

# **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 I ISO I NPT

· Body materials: 1.4408, investment casting material

· Seat seal materials: PTFE

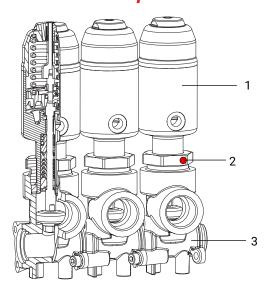
Conformities: FDA | Reg. (EU) No. 10/2011 | Regulation (EC) No. 1935/2004

Technical data depends on the respective configuration





# **Product description**



Item	Name	Materials
1		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

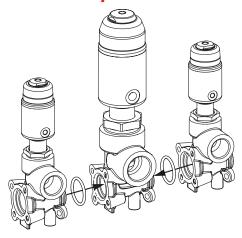
#### **Ordering**

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

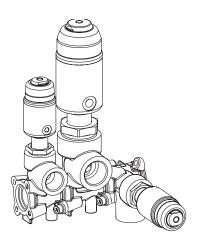
# Comparison of motorized and pneumatic actuators

Actuator version	0GE	0ME	1GP	1MP	0GS	1GS	2GS	0MS	1MS
Operation	peration Motorized I		Pneumatic		Pneumatic				
Material of actuator top	Plastic				Metal	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 inf page 15)	ormation (s	see "Techni	cal data – F	Pneumatica	lly operate	d",

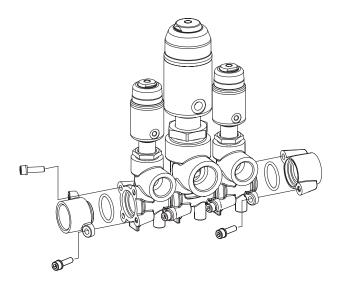
# **Functional description**



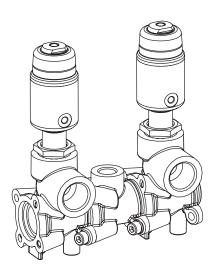
The GEMÜ 553 modular distribution valve comprises various globe valves which are mounted to form a single unit.



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



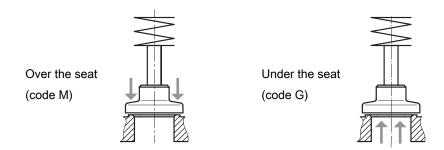
Connection modules are available for integration into the plant.



Additional sensor systems can also be integrated into the block.

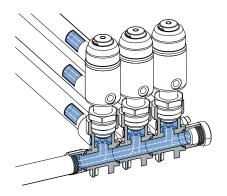
An extensive range of accessories for the valves is available for automation (see chapter on accessories).

# 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)

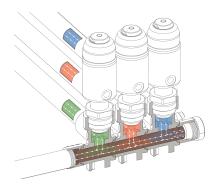
## **Functions**



Distributing function:

Medium from the supply can be distributed to several consumers.

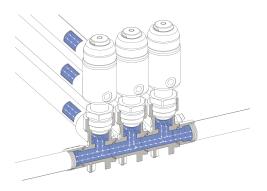
To be used: Actuator version 0GE, 0GS, 0GM, 1GS, 1GP, 2GS



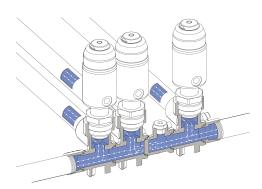
Mixing function:

Media can be mixed together (e.g. hot and cold water).

To be used: Actuator version 0ME, 0MS, 0MM, 1MS, 1MP

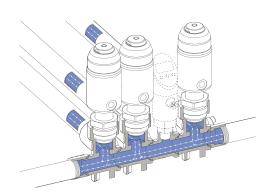


Collecting function:
The medium of several consumers can be collected as a back flow.
To be used: Actuator version 0ME, 0MS, 0MM, 1MS, 1MP



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 OME, OMS, OMM, 1MS, 1MP

# **Availabilities**

	DN	Connection size	Actuator size	Control func- tion	Flow direc- tion	Seat dia- meter	Length
Pneumatic stainless steel actuator	15	1/2" NPT, G 1/2	0	1, 2, 3	G	E E	S S
design code S	20	3/4" NPT, G 3/4	1	1	М	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	М
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	Α

8 Control module	Code
OPEN/CLOSE control, additional end position indicators	Α
OPEN/CLOSE control, additional end position indicators, configured for emergency power supply module (NC)	В
OPEN/CLOSE control, additional end position indicators, configured for emergency power supply module (NO)	С
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	OGE
Actuator size 0, under the seat, manually operated, plastic handwheel	0GM

9 Actuator version	Code
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	OME
Actuator size 0, over the seat, manually operated, plastic handwheel	OMM
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	Е
15 mm	G

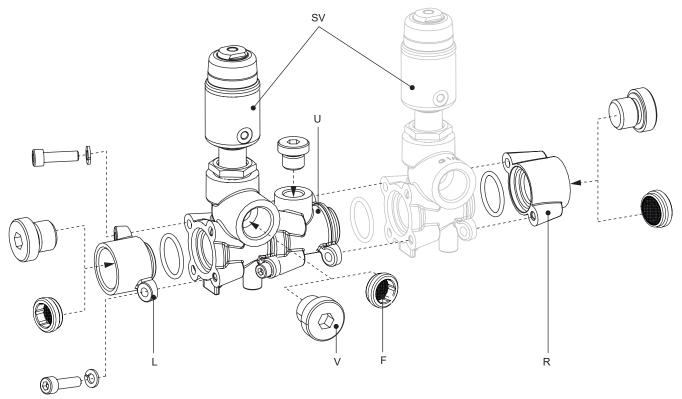
12 Length	Code
Long	L
Short	S

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

## **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 - Connection kits

	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 kit for one-sided feed  Connection flange L and connection flange R with threaded socket G 3/4 to DIN ISO 228, with threaded plug (with FPM seal)	Order designation 553 20SAV 1 37 F 20

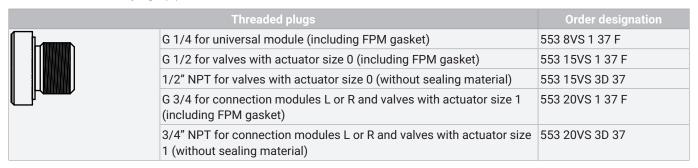
## Order data - Connection modules (L, R)

	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)

	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)



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

#### Order data - Filter (F)

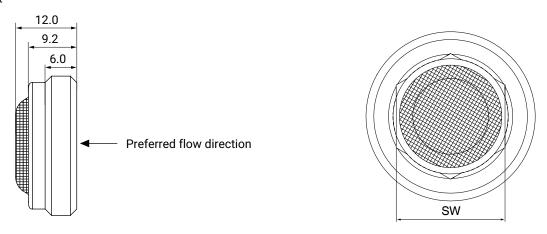
For highly polluted media, the valves must be protected against large particles by suitable filters.

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.

	Order designation	
	G 1/2 for valves with actuator size 0, SW 12	553 15FS 1 37*
HII	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 viscos-

600 mm<sup>2</sup>/s (cSt)

ity:

Other versions for lower/higher temperatures and higher viscosities on request.

## **Temperature**

**Ambient temperature:**  $0 - 60 \, ^{\circ}\text{C}$ 

**Storage temperature:**  $0 - 40 \, ^{\circ}\text{C}$ 

#### **Pressure**

Operating pressure:

Flow direction: Optional

Actuator version	Seat diameter E	Seat diameter G
0GM / 0MM	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	Α	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		Max. allowable operating pressures in bar at temperature in °C			
type code 1)	code <sup>2)</sup>	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 Dir-**

ective:

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 viscos-

600 mm<sup>2</sup>/s (cSt)

ity:

Other versions for lower/higher temperatures and higher viscosities on request.

Control medium: Inert gases

### **Temperature**

Control medium temper-

 $0 - 60 \, ^{\circ}\text{C}$ 

ature:

**Ambient temperature:**  $0 - 60 \, ^{\circ}\text{C}$ 

**Storage temperature:**  $0 - 40 \, ^{\circ}\text{C}$ 

#### **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	Α	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

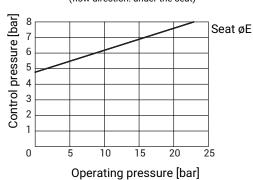
Actuator version	
0MS, 1MS, 1MP	Max. 7 bar

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

For values see diagram

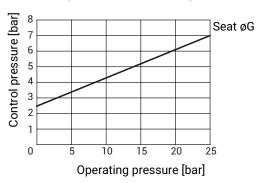
Actuator version 0GS C.f. 2 Normally open (NO) C.f. 3 Double acting (DA)

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



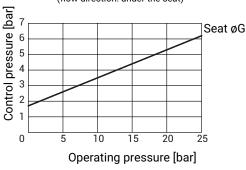
Actuator version 1GS C.f. 2 Normally open (NO) C.f. 3 Double acting (DA)

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



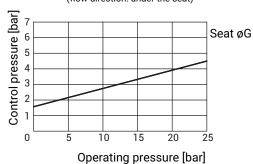
Actuator version 1GP C.f. 2 Normally open (NO) C.f. 3 Double acting (DA)

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 dm³
1GS / 1MS	Ø42 mm	0.025 dm³
1GP / 1MP	Ø50 mm	0.05 dm³
2GS	Ø60 mm	0.084 dm³

#### 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		Max. allowable operating pressures in bar at temperature in °C				
type code 1)	code <sup>2)</sup>	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 Dir-**

ective:

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 viscos- 600 mm²/s (cSt)

ity: Other versions for lower/higher temperatures and higher viscosities on request.

### **Temperature**

**Ambient temperature:**  $0 - 60 \, ^{\circ}\text{C}$ 

Note influence on duty cycle.

**Storage temperature:**  $0 - 40 \, ^{\circ}\text{C}$ 

### Duty cycle and service life

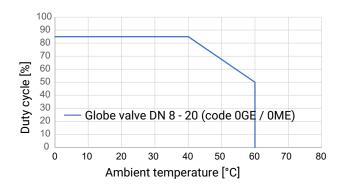
Service life: Control operation - Class C according to EN 15714-2 (1,800,000 starts and 1200 starts per hour).

Open/Close duty - At least 500,000 switching cycles at room temperature and permissible duty

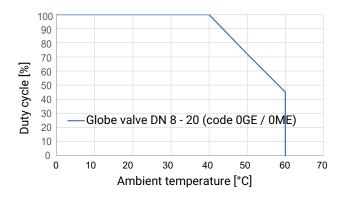
cycle.

**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	
0GE / 0ME	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	Α	Air

#### Kv values:

	Kv values
Seat diameter E	2.0
Seat diameter G	5.0

Kv values in m<sup>3</sup>/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	Material	Max. allowable operating pressures in bar at temperature in °C				
type code 1)	code <sup>2)</sup>	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 Dir-**

ective:

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 ± 10%

**Rating:** Actuator size 0 (code 0A) 20 W

Actuator size 1 (code 1A) 60 W

**Operation:** Stepper motor, self-locking

Reverse battery protec-

Yes

tion:

## 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:  $250 \Omega$ 

**Accuracy/linearity:**  $\leq \pm 0.3\%$  of full flow

**Temperature drift:**  $\leq \pm 0.1\% / 10^{\circ} \text{K}$ 

**Resolution:** 12 bit

Reverse battery protec-

tion:

Yes (up to ± 24 V DC)

#### Digital input signals

Inputs: Function selectable via IO-Link (see table Overview of available functions – Input and output sig-

nals)

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:**  $\leq \pm 0.1\% / 10^{\circ} K$ 

**Load resistor:**  $\leq 750 \text{ k}\Omega$ 

**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 sig-

nals)

Type of contact: Push-Pull

Switching voltage: Power supply Uv

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

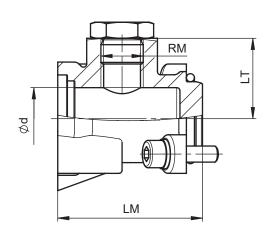
SIO operation: Yes

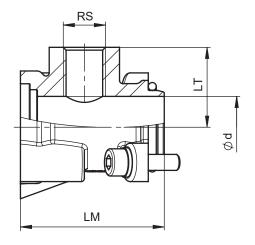
IO-Link specification: V1.1

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

# **Dimensions**

## **Universal module**



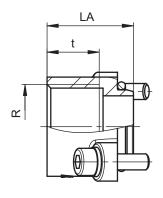


Media separator plate

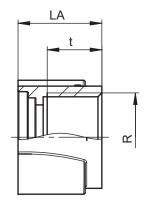
Sensor mounting bracket

Universal module	ød	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

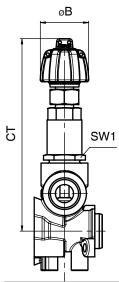


right R

Union	Connection	LA	R			Weight [kg]
left	L	G 3/4	3/4" NPT	16.3	22	0.11
right	R	G 3/4	3/4" NPT	16.3	25	0.11

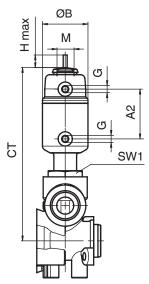
## **Actuator dimensions**

# Manually operated



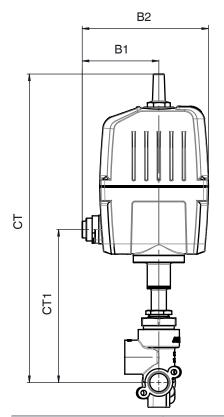
Actuator version	ø B	СТ	SW1	Weight [kg]
OGM / OMM	32.0	134.0	24	0.30

# Pneumatically operated



Actuator version	ø B	M	H max	G	A2	СТ	SW1	Weight [kg]
OGS / OMS	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	-	221.3	36	0.97

## Motorized

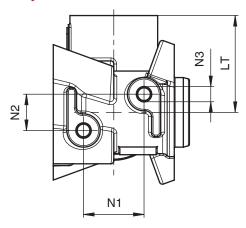


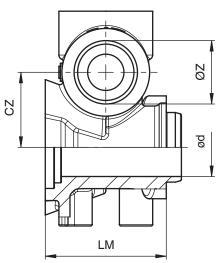


Actuator version	В	B1	B2	СТ	CT2	Weight [kg]	
OGE, OME	59.4	81.0	133.5	326.3	161.8	2.71	

# **Body dimensions**

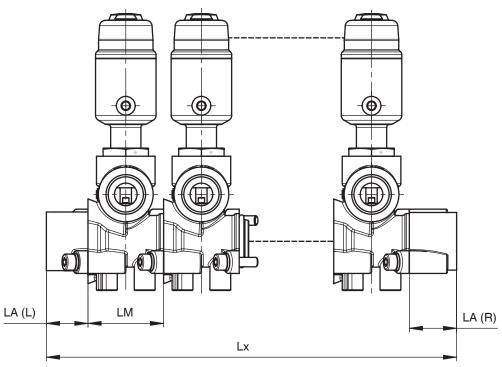
# Body module





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

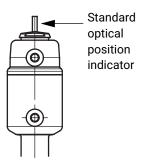


Actuator	Length	LM	L	A					Ler	igth				
version				R	1x	2x	3x	4x	5x	6x	7x	8x	9x	10x
0GS / 0MS 0GM / 0MM	S	40.0	22.0	25.0	87.0	127.0	167.0	207.0	247.0	287.0	327.0	367.0	407.0	447.0
1GS / 1MS	S	48.0	22.0	25.0	95.0	143.0	191.0	239.0	287.0	335.0	383.0	431.0	479.0	527.0
0GE / 0ME 1GP / 1MP 1GS / 1MS 2GS	L	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	OGS, OMS	1GS, 1MS		1GP, 1MP	2GS
Len	gth					
Add-on dimension of body		40 mm	48 mm	74 mm	74 mm	74 mm
Actuator	Actuator housing		Ø46 mm	Ø46 mm	Ø72 mm	Ø63 mm
GEMÜ 1300		X	X	X	X	X

#### **X** = combination possible

#### **Electrical position indicator**

			100 1110		105 (115	
Actuato	or version	OGS, OMS	1GS, 1MS		1GP, 1MP	2GS
Lei	ngth					
Add-on dime	ension of body	40 mm	48 mm	74 mm	74 mm	74 mm
Actuato	r housing	Ø32 mm	Ø46 mm	Ø46 mm	Ø72 mm	Ø63 mm
GEMÜ 1200		X	X	X	Х	X
GEMÜ 1215	Beston Typ 1215	X	X	X	X	X

Actuato	or version	OGS, OMS	1GS, 1MS		1GP, 1MP	2GS
	ngth					L
	ension of body	40 mm	48 mm	74 mm	74 mm	74 mm
	r housing	Ø32 mm	Ø46 mm	Ø46 mm	Ø72 mm	Ø63 mm
GEMÜ 1230		-	-	Х	X	Х
GEMÜ 1231		-	-	X	X	X-
GEMÜ 1232		-	-	X	X	X
GEMÜ 1234	CREATE AND	X	-	-	-	-
GEMÜ 1235		-	-	X	X	X

#### Accessories

Actuator	version	OGS, OMS	1GS, 1MS		1GP, 1MP	2GS
Len	gth					L
Add-on dime	nsion of body	40 mm	48 mm	74 mm	74 mm	74 mm
Actuator	housing	Ø32 mm	Ø46 mm	Ø46 mm Ø46 mm		Ø63 mm
GEMÜ 1236	TO SOURCE OF THE PARTY OF THE P	-	-	X	Х	X
GEMÜ 4242		-	-	X	X	X
GEMÜ 4242 Compact version K1		-	X	X	Х	Х

## **X** = combination possible

## Combi switchboxes

Actuator version	OGS, OMS	1GS, 1MS		1GP, 1MP	2GS
Length					
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
	C	Combi switchboxes	3		
GEMÜ 4222	-	-	-	-	X

<sup>- =</sup> combination not possible

Actuator	r version	OGS, OMS	1GS, 1MS		1GP, 1MP	2GS
Len	gth					L
Add-on dime	nsion 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		-	<u>-</u>	X	X	X
GEMÜ 4242 Compact version K1		-	X	Х	Х	X

**X** = combination possible

- = combination not possible

#### Pilot valve manifolds

Actuato	or version	OGS, OMS	1GS, 1MS		1GP, 1MP	2GS
Le	ength					L
Add-on dimension of body		40 mm	48 mm	74 mm	74 mm	74 mm
Actuato	Actuator housing		Ø46 mm	Ø46 mm	Ø72 mm	Ø63 mm
Pilot valve manifolds						
GEMÜ 0322		is restricted.	re recommend ext	the valve block, di		
GEMÜ 0326						

### Sensors (flowmeters and pressure switches)

Actuator version	OGS, OMS	1GS, 1MS		1GP, 1MP	2GS
Length					
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



In conjunction with universal module (preferably Electrical connection code M)

## 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.

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.

Suitable for electrical connection of the connector X2

Description	Length	Order number
5-pin, angle	without cable	88205545 <sup>1)</sup>
	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.

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.

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.

Order number: 99072365





