

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 T6, T5, T4
 - Ex II 2 G Ex tD A21 IP65 T80°C, T95°C, T130°C
 - Lockable manual override (control function 1)
 - Integrated LED (24V DC version)

Advantages

- Robust design
- Coil easy to replace
- Option: integrated LED (24V DC version)
- Multi-functional application possibilities due to various designs
- Modular battery mounting



GEMÜ 0322

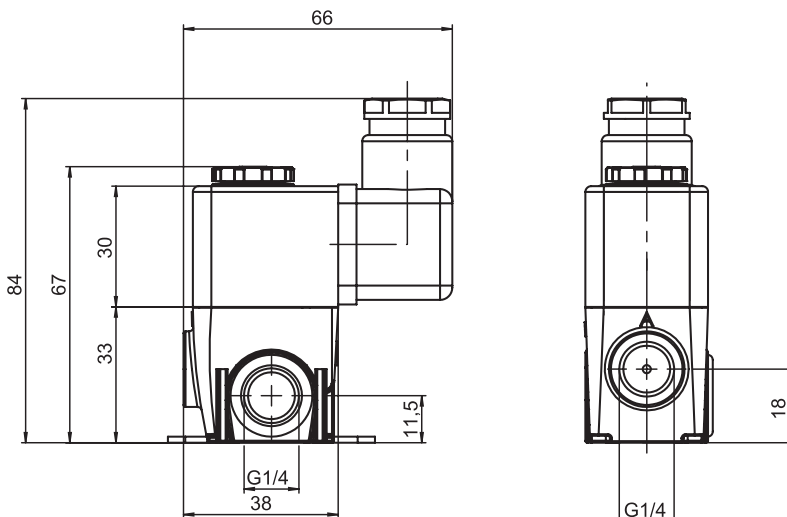


GEMÜ 0324



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 ³) |
| Pressure dew point | Class 4 (max. pressure dew point 3°C) |
| Oil concentration | Class 4 (max. oil concentration 5 mg/m ³) |
| Ambient temperature | -10° to +50° C |
| Medium temperature | -10° to +50°C |
| Operating pressure | 0 - 10 bar |

Electrical data

| | |
|------------------------------|--------------------------------------|
| Power supply | |
| Power supply U _v | |
| DC version | 24V |
| AC version | 24V, 120V, 230V |
| Perm. voltage tolerances | ± 10% |
| Max. perm. ripple | 20% |
| Power consumption | |
| 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 |
| Electrical connection | |
| Standard | Plug to DIN EN 175301-803 form A |
| Option | M12 plug, cable socket |
| ATEX version | 3 m cable |

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 |

Installation note

If installed in control cabinets adequate ventilation must be provided.

Explosion protection marking* acc. to ATEX

II 2 D Ex mb II T6, T5, T4
 II 2 G Ex tD A21 IP65 T80°C, T95°C, T130°C

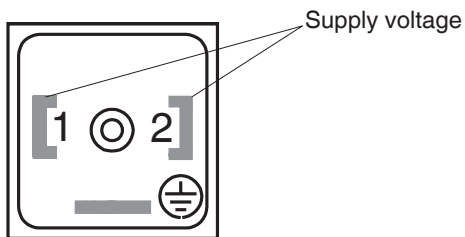
* Control function 1

Type examination certificate

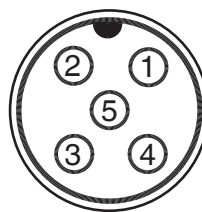
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Electrical connection

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



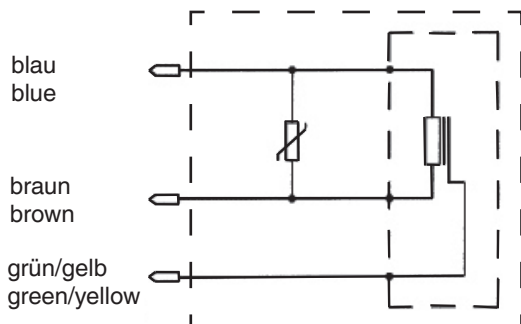
Connection diagram for M12 plug



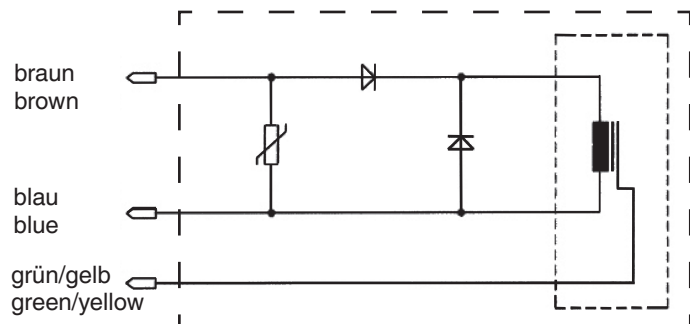
| Connection | Pin | Signal name |
|------------------------------|-----|--|
| X1 A-coded M12 plug | 1 | n.c. |
| | 2 | n.c. |
| | 3 | U _v , GND |
| | 4 | U _v , 24V DC supply voltage |
| | 5 | n.c. |

ATEX version

DC-Version

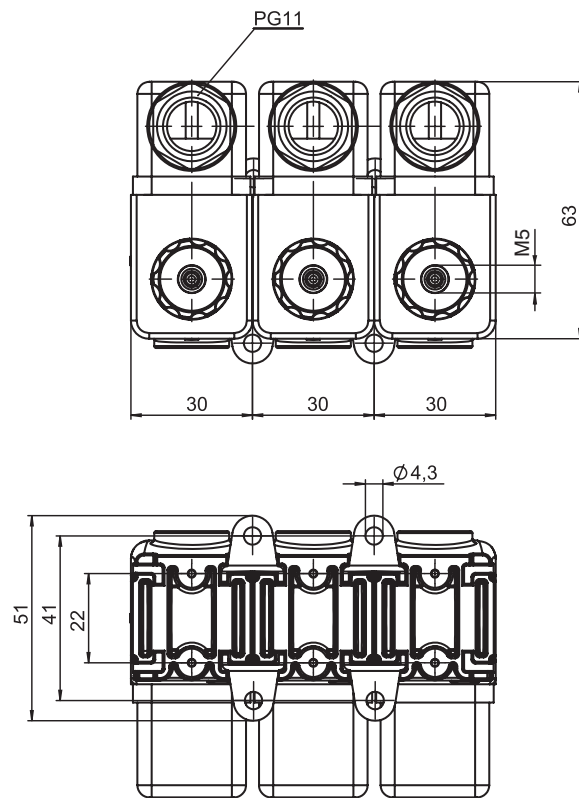


AC-Version



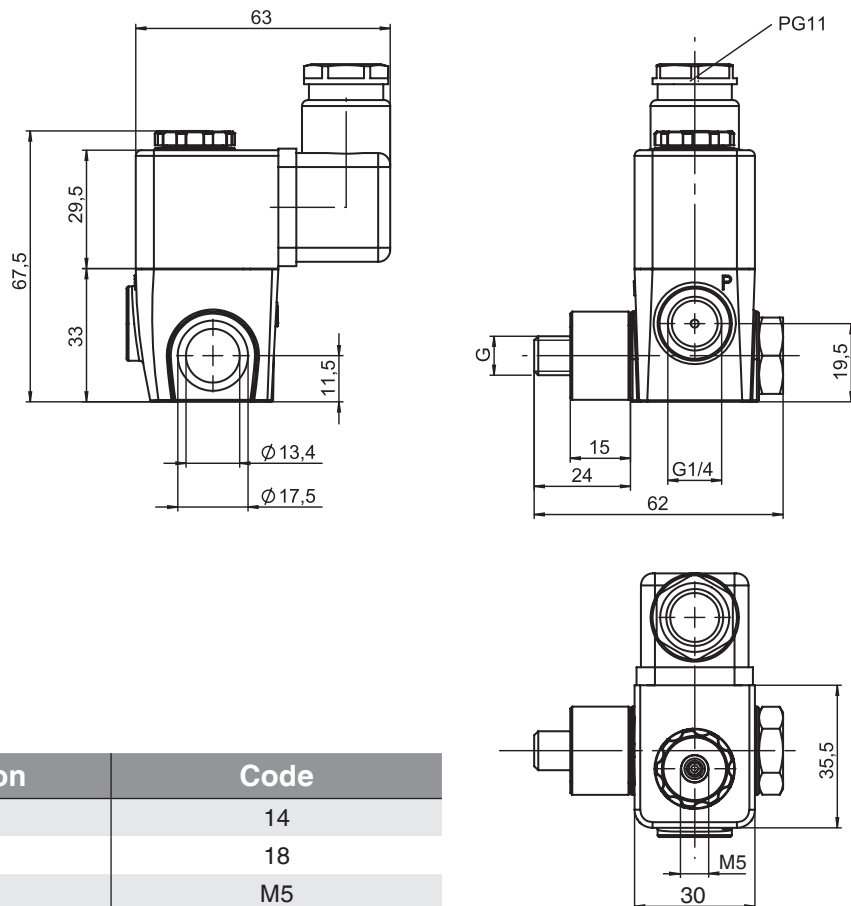
Dimensions [mm]

GEMÜ 0322



Dimensions solenoid valve
for single mounting
see page 1

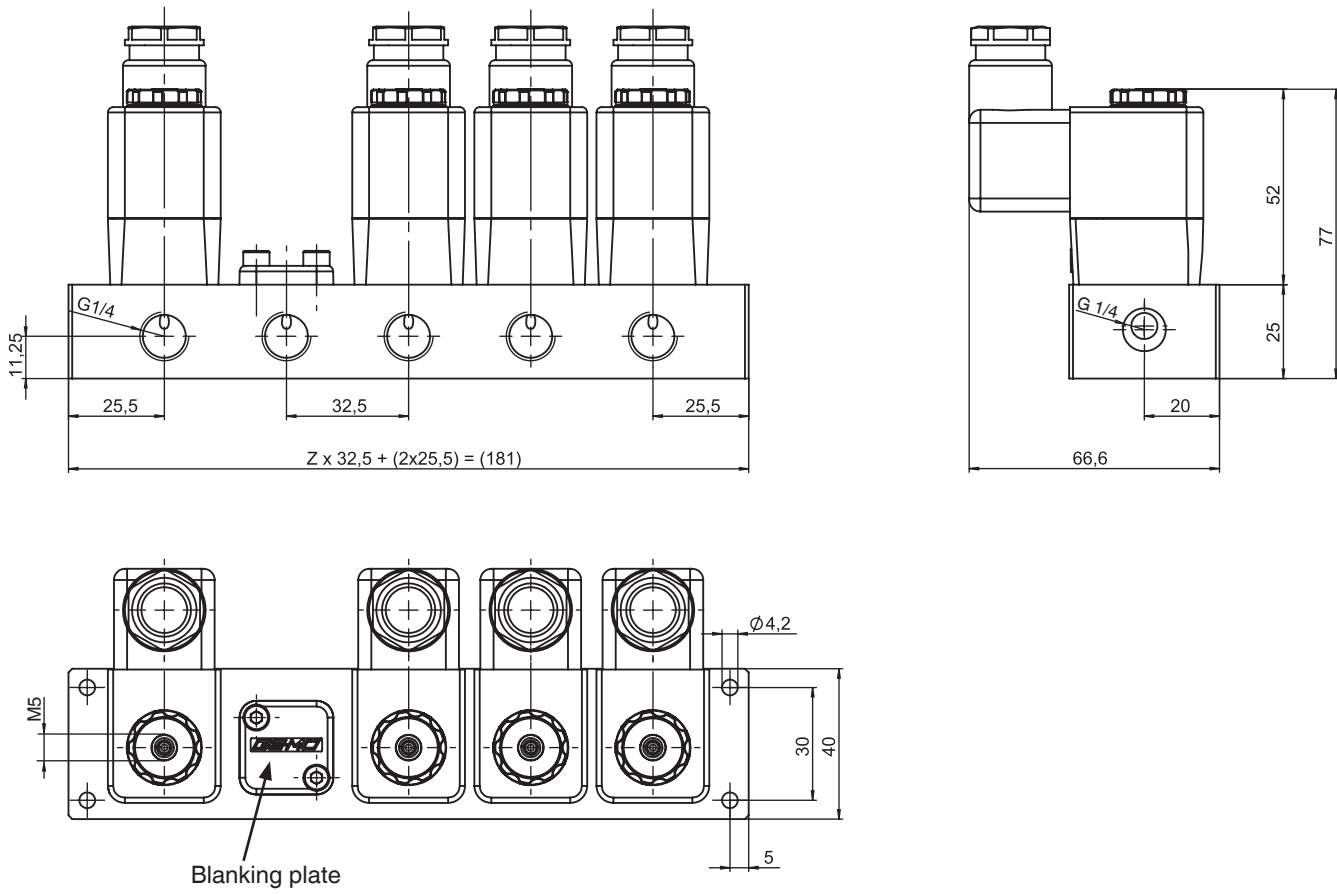
GEMÜ 0324



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

Dimensions [mm]

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) | - |

| Material - Valve body/solenoid housing | 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 | 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 |

| 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 | | | | | | | |
| Material - Valve body material/solenoid housing (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) | | | | | | | | | | | |

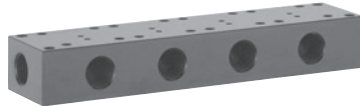
Ordering note: Please order battery rail for GEMÜ 0326 and blanking plate separately (see page 6).

Accessories

| Type | Accessories | Version | Article designation | | | | | | | | | | |
|-------------|--------------------------------------|---------|---------------------|-----|---|----|----|---|----|--|--|--|--|
| 0322 | Mounting plate for DIN rail mounting | | 1050 | 000 | Z | | | | | | | | |
| 0326 | 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.



GEMÜ® VALVES, MEASUREMENT
AND CONTROL SYSTEMS