GEMÜ 539 eSyDrive

Motorized globe valve

Features

- Linear or modified equal-percentage control characteristics
- High flow rates
- Force and speed are variably adjustable
- Extensive diagnostic facilities
- Operable via web interface eSy-Web
- Integral optical position indicator and LED high visibility display
- Suitable for vacuum up to 20 mbar (a)

Description

The GEMÜ 539 eSyDrive is a motorized 2/2-way globe valve with a hollow shaft electric actuator. The eSyDrive hollow shaft actuator can be operated as On/Off or with integrated positioner or process controller. The valve spindle is sealed by a self-adjusting gland packing providing low-maintenance and reliable valve spindle sealing even after a long service life. A wiper ring fitted in front of the gland packing protects the seal against contamination and damage. An integral optical and electrical position indicator is standard.

Technical specifications

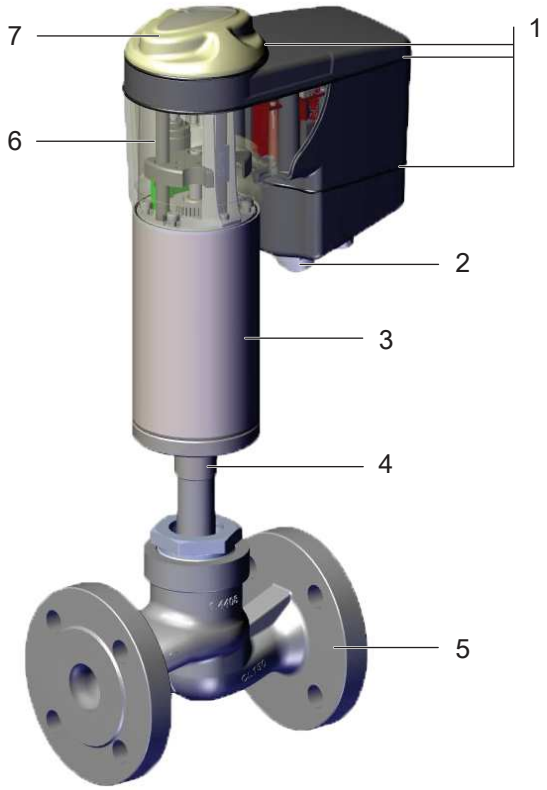
- **Media temperature:** -10 to 180 °C
- **Ambient temperature:** -10 to 60 °C
- **Operating pressure :** 0 to 40 bar
- **Nominal sizes:** DN 15 to 100
- **Body configurations:** 2/2-way body
- **Connection types:** Flange
- **Connection standards:** ANSI I ASME I EN I ISO I JIS
- **Body materials:** 1.4408, investment casting material I EN-GJS-400-18-LT, SG iron material
- **Seat seal materials:** 1.4404 I PTFE I PTFE, reinforced
- **Supply voltage:** 24 V DC
- **Actuating speed:** max. 6 mm/s
- **Protection class:** IP 65
- **Conformities:** EAC I FDA I Reg. (EU) No. 10/2011 I Regulation (EC) No. 1935/2004

Technical data depends on the respective configuration

further information
webcode: GW-539

Product description

Construction



Item	Name	Materials
1	O-rings	EPDM
2	Electrical connections	
3	Actuator base	1.4301
4	Distance piece with leak detection hole	1.4408
5	Valve body	1.4408, SG iron
6	Optical position indicator	PESU
7	Cover with high visibility LED, manual override and on-site control	PESU

GEMÜ CONEXO

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

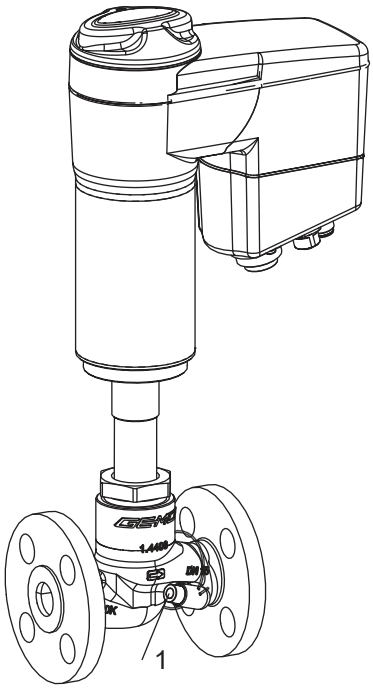
Thanks to serialization, every valve and every relevant valve component such as the body, actuator or diaphragm, and even automation components, can be clearly traced and read using the CONEXO pen RFID reader. The CONEXO app, which can be installed on mobile devices, not only facilitates and improves 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

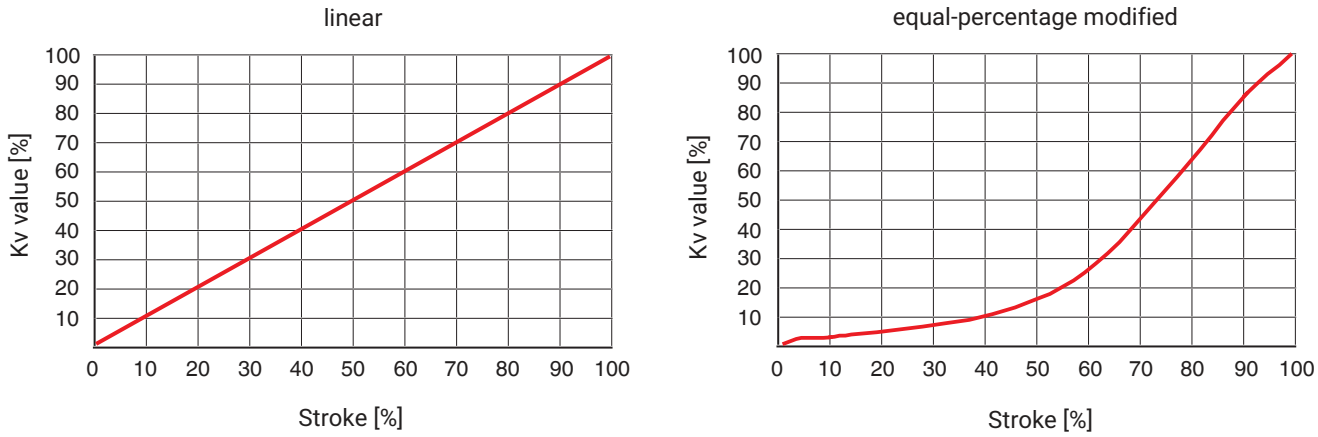
Ordering

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

In the corresponding design with CONEXO, this product has an RFID chip (1) for electronic identification purposes. The position of the RFID chip can be seen below. The CONEXO pen helps read out information stored in the RFID chips. The CONEXO app or CONEXO portal is required to view this information.

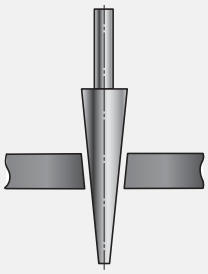
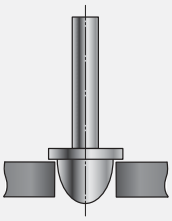


Kv value diagram



The diagram shows the approximative curve of the Kv value characteristic. The characteristic may deviate depending on valve body, nominal size, regulating cone and valve stroke.

Regulating needle / Regulating cone

Regulating needle	Regulating cone
	
Regulating needle: RAxxx – RCxxx (reduced valve seat)	Regulating cone: DN 15 - 50

Availability

Availability of valve bodies

Flange

DN	Connection types code [1]						
	8		10	11	39		48
	Material code [2]						
	37	90	37	37	37	90	37
15	-	X	-	X	X	X	X
20	-	X	-	X	X	X	X
25	-	X	-	X	X	X	X
32	-	X	X	X	X	X	-
40	-	X	X	X	X	X	X
50	X	X	-	-	X	X	X
65	X	X	-	-	X	X	-
80	X	X	-	-	X	X	-
100	X	X	-	-	X	X	-

X = Standard

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
Code 10: Flange EN 1092, PN 25, form B, face-to-face dimension FTF EN 558 series 1, ISO 5752, basic series 1
Code 11: Flange EN 1092, PN 40, form B, face-to-face dimension FTF EN 558 series 1, ISO 5752, basic series 1
Code 39: Flange ANSI Class 150 RF, face-to-face dimension FTF EN 558 series 1, ISO 5752, basic series 1
Code 48: Flange JIS 20K, face-to-face dimension FTF EN 558 series 10, ASME/ANSI B16.10 table 1, column 16, DN 50 drilled to JIS 10K

2) **Valve body material**
Code 37: 1.4408, investment casting
Code 90: EN-GJS-400-18-LT (GGG 40.3)

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
Globe valve, motorized, electro-mechanical hollow shaft actuator, eSyDrive	539

2 DN	Code
DN 15	15
DN 20	20
DN 25	25
DN 32	32
DN 40	40
DN 50	50
DN 65	65
DN 80	80
DN 100	100

3 Body configuration	Code
2/2-way body	D

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	8
Flange EN 1092, PN 25, form B, face-to-face dimension FTF EN 558 series 1, ISO 5752, basic series 1	10
Flange EN 1092, PN 40, form B, face-to-face dimension FTF EN 558 series 1, ISO 5752, basic series 1	11
Flange ANSI Class 150 RF, face-to-face dimension FTF EN 558 series 1, ISO 5752, basic series 1	39
Flange JIS 20K, face-to-face dimension FTF EN 558 series 10, ASME/ANSI B16.10 table 1, column 16, DN 50 drilled to JIS 10K	48

5 Valve body material	Code
1.4408, investment casting	37
EN-GJS-400-18-LT (GGG 40.3)	90

6 Seat seal	Code
PTFE	5
PTFE, glass fibre reinforced	5G
1.4404	10

7 Voltage/frequency	Code
24 V DC	C1

8 Control module	Code
OPEN/CLOSE, positioner and process controller	L0

9 Regulating cone	Code
Please find the number of the optional regulating cone (R-No.) for the linear or equal-percentage modified regulating cone in the Kv value table.	R....

10 Actuator version	Code
Actuator size 0	0A
Actuator size 1	1A
Actuator size 2	2A

11 Special version	Code
Special version for oxygen, maximum medium temperature: 60 °C, media wetted seal materials and auxiliary materials with BAM testing	S

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

Order example

Ordering option	Code	Description
1 Type	539	Globe valve, motorized, electro-mechanical hollow shaft actuator, eSyDrive
2 DN	40	DN 40
3 Body configuration	D	2/2-way body
4 Connection type	10	Flange EN 1092, PN 25, form B, face-to-face dimension FTF EN 558 series 1, ISO 5752, basic series 1
5 Valve body material	37	1.4408, investment casting
6 Seat seal	5	PTFE
7 Voltage/frequency	C1	24 V DC
8 Control module	L0	OPEN/CLOSE, positioner and process controller
9 Regulating cone	RS916	60 m³/h - mod.EQ
10 Actuator version	2A	Actuator size 2
11 Special version	S	Special version for oxygen, maximum medium temperature: 60 °C, media wetted seal materials and auxiliary materials with BAM testing
12 CONEXO		Without

Technical data

Medium

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

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

Temperature

Media temperature: -10 — 180 °C

Ambient temperature: -10 — 60 °C

Pressure

Operating pressure:

DN	Actuator version		
	0A	1A	2A
15	32	-	-
20	20	40	-
25	12	32	-
32	-	20	-
40	-	12	25
50	-	8	16
65	-	5	10
80	-	4	6
100	-	-	4

Pressures in bar
All pressures are gauge pressures.
For max. operating pressures the pressure / temperature correlation must be observed.
Higher operating pressures on request

Leakage rate:

Open/Close valve

Seat seal	Standard	Test procedure	Leakage rate	Test medium
Metal	DIN EN 12266-1	P12	F	Air
EPDM, FKM, PTFE	DIN EN 12266-1	P12	A	Air

Control valve

Seat seal	Standard	Test procedure	Leakage rate	Test medium
Metal	DIN EN 60534-4	1	IV	Air
PTFE, FKM, EPDM	DIN EN 60534-4	1	VI	Air

Pressure/temperature correlation:

Connection type code [1]	Material code [2]	Max. allowable operating pressures in bar at temperature in °C			
		RT	100	150	200
8	**37**	16.0	16.0	14.5	13.4
10	**37**	25.0	25.0	22.7	21.0
11	**37**	40.0	40.0	36.3	33.7
39	**37**	19.0	16.0	14.8	13.6
8	**90**	16.0	16.0	15.5	14.7
39	**90**	17.2	16.0	14.8	13.9

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
Code 10: Flange EN 1092, PN 25, form B, face-to-face dimension FTF EN 558 series 1, ISO 5752, basic series 1
Code 11: Flange EN 1092, PN 40, form B, face-to-face dimension FTF EN 558 series 1, ISO 5752, basic series 1
Code 39: Flange ANSI Class 150 RF, face-to-face dimension FTF EN 558 series 1, ISO 5752, basic series 1
Code 48: Flange JIS 20K, face-to-face dimension FTF EN 558 series 10, ASME/ANSI B16.10 table 1, column 16, DN 50 drilled to JIS 10K

2) **Valve body material**
Code 37: 1.4408, investment casting
Code 90: EN-GJS-400-18-LT (GGG 40.3)

Kv values:

Open/Close valve

DN	
15	4.6
20	8.0
25	13.0
32	22.0
40	35.0
50	50.0
65	90.0
80	127.0
100	200.0

Kv values in m³/h
Kv values determined in accordance with DIN EN 60534. The Kv value specifications refer to the largest actuator for the respective nominal size. The Kv values for other product configurations (e.g. other connections or body materials) may differ.

Control valve:

Standard regulating cone (DIN)

DN	Kv values	Operating pressure	Actuator version	linear	Equal percentage
15	4.0	32	0A	RS851	RS861
20	6.3	20	0A	RS852	RS862
25	10.0	12	0A	RS853	RS863
	10.0	32	1A	RS854	RS864
32	16.0	20	1A	RS855	RS865
40	25.0	12	1A	RS856	RS866
	25.0	20	2A	RS784	RS794
50	40.0	8	1A	RS857	RS867
	40.0	16	2A	RS785	RS795
65	63.0	5	1A	-	RS868
	80.0	10	2A	-	RS796
80	90.0	4	1A	-	RS869
80	100.0	6	2A	-	RS798
100	160.0	4	2A		RS799

Kv values in m³/h
Pressures in bar

Standard regulating cone with reduced seat

DN	Kv values	Operating pressure	Actuator ver-sion	linear	equal percentage
15	0.10 [1)]	40	0A	RA104	RA307
	0.16 [1)]	40	0A	RB110	RA309
	0.25 [1)]	40	0A	RB111	RB307
	0.40 [1)]	40	0A	RB112	RB308
	0.63 [1)]	40	0A	RC107	RC307
	1.00 [1)]	40	0A	RC108	RC308
	1.60	40	0A	RD107	RD307
	2.50	40	0A	RE110	RE310
20	1.60	40	0A	RD108	RD308
	2.50	40	0A	RE111	RE311
	4.00	40	0A	RF113	RF313
25	2.50	40	0A	RE112	RE312
	4.00	40	0A	RF114	RF314
	6.30	32	0A	RG115	RG315
32	4.00	40	0A	RF115	RF315
	6.30	36	0A	RG116	RG316
	10.00	20	0A	RH110	RH310
40	6.30	35	0A	RG117	RG317
	10.00	20	0A	RH111	RH311
	16.00	12	0A	RJ107	RJ307
50 [2)]	10.00	18	0A	RH112	RH312
	16.00	12	0A	RJ108	RJ308
	25.00	19	1A	RK104	RK304

Kv values in m³/h

Control valve:

1) metal seated
2) only for connection type code 8, 39, 48

Product compliance

Machinery Directive: 2006/42/EC

Pressure Equipment Directive: 2014/68/EU

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

EMC Directive: 2014/30/EU
Technical standards used:

Interference emission	Actuator size 0, 1 DIN EN 61000-6-4 Interference emission class: Class A Interference emission group: Group 1
	Actuator size 2 DIN EN 61800-3 Category: C3
Interference resistance	DIN EN 61000-6-2 (Nov. 2019) DIN EN 61326-1 (industry)

Mechanical data

Protection class: IP 65 acc. to EN 60529

Actuating speed:

Actuator version 0A	adjustable, max. 6 mm/s
Actuator version 1A	adjustable, max. 6 mm/s
Actuator version 2A	adjustable, max. 4 mm/s

Weight:

Actuator

Actuator version 0A	1.8 kg
Actuator version 1A	3.0 kg
Actuator version 2A	9.0 kg

Body

Connection types	8, 11, 39, 40	8, 10, 13, 47	8, 10, 39
Valve body	Flange K512	Flange K514	Flange K534
DN			
15	3.40	1.80	2.20
20	4.60	2.50	3.00
25	6.80	3.10	3.70
32	8.80	4.60	5.30
40	10.90	5.10	6.30
50	14.50	7.20	8.40
65	21.70	-	-
80	29.20	-	-
100	37.10	-	-

Weights in kg

Duty cycle and service life

Service life:

Control operation - Class C acc. to EN 15714-2 (1,800,000 start-ups and 1200 start-ups per hour).

Open/Close duty – Minimum 1,000,000 switching cycles at room temperature and permissible duty cycle.

Duty cycle:

Control operation - Class C acc. to EN 15714-2.

Open/Close duty – Continuous duty

Electrical data

Supply voltage:

	Actuator size 0	Actuator size 1	Actuator size 2
Voltage	Uv = 24 V DC ± 10%		
Rating	Max. 28 W	Max. 65 W	Max. 120 W
Reverse battery protection	Yes		

Analogue input signals

Set value

Input signal: 0/4 - 20 mA; 0 – 10 V DC (selectable using software)

Input type: passive

Input resistance: 250 Ω

Accuracy/linearity: ≤ ±0.3% of full flow

Temperature drift: ≤ ±0.1% / 10°K

Resolution: 12 bit

Reverse battery protection: No

Overload proof: Yes (up to ± 24 V DC)

Process actual value

Input signal: 0/4 - 20 mA; 0 – 10 V DC (selectable using software)

Input type: passive

Input resistance: 250 Ω

Accuracy/linearity: ≤ ±0.3% of full flow

Temperature drift: ≤ ±0.1% / 10°K

Resolution: 12 bit

Reverse battery protection: No

Overload proof: Yes (up to ± 24 V DC)

Digital input signals

Digital inputs:	3
Function:	selectable using software
Voltage:	24 V DC
Logic level "1":	>14 V DC
Logic level "0":	< 8 V DC
Input current:	typ. 2.5 mA (at 24 V DC)

Analogue output signals

Actual value

Output signal:	0/4 - 20 mA; 0 – 10 V DC (selectable using software)
Output type:	Active (AD5412)
Accuracy:	≤ ±1% of full flow
Temperature drift:	≤ ±0.1% / 10°K
Load resistor:	≤ 750 kΩ
Resolution:	10 bit
Overload proof:	Yes (up to ± 24 V DC)
Short-circuit proof:	Yes

Digital output signals

Switching outputs 1 and 2

Design:	2x make contact, potential-free
Switching voltage:	max. 48 V DC / 48 V AC
Switch rating:	max. 60 W / 2A
Switch points:	Adjustable 0 - 100 %

Switching output 3

Function:	Signal fault
Type of contact:	Push-Pull
Switching voltage:	Supply voltage
Switching current:	≤ 0.1 A
Drop voltage:	Max. 2.5 V DC at 0.1 A
Overload proof:	Yes (up to ± 24 V DC)
Short-circuit proof:	Yes
Pull-Down resistance:	120 kΩ

Communication eSy-Web

Interface: Ethernet

Function: Parameterisation via web browser

IP address: 192.168.2.1 alterable via web browser

Subnet screen: 255.255.252.0 alterable via web browser

The actuator and the PC must be in the same network to use the web server. The IP address of the actuator is entered in the web browser and the actuator can then be parametrised. In order to use more than one actuator, a definitive IP address must be assigned to each actuator in the same network.

Communication Modus TCP

Interface: Modbus TCP

IP address: 192.168.2.1 alterable via web browser

Subnet screen: 255.255.252.0 alterable via web browser

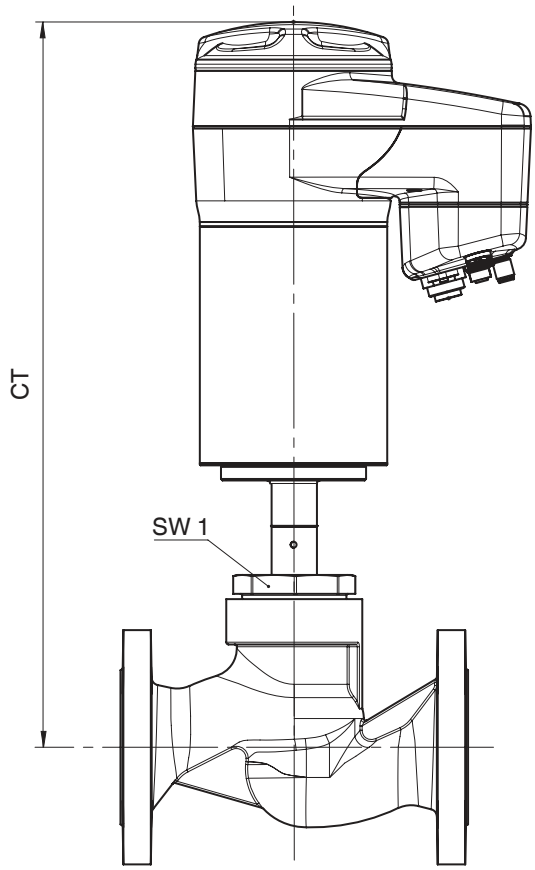
Port: 502

Supported function codes:

Code Dezimal	Code Hex	Function
3	0x03	Read Holding Registers
4	0x04	Read Input Registers
6	0x06	Write Single Register
16	0x10	Write Multiple Registers
23	0x17	Read/Write Multiple Registers

Dimensions

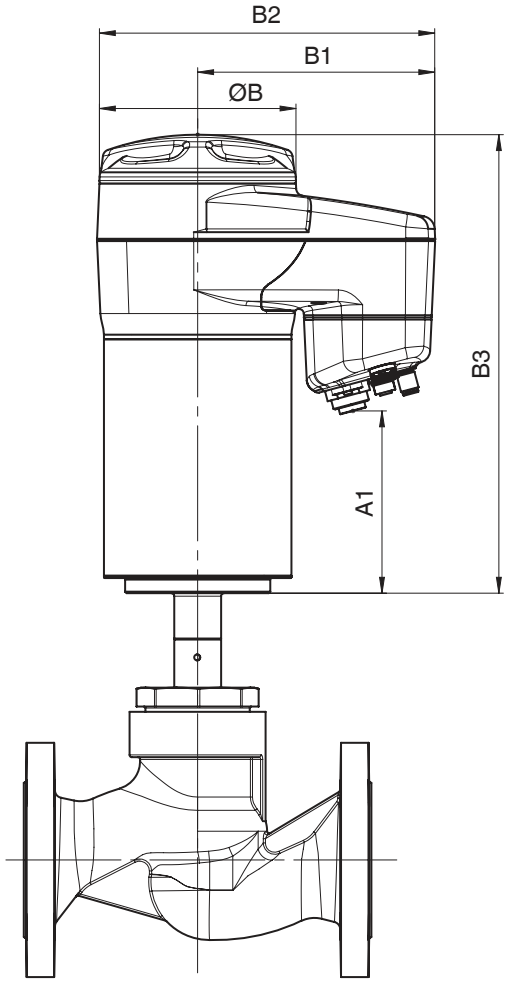
Installation dimensions



		Actuator version 0A	Actuator version 1A	Actuator version 2A
DN	SW1	CT	CT	CT
15	36	311.0	-	-
20	41	318.0	375.0	-
25	46	328.0	386.0	-
32	55	-	391.0	-
40	60	-	402.0	471.0
50	55	-	410.0	479.0
65	75	-	433.0	502.0
80	75	-	-	522.0
100	75	-	-	543.0

Dimensions in mm

Actuator dimensions

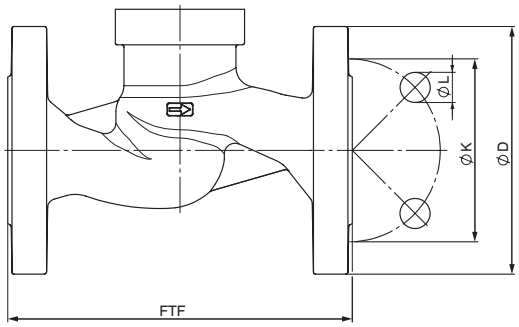


Actuator version	A1	B	B1	B2	B3
0A	45.0	68.0	126.0	160.0	193.0
1A	86.0	82.0	132.0	172.0	252.0
2A	121.0	129.0	157.0	224.0	304.0

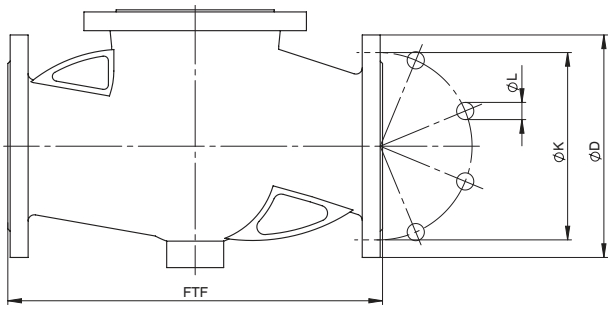
Dimensions in mm

Body dimensions

Flange connection types code 8



DN 15 - 50



DN 65 - 100

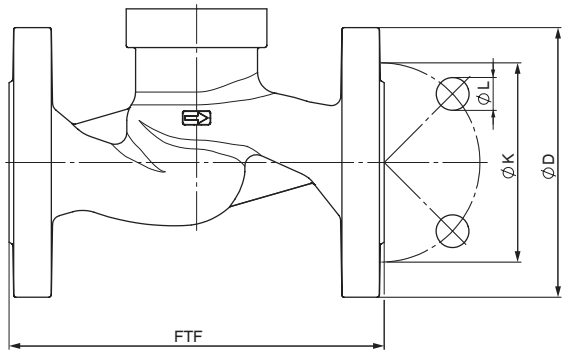
DN	Connection type code 8 [1]									
	Material code [2]									
	37					90				
	FTF	ø D	ø L	ø K	n	FTF	ø D	ø L	ø K	n
15	-	-	-	-	-	130.0	95.0	14.0	65.0	4
20	-	-	-	-	-	150.0	105.0	14.0	75.0	4
25	-	-	-	-	-	160.0	115.0	14.0	85.0	4
32	-	-	-	-	-	180.0	140.0	18.0	100.0	4
40	-	-	-	-	-	200.0	150.0	18.0	110.0	4
50	230.0	165.0	18.0	125.0	-	230.0	165.0	18.0	125.0	4
65	290.0	185.0	18.0	145.0	4	290.0	185.0	18.0	145.0	4
80	310.0	200.0	18.0	160.0	8	310.0	200.0	18.0	160.0	8
100	350.0	220.0	18.0	180.0	8	350.0	220.0	18.0	180.0	8

Dimensions in mm
n = number of bolts

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

2) **Valve body material**
Code 37: 1.4408, investment casting
Code 90: EN-GJS-400-18-LT (GGG 40.3)

Flange connection types code 10, 11, 48



DN 15 - 50 (code 10, 48)
DN 40, 50 (code 11)

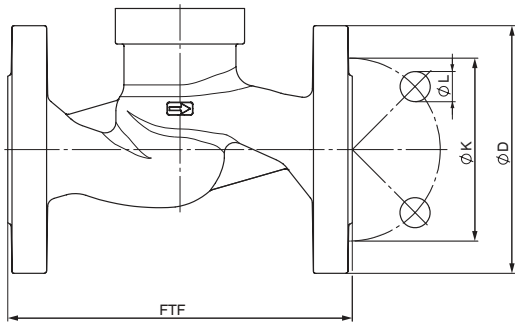
DN	Connection types code [1]														
	10					11					48				
	Material code 37 [2]														
	FTF	ø D	ø L	ø k	n	FTF	ø D	ø L	ø K	n	FTF	ø D	ø L	ø K	n
15	130.0	95.0	14.0	65.0	4	130.0	95.0	14.0	65.0	4	108.0	95.0	15.0	70.0	4
20	150.0	105.0	14.0	75.0	4	150.0	105.0	14.0	75.0	4	117.0	100.0	15.0	75.0	4
25	160.0	115.0	14.0	85.0	4	160.0	115.0	14.0	85.0	4	127.0	125.0	19.0	90.0	4
32	180.0	140.0	18.0	100.0	4	180.0	140.0	18.0	100.0	4	-	-	-	-	-
40	200.0	150.0	18.0	110.0	4	200.0	150.0	18.0	110.0	4	16..0	140.0	19.0	105.0	4
50	230.0	165.0	18.0	125.0	4	-	-	-	-	-	203.0	155.0	19.0	120.0	4

Dimensions in mm
n = number of bolts

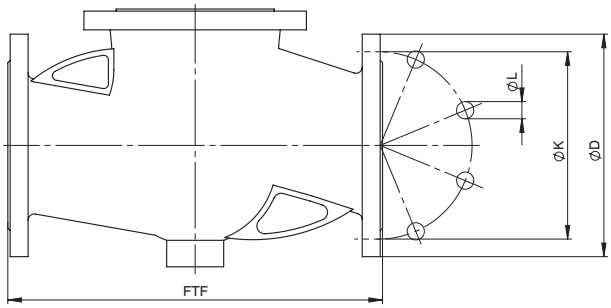
1) **Connection type**
Code 10: Flange EN 1092, PN 25, form B, face-to-face dimension FTF EN 558 series 1, ISO 5752, basic series 1
Code 11: Flange EN 1092, PN 40, form B, face-to-face dimension FTF EN 558 series 1, ISO 5752, basic series 1
Code 48: Flange JIS 20K, face-to-face dimension FTF EN 558 series 10, ASME/ANSI B16.10 table 1, column 16, DN 50 drilled to JIS 10K

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

Flange connection types code 39



DN 15 - 50



DN 65 - 100

DN	Connection types code 39 [1]				
	Material code 37,90 [2]				
	FTF	ø D	ø L	ø K	n
15	130.0	90.0	15.9	60.3	4
20	150.0	100.0	15.9	69.9	4
25	160.0	110.0	15.9	79.4	4
32	180.0	115.0	15.9	88.9	4
40	200.0	125.0	15.9	98.4	4
50	230.0	150.0	19.0	120.7	4
65	290.0	180.0	19.0	139.7	4
80	310.0	190.0	19.0	152.4	4
100	350.0	230.0	19.0	190.5	8

Dimensions in mm
n = number of bolts

1) **Connection type**
Code 39: Flange ANSI Class 150 RF, face-to-face dimension FTF EN 558 series 1, ISO 5752, basic series 1

2) **Valve body material**
Code 37: 1.4408, investment casting
Code 90: EN-GJS-400-18-LT (GGG 40.3)

Electrical connection

NOTICE

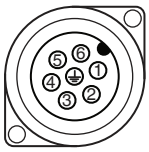
Appropriate cable socket/appropriate mating connector!

The appropriate cable socket and/or appropriate mating connector is included for X1, X3 and X4.

The appropriate cable socket and/or appropriate mating connector is **not** included for X2.

Unused plugs must be covered with the enclosed caps to ensure IP protection.

Connection X1



7-pin plug, Binder, type 693

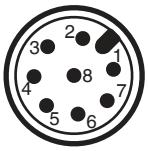
Pin	Signal name
Pin 1	Uv, 24 V DC supply voltage
Pin 2	Uv GND
Pin 3	Relay output K1, common
Pin 4	Relay output K1, make contact
Pin 5	Relay output K2, common
Pin 6	Relay output K2, make contact
Pin PE	Function earth

Connection X2

5-pin M12 built-in socket, D-coded

Pin	Signal name
Pin 1	Tx + (Ethernet)
Pin 2	Rx + (Ethernet)
Pin 3	Tx - (Ethernet)
Pin 4	Rx - (Ethernet)
Pin 5	Shield

Connection X3



8-pin M12 plug, A-coded

Pin	Signal name
Pin 1	W+ set value input
Pin 2	W – set value input
Pin 3	X + actual value output
Pin 4	GND (actual value output, digital input 1 – 3, error message output)
Pin 5	Error message output 24 V DC
Pin 6	Digital input 3
Pin 7	Digital input 1
Pin 8	Digital input 2

Connection X4

4-pin M12 built-in socket, A-coded

Pin	Signal name
Pin 1	UV, 24 V DC actual value supply
Pin 2	n.c.
Pin 3	GND (actual value supply, actual value input)
Pin 4	X+, process actual value input
Pin 5	n.c.

Accessories

GEMÜ 1218

Connector

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

Ordering information

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

1) provided in the scope of delivery

GEMÜ 1219

Cable socket / cable plug M12

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

Ordering information

GEMÜ 1219 Ethernet/M12 cable			
Connection X2 - network connection			
M12 cable plug, straight, 4-pin	Fitted with a 1 metre cable set	Ethernet RJ45	88450499
	Fitted with a 4 metre cable set		88450500
	Fitted with a 15 metre cable set		88450502
M12 cable plug, angled, 4-pin	Fitted with a 4 metre cable set		88715615
Connection X3 – analogue/digital inputs and outputs			
M12 cable socket, straight, 8-pin	Without cable, for cable dia. 6-8 mm		88304829 [1)]
	Fitted with a 5 metre cable set, PUR black cable		88758155
M12 cable socket, angled, 8-pin	Without cable, for cable dia. 6-8 mm		88422823
	Fitted with a 5 metre cable set, PUR black cable		88374574
Connection X4 – actual value supply, actual value input			
M12 cable plug, straight, 5-pin	Without cable PG7	Nickel-plated brass	88208641 [1)]
	Fitted with a 2 metre cable set, PUR black cable	5 x 0.34, nickel-plated brass	88208643
	Fitted with a 5 metre cable set, PUR black cable	5 x 0.34, nickel-plated brass	88208644
M12 cable plug, angled, 5-pin	Without cable, for cable dia. 6-8 mm	Nickel-plated brass	88208645
	Fitted with a 2 metre cable set, PUR black cable	5 x 0.34, nickel-plated brass	88208649
	Fitted with a 5 metre cable set, PUR black cable	5 x 0.34, nickel-plated brass	88208650

1) provided in the scope of delivery

GEMÜ 1571

Emergency power supply module

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

Ordering information

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

GEMÜ 1573

Switching power supply unit

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

Ordering information

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

send an E-Mail

Reference no.

Specification | GEMÜ regulating cones for globe valves

Customer/Project _____ Contact person _____

Date _____ Phone _____

Contact person (GEMÜ) _____ E-mail _____

Technical requirements

Medium [1]

Requirement characteristic	1st operating point maximum flow	2nd operating point medium flow	3rd operating point minimum flow
Media temperature [4]	°C	°C	°C
Inlet pressure	bar(g)	bar(g)	bar(g)
Outlet pressure	bar(g)	bar(g)	bar(g)
Flow rate [2, 3]			
in [m³/h] for liquids	m³/h	m³/h	m³/h
for gases [6]	Nm³/h	Nm³/h	Nm³/h
in [kg/h] for steam	kg/h	kg/h	kg/h

Operation	Manual ○					
	Pneumatic ○	Control function	○ NC (normally closed)	○ NO (normally open)	○ DA (double acting)	○ Double acting (normally open)
	Motorized ○	Voltage	○ 24 V DC	○ Other		
		Set value information	○ 0-10 V	○ 0/4–20 mA		
Control fitting	Feature		○ linear	○ modified equal-percentage		

Valve body	Type		
	Required valve DN		
	Max. operating pressure (bar)		
	Ambient temperature [4]		
	Max. media temperature		
	Connection type		
	Body material		
	Seat seal [7]	○ PTFE	○ Other
	Control pressure	min	max

1) Liquid or gas?
For media other than water or air, it is useful to give data for the density and viscosity of the medium (with unit of measurement). Otherwise we will assume data for standard conditions.

2) For steam especially, the minimum or maximum flow rate should be assigned to the appropriate inlet or outlet pressure. The temperature of the medium should also be taken into account.

3) GEMÜ recommends a positioning ratio of 1 : 10 (e.g. minimal flow rate is 10 m³/h and the maximum flow rate is 100 m³/h). Please note that the valve only controls reliably from a flow of about 10% of the max. Kv value on account of the valve opening behaviour. Other positioning ratios are possible on request or in the selection of standard regulating cones.

4) The media temperature range must be specified for steam applications. T = 20 °C is assumed unless specified otherwise.

5) This data is not absolutely necessary. A room temperature of 20 °C is assumed unless specified otherwise.

6) Basis: standard conditions 0 °C, 1013.25 mbar.
If conditions differ, please specify them.

7) The seat seal is made of PTFE as standard.
For regulating needles with a Kv value between 0.1 and 1.0 m³/h, only a metal seal is possible.
Other materials possible on request.

The technical details of each enquiry must be checked by GEMÜ.

Comment:

GEMÜ Gebr. Müller Apparatebau GmbH & Co. KG · Fritz-Müller-Str. 6-8 · D-74653 Ingelfingen-Criesbach · Phone +49(0)7940/123-0 · Fax +49(0)7940/123-224
info@gemue.de · www.gemu-group.com

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

Subject to alteration | 05.2022 | 88524484