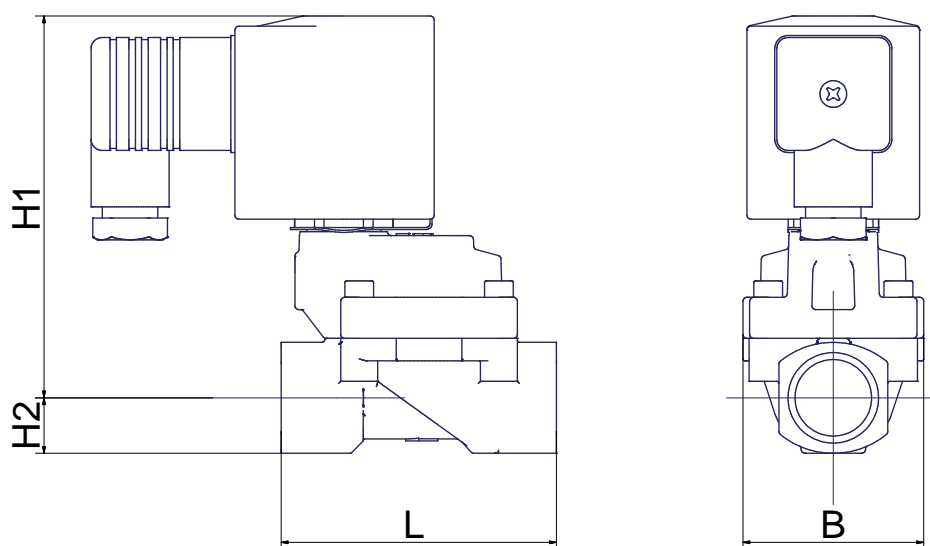
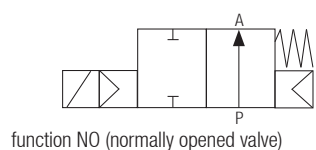
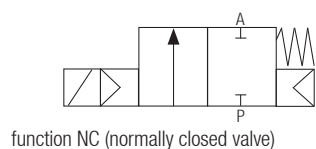
- Pos. 3: valve piston with sealing
- Pos. 9: pressure spring
- Pos. 4: sealing ring
- Pos. 5: o-ring
- Pos. 6: lip seal
- Pos. 10 solenoid
- Pos. 8: o-ring
- Pos. 11: pressure spring
- Pos. 12: plunger
- Pos. 8: o-ring

An overview of the complete material code you can find at the beginning of each product section of the product catalogue.

**options:**

- NO: opened in rest position
- HA: manual override

## 2/2-WAY SOLENOID VALVE, PILOT-OPERATED IN PISTON DESIGN FOR STEAM APPLICATIONS



match code	size [inch]	nominal size [mm]	working pressure [bar]			L [mm]	H1 [mm]	H2 [mm]	B [mm]	weight [kg]	CV* [m³/h]	solenoid power	
			min.	max. AC	max. DC							AC*	DC
GMV8532-02AT80-B31-x	G1/4	8	1	25	25	60	93.5	11.5	44	0.8	2.2	15/10VA	10W
GMV8532-03AT100-B31-x	G3/8	10	1	25	25	60	93.5	11.5	44	0.8	3.4	15/10VA	10W
GMV8532-04AT120-B31-x	G1/2	12	1	25	25	67	93.5	14	44	0.8	4.4	15/10VA	10W
GMV8532-05AT200-B31-x	G3/4	20	1	25	25	80	102.5	16.5	50	1.3	7	15/10VA	10W
GMV8532-06AT250-B31-x	G1	25	1	25	25	95	110.5	21	62	1.7	10.5	15/10VA	10W

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

\*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.



## Order information:

1: type: GMV8532

2: connection size: 02-06

3: materials:

- 1. digit: body material A (brass)
- 2. digit: sealing T (PTFE)

4. nominal size in 1/10mm (see table)

## 5: operation

- specification of the solenoid type: B31
- specification of voltage:  
0: 230V AC  
1: 24V DC  
Other voltage on request.

## 6: options (see "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 +50 °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 +200 °C.

Operating temperature solenoid (DC) reduces the power consumption. For physical reasons up to approx. 30%.