GEMÜ R629 eSyLite

GEMÜ 543 eSyStep

GEMÜ 649 eSyDrive

Motorized diaphragm, globe and diaphragm globe valves

Areas of application

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

Features

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

GEMÜ eSyDrive
for variable open/close and complex control applications

Description

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 terms of service life, compactness, 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 offers the following diaphragm, globe and diaphragm globe valves with the GEMÜ eSyDrive actuator:

- 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

- **Actuating speed*:**
  Max. 4 to 6 mm/s
- **Energy supply:**
  24 V DC
- **Protection class:**
  IP65
- **Nominal sizes*:**
  DN 8 to 100
- **Media temperature*:**
  -10 to 180 °C
- **Ambient temperature*:**
  -10 to 60 °C
- **Operating pressure*:**
  0 to 40 bar
- **Connection types*:**
  Union end, clamp, flange,
  threaded socket, threaded spigot, butt weld spigot

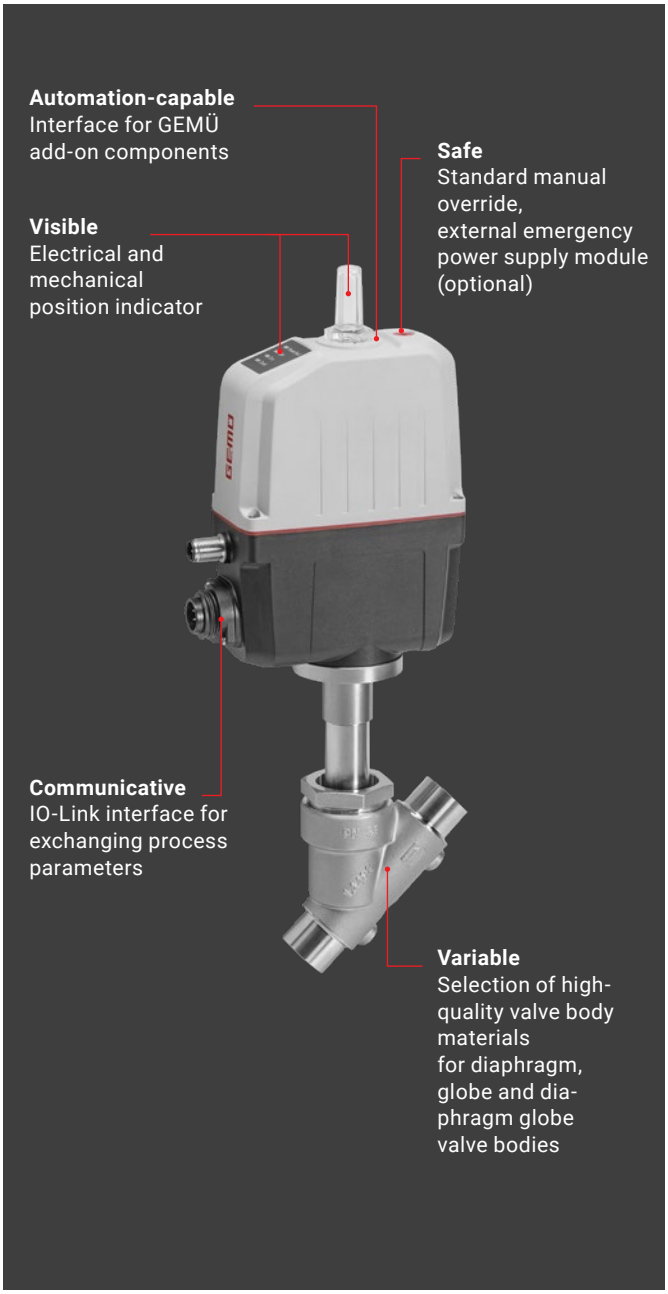
* depending on version and/or operating parameters

GEMÜ eSyStep
for open/close and simple control applications

Description

GEMÜ eSyStep is a compact spindle actuator with a stepper motor. The narrow construction of the actuator is among the features that make it ideal for use on M-block valves.
The following valve types are available with the GEMÜ eSyStep actuator:

- 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 metal diaphragm valve
- GEMÜ R639 eSyStep plastic diaphragm valve
- GEMÜ Q50 eSyStep pinch valve



Technical specifications

- **Actuating speed*:**
  Max. 3 mm/s
- **Energy supply:**
  24 V DC
- **Nominal sizes*:**
  DN 3 to 50
- **Media temperature*:**
  -40 to 180 °C
- **Ambient temperature*:**
  0 to 60 °C
- **Operating pressure*:**
  0 to 40 bar
- **Connection types*:**
  Union end, clamp, flange, threaded socket, butt weld spigot

* depending on version and/or operating parameters

GEMÜ eSyLite
for open/close applications

Description

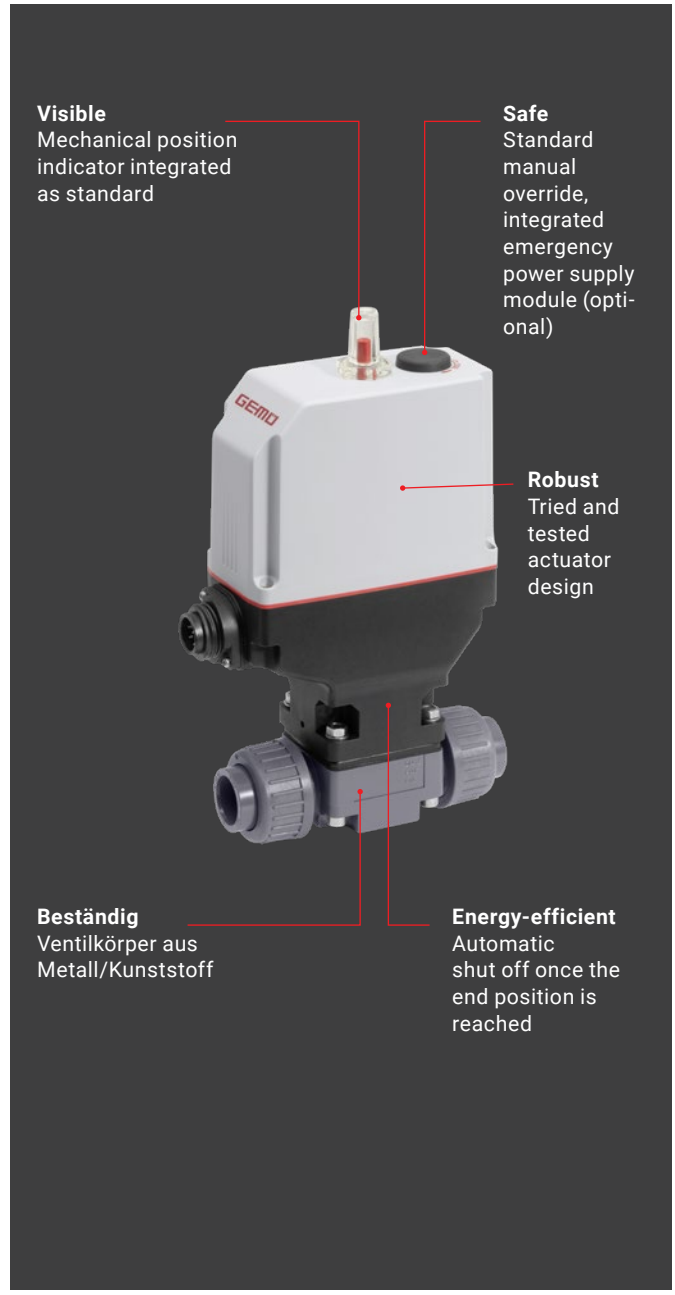
GEMÜ eSyLite is a robust and self-locking spindle actuator with integrated safety shut-down.
The motorized eSyLite basic actuator is a cost-effective alternative to solenoid valves or motorized ball valves can also be mounted on multi-port valve blocks.
The following valve types are available with the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

- 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

- **Actuating speed:**
  3 mm/s
- **Energy supply:**
  24 V DC
- **Nominal sizes*:**
  DN 4 to 80
- **Media temperature*:**
  -10 to 180 °C
- **Ambient temperature*:**
  -10 to 60 °C
- **Operating pressure*:**
  0 to 25 bar
- **Connection types:**
  Union end, flange, flare, thread, solvent cement socket, spigot

* depending on version and/or operating parameters



GEMÜ diaphragm and globe valves with motorized actuator

Actuator systems compared

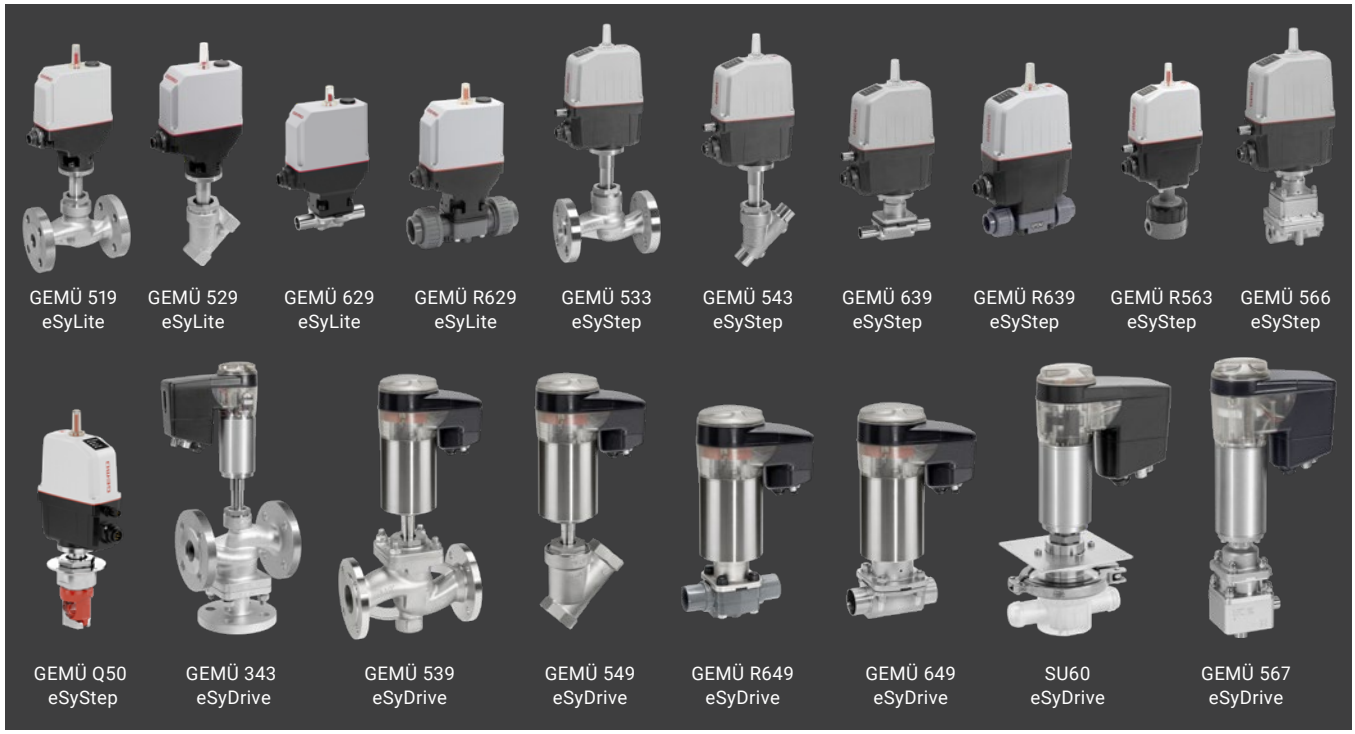
	GEMÜ eSyLite	GEMÜ eSyStep	GEMÜ eSyDrive
Main function	Open/close	Open/close or positioner	Open/close, positioner and process controller
Globe valves	DN 4 to 80	DN 3 to 50	DN 8 to 100
Diaphragm valves	MG8, MG10, MG20, MG25, MG40	MG8, MG10, MG20, MG25, MG40	MG10, MG20, MG25, MG40, MG50, MG65
Diaphragm globe valve	-	-	DN 8 to 50
Operating pressure	max. 6 bar (diaphragm valve) max. 25 bar* (globe valve)	max. 10 bar (diaphragm valve) max. 40 bar* (globe valve)	max. 10 bar (diaphragm valve, diaphragm globe valve) max. 40 bar* (globe valve)
Service life*	+	++	+++
Actuating speed	3 mm/s	3 mm/s	6 mm/s (actuator size 0, actuator size 1) 4 mm/s (actuator size 2)
Duty cycle	30 %	80 %	100 %
Media temperature	-10 to 100 °C (diaphragm valve) -10 to 180 °C (globe valve)	-10 to 100 °C (diaphragm valve) -10 to 180 °C (globe valve)	-10 to 100 °C (diaphragm valve) -10 to 160 °C (diaphragm globe valve) -10 to 180 °C (globe valve)
Interface*	-	IO-Link	Ethernet (Webserver), Modbus-TCP
Position feedback	Optional: GEMÜ 1215	Integrated	Integrated

* depending on version and/or operating parameters

Application examples

- Simple, variable as well as complex open/close and control applications
- Applications with contamination risk due to compressed air
- Compact plants without separate compressed air supply
- Mobile systems

Overview



GEMÜ Gebr. Müller Apparatebau GmbH & Co. KG
Fritz-Müller-Straße 6–8 · 74653 Ingelfingen · Germany
Phone +49 (0)7940 123-0 · info@gemue.de

Änderungen vorbehalten · 02/2025 · 88657960