

# **GEMÜ 629 eSyLite**

Motorized diaphragm valve



# **Operating instructions**











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#### 1 General information

#### 1.1 Information

- The descriptions and instructions apply to the standard versions. For special versions not described in this document the basic information contained herein applies in combination with any additional special documentation.
- Correct installation, operation, maintenance and repair work ensure faultless operation of the product.
- Should there be any doubts or misunderstandings, the German version is the authoritative document.
- Contact us at the address on the last page for staff training information.

#### 1.2 Symbols used

The following symbols are used in this document:

Symbol	Meaning	
•	Tasks to be performed	
•	Response(s) to tasks	
_	Lists	

#### 1.3 Definition of terms

#### **Working medium**

The medium that flows through the GEMÜ product.

#### Diaphragm size

Uniform seat size of GEMÜ diaphragm valves for different nominal sizes.

#### 1.4 Warning notes

Wherever possible, warning notes are organised according to the following scheme:

SIGNAL WORD		
Possible symbol for the specific danger	Type and source of the danger  ▶ Possible consequences of non-observance.  ● Measures for avoiding danger.	

Warning notes are always marked with a signal word and sometimes also with a symbol for the specific danger.

The following signal words and danger levels are used:



#### Potentially dangerous situation!

 Non-observance can cause death or severe injury.

#### **A** CAUTION



#### Potentially dangerous situation!

Non-observance can cause moderate to light injury.

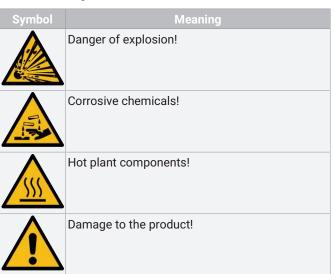
#### **NOTICE**



#### Potentially dangerous situation!

Non-observance can cause damage to property.

The following symbols for the specific dangers can be used within a warning note:



#### 2 Safety information

The safety information in this document refers only to an individual product. Potentially dangerous conditions can arise in combination with other plant components, which need to be considered on the basis of a risk analysis. The operator is responsible for the production of the risk analysis and for compliance with the resulting precautionary measures and regional safety regulations.

The document contains fundamental safety information that must be observed during commissioning, operation and maintenance. Non-compliance with these instructions may cause:

- Personal hazard due to electrical, mechanical and chemical effects.
- Hazard to nearby equipment.
- Failure of important functions.
- Hazard to the environment due to the leakage of dangerous substances.

The safety information does not take into account:

- Unexpected incidents and events, which may occur during installation, operation and maintenance.
- Local safety regulations which must be adhered to by the operator and by any additional installation personnel.

#### **Prior to commissioning:**

- 1. Transport and store the product correctly.
- 2. Do not paint the bolts and plastic parts of the product.
- 3. Carry out installation and commissioning using trained personnel.
- 4. Provide adequate training for installation and operating personnel.
- 5. Ensure that the contents of the document have been fully understood by the responsible personnel.
- 6. Define the areas of responsibility.
- 7. Observe the safety data sheets.
- 8. Observe the safety regulations for the media used.

#### **During operation:**

- 9. Keep this document available at the place of use.
- 10. Observe the safety information.
- 11. Operate the product in accordance with this document.
- 12. Operate the product in accordance with the specifications.
- 13. Maintain the product correctly.
- 14. Do not carry out any maintenance work and repairs not described in this document without consulting the manufacturer first.

#### In cases of uncertainty:

15. Consult the nearest GEMÜ sales office.

#### 3 Product description

#### 3.1 Construction



		7
Item	Name	Materials
1	Optical position indicator	PA 12
2	Manual override	
3	Motorized actu- ator	Reinforced polyamide
4	CONEXO actuator RFID chip	
5	Diaphragm	CR, EPDM, FKM, NBR, PTFE/EPDM
6	CONEXO dia- phragm RFID chip	
7	CONEXO body RFID chip	
8	Valve body	EN-GJS-400-18-LT (GGG 40.3) EN-GJS-400-18-LT (GGG 40.3), PFA lined EN-GJS-400-18-LT (GGG 40.3), PP lined EN-GJS-400-18-LT (GGG 40.3), hard rubber lined 1.4408, investment casting 1.4408, PFA lined 1.4435 (F316L), forged body 1.4435 (BN2), forged body $\Delta$ Fe < 0.5 % 1.4435, investment casting 1.4539, forged body CW614N, CW617N (brass)
9	Electrical connection	

#### 3.2 Description

The GEMÜ 629 eSyLite 2/2-way diaphragm valve is motorized. It is available as an Open/Close version. An integrated optical position indicator is standard. The self-locking actuator holds its position in a stable manner in the event of power supply failure.

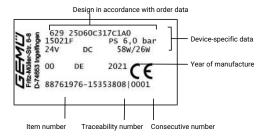
#### 3.3 Function

The product controls a flowing medium by being closed or opened by a motorised actuator. The product is designed as an OPEN/CLOSED valve and is not intended for control applications.

The product has an optical position indicator as standard. The optical position indicator indicates the OPEN and CLOSED positions.

#### 3.4 Product label

The product label is located on the actuator. Product label data (example):



The month of manufacture is encoded in the traceability number and can be obtained from GEMÜ. The product was manufactured in Germany.

The operating pressure stated on the product label applies to a media temperature of 20 °C. The product can be used up to the maximum stated media temperature. You can find the pressure/temperature correlation in the technical data.

#### 4 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

#### 5 Correct use

#### **A** DANGER

#### Danger of explosion!

Risk of death or severe injury
 Do not use the product in potentially explosive zones.

#### WARNING

#### Improper use of the product!

- Risk of severe injury or death
- ▶ Manufacturer liability and guarantee will be void.
- Only use the product in accordance with the operating conditions specified in the contract documentation and in this document.

The product is designed for installation in piping systems and for controlling a working medium.

The product is not intended for use in potentially explosive areas.

- 1. Use the product in accordance with the technical data.
- The product is designed as an OPEN/CLOSED valve and is not intended for control applications. Due to the minimum actuation time, sufficiently accurate control is not possible.

#### 6 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
Diaphragm valve, electrically operated, stainless steel diaphragm valve	629
2 DN	Code
DN 4	4
DN 6	6

2 DN	Code
DN 4	4
DN 6	6
DN 8	8
DN 10	10
DN 12	12
DN 15	15
DN 20	20
DN 25	25
DN 32	32
DN 40	40
DN 50	50
DN 65	65

3 Body configuration	Code
Tank bottom valve body	В
Body configuration code B: Dimensions and designs on request	
2/2-way body	D
T-body	Т
Body configuration code T: Dimensions on request	

4 Connection type	Code
Spigot	
Spigot DIN	0
Spigot DIN EN 10357 series B (2014 edition; formerly DIN 11850 series 1)	16
Spigot EN 10357 series A/DIN 11866 series A formerly DIN 11850 series 2	17
Spigot DIN 11850 series 3	18
Spigot JIS-G 3447	35
Spigot JIS-G 3459 schedule 10s	36
Spigot SMS 3008	37
Spigot BS 4825, part 1	55
Spigot ASME BPE/DIN EN 10357 series C (from 2022 edition)/DIN 11866 series C	59
Spigot ISO 1127/DIN EN 10357 series C (2014 edition)/ DIN 11866 series B	60
Spigot ANSI/ASME B36.19M schedule 10s	63
Spigot ANSI/ASME B36.19M schedule 5s	64
Spigot ANSI/ASME B36.19M schedule 40s	65
Threaded connection	
Threaded socket DIN ISO 228	1
NPT female thread	31
Threaded spigot DIN 11851	6
Cone spigot and union nut DIN 11851	6K

4 Connection type	Code
Flange EN 1092, PN 16, form B, face-to-face dimension FTF EN 558 series 1, ISO 5752, basic series 1, length only for body configuration D	8
Flange JIS B2220, 10K, RF, face-to-face dimension FTF EN 558 series 1, ISO 5752, basic series 1, length only for body configuration D	34
Flange ANSI Class 150 RF, face-to-face dimension FTF MSS SP-88, length only for body configuration D	38
Flange ANSI Class 125/150 RF, face-to-face dimension FTF EN 558 series 1, ISO 5752, basic series 1, length only for body configuration D	39
Clamp ASME BPE, face-to-face dimension FTF ASME BPE, length only for body configuration D	80
Clamp DIN 32676 series B, face-to-face dimension FTF EN 558 series 7, length only for body configuration D	82
Clamp ASME BPE, for pipe ASME BPE, face-to-face dimension FTF EN 558 series 7, length only for body configuration D	88
Clamp DIN 32676 series A, face-to-face dimension FTF acc. to EN 558 series 7, length only for body configuration D	8A
Clamp ISO 2852 for pipe ISO 2037, clamp SMS 3017 for pipe SMS 3008 face-to-face dimension FTF EN 558 series 7, length only for body configuration D	8E
Clamp DIN 32676 series C, face-to-face dimension FTF ASME BPE, length only for body configuration D	8P
Clamp DIN 32676 series C, face-to-face dimension FTF EN 558 series 7, length only for body configuration D	8T

5 Valve body material	Code
SG iron material	
EN-GJS-400-18-LT (GGG 40.3), PFA lined	17
EN-GJS-400-18-LT (GGG 40.3), PP lined	18
EN-GJS-400-18-LT (GGG 40.3), hard rubber lined	83
EN-GJS-400-18-LT (GGG 40.3)	90
Investment casting material	
1.4408, investment casting	37
1.4408, PFA lined	39

5 Valve body material	Code
1.4435, investment casting	C3
Forged material	
1.4435 (F316L), forged body	40
1.4435 (BN2), forged body, $\Delta$ Fe < 0.5%	42
1.4539, forged body	F4
Brass	
CW614N, CW617N (brass)	12

6 Diaphragm material	Code
Elastomer	
NBR	2
EPDM	3A
FKM	4
FKM	4A
CR	8
EPDM	13
EPDM	17
EPDM	19
EPDM	28
EPDM	29
PTFE	
PTFE/EPDM one-piece	54
PTFE/EPDM two-piece	5M
<b>Note:</b> The PTFE/EPDM diaphragm (code 5M) is available from diaphragm size 25.	

7 Voltage/Frequency	Code
24 V DC	C1

8 Control module	Code
ON/OFF actuator (economy)	A0
ON/OFF actuator (economy) Emergency power supply module (NC)	A1
ON/OFF actuator (economy) Emergency power supply module (NO)	A2
OPEN/CLOSE control with mounted GEMÜ 1235 position indicator	Y0
OPEN/CLOSE control with mounted GEMÜ 1235 position indicator Emergency power supply module (NC)	Y1
OPEN/CLOSE control with mounted GEMÜ 1235 position indicator Emergency power supply module (NO)	Y2
OPEN/CLOSE control with mounted GEMÜ 1215 position indicator	Z0
OPEN/CLOSE control with mounted GEMÜ 1215 position indicator Emergency power supply module (NC)	Z1
OPEN/CLOSE control with mounted GEMÜ 1215 position indicator Emergency power supply module (NO)	<b>Z2</b>

9 Surface	Code
Ra ≤ 6.3 µm (250 µin.) for media wetted surfaces,	1500
mechanically polished internal	

9 Surface	Code
Ra $\leq$ 0.8 $\mu$ m (30 $\mu$ in.) for media wetted surfaces, in accordance with DIN 11866 H3, mechanically polished internal	1502
Ra $\leq$ 0.8 $\mu$ m (30 $\mu$ in.) for media wetted surfaces, in accordance with DIN 11866 HE3, electropolished internal/external	1503
Ra $\leq$ 0.6 $\mu$ m (25 $\mu$ in.) for media wetted surfaces, mechanically polished internal	1507
Ra $\leq$ 0.6 $\mu$ m (25 $\mu$ in.) for media wetted surfaces, electropolished internal/external	1508
Ra $\leq 0.4  \mu m$ (15 $\mu$ in.) for media wetted surfaces, in accordance with DIN 11866 H4, mechanically polished internal	1536
Ra $\leq 0.4  \mu m$ (15 $\mu$ in.) for media wetted surfaces, in accordance with DIN 11866 HE4, electropolished internal/external	1537
Ra $\leq 0.25~\mu m$ (10 $\mu$ in.) for media wetted surfaces *), in accordance with DIN 11866 HE5, electropolished internal/external, *) for inner pipe diameters < 6 mm, in the spigot Ra $\leq 0.38~\mu m$	1516
Ra $\leq$ 0.25 µm (10 µin.) for media wetted surfaces *), in accordance with DIN 11866 H5, mechanically polished internal, *) for inner pipe diameters < 6 mm, in the spigot Ra $\leq$ 0.38 µm	1527
Ra max. 0.51 µm (20 µin.) for media wetted surfaces, in accordance with ASME BPE SF1, mechanically polished internal	SF1
Ra max. 0.64 µm (25 µin.) for media wetted surfaces, in accordance with ASME BPE SF2, mechanically polished internal	SF2
Ra max. 0.76 µm (30 µin.) for media wetted surfaces, in accordance with ASME BPE SF3, mechanically polished internal	SF3
Ra max. 0.38 µm (15 µin.) for media wetted surfaces, in accordance with ASME BPE SF4, electropolished internal/external	SF4
Ra max. 0.51 µm (20 µin.) for media wetted surfaces, in accordance with ASME BPE SF5, electropolished internal/external	SF5
Ra max. 0.64 µm (25 µin.) for media wetted surfaces, in accordance with ASME BPE SF6, electropolished internal/external	SF6

10 Actuator version	Code
Actuator size 1 diaphragm size 8 with distance piece	B1
Actuator size 1 diaphragm size 10	1C
Actuator size 1 diaphragm size 25	1F
Actuator size 3 diaphragm size 40	3H
Actuator size 3 diaphragm size 50 with distance piece	K3

11 Special version	Code
Without	

11 Special version	Code
BELGAQUA certification	В

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

#### Order example

Ordering option	Code	Description
1 Type	629	Diaphragm valve, electrically operated, stainless steel diaphragm valve
2 DN	40	DN 40
3 Body configuration	D	2/2-way body
4 Connection type	60	Spigot ISO 1127/DIN EN 10357 series C (2014 edition)/DIN 11866 series B
5 Valve body material	40	1.4435 (F316L), forged body
6 Diaphragm material	5M	PTFE/EPDM two-piece
7 Voltage/Frequency	C1	24 V DC
8 Control module	A0	ON/OFF actuator (economy)
9 Surface	1503	Ra ≤ 0.8 μm (30 μin.) for media wetted surfaces, in accordance with DIN 11866 HE3, electropolished internal/external
10 Actuator version	3H	Actuator size 3 diaphragm size 40
11 CONEXO		Without

#### 7 Technical data

#### 7.1 Medium

Working medium: Corrosive, inert, gaseous and liquid media which have no negative impact on the physical and

chemical properties of the body and diaphragm material.

The valve will seal in both flow directions up to full operating pressure (gauge pressure).

#### 7.2 Temperature

Media temperature:  $-10 - 80 \,^{\circ}\text{C}$ 

Ambient temperature:  $-10 - 50 \, ^{\circ}\text{C}$ 

If the emergency power module is used (control module code A1, A2, Z1, Z2), the maximum ambi-

ent temperature is reduced to 40 °C.

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

7.3 Pressure

**Operating pressure:** 0 - 6 bar

Pressure rating: PN 16

Leakage rate: Leakage rate A to P11/P12 EN 12266-1

Kv values:

MG	DN	Connection type code								
		0	16	17	18	37	59	60		31
8	4	0.5	-	-	-	-	-	-	-	-
	6	-	-	1.1	-	-	-	1.2	-	-
	8	-	-	1.3	-	-	0.6	2.2	1.4	-
	10	-	2.1	2.1	2.1	-	1.3	-	-	-
	15	-	-	-	-	-	2.0	-	-	-
10	10	-	2.4	2.4	2.4	-	2.2	3.3	-	-
	12	-	-	-	-	-	-	-	3.2	-
	15	3.3	3.8	3.8	3.8	-	2.2	4.0	3.4	-
	20	-	-	-	-	-	3.8	-	-	-
25	15	4.1	4.7	4.7	4.7	-	-	7.4	6.5	6.5
	20	6.3	7.0	7.0	7.0	-	4.4	13.2	10.0	10.0
	25	13.9	15.0	15.0	15.0	12.6	12.2	16.2	14.0	14.0
40	32	25.3	27.0	27.0	27.0	26.2	-	30.0	26.0	26.0
	40	29.3	30.9	30.9	30.9	30.2	29.5	32.8	33.0	33.0
50	50	46.5	48.4	48.4	48.4	51.7	50.6	55.2	60.0	60.0
	65	-	-	-	-	62.2	61.8	-	-	-

MG = diaphragm size

Kv values in m³/h

Kv values determined in accordance with DIN EN 60534 standard, inlet pressure 5 bar,  $\Delta p$  1 bar, stainless steel valve body and soft elastomer diaphragm. The Kv values for other product configurations (e.g. other diaphragm or body materials) may differ. In general, all diaphragms are subject to the influences of pressure, temperature, the process and their tightening torques. Therefore the Kv values may exceed the tolerance limits of the standard.

The Kv value curve (Kv value dependent on valve stroke) can vary depending on the diaphragm material and duration of use.

#### Kv values:

MG	DN	Cast body without lining Threaded body Flanged body		Rubber lining	Plastic lining
		Material	code 90	Material code 83	Material code 17, 18, 39
25	15	8.0	10.0	5.0	6.0
	20	11.5	14.0	9.0	11.0
	25	11.5	17.0	13.0	15.0
40	32	28.0	36.0	23.0	29.0
	40	28.0	40.0	26.0	32.0
50	50	60.0	68.0	47.0	64.0
	65	-	68.0	47.0	64.0

MG = diaphragm size, Kv values in m³/h

Kv values determined in accordance with DIN EN 60534, inlet pressure 5 bar,  $\Delta p$  1 bar, with connection flange EN 1092 length EN 558 series 1 (or threaded socket DIN ISO 228 for body material GGG40.3) and soft elastomer diaphragm. The Kv values for other product configurations (e.g. other diaphragm or body materials) may differ. In general, all diaphragms are subject to the influences of pressure, temperature, the process and their tightening torques. Therefore the Kv values may exceed the tolerance limits of the standard.

The Kv value curve (Kv value dependent on valve stroke) can vary depending on the diaphragm material and duration of use.

#### 7.4 Product compliance

Machinery Directive: 2006/42/EC

**Pressure Equipment Dir-**

ective:

2014/68/EU

Food: Regulation (EC) No. 1935/2004\*

Regulation (EC) No. 10/2011\*

FDA\*

USP\* Class VI

**EMC Directive**: 2014/30/EU

**Drinking water:** Belgaqua\*

\* depending on version and/or operating parameters

**RoHS Directive:** 2011/65/EU

#### 7.5 Mechanical data

Protection class: IP 65 acc. to EN 60529

Actuating speed: Max. 3 mm/s

Flow direction: Optional

**Installation position:** Optional

Observe the angle of rotation for optimized draining when it comes to installation.

See separate document, "Angle of rotation technical information".

Weight: Actuator

Actuator version B1 1.0 kg
Actuator version 1C 0.8 kg
Actuator version 1F 0.94 kg
Actuator version 3H 1.4 kg
Actuator version K3 2.8 kg

**Body** 

	tion type ode	0, 16, 17, 18, 35, 36, 37, 55, 59, 60, 63, 64,	1	1	1, 31	31	6, 6K	8, 38, 39	80, 82, 88, 8A, 8E, 8P, 8T
Valve	Valve body			Threade	d socket		Threade	Flange	Clamp
Material code			12	37	90	37	d spigot		
MG	DN								
8	4	0.09	-	-	-	-	-	-	-
	6	0.09	-	-	-	-	-	-	-
	8	0.09	-	0.09	-	-	-	-	0.15
	10	0.09	-	-	-	-	0.21	-	0.18
	15		-	-	-	-	-	-	0.18
10	10	0.30	-	-	-	-	0.33	-	0.30
	12	-	0.17	0.17	-	-	-	-	-
	15	0.30	0.26	0.26	-	-	0.35	-	0.43
	20	-	-	-	-	-	-	-	0.43
25	15	0.62	-	0.32	0.50	0.32	0.71	1.50	0.75
	20	0.58	-	0.34	0.60	0.34	0.78	2.20	0.71
	25	0.55	-	0.39	0.90	0.39	0.79	2.80	0.63
40	32	1.45	-	0.88	1.40	0.88	1.66	3.40	1.62
	40		-	0.93	1.90	0.93	1.62	4.50	1.50
50	50	2.25	-	1.56	2.70	1.56	2.70	6.30	2.50
	65	2.20	-	-	-	-	-	10.30	2.30

MG = diaphragm size, weight in kg

Mechanical environ-

mental 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

#### 7.6 Actuator duty cycle and service life

Service life: Class A acc. to EN 15714-2

Minimum 100,000 switching cycles at room temperature and permissible duty cycle.

**Duty cycle:** max. 30% duty

#### 7.7 Electrical data

Supply voltage: 24 V DC

Tolerance ± 10 %

Operating time: MG 10: 2.5 s

> MG 20: 3.5 s MG 25: 4.0 s MG 40: 4.5 s MG 50: 7.0 s

Close tight current / rated

current:

MG 20: 1.4 A MG 25: 1.3 A MG 40: 2.3 A MG 50: 2.3 A

MG 10: 0.5 A

Starting current / max-

imum current:

MG 10: approx. 2.4 A MG 20: approx. 2.4 A MG 25: approx. 2.4 A MG 40: approx. 4.5 A MG 50: approx. 4.5 A

Standby current con-

sumption:

approx. 10 mA

#### 7.7.1 Digital input signals

max. 30 V DC Input voltage:

≥ 56 kΩ

600 ms

High level: ≥ 18 V DC

Low level: ≤ 5 V DC

Minimum actuation dura-

tion:

Input current: < 0.6 mA

#### 7.7.2 Emergency power supply module

**Charging current:** MG 10, MG 20, MG 25: max. 0.16 A

> MG 40: 0.32 A MG 50: not available

Charging time: approx. 13 min

Service life: Guide value at 25 °C ambient temperature, approx. 3 years

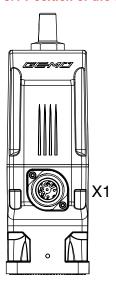
#### 8 Electrical connection

#### **NOTICE**

#### Appropriate cable socket/appropriate mating connector

► The appropriate connector is included for X1.

#### 8.1 Position of the connectors



#### 8.2 Electrical connection

#### **Connection X1**



#### 7-pin plug, Binder, type 693

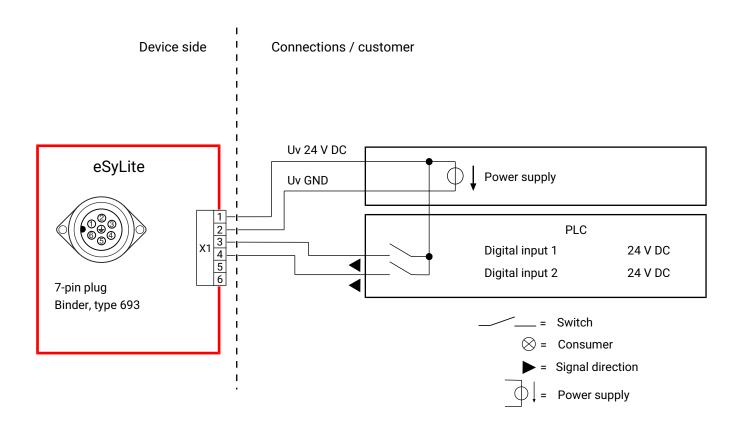
Pin	Signal name
1	24 V supply voltage
2	GND
3	Digital input OPEN
4	Digital input CLOSED
5	n.c.
6	n.c.
7	n.c.

# Preferred direction if both digital inputs are present for device version 00 (see operating instructions – Product label)

Control module ordering	Preferred direction
option	
A0, Y0, Z0	OPEN
A1, Y1, Z1	CLOSED

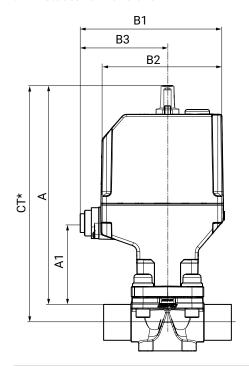
for device	h digital inputs are present version 00 ctions – Product label)
A2, Y1, Z2	OPEN
for device	h digital inputs are present version 01 ctions - Product label)
Control module ordering option	Preferred direction
A0, Y0, Z0	OPEN
A1, Y1, Z1	OPEN
A2, Y2, Z2	CLOSED

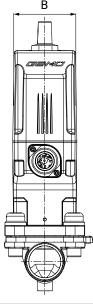
#### 8.3 Connection diagram



#### **9 Dimensions**

#### 9.1 Actuator dimensions





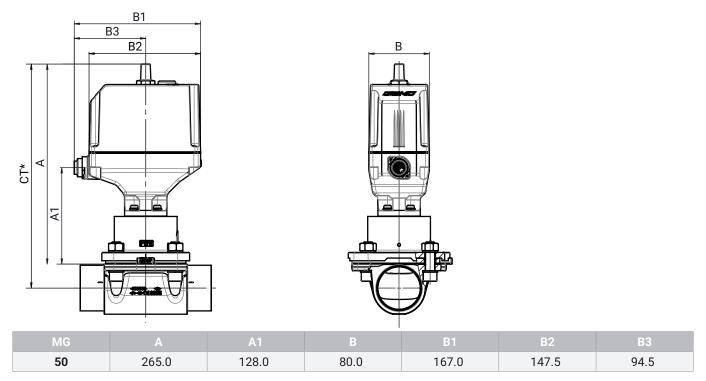
MG	А	A1	В	B1	B2	В3
8	211.0	82.0	59.5	134.5	115.0	82.0
10	192.0	63.0	59.5	134.5	115.0	82.0
25	204.0	75.0	59.5	134.5	115.0	82.0
40	228.0	91.0	80.0	167.0	147.5	94.5

Dimensions in mm

MG = diaphragm size

<sup>\*</sup> CT = A + H1 (see body dimensions)

#### 9.2 Actuator dimensions with distance piece



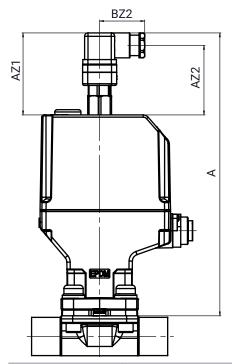
Dimensions in mm

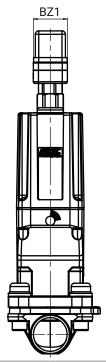
MG = diaphragm size

\* CT = A + H1 (see body dimensions)

MG 50 with metal distance piece

#### 9.3 Actuator dimensions with GEMÜ 1215 position indicator



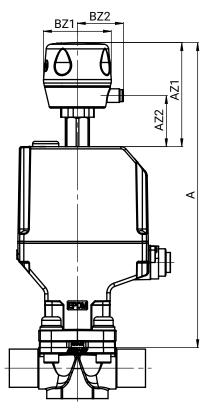


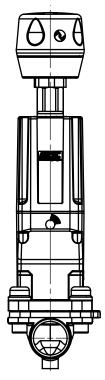
MG	А	AZ1	AZ2	BZ1	BZ2
8	256.0	72.0	61.0	30.0	40.0
10	237.0	72.0	61.0	30.0	40.0
25	249.0	72.0	61.0	30.0	40.0
40	273.0	72.0	61.0	30.0	40.0
50	310.0	72.0	61.0	30.0	40.0

Dimensions in mm MG = diaphragm size

MG 50 with metal distance piece

#### 9.4 Actuator dimensions with GEMÜ 1235 position indicator





MG	А	AZ1	AZ2	Dia. BZ1	BZ2
8	276,0	92,0	45,0	60,0	40,5
10	257,0	92,0	45,0	60,0	40,5
25	269,0	92,0	45,0	60,0	40,5
40	293,0	92,0	45,0	60,0	40,5
50	330,0	92,0	45,0	60,0	40,5

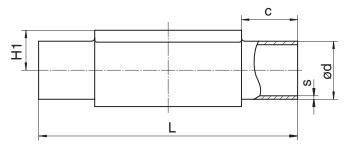
Dimensions in mm

MG = diaphragm size

MG 50 with metal distance piece

#### 9.5 Body dimensions

#### 9.5.1 Spigot DIN/EN ISO (code 0, 16, 17, 18, 60)



Connection type spigot DIN/EN/ISO (code 0, 16, 17, 18, 60) 1), forged material (code 40, 42, F4) 2)

MG	DN	NPS	c (min)			ød			H1						
				Connection type						Con	nection	type			
				0	16	17	18	60			0	16	17	18	60
8	4	-	20.0	6.0	-	-	-	-	8.5	72.0	1.0	-	-	-	-
	6	-	20.0	-	-	8.0	-	10.2	8.5	72.0	-	-	1.0	-	1.6
	8	1/4"	20.0	-	-	10.0	-	13.5	8.5	72.0	-	-	1.0	-	1.6
	10	3/8"	20.0	-	12.0	13.0	14.0	-	8.5	72.0	-	1.0	1.5	2.0	-
10	10	3/8"	25.0	-	12.0	13.0	14.0	17.2	12.5	108.0	-	1.0	1.5	2.0	1.6
	15	1/2"	25.0	18.0	18.0	19.0	20.0	21.3	12.5	108.0	1.5	1.0	1.5	2.0	1.6
25	15	1/2"	25.0	18.0	18.0	19.0	20.0	21.3	19.0	120.0	1.5	1.0	1.5	2.0	1.6
	20	3/4"	25.0	22.0	22.0	23.0	24.0	26.9	19.0	120.0	1.5	1.0	1.5	2.0	1.6
	25	1"	25.0	28.0	28.0	29.0	30.0	33.7	19.0	120.0	1.5	1.0	1.5	2.0	2.0
40	32	1¼"	25.0	34.0	34.0	35.0	36.0	42.4	26.0	153.0	1.5	1.0	1.5	2.0	2.0
	40	1½"	30.5	40.0	40.0	41.0	42.0	48.3	26.0	153.0	1.5	1.0	1.5	2.0	2.0
50	50	2"	30.0	52.0	52.0	53.0	54.0	60.3	32.0	173.0	1.5	1.0	1.5	2.0	2.0

#### Dimensions in mm

MG = diaphragm size

#### 1) Connection type

Code 0: Spigot DIN

Code 16: Spigot DIN EN 10357 series B (2014 edition; formerly DIN 11850 series 1)

Code 17: Spigot EN 10357 series A/DIN 11866 series A formerly DIN 11850 series 2

Code 18: Spigot DIN 11850 series 3

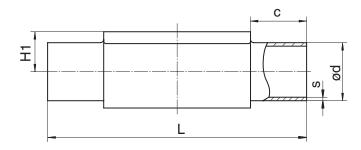
Code 60: Spigot ISO 1127/DIN EN 10357 series C (2014 edition)/DIN 11866 series B

#### 2) Valve body material

Code 40: 1.4435 (F316L), forged body

Code 42: 1.4435 (BN2), forged body,  $\Delta$  Fe < 0.5%

Code F4: 1.4539, forged body



Connection type spigot DIN/EN/ISO (code 0, 17, 60) 1, investment casting material (code C3) 2)

MG	DN	NPS	c (min)	ød		H1					
				Connection type				Co	nnection t	/pe	
				0	17	60			0	17	60
8	4	-	20.0	6,0	-	-	8.5	72.0	1,0	-	-
	6	-	20.0	-	8.0	-	8.5	72.0	-	1.0	-
	8	1/4"	20.0	-	10.0	13.5	8.5	72.0	-	1.0	1.6
	10	3/8"	20.0	-	13.0	-	8.5	72.0	-	1.5	-
10	10	3/8"	25.0	-	13.0	17.2	12.5	108.0	-	1.5	1.6
	15	1/2"	25.0	-	19.0	21.3	12.5	108.0	-	1.5	1.6
25	15	1/2"	25.0	-	19.0	21.3	13.0	120.0	-	1.5	1.6
	20	3/4"	25.0	-	23.0	26.9	16.0	120.0	-	1.5	1.6
	25	1"	25.0	-	29.0	33.7	19.0	120.0	-	1.5	2.0
40	32	1¼"	25.0	-	35.0	42.4	24.0	153.0	-	1.5	2.0
	40	1½"	30.5	-	41.0	48.3	26.0	153.0	-	1.5	2.0
50	50	2"	30.0	-	53.0	60.3	32.0	173.0	-	1.5	2.0

Dimensions in mm MG = diaphragm size

#### 1) Connection type

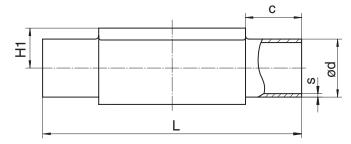
Code 0: Spigot DIN

Code 17: Spigot EN 10357 series A/DIN 11866 series A formerly DIN 11850 series 2 Code 60: Spigot ISO 1127/DIN EN 10357 series C (2014 edition)/DIN 11866 series B

#### 2) Valve body material

Code C3: 1.4435, investment casting

#### 9.5.2 Spigot ASME/BS (code 55, 59, 63, 64, 65)



Connection type spigot ASME/BS (code 55, 59, 63, 64, 65) 1), forged material (code 40, 42, F4) 2)

MG	DN	NPS	c (min)			ød			H1	L			S		
					Connection type				Connection type			type	pe		
				55	59	63	64	65			55	59	63	64	65
8	6	-	20.0	-	-	10.3	-	10.3	8.5	72.0	-	-	1.24	-	1.73
	8	1/4"	20.0	6.35	6.35	13.7	-	13.7	8.5	72.0	1.2	0.89	1.65	-	2.24
	10	3/8"	20.0	9.53	9.53	-	-	-	8.5	72.0	1.2	0.89	-	-	-
	15	1/2"	20.0	12.70	12.70	-	-	-	8.5	72.0	1.2	1.65	-	-	-
10	10	3/8"	25.0	9.53	9.53	17.1	-	17.1	12.5	108.0	1.2	0.89	1.65	-	2.31
	15	1/2"	25.0	12.70	12.70	21.3	21.3	21.3	12.5	108.0	1.2	1.65	2.11	1.65	2.77
	20	3/4"	25.0	19.05	19.05	-	-	-	12.5	108.0	1.2	1.65	-	-	-
25	15	1/2"	25.0	-	-	21.3	21.3	21.3	19.0	120.0	-	-	2.11	1.65	2.77
	20	3/4"	25.0	19.05	19.05	26.7	26.7	26.7	19.0	120.0	1.2	1.65	2.11	1.65	2.87
	25	1"	25.0	-	25.40	33.4	33.4	33.4	19.0	120.0	-	1.65	2.77	1.65	3.38
40	32	1¼"	25.0	-	-	42.2	42.2	42.2	26.0	153.0	-	-	2.77	1.65	3.56
	40	1½"	30.5	-	38.10	48.3	48.3	48.3	26.0	153.0	-	1.65	2.77	1.65	3.68
50	50	2"	30.0	-	50.80	60.3	60.3	60.3	32.0	173.0	-	1.65	2.77	1.65	3.91
	65	2½"	30.0	-	63.50	-	-	-	34.0	173.0	-	1.65	-	-	-

Connection type spigot ASME BPE (code 59) 1), investment casting material (code C3) 2)

MG	DN	NPS	c (min)	ød	H1	L	s
8	8	1/4"	20.0	6.35	8.5	72.0	0.89
	10	3/8"	20.0	9.53	8.5	72.0	0.89
	15	1/2"	20.0	12.70	8.5	72.0	1.65
10	20	3/4"	25.0	19.05	12.5	108.0	1.65
25	20	3/4"	25.0	19.05	16.0	120.0	1.65
	25	1"	25.0	25.40	19.0	120.0	1.65
40	40	1½"	30.5	38.10	26.0	153.0	1.65
50	50	2"	30.0	50.80	32.0	173.0	1.65

Dimensions in mm MG = diaphragm size

#### 1) Connection type

Code 55: Spigot BS 4825, part 1

Code 59: Spigot ASME BPE/DIN EN 10357 series C (from 2022 edition)/DIN 11866 series C

Code 63: Spigot ANSI/ASME B36.19M schedule 10s

Code 64: Spigot ANSI/ASME B36.19M schedule 5s

Code 65: Spigot ANSI/ASME B36.19M schedule 40s

#### 2) Valve body material

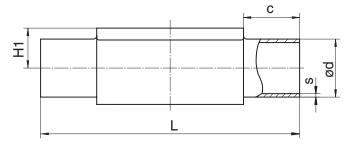
Code 40: 1.4435 (F316L), forged body

Code 42: 1.4435 (BN2), forged body,  $\Delta$  Fe < 0.5%

Code C3: 1.4435, investment casting

Code F4: 1.4539, forged body

#### 9.5.3 Spigot JIS/SMS (code 35, 36, 37)



Connection type spigot JIS/SMS (code 35, 36, 37) 1), forged material (code 40, 42, F4) 2)

MG	DN	NPS	c (min)	ød			H1				
				Connection type				Co	nnection ty	ре	
				35	36	37			35	36	37
8	6	-	20.0	-	10.5	-	8.5	72.0	-	1.20	-
	8	1/4"	20.0	-	13.8	-	8.5	72.0	-	1.65	-
10	10	3/8"	25.0	-	17.3	-	12.5	108.0	-	1.65	-
	15	1/2"	25.0	-	21.7	-	12.5	108.0	-	2.10	-
25	15	1/2"	25.0	-	21.7	-	19.0	120.0	-	2.10	-
	20	3/4"	25.0	-	27.2	-	19.0	120.0	-	2.10	-
	25	1"	25.0	25.4	34.0	25.0	19.0	120.0	1.2	2.80	1.2
40	32	1¼"	25.0	31.8	42.7	33.7	26.0	153.0	1.2	2.80	1.2
	40	1½"	30.5	38.1	48.6	38.0	26.0	153.0	1.2	2.80	1.2
50	50	2"	30.0	50.8	60.5	51.0	32.0	173.0	1.5	2.80	1.2
	65	2½"	30.0	63.5	-	63.5	34.0	173.0	2.0	-	1.6

Connection type spigot SMS (code 37) 1), investment casting material (code C3) 2)

MG	DN	NPS	c (min)	ød	H1		
25	25	1"	25.0	25.0	19.0	120.0	1.2
40	40	1½"	30.5	38.0	26.0	153.0	1.2
50	50	2"	30.0	51.0	32.0	173.0	1.2

Dimensions in mm MG = diaphragm size

#### 1) Connection type

Code 35: Spigot JIS-G 3447

Code 36: Spigot JIS-G 3459 schedule 10s

Code 37: Spigot SMS 3008

#### 2) Valve body material

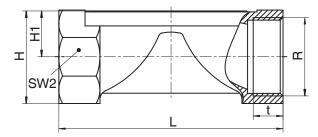
Code 40: 1.4435 (F316L), forged body

Code 42: 1.4435 (BN2), forged body,  $\Delta$  Fe < 0.5%

Code C3: 1.4435, investment casting

Code F4: 1.4539, forged body

#### 9.5.4 Threaded socket DIN (code 1)



Connection type threaded socket (code 1) 1), brass material (code 12) 2)

MG	DN	NPS	Н	H1			R	SW 2	t
10	12	3/8"	23.0	11.0	55.0	2	G 3/8	22.0	13.0
	15	1/2"	29.0	14.0	75.0	2	G 1/2	25.0	15.0

Connection type threaded socket (code 1) 1), investment casting material (code 37) 2)

MG	DN	NPS	Н	H1	L	n	R	SW 2	t
8	8	1/4"	19.0	9.0	72.0	6	G 1/4	18.0	11.0
10	12	3/8"	25.0	13.0	55.0	2	G 3/8	22.0	12.0
	15	1/2"	30.0	15.0	68.0	2	G 1/2	27.0	15.0
25	15	1/2"	28.3	14.8	85.0	6	G 1/2	27.0	15.0
	20	3/4"	33.3	17.3	85.0	6	G 3/4	32.0	16.0
	25	1"	42.3	21.8	110.0	6	G 1	41.0	13.0
40	32	1¼"	51.3	26.3	120.0	8	G 1¼	50.0	20.0
	40	1½"	56.3	28.8	140.0	8	G 1½	55.0	18.0
50	50	2"	71.3	36.0	165.0	8	G 2	70.0	26.0

Connection type threaded socket (code 1) 1), SG iron material (code 90) 2)

Connection	office and type threaded socket (bode 1), so non material (code 50)												
MG	DN	NPS	Н	H1			R	SW 2					
25	15	1/2"	32.7	16.7	85.0	6	G 1/2	32	15.0				
	20	3/4"	42.0	21.5	85.0	6	G 3/4	41	16.3				
	25	1"	46.7	23.7	110.0	6	G 1	46	19.1				
40	32	1¼"	56.0	28.5	120.0	6	G 1¼	55	21.4				
	40	1½"	66.0	33.5	140.0	6	G 1½	65	21.4				
50	50	2"	76.0	38.5	165.0	6	G 2	75	25.7				

Dimensions in mm

MG = diaphragm size

n = number of flats

1) Connection type

Code 1: Threaded socket DIN ISO 228

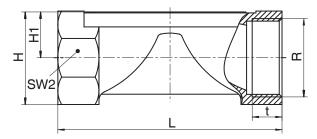
2) Valve body material

Code 12: CW614N, CW617N (brass)

Code 37: 1.4408, investment casting

Code 90: EN-GJS-400-18-LT (GGG 40.3)

#### 9.5.5 Threaded socket NPT (code 31)



Connection type threaded socket NPT (code 31) 1), investment casting material (code 37) 2)

MG	DN	NPS	Н	H1	Ĺ	n	R	SW 2	t
25	15	1/2"	28.3	14.8	85.0	6	NPT 1/2	27.0	14.0
	20	3/4"	33.3	17.3	85.0	6	NPT 3/4	32.0	14.0
	25	1"	42.3	21.8	110.0	6	NPT 1	41.0	17.0
40	32	1¼"	51.3	26.3	120.0	8	NPT 1¼	50.0	17.0
	40	1½"	56.3	28.8	140.0	8	NPT 1½	55.0	17.0
50	50	2"	71.3	36.3	165.0	8	NPT 2	70.0	18.0

Connection type threaded socket NPT (code 31) 1), SG iron material (code 90) 2)

MG	DN	NPS	Н	H1			R	SW 2	t
25	15	1/2"	32.7	16.7	85.0	6	NPT 1/2	32	13.6
	20	3/4"	42.0	21.5	85.0	6	NPT 3/4	41	14.1
	25	1"	46.7	23.7	110.0	6	NPT 1	46	16.8
40	32	1¼"	56.0	28.5	120.0	6	NPT 1¼	55	17.3
	40	1½"	66.0	33.5	140.0	6	NPT 1½	65	17.3
50	50	2"	76.0	38.5	165.0	6	NPT 2	75	17.7

Dimensions in mm

MG = diaphragm size

n = number of flats

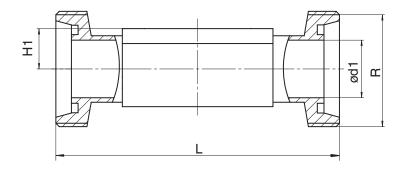
1) Connection type

Code 31: NPT female thread

2) Valve body material

Code 37: 1.4408, investment casting Code 90: EN-GJS-400-18-LT (GGG 40.3)

#### 9.5.6 Threaded spigot DIN (code 6)



Connection type threaded spigot DIN (code 6) 1), forged material (code 40, 42) 2)

	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,										
MG	DN	NPS	ød1	H1		R					
8	10	3/8"	10.0	8.5	92.0	Rd 28 x 1/8					
10	10	3/8"	10.0	12.5	118.0	Rd 28 x 1/8					
	15	1/2"	16.0	12.5	118.0	Rd 34 x 1/8					
25	15	1/2"	16.0	19.0	118.0	Rd 34 x 1/8					
	20	3/4"	20.0	19.0	118.0	Rd 44 x 1/6					
	25	1"	26.0	19.0	128.0	Rd 52 x 1/6					
40	32	1¼"	32.0	26.0	147.0	Rd 58 x 1/6					
	40	1½"	38.0	26.0	160.0	Rd 65 x 1/6					
50	50	2"	50.0	32.0	191.0	Rd 78 x 1/6					

Dimensions in mm MG = diaphragm size

#### 1) Connection type

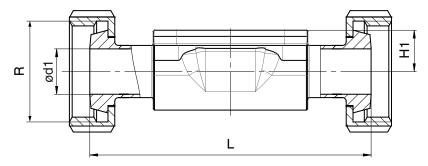
Code 6: Threaded spigot DIN 11851

#### 2) Valve body material

Code 40: 1.4435 (F316L), forged body

Code 42: 1.4435 (BN2), forged body,  $\Delta$  Fe < 0.5%

#### 9.5.7 Cone spigot DIN (code 6K)



Connection type cone spigot DIN (code 6K) 1), forged material (code 40, 42) 2)

MG	DN	NPS	ød1	H1	L	R
8	10	3/8"	10.0	8.5	90.0	Rd 28 x 1/8
10	10	3/8"	10.0	12.5	116.0	Rd 28 x 1/8
	15	1/2"	16.0	12.5	116.0	Rd 34 x 1/8
25	15	1/2"	16.0	19.0	116.0	Rd 34 x 1/8
	20	3/4"	20.0	19.0	114.0	Rd 44 x 1/6
	25	1"	26.0	19.0	127.0	Rd 52 x 1/6
40	32	1¼"	32.0	26.0	147.0	Rd 58 x 1/6
	40	1½"	38.0	26.0	160.0	Rd 65 x 1/6
50	50	2"	50.0	32.0	191.0	Rd 78 x 1/6

Dimensions in mm MG = diaphragm size

#### 1) Connection type

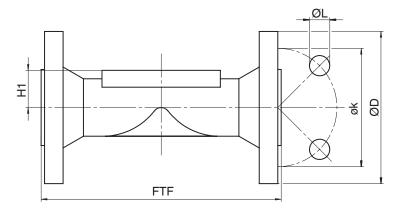
Code 6K: Cone spigot and union nut DIN 11851

#### 2) Valve body material

Code 40: 1.4435 (F316L), forged body

Code 42: 1.4435 (BN2), forged body,  $\Delta$  Fe < 0.5%

#### 9.5.8 Flange EN (code 8)



Connection type flange, length EN 558 (code 8) 1, SG iron material (code 17, 18, 83, 90), investment casting material (code 39, C3), forged material (code 40, 42) 2)

MG	DN	NPS	øD	F	ΓF		Н	1		øk	øL	n
				Mat	erial		Mat	erial				
				17, 18,	40, 42,	17, 18,	40, 42	C3	90			
				39, 83,	C3	39, 83						
				90								
25	15	1/2"	95.0	130.0	150.0	18.0	19.0	13.0	14.0	65.0	14.0	4
	20	3/4"	105.0	150.0	150.0	20.5	19.0	16.0	16.5	75.0	14.0	4
	25	1"	115.0	160.0	160.0	23.0	19.0	19.0	19.5	85.0	14.0	4
40	32	1¼"	140.0	180.0	180.0	28.7	26.0	24.0	23.0	100.0	19.0	4
	40	1½"	150.0	200.0	200.0	33.0	26.0	26.0	27.0	110.0	19.0	4
50	50	2"	165.0	230.0	230.0	39.0	32.0	32.0	32.0	125.0	19.0	4
	65	21/2"	185.0	290.0	-	51.0	-	-	38.7	145.0	19.0	4

Dimensions in mm

MG = diaphragm size

n = number of bolt holes

#### 1) Connection type

Code 8: Flange EN 1092, PN 16, form B, face-to-face dimension FTF EN 558 series 1, ISO 5752, basic series 1, length only for body configuration D

#### 2) Valve body material

Code 17: EN-GJS-400-18-LT (GGG 40.3), PFA lined

Code 18: EN-GJS-400-18-LT (GGG 40.3), PP lined

Code 39: 1.4408, PFA lined

Code 40: 1.4435 (F316L), forged body

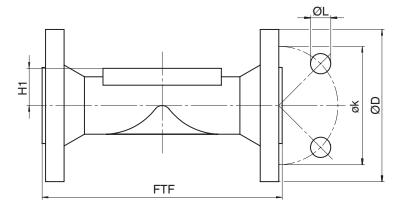
Code 42: 1.4435 (BN2), forged body,  $\Delta$  Fe < 0.5%

Code 83: EN-GJS-400-18-LT (GGG 40.3), hard rubber lined

Code 90: EN-GJS-400-18-LT (GGG 40.3)

Code C3: 1.4435, investment casting

#### 9.5.9 Flange JIS (code 34)



Connection type flange, length 558 (code 34) 1), investment casting material (code 39) 2)

MG	DN	NPS	øD	FTF	H1	øk	øL	n
25	15	1/2"	95.0	130.0	18.0	70.0	15.0	4
	20	3/4"	100.0	150.0	20.5	75.0	15.0	4
	25	1"	125.0	160.0	23.0	90.0	19.0	4
40	32	11/4	135.0	180.0	28.7	100.0	19.0	4
	40	1½"	140.0	200.0	33.0	105.0	19.0	4
50	50	2"	155.0	230.0	39.0	120.0	19.0	4

Dimensions in mm MG = diaphragm size

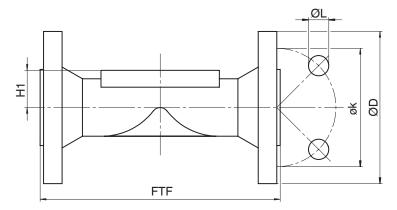
#### 1) Connection type

Code 34: Flange JIS B2220, 10K, RF, face-to-face dimension FTF EN 558 series 1, ISO 5752, basic series 1, length only for body configuration D

#### 2) Valve body material

Code 39: 1.4408, PFA lined

#### 9.5.10 Flange ANSI Class (code 38, 39)



Connection type flange, length MSS SP-88 (code 38) 1), SG iron material (code 17, 18, 83), investment casting material (code 39) 2)

MG	DN	NPS	øD	FI	FTF		øk	øL	n
				Mate	erial				
				17, 18, 39 83					
25	20	3/4"	100.0	146.0	146.4	20.5	69.9	15.9	4
	25	1"	110.0	146.0	146.4	23.0	79.4	15.9	4
40	40	1½"	125.0	175.0	171.4	33.0	98.4	15.9	4
50	50	2"	150.0	200.0	197.4	39.0	120.7	19.0	4
	65	21/2"	180.0	226.0	222.4	51.0	139.7	19.0	4

Dimensions in mm

MG = diaphragm size

n = number of bolt holes

#### 1) Connection type

Code 38: Flange ANSI Class 150 RF, face-to-face dimension FTF MSS SP-88, length only for body configuration D

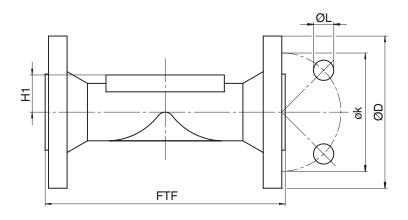
#### 2) Valve body material

Code 17: EN-GJS-400-18-LT (GGG 40.3), PFA lined

Code 18: EN-GJS-400-18-LT (GGG 40.3), PP lined

Code 39: 1.4408, PFA lined

Code 83: EN-GJS-400-18-LT (GGG 40.3), hard rubber lined



Connection type flange, length EN 558 (code 39) 1), SG iron material (code 17, 18, 83, 90), investment casting material (code 39, C3), forged material (code 40, 42) 2)

MG	DN	NPS	øD		ΓF		Н	l1		øk	øL	n
				Mat	erial		Mat	erial				
				17, 18,	40, 42,	17, 18,	C3	40, 42	90			
				39, 83,	C3	39, 83						
				90								
25	15	1/2"	90.0	130.0	150.0	-	13.0	19.0	14.0	60.3	15.9	4
	20	3/4"	100.0	150.0	150.0	20.5	16.0	19.0	16.5	69.9	15.9	4
	25	1"	110.0	160.0	160.0	23.0	19.0	19.0	19.5	79.4	15.9	4
40	32	1¼"	115.0	180.0	180.0	28.7	24.0	26.0	23.0	88.9	15.9	4
	40	1½"	125.0	200.0	200.0	33.0	26.0	26.0	27.0	98.4	15.9	4
50	50	2"	150.0	230.0	230.0	39.0	32.0	32.0	32.0	120.7	19.0	4
	65	2½"	180.0	290.0	-	51.0	-	-	38.7	139.7	19.0	4

Dimensions in mm

MG = diaphragm size

n = number of bolt holes

#### 1) Connection type

Code 39: Flange ANSI Class 125/150 RF, face-to-face dimension FTF EN 558 series 1, ISO 5752, basic series 1, length only for body configuration D

#### 2) Valve body material

Code 17: EN-GJS-400-18-LT (GGG 40.3), PFA lined

Code 18: EN-GJS-400-18-LT (GGG 40.3), PP lined

Code 39: 1.4408, PFA lined

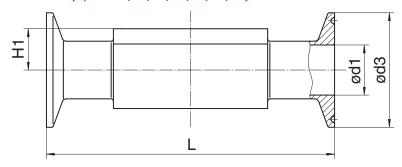
Code 40: 1.4435 (F316L), forged body

Code 42: 1.4435 (BN2), forged body,  $\Delta$  Fe < 0.5%

Code 83: EN-GJS-400-18-LT (GGG 40.3), hard rubber lined

Code 90: EN-GJS-400-18-LT (GGG 40.3) Code C3: 1.4435, investment casting

#### 9.5.11 Clamp (code 80, 82, 88, 8A, 8E, 8P, 8T)



Connection type clamp DIN/ASME (code 80, 88, 8P, 8T) 1), forged material (code 40, 42, F4) 2)

MG	DN	NPS	ød1 ød3		H1	L			
			Connection type		Connection type			Connection type	
			80, 8P	88, 8T	80, 8P	88, 8T		80, 8P	88, 8T
8	8	1/4"	4.57	-	25.0	-	8.5	63.5	-
	10	3/8"	7.75	-	25.0	-	8.5	63.5	-
	15	1/2"	9.40	9.40	25.0	25.0	8.5	63.5	108.0
10	15	1/2"	9.40	940	25.0	25.0	12.5	88.9	108.0
	20	3/4"	15.75	15.75	25.0	25.0	12.5	101.6	117.0
25	20	3/4"	15.75	15.75	25.0	250	19.0	101.6	117.0
	25	1"	22.10	22.10	50.5	50.5	19.0	114.3	127.0
40	40	1½"	34.80	34.80	50.5	50.5	26.0	139.7	159.0
50	50	2"	47.50	47.50	64.0	64.0	32.0	158.8	190.0
	65	2½"	60.20	60.20	77.5	77.5	34.0	193.8	216.0

Dimensions in mm MG = diaphragm size

#### 1) Connection type

Code 80: Clamp ASME BPE, face-to-face dimension FTF ASME BPE, length only for body configuration D

Code 88: Clamp ASME BPE, for pipe ASME BPE, face-to-face dimension FTF EN 558 series 7, length only for body configuration D

Code 8P: Clamp DIN 32676 series C, face-to-face dimension FTF ASME BPE, length only for body configuration D

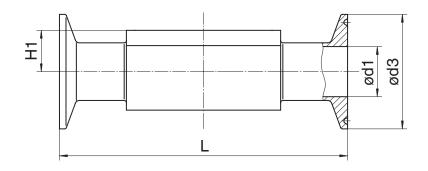
Code 8T: Clamp DIN 32676 series C, face-to-face dimension FTF EN 558 series 7, length only for body configuration D

#### 2) Valve body material

Code 40: 1.4435 (F316L), forged body

Code 42: 1.4435 (BN2), forged body,  $\Delta$  Fe < 0.5%

Code F4: 1.4539, forged body



Connection type clamp DIN/ISO (code 82, 8A, 8E) 1), forged material (code 40, 42, F4) 2)

online strong bit (100 (0000 02, 04, 02) , longed material (0000 40, 42, 14)												
MG	DN	NPS	ød1 ød3			H1						
			Connection type		Connection type				Connection type			
			82	8A	8E	82	8A	8E		82	8A	8E
8	6	1/8"	7.0	6.0	-	25.0	25.0	-	8.5	63.5	63.5	-
	8	1/4"	10.3	8.0	-	25.0	25.0	-	8.5	63.5	63.5	-
	10	3/8"	-	10.0	-	-	34.0	-	8.5	-	88.9	-
10	10	3/8"	14.0	10.0	-	25.0	34.0	-	12.5	108.0	108.0	-
	15	1/2"	18.1	16.0	-	50.5	34.0	-	12.5	108.0	108.0	-
25	15	1/2"	18.1	16.0	-	50.5	34.0	-	19.0	108.0	108.0	-
	20	3/4"	23.7	20.0	-	50.5	34.0	-	19.0	117.0	117.0	-
	25	1"	29.7	26.0	22.6	50.5	50.5	50.5	19.0	1270	127.0	127.0
40	32	1¼"	38.4	32.0	31.3	64.0	50.5	50.5	26.0	146.0	146.0	146.0
	40	1½"	44.3	38.0	35.6	64.0	50.5	50.5	26.0	159.0	159.0	159.0
50	50	2"	56.3	50.0	48.6	77.5	64.0	64.0	32.0	190.0	190.0	190.0
	65	21/2"	-	-	60.3	-	-	77.5	34.0	-	-	216.0

Dimensions in mm

MG = diaphragm size

#### 1) Connection type

Code 82: Clamp DIN 32676 series B, face-to-face dimension FTF EN 558 series 7, length only for body configuration D Code 8A: Clamp DIN 32676 series A, face-to-face dimension FTF acc. to EN 558 series 7, length only for body configuration D Code 8E: Clamp ISO 2852 for pipe ISO 2037, clamp SMS 3017 for pipe SMS 3008 face-to-face dimension FTF EN 558 series 7, length only for body configuration D

#### 2) Valve body material

Code 40: 1.4435 (F316L), forged body

Code 42: 1.4435 (BN2), forged body,  $\Delta$  Fe < 0.5%

Code F4: 1.4539, forged body

#### 10 Manufacturer's information

#### 10.1 Delivery

 Check that all parts are present and check for any damage immediately upon receipt.

The product's performance is tested at the factory. The scope of delivery is apparent from the dispatch documents and the design from the order number.

#### 10.2 Transport

- Only transport the product by suitable means. Do not drop. Handle carefully.
- 2. After the installation dispose of transport packaging material according to relevant local or national disposal regulations / environmental protection laws.

#### 10.3 Storage

- 1. Store the product free from dust and moisture in its original packaging.
- 2. Avoid UV rays and direct sunlight.
- 3. Do not exceed the maximum storage temperature (see chapter "Technical data").
- 4. Do not store solvents, chemicals, acids, fuels or similar fluids in the same room as GEMÜ products and their spare parts.

#### 11 Installation in piping

#### 11.1 Preparing for installation

#### **⚠** WARNING

#### The equipment is subject to pressure!

- Risk of severe injury or death
- Depressurize the plant.
- Completely drain the plant.

#### **MARNING**



#### Corrosive chemicals!

- ▶ Risk of caustic burns
- Wear appropriate protective gear.
- Completely drain the plant.

#### **⚠** CAUTION



#### Hot plant components!

- ▶ Risk of burns
- Only work on plant that has cooled down.

#### **⚠** CAUTION

#### Exceeding the maximum permissible pressure.

- Damage to the product
- Provide precautionary measures against exceeding the maximum permitted pressures caused by pressure surges (water hammer).

#### **A** CAUTION

#### Use as step.

- ▶ Damage to the product
- Risk of slipping-off
- Choose the installation location so that the product cannot be used as a foothold.
- Do not use the product as a step or a foothold.

#### **NOTICE**

#### Suitability of the product!

► The product must be appropriate for the piping system operating conditions (medium, medium concentration, temperature and pressure) and the prevailing ambient conditions.

#### **NOTICE**

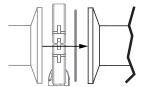
#### **Tools**

- The tools required for installation and assembly are not included in the scope of delivery.
- Use appropriate, functional and safe tools.
- 1. Ensure the product is suitable for the relevant application.
- 2. Check the technical data of the product and the materials.
- 3. Keep appropriate tools ready.
- Wear appropriate protective gear as specified in the plant operator's quidelines.
- 5. Comply with appropriate regulations for the connections.
- 6. Installation work must be performed by trained personnel.
- 7. Shut off the plant or plant component.
- 8. Secure the plant or plant component against recommissioning.
- 9. Depressurize the plant or plant component.
- 10. Completely drain the plant or plant component and allow it to cool down until the temperature is below the media vaporization temperature and cannot cause scalding.
- 11. Correctly decontaminate, rinse and ventilate the plant or plant component.
- 12. Lay piping so that the product is protected against transverse and bending forces, and also vibrations and tension.
- 13. Only install the product between matching aligned pipes (see chapters below).
- 14. Pay attention to the installation position (see "Installation position" chapter).

#### 11.2 Installation position

The installation position of the product is optional.

#### 11.3 Installation with clamp connections



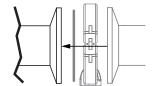


Fig. 1: Clamp connection

#### **NOTICE**

#### **Gasket and clamp**

- ► The gasket and clamps for clamp connections are not included in the scope of delivery.
- 1. Keep ready gasket and clamp.
- 2. Carry out preparation for installation (see chapter "Preparing for installation").
- 3. Insert the corresponding gasket between the body of the product and the pipe connection.
- 4. Connect the gasket between the body of the product and the pipe connection using clamps.
- 5. Re-attach or reactivate all safety and protective devices.

#### 11.4 Installation with butt weld spigots

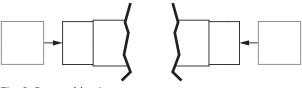


Fig. 2: Butt weld spigots

- 1. Carry out preparations for installation (see chapter "Preparing for installation").
- 2. Adhere to good welding practices!
- Disassemble the actuator with the diaphragm before welding in the valve body (see "Removing the actuator" chapter).
- 4. Weld the body of the product in the piping.
- 5. Allow butt weld spigots to cool down.
- 6. Reassemble the valve body and the actuator with diaphragm (see "Mounting the actuator" chapter).
- 7. Re-attach or reactivate all safety and protective devices.
- 8. Flush the system.

#### 11.5 Installation with threaded sockets

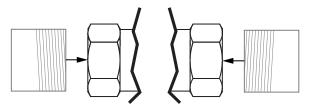


Fig. 3: Threaded socket

#### **NOTICE**

#### Sealing material

- ► The sealing material is not included in the scope of delivery.
- Only use appropriate sealing material.
- 1. Keep thread sealant ready.
- Carry out preparations for installation (see chapter "Preparing for installation").
- Screw the threaded connections into the pipe in accordance with valid standards.
- 4. Screw the body of the product onto the piping using appropriate thread sealant.
- 5. Re-attach or reactivate all safety and protective devices.

#### 11.6 Installation with threaded spigots

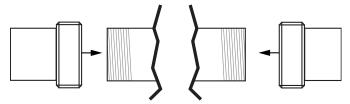


Fig. 4: Threaded spigots

#### **NOTICE**

#### Thread sealant

- The thread sealant is not included in the scope of delivery.
- Only use appropriate thread sealant.
- 1. Keep thread sealant ready.
- 2. Carry out preparations for installation (see chapter "Preparing for installation").
- 3. Screw the pipe into the threaded connection of the valve body in accordance with valid standards.
  - ⇒ Use appropriate thread sealant.
- 4. Re-attach or reactivate all safety and protective devices.

#### 11.7 Installation with flanged connection

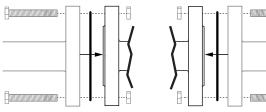


Fig. 5: Flanged connection

#### **NOTICE**

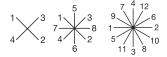
#### Sealing material

- The sealing material is not included in the scope of delivery.
- Only use appropriate sealing material.

#### **NOTICE**

#### **Connector elements**

- ► The connector elements are not included in the scope of delivery.
- Only use connector elements made of approved materials.
- Observe permissible tightening torque of the bolts.
- 1. Keep sealing material ready.
- 2. Carry out preparations for installation (see chapter "Preparing for installation").
- 3. Ensure clean, undamaged sealing surfaces on the connection flanges.
- 4. Align flanges carefully before installing them.
- 5. Clamp the product centrally between the piping with flanges.
- 6. Centre the gaskets.
- 7. Connect the valve flange and the piping flange using appropriate sealing materials and matching bolting.
- 8. Use all flange holes.
- 9. Tighten the bolts diagonally.



10. Re-attach or reactivate all safety and protective devices.

#### 12 Operation

#### 12.1 Manual override

#### **MARNING**

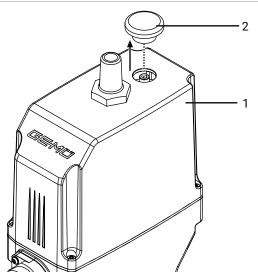
# A

#### Damage to the product!

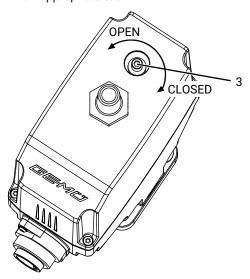
- Risk of damage to the product
- Manufacturer liability and guarantee will be void.
- Only operate the manual override by hand, because there is no mechanical stop.

#### **NOTICE**

Manual override may only be used in extreme emergencies as there is a risk of damaging the valve drive.
 Use of the manual override voids the manufacturer's liability.



1. Remove the sealing plug **2** from the actuator cover **1** using an appropriate tool.



- 2. Operate the manual override **3** with the hexagon socket (WAF3).
  - ⇒ Turn clockwise to close the valve.

- $\Rightarrow$  Turn anticlockwise to open the valve.
- 3. After actuation, the plug must be reinserted, otherwise the IP protection is no longer guaranteed and the actuator may be damaged.

#### 13 Troubleshooting

Error	Possible cause	Troubleshooting		
The product is leaking downstream (does not close or does not close fully)	Operating pressure too high	Operate the product with operating pressure specified in datasheet		
	Foreign matter between shut-off dia- phragm and valve body	Remove the actuator, remove foreign matter, check diaphragm and valve body for potential damage, replace damaged parts if necessary		
	Valve body leaking or damaged	Check valve body for potential damage, replace valve body if necessary		
	Shut-off diaphragm faulty	Check shut-off diaphragm for potential damage, replace the shut off diaphragm if necessary		
The product does not open or does not	Actuator defective	Replace the actuator		
open fully	Shut-off diaphragm incorrectly mounted	Remove the actuator, check the dia- phragm mounting, replace the shut-off diaphragm if necessary		
	Operating pressure too high	Operate the product with operating pressure specified in datasheet		
	Foreign matter in the product	Remove and clean the product		
	The actuator design is not suitable for the operating conditions	Use an actuator that is designed for the operating conditions		
	Voltage is not connected	Connect voltage		
	Cable ends incorrectly wired	Wire cable ends correctly		
The product does not close or does not close fully	The actuator design is not suitable for the operating conditions	Use an actuator that is designed for the operating conditions		
	Foreign matter in the product	Remove and clean the product		
	Voltage is not connected	Connect voltage		
The product is leaking between actuator and valve body	Shut-off diaphragm incorrectly mounted	Remove the actuator, check the dia- phragm mounting, replace the shut-off diaphragm if necessary		
	Bolting between valve body and actuator loose	Tighten bolting between valve body and actuator		
	Shut-off diaphragm faulty	Check shut-off diaphragm for potential damage, replace the shut-off diaphragm if necessary		
	Actuator/valve body damaged	Replace actuator/valve body		
The product is leaking between actuator	Mounting parts loose	Retighten mounting parts		
flange and valve body	Valve body / actuator damaged	Replace valve body/actuator		
Valve body of the GEMÜ product is leaking	Valve body of the GEMÜ product is faulty or corroded	Check valve body of the GEMÜ product for potential damage, replace valve body if necessary		
Body of the GEMÜ product is leaking	Incorrect installation	Check installation of valve body in piping		
Valve body connection to piping leaking	Incorrect installation	Check installation of valve body in piping		

#### 14 Inspection and maintenance

#### **MARNING**

#### The equipment is subject to pressure!

- Risk of severe injury or death
- Depressurize the plant.
- Completely drain the plant.

#### **⚠** CAUTION

#### Use of incorrect spare parts!

- ▶ Damage to the GEMÜ product
- Manufacturer liability and guarantee will be void
- Use only genuine parts from GEMÜ.

#### **A** CAUTION



#### Hot plant components!

- Risk of burns
- Only work on plant that has cooled down.

#### **NOTICE**

#### **Exceptional maintenance work!**

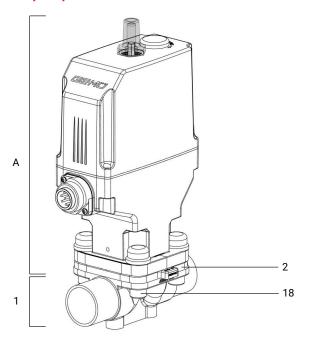
- ▶ Damage to the GEMÜ product
- Any maintenance work and repairs not described in these operating instructions must not be performed without consulting the manufacturer first.

The operator must carry out regular visual examination of the GEMÜ products dependent on the operating conditions and the potential danger in order to prevent leakage and damage.

The product also must be disassembled and checked for wear in the corresponding intervals.

- 1. Have servicing and maintenance work performed by trained personnel.
- 2. Wear appropriate protective gear as specified in plant operator's quidelines.
- 3. Shut off plant or plant component.
- 4. Secure the plant or plant component against recommissioning.
- 5. Depressurize the plant or plant component.
- 6. Actuate GEMÜ products which are always in the same position four times a year.
- If necessary, the end position counter **User** can be reset after maintenance or other changes under parameter Cycle Counter.

#### 14.1 Spare parts



ltem	Name	Order designation
Α	Actuator	9629
1	Valve body	K600
2	Diaphragm	600M
18	Bolt	629S30

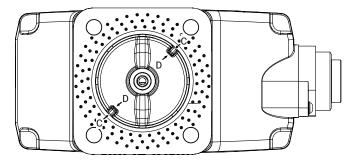
#### 14.2 Removing the actuator

- 1. Move the actuator A to the open position.
- 2. Loosen the fastening elements between actuator **A** and valve body **1** diagonally and remove them.
- 3. Lift actuator A off valve body 1.
- 4. Move the actuator A to the closed position.
- 5. Clean all parts of contamination (do not damage parts during cleaning).
- 6. Check parts for potential damage, replace if necessary (only use genuine parts from GEMÜ).

#### 14.3 Removing the diaphragm

- 1. Remove actuator A (see chapter "Removing the actuator").
- 2. Unscrew the diaphragm.
  - ⇒ Please note: Depending on the version, the compressor may fall out.
- 3. Clean all parts of contamination (do not damage parts during cleaning).
- 4. Check parts for potential damage, replace if necessary (only use genuine parts from GEMÜ).

#### 14.4 Mounting the compressor



- 1. Place the compressor loosely on the actuator spindle.
- 2. Fit recesses D into guides C.
- ⇒ The compressor must be able to be moved freely between the guides.

#### 14.5 Mounting the diaphragm

#### 14.5.1 Mounting the convex diaphragm

#### **NOTICE**

► Fit the diaphragms suitable for the product (suitable for medium, medium concentration, temperature and pressure). The diaphragm is a wearing part. Check the technical condition and function of the product before commissioning and during the whole term of use. Carry out checks regularly and determine the check intervals in accordance with the conditions of use and/or the regulatory codes and provisions applicable for this application.

#### **NOTICE**

▶ If the diaphragm is not screwed into the adapter far enough, the closing force is transmitted directly onto the diaphragm pin and not via the compressor. This will cause damage and early failure of the diaphragm and leakage of the product. If the diaphragm is screwed in too far, perfect sealing at the valve seat will not be achieved. The function of the product is no longer ensured.

#### **NOTICE**

Incorrectly mounted diaphragms cause the product leakage and emission of medium. In this case, remove the diaphragms, check the complete valve and diaphragms and reassemble again proceeding as described above.

#### **NOTICE**

▶ The compressor is loose and can fall out.

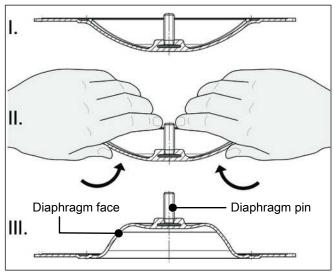


Fig. 6: Inverting the diaphragm face

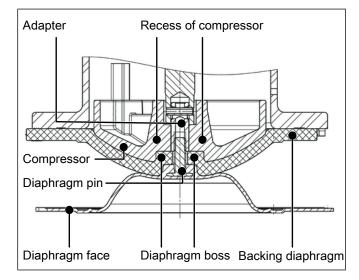
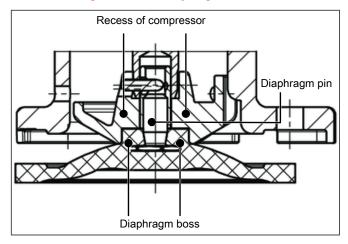


Fig. 7: Screwing in the diaphragm face

- 1. Move the actuator **A** to the closed position.
- 2. Mount the compressor (see "Mounting the compressor").
- 3. Check if the compressor is fitted in the guides.
- 4. Invert the new diaphragm face manually (use a clean, padded mat with larger nominal sizes).
- 5. Position the new backing diaphragm onto the compressor.
- 6. Position the diaphragm face onto the backing diaphragm.
- 7. Screw diaphragm face tightly into the compressor manually.
  - ⇒ The diaphragm boss must fit closely in the recess of the compressor.
- 8. If it is difficult to screw it in, check the thread and replace damaged parts.
- 9. When definitive resistance is felt, turn back the diaphragm until its bolt holes are in correct alignment with the bolt holes of the actuator.
- 10. Press the diaphragm face tightly onto the backing diaphragm manually so that it returns to its original shape and fits closely on the backing diaphragm.
- 11. Align the weir of compressor and diaphragm in parallel.

#### 14.5.2 Mounting the concave diaphragm



- 1. Move the actuator A to the closed position.
- 2. Mount the compressor (see "Mounting the compressor").
- 3. Check if the compressor is fitted in the guides.
- Manually screw new diaphragm tightly into the compressor.
- 5. Check if the diaphragm boss fits closely in the recess of the compressor.
- 6. If it is difficult to screw it in, check the thread and replace damaged parts.
- 7. When definitive resistance is felt, turn back the diaphragm until its bolt holes are in correct alignment with the bolt holes of the actuator.
- 8. Align the weir of compressor and diaphragm in parallel.

#### 14.6 Mounting the actuator

#### **NOTICE**

#### Diaphragms set in the course of time.

- ▶ Leakage
- After disassembly/assembly of the product, check that the bolts and nuts on the body are tight and retighten if required.
- Retighten the bolts and nuts at the very latest after the first sterilization process.
- 1. Move the actuator **A** to the open position.
- 2. Position actuator **A** with the mounted diaphragm on the valve body **1**.
- 3. Screw in bolts, washers and nuts hand tight.
  - ⇒ Fastening elements may vary depending on the diaphragm size and/or valve body version.
- 4. Move the actuator **A** to the closed position.
- 5. Open actuator A approx. 20%.
- 6. Fully tighten the bolts with nuts diagonally.



- 7. Ensure even compression of the diaphragm (approx. 10 to 15%).
  - Even compression is detected by an even bulge to the outside

**Please note:** For a code 5M diaphragm (convex diaphragm), the PTFE diaphragm face and the EPDM backing diaphragm must be positioned level with and parallel to the valve body.

- 8. With the valve fully assembled, check the function and tightness.
- 9. Carry out initialisation.

#### 15 Removal from piping

#### **⚠** WARNING



#### Corrosive chemicals!

- Risk of caustic burns
- Wear appropriate protective gear.
- Completely drain the plant.
- 1. Remove in reverse order to installation.
- 2. Unscrew the electrical wiring.
- 3. Disassemble the product. Observe warning notes and safety information.

#### 16 Returns

Legal regulations for the protection of the environment and personnel require that the completed and signed return delivery note is included with the dispatch documents. Returned goods can be processed only when this note is completed. If no return delivery note is included with the product, GEMÜ cannot process credits or repair work but will dispose of the goods at the operator's expense.

- 1. Clean the product.
- 2. Request a return delivery note from GEMÜ.
- 3. Complete the return delivery note.
- 4. Send the product with a completed return delivery note to  $\mathsf{GEM}\ddot{\mathsf{U}}.$

#### 17 EU Declaration of Incorporation according to the EC Machinery Directive 2006/42/EC, Annex II B



# **EU Declaration of Incorporation**

#### according to the EC Machinery Directive 2006/42/EC, Annex II B

We, the company GEMÜ Gebr. Müller Apparatebau GmbH & Co. KG

Fritz-Müller-Strasse 6-8

74653 Ingelfingen-Criesbach, Germany

hereby declare under our sole responsibility that the below-mentioned product complies with the relevant essential health and safety requirements in accordance with Annex I of the above-mentioned Directive.

Product: GEMÜ 629

**Product name:** Motorized diaphragm valve

The following essential health and safety 1.1.2; 1.1.3; 1.1.5; 1.3.2; 1.3.4; 1.3.7; 1.3.8; 1.5.1; 1.5.13; 1.5.2; 1.5.4; 1.5.6; requirements of the EC Machinery Dir 1.5.7; 1.5.8; 1.6.1; 1.6.3; 1.6.5; 1.7.1; 1.7.1; 1.7.1; 1.7.2; 1.7.3; 1.7.4; 1.7.4.1; 1.7.4.2;

ective 2006/42/EC, Annex I have been 1.7.4.3.

applied or adhered to:

The following harmonized standards (or EN ISO 12100:2010 parts thereof) have been applied:

We also declare that the specific technical documents have been created in accordance with part B of Annex VII.

The manufacturer undertakes to transmit relevant technical documents on the partly completed machinery to the national authorities in response to a reasoned request. This communication takes place electronically.

This does not affect the industrial property rights.

The partly completed machinery may be commissioned only if it has been determined, if necessary, that the machinery into which the partly completed machinery is to be installed meets the provisions of the Machinery Directive 2006/42/EC.

M. Barghoorn Head of Global Technics

Ingelfingen, 16/06/2023

GEMÜ Gebr. Müller Apparatebau GmbH & Co. KG Fritz-Müller-Straße 6-8 D-74653 Ingelfingen-Criesbach www.gemu-group.com info@gemue.de

#### 18 EU Declaration of Conformity in accordance with 2014/68/EU (Pressure Equipment Directive)



# **EU Declaration of Conformity**

#### in accordance with 2014/68/EU (Pressure Equipment Directive)

We, the company GEMÜ Gebr. Müller Apparatebau GmbH & Co. KG

Fritz-Müller-Strasse 6-8

74653 Ingelfingen-Criesbach, Germany

hereby declare under our sole responsibility that the below-mentioned product complies with the regulations of the above-mentioned Directive.

Product: GEMÜ 629

Product name: Motorized diaphragm valve

Notified body: TÜV Rheinland Industrie Service GmbH

Am Grauen Stein 1

51105 Cologne, Germany

ID number of the notified body: 0035

No. of the QA certificate: 01 202 926/Q-02 0036

**Conformity assessment procedure:** Module H1 **The following harmonized standards (or** EN 13397:2001

parts thereof) have been applied:

#### Information for products with a nominal size ≤ DN 25:

The products are developed and produced according to GEMÜ's in-house process instructions and standards of quality which comply with the requirements of ISO 9001 and ISO 14001. According to Article 4, Paragraph 3 of the Pressure Equipment Directive 2014/68/EU, these products must not be identified by a CE-marking.

Other applied technical standards / Remarks:

• AD 2000

M. Barghoorn Head of Global Technics

Ingelfingen, 16/06/2023

GEMÜ Gebr. Müller Apparatebau GmbH & Co. KG Fritz-Müller-Straße 6-8 D-74653 Ingelfingen-Criesbach www.gemu-group.com info@gemue.de

#### 19 EU Declaration of Conformity in accordance with 2014/30/EU (EMC Directive)



# **EU Declaration of Conformity**

#### in accordance with 2014/30/EU (EMC Directive)

We, the company GEMÜ Gebr. Müller Apparatebau GmbH & Co. KG

Fritz-Müller-Strasse 6-8

74653 Ingelfingen-Criesbach, Germany

hereby declare under our sole responsibility that the below-mentioned product complies with the regulations of the above-mentioned Directive.

Product: GEMÜ 629

**Product name:** Motorized diaphragm valve

 $\textbf{The following harmonized standards (or \ EN 61000-6-4:2007/A1:2011; EN 61000-6-2:2005/AC:2005)}\\$ 

parts thereof) have been applied:

M. Barghoorn

Head of Global Technics

Ingelfingen, 16/06/2023

#### 20 EU Declaration of Conformity In accordance with 2011/65/EU (RoHS Directive)



# **EU Declaration of Conformity**

#### In accordance with 2011/65/EU (RoHS Directive)

We, the company GEMÜ Gebr. Müller Apparatebau GmbH & Co. KG

Fritz-Müller-Strasse 6-8

74653 Ingelfingen-Criesbach, Germany

hereby declare under our sole responsibility that the below-mentioned product complies with the regulations of the above-mentioned Directive.

Product: GEMÜ 629

**Product name:** Motorized diaphragm valve **The following harmonized standards (or** EN IEC 63000:2018

parts thereof) have been applied:

M. Barghoorn

Head of Global Technics

Ingelfingen, 16/06/2023





