

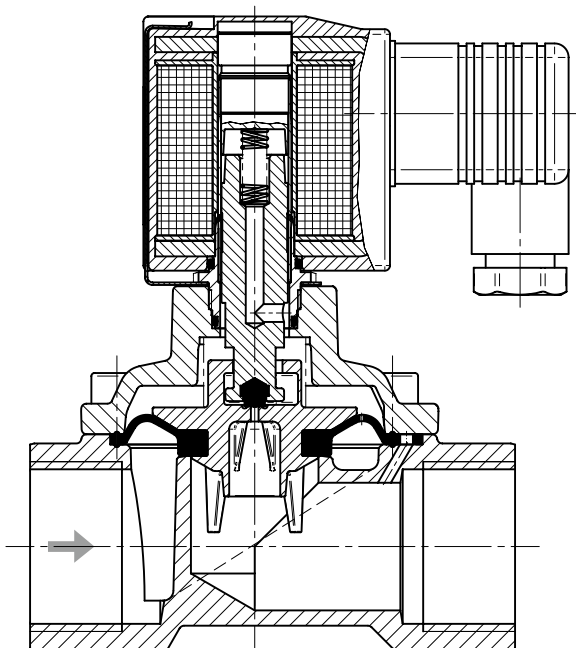
Construction

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 (Δp)
- 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
 - * not with special function ATEX

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 mm²/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

Seal material NBR -10° to 90° C

Seal material EPDM* 0° to 110° C

Seal material FPM* -5° to 110° C

* only liquid media

Higher temperatures on request

Ambient temperature

-10° to +50° C

Mounting position

Optional, preferably coil vertically upwards

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

Rating

Continuously rated

Approval

KTW (≤ DN 25, seal material EPDM)

CSA approval

Nominal size	Threaded socket connections		Operating pressure	K _v value	Weight [kg]		
	DN	DIN ISO 228 (code 1)			NPT (code 31)	[bar]	(m ³ /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:

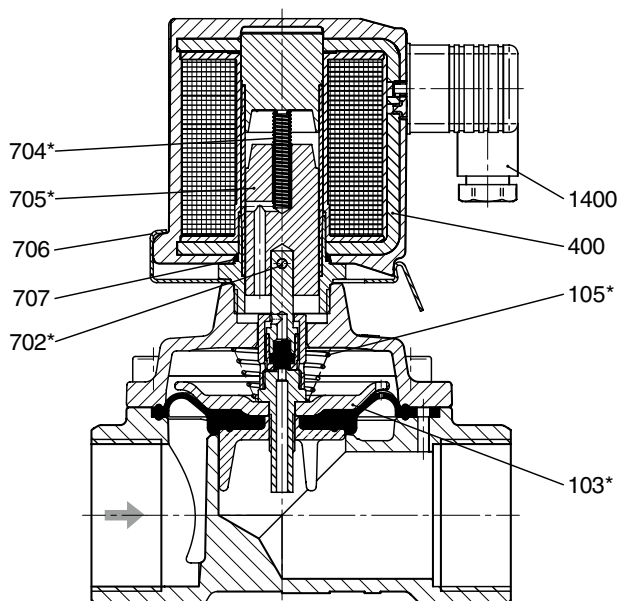
Special wiring on request. When using electronic switches and additional wiring avoid inadmissible residual currents by proper design.

Order data

Body configuration	Code	Supply voltage	Code
2/2-way	D	24 V AC	24
		110 V AC	110
		230 V AC	230
		24 V DC	24
Connection	Code	Mains frequency	Code
Threaded sockets DIN ISO 228	1	50/60 Hz	50/60
Threaded sockets NPT	31	DC	DC
Valve body material	Code	Special function	Code
CW617N, Brass	12	ATEX marking :	
Stainless steel, 1.4408	37	⊕ 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	
Seal material	Code	Available voltages / Frequency	
NBR (Perbunan N)	2	AC 24 V AC	50/60 Hz
FPM	4	110 V AC	50/60 Hz
EPDM	14	230 V AC	50/60 Hz
		DC 24 V DC	-
Control function	Code		
Normally closed	1		
Normally open	2		

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

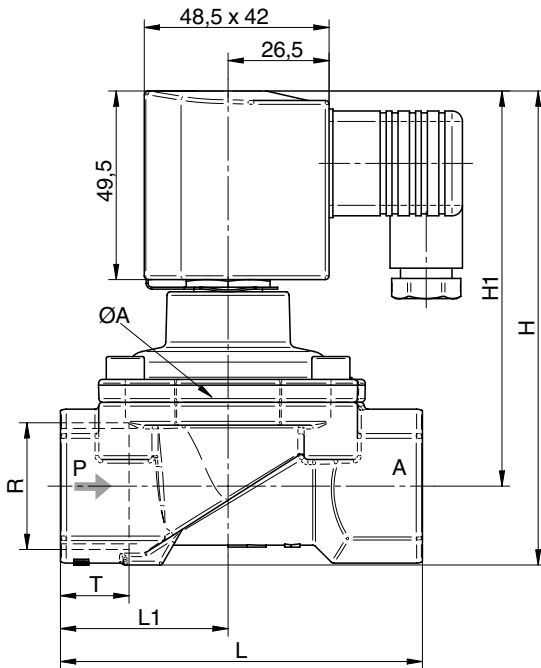


- *103 Diaphragm
- *105 Compression spring
- 400 Solenoid
- *702 DN 8-25 O-ring
- *702 DN 32-50 cylindrical pin
- *704 Compression spring
- *705 Armature
- 706 Spring clip
- *707 O-ring
- 1400 Plug (included)

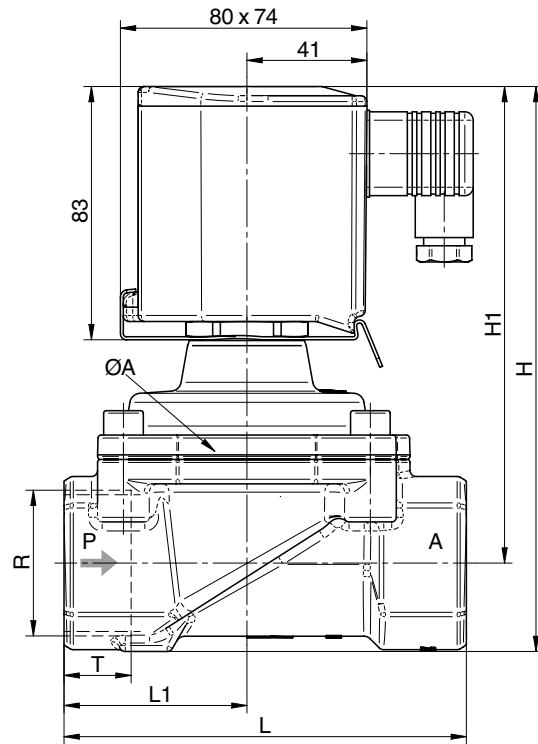
All the parts marked * are included in the wearing parts kit. When ordering spare parts, please state the complete valve order number.

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.

Technical data sheet

Should there be any doubts or misunderstandings, the German version of this data sheet is the authoritative document!

Subject to alteration · 07/2017 · 88269783