

## Angle Seat Globe Valve, Plastic/Metal

### Construction

GEMÜ S580 *SilverLine*® is a plastic or metal angle seat globe valve with a motorized actuator and optical position indicator, which is used to control liquid and gaseous media in production or automated processes. The motorized actuator with its limit switches is separated from the medium wetted part of the valve via a spindle seal. The motor is switched off internally when it is in the closed or fully open position. Its innovative design makes this valve a low cost motorized on/off valve.

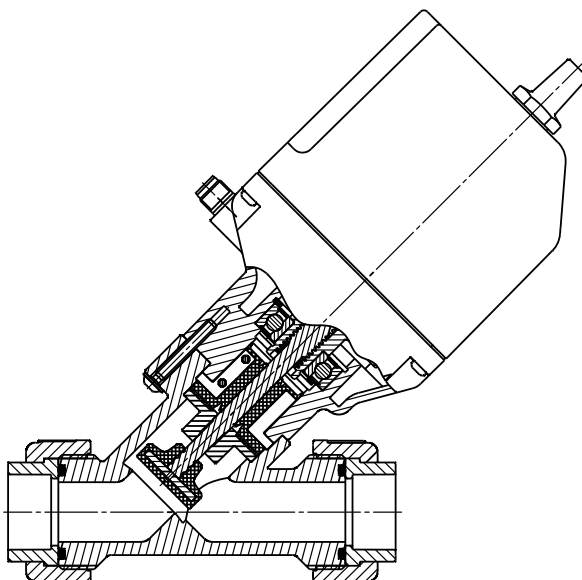
### Features

- Compact design with few components
- Low weight
- Corrosion resistant materials
- High flow rates
- Valve body available in various materials and designs
- Various connections available

### Advantages

- Excellent price-performance ratio
- Motorized globe valve alternative for applications without compressed air supply
- Low energy consumption - the actuator switches off after reaching the end positions and therefore no more power is consumed
- Optional mounting position
- Optical position indicator as standard

Sectional drawing



**GEMÜ® S580**  
**SilverLine®**

## Technical data

### Working medium

Corrosive, inert, gaseous and liquid media which have no negative impact on the physical and chemical properties of the body and seal material.

### Working medium temperature

Valve body PP-R-GR, (reinforced polypropylene) 5 to 60 °C

Valve body MS, brass 0 to 60 °C

The permissible operating pressure depends on the working medium temperature.

### Ambient temperature

Valve body PP-R-GR, (reinforced polypropylene) 5 to 60 °C

Valve body MS, brass 0 to 60 °C

### General information

Protection class to EN 60529 IP 65

Weight See table

Dimensions L x W x H See dimensional drawing

Flow direction As indicated by arrow on the body

Mounting position Optional

### Electrical data

Power supply\* 24 V DC ± 15 %

Rated current consumption

DN10 and DN15 1.9 A

DN20 and DN25 1.6 A

Start-up current consumption, momentary

DN10 and DN15 3.9 A

DN20 and DN25 3.6 A

Rating dependent on operating conditions

Electrical connection M12 5-pin plug (A-coded)

\*Other voltages on request

### Actuator material

Housing cover PP 30 glass reinforced

Housing base PP 30 glass reinforced

### Operating time

DN 10 and 15 0.3 s

DN 20 and 25 1.6 s

### Directives

EC low voltage directive 2006/95/EC

EMC directive 2004/108/EC

Interference emission EN 61000-6-4

Interference resistance EN 61000-6-2

### Pressure / temperature correlation

Temperature in °C (body)		0	5	10	20	25	30	40	50	60
Valve body material		Permissible operating pressure in bar								
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	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.

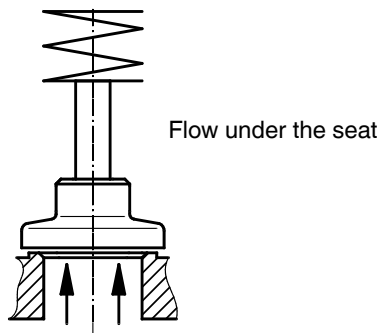
Note: The valve is not suitable for vacuum applications.

DN	Max. operating pressure	Kv value	Weight [kg]	
			Seat seal NBR	Valve body material
		[m <sup>3</sup> /h]	PP	MS
10	8 bar	4.1	0.66	-
15	8 bar	4.1	0.66	0.9
20	8 bar	11.5	1.30	-
25	8 bar	11.5	1.30	1.8

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

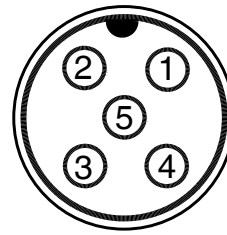
## Technical data

### Flow direction



### Electrical connection

#### Connection diagram / PIN assignment



Pin	Signal name
1	L+, direction of travel CLOSED
2	GND, direction of travel CLOSED
3	L+, direction of travel OPEN
4	GND, direction of travel OPEN
5	n.c.

## Order data

Body configuration	Code
2/2-way body	D

Seat seal	Code
NBR	2
Other materials on request	

Connection	Code
Threaded sockets DIN ISO 228 (brass)	1
Union ends with DIN insert (socket)	7
Union ends with inch insert (socket)	33 <sup>1</sup>
Union ends with DIN insert (for IR butt welding)	78 <sup>2</sup>
Body with threaded spigots for unions (without union nut, insert and O-ring)	7X
only for union insert material: <sup>1</sup> PVC-U, <sup>2</sup> PP	

Supply voltage	Code
24 V DC	C1
Other supply voltages on request	

Valve body material	Code
PP-R-GR, (reinforced polypropylene)	5
CW617N, brass (only connection code 1)	12

Union insert material	Code
PVC-U	1
PP	5
Without insert	X
Medium wetted parts (except seal materials) are always made of the same material as the valve bodies.	

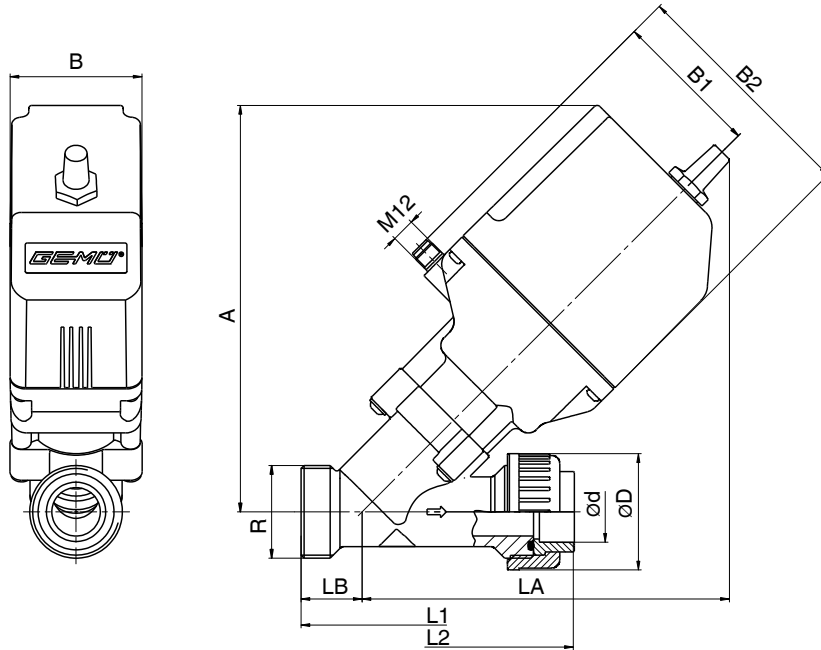
Order example	S580	15	D	7X	5	2	C1	X
Type	S580							
Nominal size		15						
Body configuration (code)			D					
Connection (code)				7X				
Valve body material (code)					5			
Seat seal (code)						2		
Supply voltage (code)							C1	
Union insert material (code)								X

## Dimensions [mm]

Valve body material: PP (code 5); connection code 7, 7X, 33

DN	B	B1	B2	ød	øD	LB	LA	L1	L2 (connection code)			A	R
									7X	7			
								PP*		PVC-U*	PVC-U*		
10	49	66	101.5	16	43	22.5	161	90	106	104	134	174	G 1
15	49	66	101.5	20	43	22.5	161	90	125	128	128	174	G 1
20	68	77	123.0	25	60	31.5	189	120	158	164	164	210	G 1 1/2
25	68	77	123.0	32	60	31.5	189	120	162	170	170	210	G 1 1/2

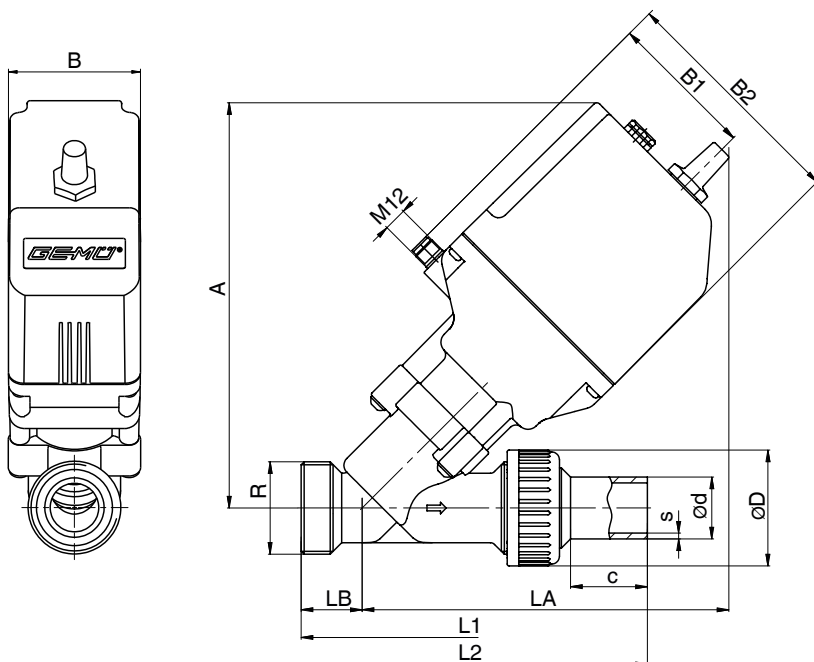
\* Insert material



Valve body material: PP (code 5); connection code 7X, 78

DN	B	B1	B2	ød	øD	LB	LA	L1	L2	A	R	c	s
15	49	66	101.5	20	43	22.5	161	90	196	174	G 1	36	1.9
20	68	77	123.0	25	60	31.5	189	120	232	210	G 1 1/2	37	2.3
25	68	77	123.0	32	60	31.5	189	120	238	210	G 1 1/2	39	3.0

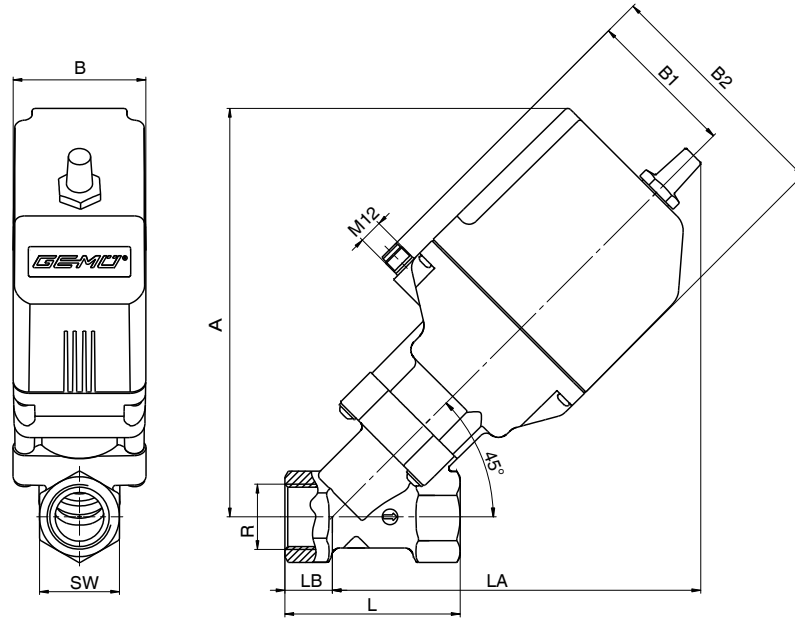
Insert material PP



## Dimensions [mm]

Valve body material: Brass (code 12); connection code 1

DN	B	B1	B2	L	LB	LA	A	R	SW
15	49	66	101.5	65	17	159	172	G 1/2	27
25	68	77	123.0	90	24	189	210	G1	41



## Overview of valve bodies for GEMÜ S580

Connection code	1	7	7X	33	78
Material	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

### Accessories



**GEMÜ 1219**  
Cable socket M12  
1219 000 Z ...



**GEMÜ 1215**  
Electrical position  
indicator with  
micro switches



**GEMÜ 1230**  
Electrical position  
indicator with  
micro switches



**GEMÜ 1235**  
Electrical position  
indicator with optical  
position feed-back  
via high visibility LEDs

### SilverLine® Angle seat globe and diaphragm valves



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

**GEMÜ S647 SilverLine®**  
pneumatically operated  
DN 20 - 50



**GEMÜ S660 SilverLine®**  
pneumatically operated  
DN 10 - 50

**GEMÜ S670 SilverLine®**  
manually operated  
DN 10 - 50



**GEMÜ S680 SilverLine®**  
motorized  
DN 10 - 25

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

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

