

GEMÜ R488 Victoria

Motorized butterfly valve



Features

- Low torques thanks to PTFE coated bushes
- Bubble tight sealing, in accordance with EN 12266-1/P12, leak rate A
- Liner material is easy to read when installed
- Sleek disc design for higher Kv values
- Robust body coating comparable to ISO 12944-6 C5
- Various actuator types can be selected
- Optional accessories are installed, set and tested so they are ready for operation

Description

The GEMÜ R488 Victoria soft seated metal butterfly valve is motorized. Various metal or plastic on/off or control actuators are available. The butterfly valve is available in nominal sizes DN 50 to 300 and in standard installation lengths ISO 5752/20 | EN 558-1/20 | API 609 category A (DIN 3202 K1) in wafer and lug body versions.

Technical specifications

- **Media temperature :** -10 to 160 °C
- **Ambient temperature:** -10 to 70 °C
- **Operating pressure :** 0 to 16 bar
- **Nominal sizes:** DN 50 to 300
- **Body configurations:** Lug | Wafer
- **Connection standards:** AS | ASME | BS | DIN | EN | ISO | JIS
- **Body materials:** EN-GJS-400-15, SG iron material | EN-GJS-400-18-LT, SG iron material
- **Body coating:** Epoxy
- **Liner materials:** EPDM | FKM | NBR | SBR, abrasion resistant | Silicone
- **Disc materials:** 1.4408, investment casting material | 1.4408, polished investment casting material | EN-GJS-400-15, SG iron material
- **Disc coating:** Epoxy | Halar® | Rilsan®
- **Supply voltage:** 100 - 120 V AC, 50/60 Hz | 12 - 24 V AC/DC | 220 - 240 V AC, 50/60 Hz | 380 - 480 V AC, 50/60 Hz
- **Operating time 90°:** 4 to 100 s
- **Protection class:** IP 65. 66. 67. 68
- **Conformities:** ACS | ATEX | Belgaqua | DNV GL | DVGW Gas | EAC | FDA | Functional safety | NSF | Oxygen | Regulation (EC) No. 1935/2004 | TA Luft (German Clean Air Act) | WRAS

Technical data depends on the respective configuration



further information
webcode: GW-R488



Product line



GEMÜ R480
Victoria

GEMÜ R481
Victoria

GEMÜ R487
Victoria

GEMÜ R488
Victoria

Operation				
With bare shaft	●	-	-	-
Manual	-	-	●	-
Pneumatic	-	●	-	-
Motorized	-	-	-	●
Nominal sizes	DN 50 to 300	DN 50 to 300	DN 50 to 300	DN 50 to 300
Media temperature	-10 to 160 °C	-10 to 160 °C	-10 to 160 °C	-10 to 160 °C
Operating pressure	0 to 16 bar	0 to 16 bar	0 to 16 bar	0 to 16 bar
Connection types				
Flange (lug)	●	●	●	●
Flange (wafer)	●	●	●	●
Conformities				
ACS	●	●	●	●
ATEX	●	●	●	●
Belgaqua	●	●	●	●
DNV GL	●	●	●	●
DVGW Gas	●	●	●	●
EAC	●	●	●	●
FDA	●	●	●	●
Functional safety	●	●	●	●
NSF	●	●	●	●
Oxygen	●	●	●	●
Regulation (EC) No. 1935/2004	●	●	●	●
TA Luft (German Clean Air Act)	●	●	●	●
WRAS	●	●	●	●

Comparison of actuator applications

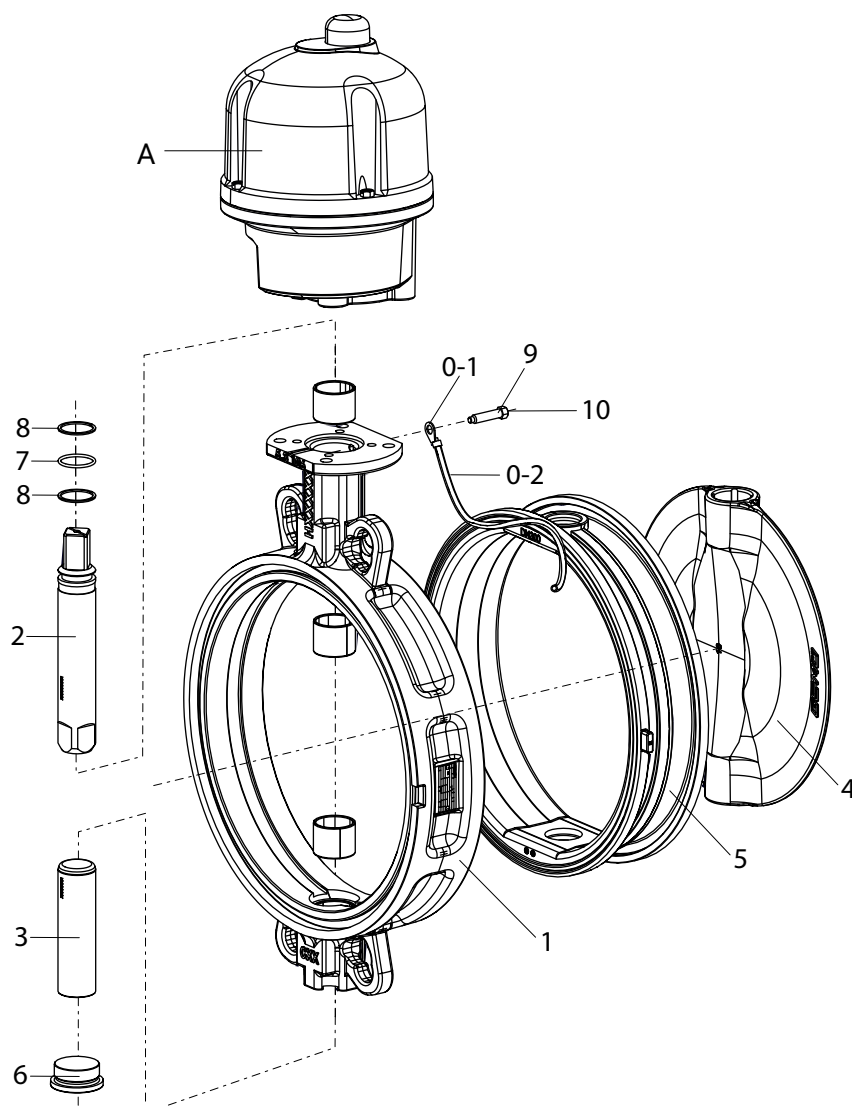
				
	GEMÜ 9428	GEMÜ 9468	GEMÜ J4C	GEMÜ AQ
Range of functions				
Use in non-aggressive environment (up to C3)	●	●	●	●
Use in aggressive environment (C5)	●	●	●	●
Use in protected outdoor areas	●	●	●	●
Use in unprotected outdoor areas	●	●	●	●
Applications with many/frequent cycle duties	●	●	●	●
Fail-safe option	●	●	●	●
Positioning application	●	●	●	●
Industrial sectors				
Chemical processes	●	●	●	●
Surface finishing	●	●	●	●
Water treatment	●	●	●	●
Mechanical engineering	●	●	●	●
Power generation and environmental systems	●	●	●	●
Food processing technology	●	●	●	●
Semiconductor	●	●	●	●
Medical systems	●	●	●	●
Pharmaceutical industry	●	●	●	●

Comparison of technical data of actuators

				
	GEMÜ 9428	GEMÜ 9468	GEMÜ J4C	GEMÜ AQ
Manufacturer	GEMÜ	GEMÜ	J+J	AUMA
Manufacturer type	9428	9468	J4C	AM, AC, SQ, SQR
Torques	6 to 55 Nm	70 to 200 Nm	20 to 300 Nm	150 to 2400 Nm
Duty cycle	100 %	30 % (ON/OFF actuator) 50 % (control actuator)	75 %	20 % (On/Off actuator) 25 % (control actuator)
Heating	No	No	Yes	Yes
Voltage				
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	●	●	-	-
400 V AC, 50 Hz	-	-	-	●
Protection class	IP 65, IP 67	IP 65	IP 67	IP 68
Ambient temperature	-10 to 60 °C	-10 to 60 °C	-20 to 70 °C	-40 to 70 °C
Housing materials				
ABS	-	●	-	-
Aluminium	-	●	-	●
Polyamide (PA6)	-	-	●	-
PP	●	-	-	-
Versions				
Limit switches	●	●	●	●
ON/OFF actuator	●	●	-	●
Optional battery pack	-	-	●	-
Optional on-site control	-	-	-	●
Optional positioner	-	-	●	●
Optional positioning actuator	-	●	●	●
Optional potentiometer	-	●	-	-
Optionally 3 positions	-	-	●	-
Torque switch	-	-	-	●

Product description

Construction



Item	Name	Materials
1	Body	SG iron 5.3106, epoxy coated (RAL 5021)
2	Shaft	1.4021
3	Axis	1.4021
4	Disc	Various materials (see order data)
5	Liner	Various materials (see order data)
6	Threaded plug	1.4408
7	O-ring	NBR
8	Support rings	PTFE
9	Hexagon head bolts	Stainless steel A2-70
0	Earthing kit for ATEX version	
0-1	Cable lug (ATEX version)	
0-2	Stranded wire (ATEX version)	
10	CONEXO RFID chip (see "GEMÜ CONEXO", page 38)	
A	Motorized actuator	

Actuator assignment

GEMÜ 9428, 9468 actuators

GEMÜ 9428, 9468 – Standard design

DN	Torque	PS	Actuator version (code)					
			1015	3015, 3035	3055	2070	4100	4200
50	7	16 bar	X	X	-	-	-	-
65	15		X	X	-	-	-	-
80	28		-	-	X	-	-	-
100	55		-	-	X	X	-	-
125	77		-	-	-	-	X	-
150	118		-	-	-	-	-	X
200	145	3 bar	-	-	-	-	-	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) ¹⁾	Voltage/Frequency			
			12 V DC (code B1)	12 V AC (code B4)	24 V DC (code C1)	24 V AC (code C4)
9428	1015, 3015	A0, AE	X	-	X	-
	2015		-	X	-	X
	3035		-	-	X	-
	3055		-	-	X	-
9468	2070	00, 0E, 0P	-	-	X	-
	4100		-	-	X	-
	4200		-	-	X	-

1) Control module

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

Code 0E: ON/OFF actuator, 2 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: OPEN/CLOSE control, 2 additional potential-free limit switches, Class A (EN15714-2)

J+J actuator**J+J - Voltage/Frequency**

Voltage/Fre- quency	Code	Actuator version (code)					
		J4C20	J4C35	J4C55	J4C85	J4C14	J4C30
12 V DV	B1	X	X	X	X	X	X
24 – 240 V AC/DC	U5	X	X	X	X	X	X

J+J - Control module

Control module	Code ¹⁾	Actuator version (code)					
		J4C20	J4C35	J4C55	J4C85	J4C14	J4C30
Open/close	A3	X	X	X	X	X	X
	AE	X	X	X	X	X	X
	AE1	X	X	X	X	X	X
	AE2	X	X	X	X	X	X
	AP	X	X	X	X	X	X
	AP1	X	X	X	X	-	-
Positioner	E1	X	X	X	X	X	X
	E11	X	X	X	X	-	-
	E2	X	X	X	X	X	X
	E22	X	X	X	X	-	-

1) Control module

Code A3: Open/Close control with 2 additional, potential-free limit switches, 3-position actuator

Code AE: Open/Close control with 2 additional, potential-free limit switches

Code AE1: Open/Close control with 2 additional, potential-free limit switches, with BSR accupack (NC)

Code AE2: Open/Close control with 2 additional, potential-free limit switches, with BSR accupack (NO)

Code AP: Open/Close control, with 5 kOhm potentiometer output

Code AP1: Open/Close control, with 5 kOhm potentiometer output, with BSR accupack (NC)

Code E1: Positioner DPS, 0 - 10 V

Code E11: Positioner DPS, 0 - 10 V, with BSR accupack (NC)

Code E2: Positioner DPS 4 - 20 mA

Code E21: Positioner DPS 4 - 20 mA with BSR accupack (NC)

Code E22: Positioner DPS 4 - 20 mA with BSR battery pack (NO)

J+J - standard design

DN	Torque	PS	Actuator version (code)					
			J4C20	J4C35	J4C55	J4C85	J4C14	J4C30
50	7	16 bar	X	-	-	-	-	-
65	15		X	-	-	-	-	-
80	28		-	X	X	-	-	-
100	55		-	-	-	X	-	-
125	77		-	-	-	X	-	-
150	118		-	-	-	-	X	-
200	242	3 bar	-	-	-	-	-	X
200	145		-	-	-	-	-	X
250	152		-	-	-	-	-	X
300	245		-	-	-	-	-	X

Torques in Nm

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

AUMA AQ actuator

AUMA AQ - Standard design

DN	Torque	PS	Actuator version (code)		
			AQ05	AQ07	AQ10
50	7	16 bar	X	-	-
65	15		X	-	-
80	28		X	-	-
100	55		X	-	-
125	77		X	-	-
150	118		X	-	-
200	242		-	X	-
250	310	10 bar	-	-	X
300	330		-	-	X
200	145	3 bar	-	x	-
250	152		-	X	-
300	245		-	X	-

Torques in Nm

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

AUMA AQ - Voltage/Frequency

Voltage/Frequency	Code	Actuator version (code)				
		AQ05H	AQ05L	AQ07H	AQ07L	AQ10L
120V 50Hz	G2	X	X	X	X	X
120V 60Hz	G3	X	X	X	X	X
380V 50Hz	J2	X	X	X	X	X
230V 50Hz	L2	X	X	X	X	X
230V 60Hz	L3	X	X	X	X	X
400V 50Hz	N2	X	X	X	X	X
480V 60Hz	P3	X	X	X	X	X
440V 60Hz	V3	X	X	X	X	X
460V 60Hz	W3	X	X	X	X	X

Product conformities

	Approved designs			Special function (code)
	Disc material	Liner material	Liner fixing	
Drinking water				
ACS	CF8M, 1.4408 (code A) CF8M, 1.4408 polished (code B) Super Duplex, 1.4469 (code D) EN-GJS-400-15 (GGG-40), epoxy coated (code E) EN-GJS-400-15, GGG40 Rilsan® PA11 coated (code R)	EPDM (code W)	All versions	A
Belgaqua	CF8M, 1.4408 (code A) CF8M, 1.4408 polished (code B) Super Duplex, 1.4469 (code D)	EPDM (code W)	Loose (code L)	B
DVGW Water	CF8M, 1.4408 (code A) CF8M, 1.4408 polished (code B)	EPDM (code W)	Loose (code L)	D
NSF	CF8M, 1.4408 (code A) Super Duplex, 1.4469 (code D)	EPDM (code W)	All versions	N
WRAS	CF8M, 1.4408 (code A) CF8M, 1.4408 polished (code B) Super Duplex, 1.4469 (code D)	EPDM (code W)	All versions	W
Food				
FDA	CF8M, 1.4408, (code A) CF8M, 1.4408 polished (code B) Super Duplex, 1.4469 (code D)	EPDM-AB/E (code G) EPDM-AB/W (code I) EPDM, white (code M) NBR (W) (code U) EPDM-HT (code Z)	All versions	no order code required
Regulation 1935/2004	CF8M, 1.4408 polished (code B)	EPDM, white (code M)	All versions	no order code required
Gas				
DVGW Gas	CF8M, 1.4408, (code A) CF8M, 1.4408 polished (code B)	NBR (code J)	Loose (code L)	G
Oxygen				
Oxygen	CF8M, 1.4408 (code A) CF8M, 1.4408 polished (code B)	EPDM (code E)	All versions	O
Ship approval				
DNV GL	All materials	All materials	All versions	S
Explosion protection				
ATEX internal and ex- ternal	CF8M, 1.4408 (code A) CF8M, 1.4408 polished (code B) Super Duplex, 1.4469 (code D) 2.0975 / CC333G (code G) 1.4435 / ASTM A351 / CF3M / AISI 316L (code I)	EPDM (code E)	All versions	Y
ATEX external	All materials	All materials	All versions	X
CE				
Pressure Equipment Directive	All materials	All materials	All versions	no order code required

Product conformities

	Approved designs			Special function (code)
	Disc material	Liner material	Liner fixing	
Machinery Directive	All materials	All materials	All versions	no order code required

Other features are not relevant for the product conformities

Availabilities - Type of design

Type of design (code) ¹⁾	
0101	All except liner code V, EPDM-HT code Z and silicone code S
1782	Only disc material code B

All other types of design can be freely combined.

1) Type of design

Code 0101: Media wetted area cleaned to ensure suitability for paint applications, parts sealed in plastic bag

Code 1782: Stainless steel valve disc, mechanically polished to 1.6 µm and electropolished, spigot internally polished to 1.6 µm

Order data

Butterfly valve with GEMÜ 9428, 9468 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. 250µm) 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 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

3 Body configuration	Code
Flange-mounted design (lug), face-to-face dimension FTF EN 558 series 20	L
Intermediate flange design (wafer), face-to-face dimension FTF EN 558 series 20	W

4 Operating pressure	Code
3 bar	0
6 bar	1
10 bar	2
16 bar	3

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
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

5 Connection type	Code
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
EN-GJS-400-15 (GGG-40), epoxy-coated 250 µm	2
EN-GJS-400-18-LT (GGG-40.3), epoxy coated 250 µm	3

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

8 Shaft material	Code
1.4021	1

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

10 Liner fixing	Code
Liner bonded into body	B

10 Liner fixing	Code
Loose liner	L

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

12 Control module	Code
ON/OFF actuator, relay, not reversible	00
ON/OFF actuator, 2 additional potential-free limit switches, relay, not reversible	0E
ON/OFF actuator, potentiometer output, relay, not reversible	0P
ON/OFF actuator	A0
ON/OFF actuator, 2 additional potential-free limit switches, Class A (EN15714-2)	AE

13 Actuator version	Code
Actuator, motorized, operating time 11s, torque 15Nm, GEMUE, size 1 supply voltage B1, C1	1015
Actuator, motorized, operating time 11s, torque 15Nm, GEMUE, size 2 supply voltage B4, C4	2015
Actuator, motorized, operating time 15s, torque 70Nm, GEMUE, size 2 supply voltage C1	2070
Actuator, motorized, operating time 15s, torque 35Nm, GEMUE, size 3 supply voltage C1	3035
Actuator, motorized, operating time 15s, torque 55Nm, GEMUE, size 3 supply voltage C1	3055
Actuator, motorized, operating time 20s, torque 100Nm, GEMUE, size 4 supply voltage C1	4100
Actuator, motorized, operating time 16s, torque 200Nm, GEMUE, size 4 supply voltage C1	4200

14 Type of design	Code
Without	
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, mechanically polished to 1.6 µm and electropolished, spigot internally polished to 1.6 µm	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 provide for this!	5143

14 Type of design	Code
Thermal separation between actuator and valve body via mounting kit	5222
Thermal separation between actuator and valve body via dew point barrier	5226
Alu 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
European origin	E
DVGW Gas approval (only valid in conjunction with a suitable manual, pneumatic or motorized actuator)	G
NSF 61 water certification	N
Oxygen	O
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. 250µm) 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	Intermediate flange design (wafer), 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
8 Shaft material	1	1.4021
9 Shut-off seal material	E	EPDM
10 Liner fixing	L	Loose liner
11 Voltage/Frequency	C1	24 VDC
12 Control module	00	ON/OFF actuator, relay, not reversible
13 Actuator version	2070	Actuator, motorized, operating time 15s, torque 70Nm, GEMUE, size 2 supply voltage C1
14 Type of design		Without
15 Special version		Without
16 CONEXO		Without

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. 250µm) 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 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

3 Body configuration	Code
Flange-mounted design (lug), face-to-face dimension FTF EN 558 series 20	L
Intermediate flange design (wafer), face-to-face dimension FTF EN 558 series 20	W

4 Operating pressure	Code
3 bar	0
6 bar	1
10 bar	2
16 bar	3

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
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

5 Connection type	Code
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
EN-GJS-400-15 (GGG-40), epoxy-coated 250 µm	2
EN-GJS-400-18-LT (GGG-40.3), epoxy coated 250 µm	3

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

8 Shaft material	Code
1.4021	1

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

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

11 Voltage/Frequency	Code
12 VDC	B1

Butterfly valve with J+J actuator

11 Voltage/Frequency	Code
24 - 240 V AC 24 - 135 V DC for model 20, 35, 55, 85, 140, 300	U5

12 Control module	Code
ON/OFF actuator, 3-position actuator, additional potential-free limit switches	A3
ON/OFF actuator, 2 additional potential-free limit switches, Class A (EN15714-2)	AE
ON/OFF actuator, 2 additional potential-free limit switches, BSR battery pack (NC)	AE1
ON/OFF actuator, 2 additional potential-free limit switches, BSR battery pack (NO)	AE2
ON/OFF actuator, potentiometer output, Class A (EN15714-2)	AP
ON/OFF actuator, 2 additional potential-free limit switches, potentiometer output 5 kOhm, Failsafe battery pack (NC), preferred direction adjustable	AP1
Control actuator, external set value 0-10 VDC	E1
Positioner DPS, external set value 0-10V, BSR battery pack (NC)	E11
Control actuator, external set value 0/4-20 mA	E2
Positioner DPS, external set value 4-20mA, BSR battery pack (NC)	E21
Positioner DPS, external set value 4-20mA, BSR battery pack (NO)	E22

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

14 Type of design	Code
Without	
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, mechanically polished to 1.6 µm and electropolished, spigot internally polished to 1.6 µm	1782

14 Type of design	Code
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 provide 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
Alu 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
European origin	E
DVGW Gas approval (only valid in conjunction with a suitable manual, pneumatic or motorized actuator)	G
NSF 61 water certification	N
Oxygen	O
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. 250µm) 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	Intermediate flange design (wafer), 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
8 Shaft material	1	1.4021
9 Shut-off seal material	E	EPDM
10 Liner fixing	L	Loose liner
11 Voltage/Frequency	U5	24 - 240 V AC 24 - 135 V DC for model 20, 35, 55, 85, 140, 300
12 Control module	AE	ON/OFF actuator, 2 additional potential-free limit switches, Class A (EN15714-2)
13 Actuator version	J4C85	Actuator, motorized, operating time 29s, torque 85Nm, J+J, type J4 heating, IP67
14 Type of design		Without
15 Special version		Without
16 CONEXO		Without

Butterfly valve with AUMA AQ 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. 250µm) 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 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

3 Body configuration	Code
Flange-mounted design (lug), face-to-face dimension FTF EN 558 series 20	L
Intermediate flange design (wafer), face-to-face dimension FTF EN 558 series 20	W

4 Operating pressure	Code
3 bar	0
6 bar	1
10 bar	2
16 bar	3

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
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

5 Connection type	Code
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
EN-GJS-400-15 (GGG-40), epoxy-coated 250 µm	2
EN-GJS-400-18-LT (GGG-40.3), epoxy coated 250 µm	3

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

8 Shaft material	Code
1.4021	1

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

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

11 Voltage/Frequency	Code
120V 50Hz	G2

11 Voltage/Frequency	Code
120V 60Hz	G3
380V 50Hz	J2
230V 50Hz	L2
230V 60Hz	L3
400V 50Hz	N2
480V 60Hz	P3
440V 60 Hz	V3
460V 60Hz	W3

12 Control module	Code
ON/OFF actuator	A0
ON/OFF actuator, 2 additional potential-free limit switches, additional potential-free torque switches, Class A (EN15714-2)	AB
ON/OFF actuator, positioner AUMATIC (AC 01.2), fieldbus interface Profibus DP-V0, Basic AUMA standard SQ (S2 15 minutes, actuator class A/B), TPC AA000-1A1-A000, TPA xxR100-0I1-000	ADP
ON/OFF actuator, 2 additional potential-free limit switches, Class A (EN15714-2)	AE
ON/OFF actuator, positioner AUMATIC (AC 01.2), fieldbus interface Modbus RTU, Basic AUMA standard SQ (S2 15 minutes, actuator class A/B), TPC AC000-1A1-A000, TPA xxR100-0I1-000	AMB
ON/OFF actuator, positioner AUMATIC (AC 01.2), fieldbus interface Modbus TCP/IP, Basic AUMA standard SQ (S2 15 minutes, actuator class A/B), TPC AC000-1A1-A5E0, TPA xxR100-0I1-000	AMI
ON/OFF actuator, positioner AUMATIC (AC 01.2), fieldbus interface ProfiNet, Basic AUMA standard SQ (S2 15 minutes, actuator class A/B), TPC AN000K1A2-A000, TPA xxR100-0I1-000	APN
ON/OFF actuator, positioner AUMATIC (AC 01.2), Basic AUMA standard SQ (S2 15 minutes, actuator class A/B), TPC A-1B1-1C1-A000, TPA xxR100-0I1-000	ASC
ON/OFF actuator, remote and on-site control, AUMA MATIC (AM 01.1), Basic AUMA standard SQ (S2 15 minutes, actuator class A/B), MSP 1110KC3-F18E1, TPA xxR1AA-101-000	ASM
Control actuator, positioner AUMATIC (AC 01.2), fieldbus interface Profibus DP, Basic AUMA standard SQR (S4 25% duty, actuator class C), only for 400V 50Hz and 230V 50/60Hz, TPC AA000-1A1-A000, TPA xxR100-0I1-000	EDP
Control actuator, remote and on-site control, AUMATIC (AC 01.2), fieldbus interface Modbus RTU, Basic AUMA standard SQR (S4 25% duty actuator class C), only for 400V 50Hz und 230V 50HZ/60HZ, TPC AC000-1A1-A000, TPA xxR100-0I1-000	EMB

12 Control module	Code
Control actuator, remote and on-site control, AUMATIC (AC 01.2), fieldbus interface Modbus TCP/IP, Basic AUMA standard SQR (S4 25% duty actuator class C), only for 400V 50Hz und 230V 50HZ/60HZ, TPC AC000-1A1-A5E0, TPA xxR100-0I1-000	EMI
Control actuator, remote and on-site control, AUMATIC (AC 01.2), fieldbus interface ProfiNet, Basic AUMA standard SQR (S4 25% duty actuator class C), only for 400V 50Hz und 230V 50HZ/60HZ, TPC AN000K1A2-A000, TPA xxR100-0I1-000	EPN
Control actuator, positioner AUMATIC (AC 01.2), Basic AUMA standard SQR (S4 25% duty, actuator class C), only for 400V 50Hz und 230V 50HZ/60HZ, TPC A-1B1-1C1-A000, TPA xxR100-0I1-000	ESC

13 Actuator version	Code
Actuator, motorized, operating time 16s, torque 150Nm, AUMA, type SQ Class A (EN15714-2), Open/Close control, 75° to 105°, continuously adjustable, flasher unit for travel indication, heating, mechanical position indicator, KS, layer thickness 0, 140mm, RAL7037, manual override, IP68	AQ05H
Actuator, motorized, operating time 32s, torque 150Nm, AUMA, type SQ Class A (EN15714-2), Open/Close control, 75° to 105°, continuously adjustable, flasher unit for travel indication, heating, mechanical position indicator, KS, layer thickness 0, 140mm, RAL7037, manual override, IP68	AQ05L
Actuator, motorized, operating time 16s, torque 300Nm, AUMA, type SQ Class A (EN15714-2), Open/Close control, 75° to 105°, continuously adjustable, flasher unit for travel indication, heating, mechanical position indicator, KS, layer thickness 0, 140mm, RAL7037, manual override, IP68	AQ07H
Actuator, motorized, operating time 32s, torque 300Nm, AUMA, type SQ Class A (EN15714-2), Open/Close control, 75° to 105°, continuously adjustable, flasher unit for travel indication, heating, mechanical position indicator, KS, layer thickness 0, 140mm, RAL7037, manual override, IP68	AQ07L
Actuator, motorized, operating time 32s, torque 600Nm, AUMA, type SQ Class A (EN15714-2), Open/Close control, 75° to 105°, continuously adjustable, flasher unit for travel indication, heating, mechanical position indicator, KS, layer thickness 0, 140mm, RAL7037, manual override, IP68	AQ10L

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, mechanically polished to 1.6 µm and electropolished, spigot internally polished to 1.6 µm	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 provide 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
Alu 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
European origin	E
DVGW Gas approval (only valid in conjunction with a suitable manual, pneumatic or motorized actuator)	G
NSF 61 water certification	N
Oxygen	O
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. 250µm) 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	Intermediate flange design (wafer), 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
8 Shaft material	1	1.4021
9 Shut-off seal material	E	EPDM
10 Liner fixing	L	Loose liner
11 Voltage/Frequency	N2	400V 50Hz
12 Control module	A0	ON/OFF actuator
13 Actuator version	AQ05H	Actuator, motorized, operating time 16s, torque 150Nm, AUMA, type SQ Class A (EN15714-2), Open/Close control, 75° to 105°, continuously adjustable, flasher unit for travel indication, heating, mechanical position indicator, KS, layer thickness 0, 140mm, RAL7037, manual override, IP68
14 Type of design		Without
15 Special version		Without
16 CONEXO		Without

Butterfly valve technical data

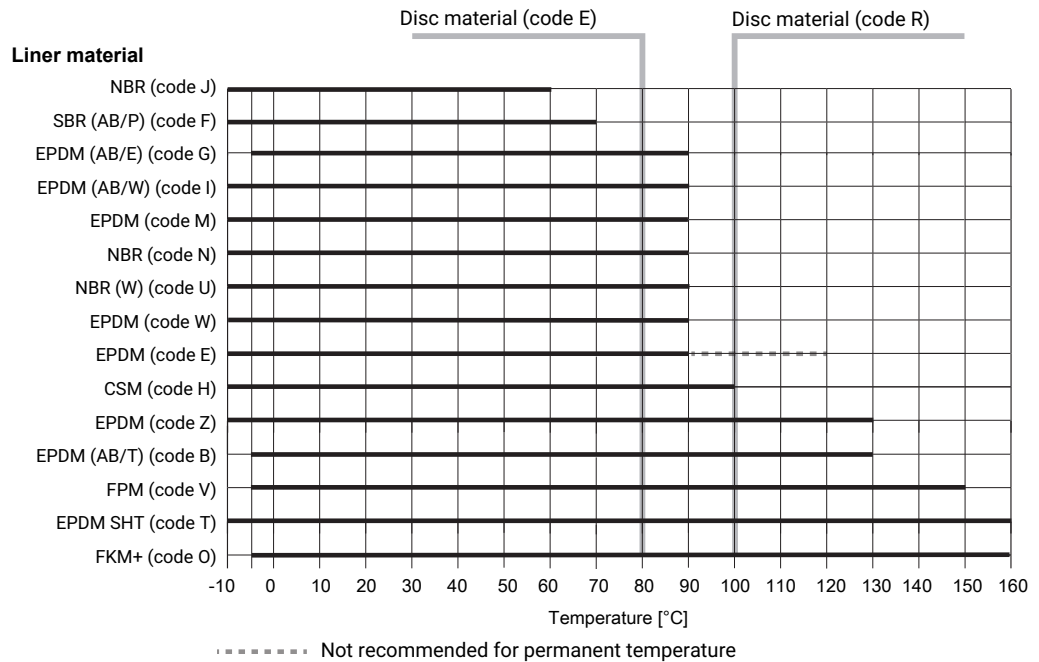
Medium

Working medium: Gaseous and liquid media which have no negative impact on the physical and chemical properties of the disc and seat material.

Temperature

Media temperature: -10 – 160 °C

Depending on the liner and disc material or the type of liner fixing



FKM material not suitable for water/steam applications above 100 °C, Observe Pressure/Temperature diagram.

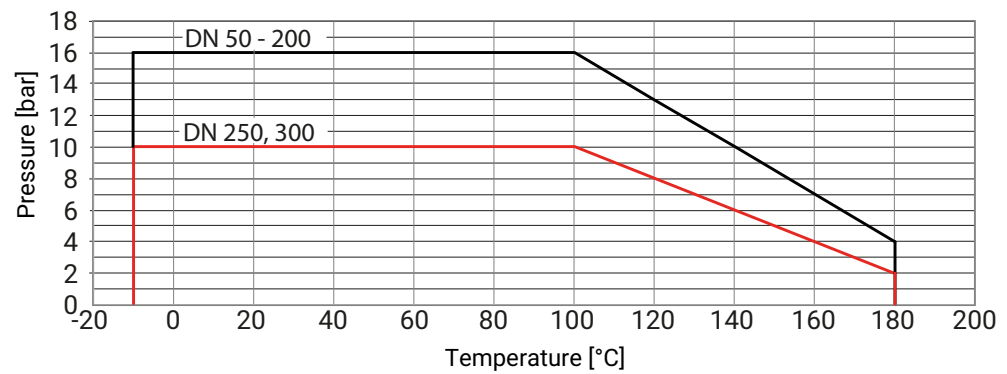
Ambient temperature: -10 – 70 °C

Storage temperature: 5 – 40 °C

Pressure

Operating pressure: 0 – 16 bar
Use as end-of-line valve
DN 50 – 200: 10 bar
DN 250, 300: 6 bar

Vacuum: Can be used up to a vacuum of 800 mbar (abs) with replaceable liner or with bonded liner up to a vacuum of 2 mbar (abs) through a leakage rate at 10^{-3} [mbar l / sec]
These values apply to room temperature and air. The values may deviate for other media and other temperatures.

Pressure/temperature diagram:**Pressure rating:**

PN 3
 PN 6
 PN 10
 PN 16

Kv values:

DN	Kv values at opening angle							
	20°	30°	40°	50°	60°	70°	80°	90°
50	3.0	9.0	20.0	33.0	65.0	110.0	124.0	125.0
65	9.0	15.0	30.0	64.0	118.0	195.0	214.0	222.0
80	19.0	40.0	66.0	117.0	196.0	321.0	353.0	363.0
100	29.0	75.0	137.0	213.0	316.0	487.0	584.0	618.0
125	48.0	100.0	185.0	315.0	550.0	895.0	1060.0	1120.0
150	60.0	150.0	281.0	450.0	789.0	1280.0	1630.0	1730.0
200	110.0	281.0	472.0	759.0	1480.0	2880.0	3710.0	3900.0
250	200.0	444.0	738.0	1190.0	2110.0	3880.0	5180.0	5410.0
300	250.0	682.0	1060.0	1670.0	3120.0	6360.0	8620.0	8930.0

Kv values in m³/h

When the opening angle is below 30° no regulation should be made!

Product conformity

Machinery Directive: 2006/42/EC

EMC Directive: 2014/30/EU

Low Voltage Directive: 2014/35/EU

Pressure Equipment Directive: 2014/68/EU

Food: FDA
 Regulation (EC) No. 1935/2004

Drinking water: ACS
 WRAS
 Belgaqua
 NSF

Oxygen: BAM compliant, the product is suitable for application with oxygen

Ship approval: DNV GL

Explosion protection: ATEX (2014/34/EU) and IECEx, order code Special version X
NEC 500 (ISA 12.12.01), order code Special version Y

ATEX marking: Special function code X
Gas:  II -/2 G Ex h -/IIB T6...T3 -/Gb X
Dust:  II -/2D Ex h -/IIIC T150°C -/Db X

Special function code Y
Gas:  II 2 G Ex h IIC/IIB T6 ... T3 Gb X
Dust:  II 2 D Ex h IIIC T150 °C Db X

Mechanical data

Torques:

DN	PS			
	3 bar	6 bar	10 bar	16 bar *
50	3.0	5.0	7.0	9.0
65	8.0	10.0	13.0	15.0
80	10.0	15.0	20.0	25.0
100	15.0	20.0	30.0	40.0
125	25.0	35.0	45.0	60.0
150	40.0	50.0	80.0	100.0
200	-	-	-	160.0
250	-	-	200.0	-
300	-	-	330.0	-

Torques in Nm

* Standard

Working medium water (20 °C) and optimal operating conditions

Weight:

DN	Wafer	Lug
50	1.7	2.2
65	2.5	2.9
80	3.2	4.4
100	4.4	6.2
125	5.9	8.1
150	7.7	10.1
200	13.9	18.4
250	19.6	28.7
300	27.3	36.8

Weights in kg

Technical data of actuator

GEMÜ 9428, 9468 actuators

Electrical data

Rated voltage: 24 V AC or DC (+10/-15 %)
12 V / 24 V AC or DC ($\pm 10\%$)

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

Electrical protection class: I (DIN EN 61140)

Power consumption:

Actuator version code	Control module code	12 V DC (code B1)	12 V AC (code B4)	24 V DC (code C1)	24 V AC (code C4)
1015, 3015	A0, AE	30.0	-	30.0	-
2015	A0, AE	-	30.0	-	30.0
3035	A0, AE	-	-	30.0	-
3055	A0, AE	-	-	40.0	-
2070	00, 0E, 0P	-	-	63.0	-
4100	00, 0E, 0P	-	-	105.0	-
4200	00, 0E, 0P	-	-	90.0	-

Power consumption in W

Current consumption:

Actuator version code	Control module code	12 V DC (code B1)	12 V AC (code B4)	24 V DC (code C1)	24 V AC (code C4)
1015, 3015	A0, AE	2.2	-	1.20	-
2015	A0, AE	-	2.0	-	1.2
3035	A0, AE	-	-	1.30	-
3055	A0, AE	-	-	1.65	-
2070	00, 0E, 0P	-	-	2.60	-
4100	00, 0E, 0P	-	-	4.40	-
4200	00, 0E, 0P	-	-	3.60	-

Current data in A

Max. switching current:

Actuator version code	Control module code	12 V DC (code B1)	12 V AC (code B4)	24 V DC (code C1)	24 V AC (code C4)
1015, 3015	A0, AE	9.2	-	1.20	-
2015	A0, AE	-	2.3	-	1.8
3035	A0, AE	-	-	3.3	-
3055	A0, AE	-	-	7.0	-
2070	00, 0E, 0P	-	-	14.0	-
4100	00, 0E, 0P	-	-	35.0	-
4200	00, 0E, 0P	-	-	35.0	-

Current data in A

Input signal:

24 V DC, 24 V AC, 120 V AC, 230 V AC
dependent on rated voltage

Duty cycle:

Continuous duty

Electrical protection:

GEMÜ 9428

Motor protective system by customer

GEMÜ 9468

Internal for functional module 0x

Actuator version 2070: MT 6.3 A

Actuator version 4100, 4200: MT 10.0 A

Motor protective system by customer, see "Recommended motor protection"

Recommended motor protection:**GEMÜ 9428**

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

Current data in A

GEMÜ 9468

Motor protection switch Siemens 3RV 1011-1FA10
type:
Set current: 4.0 A

Product compliance**Machinery Directive:** 2006/42/EC**EMC Directive:** 2014/30/EU**Low Voltage Directive:** 2014/35/EU**Mechanical data****Weight:****GEMÜ 9428**

Supply voltage 12 V / 24 V:	1.0 kg
Actuator version 3055:	2.8 kg

Actuator type 9468

Actuator version 2070:	4.6 kg
Actuator version 4100, 4200:	11.6 kg

AUMA, J+J actuators

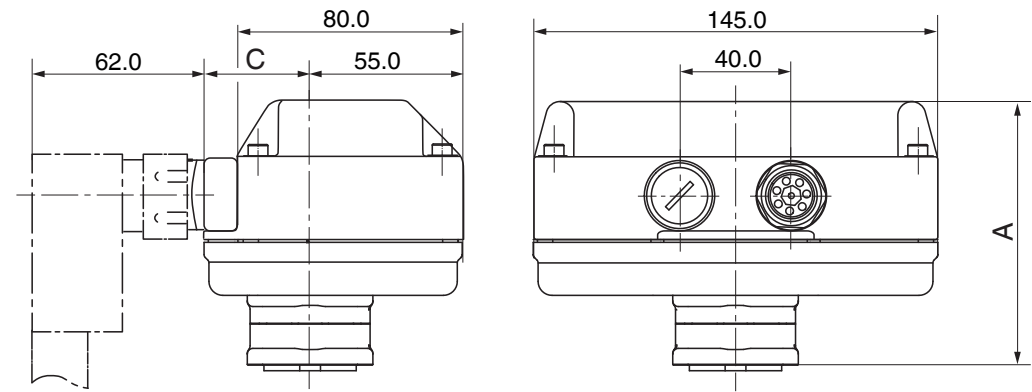
Note: For technical data see manufacturer's original datasheets

Dimensions

Actuator dimensions

GEMÜ 9428, 9468 actuators

Actuator version 1015, 2015

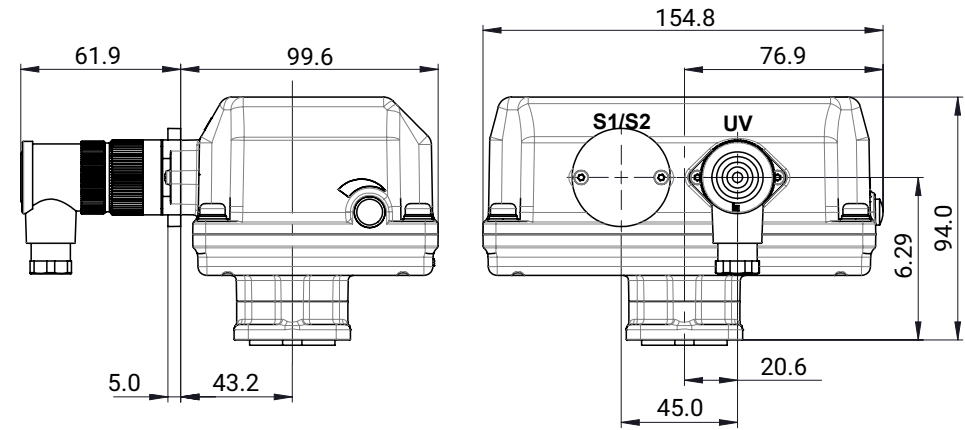


Actuator ver- sion	A	C
1006, 1015	94.0	49.0
2015	122.0	53.0

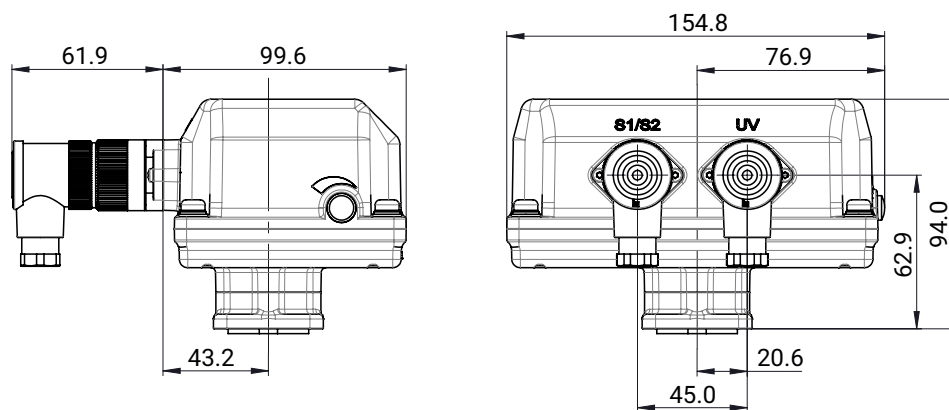
Dimensions in mm

Actuator version 3015

ON/OFF actuator (control module code A0)

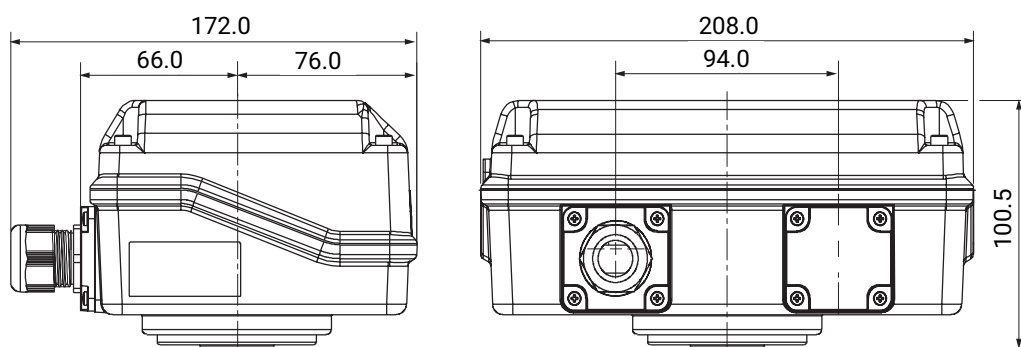


OPEN/CLOSE control, 2 additional potential-free limit switches (control module code AE)



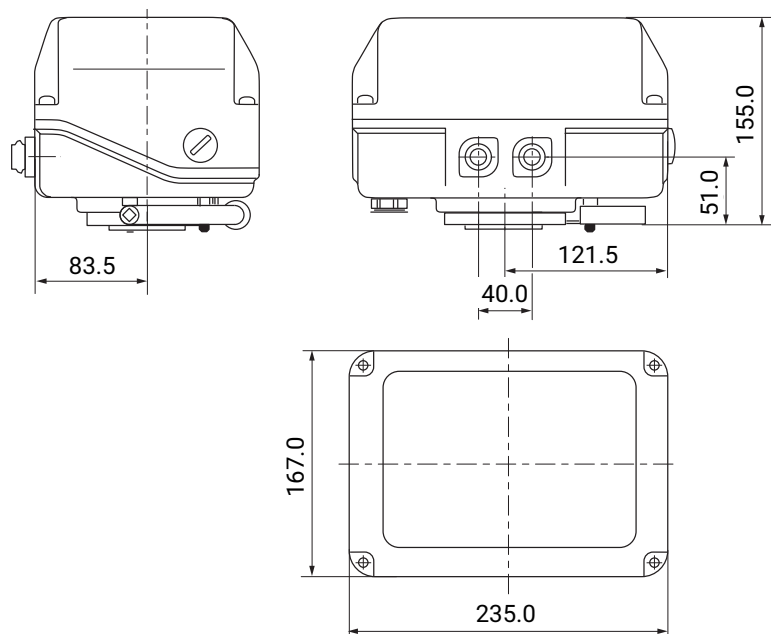
Dimensions in mm

Actuator version 3035, 3055



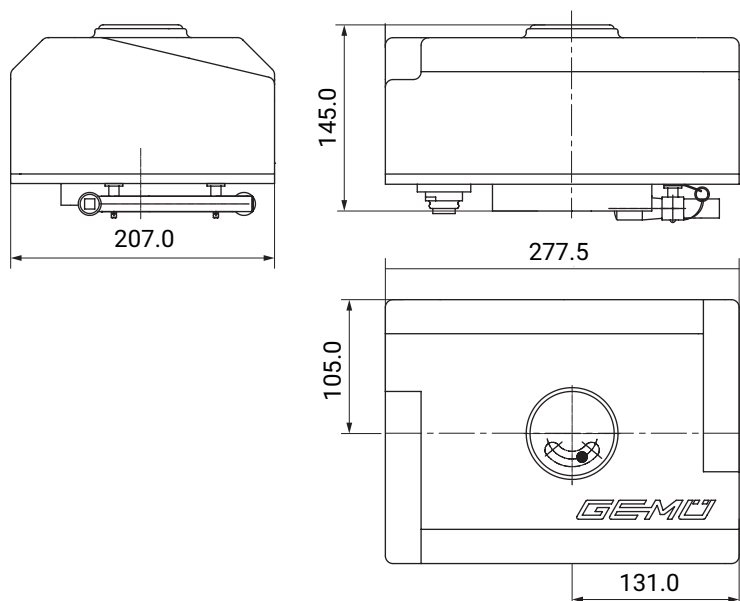
Dimensions in mm

Actuator version 2070



Dimensions in mm

Actuator version 4100, 4200



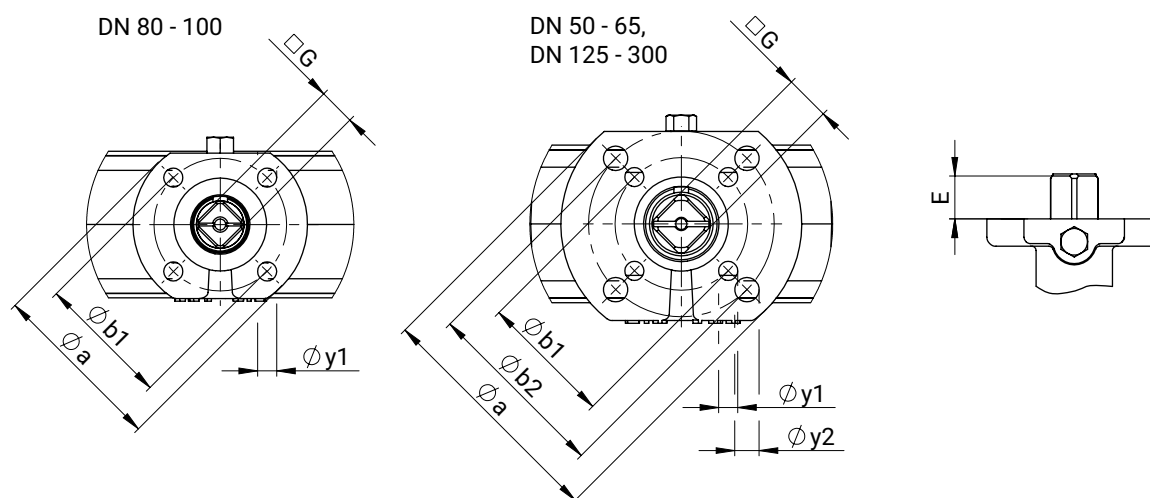
Dimensions in mm

AUMA, J+J actuators

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

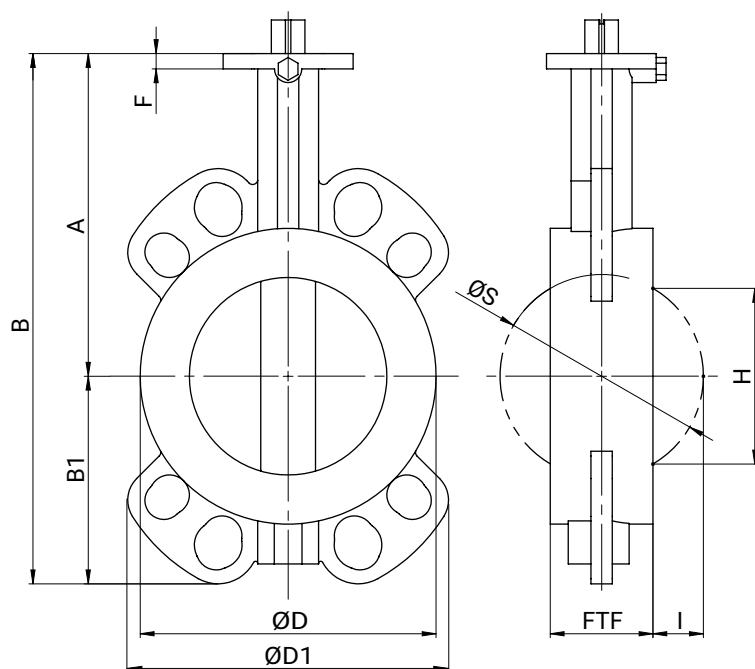
Body dimensions

Actuator flange



DN	□G	øa	ISO 5211	øb1	øy1	øb2	øy2	E
50	9.0	65.0	F03 F05	36.0	6.0	50.0	7.0	17.0
65	11.0	65.0	F03 F05	36.0	6.0	50.0	7.0	17.0
80	11.0	65.0	F05	50.0	7.0	-	-	17.0
100	14.0	65.0	F05	50.0	7.0	-	-	17.0
125	17.0	90.0	F05 F07	50.0	7.0	70.0	9.0	23.0
150	17.0	90.0	F05 F07	50.0	7.0	70.0	9.0	23.0
200	22.0	125.0	F07 F10	70.0	9.0	102.0	11.0	34.0
250	22.0	125.0	F07 F10	70.0	9.0	102.0	11.0	34.0
300	22.0	125.0	F07 F10	70.0	9.0	102.0	11.0	34.0

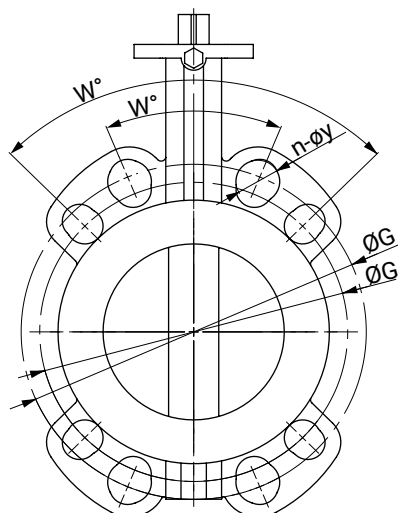
Dimensions in mm

Body**Wafer body configuration**

DN	PS	A	B	B1	ØD	ØD1	F	FTF	H	ØS	I
50	16	120.0	182.0	62.0	90.0	118.0	7.0	43.0	29.0	52.0	5.0
65	16	137.0	218.0	81.0	108.0	133.0	7.0	46.0	48.0	67.0	10.0
80	16	145.0	231.0	87.0	130.0	141.0	7.0	46.0	68.0	82.0	18.0
100	16	166.0	271.0	105.0	150.0	163.0	7.0	52.0	88.0	102.0	25.0
125	16	187.0	304.0	117.0	175.0	120.0	9.0	56.0	114.0	127.0	35.0
150	16	200.0	332.0	132.0	207.0	129.0	9.0	56.0	141.0	152.0	48.0
200	16	240.0	413.0	173.0	263.0	157.0	11.0	60.0	193.0	202.0	71.0
250	10	265.0	466.0	201.0	317.0	185.0	11.0	68.0	242.0	252.0	92.0
300	10	290.0	531.0	241.0	366.0	164.0	11.0	78.0	291.0	302.0	112.0

Dimensions in mm

Connections



Connection EN1092, EN1759

DN	INCH	Connection (code)															
		EN1092-1 PN6 (code 1)				EN1092-1 PN10 (code 2)				EN1092-1 PN16 (code 3)				EN1759/CL150 (code D)			
DIN	ASME	w°	n	ØG	y	w°	n	ØG	y	w°	n	ØG	y	w°	n	ØG	y
50	2"	90	4	110.0	14.0	90	4	125.0	18.0	90	4	125.0	18.0	90	4	120.6	19.0
65	2½"	90	4	130.0	14.0	90	8	145.0	18.0	90	8	145.0	18.0	90	4	139.7	19.0
80	3"	90	4	150.0	18.0	45	8	160.0	18.0	45	8	160.0	18.0	90	4	152.4	19.0
100	4"	90	4	170.0	18.0	45	8	180.0	18.0	45	8	180.0	18.0	45	8	190.5	19.0
125	5"	45	8	200.0	18.0	45	8	210.0	18.0	45	8	210.0	18.0	45	8	215.9	22.2
150	6"	45	8	225.0	18.0	45	8	240.0	22.0	45	8	240.0	22.0	45	8	241.3	22.2
200	8"	45	8	280.0	18.0	45	8	295.0	22.0	30	12	295.0	22.0	45	8	298.5	22.2
250	10"	30	12	335.0	18.0	30	12	350.0	22.0	30	12	355.0	26.0	30	12	362.0	25.4
300	12"	30	12	395.0	22.0	30	12	400.0	22.0	30	12	410.0	26.0	30	12	431.8	25.4

Dimensions in mm

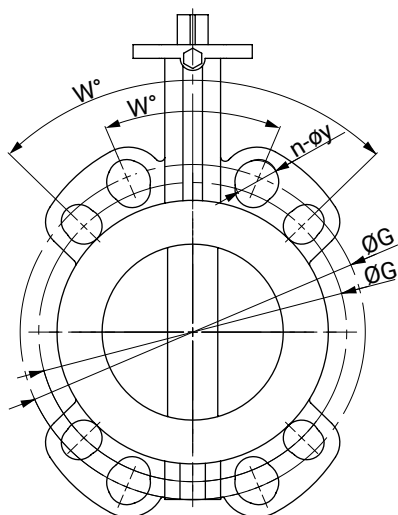
n = number of bolts

Connection AS2129, BS10

DN	INCH	Connection (code)															
		AS 2129 D (code T)				AS 2129 E (code U)				BS10 D (code H)				BS10 E (code S)			
DIN	ASME	w°	n	ØG	y	w°	n	ØG	y	w°	n	ØG	y	w°	n	ØG	y
50	2"	90	4	114.0	18.0	90	4	114.0	18.0	90	4	114.3	17.5	90	4	114.3	17.5
65	2½"	90	4	127.0	18.0	90	4	127.0	18.0	90	4	127.0	17.5	90	4	127.0	17.5
80	3"	90	4	146.0	18.0	90	4	146.0	18.0	90	4	146.1	17.5	90	4	146.1	17.5
100	4"	90	4	178.0	18.0	45	8	178.0	18.0	90	4	177.8	17.5	45	8	177.8	17.5
125	5"	45	8	210.0	18.0	45	8	210.0	18.0	45	8	209.6	17.5	45	8	209.6	17.5
150	6"	45	8	235.0	18.0	45	8	235.0	22.0	45	8	235.0	17.5	45	8	235.0	20.6
200	8"	45	8	292.0	18.0	45	8	292.0	22.0	45	8	292.1	17.5	45	8	292.1	20.6
250	10"	45	8	356.0	22.0	30	12	356.0	22.0	45	8	355.6	22.2	30	12	355.6	22.2
300	12"	30	12	406.0	22.0	30	12	406.0	26.0	30	12	406.4	22.2	30	12	406.4	25.4

Dimensions in mm

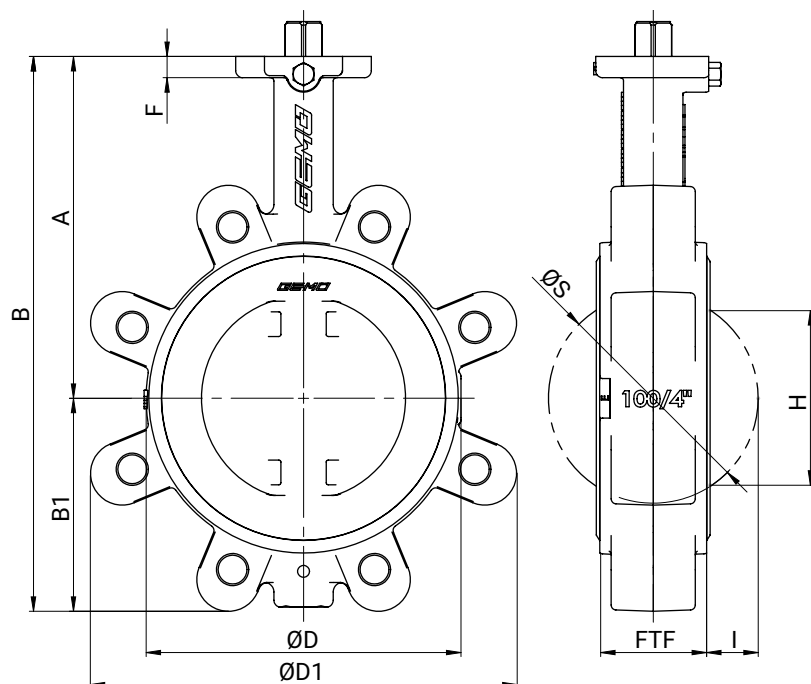
n = number of bolts



Connection JIS K10, K16

DN	INCH	Connection (code)							
		JIS-K10 (code G)				JIS-K16 (code J)			
DIN	ASME	w°	n	ØG	y	w°	n	ØG	y
50	2"	90	4	120.0	19.0	45	8	120.0	19.0
65	2½"	90	4	140.0	19.0	45	8	140.0	19.0
80	3"	45	8	150.0	19.0	45	8	160.0	23.0
100	4"	45	8	175.0	19.0	45	8	185.0	23.0
125	5"	45	8	210.0	23.0	45	8	225.0	25.0
150	6"	45	8	240.0	23.0	30	12	260.0	25.0
200	8"	30	12	290.0	23.0	30	12	305.0	25.0
250	10"	30	12	355.0	25.0	30	12	380.0	27.0
300	12"	22,5	16	400.0	25.0	22.5	16	430.0	27.0

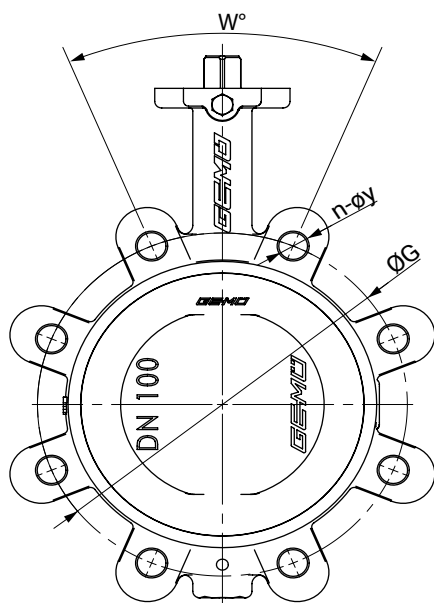
Dimensions in mm
n = number of bolts

Lug body configuration


DN	PS	A	B	B1	ØD	ØD1	F	FTF	H	ØS	I
50	16	120.0	182.0	62.0	91.0	116.0	9.0	44.0	29.0	52.0	4.0
65	16	137.0	219.0	82.0	109.0	126.0	9.0	46.0	48.0	67.0	10.0
80	16	145.0	234.0	89.0	131.0	177.0	9.0	46.0	68.0	82.0	18.0
100	16	166.0	270.0	104.0	153.0	207.0	10.0	52.0	88.0	102.0	25.0
125	16	187.0	305.0	118.0	175.0	231.0	10.0	56.0	114.0	127.0	36.0
150	16	200.0	333.0	133.0	208.0	255.0	10.0	56.0	141.0	152.0	48.0
200	16	240.0	415.0	175.0	264.0	325.0	12.0	60.0	193.0	202.0	71.0
250	10	265.0	467.0	202.0	317.0	386.0	11.0	68.0	242.0	252.0	92.0
300	10	290.0	531.0	241.0	366.0	459.0	12.0	78.0	291.0	302.0	112.0

Dimensions in mm

Connections



Connection EN1092, EN1759

DN	INCH	Connection (code)															
		EN1092-1 PN6 (code 1)				EN1092-1 PN10 (code 2)				EN1092-1 PN16 (code 3)				EN1759/CL150 (code D)			
DIN	ASME	w°	n	ØG	y	w°	n	ØG	y	w°	n	ØG	y	w°	n	ØG	y
50	2"	90	4	110.0	M12	90	4	125.0	M16	90	4	125.0	M16	90	4	120.6	5/8"
65	2½"	90	4	130.0	M12	90	4*	145.0	M16	90	8*	145.0	M16	90	4	139.7	5/8"
80	3"	90	4	150.0	M16	45	8	160.0	M16	45	8	160.0	M16	90	4	152.4	5/8"
100	4"	90	4	170.0	M16	45	8	180.0	M16	45	8	180.0	M16	45	8	190.5	5/8"
125	5"	45	8	200.0	M16	45	8	210.0	M16	45	8	210.0	M16	45	8	215.9	3/4"
150	6"	45	8	225.0	M16	45	8	240.0	M20	45	8	240.0	M20	45	8	241.3	3/4"
200	8"	45	8	280.0	M16	45	8	295.0	M20	30	12	295.0	M20	45	8	298.5	3/4"
250	10"	30	12	335.0	M16	30	12	350.0	M20	30	12	355.0	M24	30	12	362.0	7/8"
300	12"	30	12	395.0	M20	30	12	400.0	M20	30	12	410.0	M24	30	12	431.8	7/8"

Dimensions in mm

n = number of bolts

* Standard: 8 holes code 3 (PN16); if 4 holes are required, select code 2 (PN10);

Connection AS 2129, BS10

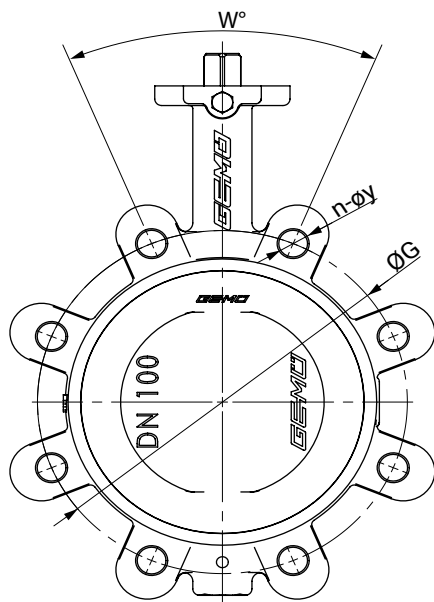
DN	INCH	Connection (code)															
		AS 2129 D (code T)				AS 2129 E (code U)				BS10 D (code H)				BS10 E (code S)			
DIN	ASME	w°	n	ØG	y	w°	n	ØG	y	w°	n	ØG	y	w°	n	ØG	y
50	2"	90	4	114.0	M16	90	4	114.0	M16	90	4	114.3	5/8"	90	4	114.3	5/8"
65	2½"	90	4	127.0	M16	90	4	127.0	M16	90	4	127.0	5/8"	90	4	127.0	5/8"
80	3"	90	4	146.0	M16	90	4	146.0	M16	90	4	146.1	5/8"	90	4	146.1	5/8"
100	4"	90	4	178.0	M16	45	8	178.0	M16	90	4	177.8	5/8"	45	8	177.8	5/8"
125	5"	45	8	210.0	M16	45	8	210.0	M16	45	8	209.6	5/8"	45	8	209.6	5/8"
150	6"	45	8	235.0	M16	45	8	235.0	M20	45	8	235.0	5/8"	45	8	235.0	3/4"
200	8"	45	8	292.0	M16	45	8	292.0	M20	45	8	292.1	5/8"	45	8	292.1	3/4"
250	10"	45	8	356.0	M20	30	12	356.0	M20	45	8	355.6	3/4"	30	12	355.6	3/4"

Dimensions

DN	INCH	Connection (code)															
		AS 2129 D (code T)				AS 2129 E (code U)				BS10 D (code H)				BS10 E (code S)			
DIN	ASME	w°	n	ØG	y	w°	n	ØG	y	w°	n	ØG	y	w°	n	ØG	y
300	12"	30	12	406.0	M20	30	12	406.0	M24	30	12	406.4	3/4"	30	12	406.4	7/8"

Dimensions in mm

n = number of bolts



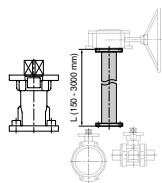
Connection JIS K10, JIS K16

DN	INCH	Connection (code)							
		JIS-K10 (code G)				JIS-K16 (code J)			
DIN	ASME	w°	n	ØG	y	w°	n	ØG	y
50	2"	90.0	4	120.0	M16	45.0	8	120.0	M16
65	2½"	90.0	4	140.0	M16	45.0	8	140.0	M16
80	3"	45.0	8	150.0	M16	45.0	8	160.0	M20
100	4"	45.0	8	175.0	M16	45.0	8	185.0	M20
125	5"	45.0	8	210.0	M20	45.0	8	225.0	M22
150	6"	45.0	8	240.0	M20	30.0	12	260.0	M22
200	8"	30.0	12	290.0	M20	30.0	12	305.0	M22
250	10"	30.0	12	355.0	M22	30.0	12	380.0	M24
300	12"	22.5	16	400.0	M22	22.5	16	430.0	M24

Dimensions in mm

n = number of bolts

Accessories



GEMÜ RCO

Shaft extension

The RCO shaft extension for quarter turn valves is a distance piece between manually, pneumatically or electrically operated valves. This means that valves can be protected from flooding or better access for operation of the valve can be ensured (also for manual override).



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.

GEMÜ ADH

Mounting sleeve

The mounting sleeve accessories are available in the square and star geometry designs. These are used for the shaft and hub support for quarter turn actuators. Both sleeves have an internal square drive (please observe stated measurement dimensions here). The sleeve material is sintered metal and they are chemically nickel plated with a surface of 25 µm.

Certificates

Certificate	Standard	Item number
2.1 Certificate of compliance with the order	EN 10204	88039442
2.2 Functionality	EN 10204/EN 12266-2 F20	88439527
2.2 Pressure test	EN 10204, DIN EN 12266 P10, P11, P12	88039443
3.1 Body material	EN 10204	88314529
3.1 Disc material	EN 10204	88314530
3.1 Shaft material		88734227
3.1 Pressure test	EN 10204, DIN EN 12266 P10, P11, P12	88337125
3.1 Layer thickness measurement		88460229
3.1 Surface roughness measurement (only disc code B)		88094384

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".



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