

GEMÜ 553

Modular distribution valve



Features

- Space-saving modular design
- Reduced servicing times of the plant compared with single valves as the complete module can be replaced
- Up to 10 single modules can be flexibly combined together
- Can be ordered ready configured
- Faster actuator replacement and easily rotatable due to fixing via union nut

Description

The modular GEMÜ 553 distribution valve comprises various globe valve modules. These can be equipped with manual, pneumatic or motorized actuators. The downstream media is isolated using a PTFE seal. The valve spindle is sealed by a self-adjusting gland packing. This provides a low maintenance and reliable valve spindle seal even after an extended period of operation. The wiper ring that is installed upstream of the gland packing also protects this against contamination and damage. The individual modules can be easily connected using screws.

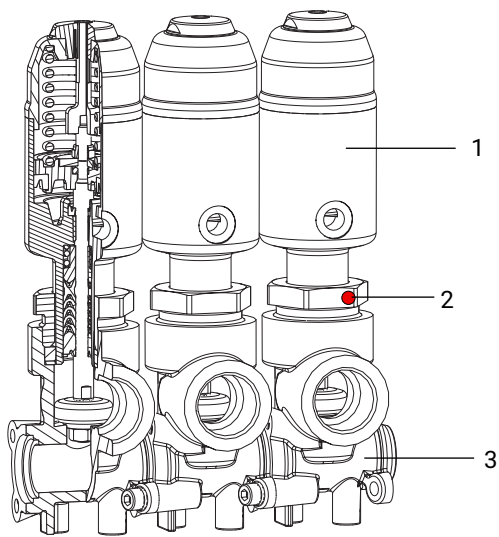
Technical specifications

- **Media temperature:** -10 to 180 °C
- **Ambient temperature:** 0 to 60 °C
- **Operating pressure:** 0 to 25 bar
- **Nominal sizes:** DN 15 to 20
- **Body configurations:** Multi-port body
- **Connection types:** Threaded connection
- **Connection standards:** DIN | ISO | NPT
- **Body materials:** 1.4408, investment casting material
- **Seat seal materials:** PTFE
- **Conformities:** FDA | Reg. (EU) No. 10/2011 | Regulation (EC) No. 1935/2004

Technical data depends on the respective configuration



Product description



Item	Name	Materials
1	Actuator	Manual: Plastic handwheel Pneumatic: Plastic and stainless steel Motorized: Plastic
2	CONEXO RFID chip	
3	Valve body	1.4408, investment casting

GEMÜ CONEXO

The interaction of valve components that are equipped with RFID chips and an associated IT infrastructure actively increase process reliability.



Thanks to serialization, every valve and every relevant valve component such as the body, actuator or diaphragm, and even automation components, can be clearly traced and read using the CONEXO pen RFID reader. The CONEXO app, which can be installed on mobile devices, not only facilitates and improves the "installation qualification" process, but also makes the maintenance process much more transparent and easier to document. The app actively guides the maintenance technician through the maintenance schedule and directly provides him with all the information assigned to the valve, such as test reports, testing documentation and maintenance histories. The CONEXO portal acts as a central element, helping to collect, manage and process all data.




For further information on GEMÜ CONEXO please visit:

www.gemu-group.com/conexo

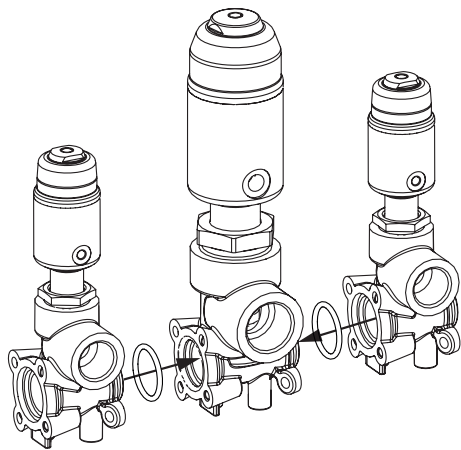
Ordering

GEMÜ Conexo must be ordered separately with the ordering option "CONEXO" (see order data).

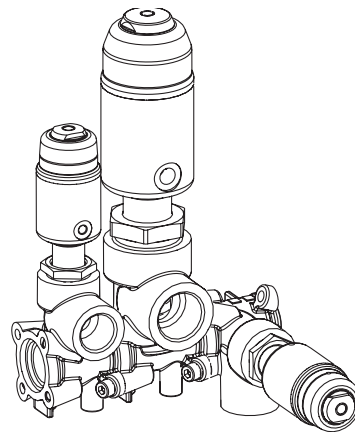
Comparison of motorized and pneumatic actuators

Actuator version	0GE	0ME	1GP	1MP	0GS	1GS	2GS	0MS	1MS
									
Operation	Motorized		Pneumatic		Pneumatic				
Material of actuator top	Plastic				Metal				
Max. operating pressure	25 bar	25 bar	12 bar	10 bar	10 bar	10 bar	22 bar	10 bar	10 bar
Seat diameter	G	G	G	G	E	G	G	E	G
Nominal size	DN 20	DN 20	DN 20	DN 20	DN 15	DN 20	DN 20	DN 15	DN 20
Flow direction	under the seat	over the seat	under the seat	over the seat	under the seat	under the seat	under the seat	over the seat	over the seat
	Further information (see "Technical data – Motorized", page 18)		Further information (see "Technical data – Pneumatically operated", page 15)						

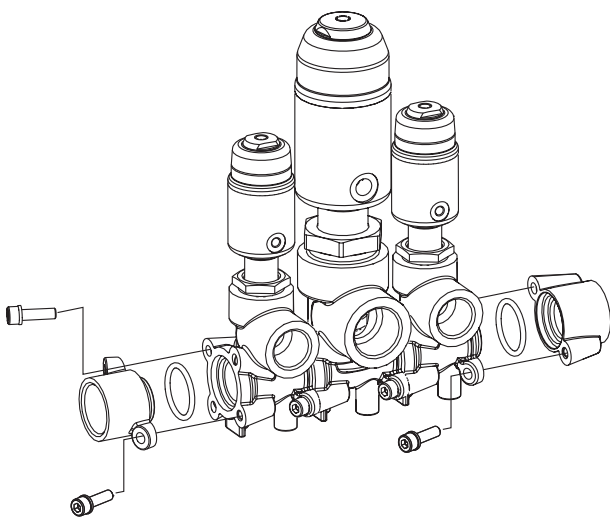
Functional description



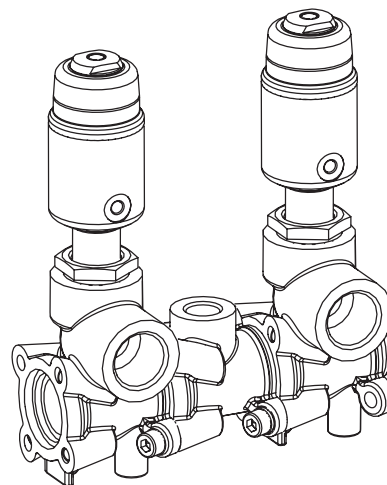
The GEMÜ 530 modular distribution valve comprises various globe valves which are mounted to form a single unit.



The position of the valves can be changed in 90° steps.



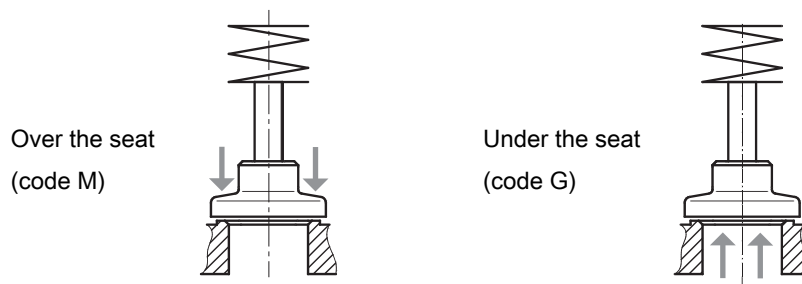
Connection modules are available for integration into the plant.



Additional sensor systems can also be integrated into the block.

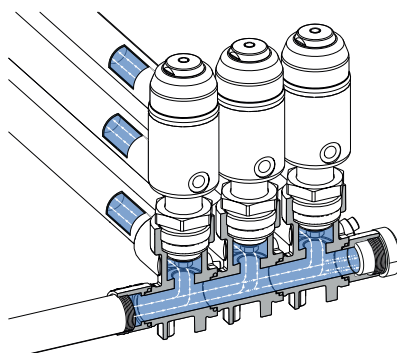
An extensive range of accessories for the valves is available for automation (see chapter on accessories).

Flow direction

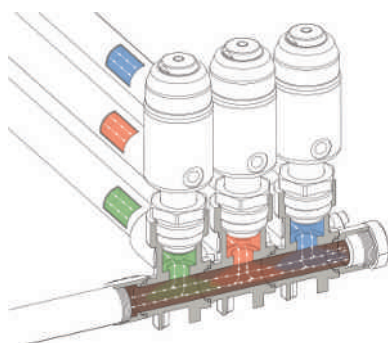


Under the seat (code G) is the preferred flow direction with incompressible liquid media to avoid water hammer
Over the seat (code M) only with control function - Normally closed (NC)

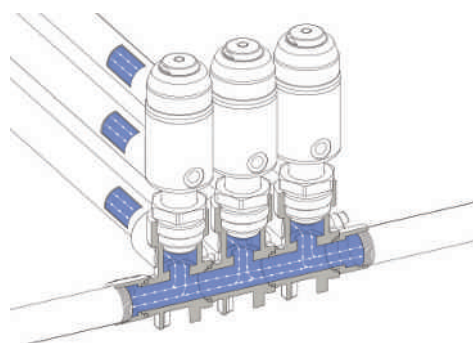
Functions



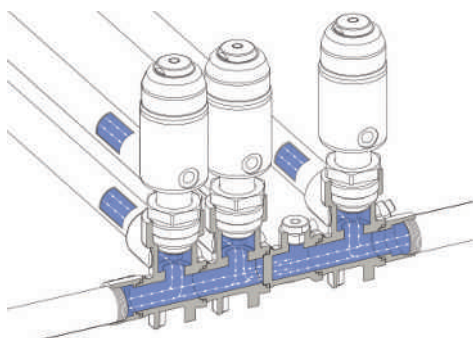
Distributing function:
 Medium from the supply can be distributed to several consumers.
 To be used: Actuator version 0GE, 0GS, 0GM, 1GS, 1GP, 2GS



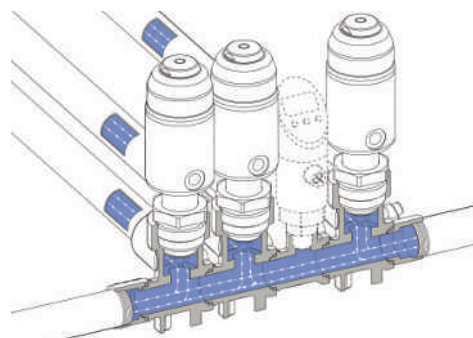
Mixing function:
 Media can be mixed together (e.g. hot and cold water).
 To be used: Actuator version 0ME, 0MS, 0MM, 1MS, 1MP



Collecting function:
 The medium of several consumers can be collected as a back flow.
 To be used: Actuator version 0ME, 0MS, 0MM, 1MS, 1MP



Separation of media:
 The distribution valve can be interrupted at one or more optional points to separate out media.
 This enables two media to be controlled independently of each other.
 Module to be used: Media separator plate



Collecting function:
 The medium of several consumers can be collected as a back flow.
 To be used: Actuator version 0ME, 0MS, 0MM, 1MS, 1MP

Availabilities

	DN	Connection size	Actuator size	Control function	Flow direction	Seat diameter	Length
Pneumatic stainless steel actuator design code S	15	1/2" NPT, G 1/2	0	1, 2, 3	G	E E	S S
	20	3/4" NPT, G 3/4	1	1	M	G G	S, L S, L
Pneumatic plastic actuator design code P	20	3/4" NPT, G 3/4	1	1, 2, 3, 1	G M	G G	L L
Manual operator design code M	15	1/2" NPT, G 1/2	0	0	G, M	E	S
Pneumatic stainless steel actuator design code S	20	3/4" NPT, G 3/4	2	2	G	G	L
Motorized actuator code E	20	3/4" NPT, G 3/4	0	-	G, M	G	L

Order data

The order data provide an overview of standard configurations.

Please check the availability before ordering. Other configurations available on request.

Order codes

1 Type	Code
Modular multi-port globe valve	553

2 DN	Code
DN 15	15
DN 20	20

3 Body configuration	Code
Multi-port	M

4 Connection type	Code
Threaded socket DIN ISO 228	1
Threaded socket NPT	3D

5 Valve body material	Code
1.4408, investment casting	37

6 Seat seal	Code
PTFE seat seal, EPDM O-ring	5E
PTFE seat seal, FKM O-ring	5F

7 Control function	Code
Manually operated	0
Normally closed (NC)	1
Normally open (NO)	2
Double acting (DA)	3
Manually operated, with handwheel locknut	L

8 Control module	Code
OPEN/CLOSE control, additional end position indicators	A
OPEN/CLOSE control, additional end position indicators, configured for emergency power supply module (NC)	B
OPEN/CLOSE control, additional end position indicators, configured for emergency power supply module (NO)	C
Positioner	D
Positioner, configured for emergency power supply module (NC)	E
Positioner, configured for emergency power supply module (NO)	F

9 Actuator version	Code
Actuator size 0, under the seat, electrically operated, eSyStep voltage/frequency 24 V DC	0GE
Actuator size 0, under the seat, manually operated, plastic handwheel	0GM
Actuator size 0, under the seat, pneumatically operated, stainless steel	0GS
Actuator size 0, over the seat, electrically operated, eSyStep voltage/frequency 24 V DC	0ME
Actuator size 0, over the seat, manually operated, plastic handwheel	0MM
Actuator size 0, over the seat, pneumatically operated, stainless steel	0MS
Actuator size 1, under the seat, manually operated, plastic handwheel	1GM
Actuator size 1, under the seat, pneumatically operated, plastic	1GP
Actuator size 1, under the seat, pneumatically operated, stainless steel	1GS
Actuator size 1, over the seat, manually operated, plastic handwheel	1MM
Actuator size 1, over the seat, pneumatically operated, plastic	1MP
Actuator size 1, over the seat, pneumatically operated, stainless steel	1MS
Actuator size 2, under the seat, pneumatically operated, stainless steel	2GS

10 DN 2	Code
DN 20	20

11 Seat diameter	Code
10 mm	E
15 mm	G

Order data

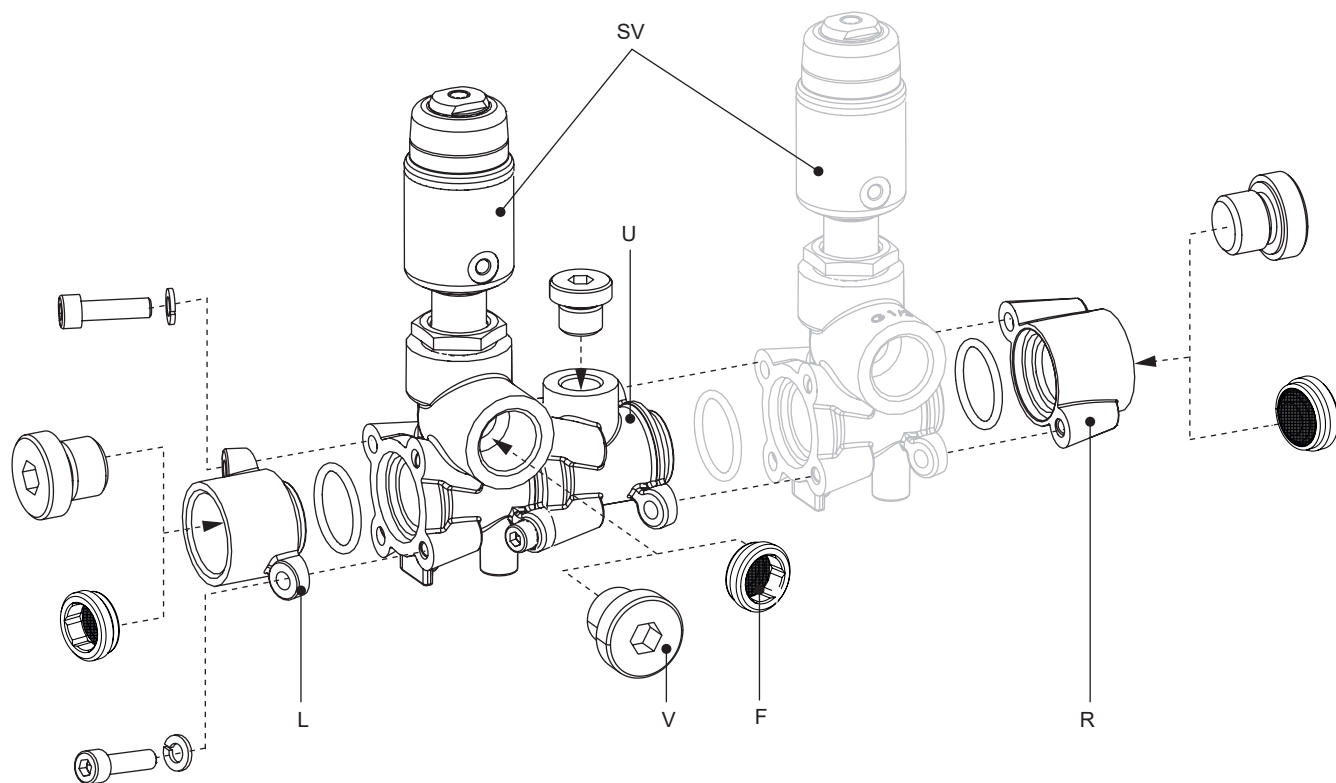
12 Length	Code
Long	L
Short	S

13 CONEXO	Code
Without	
Integrated RFID chip for electronic identification and traceability	C

Order codes

Ordering option	Code	Description
1 Type	553	Modular multi-port globe valve
2 DN	20	DN 20
3 Body configuration	M	Multi-port
4 Connection type	1	Threaded socket DIN ISO 228
5 Valve body material	37	1.4408, investment casting
6 Seat seal	5F	PTFE seat seal, FKM O-ring
7 Control function	1	Normally closed (NC)
8 Control module		
9 Actuator version	1GS	Actuator size 1, under the seat, pneumatically operated, stainless steel
10 DN 2	20	DN 20
11 Seat diameter	G	15 mm
12 Length	L	Long
13 CONEXO		Without

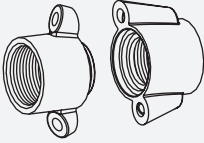
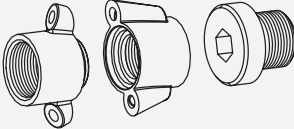
Connection designations / Construction




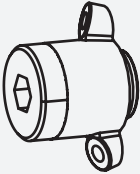

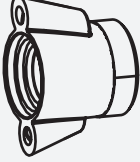
L	Connection module left
V	Threaded plug
F	Filter
R	Connection module right
U	Universal module
SV	Globe valve

Order data

Order data - Connection kits

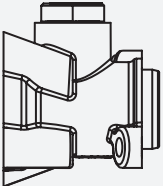
Connection kit for double-sided feed		Order designation
	Connection flange L and connection flange R with threaded socket G 3/4 to DIN ISO 228, without threaded plug	553 20SAT 1 37 F 20
	Connection flange L and connection flange R with threaded socket 3/4" NPT, without threaded plug	553 20SAT 3D 37 F 20
Connection kit for one-sided feed		Order designation
	Connection flange L and connection flange R with threaded socket G 3/4 to DIN ISO 228, with threaded plug (with FPM seal)	553 20SAV 1 37 F 20
	Connection flange L and connection flange R with threaded socket 3/4" NPT, with threaded plug (without sealing material)	553 20SAV 3D 37 F 20

Order data - Connection modules (L, R)

Single modules		Order designation
	Connection module L with threaded socket G 3/4 to DIN ISO 228, without threaded plug	553 20AFL 1 37 F 20
	Connection module L with threaded socket 3/4" NPT, without threaded plug	553 20AFL 3D 37 F 20
	Blanking flange L with threaded socket G 3/4 to DIN ISO 228, with threaded plug (sealed with FPM gasket)	553 20BFL 1 37 F 20
	Blanking flange L with threaded socket 3/4" NPT, with threaded plug (without sealing material)	553 20BFL 3D 37 F 20
	Connection module R with threaded socket G 3/4 to DIN ISO 228, without threaded plug	553 20AFR 1 37 F 20
	Connection module R with threaded socket 3/4" NPT, without threaded plug	553 20AFR 3D 37 F 20
	Blanking flange R with threaded socket G 3/4 to DIN ISO 228, with threaded plug (sealed with FPM gasket)	553 20BFR 1 37 F 20
	Blanking flange R with threaded socket 3/4" NPT, with threaded plug (without sealing material)	553 20BFR 3D 37 F 20

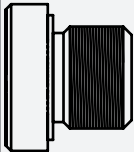
All connection modules and kits are supplied with connecting components (O-ring and screws).

Order data - Universal module (U)

Universal module		Order designation
	Designed as a media separator plate, with threaded plug (sealed with FPM gasket)	553 MT 1 37 F 20
	Designed as a sensor mounting bracket with G 1/4 adaption thread, with threaded plug (sealed with FPM gasket)	553 SA 1 37 F 20

All universal modules are supplied with connecting components (O-ring and screws).

Order data - Threaded plugs (V)

	Threaded plugs	Order designation
	G 1/4 for universal module (including FPM gasket)	553 8VS 1 37 F
	G 1/2 for valves with actuator size 0 (including FPM gasket)	553 15VS 1 37 F
	1/2" NPT for valves with actuator size 0 (without sealing material)	553 15VS 3D 37
	G 3/4 for connection modules L or R and valves with actuator size 1 (including FPM gasket)	553 20VS 1 37 F
	3/4" NPT for connection modules L or R and valves with actuator size 1 (without sealing material)	553 20VS 3D 37

Note! It is not possible to use a filter and a threaded plug at the same connection.

Order data - Filter (F)

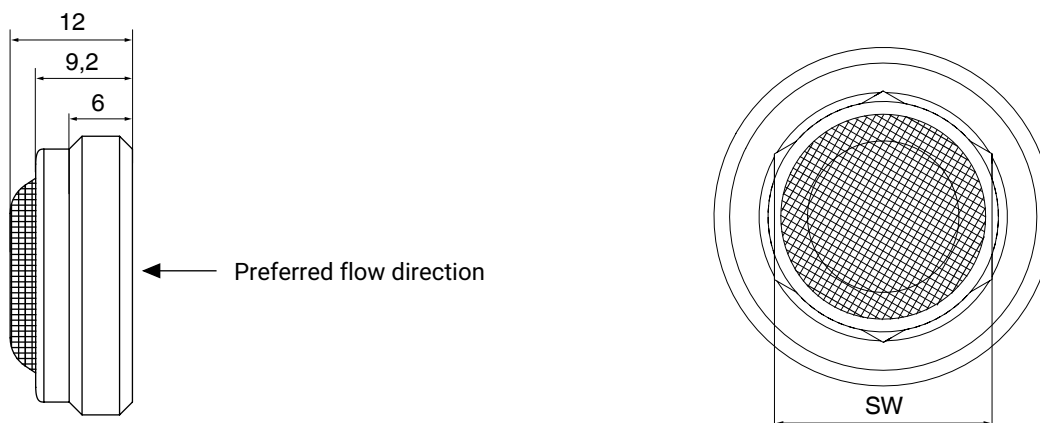
For highly polluted media, the valves must be protected against large particles by suitable filters.

Screw-in basket filters can be used in this instance, for example.

Caution! Available thread length is shortened accordingly, and Kv values are reduced. The max. pressure differential is 10 bar.

	Filter (mesh size 100 µm)	Order designation
	G 1/2 for valves with actuator size 0, SW 12	553 15FS 1 37*
	G 3/4 for connection modules L or R and valves with actuator size 1, SW 17	553 20FS 1 37*

* on request



Technical data – Manually operated

Medium

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.

Max. permissible viscosity: 600 mm²/s (cSt)
Other versions for lower/higher temperatures and higher viscosities on request.

Temperature

Ambient temperature: 0 – 60 °C

Storage temperature: 0 – 40 °C

Pressure

Operating pressure: Flow direction: Optional

Actuator version	Seat diameter E	Seat diameter G
OGM / OMM	25 bar	-

All pressures are gauge pressures. When the flow is over the seat (M), there may be the danger of water hammer with liquid media! For max. operating pressures the pressure/temperature correlation must be observed.

Leakage rate: Open/Close valve

Seat seal	Standard	Test procedure	Leakage rate	Test medium
PTFE	DIN EN 12266-1	P12	A	Air

Kv values:

	Kv values
Seat diameter E	2.0
Seat diameter G	5.0

Kv values in m³/h

Kv values determined in accordance with DIN EN 60534. The Kv values for other product configurations (e.g. other connection types or body materials) may differ.

Pressure/temperature correlation:

Connection type code ¹⁾	Material code ²⁾	Max. allowable operating pressures in bar at temperature in °C			
		RT	100	150	200
1, 3D	37	25.0	23.8	21.4	18.9

1) **Connection type**
Code 1: Threaded socket DIN ISO 228
Code 3D: Threaded socket NPT

2) **Valve body material**
Code 37: 1.4408, investment casting

Product conformity

Food: Regulation (EC) No. 1935/2004*
Regulation (EC) No. 10/2011*
FDA*
* depending on version and/or operating parameters

Pressure Equipment Directive: 2014/68/EU

Machinery Directive: 2006/42/EC

Technical data – Pneumatically operated

Medium

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.

Max. permissible viscosity: 600 mm²/s (cSt)
Other versions for lower/higher temperatures and higher viscosities on request.

Control medium: Inert gases

Temperature

Control medium temperature: 0 – 60 °C

Ambient temperature: 0 – 60 °C

Storage temperature: 0 – 40 °C

Pressure

Operating pressure: Control function 1 Normally closed (NC) / flow direction: under the seat

Actuator version	Seat diameter E	Seat diameter G
0GS	10 bar	-
1GS	-	10 bar
1GP	-	12 bar
2GS	-	22 bar

Control function 1 Normally closed (NC) / flow direction: over the seat

Actuator version	Seat diameter E	Seat diameter G
0MS	10 bar	-
1MS	-	10 bar
1MP	-	10 bar

For comparison of the actuators, see comparison table. (see “Comparison of motorized and pneumatic actuators”, page 4)

All pressures are gauge pressures. When the flow is over the seat (M), there may be the danger of water hammer with liquid media! For max. operating pressures the pressure/temperature correlation must be observed.

Leakage rate: Open/Close valve

Seat seal	Standard	Test procedure	Leakage rate	Test medium
PTFE	DIN EN 12266-1	P12	A	Air

Control pressure:

Control function 1 Normally closed (NC) / flow direction: under the seat

Actuator version	
0GS, 1GS, 2GS	4 – 8 bar
1GP	4.8 – 7 bar

Control function 1 Normally closed (NC) / flow direction: over the seat

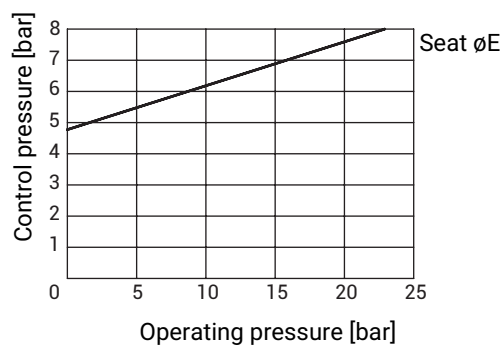
Actuator version	
0MS, 1MS, 1MP	Max. 7 bar

Control function 2 normally open (NO) / control function 3 double acting (DA) / flow direction: under the seat

For values see diagram

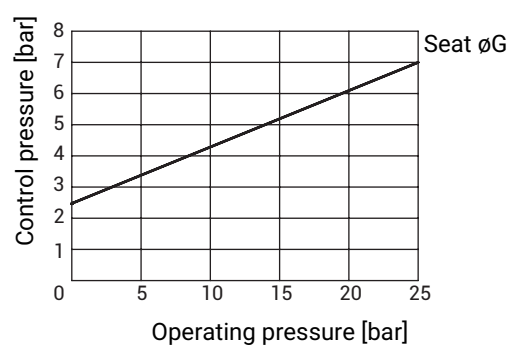
Actuator version 0GS
C.f. 2 Normally open (NO)
C.f. 3 Double acting (DA)

Min. control pressure dependent on operating pressure
(flow direction: under the seat)



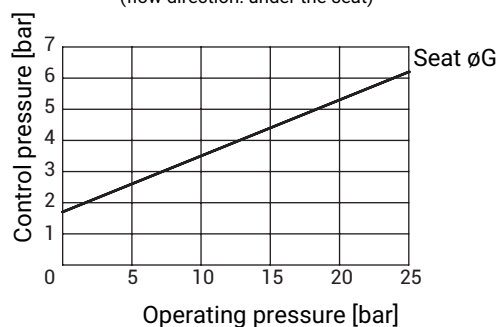
Actuator version 1GS
C.f. 2 Normally open (NO)
C.f. 3 Double acting (DA)

Min. control pressure dependent on operating pressure
(flow direction: under the seat)



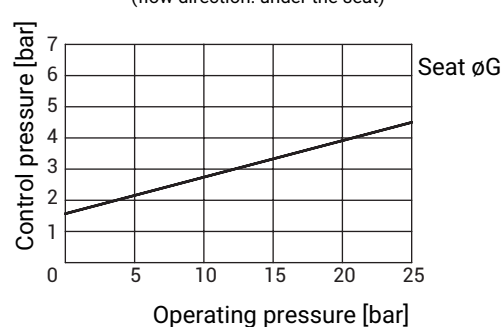
Actuator version 1GP
C.f. 2 Normally open (NO)
C.f. 3 Double acting (DA)

Min. control pressure dependent on operating pressure
(flow direction: under the seat)



Actuator version 2GS
C.f. 2 Normally open (NO)
C.f. 3 Double acting (DA)

Min. control pressure dependent on operating pressure
(flow direction: under the seat)



Filling volume:

Actuator version	Piston diameter	Filling volume
0GE / 0GS / 0MS	Ø28 mm	0.006 dm ³
1GS / 1MS	Ø42 mm	0.025 dm ³
1GP / 1MP	Ø50 mm	0.05 dm ³
2GS	Ø60 mm	0.084 dm ³

Kv values:

	Kv values
Seat diameter E	2.0
Seat diameter G	5.0

Kv values in m³/h

Kv values determined in accordance with DIN EN 60534. The Kv values for other product configurations (e.g. other connection types or body materials) may differ.

Pressure/temperature correlation:

Connection type code ¹⁾	Material code ²⁾	Max. allowable operating pressures in bar at temperature in °C			
		RT	100	150	200
1, 3D	37	25.0	23.8	21.4	18.9

1) **Connection type**

Code 1: Threaded socket DIN ISO 228

Code 3D: Threaded socket NPT

2) **Valve body material**

Code 37: 1.4408, investment casting

Product conformity

Food:

Regulation (EC) No. 1935/2004*

Regulation (EC) No. 10/2011*

FDA*

* depending on version and/or operating parameters

Pressure Equipment Directive:

2014/68/EU

Machinery Directive:

2006/42/EC

Technical data – Motorized

Medium

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.

Max. permissible viscosity: 600 mm²/s (cSt)
Other versions for lower/higher temperatures and higher viscosities on request.

Temperature

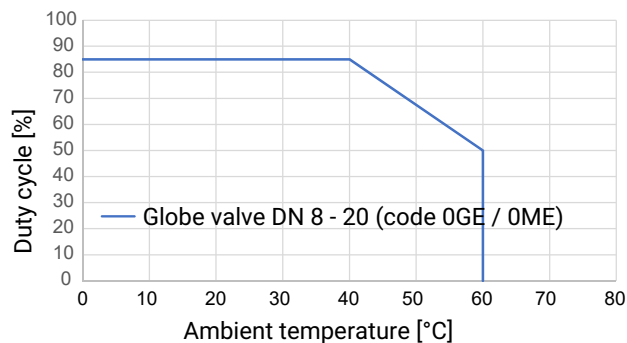
Ambient temperature: 0 – 60 °C
Note influence on duty cycle.

Storage temperature: 0 – 40 °C

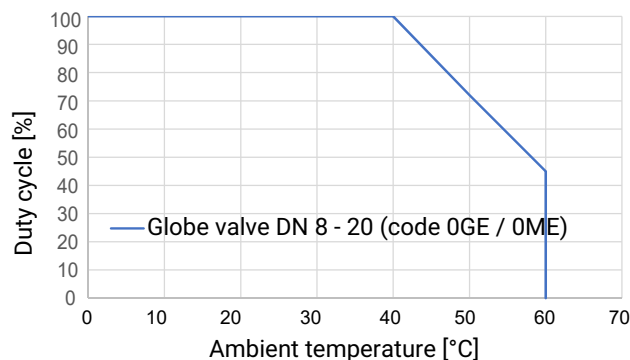
Duty cycle and service life

Service life: **Control operation** - Class C according to EN 15714-2 (1,800,000 starts and 1200 starts per hour).
Open/Close duty - At least 500,000 switching cycles at room temperature and permissible duty cycle.

Duty cycle: Control module Open/Close control (code A, B, C)
Duty cycle at full valve stroke and 10 minutes cycle time.



Control module Positioner (code D, E, F), Open/Close duty



The specified characteristics and values apply to the factory setting.

With reduced forces, higher duty cycles and/or higher ambient temperatures are possible. At higher force settings the duty cycle and/or ambient temperature is reduced (for IO-Link parameters see operating instructions).

Pressure

Operating pressure: **Motorized**

Actuator version	Seat diameter G
OGE / OME	25 bar

For comparison of the actuators, see comparison table. (see “Comparison of motorized and pneumatic actuators”, page 4)

All pressures are gauge pressures. When the flow is over the seat (M), there may be the danger of water hammer with liquid media! For max. operating pressures the pressure/temperature correlation must be observed.

Leakage rate: **Open/Close valve**

Seat seal	Standard	Test procedure	Leakage rate	Test medium
PTFE	DIN EN 12266-1	P12	A	Air

Kv values:

	Kv values
Seat diameter E	2.0
Seat diameter G	5.0

Kv values in m³/h

Kv values determined in accordance with DIN EN 60534. The Kv values for other product configurations (e.g. other connection types or body materials) may differ.

Pressure/temperature correlation:

Connection type code ¹⁾	Material code ²⁾	Max. allowable operating pressures in bar at temperature in °C			
		RT	100	150	200
1, 3D	37	25.0	23.8	21.4	18.9

1) **Connection type**

Code 1: Threaded socket DIN ISO 228

Code 3D: Threaded socket NPT

2) **Valve body material**

Code 37: 1.4408, investment casting

Product conformity

Food: Regulation (EC) No. 1935/2004*
Regulation (EC) No. 10/2011*
FDA*
* depending on version and/or operating parameters

Pressure Equipment Directive: 2014/68/EU

Machinery Directive: 2006/42/EC

Mechanical data

Protection class: IP 65 acc. to EN 60529

Mechanical environmental conditions: Class 4M8 acc. to EN 60721-3-4:1998

Vibration: 5g acc. to IEC 60068-2-6 Test Fc

Shock: 25g acc. to 60068-2-27 Test Ea

Electrical data

Supply voltage Uv:	24 V DC \pm 10%	
Rating:	Actuator size 0 (code 0A)	20 W
	Actuator size 1 (code 1A)	60 W
Operation:	Stepper motor, self-locking	

Reverse battery protection: Yes

Analogue input signals - Control module Positioner (code D, E, F)

Set value

Input signal:	0/4 - 20 mA; 0 - 10 V (function selectable via IO-Link)	
Input type:	passive	
Input resistance:	250 Ω	
Accuracy/linearity:	$\leq \pm 0.3\%$ of full flow	
Temperature drift:	$\leq \pm 0.1\%$ / 10°K	
Resolution:	12 bit	
Reverse battery protection:	Yes (up to \pm 24 V DC)	

Digital input signals

Inputs:	Function selectable via IO-Link (see table Overview of available functions – Input and output signals)	
Input voltage:	24 V DC	
Logic level "1":	> 15.3 V DC	
Logic level "0":	< 5.8 V DC	
Input current:	typically < 0.5 mA	

Analogue output signals - Control module Positioner (code D, E, F)

Actual value

Output signal:	0/4 - 20 mA; 0 - 10 V (function selectable via IO-Link)	
Output type:	active	
Accuracy:	$\leq \pm 1\%$ of full flow	
Temperature drift:	$\leq \pm 0.1\%$ / 10°K	
Load resistor:	≤ 750 k Ω	
Resolution:	12 bit	
Short-circuit proof:	Yes	

Digital output signals

Outputs:	Function selectable via IO-Link (see table Overview of available functions – Input and output signals)
Type of contact:	Push-Pull
Switching voltage:	Power supply U_v
Switching current:	≤ 140 mA
Short-circuit proof:	Yes

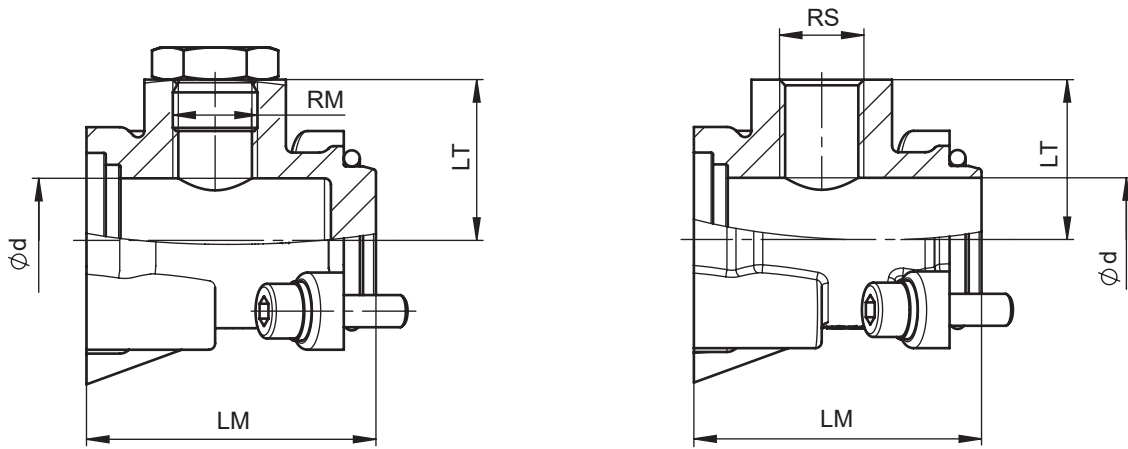
Communication

Interface:	IO-Link
Function:	Parameterization/process data
Transmission rate:	38400 baud
Frame type in Operate:	2.5 (eSyStep On/Off, code A, B, C) 2.V (eSyStep Positioner, code D, E, F), PDout 3 bytes; PDin 3 bytes; OnRequestData 2 bytes
Min. cycle time:	2.3 ms (eSyStep On/Off, code A, B, C) 20 ms (eSyStep Positioner, code D, E, F)
Vendor-ID:	401
Device-ID:	1906701 (eSyStep On/Off, code A, B, C) 1906801 (eSyStep Positioner, code D, E, F),
Product-ID:	eSyStep On/Off (code A, B, C) eSyStep Positioner (code D, E, F)
ISDU support:	Yes
SIO operation:	Yes
IO-Link specification:	V1.1

IODD files can be downloaded via <https://ioddfinder.io-link.com/> or www.gemu-group.com.

Dimensions

Universal module

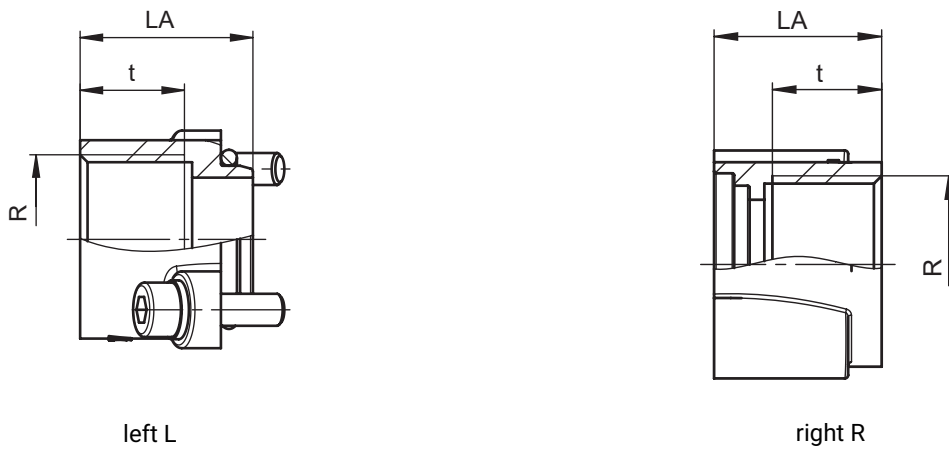


Media separator plate

Sensor mounting bracket

Universal module	ϕd	LM	LT	RM	RS	Weight [kg]
Media plate	G 1/4	-	19.3	45.0	25.0	0.25
Sensor mounting bracket	-	G 1/4	19.3	45.0	25.0	0.23

Unions



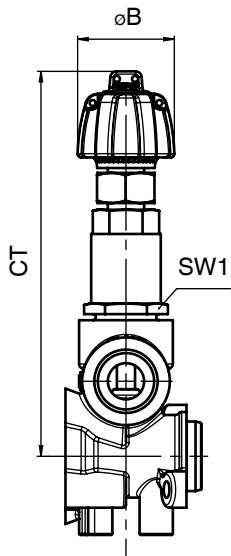
left L

right R

Union	Connection	LA	R	t	Weight [kg]
left	L	G 3/4	3/4" NPT	16.3	0.11
right	R	G 3/4	3/4" NPT	16.3	0.11

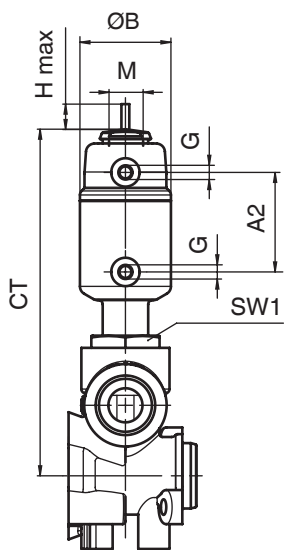
Actuator dimensions

Manually operated



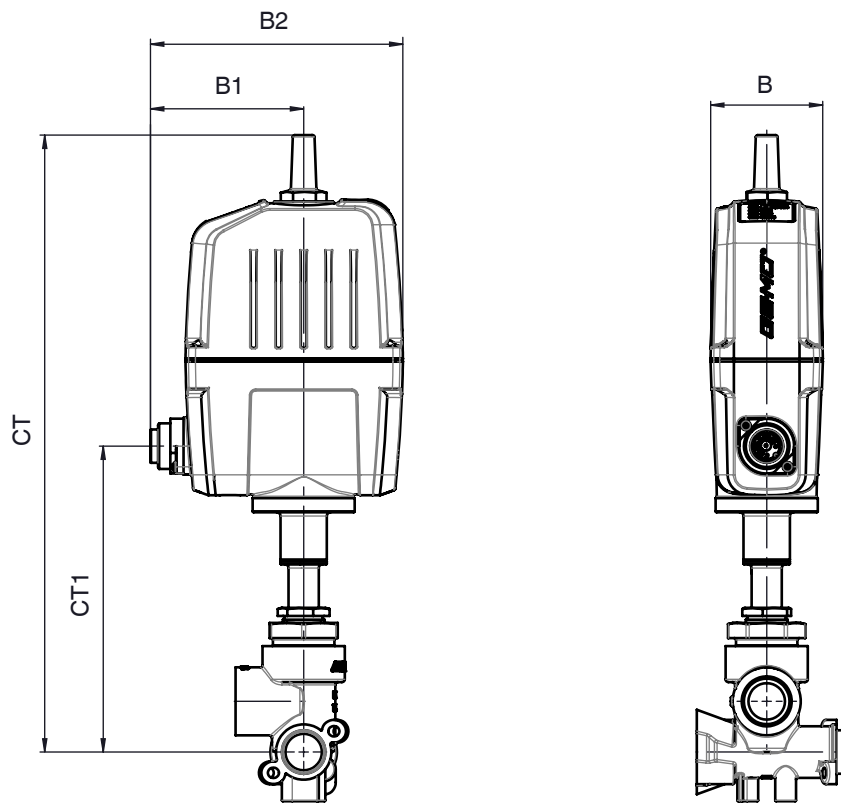
Actuator version	$\varnothing B$	CT	SW1	Weight [kg]
0GM / 0MM	32.0	134.0	24	0.30

Pneumatically operated



Actuator version	$\varnothing B$	M	H max	G	A2	CT	SW1	Weight [kg]
0GS / 0MS	32.0	M12x1	6.0	M5	35.4	122.0	24	0.25
1GS / 1MS	46.0	M16x1	12.0	G 1/8	53.0	175.0	36	0.67
1GP / 1MP	72.0	M16x1	14.0	G 1/4	70.0	207.0	36	0.90
2GS	63.0	M16x1	22.0	G 1/8	-	-	36	0.97
0GS / 0MS	32.0	M12x1	6.0	M5	35.4	122.0	24	0.25

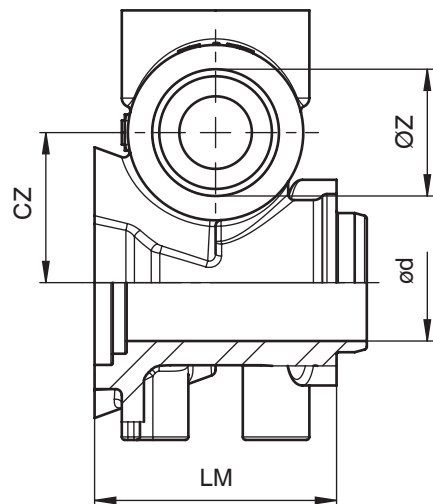
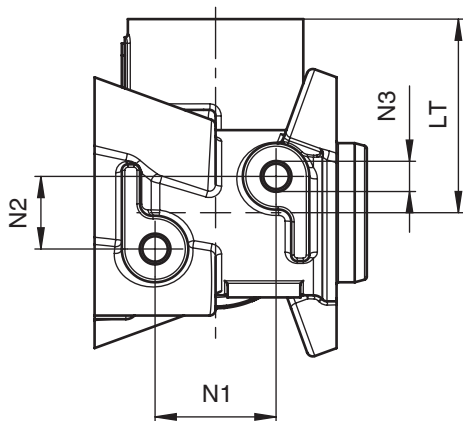
Motorized



Actuator version	B	B1	B2	CT	CT2	Weight [kg]
OGE, OME	59.4	81.0	133.5	326.3	161.8	2.71

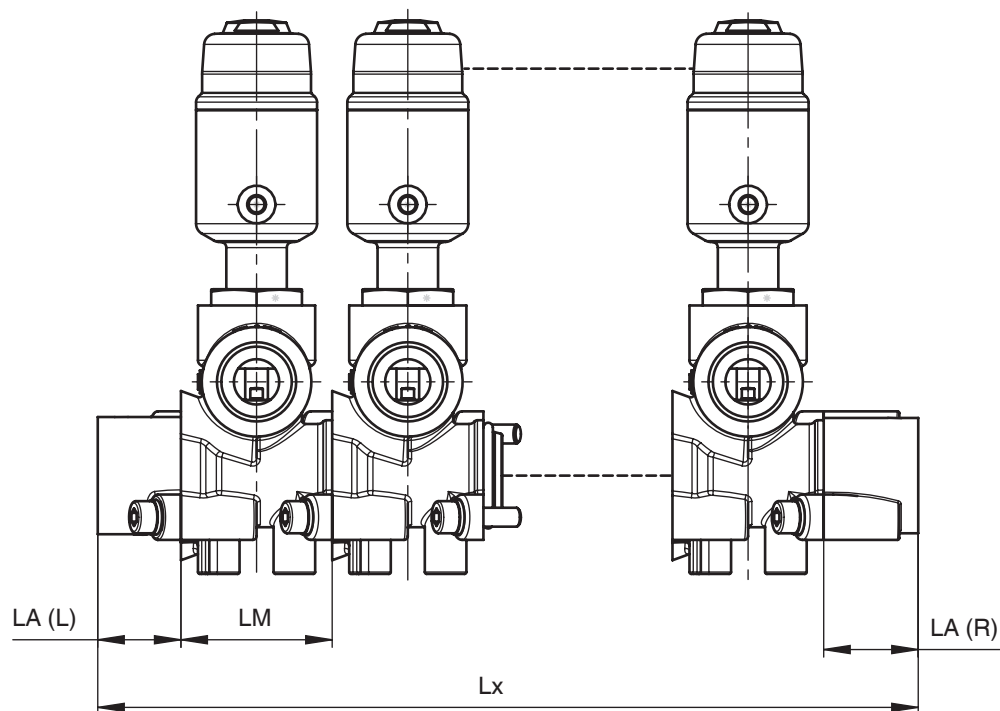
Body dimensions

Body module



Actuator version	DN	Length	CZ	ød	LM	LT	N1	N2	N3	ØZ		Weight [kg]
0GS / 0MS 0GM / 0MM	15	S	24.8	19.3	40.0	32.0	20.0	12.0	M5	G 1/2	1/2" NPT	0.34
1GS / 1MS	20	S	26.8		48.0	36.0				G 3/4	3/4" NPT	0.48
0GE / 0ME 1GP / 1MP 1GS / 1MS 2GS	20	L	26.8		74.0	26.0				G 3/4	3/4" NPT	0.55

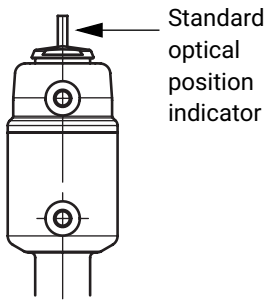
Valve block



Actuator version	Length	LM	LA		Length									
			L	R	1x	2x	3x	4x	5x	6x	7x	8x	9x	10x
0GS / 0MS 0GM / 0MM	S	40.0	22.0	25.0	87.0	127.0	167.0	207.0	247.0	287.0	327.0	367.0	407.0	447.0
1GS / 1MS	S	48.0	22.0	25.0	95.0	143.0	191.0	239.0	287.0	335.0	383.0	431.0	479.0	527.0
0GE / 0ME 1GP / 1MP 1GS / 1MS 2GS	L	74.0	22.0	25.0	121.0	195.0	269.0	343.0	417.0	491.0	565.0	639.0	713.0	787.0

Note! The overall length Lx applies for combination with identical valves.
 For the combination with different valves, the overall length Lx is calculated from LA (L), the respective valve block LM and LA (R).

Accessories



The pneumatically operated valves are equipped with an optical position indicator as standard indicating the OPEN or CLOSED valve position *).

It is possible to use the adaption thread for other directly mounted accessories, too.

*) Only control function 1 Normally closed

Optical position indicator

Actuator version		0GS, 0MS	1GS, 1MS		1GP, 1MP	2GS
Length		S	S	L	L	L
Add-on dimension of body		40 mm	48 mm	74 mm	74 mm	74 mm
Actuator housing		Ø32 mm	Ø46 mm	Ø46 mm	Ø72 mm	Ø63 mm
GEMÜ 1300		X	X	X	X	X

X = combination possible

Electrical position indicator

Actuator version		0GS, 0MS	1GS, 1MS		1GP, 1MP	2GS
Length		S	S	L	L	L
Add-on dimension of body		40 mm	48 mm	74 mm	74 mm	74 mm
Actuator housing		Ø32 mm	Ø46 mm	Ø46 mm	Ø72 mm	Ø63 mm
GEMÜ 1200		X	X	X	X	X
GEMÜ 1215		X	X	X	X	X

Actuator version		0GS, 0MS	1GS, 1MS		1GP, 1MP	2GS
Length		S	S	L	L	L
Add-on dimension of body		40 mm	48 mm	74 mm	74 mm	74 mm
Actuator housing		Ø32 mm	Ø46 mm	Ø46 mm	Ø72 mm	Ø63 mm
GEMÜ 1230		-	-	X	X	X
GEMÜ 1231		-	-	X	X	X-
GEMÜ 1232		-	-	X	X	X
GEMÜ 1234		X	-	-	-	-
GEMÜ 1235		-	-	X	X	X

Accessories

Actuator version		0GS, 0MS	1GS, 1MS		1GP, 1MP	2GS
Length		S	S	L	L	L
Add-on dimension of body		40 mm	48 mm	74 mm	74 mm	74 mm
Actuator housing		Ø32 mm	Ø46 mm	Ø46 mm	Ø72 mm	Ø63 mm
GEMÜ 1236		-	-	X	X	X
GEMÜ 4242		-	-	X	X	X
GEMÜ 4242 Compact version K1		-	X	X	X	X

X = combination possible
- = combination not possible



Combi switchboxes

Actuator version		0GS, 0MS	1GS, 1MS		1GP, 1MP	2GS
Length		S	S	L	L	L
Add-on dimension of body		40 mm	48 mm	74 mm	74 mm	74 mm
Actuator housing		Ø32 mm	Ø46 mm	Ø46 mm	Ø72 mm	Ø63 mm
Combi switchboxes						
GEMÜ 4222		-	-	-	-	X


Actuator version		0GS, 0MS	1GS, 1MS		1GP, 1MP	2GS
Length		S	S	L	L	L
Add-on dimension of body		40 mm	48 mm	74 mm	74 mm	74 mm
Actuator housing		Ø32 mm	Ø46 mm	Ø46 mm	Ø72 mm	Ø63 mm
GEMÜ 4242		-	-	X	X	X
GEMÜ 4242 Compact version K1		-	X	X	X	X

X = combination possible
 - = combination not possible

Pilot valve manifolds

Actuator version		0GS, 0MS	1GS, 1MS		1GP, 1MP	2GS
Length		S	S	L	L	L
Add-on dimension of body		40 mm	48 mm	74 mm	74 mm	74 mm
Actuator housing		Ø32 mm	Ø46 mm	Ø46 mm	Ø72 mm	Ø63 mm
Pilot valve manifolds						
GEMÜ 0322		Due to the compact design width of the valve block, direct mounting of some pilot valves is restricted. In this instance, we recommend externally fitted pilot valves which are connected to the individual actuators.				
GEMÜ 0326						

Sensors (flowmeters and pressure switches)

Actuator version	0GS, 0MS	1GS, 1MS		1GP, 1MP	2GS
Length	S	S	L	L	L
Add-on dimension of body	40 mm	48 mm	74 mm	74 mm	74 mm
Actuator housing	Ø32 mm	Ø46 mm	Ø46 mm	Ø72 mm	Ø63 mm
GEMÜ 3140	 <p>In conjunction with universal module (preferably Electrical connection code M)</p>				

Accessories for motorized design



GEMÜ 1218

Connector

The GEMÜ 1218 is a connector (cable socket / cable plug), 7-pin. Straight and/or 90° angled plug type.

Ordering information

GEMÜ 1218 Binder connector			
Connection X1 – supply voltage, relay outputs			
Binder plug	468/eSy series mating connector	Terminal compartment/ screws, 7-pin	88220649
		Terminal compartment/ screws, 7-pin, 90°	88377714 ¹⁾
		Terminal compartment/ screws, 7-pin, 90°, fitted with a 2 metre cable set	88770522

1) provided in the scope of delivery



GEMÜ 1219

Cable socket / cable plug M12

The GEMÜ 1219 is a connector (cable socket / cable plug) M12, 5-pin. Straight and/or 90° angled plug type. Defined cable length or with threaded connection without cable. Various materials available for the fixing nut.

Ordering information

Suitable for electrical connection of the connector X2

Description	Length	Order number
5-pin, angle	without cable	88205545 ¹⁾
	2 m cable	88205534
	5 m cable	88205540
	10 m cable	88210911
	15 m cable	88244667
5-pin, straight	without cable	88205544
	2 m cable	88205542
	5 m cable	88205543
	10 m cable	88270972
	15 m cable	88346791

1) provided in the scope of delivery for control module code S0



GEMÜ 1571

Emergency power supply module

The GEMÜ 1571 capacitive emergency power supply module is suitable for valves with motorized actuators such as GEMÜ eSyStep and eSyDrive, as well as the GEMÜ C53 iComLine control valve. In the event of a power failure, the product provides an uninterrupted power supply so that the valve can be moved to the safety position. The emergency power supply module is available individually or with an expansion module and can supply several valves. The input and output voltage is 24 V.

Ordering information

GEMÜ 1571 emergency power supply module			
Input voltage	Output voltage	Capacity	Item number
24 V	24 V	1700 Ws	88660398
24 V	24 V	13200 Ws	88751062



GEMÜ 1573

Switching power supply unit

The GEMÜ 1573 switching power supply unit converts unstable input voltages from 100 to 240 V AC into a continuous DC voltage. It can be used as an accessory for valves with motorized actuators, e.g. eSyLite, GEMÜ eSyStep and eSyDrive, and for additional devices with a 24 V DC power supply. Different power levels, output currents and a 48 V DC version for servoDrive actuators are available.

Ordering information

GEMÜ 1573 switching power supply unit			
Input voltage	Output voltage	Output current	Item number
100 - 240 V AC	24 V DC	5 A	88660400
		10 A	88660401



GEMÜ SERVICE-IO-LINK-KIT

Programming set

The GEMÜ service IO-Link set comprises an IO-Link master, an adapter and a cable gland. The programming set is suitable for all GEMÜ IO-Link interfaces.

Ordering information

Order number: 99072365



GEMÜ Gebr. Müller Apparatebau GmbH & Co. KG
Fritz-Müller-Straße 6-8, 74653 Ingelfingen-Criesbach, Germany
Phone +49 (0) 7940 1230 · info@gemu.de
www.gemu-group.com