

Butterfly Valve, Metal

Construction

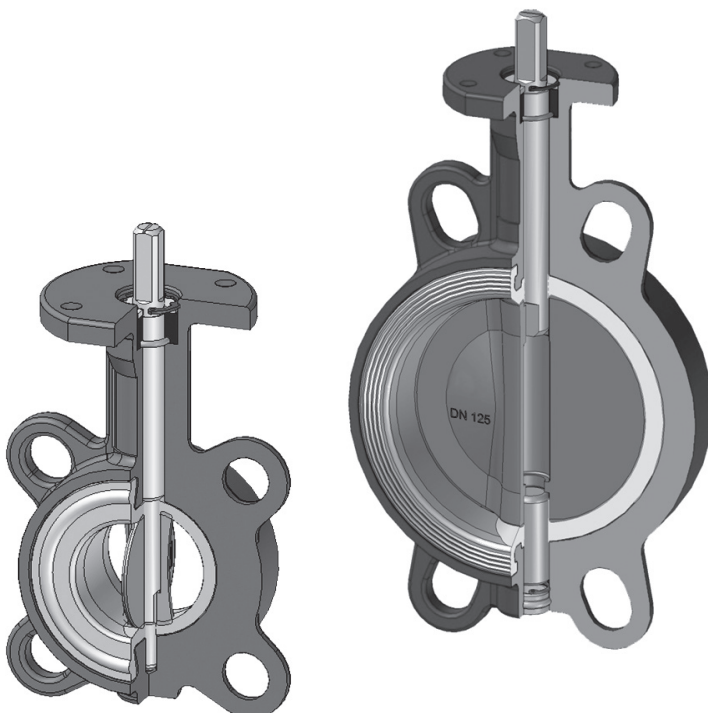
GEMÜ type D480 is a butterfly valve with various versions. It is available in nominal sizes DN 25 – 1600, various body versions (Wafer, Lug and U section) and in a large number of seal and body materials. It can be supplied with various operators: hand lever or gearbox, pneumatic actuator or motorized 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, API 609 category A
- Top flange acc. to EN ISO 5211
- Max. operating pressure 150/232/363 psi
- Connection standards: PN 10, PN 16, ASME B16.47 Series A Class 150, ASME B16.5 Class 150
- Valve acc. to 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 2014/34/EU for fluids of group 1 and 2



Sectional drawing



GEMÜ D480



GEMÜ D487



GEMÜ D481



GEMÜ D488

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

-76 to 410 °F (dependent on seat (liner) material)

Other temperatures on request

No water hammer permissible

Ambient conditions

Max. permissible ambient temperature -4 to 158 °F

Cv values [gpm]

DN	Opening angle							
	25°	30°	40°	50°	60°	70°	80°	90°
25/32	-	2	7	14	22	34	43	53
40	3	5	10	17	26	44	70	80.0
50	6	9	16	27	53	70	105	131
65	10	15	26	42	82	105	161	201
80	15	22	39	63	129	161	242	302
100	28	42	74	120	234	304	480	555
125	61	89	156	252	491	632	1006	1135
150	171	146	252	413	807	1041	1661	1966
200	171	252	421	705	1310	1767	2749	3276
250	262	393	679	1158	2164	3732	4329	5043
300	383	556	1006	1615	3124	4083	6101	7564
350	503	755	1310	2218	4136	5142	8167	10085
400	655	907	1714	2673	5142	6552	10893	12607
450	907	1260	2317	3732	7160	9278	14859	17651
500	1135	1615	2825	4639	8775	11583	17649	22189
600	1513	2217	3832	9664	11852	16643	24219	28240
700	1579	2328	4516	6997	12402	20007	29601	42120
750	1825	2486	5089	8365	13396	21528	32058	47385
800	1872	2574	5265	9594	14625	23400	33930	51480
900	2106	2691	7137	12168	20475	33930	49140	67860
1000	2925	4446	10179	15795	26910	43875	69264	94185
1200	6318	9126	14625	26442	41535	71955	95940	129285
1400	6646	10025	17849	33871	53451	100269	170586	199485
1600	7553	12814	24065	44284	69559	129080	232186	257809

Technical data

Torques dependent on the material combination [in/lbs]

Material (code)		Operating pressure	Nominal size											
Disc	Seat (liner)		PS	DN										
		25/32		40	50	65	80	100	125	150	200	250	300	350
A, B, D, E, G, H, K	E, N	45 psi	44	44	44	133	150	194	346	425	797	1115	1424	2168
		90 psi	53	53	62	142	178	257	407	664	1062	1859	2389	2656
		150 psi	79	79	115	178	204	372	637	797	1240	2389	3451	4426
		232 psi	133	133	150	221	248	443	752	973	1903	3097	4956	8408
	A, C, D, F, G, H, J, K, O, P, R, S, V, W, Z	45 psi	53	53	53	160	178	230	416	514	956	1337	1708	2602
		90 psi	62	62	71	168	212	310	487	797	1274	2231	2868	3186
		150 psi	97	97	142	212	248	443	761	956	1487	2868	4142	5310
		232 psi	160	160	178	265	301	532	902	1169	2284	3718	5947	10090
C, F, N, P, R	E, N	45 psi	53	53	53	160	178	230	416	514	956	1337	1708	2602
		90 psi	62	62	71	168	212	310	487	797	1274	2231	2868	3186
		150 psi	97	97	142	212	248	443	761	956	1487	2868	4142	5310
		232 psi	160	160	178	265	301	532	902	1169	2284	3718	5947	10090
	A, C, D, F, G, H, J, K, O, P, R, S, V, W, Z	45 psi	62	62	62	194	212	283	496	611	1151	1602	2053	3125
		90 psi	79	79	89	204	257	372	584	956	1531	2672	3443	3823
		150 psi	115	115	168	257	292	532	920	1151	1788	3443	4974	6372
		232 psi	194	194	212	319	354	637	1080	1398	2743	4460	7134	12108

Material (code)		Operating pressure	Nominal size											
Disc	Seat (liner)		PS	DN										
		400		450	500	600	700	750	800	900	1000	1200	1400	1600
A, B, D, E, G, H, K	E, N	45 psi	4602	5222	7435	8851	14604	15931	20357	41598	57530	75232	123911	194717
		90 psi	5310	9913	12302	19471	29208	30978	40714	60185	75232	106208	150463	230119
		150 psi	6196	12834	15931	30535	44254	48679	57530	75232	101784	137186	172590	265523
		232 psi	8851	17258	22127	33632	51865	53105	84082	101784	132761	194717	-	-
	A, C, D, F, G, H, J, K, O, P, R, S, V, W, Z	45 psi	5522	6266	8922	10621	17525	19117	24428	49919	69036	90277	148692	233659
		90 psi	6372	11896	14764	23366	35048	37174	48856	72222	90277	127451	180556	276143
		150 psi	7435	15401	19117	36642	53105	53105	69036	90277	122141	164624	207108	318626
		232 psi	10621	20711	26552	40360	62238	63725	100898	122141	159313	233659	-	-
C, F, N, P, R	E, N	45 psi	5522	6266	8922	10621	17525	19117	24428	49919	69036	90277	148692	233659
		90 psi	6372	11896	14764	23366	35048	37174	48856	72222	90277	127451	180556	276143
		150 psi	7435	15401	19117	36642	53105	53105	69036	90277	122141	164624	207108	318626
		232 psi	10621	20711	26552	40360	62238	63725	100898	122141	159313	233659	-	-
	A, C, D, F, G, H, J, K, O, P, R, S, V, W, Z	45 psi	6629	7523	10710	12745	21029	22942	29314	59902	82843	108334	178432	280392
		90 psi	7648	14276	17719	28039	42059	44608	58627	86666	108334	152941	216666	331372
		150 psi	8922	18480	22942	43970	63725	63725	82843	108334	146568	197549	248528	382352
		232 psi	12745	24853	31862	48431	74682	76470	121079	146568	191176	280392	-	-

Torques dependent on the material combination [in/lbs]

Torque values valid for optimal operating conditions, 68 °F, lubricious liquids

Order data

1 Type	Code
Butterfly valve with bare shaft	D480
Butterfly valve with pneumatic actuator	D481
Butterfly valve with manual operator	D487
Butterfly valve with motorized actuator	D488

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
DN 700 NPS 28"	700
DN 750 NPS 30"	750
DN 800 NPS 32"	800
DN 900 NPS 36"	900
DN 1000 NPS 40"	1T0
DN 1200 NPS 48"	1T2
DN 1400 NPS 56"	1T4
DN 1600 NPS 64"	1T6

3 Body configuration	Code
Wafer (DN 25 - 1200)	W
Lug (DN 25 - 1000)	L
U section (DN 200 - 1600)	U

4 Operating pressure				
DN	PS 45 psi	PS 90 psi	PS 150 psi	PS 232 psi
	Code			
25	0	1	2	3
32	0	1	2	3
40	0	1	2	3
50	0	1	2	3
65	0	1	2	3
80	0	1	2	3
100	0	1	2	3
125	0	1	2	3
150	0	1	2	3

4 Operating pressure				
DN	PS 45 psi	PS 90 psi	PS 150 psi	PS 232 psi
	Code			
200	0	1	2	3
250	0	1	2	3
300	0	1	2	3
350	0	1	2	3
400	0	1	2	3
450	0	1	2	3
500	0	1	2	3
600	0	1	2	3
700	0	1	2	3
750	0	1	2	3
800	0	1	2	3
900	0	1	2	3
1000	0	1	2	3
1200	0	1	2	3
1400	0	1	2	
1600	0	1	2	

Standard PS 363 on request

5 Connection							
DN	Wafer			Lug		U section	
	PN 6	PN 10	PN 16	PN 10	PN 16	PN 10	PN 16
	Code			Code		Code	
25	3	3	3	3	3		
32	3	3	3	3	3		
40	3	3	3	3	3		
50		3	3	3	3		
65	3	3	3	3	3		
80	3	3	3	3	3		
100	3	3	3	3	3		
125	3	3	3	3	3		
150	3	3	3	3	3	2	
200	3	3	3	2	3	2	3
250	3	3	3	2	3	2	3
300	3	3	3	2	3	2	3
350		3	3	2	3	2	3
400		3	3	2	3	2	3
450		2	3	2	3	2	3
500		2	3	2	3	2	3
600		2	3	2	3	2	3
700		2	3	2	3	2	3
750		2	3	2	3	2	3
800		2	3	2	3	2	3
900		2	3	2	3	2	3
1000		2	3	2	3	2	3
1200		2	3			2	3
1400						2	3
1600						2	3

Standard

For further connections see availability on page 12

Order data

6 Body material	Code
EN-GJS-400-15 (GGG 40), Epoxy coated, DN 25 - 600	2
EN-GJL-250 (GG 25), Epoxy coated, DN 700 - 1600	1
EN-GJS-400-18-LT (GGG 40.3), Epoxy coated, DN 25 - 300, body configuration Lug	3
ASTM A351, CF8M, cast stainless steel 1.4408	4
ASTM A216 WCB, cast steel	5
ASTM A352 LCC, cast steel	L
S 275 JR + Epox laminated carbon steel	9
EN-AC-46100 / EN-AC-47100, cast aluminium	0

7 Disc material	Code
CF8M, 1.4408	A
CF8M, 1.4408 polished	B
EN-GJS-400-15 (GGG 40), Halar coated	P
CF8M, 1.4408 Halar coated	C
1.4469 Super Duplex	D
EN-GJS-400-15 / GGG40, Epoxy coated (Resicoat)	E
EN-GJS-400-15 / GGG40, rubber lined EPDM (≤ DN 600)	F
EN-GJS-400-15 (GGG 40) (≤ DN 600) rubber lined Flucast AB/P	N
EN-GJS-400-15, GGG40 Rilsan® PA11 coated (≤ DN 600)	R
Cast bronze: DIN 1705 (Rg 10) (≤ DN 300), UNE EN 1982 (CuAl10FeNi5C) (≥ DN 350)	G
URANUS B6, 1.4539 (similar 904L)	K
2.4602, Alloy 22 (NiCr21Mo14W) (≤ DN 200)	H

8 Shaft material	Code
AISI 420 / 1.4021	1
AISI 316 / 1.4401 (max. operating pressure PS 150 psi)	2
1.4462 Duplex	4

9 Seat (liner) material	Code
EPDM	-4...230 °F E
EPDM KP / FDA (not vulcanizable)	14...266 °F Z
EPDM (ACS, WRAS, DVGW water approval)	-4...203 °F W
NBR LT	-4... 194 °F 2
NBR	14... 194 °F N
NBR (DVGW Gas)	14... 194 °F J
HNBR	14 ... 212 °F A
FKM	5 ... 410 °F V
FKM GF	5 ... 410 °F D
FKM - BIO	23 ... 392 °F O
AB/P - SBR (abrasion-resistant)	14 ... 158 °F F

9 Seat (liner) material	Code
AB/E - EPDM (abrasion-resistant)	14 ... 194 °F G
AB/N - NBR (abrasion-resistant)	32 ... 194 °F K
AB/T - EPDM-HT (abrasion-resistant)	23 ... 266 °F B
Silicone (steam) (red. operating press. max. 150 psi)	-76 ... 284 °F R
Silicone	-76 ... 392 °F S
Hypalon	-13 ... 248 °F H
Epichlorhydrine	-40 ... 257 °F C
Neoprene	-13 ... 176 °F P

10 Liner fixing	Code
Loose liner (standard)	L
Bonded liner (to DN 400)	B
Vulcanized liner (to DN 1000)	V

11 Control function	Code
Butterfly valve with bare shaft	type D480 F
Butterfly valve with manual operator	type D487 0
Normally closed (NC)	type D481 1
Normally open (NO)	type D481 2
Double acting (DA)	type D481 3
Normally closed (NC), actuator mounted across the piping	type D481 Q
Double acting (DA) actuator mounted across the piping	type D481 T
Normally open (NO), actuator mounted across the piping	type D481 U

12 Special function	Code
ACS	A*
DVGW water	D*
WRAS	W*

* only seat (liner) material Code W

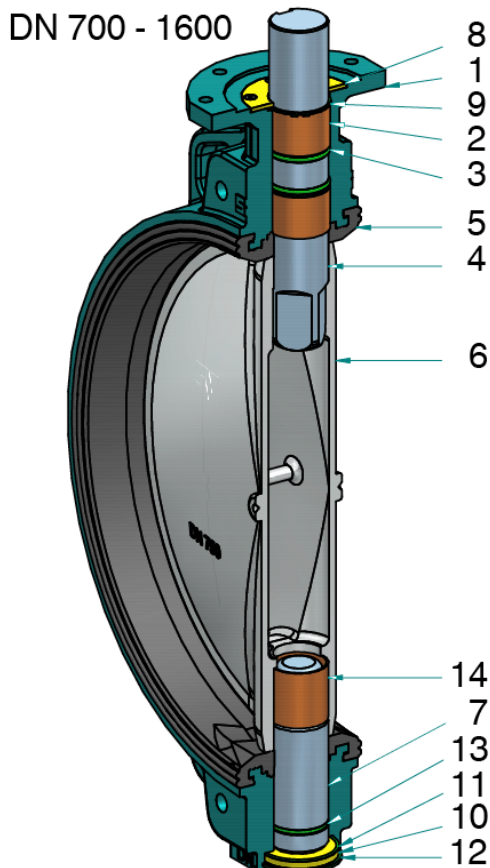
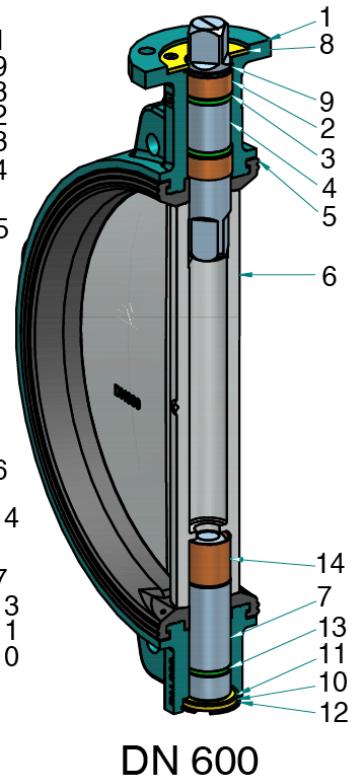
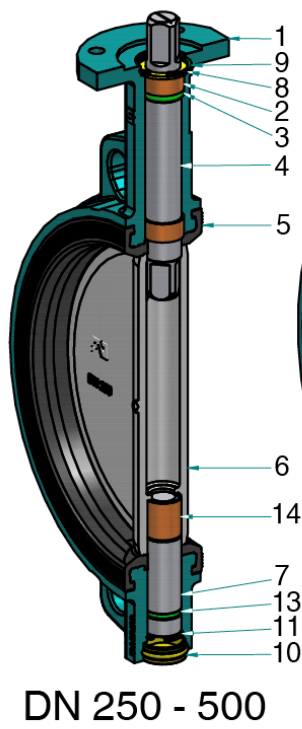
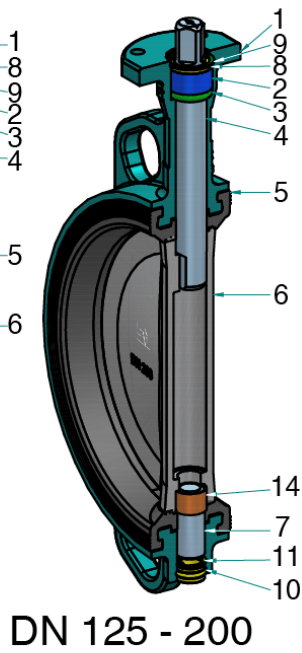
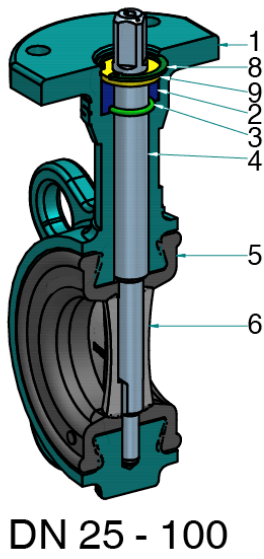
13 Operator size	Code
D480 (column 12)	see page 13
D481 (column 12)	see page 17
D487 (column 12)	see page 14/15
D488 (column 13/14/15)	see page 22

Order example	1	2	3	4	5	6	7	8	9	10	11	12	13
Code	D480	50	W	3	3	2	A	1	E	L	F	-	07 D11

Other designs and materials on request

Parts list

* not body material- cast aluminium (code 0)

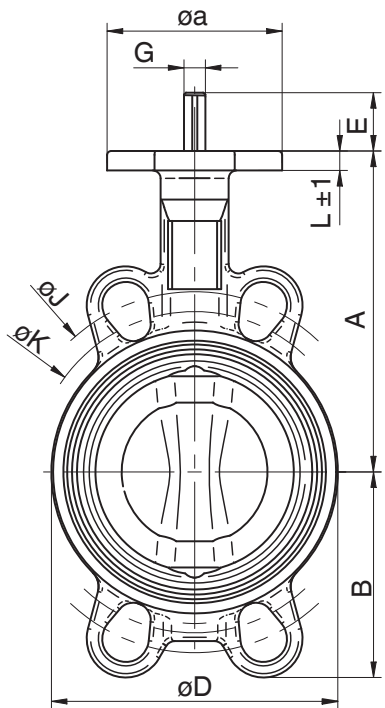


Pos.	Bearing
1	Body
2	Bearing
3	O-ring
4	Shaft
5	Seat (liner)
6	Disc
7	Lower axis
8	Circlip
9	Washer
10	Plug
11	Circlip
12	O-ring
13	O-ring
14	Bearing

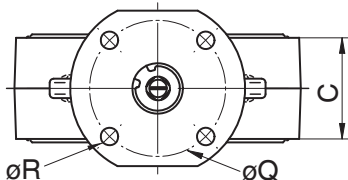
Body dimensions [inch]

Body configuration - Wafer (code W)

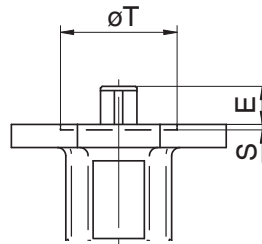
DN	A	B	C	D	E	G	øa	H	J	K	L	ISO	P	Q	R	S	T	Weight [lbs]
25	4.04	2.37	1.30	2.68	0.71	□0.43	3.54	0.59	3.94	3.35	0.31	F07	0.51	2.76	4x0.35			3.3
32	4.04	2.37	1.30	2.68	0.71	□0.43	3.54	0.59	3.94	3.35	0.31	F07	0.51	2.76	4x0.35			3.3
40	4.33	2.20	1.30	2.99	0.71	□0.43	3.54	1.02	4.33	3.74	0.39	F07	0.51	2.76	4x0.35			3.7
50	4.72	2.42	1.69	3.94	0.71	□0.43	3.54	1.18	4.92	4.75	0.39	F07	0.51	2.76	4x0.35			5.3
65	5.31	2.72	1.81	4.25	0.71	□0.43	3.54	1.85	5.71	5.00	0.39	F07	0.51	2.76	4x0.35			5.9
80	5.55	3.70	1.81	4.88	0.71	□0.43	3.54	2.60	6.30	5.71	0.39	F07	0.51	2.76	4x0.35			7.0
100	6.50	4.17	2.05	5.79	0.71	□0.43	3.54	3.54	7.30	6.50	0.39	F07	0.51	2.76	4x0.35			8.8
125	7.09	4.98	2.20	7.09	0.71	□0.55	3.54	4.45	8.86	8.11	0.47	F07	0.67	2.76	4x0.35			13.7
150	7.60	5.24	2.20	8.11	0.71	□0.55	3.54	5.47	9.50	9.02	0.47	F07	0.67	2.76	4x0.35			16.1
200	8.86	6.69	2.36	10.12	0.94	□0.67	3.54	7.60	12.01	11.02	0.47	F07	0.80	2.76	4x0.35			24.5
250	11.12	8.27	2.68	12.76	1.26	□0.87	5.12	9.49	14.25	13.19	0.55	F10	1.03	4.02	4x0.47	0.12	70	44.5
300	12.13	9.45	3.07	14.80	1.26	□0.87	5.12	11.42	17.00	15.51	0.55	F10	1.03	4.02	4x0.47	0.12	70	65.3
350	13.33	10.35	3.07	16.93	1.26	□0.87	6.30	13.31	18.75	17.52	0.59	F10	1.10	4.02	4x0.47	0.12	70	77.6
400	14.96	12.13	4.02	19.09	1.10	□1.06	6.30	15.24	21.26	20.08	0.71	F12	1.30	4.92	4x0.55	0.16	85	122.4
450	14.98	13.39	4.49	21.10	1.46	□1.42	7.48	17.20			0.79	F14	1.89	5.51	4x0.71	0.16	100	175.7
500	17.03	14.96	5.00	23.35	1.46	□1.42	8.27	18.82			0.79	F14	1.89	5.51	4x0.71	0.16	100	251.3
600	19.45	17.32	6.06	27.17	1.85	□1.81	8.27	22.76			0.94	F16		6.50	4x0.87	0.20	130	376.8
700	23.23	19.29	6.50	32.68	4.17	Ø2.56	11.81	26.69			1.18	F25		10.00	8x0.71	0.20	200	557.5
750	23.23	20.87	7.48	32.91	4.17	Ø3.15	11.81	27.68			0.98	F25		10.00	8x0.71	0.20	200	650.1
800	24.8	22.24	7.48	35.51	4.17	Ø3.15	11.81	30.20			1.10	F25		10.00	8x0.71	0.20	200	763.9
900	27.36	24.02	7.99	39.76	4.33	Ø3.15	13.78	34.13			1.26	F25		10.00	8x0.71	0.20	200	1013.0
1000	30.31	26.57	8.50	43.94	4.33	Ø3.15	13.78	37.95			1.26	F25		10.00	8x0.71	0.20	200	1280.2
1200	34.45	32.20	10.00	52.52	4.33	Ø3.94	13.78	45.59			1.57	F30		11.73	8x0.91	0.20	230	2123.7



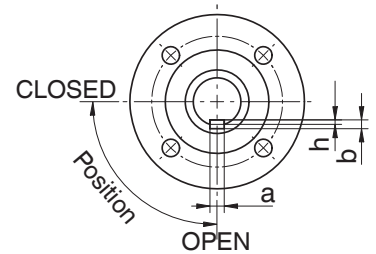
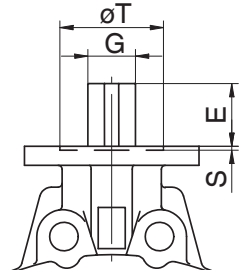
DN 32-450



Shaft connection
Square, diagonal
DN 25 - 600



Shaft connection
Round with single keyway
DN 700 - 1200

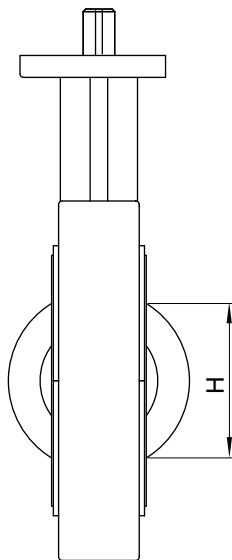
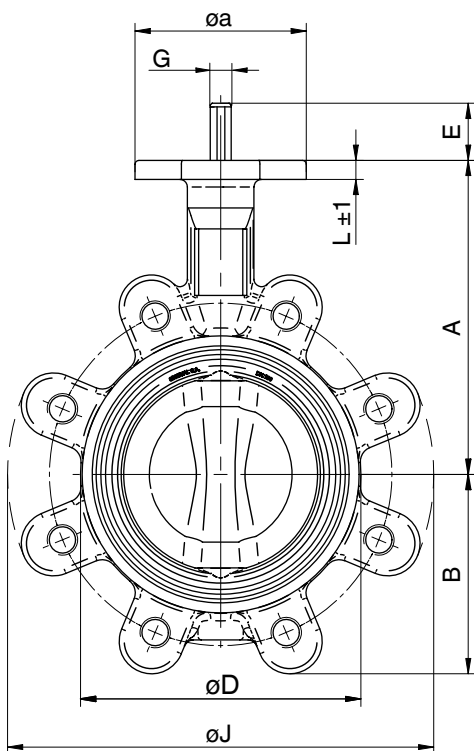


DN	a	b	h
700	0.71	0.43	0.28
750-1100	0.87	0.55	0.35
1200	1.10	0.63	0.39

Body dimensions [inch]

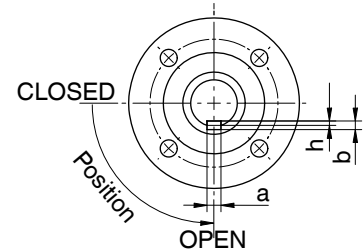
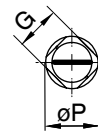
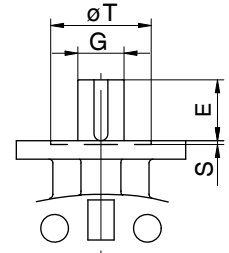
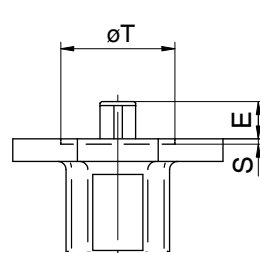
Body configuration - Lug (code L)

DN	A	B	C	D	E	G	øa	H	J	L	ISO	P	Q	R	S	T	Weight [lbs]
25	4.04	1.98	1.30	2.68	0.71	□0.43	3.54	0.59	5.12	0.31	F07	0.51	2.76	4x0.35			4.2
32	4.04	1.98	1.30	2.68	0.71	□0.43	3.54	0.59	5.12	0.31	F07	0.51	2.76	4x0.35			4.2
40	4.33	2.13	1.30	2.99	0.71	□0.43	3.54	1.02	5.51	0.39	F07	0.51	2.76	4x0.35			4.4
50	4.72	2.34	1.69	3.94	0.71	□0.43	3.54	1.18	6.14	0.39	F07	0.51	2.76	4x0.35			6.4
65	5.31	2.62	1.81	4.25	0.71	□0.43	3.54	1.85	6.89	0.39	F07	0.51	2.76	4x0.35			7.3
80	5.55	3.58	1.81	4.88	0.71	□0.43	3.54	2.60	7.64 7.28	0.39	F07	0.51	2.76	4x0.35			10.6 7.7
100	6.50	4.13	2.05	5.79	0.71	□0.43	3.54	3.54	8.82	0.39	F07	0.51	2.76	4x0.35			13.9
125	7.09	4.92	2.20	7.09	0.71	□0.55	3.54	4.45	10.51	0.47	F07	0.67	2.76	4x0.35			21.6
150	7.60	5.37	2.20	8.11	0.71	□0.55	3.54	5.47	11.50	0.47	F07	0.67	2.76	4x0.35			23.4
200	8.86	6.14 6.73	2.36	10.12	0.94	□0.67	3.54	7.60	13.15 13.86	0.47	F07	0.80	2.76	4x0.35			29.5 38.6
250	11.12	8.27	2.68	12.76	1.26	□0.87	5.12	9.49	16.10	0.55	F10	1.03	4.02	4x0.47	0.12	2.76	58.2
300	12.13	9.45	3.07	14.80	1.26	□0.87	5.12	11.42	18.90	0.55	F10	1.03	4.02	4x0.47	0.12	2.76	87.3
350	13.33	10.35	3.07	16.93	1.26	□0.87	6.30	13.31	20.55	0.71	F10	1.10	4.02	4x0.47	0.12	2.76	123.7
400	14.96	12.13	4.02	19.09	1.10	□1.06	6.30	15.24	23.43	0.67	F12	1.30	4.92	4x0.55	0.16	3.35	165.1
450	14.98	13.39	4.49	21.10	1.46	□1.42	7.48	17.20	24.92 25.12	0.79	F14	1.89	5.51	4x0.71	0.16	3.94	227.1 208.6
500	17.03	14.96	5.00	23.35	1.46	□1.42	8.27	18.82	28.23	0.79	F14	1.89	5.51	4x0.71	0.16	3.94	348.3
600	19.45	17.32	6.06	27.17	1.85	□1.81	8.27	22.76	32.80	0.94	F16		6.50	4x0.87	0.20	5.12	485.0
700	23.23	19.29	6.50	32.76	4.17	Ø2.56	11.81	26.69	35.59 36.38	1.18	F25		10.00	8x0.71	0.20	7.87	645.9 687.8
750	23.23	20.87	7.48	32.91	4.17	Ø3.15	11.81	27.68	37.95 38.54	0.98	F25		10.00	8x0.71	0.20	7.87	822.3 864.2
800	24.80	22.24	7.48	35.51	4.17	Ø3.15	11.81	30.20	40.16	1.10	F25		10.00	8x0.71	0.20	7.87	952.4
900	27.36	24.02	7.99	39.76	4.33	Ø3.15	13.78	34.13	44.09	1.26	F25		10.00	8x0.71	0.20	7.87	1188.3
1000	30.31	26.57	8.50	43.94	4.33	Ø3.15	13.78	37.95	49.06	1.26	F25		10.00	8x0.71	0.20	7.87	1521.2



Shaft connection
Square, diagonal
DN 25 - 600

Shaft connection
Round with single keyway
DN 700 - 1000

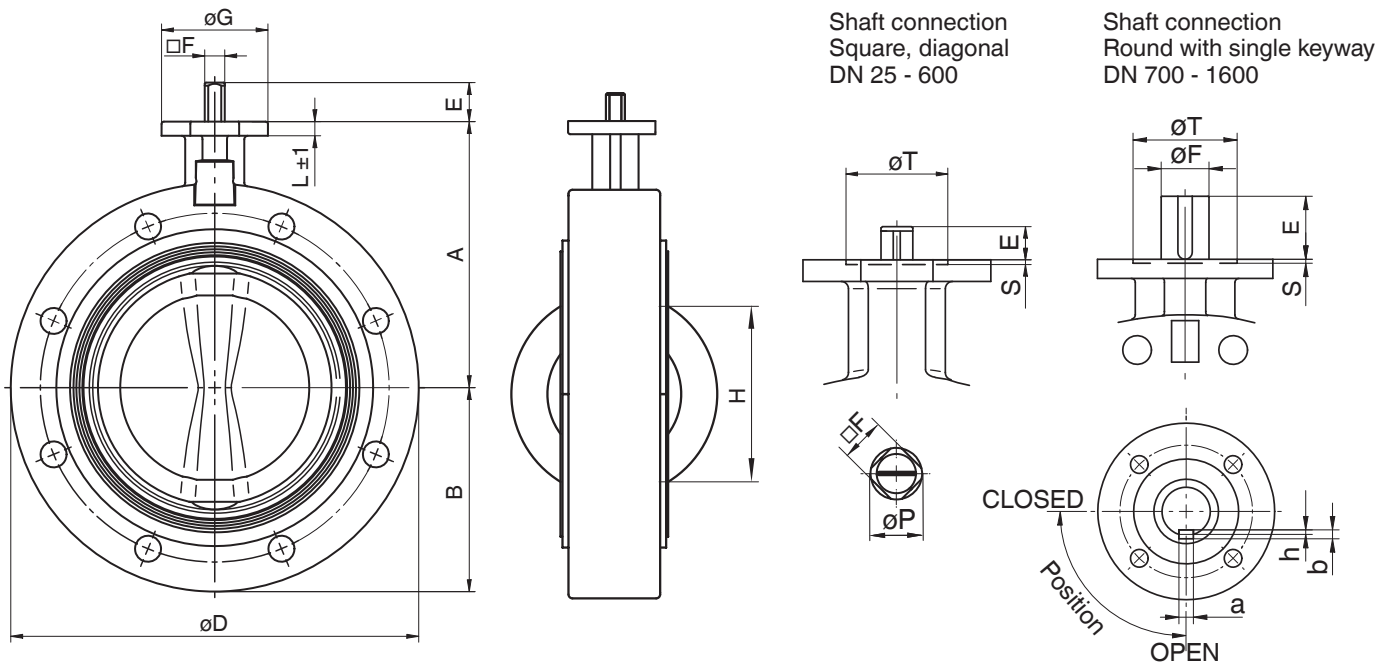


DN	a	b	h
700	0.71	0.43	0.28
750-1000	0.87	0.55	0.35

Body dimensions [inch]

Body configuration - U section (code U)

DN	A	B	C	D	E	G	øa	H	L	ISO	P	Q	R	S	T	Weight [lbs]
150	7.60	5.63	2.20	11.22	0.75	□0.55	3.54	5.47	0.47	F07	17.00	2.76	4x0.35			24.2
200	8.86	6.79	2.36	13.58	0.94	□0.67	3.54	7.60	0.47	F07	20.30	2.76	4x0.35			40.6
250	11.12	8.27	2.68	15.98	1.26	□0.87	5.12	9.49	0.55	F10	26.20	4.02	4x0.47	0.12	2.76	67.9
300	12.13	9.45	3.07	18.90	1.26	□0.87	5.12	11.42	0.55	F10	26.20	4.02	4x0.47	0.12	2.76	100.1
350	13.33	10.55	3.07	21.06	1.26	□0.87	6.30	13.31	0.59	F10	28.00	4.02	4x0.47	0.12	2.76	119.9
400	14.96	12.13	4.02	23.50	1.10	□1.06	6.30	15.24	0.71	F12	33.00	4.92	4x0.55	0.16	3.35	174.6
450	14.98	13.39	4.49	25.20	1.46	□1.42	7.48	17.20	0.79	F14	48.00	5.51	4x0.71	0.16	3.94	220.2
500	17.03	14.96	5.00	27.56	1.46	□1.42	8.27	18.82	0.79	F14	48.00	5.51	4x0.71	0.16	3.94	296.5
600	19.45	17.32	6.06	32.83	1.85	□1.81	8.27	22.76	0.94	F16		6.50	4x0.87	0.20	5.12	477.1
700	23.23	19.29	6.50	36.06	4.17	Ø2.56	11.81	26.69	1.18	F25		10.00	8x0.71	0.20	7.87	603.8
750	23.23	20.87	7.48	39.17	4.17	Ø3.15	11.81	27.68	0.98	F25		10.00	8x0.71	0.20	7.87	769.2
800	24.80	22.24	7.48	41.93	4.17	Ø3.15	11.81	30.20	1.10	F25		10.00	8x0.71	0.20	7.87	871.9
900	27.36	24.02	7.99	44.09	4.33	Ø3.15	13.78	34.13	1.26	F25		10.00	8x0.71	0.20	7.87	1127.7
1000	30.31	26.57	8.50	50.79	4.33	Ø3.15	13.78	37.95	1.26	F25		10.00	8x0.71	0.20	7.87	1553.6
1200	34.45	32.20	10.00	58.46	4.72	Ø3.94	13.78	45.59	1.57	F30		11.73	8x0.91	0.20	9.06	2411.9
1400	39.37	38.15	11.02	66.34	4.72	Ø4.72	13.78	52.72	1.38	F30		11.73	8x0.91	0.20	9.06	3650.9
1600	43.90	42.91	12.52	75.98	6.30	Ø5.12	18.70	60.35	1.57	F40		15.98	8x1.54	0.31	11.81	4700.3



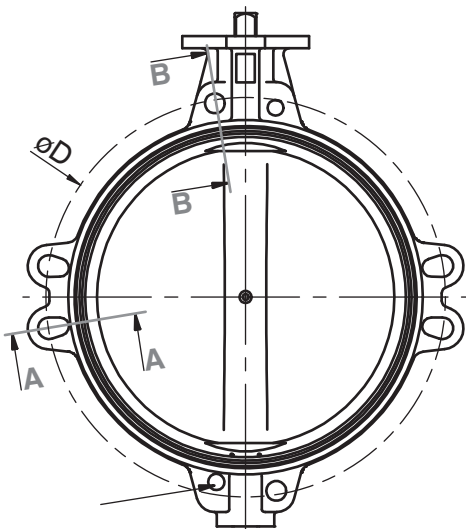
DN	a	b	h
700	0.71	0.43	0.28
750-1100	0.87	0.55	0.35
1200	1.10	0.63	0.39
1400, 1600	1.26	0.71	0.43

Connection dimensions [inch]

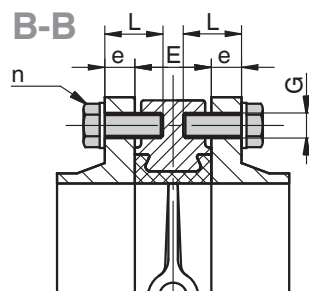
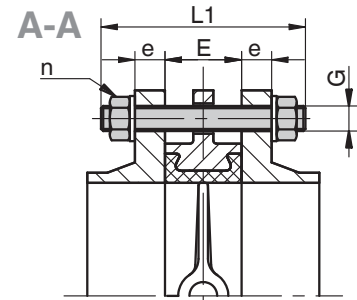
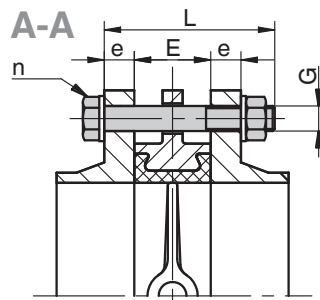
Wafer (Code W)

DN	E	PN 10						PN 16						ASME Class 150*					
		øD	e	L	L1	n	G	øD	e	L	L1	n	G	øD	e	L	L1	n	G
25	1.30	3.35	0.63	3.54	4.33	4	M12	3.35	0.63	3.54	4.33	4	M12	3.13	0.56	3.35	4.13	4	1/2"-13 UNC
32	1.30	3.94	0.63	3.54	4.33	4	M16	3.94	0.63	3.54	4.33	4	M16	3.50	0.69	3.54	4.33	4	1/2"-13 UNC
40	1.30	4.33	0.63	3.54	4.33	4	M16	4.33	0.63	3.54	4.33	4	M16	3.87	0.69	3.54	4.33	4	1/2"-13 UNC
50	1.69	4.92	0.71	3.94	4.72	4	M16	4.92	0.71	3.94	4.72	4	M16	4.75	0.75	3.94	4.72	4	5/8"-11 UNC
65	1.81	5.71	0.71	3.94	4.72	4	M16	5.71	0.71	3.94	4.72	4	M16	5.50	0.87	4.33	5.12	4	5/8"-11 UNC
80	1.81	6.30	0.79	4.33	5.12	8	M16	6.30	0.79	4.33	5.12	8	M16	6.00	0.94	4.33	5.12	4	5/8"-11 UNC
100	2.05	7.09	0.79	4.33	5.12	8	M16	7.09	0.79	4.33	5.12	8	M16	7.50	0.94	4.72	5.51	8	5/8"-11 UNC
125	2.20	8.27	0.87	4.72	5.51	8	M16	8.27	0.87	4.72	5.51	8	M16	8.50	0.94	5.12	5.91	8	3/4"-10 UNC
150	2.20	9.45	0.87	5.12	5.91	8	M20	9.45	0.87	5.12	5.91	8	M20	9.50	1.00	5.12	5.91	8	3/4"-10 UNC
200	2.36	11.61	0.94	5.12	6.30	8	M20	11.61	0.94	5.12	6.30	12	M20	11.75	1.13	5.51	6.3	8	3/4"-10 UNC
250	2.68	13.78	1.02	5.91	6.69	12	M20	13.98	1.02	5.91	6.69	12	M24	14.25	1.19	6.30	7.09	12	7/8"- 9 UNC
300	3.07	15.75	1.02	6.30	7.09	12	M20	16.14	1.10	6.30	7.09	12	M24	17.00	1.25	6.69	7.48	12	7/8"- 9 UNC
350	3.07	18.11	1.02	6.69	7.09	16	M20	18.50	1.18	6.69	7.48	16	M24	18.75	1.37	7.09	7.87	12	1"- 8 UNC
400	4.02	20.28	1.02	7.09	8.27	16	M24	20.67	1.26	7.87	8.66	16	M27	21.25	1.44	8.27	9.06	16	1"- 8 UNC
450	4.49	23.03	1.02	7.48	8.66	16	M24	23.03	1.26	8.27	9.45	16	M27	22.75	1.56	9.06	9.84	16	1 1/8"-7 UNC
				2.36	8	8													
500	5.00	24.41	1.10	8.27	9.06	20	M24	25.59	1.34	9.06	10.24	20	M30	25.00	1.81	9.84	11.02	20	1 1/8"-7 UNC
600	6.06	28.54	1.10	9.45	10.63	20	M24	30.31	1.42	10.24	11.42	20	M33	29.50	1.87	11.02	12.20	20	1 1/4"-7 UNC
700	6.50	33.07	1.18	10.24	11.02	20	M27	33.07	1.42	10.63	11.81	20	M33	34.00	2.07	12.20	13.39	24	1 1/4"-7 UNC
				3.15	8	3.35				8		4.33				8			
750	7.48	35.43	1.26	11.42	12.60	20	M30	35.43	1.50	11.81	13.58	20	M33	36.00	2.13	13.19	14.76	24	1 1/4"-7 UNC
				3.74	8	3.94				8		4.33				8			
800	7.48	37.40	1.26	11.42	12.60	20	M30	37.40	1.50	12.2	13.58	20	M36	38.50	2.24	13.39	14.96	24	1 1/2"-6 UNC
				4.33	8	3.94				8		3.74				8			
900	7.99	41.34	1.34	12.20	13.78	24	M30	41.34	1.57	12.99	14.76	24	M36	42.76	2.36	14.57	16.34	28	1 1/2"-6 UNC
				3.94	8	3.94				8		4.33				8			
1000	8.50	45.67	1.34	12.80	14.17	24	M33	46.06	1.65	13.58	15.35	24	M39	47.24	2.50	15.35	16.93	32	1 1/2"-6 UNC
				3.74	8	3.94				8		4.72				8			
1100	8.50	50.00	1.50	12.99	14.57	28	M33	50.00	1.89	14.17	15.75	28	M39	51.75	3.98	18.31	16.14	36	1 1/2"-6 UNC
				3.94	8	4.33				8		5.91				8			
1200	10.00	54.33	1.50	14.76	16.54	28	M36	54.72	1.89	15.55	17.52	28	M45	55.98	4.25	18.70	20.47	40	1 1/2"-6 UNC
				4.33	8	4.53				8		6.50				8			

* DN 25 - 600: ASME B16.5; DN 700 - 1200: ASME B16.47 Series A



Flange holes are specially machined
(finish as threaded holes)
DN 450, DN 700 - 1200

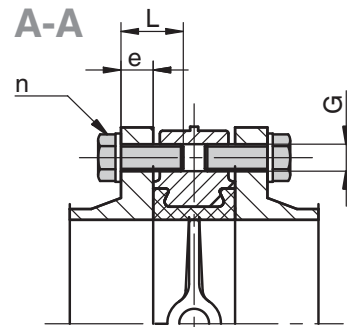
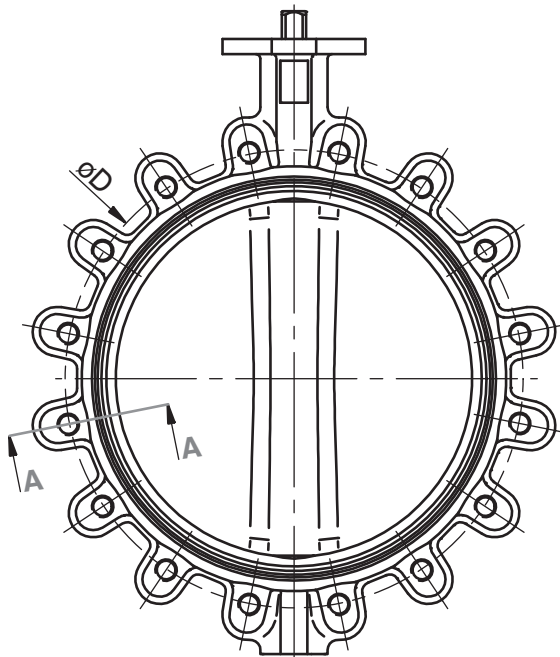


n = number of screws

Connection dimensions [inch]

Lug (Code L)

DN	E	PN 10					PN 16					ASME B16.5 Class 150				
		øD	e	L	n	G	øD	e	L	n	G	øD	e	L	n	G
25	1.30	3.35	0.63	1.18	8	M12	3.35	0.63	1.18	8	M12	3.13	0.56	1.18	8	1/2"-13 UNC
32	1.30	3.94	0.63	1.18	8	M16	3.94	0.63	1.18	8	M16	3.50	0.69	1.18	8	1/2"-13 UNC
40	1.30	4.33	0.63	1.18	8	M16	4.33	0.63	1.18	8	M16	3.87	0.69	1.18	8	1/2"-13 UNC
50	1.69	4.92	0.71	1.38	8	M16	4.92	0.71	1.38	8	M16	4.75	0.75	1.38	8	5/8"-11 UNC
65	1.81	5.71	0.71	1.57	8	M16	5.71	0.71	1.57	8	M16	5.50	0.87	1.77	8	5/8"-11 UNC
80	1.81	6.30	0.79	1.57	16	M16	6.30	0.79	1.57	16	M16	6.00	0.94	1.77	8	5/8"-11 UNC
100	2.05	7.09	0.79	1.77	16	M16	7.09	0.79	1.77	16	M16	7.50	0.94	1.77	16	5/8"-11 UNC
125	2.20	8.27	0.87	1.97	16	M16	8.27	0.87	1.97	16	M16	8.50	0.94	1.97	16	3/4"-10 UNC
150	2.20	9.45	0.87	1.97	16	M20	9.45	0.87	1.97	16	M20	9.50	1.00	1.97	16	3/4"-10 UNC
200	2.36	11.61	0.94	1.97	16	M20	11.61	0.94	1.97	24	M20	11.75	1.13	2.17	16	3/4"-10 UNC
250	2.68	13.78	1.02	2.36	24	M20	13.98	1.02	2.36	24	M24	14.25	1.19	2.36	24	7/8"- 9 UNC
300	3.07	15.75	1.02	2.56	24	M20	16.14	1.10	2.56	24	M24	17.00	1.25	2.76	24	7/8"- 9 UNC
350	3.07	18.11	1.02	2.56	32	M20	18.50	1.18	2.56	32	M24	18.75	1.37	2.76	24	1"- 8 UNC
400	4.02	20.28	1.02	2.95	32	M24	20.67	1.26	3.15	32	M27	21.25	1.44	3.35	32	1"- 8 UNC
450	4.49	22.24	1.02	2.95	32	M24	23.03	1.26	3.15	32	M27	22.75	1.56	3.35	32	1 1/8"- 7 UNC
				2.36	8				2.36	8						
500	5.00	24.41	1.10	3.54	40	M24	25.59	1.34	2.56	40	M30	25.00	1.81	4.13	40	1 1/8"- 7 UNC
600	6.06	28.54	1.10	3.94	40	M27	30.31	1.42	4.33	40	M33	29.50	1.87	4.72	40	1 1/4"- 7 UNC
700	6.50	33.07	1.18	4.33	40	M27	33.07	1.42	4.72	40	M33	34.00	-	-	-	-
				3.15	8				3.35	8						
750	7.48	35.43	1.26	5.12	40	M30	35.43	1.50	5.12	40	M33	36.00	2.13	5.91	48	1 1/4"- 7 UNC
				3.94	8				3.94	8				4.33	8	
800	7.48	37.40	1.26	5.12	40	M30	37.40	1.50	5.12	40	M36	-	-	-	-	-
				4.33	8				4.33	8						
900	7.99	41.34	1.34	5.12	48	M30	41.34	1.57	5.51	48	M36	-	-	-	-	-
				3.74	8				3.94	8						
1000	8.50	45.67	1.34	5.51	48	M33	46.06	1.65	5.91	48	M39	-	-	-	-	-
				3.74	8				3.94	8						



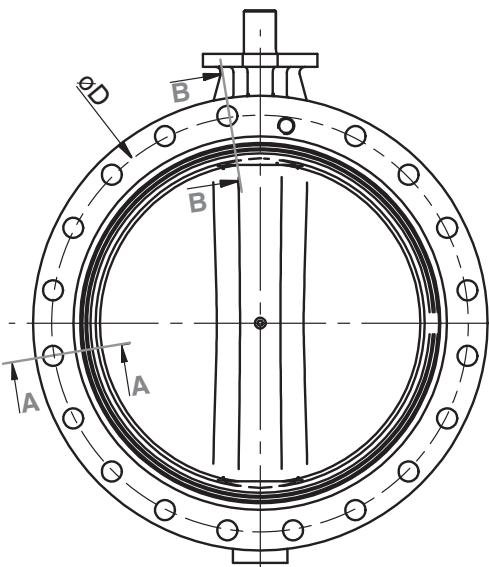
n = number of screws

Connection dimensions [inch]

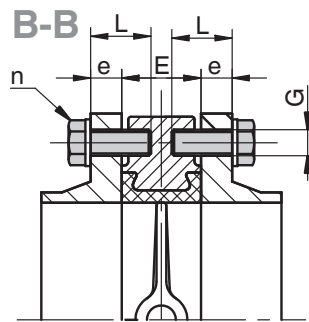
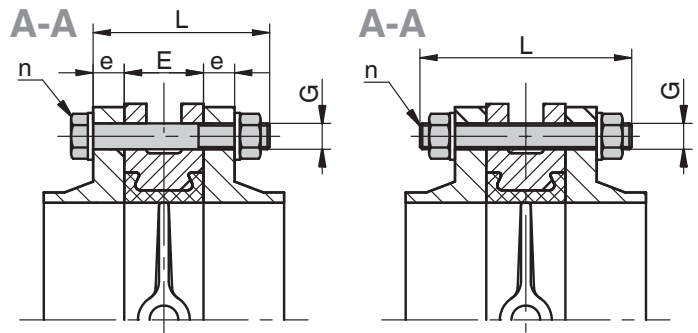
U section (Code U)

DN	E	PN 10						PN 16						ASME Class 150*					
		øD	e	L	L1	n	G	øD	e	L	L1	n	G	øD	e	L	L1	n	G
150	2.20	9.45	0.87	5.12	5.91	8	M20	9.45	0.87	5.12	5.91	8	M20	9.50	1.00	5.12	5.91	8	3/4"-10 UNC
200	2.36	11.61	0.94	5.12	6.30	8	M20	11.61	0.94	5.12	6.30	12	M20	11.75	1.13	5.51	6.30	8	3/4"-10 UNC
250	2.68	13.78	1.02	5.91	6.69	12	M20	13.98	1.02	5.91	6.69	12	M24	14.25	1.19	6.30	7.09	12	7/8"- 9 UNC
300	3.07	15.75	1.02	6.30	7.09	12	M20	16.14	1.10	6.3	7.09	12	M24	17.00	1.25	6.69	7.48	12	7/8"- 9 UNC
350	3.07	18.11	1.02	6.69	7.09	16	M20	18.50	1.18	6.69	7.48	16	M24	18.75	1.37	7.09	7.87	12	1"- 8 UNC
400	4.02	20.28	1.02	7.09	8.27	16	M24	20.67	1.26	7.87	8.66	16	M27	21.25	1.44	8.27	9.06	16	1"- 8 UNC
450	4.49	22.24	1.02	7.48	8.66	16	M24	23.03	1.26	8.27	9.45	16	M27	22.75	1.56	9.06	9.84	16	1 1/8"-7 UNC
				2.36		8				2.36		8							
500	5.00	24.41	1.10	8.27	9.06	20	M24	25.59	1.34	9.06	10.24	20	M30	25.00	1.81	9.84	11.02	20	1 1/8"-7 UNC
600	6.06	28.54	1.10	9.45	10.63	20	M27	30.31	1.42	10.24	11.42	20	M33	29.5	1.87	11.02	12.20	20	1 1/4"-7 UNC
700	6.50	33.07	1.18	10.24	11.02	20	M27	33.07	1.42	10.63	11.81	20	M30	34.00	2.07	12.20	13.39	24	1 1/4"-7 UNC
				3.15		8				3.35		8							
750	7.48	35.43	1.26	11.42	12.60	20	M30	35.43	1.50	11.81	13.39	80	M36	36.00	2.13	13.19	14.76	24	1 1/4"-7 UNC
				3.74		8				3.94		8							
800	7.48	37.40	1.26	11.42	12.60	20	M30	37.40	1.50	12.20	13.58	20	M36	38.50	2.24	13.39	14.96	24	1 1/2"-6 UNC
				4.33		8				3.15		8							
900	7.99	41.34	1.34	12.20	13.78	24	M30	42.13	1.57	12.99	14.76	24	M36	42.76	2.36	14.57	16.34	28	1 1/2"-6 UNC
				3.94		8				3.94		8							
1000	8.50	45.67	1.34	12.80	14.17	24	M33	45.67	1.65	13.58	15.35	24	M39	47.24	2.50	15.35	16.93	32	1 1/2"-6 UNC
				3.74		8				3.94		8							
1100	8.50	50.00	1.50	12.99	14.57	28	M33	50.00	1.89	14.17	15.75	28	M39	51.75	3.98	18.31	16.14	36	1 1/2"-6 UNC
				3.94		8				4.33		8							
1200	10.00	54.33	1.50	14.76	16.54	28	M36	54.72	1.89	15.55	17.52	28	M45	55.98	4.25	18.70	20.47	40	1 1/2"-6 UNC
				4.33		8				4.53		8							
1400	11.02	62.60	1.65	16.14	17.72	32	M39	62.6	2.05	17.32	19.29	32	M45	65.00	4.88	22.83	24.80	44	1 3/4"-5 UNC
				4.72		8				4.72		8							
1600	12.52	71.65	1.81	18.11	20.08	36	M45	71.65	2.28	18.50	20.87	36	M52	-	-	-	-	-	-
				4.33		8				4.72		8							

* DN 25 - 600: ASME B16.5; DN 700 - 1200: ASME B16.47 Series A



Flange holes are specially machined
(finish as threaded holes)
DN 450, DN 700 - 1600



DN 450, DN 700 - 1600

n = number of holes

Availability / code - Body configuration / connection

Wafer																						
Flange	Nominal size																					
	25	32	40	50	65	80	100	125	150	200	250	300	350	400	450	500	600	700	800	900	1000	1200
PN 6	○	3	3	○	3	3	3	3	3	3	3	3	3	○	○	○	○	-	○	○	○	○
PN 10	3	3	3	3	3	3	3	3	3	3	3	3	3	3	2	2	2	2	2	2	2	2
PN 16	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
ASME B16.5 Class 150	○	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	○	-	-	○	○
ASME B16.47 Class 150	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	○	E	E	○	○
JIS 5k	○	K	K	-	K	K	K	K	K	K	K	K	○	○	○	○	○	○	○	○	○	○
JIS 10k	○	G	G	G	G	G	G	G	G	G	G	○	G	G	G	G	G	G	○	G	G	G
JIS 16k	○	J	J	○	○	J	J	J	○	J	○	○	○	J	J	J	J	-	J	J	J	J
BS 10 D	○	H	○	H	H	H	H	H	H	○	H	H	○	H	○	○	-	-	○	-	○	
BS 10 E	○	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	○	S	S	S	S
AS 2129 Tab E	○	U	U	○	U	U	U	U	U	U	U	U	U	○	U	○	○	○	○	○	○	-

Lug																					
Flange	25	32	40	50	65	80	100	125	150	200	250	300	350	400	450	500	600				
PN 6	1	1	1	1	1	1	○	1	1	1	1	1	1	1	1	○	○				
PN 10	3	3	3	3	3	3	3	3	3	2	2	2	2	2	2	2	2				
PN 16	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3				
ASME B16.5 Class 150	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D				
JIS 5k	K	K	K	-	K	K	K	K	K	K	K	K	○	K	K	K	K				
JIS 10k	G	G	G	G	G	G	G	G	G	G	○	G	G	G	G	G	○				
JIS 16k	J	J	J	○	○	J	J	J	○	J	○	○	J	J	○	J	○				
BS 10 D	H	H	H	H	H	H	○	H	H	H	○	H	H	○	○	○	○				
BS 10 E	S	S	S	S	S	S	S	S	S	S	S	S	S	○	S	○	○				
AS 2129 Tab E	U	U	U	U	U	U	U	U	U	U	U	U	U	○	U	○	○				

U section															
Flange	200	250	300	350	400	450	500	600	700	800	900	1000	1200	1400	
PN 6	○	1	○	○	○	○	○	○	-	○	○	○	○	1	
PN 10	2	2	2	2	2	2	2	2	2	2	2	2	2	2	
PN 16	3	3	3	3	3	3	3	3	3	3	3	3	3	3	
ASME B16.5 Class 150	D	D	D	D	D	D	D	D	○	-	○	-	-	-	
ASME B16.47 Class 150	-	-	-	-	-	-	-	-	○	E	○	E	E	E	
JIS 5k	○	K	○	○	○	○	K	K	○	K	○	○	○	-	
JIS 10k	G	G	○	G	G	G	G	G	G	G	G	G	G	-	
JIS 16k	J	-	J	J	J	J	J	J	-	J	J	J	J	-	
BS 10 D	H	H	H	H	○	H	○	○	-	-	H	-	-	-	
BS 10 E	S	S	S	S	○	S	○	○	-	-	S	-	-	-	
AS 2129 Tab E	U	U	U	U	○	U	○	○	○	U	U	U	U	-	

○ = on request

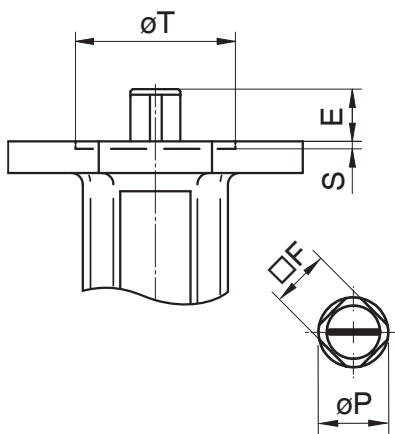
12 Operator size - Type D480 - Butterfly valve with bare shaft

Dimensions - Operator flange [inch]

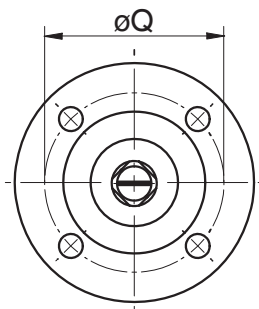
DN	ISO	Q	Shaft connection*	G	E	T	S	Code
25-32	F07	2.76	D	□0.43	0.71			07 D11
40	F07	2.76	D	□0.43	0.71			07 D11
50	F07	2.76	D	□0.43	0.71			07 D11
65	F07	2.76	D	□0.43	0.71			07 D11
80	F07	2.76	D	□0.43	0.71			07 D11
100	F07	2.76	D	□0.43	0.71			07 D11
125	F07	2.76	D	□0.55	0.71			07 D14
150	F07	2.76	D	□0.55	0.71			07 D14
200	F07	2.76	D	□0.67	0.94			07 D17
250	F10	4.02	D	□0.87	1.26	2.76	0.12	10 D22
300	F10	4.02	D	□0.87	1.26	2.76	0.12	10 D22
350	F10	4.02	D	□0.87	1.26	2.76	0.12	10 D22
400	F12	4.92	D	□1.06	1.10	3.35	0.16	12 D27
450	F14	5.51	D	□1.42	1.46	3.94	0.16	14 D36
500	F14	5.51	D	□1.42	1.46	3.94	0.16	14 D36
600	F16	6.50	D	□1.81	1.85	5.12	0.20	16 D46
700	F25	10.00	V	∅2.56	4.17	7.87	0.20	25 V65
800	F25	10.00	V	∅3.15	4.17	7.87	0.20	25 V80
900	F25	10.00	V	∅3.15	4.33	7.87	0.20	25 V80
1000	F25	10.00	V	∅3.15	4.33	7.87	0.20	25 V80
1200	F30	11.73	V	∅3.94	4.72	9.06	0.20	30 V100

* D = Square, diagonal (standard); V = Round with single keyway

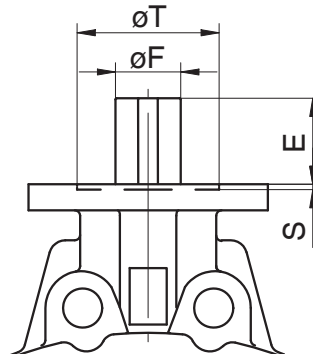
DN 32 - 600



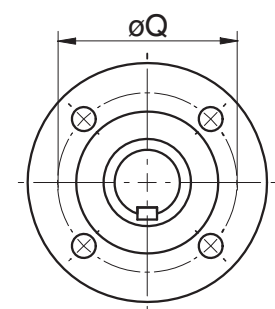
Shaft connection
Square, diagonal



DN 700 - 1200



Shaft connection
Round with single keyway

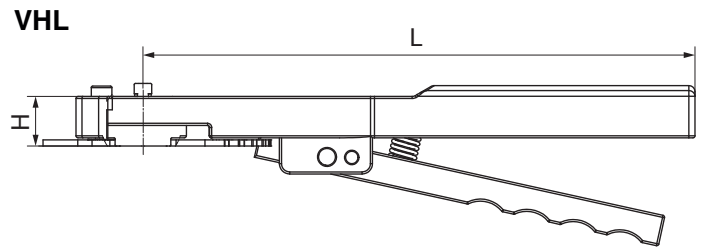
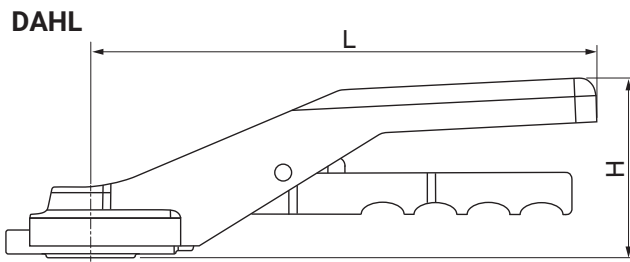


Order data

Order example	1	2	3	4	5	6	7	8	9	10	11	12
Code	D480	Order data butterfly valve (page 4,5)									F	07 D11

12 Order data / Dimensions - Type D487 Butterfly valve with hand lever [inch]

DAHL version = Latching hand lever with 10° notches



Hand lever						
DN	Order designation	Code	L	H	Weight [lbs]	Top flange
25 - 200	VHL F0717.267	VHL17	10.51	0.94	2.65	F07
25-65	DAHL-F0711.200	DAHL11	7.87	3.11	1.1	F07
80 - 100	DAHL-F0711.270	DAHL11	10.63	3.23	1.3	F07
125 - 150	DAHL-F0714.270	DAHL14	10.63	3.46	1.5	F07
200	DAHL-F0717.315	DAHL17	12.40	3.46	1.5	F07

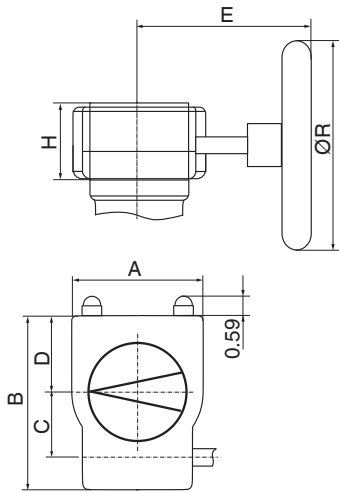
Continuously adjustable hand lever on request

The actuator designs apply to disc material code A, B, D, E, G, H, K in combination with shut off seal code E, N.

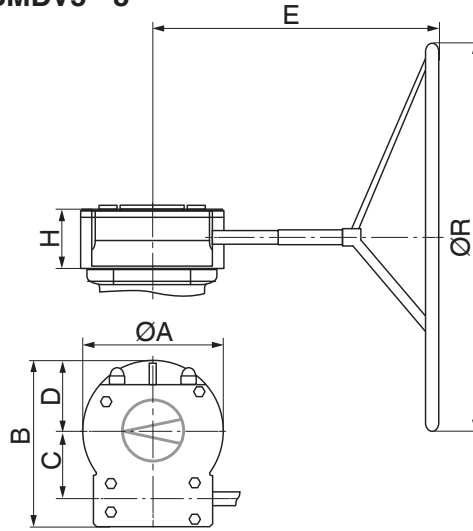
Order example	1	2	3	4	5	6	7	8	9	10	11	12
Code	D487	Order data butterfly valve (page 4,5)									0	MHL1731

12 Dimensions gear box/Code - valve with manual operator [inch]

GB232 / GBMDV3 - 4



GBMDV5 - 8



Gearbox / handwheel

DN	Order designation	Code	A	B	C	D	E	H	øR	n*	Weight [lbs]
DN 32-100	GB23205F05-F07 D11 PS100	GB232	3.15	4.49	1.67	1.89	4.13	2.09	3.94	0.39	1.8
DN 125	GB23205F05-F07 D14 PS100	GB232	3.15	4.49	1.67	1.89	4.13	2.09	3.94	0.39	1.8
DN 150	GB23206F05-F07 D14 PS160	GB232	3.15	4.49	1.67	1.89	6.10	2.32	6.30	0.39	2.0
DN 200	GB23206F05-F07 D17 PS160	GB232	3.15	4.49	1.67	1.89	6.10	2.32	6.30	0.39	2.0
DN 250-300	GB23208F07-F10 D22 PS200	GB232	3.94	5.16	1.97	2.20	6.69	2.64	7.87	0.37	3.1
DN 350	GB23211F10-F12 D22 SG400	GB232	5.75	6.85	2.36	3.11	7.87	3.11	15.75	0.44	5.9
DN 400	GB23211F10-F12 D27 SG400	GB232	5.75	6.85	2.36	3.11	7.87	3.11	15.75	0.44	5.9
DN 450 - 500	GBMDV3F12-F16 D36 SG400	GBMDV3	7.09	9.25	3.80	3.60	12.64	3.94	15.75	0.47	40.6
DN 600	GBMDV4F16-F25 D46 SG500	GBMDV4	11.10	12.83	5.41	5.51	16.06	5.04	19.69	0.71	75.4
DN 700	GBMDV4F16-F25 V65 SG500	GBMDV4	11.10	12.83	5.41	5.51	16.06	5.04	19.69	0.71	75.4
DN 800	GBMDV5F16-F25 V80 SG600	GBMDV5	11.10	12.83	5.41	5.51	17.95	5.04	23.62	2.64	90.4
DN 900 - 1000	GBMDV7F25-F30 V80 SG700	GBMDV7	14.80	15.59	7.09	6.14	20.08	5.31	27.56	2.64	133.6
DN 1200	GBMDV8F25-F30 V100 SG700	GBMDV8	14.80	15.59	7.09	6.14	22.80	5.31	27.56	6.38	146.4

Material: Aluminium, polyurethane coated

n*: Handwheel turns OPEN/CLOSED

The actuator designs apply to disc material code A, B, D, E, G, H, K in combination with shut off seal code E, N.

Order data	1	2	3	4	5	6	7	8	9	10	11	12
Code	D487	Order data butterfly valve (page 4, 5)									0	GB232

Technical data - GEMÜ D481 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

87 - 116 psi

Angle of rotation

±4° adjustable (86° - 94°)

90°

12 Order data - GEMÜ D481 with pneumatic actuator Type ADA/ASR

Order example	1	2	3	4	5	5	6	7	8	9	10	11*	*see
Code	D481	Order data butterfly valve (page 4, 5)										BU08AC0	page 16

Stroke limiter on request

Technical data - GEMÜ D481 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

87 - 116 psi

Angle of rotation

20° adjustable (75° - 95°)

90°

12 Order data - GEMÜ D481 with pneumatic actuator Type DR/SC

Order example	1	2	3	4	5	6	7	8	9	10	11	12*	*see
Code	D481	Order data butterfly valve (page 4, 5)										DU06AC0	page 18

Stroke limiter on request

Actuator version* / Code - GEMÜ D481 with pneumatic actuator type ADA/ASR

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

DN	Pneumatic double acting	Code	Pneumatic single acting	Code
25	ADA0020U F05 Y S14/S11 A	BU02AB0	ASR0020U S08 F05 Y S14 A	AU02FB0
32	ADA0020U F05 Y S14/S11 A	BU02AB0	ASR0020U S08 F05 Y S14 A	AU02FB0
40	ADA0020U F05 Y S14/S11 A	BU02AB0	ASR0020U S08 F05 Y S14 A	AU02FB0
50	ADA0020U F05 Y S14/S11 A	BU02AB0	ASR0020U S08 F05 Y S14 A	AU02FB0
65	ADA0020U F05 Y S14/S11 A	BU02AB0	ASR0040U S14 F05 Y S14/S11 A	AU04KB0
80	ADA0020U F05 Y S14/S11 A	BU02AB0	ASR0040U S14 F05 Y S14/S11 A	AU04KB0
100	ADA0080U F05F07 Y S17/S14 A	BU08AC0	ASR0080U S14 F05F07 Y S17/S14 A	AU08KC0
125	ADA0080U F05F07 Y S17/S14 A	BU08AC0	ASR0130U S14 F05F07 Y S17/S14 A	AU13KC0
150	ADA0080U F05F07 Y S17/S14 A	BU08AC0	ASR0200U S14 F07F10 Y S17/S14 A	AU20KE0
200	ADA0130U F05F07 Y S 17/S14 A	BU13AC0	ASR0300U S14 F07F10 Y S22 A	AU30KD0
250	ADA0300U F07F10 Y S22 A	BU30AD0	ASR0500U S14 F10 Y S22 A	AU50KF0
300	ADA0300U F07F10 Y S22 A	BU30AD0	ASR0500U S14 F10 Y S22 A	AU50KF0
350	ADA0300U F07F10 Y S22 A	BU30AD0	ASR0850U S14 F10F12 Y S27 A	AU85KG0
400	ADA0850U F10F12 Y S27 A	BU85AG0	ASR1750U S14 F14 Y S36 A	A17UKK0
450	ADA1200U F10F14 Y S36 A	B12UAH0	ASR1750U S14 F14 Y S36 A	A17UKK0
500	ADA1200U F10F14 Y S36 A	B12UAH0	ASR2100U S14 F14 Y S36 A	A21UKK0
600	ADA1200U F10F14 Y S36 A	B12UAH0	ASR2500U S14 F16 Y S46 A	A25UKL0

Operating pressure 90 psi (see order data - operating pressure code 1)

25	ADA0020U F05 Y S14/S11 A	BU02AB0	ASR0020U S08 F05 Y S14 A	AU02FB0
32	ADA0020U F05 Y S14/S11 A	BU02AB0	ASR0020U S08 F05 Y S14 A	AU02FB0
40	ADA0020U F05 Y S14/S11 A	BU02AB0	ASR0020U S08 F05 Y S14 A	AU02FB0
50	ADA0020U F05 Y S14/S11 A	BU02AB0	ASR0020U S08 F05 Y S14 A	AU02FB0
65	ADA0020U F05 Y S14/S11 A	BU02AB0	ASR0040U S14 F05 Y S14/S11 A	AU04KB0
80	ADA0080U F05F07 Y S17/S14 A	BU08AC0	ASR0080U S14 F05F07 Y S17/S14 A	AU08KC0
100	ADA0080U F05F07 Y S17/S14 A	BU08AC0	ASR0080U S14 F05F07 Y S17/S14 A	AU08KC0
125	ADA0080U F05F07 Y S17/S14 A	BU08AC0	ASR0200U S14 F07F10 Y S17/S14 A	AU20KE0
150	ADA0080U F05F07 Y S17/S14 A	BU08AC0	ASR0300U S14 F07F10 Y S22 A	AU30KD0
200	ADA0200U F07F10 Y S17/S14 A	BU20AE0	ASR0500U S14 F07F10 Y S22 A	AU50KD0
250	ADA0300U F07F10 Y S22 A	BU30AD0	ASR0850U S14 F10F12 Y S27 A	AU85KG0
300	ADA0300U F07F10 Y S22 A	BU30AD0	ASR0850U S14 F10F12 Y S27 A	AU85KG0
350	ADA0500U F10 Y S22 A	BU50AF0	ASR1200U S14 F10F14 Y S36 A	A12UKH0
400	ADA0850U F10F12 Y S27 A	BU85AG0	ASR1750U S14 F14 Y S36 A	A17UKK0
450	ADA1750U F14 Y S36 A	B17UAK0	ASR2500U S14 F14 Y S36 A	A25UK10
500	ADA1750U F14 Y S36 A	B17UAK0	ASR4000U S14 F16F25 Y S55 A	A40UKM0
600	ADA2500U F16 Y S46 A	B25UAL0		

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

25	ADA0020U F05 Y S14/S11 A	BU02AB0	ASR0020U S08 F05 Y S14 A	AU02FB0
32	ADA0020U F05 Y S14/S11 A	BU02AB0	ASR0020U S08 F05 Y S14 A	AU02FB0
40	ADA0020U F05 Y S14/S11 A	BU02AB0	ASR0020U S08 F05 Y S14 A	AU02FB0
50	ADA0020U F05 Y S14/S11 A	BU02AB0	ASR0040U S14 F05 Y S14/S11 A	AU04KB0
65	ADA0080U F05F07 Y S17/S14 A	BU08AC0	ASR0080U S14 F05F07 Y S17/S14 A	AU08KC0
80	ADA0080U F05F07 Y S17/S14 A	BU08AC0	ASR0080U S14 F05F07 Y S17/S14 A	AU08KC0
100	ADA0080U F05F07 Y S17/S14 A	BU08AC0	ASR0130U S14 F05F07 Y S17/S14 A	AU13KC0
125	ADA0080U F05F07 Y S17/S14 A	BU08AC0	ASR0200U S14 F07F10 Y S17/S14 A	AU20KE0
150	ADA0130U F05F07 Y S17/S14 A	BU13AC0	ASR0300U S14 F07F10 Y S22 A	AU30KD0
200	ADA0200U F07F10 Y S17/S14 A	BU20AE0	ASR0500U S14 F07F10 Y S22 A	AU50KD0
250	ADA0300U F07F10 Y S22 A	BU30AD0	ASR0850U S14 F10F12 Y S27 A	AU85KG0
300	ADA0500U F10 Y S22 A	BU50AF0	ASR1200U S14 F10F14 Y S36 A	A12UKH0
350	ADA0850U F10F12 Y S27 A	BU85AG0	ASR1750U S14 F14 Y S36 A	A17UKK0
400	ADA1200U F10F12 Y S27 A	B12UAG0	ASR2100U S14 F14 Y S36 A	A21UK10
450	ADA2100U F14 Y S36 A	B21UA10	ASR4000U S14 F16F25 Y S55 A	A40UKM0
500	ADA2100U F14 Y S36 A	B21UA10		

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

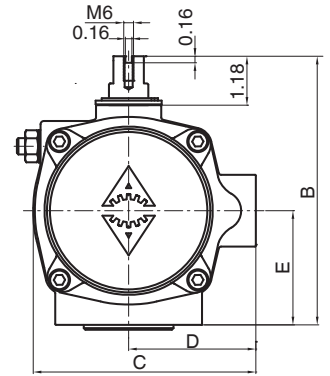
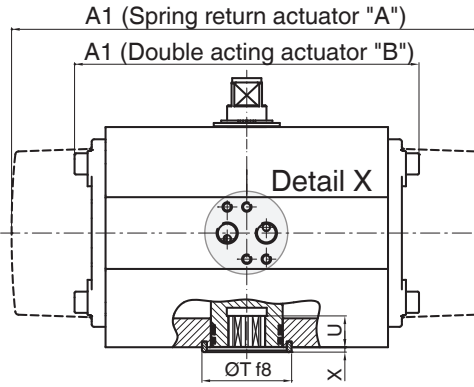
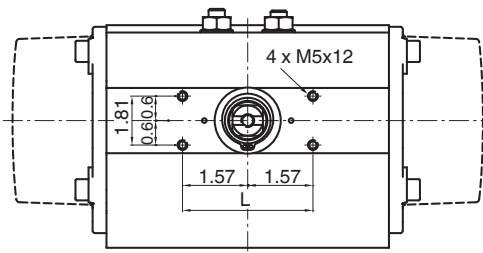
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32	ADA0020U F05 Y S14/S11 A	BU02AB0	ASR0040U S14 F05 Y S14/S11 A	AU04KB0
40	ADA0020U F05 Y S14/S11 A	BU02AB0	ASR0040U S14 F05 Y S14/S11 A	AU04KB0
50	ADA0020U F05 Y S14/S11 A	BU02AB0	ASR0040U S14 F05 Y S14/S11 A	AU04KB0
65	ADA0080U F05F07 Y S17/S14 A	BU08AC0	ASR0080U S14 F05F07 Y S17/S14 A	AU08KC0
80	ADA0080U F05F07 Y S17/S14 A	BU08AC0	ASR0080U S14 F05F07 Y S17/S14 A	AU08KC0
100	ADA0080U F05F07 Y S17/S14 A	BU08AC0	ASR0200U S14 F07F10 Y S17/S14 A	AU20KE0
125	ADA0130U F05F07 Y S17/S14 A	BU13AC0	ASR0300U S14 F07F10 Y S22 A	AU30KD0
150	ADA0130U F05F07 Y S17/S14 A	BU13AC0	ASR0300U S14 F07F10 Y S22 A	AU30KD0
200	ADA0300U F07F10 Y S22 A	BU30AD0	ASR0850U S14 F10F12 Y S27 A	AU85KG0
250	ADA0500U F10 Y S22 A	BU50AF0	ASR1200U S14 F10F14 Y S36 A	A12UKH0
300	ADA0850U F10F12 Y S27 A	BU85AG0	ASR1750U S14 F14 Y S36 A	A17UKK0
350	ADA1200U F10F12 Y S27 A	B12UAG0	ASR2500U S14 F14 Y S36 A	A25UKK0
400	ADA1750U F14 Y S36 A	B17UAK0	ASR4000U S14 F16F25 Y S55 A	A25UK10
450	ADA2100U F14 Y S36 A	B21UA10		
500	ADA2500U F16 Y S46 A	B25UAL0		

* Technical data for liquids 68 to 176 °F with control pressure 87 psi

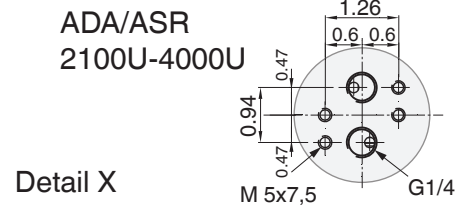
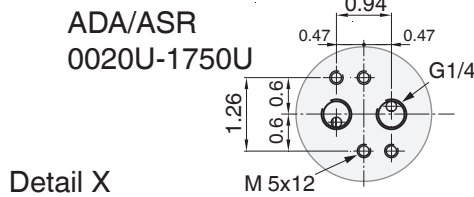
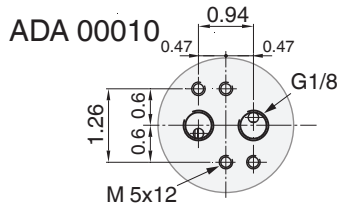
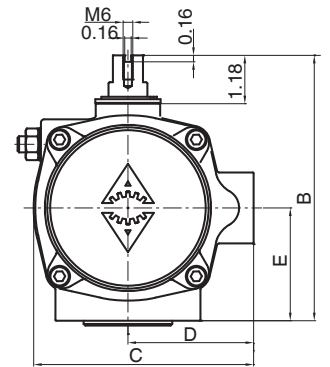
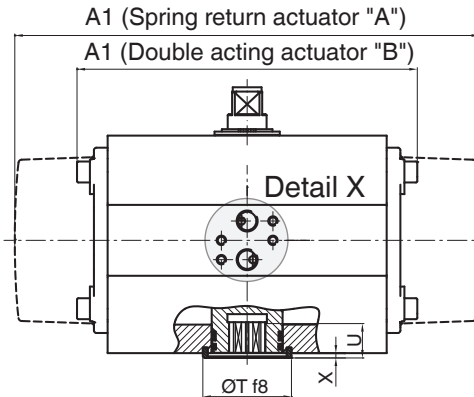
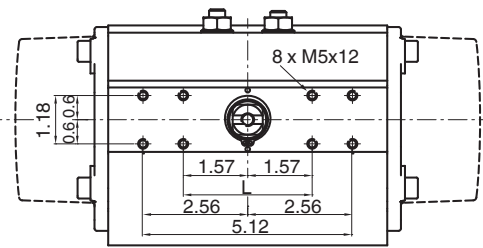
The actuator designs apply to disc material code A, B, D, E, G, H, K in combination with shut off seal code E, N.

Actuator dimensions ADA/ASR [inch]

ADA/ASR 00010-0850U



ADA/ASR 1200U-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	F14	F16	F14	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	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	24.80			
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			

Actuator version* / Code - GEMÜ D481 with pneumatic actuator type DR/SC

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

DN	Pneumatic double acting	Code	Pneumatic single acting	Code
25	DR0030U F05F07 N S14 A	DU03AP0	SC0030U 6 F05F07 N S14 A	SU03KP0
32	DR0030U F05F07 N S14 A	DU03AP0	SC0030U 6 F05F07 N S14 A	SU03KP0
40	DR0030U F05F07 N S14 A	DU03AP0	SC0030U 6 F05F07 N S14 A	SU03KP0
50	DR0030U F05F07 N S14 A	DU03AP0	SC0030U 6 F05F07 N S14 A	SU03KP0
65	DR0030U F05F07 N S14 A	DU03AP0	SC0060U 6 F05F07 N S14 A	SU06KP0
80	DR0030U F05F07 N S14 A	DU03AP0	SC0060U 6 F05F07 N S14 A	SU06KP0
100	DR0030U F05F07 N S14 A	DU03AP0	SC0060U 6 F05F07 N S14 A	SU06KP0
125	DR0060U F05F07 N S14 A	DU06AP0	SC0100U 6 F05F07 N S17 A	SU10KCO
150	DR0060U F05F07 N S14 A	DU06AP0	SC0150U 6 F05F07 N S17 A	SU15KCO
200	DR0100U F05F07 N S17 A	DU10AC0	SC0220U 6 F07F10 N S22 A	SU22KDO
250	DR0150U F07F10 N S22 A	DU15AD0	SC0300U 6 F07F10 N S22 A	SU30KDO
300	DR0220U F07F10 N S22 A	DU22AD0	SC0450U 6 F10F12 N S27 A	SU45KGO
350	DR0220U F07F10 N S22 A	DU22AD0	SC0600U 6 F10F12 N S27 A	SU60KGO
400	DR0450U F10F12 N S27 A	DU45AG0	SC2000U 6 F12 N D27 A	S20UKV0
450	DR0900U F14 N S36 A	DU90AK0	SC2000U 6 F12 N D27 A	S20UKK0
500	DR0900U F14 N S36 A	DU90AK0	SC2000U 6 F12 N D27A	S20UKK0
600	DR1200U F14 N S36 A	D12UAK0	SC3000U 6 F16 N S46 A	S30UKLO

Operating pressure 90 psi (see order data - operating pressure code 1)

25	DR0030U F05F07 N S14 A	DU03AP0	SC0030U 6 F05F07 N S14 A	SU03KP0
32	DR0030U F05F07 N S14 A	DU03AP0	SC0030U 6 F05F07 N S14 A	SU03KP0
40	DR0030U F05F07 N S14 A	DU03AP0	SC0030U 6 F05F07 N S14 A	SU03KP0
50	DR0030U F05F07 N S14 A	DU03AP0	SC0030U 6 F05F07 N S14 A	SU03KP0
65	DR0030U F05F07 N S14 A	DU03AP0	SC0060U 6 F05F07 N S14 A	SU06KP0
80	DR0030U F05F07 N S14 A	DU03AP0	SC0060U 6 F05F07 N S14 A	SU06KP0
100	DR0030U F05F07 N S14 A	DU03AP0	SC0100U 6 F05F07 N S17 A	SU10KCO
125	DR0060U F05F07 N S14 A	DU06AP0	SC0150U 6 F05F07 N S17 A	SU15KCO
150	DR0100U F05F07 N S17 A	DU10AC0	SC0220U 6 F07F10 N S22 A	SU22KDO
200	DR0150U F05F07 N S17 A	DU15AC0	SC0300U 6 F07F10 N S22 A	SU30KDO
250	DR0220U F07F10 N S2 2A	DU22AD0	SC0600U 6 F10F12 N S27 A	SU60KGO
300	DR0300U F07F10 N S22 A	DU30AD0	SC0600U 6 F10F12 N S27 A	SU60KGO
350	DR0300U F07F10 N S22 A	DU30AD0	SC0900U 6 F10F12 N S27 A	SU90KGO
400	DR0600U F10F12 N S27 A	DU60AG0	SC2000U 6 F12 N D27 A	S20UKV0
450	DR1200U F14 N S36 A	D12UAK0	SC3000U 6 F14 N S36 A	S30UKK0
500	DR2000U F14 N S36 A	D20UAK0	SC4000U 6 F16 N S46 A	S40UKLO
600	DR3000U F16 N S46 A	D30UAL0	SC5000U 6 F16F25 N S46 A	S50UKSO

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

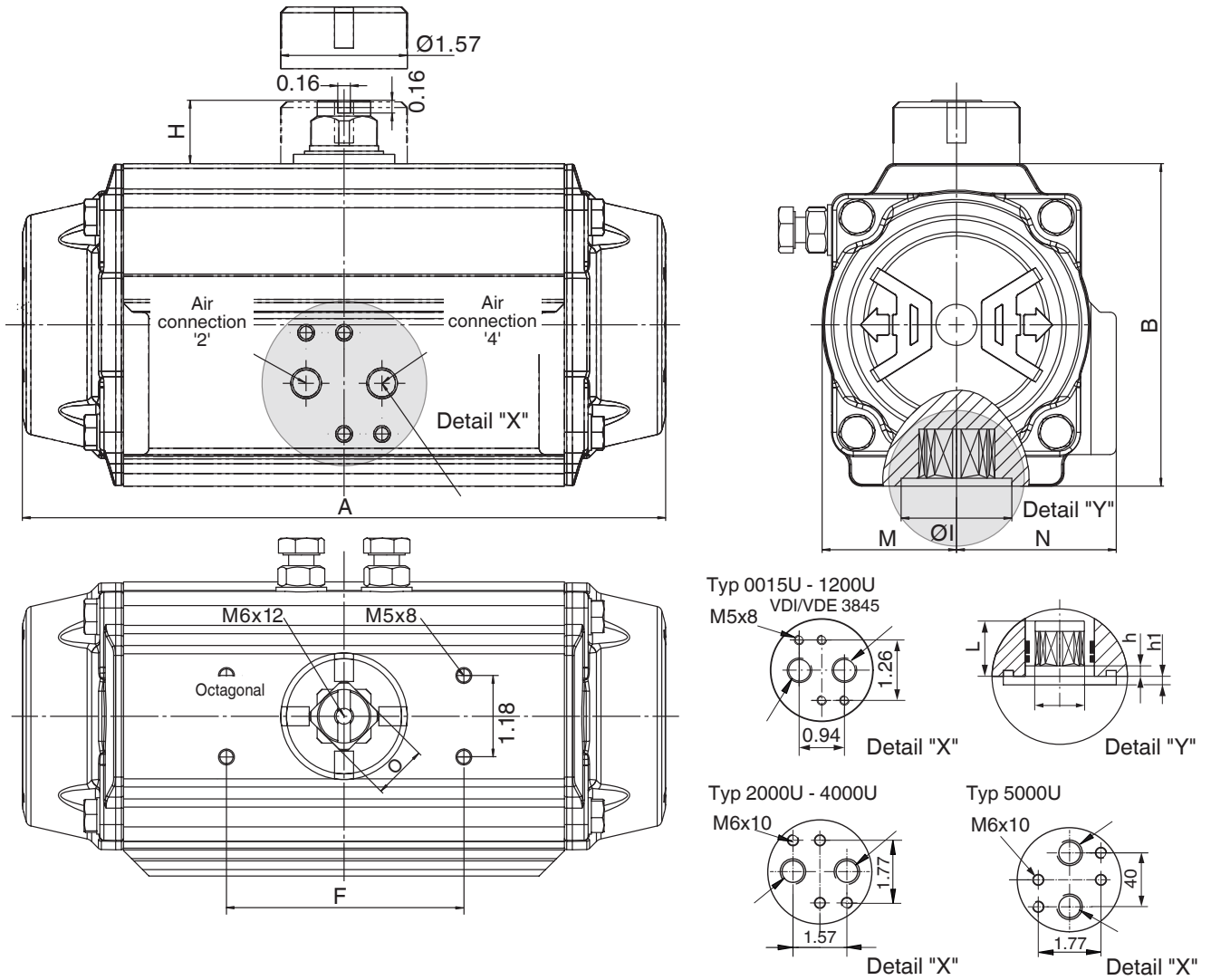
25		DU03AP0		SU03KP0
32	DR0030U F05F07 N S14 A	DU03AP0	SC0030U 6 F05F07 N S14 A	SU03KP0
40	DR0030U F05F07 N S14 A	DU03AP0	SC0030U 6 F05F07 N S14 A	SU03KP0
50	DR0030U F05F07 N S14 A	DU03AP0	SC0030U 6 F05F07 N S14 A	SU03KP0
65	DR0030U F05F07 N S14 A	DU03AP0	SC0060U 6 F05F07 N S14 A	SU06KP0
80	DR0030U F05F07 N S14 A	DU03AP0	SC0060U 6 F05F07 N S14 A	SU06KP0
100	DR0060U F05F07 N S14 A	DU06AP0	SC0100U 6 F05F07 N S17 A	SU10KCO
125	DR0100U F05F07 N S17 A	DU10AC0	SC0220U 6 F07F10 N S22 A	SU22KDO
150	DR0100U F05F07 N S17 A	DU10AC0	SC0220U 6 F07F10 N S22 A	SU22KDO
200	DR0150U F05F07 N S17 A	DU15AC0	SC0450U 6 F10F12 N S27 A	SU45KGO
250	DR0300U F07F10 N S22 A	DU30AD0	SC0600U 6 F10F12 N S27 A	SU60KGO
300	DR0450U F10F12 N S27 A	DU45AG0	SC1200U 6 F10F12 N S27 A	S12UKGO
350	DR0450U F10F12 N S27 A	DU45AG0	SC1200U 6 F10F12 N S27 A	S12UKGO
400	DR0900U F10F12 N S27 A	DU90AG0	SC3000U 6 F12 N D27 A	S30UKV0
450	DR2000U F14 N S36 A	D20UAK0	SC4000U 6 F16 N S46 A	S40UKLO
500	DR2000U F14 N S36 A	D20UAK0	SC5000U 6 F16F25 N S46 A	S50UKSO
600	DR4000U F16 N S46 A	D40UAL0		

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

25		DU03AP0		SU06KP0
32	DR0030U F05F07 N S14 A	DU03AP0	SC0060U 6 F05F07 N S14 A	SU06KP0
40	DR0030U F05F07 N S14 A	DU03AP0	SC0060U 6 F05F07 N S14 A	SU06KP0
50	DR0030U F05F07 N S14 A	DU03AP0	SC0060U 6 F05F07 N S14 A	SU06KP0
65	DR0030U F05F07 N S14 A	DU03AP0	SC0060U 6 F05F07 N S14 A	SU06KP0
80	DR0030U F05F07 N S14 A	DU03AP0	SC0100U 6 F05F07 N S17 A	SU10KCO
100	DR0060U F05F07 N S14 A	DU06AP0	SC0150U 6 F05F07 N S17 A	SU15KCO
125	DR0100U F05F07 N S17 A	DU10AC0	SC0220U 6 F07F10 N S22 A	SU22KDO
150	DR0100U F05F07 N S17 A	DU10AC0	SC0300U 6 F07F10 N S22 A	SU30KDO
200	DR0220U F07F10 N S22 A	DU22AD0	SC0600U 6 F10F12 N S27 A	SU60KGO
250	DR0450U F10F12 N S27 A	DU45AG0	SC0900U 6 F10F12 N S27 A	SU90KGO
300	DR0600U F10F12 N S27 A	DU60AG0	SC2000U 6 F12 N D27 A	S20UKV0
350	DR1200U F10F12 N S27 A	D12UAG0	SC3000U 6 F12 N D27 A	S30UKV0
400	DR2000U F14 N S36 A	D20UAK0	SC4000U 6 F16N S46 A	S40UKLO
450	DR2000U F14 N S36 A	D20UAK0		S50UKSO
500	DR3000U F16 N S46 A	D30UAL0		
600	DR4000U F16 N S46 A	D40UAL0		

*Technical data for liquids 68 to 176 °F with control pressure 87 psi
The actuator designs apply to disc material code A, B, D, E, G, H, K in combination with shut off seal code E, N.

Actuator dimensions DR/SC [inch]



Type	0030U	0060U	0100U	0150U	0220U	0300U	0450U	0600U	0900U	1200U	2000U	3000U	4000U
ISO Flange	F04 F05/07	F05/07	F05/07	F07/10	F07/10	F07/10	F10/12	F10/12	F14	F14	F16	F16	F16
Octagonal	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
L	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
Air connector	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
A	6.04	8.01	9.49	10.2	11.97	13.11	15.53	16.63	18.66	20.79	23.82	27.95	31.97
B	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
F	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
H	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
$\text{Ø}l$	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
M	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
N	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
O	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
h	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
h1	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
L	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
Weight [lbs]													
DR	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
SC	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

Technical data - Motorized GEMÜ actuators

Min. / max. ambient temperature

14 to 140 °F

Protection class to EN 60529

IP 65

Weight

Actuator version 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

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 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 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
Housing base	ABS	Aluminium
Housing cover	ABS	Aluminium
Indicator	PP-R natur	PMMA

gr = glass reinforced

Correlation actuator vers. / Voltage-frequency

Actuator version (code)	Supply voltage/mains frequency (code)	
	C1 24 V DC	C4 24 V AC
1015 (133 in-lbs)	X	-
2015 (133 in-lbs)	-	X
3035 (310 in-lbs)	X	X
2070 (619 in-lbs)	X	X
4100 (886 in-lbs)	X	X
4200 (1770 in-lbs)	X	X

Power and current consumption

Actuator version code	24 V DC		24 V AC	
	A0/AE/AP	00/0E/0P	A0/AE/AP	00/0E/0P
	Power consumption [W]			
1015, 2015 (132 in-lbs)	30	-	40	-
3035 (310 in-lbs)	30	-	30	-
2070 (619 in-lbs)	96	63	-	63
4100 (886 in-lbs)	96	105	-	140
4200 (1770 in-lbs)	96	90	-	110

Correlation actuator version / functional module

Actuator version code	Functional module (code)					
	A0	AE	AP	00	0E	0P
1015 (132 in-lbs)	X	X	-	-	-	-
2015 (12 in-lbs)	X	X	-	-	-	-
3035 (310 in-lbs)	X	X	-	-	-	-
2070 (619 in-lbs)	X	X	X	X	X	X
4100 (886 in-lbs)	X	X	X	X	X	X
4200 (1770 in-lbs)	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 - Data sheet GEMÜ 9468

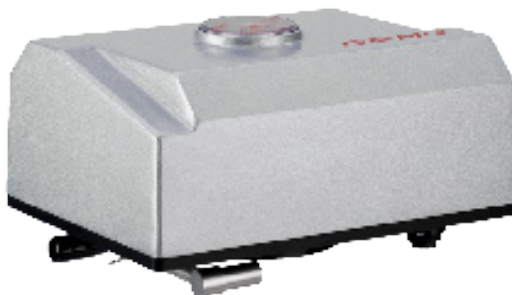
Technical data - Motorized GEMÜ actuators

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 2070, 4100, 4200	100 %

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
40	X	X	-	-	-	-
50	-	-	X	-	-	-
65	-	-	X	-	-	-
80	-	-	-	X	-	-
100	-	-	-	X	-	-
125	-	-	-	-	X	-
150	-	-	-	-	-	X
200	-	-	-	-	-	X

Order data - GEMÜ 488 with motorized GEMÜ actuators



13 Voltage/frequency	Code
24 V DC C1	
24 V AC 50/60 Hz	C4

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

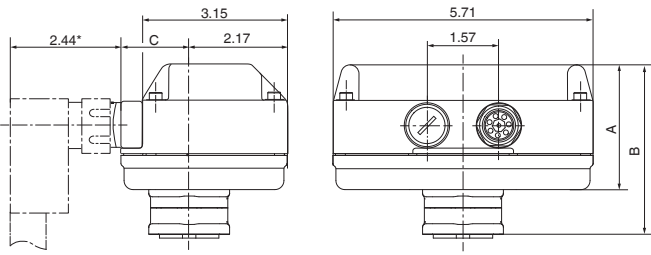
15 Actuator version	Code
Actuator, motorized, operating time 11s, torque 15Nm, GEMUE, size 1, supply voltage B1, C1	1015
Actuator, motorized, operating time 11s, torque 15Nm, GEMUE, size 2, supply voltage B4, C4	2015
Actuator, motorized, operating time 15s, torque 35Nm, GEMUE, size 3, supply voltage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

Technical data for liquids +20 to +80 °C

Order example	1	2	3	4	5	6	7	8	9	10	13	14	15
Code	D488	Order data butterfly valve (page 4, 5)									C1	A0	2070

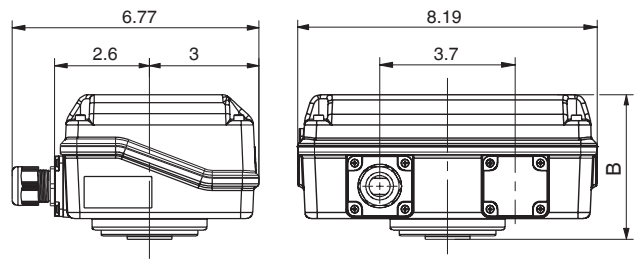
Actuator dimensions [inch]

Actuator version 1015, 2015



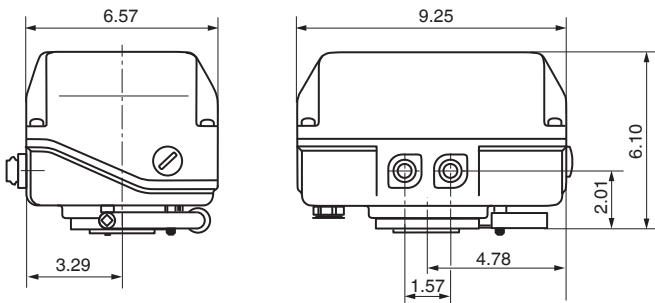
Voltages	A	B	C
24 V	2.72	3.70	1.93

Actuator version 3035

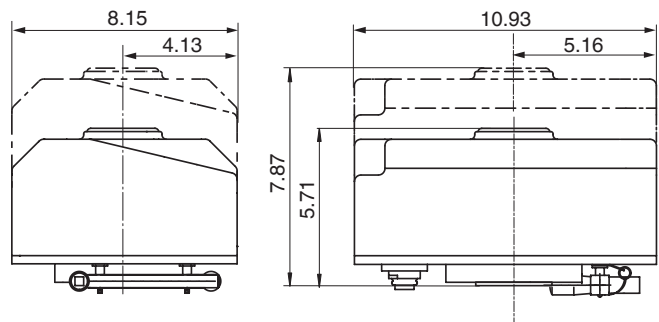


Voltages	B
24 V	3.96

Actuator version 2070



Actuator version 4100, 4200



- 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

Technical data - Motorized J+J actuators

Min. / max. ambient temperature	
-4 to 158 °F	
Protection class to EN 60529	
IP 67 - J4C20, J4C35, J4C55 IP 65 - J2140, J2300	
Special feature	
Standard manual override	
Weight	
Actuator version J4C20	4.0 lbs
Actuator version J4C35	4.2 lbs
Actuator version J4C55	5.1 lbs
Actuator version J2140 / J2300	11.5 lbs
Power supply	
Rated voltage	
Version J4C14/30	24 V AC/DC (0/+5 %)
Version J4C20/35/55/85	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
J4C20	10 s	-
J4C35	10 s	-
J4C55	14 s	-
J4C85	30 s	-
J4C14	-	34 s
J4C30	-	58 s

Correlation actuator version / nominal size					
DN	Actuator version - Standard (code)				
	J4C20 178 in-lbs	J4C35 310 in-lbs	J4C55 487 in-lbs	J2140 1240 in-lbs	J2300 2656 in-lbs
25-50	X	-	-	-	-
65-80	-	X	-	-	-
100	-	-	X	-	-
125-150	-	-	-	X	-
200-250	-	-	-	-	X

Order data - GEMÜ D488 with motorized J+J actuators



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

Technical data for liquids +20 to +80 °C

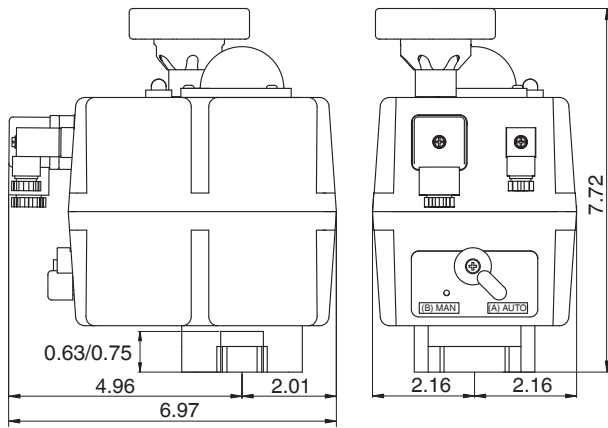
14 Control module	Code
ON/OFF actuator, 2 additional potential-free limit switches, Class A (EN15714-2)	AE
ON/OFF actuator, potentiometer output, Class A (EN15714-2)	AP
Control actuator, external set value 0/4-20 mA	E2
Control actuator, external set value 0-10 V DC	E1
Positioner DPS, external set value 0-10 V, BSR battery pack (NC)	E11
Positioner DPS, external set value 4-20mA, BSR battery pack (NC)	E21
ON/OFF actuator, 2 additional potential-free limit switches, BSR battery pack (NC)	AE1
ON/OFF actuator, 2 additional potential-free limit switches, BSR battery pack (NO)	AE2

15 Actuator version	Code
Actuator, motorized, operating time 10s, torque 20Nm, J+J, type J4, heating, IP67	J4C20
Actuator, motorized, operating time 10s, torque 35Nm, J+J, type J4, heating, IP67	J4C35
Actuator, motorized, operating time 13s, torque 55Nm, J+J, type J4, heating, IP67	J4C55
Actuator, motorized, operating time 29s, torque 85Nm, J+J, type J4, heating, IP67	J4C85
Actuator, motorized, operating time 34s, torque 140Nm, J+J, type J4, heating, IP67	J4C14
Actuator, motorized, operating time 58s, torque 300Nm, J+J, type J4, heating, IP67	J4C30

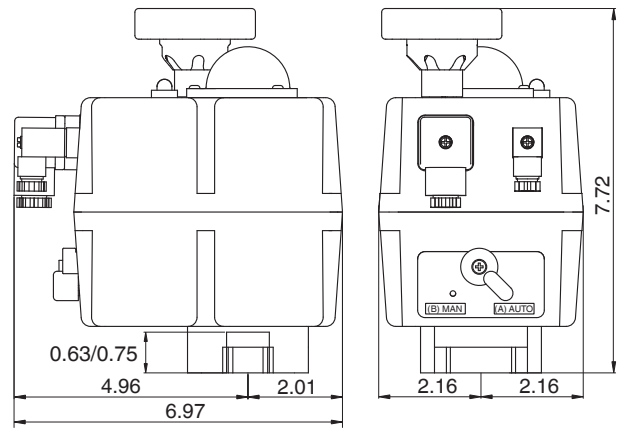
Order example	1	2	3	4	5	6	7	8	9	10	13	14	15
Code	D488		Order data butterfly valve (page 4, 5)								U5	AE	J4C55

Actuator dimensions [inch]

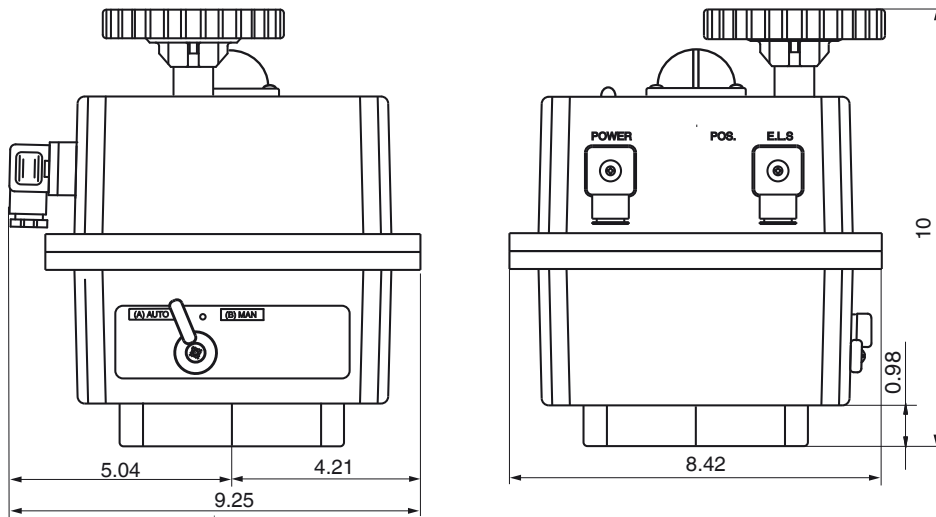
Actuator version - J4C20 / J4C35



Actuator version - J4C55



Actuator version - J2140 and J2300



Certificate	Standard	Item number
2.1 Certificate of compliance with the order	EN 10204	88039442
2.2 Functionality	EN 10204/EN 12266-2 F20	88439527
2.2 Pressure test	EN 10204, DIN EN 12266 P10, P11, P12	88039443
3.1 Body material	EN 10204	88348926
3.1 Disc material	EN 10204	88348927
3.1 Pressure test	DIN EN 12266 P10, P11, P12	88348929
3.1 Layer thickness measurement		88413409

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

GEMÜ® VALVES, MEASUREMENT
AND CONTROL SYSTEMS

