

## Pilot Solenoid Valve Plastic

### Construction

The directly controlled GEMÜ 3/2 way solenoid valve consists of a solenoid encapsulated in plastic and a plastic valve body. A connector socket provides a connection to electrical supply. A manual override is integrated as standard.

**GEMÜ 320:** This variant is designed for single mounting. The valve body has a straight through design. The pneumatic connection is via a female thread.

**GEMÜ 322:** This variant is designed for battery mounting of up to 12 units (by using clips) depending on the devices to be controlled.

**GEMÜ 324:** For direct mounting to pneumatically operated valves or other devices (inlet and outlet arranged at an angle of 90°).

**GEMÜ 326:** Compact valve battery with aluminium distribution rail for mounting in switch gear cubicles or as a valve manifold near the pneumatic components to be controlled.

### Features

- Suitable for the control of chemically inert gases
- Control functions "normally closed" and "normally open" are available
- ATEX marking:  $\text{Ex}$  II 3 GD EEx nA II T3 T 150°C

### Advantages

- Robust design
- Reliable direct control of the control medium
- Multi-functional application possibilities due to various designs
- Accessories (only for GEMÜ 326)
  - Battery rails and blanking plates



GEMÜ 320



GEMÜ 322

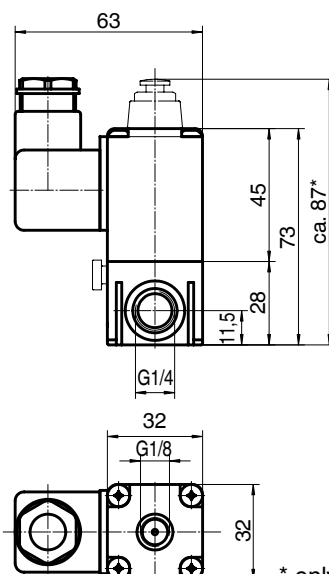


GEMÜ 324



GEMÜ 326

### Dimensions - GEMÜ 320 [mm]



\* only control function 2

## Technical data

### Working medium

|                                     |               |
|-------------------------------------|---------------|
| Chemically inert gases              |               |
| Temperature range of working medium | -15 to +50° C |
| Working pressure                    | 0 - 10 bar    |

### Ambient conditions

|                     |              |
|---------------------|--------------|
| Ambient temperature | -20 to +50°C |
|---------------------|--------------|

### Rating

Continuously rated

### Power consumption

|                 |               |
|-----------------|---------------|
| Pull in current | 18 VA         |
| Hold in current | 8 VA or 6.5 W |

### Electrical connection

Standard connector socket, form A DIN EN 175301-803

### K<sub>V</sub> value

|                 |           |
|-----------------|-----------|
| Normally closed | 1.2 l/min |
| Normally open   | 1.2 l/min |

### Weight

220 g

### Max. switching frequency

3600 times/hour

### Switching time

20 ms

### Permissible voltage tolerances

-10 / +6%

### Protection class

IP 65

### Installation note

If installed in switch gear cubicles adequate ventilation must be provided.

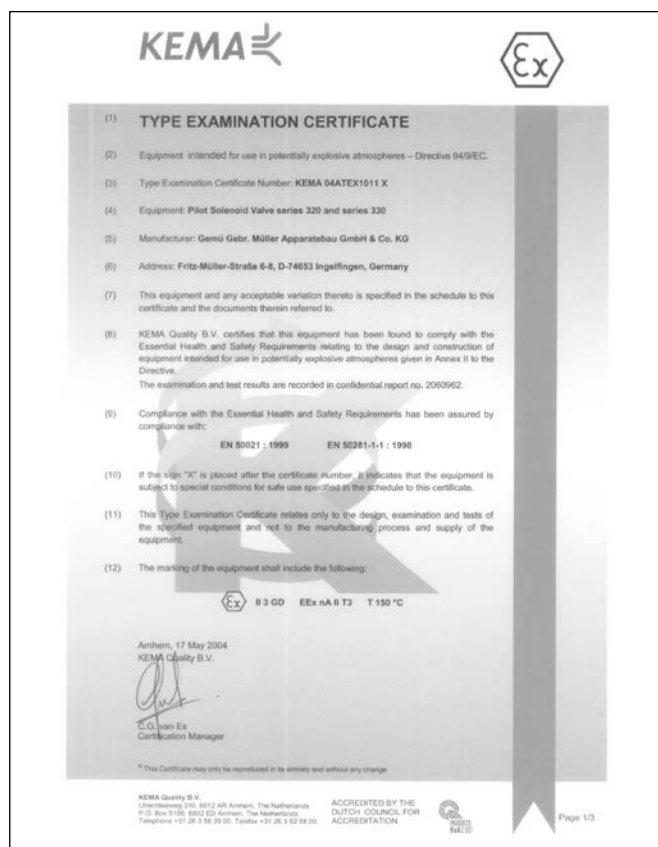
## Approval (24V DC, 230V 50/60 Hz)

### Explosion protection marking acc. to ATEX

Ex II 3 GD EEx nA II T3 T 150°C

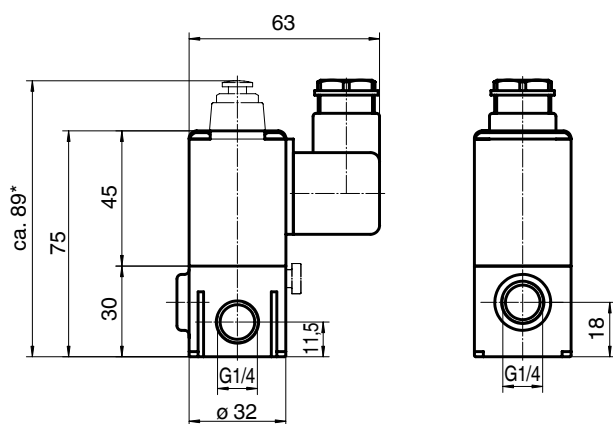
### Type examination certificate

KEMA 04 ATEX 1011 X



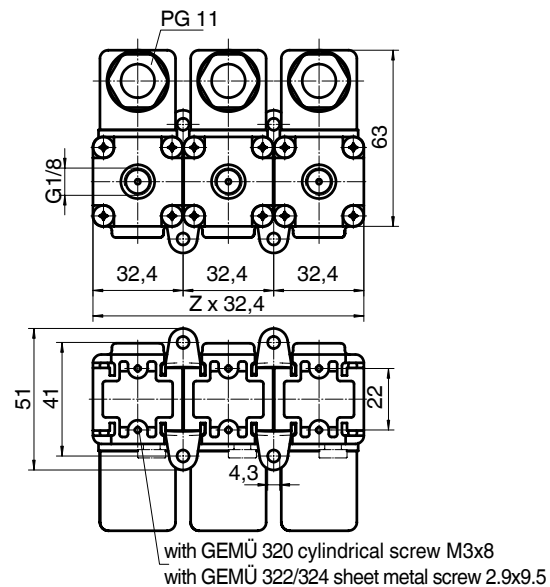
## Dimensions [mm]

### GEMÜ 322



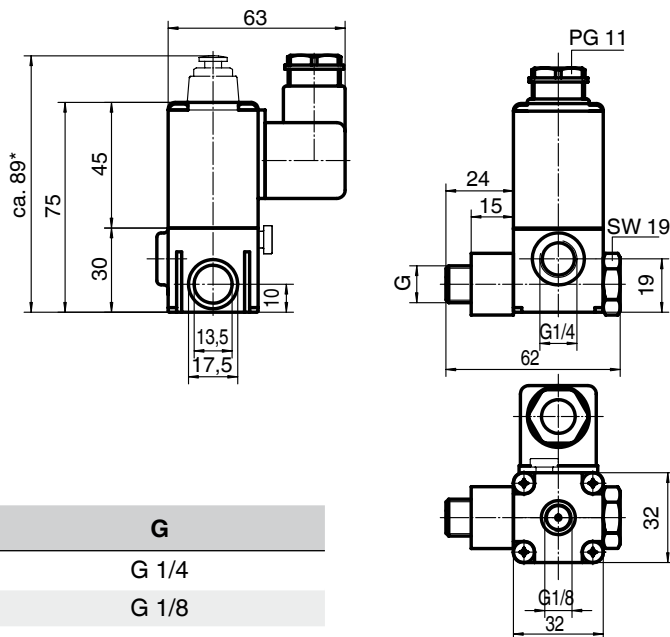
\* only control function 2

### Battery GEMÜ 322



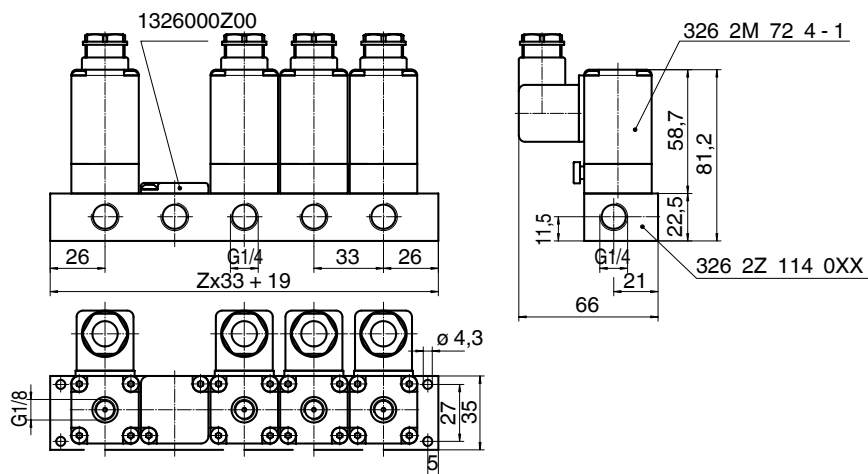
### GEMÜ 324

\* only control function 2



| Type of design | G     |
|----------------|-------|
| Standard       | G 1/4 |
| 5200           | G 1/8 |

### GEMÜ 326



## Order data

| Type                               | Code |
|------------------------------------|------|
| Single mounting                    | 320  |
| Single or battery mounting system  | 322  |
| Single valve with hollow bolt      | 324  |
| Compact valve manifold Ventilinsel | 326  |

| Nominal size | Code |
|--------------|------|
| 2 mm         | 2    |

| Body configuration | Code |
|--------------------|------|
| Multi-way body     | M    |

| Connection                                   | Code |
|--|------|
| Threaded sockets DIN ISO 228 (GEMÜ 320, 324) | 1    |
| Threaded sockets DIN ISO 228 (GEMÜ 322)      | 01   |
| Threaded sockets DIN ISO 228 (GEMÜ 326)      |      |

| Valve body material  | Code |
|----------------------|------|
| PBTP (GEMÜ 320, 324) | 25   |
| PPS (GEMÜ 322, 326)  | 72   |

| Seal material | Code |
|---------------|------|
| FPM           | 4    |

| Control function          | Code |
|---------------------------|------|
| Normally closed           | 1    |
| Normally open*            | 2    |
| * only GEMÜ 320, 322, 324 |      |

| Supply voltages / frequency | Code      |
|-----------------------------|-----------|
| 24V DC                      | 24 DC     |
| 24V 50/60 Hz                | 24 50/60  |
| 120V 50/60 Hz               | 120 50/60 |
| 230V 50/60 Hz               | 230 50/60 |
| Other voltages on request   |           |

| Type of design (GEMÜ 324)      | Code |
|--------------------------------|------|
| Hollow bolt, male thread G 1/4 | -    |
| Hollow bolt, male thread G 1/8 | 5200 |

| Order example                        | 322 | 2 | M | 1 | 72 | 4 | 1 | 230 | 50/60 | - |
|--------------------------------------|-----|---|---|---|----|---|---|-----|-------|---|
| Type                                 | 322 |   |   |   |    |   |   |     |       |   |
| Nominal size                         |     | 2 |   |   |    |   |   |     |       |   |
| Body configuration (code)            |     |   | M |   |    |   |   |     |       |   |
| Connection (code)                    |     |   |   | 1 |    |   |   |     |       |   |
| Valve body material (code)           |     |   |   |   | 72 |   |   |     |       |   |
| Seal material (code)                 |     |   |   |   |    | 4 |   |     |       |   |
| Control function (code)              |     |   |   |   |    |   | 1 |     |       |   |
| Supply voltage (code)                |     |   |   |   |    |   |   | 230 |       |   |
| Frequency (code)                     |     |   |   |   |    |   |   |     | 50/60 |   |
| Type of design (nur GEMÜ 324) (code) |     |   |   |   |    |   |   |     |       | - |

## Order data - Accessories (only for GEMÜ 326)

### Battery rails

| Connection           | Code |
|----------------------|------|
| Threaded sockets 1/4 | 1    |

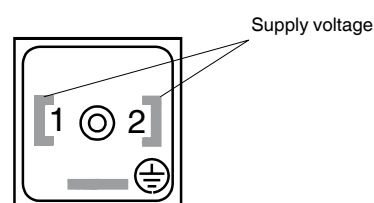
| Material  | Code |
|-----------|------|
| Aluminium | 14   |

| DN [mm] | Battery rail | Order no.      |
|---------|--------------|----------------|
| 2       | 2-fold       | 326 2Z 114 002 |
|         | 3-fold       | 326 2Z 114 003 |
|         | 4-fold       | 326 2Z 114 004 |
|         | 5-fold       | 326 2Z 114 005 |
|         | 6-fold       | 326 2Z 114 006 |
|         | 7-fold       | 326 2Z 114 007 |
|         | 8-fold       | 326 2Z 114 008 |
|         | 9-fold       | 326 2Z 114 009 |
|         | 10-fold      | 326 2Z 114 010 |

### Blanking plate

| Order no. |
|-----------|
| 326000ZBL |

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



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

**GEMÜ®** VALVES, MEASUREMENT  
AND CONTROL SYSTEMS