

## Pilot Solenoid Valve, Plastic

### Construction

The directly controlled GEMÜ 3/2-way pilot solenoid valve consists of an epoxy encapsulated detachable coil and a plastic body. The electrical connection is made via a plug complying with DIN EN 175301-803 form A or a M12 plug.

**GEMÜ 0322:** Designed for single mounting (straight through design) or for modular battery mounting of up to 12 valves (by using clips).

**GEMÜ 0324:** Designed for direct mounting (hollow bolt) to pneumatically operated valves or other devices.

**GEMÜ 0326:** Designed for mounting to a compact aluminium rail as a valve battery for mounting in control cabinets or as a valve manifold near the pneumatic components to be controlled. Battery rail for up to 10 valves.

### Features

- Suitable for the control of chemically inert gases
- Normally closed and Normally open control functions are available
- Options
  - ATEX version: ATEX-marking (control function 1):
    - Ex II 2 D Ex mb II T4
    - Ex II 2 G Ex tD A21 IP65 T80°C, T95°C, T130°C
  - Lockable manual override (control function 1)
  - Integrated LED (M12 version)

### Advantages

- Robust design
- Coil easy to replace
- Option: integrated LED (M12 version)
- Multi-functional application possibilities due to various designs
- Modular battery mounting



GEMÜ 0322

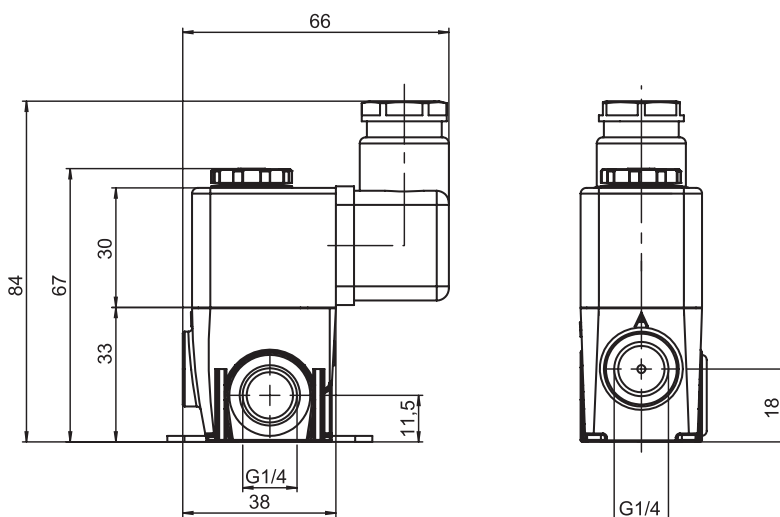


GEMÜ 0324



GEMÜ 0326

### Dimensions - GEMÜ 0322 [mm]



For dimensions for GEMÜ 0322 battery, 0324 and 0326 see pages 3 and 4.

## Technical data



### Operating conditions

Working medium	Quality classes to DIN ISO 8573-1
Dust content	Class 4 (max. particle size 15 µm) (max. particle density 8 mg/m <sup>3</sup> )
Pressure dew point	Class 4 (max. pressure dew point 3°C)
Oil concentration	Class 4 (max. oil concentration 5 mg/m <sup>3</sup> )
Ambient temperature	-10° to +50° C
Medium temperature	-10° to +50°C
Operating pressure	0 - 10 bar

### General information

Max. switching frequency	5 Hz
Switching time	On 11 ms Off 20 ms
Flow rate value	Normally closed 70 l/min Normally open 40 l/min
Nominal size	1.8 mm
Pneum. connections	Air supply (1) G1/4 Outlet (2) G1/4 Exhaust air (3) M5
Protection class	IP65
Isolation class	F
Weight	150 g
Corrosion resistance class	KBK 2

### Explosion protection marking\* acc. to ATEX

 II 2 D Ex mb II T4  
 II 2 G Ex tD A21 IP65 T80°C, T95°C, T130°C

\* Control function 1

### Electrical data

<b>Power supply</b>	
Power supply U <sub>v</sub>	
DC version	24V
AC version	24V, 120V, 230V
Perm. voltage tolerances	± 10%
Max. perm. ripple	20%
<b>Power consumption</b>	
Normally closed (NC)	DC version 4.5 W AC version 8.5 W
Normally open (NO)	DC version 6.8 W AC version 8.5 W
Rating	Continuously rated
<b>Electrical connection</b>	
Standard	Plug to DIN EN 175301-803 form A
Option	M12 plug, cable socket
ATEX version	3 m cable
DC coils are used for the AC version of normally open (NO) solenoid valves.	
For these AC applications with normally open (NO) valves a plug with an integrated bridge rectifier must be used (e.g. GEMÜ 1221 article no. 88256107)	

### Material

Valve body	PA 6, Polyamide
Solenoid, plug	PA 6, Polyamide
Solenoid, M12	Thermoset (Epoxyde NU463)
Solenoid, ATEX	PPS
Seal material	FPM

### Installation note

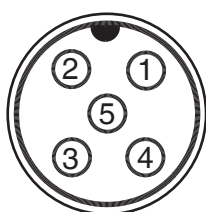
If installed in control cabinets adequate ventilation must be provided.

### Type examination certificate

PTB 03 ATEX 2018 X

## Electrical connection

### Connection diagram for M12 plug

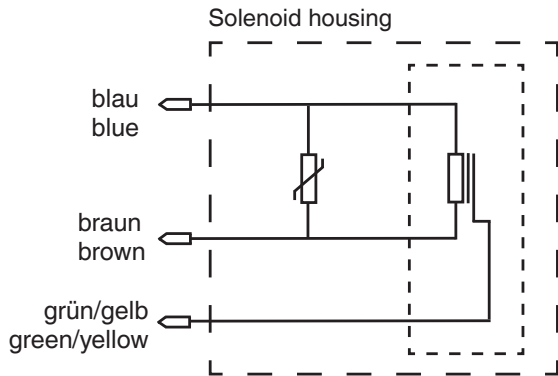


Connection	Pin	Signal name
X1 A-coded M12 plug	1	n.c.
	2	n.c.
	3	U <sub>v</sub> , GND
	4	U <sub>v</sub> , 24V DC supply voltage
	5	n.c.

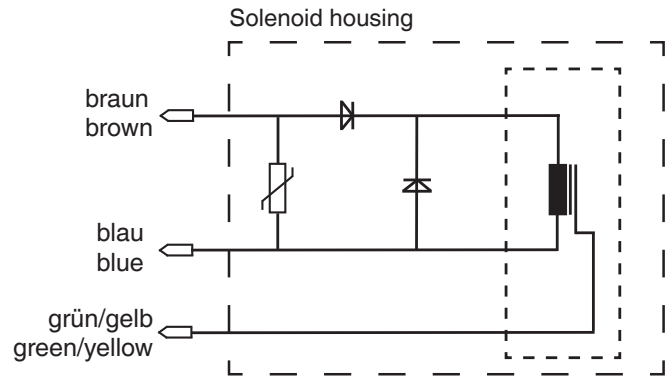
## Electrical connection

### ATEX version

#### DC Version

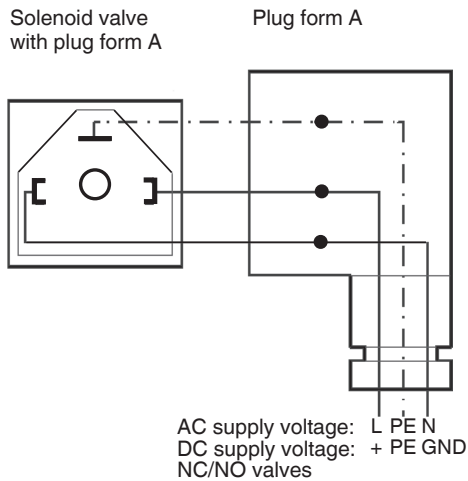


#### AC Version

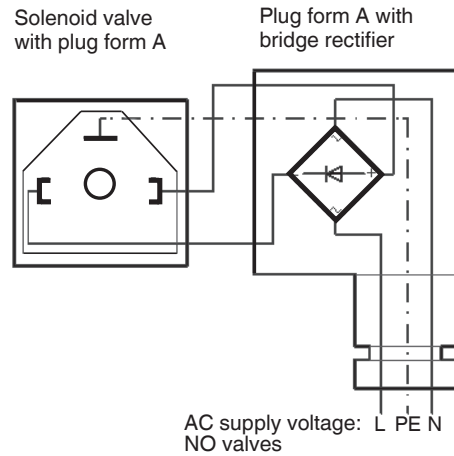


### Connection diagram for plug form A (DIN EN 175301-803)

#### Control function 1 (NC), AC/DC voltage Control function 2 (NO), DC voltage

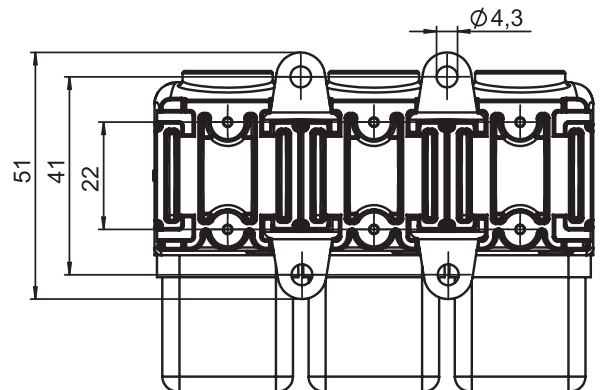
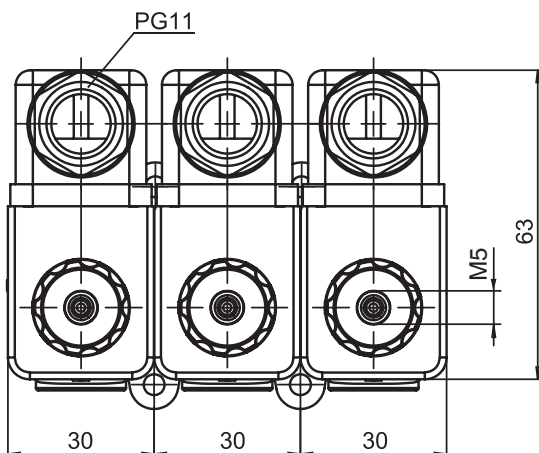


#### Control function 2 (NO), AC voltage



## Dimensions [mm]

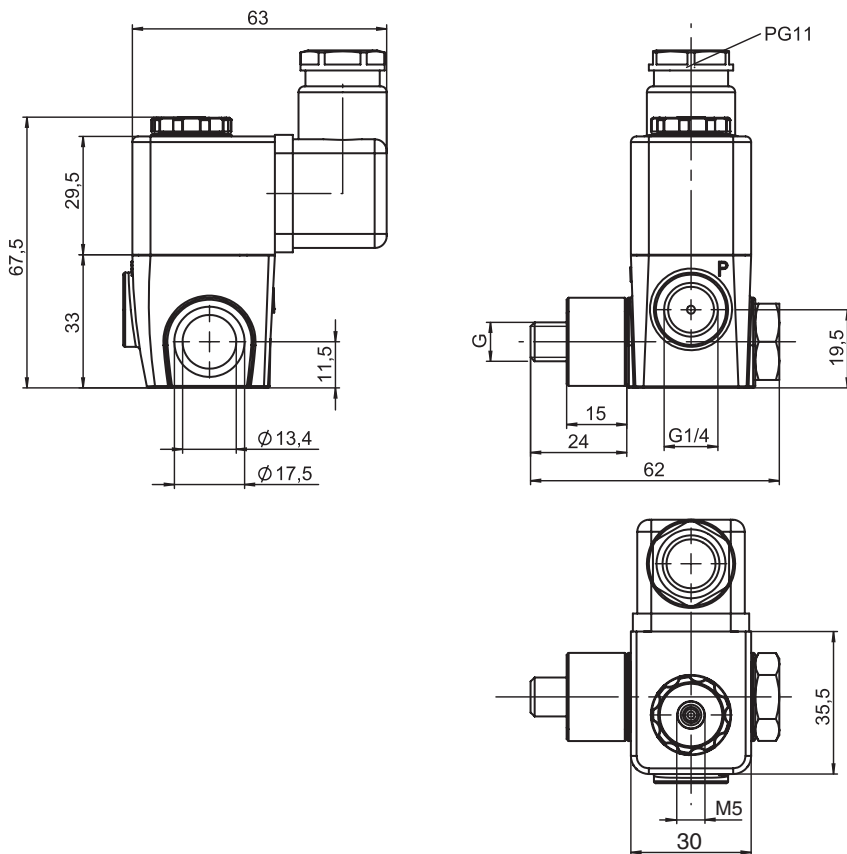
### GEMÜ 0322



Dimensions solenoid valve for single mounting see page 1

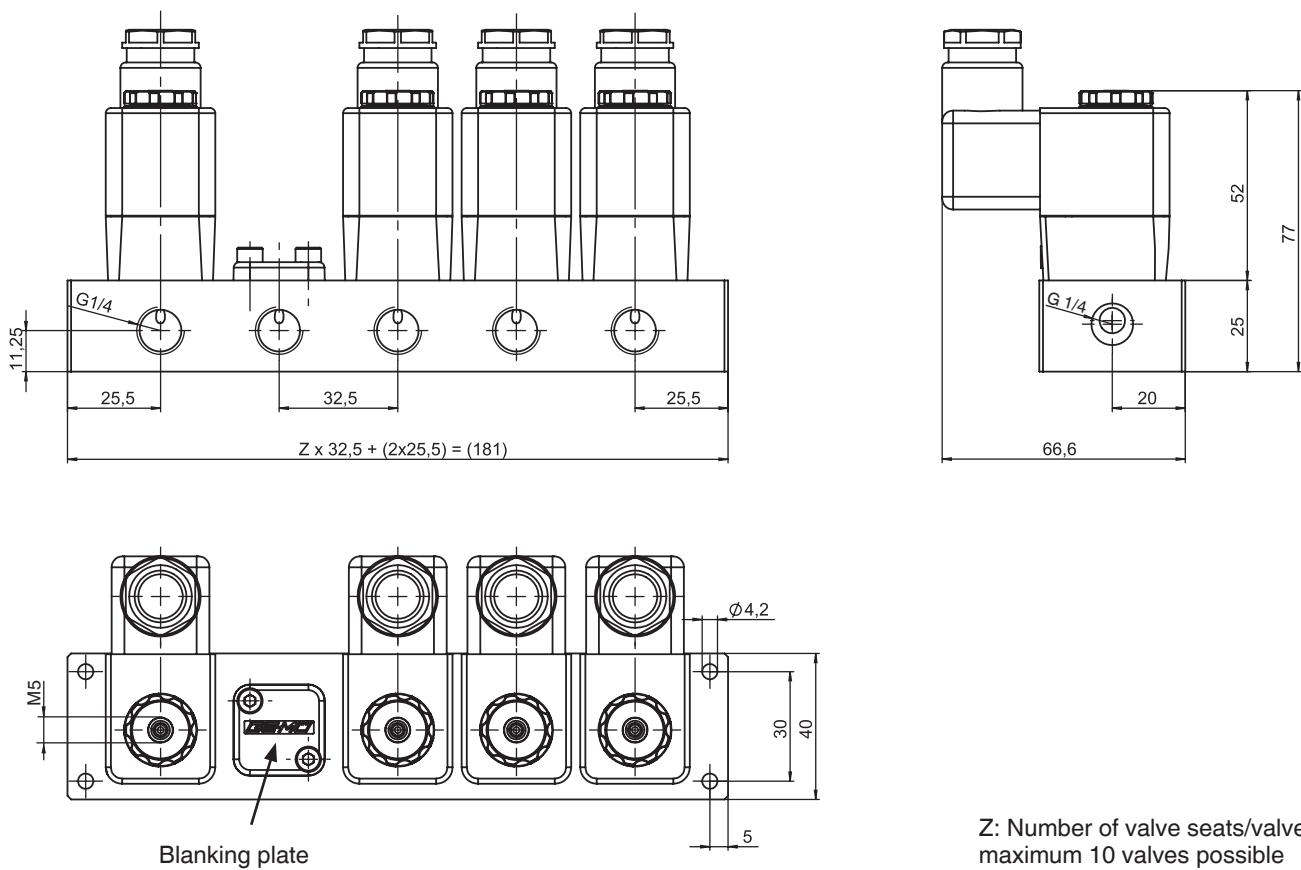
## Dimensions [mm]

### GEMÜ 0324



Connection	Code
G 1/4	14
G 1/8	18
M5	M5

### GEMÜ 0326 with aluminium battery rail



Z: Number of valve seats/valves, maximum 10 valves possible

## Order data

Type	Code
Solenoid valve for single mounting / battery mounting	0322
Solenoid valve for direct mounting	0324
Solenoid valve for mounting to battery rail	0326

Nominal size	Code
	2

Body configuration	Code
Multi-port version	M

Connection	Code
Threaded sockets DIN ISO 228 (GEMÜ 0322)	1
Threaded sockets DIN ISO 228 (GEMÜ 0324) Hollow bolt G 1/4	14
Threaded sockets DIN ISO 228 (GEMÜ 0324) Hollow bolt G 1/8	18
Threaded sockets DIN ISO 228 (GEMÜ 0324) Hollow bolt M5	M5
Connection for GEMÜ battery rail (GEMÜ 0326)	-

Valve body material	Code
PA 6, Polyamide	74

Seal material	Code
FPM	4

Control function	Code
Normally closed (NC)	1
Normally open (NO) (GEMÜ 0322, 0324)	2

Voltage/Frequency	Code
24V DC	C1
24V 50/60 Hz	C4
120V 50/60 Hz	G4
230V 50/60 Hz	L4
Other voltages on request	

Electrical connection	Code
Plug type A without cable socket	00*
Plug type A with cable socket, without cable	01
M12 plug (only 24V DC version)	02
M12 plug with cable socket, without cable (only 24V DC version)	03
Plug type A with cable socket and 3m encapsulated cable (only ATEX version)	05
* not available in control function normally open (NO) for voltage/frequency C4, G4 and L4	

Option	Code
Without	00
ATEX version	01*
Manual override (only control function normally closed code 1)	02
Silencer	03
ATEX version + manual override	04*
ATEX version + silencer	05*
Manual override + silencer (only control function normally closed code 1)	06
ATEX version + manual override + silencer	07*
* only control function normally closed code 1 and electr. connection code 05	

Max. operating pressure	Code
10 bar	10

Design	Code
Standard	-
Without paint adhesion interfering substances such as silicone	0101

Order example	0322	2	M	1	74	4	1	C1	01	00	10
Type (code)	0322										
Nominal size (code)		2									
Body configuration (code)			M								
Connection (code)				1							
Valve body material (code)					74						
Seal material (code)						4					
Control function (code)							1				
Voltage/Frequency (code)								C1			
Electrical connection (code)									01		
Option (code)										00	
Max. operating pressure (code)											10
Design (code)											

**Ordering note:** Please order battery rail for GEMÜ 0326 and blanking plate separately (see page 6).

## Accessories

Type	Accessories	Version	Article designation										
<b>0322</b>	Mounting plate for DIN rail mounting		1050	000	Z								
<b>0326</b>	Battery rail	2-fold	0326	000	Z	BR	14			02			
		3-fold	0326	000	Z	BR	14			03			
		4-fold	0326	000	Z	BR	14			04			
		5-fold	0326	000	Z	BR	14			05			
		6-fold	0326	000	Z	BR	14			06			
		7-fold	0326	000	Z	BR	14			07			
		8-fold	0326	000	Z	BR	14			08			
		9-fold	0326	000	Z	BR	14			09			
		10-fold	0326	000	Z	BR	14			10			
	Blanking plate		0326	000	Z	BL	74	4					



**GEMÜ 1050**  
Mounting plate for  
DIN rail mounting



Battery rail



Blanking plate

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