

GEMÜ 8258

Electrically operated solenoid valve



Features

- Low power consumption
- High flow rate
- Soft closing action
- Low minimum pressure differential
- Simple, compact construction
- Simple coil replacement without tools (Click-on®)
- Optional manual override
- Explosion protected solenoids acc. to ATEX available as an option
- Type examination up to DN 25 to DIN EN 60730-2-8
- Optional mounting bracket available (not pre-assembled)
- NPT thread available

Description

The GEMÜ 8258 servo-assisted 2/2-way solenoid valve has a brass or stainless steel valve body. All parts that come into contact with the medium are made from stainless steel, NBR, EPDM or FKM. The valve is suitable for inert media such as air, water and oils.

Technical specifications

- **Media temperature :** -10 to 110 °C
- **Ambient temperature:** -10 to 50 °C
- **Operating pressure :** 0.1 to 16 bar
- **Nominal sizes:** DN 8 to 50
- **Connection type:** Threaded connection
- **Connection standards:** DIN | ISO | NPT
- **Body materials:** 1.4408, investment casting material | CW617N, brass
- **Supply voltages:** 110 V AC, 50/60 Hz | 230 V AC, 50/60 Hz | 24 V AC, 50/60 Hz | 24 V DC
- **Conformities:** EAC

Technical data depends on the respective configuration

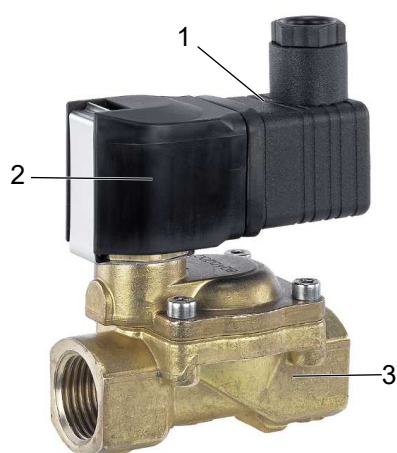


Product line

				
	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 463 V
3	Valve body	CW617N (brass), 1.4408, stainless steel
	Seal material	EPDM, NBR, FKM

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, servo assisted	8258

2 DN	Code
DN 8	8
DN 10	10
DN 15	15
DN 20	20
DN 25	25
DN 32	32
DN 40	40
DN 50	50

3 Body configuration	Code
2/2-way body	D

4 Connection type	Code
Threaded socket DIN ISO 228	1
Threaded socket NPT	31

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

6 Seal material	Code
NBR	2
FKM	4
EPDM	14

7 Control function	Code
Normally closed (NC)	1
Normally open (NO)	2
Normally closed (NC), with manual override	S

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

9 Frequency	Code
50 - 60 Hz	50/60
DC	DC

10 Special version	Code
Without	
ATEX version	X

Order example

Ordering option	Code	Description
1 Type	8258	Solenoid valve, servo assisted
2 DN	25	DN 25
3 Body configuration	D	2/2-way body
4 Connection type	1	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	50/60	50 - 60 Hz
10 Special version		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 mm ² /s (cSt) Note: When used with contaminated media we recommend installing a strainer in front of the valve (on request)

Temperature

Media temperature:	Seal material NBR (code 2):	-10 to 90 °C
	Seal material EPDM (code 14):	0 to 110 °C
	Seal material FKM (code 4):	-5 to 110 °C
Ambient temperature:		-10 – 50 °C
Storage temperature:		0 – 40 °C

Product compliance

Approvals:	KTW (contact with drinking water) approval ($\leq$ DN 25, gasket EPDM) (not for ATEX version) CSA approval (not for ATEX version)
Explosion protection:	Special version X order code
ATEX marking:	Gas:  II 2G Ex eb mb IIC T4 Gb Dust:  II 2D Ex mb tb IIIB T125°C-135°C Db
Type examination certificate:	PTZ 16 ATEX 0011 X

Mechanical data

Installation position:	Optional
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Weight:	DN 8	DN 10	DN 15	DN 20	DN 25	DN 32	DN 40	DN 50
	0.47	0.45	0.50	0.65	0.95	2.73	2.53	3.85

Weights in kg

Protection class:	IP 65 (with plug)
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Isolation class:	F
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Pressure

Operating pressure:

DN	Seal material	
8 - 25	EPDM	0.3–16 bar
	NBR, FKM	0.1–16 bar
32 - 50	EPDM	0.3–10 bar
	NBR, FKM	0.1–10 bar

DN 32–50: Higher operating pressures on request.

The operating pressure applies to free discharge conditions. In closed systems Δp between the inlet and outlet must be at least 0.1 bar.

Operational limits:

Operational limits for FKM diaphragms

Pressure differential	0.1 bar required
Operating pressure $\leq G 1$	0.1–16 bar
Operating pressure $> G 1$	0.1–10 bar
Medium temperature	-5 °C to +110 °C
Ambient temperature	-10 °C to +50 °C

Operational limits for EPDM diaphragms

Pressure differential	0.3 bar required
Operating pressure $\leq G 1$	0.3–16 bar
Operating pressure $> G 1$	0.3–10 bar
Medium temperature	-10 °C to +110 °C
Ambient temperature	-10 °C to +50 °C

Kv values:

DN 8	DN 10	DN 15	DN 20	DN 25	DN 32	DN 40	DN 50
1.9	3.0	3.4	5.8	8.0	23.0	25.0	41.0

Kv values in m³/h

Electrical data

Power consumption:

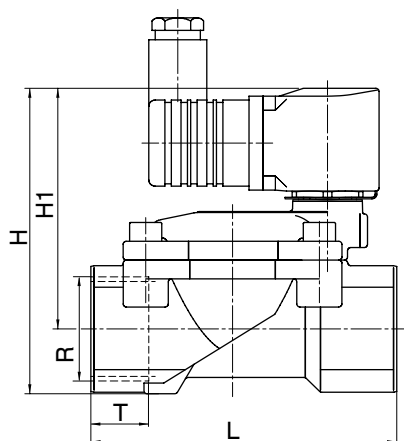
AC operation			
Pull in	DN 8–50	Normally closed (NC)	15 VA
	DN 8–25	Normally open (NO)	15 VA
	DN 32–50	Normally open (NO)	45 VA
Hold in	DN 8–50	Normally closed (NC)	12 VA
	DN 8–25	Normally open (NO)	12 VA
	DN 32–50	Normally open (NO)	35 VA
DC operation			
Pull in	DN 8–50	Normally closed (NC)	8 W
	DN 8–25	Normally open (NO)	8 W
	DN 32–50	Normally open (NO)	18 W
Hold in	DN 8–50	Normally closed (NC)	8 W
	DN 8–25	Normally open (NO)	8 W
	DN 32–50	Normally open (NO)	18 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		Control function code ¹⁾				Connection type code ²⁾			
		1		2		1		31	
		L	H	H1	H	R	T	R	T
8		60.0	78.5	67.0	78.5	67.0	G 1/4	12.0	1/4" NPT
10		60.0	78.5	67.0	78.5	67.0	G 3/8	12.0	3/8" NPT
15		67.0	81.0	67.0	81.0	67.0	G 1/2	14.0	1/2" NPT
20		80.0	88.0	71.5	88.0	71.5	G 3/4	16.0	3/4" NPT
25		95.0	97.5	77.0	97.5	77.0	G 1	18.0	1" NPT
32		132.0	124.5	95.5	142.0	113.0	G 1 1/4	20.0	1 1/4" NPT
40		132.0	124.5	95.5	142.0	113.0	G 1 1/2	22.0	1 1/2" NPT
50		160.0	142.5	108.0	160.0	125.5	G 2	24.0	2" NPT

Dimensions in mm

1) Control function

Code 1: Normally closed (NC)

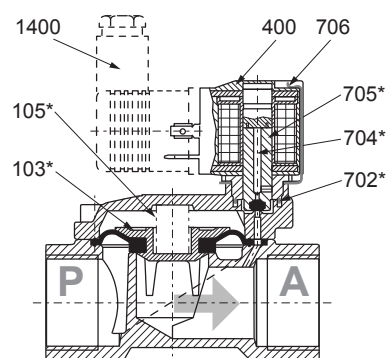
Code 2: Normally open (NO)

2) Connection type

Code 1: Threaded socket DIN ISO 228

Code 31: Threaded socket NPT

Spare parts



P = inlet

A = outlet

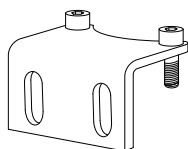
103*	Diaphragm
105*	Compression spring
400	Coil
702*	O-ring
704*	Compression spring
705*	Armature
706	Spring clip
1400	Plug (in an accessory pack)

All the parts marked * are included in the wearing parts kit.

When ordering spare parts, please state the complete valve order number.

Accessories

GEMÜ 8258 000 P



Mounting bracket including screws

Nominal size	Item designation	Order no.
DN 8 - 15	8258 000 P 12	88293212
DN 20	8258 000 P 20	88293213
DN 25	8258 000 P 25	88293214
DN 32 - 40	8258 000 P 40	88293215
DN 50	8258 000 P 50	88293216



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