

**GEMÜ**



**Product Range**  
**Valves, Measurement and Control Systems**



Headquarters in Ingelfingen-Criesbach



Research and Development Centre in Niedernhall-Waldzimmern



European Production and Logistics Centre in the Hohenlohe business park on the A6 (Kupferzell exit)

### Product and system solutions for complex applications and processes

Valves, measurement and control systems by GEMÜ are used successfully in process engineering and adjacent fields of activity. GEMÜ system technology covers the complete process cycle, from the individual detailed solution, which represents an essential quality criterion in many processes, right through to the universal overall solution.

### Leading the world in pharmaceutical and biotechnology industry sterilisation processes

GEMÜ is one of the leading manufacturers of valves, measurement and control systems and is the world market leader for sterile valve applications in the pharmaceutical and biotechnology industries. This position is based on GEMÜ's comprehensive investments in application-oriented research & development, amounting to more than 5% of the company's turnover.

### Creating value through innovative system solutions:

Specialist technical design departments at GEMÜ develop application focussed system solutions which make a significant contribution to the value created in plant engineering and in production. GEMÜ specializes in the following sectors with its products and services:

- Pharmaceutical, biotechnology and cosmetics industries
- Food and beverage industries
- Microelectronics and semiconductor industries
- Chemical industry and environmental systems
- Water treatment
- Processing industries
- Power generation
- Medical systems

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# Diaphragm valves, stainless steel, sterile applications

## Manual operator



### GEMÜ 601/602

Diaphragm valve, metal, manually operated  
Seal adjuster, optical position indicator

DN	Operating pressure	Connection	Valve body material	Diaphragm material
4 to 15	0 to 10 bar *	Butt weld spigots Threaded connections Clamp connections Different standards and designs available.	Stainless steel 1.4435	FPM EPDM PTFE



### GEMÜ 612

Diaphragm valve, metal, manually operated  
Seal adjuster, optical position indicator

DN	Operating pressure	Connection	Valve body material	Diaphragm material
10 to 20	0 to 10 bar *	Butt weld spigots Clamp connections Different standards and designs available.	Stainless steel 1.4435, 1.4408	FPM EPDM PTFE



### GEMÜ 673

Diaphragm valve, metal, manually operated  
Seal adjuster, optical position indicator

DN	Operating pressure	Connection	Valve body material	Diaphragm material
15 to 50	0 to 10 bar *	Butt weld spigots Clamp connections Different standards and designs available.	Stainless steel 1.4435, 1.4408	FPM EPDM PTFE



### GEMÜ 653 BioStar

Diaphragm valve, metal, manually operated  
With integr. seal adjuster and stroke limiter, optional handwheel locking device, proximity switches

DN	Operating pressure	Connection	Valve body material	Diaphragm material
10 to 100	0 to 10 bar *	Butt weld spigots Clamp connections Different standards and designs available.	Stainless steel 1.4435, 1.4408	FPM EPDM PTFE

\* dependent on diaphragm material



D operator



T operator

### GEMÜ 654 BioStar

Diaphragm valve, metal, manually operated

With integr. seal adjuster and stroke limiter, optional handwheel locking device, proximity switches

DN	Operating pressure	Connection	Valve body material	Diaphragm material
4 - 100	0 to 10 bar *	Butt weld spigots Threaded connections Clamp connections Different standards and designs available.	Stainless steel 1.4435, 1.4408	FPM EPDM PTFE

### GEMÜ 643

2/2-way diaphragm valve, metal, manually operated

Tank bottom valve with side mounted gear operator, can be welded into tank bottom, tank flange on request



DN	Operating pressure	Connection	Valve body material	Diaphragm material
15 - 40	0 to 10 bar *	Butt weld spigots Different standards and designs available.	Stainless steel 1.4435, 1.4539	FPM EPDM PTFE

### GEMÜ 611

Diaphragm valve, metal, manually operated

Seal adjuster, optical position indicator



DN	Operating pressure	Connection	Valve body material	Diaphragm material
10 to 20	0 to 10 bar *	Butt weld spigots Threaded connections Clamp connections Different standards and designs available.	Stainless steel 1.4435	FPM EPDM PTFE

### GEMÜ 671

Diaphragm valve, metal, manually operated

Option: lockable / with mounting thread for electrical position indicator (open)



DN	Operating pressure	Connection	Valve body material	Diaphragm material
15 to 100	0 to 10 bar *	Butt weld spigots Threaded connections Clamp connections Different standards and designs available.	Stainless steel 1.4435, 1.4408	FPM EPDM PTFE

\* dependent on diaphragm material

# Diaphragm valves, stainless steel, sterile applications

## Pneumatic actuator



### GEMÜ 605

Diaphragm valve, metal, pneumatically operated

Control function: Normally closed (NC), Normally open (NO), Double acting (DA)

DN	Operating pressure	Connection	Valve body material	Diaphragm material
4 to 15	0 to 8 bar *	Butt weld spigots Threaded connections Clamp connections Different standards and designs available.	Stainless steel 1.4435	FPM EPDM PTFE



### GEMÜ 625

Diaphragm valve, metal, pneumatically operated

Control function: Normally closed (NC), Normally open (NO), Double acting (DA)

DN	Operating pressure	Connection	Valve body material	Diaphragm material
10 to 20	0 to 6 bar *	Butt weld spigots Threaded connections Clamp connections Different standards and designs available.	Stainless steel 1.4435	FPM EPDM PTFE



### GEMÜ 650 BioStar

Diaphragm valve, metal, pneumatically operated

Control function: Normally closed (NC), Normally open (NO), Double acting (DA)

DN	Operating pressure	Connection	Valve body material	Diaphragm material
4 to 100	0 to 10 bar *	Butt weld spigots Threaded connections Clamp connections Flanges Different standards and designs available.	Stainless steel 1.4435	FPM EPDM PTFE



### GEMÜ 651

Diaphragm valve, metal, pneumatically operated, with fully integrated automation module

Control function: Normally closed (NC), Normally open (NO), Double acting (DA)

DN	Operating pressure	Connection	Valve body material	Diaphragm material
4 to 25	0 to 10 bar *	Butt weld spigots Threaded connections Clamp connections Flanges Different standards and designs available.	Stainless steel 1.4435, 1.4408	EPDM PTFE

\* dependent on diaphragm material



Operator size 1



Operator size 2

### GEMÜ 660

Diaphragm valve, metal, pneumatically operated;  
specially developed for dosing and filling applications

Control function: Normally closed (NC), Normally open (NO), Double acting (DA)

DN	Operating pressure	Connection	Valve body material	Diaphragm material
4 to 25	0 to 5 bar *	Butt weld spigots Clamp connections Different standards and designs available.	Stainless steel 1.4435, 1.4408	EPDM PTFE

### GEMÜ 687

Diaphragm valve, metal, pneumatically operated

Control function: Normally closed (NC), Normally open (NO), Double acting (DA)



DN	Operating pressure	Connection	Valve body material	Diaphragm material
10 to 100	0 to 10 bar **	Butt weld spigots Clamp connections Different standards and designs available.	Stainless steel 1.4435, 1.4408	FPM EPDM PTFE

### GEMÜ 658 / 688

Diaphragm valve, metal, pneumatically operated; two stage actuator

Control function: Normally closed (NC)



GEMÜ 658



GEMÜ 688

DN	Operating pressure	Connection	Valve body material	Diaphragm material
10 to 50	0 to 10 bar *	Butt weld spigots Threaded connections Clamp connections Different standards and designs available.	Stainless steel 1.4435, 1.4408	FPM EPDM PTFE

### GEMÜ 615

Diaphragm valve, metal, pneumatically operated

Control function: Normally closed (NC), Normally open (NO), Double acting (DA)



DN	Operating pressure	Connection	Valve body material	Diaphragm material
10 to 20	0 to 6 bar *	Butt weld spigots Clamp connections Different standards and designs available.	Stainless steel 1.4435	FPM EPDM PTFE

\* dependent on diaphragm material, \*\* dependent on diaphragm material and nominal size

# Diaphragm valves, stainless steel, sterile applications



## GEMÜ 695

Diaphragm valve, metal, pneumatically operated

Control function: Normally closed (NC), Normally open (NO), Double acting (DA)

DN	Operating pressure	Connection	Valve body material	Diaphragm material
15 to 50	0 to 10 bar *	Butt weld spigots Clamp connections Different standards and designs available.	Stainless steel 1.4435, 1.4408	FPM EPDM PTFE



## GEMÜ 618

Diaphragm valve, metal, motorized

With/without integr. positioner/process controller, operating time 17 sec./45 sec.

DN	Operating pressure	Connection	Voltage	Valve body material	Diaphragm material
4 to 20	0 to 6 bar	Butt weld spigots Clamp connections Different standards and designs available.	24 VDC 120 VAC 230 VAC 50/60Hz	Stainless steel 1.4435	FPM EPDM PTFE



## GEMÜ 648 SideStep

Diaphragm valve, metal, motorized

Open/Close or control actuator with various options available

DN	Operating pressure	Connection	Voltage	Valve body material	Diaphragm material
15 to 50	0 to 10 bar *	Butt weld spigots Different standards and designs available.	24 VDC 120 VAC 230 VAC 50/60Hz	Stainless steel 1.4435	EPDM PTFE



## GEMÜ 698

Diaphragm valve, metal, motorized

Can be used as control actuator

DN	Operating pressure	Connection	Voltage	Valve body material	Diaphragm material
15 to 50	0 to 10 bar **	Butt weld spigots Clamp connections Different standards and designs available.	24 VAC 120 VAC 230 VAC 50/60Hz	Stainless steel 1.4435, 1.4408	FPM EPDM PTFE

\* dependent on diaphragm material, \*\* dependent on diaphragm material and nominal size





### GEMÜ T valve bodies

T valve bodies are ideal for welding into ring mains. This allows the working medium to be fed or drawn off vertically and almost deadleg free.

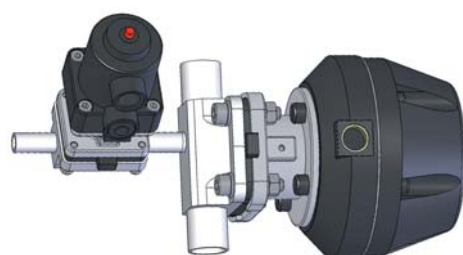
#### Features

- Tried and tested GEMÜ seal system
- Made from block material, no welded components
- Fitted with butt weld spigots as standard, i.e. reduction of validation times
- Compact design, GMP-compliant design
- Internal surface contour mechanically polished and/or electropolished down to Ra 0.25 µm
- Standard valve body material 1.4435 (316L). Other materials on request
- Clamps, union ends and flanges as well as other connections on request
- Available with manual, pneumatic or motorized operators



### GEMÜ W600 Valve configurations

The arrangement of two valves welded together to suit the respective application provides maximum functionality in a restricted space. The assembly does without a T piece and thus the dead space between the valves is essentially reduced and two welds are no longer necessary. If superior designs are required, we recommend using multi-port valve blocks from the GEMÜ M600 series which are machined from a single block.



# Diaphragm valves, stainless steel, sterile applications



## GEMÜ i-bodies

The evolution from welded SAP valve configurations according to the 6D- or 3D-rule to modern M-blocks shows the advantages of M-blocks very clearly. The GEMÜ i-body (integrated sampling valve) machined from either forged or solid material can be seen as an intermediate step to full GEMÜ M-block design. It offers a low cost and good alternative to the M-block for a number of combinations. The i-body already exhibits two essential features of an M-block. It has a greatly reduced dead volume and no welds in the product area. The drain or supply spigot is only welded on behind the valve seat.

„i“-bodies are a special construction type of the classical 2/2-way bodies. „i“ stands for integrated sampling, steam and condensate valve. The valve bodies have two valve seats and 3 pipe connections. They are manufactured from a forging blank or a piece of block material. The major advantages of i-bodies compared to standard sampling or condensate valve bodies are as follows:

- Compact design and reduced weight
- Minimal deadleg
- No weld in the product area
- Horizontal spigot available
- No rear mounted operators
- Cost effective
- Draining in vertical mounting position possible if adhering to the 3D-rule
- Better drainability than with welded combinations
- Pneumatic and manual operators are available for both valve seats





### GEMÜ B600 Tank valves

Today tank valves are available in a large number of versions. They can be installed or welded into the tank cover, tank wall or tank bottom. Their main functions are for filling, sampling and draining the tank contents. Sometimes these functions are combined in one valve for reasons of process safety and sometimes even extra functions are added such as integrated CIP/SIP connections.

All these GEMÜ valves have one thing in common. They are diaphragm valves whose sealing weir is as close as possible to the tank wall to avoid deadlegs in the tank. The internal of the tank bottom valve body has a specially designed cavity which promotes optimum draining of the tank contents and improves their cleanliness and sterilisation. Only this cavity ensures optimised draining of the tank!

#### Features

- Being very compact, the B600 tank valves are ideal for applications where space is at a premium
- Minimal deadlegs and optimized draining capabilities
- The valve body is machined from a single piece of block material. (Monoblock - no welding)
- The valve has CIP/SIP and sterilising capabilities
- The internal surface contour of the valve body is available mechanically and/or electropolished down to Ra 0.25 µm
- The valve has optimized flow geometry
- Pipe connections such as butt weld spigots, clamps and threaded connections are available in accordance with industrial standards
- Valve body materials are 1.4435/316L, other alloys are available to customer specification or test requirements (AD 2000 WZ)
- Welding into the tank bottom is simplified by a welding neck (standard 6 mm)
- Both the tank bottom valve and the tank wall valve are available with a manual, pneumatic or motorized operator
- Optical and/or electrical position indicators are available as actuator instrumentation
- Tank flange on request



# Diaphragm valves, stainless steel, sterile applications



## GEMÜ M600 Multi-port valve blocks

To make processes safer, increase the availability of the plant and reduce the life cycle costs of a plant within the scope of a total cost of ownership concept, GEMÜ has implemented more than 400 different designs and thousands of customized variants of multi-port valves over the years. We support our customers with ideas and initial drafts at the planning phase. The drafts are then implemented constructively in our 3D CAD system, agreed in close cooperation with the customer and then machined in our highly efficient machine park. We machine several thousand blocks weighing between 0.1 kg and 500 kg per year on multi-axis machining centres. Every day, our Design Centre turns out new customized block designs.

### Features

- Individual, customized and very flexible design
- Compact – low space requirements
- Low hold-up volume, small wetted area
- Greatly reduced deadlegs
- All blocks are designed for optimized draining
- Machined from one block of material
- Much greater product reliability
- No internal welds
- Fewer fittings, welds and radiographic inspections
- Standard welded ends for orbital welding
- Reduced total cost of ownership
- Operators and diaphragms from the proven GEMÜ modular system can be used
- Reduced and simple validation
- Customized version



# Diaphragm valves, metal, industry

## Manual operator



### GEMÜ 611

2/2-way diaphragm valve, metal, manually operated  
Seal adjuster, optical position indicator

DN	Operating pressure	Connection	Valve body material	Diaphragm material
10 to 20	0 to 10 bar *	Threaded sockets Different standards and designs available.	Stainless steel 1.4435 Brass	FPM EPDM PTFE



### GEMÜ 671

2/2-way diaphragm valve, metal, manually operated  
Option: lockable / with mounting thread for electrical position indicator

DN	Operating pressure	Connection	Valve body material	Diaphragm material
15 to 100	0 to 10 bar *	Threaded sockets Flanges Different standards and designs available.	Stainless steel 1.4435, 1.4408 Cast iron SG iron with Halar, PFA, PP and rubber lining	FPM EPDM PTFE



### GEMÜ 653

2/2-way diaphragm valve, metal, manually operated  
With integr. seal adjuster and stroke limiter, optional handwheel locking device, proximity switches

DN	Operating pressure	Connection	Valve body material	Diaphragm material
10 to 100	0 to 10 bar *	Threaded sockets Flanges Different standards and designs available.	Stainless steel 1.4435, 1.4408 PFA lining available	FPM EPDM PTFE



Seal adjuster/stroke limiter  
with manual locking device  
(LOC)



Seal adjuster/stroke limiter with  
electromagnetic locking device  
(MAG)



Mounting for proximity  
switches

\* dependent on diaphragm material

# Diaphragm valves, metal, industry

## Manual operator



### GEMÜ 673

2/2-way diaphragm valve, metal, manually operated  
Seal adjuster, optical position indicator

DN	Operating pressure	Connection	Valve body material	Diaphragm material
10 to 50	0 to 10 bar *	Threaded sockets Flanges Different standards and designs available.	Stainless steel 1.4435 Cast iron SG iron with PFA, PP and rubber lining	FPM EPDM PTFE



### GEMÜ 675

2/2-way diaphragm valve, metal, manually operated  
Option: facility for locking with a padlock up to DN 100

DN	Operating pressure	Connection	Valve body material	Diaphragm material
15 to 300	0 to 10 bar *	Threaded sockets Various flanges to EN and ANSI Lengths to EN and MSS	EN-GJL-250 (GG 25), EN-GJL-250 (GG 25) with Halar coating, EN-GJS-400-18-LT (GGG 40.3) with PFA, PP and hard rubber lining EN-GJS-500-7 (GGG 50) with PFA, PP lining	CSM NBR FPM CR EPDM PTFE IIR



GEMÜ 675  
Lockable handwheel

\* dependent on diaphragm material

# Diaphragm valves, metal, industry

## Pneumatic actuator



### GEMÜ 615

2/2-way diaphragm valve, metal, pneumatically operated

Control function: Normally closed (NC), Normally open (NO), Double acting (DA)

DN	Operating pressure	Connection	Valve body material	Diaphragm material
10 to 20	0 to 6 bar *	Threaded sockets Different standards and designs available.	Brass Investment casting 1.4435 (ASTM A 351 CF3M)	FPM EPDM PTFE



### GEMÜ 620

2/2-way diaphragm valve, metal, pneumatically operated

Control function: Normally closed (NC), Normally open (NO), Double acting (DA)

DN	Operating pressure	Connection	Valve body material	Diaphragm material
15 to 150	0 to 10 bar **	Threaded sockets Various flanges acc. to EN and ANSI, lengths acc. to EN and MSS	EN-GJL-250 (GG 25), EN-GJL-250 (GG 25) with Halar coating, EN-GJS-400-18-LT (GGG 40.3) with PFA, PP and hard rubber lining EN-GJS-500-7 (GGG 50) with PFA, PP lining	CSM NBR FPM CR EPDM PTFE



### GEMÜ 687

2/2-way diaphragm valve, metal, pneumatically operated

Control function: Normally closed (NC), Normally open (NO), Double acting (DA)

DN	Operating pressure	Connection	Valve body material	Diaphragm material
15 to 100	0 to 10 bar *	Threaded sockets Flanges Different standards and designs available.	EN-GJS-400-18-LT (GGG 40.3) with PFA, PP and hard rubber lining Stainless steel 1.4435, 1.4408, 1.4408 with PFA lining	FPM EPDM PTFE



### GEMÜ 695

2/2-way diaphragm valve, metal, pneumatically operated

Control function: Normally closed (NC), Normally open (NO), Double acting (DA)

DN	Operating pressure	Connection	Valve body material	Diaphragm material
15 to 50	0 to 10 bar *	Threaded connections Flanges Different standards and designs available.	EN-GJL-250 (GG 25) EN-GJS-400-18-LT (GGG 40.3) with PFA, PP and hard rubber lining Stainless steel 1.4435, 1.4408, 1.4408 with PFA lining	FPM EPDM PTFE

\* dependent on diaphragm material, \*\* dependent on diaphragm material and nominal size

# Diaphragm valves, metal, industry

## Motorized actuator



### GEMÜ 618

2/2-way diaphragm valve, metal, motorized

With/without integr. positioner/process controller, operating time 17 sec./45 sec.

DN	Operating pressure	Connection	Voltage	Valve body material	Diaphragm material
4 to 20	0 to 6 bar *	Threaded connections Different standards and designs available.	24 VDC 120 VAC 230 VAC 50/60Hz	Brass Stainless steel 1.4435	FPM EPDM PTFE



### GEMÜ 648 SideStep

2/2-way diaphragm valve, metal, motorized

Open/Close or control actuator available

DN	Operating pressure	Connection	Voltage	Valve body material	Diaphragm material
15 to 100	0 to 10 bar *	Threaded connections Flanges Different standards and designs available.	24 VDC 120 VAC 230 VAC 50/60Hz	EN-GJL-250 (GG 25), EN-GJL-250 (GG 25) with Halar coating EN-GJS-400-18-LT (GGG 40.3) with PFA, PP and hard rubber lining EN-GJS-500-7-LT (GGG 50) with PFA and PP lining Stainless steel 1.4435, 1.4408	CSM NBR FPM CR EPDM PTFE



### GEMÜ 628

2/2-way diaphragm valve, metal, motorized

AUMA linear actuator (Open/Close, control actuator)

DN	Operating pressure	Connection	Voltage	Valve body material	Diaphragm material
40 to 150	0 to 10 bar **	Threaded connections Flanges Different standards and designs available.	230 VAC 400 VAC 50/60 Hz 480 VAC 50 Hz	EN-GJL-250 (GG 25), EN-GJL-250 (GG 25) with Halar coating EN-GJS-400-18-LT (GGG 40.3) with PFA, PP and hard rubber lining EN-GJS-500-7 (GGG 50) with PFA and PP lining	CSM NBR FPM CR EPDM PTFE



### GEMÜ 698

2/2-way diaphragm valve, metal, motorized

With/without integr. positioner/process controller, 2 operating times

DN	Operating pressure	Connection	Voltage	Valve body material	Diaphragm material
15 to 50	0 to 10 bar **	Threaded connections Flanges Different standards and designs available.	24 VAC 120 VAC 230 VAC 50/60Hz	EN-GJL-250 (GG 25) EN-GJS-400-18-LT (GGG 40.3) with PFA, PP and hard rubber lining Stainless steel 1.4435, 1.4408, 1.4408 with PFA lining	CSM NBR FPM CR EPDM PTFE

\* dependent on diaphragm material, \*\* dependent on diaphragm material and nominal size



# Full bore diaphragm valves, metal, industry



## GEMÜ 655

2/2-way diaphragm valve, full bore design, metal, manually operated

DN	Operating pressure	Connection	Valve body material	Diaphragm material
25 to 300	0 to 7 bar **	Various flanges to EN and ANSI Lengths to EN and MSS	EN-GJL-250 (GG 25), EN-GJL-250 (GG 25) with hard and soft rubber lining	CSM NBR IIR CR NR EPDM



## GEMÜ 656

2/2-way diaphragm valve, full bore design, metal, pneumatically operated  
Control function: Normally closed (NC), Normally open (NO), Double acting (DA)

DN	Operating pressure	Connection	Valve body material	Diaphragm material
25 to 300	0 to 7 bar **	Various flanges to EN and ANSI Lengths to EN and MSS	EN-GJL-250 (GG 25), EN-GJL-250 (GG 25) with hard rubber lining, EN-GJL-250 (GG 25) with soft rubber coating	CSM NBR FPM CR EPDM



## GEMÜ 638

2/2-way diaphragm valve, full bore design, metal, motorized  
AUMA linear actuator (Open/Close, control actuator)

DN	Operating pressure	Connection	Voltage	Valve body material	Diaphragm material
25 to 150	0 to 7 bar **	Various flanges to EN and ANSI Lengths to EN and MSS	230 VAC 400 VAC 50/60 Hz 480 VAC 50 Hz	EN-GJL-250 (GG 25), EN-GJL-250 (GG 25) with hard and soft rubber lining	CSM NBR FPM CR EPDM

\* dependent on diaphragm material, \*\* dependent on diaphragm material and nominal size

# Diaphragm valves, plastic



## GEMÜ 617

2/2-way diaphragm valve, plastic, manually operated

DN	Operating pressure	Connection	Valve body material	Diaphragm material
12 to 15	0 to 6 bar *	Spigots for solvent cement or weld connections Union ends with insert Threaded and solvent cement sockets	PVC-U, grey PP reinforced PP-H natural PVDF	EPDM FPM NBR PTFE



## GEMÜ R677

2/2-way diaphragm valve, plastic, manually operated

DN	Operating pressure	Connection	Valve body material	Diaphragm material
15 to 50	0 to 10 bar *	Spigots for solvent cement or weld connections Flanges Union ends with insert	PVC-U, grey ABS	EPDM PTFE



## GEMÜ 610

2/2-way diaphragm valve, plastic, pneumatically operated

Control function: Normally closed (NC), Normally open (NO), Double acting (DA)

Option: with mounting plate

DN	Operating pressure	Connection	Valve body material	Diaphragm material
12 to 15	0 to 6 bar *	Spigots for solvent cement or weld connections Union ends with insert Threaded and solvent cement sockets	PVC-U, grey PP reinforced PP-H natural PVDF	EPDM FPM NBR PTFE



## GEMÜ 630

2/2-way diaphragm valve, plastic, pneumatically operated

Control function: Normally closed (NC), Normally open (NO), Double acting (DA)

DN	Operating pressure	Connection	Valve body material	Diaphragm material
12 to 15	0 to 6 bar *	Union ends with insert	PVC-U, grey PP reinforced PP-H natural PVDF	EPDM FPM NBR PTFE

\* dependent on diaphragm material



### GEMÜ R690

2/2-way diaphragm valve, plastic, pneumatically operated

Control function: Normally closed (NC), Normally open (NO), Double acting (DA)

DN	Operating pressure	Connection	Valve body material	Diaphragm material
15 to 100	0 to 10 bar *	Spigots for solvent cement or weld connections Flanges Union ends with insert	PVC-U, grey ABS PP / PP-H PVDF	NBR FPM EPDM PTFE



### GEMÜ 613

2/2-way diaphragm valve, plastic, motorized

With/without integr. positioner/process controller, operating time 17 sec./45 sec.

DN	Operating pressure	Connection	Voltage	Valve body material	Diaphragm material
12 to 15	0 to 6 bar *	Union ends with insert Spigots for socket or butt welding	24 VAC 120 VAC 230 VAC 50/60Hz	PVC-U, grey PP, reinforced PVDF	NBR FPM EPDM PTFE

\* dependent on diaphragm material, \*\* dependent on diaphragm material and nominal size

# Angle seat globe valves, metal



## GEMÜ 507

2/2-way globe valve, metal, manually operated with plastic handwheel

DN	Operating pressure	Connection	Valve body material	Seat seal
6 to 80	0 to 25 bar *	Butt weld spigots Threaded connections Clamp connections Flanges Different standards and designs available.	Stainless steel 1.4435, 1.4408	PTFE PEEK



## GEMÜ 505

2/2-way globe valve, metal, manually operated with plastic handwheel

DN	Operating pressure	Connection	Valve body material	Seat seal
8 to 80	0 to 10 bar *	Butt weld spigots Different standards and designs available.	Stainless steel 1.4435	PTFE



## GEMÜ 555

2/2-way globe valve, metal, pneumatically operated, stainless steel piston actuator  
Control function: Normally closed (NC)

DN	Operating pressure	Connection	Valve body material	Seat seal
8 to 80	0 to 10 bar *	Butt weld spigots Different standards and designs available.	Stainless steel 1.4435	PTFE



## GEMÜ 554

2/2-way globe valve, metal, pneumatically operated, plastic piston actuator  
Control function: Normally closed (NC), Normally open (NO), Double acting (DA)

DN	Operating pressure	Connection	Valve body material	Seat seal
6 to 80	0 to 25 bar *	Butt weld spigots Threaded connections Clamp connections Flanges Different standards and designs available.	Cast bronze Stainless steel 1.4435, 1.4408	PTFE EPDM NBR

\* dependent on nominal size and design



### GEMÜ 550

2/2-way globe valve, metal, pneumatically operated, stainless steel piston actuator  
Control function: Normally closed (NC), Normally open (NO), Double acting (DA)

DN	Operating pressure	Connection	Valve body material	Seat seal
6 to 80	0 to 25 bar *	Butt weld spigots Threaded connections Clamp connections Flanges Different standards and designs available.	Stainless steel 1.4435, 1.4408	PTFE EPDM NBR Steel



### GEMÜ 514

2/2-way globe valve, metal, pneumatically operated, aluminium piston actuator  
Control function: Normally closed (NC), Normally open (NO), Double acting (DA)

DN	Operating pressure	Connection	Valve body material	Seat seal
10 to 80	0 to 25 bar *	Butt weld spigots Threaded connections Flanges Different standards and designs available.	Cast bronze Stainless steel 1.4435, 1.4408	PTFE EPDM NBR Steel

\* dependent on nominal size and design

# Globe valves, metal



## GEMÜ 537

2/2-way globe valve, metal, manually operated with plastic handwheel

DN	Operating pressure	Connection	Valve body material	Seat seal
15 to 50	0 to 25 bar *	Flanges Different standards and designs available.	Stainless steel 1.4408 EN-GJS-400 18-LT GGG 40.3	PTFE



## GEMÜ 530

2/2-way globe valve, metal, pneumatically operated, stainless steel piston actuator  
Control function: Normally closed (NC), Normally open (NO), Double acting (DA)

DN	Operating pressure	Connection	Valve body material	Seat seal
15 to 50	0 to 25 bar *	Flanges Different standards and designs available.	Stainless steel 1.4408	FPM PTFE Steel EPDM



## GEMÜ 532

2/2-way globe valve, metal, pneumatically operated, aluminium piston actuator  
Control function: Normally closed (NC), Normally open (NO), Double acting (DA)

DN	Operating pressure	Connection	Valve body material	Seat seal
15 to 50	0 to 25 bar *	Flanges Different standards and designs available.	Stainless steel 1.4408 EN-GJS-400 18-LT GGG 40.3	FPM PTFE Steel EPDM



## GEMÜ 534

2/2-way globe valve, metal, pneumatically operated, plastic piston actuator  
Control function: Normally closed (NC), Normally open (NO), Double acting (DA)

DN	Operating pressure	Connection	Valve body material	Seat seal
15 to 50	0 to 25 bar *	Flanges Different standards and designs available.	Stainless steel 1.4408 EN-GJS-400 18-LT GGG 40.3	FPM PTFE EPDM

\* dependent on nominal size and design



### GEMÜ 536

2/2-way globe valve, metal, pneumatically operated, metal membrane actuator  
Control function: Normally closed (NC), Normally open (NO), Double acting (DA)

DN	Operating pressure	Connection	Valve body material	Seat seal
65 to 150	0 to 16 bar *	Flanges Different standards and designs available.	Cast stainless steel 1.4408	PTFE



### GEMÜ 314

3/2-way globe valve, metal, pneumatically operated, aluminium piston actuator  
Control function: in resting position - straight through passage, actuated - angled passage

DN	Operating pressure	Connection	Valve body material	Seat seal
15 to 50	0 to 16 bar *	Threaded sockets DIN ISO 228	Cast bronze	PTFE



### GEMÜ 312

3/2-way globe valve, metal, pneumatically operated, aluminium piston actuator  
Control function: in resting position - straight through passage, actuated - angled passage

DN	Operating pressure	Connection	Valve body material	Seat seal
15 to 100	0 to 16 bar *	Flanges Different standards and designs available.	Cast iron EN-GJL-250	PTFE



### GEMÜ 352

3/2-way globe valve, metal, pneumatically operated, plastic piston actuator  
Control function: Normally closed (NC)

DN	Operating pressure	Connection	Valve body material	Seat seal
15 to 100	0 to 16 bar *	Flanges Different standards and designs available.	Cast iron EN-GJL-250	PTFE

\* dependent on nominal size and design

# Globe valves, metal



## GEMÜ 354

3/2-way globe valve, metal, pneumatically operated, plastic piston actuator  
Control function: Normally closed (NC)

DN	Operating pressure	Connection	Valve body material	Seat seal
15 to 50	0 to 16 bar *	Threaded sockets DIN ISO 228	Cast bronze	PTFE



## GEMÜ 342

3/2-way globe valve, metal, motorized

DN	Operating pressure	Connection	Voltage	Valve body material	Seat seal
25 to 80	0 to 16 bar *	Threaded sockets DIN ISO 228	24 VAC 120 VAC 230 VAC 50/60Hz	Cast iron EN-GJL-250	PTFE



## GEMÜ 344

3/2-way globe valve, metal, motorized

DN	Operating pressure	Connection	Voltage	Valve body material	Seat seal
25 to 50	0 to 16 bar *	Flanges Different standards and designs avail- able.	24 VAC 120 VAC 230 VAC 50/60Hz	Cast bronze	PTFE

\* dependent on nominal size and design



# Control valves, plastic and metal



## GEMÜ 565

2/2-way globe valve, plastic and metal, pneumatically operated  
Stainless steel piston actuator, control function: Normally closed (NC)

DN	Operating pressure	Connection	Valve body material	Seat seal
3 to 15	0 to 6 bar *	Threaded sockets DIN ISO 228 Threaded spigots Union ends with insert Clamp connections	PVC-U, grey PVDF	FPM EPDM



## GEMÜ 566

2/2-way control valve, metal, various actuation types  
Stainless steel operator (manual, pneumatic), plastic actuator (motorized)

DN	Operating pressure	Connection	Valve body material	Seat seal
8 to 15	0 to 6 bar *	Threaded sockets	1.4435 (investment casting)	FPM EPDM



## GEMÜ 563

2/2-way globe valve, plastic, motorized, plastic actuator  
With/without integr. positioner/process controller, operating time 17 sec./45 sec.

DN	Operating pressure	Connection	Voltage	Valve body material	Seat seal
3 to 15	0 to 6 bar *	Threaded sockets DIN ISO 228	24 VAC 120 VAC 230 VAC 50/60Hz	PVC-U, grey PVDF	FPM EPDM



## GEMÜ 548 SideStep

2/2-way globe valve, metal, motorized, plastic actuator  
Open/Close or control actuator with various options available

DN	Operating pressure	Connection	Voltage	Valve body material	Seat seal
25 to 80	0 to 25 bar *	Butt weld spigots, threaded connections Different standards and designs available.	24 VAC 120 VAC 230 VAC 50/60Hz	Cast bronze Stainless steel 1.4435, 1.4408	FPM EPDM PTFE

\* dependent on nominal size and design

# Butterfly valves, plastic



## GEMÜ 417

Butterfly valve, plastic, manually operated  
Lockable hand lever

DN	Operating pressure	Connection	Valve body material	Disc material	Seal material
15 to 100	0 to 6 bar	Union ends with DIN insert Union ends with inch insert	PVC-U, grey	PVDF	EPDM FPM



## GEMÜ 410

Butterfly valve, plastic, pneumatically operated  
Control function: Normally closed (NC), Normally open (NO), Double acting (DA)

DN	Operating pressure	Connection	Valve body material	Disc material	Seal material
15 to 100	0 to 6 bar	Union ends with DIN insert Union ends with inch insert	PVC-U, grey	PVDF	EPDM FPM



## GEMÜ 423

Butterfly valve, plastic, motorized  
On/Off duty

DN	Operating pressure	Connection	Voltage	Valve body material	Disc material	Seal material
15 to 100	0 to 6 bar	Union ends with DIN insert Union ends with inch insert	12/24 V DC 12/24 V AC 50/60 Hz 100-250 V AC 50/60 Hz	PVC-U, grey	PVDF	EPDM FPM



### GEMÜ D457

Butterfly valve, plastic, manually operated  
With hand lever or gearbox

DN	Operating pressure	Connection	Valve body material	Disc material	Seal material
50 to 300	0 to 10 bar	Wafer-type flange body	PP glass fibre reinforced (GF)	PVC-U PVC-C PP-H	EPDM FPM



### GEMÜ D450

Butterfly valve, plastic, pneumatically operated  
Control function: Normally closed (NC), Normally open (NO), Double acting (DA)

DN	Operating pressure	Connection	Valve body material	Disc material	Seal material
50 to 300	0 to 10 bar	Wafer-type flange body	PP glass fibre reinforced (GF)	PVC-U PVC-C PP-H	EPDM FPM



### GEMÜ D451

Butterfly valve, plastic, pneumatically operated  
Control function: Normally closed (NC), Normally open (NO), Double acting (DA)

DN	Operating pressure	Connection	Valve body material	Disc material	Seal material
50 to 300	0 to 10 bar	Wafer-type flange body	PP glass fibre reinforced (GF)	PVC-U PVC-C PP-H	EPDM FPM



### GEMÜ D458

Butterfly valve, plastic, motorized

DN	Operating pressure	Connection	Voltage	Valve body material	Disc material	Seal material
50 to 300	0 to 10 bar	Wafer-type flange body	24 V DC 24, 120, 230 VAC 50/60 Hz 12-48 VDC	PP glass fibre reinforced (GF)	PVC-U PVC-C PP-H	EPDM FPM

# Butterfly valves, metal



## GEMÜ 411

Butterfly valve, metal, manually operated  
Lockable hand lever

DN	Operating pressure	Connection	Valve body material	Disc material	Seal material
15 to 50	0 to 10 bar	Threaded sockets DIN ISO 228 Butt weld spigots Different standards and designs available.	Brass Stainless steel 1.4581	Brass Stainless steel 1.4581	EPDM FPM PSI



## GEMÜ 415

Butterfly valve, metal, pneumatically operated  
Control function: Normally closed (NC), Normally open (NO), Double acting (DA)

DN	Operating pressure	Connection	Valve body material	Disc material	Seal material
15 to 50	0 to 10 bar	Threaded sockets DIN ISO 228 Butt weld spigots Different standards and designs available.	Brass Stainless steel 1.4581	Brass Stainless steel 1.4581	EPDM FPM PSI



## GEMÜ 428

Butterfly valve, metal, motorized  
On/Off duty

DN	Operating pressure	Connection	Voltage	Valve body material	Disc material	Seal material
15 to 50	0 to 10 bar	Threaded sockets DIN ISO 228 Butt weld spigots Different standards and designs available.	12/24 V DC 12/24 V AC 50/60 Hz 100-250 V AC 50/60 Hz	Brass Stainless steel 1.4581	Brass Stainless steel 1.4581	EPDM FPM PSI



**GEMÜ 487 Victoria**  
Butterfly valve, metal, manually operated

DN	Operating pressure	Connection	Valve body material	Disc material	Seal material
25 to 600	0 to 16 bar *	Wafer, Lug and U section PN 6, PN 10, PN 16 ANSI 150	EN- GJS-400-15 (GGG 40), epoxy coated 120 µm	Stainless steel 1.4408 SG iron (GGG 40) epoxy coated Stainless steel 1.4408 Halar coated SG iron (GGG 40) Rilsan® PA11 coated 1.4469 Super Duplex	EPDM NBR FPM



**GEMÜ 481 Victoria**  
Butterfly valve, metal, pneumatically operated  
Control function: Normally closed (NC), Normally open (NO), Double acting (DA)

DN	Operating pressure	Connection	Valve body material	Disc material	Seal material
25 to 600	0 to 16 bar *	Wafer and Lug PN 6, PN 10, PN 16 ANSI 150	EN- GJS-400-15 (GGG 40), epoxy coated 120 µm	Stainless steel 1.4408 SG iron (GGG 40) epoxy coated Stainless steel 1.4408 Halar coated SG iron (GGG 40) Rilsan® PA11 coated 1.4469 Super Duplex	EPDM NBR FPM



**GEMÜ 488 Victoria**  
Butterfly valve, metal, motorized

DN	Operating pressure	Connection	Voltage	Valve body material	Disc material	Seal material
25 to 600	0 to 16 bar *	Wafer and Lug PN 6, PN 10, PN 16 ANSI 150	24 V DC 24/120/230 VAC 50/60 Hz 400 VAC 50 Hz	EN- GJS-400-15 (GGG 40), epoxy coated 120 µm	Stainless steel 1.4408 SG iron (GGG 40) epoxy coated Stainless steel 1.4408 Halar coated SG iron (GGG 40) Rilsan® PA11 coated 1.4469 Super Duplex	EPDM NBR FPM

Actuators from GEMÜ, AUMA, Rotork, Deufra  
Bernhard etc. available

\* dependent on nominal size and design

# Butterfly valves, metal



## GEMÜ D487

Butterfly valve, metal, manually operated

DN	Operating pressure	Connection
32 to 1400	0 to 16 bar *	Wafer Lug U section



## GEMÜ D481

Butterfly valve, metal, pneumatically operated

Control function: Normally closed (NC), Normally open (NO), Double acting (DA)

DN	Operating pressure	Connection
32 to 1400	0 to 16 bar *	Wafer Lug U section



## GEMÜ D488

Butterfly valve, metal, motorized

DN	Operating pressure	Connection	Voltage
32 to 1400	0 to 16 bar *	Wafer Lug U section	12-24 VAC/DC 120, 230 VAC 50/60 Hz

The technical data in the table below is valid for all the above product types.

Valve body material	Disc material	Seal material
EN-GJL-250 (GG 25) EN-GJS-400-15 (GGG 40) epoxy coated ASTM A351, CF8M, cast stainless steel ASTM A216 WCB, cast steel DIN 1705 (Rg 10), cast bronze S355J2+N, S 275 JR + epoxy coated EN-AC-47100, cast aluminium	CF8M / 1.4408 CF8M / 1.4408 polished CF8M / 1.4408 Halar coated 1.4469 Super Duplex EN-GJS-400 -15 / GGG40 Resicoat coated EN-GJS-400 -15 / GGG40 rubber lined EPDM DIN 1705 (Rg 10), cast bronze URANUS B6 Super duplex 1.4539	HNBR, Butyl, epichlorhydrine, FPM GF, EPDM Flucast AB/P, Flucast AB/E Hypalon EPDM (FDA), EPDM (high temperature), EPDM (ACS, KTW, WRAS, W270) NBR Neoprene Silicone, Silicone (steam)

\* dependent on nominal size and design



### GEMÜ 497

Butterfly valve, metal, manually operated

DN	Operating pressure	Connection	Valve body material	Disc material	Seal material
40 to 900	0 to 10 bar *	Wafer and Lug PN 10, PN 16 ANSI B 16.5	Stainless steel 316L SG iron (GGG 40) epoxy coated Steel S355J2G3 Duroplast (VE-CF)	Stainless steel PFA encapsulated Titanium Grade 2 Hastelloy C22	TFM™ / silicone TFM™ / EPDM TFM™ / FPM



### GEMÜ 491

Butterfly valve, metal, pneumatically operated

Control function: Normally closed (NC), Normally open (NO), Double acting (DA)

DN	Operating pressure	Connection	Valve body material	Disc material	Seal material
40 to 900	0 to 10 bar *	Wafer and Lug PN 10, PN 16 ANSI B 16.5	Stainless steel 316L SG iron (GGG 40) epoxy coated Steel S355J2G3 Duroplast (VE-CF)	Stainless steel PFA encapsulated Titanium Grade 2 Hastelloy C22	TFM™ / silicone TFM™ / EPDM TFM™ / FPM



### GEMÜ 498

Butterfly valve, metal, motorized

DN	Operating pressure	Connection	Voltage	Valve body material	Disc material	Seal material
40 to 900	0 to 10 bar *	Wafer and Lug PN 10, PN 16 ANSI B 16.5	24 V DC 24, 120, 230 VAC 50/60 Hz	Stainless steel 316L SG iron (GGG 40) epoxy coated Steel S355J2G3 Duroplast (VE-CF)	Stainless steel PFA encapsulated Titanium Grade 2 Hastelloy C22	TFM™ / silicone TFM™ / EPDM TFM™ / FPM

\* dependent on nominal size and design

# Check valves, plastic and metal



**GEMÜ RSK**  
Check valve, plastic

DN	Operating pressure	Spring return	Valve body material	Disc material	Seal material
40 to 600	0 to 10 bar *	Stainless steel 1.4571 Hastelloy	PVC-U, grey PP PVDF	PVC-U, grey PP PVDF	EPDM FPM Nitrile PTFE



**GEMÜ ZRSK**  
Check valve, metal

DN	Operating pressure	Spring return	Valve body material	Disc material	Seal material
40 to 600	0 to 10 bar *	Stainless steel 1.4571 Hastelloy	Stainless steel 1.4305, 1.4571 Brass	Stainless steel 1.4305, 1.4571 Brass	EPDM FPM Nitrile PTFE

\* dependent on nominal size and design



# Solenoid valves, plastic



## GEMÜ 52

2/2-way solenoid valve, plastic, directly controlled

Control function: Normally closed

DN	Operating pressure	Connection	Voltage	Valve body material	Seal material
2	0 to 6 bar	Threaded sockets Solvent cement sockets	24 V DC 24 V AC 120 V AC 230 V AC	PVC-U, grey PVDF	FPM EPDM PTFE
4	0 to 3 bar				
6	0 to 1.5 bar				



## GEMÜ 102

2/2-way solenoid valve, plastic, directly controlled

Control function: Normally closed

DN	Operating pressure	Connection	Voltage	Valve body material	Seal material
6	0 to 4 bar	Threaded sockets Solvent cement sockets	24 V DC 24 V AC 120 V AC 230 V AC	PVC-U, grey PVDF	FPM EPDM PTFE
8	0 to 2 bar				
10	0 to 1 bar				



## GEMÜ 202

2/2-way solenoid valve, plastic, directly controlled

Control function: Normally closed

DN	Operating pressure	Connection	Voltage	Valve body material	Seal material
10, 15	0 to 2 bar *	Threaded sockets Solvent cement sockets	24 V DC 24 V AC 120 V AC 230 V AC	PVC-U, grey PVDF	FPM EPDM PTFE

\* dependent on nominal size and design

# Solenoid valves, plastic



## GEMÜ 205

2/2-way solenoid valve, plastic, directly controlled, with manual override  
Control function: Normally closed

DN	Operating pressure	Connection	Voltage	Valve body material	Seal material
10	0 to 6 bar	Threaded sockets Solvent cement sockets	24 VAC 120 VAC 230 VAC	PVC-U, grey PVDF	FPM EPDM PTFE
15	0 to 2 bar	Welded sockets Union ends with DIN and inch insert			
20 to 32	0 to 1 bar				
40 to 50	0 - 0.2 bar				



## GEMÜ 225

2/2-way solenoid valve, plastic, servo assisted, with manual override  
Control function: Normally closed

DN	Operating pressure	Connection	Voltage	Valve body material	Seal material
15 to 20	0.5 to 6 bar	Solvent cement spigots, DIN Threaded spigots	24 VAC 120 VAC 230 VAC	PVC-U, grey PVDF	FPM EPDM
25 to 50	0 to 6 bar	Solvent cement spigots, inch			

# Solenoid valves, metal



## GEMÜ 8253

2/2-way solenoid valve, metal, with positive lift diaphragm

Control function: Normally closed

DN	Operating pressure	Connection	Voltage	Valve body material	Seal material
8 to 25	0 to 10 bar	Threaded sockets	24 V DC 24 V AC 110 V AC 230 V AC 50/60Hz	Brass Stainless steel 1.4408	NBR EPDM
32 to 50	0 to 16 bar				



## GEMÜ 8257

2/2-way solenoid valve, metal, with positive lift diaphragm

Control function: Normally closed

DN	Operating pressure	Connection	Voltage	Valve body material	Seal material
10	0 to 10 bar *	Threaded sockets	24 V DC 24 V AC 110 V AC 230 V AC 50/60Hz	Brass Stainless steel 1.4408	NBR FPM EPDM



## GEMÜ 8258

2/2-way solenoid valve, metal, servo assisted

Control function: Normally closed, Normally open

DN	Operating pressure	Connection	Voltage	Valve body material	Seal material
8 to 25	0.1 to 16 bar	Threaded sockets	24 V DC 24 V AC 110 V AC 230 V AC 50/60Hz	Brass Stainless steel 1.4408	NBR FPM EPDM
32 to 50	0.1 to 10 bar				



## GEMÜ 8259

2/2-way solenoid valve, metal, directly controlled

Control function: Normally closed, Normally open

DN	Operating pressure	Connection	Voltage	Valve body material	Seal material
2	0 to 10 bar	Threaded sockets	24 V DC 24 V AC 110 V AC 230 V AC 50Hz	Brass Stainless steel 1.4408	NBR FPM EPDM
3	0 to 20 bar				
4	0 to 12 bar				
5	0 to 6 bar				

\* dependent on seal material

# Pilot solenoid valves, plastic



## GEMÜ 0322/0324

3/2-way solenoid valve, plastic, directly controlled  
 0322 single mounting & battery design, 0324 direct mounting  
 Control function: Normally closed

DN	Operating pressure	Connection	Voltage	Valve body material	Seal material
2	0 to 10 bar	Threaded sockets	24 V DC 24 V AC 120 V AC 230 V AC 50/60Hz	PA	FPM



## GEMÜ 332/334

3/2-way solenoid valve, plastic, directly controlled  
 332 battery design, 334 direct mounting  
 Control function: Normally closed

DN	Operating pressure	Connection	Voltage	Valve body material	Seal material
1	0 to 10 bar	Threaded sockets	24 V DC 24 V AC 120 V AC 230 V AC 50/60Hz	PBTP	FPM

# Pilot solenoid valves, metal



## GEMÜ 8303

3/2-way solenoid valve, metal, directly controlled

Control function: Normally closed

DN	Operating pressure	Air output	Connection	Voltage	Valve body material	Seal material
2	1 to 10 bar	1.2 m <sup>3</sup> /h at 6 bar	Threaded sockets	24 V DC 24 V AC 110 V AC 230 V AC 50Hz	Brass Stainless steel 1.4581	NBR



## GEMÜ 8357

3/2-way solenoid valve, metal, servo assisted

Control function: Normally closed

DN	Operating pressure	Air output	Connection	Voltage	Valve body material	Seal material
6	1 to 10 bar	1.2 m <sup>3</sup> /h at 6 bar	Threaded sockets	24 V DC 24 V AC 230 V AC 50Hz	Aluminium	NBR



## GEMÜ 8458

5/2-way solenoid valve, metal, servo assisted

Control function: Normally closed

DN	Operating pressure	Air output	Connection	Voltage	Valve body material	Seal material
6	1 to 10 bar	1.2 m <sup>3</sup> /h at 6 bar	Threaded sockets	24 V DC 24 V AC 230 V AC 50Hz	Aluminium	NBR



## GEMÜ 8505

4/2-way solenoid valve, metal, servo assisted

Control function: Normally closed

DN	Operating pressure	Air output	Connection	Voltage	Valve body material	Seal material
4	1.5 to 10 bar	0.7 m <sup>3</sup> /h at 6 bar	Threaded sockets	24 V DC 24 V AC 230 V AC 50Hz	Aluminium	NBR
7	1 to 10 bar	1.4 m <sup>3</sup> /h at 6 bar				

# Pilot solenoid valves, metal



## GEMÜ 8506 NAMUR

3/2, 5/2-way solenoid valve, metal, servo assisted

Control function: Normally closed

DN	Operating pressure	Air output	Connection	Voltage	Valve body material	Seal material
6	2 to 8 bar	1.2 m <sup>3</sup> /h at 6 bar	Threaded sockets	24 V DC 24 V AC 230 V AC 50Hz	Aluminium	NBR

# Pressure control valves, plastic



## GEMÜ N082, N182, N782

Pressure reducer

DN	Operating pressure	Connection	Valve body material	Media temperature
10 to 100 *	0 to 10 bar *	Union ends Flanges Spigots	PP PVC PVDF	-20 to 100 °C



## GEMÜ N085, N185

Pressure relief valve

DN	Operating pressure	Connection	Valve body material	Media temperature
10 to 100 *	0 to 10 bar *	Union ends Flanges Spigots	PP PVC PVDF	-20 to 100 °C



## GEMÜ N086, N186, N786

Pressure retaining valve

DN	Operating pressure	Connection	Valve body material	Media temperature
10 to 100 *	0 to 10 bar *	Union ends Flanges Spigots	PP PVC PVDF	-20 to 100 °C

\*depending on version and/or operating parameters

# Ball valves, plastic



## GEMÜ 717

2/2, 3/2-way ball valve, plastic, manually operated

DN	Operating pressure	Connection	Valve body material	Seal material
15 to 100	0 to 10 bar *	Solvent cement/ welded sockets (DIN)	PVC-U, grey PP PVDF	Seat: PTFE/ O-rings: EPDM Seat: PTFE/ O-rings: FPM



## GEMÜ 710

2/2, 3/2-way ball valve, plastic, pneumatically operated

Control function: Normally closed (NC), Double acting (DA)

DN	Operating pressure	Connection	Valve body material	Seal material
15 to 100	0 to 10 bar *	Solvent cement/ welded sockets (DIN)	PVC-U, grey PP	Seat: PTFE/ O-rings: EPDM Seat: PTFE/ O-rings: FPM



## GEMÜ 723

2/2, 3/2-way ball valve, plastic, motorized

DN	Operating pressure	Connection	Voltage	Valve body material	Seal material
15 to 100	0 to 10 bar *	Solvent cement/ welded sockets (DIN)	12, 24 VDC 12, 24, 100-250 VAC 50/60 Hz	PVC-U, grey PP PVDF	Seat: PTFE/ O-rings: EPDM Seat: PTFE/ O-rings: FPM

\* dependent on operating temperature



# Ball valves, metal



## GEMÜ 707

2/2-way ball valve, metal, 2-piece body, manually operated  
Lockable hand lever

DN	Operating pressure	Connection	Valve body material	Seal material
8 to 50	0 to 63 bar *	Threaded sockets	Stainless steel 1.4408 (body) 1.4401 (ball)	PTFE



## GEMÜ 711

2/2, 3/2-way ball valve, metal, 3-piece body with top flange, manually operated  
Lockable hand lever

DN	Operating pressure	Connection	Valve body material	Seal material
8 to 100	0 to 63 bar *	Threaded sockets Spigots Flanges Different standards and designs available.	Stainless steel 1.4408 (body) 1.4401 (ball) CF3M (body) 316L (ball)	PTFE



## GEMÜ 712

2/2, 3/2-way ball valve, metal, 3-piece body, manually operated  
Lockable hand lever

DN	Operating pressure	Connection	Valve body material	Seal material
8 - 100	0 to 63 bar *	Threaded sockets Spigots Flanges Different standards and designs available.	Stainless steel 1.4408 (body) 1.4401 (ball)	PTFE



## GEMÜ 740 Sanitary

2/2-way ball valve, metal, 3-piece body, manually operated  
Lockable hand lever

DN	Operating pressure	Connection	Valve body material	Seal material
15 to 100	0 to 63 bar *	Butt weld spigots Spigots Clamps Different standards and designs available.	Stainless steel CF3M (316L) (body) CF3M (316L) (ball)	TFM™ PTFE

\* dependent on operating temperature and nominal size

# Ball valves, metal



## GEMÜ 762

2/2-way ball valve, metal, one-piece body with top flange, manually operated  
Lockable hand lever

DN	Operating pressure	Connection	Valve body material	Seal material
15 to 100	0 to 16 bar *	Flanges	Stainless steel 1.4408 (body) 1.4401 (ball)	PTFE



## GEMÜ 741 Sanitary

2/2-way ball valve, metal, 3-piece body with top flange, pneumatically operated

DN	Operating pressure	Connection	Valve body material	Seal material
15 to 100	0 to 63 bar *	Butt weld spigots Spigots Clamps Different standards and designs available.	Stainless steel CF3M (316L) (body) CF3M (316L) (ball)	TFM™ PTFE



## GEMÜ 751

2/2, 3/2-way ball valve, metal, 3-piece body with top flange, pneumatically operated

DN	Operating pressure	Connection	Valve body material	Seal material
8 to 100	0 to 63 bar *	Threaded sockets Spigots Flanges Different standards and designs available.	Stainless steel 1.4408 (body) 1.4401 (ball) CF3M (body) 316L (ball)	PTFE



## GEMÜ 761

2/2-way ball valve, metal, one-piece body with top flange, pneumatically operated

DN	Operating pressure	Connection	Valve body material	Seal material
15 to 100	0 to 16 bar *	Flanges	Stainless steel 1.4408 (body) 1.4401 (ball)	PTFE

\* dependent on operating temperature and nominal size



### GEMÜ 748 Sanitary

2/2-way ball valve, metal, 3-piece body with top flange, motorized

DN	Operating pressure	Connection	Voltage	Valve body material	Seal material
15 to 100	0 to 63 bar *	Butt weld spigots Spigots Clamps Different standards and designs available.	12 V / 24 V 100-250 V	Stainless steel CF3M (316L) (body) CF3M (316L) (ball)	TFM™ PTFE



### GEMÜ 728 Sanitary

2/2-way ball valve, metal, 3-piece body with top flange, motorized

DN	Operating pressure	Connection	Voltage	Valve body material	Seal material
15 to 100	0 to 63 bar *	Threaded sockets Spigots Flanges Different standards and designs available.	12, 24 VDC 24, 120, 230 VAC 50/60 Hz	Stainless steel 1.4408 (body) 1.4401 (ball) CF3M (body) 316L (ball)	PTFE



### GEMÜ 768 Sanitary

2/2-way ball valve, metal, one-piece body with top flange, motorized

DN	Operating pressure	Connection	Voltage	Valve body material	Seal material
15 to 100	0 to 63 bar *	Flanges	12, 24 VDC 24, 120, 230 VAC 50/60 Hz	Stainless steel 1.4408 (body) 1.4401 (ball)	PTFE

\* dependent on operating temperature and nominal size

# Valves

## for the microelectronics and semiconductor industries



### GEMÜ 677 HPW

2/2-way diaphragm valve, plastic, manually operated  
Option: handwheel with locking device

DN	Operating pressure	Connection	Valve body material	Diaphragm material
15 to 100	0 to 6 bar	Union ends Butt weld spigots	PVDF-HP PFA/PVDF-HP	PTFE



### GEMÜ 677 HPW

T diaphragm valve, plastic, manually operated  
Option: handwheel with locking device

DN	Operating pressure	Connection	Valve body material	Diaphragm material
15 to 100	0 to 6 bar	Butt weld spigots	PVDF-HP	PTFE



### GEMÜ 600 HPW

2/2-way diaphragm valve, plastic, pneumatically operated  
Control function: Normally closed (NC), Normally open (NO), Double acting (DA)

DN	Operating pressure	Connection	Valve body material	Diaphragm material
15 to 50	0 to 6 bar	Butt weld spigots	PVDF-HP PFA/PVDF-HP	PTFE/EPDM



### GEMÜ 690 HP

2/2-way diaphragm valve, plastic, pneumatically operated  
Control function: Normally closed (NC), Normally open (NO), Double acting (DA)

DN	Operating pressure	Connection	Valve body material	Diaphragm material
15 to 100	0 to 6 bar (dependent on DN)	Union ends Butt weld spigots	PVDF-HP PP-HP	PTFE



### GEMÜ 690 HP

T diaphragm valve, plastic, pneumatically operated

Control function: Normally closed (NC), Normally open (NO), Double acting (DA)

DN	Operating pressure	Connection	Valve body material	Diaphragm material
15 to 100	0 to 6 bar	Butt weld spigots	PVDF-HP	PTFE



### GEMÜ 613

2/2-way diaphragm valve, plastic, motorized

With/without integr. positioner/process controller, 2 operating times

DN	Operating pressure	Connection	Voltage	Valve body material	Diaphragm material
15	0 to 6 bar	Butt weld spigots	24 V 120 V 230 V 50/60Hz	PFA/PVDF	PTFE/EPDM



### GEMÜ CleanStar C67

2/2-way diaphragm valve, plastic, manually operated

DN	Connection size Inch	Operating pressure	Connection	Valve body material	Diaphragm material
4 to 25	¼" to 1¼"	0 to 6 bar	Flare connections Flare connection -Space saver Butt weld spigots Union ends	PFA-HP PVDF-HP	PTFE/EPDM

HighFlow version with a Kv value increase up to 100% available.



### GEMÜ CleanStar C67

T diaphragm valve, plastic, manually operated

DN	Connection size Inch	Operating pressure	Connection	Valve body material	Diaphragm material
4 to 25	¼" to 1¼"	0 to 6 bar	Flare connections Flare connection -Space saver Butt weld spigots	PFA-HP	PTFE/EPDM

# Valves

## for the microelectronics and semiconductor industries



**GEMÜ CleanStar C67**  
3-way diaphragm valve, plastic, manually operated

DN	Connection size Inch	Operating pressure	Connection	Valve body material	Diaphragm material
10 to 15	½" to ¾"	0 to 6 bar	Flare connections	PFA-HP	PTFE/EPDM



**GEMÜ CleanStar C67**  
Lock out device for manually operated CleanStar valves



**GEMÜ CleanStar C60**  
2/2-way diaphragm valve, plastic, pneumatically operated  
Control function: Normally closed (NC), Normally open (NO), Double acting (DA)

DN	Connection size Inch	Operating pressure	Connection	Valve body material	Diaphragm material
4 to 25	¼" to 1¼"	0 to 6 bar	Flare connections Flare connection -Space saver Butt weld spigots Union ends	PFA-HP PVDF-HP	PTFE/EPDM

HighFlow version with a Kv value increase up to 100% available.



**GEMÜ CleanStar C60**  
T diaphragm valve, plastic, pneumatically operated  
Control function: Normally closed (NC), Normally open (NO), Double acting (DA)

DN	Connection size Inch	Operating pressure	Connection	Valve body material	Diaphragm material
4 to 25	¼" to 1¼"	0 to 6 bar	Flare connections Flare connection -Space saver Butt weld spigots	PFA-HP	PTFE/EPDM



### GEMÜ CleanStar C60

2/2-way diaphragm valve, plastic, pneumatically operated, with integrated handwheel  
Control function: Normally closed (NC), Normally open (NO), Double acting (DA)

DN	Connection size Inch	Operating pressure	Connection	Valve body material	Diaphragm material
10 to 25	½" to 1¼"	0 to 6 bar	Flare connections Union ends	PFA-HP PVDF-HP	PTFE/EPDM



### GEMÜ CleanStar C60

3-way diaphragm valve, plastic, pneumatically operated, with integrated handwheel  
Control function: Normally closed (NC), Normally open (NO), Double acting (DA)

DN	Connection size Inch	Operating pressure	Connection	Valve body material	Diaphragm material
10 to 15	½" to ¾"	0 to 6 bar	Flare connections	PFA-HP	PTFE/EPDM



### GEMÜ CleanStar SmartLine C67 HPS

2/2-way diaphragm valve, plastic, manually operated

DN	Connection size Inch	Operating pressure	Connection	Valve body material	Diaphragm material
10 to 32	½" to 1¼"	0 to 6 bar	Flare connections Butt weld spigots	PP-H, grey PP-R, natural	PTFE/EPDM



### GEMÜ CleanStar SmartLine C60 HPS

2/2-way diaphragm valve, plastic, pneumatically operated  
Control function: Normally closed (NC), Normally open (NO), Double acting (DA)

DN	Connection size Inch	Operating pressure	Connection	Valve body material	Diaphragm material
10 to 32	½" to 1¼"	0 to 6 bar	Flare connections Butt weld spigots	PP-H, grey PP-R, natural	PTFE/EPDM

# Valves

## for the microelectronics and semiconductor industries



### GEMÜ CleanStar C50 Block valve

2/2-way diaphragm globe valve, plastic, pneumatically operated  
Control function: Normally closed (NC), Normally open (NO), Double acting (DA)

DN	Connection size Inch	Operating pressure	Connection	Valve body material	Diaphragm material
4 to 25	¼" to 1¼"	0 to 6 bar	Flare connections	PTFE	PTFE



### GEMÜ CleanStar C51 Block valve

2/2-way diaphragm globe valve, plastic, manually operated (quarter turn)

DN	Connection size Inch	Operating pressure	Connection	Valve body material	Diaphragm material
4 to 25	¼" to ¾"	0 to 6 bar	Flare connections	PTFE	PTFE



### GEMÜ CleanStar C57 Block valve

2/2-way diaphragm globe valve, plastic, manually operated (multi turn)

DN	Connection size Inch	Operating pressure	Connection	Valve body material	Diaphragm material
4 to 25	¼" to 1"	0 to 6 bar	Flare connections	PTFE	PTFE



GEMÜ CleanStar PC 50  
special valve block



# Pressure measurement systems for the microelectronics and semiconductor industries



**GEMÜ C30 Hydra-Gauge**  
Pressure gauge

Size [inch]	Operating pressure	Connection	Body material	Diaphragm material
¼" to 1¼"	0 to 6 bar	Flare connections (In-Line, Dead-End)	PFA-HP	PFA



**GEMÜ C31 Hydra-Sensor**  
Pressure transmitter

Size [inch]	Operating pressure	Connection	Body material	Diaphragm material
¼" to 1¼"	0 to 6 bar	Flare connections (In-Line, Dead-End)	PFA-HP	PFA



**GEMÜ C32 Hydra-Dry**  
Measuring transducer

Size [inch]	Operating pressure	Connection	Body material	Diaphragm material
¼" to 1¼"	0 to 6 bar	Flare connections (In-Line, Dead-End)	PFA-HP	PFA



Back pressure control system mounted ready for connection, consisting of CleanStar valves, HydraLine pressure measurement system and GEMÜ 1436 cPos process controller.

# Flow measurement systems

## for the microelectronics and semiconductor industries



**GEMÜ C38 SonicLine**  
Ultrasonic flowmeter

Size [inch]	Measuring range [l/min]	Connection	Body material
3/8" to 1"	0,03 - 120	Flare connections	PFA-HP



**GEMÜ 883, 833, 834**  
Flowmeter, PVDF float, with magnet, O-ring FPM

DN	Measuring range [l/h]	Connection	Body material
15 to 50	20 to 10,000	Butt weld spigots	PVDF-HP



**GEMÜ 873, 823, 824**  
Flowmeter, PVDF float, without magnet, O-ring FPM

DN	Measuring range [l/h]	Connection	Body material
15 to 50	20 to 10,000	Butt weld spigots	PVDF-HP



Manifolds mounted ready for connection.

# Tools, fittings and tubing

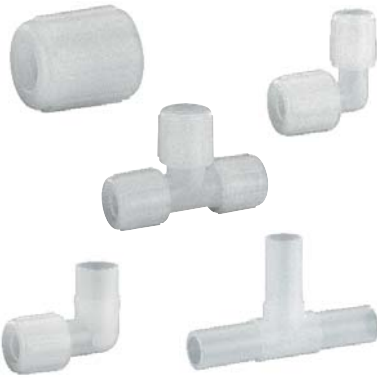
## for the microelectronics and semiconductor industries



**GEMÜ C67**  
Service tool for CleanStar actuators



**GEMÜ CF**  
Service tool for FlareStar union nuts



**GEMÜ FlareStar**  
PFA-HP tube fittings, various configurations such as male connectors, male elbows, union elbows, adapters, union tees, etc.

O.D. Tube fitting	Connection	Body material	Union nut material
¼" to 1¼"	Flare connections Flare connection-Space saver Butt weld spigots	PFA-HP	PFA-HP PVDF-HP CPFA-HP



**GEMÜ TubeStar**  
PFA standard and HP tube, various lengths and delivery forms available  
(Spools with 10 m, 20 m, 50 m, 100 m and straight tube pieces with 6 m)

Size [inch]	O.D. [mm]	Wall thickness [mm]	Material
¼" to 1¼"	6.35 - 31.75	1.19 - 1.90	PFA-HP PFA-HPS

# Flow measurement systems



**GEMÜ 800/850**  
Flowmeters

- Variable area principle
- For corrosive, inert, gaseous and liquid media which have no negative impact on the physical and chemical properties of the tube, float, seal and union materials
- Corrosion resistant, robust and high chemical resistance
- Tube material : Trogamid-T, Polysulfone, PVC, PVDF
- Measuring range: From 2 l/h to 20,000 l/h for liquids and 0.2 Nm<sup>3</sup>/h to 450.0 Nm<sup>3</sup>/h for air
- Available sizes: DN 10 to 65
- Optional electrical limit switches or instrument sensor
- Connection by metric or imperial union ends with insert




**GEMÜ 840**  
Flowmeter

- Part flow principle
- Consists of main flow unit, orifice plate, part flow unit, manual diaphragm valves
- For corrosive and inert liquid media which have no negative impact on the physical and chemical properties of the tube, float, seal and union materials
- Robust, high chemical resistance
- Housing material : PVC-U, grey, PP
- Measuring range from 3,000 l/h to 50,000 l/h
- Available sizes: DN 65
- Optional electrical limit switches or instrument sensor
- Connection by solvent cement or welded spigots




**GEMÜ 1250/1251/1252/1256/1257**  
Limit switches

- Suitable for GEMÜ flowmeters with magnetic float
- Simple mounting and setting by clamping to flowmeter
- Reed contacts are actuated by the magnet in the float
- GEMÜ 1250: with bistable reed contact with SPDT (Single Pole Double Throw) contact
- GEMÜ 1251 - 1257: with bistable reed contact for Min or Max limit value
- ATEX optional 



### GEMÜ 1270-1273

#### Instrument sensors

- Suitable for GEMÜ flowmeters with magnetic float
- For continuous flow monitoring
- Simple mounting and setting by clamping to flowmeter
- Reed contacts in a chain of resistors are actuated by the magnet in the float
- GEMÜ 1270/1271: The signal reading is effected via voltage divider (0-10kOhm)
- GEMÜ 1272/1273: The signal reading is effected via integrated 2-wire measuring transducer (4-20mA)
- GEMÜ 1270/1271: ATEX optional 



### GEMÜ 3020

#### Flow transmitter

- Detection of volumetric flow by means of turbine flow measurement (magnetic)
- For inert and corrosive aqueous liquids (see datasheet)
- Turbine material : PVDF / turbine body material: PVDF / PVC-U, grey
- Shaft: ceramics; Bearing: glass
- Available sizes: DN 25/DN 50
- Measuring range: 120 to 3,600 l/h / 500 to 25,000 l/h
- Power supply: 24 V DC
- Frequency output/current output 4 - 20 mA
- Connection by metric or imperial union ends with insert

# Flow measurement systems



## GEMÜ 3021

Flow transmitter, totalizer or batch controller

- Detection of volumetric flow by means of turbine flow measurement (magnetic)
- Measuring transducer with totalizer or batch controller
- For inert and corrosive aqueous liquids (see datasheet)
- Turbine material : PVDF / turbine body material: PVDF / PVC-U, grey
- Available sizes: DN 25 / DN 50
- Measuring range: 120 to 7,200 l/h / 500 to 25,000 l/h
- Electronic system enables adjustment to operating conditions
- Power supply: 24 V DC
- Outputs depending on type: Frequency 24 V PNP; current 0/4 - 20 mA; 2 x relays
- Signal inputs for PLC or remote operation
- Connection by metric or imperial union ends with insert



## GEMÜ 3030 mFlow

Magnetically inductive flowmeter

- Detection of flow rates / volumetric flow
- Electronic system enables adjustment to operating conditions
- For DN 25 to 300
- Integrated totalizer
- Connection by various fittings
- Temperature sensor PT1000 (option)
- Power supply: 24 V DC
- Measuring range: 0 to 4 m/s, 0 to 10 m/s
- Output signals: 0 / 4-20mA; pulse; relay
- Fieldbus interface (Profibus DP)
- Conductivity of medium:  $\geq 20 \mu\text{S}/\text{cm}$
- Temperature range: 0 to 135 °C
- e.<sup>sy</sup>-com interface for connection of a Bluetooth module, industrial modem or for access via PDA or PC
- Integrated Web browser capability

# Pressure / Temperature measurement systems



## GEMÜ 3120

Pressure/differential pressure transducer

- Measuring range: 0 to 10 bar
- Sensor material: Stainless steel 1.4401/1.4301 or ceramics with PTFE diaphragm
- Connecting element in PVDF
- Version: 2-wire transducer or 4-wire pressure measurement device with display
- Current output: 0/4 - 20 mA
- 2 x relay outputs, switch points freely adjustable
- Power supply: 24 V DC
- Media temperature: -10 to 60 °C
- Process connection dependent on version: G ¼", G ½" or G ¾" thread



## GEMÜ 3220

Temperature transducer

- Measuring range: 0 to 100 °C
- Sensor material: Ceramics (option encapsulated in PVDF)
- Connecting element in PVDF
- Versions: 2-wire transducer or 4-wire temperature measurement device with display
- Current output 0/4 - 20 mA
- 2 x relay outputs, switch points freely adjustable
- Power supply: 24 V DC
- Process connection dependent on version: G ½" or G ¾" thread

# Display units / Level measurement systems



## GEMÜ 1276

### Digital display unit

- Universal, digital display unit for use with all common measurement units
- 4 or 5-digit LED display
- Input signal: 0 to 10 VDC, 0/4 - 20 mA
- Power supply: 24 VDC, 115 VAC, 230 VAC
- Option with sensor supply: 10 VDC or 24 VDC
- Option with analogue output: 0 to 10 VDC, 0/4 - 20 mA
- Option with RS232 interface
- Option: 2 or 4 relay switch points freely adjustable
- Input for frequency: Version ZF



## GEMÜ 902/910

### Level transmitters

- On reed contact basis / chain of resistors
- For monitoring inert and corrosive media (see datasheet)
- Independent of: pressure, conductivity, concentration, density
- Media wetted parts either: PP, PVDF, PVC-U, grey, stainless steel 1.4435
- Version:  
GEMÜ 902 with limiting contacts (monostable) or working contacts (bistable)  
GEMÜ 910 with chain of resistors or 2-wire transducer (4-20mA)
- Supply voltage: GEMÜ 902:  $U_v \leq 40$  VDC  
GEMÜ 910 with chain of resistors:  $U_v \leq 40$  VDC  
GEMÜ 910 with 2-wire transducer:  $U_v = 11V$  to 40 V (dependent on load resistor)
- Temperature range: -10 to 80 °C



# Controllers



## GEMÜ 1283 3-point controller

- For position control of motorized valves (e.g. GEMÜ 563/568, 613/618 and 693/698)
- Panel mounting or direct mounting to a valve
- Set value setting via integrated potentiometer or via set value input: 0/4 - 20 mA, 0 to 10 V optional
- Setting of actual value via integrated potentiometer in the motorized valve
- Power supply: 24 VDC, 24 VAC, 100-250 VAC
- Simple menu
- Adjustable dead zone
- Adjustable min/max limitation of stroke position
- Compact construction
- Fast commissioning



## GEMÜ 1434 µPos Electro-pneumatic positioner

- Compact construction, small dimensions
- Remote mounting of positioner and travel sensor is possible
- Integrated potentiometer
- Low investment costs
- Low operating costs, no air consumption when idle
- Fast commissioning, no need to open the housing
- Simple operation
- Easy mounting to GEMÜ valves and other makes
- Simple electrical and pneumatic connection
- **speed<sup>AP</sup>** function for fast mounting and initialisation



GEMÜ 1434 directly mounted



GEMÜ 1434 - mounting with external travel sensor

# Controllers



## GEMÜ 1435 ePos

Intelligent positioner

- Electro-pneumatic positioner for linear and quarter turn actuators
- For single or double acting actuators
- **speed<sup>AP</sup>** function for fast mounting and initialisation
- Remote mounting of the positioner is possible (no mechanical linkage required)
- No air consumption when idle
- High air output: 50 l/min or 90 l/min
- Safety position during power or air supply failure (depends on the control function of the valve)
- Simple, self-explanatory menu
- Set value setting via a 0 to 10 V or 0/4-20 mA signal
- Actual value input for potentiometer (travel sensor)
- Power supply 24 VDC
- 2 alarm outputs and 1 error output
- Position feedback 0-10 V (4-20 mA option)



## GEMÜ 1436 cPos

Process positioner

- Electro-pneumatic positioner with optional integrated process controller
- For single or double acting linear and quarter turn actuators
- **speed<sup>AP</sup>** function for fast mounting and initialisation
- No air consumption when idle
- Safety position during power or air supply failure (depends on the control function of the valve)
- Simple, self-explanatory menu
- High air output: 100 l/min, 180 l/min
- Set value setting via 0/4-20 mA signal
- Actual value input: Potentiometer (travel sensor) for position control
- Actual value input: 0/4-20 mA signal for process control
- Output signals: 4-20 mA signal, 2 relay outputs
- Power supply: 24 V DC
- 2-line backlit display
- Remote mounting of positioner and travel sensor possible (also for quarter turn actuators)
- Fieldbus interface (Profibus DP, Device Net)
- Integrated Web browser capability
- Simple commissioning and versatile operating facilities
  - fascia buttons
  - PC connection with Internet browser
  - Bluetooth interface as an option
- **e.<sup>sy</sup>-com** interface for connection of a Bluetooth module, industrial modem or for access via PDA or PC

# Electrical position indicators for pneumatic linear actuators



## GEMÜ 1201 / 1230

Electrical position indicators with microswitches

- Choice of one or two microswitches with integrated SPDT (Single Pole Double Throw) contact
- Microswitches individually continuously and precisely adjustable via threaded spindles
- Rated voltage / current:  
GEMÜ 1201: 250 VAC / 100mA - 8 A, 28 VDC / 5 mA - 5 A  
GEMÜ 1230: 250 VAC / 2.5 A, 24 VDC / 4 A
- Ambient temperature: - 20 to 60 °C
- Connection by cable gland or connector possible
- GEMÜ 1201: up to 70 mm stroke
- GEMÜ 1230: up to 20 mm stroke, Option with LED indication



## GEMÜ 1211 / 1231

Electrical position indicators with proximity switches to NAMUR EN 60529

- For hazardous locations EEx ia IIC T6
- Choice of one or two inductive proximity switches
- Proximity switches individually continuously and precisely adjustable via threaded spindles
- Rated voltage: 8 V DC
- Ambient temperature: - 20 to 60 °C
- Connection by cable gland or connector possible
- GEMÜ 1211: up to 70 mm stroke
- GEMÜ 1231: up to 20 mm stroke



## GEMÜ 1214 / 1232

Electrical position indicators with proximity switches

- Choice of one or two inductive proximity switches
- Proximity switches individually continuously and precisely adjustable via threaded spindles
- Rated voltage: 24 V DC
- Ambient temperature: - 20 to 60 °C
- Connection by cable gland or connector possible  
GEMÜ 1214: up to 70 mm stroke, GEMÜ 1232: up to 20 mm stroke
- Option with LED indication



## GEMÜ 1215

Electrical position indicator with microswitch

- For hazardous locations EEx II2GII BTG
- One microswitch with SPDT (Single Pole Double Throw) contact for open position (Exception 667 / 661: here the closed position is indicated)
- Rated voltage / current: 250 VAC / 4 A, 24 VDC / 4 A
- Ambient temperature: -15 to 55 °C
- Connection by cable gland



# Electrical position indicators for pneumatic linear actuators



## GEMÜ 1234

Electrical position indicator

- For linear actuators with 1 mm to 10 mm stroke
- Optical indication of position and function by LEDs
- **speed<sup>AP</sup>** function for fast mounting and initialisation
- Adjustable switch point tolerances
- Local or remote programming via programming input
- Optional AS-Interface fieldbus connection
- M12 plug
- No need to open the housing for commissioning
- Compact design
- Protection class IP65
- Ambient temperature -10 to 70 °C



GEMÜ 1235

GEMÜ 1236

## GEMÜ 1235 / 1236

Electrical position indicators

- GEMÜ 1235: PVDF base
- GEMÜ 1236: Stainless steel base
- For linear actuators with 2.2 mm to 75 mm stroke
- Optical high visibility position and function indication via LEDs
- **speed<sup>AP</sup>** function for fast mounting and initialisation
- Adjustable switch point tolerances
- Local or remote programming via programming input
- Communication interface IO-Link
- M12 plug
- No need to open the housing for commissioning
- Compact design
- Protection class IP67
- High visibility LEDs for OPEN/CLOSED visual indication
- Ambient temperature -10 to 70 °C



## GEMÜ 1242

Electrical fieldbus position indicator

- For linear actuators with 2 mm to 30 mm stroke
- Optical high visibility position and function indication via LEDs
- Anodized aluminium or stainless steel base
- **speed<sup>AP</sup>** function for fast mounting and initialisation
- Adjustable switch point tolerances
- Extensive diagnostic facilities
- Local or remote programming via programming input
- Fieldbus connection AS-Interface or DeviceNet
- M12 plug
- No need to open the housing for commissioning
- Compact design
- Protection class IP65
- Ambient temperature 0 to 60 °C

# Electrical position indicators for pneumatic quarter turn actuators



## GEMÜ 1225

Electrical position indicator with microswitches

- Two integrated microswitches with SPDT (Single Pole Double Throw) contact for OPEN and CLOSED position
- OPEN / CLOSED position indication and indication of power supply via LED
- Microswitches individually adjustable via trip cams
- Operating voltage: 10 to 30 V DC
- Rated voltage / current: 24 VDC / 2.5 A
- Ambient temperature: -20 to 60 °C
- Connection by cable gland



GEMÜ LSR



GEMÜ LST



GEMÜ LSF

## GEMÜ LSR / LST / LSF

Electrical position indicators with microswitches / proximity switches

- Choice of one or two microswitches or proximity switches
- Optical position indication, good visibility
- Indication of switch positions of 2-way or 3-way valves
- Detachable mounting plate with switches
- ATEX version possible
- Connection via M20 cable gland (GEMÜ LSR, LST) or M12 4-pin plug (GEMÜ LSF)



# Combi switchbox with integrated pilot valve



## GEMÜ 4221

Combi switchbox with integrated pilot valve

- For single or double acting pneumatic quarter turn actuators up to 180° travel range
- Optical indication of position and function by LEDs
- Integrated 3/2-way pilot valve
- Aluminium or stainless steel base
- **speed<sup>AP</sup>** function for fast mounting and initialisation
- Adjustable switch point tolerances
- Option: Fieldbus connection AS-Interface or DeviceNet
- M12 plug
- No need to open the housing for commissioning
- Protection class IP65
- Ambient temperature 0 to 50 °C
- Air output: 100 NI/min



Size 1

Size 2

## GEMÜ 4242

Combi switchbox with integrated pilot valve

- For single or double acting pneumatic linear actuators with 2 mm to 75 mm stroke
- Optical high visibility position and function indication via LEDs
- Integrated 3/2-way pilot valve
- **speed<sup>AP</sup>** function for fast mounting and initialisation
- Integrated manual override
- Adjustable switch point tolerances
- Extensive diagnostic facilities
- Local or remote programming via programming input
- Option: Fieldbus connection AS-Interface or DeviceNet
- Communication interface IO-Link
- M12 plug
- No need to open the housing for commissioning
- Compact design
- Protection class IP65
- Ambient temperature 0 to 60 °C
- Air output 14 NI/min, 23NI/min or 250 NI/min



## GEMÜ 4216

ATEX combi switchbox with integrated pilot valve

- For single or double acting pneumatic linear actuators
- Integrated 24 VDC 3/2-way pilot valve (intrinsically safe)
- Valve operation via 5/2-way pilot valve
- Position feedback via NAMUR proximity switch
- Proximity switches individually continuously and precisely adjustable via threaded spindles
- Connection by cable gland and terminal strip
- Air output: 588 NI/min

# Pneumatic actuators for quarter turn valves



## GEMÜ 9415

Quarter turn actuator, plastic, pneumatically operated

Actuator sizes ø	Max. torque [Nm]	Max. control pressure [bar]	Control connection
Size 0: 50 mm Size 1: 70 mm Size 2: 100 mm Size 3: 140 mm	6 32 49 140	Actuator 0: 6 bar Actuator 1: 6 bar Actuator 2: 6 bar Actuator 3: Control function 1 (NC): 5 bar Control function 3 (DA): 4 bar	G ¼



## GEMÜ DR/SC

Quarter turn actuator, metal, pneumatically operated

Max. torque [Nm]	Max. control pressure [bar]	Control connection
8.1 to 5446	6 - 8	0015 to 0100: G ⅛ 0150 to 1200: G ¼ 2000: G ⅜ 3000 to 5000: G ½



## GEMÜ ADA/ASR

Quarter turn actuator, metal, pneumatically operated

Max. torque [Nm]	Max. control pressure [bar]	Control connection
10 to 5000	6 - 8	G ¼



GEMÜ 410



GEMÜ 710



GEMÜ 481

# Motorized actuators for quarter turn valves



## GEMÜ 9428

Quarter turn actuator, motorized

- For nominal sizes DN 15 to 50
- Maximum travel: 93° (nominal travel: 90°)
- Electrical connection: Cable gland or connector
- With optical position indicator
- Option with additional potential-free limit switches
- Ambient temperature: -10 to 60 °C

Power supply	Torque [Nm]	Operating time approx. [s]
12/24 VDC, 12/24 VAC, 100-230 VAC	6	4
12/24 VDC, 12/24 VAC, 100-230 VAC	15	11
24 VDC, 24 VAC, 100-230 VAC	35	15



## GEMÜ 9468

Quarter turn actuator, motorized

- For nominal sizes DN 65 to 250
- Maximum travel: 93° (nominal travel: 90°)
- Electrical connection: Connector
- With optical position indicator
- Option with additional potential-free limit switches
- Option with analogue position feedback via potentiometer
- Option with integrated positioner
- Ambient temperature: -10 to 60 °C

Power supply	Torque [Nm]	Operating time approx. [s]
24 VDC, 24 VAC, 120 VAC, 230 VAC	70	15
	100	20
	200	16
	400	29



## GEMÜ 9ASS

Linear actuator, motorized

- For linear valves with flange adapters
- Electrical connection: Connector
- Maximum stroke: 28 to 46 mm (dependent on actuator version)
- With optical position indicator
- Power supply 24 VDC, 120 VAC/230 VAC 50/60 Hz
- Operating time 1.04-3.3 mm/sec. (dependent on actuator version)
- Ambient temperature: 0 to 55 °C
- Automatic initialisation
- Fieldbus capable (Profibus, AS-Interface)
- Torque limitation
- Max. torque 4.5-14 kN (dependent on actuator version)
- Option with positioner or process controller
- Position feedback
- Programmable end position feedback



# GEMÜ accessories

## All from a single source



**GEMÜ 1002**  
Handwheel with optical position indicator as a manual override for pneumatic valves DN 15-50



**GEMÜ 1030/1035**  
Plastic union  
DN 65 - DN 100



**GEMÜ 1031**  
Plastic threaded socket  
DN 15 - DN 50



**GEMÜ 1034**  
Plastic flange DN 15 to 100



**GEMÜ 1041**  
Plastic compensating/mounting plate for plastic diaphragm valves



**GEMÜ 1050**  
Plastic mounting plate for pilot valves GEMÜ 0320



**GEMÜ 1106**  
Stroke limiter with seal adjuster



**GEMÜ 1110**  
Stroke limiter with transparent cap



**GEMÜ 1151**  
Stroke limiter with optical position indicator, control function 1 (NC)



**GEMÜ 1161**  
Stroke limiter with optical position indicator, control function 2 (NO)



**GEMÜ 1114**  
Stroke limiter with optical position indicator and manual override



**GEMÜ 1216**  
Mounting brackets for proximity switches M 8 x 1, M12 x 1, M18 x 1

# GEMÜ accessories

## All from a single source



**GEMÜ 1219**  
Cable socket/plug M12, 5-pin  
for GEMÜ 1230-1235



**GEMÜ 1220-1221**  
Connector acc. to DIN EN 175301-  
801 design A



**GEMÜ 1222-1224**  
Connector acc. to DIN EN 175301-  
801/Industry



**GEMÜ 1300**  
Optical position indicator, plastic



**GEMÜ 1450**  
NAMUR mounting bracket with/with-  
out manual override



**GEMÜ 1460**  
NAMUR mounting bracket with/with-  
out manual override



**GEMÜ 1470**  
NAMUR control air adapter for  
GEMÜ 410, 415, 600, 710, 9415



**GEMÜ 1750-1753**  
Silencer



**GEMÜ 1755-1756**  
Double threaded nipple



**GEMÜ 1310**  
Mounting facility for proximity  
switches M18 x 1 with optical posi-  
tion indicator

# Worldwide presence

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