

# Solenoid Valve, Metal

## Construction

The GEMÜ 8257 2/2-way solenoid valve with a positive lift diaphragm has a brass or stainless steel valve body. All medium wetted parts are made of NBR, FPM, EPDM, PVDF, brass or stainless steel.

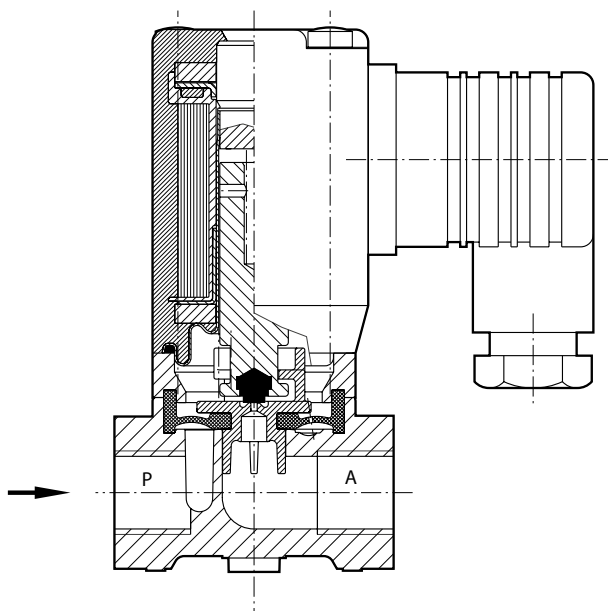
The electrical connection is made via a plug to DIN EN 175301-803 form A. The coil has isolation class F as standard. The valve is suitable for inert media such as air, water and oil.

## Advantages

- Valve operates without minimum pressure differential ( $\Delta p$ )
- Soft closing action
- Compact design
- Suitable for vacuum applications
- Explosion protected solenoids acc. to ATEX available as an option
- Optimum media compatibility due to choice of materials
- NPT thread available
- Option: for liquids and steam up to 150°C



Sectional drawing - GEMÜ 8257



## Technical data

### Working medium

Inert gaseous or liquid media which have no negative impact on the physical and chemical properties of the body and seal material.

### Max. perm. viscosity of working medium

25 mm<sup>2</sup>/s (cSt)

**Note:** When used with contaminated media we recommend installing a strainer in front of the valve (on request)

### Perm. temperature of working medium

-10° to +90°C

-10° to +150°C only with seal material HNBR (code 7)

### Ambient temperature

-10° to +50°C

### Mounting position

Optional, preferably coil vertically upwards

### Power consumption

**AC operation:** Pull in / Hold in  
Control function 1 13 VA

**DC operation:** Pull in / Hold in  
Control function 1 12 W

### Protection class

IP 65 (with plug)

### Permissible voltage tolerance

±10 % to VDE 0580

### Rating

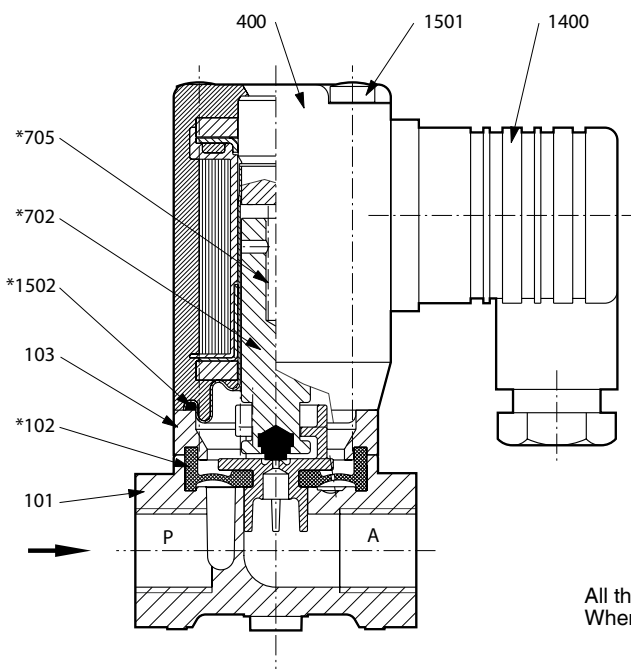
Continuously rated

Nominal size [DN]	Connection - Threaded sockets		Operating pressure [bar]		K <sub>v</sub> value [m <sup>3</sup> /h]	Weight [kg]
	DIN ISO 228	NPT	Seal material			
			Code 2, 4, 14	Code 7		
10	G 1/4	1/4" NPT	0 - 10	0 - 6	1.5	0.5
	G 3/8	3/8" NPT			1.7	0.5
	G 1/2	1/2" NPT			1.7	0.6

### Wiring note

Special wiring on request. When using electronic switches and additional wiring, carefully design out any potential residual currents upon installation.

### Spare parts



- 101 Valve body
- \*102 Diaphragm
- 103 Spacer
- 400 Solenoid
- \*702 Armature
- \*705 Compression spring
- 1400 Plug
- 1501 Oval head screw
- \*1502 O-ring

All the parts marked \* are included in the wearing parts kit.  
When ordering spare parts, please state the complete valve order number.

## Order data

Body configuration	Code
2/2-way	D

Connection	Code
G 1/4 Threaded sockets DIN ISO 228	G2
G 3/8 Threaded sockets DIN ISO 228	G3
G 1/2 Threaded sockets DIN ISO 228	G4
G 1/4 Threaded sockets NPT	N2
G 3/8 Threaded sockets NPT	N3
G 1/2 Threaded sockets NPT	N4

Valve body material	Code
CW617N, Brass	12
1.4408, stainless steel	37

Seal material	Code
NBR (Perbunan N) max. 90°C	2
FPM max. 90°C	4
EPDM max. 90°C	14
HNBR max. 150°C	7

Control function	Code
Normally closed	1

Supply voltage	Code
24V AC	24
110V AC	110
230V AC	230
24V DC	24

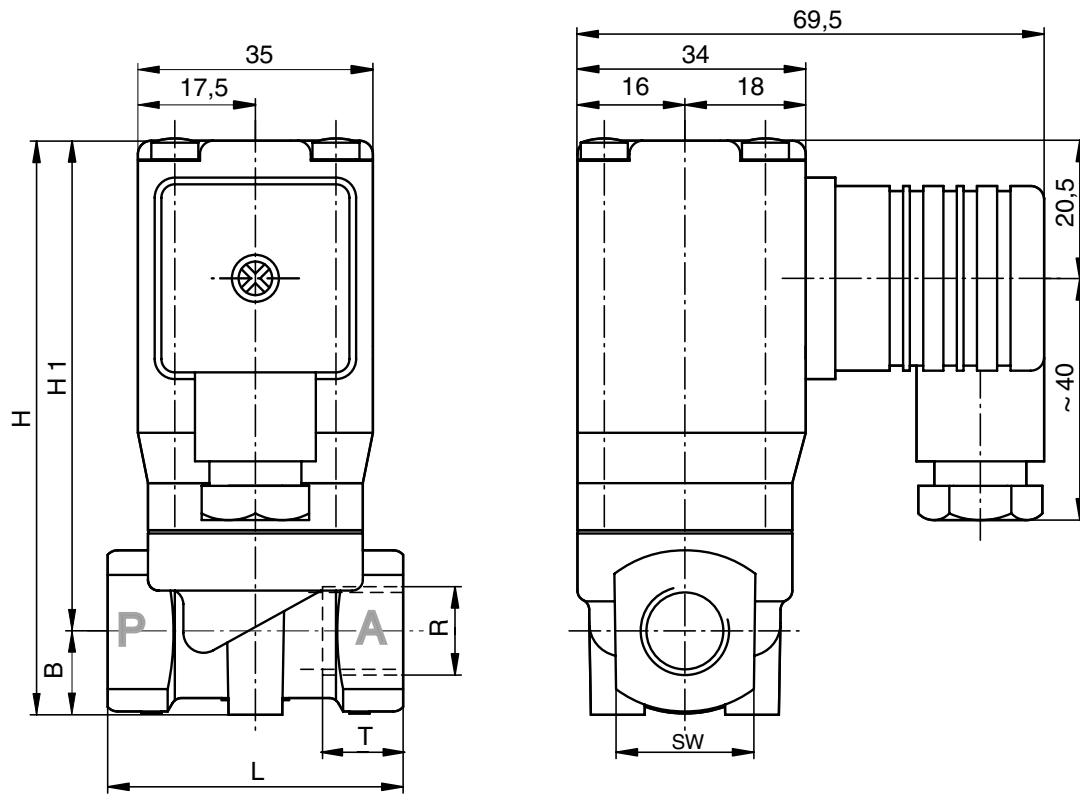
Frequency	Code
50 Hz	50
60 Hz	60
DC	DC

Optional version	K-Number
Coil protection class EEx me II T3 ATEX marking $\text{Ex}$ II 2 GD	6419

Available voltages / Frequency		
<b>AC</b>	24V AC	50 / 60 Hz
	110V AC	50 / 60 Hz
	230V AC	50 / 60 Hz
<b>DC</b>	24V DC	-
	Other voltages on request	

Order example	8257	10	D	G2	12	2	1	230	50	6419
Type	8257									
Nominal size		10								
Body configuration (code)			D							
Connection (code)				G2						
Valve body material (code)					12					
Seal material (code)						2				
Control function (code)							1			
Supply voltage (code)								230		
Frequency (code)									50	
Optional version (K-no.)										6419

## Dimensions [mm]



### Body dimensions - GEMÜ 8257 [mm]

DN	B	H	H1	L	SW	Threaded sockets DIN ISO Connection code 1		Threaded sockets NPT Connection code 31	
						R	T	R	T
10	14	87	73.0	44	21	G 1/4	12	1/4" NPT	10
		87	73.0	44	21	G 3/8	12	3/8" NPT	10
		90	74.5	60	27	G 1/2	15	1/2" NPT	13

### Other metal solenoid valves



#### GEMÜ 8253

Servo assisted solenoid valve with a positive lift diaphragm without pressure differential  
Brass or stainless steel  
DN 10 - 25 (0 - 16 bar)



#### GEMÜ 8258

Servo assisted solenoid valve with pressure differential  
Brass or stainless steel  
DN 8 - 15 (0.1 - 16 bar)



#### GEMÜ 8259

Direct acting solenoid valve without pressure differential  
Brass or stainless steel  
DN 1.5 - 5 (0 - 25 bar)

For other solenoid valves, accessories and other products, please see our Product Range catalogue and Price List. Contact GEMÜ.

**GEMÜ**® VALVES, MEASUREMENT  
AND CONTROL SYSTEMS

