

GEMÜ®

Butterfly valve, Metal

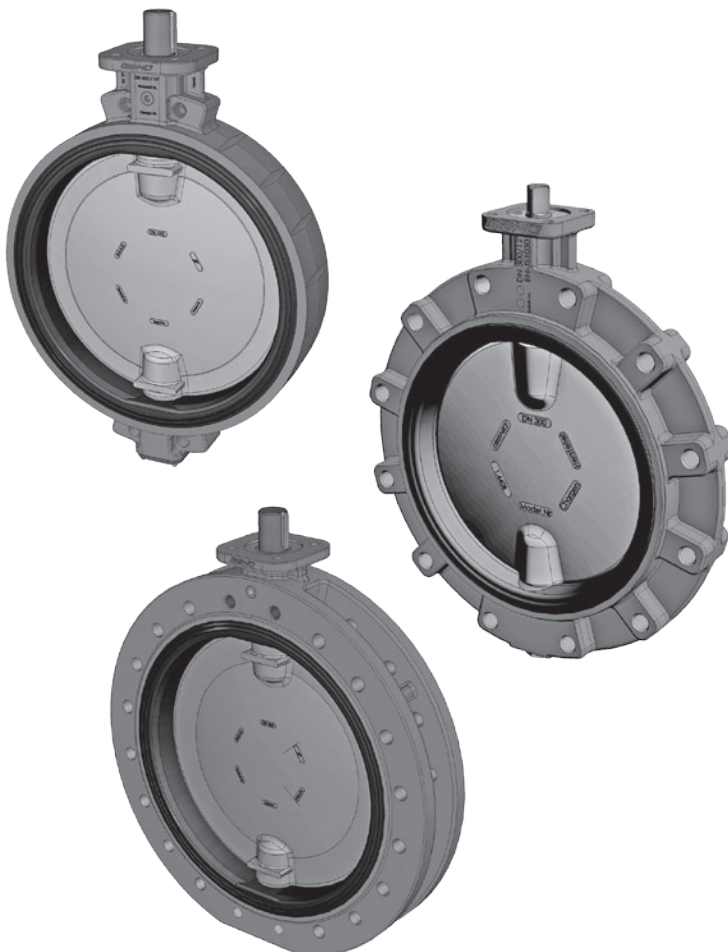
Construction

The GEMÜ VICTORIA is a wafer pattern butterfly valve with an elastomer liner. It is available in nominal sizes DN 50 - 600 and in various body versions such as Wafer, Lug and U section.

The butterfly valve can be supplied with various operators: GEMÜ 487 with lever or gearbox, GEMÜ 481 with pneumatic actuator, GEMÜ 488 with motorized on/off or control actuator.

Features

- Suitable for gaseous and liquid media in industrial applications as well as water treatment
- Installation length acc. to ISO 5752/20, EN 558-1/20
- Top flange acc. to ISO 5211
- Max. operating pressure 10/16 bar
- Connection standards PN 10, PN 16, ANSI cl. 150
- Leak test acc. to EN 12266
- The butterfly valve complies with the safety requirements of Annex I of the European Pressure Equipment Directive 97/23/EC for fluids of group 1 and 2
- ATEX compliant version and version without paint adhesion interfering substances available as an option



GEMÜ® VICTORIA
480, 481, 487, 488

Technical data

Working medium

Gaseous and liquid media which have no negative impact on the physical and chemical properties of the disc and seal material.

Max. perm. temp. of working medium

-10 °C ... 150 °C dependent on liner material

Other temperatures on request

No water hammer permissible

Ambient conditions

Max. perm. ambient temperature -10 ... 70°C

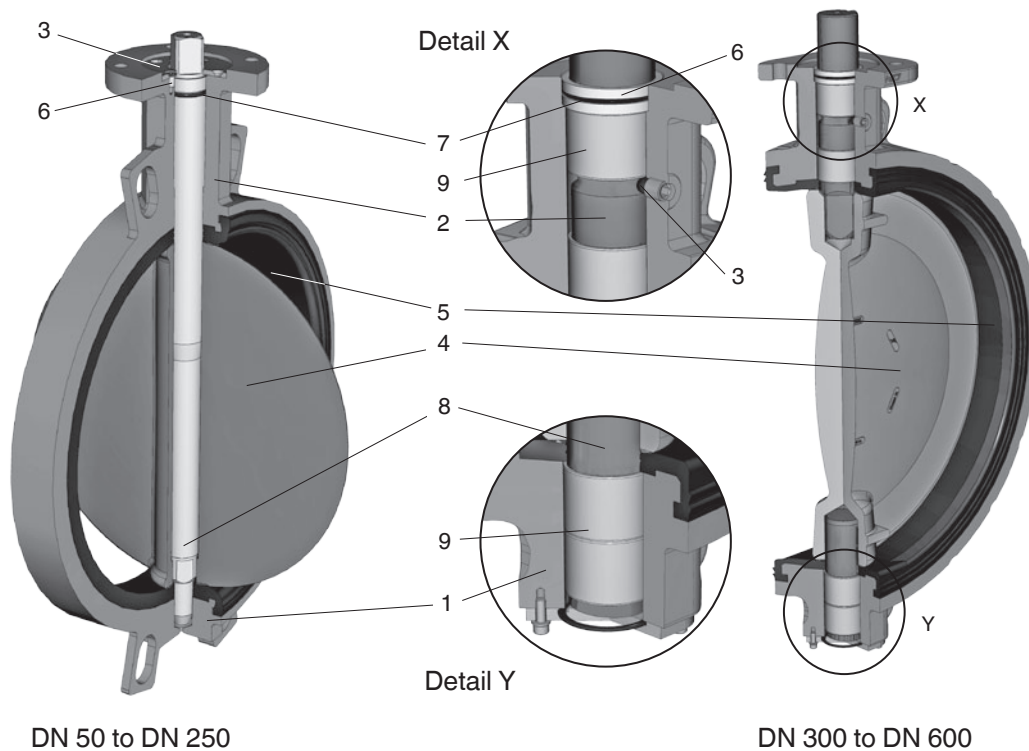
Max. perm. pressure of working medium

PS	Fluid Group 1		Fluid group 2	
	Gases	Liquids	Gases	Liquids
16 bar	DN 50 - DN 200	DN 50 - DN 200	DN 50 - DN 200	DN 50 - DN 200
10 bar	DN 250 - DN 350	DN 250 - DN 600	DN 250 - DN 500	DN 250 - DN 600
6 bar	-	-	DN 600	-
For liquids the max. operating pressure for end-of-line valves DN 50 - 200 10 bar DN 250 - 600 6 bar				

Kv values [m³/h]

DN	50	65	80	100	125	150	200	250	300
Kv	91	147	283	548	825	1407	2482	4072	5420

Sectional drawing



DN 50 to DN 250

DN 300 to DN 600

Item	Designation	Item	Designation
1	Body	6	Screw
2	Shaft with position indicator	7	External shaft seal
3	Lock washer		
4	Disc		
5	Seat (liner)		

Item	Designation	Item	Designation
1	Body	6	Support ring
2	Shaft with position indicator	7	External shaft seal
3	Blow out protection	8	Axis
4	Disc	9	Bearing
5	Seat (liner)		

Order data

1 Type		Code	2 Body configuration		Code
Butterfly valve with bare shaft		480	Wafer (DN 50 - DN 600)		W
Butterfly valve with pneumatic actuator		481	Lug (DN 50 - DN 400)		L
Butterfly valve with manual operator		487	U section (DN 400 - DN 600)		U
Butterfly valve with motorized actuator		488			

3 Operating pressure (Body material EN-GJS 400-15)															
	DN	50	65	80	100	125	150	200	250	300	350	400	450	500	600
PS 10 bar	Code	2	2	2	2	2	2	2	2	2	2	2	2	2	2
PS 16 bar	Code	3	3	3	3	3	3	3							
Standard															

4 Connection															
	DN	50	65	80	100	125	150	200	250	300	350	400	450	500	600
Wafer	PN 6	Code	3	3	3	3	3	3	3						
	PN 10	Code	3	3	3	3	3	3	3	3	3	2	3	2	
	PN 16	Code	3	3	3	3	3	3	3	3	3	3	3	3	3
Lug	PN 10	Code	3	3	3	3	3	2	2	2	2	2			
	PN 16	Code	3	3	3	3	3	3	3	3	3	3			
U-Sektion	PN 10	Code										2	2	2	2
	PN 16	Code										3	3	3	3
Standard															

For further connections see page 7

5 Body material	Code
EN-GJS-400-15 (GGG 40), Epoxy coated 120µm	2

6 Disc material	Code
CF8M, 1.4408	A
EN-GJS-400-15, GGG40 Epoxy coated	E
CF8M, 1.4408 Halar coated	C
CF8M, 1.4408 polished	B
EN-GJS-400-15, GGG40 Rilsan® PA11 coated	R

7 Shaft material	Code
AISI 420 / 1.4021	1

8 Seat (liner) material	Code
EPDM -10 °C ... +120 °C	2
NBR* -10 °C ... +100 °C	3
FPM* -10 °C ... +150 °C	4
EPDM -10 °C ... +120 °C DVGW approval for drinking water (DN 50 - 300)	1

* max. operating pressure 10 bar

9 Liner fixing	Code
Loose liner (Standard)	L
Bonded liner -10 °C ... + 80 °C	B
Vulcanized liner	V

10 Control function	Code
Butterfly valve with bare shaft Typ 480	F
Butterfly valve with manual operator Typ 487	0
Normally closed (NC), Typ 481	1
Normally open (NO), Typ 481	2
Double acting (DA), Typ 481	3

11 Operator size	Code
480	see page 8
481	see page 10/12
487	see page 9
488	see page 14 (Code 13,14,15)

12 Special function	Code
ATEX version: only butterfly valve with bare shaft (code 480)	X

Order example	1	DN	2	3	4	5	6	7	8	9	10	11	12
Code	487	100	W	3	3	2	A	1	2	L	0	AHL14	-

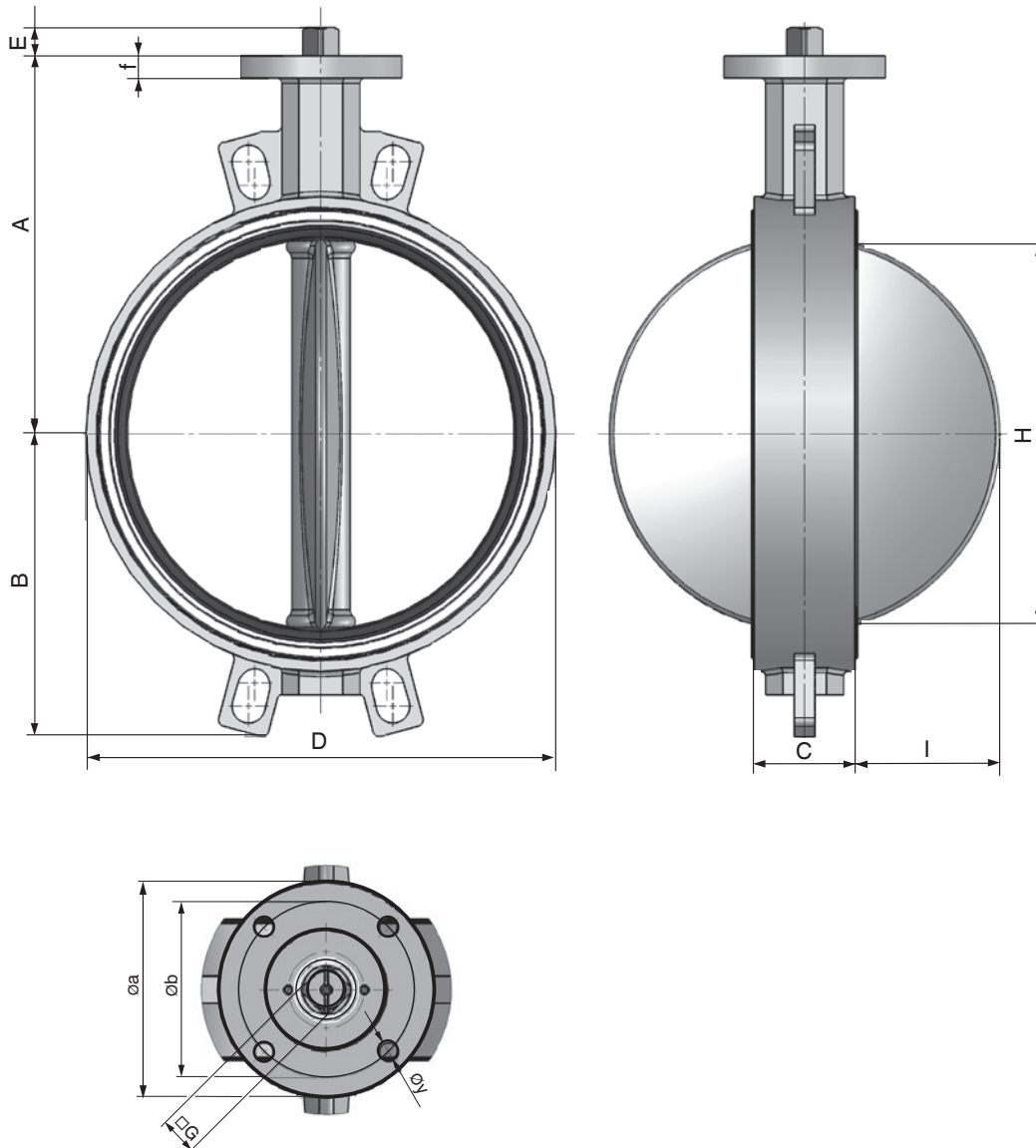
Other designs and materials on request

Body dimensions [mm]

Body configuration - Wafer (code W)

DN	A	B	C	D	E	H*	I	□G	ISO	a	øb	f	øy	Weight [kg]
50	120	60.2	43	91	19	27.4	4.0	9	F05	ø65	50	12	7	3.0
65	140	67.6	46	111	19	47.6	10.1	11	F05	ø65	50	12	7	3.6
80	145	90.4	46	130	19	66.9	17.6	11	F05	ø65	50	12	7	4.0
100	166	105.1	52	150	19	87.1	24.7	14	F05	ø65	50	14	7	5.5
125	187	119.6	56	179	25	113.3	35.2	17	F07	ø90	70	16	9	7.5
150	200	131.5	56	210	25	140.7	47.7	17	F07	ø90	70	16	9	8.6
200	240	158.5	60	264	32	192.7	70.9	22	F10	ø125	102	17	11	12.7
250	265	195.3	68	314	32	242.4	91.9	22	F10	ø125	102	17	11	22.2
300	290	232.0	78	364	32	292.3	112.2	22	F10	ø125	102	17	11	30.8
350	321	266.0	78	440	28	329.0	130.0	27	F12	□130	125	15	13	48.0
400	347	308.0	102	485	37	379.0	145.0	36	F14	□160	140	20	17	72.0
450	372	333.0	114	541	37	428.0	164.0	36	F14	□160	140	20	17	95.0
500	372	358.0	127	600	37	478.0	183.5	36	F14	□160	140	20	17	120.0
600	470	442.0	154	700	47	574.0	220.0	46	F16	□200	165	24	21	192.0

*Please note dimension H when using plastic piping systems to prevent disc binding on pipe internal

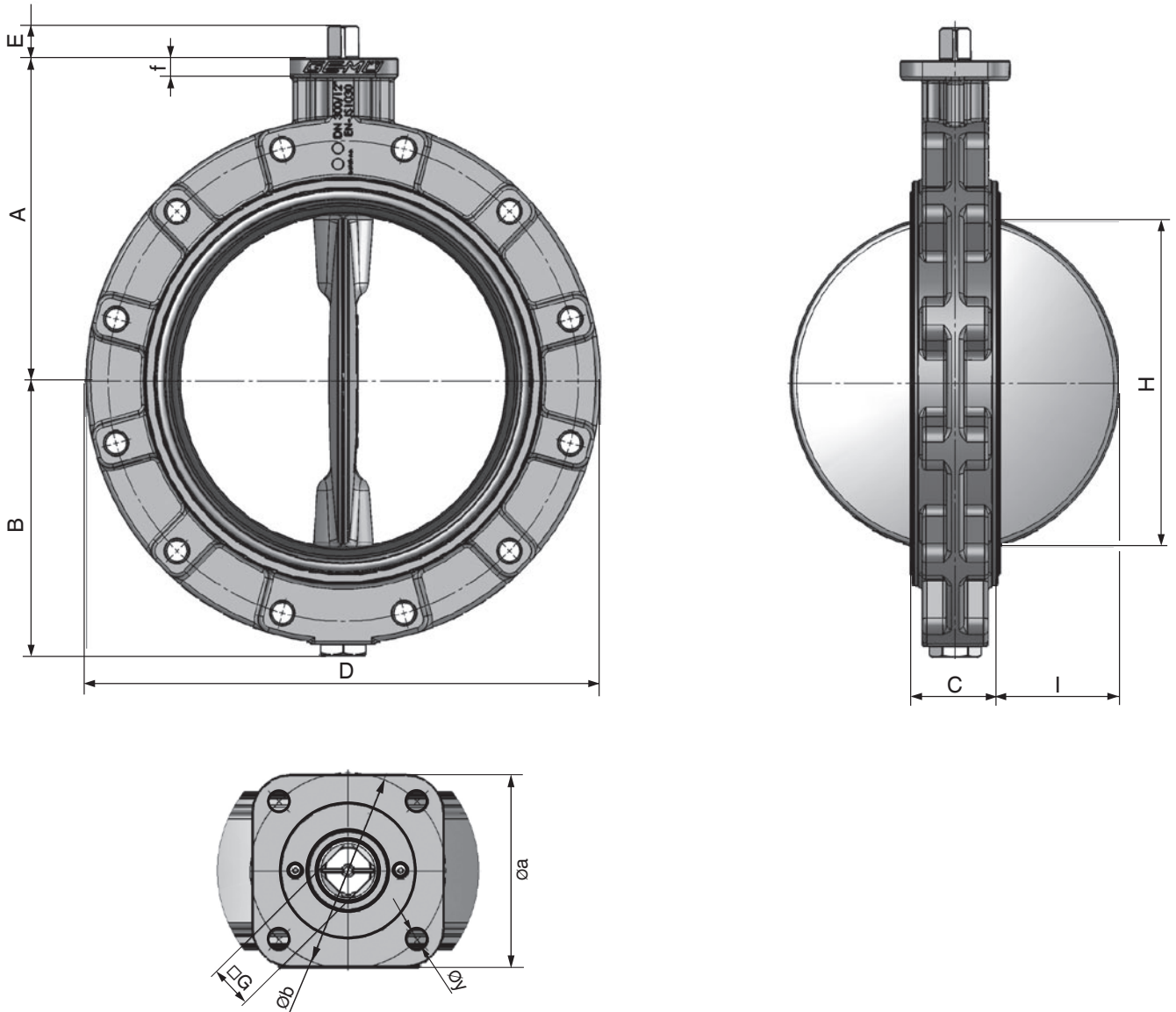


Body dimensions [mm]

Body configuration - Lug (code L)

DN	A	B	C	D	E	H*	I	□G	ISO	□a	øb	f	y	Weight [kg]
50	120	60.0	43	151.0	19	27.4	4.0	9	F05	50	50	12	7	3.7
65	140	67.0	46	171.0	19	47.6	10.1	11	F05	50	50	12	7	4.0
80	145	89.0	46	188.0	19	66.9	17.6	11	F05/F07	75	50/70	12	7/9	7.0
100	166	103.0	52	218.5	19	87.1	24.7	14	F05/F07	75	50/70	14	7/9	7.5
125	187	119.0	56	250.0	25	113.3	35.2	17	F07	75	70	16	9	11.0
150	200	130.5	56	275.0	25	140.7	47.7	17	F07	75	70	16	9	14.0
200	240	170.5	60	330.0	32	192.7	70.9	22	F10	100	102	17	11	21.0
250	265	203.0	68	402.0	32	242.4	91.9	22	F10	100	102	17	11	32.0
300	290	236.0	78	472.0	32	292.3	112.2	22	F10	100	102	17	11	43.0
350	321	260.0	78	520.0	28	329.0	130.0	27	F12	130	125	15	13	66.0
400	347	300.0	102	596.0	37	379.0	145.0	36	F14	160	140	20	17	110.0

*Please note dimension H when using plastic piping systems to prevent disc binding on pipe internal

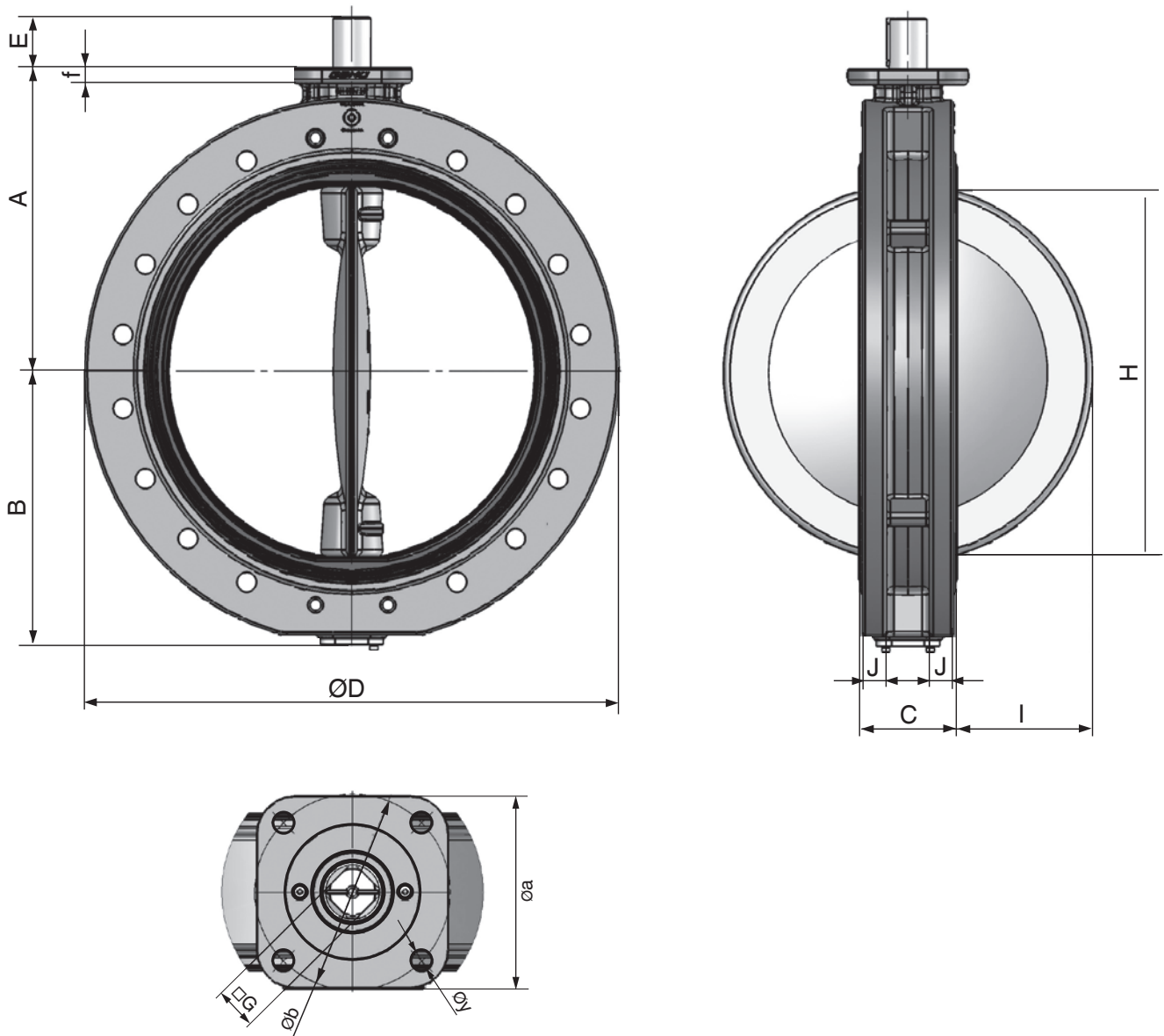


Body dimensions [mm]

Body configuration - U section (code U)

DN	A	B	C	D	E	H	I	J	□G	ISO	□a	øb	f	y	Weight [kg]
400	347	308	102	485	37	379	145.0	28.0	36	F14	16	140	20	17	105.0
450	372	333	114	541	37	428	164.0	28.0	36	F14	160	140	20	17	128.0
500	372	358	127	715	37	478	183.5	31.5	36	F14	160	140	20	17	165.0
600	470	442	154	840	47	574	220.0	36.0	46	F16	200	165	24	21	263.0

*Please note dimension H when using plastic piping systems to prevent disc binding on pipe internal



Availability / code - Body configuration / connection

Wafer														
Flange	Nominal size													
	50	65	80	100	125	150	200	250	300	350	400	450	500	600
DIN EN1092-2 PN06	3	3	3	3	3	3	3	3	-	-	-	-	-	-
DIN EN1092-2 PN10	3	3	3	3	3	3	3	3	3	3	3	2	3	2
DIN EN1092-2 PN16	3	3	3	3	3	3	3	3	3	3	3	3	3	3
ASME B16.1 Kl. 150	3	3	3	3	3	3	3	3	3	3	3	D	3	D
AS 2129 C	o.r.	-	-	o.r.	o.r.	o.r.	o.r.	-	o.r.	o.r.	-	-	-	-
AS 2129 D	o.r.	-	-	o.r.	o.r.	o.r.	o.r.	-	o.r.	o.r.	-	-	-	-
AS 2129 E	o.r.	-	-	o.r.	o.r.	o.r.	o.r.	-	o.r.	o.r.	-	o.r.	-	-
JIS K5	-	o.r.	-	-	o.r.	o.r.	-	o.r.	-	-	-	-	-	-
JIS K10	o.r.	o.r.	o.r.	o.r.	o.r.	o.r.	o.r.	o.r.	-	-	-	o.r.	o.r.	-
JIS K16	o.r.	-	-	-	-	-	-	-	-	-	-	-	-	-
BS 10	o.r.	-	-	o.r.	o.r.	o.r.	o.r.	-	o.r.	o.r.	-	-	-	-

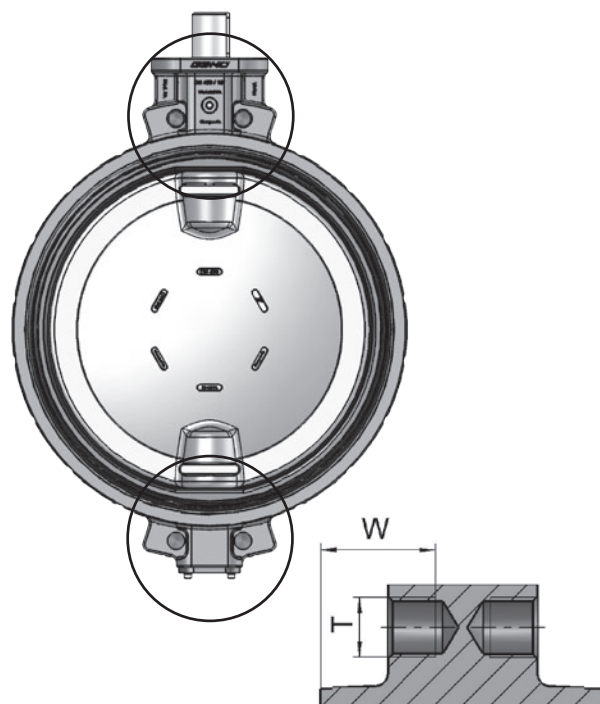
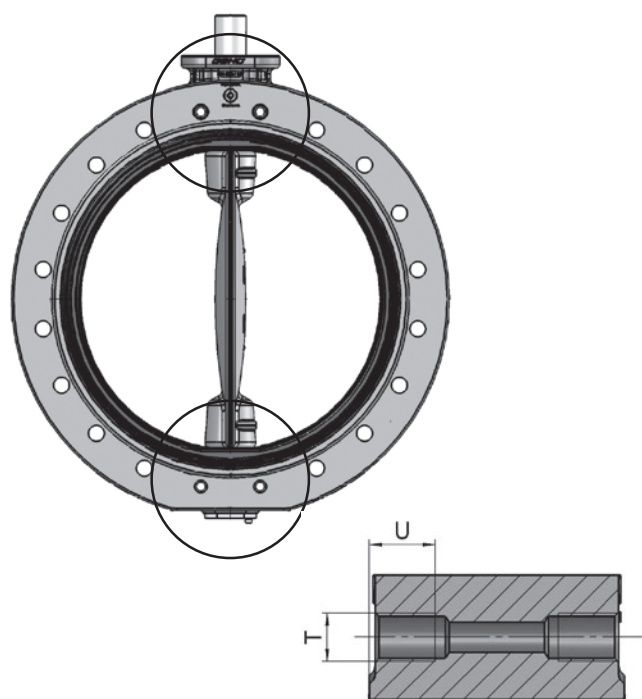
Lug												
Flange	50	65	80	100	125	150	200	250	300	350	400	
DIN EN1092-2 PN06	1	1	1	1	1	1	1	1	1	-	-	
DIN EN1092-2 PN10	3	3	3	3	3	3	2	2	2	2	2	
DIN EN1092-2 PN16	3	3	3	3	3	3	3	3	3	3	3	
ASME B16.1 Kl. 150	D	D	D	D	D	D	D	D	D	D	D	
AS 2129 C	o.r.	o.r.	o.r.	-	o.r.	o.r.	o.r.	-	o.r.	o.r.	-	
AS 2129 D	o.r.	o.r.	o.r.	-	o.r.	o.r.	o.r.	-	o.r.	o.r.	-	
AS 2129 E	o.r.	o.r.	o.r.	o.r.	o.r.	o.r.	o.r.	o.r.	o.r.	o.r.	-	
JIS K5	o.r.	o.r.	o.r.	o.r.	o.r.	o.r.	o.r.	o.r.	o.r.	o.r.	o.r.	
JIS K10	o.r.	o.r.	o.r.	o.r.	o.r.	o.r.	o.r.	o.r.	-	o.r.	o.r.	
JIS K16	-	-	-	-	-	-	-	-	-	-	o.r.	
BS 10	o.r.	o.r.	o.r.	-	o.r.	o.r.	o.r.	-	o.r.	o.r.	-	

U section														
Flange											400	450	500	600
DIN EN1092-2 PN06											1*	1*	1*	1*
DIN EN1092-2 PN10											2	2	2	2
DIN EN1092-2 PN16											3	3	3	3
ASME B16.1 Kl. 150											D	D	D	D
AS 2129 C											o.r.*	o.r.	o.r.	o.r.
AS 2129 D											o.r.	o.r.	o.r.	o.r.
AS 2129 E											o.r.	o.r.	o.r.	o.r.
JIS K5											o.r.*	o.r.	o.r.	o.r.
JIS K10											o.r.	o.r.	o.r.	-
JIS K16											o.r.	-	o.r.	-
BS 10											o.r.	o.r.	o.r.	o.r.

* only with threaded holes - LUG

o.r. = on request

Dimensions of threaded holes [mm]



Flange connection holes - U section

DN	DIN EN 1092-2 PN 10		DIN EN 1092-2 PN 16		ASME 16.5 KI. 150	
	T	U	T	U	T	U
400	M24	24	M27	27	1" - 8 UN	-
450	M24	24	M27	27	1 1/8" - 8 UN	30
500	M24	24	M30	30	1 1/8" - 8 UN	30
600	M27	27	M33	33	1 1/4" - 8 UN	33

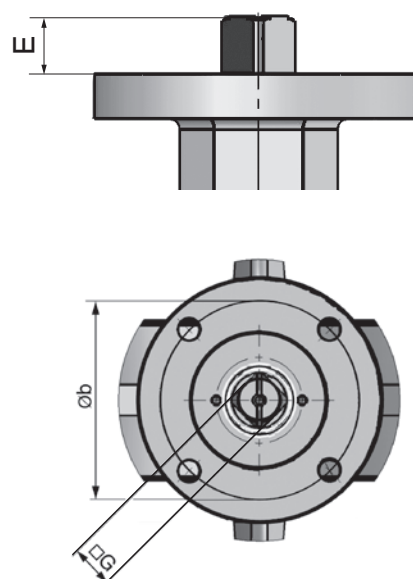
Flange connection holes - Wafer

DN	DIN EN 1092-2 PN 10		DIN EN 1092-2 PN 16		ASME 16.5 KI. 150	
	T	W	T	W	T	W
450	M24	46	M27	46	Ø 31,7	-

Operator size - Type 480 - Butterfly valve with bare shaft

Dimensions [mm] Operator flange

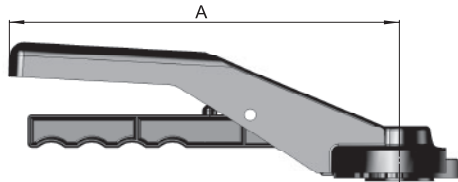
DN	ISO	Øb	Shaft connection	□G	E	Code
50	F05	50	D	09	19	05 D09
65	F05	50	D	11	19	05 D11
80	F05	50	D	11	19	05 D11
100	F05	50	D	14	19	05 D14
125	F07	70	D	17	25	07 D17
150	F07	70	D	17	25	07 D17
200	F10	102	D	22	32	10 D22
250	F10	102	D	22	32	10 D22
300	F10	102	D	22	32	10 D22
350	F12	125	D	27	28	12 D27
400	F14	140	D	36	37	14 D36
450	F14	140	D	36	37	14 D36
500	F14	140	D	36	37	14 D36
600	F16	165	D	46	47	16 D46



Dimensions - Hand lever / Code - Type 487 with manual operator [mm]

DN	Designation	A	[kg]	Top flange	Code
50	AHL09.F05.200	200	0.314	F05	AHL09
65-80	AHL11.F05.200	200	0.314	F05	AHL11
100	AHL14.F05.200	200	0.314	F05	AHL14
125-150	AHL17.F07.270	270	0.716	F07	AHL17
200	AHL22.F10.340	340	0.730	F10	AHL22

Material: Aluminium

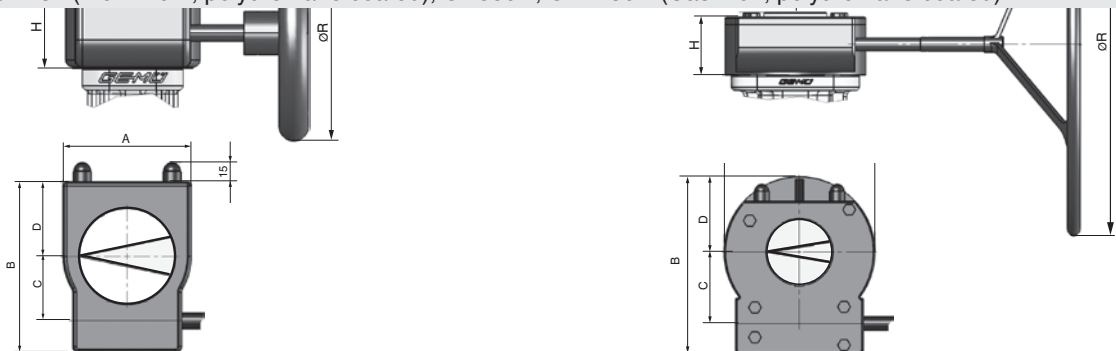


Dimensions - Gear box / Code - Type 487 with manual operator [mm]

DN	Designation	A	B	C	D	E	H	ØR	n	[kg]	Code
50	GB23205F05-F07D9 PS100	80	114	42.5	48	121	53	100	10.0	0.8	GB232
65-80	GB23205F05-F07D11 PS100	80	114	42.5	48	121	53	100	10.0	0.8	GB232
100	GB23205F05-F07D14 PS100	80	114	42.5	48	121	53	100	10.0	0.8	GB232
125	GB23206F05-F07D17 PS100	80	114	42.5	48	171	59	100	10.0	0.9	GB232
150	GB23206F05-F07D17 PS160	80	114	42.5	48	171	59	160	9.3	0.9	GB232
200-250	GB23208F07-F10D22 PS200	100	131	50.0	56	195	67	125	9.3	1.4	GB232
300	GB23211F10-F12D22 SG400	146	174	60.0	79	197	79	400	11.3	2.7	GB232
350	GB23214F10-F12D27 SG500	175	209	80.0	83	293	85	500	10.0	4.7	GB232
400	GB23214 F14D36 SG500	175	209	80.0	83	376	85	500	11.3	4.7	GB232
450-500	GB880NF10-F14D36 SG800	200	226	86.0	100	339	93	800	9.5	14.0	GB880N
600	GB1250NF12-F16D46 SG700	220	258	105.0	110	305	102	700	13.8	22.0	GB1250N

Sizes larger than DN 300: Design on request

Material: GB232 (Aluminium, polyurethane coated); GB880N, GB1250N (Cast iron, polyurethane coated)



GEMÜ 481 with pneumatic actuator type ADA/ASR



11 Actuator size*

DN	Pneumatic double acting	Code	Pneumatic single acting	Code
50	ADA0040 F05YS14/S11A	B004AB0	ASR0040 S14 F05YS14/S11A	A004KB0
65	ADA0040 F05YS14/S11A	B004AB0	ASR0080 S14F05F07YS17/S14A	A008KC0
80	ADA0040 F05YS14/S11A	B004AB0	ASR0130 S14F05F07YS17/S14A	A013KC0
100	ADA0080 F05F07YS17/S14A	B008AC0	ASR0200 S14F07F10YS17/S14A	A020KE0
125	ADA0080 F05F07YS17/S14A	B008AC0	ASR0200 S14F07F10YS17/S14A	A020KE0
150	ADA0130 F05F07YS17/S14A	B013AC0	ASR0300 S14F07F10Y S22A	A030KD0
200	ADA0300 F07F10Y S22A	B030AD0	ASR0850 S14F10F12Y S27A	A085KG0
250	ADA0500 F10Y S22A	B050AF0	ASR1200 S14F10F14Y S36A	A120KH0
300	ADA0500 F10Y S22A	B050AF0	ASR1200 S14F10F14Y S36A	A120KH0
350	ADA0850 F10F12Y S27A	B085AG0	ASR2500 S14 F16Y S46A	A250KL0
400	ADA1200 F10F14Y S36A	B120AH0	ASR2500 S14 F16Y S46A	A250KL0
450	ADA1750 F14Y S36A	B175AK0	ASR2500 S14 F16Y S46A	A250KL0

*Technical data for liquids +20 to +80°C with control pressure 6 bar

Control medium

Filtered, dry compressed air, non-corrosive medium

Control pressure

6 - 8 bar

Temperature range

-30°C to +100°C, other temperatures on request

Angle of rotation

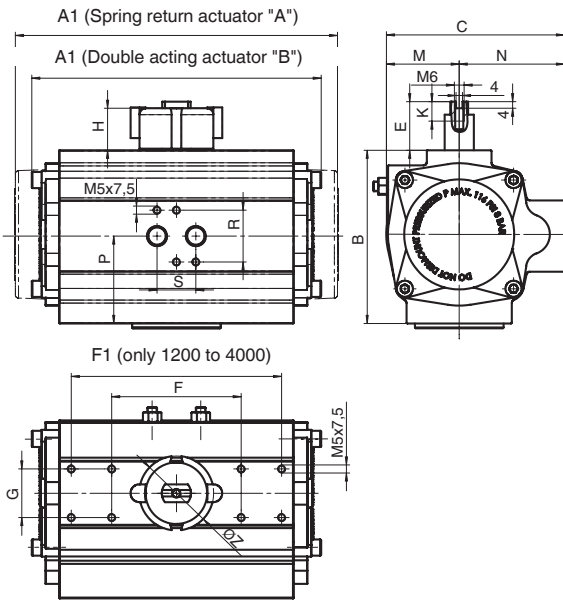
(±20° adjustable) (75° - 95°) 90°

Order example	1	DN	2	3	4	5	6	7	8	9	10	11
Code	481		Order data butterfly valve (page 3)									B013AC0

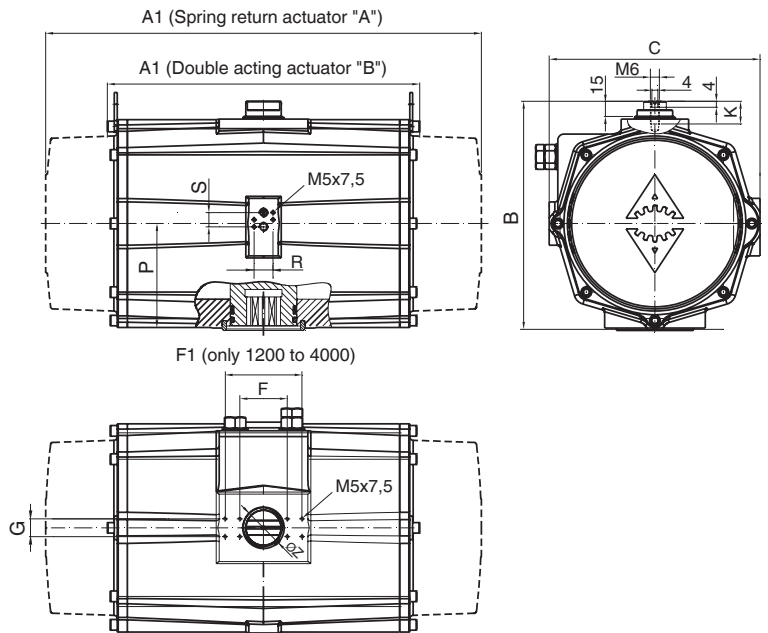
Stroke limiter on request

Actuator dimensions ADA/ASR [mm]

Typ ADA/ASR 0020 - 1750



Typ ADA/ASR 2500 - 4000



ADA/ASR	0020	0040	0080	0130	0200	0300	0500	0850	1200	1750	2500	4000
ISO 5211	F04	F04	F05/F07	F05/F07	F07/F10	F07/F10	F10	F10/F12	F10/F14	F14	F16	F16/F25
Square	11	11	17	17	17	22	22	27	36	36	46	55
Air connector	G¼	G¼	G¼	G¼	G¼	G¼	G¼	G¼	G¼	G¼	G¼	G¼
A	145	158	177	196	225	273	304	372	439	461	518	630
A1	163	195	217	258	299	348.5	397	473	560	601	738	940
B	66	85	107	117	135	182	169	191	219	250	383	434
C	76	91	111	122	135.5	152.5	173	191.5	212.5	242.5	356	415
E	30	30	30	30	30	30	30	30	30	30	15	15
F	80	80	80	80	80	80	80	80	80	80	80	80
F1	-	-	-	-	-	-	-	-	130	130	130	130
G	30	30	30	30	30	30	30	30	30	30	30	30
H	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	-	-
K	9	9	12	15	15	16	17	15	16	16	16	16
M	28	35	45	51	57	66.5	77	85	96	111	178.5	202
N	48	56	66	71	78	86	96	106	116	131	177.5	213
P	34	45	55	60	70	80	85	98	114	130	176.5	201
R	32	32	32	32	32	32	32	32	32	32	32	32
S	24	24	24	24	24	24	24	24	24	24	24	24
ØZ	46	46	46	46	46	54	64	64	80	81	81	91
Weight [kg]												
ADA	1.4	2.1	3.0	3.8	5.6	8.5	11.2	16.9	25.8	32.5	69.6	129.4
ASR	1.5	2.3	3.7	4.8	7.3	10.8	15.4	22.2	34.3	46.0	99.9	182.9

GEMÜ 481 with pneumatic actuator type DR/SC*



11 Actuator size*

DN	Pneumatic double acting	Code	Pneumatic single acting	Code
50	DR0030U F05F07NS14A	DU03AP0	SC0060U 6 F05F07NS14A	SU06KP0
65	DR0030U F05F07NS14A	DU03AP0	SC0100U 6 F05F07NS17A	SU10KC0
80	DR0030U F05F07NS14A	DU03AP0	SC0100U 6 F05F07NS17A	SU10KC0
100	DR0060U F05F07NS17A	DU06AC0	SC0150U 6 F05F07NS17A	SU15KC0
125	DR0060U F05F07NS17A	DU06AC0	SC0220U 6 F07F10NS22A	SU22KD0
150	DR0150U F07F10NS22A	DU15AD0	SC0300U 6 F07F10NS22A	SU30KD0
200	DR0220U F07F10NS22A	DU22AD0	SC0600U 6 F10F12NS27A	SU60KG0
250	DR0450U F10F12NS27A	DU45AG0	SC0900U 6 F10F12NS27A	SU90KG0
300	DR0450U F10F12NS27A	DU45AG0	SC1200U 6 F10F12NS27A	S12UKG0
350	DR0900U F10F12NS27A	DU90AG0	SC2000U 6 F12NS27A	S20UKQ0
400	DR1200U F14NS36A	D12UAK0	SC3000U 6 F14NS36A	S30UKK0
450	DR1200U F14NS36A	D12UAK0	SC3000U 6 F14NS36A	S30UKK0
500	DR2000U F14NS36A	D20UAK0	SC3000U 6 F14NS36A	S30UKK0
600	DR2000U F16NS46A	D20UAL0	SC5000U 6 F16F25NS46A	S50UKS0

* Technical data for liquids +20 to +80°C with control pressure 6 bar

Control medium

Filtered, dry compressed air, non-corrosive medium

Control pressure

6 - 8 bar

Temperature range

-30°C to +100°C, other temperatures on request

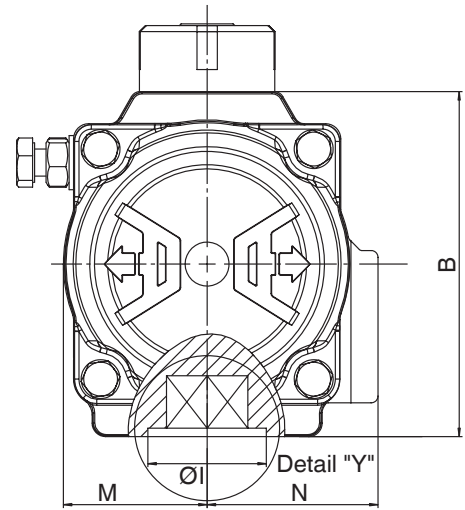
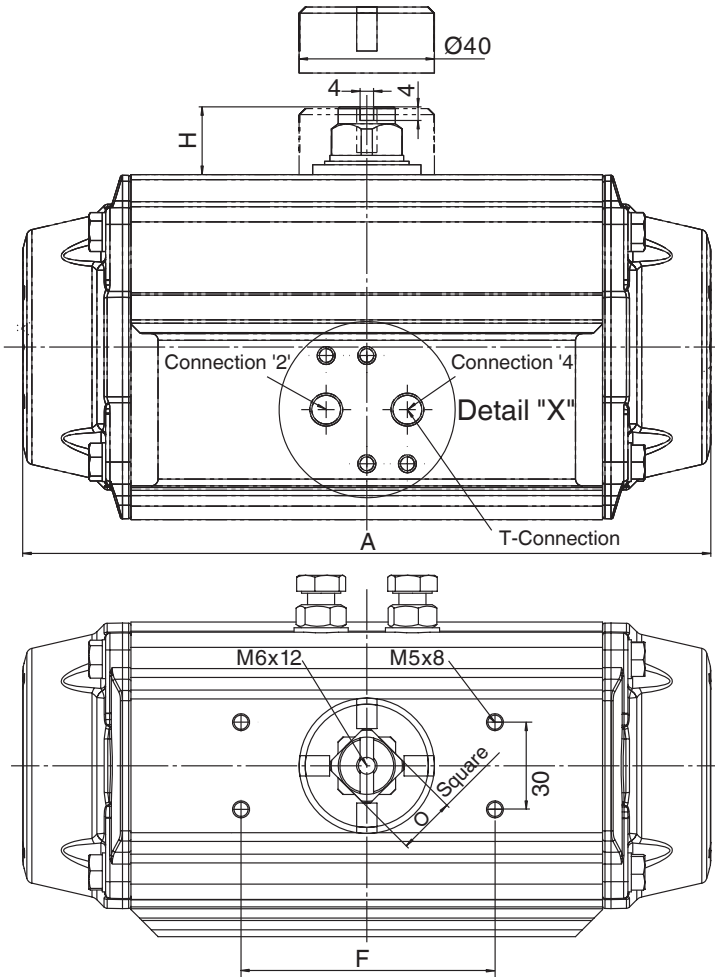
Angle of rotation

(±20° adjustable) (75° - 95°) 90°

Order example	1	DN	2	3	4	5	6	7	8	9	10	11
Code	481		Order data butterfly valve (page 3)									DU15AD0

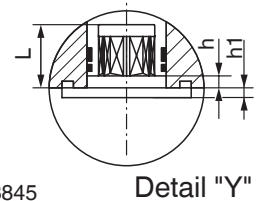
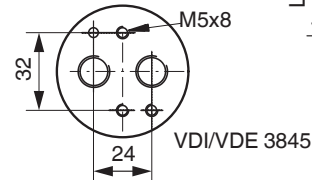
Stroke limiter on request

Actuator dimensions - DR/SC [mm]

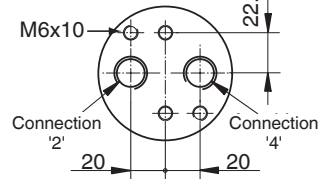


Detail "X"

Typ 0015U - 1200U



Typ 2000U - 4000U



Typ	0015U	0030U	0060U	0100U	0150U	0220U	0300U	0450U	0600U	0900U	1200U	2000U	3000U	4000U	5000U
ISO Flange	F04	F04 F05/07	F05/07	F05/07	F07/10	F07/10	F07/10	F10/12	F10/12	F14	F14	F16	F16	F16	F25
Square	11	14	14	17	17	22	22	27	27	36	36	46	46	46	55
L	12	16	19	19	25	24	24	29	40	38	38	48	48	49	57
Air connector	G 1/8	G 1/8	G 1/8	G 1/8	G 1/4	G 1/4	G 1/4	G 1/4	G 1/4	G 1/4	G 1/4	G 3/8	G 1/2	G 1/2	G 1/2
A	136,0	153,5	203,5	241,0	259,0	304,0	333,0	394,5	422,5	474,0	528,0	605,0	710,0	812,0	876,0
B	69,0	85,0	102,0	115,0	127,0	145,0	157,0	177,0	196,0	220,5	245,0	298,5	330,0	383,0	410,0
F	80	80	80	80	80	80	80	80	80	130	130	130	130	130	130
H	20	20	20	20	20	20	20	30	30	30	50	50	50	50	50
Ø I	30	35	35	40	55	55	55	70	70	100	100	130	130	130	200
M	29,0	36,0	42,5	49,5	55,5	64,0	69,5	80,0	88,0	99,0	110,0	131,0	165,0	185,5	204,0
N	43,0	48,5	50,5	56,5	63,0	72,0	77,0	86,0	93,0	101,0	111,5	131,0	165,0	185,5	214,0
O	11	11	17	17	17	27	27	27	27	36	36	36	36	36	36
R	32	32	32	32	32	32	32	32	32	32	32	45	45	45	45
S	24	24	24	24	24	24	24	24	24	24	24	40	40	40	40
h	0,5	0,5	0,5	1,5	1,5	1,5	1,5	1,5	1,5	2	2	2,5	2,5	2,5	2,5
h1	1,5	1,5	2	1,5	2	2	2	3	3	3	3	2,5	2,5	4	3,5
L	11	11	19	19	19	19	25	32	40	40	40	40	40	57	57
Weight [kg]															
DR	1,0	1,6	2,7	3,8	5,4	8,4	10,2	14,5	19,8	25,0	35,5	53,0	83,0	118,0	134,0
SC	1,1	1,7	3,2	4,4	6,5	9,8	12,6	18,1	24,0	31,6	45,1	64,2	102,2	150,0	169,0

GEMÜ 488 with motorized actuators



14 Functional module	Code
OPEN/CLOSE control	A0
OPEN/CLOSE control with 2 additional potential-free limit switches	AE
OPEN/CLOSE control with potentiometer output	AP
Control module; for external set value 0/4-20 mA	E2
Control module; for external set value 0-10V DC	E1
OPEN/CLOSE control with relay, not reversible	00
OPEN/CLOSE control with 2 additional potential-free limit switches, with relay, not reversible	0E
OPEN/CLOSE control, not reversible with potentiometer output	0P

13 Voltage/frequency	Code
24V DC	C1
24V AC 50/60 Hz	C4
120V AC 50/60 Hz	G4
100 - 250V 50/60 Hz	O4
230V AC 50/60 Hz	L4

15 Actuator version	Code
Torque 15 Nm, operating time 11 sec; supply voltage C1	1015
Torque 15 Nm, operating time 11 sec; supply voltage C4, O4	2015
Torque 35 Nm, operating time 15 sec; supply voltage C1, C4, O4	3035
Torque 70 Nm, operating time 15 sec; supply voltage C1, C4, G4, L4	2070
Torque 100 Nm, operating time 20 sec; supply voltage C1, C4, G4, L4	4100
Torque 200 Nm, operating time 16 sec; supply voltage C1, C4, G4, L4	4200
Torque 400 Nm, operating time 29 sec; supply voltage C1, C4, G4, L4	6400

Order example	1	DN	2	3	4	5	6	7	8	9	13	14	15
Code	488		Order data butterfly valve (page 3)								C	A0	2070

Technical data - Motorized GEMÜ actuators

Min. / max. ambient temperature

-10 to +60° C

Min. / max. storage temperature

-20 to +60° C

Protection class to EN 60529

IP 65

Mounting position

Optional

Weight

Actuator version 1015	0.9 kg
Actuator version 2015	1.2 kg
Actuator version 3035	2.4 kg
Actuator version 2070	4.6 kg
Actuator version 4100, 4200	11.0 kg
Actuator version 6400	14.0 kg

Directives

EC Machinery directive 98/37/EC, annex II B
EC EMC directive 89/336/EEC

Special feature

Standard manual override

Power supply

Rated voltage	24 V DC / 24 V, 120 V, 230 V AC
Rated frequency at AC rated voltage	50/60 Hz
Voltage tolerance	+10% / -15%

Operating time

Actuator version 1015, 2015	approx. 11 sec
Actuator version 2070, 3035	approx. 15 sec
Actuator version 4100	approx. 20 sec
Actuator version 4200	approx. 16 sec
Actuator version 6400	approx. 29 sec

Technical data - Motorized GEMÜ actuators

Travel	
Nominal travel	90°
Max. travel	93°
Setting range limit switch min.	0-20°
Setting range limit switch max.	70-93°

Rating	
Actuator version 1015, 2015, 3035	60 %
Actuator version 1015, 2015, 3035 (voltage O4)	40 %
Actuator version 3035	60 %
Actuator version 2070	100 %
Actuator version 4100	100 %
Actuator version 4200	100 %
Actuator version 6400	70 %

Correlation actuator version / nominal size							
DN	Actuator version (code)						
	1015 15 Nm	2015 15 Nm	3035 35 Nm	2070 70 Nm	4100 100 Nm	4200 200 Nm	6400 400 Nm
40	X	X	-	-	-	-	-
50	-	-	X	-	-	-	-
65	-	-	X	-	-	-	-
80	-	-	-	X	-	-	-
100	-	-	-	X	-	-	-
125	-	-	-	-	X	-	-
150	-	-	-	-	-	X	-
200	-	-	-	-	-	X	-
250	-	-	-	-	-	-	X
300	-	-	-	-	-	-	X

Correlation actuator vers. / Voltage-frequency					
Actuator version (code)	Supply voltage/mains frequency (code)				
	C1 24 V DC	C4 24 V AC	G4 120 V	L4 230 V	O4 100-250 V
1015 (15 Nm)	X	-	-	-	-
2015 (15 Nm)	-	X	-	-	X
3035 (35 Nm)	X	X	-	-	X
2070 (70 Nm)	X	X	X	X	-
4100 (100 Nm)	X	X	X	X	-
4200 (200 Nm)	X	X	X	X	-
6400 (400 Nm)	X	X	X	X	-

Actuator material		
Actuator version	1015	2015 / 3035
Housing base	PP (30 % gr)	PP (30 % gr)
Housing cover	PPO (10 % gr)	PP (30 % gr)
Indicator	PP-R natur	PP-R natur
Actuator version	2070	4100, 4200, 6400
Housing base	ABS	Aluminium
Housing cover	ABS	Aluminium
Indicator	PP-R natur	PMMA

gr = glass reinforced

Power and current consumption								
Actuator version code	24 V DC		24 V AC		120 V AC		230 V AC	
	A0/AE/AP E1/E2	00/0E/0P	A0/AE/AP E1/E2	00/0E/0P	A0/AE/AP E1/E2	00/0E/0P	A0/AE/AP E1/E2	00/0E/0P
Power consumption [W]								
1015, 2015 (15 Nm)	24	-	24	-	30	-	30	-
3035 (35 Nm)	24	-	24	-	30	-	30	-
2070 (70 Nm)	96	63	-	63	160	-	161	-
4100 (100 Nm)	96	105	-	140	160	105	161	130
4200 (200 Nm)	96	90	-	110	160	90	161	105
6400 (400 Nm)	120	120	-	120	170	120	185	145

Correlation actuator version / functional module								
Actuator version code	Functional module (code)							
	A0	AE	AP	E2	E1	00	0E	0P
1015 (15 Nm)	X	X	-	-	-	-	-	-
2015 (15 Nm)	X	X	-	-	-	-	-	-
3035 (35 Nm)	X	X	-	-	-	-	-	-
2070 (70 Nm)	X	X	X	X	X	X	X	X
4100 (100 Nm)	X	X	X	X	X	X	X	X
4200 (200 Nm)	X	X	X	X	X	X	X	X
6400 (400 Nm)	X	X	X	X	X	X	X	X

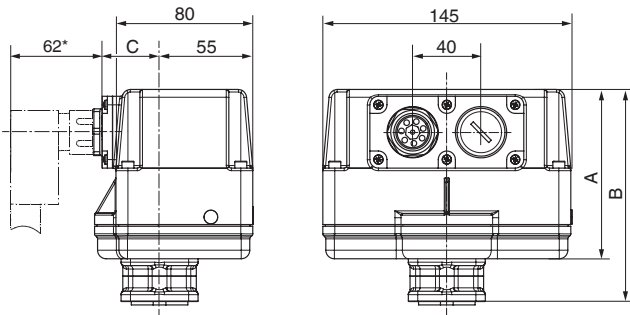
Note: For connection and wiring diagrams for motorized GEMÜ actuators see data sheet

Actuator version code 1015, 2015, 3035 - Data sheet GEMÜ 9428

Actuator version code 2070, 4100, 4200, 6400 - Data sheet GEMÜ 9468

Actuator dimensions [mm]

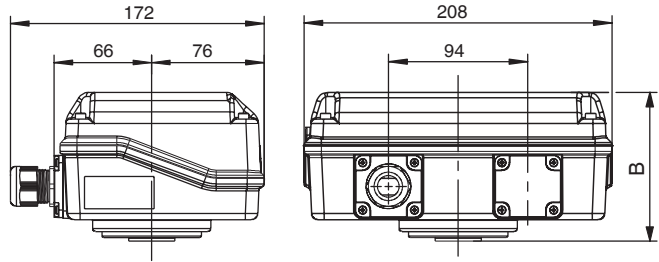
Actuator version 1015, 2015



Voltages	A	B	C
24 V	69	94	49
100 V - 250 V	99	124	53

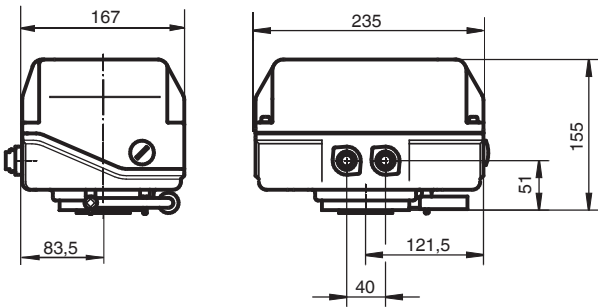
* Standard with supply voltage code O4*

Actuator version 3035

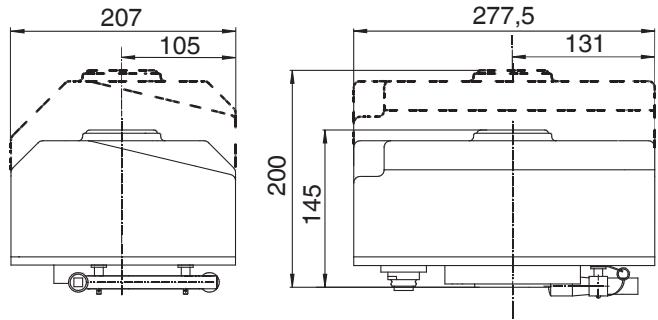


Voltages	B
24 V	100,5
100 V - 250 V	124,5

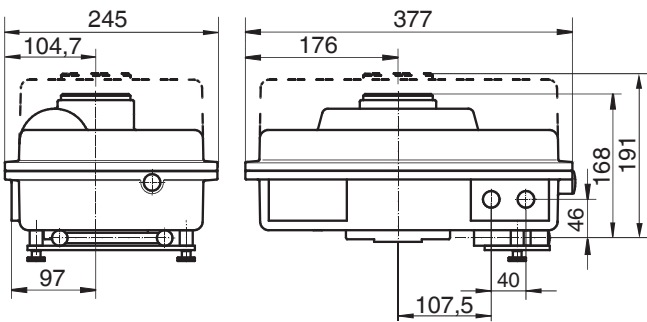
Actuator version 2070



Actuator version 4100, 4200



Actuator version 6400



- full line \triangle overall height 1
version functional module code 00, 0E, 0P
- - - broken line \triangle overall height 2
version functional module code A0, AE, AP, E2, E1

For further butterfly valves, accessories and other products, please see our Product Range catalogue and Price List.
Contact GEMÜ.