

## GEMÜ 428

### Motorized butterfly valve



#### Features

- Available in small nominal sizes
- Suitable for vacuum applications and low temperatures
- High-quality shut-off damper made of stainless steel
- Compact and robust body

#### Description

The GEMÜ 428 soft-seated, centric butterfly valve made of stainless steel is operated by an electric motor. A manual override and an optical position indicator are integrated as standard. With its rounded and polished disc edges, the butterfly valve is optimized for frequent cycle duties. The surface of the butterfly valve can be further finished.

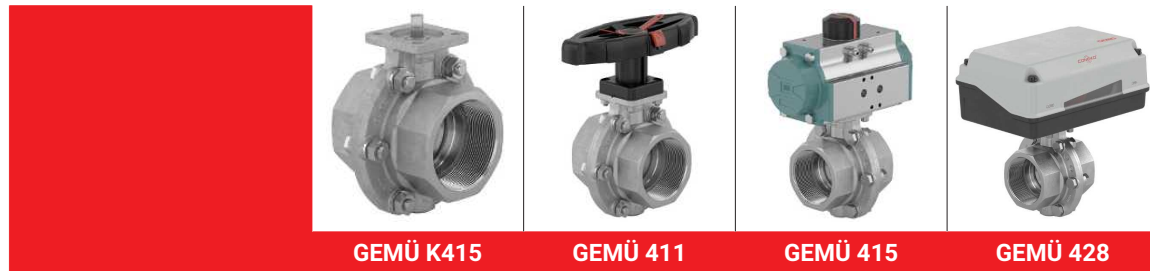
#### Technical specifications

- **Media temperature:** -20 to 160 °C
- **Ambient temperature:** -10 to 60 °C
- **Operating pressure:** 0 to 10 bar
- **Nominal sizes:** DN 15 to 50
- **Connection types:** Clamp | Spigot | thread
- **Connection standards:** ASME | DIN | EN | ISO | SMS
- **Housing materials:** 1.4408, investment casting material
- **Liner materials:** EPDM | FKM | Silicone
- **Disc materials:** 1.4408, investment casting material
- **Supply voltage:** 12 V AC, 50/60 Hz | 12 V DC | 24 V AC, 50/60 Hz | 24 V DC
- **90° operating time:** 4 Up to 100 s
- **Protection class:** IP 65. 66. 67
- **Conformities:** EAC | FDA

Technical data depends on the respective configuration



## Product line



	GEMÜ K415	GEMÜ 411	GEMÜ 415	GEMÜ 428
<b>Operation</b>				
With bare shaft	●	-	-	-
manually	-	●	-	-
Pneumatic	-	-	●	-
Motorized	-	-	-	●
<b>Nominal sizes</b>	DN 15 Up to 50	DN 15 Up to 50	DN 15 Up to 50	DN 15 Up to 50
<b>Media temperature</b>	-20 Up to 160 °C	-20 Up to 160 °C	-20 Up to 160 °C	-20 Up to 160 °C
<b>Operating pressure</b>	0 Up to 10 bar	0 Up to 10 bar	0 Up to 10 bar	0 Up to 10 bar
<b>Connection types</b>				
Clamp	●	●	●	●
Spigot	●	●	●	●
thread	●	●	●	●
<b>Conformities</b>				
ATEX	-	-	●	-
EAC	●	●	●	●
FDA	●	●	●	●
Functional safety	-	●	-	-

## Motorized actuators GEMÜ 9428, RP, J4C



GEMÜ 9428

GEMÜ RP

GEMÜ J4C

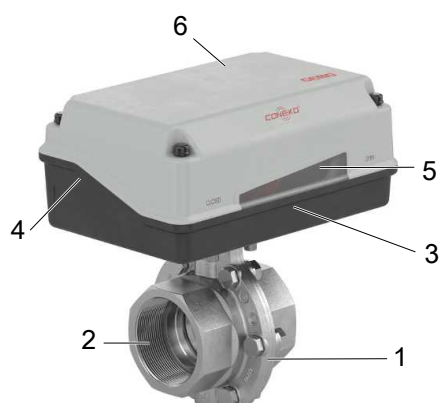
	GEMÜ 9428	GEMÜ RP	GEMÜ J4C
<b>Manufacturer</b>	GEMÜ	AUMA	J+J
<b>Manufacturer type</b>	9428	RP	J4C
<b>Torques</b>	6 to 55 Nm	32 to 100 Nm	20 to 300 Nm
<b>Duty cycle</b>	100 %	25 % (control actuator) S2 - 15min (ON/OFF actuator)	75 %
<b>Heating</b>	No	Yes	Yes
<b>Voltage</b>			
100 - 240 V, 50/60 Hz	-	●	-
110 V AC, 60 Hz	-	●	-
12 V AC, 50/60 Hz	●	-	-
12 V DC	●	-	●
230 V AC, 50 Hz	-	●	-
24 - 240 V AC/DC	-	-	●
24 V AC, 50/60 Hz	●	-	-
24 V DC	●	●	-
<b>Protection class</b>	IP 65, IP 67	IP 67	IP 67
<b>Ambient temperature</b>	-10 to 60 °C	-20 to 60 °C	-20 to 70 °C
<b>Housing materials</b>			
PA66 GF25	-	●	-
Polyamide (PA6)	-	-	●
PP	●	-	-
X518CrNi18-10 - 1.4301	-	●	-
<b>Versions</b>			
Limit switches	●	●	●
ON/OFF actuator	●	●	-
Optional battery pack	-	-	●
Optional positioner	-	-	●
Optional positioning actuator	-	●	●
Optionally 3 positions	-	-	●
Torque switch	-	●	-

## Comparison of area of application – actuators GEMÜ 9428, RP, J4C



	GEMÜ 9428	GEMÜ RP	GEMÜ J4C
<b>Range of functions</b>			
Use in non-aggressive environment (up to C3)	●	●	●
Use in aggressive environment (C5)	●	●	●
Use in protected outdoor areas	●	●	●
Use in unprotected outdoor areas	●	●	●
Applications with many/frequent cycle duties	●	●	●
Fail-safe option	●	●	●
Positioning application	●	●	●
<b>Industrial sectors</b>			
Chemical processes	●	●	●
Surface finishing	●	●	●
Water treatment	●	●	●
Mechanical engineering	●	●	●
Power generation and environmental systems	●	●	●
Food processing technology	●	●	●
Semiconductor	●	●	●
Medical systems	●	●	●
Pharmaceutical industry	●	●	●

## Product description



Item	Name	Material
1	Butterfly valve body	Investment casting (1.4408)
2	Pipe connections	Investment casting (1.4408)
3	Housing base	Actuator versions 3006, 3015: PP + 30% glass fibre reinforced Actuator version 3035: PP + 20% glass bead reinforced
4	Connection for manual override	
5	Optical position indicator	PP-R natural
6	Housing cover	Actuator versions 3006, 3015: PPE + 30% glass fibre reinforced Actuator version 3035: PP + 20% glass bead reinforced

## Actuator assignment

### GEMÜ 9428 actuator

#### GEMÜ 9428 – standard version

DN	Torque	PS	Actuator version (code)				
			3015, 3035	3055	2070	4100	4200
25	4	16 bar	-	-	-	-	-
40	7		-	-	-	-	-
50	7		X	-	-	-	-
65	15		X	-	-	-	-
80	28		-	X	-	-	-
100	55		-	X	X	-	-
125	77		-	-	-	X	-
150	118	3 bar	-	-	-	-	X
200	145		-	-	-	-	X
250	152		-	-	-	-	X

Torques in Nm

Design for EPDM sleeve, medium water, medium temperature +20 °C

GEMÜ type	Actuator version (code)	Control module (code) <sup>1)</sup>	Voltage/frequency			
			12 V DC (code B1)	12 V AC (code B4)	24 V DC (code C1)	24 V AC (code C4)
9428	3015	A0, AE	X	-	X	-

## Actuator assignment

GEMÜ type	Actuator version (code)	Control module (code) <sup>1)</sup>	Voltage/frequency			
			12 V DC (code B1)	12 V AC (code B4)	24 V DC (code C1)	24 V AC (code C4)
	<b>2015</b>		-	X	-	X
	<b>3035</b>		-	-	X	-
	<b>3055</b>		-	-	X	-

### 1) Control module

Code 00: ON/OFF actuator, relay, not reversible

Code 0E: ON/OFF actuator, two additional potential-free limit switches, relay, not reversible

Code 0P: ON/OFF actuator, potentiometer output, relay, not reversible

Code A0: ON/OFF actuator

Code AE: ON/OFF actuator, two additional potential-free limit switches, Class A (EN15714-2)

## Actuator RP

### RP – voltage/frequency

Voltage/frequency	Code	Actuator version (code)		
		RP32	RP64	RP100
<b>12 V DC</b>	<b>C1</b>	X	X	X
<b>100 - 240 V</b>	<b>T4</b>	X	X	X
<b>50 - 60 Hz</b>				

### RP – control module

Control module	Code <sup>1)</sup>	Actuator version (code)		
		RP32	RP64	RP100
<b>ON/OFF</b>	<b>A0</b>	X	X	X
	<b>AE</b>	X	X	X
<b>Positioner</b>	<b>E1</b>	X	X	X
	<b>E2</b>	X	X	X

### 1) Control module

Code A0: ON/OFF actuator

Code AE: ON/OFF actuator, two additional potential-free limit switches, Class A (EN15714-2)

Code E1: Control actuator, external set value 0–10 VDC

Code E2: Control actuator, external set value 0/4–20 mA

### RP – standard version

DN	Torque	PS	Actuator version (code)		
			RP32	RP64	RP100
<b>25</b>	4	16 bar	X	-	-
<b>40</b>	7		X	-	-
<b>50</b>	7		X	-	-
<b>65</b>	15		X	-	-
<b>80</b>	28		X	X	-
<b>100</b>	55		-	X	X
<b>125</b>	77		-	-	X

Torques in Nm

Design for EPDM sleeve, medium water, medium temperature +20 °C

## Availability

### Body

DN	NPS	Body material <sup>1)</sup> : Investment casting code 37									
		Connection type code <sup>2)</sup>									
		Threaded socket		Spigot						Clamp	
		1	31	0	16	17	37	59	60	86	88
15	1/2"	X	X	X	X	X	-	X	X	X	X
20	3/4"	X	X	X	X	X	-	X	X	X	X
25	1"	X	X	X	X	X	X	X	X	X	X
32	1¼"	X	X	X	X	X	X	-	X	X	-
40	1½"	X	X	X	X	X	X	X	X	X	X
50	2"	X	X	X	X	X	X	X	X	X	X

1) **Body material**

Code 37: 1.4408, investment casting

2) **Connection type**

Code 0: Spigot DIN

Code 1: Threaded socket DIN ISO 228

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

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

Code 31: NPT female thread

Code 37: Spigot SMS 3008

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

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

Code 86: Clamp DIN 32676 series A, face-to-face dimension FTF EN 558 series 14

Code 88: Clamp ASME BPE, for pipe ASME BPE, face-to-face dimension FTF EN 558 series 14

## Actuator

### Actuator GEMÜ 9428 – voltage/frequency

Actuator version Code <sup>1)</sup>	Control module Code <sup>2)</sup>	Voltage/frequency			
		12 V DC (code B1)	12 V AC (code B4)	24 V DC (code C1)	24 V AC (code C4)
<b>3006</b>	<b>A0, AE</b>	X	X	X	X
<b>3015</b>	<b>A0, AE</b>	X	-	X	-
<b>3035</b>	<b>A0, AE</b>	-	-	X	-

1) **Actuator version**

Code 3006: Actuator, motorized, operating time 4 s, torque 6 Nm, GEMÜ, size 3, supply voltage B1, C1, B4, C4

Code 3015: Actuator, motorized, operating time 11 s, torque 15 Nm, GEMÜ, size 3, supply voltage B1, C1

Code 3035: Actuator, motorized, operating time 15 s, torque 35 Nm, GEMÜ, size 3, supply voltage C1

2) **Control module**

Code A0: ON/OFF actuator

Code AE: ON/OFF actuator, two additional potential-free limit switches, Class A (EN15714-2)

### GEMÜ 9428 actuator

DN	Actuator version <sup>1)</sup>		
	3006	3015	3035
<b>15</b>	X	X	-
<b>20</b>	X	X	-
<b>25</b>	X	X	-
<b>32</b>	-	X	X
<b>40</b>	-	-	X
<b>50</b>	-	-	X

1) **Actuator version**

Code 3006: Actuator, motorized, operating time 4 s, torque 6 Nm, GEMÜ, size 3, supply voltage B1, C1, B4, C4

Code 3015: Actuator, motorized, operating time 11 s, torque 15 Nm, GEMÜ, size 3, supply voltage B1, C1

Code 3035: Actuator, motorized, operating time 15 s, torque 35 Nm, GEMÜ, size 3, supply voltage C1

## Order data

### Butterfly valve with GEMÜ 9428 actuator

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
Butterfly valve, motorized	428

2 DN	Code
DN 15	15
DN 20	20
DN 25	25
DN 32	32
DN 40	40
DN 50	50

3 Body configuration	Code
2/2-way body	D

4 Connection type	Code
<b>Spigot</b>	
Spigot DIN	0
Spigot DIN EN 10357 series B (2014 issue; formerly DIN 11850 series 1)	16
Spigot EN 10357 series A/DIN 11866 series A, formerly DIN 11850 series 2	17
Spigot SMS 3008	37
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
<b>Threaded socket</b>	
Threaded socket DIN ISO 228	1
NPT female thread	31
<b>Clamp</b>	
Clamp DIN 32676 series A, face-to-face dimension FTF EN 558 series 14	86
Clamp ASME BPE, for pipe ASME BPE, face-to-face dimension FTF EN 558 series 14	88

5 Body material	Code
1.4408, investment casting	37

6 Shut-off seal material	Code
FKM	4
Silicone (MVQ)	9
EPDM	14

7 Voltage/Frequency	Code
12 VDC	B1
12 V, 50/60 Hz	B4
24 VDC	C1
24 V, 50/60 Hz	C4

8 Control module	Code
ON/OFF actuator	A0
ON/OFF actuator, two additional potential-free limit switches, Class A (EN15714-2)	AE

9 Actuator version	Code
Actuator, motorized, operating time 4 s, torque 6 Nm, GEMÜ, size 3, supply voltage B1, C1, B4, C4	3006
Actuator, motorized, operating time 11 s, torque 15 Nm, GEMÜ, size 3, supply voltage B1, C1	3015
Actuator, motorized, operating time 15 s, torque 35 Nm, GEMÜ, size 3 supply voltage C1	3035

10 Type of design	Code
Standard	

**Order example**

Ordering option	Code	Description
1 Type	428	Butterfly valve, motorized
2 DN	25	DN 25
3 Body configuration	D	2/2-way body
4 Connection type	1	Threaded socket DIN ISO 228
5 Body material	37	1.4408, investment casting
6 Shut-off seal material	14	EPDM
7 Voltage/Frequency	C1	24 VDC
8 Control module	A0	ON/OFF actuator
9 Actuator version	3006	Actuator, motorized, operating time 4 s, torque 6 Nm, GEMÜ, size 3, supply voltage B1, C1, B4, C4
10 Type of design		Standard

## Butterfly valve with actuator GEMÜ RP

The order data provide an overview of standard configurations.

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

Products ordered with **bold marked ordering options** are so-called preferred series. Depending on the nominal size, these are available more quickly.

### Order codes

1 Type	Code
Butterfly valve, motorized	428

2 DN	Code
DN 15	15
DN 20	20
DN 25	25
DN 32	32
DN 40	40
DN 50	50

3 Body configuration	Code
2/2-way body	D

4 Connection type	Code
<b>Spigot</b>	
Spigot DIN	0
Spigot DIN EN 10357 series B (2014 issue; formerly DIN 11850 series 1)	16
Spigot EN 10357 series A/DIN 11866 series A, formerly DIN 11850 series 2	17
Spigot SMS 3008	37
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
<b>Threaded socket</b>	
Threaded socket DIN ISO 228	1
NPT female thread	31
<b>Clamp</b>	
Clamp DIN 32676 series A, face-to-face dimension FTF EN 558 series 14	86
Clamp ASME BPE, for pipe ASME BPE, face-to-face dimension FTF EN 558 series 14	88

5 Body material	Code
1.4408, investment casting	37

6 Shut-off seal material	Code
FKM	4
Silicone (MVQ)	9
EPDM	14

7 Voltage/Frequency	Code
12 VDC	B1
12 V, 50/60 Hz	B4
24 VDC	C1
24 V, 50/60 Hz	C4

8 Control module	Code
ON/OFF actuator	A0
ON/OFF actuator, two additional potential-free limit switches, Class A (EN15714-2)	AE

9 Actuator version	Code
Actuator AUMA RP With detachable hand crank, insulation class B mechanical position indicator, heating protection class IP67 acc. to EN 60529, C2 acc. to EN ISO 12944-2, standard ambient temperature -20 °C to +60 °C torque measurement and torque limits,	RP32
Actuator AUMA RP With detachable hand crank, insulation class B mechanical position indicator, heating protection class IP67 acc. to EN 60529, C2 acc. to EN ISO 12944-2, standard ambient temperature -20 °C to +60 °C torque measurement and torque limits,	RP64
Actuator AUMA RP With detachable hand crank, insulation class B mechanical position indicator, heating protection class IP67 acc. to EN 60529, C2 acc. to EN ISO 12944-2, standard ambient temperature -20 °C to +60 °C torque measurement and torque limits,	RP100

10 Type of design	Code
Without	
Media-wetted area cleaned to ensure suitability for paint applications, parts sealed in plastic bag	0101
Ra ≤ 0.6 µm electropolished internal/external, surface finish data refers to media-wetted surfaces	1508
Ra ≤ 0.8 µm mechanically polished internal, blasted external, surface finish data refers to media-wetted surfaces	1502
Nickel-plated brass body	1524
Disc/spigot polished to 1.6 µm	1590

11 Special version	Code
Without	
ATEX certification	X

**Order example - standard version**

Ordering option	Code	Description
1 Type	428	Butterfly valve, motorized
2 DN	25	DN 25
3 Body configuration	D	2/2-way body
4 Connection type	1	Threaded socket DIN ISO 228
5 Body material	37	1.4408, investment casting
6 Shut-off seal material	14	EPDM
7 Voltage/Frequency	C1	24 VDC
8 Control module	A0	ON/OFF actuator
9 Actuator version	3006	Actuator, motorized, operating time 4 s, torque 6 Nm, GEMÜ, size 3, supply voltage B1, C1, B4, C4
10 Actuator version	RP64	Actuator AUMA RP With detachable hand crank, insulation class B mechanical position indicator, heating protection class IP67 acc. to EN 60529, C2 acc. to EN ISO 12944-2, standard ambient temperature -20 °C to +60 °C torque measurement and torque limits,
11 Type of design		Standard

## Butterfly valve with J+J actuator

The order data provide an overview of standard configurations.

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

Products ordered with **bold marked ordering options** are so-called preferred series. Depending on the nominal size, these are available more quickly.

### Order codes

1 Type	Code
Butterfly valve, motorized, body with C5-M coating (min. 250 µm) and integrated leakage groove, blow-out proof shaft with dust protection, multiple bearings through PTFE bushing, multiple sealing system with insertion slope, material easy to read when installed	R488

2 DN	Code
DN 25	25
DN 32	32
DN 40	40
DN 50	50
DN 65	65
DN 80	80
DN 100	100
DN 125	125
DN 150	150
DN 200	200
DN 250	250
DN 300	300
DN 350	350
DN 400	400
DN 450	450
DN 500	500
DN 600	600

3 Body configuration	Code
Flange-mounted design (lug), face-to-face dimension FTF EN 558 series 20	L
Double flange design (U section), face-to-face dimension FTF EN 558, series 20	U
Wafer-type flange design, face-to-face dimension FTF EN 558 series 20	W

4 Operating pressure	Code
3 bar	0
<b>6 bar</b>	<b>1</b>
10 bar	2
<b>16 bar</b>	<b>3</b>

5 Connection type	Code
PN 6/flange EN 1092, face-to-face dimension FTF EN 558 series 20	1
PN 10/flange EN 1092, face-to-face dimension FTF EN 558 series 20	2
PN 16/flange EN 1092, face-to-face dimension FTF EN 558 series 20	3

5 Connection type	Code
ANSI B16.5, class 150, face-to-face dimension FTF EN 558 series 20	D
Flange BS 10 Tab E, face-to-face dimension FTF EN 558, series 20	S
Flange AS 2129 Tab D, face-to-face dimension FTF EN 558, series 20	T
Flange AS 2129 Tab E, face-to-face dimension FTF EN 558, series 20	U
Flange BS 10 Tab D, face-to-face dimension FTF EN 558, series 20	H
JIS 10 K, face-to-face dimension FTF EN 558, series 20	G
JIS 16 K, face-to-face dimension FTF EN 558, series 20	J

6 Body material	Code
<b>EN-GJS-400-15 (GGG-40), epoxy coated 250 µm</b>	<b>2</b>
EN-GJS-400-18-LT (GGG-40.3), epoxy coated 250 µm	3

7 Disc material	Code
<b>1.4408/ASTM A351 CF8M</b>	<b>A</b>
1.4408, polished, roughness Ra 0.6–3.2, except disc marking	B
<b>1.4408, HALAR coated</b>	<b>C</b>
<b>1.4469/ASTM GR5A</b>	<b>D</b>
EN-GJS-400-15 (GGG-40), epoxy coated	E
EN-GJS-400-15 (GGG-40), HALAR coated	P
<b>EN-GJS-400-15 (GGG-40), RILSAN PA11 coated</b>	<b>R</b>
2.0975/CC333G	G
1.4435/ASTM A351/CF3M/AISI 316L	I

8 Shaft material	Code
1.4021/AISI 420	1

9 Shut-off seal material	Code
<b>EPDM</b>	<b>E</b>
SBR-AB/P (abrasion resistant)	F
CSM	H
NR (FDA/1935-2004 certification), white AB/W	I
NBR (DVGW Gas certification)	J
EPDM (FDA/1935-2004 certification), white	M
<b>NBR</b>	<b>N</b>
FKM +	O
EPDM-SHT (steam)	T
NBR (FDA/1935-2004 certification), white	U
<b>FKM</b>	<b>V</b>
<b>EPDM (drinking water compliant)</b>	<b>W</b>
<b>EPDM-HT (FDA/1935-2004 certification)</b>	<b>Z</b>

Butterfly valve with J+J actuator

10 Liner fixing	Code
Liner bonded into body	B
Loose liner	L

11 Voltage/Frequency	Code
12 VDC	B1
24 V–240 V AC/DC for model 20, 35, 55, 85, 140, 300	U5

12 Control module	Code
ON/OFF actuator, three-position actuator, additional potential-free limit switches	A3
ON/OFF actuator, two additional potential-free limit switches, Class A (EN15714-2)	AE
ON/OFF actuator, two additional potential-free limit switches, BSR battery pack (NC)	AE1
ON/OFF actuator, two additional potential-free limit switches, BSR battery pack (NO)	AE2
ON/OFF actuator, potentiometer output, Class A (EN15714-2)	AP
ON/OFF actuator, two additional potential-free limit switches, potentiometer output 5 kOhm, FailSafe battery pack (NC), preferred direction is adjustable	AP1
Control actuator, external set value 0–10 VDC	E1
DPS positioner, external set value 0–10 V, BSR battery pack (NC)	E11
Control actuator, external set value 0/4–20 mA	E2
Positioner, external set value 4–20 mA, battery pack (NC)	E21
Positioner, external set value 4–20 mA, battery pack (NO)	E22

13 Actuator version	Code
Actuator, motorized, operating time 9 s, torque 20 Nm, J+J, type J4, heating, IP67	J4C20
Actuator, motorized, operating time 9 s, torque 35 Nm, J+J, type J4, heating, IP67	J4C35
Actuator, motorized, operating time 13 s, torque 55 Nm, J+J, type J4, heating, IP67	J4C55
Actuator, motorized, operating time 29 s, torque 85 Nm, J+J, type J4, heating, IP67	J4C85
Actuator, motorized, operating time 34 s, torque 140 Nm, J+J, type J4, heating, IP67	J4C14
Actuator, motorized, operating time 58 s, torque 300 Nm, J+J, type J4, heating, IP67	J4C30

14 Type of design	Code
Without	

14 Type of design	Code
Media-wetted area cleaned to ensure suitability for paint applications, parts sealed in plastic bag	0101
Valve free of oil and grease, media-wetted area cleaned and packed in PE bag	0107
Stainless steel valve disc, without lettering, mechanically polished to 1.6 µm and electropolished, spigot internally polished to 1.6 µm, no polishing of internal threads	1782
Butterfly valve body powder coated, RAL 5015, sky blue	1892
Butterfly valve body powder coated, RAL 1023, traffic yellow	1925
Mounting parts in A4 quality. Caution! Danger of galling! Customer must take the necessary precautions for this!	5143
Thermal separation between actuator and valve body via mounting kit	5222
Thermal separation between actuator and valve body via dew point barrier	5226
Aluminium product label, black anodized, lasered marking, riveted to the body	6061

15 Special version	Code
Without	
ACS certification	A
BELGAQUA certification	B
DVGW Water certification	D
Country of origin Germany	E
DVGW Gas certification	G
NSF 61 Water certification	N
Special version for oxygen Maximum temperature for medium: 100 °C, Operating pressure limited in accordance with product label data Media-wetted materials cleaned, and grease and seal tested in accordance with DIN EN 1797/ISO 21010	O
ASME B31.3	P
DNV GL certification	S
WRAS certification	W
ATEX certification	X
ATEX certification (in the piping system)	Y

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

**Order example - standard version**

Ordering option	Code	Description
1 Type	R488	Butterfly valve, motorized, body with C5-M coating (min. 250 µm) and integrated leakage groove, blow-out proof shaft with dust protection, multiple bearings through PTFE bushing, multiple sealing system with insertion slope, material easy to read when installed
2 DN	100	DN 100
3 Body configuration	W	Wafer-type flange design, face-to-face dimension FTF EN 558 series 20
4 Operating pressure	3	16 bar
5 Connection type	3	PN 16/flange EN 1092, face-to-face dimension FTF EN 558 series 20
6 Body material	2	EN-GJS-400-15 (GGG-40), epoxy coated 250 µm
7 Disc material	A	1.4408/ASTM A351 CF8M
8 Shaft material	1	1.4021/AISI 420
9 Shut-off seal material	E	EPDM
10 Liner fixing	L	Loose liner
11 Voltage/Frequency	U5	24 V–240 V AC/DC for model 20, 35, 55, 85, 140, 300
12 Control module	AE	ON/OFF actuator, two additional potential-free limit switches, Class A (EN15714-2)
13 Actuator version	J4C85	Actuator, motorized, operating time 29 s, torque 85 Nm, J+J, type J4, heating, IP67
14 Type of design		Without
15 Special version		Without
16 CONEXO		Without

## Butterfly valve technical data

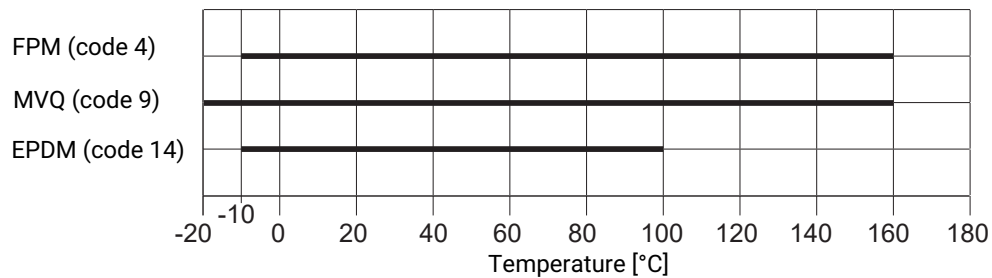
### Medium

**Working medium:** Corrosive, inert, gaseous and liquid media which have no negative impact on the physical and chemical properties of the body, disc and seal material. The product is only suitable for use with fluids of group 2 according to the Pressure Equipment Directive.

### Temperature

**Media temperature:**

Shut-off seal



For media temperatures above 100 °C additionally use mounting kit GEMÜ MSC (see accessories).

**Ambient temperature:** -10 – 60 °C

**Storage temperature:** -20 – 60 °C

### Pressure

**Operating pressure:** 0 – 10 bar

**Note:** Cannot be used as an end-of-line valve

**Pressure rating:** PN 10

**Kv values:**

DN	Body material
	Code 37
15	7
20	15
25	20
32	55
40	90
50	140

Kv values in m³/h

### Product compliance

**Machinery Directive:** 2006/42/EC

**Pressure Equipment Directive:** 2014/68/EU

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

**Approvals:** FDA

**Mechanical data****Torques:**

DN	Torques
15	6.0
20	6.0
25	6.0
32	8.0
40	20.0
50	21.0

Torques in Nm

**Weight:****Body**

DN	Body material
	Code 37
15	900
20	940
25	1020
32	1100
40	1500
50	1950

Weight in g

## Technical data for actuator

### GEMÜ 9428 actuator

#### Mechanical data

Weight: **GEMÜ 9428**

Supply voltage 12 V / 24 V:	1.0 kg
Actuator version 3035:	2.4 kg

Protection class: IP 65 acc. to EN 60529

Nominal travel: 90°

Max. travel: 93°

Setting range: 0 to 20° (limit switch Min.)  
70 to 93° (limit switch Max.)

#### Electrical data

Duty cycle: Continuous duty

Electrical protection: Motor protective system by customer

Electrical protection class: I (DIN EN 61140)

#### Electrical connection

Electrical connection type: Cable connection PG 13.5  
Binder RD24 flange plug series 693, number of poles: 6+PE, IP67 (GEMÜ 3006, 3015)

Cable diameter: 7.5 – 12.5 mm

Max. cross section of wire: 1.5 mm<sup>2</sup>

Recommended motor protection:

Voltage	12 V DC	24 V DC
<b>Motor protection switch type</b>	Siemens 3RV 1011-1CA10	Siemens 3RV 1011-1BA10
<b>Set current</b>	2.20	1.70

Current data in A

Rated voltage: 12 V / 24 V AC or DC (± 10 %)

Rated frequency: 50/60 Hz (at AC rated voltage)

Power consumption:

Actuator version	12 V DC	12 V AC	24 V DC	24 V AC
	Code B1	Code B4	Code C1	Code C4
<b>3006</b>	30.0	30.0	30.0	30.0
<b>3015</b>	30.0	-	30.0	-
<b>3035</b>	-	-	30.0	-

Power consumption in W

Current consumption:	Actuator version	12 V DC	12 V AC	24 V DC	24 V AC
		Code B1	Code B4	Code C1	Code C4
	<b>3006</b>	2.2	2.0	1.20	1.5
	<b>3015</b>	2.2	-	1.20	-
	<b>3035</b>	-	-	1.30	-

Current data in A

Max. current at start up:	Actuator version (code)	12 V DC	12 V AC	24 V DC	24 V AC
		Code B1	Code B4	Code C1	Code C4
	<b>3006</b>	6.3	2.4	4.0	1.8
	<b>3015</b>	9.2	-	3.8	-
	<b>3035</b>	-	-	3.3	-

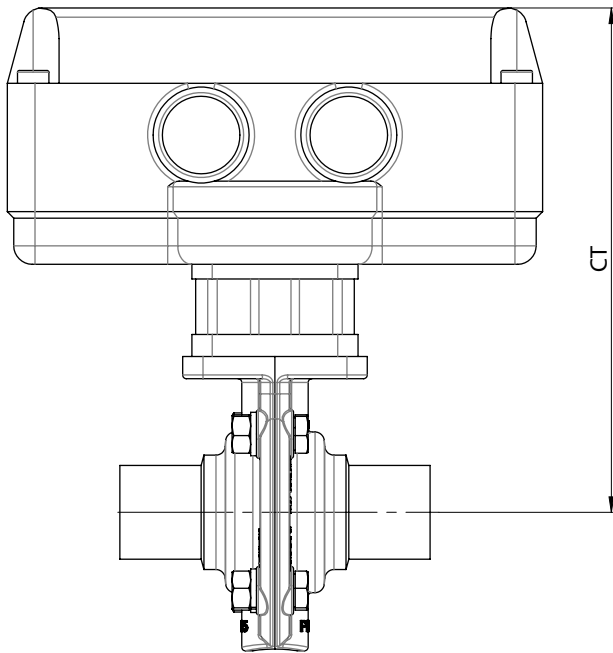
Current data in A

## **Actuator RP**

See operating instructions for actuator AUMA RP.

## Dimensions

### Mounting height



DN	CT	
	Actuator version (code) <sup>1)</sup>	
	3006, 3015	3035
15	135.5	-
20	135.5	-
25	135.5	-
32	142.0	148.5
40	-	156.5
50	-	165.5

Dimensions in mm

1) **Actuator version**

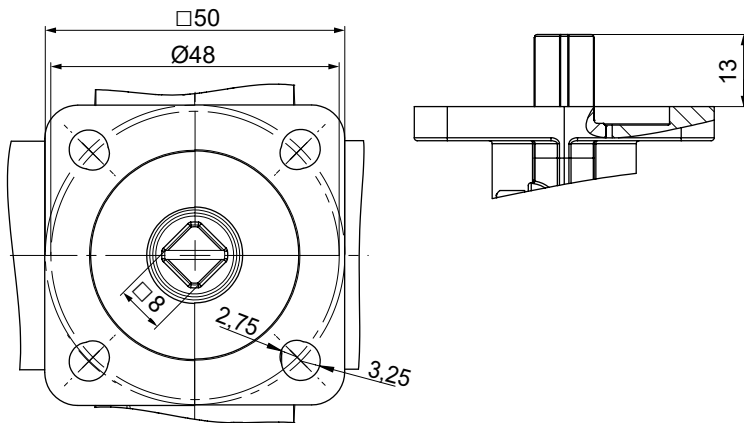
Code 3006: Actuator, motorized, operating time 4 s, torque 6 Nm, GEMÜ, size 3, supply voltage B1, C1, B4, C4

Code 3015: Actuator, motorized, operating time 11 s, torque 15 Nm, GEMÜ, size 3, supply voltage B1, C1

Code 3035: Actuator, motorized, operating time 15 s, torque 35 Nm, GEMÜ, size 3, supply voltage C1

**Actuator**

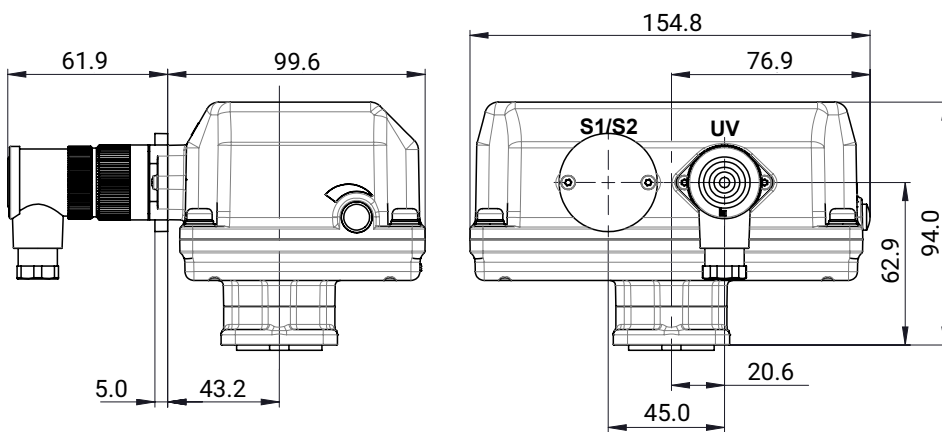
**Actuator flange F05/G05**



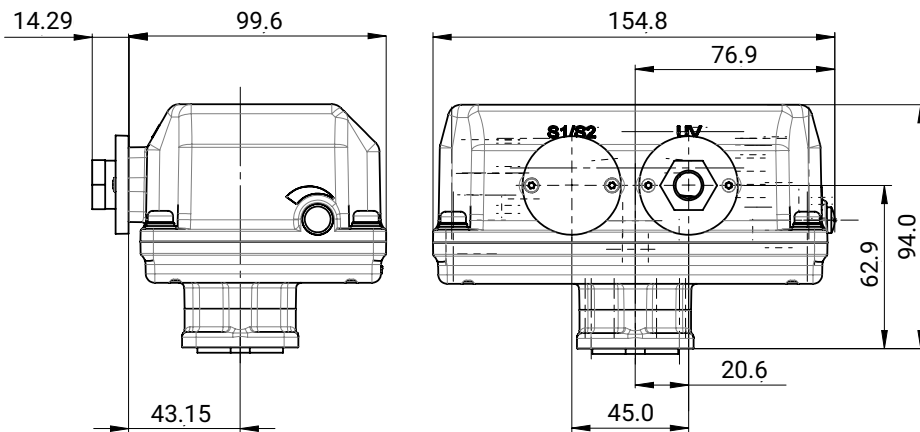
Dimensions in mm

**Actuator version 3006, 3015**

ON/OFF actuator (control module code A0)

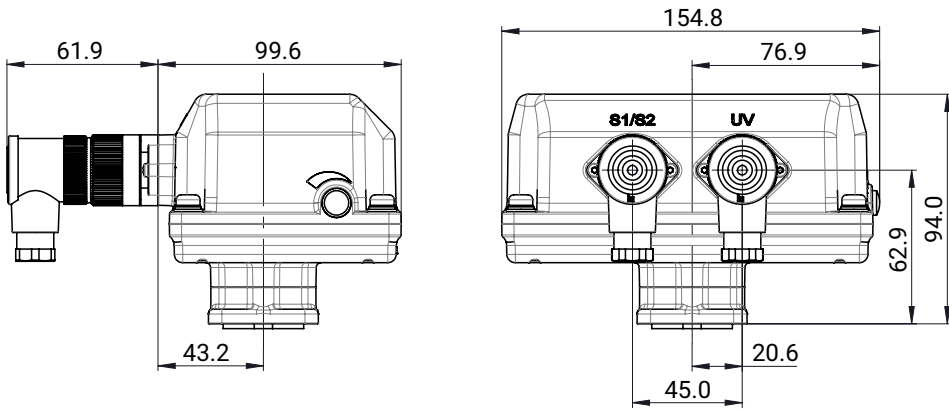


ON/OFF actuator (control module code A0/K-no. 7158)



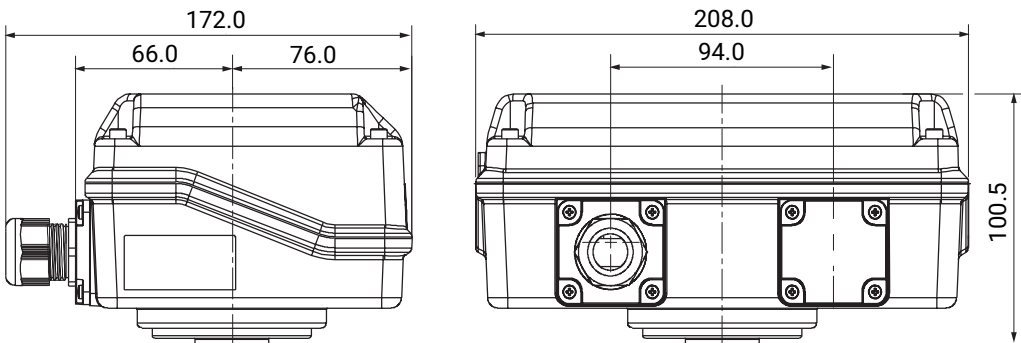
Dimensions

**OPEN/CLOSE control, two additional potential-free limit switches (control module code AE)**



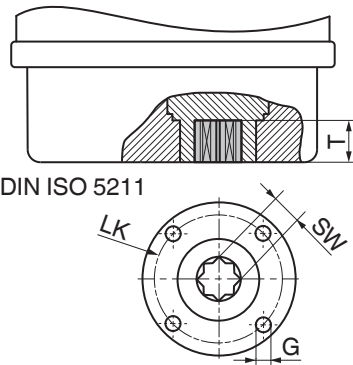
Dimensions in mm

**Actuator version 3035**



Dimensions in mm

**Connection dimensions actuator version (20XX, 30XX)**



DIN ISO 5211

Actuator version (code) <sup>1)</sup>	Connection size (code)	Centring (code)	WAF	G	LK	T
<b>3006, 3015</b>	G05	Y	S08	Ø5.5	48.0	15.0
	F03	N	S09	M5	36.0	16.0
	F04	N	S09	M5	42.0	16.0
	F05	N	S09	M6	50.0	16.0
	F05	N	S11	M6	50.0	16.0
<b>3035</b>	F05	Y	S14	M6	50.0	22.0

Dimensions in mm

**1) Actuator version**

Code 3006: Actuator, motorized, operating time 4 s, torque 6 Nm, GEMÜ, size 3, supply voltage B1, C1, B4, C4

Code 3015: Actuator, motorized, operating time 11 s, torque 15 Nm, GEMÜ, size 3, supply voltage B1, C1

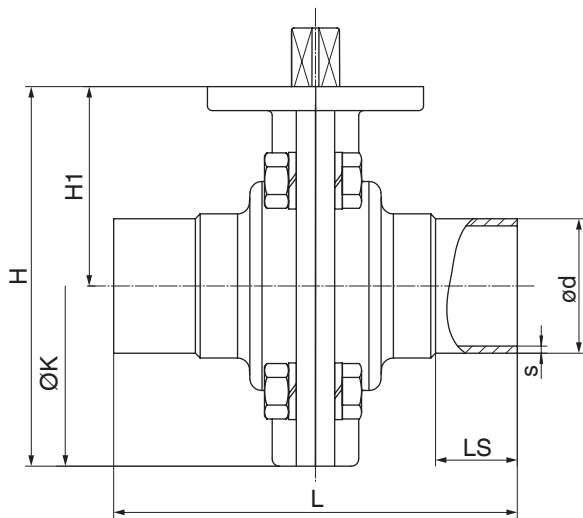
Code 3035: Actuator, motorized, operating time 15 s, torque 35 Nm, GEMÜ, size 3, supply voltage C1

**Actuators AUMA, J+J**

For more detailed information on third-party actuators, refer to the manufacturers' documentation

**Body**

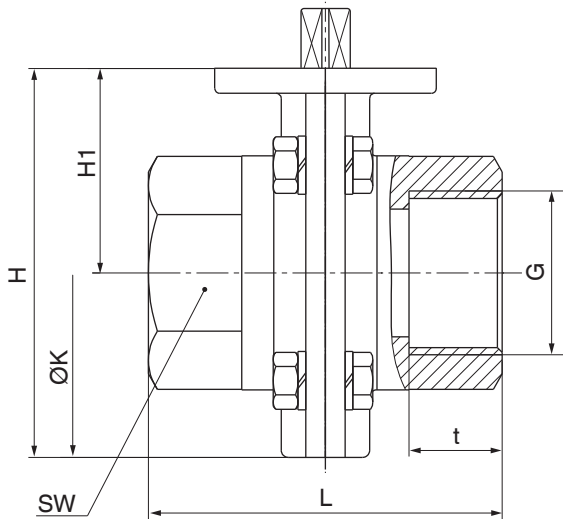
**Butt weld spigot (connection type code 0, 16, 17, 37, 59, 60)**



							DIN		EN 10357			
							Code 0		Code 16		Code 17	
DN	NPS	L	H	H1	øK	LS	ød	s	ød	s	ød	s
15	1/2"	80.0	79.0	41.5	75.0	20.0	18.0	1.5	18.0	1.0	19.0	1.5
20	3/4"	84.0	79.0	41.5	75.0	22.0	22.0	1.5	22.0	1.0	23.0	1.5
25	1"	84.0	79.0	41.5	75.0	22.0	28.0	1.5	28.0	1.0	29.0	1.5
32	1¼"	88.0	91.0	48.0	85.0	25.0	34.0	1.5	34.0	1.0	35.0	1.5
40	1½"	96.0	108.0	56.0	103.0	25.0	40.0	1.5	40.0	1.0	41.0	1.5
50	2"	110.0	123.0	65.0	116.0	30.0	52.0	1.5	52.0	1.0	53.0	1.5

							SMS 3008		EN ISO 1127		ASME BPE	
							Code 37		Code 60		Code 59	
DN	NPS	L	H	H1	øK	LS	ød	s	ød	s	ød	s
15	1/2"	80.0	79.0	41.5	75.0	20.0	-	-	21.3	1.6	12.7	1.65
20	3/4"	84.0	79.0	41.5	75.0	22.0	-	-	26.9	1.6	19.1	1.65
25	1"	84.0	79.0	41.5	75.0	22.0	25.0	1.2	33.7	2.0	25.4	1.65
32	1¼"	88.0	91.0	48.0	85.0	25.0	33.7	1.2	42.4	2.0	-	-
40	1½"	96.0	108.0	56.0	103.0	25.0	38.0	1.2	48.3	2.0	38.1	1.65
50	2"	110.0	123.0	65.0	116.0	30.0	51.0	1.2	60.3	2.0	50.8	1.65

Dimensions in mm

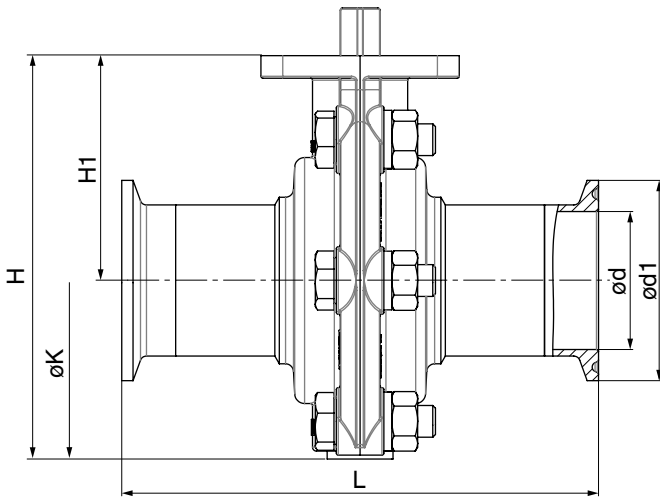
**Threaded socket (connection type code 1, 31)**

DN	G/NPT	L	H	H1	t	øK	SW	n
15	1/2"	72.0	79.0	41.5	15.0	75.0	27.0	6
20	3/4"	72.0	79.0	41.5	16.0	75.0	32.0	6
25	1"	72.0	79.0	41.5	19.0	75.0	41.0	6
32	1¼"	72.0	91.0	48.0	21.4	85.0	50.0	8
40	1½"	83.0	108.0	56.0	21.4	103.0	55.0	8
50	2"	88.0	123.0	65.0	25.7	116.0	70.0	8

Dimensions in mm

n = number of flats

**Clamp (connection type code 86, 88)**



DN	NPS	L	H	H1	øK	DIN 32676 series A		ASME BPE	
						Code 86		Code 88	
						ød	ød1	ød	ød1
15	1/2"	115.0	79.0	41.5	75.0	16.0	34.0	9.4	25.0
20	3/4"	120.0	79.0	41.5	75.0	20.0	34.0	15.8	25.0
25	1"	125.0	79.0	41.5	75.0	26.0	50.5	22.1	50.5
32	1¼"	130.0	91.0	48.0	85.0	32.0	50.5	-	-
40	1½"	140.0	108.0	56.0	103.0	38.0	50.5	34.8	50.5
50	2"	150.0	123.0	65.0	116.0	50.0	50.5	47.5	64.0

Dimensions in mm

**Accessories**



**GEMÜ MSC  
Mounting kit**

The MSC mounting kit is an interface, for the same and different ends, to join flange designs according to ISO 5211. This mounting kit ensures thermal separation of actuator and valve body. It can also be used as height compensation for insulated pipelines. The mounting kit is available in steel, electrogalvanized and stainless steel in an open or closed design.



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