

**SilverLine®**

Diaphragm Valves and Angle Seat Globe Valves



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

## GEMÜ SilverLine® diaphragm valves and globe valves

GEMÜ SilverLine® is a range of simple yet robust diaphragm valves and globe valves for the control of liquids and gases. All valves have a compact design with reduced components. Typical features of these valves are their low weight, high flow rates and an excellent price-performance ratio.

**S647 – S680 diaphragm valves** with PVC-U valve body and EPDM diaphragm comply with the French drinking water standard ACS. The design of these valves in comparison to solenoid or globe valves makes them insensitive to particulate media.

**Product applications:**

- Waste water treatment
- Drinking water treatment
- Manufacture of porcelain and ceramics
- Treatment of slurries in the semiconductor industry

**S560 und S580 globe valves** are used to control clean liquids and gases. The versions with plastic bodies are used in applications where higher chemical resistance of valve bodies is required. The conventional brass bodies are only suitable for the control of inert gases and liquids.

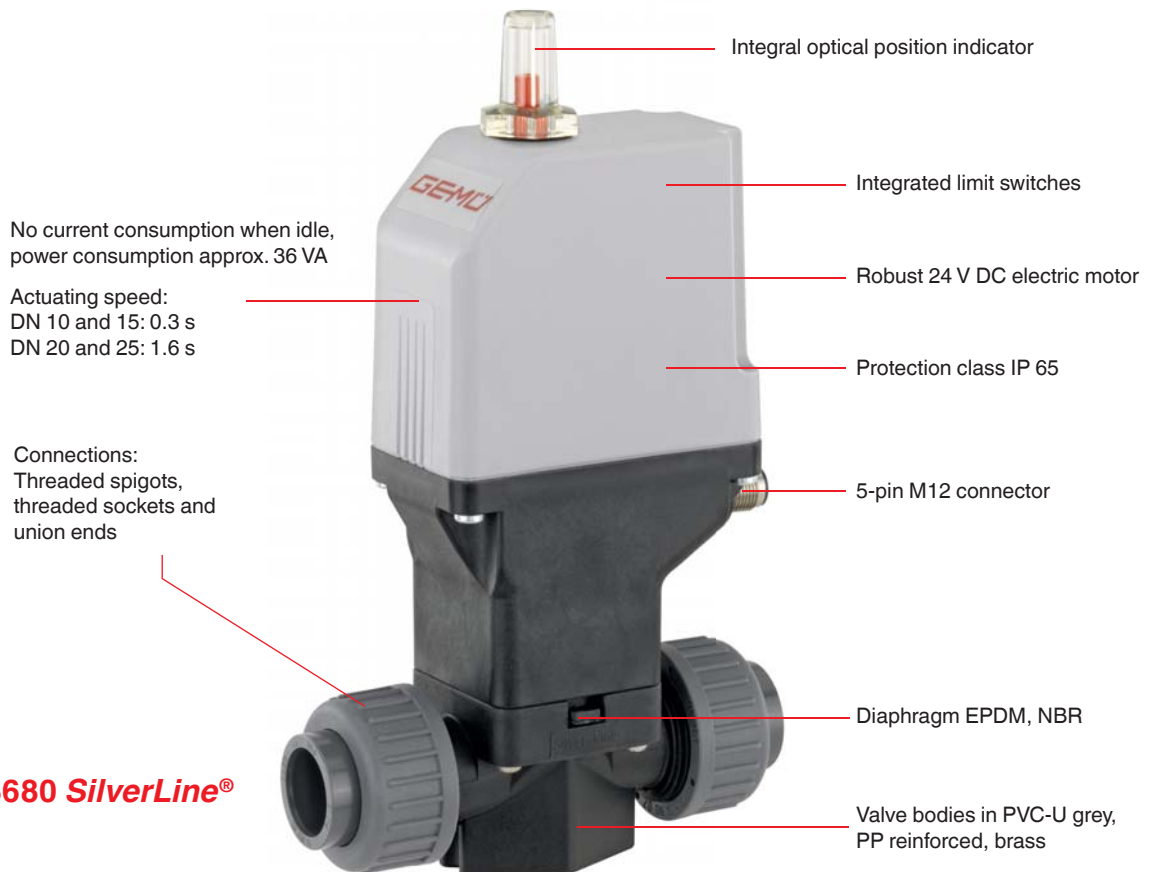
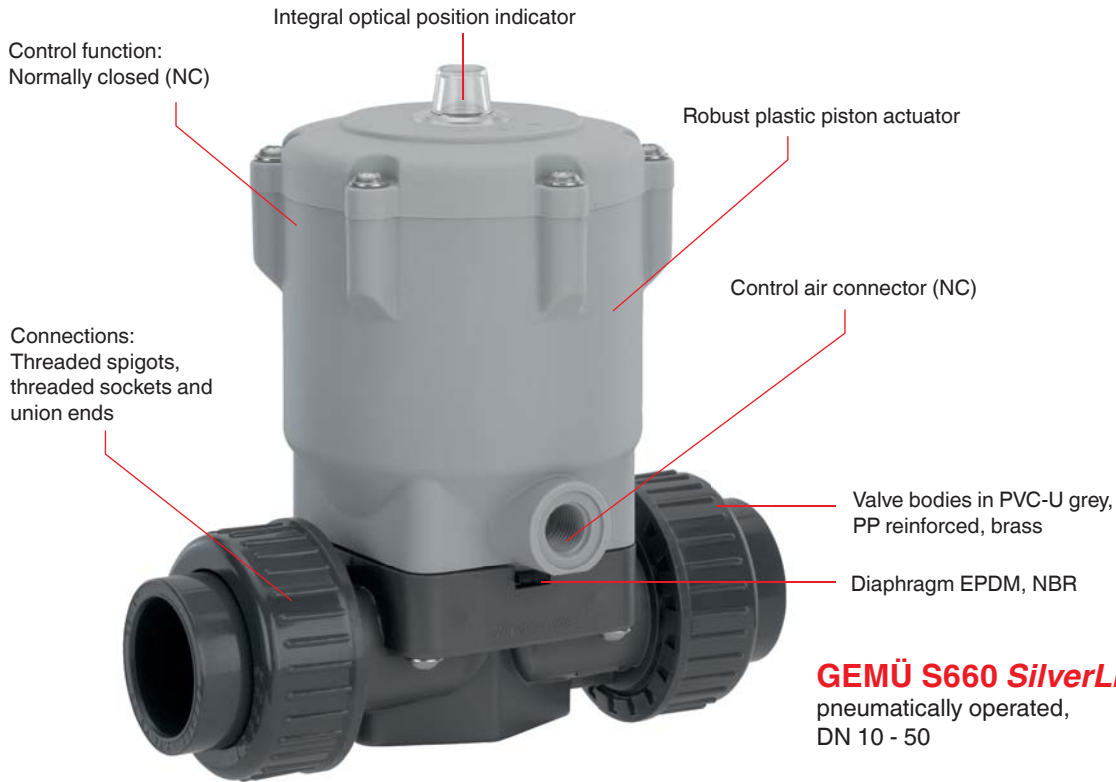


	Diaphragm valves				Globe valves	
Type	S670	S647	S660	S680	S560	S580
Operator	Plastic handwheel with optical position indicator	Pneumatic, direct operation	Pneumatic plastic piston actuator with integrated optical position indicator	Electric gear motor 24 VDC with limit switches	Pneumatic plastic piston actuator with integrated optical position indicator	Electric gear motor 24 VDC with limit switches
Control function	Manual	Opened by operating pressure, closed by control pressure	Normally closed (NC)	Motorized, switches off automatically when the end positions are reached	Normally closed (NC)	Motorized, switches off automatically when the end positions are reached
Valve body material	PVC-U, PP reinforced, brass	PVC-U, PP reinforced, brass	PVC-U, PP reinforced, brass	PVC-U, PP reinforced, brass	PP reinforced, brass	PP reinforced, brass
Perm. operating pressure*	6 bar	6 bar	6 bar	6 bar	6 - 8 bar (depending on DN)	8 bar
DN	10 - 50	20 - 50	10 - 50	10 - 25	10 - 50	10 - 25

\* dependent on valve body material, please note operating pressure-operating temperature tables

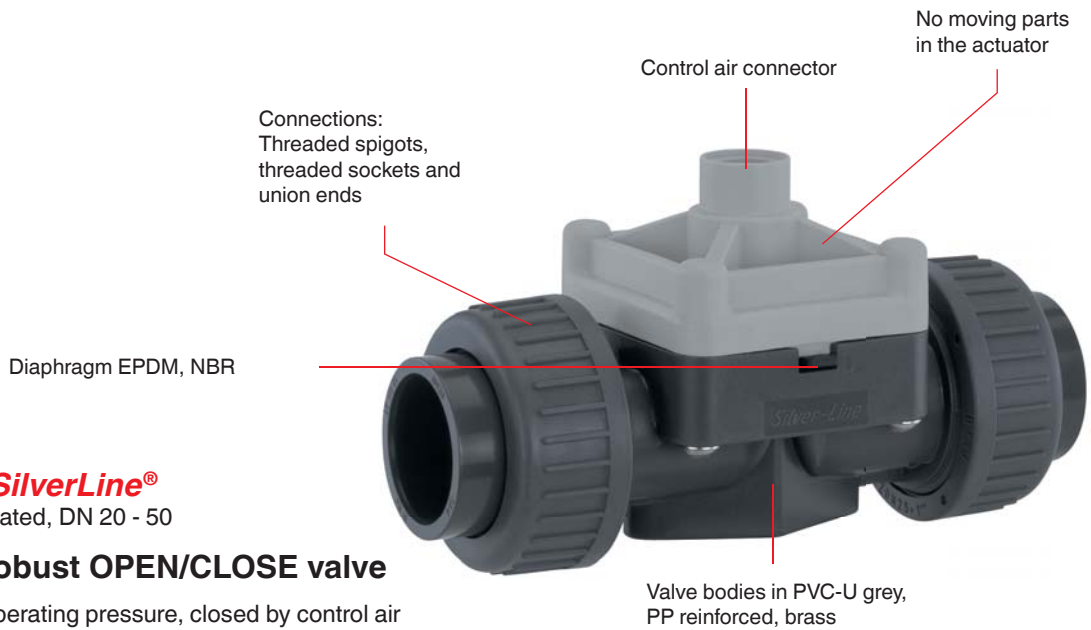
# GEMÜ S660, S680 SilverLine®

Diaphragm valves, DN 10 - 50



## GEMÜ S647, S670 SilverLine®

Diaphragm valves, DN 10 - 50

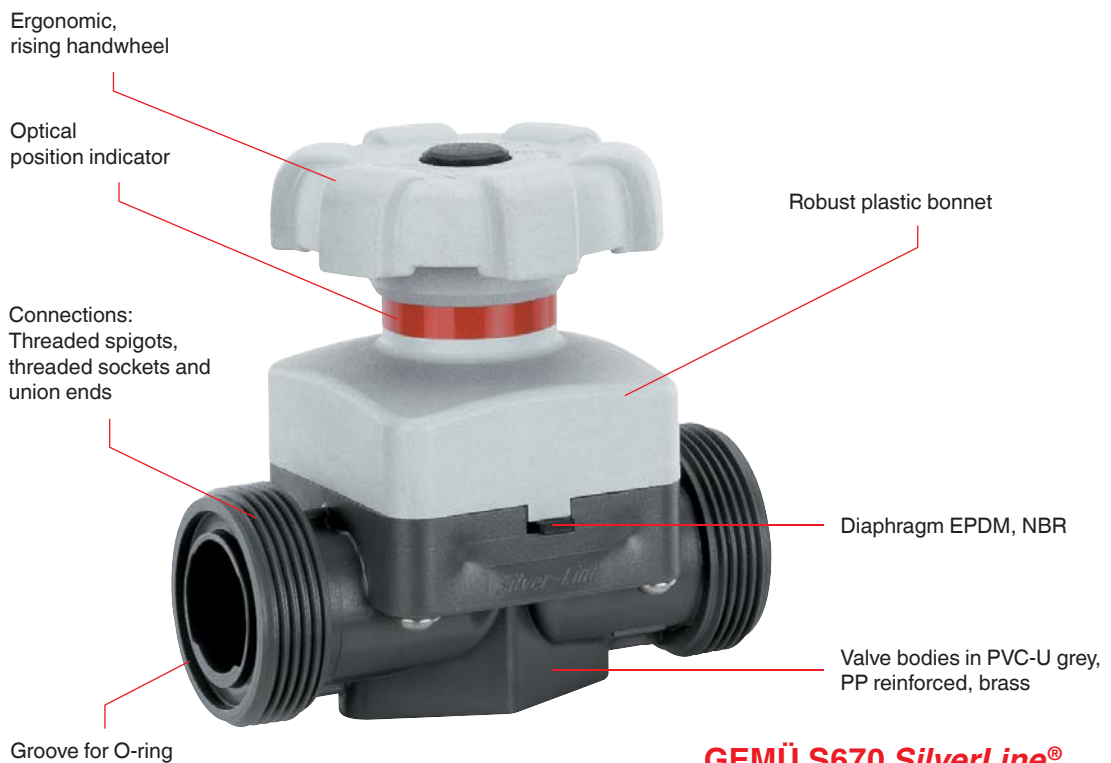


### GEMÜ S647 SilverLine®

pneumatically operated, DN 20 - 50

#### Simple and robust OPEN/CLOSE valve

Valve opened by operating pressure, closed by control air



### GEMÜ S670 SilverLine®

manually operated, DN 10 - 50

Pressure / temperature correlation									
Temperature in °C (body)		5	10	20	25	30	40	50	60
Valve body material		Permissible operating pressure [bar]							
PVC-U	Code 1	10.0	10.0	10.0	10.0	8.0	6.0	3.5	1.5
PP	Code 5	10.0	10.0	10.0	10.0	8.5	7.0	5.5	4.0
Brass	Code 12	10.0	10.0	10.0	10.0	10.0	10.0	10.0	8.0

Data for extended temperature ranges on request. Please note that the ambient temperature and medium temperature generate a combined temperature at the valve body which must not exceed the above values.

DN	Max. operating pressure EPDM / NBR	Control pressure	Kv value [m <sup>3</sup> /h]
10*, 15*	6.0 bar	4.5 - 6.0 bar	4.5
20, 25			17.7
32, 40			34.8
50			44.7

Kv values determined acc. to IEC 534 standard, PP valve body with union ends and DIN insert.

\* not available for GEMÜ S647

Type	Code
Diaphragm valve with direct pneumatic operation	S647
Diaphragm valve, pneumatically operated	S660
Diaphragm valve, manually operated	S670
Diaphragm valve, motorized	S680

Body configuration	Code
2/2-way body	D

Connection	Code
Threaded sockets DIN ISO 228 (brass)	1*
Union ends with DIN insert (socket) (PP)	7
Union ends with inch insert (socket) (PVC-U)	33
Union ends with insert (PP)	78
Body with threaded spigots for unions (PP) (without union nut, insert and O-ring)	7X

\* only available with valve body material code 12

Valve body material	Code
PVC-U, grey	1
PP reinforced	5
MS, brass (only connection code 1)	12

Diaphragm material	Code
NBR	2
EPDM	14

Other diaphragm materials on request

Control function	Code
Manually operated (GEMÜ S670)	0
Normally closed (NC), (GEMÜ S660)	1
Closed by control pressure/ opened by operating pressure, (GEMÜ S647)	5

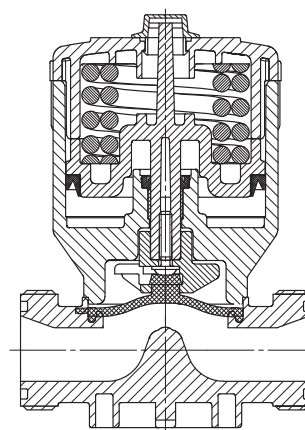
Supply voltage	Code
24V DC (GEMÜ S680)	C1

Union insert material	Code
PVC-U, grey	1
PP	5
Without insert	X

Overview of valve bodies					
Connection code	1	7	7X	33	78
Material code	Brass (code 12)	PVC-U (code 1), PP (code 5)			
DN 10*	-	X	-	-	-
DN 15**	X	X	X	X	X
DN 20*	X	X*	-	X	X
DN 25	X	X	X	X	X
DN 32*	X	X*	-	X	X
DN 40	X	X	X	X	X
DN 50	X	X	X	X	X

\* only available with union ends incorporating a reducing socket

\*\* not available for GEMÜ S647



# GEMÜ S560, S580 SilverLine®

2/2-way angle seat globe valves, DN 10 - 50



**GEMÜ S560 SilverLine®**  
pneumatically operated,  
DN 10 - 50



**GEMÜ S580 SilverLine®**  
motorized,  
DN 10 - 25

## Angle seat globe valves – Technical data

Pressure / temperature correlation									
Temperature in °C (body)		5	10	20	25	30	40	50	60
Valve body material		Permissible operating pressure [bar]							
PP (DN 10 - 40)	Code 5	10.0	10.0	10.0	10.0	10.0	7.0	5.5	4.0
PP (DN 50)		6.0	6.0	6.0	6.0	6.0	6.0	5.5	4.0
Brass	Code 12	10.0	10.0	10.0	10.0	10.0	10.0	10.0	8.0

Data for extended temperature ranges on request. Please note that the ambient temperature and medium temperature generate a combined temperature at the valve body which must not exceed the above values.

Nominal size	Max. operating pressure	Control pressure	Kv values
DN	[bar]	[bar]	Kv value [m <sup>3</sup> /h]
10	8	4.5 - 6.0	1.7
15			4.1
20			15.8
25			15.8
32			40.0
40	6	4.5 - 6.0	40.0
50			40.0

Kv values determined acc. to IEC 534 standard, PP valve body with union ends and DIN insert.

Body configuration	Code
2/2-way body	D

Connection	Code
Threaded sockets DIN ISO 228 (brass)	1*
Union ends with DIN insert (socket) (PP)	7
Union ends with inch insert (socket) (PVC-U)	33
Union ends with insert (PP)	78
Body with threaded spigots for unions (PP) (without union nut, insert and O-ring)	7X

\* only available with valve body material code 12

Valve body material	Code
PP reinforced	5*
MS, brass (only connection code 1)	12

\* only with connection code 7 and 7X

Seat seal	Code
NBR	2

Control function	Code
Normally closed (GEMÜ S560)	1

Supply voltage	Code
24V DC (GEMÜ S580)	C1

Union insert material	Code
PVC-U, grey	1
PP	5
Without insert	X

Overview of valve bodies for GEMÜ S560					
Connection code	1	7	7X	33	78
Material code	Brass (code 12)		PP (code 5)		
	DN 10	-	X	X	X
DN 15	X	X	X	X	X
DN 20	X	X*	-	X	X
DN 25	X	X	X	X	X
DN 32	X	X*	-	X	X
DN 40	X	X	X	X	X
DN 50	X	X	X	X	X

\* only available with union ends incorporating a reducing socket

Overview of valve bodies for GEMÜ S580					
Connection code	1	7	7X	33	78
Material code	Brass (code 12)		PP (code 5)		
	DN 10	-	X	-	X
DN 15	X	X	X	X	X
DN 20	-	X	-	X	X
DN 25	X	X	X	X	X



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

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