



Solutions@GEMÜ

Table of contents

Sustainability	Valve designs for hydrogen generation	GEMÜ 567 BioStar control	GEMÜ P600S
Consistently on the road to climate neutrality 5	Application-based solutions for your project business . . . 18	Control valve made from stainless steel 42	M-block diaphragm valve with flexible connection system . . 64
ACHEMA 2022	Valve designs and solutions	GEMÜ F40 and F60 servoDrive	GEMÜ P600M
Hybrid event with digital showroom 6	for single-use applications 20	Filling valves with PD design 44	M-block diaphragm valve 66
Production and logistics	GEMÜ manifolds	GEMÜ R470 Tugela series	GEMÜ Code 19
Process quality for the highest product requirements 8	Customized distribution systems 22	Double-eccentric butterfly valves 46	One-piece EPDM diaphragm 68
Even closer to the customer	GEMÜ 1441 cPos-X	GEMÜ R480 Victoria series	GEMÜ Code 5M
Products for different customer requirements 9	Intelligent electro-pneumatic positioner 26	The latest generation of butterfly valves 48	Two-piece PTFE/EPDM diaphragm 69
GEMÜ Customer Service	GEMÜ eSyDrive, eSyStep and eSyLite	GEMÜ C53 iComLine	GEMÜ Code 71
Fast, competent and reliable 10	Motorized actuators 28	Motorized control valve 50	Three-piece PTFE/PVDF/EPDM diaphragm 70
GEMÜ technical training	GEMÜ eSyDrive	GEMÜ C58 iComLine	Worldwide presence 71
Our knowledge for your success 11	For complex Open/Close and control applications 30	Pneumatically operated 3/2-way diaphragm globe valve . . 52	
GEMÜ Systems	GEMÜ eSyStep	GEMÜ 60 and C67 CleanStar – actuator size 4	
Customized system solutions from a single source 12	For Open/Close and simple control applications 32	Pneumatically and manually operated diaphragm valves . . 54	
GEMÜ Medical	GEMÜ eSyLite	GEMÜ M75	
Customer solutions for Medical Industry Products 13	For Open/Close applications 34	Process solenoid valve with full pressure compensation . . 56	
GEMÜ App	GEMÜ SUMONDO	GEMÜ J70	
Numerous functions in one mobile application 14	Single-use diaphragm valve 36	Electrically operated solenoid valve 58	
CONEXO	GEMÜ SUMONDO	GEMÜ 553	
Digital information management and maintenance support .16	Single-use M-block diaphragm valve 38	Modular distribution valve made from stainless steel 62	
GEMÜ VR	GEMÜ Q30, Q40 and Q50 eSyStep	GEMÜ PC50 iComLine	
Virtual reality training modules 17	Single-use pinch valves 40	M-block diaphragm globe valve for ultra pure applications . . 63	

GEMÜ Group

The GEMÜ Group is a leading manufacturer of valves, measurement and control systems employing over 2,200 members of staff worldwide.

With six production companies and 28 subsidiaries as well as a tight network of commercial partners, GEMÜ is active in over 50 countries on all continents.

1964

founded

2,200+

employees worldwide

6

production sites

28

sales companies

"ACHEMA is a large international market place for showcasing current technological trends. Within this framework, we're glad to welcome our customers and all interested parties back to our GEMÜ stand in Frankfurt. As a technology company, we offer lots of exciting digital interactive offerings at the GEMÜ trade fair stand, and combine an on-site appearance with our digital showroom."



Gert Müller, Managing Partner

Sustainability

Consistently on the road to climate neutrality

For us, acting in a sustainable manner means using the earth's finite resources responsibly. For many years, GEMÜ has been capitalizing increasingly on green engineering and environmental protection. In doing so, we pursue our sustainability objectives in product research and development just as in CO₂ reduction. This includes the construction of photovoltaic and solar systems on company buildings, efficient thermal insulation, exploitation of waste heat and the use of electric vehicles to take employees around sites.

Applications in future markets

Above all, future means trust. Future markets trust the highly efficient products of GEMÜ. GEMÜ is thus a strong partner for its customers in the implementation of climate-neutral objectives. That can be seen in the use of its products, which are used in many different applications for state-of-the-art technologies, such as wind power, photovoltaic systems and mobility.

GEMÜ is carbon neutral

A reduction of CO₂ emissions depends very significantly on voluntary and consistent economic actions in industrial

countries. For this reason, we are offsetting greenhouse gas emissions that could not previously be reduced, and that have been caused by the business activities of GEMÜ and by the activities of the winery and the Schlosshotel Ingelfingen, by acquiring a total of 7528 climate protection certificates in 2021 and 2022.

Corporate responsibility basic principles

We place great value on sustainable processes and responsible dealings with each other. We have always felt committed to this tradition. Our corporate responsibility basic principles describe our understanding of responsibility towards people and the environment, as well as maintaining healthy living conditions. The corporate responsibility basic principles form a binding operational framework for every one of us.

Sustainable from conviction

Personally and as a Managing Partner of GEMÜ, Gert Müller is convinced that social responsibility is always both a personal and a corporate duty. We confront this duty as a company and as a partner in the region, and make our contribution for the next generation.



New building for GEMÜ headquarters



ACHEMA 2022

Hybrid event with digital showroom

The ACHEMA in Frankfurt will be opening its doors between 22nd and 26th August 2022. The world's leading trade fair for the processing industry is generally held every three years and has established itself as a global forum for chemical engineering, process engineering and the biotechnology industry. ACHEMA offers experts and sales prospects from all over the world a unique range of topics, exciting focal topics and new event formats.

ACHEMA is also one of the most important dates in GEMÜ's trade fair calendar. GEMÜ will offer visitors a hybrid live experience in 2022 at the ACHEMA trade fair. In addition to the modern and lively trade fair design with many interactive digital offerings, the technology company's trade fair highlight will be taking place not just on-site in

Frankfurt but also in the GEMÜ digital showroom. Alongside the in-person event in Frankfurt, customers and other interested parties from all across the world will have the opportunity to attend online presentations regarding the current trends and new products from the world of valves, measurement and control systems in different virtual rooms. The GEMÜ digital showroom will also offer specialist talks and live presentations in the Live@ACHEMA area.

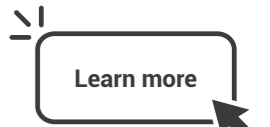
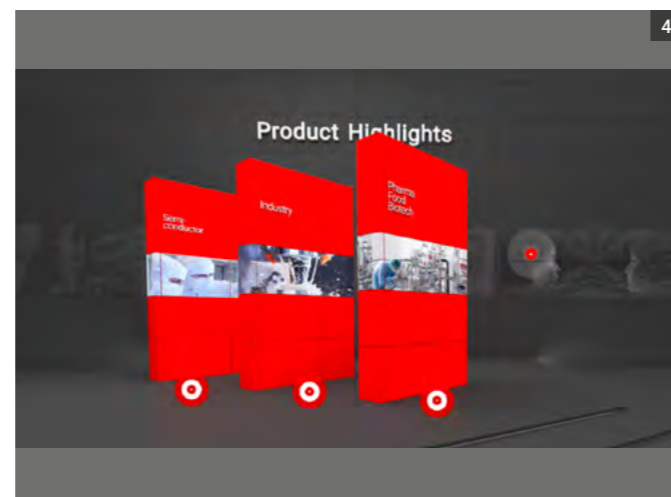
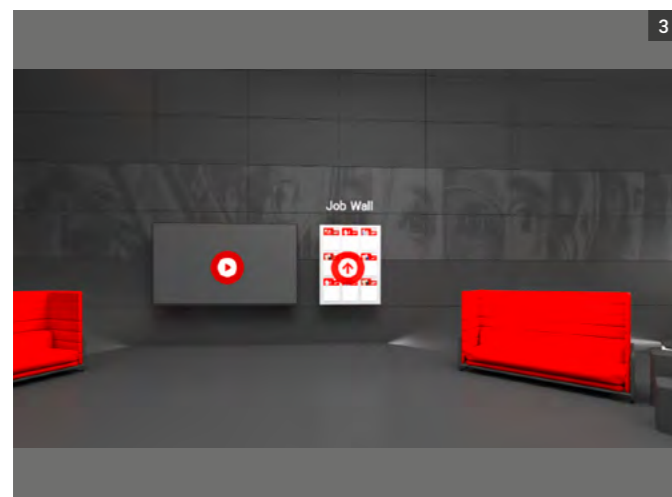
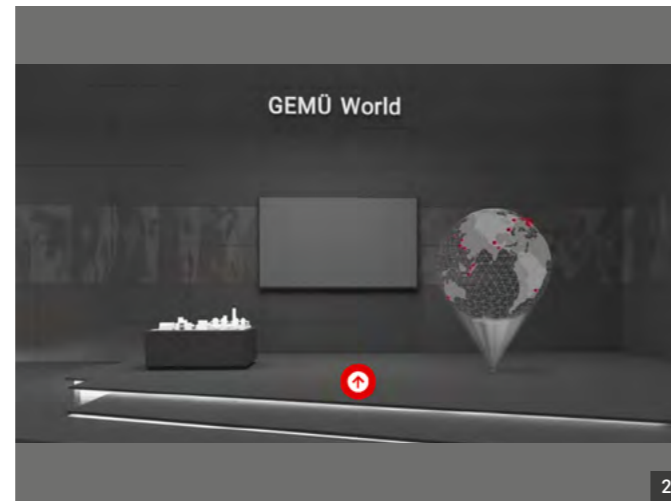
Solutions@GEMÜ

GEMÜ is appearing this year at the trade fair under the motto Solutions@GEMÜ. To this end, GEMÜ will present solutions and innovations from valves, measurement and control systems at their stand. Digitalization is a focal topic of GEMÜ's trade fair experience. GEMÜ will present the valve designs of the future with innovative actuator and sensor system concepts as well as practical training options using VR. Some of the highlights include trending topics such as electrification and products such as the GEMÜ 1441 cPos-X electro-pneumatic positioner, which can be operated and parametrized via the app.

All products at the trade fair stand are equipped with digital product labels. This gives prospective clients product-specific information via QR codes. The trade fair experience is rounded off with a virtual plant tour, offering totally new insights into the Production departments of GEMÜ.

Using the example of the three functional models of battery filling, cleaning installation and single-use, GEMÜ shows its valve in operation. Each of the functional models here simulates a typical system in which the different GEMÜ products are used. Visitors can thus get a precise picture of the functional principles of the valves.

- [1] Live@ACHEMA
- [2] GEMÜ world
- [3] HR corner
- [4] Product highlights



Digital Showroom



Production and logistics

Process quality for the highest product requirements

With six manufacturing sites and 28 subsidiaries, GEMÜ is networked all over the world. Our products are manufactured in Germany, France, Switzerland, Brazil, the USA and China. Within the manufacturing sites, each plant concentrates on specific core skills. The Production and Logistics Centre founded in Germany in 2013 is the hub for all manufacturing sites and subsidiaries.

Process quality for the highest product requirements

- Quality assurance measures throughout the entire manufacturing process
- Products comply with approvals, certifications and conformities
- Fulfilment of individual customer requirements
- Worldwide availability of products

Stainless steel and surface processing in Germany

The manufacturing site in Germany specializes in stainless steel finishing and surface technology. Our capabilities lie in the areas of milling, grinding, welding and electroplating.

[1] Diaphragm production in France

We design, develop and manufacture the heart of any diaphragm valve – the diaphragm – ourselves. We process all common elastomers from EPDM to NBR as well as thermoplastic materials such as PTFE.

[2] Cleanroom manufacturing in Switzerland

All products manufactured in the cleanroom for the high purity or semiconductor and single-use sector are produced in the production plant in Switzerland.

[3] Production of our butterfly valves in China

With the help of state-of-the-art robot technology, our butterfly valves are produced in-house, from the initial milling right through to the high-quality coating according to strict GEMÜ standards of quality.

Even closer to the customer

Products for different customer requirements

Through continuous innovative capacity and an orientation towards quality and proximity to our customers, GEMÜ is one of today's leading worldwide manufacturers of valves, measurement and control systems. With our broad product range and the correlated strategic business units, we offer solutions for different customer groups and areas of application.

[1] Pharma, Food & Biotech

- Pharmaceutical industry
- Foodstuffs and beverages
- Biotechnology industry
- Cosmetics

[2] Industry

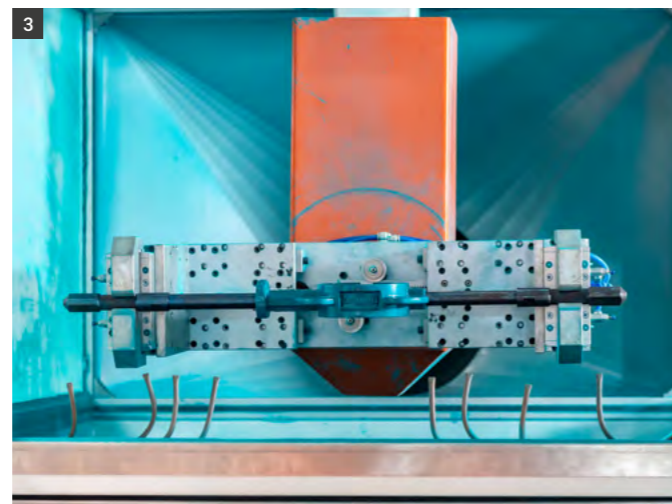
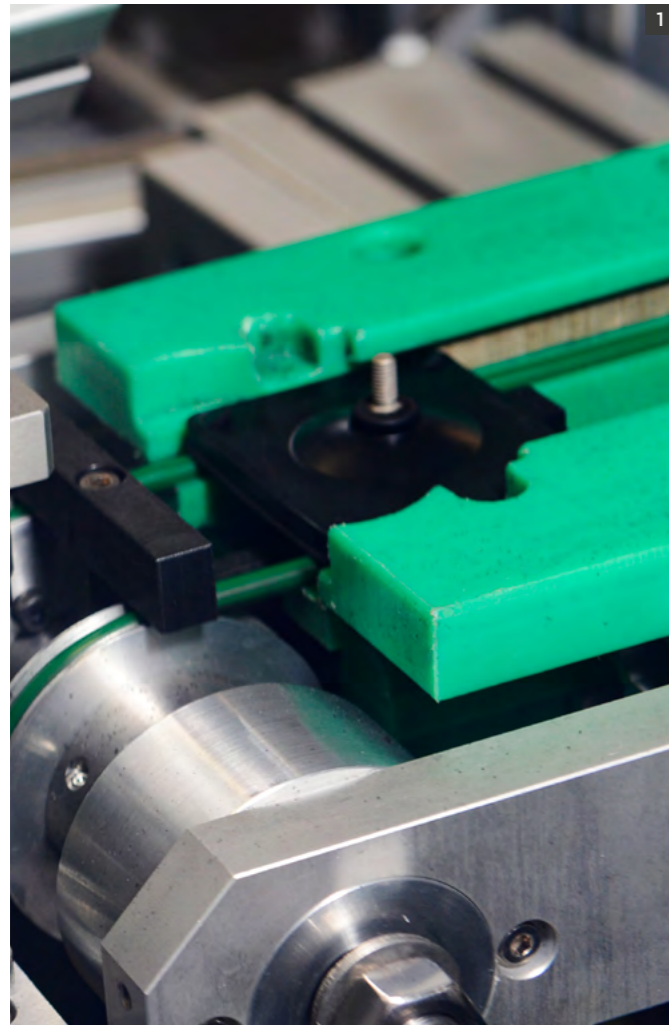
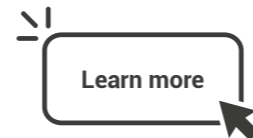
- Industrial water treatment
- Chemical engineering and surface finishing
- Power generation and environmental systems
- Mechanical engineering and processing industries

[3] Semiconductors

- Microelectronics
- Semiconductor production
- Battery production

[4] Medical

- Drug delivery
- Medical apparatus
- Diabetes care
- Disposables and laboratory equipment



GEMÜ Customer Service

Fast, competent and reliable

Regular maintenance procedures are essential to increase the service life of your components. Our service engineers carry out the maintenance work on site at your premises or in modern repair facilities. For fast identification of shortcomings in your processes, we offer regular plant screening. We have many years of experience in commissioning plants and their components. With our expert knowledge, we support you with correct installation and integration into the existing system landscape.

Maintenance

- Increased reliability of your plant
- Extended system operating time
- Increase in production volume
- Maintenance documentation in accordance with your requirements

Repair work

- Short and flexible reaction time
- Large stock of spare and wearing parts
- Remote diagnostics with innovative software solution
- Equipment tests on modern test rigs

Plant screening and findings

- Recognition of shortcomings in processes
- Transparent explanation and documentation
- Condition analyses on used devices
- Optimisation proposals through device analyses

Commissioning

- Ideal adjustment of single components
- Programme optimisations on electrical devices
- Ensuring high assembly quality
- Documentation of settings and operations

Contact the
Service Helpline
now

helpline@gemue.de
Tel. +49 (0) 7940 123-450

Learn more

GEMÜ technical training

Our knowledge for your success

GEMÜ offers you a comprehensive training and further education programme. The technical training courses are aimed at new entrants and people changing career as well as experienced specialists. Select your optimal further training from our wide-ranging portfolio of training courses – from basic training to valve designs and service training. We can run our training courses on-site on your premises, in-house on our premises, or virtually.

Basic training courses

- Functional principles of valves
- Measurement and valve control technology
- Working on functional models

Valve designs in detail

- Linear and quarter turn valves
- Multi-port block technology and valve body configurations
- Actuator designs and accessory components
- Automation components

Service fitter and expert training

Develop your employees' capabilities in the adjustment, maintenance and replacement of wearing parts on GEMÜ valves, measurement and control systems, and train experts on selected topics.

Contact
our
training team

training@gemue.de
Tel. +49 (0) 7940 123-450

Learn more



GEMÜ Systems

Customized system solutions from a single source

As a system supplier, GEMÜ Systems offers you customized solutions that go beyond the provision of standard products. We are by your side, from inquiries about individual components and ready-to-fit subassemblies to the joint development of individual connection solutions and entire systems. Using state-of-the-art construction tools, we can implement tailored and complex systems.

Specific solutions

- Support throughout the entire procurement process
- Individual valve configurations and connection solutions
- Sample and low-volume production
- Process optimization and special solutions

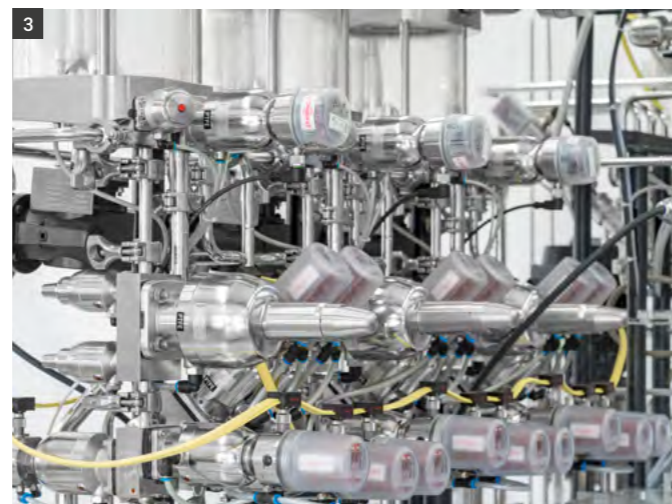
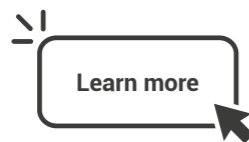
State-of-the-art design tools

- CAD concepts
- 3D printing
- Prototype construction

Your consultant is available for you on-site

With our specification sheet and your drawings, we discuss your requirements together and develop solutions for you.

- [1] Simple component assembly
- [2] Component assembly with control unit
- [3] Control systems and system development



GEMÜ Medical

Customer solutions for Medical Industry Products

GEMÜ Medical is an engineering and production partner for injection-moulded plastic system solutions for medical products. By establishing a reliable partnership, we develop and manufacture precisely tailored solutions for surgical instruments, lab accessories and medical devices.

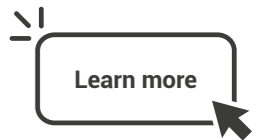
As a supplier for medical technology companies and pharmaceutical manufacturers, GEMÜ Medical produces customized plastic solutions. Our international customers receive individual components and packaged and inspected subassemblies right up to sterile finished products for immediate use in the medical industry.

Cleanroom manufacturing in Emmen

- Cleanroom manufacturing and assembly in cleanroom class
- Contamination control
- Access control
- Radiation sterilization (X-ray)

Services in the cleanroom

- Injection moulding and welding plastics
- Installation, packaging and printing
- Ready-to-use (RTU)
- Sterile finished products
- Assembly of semi-finished products through to checked finished products



GEMÜ App

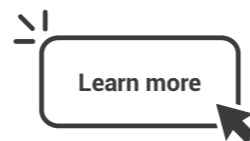
Numerous functions in one mobile application

Take a step with us into a mobile era!

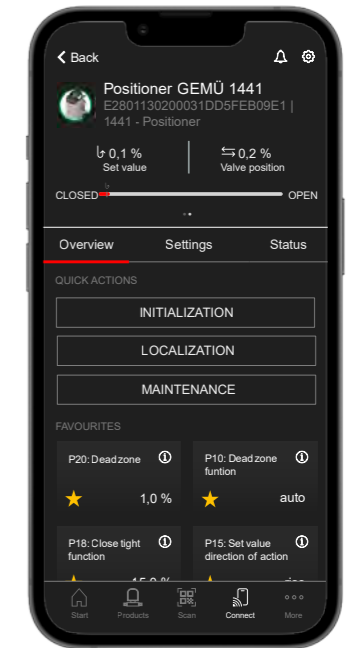
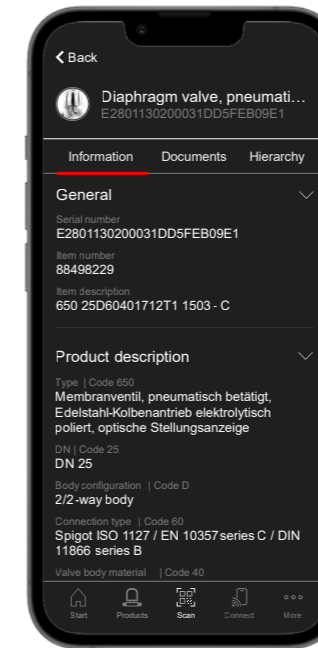
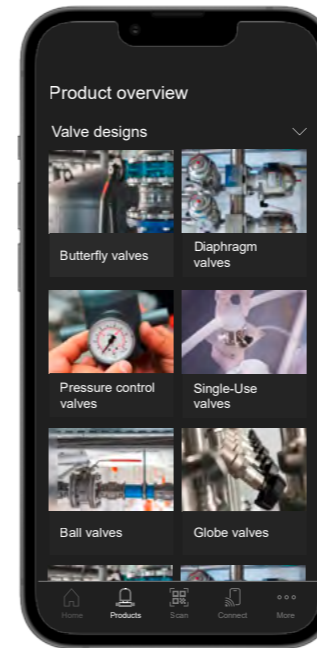
Discover the new GEMÜ App – with numerous functions that simplify your life. The complete GEMÜ product range will also be available with immediate effect in your pocket. With our app for smartphones and tablets, you can call up product information anywhere and benefit from our digital services.

Advantages

- Product documentation on all GEMÜ products can be downloaded on the move
- Call up item-specific information without long searching
- Clear identification of GEMÜ products with QR code or RFID tag
- Convenient operation and configuration of GEMÜ products with Bluetooth interface
- Quick and easy way to get in touch



Overview of main functions



Calling up product information

- General product data
- Datasheets
- Operating instructions
- Product flyer
- Etc.

Positively identifying products

- Scanning QR codes or RFID tags
- Direct access to specific item information
- Display of appropriate product documentation and customized certificates
- Overview of installed product components

Configuring and operating products

- Initialization, configuration and parameterization
- Detailed depiction of process values and status information
- Error analysis
- Setting the operating mode



Download the GEMÜ App now!

The GEMÜ App is available in German, English and French, and can be used both on Android and on iOS operating systems.



CONEXO

Digital information management and maintenance support

In addition to clear identification of components, CONEXO also offers support with the qualification of plants and paperless maintenance. Identification is done via an RFID chip with the CONEXO pen or via a QR code with CONEXO Webview and the GEMÜ app directly on the component within the plant.

[1] Identification

- Electronic identification of components using CONEXO tags (QR code or RFID chip)
- Scanning the CONEXO tag
- Displaying the product information and documentation

[2] Documentation

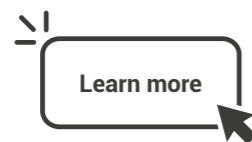
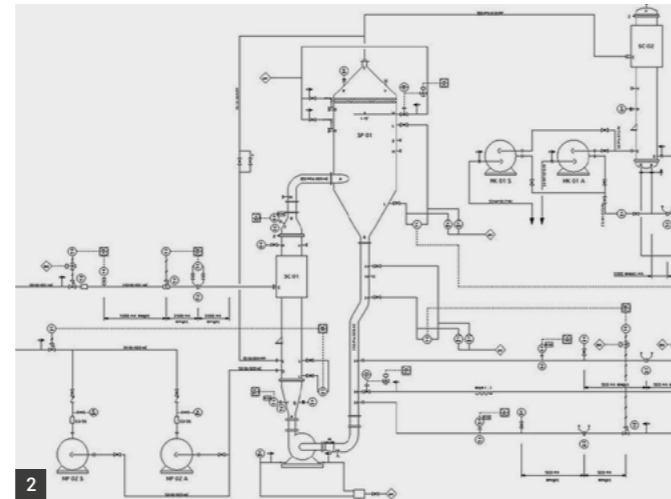
- Construction of the plant structure on the CONEXO portal
- Integration of the component data
- Creation of step-by-step instructions for each maintenance type
- Definition of the maintenance tasks with location, cycle, implementation period and operator

[3] Maintenance support

- Implementation of maintenance work via step-by-step instructions
- Automatic documentation of implementation
- Electronic signature through user login
- Distribution of the maintenance report via PDF
- Calling up the maintenance report

Digital product label

Since mid-2021, in addition to the normal product label, GEMÜ products have gradually also included an additional label with a QR code and serial number. You can use this to positively identify our products all over the world and, in addition to the classic product label, call up lots of additional product-related information in digital format.



GEMÜ VR

Virtual reality training modules

The high-quality valve, measurement and control components that GEMÜ produces are important elements of a technical processing plant. Proper installation and regular professional maintenance procedures are necessary in order for the plant to operate efficiently and in optimal cycles. As an ideal addition to the technical trainings, GEMÜ makes virtual reality training modules available.

Advantages

- Realistic course content and processes
- Long-term learning due to a training course aimed at practical experience
- Simulation of servicing and error scenarios
- Multi-user functionality

Possible applications

- Training course and learning check for assembly and maintenance staff
- Intensive training course for preparing for the maintenance cycles
- Accompanied by technical trainers with decades of experience in the sector

Worldwide availability

The VR training courses are already available in a number of countries, for example at our sites in Germany, France and Austria; alternatively, they can also be held as in-house training events at customers' premises with our mobile VR equipment. It is also possible to establish a virtual link between the sites.

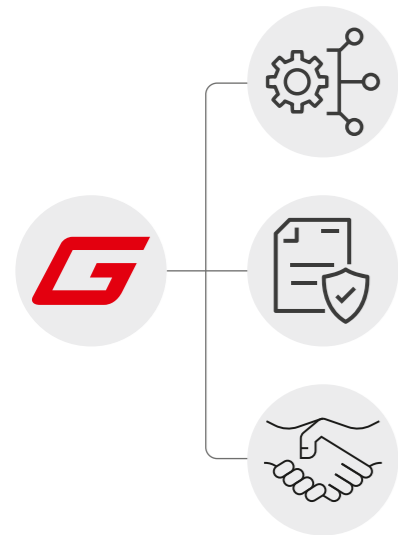


Valve designs for hydrogen generation

Application-based solutions for your project business

Having excellent references in industrial markets shows that we clearly understand your requirements. With our comprehensive range of products, we fulfil the requirements of applications like water treatment,

electrolysis, gas treatment and power-to-liquid. The specific requirements of these industrial sectors are fulfilled by our flexible product range.



GEMÜ solutions from a single source

As a system provider, we can react very flexibly to your needs on a case by case basis. Our worldwide sales network provides fast reaction times, customer oriented service and a committed project management team.

Plant reliability comes first

At GEMÜ, we only use carefully selected materials and our quality management system ensures continuous monitoring. This is also certified by external institutes.

Partner of BW-Elektrolyse

Industrial partnership for the development and operation of a hydrogen electrolysis plant in Baden-Württemberg.

Hydrogen as a medium places stringent requirements on valves. Above all, the small molecular size of the volatile gas quickly becomes a challenge when selecting materials. No matter whether it's about the right material or the corresponding approval, we are by your side in the selection of the right valve. Please contact us.

Hydrogen embrittlement

Hydrogen displays high diffusion in many materials, which can lead to hydrogen embrittlement at high temperatures for some steels. Austenitic stainless steel is therefore used in preference. We carefully advise you in selecting the material, especially for parts that come into contact with the medium.

Tightness

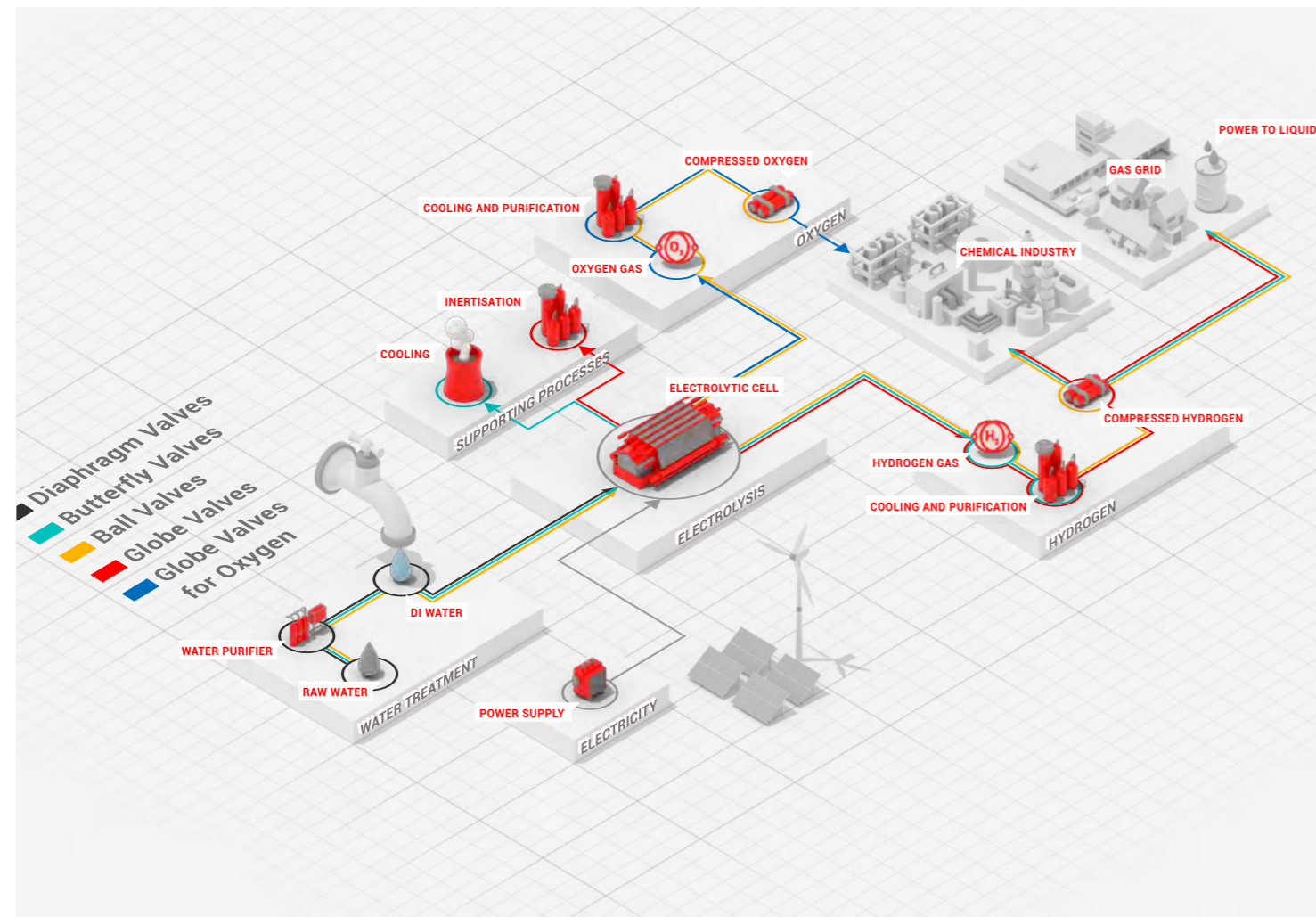
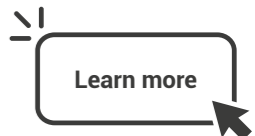
In addition to the diffusion integrity of the materials, the tightness of the entire valve is also of significance. The tightness of GEMÜ valves is verified in accordance with TA Luft (German Clean Air Act). Upon request, an additional examination with a helium test rig is possible.

Potentially explosive atmosphere

Hydrogen can form explosive mixtures. Furthermore, the systems are frequently installed in areas with high safety requirements. We're happy to advise you on the selection of valves for the respective ATEX zone or for handling combustible gases.

Local installation

When locally installing hydrogen electrolyzers, compressed air is often unavailable on-site. GEMÜ offers a wide range of products (electrically operated valves with corresponding safety positions).



Valve designs and solutions for single-use applications

Single-use valves are used if cross contamination has to be avoided or if a simplified plant design is required. The GEMÜ range comprises single-use diaphragm and pinch valves as well as customized components.

Single-use valve designs

GEMÜ SUMONDO diaphragm valves

The valve body is disconnected from the actuator and disposed of after it is used once. By contrast, the actuator remains in the plant for multiple use. With GEMÜ SUMONDO Multiport, you combine different valves in one multi-port valve block.

GEMÜ pinch valves

They have a secured retainer into which the tube is inserted. To control the transferred medium, the tube is compressed from above by a compressor. The specially developed contour minimizes the load and increases the service life.

Production in the cleanroom plant in Switzerland

In our cleanroom plant in Emmen in Switzerland, we have gained a lot of experience in the manufacture of ultra pure single-use products in recent years. In addition to our core skill in valve designs, we have now expanded our range and offer additional individually manufactured single-use plant components.

Individual single-use solutions

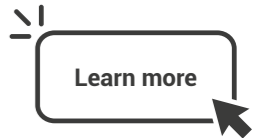
GEMÜ flowpath

Do you want to form a complete plant section? GEMÜ offers you individual flowpath solutions – both disposables and permanently installed plant components. We support you with:

- Flow rate calculations
- Qualification of the complete system
- X-ray sterilization of your flowpath configuration

Solutions

Mixers, distribution plates, fittings, sensor blocks and sensor holders



GEMÜ manifolds

Customized distribution systems

GEMÜ manifolds are valve systems made of plastic and stainless steel used in semiconductor production to distribute media from the supply level to the individual processing devices.

Trends in the semiconductor industry

We cannot imagine our modern world without semiconductor technology. Computers and smartphones only represent a fraction of the products which we use daily. Due to megatrends like cloud computing, big data and artificial intelligence, semiconductors will continue to gain importance in the future, too.

Another growth market is the automobile industry. Electric and hybrid vehicles as well as autonomous driving will significantly increase the demand for semiconductors in vehicles. Even in the medical industry, more and more semiconductors are being used in analytical and laboratory equipment and robots. These products and their components (microchips) are manufactured under totally pure conditions. Numerous plant designers and end users choose GEMÜ products and customized solutions when equipping their production plants.

Customized solutions

Many years of experience in various areas of semiconductor production along with the core skill of handling critical media mean that GEMÜ is well qualified to offer a product range that is tailored to meet the specific needs of the semiconductor industry.

From the supply level of a semiconductor factory, through the mixing and distribution level, to use in process equipment in the cleanroom – GEMÜ components and system solutions for the control and regulation of process media are used in various areas of a semiconductor factory.

Depending on the medium, various materials and detachable and non-detachable connections are available. For solvents, GEMÜ offers distribution systems in stainless steel with welded or VCR joints. Manifolds made from ultra pure plastics are suitable for slurry, chemicals or ultra pure water.

Areas of application of GEMÜ manifolds



Semiconductor production



Slurry supply



Solvent supply



Chemical supply



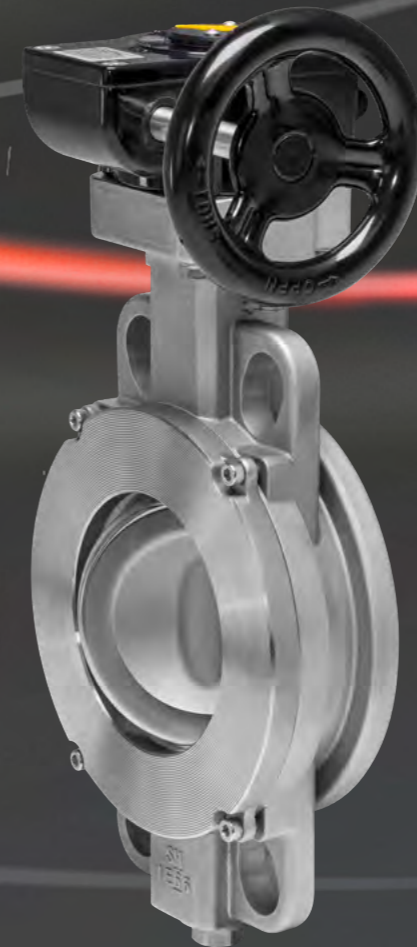
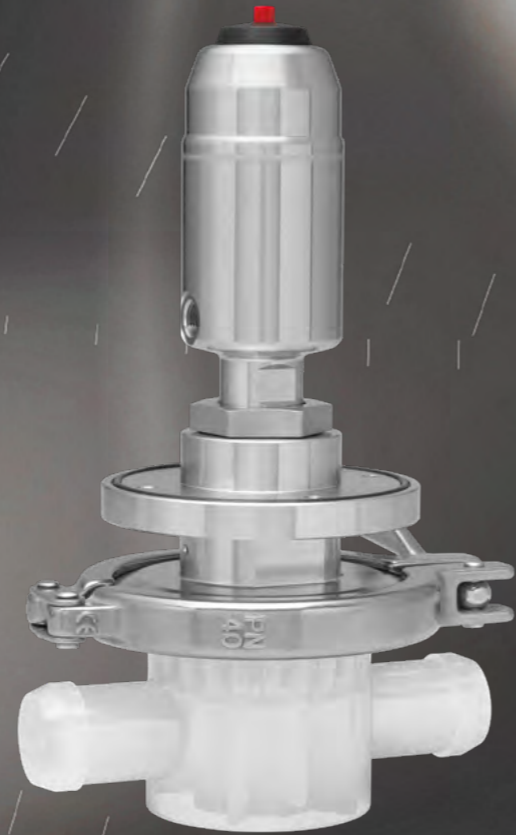
Lithium-ion battery cell production



Wet process equipment



Product highlights



GEMÜ 1441 cPos-X

Intelligent electro-pneumatic positioner

The GEMÜ 1441 cPos-X is an intelligent, digital electro-pneumatic positioner in two-wire technology used to control pneumatically operated process valves. It can be combined with single acting or double acting linear actuators or quarter turn actuators. This means that it can be used, among other things, for diaphragm, globe and diaphragm globe valves as well as for ball valves and butterfly valves, for instance. The positioner has a robust housing with a covered LCD display for status information. The positioner can be operated via remote access, using a mobile device to configure settings and to view detailed information.

Features

- Two-wire connection technology
- Quick commissioning using well-balanced preconfiguration
- HART communication available upon request
- "Fail-safe" and "Fail-freeze" fail safe function available
- BLE communication for remote access and configuration
- Almost no air consumption when idle

Areas of application

- Potentially explosive areas
- Pharmaceutical, biotechnology and cosmetics industries
- Foodstuffs and beverages
- Chemical processes
- Power generation and environmental systems
- Mechanical engineering and processing industries

Technical specifications

Ambient temperature: -10 to 60 °C

Operating pressure: 1.5 to 7 bar

Flow rate: 115 l/min

Electrical connection types:
M16 cable gland | M12 plug

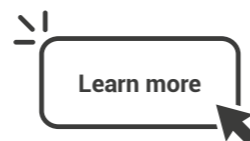
Communication modes: BLE | HART

Conformity: ATEX | IECEx | NEC 500 | UL Listed

Technical data depends on the respective configuration – see datasheet or Product Selection Tool

Device operation with the GEMÜ App

- Initialization, configuration and parameterization
- Detailed display of process values and status
- Error analysis
- Operating mode settings



GEMÜ eSyDrive, eSyStep and eSyLite Motorized actuators

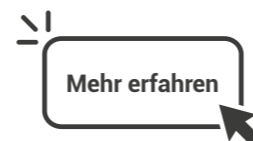
Electrification is also changing the processing industry. At GEMÜ, we offer a multitude of electrically operated valves. A range of actuator systems and valve types are available. For more than 55 years, we have been developing electromagnetic and motorized actuators and are continuously expanding our know-how.

Features

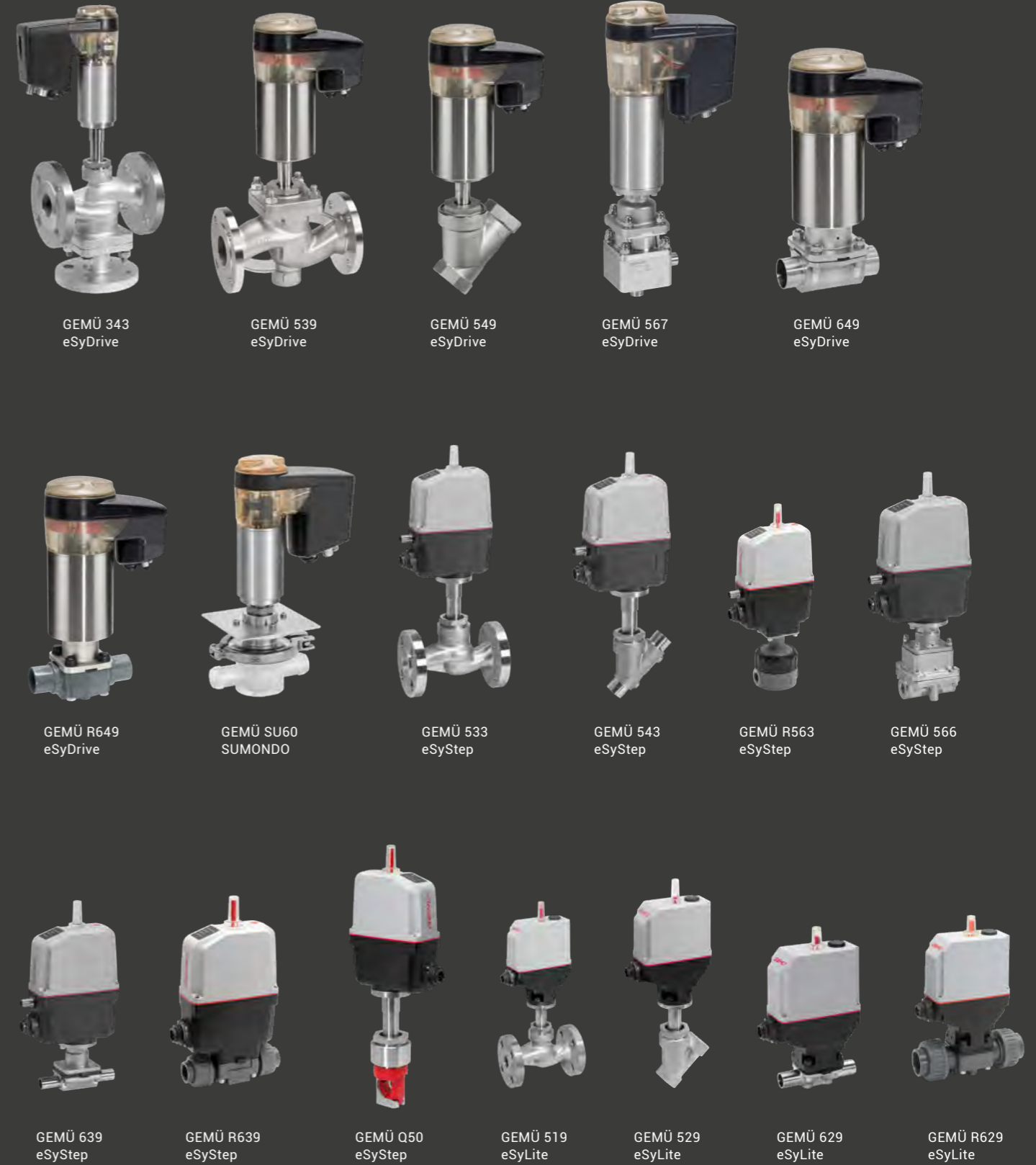
- Energy-efficient alternative to compressed air systems
- Available as diaphragm, globe and diaphragm globe valves
- Suitable for multi-port valve blocks
- Open/closed, positioner and process controller designs

Areas of application

- Pharmaceutical, biotechnology and cosmetics industries
- Foodstuffs and beverages
- Industrial water treatment
- Chemical engineering and surface finishing
- Power generation and environmental systems
- Mechanical engineering and processing industries



Overview



GEMÜ eSyDrive

For complex Open/Close and control applications

Designed on the basis of the hollow shaft principle in conjunction with technology that does not use brushes or sensors, the GEMÜ eSyDrive actuator sets new standards in relation to service life, compact valve design, actuating speed and energy efficiency. The self-locking actuator also offers a high level of reproducibility for positioning and is therefore ideal for use in control applications.

GEMÜ eSyDrive actuators

- GEMÜ 539 eSyDrive globe valve
- GEMÜ 549 eSyDrive angle seat globe valve
- GEMÜ 343 eSyDrive multi-port globe valve
- GEMÜ 649 eSyDrive metal diaphragm valve
- GEMÜ R649 eSyDrive plastic diaphragm valve
- GEMÜ 567 eSyDrive diaphragm globe valve
- GEMÜ SU60 eSyDrive single-use diaphragm valve

Technical specifications

Media temperature:	-10 to 180 °C
Operating pressure:	0 to 40 bar
Nominal sizes:	DN 8 to 100
Connection types:	Union end Threaded connection Clamp Flange Spigot
Actuating speed:	Max. 4 to 6 mm/s

Technical data depends on the respective configuration – see datasheet or Product Selection Tool



GEMÜ eSyStep

For Open/Close and simple control applications

The GEMÜ eSyStep actuator is a compact spindle actuator with stepper motor. The narrow construction of the actuator makes it suitable for use on M-block valves.

GEMÜ eSyStep actuators

- GEMÜ 533 eSyStep globe valve
- GEMÜ 543 eSyStep angle seat globe valve
- GEMÜ R563 eSyStep plastic control valve
- GEMÜ 566 eSyStep metal control valve
- GEMÜ 639 eSyStep stainless steel diaphragm valve
- GEMÜ R639 eSyStep plastic diaphragm valve
- GEMÜ Q50 eSyStep pinch valve

Technical specifications

Media temperature:	-10 to 180 °C
Operating pressure:	0 to 40 bar
Nominal sizes:	DN 3 to 50
Connection types:	Union end Threaded connection Clamp Flange Spigot
Actuating speed:	Max. 3 mm/s

Technical data depends on the respective configuration – see datasheet or Product Selection Tool

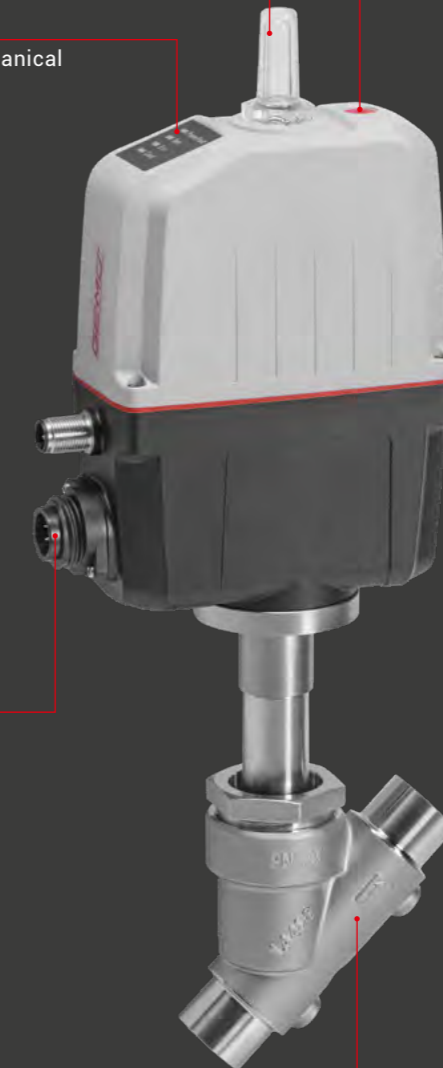
Automation-capable
Interface for GEMÜ add-on components

Visible
Electrical and mechanical position indicator

Safe
Standard manual override, external emergency power supply module (optional)

Communicative
IO-Link interface for exchanging process parameters

Variable
Selection of high-quality valve body materials for diaphragm, globe and diaphragm globe valve bodies



GEMÜ eSyLite

For Open/Close applications

GEMÜ eSyLite is a robust and self-locking spindle actuator with integrated safety shut-down. The motorized eSyLite basic actuator is a cost effective alternative to solenoid valves or motorized ball valves and can also be mounted on multi-port valve blocks.

GEMÜ eSyLite actuators

- GEMÜ 629 eSyLite metal diaphragm valve
- GEMÜ R629 eSyLite plastic diaphragm valve
- GEMÜ 519 eSyLite globe valve
- GEMÜ 529 eSyLite angle seat globe valve

Technical specifications

Media temperature:	-10 to 180 °C
Operating pressure:	0 to 25 bar
Nominal sizes:	DN 4 to 80
Connection type:	Union end Flange Flare Threaded connection Solvent cement socket Spigot

Technical data depends on the respective configuration – see datasheet or Product Selection Tool

Visible
Optical position indicator
integrated as standard

Safe
Standard manual override, integrated
emergency power supply module
(optional)



Robust
Tried and tested actuator design

Energy-efficient
Automatic shut off once the end
position is reached

Variable
Selection of high-quality valve
body materials for diaphragm and
globe valves

GEMÜ SUMONDO

Single-use diaphragm valve

The GEMÜ SUMONDO single-use valve comprises the GEMÜ SUB diaphragm valve body, which can be paired with a manual, pneumatic or motorized actuator. After use, the media wetted GEMÜ SUB unit can easily be disconnected from the actuator and replaced.



GEMÜ SUHK SUMONDO manual valve actuator with GEMÜ SUB SUMONDO valve body



GEMÜ SU40 SUMONDO pneumatic valve actuator with GEMÜ SUB SUMONDO valve body



GEMÜ SU60 SUMONDO motorized valve actuator with GEMÜ SUB SUMONDO valve body

GEMÜ SUB SUMONDO

- Single-use valve bodies
- Choice of 2/2-way, angle or T valve body version
- Mechanically stable, gamma-sterilizable valve body materials
- Valve body fulfils purity requirements

GEMÜ SUHK SUMONDO

- Manual actuator version
- Autoclavable actuator
- Continuously adjustable minimum media flow rate thanks to closing stroke limiter

GEMÜ SU40 SUMONDO

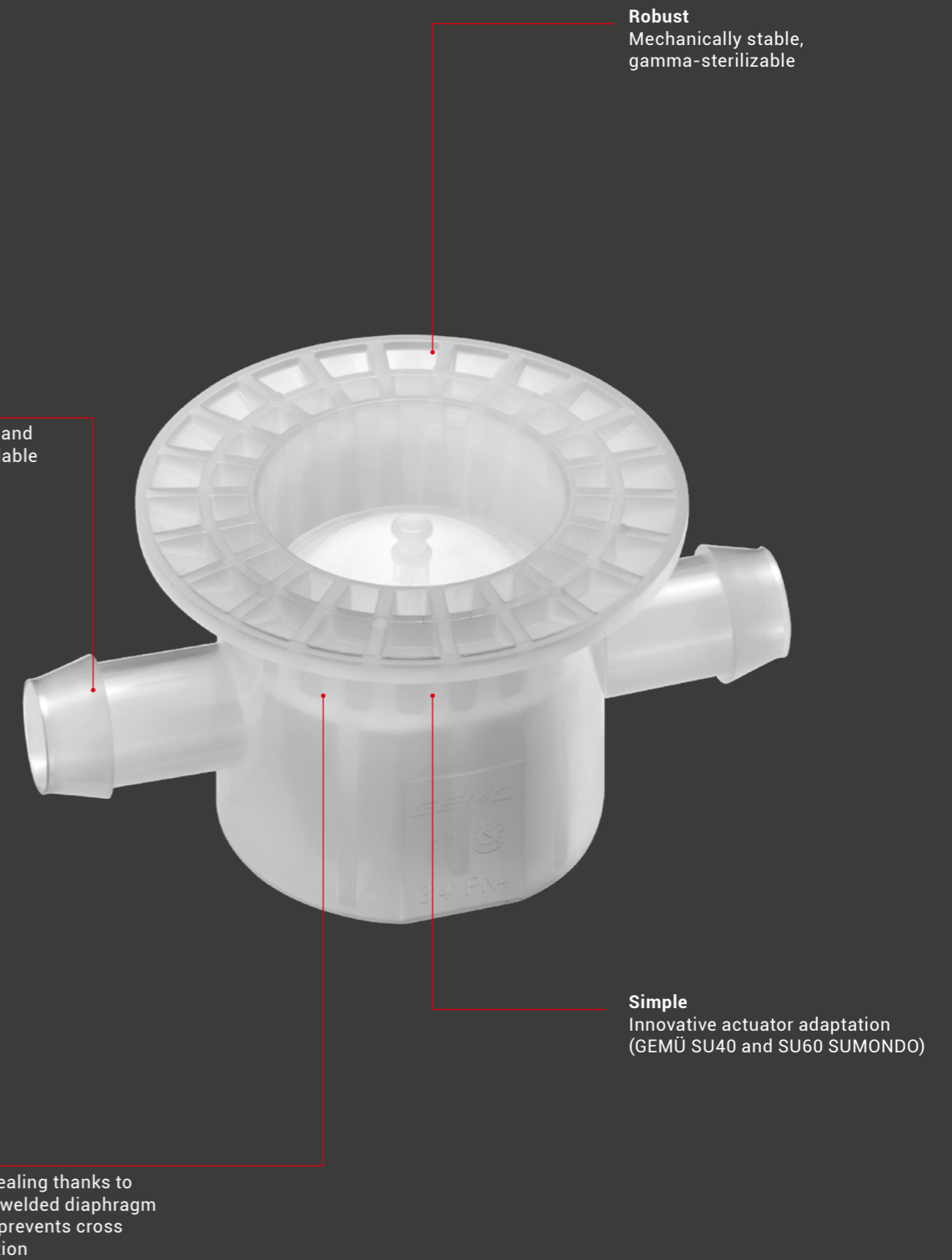
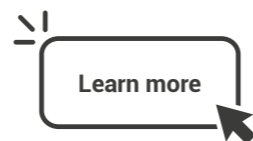
- Pneumatic actuator version
- Autoclavable actuator
- Tried and tested, reliable actuator design

GEMÜ SU60 SUMONDO

- Motorized actuator version
- Open/Close function, positioner and process controller
- Actuation force and actuating speed variably adjustable

Areas of application

- Media mixing
- Fermentation
- Cell harvesting
- Purification
- Filtration
- Filling



GEMÜ SUMONDO

Single-use M-block diaphragm valve

The requirement to combine a wide range of valve functions in the smallest of spaces is well established in the area of stainless steel valves. Additional requirements in the area of single-use systems, such as the quick, easy and safe replacement of the disposables and/or valve body, present previously unknown challenges to valve designs.

The new single-use multi-port valves from GEMÜ meet these requirements and open up new opportunities in plant design. The single-use M-block diaphragm valves comprise an actuator unit, which can be easily integrated into the single-use skid, and the media-wetted valve body with welded diaphragms. The disposables are manually connected to the actuator unit using a hand lever or, as an option, pneumatically via a locking cylinder.

Features

- Hermetic separation between medium and actuator
- Individually adjustable valve body design
- Compact design and consequently greatly reduced deadlegs
- Quick, easy and safe replacement of the disposables
- Manual or pneumatic connection of the disposables to the actuator unit
- Simple integration of the actuator unit into the single-use skid
- Pneumatically actuated and motorized actuators

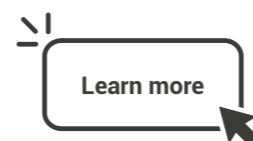
Areas of application

- Mixing media
- Distributing media
- Dosing media
- Control of flows

Technical specifications

Media temperature:	5 to 40 °C
Operating pressure:	Max. 4.9 bar
Nominal sizes:	¼" to 1"
Connection types:	Clamp Hose barb
Body material:	PP-R natural
Diaphragm material:	TPE and PP-R natural
Approvals:	USP Class VI, BSE/TSE-compliant

Technical data depends on the respective configuration – see datasheet or Product Selection Tool

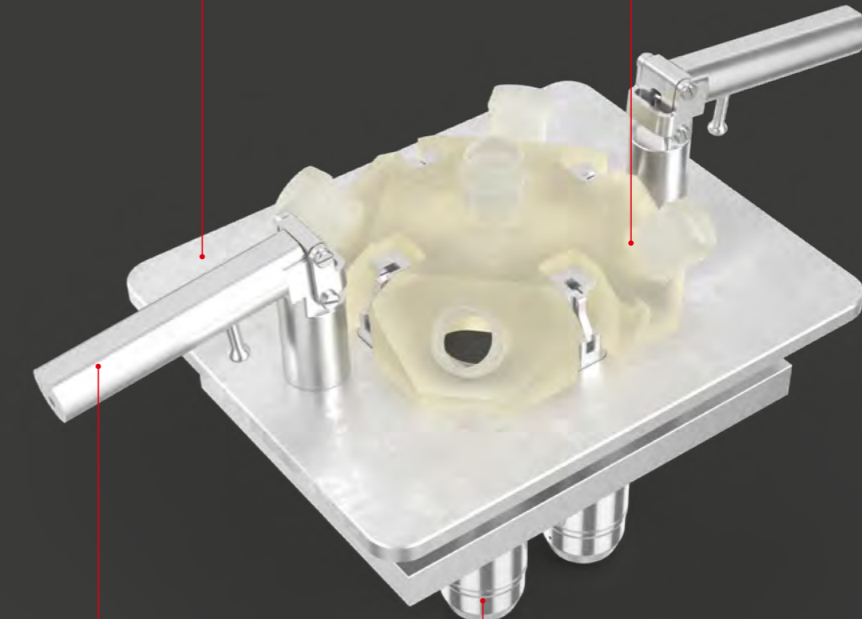


Simple

Actuator unit with base plate for integration into single-use skids

Flexible

Single-use M-block available in individual nominal sizes, connection types and body designs



Safe

Manual locking of the disposables (pneumatically as an option)

Tried and tested

Pneumatic actuators (motorized as an option)



Connecting the disposables

1. Open the actuator unit
2. Insert the single-use M-block
3. Lock the single-use M-block
4. Secure the joint by removing the hand lever

GEMÜ Q30, Q40 and Q50 eSyStep Single-use pinch valves

The GEMÜ Q30, Q40 and Q50 eSyStep single-use pinch valves are distinguished by their intuitive, safe operation as well as their high quality and service life. The valves guide a tube which is compressed from above by a compressor to control and regulate media. Due to the specially developed contour of the compressor, the strain on the tube is minimized and thus the service life of the tubes is increased.

Features

- High quality and long service life
- Minimized strain on the tube due to the optimized compressor
- Installations with positioners and process controllers are possible (GEMÜ Q30 and Q40)
- Several actuator and body configurations available
- Fast and safe tube replacement
- Easy mounting possible by means of mounting flange or internal thread on the body

Areas of application

- Pharmaceutical, biotechnology and cosmetics industries
- Foodstuffs and beverages

Technical specifications

GEMÜ Q30 and Q40 actuators

Special feature:	Positioners and process controllers optionally available
Body material:	Plastic (Q30) Metal (Q40)
Control function:	Normally Open Normally Closed
Control pressure:	3 bar (NO) 6 bar (NC)

GEMÜ Q50 eSyStep actuator

Special feature:	Open/Close function or with integrated positioner, on-site or external end position programming via programming input, parameterizable via IO-Link
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Body material: Plastic

Actuating speed: Max. 3 mm/s

Technical data depends on the respective configuration – see datasheet or Product Selection Tool



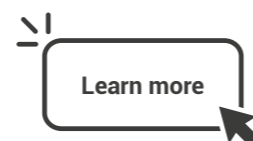
GEMÜ Q30



GEMÜ Q40



GEMÜ Q50 eSyStep



GEMÜ 567 BioStar control

Control valve made from stainless steel

The GEMÜ 567 BioStar Control 2/2-way diaphragm globe valve is an aseptic control valve and has been designed for demanding applications. Flow rates range from 80 l/h to 63,000 l/h, depending on the version. The sealing concept of the valve is based on the GEMÜ PD design. All actuator parts (except the seals) are made from stainless steel. Manual, pneumatic or motorized actuators are available.

Features

- CIP/SIP capable
- Available with linear or equal-percentage control characteristic
- Hermetic separation of the actuator from the medium using a PTFE seal
- Various valve body connections available
- Surface finishes down to 0.25 µm, electropolished
- ATEX version optionally available
- Actuator can be replaced under upcoming operating pressure without contaminating the medium

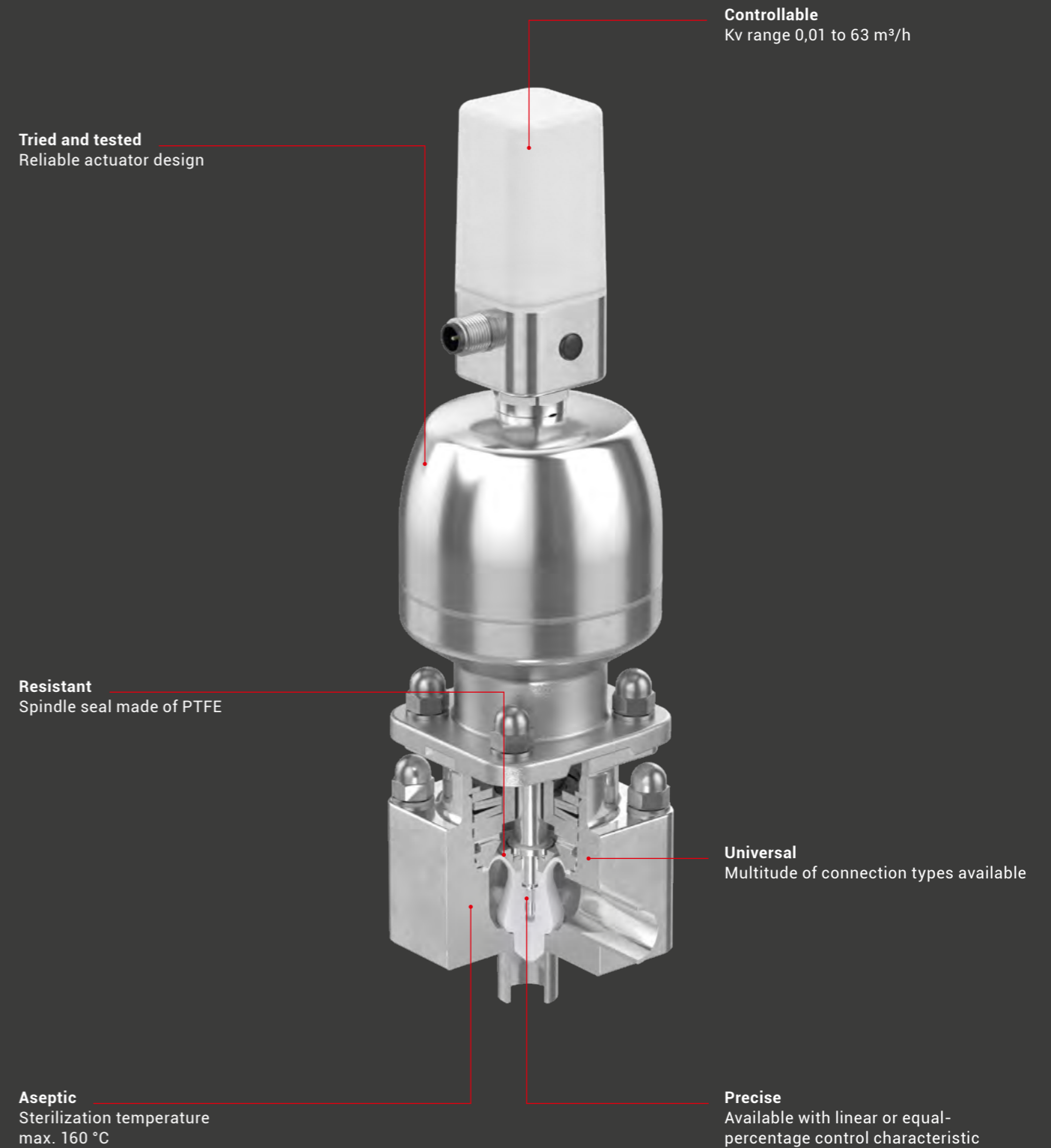
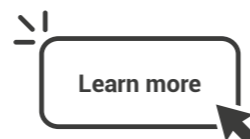
Areas of application

- Control of sterile steam and air
- Feed and discharge control in bioreactors
- Dosing of liquids and gases in the food and beverage industries

Technical specifications

Media temperature:	-10 to 160 °C
Operating pressure:	0 to 10 bar
Nominal sizes:	DN 8 to 65
Connection types:	Clamp Spigot
Body materials:	Stainless steel 1.4435 (block material)
Approvals:	3A BSE/TSE CRN EAC FDA Oxygen USP Regulation (EC) No. 1935/2004 Regulation (EC) No. 2023/2006 Regulation (EU) No. 10/2011

Technical data depends on the respective configuration – see datasheet or Product Selection Tool



GEMÜ F40 and F60 servoDrive Filling valves with PD design

Based on the PD design, GEMÜ has developed an innovative generation of filling valves. The PD design used enables the moving parts of the actuator to be hermetically separated from the product area, enabling a very high number of switching cycles and precise dosing. Maintenance is simultaneously very quick and easy – long downtimes are therefore a thing of the past. The filling valve is available as a pneumatic or motorized version.



GEMÜ F40 pneumatically operated filling valve

Features

- Compact design due to control air connector at the top
- Long service life with over ten million cycle duties
- Suitable for vacuum as standard
- ATEX version optionally available
- Only one assembly tool required

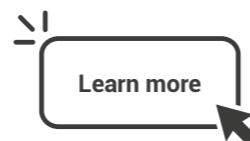
Areas of application

- Filling pressure controls
- Filling of liquid and viscous media
- Pre-evacuation, gas injection, inert gas injection overlay
- Duration and cycle programs for sanitizing the filling machine
- CIP/SIP and autoclavable processes

Technical specifications

Media temperature:	-10 to 140 °C
Operating pressure:	0 to 7 bar
Nominal sizes:	DN 8 to 25
Connection types:	Clamp Spigot
Body materials:	1.4435 (316L), block material 1.4435, investment casting material
Conformities:	3A ATEX FDA USP Regulation (EC) No. 1935/2004 Regulation (EC) No. 2023/2006 Regulation (EU) No. 10/2011

Technical data depends on the respective configuration – see datasheet or Product Selection Tool



GEMÜ F60 servoDrive motorized filling valve

Features

- Extremely high positioning accuracy
- Fast filling cycles (less than 400 ms) possible
- Flexible and fast program changes thanks to freely programmable filling curves
- Can be used for positioning and process control

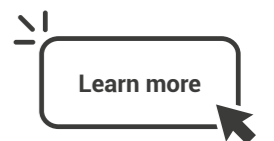
Areas of application

- Filling of fibrous or pulp-containing media
- Filling of medicines using a linear filler
- Aseptic filling in cleanrooms and insulators

Technical specifications

Media temperature:	-10 to 140 °C
Operating pressure:	0 to 7 bar
Nominal sizes:	DN 8 to 25
Connection types:	Clamp Spigot
Body materials:	1.4435, investment casting material
Actuating speed:	Max. 200 mm/s
Conformities:	3A EHEDG FDA USP Regulation (EC) No. 1935/2004 Regulation (EC) No. 2023/2006 Regulation (EU) No. 10/2011

Technical data depends on the respective configuration – see datasheet or Product Selection Tool



GEMÜ R470 Tugela series

Double-eccentric butterfly valves

The double-eccentric butterfly valves from the metal GEMÜ R470 Tugela series are available in nominal sizes DN 50 to 600 in a wafer body version with TFM sealing. Manual, pneumatic and motorized actuator versions are available.



Manual: GEMÜ R477 Tugela



Pneumatic: GEMÜ R471 Tugela



Motorized: GEMÜ R478 Tugela

Features

- Outstanding sealing at high pressures and high temperatures
- High quality and long service life
- Low maintenance requirements when installed
- Reduced torque thanks to the double-eccentric structure
- Anti-static fixtures for the ATEX sector

Areas of application

- Chemical processes
- Foodstuffs and beverages
- Industrial water treatment
- Mechanical engineering and processing industries
- Pharmaceutical, biotechnology and cosmetics industries
- Cooling and heating circuits

Technical specifications

Max. operating pressure: 0 to 40 bar

Media temperature: 10 to 230 °C

Nominal sizes: DN 50 to 600

Connection types: Class 150 PN 10, PN 16
Class 300 PN 25, PN 40

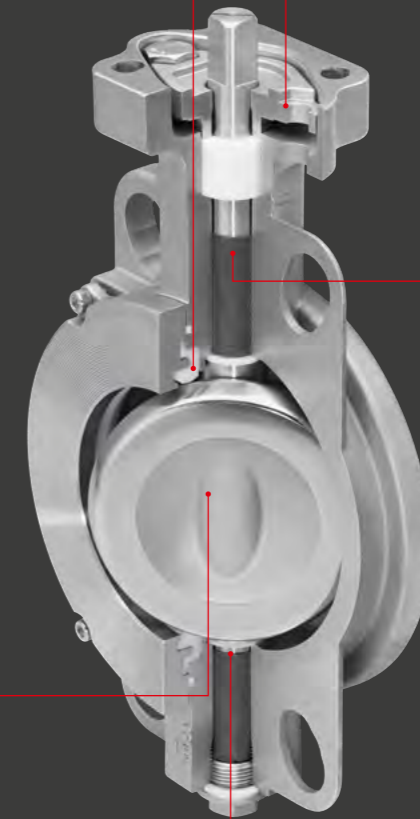
Body material: Stainless steel 1.4408, A351-CF8M 316L
Cast steel 1.0619, ASTM A216 WCB

Conformities: FDA | ATEX

Technical data depends on the respective configuration – see datasheet or Product Selection Tool

Resistant
TFM sealing ring with excellent properties for chemical sectors

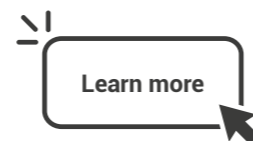
Reliable
Clamping system for sealing with concentricity control ring



Wear-optimized
Protected spindle due to temperature resistant, copper alloy bush

High-quality
Spherical surfaces for improved mechanical behaviour under pressure and temperature fluctuations

Durable
Reduced friction of the disc due to double-eccentric structure



GEMÜ R480 Victoria series

The latest generation of butterfly valves

The GEMÜ R480 Victoria series of soft seated butterfly valves made of metal is available in nominal sizes DN 50 to 300 and in standardized installation lengths ISO 5752/20, EN 558-1/20 and API 609 category A (DIN 3202 K1) in wafer and lug body versions. Manual, pneumatic and motorized actuator versions are available.



Manual: GEMÜ R487 Victoria



Pneumatic: GEMÜ R481 Victoria



Motorized: GEMÜ R488 Victoria

Features

- Low torques due to PTFE-coated bushes
- Sealed without drops or bubbles forming, acc. to EN 12266-1/P12, leakage rate A
- Liner material is easy to read when installed
- Sleek disc design for optimized Kv values
- Robust body coating in accordance with ISO 12944-6 C5-M, min. layer thickness of 250 µm

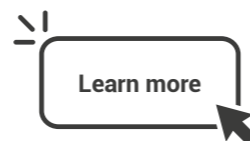
Areas of application

- Chemical engineering and surface finishing
- Industrial water treatment
- Power generation and environmental systems
- Mechanical engineering and processing industries
- Pharmaceutical, biotechnology and cosmetics industries
- Foodstuffs and beverages

Technical specifications

Operating pressure:	0 to 16 bar
Media temperature:	10 to 150 °C, low temperatures on request
Nominal sizes:	DN 50 to 300
Body configurations:	Wafer Lug
Connection types:	Flange
Body material:	EN-GJS-400-15 EN-GJS-400-18-LT, SG iron

Technical data depends on the respective configuration – see datasheet or Product Selection Tool



Durable

Lower torques due to PTFE-coated bushes

Made by GEMÜ

Narrow shape and positional tolerances and high-quality epoxy coating from our in-house manufacturing capabilities

Smart

Liner material is easy to read when installed, compatible with CONEXO

Reliable

Optimized liner for technically flawless tightness

Flow-optimized

Sleek disc design for optimized Kv values



GEMÜ C53 iComLine Motorized control valve

The GEMÜ C53 iComLine 2/2-way diaphragm globe valve was developed for precise and demanding control applications in semiconductor production. The sealing concept of the valve is based on the tried and tested GEMÜ PD design, with actuator and medium separated by a regulating cone made of resistant PTFE. As the regulating cone contour, actuator stroke and connection size can be customized to fulfil customers' requirements, the GEMÜ C53 iComLine satisfies virtually all control and flow requirements of the high-tech semiconductor industry.

Features

- High-resolution linear actuator with stepper motor
- Suitable for ultra pure, corrosive media
- Low space requirement due to compact design
- Can be integrated into manifolds and M-block valves
- One million qualified control switching cycles
- Cleanroom manufacturing (HP version), complies with SEMI F 57

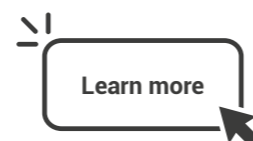
Areas of application

- Lithography
- Chemical-mechanical polishing (CMP)
- Etching processes
- Analysis

Technical specifications

Media temperature:	-10 to 150 °C
Operating pressure:	0 to 6 bar
Nominal sizes:	1/4" 3/8" 1/2" 3/4"
Connection types:	Flare PrimeLock® Super 300 Type Pillar®
Body materials:	PFA PTFE TFM™
Actuating speed:	Max. 2 mm/s

Technical data depends on the respective configuration – see datasheet or Product Selection Tool



Motorized actuator

Adjustable valve stroke (adaptation possible at the factory), can be integrated into customized multi-port valve blocks



PD (plug diaphragm)
Tried-and-tested seal system, regulating cone for equal-percentage and linear automatic control system available, customized regulating cone configuration possible

Valve body

Common connection sizes and types available, ultra pure fluoroplastics for use in semiconductor production

GEMÜ C58 iComLine

Pneumatically operated 3/2-way diaphragm globe valve

The GEMÜ C58 iComLine ultra pure 3/2-way diaphragm globe valve has a pneumatic actuator. All media wetted parts are made of PTFE TFM™. The exterior actuator parts are made of PVDF. An optical position indicator and solid mounting lugs with slotted holes are integrated as standard.

Features

- High Kv value
- Suitable for ultra pure, corrosive media
- Innovative sealing concept
- Cleanroom manufacturing fulfils SEMI F 57

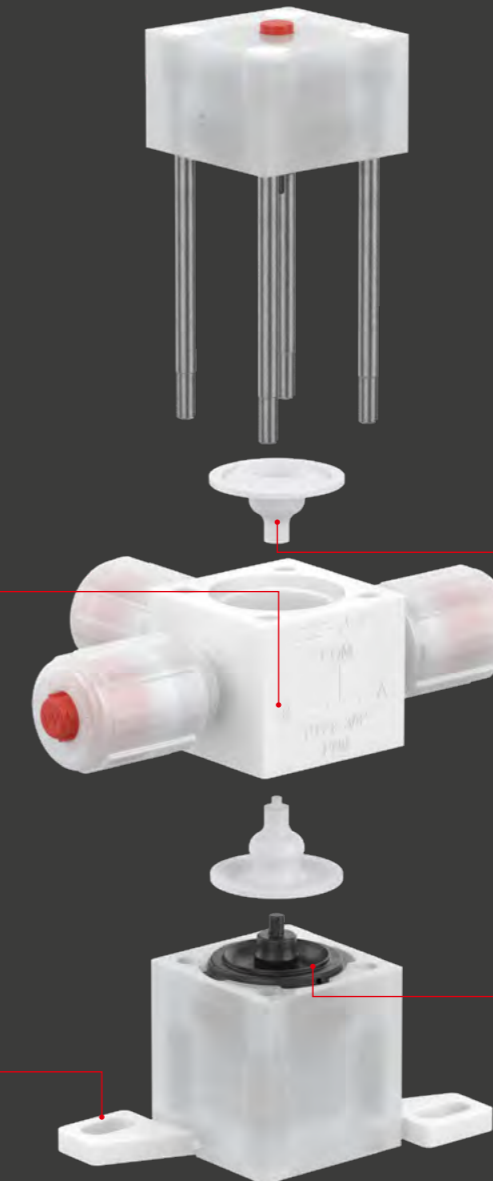
Areas of application

- Lithography
- Chemical-mechanical polishing (CMP)
- Etching processes
- Handling corrosive chemicals and ultra pure media in the processing industry

Technical specifications

Media temperature:	-10 to 90 °C
Operating pressure:	0 to 6 bar
Nominal sizes:	DN 4 to 10
Connection types:	Flare
Body materials:	PTFE TFM™

Technical data depends on the respective configuration – see datasheet or Product Selection Tool



Compact
Space-saving design
minimizes deadleg

Innovative
Highly resistant double conical diaphragm made of PTFE TFM™ combines the advantages of globe and diaphragm valves

Safe
Hermetic separation of the actuator from the media flow

Helpful
Solid mounting lugs with
slotted holes

GEMÜ 60 and C67 CleanStar – actuator size 4

Pneumatically and manually operated diaphragm valves

The ultra pure 2/2-way GEMÜ CleanStar product range's new actuator size 4 was developed to continue to meet the ever increasing market requirements in terms of the quantities and purity of process media. The large nominal sizes allow ultra pure valve designs to be used even at the supply and distribution level of semiconductor production. The valve comes with an optical position indicator. In addition, solid mounting lugs with slotted holes have been integrated into the body design.

Features

- High Kv value and minimal deadleg
- Media wetted parts made of PFA or PTFE TFM™, specially designed for use in high-purity applications
- Outstanding footprint/flow ratio
- Exterior parts made of PVDF
- GEMÜ CleanStar design that has been established on the market for many years
- Cleanroom manufacturing complies with SEMI F57

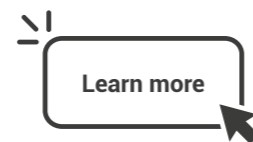
Areas of application

- Chemical supply for the processes of polishing, cleaning and wet etching
- Transport of large media quantities (bulk supply, day tank supply)
- Blending and distribution systems (slurry mixing plants, VMB)

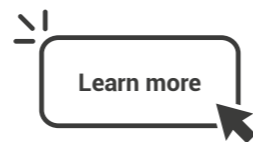
Technical specifications

Media temperature:	-10 to 100 °C
Ambient temperature:	Max. 60 °C
Operating pressure:	Max. 6 bar [87 psig] applied upstream
Nominal sizes:	2" (DN50) 1½" (DN40)
Connection types:	Imperial butt weld spigot Union end (optional)
Body material:	PFA

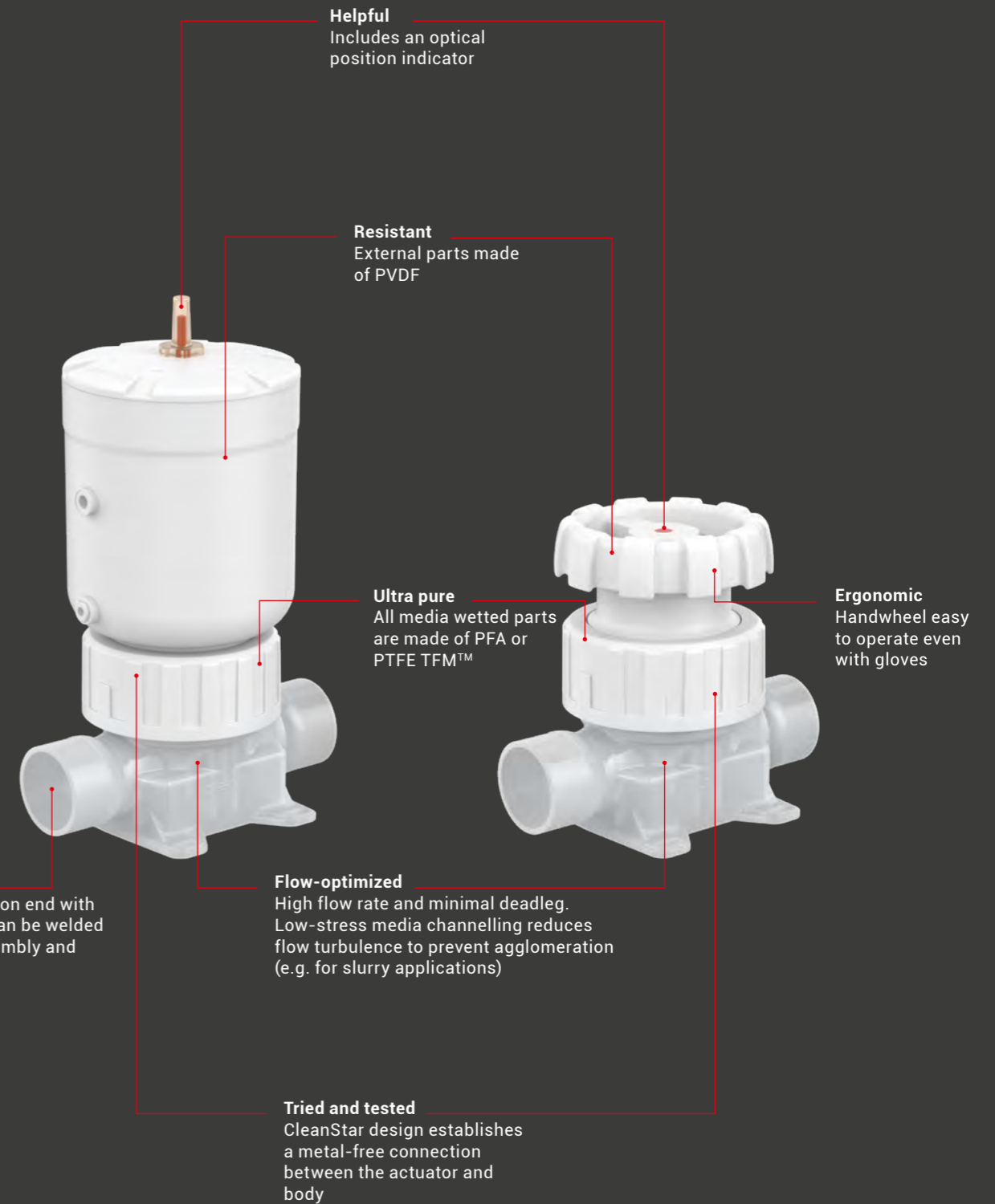
Technical data depends on the respective configuration – see datasheet or Product Selection Tool



GEMÜ C60



GEMÜ C67



GEMÜ M75

Process solenoid valve with full pressure compensation

The GEMÜ M75 directly controlled 2/2-way process solenoid valve has innovative double bellows as a seal, with which the pressure forces can be compensated for. The plastic encapsulated compact coil is available in several supply voltages. O-rings in various designs ensure hermetic separation between medium and actuator. The valve is suitable for liquid and gaseous media in Open/Close applications with short operating times. The GEMÜ M75 has a manual override and an energy-saving reduction in holding current as standard.

Features

- Compact design across all nominal sizes
- Coil can be exchanged without removing the valve body
- Hermetic separation between medium and actuator
- Optimal compatibility with media due to selection of high-quality materials
- Manual override possible in case of power failure
- RFID chip integrated as standard

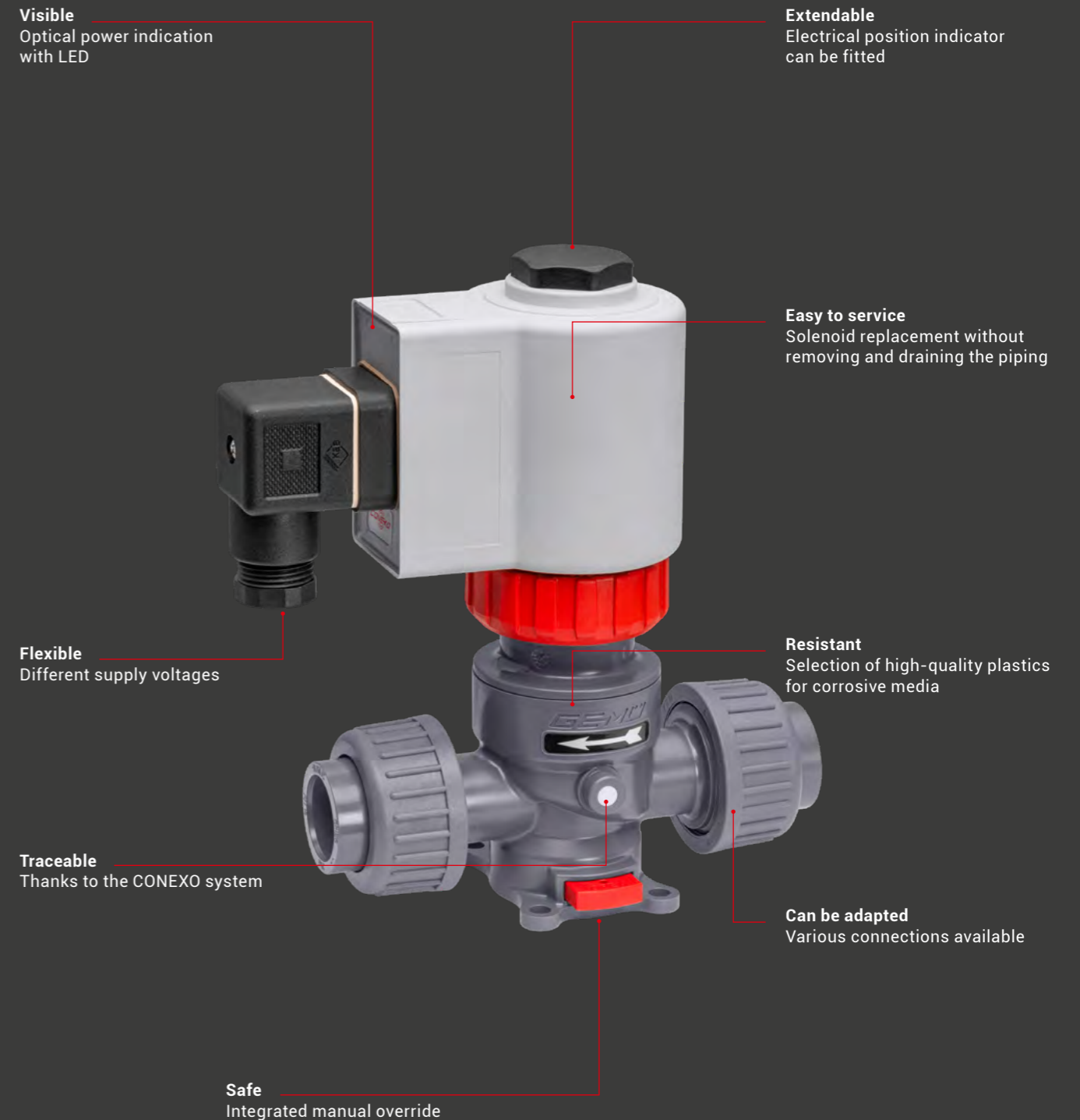
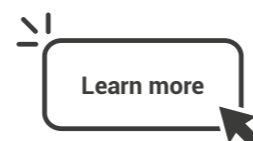
Areas of application

- Industrial water treatment
- Chemical engineering and surface finishing
- Power generation and environmental systems
- Mechanical engineering and processing industries

Technical specifications

Media temperature:	-10 to 90 °C
Operating pressure:	0 to 6 bar
Nominal sizes:	DN 8 to 20
Connection types:	Union end Threaded connection Solvent cement socket Spigot
Body materials:	PP PVC PVDF

Technical data depends on the respective configuration – see datasheet or Product Selection Tool



GEMÜ J70

Electrically operated solenoid valve

The compact GEMÜ J70 2/2-way solenoid valve is electrically operated and is ideal for dosing and analysis applications. The hermetic sealing between the medium and the actuator is ensured via a highly resistant plug diaphragm (PD) made of PTFE. The metal actuator is also optionally available with a plastic housing.

Features

- Precise dosing possible
- Good cleanability
- Hermetic separation between medium and actuator
- The coil can be exchanged without removing the valve body from the piping
- Suitable for vacuum applications

Areas of application

- Pharmaceutical, biotechnology and cosmetics industries
- Foodstuffs and beverages
- Chemical processes
- Power generation and environmental systems
- Mechanical engineering and processing industries

Technical specifications

Media temperature:	-10 to 90 °C
Ambient temperature:	-10 to 40 °C
Operating pressure:	0 to 6 bar
Nominal size:	DN 8
Body materials:	1.4404 (316L), block material
Supply voltage:	24 V DC

Technical data depends on the respective configuration – see datasheet or Product Selection Tool

Low maintenance
Low wear and simple replacement of worn parts

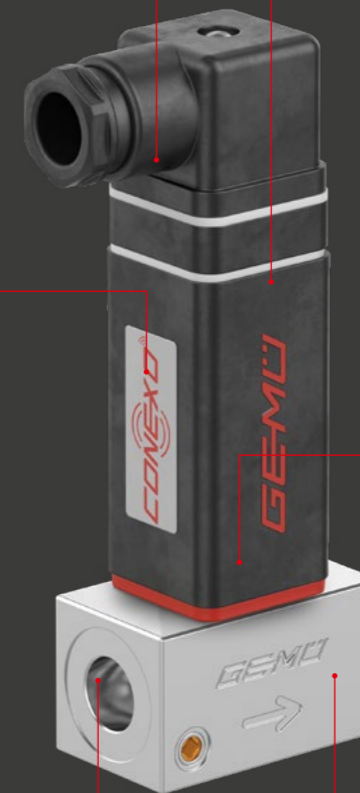
Compact
Space-saving design

Traceable
Clear identification and documentation via CONEXO

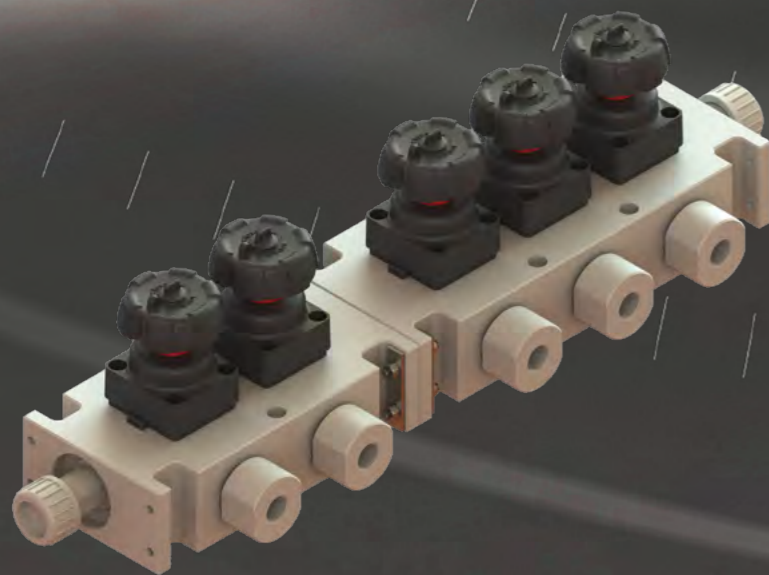
Resistant
Unique sealing concept thanks to the highly resistant plug diaphragm (PD)

Extendable
Suitable for valve manifolds and can be easily connected to each other

Variable
Suitable for multi-port valve blocks



Multi-port valves



GEMÜ 553

Modular distribution valve made from stainless steel

The modular GEMÜ 553 distribution valve comprises various globe valve modules. These can be equipped with manual, pneumatic or motorized actuators. The single modules are joined using screws. The sealing on the connection flange and between the individual valve bodies has an O-ring.

Features

- Compact design and easily extendable
- Versatile adaptation options
- Outlets can be turned in steps of 90°
- Filters or separation of media can be integrated
- Versatile range of accessories

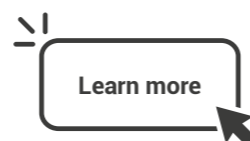
Areas of application

- Distribution of process steam
- Distribution of cooling and lubricating fluids in machine tools
- Control and distribution of cleaning media in an extremely wide variety of industrial processes

Technical specifications

Media temperature:	-10 to 180 °C
Operating pressure:	Max. 25 bar
Nominal sizes:	DN 15 and 20
Connection types:	NPT threaded socket, DIN ISO 228
Body materials:	1.4408, cast stainless steel

Technical data depends on the respective configuration – see datasheet or Product Selection Tool



GEMÜ PC50 iComLine

M-block diaphragm globe valve for ultra pure applications

GEMÜ PC50 iComLine multi-port valve blocks made of plastic and stainless steel are used for particularly clean applications. Due to their tried and tested PD design and customized technology, a wide variety of functions are combined in the smallest of spaces. The actuators of the multi-port valve blocks are based on the GEMÜ C50, C51, C53 and C57 valve types and are suitable for many areas of application by selecting the appropriate material.

Features

- Fully-integrated system solutions (valve functions, fittings, sensor system, check valves, tank/housing walls, etc.)
- Customized valve bodies in plastic and stainless steel
- Compact design, low space requirement and low maintenance
- Cleanroom manufacturing (HP version), complies with SEMI F 57

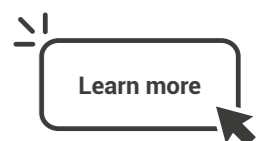
Areas of application

- Semiconductor production and battery production
- Pharmaceutical industry
- Chemical industry and environmental engineering
- Mechanical engineering

Technical specifications

Media temperature:	-10 to 200 °C
Operating pressure:	0 to 6 bar
Connection sizes:	1/8" to 1 1/2"
Connection types:	Union end Clamp Flare Threaded connection Threaded socket PrimeLock® Super 300 Type Pillar® Yodogawa Nano Link
Body materials:	Stainless steel PTFE TFM™ PTFE, conductive PP PVC PVDF

Technical data depends on the respective configuration – see datasheet or Product Selection Tool



GEMÜ P600S

M-block diaphragm valve with flexible connection system

The GEMÜ P600S M-block diaphragm valve comprises one or more diaphragm valve seats. These can be equipped with manual, pneumatic or motorized actuators. The downstream media is isolated using a diaphragm at the valve seat. The various inserts mean that the connections can be individually selected and replaced. The GEMÜ P600S multi-port valve block is available in various plastics and stainless steels. Its modular connection point means that it can always be extended.

Features

- Customized design thanks to interchangeable connections
- Valve body and diaphragm available in various materials
- Collation of several valves and pipe sections in one compact unit
- Combination of multiple functions in a single block
- Reduced number of welded and solvent cemented joints in the plant
- Low maintenance

Areas of application

- Chemical engineering and surface finishing
- Industrial water treatment
- Power generation and environmental systems
- Mechanical engineering and processing industries
- Foodstuffs and beverages
- Pharmaceutical and biotechnology industries

Technical specifications

Max. operating pressure: 0 to 10 bar

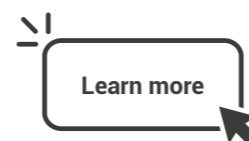
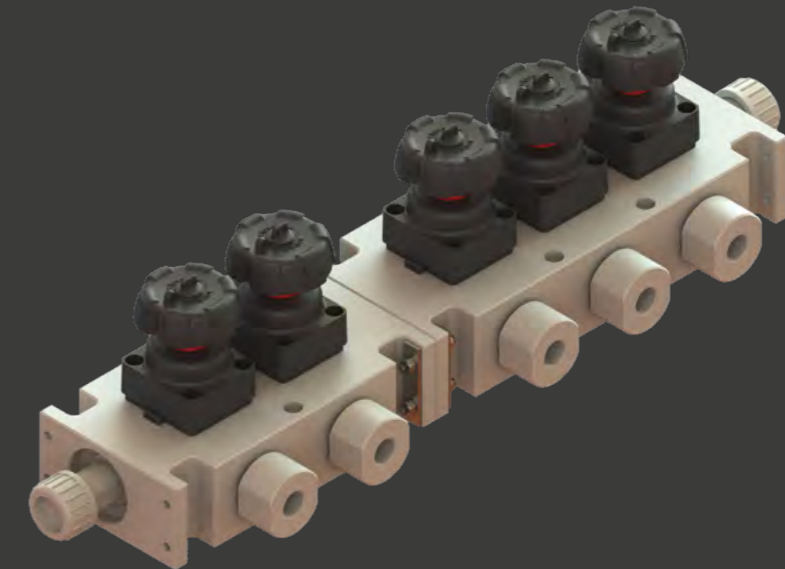
Media temperature: -10 to 100 °C

Nominal sizes: DN 8 to 25

Body materials: PP-H | PVC-U |
1.4435 (316L), block material I
1.4435 (BN2), block material I
1.4539 (904L), block material

Connection types: Union end | Spigot | Socket |
Clamp | Flange

Technical data depends on the respective configuration – see datasheet or Product Selection Tool



GEMÜ P600M

M-block diaphragm valve

The M-block diaphragm valve in stainless steel, GEMÜ P600M, comprises one or more diaphragm valve seats. It is possible to choose between manual, pneumatic and motorized actuator versions. The downstream media is isolated using a diaphragm at the valve seat. GEMÜ P600M is available in various plastics and stainless steels.

Features

- Combination of several valves and pipe sections in one compact unit
- Space savings thanks to compact design
- Individual, customized and flexible design
- Reduced deadleg
- Reduced number of welded and solvent cemented joints in the plant
- Combining several functions in one block: Control, batch, distribute, flush, etc.

Areas of application

- Pharmaceutical industry
- Biotechnology industry
- Cosmetics
- Food technology
- Water treatment
- Chemical processes
- Surface finishing
- Coating and electroplating

Technical specifications

Max. operating pressure: 0 to 10 bar

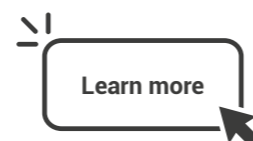
Media temperature: -10 to 100 °C

Nominal sizes: DN 4 to 150

Connection types: Union end | Clamp | Flange | Threaded connection | Spigot

Body materials: 1.4435 (316L), block material | 1.4435 (BN2), block material | 1.4539 (904L), block material | PVC-U, grey | PP-H, grey | PP-H, natural | PVDF

Technical data depends on the respective configuration – see datasheet or Product Selection Tool



GEMÜ Code 19

One-piece EPDM diaphragm

The GEMÜ code 19 diaphragm is a one-piece peroxide cured EPDM diaphragm that has been developed for use in pharmaceutical and biotechnological applications as well as for the food and beverage industries. The diaphragm displays improved setting behaviour and reduced signs of wear, which enables high switching cycles and therefore an increased service life.

Features

- Fabric reinforced (diaphragm sizes 10 to 100)
- Low signs of wear and optimized setting behaviour
- High performance capability thanks to improved positioning of the fabric insert
- Greatly reduced adhesive behaviour, no sticking on the valve seat of the diaphragm as a result of new material compounding
- High sealing values and low deformation through steam use
- Extremely long service life thanks to good material properties

Areas of application

- High level of insensitivity to mechanically contaminated working media e.g. cellular lumps, solid matter or catalytic solid matter
- Suitable for abrasive media
- Resistant to many acids, alkalis and diluted saline solutions
- Suitable for inert industrial gases and many other industrial gases
- Only conditionally suitable for oils and greases

Technical specifications

Media temperature: -10 to 100 °C

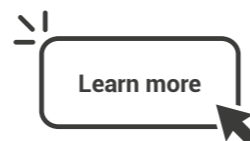
Sterilization temperature: Max. 150 °C

Diaphragm material: EPDM

Diaphragm sizes: 8 | 10 | 25 | 40 | 50 | 80 | 100

Conformities: BSE/TSE | FDA | Ozone resistance | Oxygen | TA Luft (German Clean Air Act) | USP | Regulation (EC) No. 1935/2004

Technical data depends on the respective configuration – see datasheet or Product Selection Tool



GEMÜ Code 5M

Two-piece PTFE/EPDM diaphragm

The GEMÜ code 5M diaphragm has a two-piece design and comprises a PTFE face and a peroxide cured EPDM backing. The PTFE used is chemically modified second generation PTFE – what has become known as PTFE TFMTM. This material offers maximum chemical resistance and also features a considerably lower level of wear under steam conditions.

Features

- Fabric reinforced EPDM backing
- Excellent long-term tightness and vacuum compatibility thanks to improved geometry
- Leak detection holes in the EPDM backing
- Extremely long service life
- Simple and defined mounting thanks to the threaded pin that is sintered into with integrated screw-in stop

Areas of application

- Suitable for use at permanently high temperatures and for steam
- Resistant against virtually all chemicals, such as strong acids, alkalis and salts
- Can be used to manufacture pharmaceuticals and WFI
- Insensitive to solvents, chlorine and aromatic hydrocarbons

Technical specifications

Media temperature: -10 to 100 °C

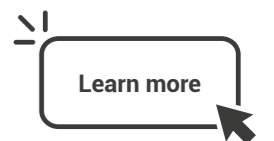
Diaphragm materials: PTFE/EPDM

Diaphragm sizes: 10 | 25 | 40 | 50 | 80 | 100

Sterilization temperature: Max. 150 °C

Conformities: BSE/TSE | FDA | Ozone resistance | Oxygen | TA Luft (German Clean Air Act) | USP | Regulation (EC) No. 1935/2004 | Regulation (EU) No. 10/2011

Technical data depends on the respective configuration – see datasheet or Product Selection Tool



GEMÜ Code 71

Three-piece PTFE/PVDF/EPDM diaphragm

The GEMÜ code 71 diaphragm is a three-piece diaphragm that has been developed for use in industrial applications. The diaphragm is made up of a PTFE face, a PVDF intermediate layer and an EPDM backing and has excellent permeation properties against gases. The diaphragm is extremely resistant to wet chlorine in particular, due to the PVDF intermediate layer and the titanium mounting pin.

Features

- PVDF layer with 1 mm thickness offers a good permeation block
- Good resistance against wet chlorine
- Mounting pin made of grade 7 titanium offers corrosion resistance against chlorine, bromine and their derivatives
- Simple and defined mounting thanks to sintered-into threaded pin with integrated screw-in stop
- No leakage holes in the EPDM backing, for better permeation properties

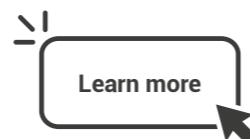
Areas of application

- Very good permeation properties, therefore suitable for industrial gases
- Excellent resistance against chlorine (wet), bromine and halogenated joints
- Resistant against virtually all chemicals, such as volatile acids, oxidizing agents and salts
- Suitable for use at permanently high temperatures

Technical specifications

Media temperature:	-20 to 100 °C
Diaphragm material:	PTFE/PVDF/EPDM
Diaphragm sizes:	10 25 40 50 80 100
Vacuum:	Up to 70 mbar (absolute)

Technical data depends on the respective configuration – see datasheet or Product Selection Tool



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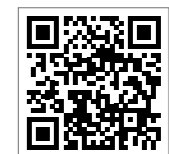
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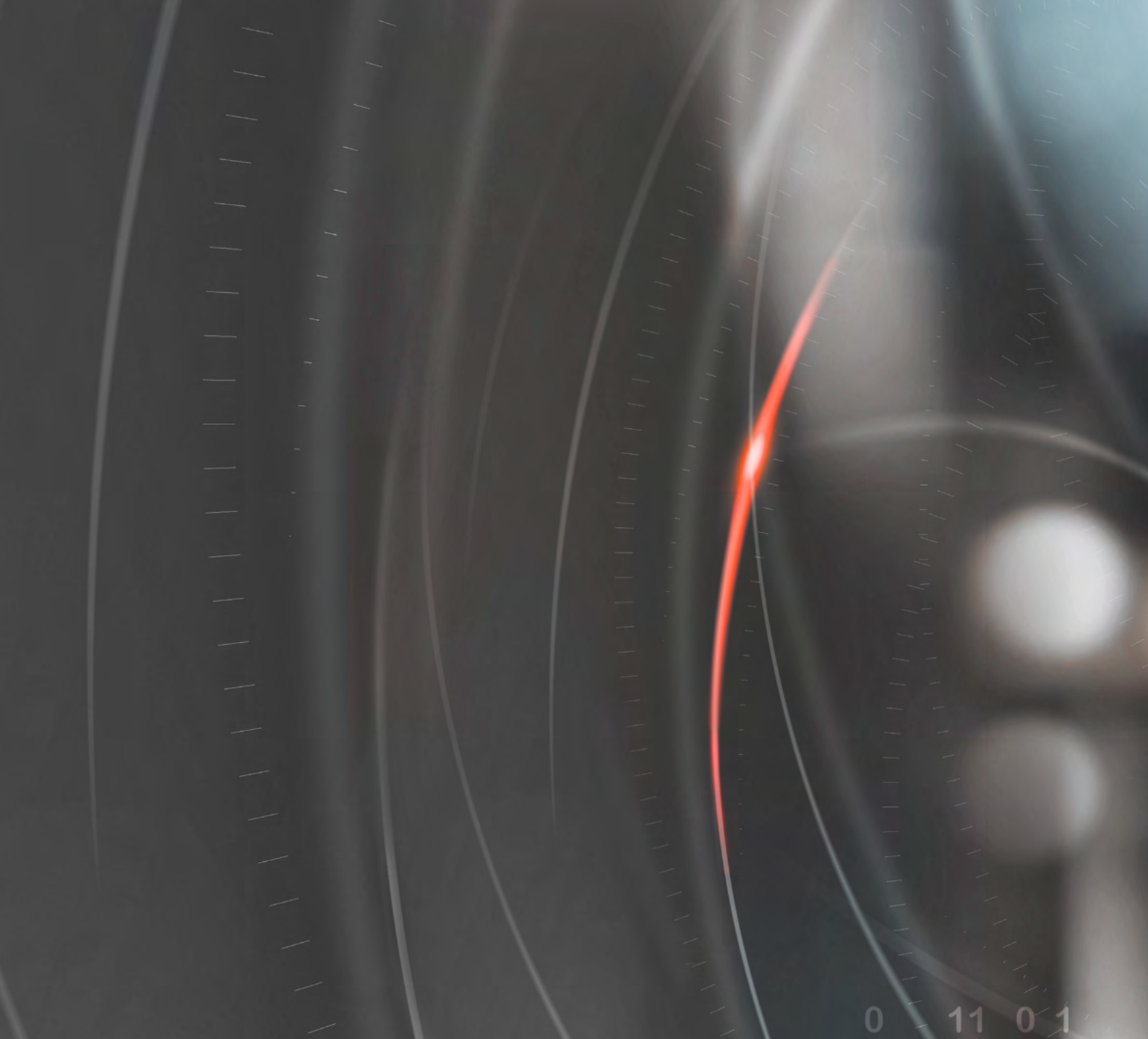
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