

GEMÜ 343 eSyDrive

Motorized multi-port globe valve



Features

- Linear control characteristics can be implemented
- 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 343 eSyDrive is a motorized 3/2-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. This provides a low-maintenance and reliable valve spindle seal even after an extended period of operation. 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 250 °C
- **Ambient temperature:** -10 Up to 60 °C
- **Operating pressure :** 0 Up to 40 bar
- **Nominal sizes:** DN 15 to 100
- **Body configurations:** Multi-port body
- **Connection types:** Flange | Threaded connection
- **Connection standards:** ANSI | DIN | EN | ISO
- **Body materials:** 1.4408, investment casting material | CC499K, cast bronze material
- **Seat seal materials:** PTFE | PTFE, reinforced
- **Supply voltage:** 24 V DC
- **Actuating speed:** max. 6 mm/s
- **Protection class:** IP 65
- **Conformities:** EAC

Technical data depends on the respective configuration

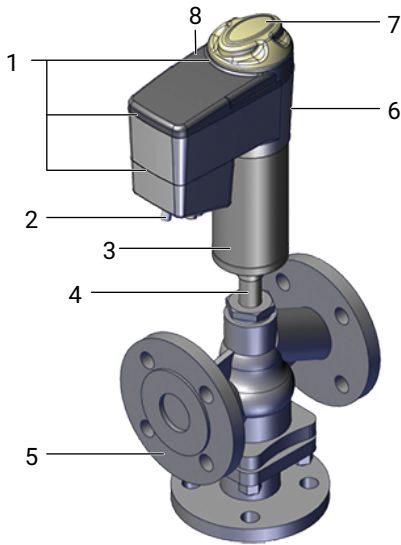


further information
webcode: GW-343



Product description

Construction



Item	Name	Materials
1	O-rings	EPDM
2	Electrical connections	
3	Actuator base	1.4301/1.4305
4	Distance piece with leak detection hole	1.4408
5	Valve body	1.4408, cast bronze
6	Optical position indicator	PESU
7	Cover with high visibility LED, manual override and on-site control	PESU
8	Actuator top	PESU black

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.

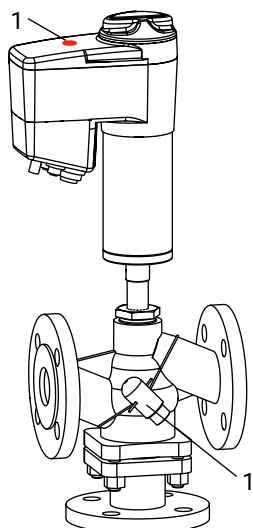
For further information on GEMÜ CONEXO please visit:

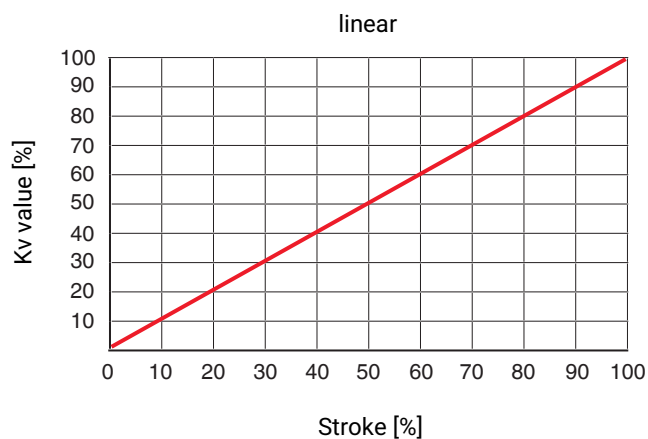
www.gemu-group.com/conexo

Ordering

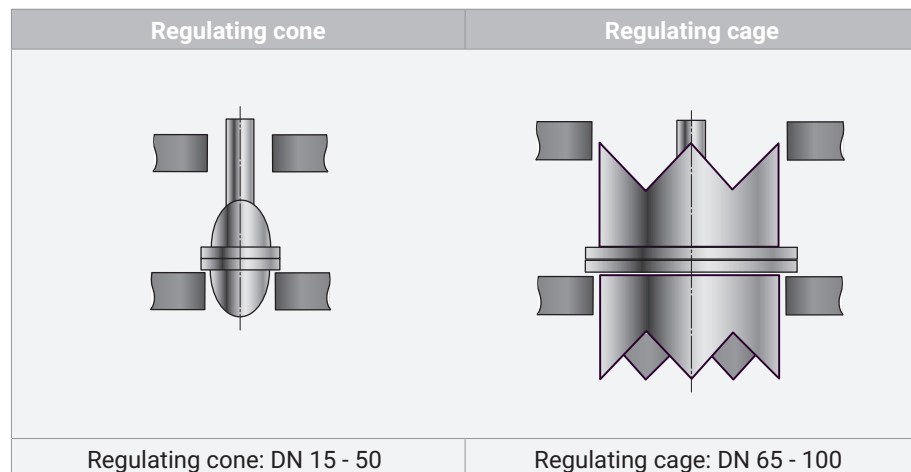
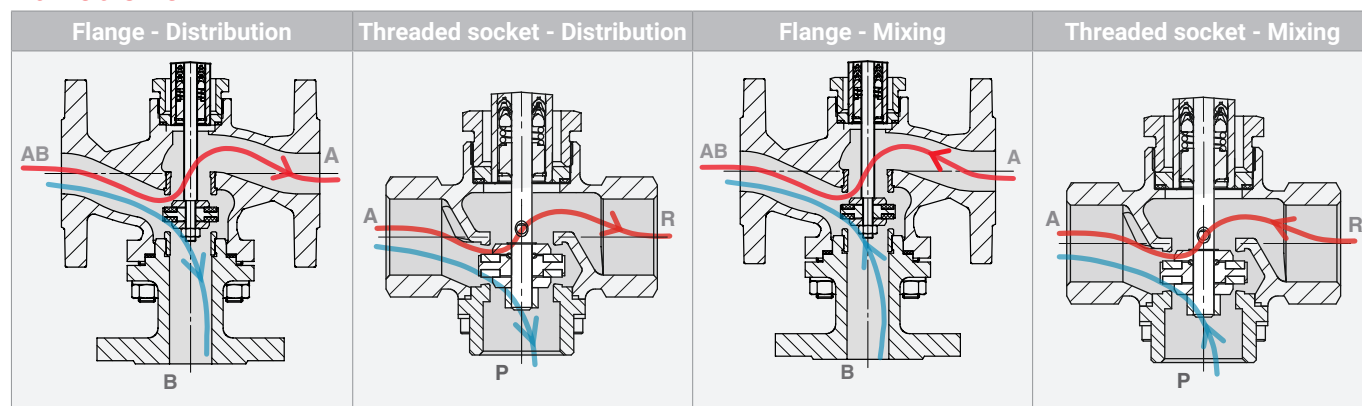
GEMÜ Conexo must be ordered separately with the ordering option "CONEXO".

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 display 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 cone/regulating cage**Functions**

Availability

Availability of valve bodies

Flange

DN	Connection type code ¹⁾							
	8		11			39		
	Material code 37 ²⁾							
	AG 1A	AG 2A	AG 0A	AG 1A	AG 2A	AG 0A	AG 1A	AG 2A
15	-	-	X	-	-	X	-	-
20	-	-	X	X	-	X	X	-
25	-	-	X	X	-	X	X	-
32	-	-	-	X	-	-	X	-
40	-	-	-	X	X	-	X	X
50	-	-	-	X	X	-	X	X
65	X	X	-	-	-	-	-	-
80	X	X	-	-	-	-	-	-
100	-	X	-	-	-	-	-	-

X = Standard

AG = actuator size

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 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 125/150 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

Threaded connection

DN	Connection type code 1 ¹⁾		
	Material code 9 ²⁾		
	AG 0A	AG 1A	AG 2A
15	X	-	-
20	X	X	-
25	X	X	-
32	-	X	-
40	-	X	X
50	-	X	X

X = Standard

AG = actuator size

1) Connection type

Code 1: Threaded socket DIN ISO 228

2) Valve body material

Code 9: CC499K, cast bronze

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
Multi-port globe valve, electrically operated, electro-mechanical hollow shaft actuator, body with flanged connection, eSyDrive	343

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 Housing configuration	Code
Multi-port design	M

4 Connection type	Code
Threaded socket DIN ISO 228	1
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 40, form B, face-to-face dimension FTF EN 558 series 1, ISO 5752, basic series 1	11
Flange ANSI Class 125/150 RF, face-to-face dimension FTF EN 558 series 1, ISO 5752, basic series 1	39

5 Valve body material	Code
CC499K, cast bronze	9
1.4408, investment casting	37

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

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

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

11 Type of design	Code
Standard	
For elevated temperatures	2024

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

Order example

Ordering option	Code	Description
1 Type	343	Multi-port globe valve, electrically operated, electro-mechanical hollow shaft actuator, body with flanged connection, eSyDrive
2 DN	40	DN 40
3 Housing configuration	M	Multi-port design
4 Connection type	11	Flange EN 1092, PN 40, 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 Type of design		Standard
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
Other versions for lower / higher temperatures and higher viscosities on request.

Temperature

Media temperature: -10 – 180 °C
-10 to 250 °C with K-no. 2024 + seat seal code 5G
For material code 37 + K-no. 2013: -40 to 180 °C

Ambient temperature: -10 – 60 °C
-10 to 40 °C with K-no. 2024 + seat seal code 5G

Storage temperature: 0 – 40 °C

Pressure

Operating pressure: B-AB/AB-A

DN	Actuator version					
	0A		1A		2A	
	Flange	Threaded socket	Flange	Threaded socket	Flange	Threaded socket
15	32.0	16.0	-	-	-	-
20	20.0	16.0	40.0	16.0	-	-
25	12.0	12.0	25.0	16.0	-	-
32	-	-	20.0	16.0	-	-
40	-	-	12.0	12.0	25.0	16.0
50	-	-	8.0	8.0	16.0	16.0
65	-	-	5.0	-	10.0	-
80	-	-	4.0	-	6.0	-
100	-	-	-	-	4.0	-

Pressures in bar

All pressures are gauge pressures.

For max. operating pressures the pressure / temperature correlation must be observed.

Leakage rate:

Open/Close valve

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

Control valve

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

Pressure/temperature correlation:

Connection type code ¹⁾	Material code ²⁾	Max. permissible operating pressures in bar at temperature in °C				
		RT	100	150	200	250
1	9	16.0	16.0	16.0	13.5	-
8	37	16.0	16.0	14.5	13.4	12.7
11	37	40.0	40.0	36.3	33.7	31.8

All pressures are gauge pressures.

The valves are suitable for temperatures as low as -10 °C

RT = room temperature

1) **Connection type**

Code 1: Threaded socket DIN ISO 228

Code 8: Flange EN 1092, PN 16, 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

2) **Valve body material**

Code 9: CC499K, cast bronze

Code 37: 1.4408, investment casting

Kv values:**Open/Close valve**

DN	Flange		Threaded socket	
	AB - A	B - AB	A - R	P - A
15	4.1	5.4	2.5	3.6
20	7.5	11.6	3.3	5.5
25	12.0	17.6	7.3	10.6
32	18.8	27.0	10.4	18.0
40	30.7	46.7	20.9	31.0
50	42.0	67.1	33.7	47.0
65	71.9	119.9	-	-
80	107.6	174.4	-	-
100	157.1	250.7	-	-

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 - Flange

DN	Flange			Kv value
	AG 0	AG 1	AG 2	
15	RS190	-	-	4.0
20	RS191	RS193	-	6.3
25	RS192	RS194	-	10.0
32	-	RS195	-	14.0
40	-	RS196	RS200	20.0
50	-	RS197	RS231	32.0
65	-	RS198	RS232	63.0
80	-	RS199	RS233	90.0
100	-	-	RS234	140.0

Kv values in m³/h

Kv values refer to the flow direction A-AB and B-AB.

Kv values:

Control valve - Threaded socket

DN	Threaded socket			
	AG 0	AG 1	AG 2	Kv value
15	RS180	-	-	1.6
20	RS181	-	-	2.5
25	RS182	RS183	-	6.3
32	-	RS184	-	10.0
40	-	RS185	RS188	16.0
50	-	RS187	RS189	25.0

Kv values in m³/h

Kv values refer to the flow direction A-AB and B-AB.

Product compliance

Machinery Directive: 2006/42/EC

Pressure Equipment Directive: 2014/68/EU

EMC Directive: 2014/30/EU

RoHS Directive: 2011/65/EU

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

DN	Flange	Threaded socket
15	3.4	0.6
20	4.9	0.7
25	5.7	1.1
32	8.5	1.8
40	9.7	2.3
50	15.8	3.4
65	19.4	-
80	24.6	-
100	32.8	-

Weights in kg

Actuator 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 - 100%

Electrical data

Supply voltage:	Actuator size 0	Actuator size 1	Actuator size 2
Voltage	U _V = 24 V DC ± 10%		
Rating	Max. 28 W	Max. 65 W	Max. 100 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:	Can be selected 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:	$\leq \pm 1\%$ of full flow
Temperature drift:	$\leq \pm 0.1\%$ / 10°K
Load resistor:	$\leq 750\text{ k}\Omega$
Resolution:	10 bit
Overload proof:	Yes (up to $\pm 24\text{ V DC}$)
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:	$\leq 0.1\text{ A}$
Drop voltage:	Max. 2.5 V DC at 0.1 A
Overload proof:	Yes (up to $\pm 24\text{ V DC}$)
Short-circuit proof:	Yes
Pull-Down resistance:	120 k Ω

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:

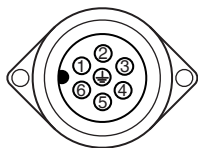
Code Dezimal	Code Hex	Function
3	0x03	Read Holding Registers
4	0x04	Read Input Registers
6	0x06	Write Single Register
16	0x10	Write Multiple Registers
23	0x17	Read / Write Multiple Registers

Behaviour in the event of an error

Function:	In the event of an error the valve moves to the error position. Notes: Moving to the error position is only possible with full power supply. This behaviour is not a safety position. The valve must be operated with a GEMÜ 1571 emergency power supply module (see accessories) to ensure the function in case of voltage loss.
Error position:	Closed, open or hold (adjustable via eSy-web web interface).

Electrical connection

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

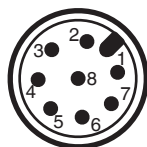
Connection X2



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

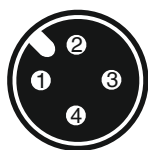
Pin	Signal name
Pin 1	Tx + (Ethernet)
Pin 2	Rx + (Ethernet)
Pin 3	Tx - (Ethernet)
Pin 4	Rx - (Ethernet)
Pin 5	Shield

Connection X3



8-pin M12 plug, A-coded

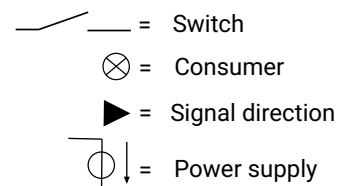
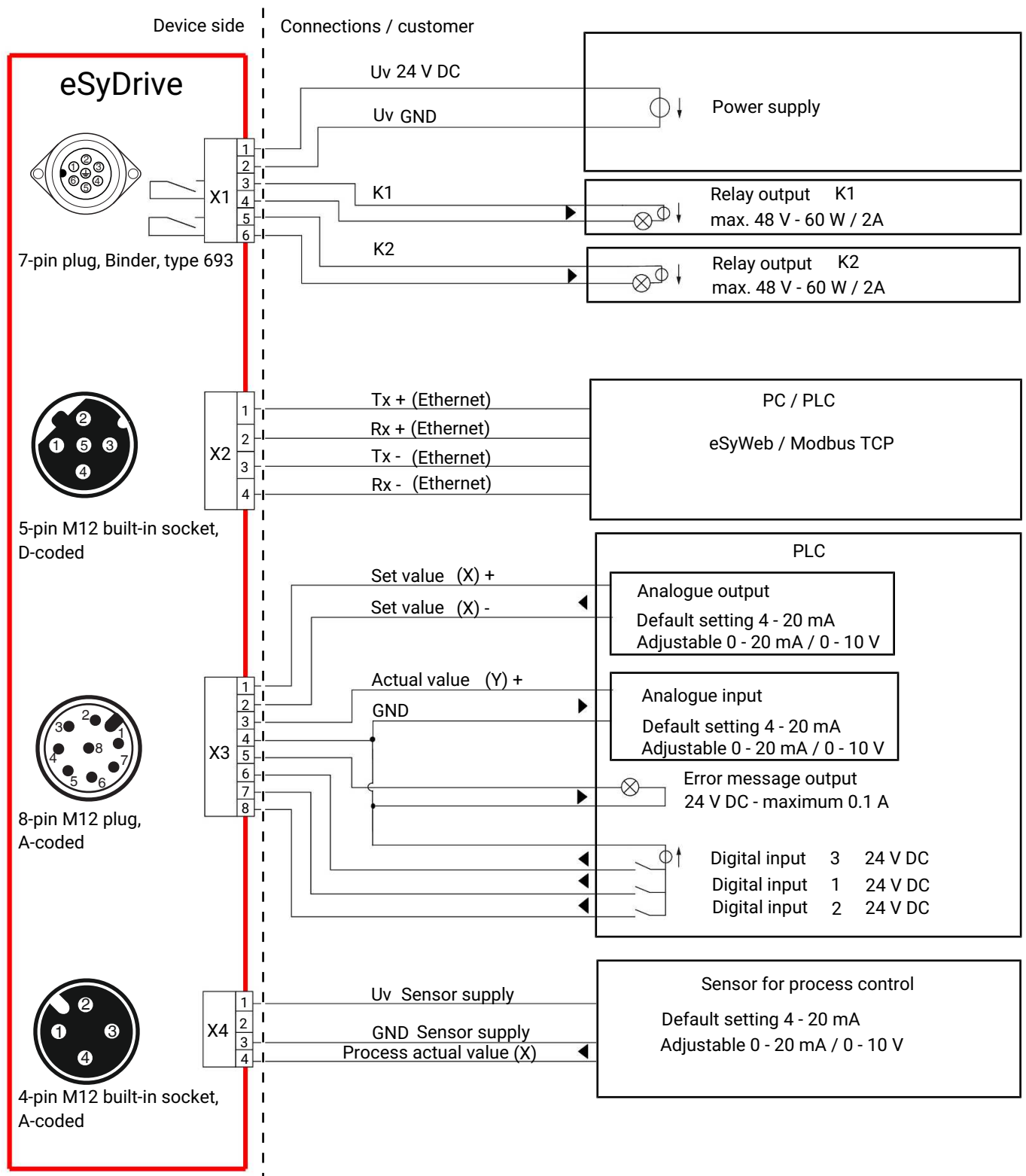
Pin	Signal name
Pin 1	W+ set value input
Pin 2	W – set value input
Pin 3	X + actual value output
Pin 4	GND (actual value output, digital input 1 – 3, error message output)
Pin 5	Error message output 24 V DC
Pin 6	Digital input 3
Pin 7	Digital input 1
Pin 8	Digital input 2

Connection X4

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

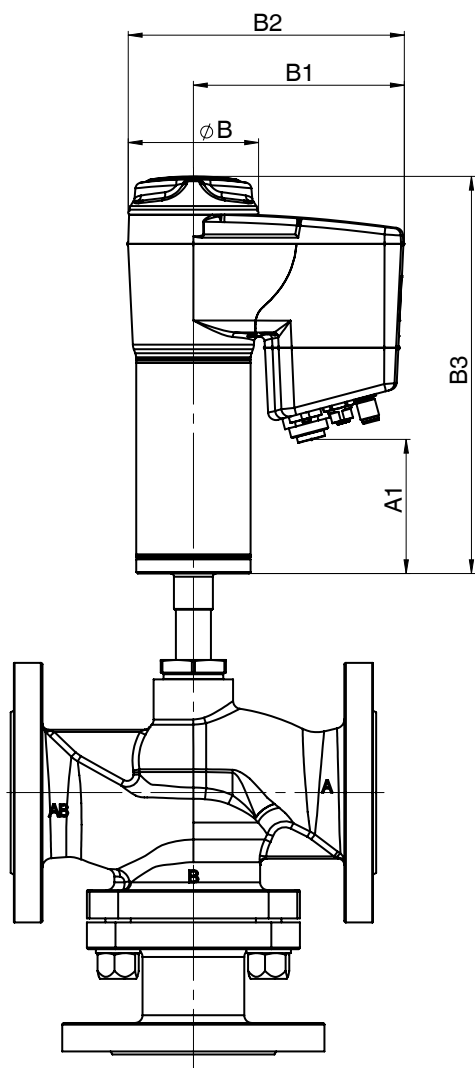
Pin	Signal name
Pin 1	UV, 24 V DC actual value supply
Pin 2	n.c.
Pin 3	GND (actual value supply, actual value input)
Pin 4	X+, process actual value input
Pin 5	n.c.

Connection diagram



Dimensions

Actuator dimensions

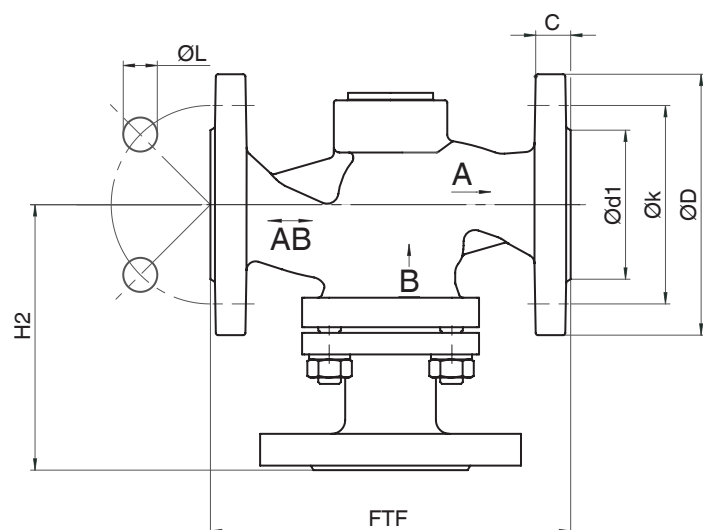


Actuator version	A1	B	B1	B2	B3
0A	45.0	68.0	126.0	160.0	193.0
1A	86.0	82.0	132.0	172.0	252.0
2A	121.0	129.0	157.0	224.0	304.0

Dimensions in mm

Body dimensions

Flange EN (code 8, 11)



Connection type flange, length EN 558 (code 8)¹⁾, investment casting material (code 37)²⁾

DN	NPS	C	ø D	FTF	H2	ø k	ø L	n
65	2½"	20.0	185.0	290.0	183.0	145.0	18.0	4
80	3"	22.0	200.0	310.0	204.0	160.0	18.0	8
100	4"	24.0	220.0	350.0	236.0	180.0	18.0	8

Connection type flange, length EN 558 (code 11)¹⁾, investment casting material (code 37)²⁾

DN	NPS	C	ø D	FTF	H2	ø k	ø L	n
15	1/2"	16.0	95.0	130.0	97.0	65.0	14.0	4
20	3/4"	18.0	105.0	150.0	112.0	75.0	14.0	4
25	1"	18.0	115.0	160.0	118.0	85.0	14.0	4
32	1¼"	18.0	140.0	180.0	143.0	100.0	18.0	4
40	1½"	18.0	150.0	200.0	147.0	110.0	18.0	4
50	2"	20.0	165.0	230.0	167.0	125.0	18.0	4

Dimensions in mm

n = number of bolts

1) Connection type

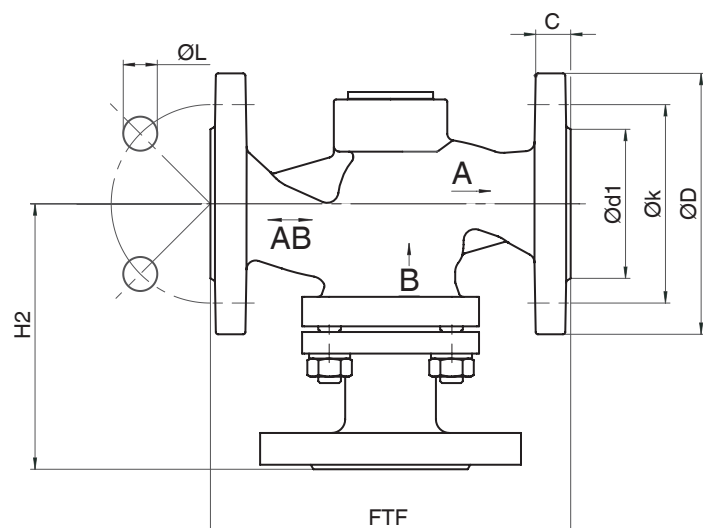
Code 8: Flange EN 1092, PN 16, form B, face-to-face dimension FTF EN 558 series 1, ISO 5752, basic series 1

Code 11: Flange EN 1092, PN 40, 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

Flange ANSI Class (code 39)



Connection type flange, length EN 558 (code 39)¹⁾, investment casting material (code 37)²⁾

DN	NPS	C	ø D	FTF	H2	ø k	ø L	n
15	1/2"	16.0	90.0	130.0	97.0	60.3	15.9	4
20	3/4"	18.0	100.0	150.0	112.0	69.9	15.9	4
25	1"	18.0	110.0	160.0	118.0	79.4	15.9	4
32	1¼"	18.0	115.0	180.0	143.0	88.9	15.9	4
40	1½"	18.0	125.0	200.0	147.0	98.4	15.9	4
50	2"	20.0	150.0	230.0	167.0	120.7	19.0	4

Dimensions in mm

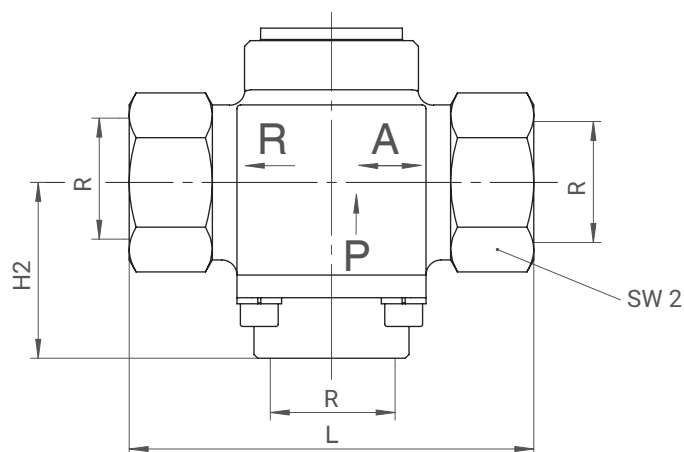
n = number of bolts

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

2) Valve body material

Code 37: 1.4408, investment casting

Threaded socket DIN (code 1)**Connection type threaded socket DIN (code 1)¹⁾, block material (code 9)²⁾**

Connection type threaded socket DIN (code 1) , block material (code 9)										
DN	NPS	CT		CT1		H2	L	R	SW1	SW2
		Actuator		Actuator						
		1	2	1	2					
15	1/2"	192.0	-	88.0	-	41.0	75.0	G 1/2	36	27
20	3/4"	196.0	-	92.0	-	46.0	87.0	G 3/4	36	32
25	1"	196.0	-	92.0	-	47.0	107.0	G 1	41	41
32	1¼"	200.0	277.0	96.0	125.0	66.0	123.0	G 1¼	55	50
40	1½"	200.0	277.0	96.0	125.0	68.0	147.0	G 1½	55	58
50	2"	204.0	281.0	100.0	125.0	74.0	171.0	G 2	55	70

Dimensions in mm

1) Connection type

Code 1: Threaded socket DIN ISO 228

2) Valve body material

Code 9: CC499K, cast bronze

Error messages

Accessories



GEMÜ 1218

Connector

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

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.

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 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 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
	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 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.

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.

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

Specification | GEMÜ regulating cones for globe valves

Customer/Project _____ Contact person _____

Date _____ Phone _____

Contact person (GEMÜ) _____ E-mail _____

Technical requirementsMedium ¹⁾

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

Operation	Manual					
	Pneumatic	Control function	NC (normally closed)	NO (normally open)	DA (double acting)	Double acting (normally open)
	Motorized	Voltage	24 V DC	Other		
Control fitting		Set value information	0-10 V	0/4-20 mA		
	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-Straße 6-8, 74653 Ingelfingen-Criesbach, Germany
Phone +49 (0) 7940 1230 · info@gemue.de
www.gemu-group.com