GEMÜ 8257

Electrically operated solenoid valve

Features

- Valve operates without minimum pressure differential
- 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

Description

The GEMÜ 8257 2/2-way solenoid valve with a positive lift diaphragm is electromagnetically operated and has a brass or stainless steel valve body. All media wetted parts are made of NBR, HNBR, FKM, EPDM, brass or stainless steel. The valve is suitable for inert media such as air, water and oils.

Technical specifications

- **Media temperature :** -10 to 150 °C
- **Ambient temperature:** -10 to 50 °C
- **Operating pressure :** 0 to 10 bar
- **Nominal size:** DN 10
- **Connection type:** Threaded connection
- **Connection standards:** DIN I ISO I NPT
- **Body materials:** 1.4408, investment casting material I CW617N, brass
- **Supply voltages:** 230 V AC, 50 Hz I 230 V AC, 60 Hz I 24 V AC, 50 Hz I 24 V AC, 60 Hz I 24 V DC
- **Conformities:** EAC

Technical data depends on the respective configuration

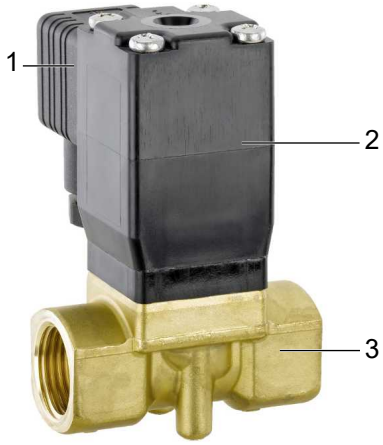
further information
webcode: GW-8257

Product line

				
	GEMÜ 8253	**GEMÜ 8257**	**GEMÜ 8258**	**GEMÜ 8259**
Nominal sizes	DN 8 to 50	DN 10	DN 8 to 50	DN 2 to 5
Voltage				
110 V AC, 50 Hz	-	-	-	●
110 V AC, 50/60 Hz	●	-	●	-
230 V AC, 50 Hz	-	●	-	●
230 V AC, 50/60 Hz	●	-	●	-
230 V AC, 60 Hz	-	●	-	-
24 V AC, 50 Hz	-	●	-	-
24 V AC, 50/60 Hz	●	-	●	-
24 V AC, 60 Hz	-	●	-	-
24 V DC	●	●	●	●
Media temperature *	-10 to 110 °C	-10 to 150 °C	-10 to 110 °C	-10 to 110 °C
Operating pressure *	0 to 16 bar	0 to 10 bar	0,1 to 16 bar	0 to 20 bar
Connection types				
Threaded connection	●	●	●	●
Body material				
1.4408, investment casting material	●	●	●	●
CW617N, brass	●	●	●	●

* depending on version and/or operating parameters

Product description



Item	Name	Materials
1	Plug	PA
2	Coil	Duresco NU 463V
3	Valve body	CW617N (brass), 1.4408 (stainless steel)
	Seal material	EPDM, NBR, FKM, HNBR

Order data

The order data provide an overview of standard configurations.

Please check the availability before ordering. Other configurations available on request.

Order codes

1 Type	Code
Solenoid valve, with positive lift diaphragm	8257

2 DN	Code
DN 10	10

3 Body configuration	Code
2/2-way body	D

4 Connection type	Code
G 1/4, threaded socket DIN ISO 228	G2
G 3/8, threaded socket DIN ISO 228	G3
G 1/2, threaded socket DIN ISO 228	G4
1/4 NPT, threaded socket	N2
3/8 NPT, threaded socket	N3
1/2 NPT, threaded socket	N4

5 Valve body material	Code
CW617N (brass)	12
1.4408, stainless steel	37

6 Seal material	Code
EPDM	14
NBR	2
FKM	4
HNBR	7

7 Control function	Code
Normally closed (NC)	1

8 Voltage	Code
24 V	24
110 V	110
230 V	230

9 Frequency	Code
DC	DC
50 Hz	50
60 Hz	60

10 Special specification	Code
Without	
ATEX version	X

Order example

Ordering option	Code	Description
1 Type	8257	Solenoid valve, with positive lift diaphragm
2 DN	10	DN 10
3 Body configuration	D	2/2-way body
4 Connection type	G3	G 3/8, threaded socket DIN ISO 228
5 Valve body material	12	CW617N (brass)
6 Seal material	2	NBR
7 Control function	1	Normally closed (NC)
8 Voltage	230	230 V
9 Frequency	50	50 Hz
10 Special specification		Without

Technical data

Medium

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. permissible viscosity: 25 mm²/s (cSt)
Note: When used with contaminated media we recommend installing a strainer in front of the valve (on request)

Temperature

Media temperature:

NBR (code 2):	-10 to 90 °C
FKM (code 4):	-10 to 90 °C
HNBR (code 7):	-10 to 150 °C
EPDM (code 14):	-10 to 90 °C

Ambient temperature: -10 — 50 °C

Storage temperature: 0 — 40 °C

Product compliance

Type examination certificate: PTZ 16 ATEX 0011 X

Explosion protection: Special version X order code

ATEX marking: Gas: Ⓔx II 2G Ex eb mb IIC T3 Gb
Dust: Ⓔx II 2D Ex mb tb IIIB T135°C-150°C Db

Mechanical data

Installation position: Optional

Weight:

G 1/4, 1/4 NPT:	0.5 kg
G 3/8, 3/8 NPT:	0.5 kg
G 1/2, 1/2 NPT:	0.6 kg

Protection class: IP 65 (with plug)

Isolation class: F

Pressure

Operating pressure:

NBR (code 2):	0 to 10 bar
FKM (code 4):	0 to 10 bar
EPDM (code 14):	0 to 10 bar
HNBR (code 7):	0 to 6 bar

Kv values:

G 1/4, 1/4 NPT:	1.5 m³/h
G 3/8, 3/8 NPT:	1.7 m³/h
G 1/2, 1/2 NPT:	1.7 m³/h

Electrical data

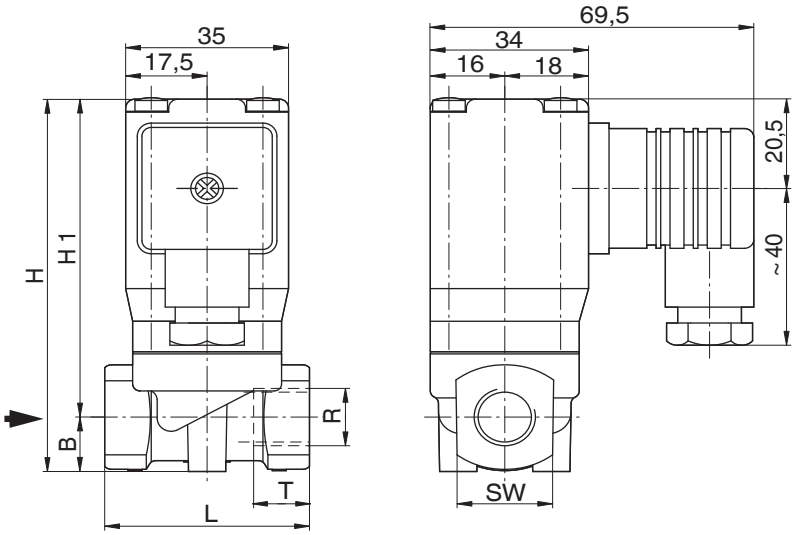
Power consumption:	**AC operation**			
	Pull in / Hold in	DN 10	Normally closed (NC)	13 VA
	DC operation			
	Pull in / Hold in	DN 10	Normally closed (NC)	12 W

Permissible voltage tolerance: ±10 % to VDE 0580

Duty cycle: Continuous duty

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

Dimensions

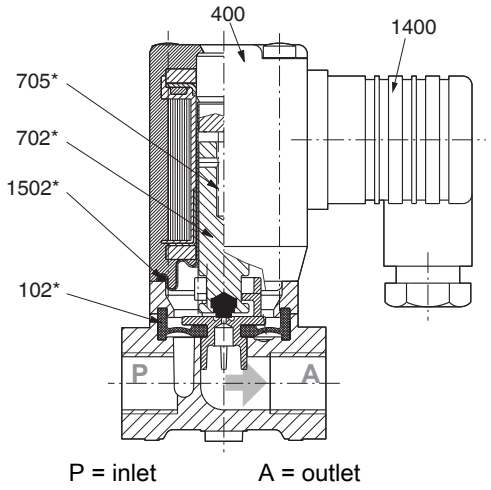


DN	Connection type code [1]								
	G2, G3, G4, N2, N3, N4					G2, G3, G4		N2, N3, N4	
	B	H	H1	L	SW	R	T	R	T
DN 10	14.0	87.0	73.5	44.0	21.0	G 1/4	12.0	1/4" NPT	10.0
	14.0	87.0	73.5	44.0	21.0	G 3/8	12.0	3/8" NPT	10.0
	14.0	90.0	74.5	60.0	27.0	G 1/2	15.0	1/2" NPT	13.0

Dimensions in mm

1) **Connection type**
Code G2: G 1/4, threaded socket DIN ISO 228
Code G3: G 3/8, threaded socket DIN ISO 228
Code G4: G 1/2, threaded socket DIN ISO 228
Code N2: 1/4 NPT, threaded socket
Code N3: 3/8 NPT, threaded socket
Code N4: 1/2 NPT, threaded socket

Spare parts



102*	Diaphragm
400	Coil
702*	Armature
705*	Compression spring
1400	Plug (in an accessory pack)
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.

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