

**Construction**

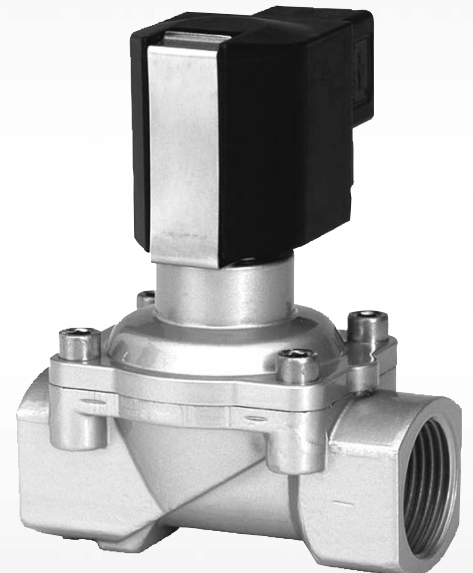
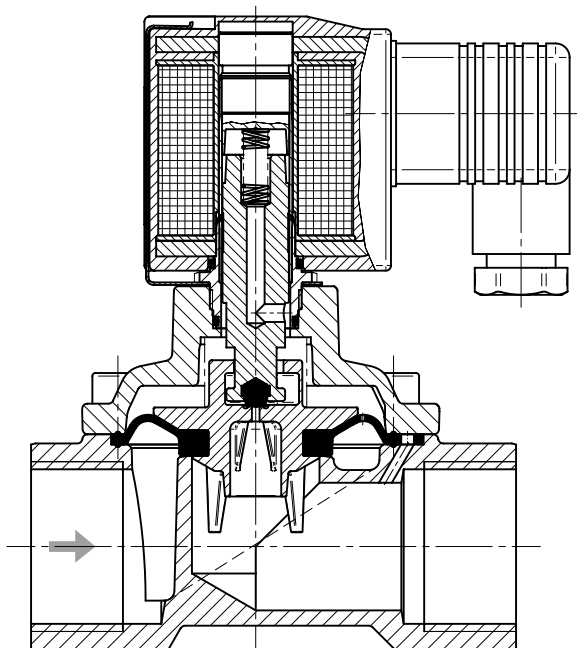
The GEMÜ 8253 2/2-way solenoid valve with a positive lift diaphragm has a brass or stainless steel valve body. All medium wetted parts are made of NBR, FPM, EPDM, PVDF, brass or stainless steel.

The electrical connection is made via a plug to DIN EN 175301-803 form A. The DC design includes a rectifier in the terminal enclosure, so that the valve can be used with an AC supply. 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 ( $\Delta p$ )
- Excellent flow capability
- Soft closing action
- Suitable for vacuum applications
- Simple coil replacement without tools (*Click-on®*)
- NPT thread available
- Explosion protected solenoids acc. to ATEX available as an option
- UL and CSA approvals available

Sectional drawing GEMÜ 8253



## Technical data

### Working medium

Inert gaseous and 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

Higher temperatures on request

### Ambient temperature

-10° to +50° C

### Power consumption

#### AC operation:

Pull in / hold in		
DN 8 - 25	Control function 1	20 VA
DN 32 - 50	Control function 2	45 VA
DN 32 - 50	Control function 1	42 VA

#### DC operation:

Pull in / hold in		
DN 8 - 25	Control function 1	18 W
DN 8 - 25	Control function 2	38 W
DN 32 - 50	Control function 1	38 W

### Protection class

IP 65 (with plug)

### Permissible voltage tolerance

±10 % to VDE 0580

### Mounting position

Optional, preferably coil vertically upwards

### Rating

Continuously rated

Nominal size	Threaded socket connections		Operating pressure	K <sub>v</sub> value	Weight [kg]		
	DN	DIN ISO 228 (code 1)			NPT (code 31)	[bar]	(m <sup>3</sup> /h)
8		G 1/4	1/4" NPT	0 - 10	1.9	0.7	0.8
10		G 3/8	3/8" NPT	0 - 10	3.0	0.7	0.8
15		G 1/2	1/2" NPT	0 - 10	3.4	0.8	0.8
20		G 3/4	3/4" NPT	0 - 10	5.8	0.9	1.0
25		G 1	1" NPT	0 - 10	8.0	1.3	1.3
32		G 1 1/4	1 1/4" NPT	0 - 16	23.0	4.3	4.3
40		G 1 1/2	1 1/2" NPT	0 - 16	25.0	4.1	4.3
50		G 2	2" NPT	0 - 16	41.0	5.1	5.4

## Notes

### Installation note

Caution: DC solenoids are designed for unsmoothed voltages, e.g. as obtained from a bridge rectifier.

### Wiring note:

Special wiring on request. When using electronic switches and additional wiring avoid inadmissible residual currents by proper design.

## Order data

Body configuration	Code
2/2-way	D

Connection	Code
Threaded sockets DIN ISO 228	1
Threaded sockets NPT	31

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

Seal material	Code
NBR (Perbunan)	2
Other seal materials on request.	

Control function	Code
Normally closed	1
Normally open	2

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

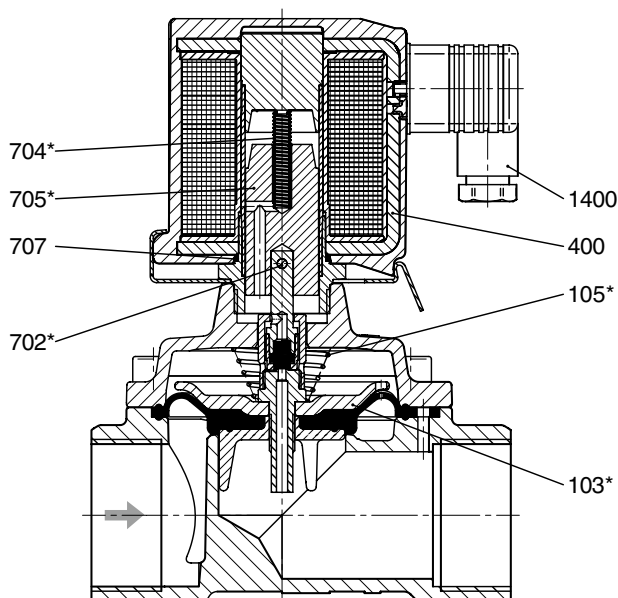
Mains frequency	Code
50 Hz	50
DC	DC

Special function	Code
ATEX marking :	
⊕ II 2 G EEx me II T3 / T4	
⊕ II 2 G EEx m II T3 / T4	
II 2 D T140°C	X
Other versions acc. to ATEX or US regulations on request	

Available voltages / Frequency		
AC	24 V AC	50 Hz
	110 V AC	50 Hz
	230 V AC	50 Hz
DC	24 V DC	-

Order example	8253	25	D	1	12	2	1	230	50/60	X
Type	8253									
Nominal size		25								
Body configuration (code)			D							
Connection (code)				1						
Valve body material (code)					12					
Seal material (code)						2				
Control function (code)							1			
Supply voltage (code)								230		
Mains frequency (code)									50/60	
Special function (code)										X

## Spare parts

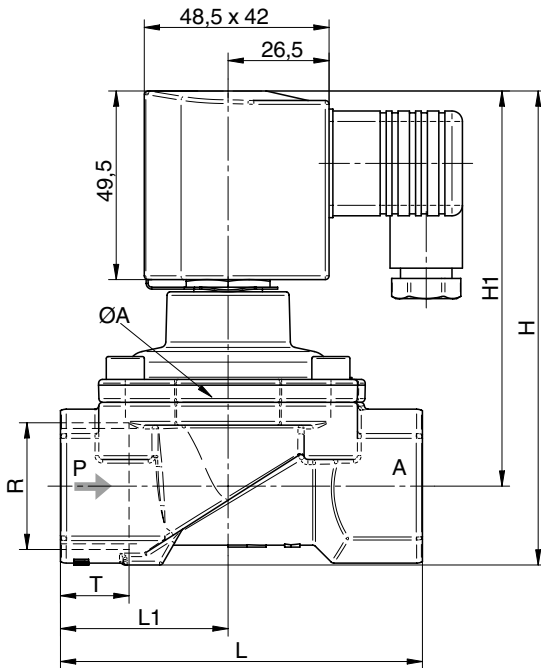


- \*103 Diaphragm
- \*105 Compression spring
- 400 Solenoid
- \*702 DN 8-25 O-ring
- \*702 DN 32-50 cylindrical pin
- \*704 Compression spring
- \*705 Armature
- \*707 O-ring
- 1400 Plug (included)

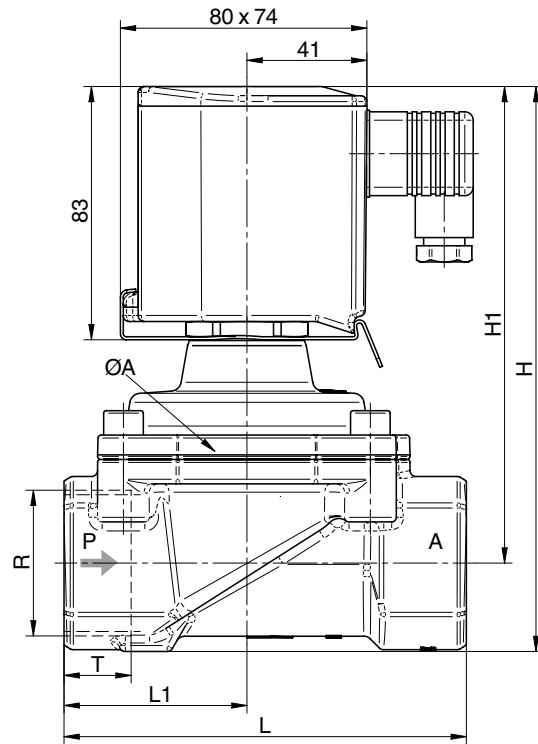
All the parts marked \* are included in the wearing parts kit. When ordering spare parts, please state the complete valve order number.

## Dimensional drawings - GEMÜ 8253

DN 8 - DN 25



DN 32 - DN 50



Body dimensions GEMÜ 8253 [mm]

DN	øA	H	H1	L	L1	Threaded sockets DIN ISO		Threaded sockets NPT	
						Connection code 1		Connection code 31	
						R	T	R	T
8	44	104.0	92.5	60	27.5	G 1/4	12.0	1/4" NPT	10.0
10	44	104.0	92.5	60	27.5	G 3/8	12.0	3/8" NPT	10.5
15	44	108.0	94.5	67	31.0	G 1/2	14.0	1/2" NPT	13.5
20	50	115.0	99.0	80	36.5	G 3/4	16.0	3/4" NPT	14.0
25	62	124.0	103.5	95	44.0	G 1	18.0	1" NPT	17.0
32	92	186.0	157.0	132	60.0	G 1 1/4	20.0	1 1/4" NPT	17.0
40	92	186.0	157.0	132	60.0	G 1 1/2	22.0	1 1/2" NPT	17.0
50	109	201.5	167.0	160	74.0	G 2	24.0	2" NPT	17.5

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

