

GEMÜ®

Butterfly valve, Metal

Construction

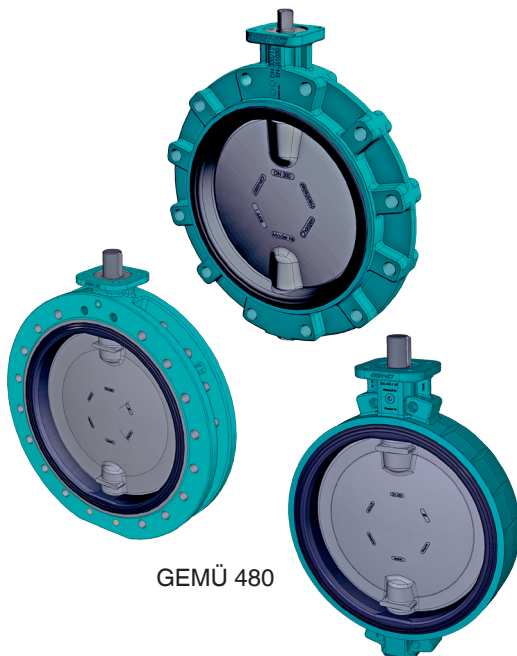
The GEMÜ Victoria is a soft seated butterfly valve with an elastomer liner. It is available in nominal sizes DN 25 - 600 and in various body versions such as Wafer, Lug and U section. The butterfly valve can be supplied with various operators: GEMÜ 487 with hand lever or gearbox, GEMÜ 481 with pneumatic actuator, GEMÜ 488 with motorized on/off or control actuator.

Features

- Suitable for gaseous and liquid media in industrial applications as well as in water treatment
- Installation length acc. to ISO 5752/20, EN 558-1/20, API 609 category A
- Top flange acc. to EN ISO 5211
- Max. operating pressure 45/ 150 / 232 psi
- Connection standards PN 10, PN 16, ASME B16.5 cl. 150
- Standard of fitness for use EN 593
- Leak test acc. to EN 12266-1/P12 leakage rate A
- 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
- Version according to ATEX and version without paint adhesion interfering substances available as an option

Advantages

- Advanced seal design - even for larger diameters
- Extensive applications using a variety of materials
- Modular construction
- Simple installation
- Low torques
- Drinking water approval (DVGW, ACS, Belgaqua)
- Body coating in accordance with ISO 12944-6 C5-M
- Suitable for coastal and offshore areas as well as structures with high stress due to condensation and contamination



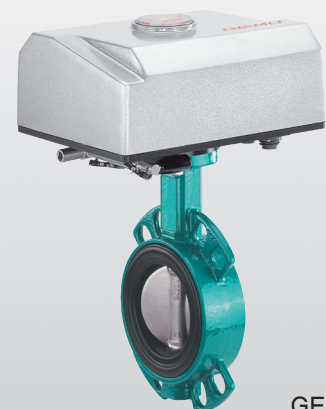
GEMÜ 480



GEMÜ 487



GEMÜ 481



GEMÜ 488

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 seat material.

Permissible temperature of working medium

14 to 302 °F dependent on seat (liner) material

Other temperatures on request

No water hammer permissible

Ambient conditions

Permissible ambient temperature 14 to 158 °F

Vacuum

Loose seat (liner):
can be used up to a vacuum of 23.6 inhg mbar (abs)

Bonded seat (liner):
can be used up to a vacuum of 0.6 inhg (abs)

This values are for room temperature and air. The values may deviate for other medias and other temperatures.

Max. perm. pressure of working medium

PS	Fluids of group 1		Fluids of group 2	
	Gases	Liquids	Gases	Liquids
232 psi	DN 25 - 200	DN 25 - 200	DN 25 - 200	DN 25 - 200
150 psi	DN 250 - 350	DN 250 - 600	DN 250 - 500	DN 250 - 600
90 psi	-	-	DN 600	-
45 psi	DN 200 - 350	DN 200 - 600	DN 200 - 600	DN 200 - 600

When used (installed) as an end-of-line valve the max. operating pressure for liquids is DN 50 - 200 150 psi
DN 250 - 600 90 psi

When used as an end-of-line valve, a mating flange must be fitted.

Torque / Kv values

DN	PS [psi]	Torque* [in-lbs]	Cv values [gpm] at opening angle								
			20°	30°	40°	50°	60°	70°	80°	90°	
25	232	36	1	2	5	8	13	17	19	20	
40		62	3	8	17	29	45	59	68	70	
50		62	4	10	23	39	61	94	105	106	
65		133	10	17	35	75	111	151	166	172	
80		248	22	47	77	137	197	292	322	331	
100		487	34	88	160	249	370	505	606	641	
125		682	56	117	216	368	550	772	918	966	
150		1044	70	175	329	526	821.3	1216	1550	1646	
200		2142	129	329	552	888	1416	2147	2761	2904	
250	150	2743	234	519	863	1389	2207	3414	4565	4764	
300		2921	292	1107	1245	1952	2971	4516	6318	6341	
350		3806	545	1212	2014	3237	5144	7959	10643	11108	
400		9161	753	1674	2780	4469	7104	10991	14696	15339	
450		10178	1216	2700	4486	7211	11461	17730	23709	24744	
500		11064	1267	2815	4676	7517	11949	18486	24719	25798	
600		18941	1829	4063	6751	10853	17250	26686	35685	37243	
200		45	1283	129	329	552	888	1416	2147	2761	2904
250			1345	234	519	863	1389	2207	3414	4565	4764
300	2168		292	1107	1245	1952	2971	4516	6318	6341	
350	2257		545	1212	2014	3237	5144	7959	10643	11108	
400	5134		753	1674	2780	4469	7104	10991	14696	15339	
450	5310		1216	2700	4486	7211	11461	17730	23709	24744	
500	7612		1267	2815	4676	7517	11949	18486	24719	25798	
600	12745		1829	4063	6751	10853	17250	26686	35685	37243	

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

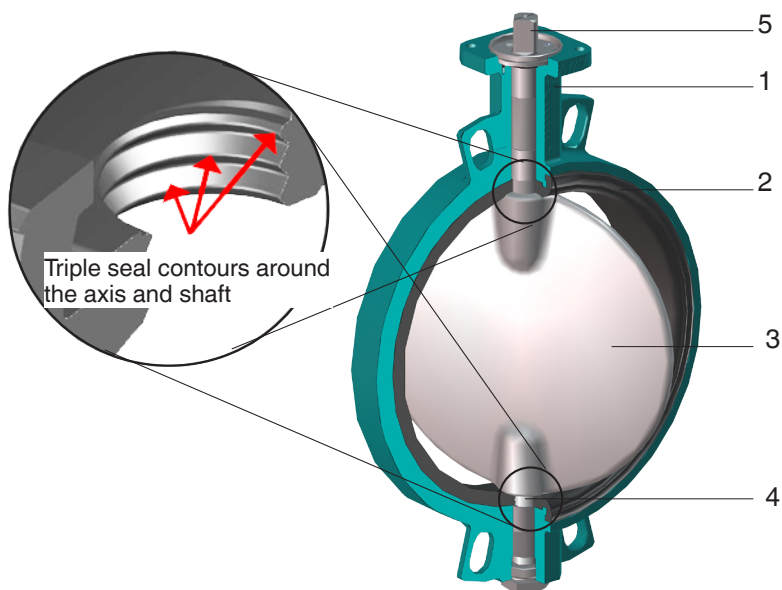
* Working medium water (68 °F) and optimal operating conditions

For butterfly valves with a bonded seat the torque must be multiplied by a factor of 1.3.

For butterfly valves with a EPDM seat (code T) the torque must be multiplied by a factor of 1.44.

Special function (approvals)				
Approval	Approved designs			Code
	Disc material	Seat (liner) material	Liner fixing	
Drinking water				
DVGW water (W270, KTW)	CF8M, 1.4408 (code A) CF8M, 1.4408 polished (code B)	EPDM (code W)	All versions	D
ACS	CF8M, 1.4408 (code A) CF8M, 1.4408 polished (code B) Super Duplex, 1.4469 (code D) EN-GJS-400-15,GGG40 Rilsan® PA11 coated (code R)	EPDM (code W)	All versions	A
WRAS	CF8M, 1.4408 (code A) CF8M, 1.4408 polished (code B)	EPDM (code W)	All versions	W
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
Gas				
DVGW Gas *	CF8M, 1.4408 (code A) CF8M, 1.4408 polished (code B)	NBR (Code J)	All versions	G
FDA				
FDA	CF8M, 1.4408 (code A) CF8M, 1.4408 polished (code B) Super Duplex, 1.4469 (code D)	EPDM, white (code M) EPDM HT (code Z)	Loose (code L)	No order code necessary
Ship approval				
DNVGL	All materials	All materials except SBR	All versions	S
Explosion protection				
ATEX *	All materials	All materials	All versions	X

* only GEMÜ 480
Other features are not relevant for the approvals



Item	Designation
1	Body
2	Seat (liner)
3	Disc
4	Axis
5	Shaft with position indicator

Order data

1 Type	Code
Butterfly valve with bare shaft	480
Butterfly valve with pneumatic actuator	481
Butterfly valve with manual operator	487
Butterfly valve with motorized actuator	488

2 Nominal size	Code	
DN 25	NPS 1"	25
DN 32	NPS 1 1/4"	32
DN 40	NPS 1 1/2"	40
DN 50	NPS 2"	50
DN 65	NPS 2 1/2"	65
DN 80	NPS 3"	80
DN 100	NPS 4"	100
DN 125	NPS 5"	125
DN 150	NPS 6"	150
DN 200	NPS 8"	200
DN 250	NPS 10"	250
DN 300	NPS 12"	300
DN 350	NPS 14"	350
DN 400	NPS 16"	400
DN 450	NPS 18"	450
DN 500	NPS 20"	500
DN 600	NPS 24"	600

3 Body configuration	Code
Wafer (DN 25 - DN 600)	W
Lug (DN 50 - DN 400)	L
U section (DN 400 - DN 600)	U

4 Operating pressure (body material EN-GJS 400-15)		DN	25	40	50	65	80	100	125	150	200	250	300	350	400	450	500	600
PS 45 psi*	Code										0	0	0	0	0	0	0	0
PS 150 psi	Code	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
PS 232 psi	Code	3	3	3	3	3	3	3	3	3	3							
Standard																		

* only disc material code A

5 Connection		DN	25	40	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	3	3	3						
	PN 10	Code	3	3	3	3	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	3	3	3
Lug	PN 10	Code			3	3	3	3	3	3	2	2	2	2	2			
	PN 16	Code			3	3	3	3	3	3	3	3	3	3	3			
U section	PN 10	Code													2	2	2	2
	PN 16	Code													3	3	3	3
Standard																		

For further connections see page 11

6 Body material	Code
EN-GJS-400-15 (GGG 40), epoxy coated 250 µm (RAL 5021)	2

Order data

7 Disc material	Code
CF8M, 1.4408	A
EN-GJS-400-15 (GGG40), epoxy coated (14 ... 176 °F)	E
CF8M, 1.4408 Halar coated (14 ... 302 °F)	C
CF8M, 1.4408 polished	B
Super Duplex, 1.4469	D
EN-GJS-400-15 (GGG 40), Halar coated	P
EN-GJS-400-15 (GGG40), Rilsan® PA11 coated (14 ... 212 °F)	R

8 Shaft material	Code
AISI 420 / 1.4021	1

9 Seat (liner) material	Code
EPDM 14 ... + 248 °F	E
Flucast AB/P 14 ... + 158 °F	F
EPDM white 14 ... + 203 °F (FDA approval)	M
NBR 14 ... + 212 °F	N*
EPDM HT 14 ... + 266 °F (FDA approval)	Z
FKM 14... + 302 °F	V*
EPDM 14... + 203 °F (ACS, Belgaqua and DVGW water approval)	W
NBR 14 ... + 140 °F	J
DVGW gas approval	
* Max. operating pressure 150 psi	
Other materials on request	

10 Liner fixing	Code
Loose seat (liner) (standard)	L
Bonded seat (liner) 14...+176 °F	B

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

12 Operator size	Code
480 (column 12)	see page 11
481 (column 12)	see page 17
487 (column 12)	see page 12
488 (column 14,15,16)	see page 29

13 Special function	Code
DVGW water	D
DVGW gas	G
ACS	A
Belgaqua	B
WRAS	W
ATEX	X
See table page 3	

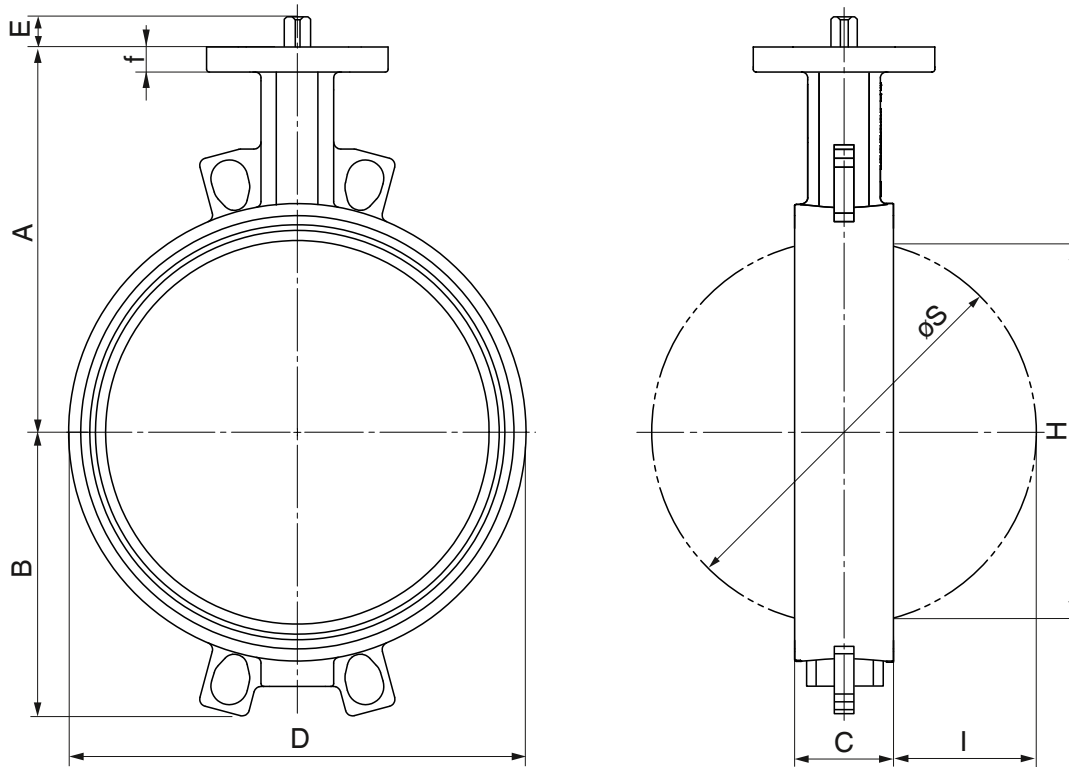
Order example	1	2	3	4	5	6	7	8	9	10	11	12	13
Code	487	100	W	3	3	2	A	1	E	L	0	AHL14	-
Other versions and materials on request													

Body dimensions [inch]

Body configuration - Wafer (code W)

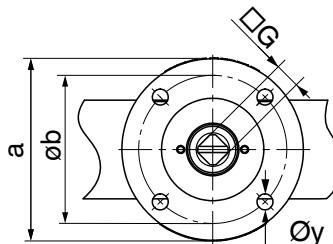
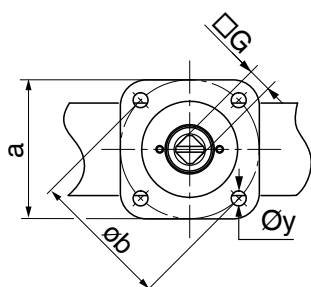
DN	A	B	C	D	E		H* max	øS max	I	G		ISO	a	øb	f	øy	Weight [lbs]
					PS10 PS16	PS3				PS10 PS16	PS3						
25	3.94	1.63	0.98	2.34	0.75	-	0.63	1.04	0.02	0.35	-	F05	□1.97	1.97	0.47	0.28	2.6
40	4.72	2.12	1.3	2.98	0.75	-	0.96	1.63	0.16	0.35	-	F05	□1.97	1.97	0.47	0.28	3.3
50	4.72	2.37	1.69	3.58	0.75	-	1.08	2.03	0.16	0.35	-	F05	ø2.56	1.97	0.47	0.28	6.6
65	5.51	2.66	1.81	4.37	0.75	-	1.87	2.63	0.40	0.43	-	F05	ø2.56	1.97	0.47	0.28	7.9
80	5.71	3.56	1.81	5.12	0.75	-	2.63	3.22	0.69	0.43	-	F05	ø2.56	1.97	0.47	0.28	8.8
100	6.54	4.14	2.05	5.91	0.75	-	3.43	4.01	0.97	0.55	-	F05	ø2.56	1.97	0.55	0.28	12.1
125	7.36	4.71	2.20	7.05	0.98	-	4.46	5.00	1.39	0.67	-	F07	ø3.54	2.76	0.63	0.35	16.5
150	7.87	5.18	2.20	8.27	0.98	-	5.54	5.98	1.88	0.67	-	F07	ø3.54	2.76	0.63	0.35	19.0
200	9.45	6.30	2.36	10.39	1.26	0.98	7.59	7.96	2.79	0.87	0.67	F10	ø4.92	4.02	0.67	0.43	28.0
250	10.43	7.69	2.68	12.36	1.26	0.98	9.54	9.93	3.62	0.87	0.67	F10	ø4.92	4.02	0.67	0.43	48.9
300	11.42	9.30	3.07	14.33	1.26	0.98	11.51	11.93	4.42	0.87	0.67	F10	ø4.92	4.02	0.67	0.43	67.9
350	12.64	10.47	3.07	17.32	1.10	1.10	12.95	13.28	5.12	1.06	0.87	F12	□5.12	4.92	0.59	0.51	105.8
400	13.66	12.13	4.02	19.09	1.46	1.10	14.92	15.41	5.71	1.42	1.06	F14	□6.30	5.51	0.79	0.67	158.7
450	14.65	13.11	4.49	21.30	1.46	1.10	16.85	17.38	6.46	1.42	1.06	F14	□6.30	5.51	0.79	0.67	209.4
500	15.67	14.09	5.00	23.62	1.46	1.10	18.82	19.43	7.22	1.42	1.06	F14	□6.30	5.51	0.79	0.67	264.5
600	18.50	17.40	6.06	27.56	1.85	1.46	22.60	23.36	8.66	1.81	1.42	F16	□7.87	6.50	0.94	0.83	423.3

*Please note dimension H to prevent disc binding on internal pipe



DN 25, 40, 350 - 600

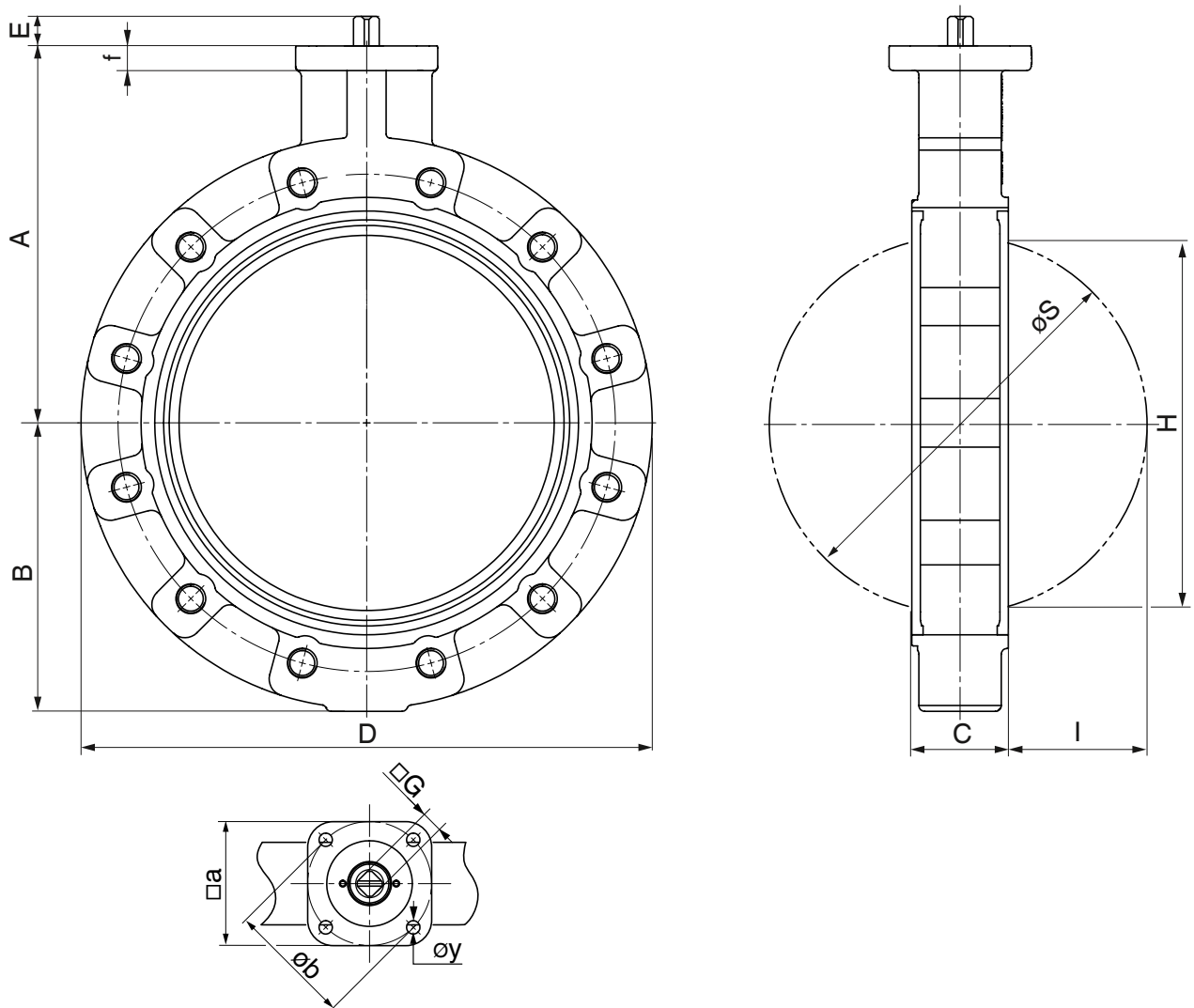
DN 50 - 300



Body configuration - Lug (code L)

DN	A	B	C	D	E		H* max	øS max	I	□G		ISO	□a	øb	f	øy	Weight [lbs]
					PS10 PS16	PS3				PS10 PS16	PS3						
50	4.72	2.36	1.69	5.94	0.75	-	1.08	2.03	0.16	0.35	-	F05	1.97	1.97	0.47	0.28	8.2
65	5.51	2.64	1.81	6.73	0.75	-	1.87	2.63	0.40	0.43	-	F05	1.97	1.97	0.47	0.28	8.8
80	5.71	3.50	1.81	7.40	0.75	-	2.63	3.22	0.69	0.43	-	F05/F07	2.95	2/2.76	0.47	0.28/ 0.35	15.4
100	6.54	4.06	2.05	8.60	0.75	-	3.43	4.01	0.97	0.55	-	F05/F07	2.95	2/2.76	0.55	0.28/ 0.35	16.5
125	7.36	4.69	2.20	9.84	0.75	-	4.46	5.00	1.39	0.67	-	F07	2.95	2.76	0.63	0.35	24.2
150	7.87	5.14	2.20	10.83	0.98	-	5.54	5.98	1.88	0.67	-	F07	2.95	2.76	0.63	0.35	30.9
200	9.45	6.71	2.36	12.99	0.98	-	7.59	7.96	2.79	0.87	0.67	F10	3.94	4.02	0.67	0.43	46.3
250	10.43	7.99	2.68	15.83	1.26	0.98	9.54	9.93	3.62	0.87	0.67	F10	3.94	4.02	0.67	0.43	70.5
300	11.42	9.29	3.07	18.58	1.26	0.98	11.51	11.91	4.42	0.87	0.67	F10	3.94	4.02	0.67	0.43	94.8
350	12.64	10.24	3.07	20.47	1.26	0.98	12.95	13.28	5.12	1.06	0.87	F12	5.12	4.92	0.59	0.51	145.5
400	13.66	11.81	4.02	23.46	1.10	1.10	14.92	15.41	5.71	1.42	1.06	F14	6.30	5.51	0.79	17.00	110.0

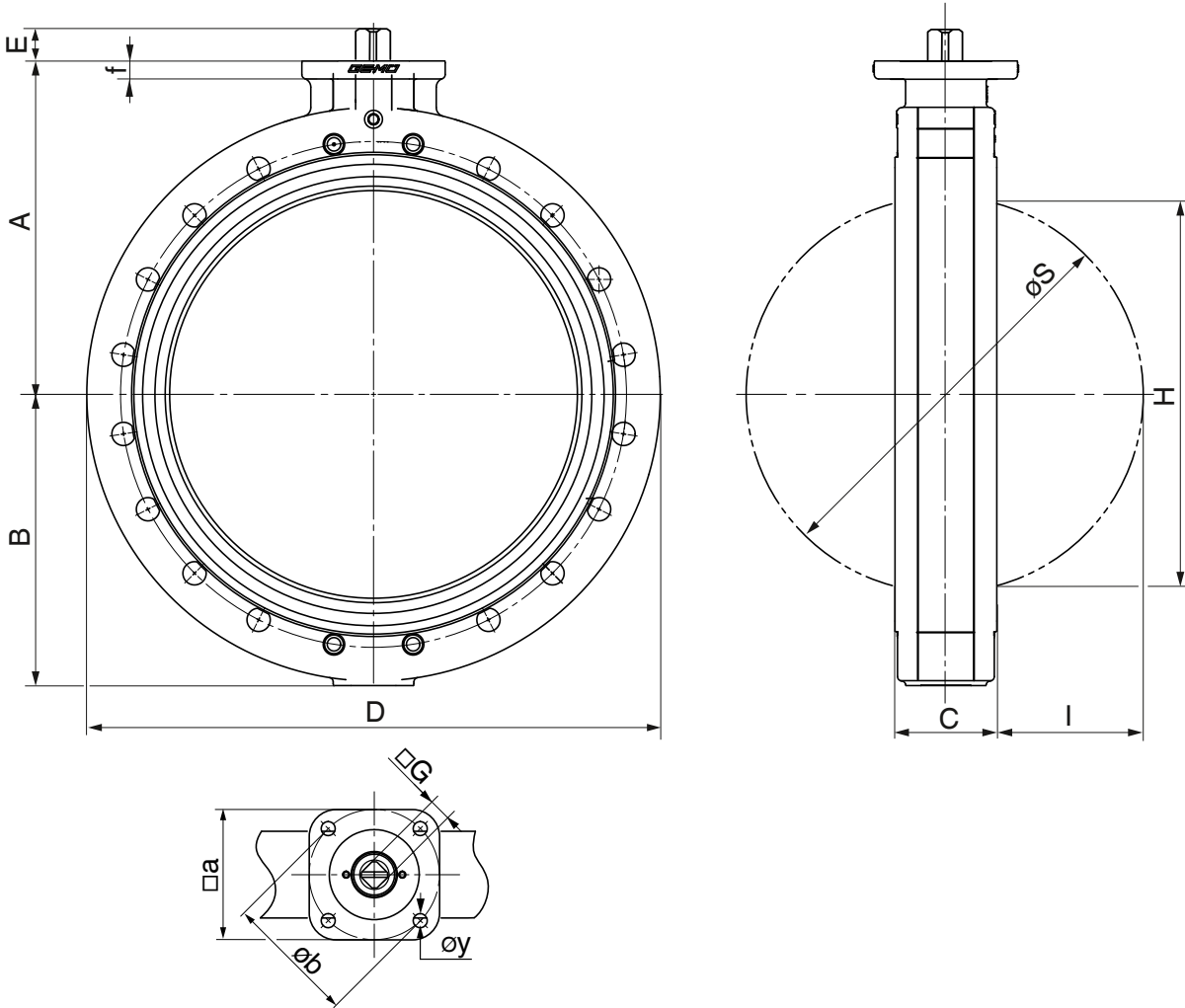
*Please note dimension H to prevent disc binding on internal pipe



Body configuration - U section (Code U)

DN	A	B	C	D	E		H* max	øS max	I	□G		ISO	□a	øb	f	øy	Weight [lbs]
					PS10	PS3				PS10	PS3						
400	13.66	9.33	4.02	19.09	1.46	1.10	14.92	15.41	5.71	1.42	1.06	F14	6.30	5.51	0.79	0.67	235.9
450	14.65	9.33	4.49	21.30	1.46	1.10	16.85	17.38	6.46	1.42	1.06	F14	6.30	5.51	0.79	0.67	275.6
500	15.67	9.33	5.00	28.15	1.46	1.10	18.82	19.43	7.22	1.42	1.06	F14	6.30	5.51	0.79	0.67	361.6
600	18.50	9.33	6.06	33.07	1.85	1.46	22.6	23.36	8.66	1.81	1.42	F16	7.87	6.50	0.94	0.83	575.4

*Please note dimension H to prevent disc binding on internal pipe

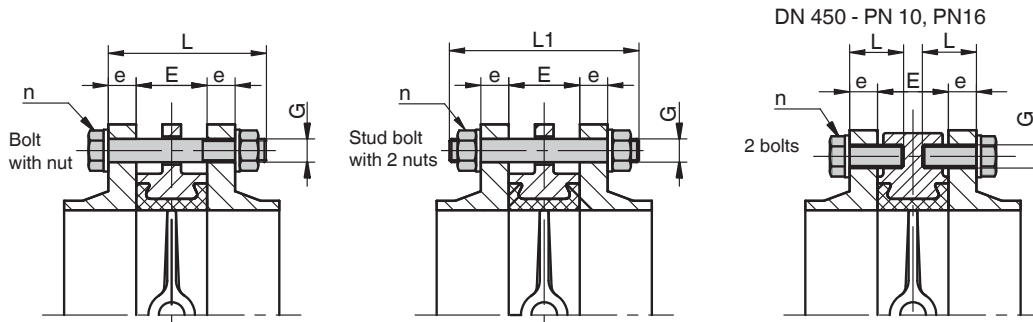


Connection dimensions [inch]

Body configuration - Wafer (code W)

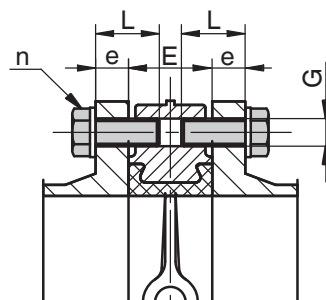
DN	E	PN 10					PN 16					ASME B16.5 cl. 150				
		e	L	L1	n	G	e	L	L1	n	G	e	L	L1	n	G
25	0.98	0.71	3.35	3.94	4	M12	0.71	3.35	3.94	4	M12	0.56	3.35	3.94	4	1/2"-13 UNC
40	1.30	0.71	3.54	4.33	4	M16	0.71	3.54	4.33	4	M16	0.69	3.54	4.33	4	1/2"-13 UNC
50	1.69	0.71	3.94	4.72	4	M16	0.71	3.94	4.72	4	M16	0.75	3.94	4.72	4	5/8"-11 UNC
65	1.81	0.71	3.94	4.72	4	M16	0.71	3.94	4.72	4	M16	0.87	4.33	5.12	4	5/8"-11 UNC
80	1.81	0.79	4.33	5.12	8	M16	0.79	4.33	5.12	8	M16	0.94	4.33	5.12	4	5/8"-11 UNC
100	2.05	0.79	4.33	5.12	8	M16	0.79	4.33	5.12	8	M16	0.94	4.72	5.51	8	5/8"-11 UNC
125	2.20	0.87	4.72	5.51	8	M16	0.87	4.72	5.51	8	M16	0.94	5.12	5.91	8	3/4"-10 UNC
150	2.20	0.87	5.12	5.91	8	M20	0.87	5.12	5.91	8	M20	1.00	5.12	5.91	8	3/4"-10 UNC
200	2.36	0.94	5.12	6.30	8	M20	0.94	5.12	6.30	8	M20	1.13	5.51	6.30	8	3/4"-10 UNC
250	2.68	1.02	5.91	6.69	12	M20	1.02	5.91	6.69	12	M24	1.19	6.30	7.09	12	7/8"- 9 UNC
300	3.07	1.02	6.30	7.09	12	M20	1.10	6.30	7.09	12	M24	1.25	6.69	7.48	12	7/8"- 9 UNC
350	3.07	1.02	6.69	7.09	16	M20	1.18	6.69	7.48	16	M24	1.37	7.09	7.87	12	1"- 8 UNC
400	4.02	1.02	7.09	8.27	16	M24	1.26	7.87	8.66	16	M27	1.44	8.27	9.06	16	1"- 8 UNC
450*	4.49	1.02	7.48	8.66	16	M24	1.26	8.27	9.45	16	M27	1.56	9.06	9.84	16	1 1/8"-7 UNC
			2.36		8			8								
500	5.00	1.10	8.27	9.06	20	M24	1.34	9.06	10.24	20	M30	1.81	9.84	11.02	20	1 1/8"-7 UNC
600	6.06	1.10	9.45	10.63	20	M27	1.42	10.24	11.42	20	M33	1.87	11.02	12.20	20	1 1/4"-7 UNC

* Note: The butterfly valve in DN 450 must be fastened to the flange using eight threaded bolts. The 16 remaining flange holes can be joined using through bolts or stud bolts.



Body configuration - Lug (code L)

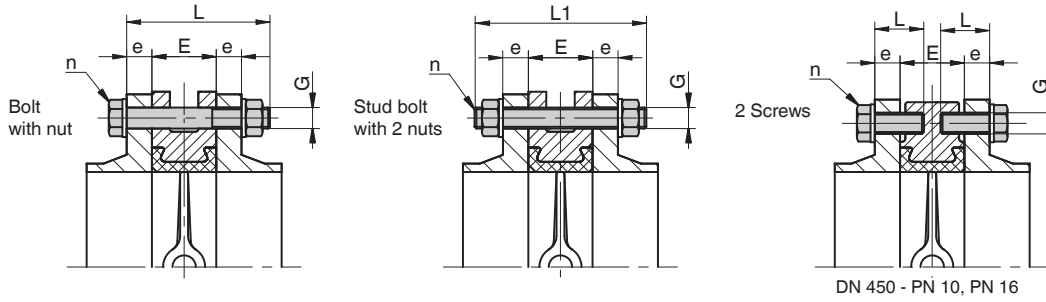
DN	E	PN 10				PN 16				ASME B16.5 cl. 150			
		e	L	n	G	e	L	n	G	e	L	n	G
50	1.69	0.71	1.38	8	M16	0.71	1.38	8	M16	0.75	1.38	8	5/8"-11 UNC
65	1.81	0.71	1.57	8	M16	0.71	1.57	8	M16	0.87	1.77	8	5/8"-11 UNC
80	1.81	0.79	1.57	16	M16	0.79	1.57	16	M16	0.94	1.77	8	5/8"-11 UNC
100	2.05	0.79	1.77	16	M16	0.79	1.77	16	M16	0.94	1.77	16	5/8"-11 UNC
125	2.20	0.87	1.97	16	M16	0.87	1.97	16	M16	0.94	1.97	16	3/4"-10 UNC
150	2.20	0.87	1.97	16	M20	0.87	1.97	16	M20	1.00	1.97	16	3/4"-10 UNC
200	2.36	0.94	1.97	16	M20	0.94	1.97	24	M20	1.13	2.17	16	3/4"-10 UNC
250	2.68	1.02	2.36	24	M20	1.02	2.36	24	M24	1.19	2.36	24	7/8"- 9 UNC
300	3.07	1.02	2.56	24	M20	1.10	2.56	24	M24	1.25	2.76	24	7/8"- 9 UNC
350	3.07	1.02	2.56	32	M20	1.18	2.56	32	M24	1.37	2.76	24	1"- 8 UNC
400	4.02	1.02	2.95	32	M24	1.26	3.15	32	M27	1.44	3.35	32	1"- 8 UNC



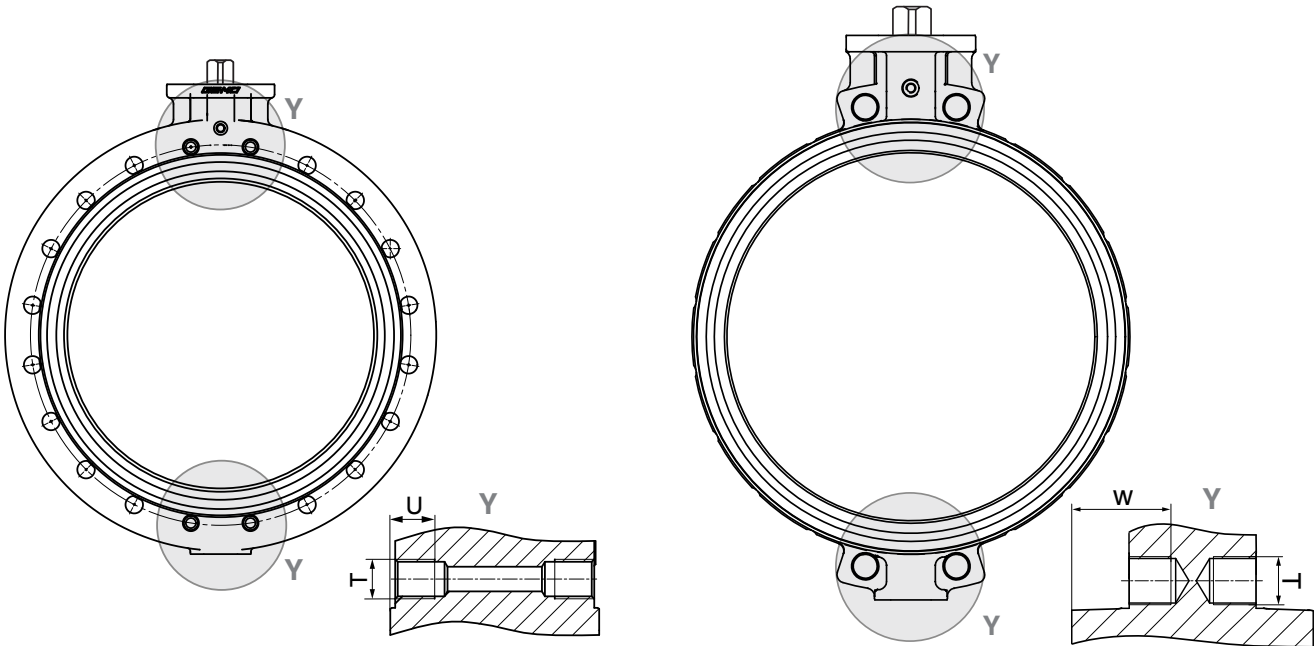
n = number of bolts

Body configuration - U section (Code U)

DN	E	PN 10					PN 16					ASME B16.5 cl. 150				
		e	L	L1	n	G	e	L	L1	n	G	e	L	L1	n	G
400	4.02	1.02	7.09	8.27	12	M24	1.26	7.87	8.66	12	M27	1.44	8.27	9.06	12	1"-8 UNC
			1.97					2.17								
450	4.49	1.02	7.48	8.66	16	M24	1.26	8.27	9.45	16	M27	1.56	9.06	9.84	16	1 1/8"-7 UNC
			1.97					2.17					8			
500	5.00	1.10	8.27	9.06	16	M24	1.34	9.06	10.24	16	M30	1.81	9.84	11.02	16	1 1/8"-7 UNC
			1.97					2.36					8			
600	6.06	1.10	9.45	10.63	16	M27	1.42	10.24	11.42	16	M33	1.87	11.02	12.20	16	1 1/4"-7 UNC
			1.97					2.36					8			



Dimensions of threaded holes [inch]



Flange connection holes - U section

DN	DIN EN 1092 PN 10		DIN EN 1092 PN 16		ASME B16.5 cl. 150	
	T	U	T	U	T	U
400	M24	0.94	M27	1.06	1"-8 UNC	-
450	M24	0.94	M27	1.06	1 1/8"-7 UNC	1.18
500	M24	0.94	M30	1.18	1 1/8"-7 UNC	1.18
600	M27	1.06	M33	1.30	1 1/4"-7 UNC	1.3

Flange connection holes - Wafer

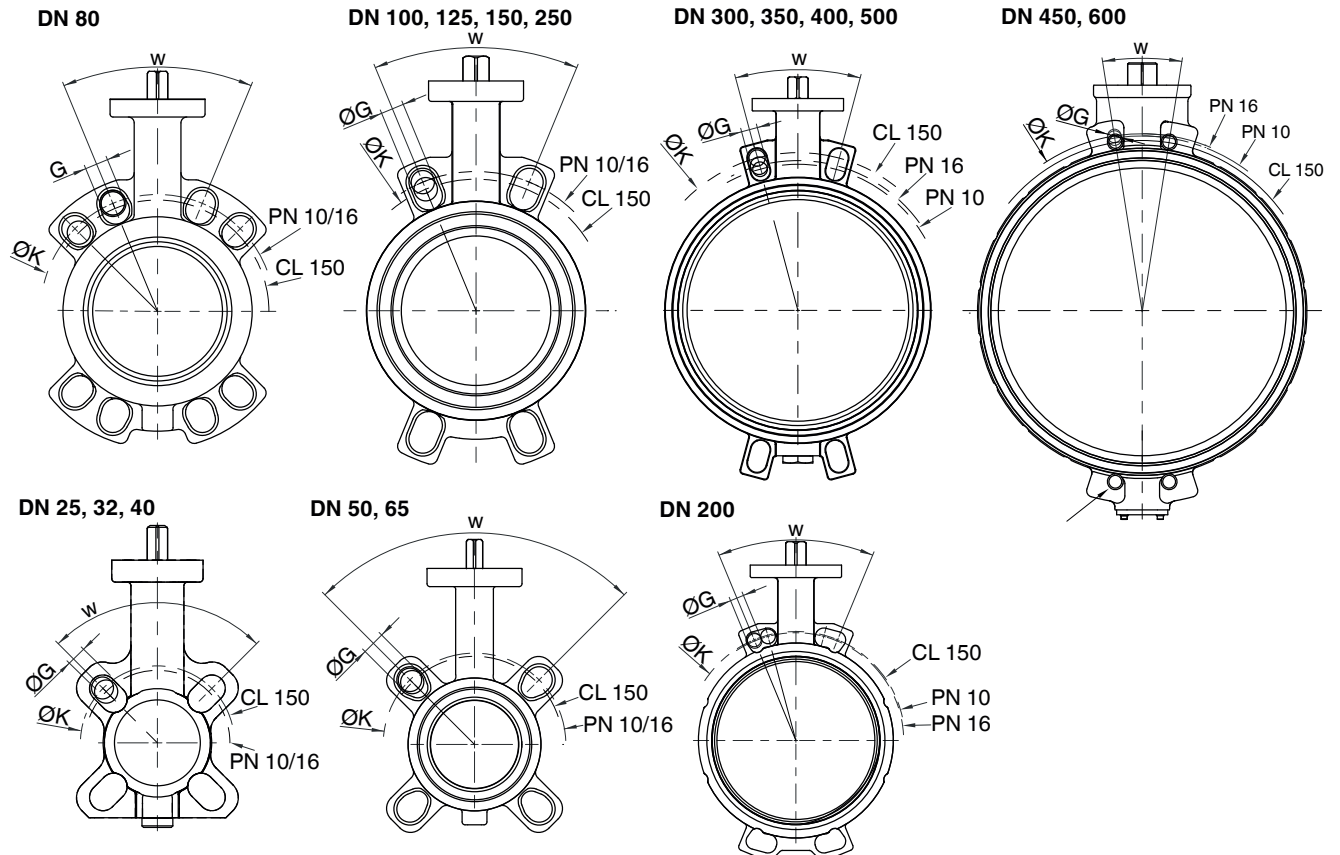
DN	DIN EN 1092 PN 10		DIN EN 1092 PN 16		ASME B16.5 cl. 150	
	T	W	T	W	T	W
450	M24	1.81	M27	1.81	Ø 1.25	-

Flange, body configuration - Wafer (code W)

DN	PN 10				PN 16				ASME B16.5 cl. 150			
	K	n	G	w	K	n	G	w	K	n	G	w
25	3.35	4	M12	90°	3.35	4	M12	90°	3.13	4	1/2"	90°
32	3.94	4	M16	90°	3.94	4	M16	90°	3.50	4	1/2"	90°
40	4.33	4	M16	90°	4.33	4	M16	90°	3.87	4	1/2"	90°
50	4.92	4	M16	90°	4.92	4	M16	90°	4.75	4	5/8"	90°
65	5.71	4*	M16	90°	5.71	4*	M16	90°	5.50	4	5/8"	90°
80	6.30	8	M16	45°	6.30	8	M16	45°	6.00	4	5/8"	90°
100	7.09	8	M16	45°	7.09	8	M16	45°	7.50	8	5/8"	45°
125	8.27	8	M16	45°	8.27	8	M16	45°	8.50	8	3/4"	45°
150	9.45	8	M20	45°	9.45	8	M20	45°	9.50	8	3/4"	45°
200	11.61	8	M20	45°	11.61	12	M20	30°	11.75	8	3/4"	45°
250	13.78	12	M20	30°	13.98	12	M24	30°	14.25	12	7/8"	30°
300	15.75	12	M20	30°	16.14	12	M24	30°	17.00	12	7/8"	30°
350	18.11	16	M20	22°	18.50	16	M24	22.5°	18.75	12	1"	30°
400	20.28	16	M24	22.5°	20.67	16	M27	22.5°	21.25	16	1"	22.5°
450	22.24	20	M24	18°	23.03	20	M27	18°	22.75	16	1 1/8"	22.5°
500	24.41	20	M24	18°	25.59	20	M30	18°	25.00	20	1 1/8"	18°
600	28.54	20	M27	18°	30.31	20	M33	18°	29.50	20	1 1/4"	18°

n = number of bolts

* non-standard



Availability / Body configuration code / Connection

Wafer (code)

Flanges	20	25	32	40	50	65	80	100	125	150	200	250	300	350	400	450	500	600
DIN EN1092 PN06	3	3	3	3	3	3	3	3	3	3	3	3	3	-	-	-	-	-
DIN EN1092 PN10	3	3	3	3	3	3	3	3	3*	3	3	3*	3*	3	3	2	3	2
DIN EN1092 PN16	3	3	3	3	3	3	3	3	3*	3	3	3	3*	3	3	3	3	3
ASME B16.5 cl.150	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
AS 2129 D	T	T	T	T	T	-	-	T*	T*	T*	T*	-	T*	T	-	-	-	T
AS 2129 E	U	U	U	U	U	-	-	U	U*	U	U*	U*	U*	U	-	U	-	U
JIS 5 K	K	K	K	K	K	K	K	K	K	-	-	-	-	-	-	-	-	-
JIS 10 K	G	G	G	G	G	G	G	G	G	G	G	-	-	-	G	G	G	G
BS 10 D	H	H	H	H	H	-	-	-	H	-	-	-	-	H	-	-	-	H
BS 10 E	S	S	S	S	S	-	-	S	S	S	S	-	-	S	-	S	-	S

* **Note:** During installation it is important to centrally align the butterfly valve

Lug (code)

Flanges	50	65	80	100	125	150	200	250	300	350	400
DIN EN1092 PN06	1	1	1	1	1	1	1	1	1	-	-
DIN EN1092 PN10	3	3*	3	3	3	3	2	2	2	2	2
DIN EN1092 PN16	3	3*	3	3	3	3	3	3	3	3	3
ASME B16.5 cl. 150	D	D	D	D	D	D	D	D	D	D	D
AS 2129 D	T	-	T	T	T	T	T	-	T	-	-
AS 2129 E	U	-	U	U	U	U	U	U	U	-	-
JIS 10 K	G	G	G	G	G	G	G	G	-	G	G
BS 10 D	H	-	H	H	H	H	H	-	H	-	-
BS 10 E	S	-	S	S	S	S	S	S	S	-	-

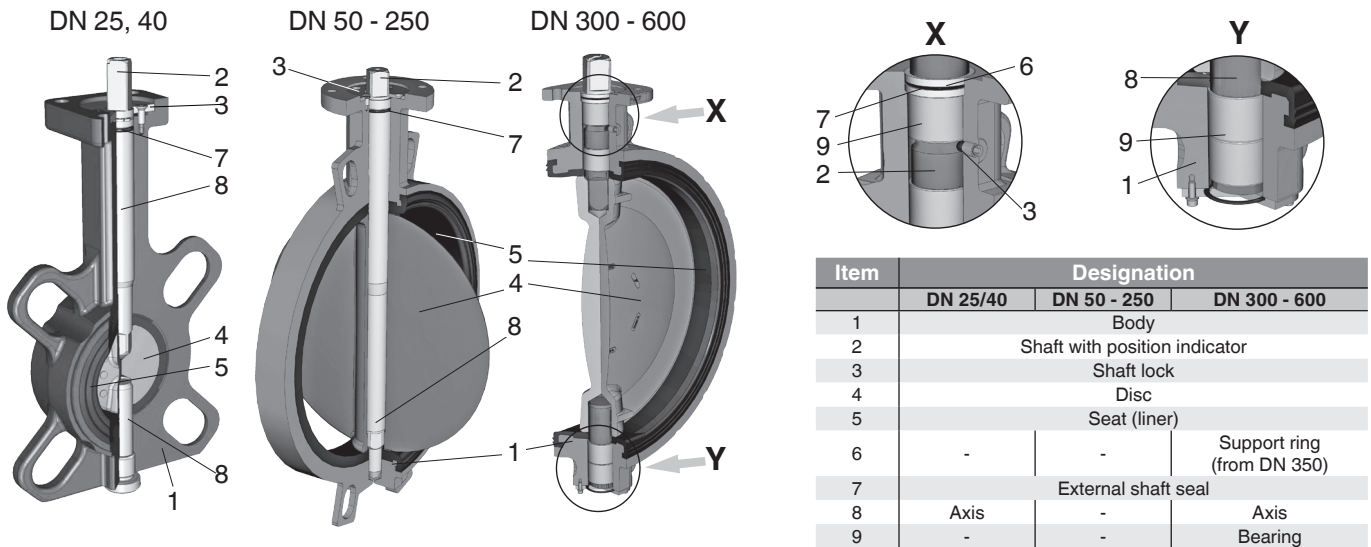
* drilled, with 4 threaded holes

U section (code)

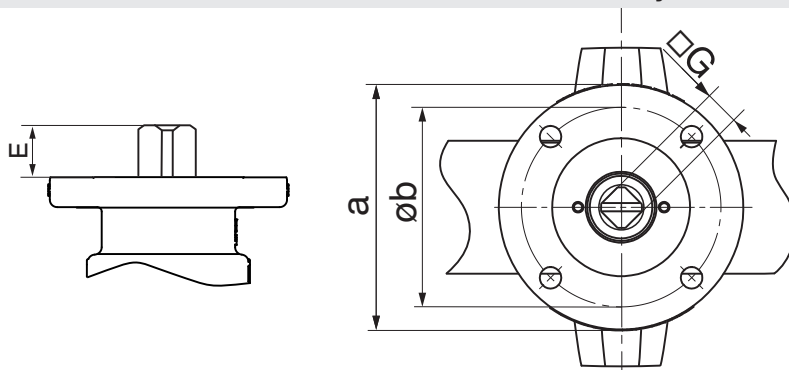
Flanges	400	450	500	600
DIN EN1092 PN06	1*	1*	1*	1*
DIN EN1092 PN10	2	2	2	2
DIN EN1092 PN16	3	3	3	3
ASME B16.5 cl. 150	D	D	D	D
AS 2129 E	-	U	-	-
BS 10 D	-	-	-	H
BS 10 E	-	S	-	-

* only available with threaded holes

Sectional view



12 Order data / Connection dimensions - GEMÜ 480 butterfly valve with bare shaft [inch]



12 Operator flange

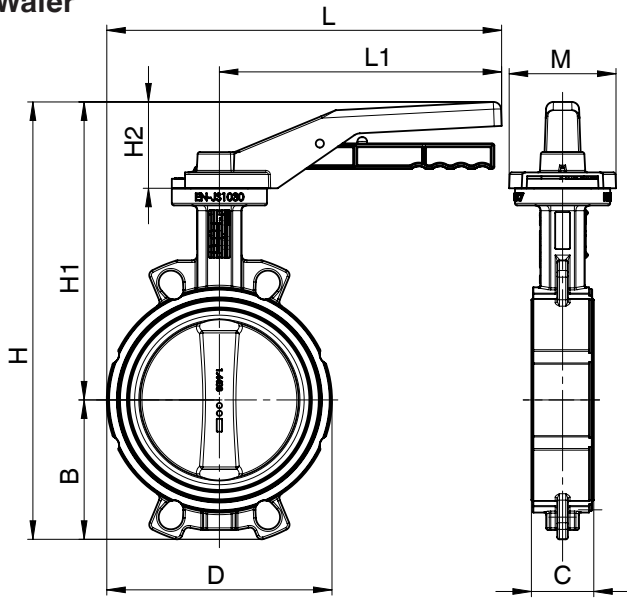
DN	ISO	Øb	Shaft connection	□G		E		Code
				PS10 / PS16	PS3	PS10 / PS16	PS3	
25	F05	1.97	D	0.35	-	0.75	-	05 D09
40	F05	1.97	D	0.35	-	0.75	-	05 D09
50	F05	1.97	D	0.35	-	0.75	-	05 D09
65	F05	1.97	D	0.43	-	0.75	-	05 D11
80	F05	1.97	D	0.43	-	0.75	-	05 D11
100	F05	1.97	D	0.55	-	0.75	-	05 D14
125	F07	2.76	D	0.67	-	0.98	-	07 D17
150	F07	2.76	D	0.67	-	0.98	-	07 D17
200	F10	4.02	D	0.87	0.67	1.26	0.98	10 D22
250	F10	4.02	D	0.87	0.67	1.26	0.98	10 D22
300	F10	4.02	D	0.87	0.67	1.26	0.98	10 D22
350	F12	4.92	D	1.06	0.87	1.10	1.10	12 D27
400	F14	5.51	D	1.42	1.06	1.46	1.10	14 D36
450	F14	5.51	D	1.42	1.06	1.46	1.10	14 D36
500	F14	5.51	D	1.42	1.06	1.46	1.10	14 D36
600	F16	6.50	D	1.81	1.42	1.85	1.46	16 D46

Order example	1	2	3	4	5	6	7	8	9	10	11	12	13
Code	480	Order data butterfly valve (page 4)									F	07 D17	

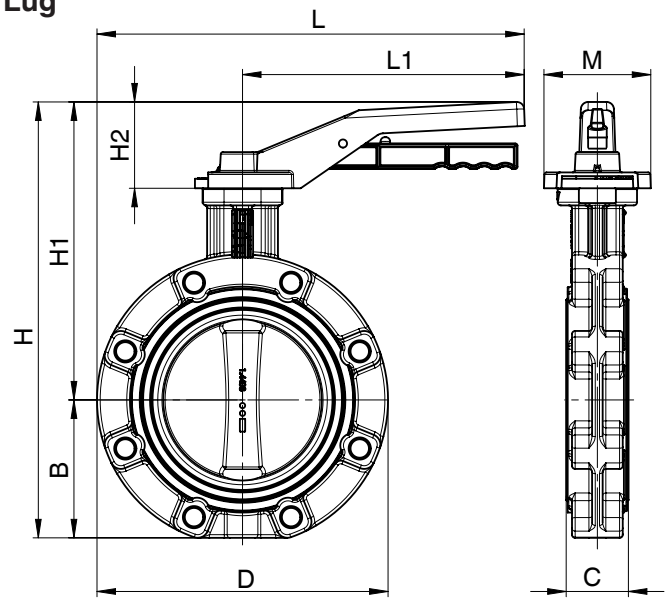
12 Order data / Dimensions - GEMÜ 487 butterfly valve with manual operator [inch]

Hand lever

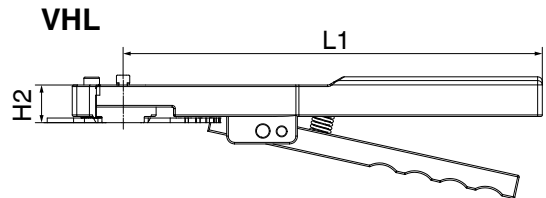
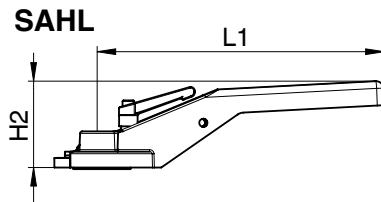
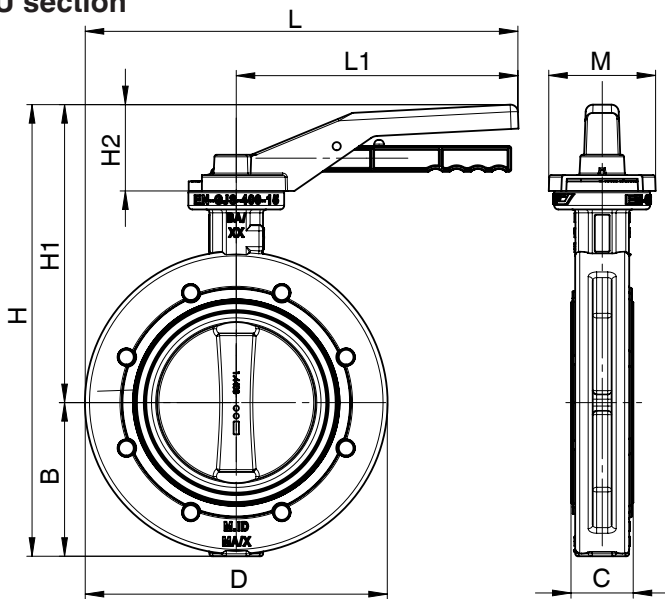
Wafer



Lug



U section



DN	PS	Weight [lbs]	Top flange	Latching hand lever		Continuously adjustable hand lever	
				Designation	Code	Designation	Code
25,40,50	150, 232	0.7	F05	AHL09.F05.200	AHL09	SAHL09.F05.200	SAHL09
65-80		0.7	F05	AHL11.F05.200	AHL11	SAHL11.F05.200	SAHL11
100		0.7	F05	AHL14.F05.200	AHL14	SAHL14.F05.200	SAHL14
125-150		1.6	F07	AHL17.F07.270	AHL17	SAHL17.F07.270	SAHL17
200	45	1.6	F10	AHL22.F10.340	AHL22	-	-
250		1.6	F10	AHL17.F10.340	AHL22	-	-

Material: Aluminium

12 Order data / Dimensions - GEMÜ 487 butterfly valve with manual operator [inch]

Hand lever

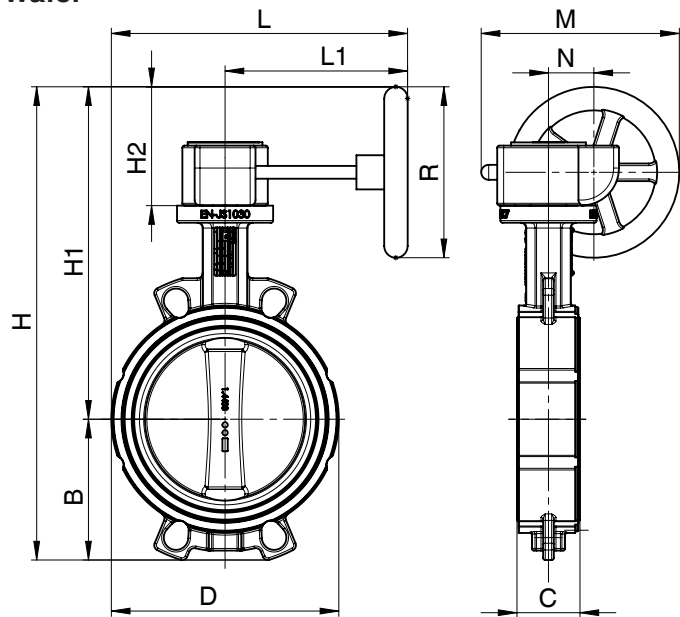
Body configuration													Hand lever					
DN	Wafer						Lug						AHL / SAHL					Code
	D	L	B	H1	H	lbs	D	L	B	H1	H	lbs	C	PS	H2	L1	M	
25	2.34	9.05	1.63	6.69	8.32	3.3	-	-	-	-	-	-	0.98	232	2.76	7.87	2.91	AHL09 / SAHL09
40	2.97	9.36	2.12	7.48	9.60	4.0	-	-	-	-	-	-	1.30	232	2.76	7.87	2.91	AHL09 / SAHL09
50	3.58	9.67	2.37	7.48	9.85	7.3	5.94	10.85	2.36	7.48	9.84	8.8	1.69	232	2.76	7.87	2.91	AHL09 / SAHL09
65	4.37	10.06	2.66	8.27	10.93	8.6	6.73	11.24	2.64	8.27	10.91	9.5	1.81	232	2.76	7.87	2.91	AHL11 / SAHL11
80	5.12	10.43	3.56	8.46	12.02	9.5	7.40	11.57	3.50	8.46	11.97	16.1	1.81	232	2.76	7.87	2.91	AHL11 / SAHL11
100	5.91	10.83	4.14	9.29	13.43	12.8	8.60	12.18	4.06	9.29	13.35	17.2	2.05	232	2.76	7.87	2.91	AHL14 / SAHL14
125	7.05	14.15	4.71	10.91	15.61	18.1	9.84	15.55	4.69	10.91	15.59	25.8	2.20	232	3.54	10.63	4.02	AHL17 / SAHL17
150	8.27	14.76	5.18	11.42	16.59	20.5	10.83	16.04	5.14	11.42	16.56	32.4	2.20	232	3.54	10.63	4.02	AHL17 / SAHL17
200	10.39	18.58	6.30	22.83	29.13	29.5	12.99	19.88	6.71	22.83	29.55	47.8	2.36	232	13.39	13.39	4.96	AHL22 / SAHL22
250	12.36	19.57	7.69	23.82	31.51	50.5	15.83	21.3	7.99	23.82	31.81	72.1	2.68	45	13.39	13.39	4.96	AHL22 / SAHL22

Order example	1	2	3	4	5	6	7	8	9	10	11	12
Code	487	Order data butterfly valve (page 4)									0	AHL09

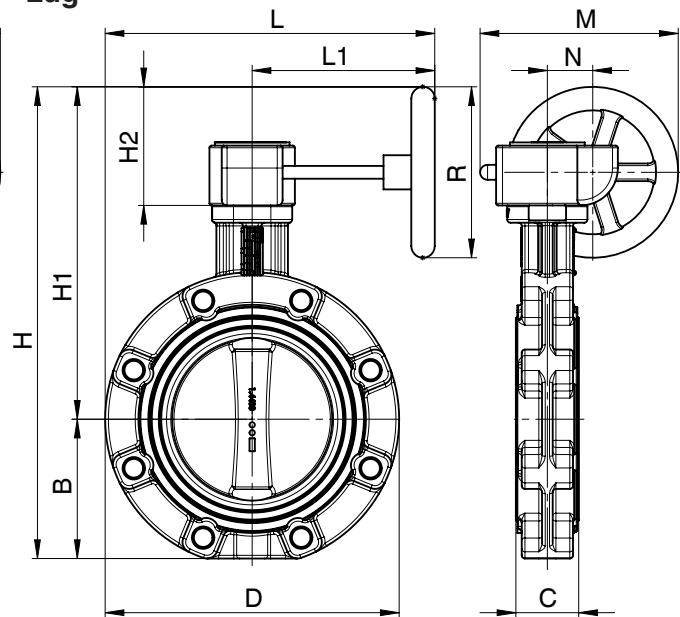
12 Order data / Dimensions - GEMÜ 487 butterfly valve with manual operator [inch]

Gearbox with handwheel

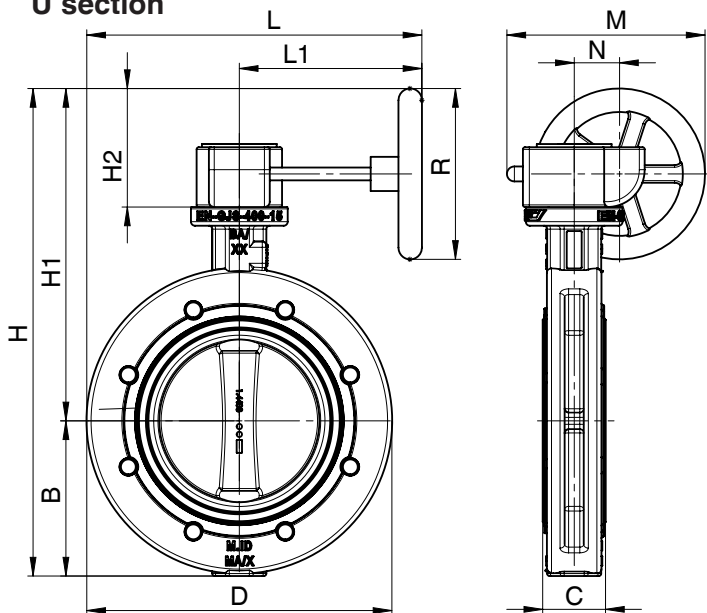
Wafer



Lug



U section



DN	Weight [lbs]	Designation	Material	Code
25, 40, 50	1.8	GB23205F05-F07D9 PS100	Aluminium, polyurethane coated	GB232
65 - 80	1.8	GB23205F05-F07D11 PS100		GB232
100	1.8	GB23205F05-F07D14 PS100		GB232
125	2.0	GB23206F05-F07D17 PS100		GB232
150	2.0	GB23206F05-F07D17 PS160		GB232
200 - 300	3.1	GB23208F07-F10D22 PS200		GB232
350	10.4	GB23214F10-F12D27 SG500		GB232
400	10.4	GB23214 F14D36 SG500		GB232
450 - 500	30.9	GB880NF10-F14D36 SG800	GG25, polyurethane coated	GB880N
600	48.5	GB1250NF12-F16D46 SG700		GB1250N

12 Order data / Dimensions - GEMÜ 487 butterfly valve with manual operator [inch]

Gearbox with handwheel

Body configuration								Gearbox					
Wafer								GB					
DN	D	L	B	C	H1	H	lbs	H2	L1	R	N	M	Code
25	2.34	9.05	1.63	0.98	7.48	9.11	4.4	3.54	4.76	3.94	1.67	6.12	GB232
40	2.97	9.36	2.12	1.30	8.27	10.39	5.1	3.54	4.76	3.94	1.67	6.12	GB232
50	3.58	9.67	2.37	1.69	8.27	10.64	8.4	3.54	4.76	3.94	1.67	6.12	GB232
65	4.37	10.06	2.66	1.81	9.06	11.72	9.7	3.54	4.76	3.94	1.67	6.12	GB232
80	5.12	10.43	3.56	1.81	9.25	12.81	10.6	3.54	4.76	3.94	1.67	6.12	GB232
100	5.91	10.83	4.14	2.05	10.08	14.22	13.9	3.54	4.76	3.94	1.67	6.12	GB232
125	7.05	14.15	4.71	2.20	10.91	15.61	18.5	3.54	6.73	3.94	1.67	6.12	GB232
150	8.27	14.76	5.18	2.20	12.60	17.78	20.9	4.72	6.73	6.30	1.67	7.30	GB232
200	10.39	18.58	6.3	2.36	15.35	21.65	31.1	5.91	7.68	7.87	1.97	8.70	GB232
250	12.36	19.57	7.69	2.68	16.34	24.03	52.0	5.91	7.68	7.87	1.97	8.70	GB232
300	14.33	20.55	9.30	3.07	17.32	26.63	71.0	5.91	7.68	7.87	1.97	8.70	GB232
350	17.32	8.66	10.47	3.07	25.93	36.40	116.2	13.29	11.54	19.69	3.15	16.85	GB232
400	19.09	9.55	12.13	4.02	26.95	39.07	169.1	13.29	14.80	19.69	3.15	16.85	GB232
450	21.30	10.65	13.11	4.49	34.33	47.44	240.3	19.69	18.31	31.50	3.39	19.13	GB880N
500	23.62	11.81	14.09	5.00	35.35	49.45	295.4	19.69	18.31	31.50	3.39	19.13	GB880N
600	27.56	13.78	17.40	6.06	36.61	54.02	471.8	16.14	18.9	27.56	4.13	19.13	GB1250N

Body configuration								Gearbox					
Lug								GB					
DN	D	L	B	C	H1	H	lbs	H2	L1	R	N	M	Code
50	5.94	7.74	2.36	1.69	8.27	10.63	9.9	3.54	4.76	3.94	1.67	6.12	GB232
65	6.73	8.13	2.64	1.81	9.06	11.69	10.6	3.54	4.76	3.94	1.67	6.12	GB232
80	7.40	8.46	3.50	1.81	9.25	12.76	17.2	3.54	4.76	3.94	1.67	6.12	GB232
100	8.60	9.07	4.06	2.05	10.08	14.13	18.3	3.54	4.76	3.94	1.67	6.12	GB232
125	9.84	11.65	4.69	2.20	10.91	15.59	26.2	3.54	6.73	3.94	1.67	6.12	GB232
150	10.83	12.15	5.14	2.20	12.6	17.74	32.8	4.72	6.73	6.30	1.67	7.30	GB232
200	12.99	14.17	6.71	2.36	15.35	22.07	49.4	5.91	7.68	7.87	1.97	8.70	GB232
250	15.83	15.59	7.99	2.68	16.34	24.33	73.6	5.91	7.68	7.87	1.97	8.70	GB232
300	18.58	16.97	9.29	3.07	17.32	26.61	97.9	5.91	7.68	7.87	1.97	8.70	GB232
350	20.47	21.77	10.24	3.07	25.93	36.16	155.9	13.29	11.54	19.69	3.15	16.85	GB232
400	23.46	26.54	11.81	4.02	26.95	38.76	252.9	13.29	14.80	19.69	3.15	16.85	GB232

Body configuration								Gearbox					
U section								GB					
DN	D	L	B	C	H1	H	lbs	H2	L1	R	N	M	Code
400	19.09	20.87	9.33	4.02	26.95	36.28	246.3	13.29	14.80	19.69	3.15	16.85	GB232
450	21.30	24.86	9.33	4.49	34.33	43.66	306.4	19.69	18.31	31.50	3.39	19.13	GB880N
500	28.15	25.35	9.33	5.00	35.35	44.69	392.4	19.69	18.31	31.50	3.39	19.13	GB880N
600	33.07	27.60	9.33	6.06	36.61	45.94	623.9	16.14	18.90	27.56	4.13	19.13	GB1250N

Order example	1	2	3	4	5	6	7	8	9	10	11	12	
Code	487	Order data butterfly valve (page 4)									0	GB232	

Technical data - GEMÜ 481 with pneumatic actuator type ADA/ASR



Control medium

Filtered, dry compressed air, non-corrosive medium

Temperature range

-22 to +212 °F, other temperatures on request

Control pressure

90 - 120 psi

Angle of rotation

±5° adjustable (85° - 95°)

90°

12 Order data - GEMÜ 481 with pneumatic actuator type ADA/ASR

12 Actuator size*

Operating pressure 232 psi (see order data - operating pressure code 3)

DN	Pneumatic double acting	Code	Pneumatic single acting	Code
25	ADA0020U F05 Y S14/S11A	BU02AB0	ASR0020U S08 F03F05Y S09 A	AU02FN0
40	ADA0020U F05 Y S14/S11A	BU02AB0	ASR0020U S08 F03F05 Y S09 A	AU02FN0
50	ADA0020U F05 Y S14/S11A	BU02AB0	ASR0020U S08 F03F05 Y S09A	AU02FN0
65	ADA0020U F05 Y S14/S11A	BU02AB0	ASR0040U S14 F05 Y S14/S11A	AU04KB0
80	ADA0040U F05 Y S14/S11A	BU04AB0	ASR0080U S14 F05F07 Y S17/S14A	AU08KC0
100	ADA0080U F05F07 Y S17/S14A	BU08AC0	ASR0200U S14 F07F10 Y S17/S14A	AU20KE0
125	ADA0080U F05F07 Y S17/S14A	BU08AC0	ASR0200U S14 F07F10 Y S17/S14A	AU20KE0
150	ADA0130U F05F07 Y S17/S14A	BU13AC0	ASR0300U S14 F07F10 Y S22A	AU30KD0
200	ADA0300U F07F10 Y S22A	BU30AD0	ASR0850U S14 F10F12 Y S27A	AU85KG0

Operating pressure 150 psi (see order data - operating pressure code 2)

250	ADA0500U F10 Y S22A	BU50AF0	ASR1200U S14 F10F14 Y S36A	A12UKH0
300	ADA0500U F10 Y S22A	BU50AF0	ASR1200U S14 F10F14 Y S36A	A12UKH0
350	ADA0850U F10F12 Y S27A	BU85AG0	ASR1750U S14 F14 Y S36A	A17UKK0
400	ADA1200U F10F14 Y S36A	B12UAH0	ASR2500U S14 F14 Y S36A	A25UKK0
450	ADA1750U F14 Y S36 A	B17UAK0	ASR2500U S14 F14 Y S36A	A25UKK0
500	ADA1750U F14 Y S36 A	B17UAK0	ASR4000U S14 F16F25 Y S55A	A40UKM0
600	ADA2100U F16 Y S46A	B21UAL0		

Operating pressure 45 psi (see order data - operating pressure code 0)

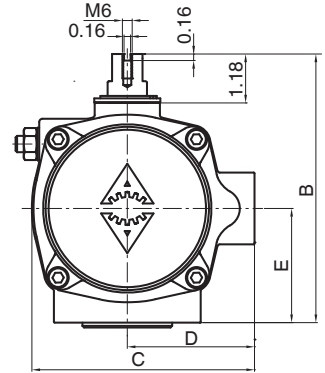
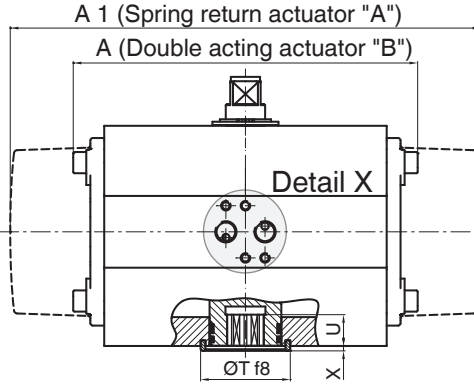
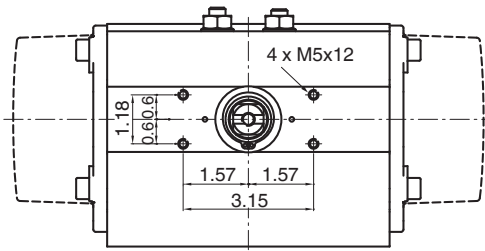
200	ADA0200U F07F10 Y S17/S14A	BU20AE0	ASR0500U S14 F10 Y S22A	AU50KF0
250	ADA0200U F07F10 Y S17/S14A	BU20AE0	ASR0500U S14 F10 Y S22A	AU50KF0
300	ADA0300U F07F10 Y S22A	BU30AD0	ASR0850U S14 F10F12 Y S27A	AU85KG0
350	ADA0300U F07F10 Y S22A	BU30AD0	ASR0850U S14 F10F12 Y S27A	AU85KG0
400	ADA1200U F10F14 Y S36A	B12UAH0	ASR1750U S14 F14 Y S36A	A17UKK0
450	ADA1200U F10F14 Y S36A	B12UAH0	ASR1750U S14 F14 Y S36A	A17UKK0
500	ADA1200U F10F14 Y S36A	B12UAH0	ASR2100U S14 F14 Y S36A	A21UKK0
600	ADA2100U F16 Y S46A	B21UAL0	ASR4000U S14 F16F25 Y S55A	A40UKM0

* Technical data for liquids +68 to +176 °F with control pressure 90 psi

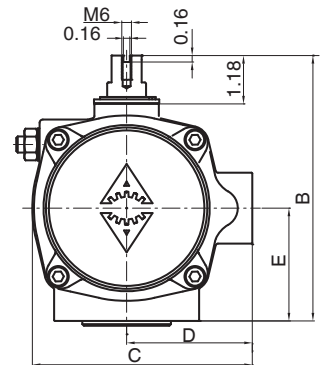
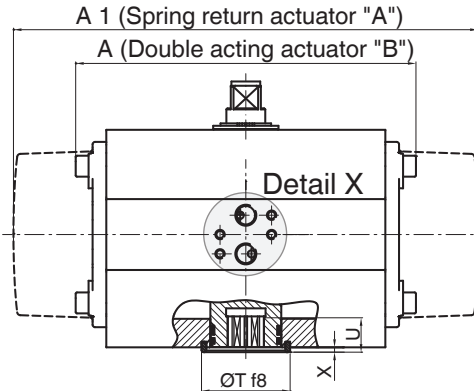
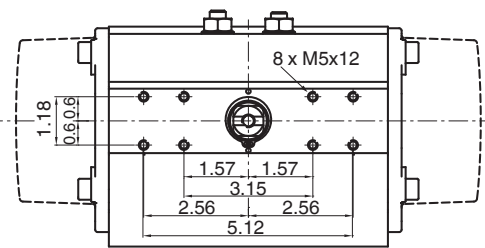
Order example	1	2	3	4	5	6	7	8	9	10	11	12
Code	481		Order data butterfly valve (page 4)									BU13AC0

Actuator dimensions ADA/ASR [inch]

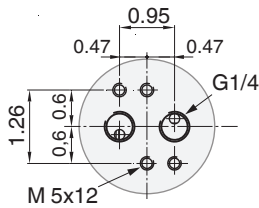
ADA/ASR 0020U-0850U



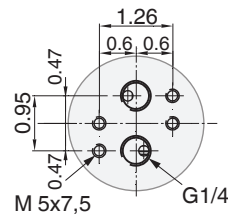
ADA/ASR 1200U-4000U



Detail X
ADA/ASR
0020U-1750U



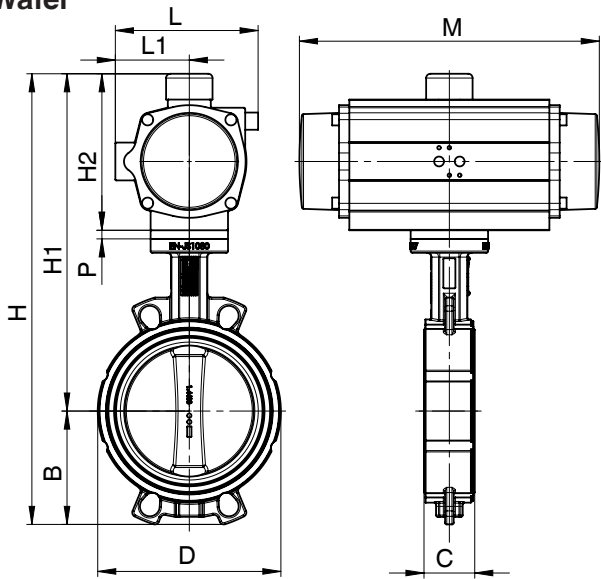
Detail X
ADA/ASR
2100U-4000U



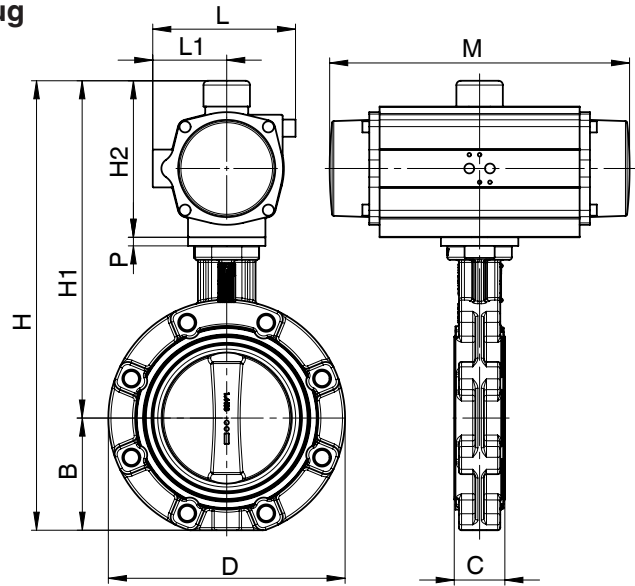
ADA/ASR	0020U		0040U		0080U	0130U	0200U	0300U	0500U	0850U	1200U	1750U	2100U	2500U	4000U	
ISO 5211	F03/ F05	F04	F05	F04	F05	F05	F05	F07	F07	F10	F10	F10	F14	F16	F16	F16
Octagonal	0.35	0.55		0.55	0.67	0.67	0.67	0.87	0.87	1.06	1.42	1.42	1.81	1.81	2.17	
Air connector	G1/4		G1/4		G1/4	G1/4	G1/4	G1/4	G1/4	G1/4	G1/4	G1/4	G1/4	G1/4	G1/4	
A	5.71		6.22		6.97	7.72	8.86	10.75	11.97	14.65	17.28	18.15	20.08	20.39	24.8	
A1	6.42		7.68		8.54	10.16	11.77	13.72	15.63	18.62	22.05	23.66	27.64	29.06	37.01	
B	3.78		4.53		5.39	5.79	6.50	7.17	7.83	8.70	9.80	11.02	12.32	15.08	17.09	
C	2.99		3.58		4.37	4.80	5.33	6.00	6.81	7.54	8.37	9.55	10.89	14.02	16.34	
D	1.89		2.20		2.60	2.80	3.07	3.39	3.78	4.17	4.57	5.16	5.83	6.99	8.39	
E	1.34		1.77		2.17	2.36	2.76	3.15	3.35	3.86	4.49	5.12	5.79	6.95	7.91	
ØT	0.98	1.38		1.38	2.17	2.17	2.17	2.76	2.76	3.35	3.94	3.94	5.12	5.12	7.87	
U	0.39	0.47		0.47	0.75	0.87	0.91	0.94	1.26	1.54	1.89	1.97	1.97	2.28	2.36	
Weight [lbs]																
ADA	3.1		4.6		6.6	8.4	12.3	18.7	24.7	37.3	56.9	71.6	108.0	153.4	285.3	
ASR	3.3		5.1		8.2	10.6	16.1	23.8	33.9	48.9	75.6	101.4	149.9	220.2	403.2	

Dimensions - GEMÜ 481 butterfly valve with pneumatic actuator
GEMÜ ADA - double acting [inch]

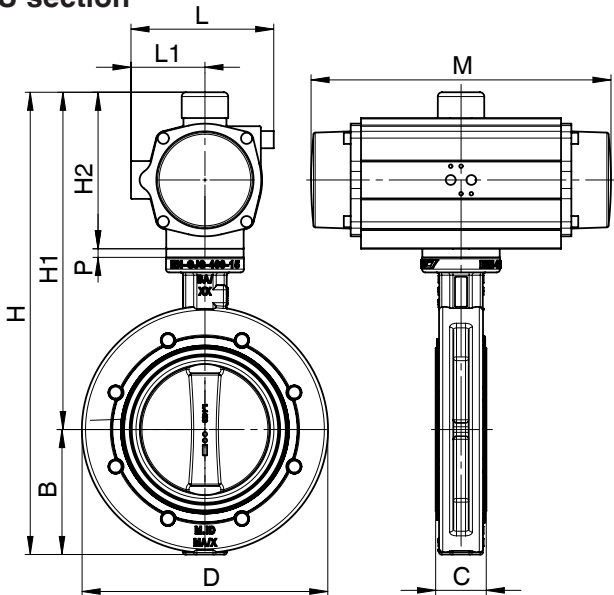
Wafer



Lug

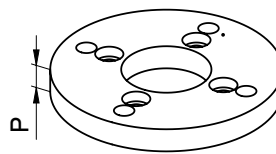


U section

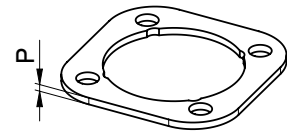


Accessories (ZB)

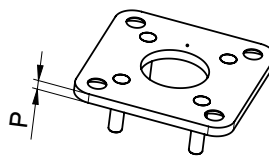
Adapter plate (ADP)



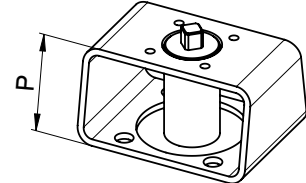
Spacer (DIS)



Adapter plate (ADP)



Mounting kit (MSC)

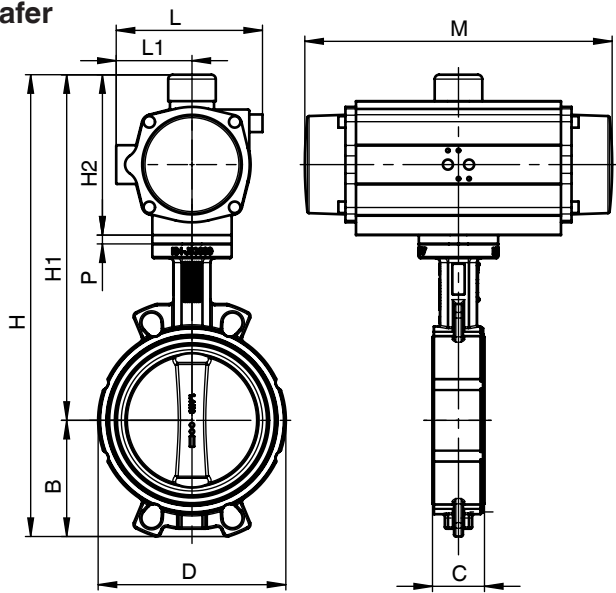


**Dimensions - GEMÜ 481 butterfly valve with pneumatic actuator
GEMÜ ADA - double acting [inch]**

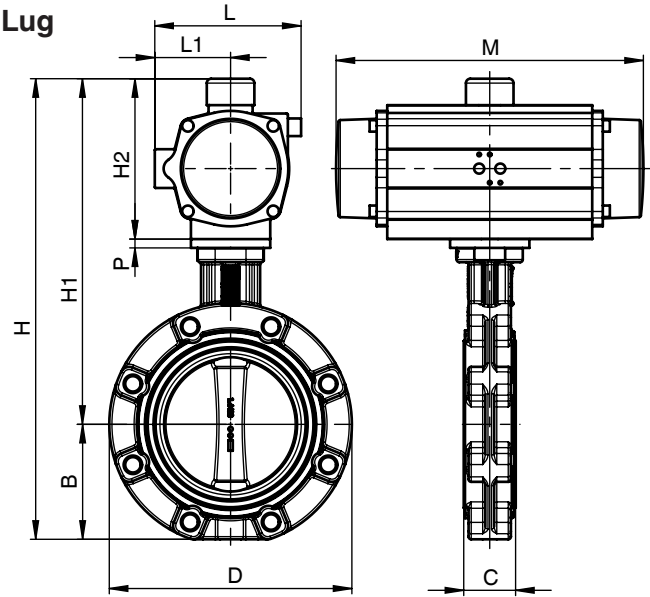
Body configuration								Actuator						
Wafer								ADA						
DN	PS	D	B	C	H1	H	lbs	H2	L1	L	M	ZB	P	Code
25	232	2.34	1.63	0.98	7.72	9.34	5.7	3.78	1.89	2.99	5.71	-	0	BU02AB0
40	232	2.97	2.12	1.30	8.50	10.62	6.4	3.78	1.89	2.99	5.71	-	0	BU02AB0
50	232	3.58	2.37	1.69	8.50	10.87	9.7	3.78	1.89	2.99	5.71	-	0	BU02AB0
65	232	4.37	2.66	1.81	9.29	11.95	11.0	3.78	1.89	2.99	5.71	-	0	BU02AB0
80	232	5.12	3.56	1.81	10.24	13.80	13.4	4.53	2.20	3.58	6.22	-	0	BU04AB0
100	232	5.91	4.14	2.05	11.93	16.07	18.7	5.39	2.60	4.37	6.97	-	0	BU08AC0
125	232	7.05	4.71	2.20	12.76	17.46	23.1	5.39	2.60	4.37	6.97	-	0	BU08AC0
150	232	8.27	5.18	2.20	13.66	18.84	27.3	5.79	2.80	4.80	7.72	-	0	BU13AC0
200	232	10.39	6.30	2.36	17.01	23.31	46.7	7.17	3.39	6.00	10.75	DIS	0.39	BU30AD0
250	150	12.36	7.69	2.68	18.27	25.96	73.6	7.83	3.78	6.81	11.97	-	0	BU50AF0
300	150	14.33	9.30	3.07	19.25	28.56	92.6	7.83	3.78	6.81	11.97	-	0	BU50AF0
350	150	17.32	10.47	3.07	21.34	31.81	143.1	8.70	4.17	7.54	14.65	-	0	BU85AG0
400	150	19.09	12.13	4.02	23.46	35.59	215.6	9.80	4.57	8.37	17.28	-	0	B12UAH0
450	150	21.30	13.11	4.49	25.67	38.78	281.1	11.02	5.16	9.55	18.15	-	0	B17UAK0
500	150	23.62	14.09	5.00	26.69	40.79	336.2	11.02	5.16	9.55	18.15	-	0	B17UAK0
600	150	27.56	17.4	6.06	30.83	48.23	531.3	12.32	5.83	10.89	20.08	-	0	B21UAL0
200	45	10.39	6.30	2.36	15.94	22.24	40.3	6.50	3.07	5.33	8.86	-	0	BU20AE0
250	45	12.36	7.69	2.68	16.93	24.62	61.3	6.50	3.07	5.33	8.86	-	0	BU20AE0
300	45	14.33	9.30	3.07	18.58	27.89	86.6	7.17	3.39	6.00	10.75	-	0	BU30AD0
350	45	17.32	10.47	3.07	20.39	30.87	124.6	7.17	3.39	6.00	10.75	ADP	0.59	BU30AD0
400	45	19.09	12.13	4.02	23.46	35.59	215.6	9.80	4.57	8.37	17.28	-	0	B12UAH0
450	45	21.30	13.11	4.49	24.45	37.56	266.3	9.80	4.57	8.37	17.28	-	0	B12UAH0
500	45	23.62	14.09	5.00	25.47	39.57	321.4	9.80	4.57	8.37	17.28	-	0	B12UAH0
600	45	27.56	17.40	6.06	30.83	48.23	531.3	12.32	5.83	10.89	20.08	-	0	B21UAL0
Lug								ADA						
DN	PS	D	B	C	H1	H	lbs	H2	L1	L	M	ZB	P	Code
50	232	5.94	2.36	1.69	8.50	10.87	11.2	3.78	1.89	2.99	5.71	-	0	BU02AB0
65	232	6.73	2.64	1.81	9.29	11.93	11.9	3.78	1.89	2.99	5.71	-	0	BU02AB0
80	232	7.40	3.50	1.81	10.24	13.74	20.1	4.53	2.20	3.58	6.22	-	0	BU04AB0
100	232	8.60	4.06	2.05	11.93	15.98	23.1	5.39	2.60	4.37	6.97	-	0	BU08AC0
125	232	9.84	4.69	2.20	12.76	17.44	30.9	5.39	2.60	4.37	6.97	-	0	BU08AC0
150	232	10.83	5.14	2.20	13.66	18.80	39.2	5.79	2.80	4.80	7.72	-	0	BU13AC0
200	232	12.99	6.71	2.36	17.01	23.72	65.0	7.17	3.39	6.00	10.75	DIS	0.39	BU30AD0
250	150	15.83	7.99	2.68	18.27	26.26	95.2	7.83	3.78	6.81	11.97	-	0	BU50AF0
300	150	18.58	9.29	3.07	19.25	28.54	119.5	7.83	3.78	6.81	11.97	-	0	BU50AF0
350	150	20.47	10.24	3.07	21.34	31.57	182.8	8.70	4.17	7.54	14.65	-	0	BU85AG0
400	150	23.46	11.81	4.02	23.46	35.28	299.4	9.80	4.57	8.37	17.28	-	0	B12UAH0
450	150	25.20	13.11	4.49	25.67	38.78	345.0	11.02	5.16	9.55	18.15	-	0	B17UAK0
500	150	27.95	14.09	5.00	26.69	40.79	437.6	11.02	5.16	9.55	18.15	-	0	B17UAK0
600	150	33.07	17.40	6.06	30.83	48.23	628.3	12.32	5.83	10.89	20.08	-	0	B21UAL0
200	45	12.99	6.71	2.36	15.94	22.66	58.6	6.50	3.07	5.33	8.86	-	0	BU20AE0
250	45	15.83	7.99	2.68	16.93	24.92	82.9	6.50	3.07	5.33	8.86	-	0	BU20AE0
300	45	18.58	9.29	3.07	18.58	27.87	113.5	7.17	3.39	6.00	10.75	-	0	BU30AD0
350	45	20.47	10.24	3.07	20.39	30.63	164.2	7.17	3.39	6.00	10.75	ADP	0.59	BU30AD0
400	45	23.46	11.81	4.02	23.46	35.28	299.4	9.80	4.57	8.37	17.28	-	0	B12UAH0
U section								ADA						
DN	PS	D	B	H1	H	lbs	C	H2	L1	L	M	ZB	P	Code
400	45	19.09	9.33	23.46	32.80	292.8	4.02	9.80	4.57	8.37	17.28	-	0	B12UAH0
450	45	21.30	9.33	24.45	33.78	332.5	4.49	9.80	4.57	8.37	17.28	-	0	B12UAH0
500	45	28.15	9.33	25.47	34.80	418.4	5.00	9.80	4.57	8.37	17.28	-	0	B12UAH0
600	45	33.07	9.33	30.83	40.16	683.4	6.06	12.32	5.83	10.89	20.08	-	0	B21UAL0

Dimensions - GEMÜ 481 butterfly valve with pneumatic actuator
GEMÜ ASR - single acting [inch]

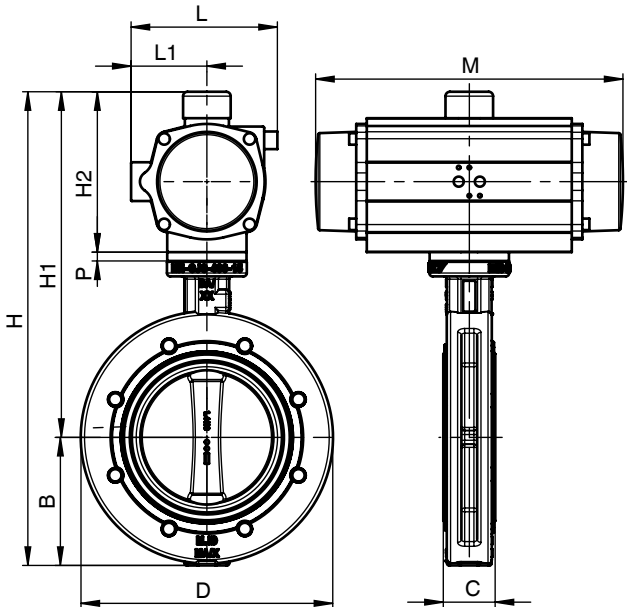
Wafer



Lug

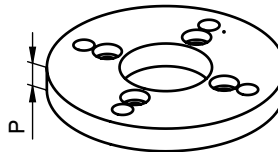


U section

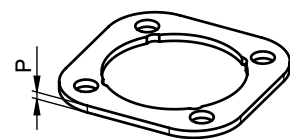


Accessories (ZB)

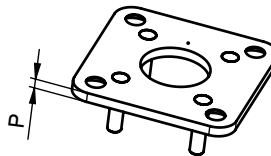
Adapter plate (ADP)



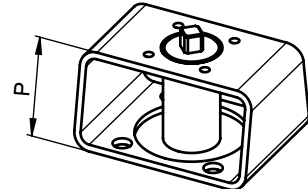
Spacer (DIS)



Adapter plate (ADP)



Mounting kit (MSC)



**Dimensions - GEMÜ 481 butterfly valve with pneumatic actuator
GEMÜ ASR - single acting [inch]**

Body configuration								Actuator						
Wafer								ASR						
DN	PS	D	B	C	H1	H	lbs	H2	L1	L	M	ZB	P	Code
25	232	2.34	1.63	0.98	7.72	9.34	5.9	3.78	1.89	2.99	6.42	-	0	AU02FN0
40	232	2.97	2.12	1.30	8.5	10.62	6.6	3.78	1.89	2.99	6.42	-	0	AU02FN0
50	232	3.58	2.37	1.69	8.5	10.87	9.9	3.78	1.89	2.99	6.42	-	0	AU02FN0
65	232	4.37	2.66	1.81	10.04	12.70	13.0	4.53	2.20	3.58	7.68	-	0	AU04KB0
80	232	5.12	3.56	1.81	11.10	14.66	17.0	5.39	2.60	4.37	8.54	-	0	AU08KC0
100	232	5.91	4.14	2.05	13.43	17.56	28.2	6.50	3.07	5.33	11.77	ADP	0.39	AU20KE0
125	232	7.05	4.71	2.20	13.86	18.57	32.6	6.50	3.07	5.33	11.77	-	0	AU20KE0
150	232	8.27	5.18	2.20	15.04	20.22	42.8	7.17	3.39	6.00	13.72	-	0	AU30KD0
200	232	10.39	6.30	2.36	18.15	24.45	76.9	8.70	4.17	7.54	18.62	-	0	AU85KG0
250	150	12.36	7.69	2.68	20.24	27.93	124.6	9.80	4.57	8.37	22.05	-	0	A12UKH0
300	150	14.33	9.30	3.07	21.22	30.52	143.5	9.80	4.57	8.37	22.05	-	0	A12UKH0
350	150	17.32	10.47	3.07	27.20	37.68	207.2	11.02	5.16	9.55	23.66	MSC	3.54	A17UKK0
400	150	19.09	12.13	4.02	28.74	40.87	379.0	15.08	4.63	14.02	29.06	-	0	A25UKK0
450	150	21.30	13.11	4.49	29.72	42.83	429.7	15.08	4.63	14.02	29.06	-	0	A25UKK0
500	150	23.62	14.09	5.00	33.9	47.99	667.8	13.50	8.39	16.34	37.01	MSC	4.72	A40UKM0
200	45	10.39	6.30	2.36	17.28	23.58	61.9	7.83	3.78	6.81	15.63	-	0	AU50KF0
250	45	12.36	7.69	2.68	18.27	25.96	82.9	7.83	3.78	6.81	15.63	-	0	AU50KF0
300	45	14.33	9.30	3.07	20.12	29.42	116.8	8.70	4.17	7.54	18.62	-	0	AU85KG0
350	45	17.32	10.47	3.07	21.34	31.81	154.8	8.70	4.17	7.54	18.62	-	0	AU85KG0
400	45	19.09	12.13	4.02	24.69	36.81	260.1	11.02	5.16	9.55	23.66	-	0	A17UKK0
450	45	21.30	13.11	4.49	25.67	38.78	310.8	11.02	5.16	9.55	23.66	-	0	A17UKK0
500	45	23.62	14.09	5.00	25.47	39.57	414.5	9.80	5.83	10.89	27.64	-	0	A21UKK0
600	45	27.56	17.40	6.06	32.01	49.41	826.5	13.50	8.39	16.34	37.01	-	0	A40UKM0
Lug								ASR						
DN	PS	D	B	C	H1	H	lbs	H2	L1	L	M	ZB	P	Code
50	232	5.94	2.36	1.69	8.50	10.87	11.5	3.78	1.89	2.99	6.42	-	0	AU02FN0
65	232	6.73	2.64	1.81	10.04	12.68	13.9	4.53	2.20	3.58	7.68	-	0	AU04KB0
80	232	7.40	3.50	1.81	11.10	14.61	23.6	5.39	2.60	4.37	8.54	-	0	AU08KC0
100	232	8.60	4.06	2.05	13.43	17.48	32.6	6.50	3.07	5.33	11.77	ADP	0.39	AU20KE0
125	232	9.84	4.69	2.20	13.86	18.54	40.3	6.50	3.07	5.33	11.77	-	0	AU20KE0
150	232	10.83	5.14	2.20	15.04	20.18	54.7	7.17	3.39	6.00	13.72	-	0	AU30KD0
200	232	12.99	6.71	2.36	18.15	24.86	95.2	8.70	4.17	7.54	18.62	-	0	AU85KG0
250	150	15.83	7.99	2.68	20.24	28.23	146.2	9.80	4.57	8.37	22.05	-	0	A12UKH0
300	150	18.58	9.29	3.07	21.22	30.51	170.4	9.80	4.57	8.37	22.05	-	0	A12UKH0
350	150	20.47	10.24	3.07	27.20	37.44	246.9	11.02	5.16	9.55	23.66	MSC	3.54	A17UKK0
400	150	23.46	11.81	4.02	28.74	40.55	462.7	15.08	4.63	14.02	29.06	-	0	A25UKK0
450	150	25.20	13.11	4.49	29.72	42.83	493.6	15.08	4.63	14.02	29.06	-	0	A25UKK0
500	150	27.95	14.09	5.00	33.90	47.99	769.2	13.50	8.39	16.34	37.01	MSC	4.72	A40UKM0
200	45	12.99	6.71	2.36	17.28	24.00	80.2	199.00	96.00	173.00	397.00	-	0	AU50KF0
250	45	15.83	7.99	2.68	18.27	26.26	104.5	199.00	96.00	173.00	397.00	-	0	AU50KF0
300	45	18.58	9.29	3.07	20.12	29.41	143.7	221.00	106.00	191.50	473.00	-	0	AU85KG0
350	45	20.47	10.24	3.07	21.34	31.57	194.4	221.00	106.00	191.50	473.00	-	0	AU85KG0
U section								ASR						
DN	PS	D	B	C	H1	H	lbs	H2	L1	L	M	ZB	P	Code
400	45	19.09	9.33	4.02	24.69	34.02	337.3	11.02	5.16	9.55	23.66	-	0	A17UKK0
450	45	20.24	9.33	4.49	25.67	35.00	377.0	11.02	5.16	9.55	23.66	-	0	A17UKK0
500	45	28.15	9.33	5.00	25.47	34.80	511.5	9.80	5.83	10.89	27.64	-	0	A21UKK0
600	45	33.07	9.33	6.06	32.01	41.34	978.6	13.50	8.39	16.34	37.01	-	0	A40UKM0

Technical data - GEMÜ 481 with pneumatic actuator type DR/SC



Control medium

Filtered, dry compressed air, non-corrosive medium

Temperature range

-40 to +176 °F, other temperatures on request

Control pressure

90 - 120 psi

Angle of rotation

20° adjustable (75° - 95°)

90°

12 Order data - GEMÜ 481 with pneumatic actuator type DR/SC

12 Actuator size*

Operating pressure 232 psi (see order data - operating pressure code 3)

DN	Pneumatic double acting	Code	Pneumatic single acting	Code
25	DR0015U F03F05 N S11A	DU01AW0	SC0015U 8 F03F05 N S11A	SU01KW0
40	DR0015U F03F05 N S11A	DU01AW0	SC0015U 8 F03F05 N S11A	SU01KW0
50	DR0015U F03F05 N S11A	DU01AW0	SC0015U 8 F03F05 N S11A	SU01KW0
65	DR0015U F03F05 N S11A	DU01AW0	SC0060U 6 F05F07 N S14A	SU06KP0
80	DR0030U F05F07 N S14A	DU03AP0	SC0100U 6 F05F07 N S17A	SU10KC0
100	DR0060U F05F07 N S14A	DU06AP0	SC0150U 6 F05F07 N S17A	SU15KC0
125	DR0100U F05F07 N S17A	DU10AC0	SC0220U 6 F07F10 N S22A	SU22KD0
150	DR0150U F07F10 N S17A	DU15AE0	SC0300U 6 F07F10 N S22A	SU30KD0
200	DR0220U F07F10 N S22A	DU22AD0	SC0600U 6 F10F12 N S27A	SU60KG0

Operating pressure 150 psi (see order data - operating pressure code 2)

250	DR0300U F07F10 N S22A	DU30AD0	SC0900U 6 F10F12 N S27A	SU90KG0
300	DR0300U F07F10 N S22A	DU30AD0	SC0900U 6 F10F12 N S27A	SU90KG0
350	DR0450U F10F12 N S27A	DU45AG0	SC1200U 6 F10F12 N S27A	S12UKG0
400	DR1200U F14 N S36A	D12UAK0	SC3000U 6 F14 N S36A	S30UKK0
450	DR1200U F14 N S36A	D12UAK0	SC3000U 6 F14 N S36A	S30UKK0
500	DR1200U F14 N S36A	D12UAK0	SC3000U 6 F14 N S36A	S30UKK0
600	DR2000U F16 N S46A	D20UAL0	SC5000U 6 F16F25 N S46A	S50UKS0

Operating pressure 45 psi (see order data - operating pressure code0)

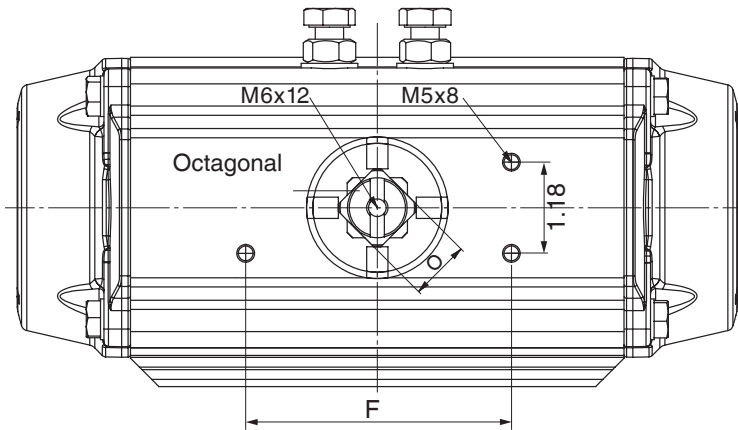
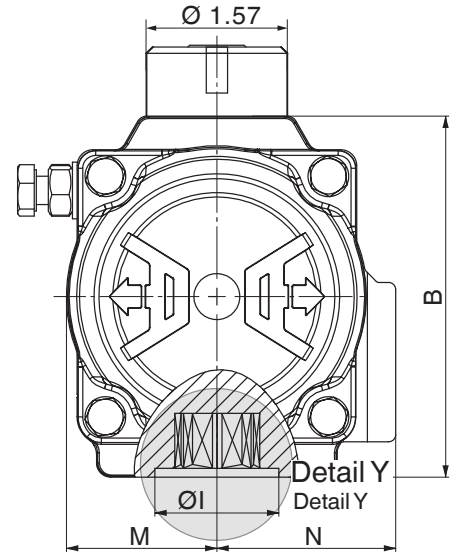
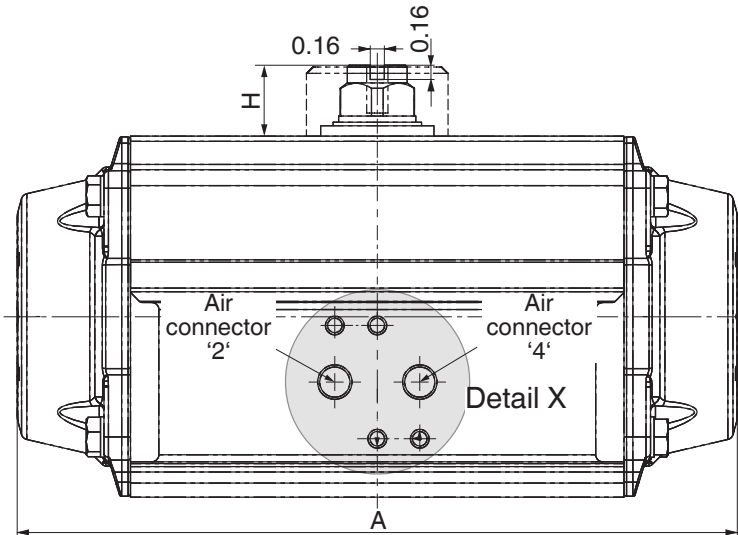
200	DR0150U F07F10 N S17A	DU15AE0	SC0450U 6 F10F12 N S27A	SU45KG0
250	DR0150U F07F10 N S17A	DU15AE0	SC0450U 6 F10F12 N S27A	SU45KG0
300	DR0220U F07F10 N S22A	DU22AD0	SC0600U 6 F10F12 N S27A	SU60KG0
350	DR0220U F07F10 N S22A	DU22AD0	SC0600U 6 F10F12 N S27A	SU60KG0
400	DR0900U F14 N S36A	DU90AK0	SC2000U 6 F14 N S36A	S20UKK0
450	DR0900U F14 N S36A	DU90AK0	SC2000U 6 F14 N S36A	S20UKK0
500	DR0900U F14 N S36A	DU90AK0	SC2000U 6 F14 N S36A	S20UKK0
600	DR2000U F16 N S46A	D20UAL0	SC4000U 6 F16 N S46A	S40UKL0

* Technical data for liquids +68 to +176 °F with control pressure 90 psi

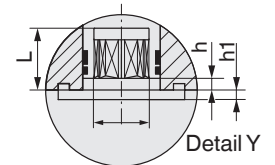
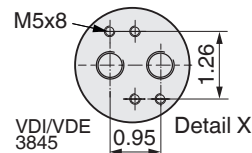
Order example	1	2	3	4	5	6	7	8	9	10	11	12
Code	481		Order data butterfly valve (page 4)									DU15AD0

Stroke limiter on request

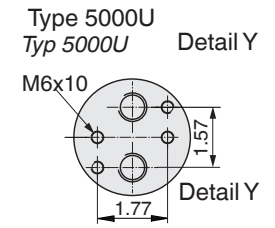
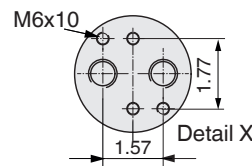
Actuator dimensions DR/SC [inch]



Typ 0015U-1200U



Typ 2000U-4000U

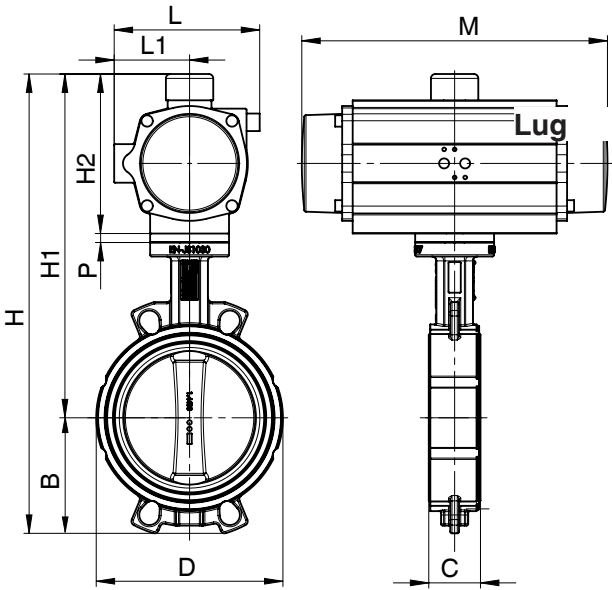


Type 5000U
Typ 5000U

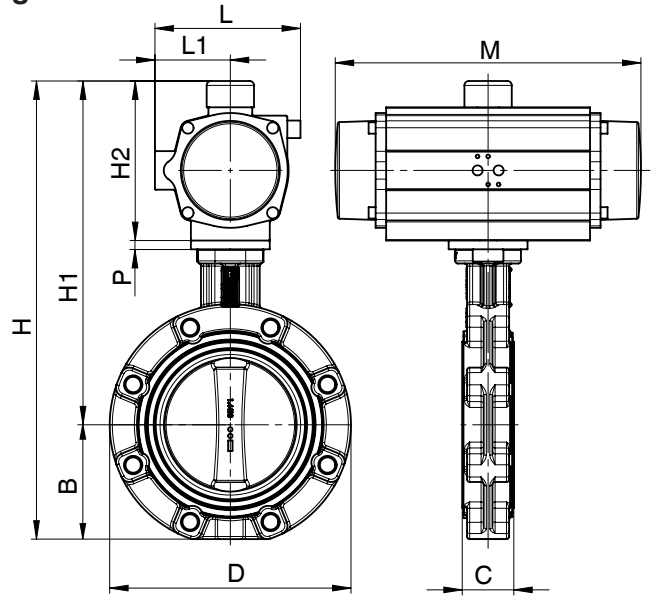
Type	0015U	0030U	0060U	0100U	0150U	0220U	0300U	0450U	0600U	0900U	1200U	2000U	3000U	4000U	5000U
ISO flange	F04	F04 F05/07	F05/07	F05/07	F07/10	F07/10	F07/10	F10/12	F10/12	F14	F14	F16	F16	F16	F25
Octagonal	0.43	0.55	0.55	0.67	0.67	0.87	0.87	1.06	1.06	1.42	1.42	1.81	1.81	1.81	2.17
L	0.47	0.63	0.75	0.75	0.98	0.94	0.94	1.14	1.57	1.5	1.5	1.89	1.89	1.93	2.24
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	5.35	6.04	8.01	9.49	10.20	11.97	13.11	15.53	16.63	18.66	20.79	23.82	27.95	31.97	34.49
B	2.72	3.35	4.02	4.53	5.00	5.71	6.18	6.97	7.72	8.68	9.65	11.75	12.99	15.08	16.14
F	3.15	3.15	3.15	3.15	3.15	3.15	3.15	3.15	3.15	5.12	5.12	5.12	5.12	5.12	5.12
H	0.79	0.79	0.79	0.79	0.79	1.18	1.18	1.18	1.18	1.97	1.97	1.97	1.97	1.97	1.97
Ø I	1.18	1.38	1.38	1.57	2.17	2.17	2.17	2.76	2.76	3.94	3.94	5.12	5.12	5.12	7.87
M	1.14	1.42	1.67	1.95	2.19	2.52	2.74	3.15	3.46	3.90	4.33	5.16	6.50	7.30	8.03
N	1.69	1.91	1.99	2.22	2.48	2.83	3.03	3.39	3.66	3.98	4.39	5.16	6.50	7.30	8.43
O	0.43	0.43	0.67	0.67	0.67	1.06	1.06	1.06	1.06	1.42	1.42	1.42	1.42	1.42	1.42
h	0.02	0.02	0.02	0.06	0.06	0.06	0.06	0.06	0.06	0.08	0.08	0.10	0.10	0.10	0.10
h1	0.06	0.06	0.08	0.06	0.08	0.08	0.08	0.12	0.12	0.12	0.12	0.10	0.10	0.16	0.14
L	0.43	0.43	0.75	0.75	0.75	0.75	0.98	1.26	1.57	1.50	1.50	1.50	1.57	2.24	2.24
Weight [lbs]															
DR	2.2	3.5	5.9	8.2	11.5	17.6	21.6	30.9	39.7	52.9	75.0	116.8	163.1	271.2	280.0
SC	2.4	3.7	6.8	9.5	13.4	20.5	26.5	37.5	48.5	72.7	92.6	147.7	205.0	341.7	372.6

Dimensions - GEMÜ 481 butterfly valve with pneumatic actuator
GEMÜ DR - double acting [inch]

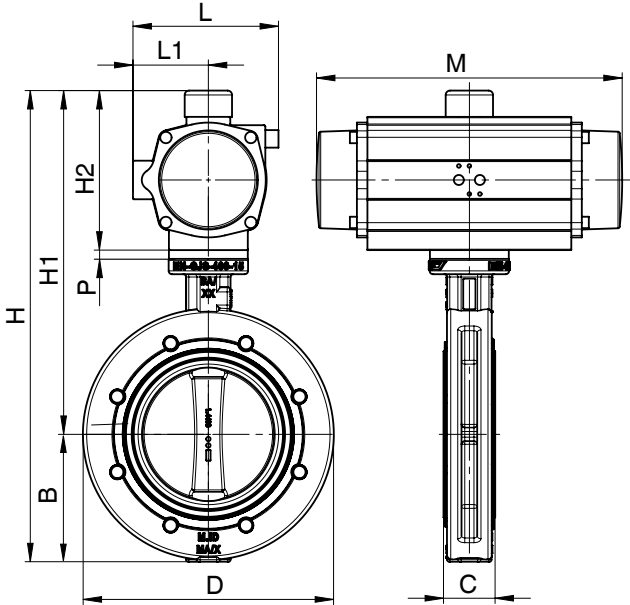
Wafer



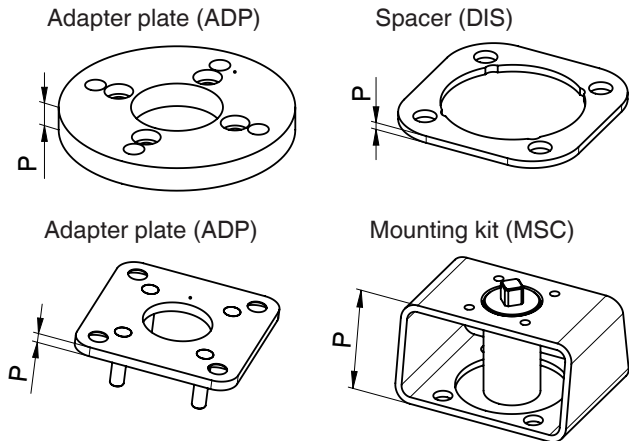
Lug



U section



Accessories (ZB)

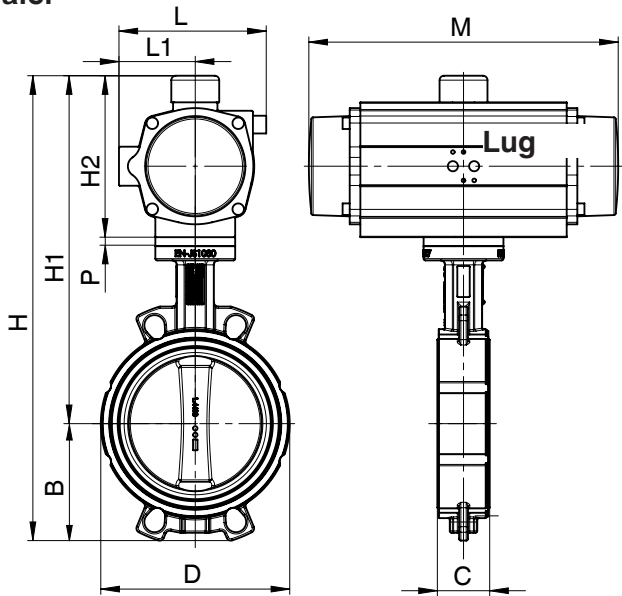


**Dimensions - GEMÜ 481 butterfly valve with pneumatic actuator
GEMÜ DR - double acting [inch]**

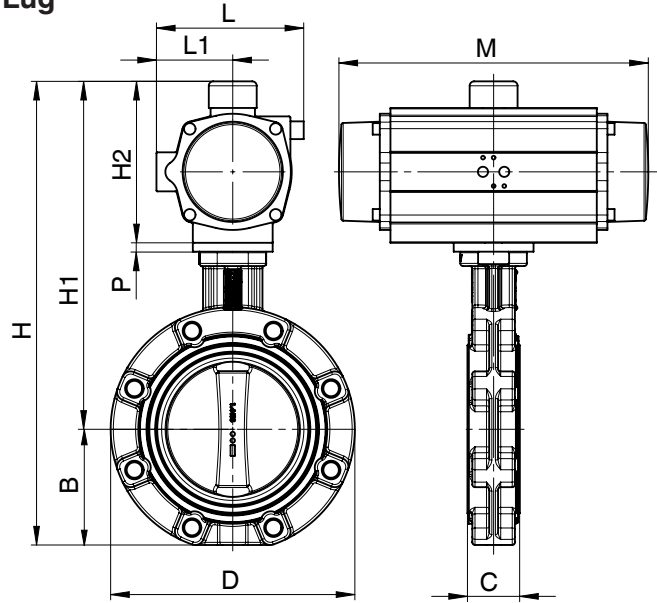
Body configuration								Actuator						
Wafer								DR						
DN	PS	D	B	C	H1	H	lbs	H2	L1	L	M	ZB	P	Code
25	232	2.34	1.63	0.98	6.89	8.52	4.8	2.72	1.69	2.83	5.35	DIS	0.24	DU01AW0
40	232	2.97	2.12	1.30	7.68	9.80	5.5	2.72	1.69	2.83	5.35	DIS	0.24	DU01AW0
50	232	3.58	2.37	1.69	7.68	10.05	8.8	2.72	1.69	2.83	5.35	DIS	0.24	DU01AW0
65	232	4.37	2.66	1.81	8.46	11.13	10.1	2.72	1.69	2.83	5.35	DIS	0.24	DU01AW0
80	232	5.12	3.56	1.81	9.17	12.73	12.3	3.35	1.91	3.33	6.04	DIS	0.12	DU03AP0
100	232	5.91	4.14	2.05	10.55	14.69	18.1	4.02	1.99	3.66	8.01	-	0	DU06AP0
125	232	7.05	4.71	2.20	11.77	16.48	22.5	4.02	1.99	3.66	8.01	DIS	0.39	DU06AC0
150	232	8.27	5.18	2.20	12.87	18.05	30.9	5.00	2.48	4.67	10.20	-	0	DU15AD0
200	232	10.39	6.30	2.36	15.28	21.57	46.5	5.71	2.83	5.35	11.97	DIS	0.12	DU22AD0
250	150	12.36	7.69	2.68	16.61	24.30	71.4	6.18	3.03	5.77	13.11	-	0	DU30AD0
300	150	14.33	9.30	3.07	17.60	26.90	90.4	6.18	3.03	5.77	13.11	-	0	DU30AD0
350	150	17.32	10.47	3.07	19.61	30.08	137.8	6.97	3.39	6.54	15.53	-	0	DU45AG0
400	150	19.09	12.13	4.02	23.31	35.43	237.0	9.65	4.39	8.72	20.79	-	0	D12UAK0
450	150	21.3	13.11	4.49	24.29	37.40	287.7	9.65	4.39	8.72	20.79	-	0	D12UAK0
500	150	23.62	14.09	5.00	25.31	39.41	342.8	9.65	4.39	8.72	20.79	-	0	D12UAK0
600	150	27.56	17.40	6.06	29.90	47.30	540.1	11.40	5.16	10.31	23.82	-	0	D20UAL0
200	45	10.39	6.30	2.36	14.45	20.75	39.9	5.00	2.48	4.67	10.20	-	0	DU15AE0
250	45	12.36	7.69	2.68	15.43	23.12	60.8	5.00	2.48	4.67	10.20	-	0	DU15AE0
300	45	14.33	9.30	3.07	17.13	26.43	86.4	5.71	2.83	5.35	11.97	-	0	DU22AD0
350	45	17.32	10.47	3.07	18.94	29.41	124.3	5.71	2.83	5.35	11.97	ADP	0.59	DU22AD0
400	45	19.09	12.13	4.02	22.34	34.47	213.8	8.68	3.98	7.87	18.66	-	0	DU90AK0
450	45	21.3	13.11	4.49	23.33	36.44	264.5	8.68	3.98	7.87	18.66	-	0	DU90AK0
500	45	23.62	14.09	5.00	24.35	38.44	319.7	8.68	3.98	7.87	18.66	-	0	DU90AK0
600	45	27.56	17.40	6.06	30.26	47.66	540.1	11.75	5.16	10.31	23.82	-	0	D20UAL0
Lug								DR						
DN	PS	D	B	C	H1	H	lbs	H2	L1	L	M	ZB	P	Code
50	232	5.94	2.36	1.69	7.68	10.04	10.4	2.72	1.69	2.83	5.35	DIS	0.24	DU01AW0
65	232	6.73	2.64	1.81	8.46	11.10	11.0	2.72	1.69	2.83	5.35	DIS	0.24	DU01AW0
80	232	7.40	3.50	1.81	9.17	12.68	19.0	3.35	1.91	3.33	6.04	DIS	0.12	DU03AP0
100	232	8.60	4.06	2.05	10.55	14.61	22.5	4.02	1.99	3.66	8.01	-	0	DU06AP0
125	232	9.84	4.69	2.20	11.77	16.46	30.2	4.02	1.99	3.66	8.01	DIS	0.39	DU06AC0
150	232	10.83	5.14	2.20	12.87	18.01	42.8	5.00	2.48	4.67	10.2	-	0	DU15AD0
200	232	12.99	6.71	2.36	15.28	21.99	64.8	5.71	2.83	5.35	11.97	DIS	0.12	DU22AD0
250	150	15.83	7.99	2.68	16.61	24.61	93.0	6.18	3.03	5.77	13.11	-	0	DU30AD0
300	150	18.58	9.29	3.07	17.60	26.89	117.3	6.18	3.03	5.77	13.11	-	0	DU30AD0
350	150	20.47	10.24	3.07	19.61	29.84	177.5	6.97	3.39	6.54	15.53	-	0	DU45AG0
400	150	23.46	11.81	4.02	23.31	35.12	320.8	9.65	4.39	8.72	20.79	-	0	D12UAK0
450	150	25.20	13.11	4.49	24.29	37.40	351.6	9.65	4.39	8.72	20.79	-	0	D12UAK0
500	150	27.95	14.09	5.00	25.31	39.41	444.2	9.65	4.39	8.72	20.79	-	0	D12UAK0
600	150	33.07	17.40	6.06	29.90	47.30	637.1	11.4	5.16	10.31	23.82	-	0	D20UAL0
200	45	12.99	6.71	2.36	14.45	21.16	58.2	5.00	2.48	4.67	10.2	-	0	DU15AE0
250	45	15.83	7.99	2.68	15.43	23.43	82.4	5.00	2.48	4.67	10.2	-	0	DU15AE0
300	45	18.58	9.29	3.07	17.13	26.42	113.3	5.71	2.83	5.35	11.97	-	0	DU22AD0
350	45	20.47	10.24	3.07	18.94	29.17	164.0	5.71	2.83	5.35	11.97	ADP	0.59	DU22AD0
400	45	23.46	11.81	4.02	22.34	34.15	297.6	8.68	3.98	7.87	18.66	-	0	DU90AK0
U section								DR						
DN	PS	D	B	C	H1	H	lbs	H2	L1	L	M	ZB	P	Code
400	45	19.09	9.33	4.02	22.34	31.67	291.0	8.68	3.98	7.87	18.66	-	0	DU90AK0
450	45	21.30	9.33	4.49	23.33	32.66	330.7	8.68	3.98	7.87	18.66	-	0	DU90AK0
500	45	28.15	9.33	5.00	24.35	33.68	416.7	8.68	3.98	7.87	18.66	-	0	DU90AK0
600	45	33.07	9.33	6.06	30.26	39.59	692.2	11.75	5.16	10.31	23.82	-	0	D20UAL0

Dimensions - GEMÜ 481 butterfly valve with pneumatic actuator
GEMÜ SC - single acting [inch]

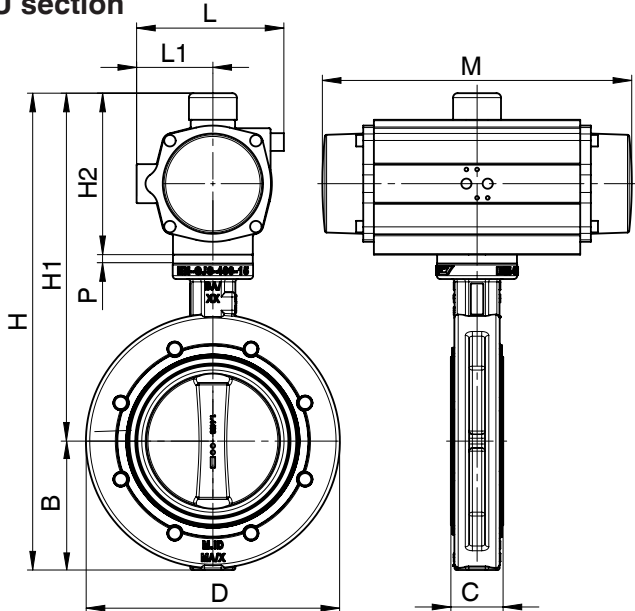
Wafer



Lug

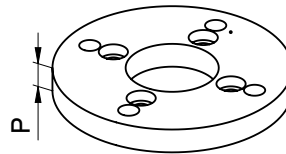


U section

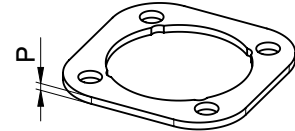


Accessories (ZB)

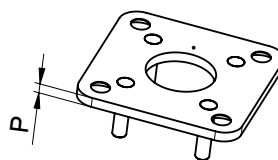
Adapter plate (ADP)



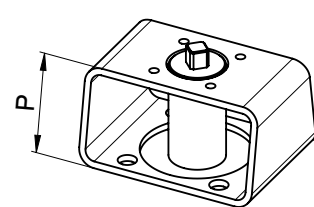
Spacer (DIS)



Adapter plate (ADP)



Mounting kit (MSC)



**Dimensions - GEMÜ 481 butterfly valve with pneumatic actuator
GEMÜ SC - single acting [inch]**

Body configuration								Actuator						
Wafer								SC						
DN	PS	D	B	C	H1	H	lbs	H2	L1	L	M	ZB	P	Code
25	232	2.34	1.63	0.98	6.89	8.52	5.7	2.72	1.69	2.83	5.35	DIS	0.24	SU01KW0
40	232	2.97	2.12	1.30	7.68	9.80	6.49	2.72	1.69	2.83	5.35	DIS	0.24	SU01KW0
50	232	3.58	2.37	1.69	7.68	10.05	9.7	2.72	1.69	2.83	5.35	DIS	0.24	SU01KW0
65	232	4.37	2.66	1.81	9.53	12.19	15.0	4.02	1.99	3.66	8.01	-	0	SU06KP0
80	232	5.12	3.56	1.81	10.24	13.80	18.5	4.53	2.22	4.17	9.49	-	0	SU10KC0
100	232	5.91	4.14	2.05	11.54	15.67	26.5	5.00	2.48	4.67	10.20	-	0	SU15KC0
125	232	7.05	4.71	2.20	13.07	17.78	38.1	5.71	2.83	5.35	11.97	-	0	SU22KD0
150	232	8.27	5.18	2.20	14.06	19.23	46.7	6.18	3.03	5.77	13.11	-	0	SU30KD0
200	232	10.39	6.30	2.36	17.17	23.46	80.9	7.72	3.66	7.13	16.63	-	0	SU60KG0
250	150	12.36	7.69	2.68	19.11	26.8	118.6	8.68	3.98	7.87	18.66	-	0	SU90KG0
300	150	14.33	9.30	3.07	20.10	29.40	137.6	8.68	3.98	7.87	18.66	-	0	SU90KG0
350	150	17.32	10.47	3.07	22.28	32.76	205.2	9.65	4.39	8.72	20.79	-	0	S12UKG0
400	150	19.09	12.13	4.02	41.61	53.74	384.0	27.95	6.50	12.99	27.95	-	0	S30UKK0
450	150	21.3	13.11	4.49	42.60	55.71	435.0	27.95	6.50	12.99	27.95	-	0	S30UKK0
500	150	23.62	14.09	5.00	43.62	57.72	490.1	27.95	6.50	12.99	27.95	-	0	S30UKK0
600	150	27.56	17.40	6.06	52.99	70.39	795.9	34.49	8.43	16.46	34.49	-	0	S50UKS0
200	45	10.39	6.30	2.36	16.42	22.72	67.9	6.97	3.39	6.54	15.53	-	0	SU45KG0
250	45	12.36	7.69	2.68	17.40	25.09	88.8	6.97	3.39	6.54	15.53	-	0	SU45KG0
300	45	14.33	9.30	3.07	19.13	28.44	120.8	7.72	3.66	7.13	16.63	-	0	SU60KG0
350	45	17.32	10.47	3.07	20.35	30.83	158.7	7.72	3.66	7.13	16.63	-	0	SU60KG0
400	45	19.09	12.13	4.02	25.06	37.19	300.3	11.40	5.16	10.31	23.82	-	0	S20UKK0
450	45	21.30	13.11	4.49	26.04	39.15	351.0	11.40	5.16	10.31	23.82	-	0	S20UKK0
500	45	23.62	14.09	5.00	27.07	41.16	406.1	11.40	5.16	10.31	23.82	-	0	S20UKK0
600	45	27.56	17.40	6.06	33.58	50.98	754.0	15.08	7.30	14.61	31.97	-	0	S40UKL0
Lug								SC						
DN	PS	D	B	C	H1	H	lbs	H2	L1	L	M	ZB	P	Code
50	232	5.94	2.36	1.69	7.68	10.04	11.2	2.72	1.69	2.83	5.35	DIS	0.24	SU01KW0
65	232	6.73	2.64	1.81	9.53	12.17	15.9	4.02	1.99	3.66	8.01	-	0	SU06KP0
80	232	7.40	3.50	1.81	10.24	13.74	25.1	4.53	2.22	4.17	9.49	-	0	SU10KC0
100	232	8.60	4.06	2.05	11.54	15.59	30.9	5.00	2.48	4.67	10.20	-	0	SU15KC0
125	232	9.84	4.69	2.20	13.07	17.76	45.9	5.71	2.83	5.35	11.97	-	0	SU22KD0
150	232	10.83	5.14	2.20	14.06	19.19	58.6	6.18	3.03	5.77	13.11	-	0	SU30KD0
200	232	12.99	6.71	2.36	17.17	23.88	99.2	7.72	3.66	7.13	16.63	-	0	SU60KG0
250	150	15.83	7.99	2.68	19.11	27.11	140.2	8.68	3.98	7.87	18.66	-	0	SU90KG0
300	150	18.58	9.29	3.07	20.10	29.39	164.5	8.68	3.98	7.87	18.66	-	0	SU90KG0
350	150	20.47	10.24	3.07	22.28	32.52	244.9	9.65	4.39	8.72	20.79	-	0	S12UKG0
400	150	23.46	11.81	4.02	41.61	53.43	467.8	27.95	6.50	12.99	27.95	-	0	S30UKK0
450	150	25.20	13.11	4.49	42.60	55.71	498.9	27.95	6.50	12.99	27.95	-	0	S30UKK0
500	150	27.95	14.09	5.00	43.62	57.72	591.5	27.95	6.50	12.99	27.95	-	0	S30UKK0
600	150	33.07	17.40	6.06	52.99	70.39	892.9	34.49	8.43	16.46	34.49	-	0	S50UKS0
200	45	12.99	6.71	2.36	16.42	23.13	86.2	6.97	3.39	6.54	15.53	-	0	SU45KG0
250	45	15.83	7.99	2.68	17.40	25.39	110.4	6.97	3.39	6.54	15.53	-	0	SU45KG0
300	45	18.58	9.29	3.07	19.13	28.43	147.7	7.72	3.66	7.13	16.63	-	0	SU60KG0
350	45	20.47	10.24	3.07	20.35	30.59	198.4	7.72	3.66	7.13	16.63	-	0	SU60KG0
400	45	23.46	11.81	4.02	25.06	36.87	384.0	11.40	5.16	10.31	23.82	-	0	S20UKK0
U section								SC						
DN	PS	D	B	C	H1	H	lbs	H2	L1	L	M	ZB	P	Code
400	45	19.09	9.33	4.02	25.06	34.39	377.4	11.40	5.16	10.31	23.82	-	0	S20UKK0
450	45	21.30	9.33	4.49	26.04	35.37	417.1	11.40	5.16	10.31	23.82	-	0	S20UKK0
500	45	28.15	9.33	5.00	27.07	36.40	503.1	11.40	5.16	10.31	23.82	-	0	S20UKK0
600	45	33.07	9.33	6.06	33.58	42.91	906.1	15.08	7.30	14.61	31.97	-	0	S40UKL0

Technical data - Motorized GEMÜ actuators

Min. / max. ambient temperature

14 to +140° F

Special features

Standard manual override

Protection class to EN 60529

IP 65

Power supply

Rated voltage 12 V, 24 V DC / 12 V, 24 V AC

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

Voltage tolerance +10% / -15%

Weight

Actuator version 1006, 2006, 1015	2.0 lbs
Actuator version 2015	2.6 lbs
Actuator version 3035	5.3 lbs
Actuator version 2070	10.1 lbs
Actuator version 4100/4200	24.2 lbs

Operating times

Actuator version 1006	approx. 4 s
Actuator version 1015, 2015	approx. 11 s
Actuator version 2070, 3035	approx. 15 s
Actuator version 4100	approx. 20 s
Actuator version 4200	approx. 16 s

Directives

EC Machinery Directive 98/37/EC, annex II B

EC EMC directive 89/336/EEC

Actuator version / Functional module

Actuator version (Code)	Functional module (Code)				
	A0	AE	00	0E	0P
1006, 1015, 2015, 3035	X	X	-	-	-
2070*, 4100*, 4200*	-	-	X	X	X

*Combinations voltage/functional module see datasheet GEMÜ 9468

Power and current consumption [W]

Actuator version (code)	12 V DC A0, AE	12 V AC A0, AE	24 V DC 00/0E/0P	24 V AC 00/0E/0P
1006	30	30	-	-
1015	30	-	-	-
2015	-	30	-	-
3035	-	-	30	-
2070	-	-	63	63
4100	-	-	105	140
4200	-	-	90	110

Travel

Nominal travel	90°
Maximum travel	93°
Setting range of limit switch - Actuator version	
1006, 2006, 1015, 2015, 3035	min. 2 - 12° / max. 76 - 91°
2070, 4100, 4200, 6400	min. 0 - 20° / max. 70 - 93°

Rating

100 % rated

Correlation actuator version / nominal size

DN	PS [psi]	Actuator version (code)						
		1006	1015	2015	3035	2070	4100	4200
25	232	X	-	-	-	-	-	-
40		-	X	X	-	-	-	-
50 - 65		-	-	-	X	-	-	-
80 - 100		-	-	-	-	X	-	-
125		-	-	-	-	-	X	-
150		-	-	-	-	-	-	X
200-250	45	-	-	-	-	-	-	X

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

Actuator version code 1006, 1015, 2015, 3035 - datasheet GEMÜ 9428

Actuator version code 2070, 4100, 4200, - datasheet GEMÜ 9468

Technical data - Motorized GEMÜ actuators

Correlation - Actuator version / voltage/frequency

Actuator version (code)	Voltage/Frequency (code)			
	12 V DC	12 V AC	24 V DC	24 V AC
	B1	B4	C1	C4
1006 (6 Nm)	X	X	X	X
1015 (15 Nm)	X	-	X	-
2015 (15 Nm)	-	X	-	X
3035 (35 Nm)	-	-	X	-
2070 (70 Nm)	-	-	X	X
4100 (100 Nm)	-	-	X	X
4200 (200 Nm)	-	-	X	X

Actuator materials

Operator version	1006, 1015	2015, 3035	2070	4100, 4200, 6400
Housing base	PP (30 % glass reinforced)	PP (30 % glass reinforced)	ABS	Aluminium
Housing cover	PPO (10 % glass reinforced)	PP (30 % glass reinforced)	ABS	Aluminium
Optical position indicator	PPR natural	PPR natural	PPR natural	PMMA

Order data - GEMÜ 488 with motorized GEMÜ actuator

14 Voltage / Frequency	Code
12 V DC	B1
12 V AC 50/60 Hz	B4
24 V DC	C1
24 V AC 50/60 Hz	C4

15 Functional module	Code
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 with potentiometer output, with relay, not reversible	0P*
Standard OPEN/CLOSE control	A0**
OPEN/CLOSE control with 2 additional potential-free limit switches	AE**

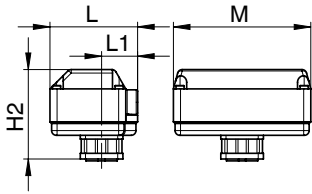
* overall height 1 ** overall height 2

16 Actuator version	Code
Torque 6 Nm, operating time 4 s; supply voltage B1,C1, B4,C4	1006
Torque 15 Nm, operating time 11 s; supply voltage C1	1015
Torque 15 Nm, operating time 11 s; supply voltage C4	2015
Torque 35 Nm, operating time 15 s; supply voltage C1	3035
Torque 70 Nm, operating time 15 s; supply voltage C1, C4	2070
Torque 100 Nm, operating time 20 s; supply voltage C1,C4	4100
Torque 200 Nm, operating time 16 s; supply voltage C1,C4	4200
Technical data for liquids +68 ... +176 °F	

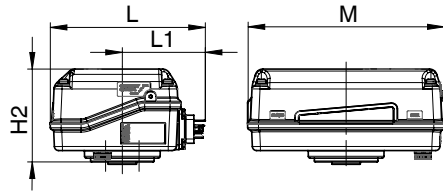
Order example	1	2	3	4	5	6	7	8	9	10	14	15	16	
Code	488		Order data butterfly valve (page 4)									C1	A0	2070

Dimensions - GEMÜ 488 butterfly valve with motorized GEMÜ actuators [inch]

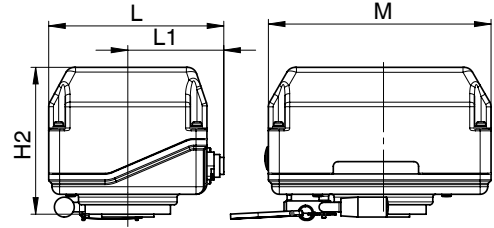
Code 1006, 2006, 1015, 2015



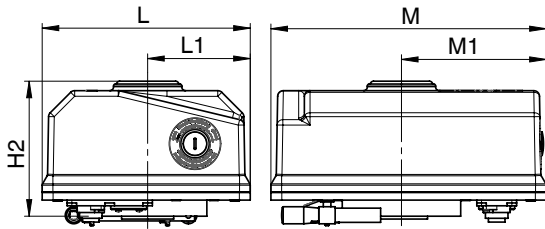
Code 3035



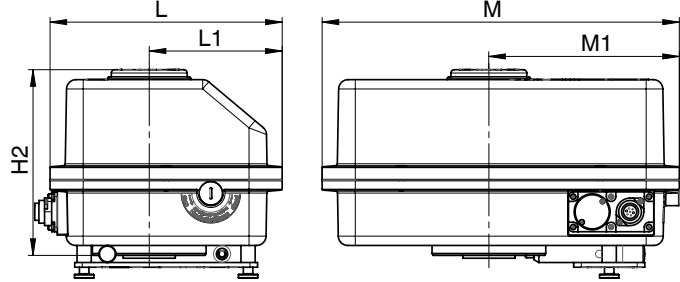
Code 2070



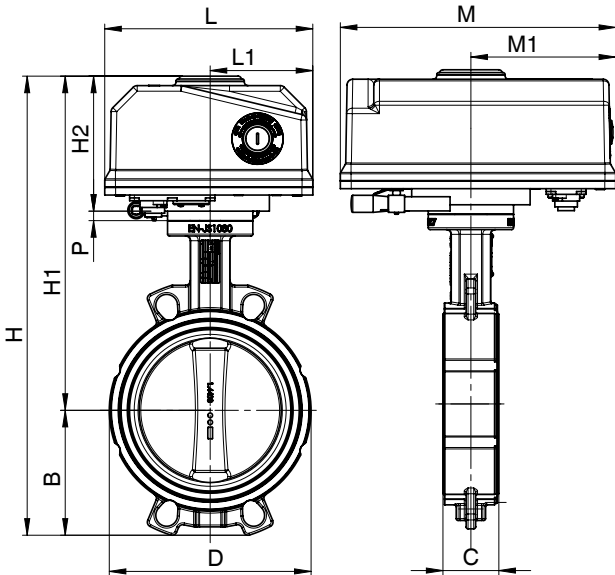
Code 4100, 4200



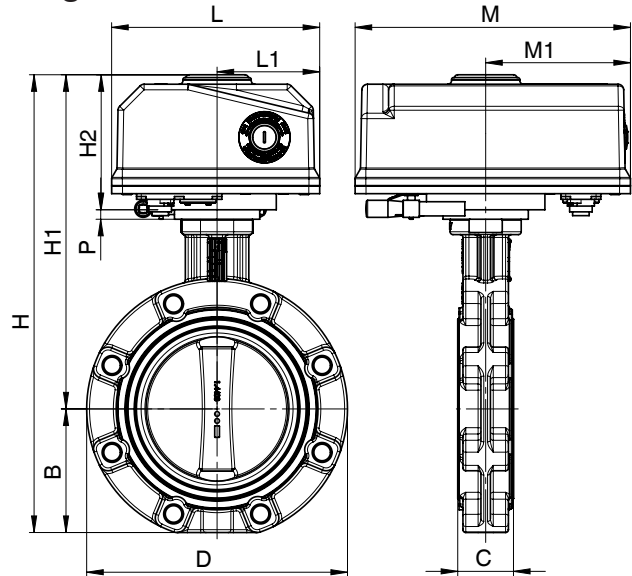
Code 6400



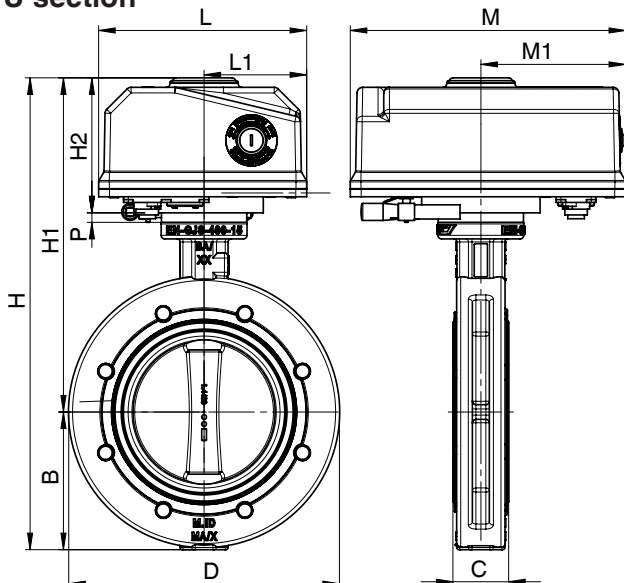
Wafer



Lug

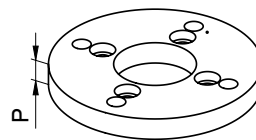


U section

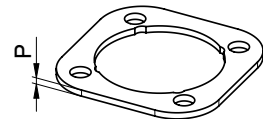


Accessories (ZB)

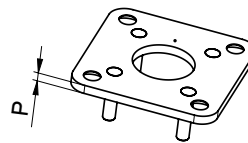
Adapter plate (ADP)



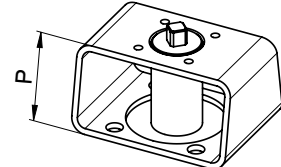
Spacer (DIS)



Adapter plate (ADP)



Mounting kit (MSC)



Dimensions - GEMÜ 488 butterfly valve with motorized GEMÜ actuators [inch]

Body configuration								Actuator								
Wafer								9428 / 9468								
DN	PS	C	D	B	H1	H	lbs	Actuator version	H1	H2	L	L1	M	M1	ZB	P
25	232	0.98	2.34	1.63	8.70	10.33	4.6	1006	8.70	4.76	4.25	2.09	5.71	-	-	0
40	232	1.30	2.97	2.12	9.49	11.61	5.9	1015/2015	9.49	4.76	4.25	2.09	5.71	-	-	0
50	232	1.69	3.58	2.37	9.63	12.00	11.9	3035	9.63	4.90	6.77	3.78	8.19	-	-	0
65	232	1.81	4.37	2.66	10.41	13.07	13.2	3035	10.41	4.90	6.77	3.78	8.19	-	-	0
80	232	1.81	5.12	3.56	11.81	15.37	19.0	2070	11.81	6.10	6.57	3.29	9.25	-	-	0
100	232	2.05	5.91	4.14	12.64	16.78	22.3	2070	12.64	6.10	6.57	3.29	9.25	-	-	0
125	232	2.20	7.05	4.71	15.24	19.94	40.8	4100	15.24	7.87	8.15	4.02	10.93	5.77	-	0
150	232	2.20	8.27	5.18	15.75	20.93	43.2	4200	15.75	7.87	8.15	4.02	10.93	5.77	-	0
200	45	2.36	10.39	6.30	17.32	23.62	52.2	4200	17.32	7.87	8.15	4.02	10.93	5.77	-	0
250	45	2.68	12.36	7.69	18.31	26.00	73.2	4200	18.31	7.87	8.15	4.02	10.93	5.77	-	0

Lug								9428 / 9468								
DN	PS	C	D	B	H1	H	lbs	Actuator version	H1	H2	L	L1	M	M1	ZB	P
50	232	1.69	5.94	2.36	9.63	11.99	13.4	3035	9.63	4.90	6.77	3.78	8.19	-	-	0
65	232	1.81	6.73	2.64	10.41	13.05	14.1	3035	10.41	4.90	6.77	3.78	8.19	-	-	0
80	232	1.81	7.40	3.50	11.81	15.31	25.6	2070	11.81	6.10	6.57	3.29	9.25	-	-	0
100	232	2.05	8.60	4.06	12.64	16.69	26.7	2070	12.64	6.10	6.57	3.29	9.25	-	-	0
125	232	2.20	9.84	4.69	15.24	19.92	48.5	4100	15.24	7.87	8.15	4.02	10.93	5.77	-	0
150	232	2.20	10.83	5.14	15.75	20.89	55.1	4200	15.75	7.87	8.15	4.02	10.93	5.77	-	0
200	45	2.36	12.99	6.71	17.32	24.04	70.5	4200	17.32	7.87	8.15	4.02	10.93	5.77	-	0
250	45	2.68	15.83	7.99	18.31	26.30	94.8	4200	18.31	7.87	8.15	4.02	10.93	5.77	-	0

U section								GEMÜ 9428 / 9468								
DN	PS	C	D	B	H1	H	lbs	Actuator version	H1	H2	L	L1	M	M1	ZB	P
150	232	2.20	10.59	5.75	15.75	21.50	61.7	4200	15.75	7.87	8.15	4.02	10.93	5.77	-	0
200	45	2.36	13.5	6.89	17.32	24.21	70.5	4200	17.32	7.87	8.15	4.02	10.93	5.77	-	0
250	45	2.68	15.91	8.07	18.31	26.38	101.4	4200	18.31	7.87	8.15	4.02	10.93	5.77	-	0

Technical data - Motorized J+J actuators

Min. / max. ambient temperature

-4 to +158° F

Protection class to EN 60529

IP 67

Special features

Standard manual override

Weight

Actuator version J3C20	4.0 lbs
Actuator version J3C35	4.2 lbs
Actuator version J3C55	5.1 lbs
Actuator version J3C85	6.6 lbs
Actuator version J3C14 / J3C30	11.5 lbs

Power supply

Rated voltage

Version J3C14/30 24 V AC/DC (0/+5 %)
 Version J3C20/35/55/85 24 - 240 V AC/DC (± 0%)
 All versions 85 - 240 V AC/DC (0/+ 5%)

Rated frequency at AC rated voltage 50/60 Hz

Rating 75 %

Operating times (± 10%)

Actuator version	24- 240 V AC/DC Code U5	24 V, 85-240 V AC/DC Code C5, S5
J3C20	10 s	-
J3C35	10 s	-
J3C55	14 s	-
J3C85	30 s	-
J3C14	-	34 s
J3C30	-	58 s

Correlation actuator version / nominal size

DN	PS [psi]	Actuator version (Code)					
		J3C20	J3C35	J3C55	J3C85	J3C14	J3C30
25 - 50	232	X	-	-	-	-	-
65		-	X	-	-	-	-
80		-	-	X	-	-	-
100 - 125		-	-	-	X	-	-
150		-	-	-	-	X	-
200		-	-	-	-	-	X
200 - 350	45	-	-	-	-	-	X

Technical data for EPDM, +68 °F, medium water

Order data - GEMÜ 488 with motorized J+J actuator

13 Voltage/frequency	Code
24 V AC/DC (-0/+5 %) Version 140, 300	C5
24 - 240 V AC/DC (-0/+0 %) Version 20, 35, 55, 85	U5
85 - 240 V AC/DC (-0/+5 %) Version 140, 300	S5

15 Functional module	Code
OPEN/CLOSE control with 2 additional potential-free limit switches	AE
Control module; for external set value 4-20 mA	E2
Control module; for external set value 0-10 V DC	E1
With BSR accupack - NC	AE1
With BSR accupack - NO	AE2

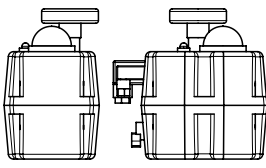
16 Actuator version	Code
Torque 178 in-lbs	J3C20
Torque 310 in-lbs	J3C35
Torque 487 in-lbs	J3C55
Torque 752 in-lbs	J3C85
Torque 1240 in-lbs	J3C14
Torque 2656 in-lbs	J3C30

Technical data for liquids +68 ... +176 °F

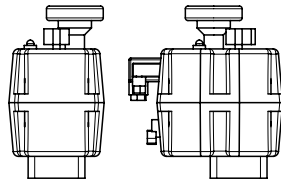
Order example	1	2	3	4	5	6	7	8	9	10	14	15	16	
Code	488		Order data butterfly valve (page 4)									R5	AE	J3C85

Dimensions - GEMÜ 488 butterfly valve with motorized J+J actuators [inch]

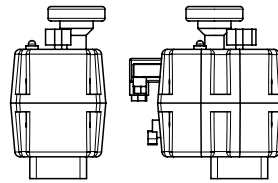
Code J3C20, J3C35



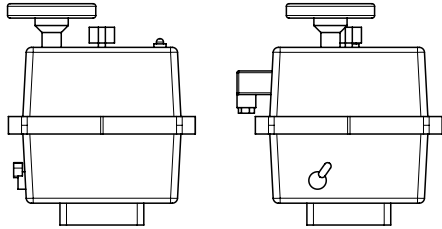
Code J3C55



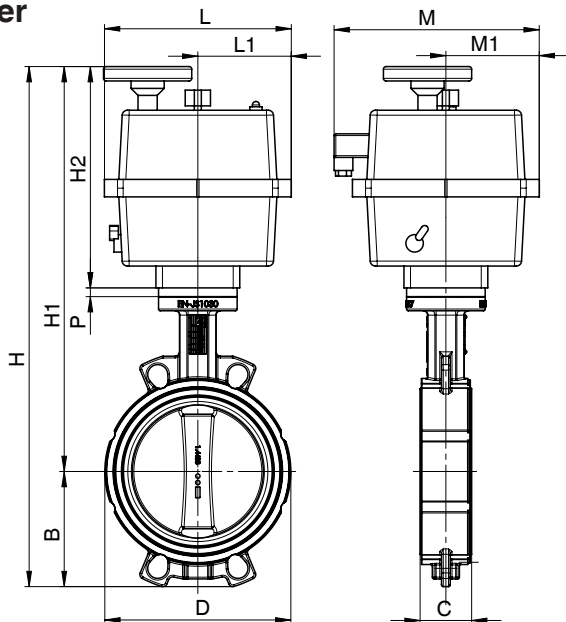
Code J3C85



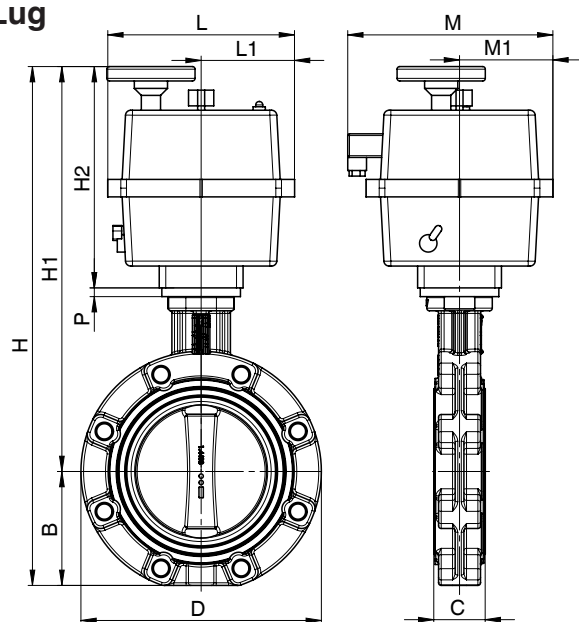
Code J3C14, J3C30



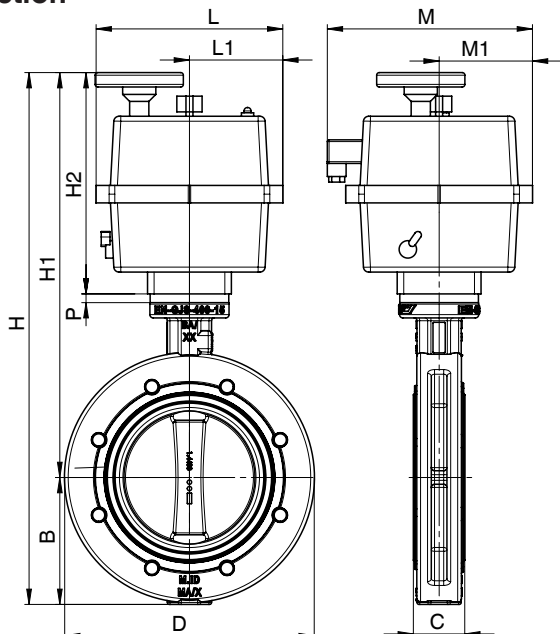
Wafer



Lug



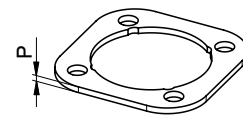
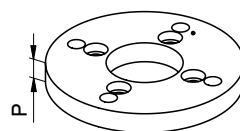
U section



Accessories (ZB)

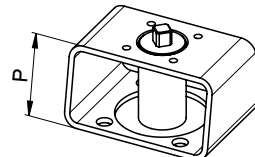
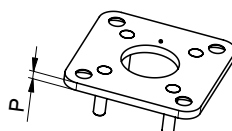
Adapter plate (ADP)

Spacer (DIS)



Adapter plate (ADP)

Mounting kit (MSC)



Dimensions - GEMÜ 488 butterfly valve with motorized J+J actuators [inch]

Body configuration								Actuator								
Wafer								J+J								
DN	PS	C	D	B	H1	H	lbs	Actuator version	H1	H2	L	L1	M	M1	ZB	P
25	232	0.98	2.34	1.63	10.67	12.3	6.6	J3C20	10.67	6.73	4.33	2.17	6.97	2.01	-	0
40	232	1.30	2.97	2.12	11.46	13.57	7.3	J3C20	11.46	6.73	4.33	2.17	6.97	2.01	-	0
50	232	1.69	3.58	2.37	11.46	13.83	10.6	J3C20	11.46	6.73	4.33	2.17	6.97	2.01	-	0
65	232	1.81	4.37	2.66	12.24	14.91	12.1	J3C35	12.24	6.73	4.33	2.17	6.97	2.01	-	0
80	232	1.81	5.12	3.56	13.43	16.98	13.9	J3C55	13.43	7.72	4.33	2.17	6.97	2.01	-	0
100	232	2.05	5.91	4.14	14.25	18.39	18.7	J3C85	14.25	7.72	4.33	2.17	6.97	2.01	-	0
125	232	2.20	7.05	4.71	15.08	19.79	23.1	J3C85	15.08	7.72	4.33	2.17	6.97	2.01	DIS	0.24
150	232	2.20	8.27	5.18	17.87	23.05	30.4	J3C14	17.87	10.00	8.43	4.21	9.25	4.21	-	0
200	232	2.36	10.39	6.30	19.45	25.75	39.5	J3C30	19.45	10.00	8.43	4.21	9.25	4.21	-	0
200	45	2.36	10.39	6.30	19.45	25.75	39.5	J3C30	19.45	10.00	8.43	4.21	9.25	4.21	-	0
250	45	2.68	12.36	7.69	20.43	28.12	60.4	J3C30	20.43	10.00	8.43	4.21	9.25	4.21	-	0
300	45	3.07	14.33	9.30	21.42	30.72	79.4	J3C30	21.42	10.00	8.43	4.21	9.25	4.21	-	0
350	45	3.07	17.32	10.47	23.03	33.5	117.3	J3C30	22.64	10.00	8.43	4.21	9.25	4.21	ADP	0.39

Lug								J+J								
DN	PS	C	D	B	H1	H	lbs	Actuator version	H1	H2	L	L1	M	M1	ZB	P
50	232	1.69	5.94	2.36	11.46	13.82	12.1	J3C20	11.46	6.73	4.33	2.17	6.97	2.01	-	0
65	232	1.81	6.73	2.64	12.24	14.88	13.0	J3C35	12.24	6.73	4.33	2.17	6.97	2.01	-	0
80	232	1.81	7.40	3.50	13.43	16.93	20.5	J3C55	13.43	7.72	4.33	2.17	6.97	2.01	-	0
100	232	2.05	8.60	4.06	14.25	18.31	23.1	J3C85	14.25	7.72	4.33	2.17	6.97	2.01	-	0
125	232	2.2	9.84	4.69	15.08	19.76	30.9	J3C85	15.08	7.72	4.33	2.17	6.97	2.01	DIS	0.24
150	232	2.2	10.83	5.14	17.87	23.01	42.3	J3C14	17.87	10.00	8.43	4.21	9.25	4.21	-	0
200	232	2.36	12.99	6.71	19.45	26.16	57.8	J3C30	19.45	10.00	8.43	4.21	9.25	4.21	-	0
200	45	2.36	12.99	6.71	19.45	26.16	57.8	J3C30	19.45	10.00	8.43	4.21	9.25	4.21	-	0
250	45	2.68	15.83	7.99	20.43	28.43	82.0	J3C30	20.43	10.00	8.43	4.21	9.25	4.21	-	0
300	45	3.07	18.58	9.29	21.42	30.71	106.3	J3C30	21.42	10.00	8.43	4.21	9.25	4.21	-	0
350	45	3.07	20.47	10.24	23.03	33.27	157.0	J3C30	22.64	10.00	8.43	4.21	9.25	4.21	ADP	0.39

U section								J+J								
DN	PS	C	D	B	H1	H	lbs	Actuator version	H1	H2	L	L1	M	M1	ZB	P
150	232	2.20	10.59	5.75	17.87	23.62	48.9	J3C14	17.87	10.00	8.43	4.21	9.25	4.21	-	0
200	232	2.36	13.50	6.89	19.45	26.34	57.8	J3C30	19.45	10.00	8.43	4.21	9.25	4.21	-	0
200	45	2.36	13.50	6.89	19.45	26.34	57.8	J3C30	19.45	10.00	8.43	4.21	9.25	4.21	-	0
250	45	2.68	15.91	8.07	20.43	28.50	88.6	J3C30	20.43	10.00	8.43	4.21	9.25	4.21	-	0
300	45	3.07	19.06	9.33	21.42	30.75	132.7	J3C30	21.42	10.00	8.43	4.21	9.25	4.21	-	0
350	45	3.07	10.31	10.31	23.03	33.35	139.3	J3C30	22.64	10.00	8.43	4.21	9.25	4.21	ADP	0.39

Certificate	Standard	Item number
2.1 Certificate of compliance with the order	EN 10204	88039442
2.2 Functionality	EN10204/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

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