

Technische Dokumentation Technical Documentation



Severe Service Butterfly Valves Series 9000

XOMOX Severe Service Butterfly Valves - Series 9000

Table of Content

Scope of Supply	Page 3
Lug Type Body DIN - Materials of Construction	Page 4
Lug Type Body ANSI - Materials of Construction	Page 5
Double Flange Body DIN - Materials of Construction	Page 6
Double Flange Body ISO - Materials of Construction	Page 7
Double Flange Body ANSI - Materials of Construction	Page 8
Lug Type Body DIN / ANSI & Double Flange Body ISO Dimensions / Bare Shaft	Page 9
Lug Type Body DIN / ANSI & Double Flange Body ISO Dimensions with Gear (DN 80 – 350)	Page 10
Lug Type Body DIN / ANSI & Double Flange Body ISO Dimensions with Gear (DN 400 - 600)	Page 11
Lug Type Body DIN – Bolt Dimensions	Page 12
Lug Type Body ANSI – Bolt Dimensions	Page 13
Double Flange Body DIN – Bolt Dimensions	Page 14
Double Flange Body ISO – Bolt Dimensions	Page 15
Double Flange Body ANSI- Bolt Dimensions	Page 16
Weights for DN 80 – 250 (in kg)	Page 17
Weights for DN 30 – 600 (in kg)	Page 18
Lug Type Body DIN / Double Flange Body DIN Pressure-Temperature-Ratings	Page 19 / 20
Lug Type Body ANSI / Double Flange Body ISO / Double Flange Body ANSI - Pressure-Temperature-Ratings	Page 21 / 22
Torques, Kv-Values, Standard Spare Parts	Page 23
XOMOX Model Numbers (currently under review)	

XOMOX Severe Service Butterfly Valves - Series 9000

Scope of Supply



Lug Type Body

EN 558-1, Basic Series 16 (DIN 3202-K3)

API 609 – Tab. 2

Nominal Size: DN 80 – 600

Nominal Pressure: PN 10, 16, 25, 40

ANSI Class 150 - 300

Other pressure ratings on request.



Double Flange Body DIN / ISO

EN 558-1, Basic Series 13 (DIN 3202-F16)

ISO 5752 - Tab. 4 short

Nominal Size: DN 80 – 600

Nominal Pressure: PN 10, 16, 25, 40

ANSI Class 150 - 300

Other pressure ratings on request.



Double Flange Body ANSI

ANSI B16.10

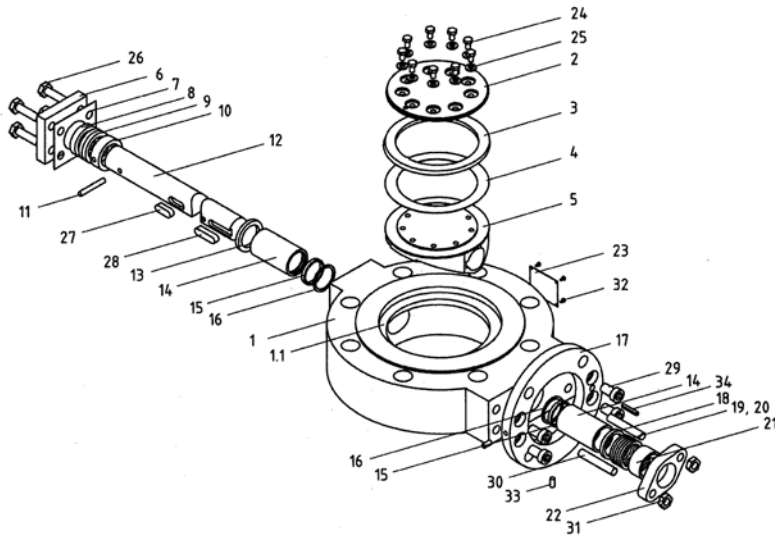
Nominal Size: 3" – 12"

Nominal Pressure: ANSI Class 150, 300

Other pressure ratings on request.

XOMOX Severe Service Butterfly Valves - Series 9000

Lug Type Body DIN - Materials of Construction

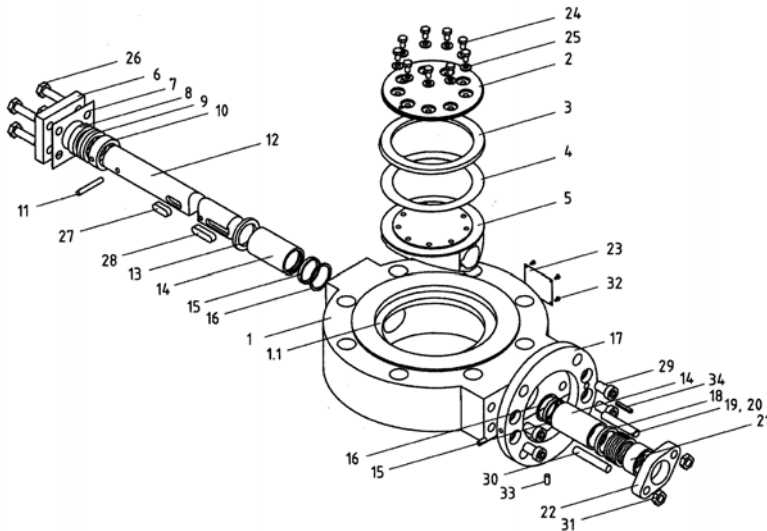


Item	Temp.-Range Component	Carbon Steel Version *2		Stainless Steel Version *2		
		-10 °C to +400 °C Standard	-10 °C to +300 °C Nace	-10°C - 400°C Standard	-10°C - 300°C Nace	- 60°C to + 550°C High / Low Temp.
1	Body *	GP240GH / P265GH		1.4552 / 1.4541		
1.1	Body Seat	1.4571 or equal, Stellite on request		1.4552 / 1.4541, Stellite on request		
2	Clamping Cover *	P265GH / P250GH		1.4541		
3	Disc Seat	1.4541 / Graphite		1.4541 / Graphite		
4	End Seal	Graphite		Graphite		
5	Disc *	GP240GH / P265GH / P250GH		1.4552 / 1.4541		
6	Cover *	P265GH		1.4541		
7	Cover Seal	Graphite		Graphite		
8	Intermediate Ring	1.4305		1.4305		
9	Ring	Graphite		Graphite		
10	Retaining Ring	1.4305 hard chrome plated		1.4305 hard chrome plated		
11	Pin	1.4571 or equal		1.4571 or equal		
12	Shaft	1.4057	1.4462	1.4057	1.4462	1.4980
13	Sliding Ring *	1.4112 / 1.4034 (hardened)		1.4112 / 1.4034 (hardened)		
14	Bearing Bush	1.4305 coated		1.4305 coated		
15	Bearing Protection Ring	Carbon Fiber		Carbon Fiber		
16	Bearing Ring	-		1.4112 / 1.4034 (hardened)		
17	Mounting Plate	Steel		Steel nickel plated		
18	Ring	1.4305		1.4305		
19	Spacer	Carbon Fiber		Carbon Fiber		
20	Packing Ring	Graphite		Graphite		
21	Gland	1.4305		1.4305		
22	Gland Flange *	P265GH		1.4571		
23	Name Plate	Stainless Steel		Stainless Steel		
24	Clamping Ring Screw	A2-70		A2-70	A2-70	1.4980
25	Spring Washer *	1.4923 / 1.4122	Inconel	1.4923 / 1.4122	Inconel	
26	Cover Screw	A2-70		A2-70	A2-70	1.4980
27	Fitting Key	1.4571		1.4571		
28	Fitting Key (output)	1.4571		1.4571		
29	Screw	A2-70		A2-70	A2-70	1.4980
30	Stud	A2-70		A2-70	A2-70	1.4980
31	Nut	A2-70		A2-70	A2-70	1.4980
32	Grooved Pin	Stainless Steel		Stainless Steel		

*Material selection at manufacturer's optional *2 Please specify detailed application (medium / temperature) when ordering.

XOMOX Severe Service Butterfly Valves - Series 9000

Lug Type Body ANSI - Materials of Construction

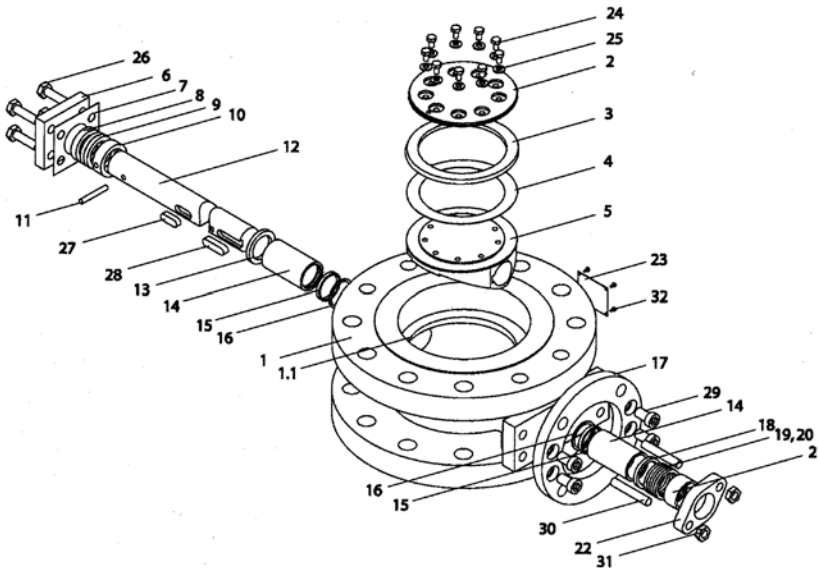


Item	Temp.-Range Component	Carbon Steel Version *2		Stainless Steel Version *2		
		-10°C to +400°C Standard	-10°C to +300°C Nace	-10°C to 400°C Standard	-10°C to 300°C Nace	- 60°C to + 550°C High- / Low Temp.
1	Body *	A216-WCB / A516 Gr. 60		A351 CF8M / A240 Type 321		
1.1	Body Seat	1.4571 or equal, Stellite on request		1.4552 / 1.4541, Stellite on request		
2	Clamping Cover *	P265GH / P250GH (nickel plated)		1.4541		
3	Disc Seat	1.4541 / Graphite		1.4541 / Graphite		
4	End Seal	Graphite		Graphite		
5	Disc *	A216-WCB / P265GH / P250GH (nickel pltd.)		A351 CF8M / A240 Type 321		
6	Cover *	P265GH		1.4541		
7	Cover Seal	Graphite		Graphite		
8	Intermediate Ring	1.4305		1.4305		
9	Ring	Graphite		Graphite		
10	Retaining Ring	1.4305 hard chrome plated		1.4305 hard chrome plated		
11	Pin	1.4571 or equal		1.4571 or equal		
12	Shaft	1.4057	1.4462	1.4057	1.4462	1.4980
13	Sliding Ring *	1.4112 / 1.4034 (hardened)		1.4112 / 1.4034 (hardened)		
14	Bearing Bush	1.4305 coated		1.4305 coated		
15	Bearing Protection Ring	Carbon Fiber		Carbon Fiber		
16	Bearing Ring	-		1.4112 / 1.4034 (hardened)		
17	Mounting Plate	Steel		Steel nickel plated		
18	Ring	1.4305		1.4305		
19	Spacer	Carbon Fiber		Carbon Fiber		
20	Packing Ring	Graphite		Graphite		
21	Gland	1.4305		1.4305		
22	Gland Flange *	P265GH		1.4571		
23	Name Plate	Stainless Steel		Stainless Steel		
24	Clamping Ring Screw	A2-70		A2-70	A2-70	1.4980
25	Spring Washer *	1.4923 / 1.4122	Inconel	1.4923 / 1.4122		Inconel
26	Cover Screw	A2-70		A2-70	A2-70	1.4980
27	Fitting Key	1.4571		1.4571		
28	Fitting Key (output)	1.4571		1.4571		
29	Screw	A2-70		A2-70	A2-70	1.4980
30	Stud	A2-70		A2-70	A2-70	1.4980
31	Nut	A2-70		A2-70	A2-70	1.4980
32	Grooved Pin	Stainless Steel		Stainless Steel		
33	Grooved pin/mount. plate	Steel zinc coated		Steel zinc coated		
34	Rolled Pin	Steel zinc coated		Steel zinc coated		

*Material selection at manufacturer's optional *2 Please specify detailed application (medium / temperature) when ordering.

XOMOX Severe Service Butterfly Valves - Series 9000

Double Flange Body DIN - Materials of Construction

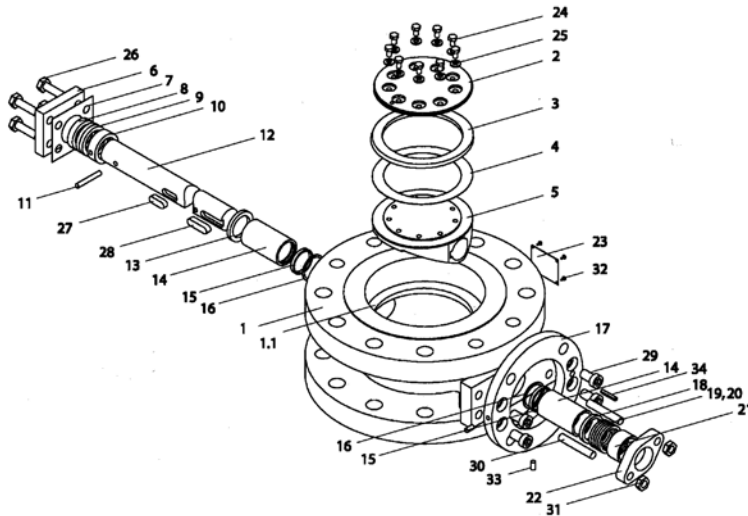


Item	Temp.-Range Component	Carbon Steel Version * ²		Stainless Steel Version * ²		
		-10°C to +400°C Standard	-10°C to +300°C Nace	-10 to 400°C Standard	-10 to 300°C Nace	- 60 to + 550°C High / Low Temp.
1	Body *	GP240GH		1.4552 / 1.4541		
1.1	Body Seat	1.4571 or equal, Stellite on request		1.4552 / 1.4541, Stellite on request		
2	Clamping Cover *	P265GH / P250GH		1.4541		
3	Disc Seat	1.4541 / Graphite		1.4541 / Graphite		
4	End Seal	Graphite		Graphite		
5	Disc *	GP240GH / P265GH / P250GH		1.4552 / 1.4541		
6	Cover *	P265GH		1.4541		
7	Cover Seal	Graphite		Graphite		
8	Intermediate Ring	1.4305		1.4305		
9	Ring	Graphite		Graphite		
10	Retaining Ring	1.4305 hard chrome plated		1.4305 hard chrome plated		
11	Pin	1.4571 or equal		1.4571 or equal		
12	Shaft	1.4057	1.4462	1.4057	1.4462	1.4980
13	Sliding Ring *	1.4112 / 1.4034 (hardened)		1.4112 / 1.4034 (hardened)		
14	Bearing Bush	1.4305 coated		1.4305 coated		
15	Bearing Protection Ring	Carbon Fiber		Carbon Fiber		
16	Bearing Ring	-		1.4112 / 1.4034 (hardened)		
17	Mounting Plate	Steel		Steel nickel plated		
18	Ring	1.4305		1.4305		
19	Spacer	Carbon Fiber		Carbon Fiber		
20	Packing Ring	Graphite		Graphite		
21	Gland	1.4305		1.4305		
22	Gland Flange *	P265GH		1.4571		
23	Name Plate	Stainless Steel		Stainless Steel		
24	Clamping Ring Screw	A2-70		A2-70	A2-70	1.4980
25	Spring Washer *	1.4923 / 1.4122	Inconel	1.4923 / 1.4122	Inconel	
26	Cover Screw	A2-70		A2-70	A2-70	1.4980
27	Fitting Key	1.4571		1.4571		
28	Fitting Key (output)	1.4571		1.4571		
29	Screw	A2-70		A2-70	A2-70	1.4980
30	Stud	A2-70		A2-70	A2-70	1.4980
31	Nut	A2-70		A2-70	A2-70	1.4980
32	Grooved Pin	Stainless Steel		Stainless Steel		

*Material selection at manufacturer's optional *² Please specify detailed application (medium / temperature) when ordering.

XOMOX Severe Service Butterfly Valves - Series 9000

Double Flange Body ISO - Materials of Construction

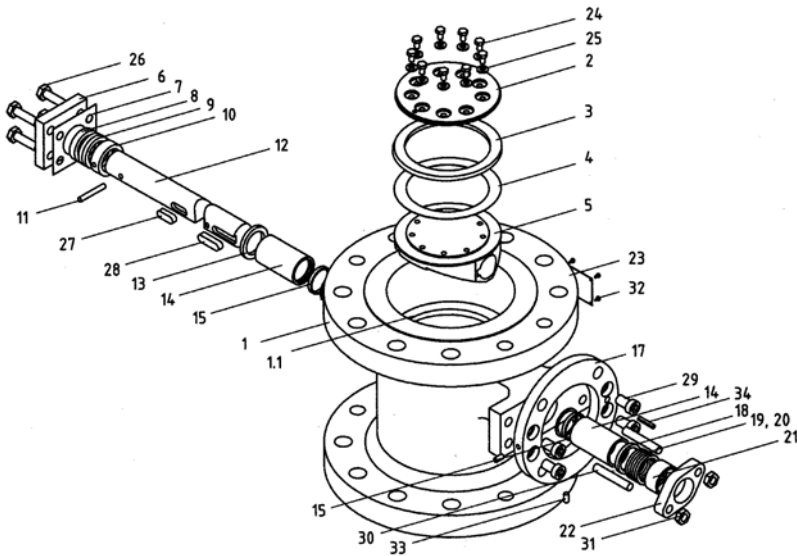


Item	Temp.-Range Component	Carbon Steel Version *2		Stainless Steel Version *2		
		-10°C to +400°C Standard	-10°C to +300°C Nace	-10°C to 400°C Standard	-10°C to 300°C Nace	- 60°C to + 550°C High / Low Temp.
1	Body *	A216-WCB / A516 Gr. 60		A351CF8M		
1.1	Body Seat	1.4571 or equal, Stellite on request		1.4552 / 1.4541, Stellite on request		
2	Clamping Cover *	P265GH / P250GH (nickel plated)		1.4541		
3	Disc Seat	1.4541 / Graphite		1.4541 / Graphite		
4	End Seal	Graphite		Graphite		
5	Disc *	A216-WCB / P265GH / P250GH (nickel pltd.)		A351CF8M		
6	Cover *	P265GH		1.4541		
7	Cover Seal	Graphite		Graphite		
8	Intermediate Ring	1.4305		1.4305		
9	Ring	Graphite		Graphite		
10	Retaining Ring	1.4305 hard chrome plated		1.4305 hard chrome plated		
11	Pin	1.4571 or equal		1.4571 or equal		
12	Shaft	1.4057	1.4462	1.4057	1.4462	1.4980
13	Sliding Ring *	1.4112 / 1.4034 (hardened)		1.4112 / 1.4034 (hardened)		
14	Bearing Bush	1.4305 coated		1.4305 coated		
15	Bearing Protection Ring	Carbon Fiber		Carbon Fiber		
16	Bearing Ring	-		1.4112 / 1.4034 (hardened)		
17	Mounting Plate	Steel		Steel nickel plated		
18	Ring	1.4305		1.4305		
19	Spacer	Carbon Fiber		Carbon Fiber		
20	Packing Ring	Graphite		Graphite		
21	Gland	1.4305		1.4305		
22	Gland Flange *	P265GH		1.4571		
23	Name Plate	Stainless Steel		Stainless Steel		
24	Clamping Ring Screw	A2-70		A2-70	A2-70	1.4980
25	Spring Washer *	1.4923 / 1.4122	Inconel	1.4923 / 1.4122		Inconel
26	Cover Screw	A2-70		A2-70	A2-70	1.4980
27	Fitting Key	1.4571		1.4571		
28	Fitting Key (output)	1.4571		1.4571		
29	Screw	A2-70		A2-70	A2-70	1.4980
30	Stud	A2-70		A2-70	A2-70	1.4980
31	Nut	A2-70		A2-70	A2-70	1.4980
32	Grooved Pin	Stainless Steel		Stainless Steel		
33	Grooved pin/mount. plate	Steel zinc coated		Steel zinc coated		
34	Roll Pin	Steel zinc coated		Steel zinc coated		

*Material selection at manufacturer's optional *2 Please specify detailed application (medium / temperature) when ordering.

XOMOX Severe Service Butterfly Valves - Series 9000

Double Flange Body ANSI - Materials of Construction

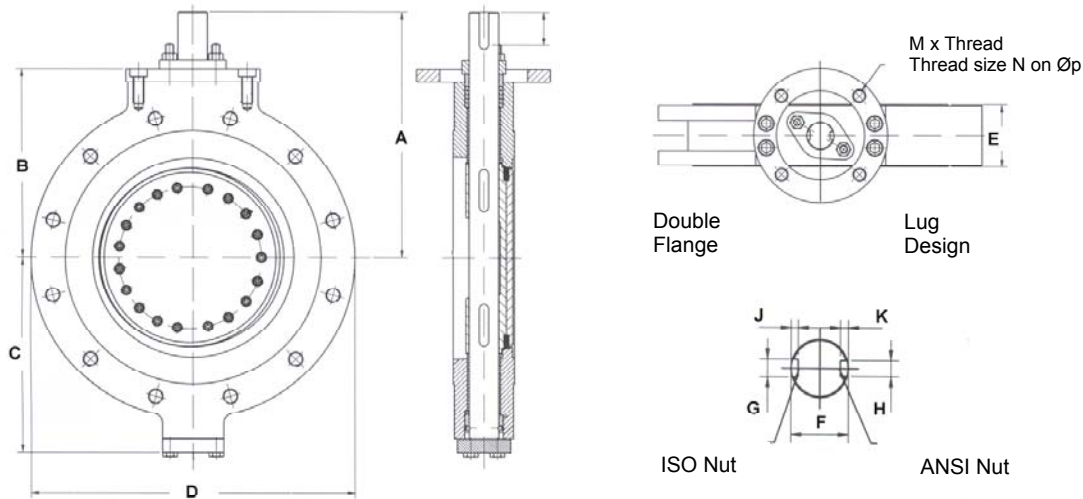


Item	Temp.-Range Component	Stainless Steel Version ^{*2}	
		- 10°C to + 400°C Standard	- 10°C to + 300°C Nace
1	Body *	A216-WCB	
1.1	Body Seat	1.4571 or equal, Stellite on request	
2	Clamping Cover *	P265GH / P250GH (nickel plated)	
3	Disc Seat	1.4541 / Graphite	
4	End Seal	Graphite	
5	Disc *	A216-WCB / P265GH / P250GH (nickel plated)	
6	Cover *	P265GH	
7	Cover Seal	Graphite	
8	Intermediate Ring	1.4305	
9	Ring	Graphite	
10	Retaining Ring	1.4305 hard chrome plated	
11	Pin	1.4571 or equal	
12	Shaft	1.4057	1.4462
13	Sliding Ring *	1.4112 / 1.4034 (hardened)	
14	Bearing Bush	1.4305 coated	
15	Bearing Protection Ring	Carbon Fiber	
17	Bearing Ring	Steel	
18	Mounting Plate	1.4305	
19	Ring	Carbon Fiber	
20	Spacer	Graphite	
21	Packing Ring	1.4305	
22	Gland *	P265GH	
23	Gland Flange	Stainless Steel	
24	Name Plate	A2-70	
25	Clamping Ring Screw *	1.4923 / 1.4122	Inconel
26	Spring Washer	A2-70	
27	Cover Screw	1.4571	
28	Fitting Key	1.4571	
29	Fitting Key (output)	A2-70	
30	Screw	A2-70	
31	Stud	A2-70	
32	Nut	Stainless Steel	
33	Grooved pin/mount. plate	Steel zinc coated	
34	Pin	Steel zinc coated	

*Material selection at manufacturer's optional ^{*2} Please specify detailed application (medium / temperature) when ordering.

XOMOX Severe Service Butterfly Valves - Series 9000

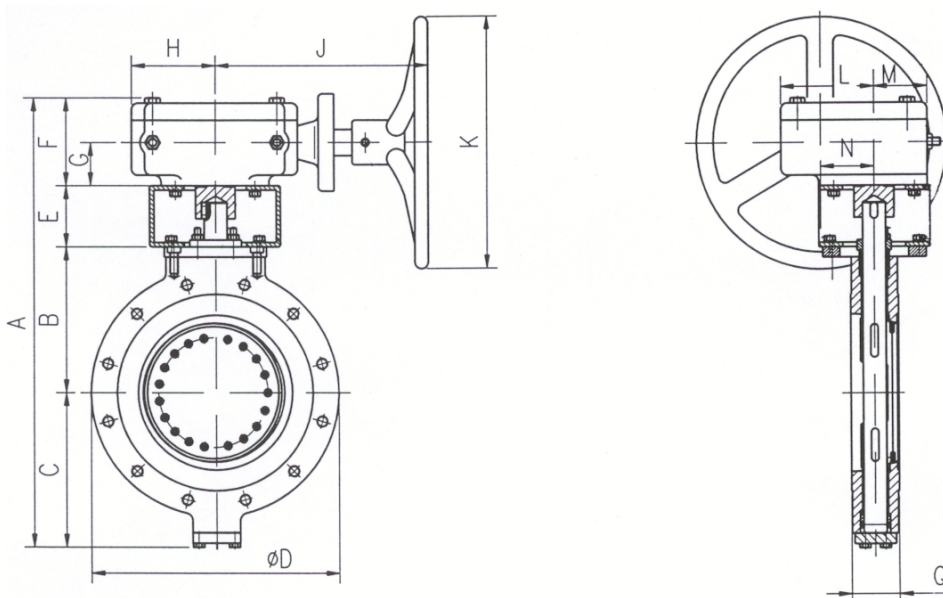
Lug Type Body DIN / ANSI & Double Flange Body ISO Dimensions / Bare Shaft



DN	80	100	125	150	200	250	300	350	400	450	500	600	
A	192	207	227	252	303	339	367	407	476	533	575	657	
B	130	145	155	180	223	259	282	317	363	413	445	517	
C	130	145	140	180	208	240	292	317	383	433	465	537	
D (PN 10)	200	225	260	292	367	400	452	516	575	-	670	780	
D (PN 16)	200	225	260	292	367	400	452	516	575	-	715	842	
D (PN 25)	200	225	260	292	367	440	502	567	620	-	740	842	
D (PN 40)	200	225	260	292	367	440	502	567	660	-	740	-	
D (ANSI 150)	190	240	-	280	343	406	482	533	597	635	698	813	
D (ANSI 300)	210	240	-	318	381	444	520	584	648	711	774	914	
E (DIN)	64	64	70	76	89	114	114	127	140	-	152	178	
E (ISO)	114	127	-	140	152	165	178	190	216	222	229	267	
E (ANSI 150)	48	54	-	57	64	71	81	92	102	114	127	154	
E (ANSI 300)	48	54	-	59	73	83	92	117	133	149	159	181	
F	20	22	25	32	38	40	45	55	65	70	75	90	
G	6	6	8	10	10	12	14	16	18	20	20	25	
H	4.8	4.8	-	8	9.5	9.5	12.7	12.7	15.0	19.1	19.1	22.3	
J	3.5	3.5	4	5	5	5	5.5	6	7	7.5	7.5	9	
K	2.7	2.7	-	4.5	5.4	5.4	7.3	7.1	9	10.9	10.8	12.6	
L	22	22	32	32	40	40	45	50	63	70	80	90	
M	4	4	4	4	4	4	4	4	8	8	8	8	
N (DIN)	M12		M16		M20				M16	-	M16		
N (ANSI / ISO)	7/16 -14UNC		-	5/8 -11UNC	3/4 -10UNC				5/8 -11UNC				
P	125		140		165				254				

XOMOX Severe Service Butterfly Valves - Series 9000

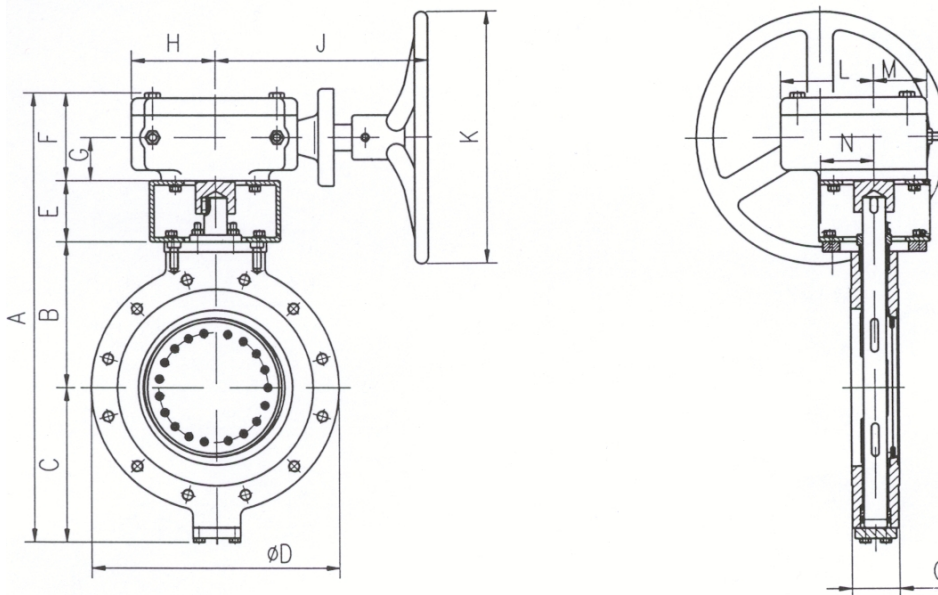
Lug Type Body DIN / ANSI & Double Flange Body ISO Dimensions with Gear (DN 80 – 350)



DN	80	100	125	150		200		250	300			350		
A	401	431	446	511	515	607	611	679	754	780	801	814	840	861
B	130	145	155	180		223		259	282			317		
C	130	145	140	180		208		240	292			317		
D (CL 150)	190	240	-	280		343		406	482			533		
D (CL 300)	210	240	-	318		381		444	520			584		
D (PN 10)	200	225	260	292		367		400	452			516		
D (PN 16)	200	225	260	292		367		400	452			516		
D (PN 25)	200	225	260	292		367		400	502			567		
D (PN 40)	200	225	260	292		367		440	502			567		
E	80	80	90	90		120		120	120			120		
Q (DIN)	64	64	70	76		89		114	114			127		
Q (ISO)	114	127	-	140		152		165	178			190		
Q (ANSI 150)	48	54	-	57		64		71	81			92		
Q (ANSI 300)	48	54	-	59		73		83	92			117		
F	76	76	76	76	80	76	80	80	80	106	127	80	106	127
G	42	42	42	42	44.5	42	44.5	44.5	44.5	50	50	44.5	50	50
H	64	64	64	64	100	64	100	100	100	126	158	100	126	158
J	240	240	240	240	282	240	282	282	282	362	387	282	362	387
K	250	250	250	250	400	250	400	400	400	600	600	400	600	600
L	98	98	98	98	134	98	134	134	134	178	209	134	178	209
M	45	45	45	45	64	45	64	64	64	114	117	64	114	117
N	65	65	65	65	96.4	65	96.4	96.4	96.4	123	154	96.4	123	154
Δp max.	40	40	40	16	40	16	40	40	16	25	40	16	25	40

XOMOX Severe Service Butterfly Valves - Series 9000

Lug Type Body DIN / ANSI & Double Flange Body ISO Dimensions with Gear (DN 400 - 600)



DN	400			450				500				600		
A	986	1012	1058	1132	1153	1178	1176	1176	1197	1222	1220	1366	1364	1378
B	363			413				445				517		
C	383			433				465				537		
D (CL 150)	597			635				698				813		
D (CL 300)	648			711				774				914		
D (PN 10)	575			-				670				780		
D (PN 16)	575			-				715				842		
D (PN 25)	620			-				740				842		
D (PN 40)	660			-				740				-		
E	180			180				180				180		
Q (DIN)	140			-				152				178		
Q (ISO)	216			222				229				267		
Q (ANSI 150)	102			114				127				154		
Q (ANSI 300)	133			149				159				181		
F	80	106	152	106	127	152	150	106	127	152	150	152	150	164
G	44.5	50	66	50	50	66	64	50	50	66	64	66	64	70
H	100	126	155	126	158	155	153	126	158	155	153	155	153	232
J	282	362	493	362	387	493	509	362	387	493	509	493	509	517
K	400	600	600	600	600	600	600	600	600	600	600	600	600	600
L	134	178	232	178	209	232	239	178	209	232	239	232	239	236
M	64	114	158	114	117	158	171	114	117	158	171	158	171	175
N	96.4	123	60	132	154	60	68	123	154	60	68	60	68	152
Δp max.	10	25	40	10	16	25	40	10	16	25	40	16	25	40

Dimensions for Double Flange Body DIN and ANSI on request.

XOMOX Severe Service Butterfly Valves - Series 9000

Lug Type Body DIN – Bolt Dimensions

For Weld Neck Flanges acc. to DIN

DN		PN	Flange DIN	Number	x	Thread	x	Length
80	3"	10-40	2633/2635	16	x	M16	x	50
100	4"	10/16	2633	16	x	M16	x	50
		25/40	2635	16	x	M20	x	55
125	5"	10/16	2633	16	x	M16	x	50
		25/40	2635	16	x	M24	x	55
150	6"	10/16	2633	16	x	M20	x	50
		25/40	2635	16	x	M24	x	60
200	8"	10	2632	16	x	M20	x	55
		16	2633	24	x	M20	x	55
		25	2634	24	x	M24	x	65
		40	2635	24	x	M27	x	70
250	10"	10	2632	24	x	M20	x	55
		16	2633	24	x	M24	x	60
		25	2634	24	x	M27	x	70
		40	2635	24	x	M30	x	80
300	12"	10	2632	24	x	M20	x	55
		16	2633	24	x	M24	x	60
		25	2634	32	x	M27	x	70
		40	2635	24	x	M30	x	90
			2635	8*	x	M30	x	80
350	14"	10	2632	32	x	M20	x	55
		16	2633	32	x	M24	x	65
		25	2634	32	x	M30	x	80
		40	2635	32	x	M33	x	90
400	16"	10	2632	32	x	M24	x	60
		16	2633	32	x	M27	x	70
		25	2634	32	x	M33	x	90
		40	2635	32	x	M36	x	100
500	20"	10	2632	32	x	M24	x	65
				8*	x	M24	x	60
		16	2633	32	x	M30	x	80
				8*	x	M30	x	70
		25	2634	32	x	M33	x	90
				8*	x	M33	x	80
		40	2635	32	x	M39	x	110
				8*	x	M39	x	80
600	24"	10	2632	32	x	M27	x	70
				8*	x	M27	x	65
		16	2633	32	x	M33	x	80
				8*	x	M33	x	75
		25	2634	32	x	M36	x	100
				8*	x	M36	x	80

*These shorter bolts are required for the tapped holes next to the stem.

XOMOX Severe Service Butterfly Valves - Series 9000

Lug Type Body ANSI – Bolt Dimensions

For Weld Neck Flanges acc. to ANSI B 16.5

DN		ANSI Class	Number	x	Thread	x	Length	
80	3"	150	8	x	5/8 - 11UNC	x	1 3/4"	
		300	16		3/4 - 10UNC		2"	
100	4"	150	16	x	5/8 - 11UNC	x	2"	
		300	16		3/4 - 10UNC		2 1/4"	
150	6"	150	16	x	3/4 - 10UNC	x	2"	
		300	24		3/4 - 10UNC		2 1/2"	
200	8"	150	16	x	3/4 - 10UNC	x	2 1/4"	
		300	24		7/8 - 9UNC		3"	
250	10"	150	24	x	7/8 - 9UNC	x	2 1/2"	
			24		1 - 8UNC		3 1/4"	
			8*		1 - 8UNC		2 3/4"	
300	12"	150	24	x	7/8 - 9UNC	x	2 1/2"	
			32		1 1/8 - 7UNC		3 1/2"	
			8*		1 1/8 - 7UNC		3"	
350	14"	150	24	x	1 - 8UNC	x	2 3/4"	
			32		1 1/8 - 7UNC		4"	
			8*		1 1/8 - 7UNC		3"	
400	16"	150	32	x	1 - 8UNC	x	2 3/4"	
			32		1 1/4 - 7UNC		4"	
			8*		1 1/4 - 7UNC		3 1/4"	
450	18"	150	24	x	1 1/8 - 7UNC	x	3"	
			8*		1 1/8 - 7UNC		2 1/2"	
			300		40		1 1/4 - 7UNC	4"
					8*		1 1/4 - 7UNC	3 1/4"
500	20"	150	32	x	1 1/8 - 7UNC	x	3 1/4"	
			8*		1 1/8 - 7UNC		2 1/2"	
			300		40		1 1/4 - 7UNC	4 1/2"
					8*		1 1/4 - 7UNC	3 1/2"
600	24"	150	32	x	1 1/4 - 7UNC	x	3 1/2"	
			8*		1 1/4 - 7UNC		2 3/4"	
			300		40		1 1/2 - 6UNC	5"
					8*		1 1/2 - 6UNC	4"

* These shorter bolts are required for the tapped holes next to the spindle.

XOMOX Severe Service Butterfly Valves - Series 9000

Double Flange Body DIN – Bolt Dimensions Bolt-/ Nut Dimensions for weld neck flanges acc. to DIN

DN	PN	DIN**	Number	x	Thread	x	Length	
80	3"	10-40	2633/2635	8	x	M16	x	70 Bolt and nut
				8*	x	M16	x	50
100	4"	10/16	2633	8	x	M16	x	70 Bolt and nut
				8*	x	M16	x	45
		25/40	2635	8	x	M20	x	80 Bolt and nut
				8*	x	M20	x	50
150	6"	10/16	2633	8	x	M20	x	75 Bolt and nut
				8*	x	M20	x	50
		25/40	2635	8	x	M24	x	100 Bolt and nut
				8*	x	M24	x	65
200	8"	10	2632	8	x	M20	x	80 Bolt and nut
				8*	x	M20	x	55
		16	2633	16	x	M20	x	80 Bolt and nut
				8*	x	M20	x	55
		25	2634	16	x	M24	x	100 Bolt and nut
				8*	x	M24	x	60
		40	2635	16	x	M27	x	110 Bolt and nut
				8*	x	M27	x	70
250	10"	10	2632	16	x	M20	x	80 Bolt and nut
				8*	x	M20	x	55
		16	2633	16	x	M24	x	90 Bolt and nut
				8*	x	M24	x	60
		25	2634	16	x	M27	x	120 Bolt and nut
				8*	x	M27	x	65
		40	2635	16	x	M30	x	120 Bolt and nut
				8*	x	M30	x	75
300	12"	10	2632	16	x	M20	x	90 Bolt and nut
				8*	x	M20	x	55
		16	2633	16	x	M24	x	90 Bolt and nut
				8*	x	M24	x	60
		25	2634	24	x	M27	x	100 Bolt and nut
				8*	x	M27	x	75
		40	2635	24	x	M30	x	130 Bolt and nut
				8*	x	M30	x	80
350	14"	10	2632	24	x	M20	x	90 Bolt and nut
				8*	x	M20	x	55
		16	2633	24	x	M24	x	100 Bolt and nut
				8*	x	M24	x	65
		25	2634	24	x	M30	x	130 Bolt and nut
				8*	x	M30	x	80
		40	2635	24	x	M33	x	140 Bolt and nut
				8*	x	M33	x	90
400	16"	10	2632	24	x	M24	x	100 Bolt and nut
				8*	x	M24	x	60
		16	2633	24	x	M30	x	100 Bolt and nut
				8*	x	M30	x	70
		25	2634	24	x	M33	x	140 Bolt and nut
				8*	x	M33	x	80
		40	2635	24	x	M36	x	150 Bolt and nut
				8*	x	M36	x	90
500	20"	10	2632	32	x	M24	x	100 Bolt and nut
				8*	x	M24	x	60
		16	2633	32	x	M30	x	140 Bolt and nut
				8*	x	M30	x	80
		25	2634	32	x	M33	x	150 Bolt and nut
				8*	x	M33	x	90
		40	2635	32	x	M39	x	170 Bolt and nut
				8*	x	M39	x	100
600	24"	10	2632	32	x	M27	x	110 Bolt and nut
				8*	x	M27	x	70
		16	2633	32	x	M33	x	150 Bolt and nut
				8*	x	M33	x	80
		25	2634	32	x	M36	x	160 Bolt and nut
				8*	x	M36	x	90

Only bolts are required for the tapped holes next to the stem
 **Dimensions refer to bolt circle diameter, thread size and bolt numbers.

The flange outside diameter corresponds to ANSI B16.5.

XOMOX Severe Service Butterfly Valves - Series 9000

Double Flange Body ISO – Bolt Dimensions

Bolt-/ Nut Dimensions for Weld Neck Flanges according to ANSI B 16.5

DN		ANSI Class	Number	x	Thread	x	Length	
80	3"	150	8	x	5/8 – 11UNC	x	2 3/4"	Bolt and nut
		300	8	x	3/4 – 10UNC	x	3"	Bolt and nut
			8*	x	3/4 – 10UNC	x	2"	
100	4"	150	8	x	5/8 – 11UNC	x	2 3/4"	Bolt and nut
			8*	x	5/8 – 11UNC	x	1 3/4"	
		300	8	x	3/4 – 10UNC	x	3 1/2"	Bolt and nut
			8*	x	3/4 – 10UNC	x	2 1/4"	
150	6"	150	8	x	3/4 – 10UNC	x	2 3/4"	Bolt and nut
			8*	x	3/4 – 10UNC	x	1 3/4"	
		300	16	x	3/4 – 10UNC	x	4"	Bolt and nut
			8*	x	3/4 – 10UNC	x	2 1/4"	
200	8"	150	8	x	3/4 – 10UNC	x	3"	Bolt and nut
			8*	x	3/4 – 10UNC	x	2"	
		300	16	x	7/8 – 9UNC	x	4 1/4"	Bolt and nut
			8*	x	7/8 – 9UNC	x	2 3/4"	
250	10"	150	16	x	7/8 – 9UNC	x	3 1/2"	Bolt and nut
			8*	x	7/8 – 9UNC	x	2 1/4"	
		300	24	x	1 – 8UNC	x	5"	Bolt and nut
			8*	x	1 – 8UNC	x	3"	
300	12"	150	16	x	7/8 – 9UNC	x	3 1/2"	Bolt and nut
			8*	x	7/8 – 9UNC	x	2 1/4"	
		300	24	x	1 1/8 – 7UNC	x	5 1/4"	Bolt and nut
			8*	x	1 1/8 – 7UNC	x	3 1/4"	
350	14"	150	16	x	1 – 8UNC	x	4"	Bolt and nut
			8*	x	1 – 8UNC	x	2 3/4"	
		300	32	x	1 1/8 – 7UNC	x	5 1/2"	Bolt and nut
			8*	x	1 1/8 – 7UNC	x	3 1/2"	
400	16"	150	24	x	1 – 8UNC	x	4"	Bolt and nut
			8*	x	1 – 8UNC	x	2 3/4"	
		300	32	x	1 1/4 – 7UNC	x	6"	Bolt and nut
			8*	x	1 1/4 – 7UNC	x	3 1/2"	
450	18"	150	24	x	1 1/8 – 7UNC	x	4 1/2"	Bolt and nut
			8*	x	1 1/8 – 7UNC	x	3"	
		300	40	x	1 1/4 – 7UNC	x	6"	Bolt and nut
			8*	x	1 1/4 – 7UNC	x	4"	
500	20"	150	32	x	1 1/8 – 7UNC	x	4 1/2"	Bolt and nut
			8*	x	1 1/8 – 7UNC	x	3 1/4"	
		300	40	x	1 1/4 – 7UNC	x	6 1/2"	Bolt and nut
			8*	x	1 1/4 – 7UNC	x	4"	
600	24"	150	32	x	1 1/4 – 7UNC	x	5"	Bolt and nut
			8*	x	1 1/4 – 7UNC	x	3 1/2"	
		300	40	x	1 1/2 – 6UNC	x	7"	Bolt and nut
			8*	x	1 1/2 – 6UNC	x	4 1/2"	

The shorter bolts are required for the tapped holes next to the stem.

XOMOX Severe Service Butterfly Valves - Series 9000

Double Flange Body ANSI – Bolt Dimensions

Bolt-/ Nut Dimensions for Weld Neck Flanges acc. to ANSI B16.5

DN		ANSI Class	Number	x	Thread	x	Length
100	4"	150	16	x	5/8 - 11UNC	x	2 3/4"
		300	16	x	3/4 - 10UNC	x	3 1/2"
150	6"	150	16	x	3/4 - 10UNC	x	2 3/4"
		300	24	x	3/4 - 10UNC	x	4"
200	8"	150	16	x	3/4 - 10UNC	x	3"
		300	24	x	7/8 - 9UNC	x	4 1/4"
250	10"	150	24	x	7/8 - 9UNC	x	3 1/4"
		300	32	x	1 - 8UNC	x	5"
300	12"	150	24	x	7/8 - 9UNC	x	3 1/2"
		300	32	x	1 1/8 - 7UNC	x	5 1/4"

XOMOX Severe Service Butterfly Valves - Series 9000

Weights for DN 80 – 250 (in kg)

DN	Nominal Pressure	Butterfly Valve / Bare Shaft					Butterfly Valve / Gear Operated				
		A*	B*	C*	D*	E*	A*	B*	C*	D*	E*
80	PN 10	20	-	-	22	-	34	-	-	32	-
	PN 16	20	-	-	22	-	34	-	-	32	-
	PN 25	20	-	-	22	-	34	-	-	32	-
	PN 40	20	-	-	22	-	34	-	-	32	-
	ANSI 150	-	15	18	-	-	-	29	32	-	-
	ANSI 300	-	15	22	-	-	-	29	36	-	-
100	PN 10	24	-	-	22	-	38	-	-	36	-
	PN 16	24	-	-	22	-	38	-	-	36	-
	PN 25	24	-	-	31	-	38	-	-	45	-
	PN 40	24	-	-	31	-	38	-	-	45	-
	ANSI 150	-	20	22	-	25	-	34	36	-	39
	ANSI 300	-	20	31	-	37	-	34	45	-	51
125	PN 10	25	-	-	-	-	39	-	-	-	-
	PN 16	25	-	-	-	-	39	-	-	-	-
	PN 25	25	-	-	-	-	39	-	-	-	-
	PN 40	25	-	-	-	-	39	-	-	-	-
150	PN 10	37	-	-	36	-	51	-	-	50	-
	PN 16	37	-	-	36	-	51	-	-	50	-
	PN 25	37	-	-	53	-	51	-	-	74	-
	PN 40	37	-	-	53	-	51	-	-	74	-
	ANSI 150	-	28	36	-	46	-	42	50	-	60
	ANSI 300	-	29	53	-	71	-	50	74	-	74
200	PN 10	64	-	-	60	-	83	-	-	79	-
	PN 16	64	-	-	60	-	83	-	-	79	-
	PN 25	64	-	-	85	-	90	-	-	111	-
	PN 40	64	-	-	85	-	90	-	-	111	-
	ANSI 150	-	46	60	-	73	-	65	79	-	92
	ANSI 300	-	52	85	-	110	-	78	111	-	136
250	PN 10	106	-	-	96	-	132	-	-	122	-
	PN 16	106	-	-	96	-	132	-	-	122	-
	PN 25	106	-	-	134	-	132	-	-	160	-
	PN 40	106	-	-	134	-	132	-	-	160	-
	ANSI 150	-	66	96	-	89	-	92	122	-	115
	ANSI 300	-	-	134	-	169	-	103	-	-	195

A*: Lug Type Body DIN 3202-K3 (EN 558-1, Basic Series 16)

B*: Lug Type Body API 609 Tab. 2

C*: Double Flange Body ISO 5752 Tab. 4 short

D*: Double Flange Body DIN 3202-F16 (EN 558-1, Basic Series 13)

E*: Double Flange Body ANSI B16.10

XOMOX Severe Service Butterfly Valves - Series 9000

Weights for DN 300 – 600 (in kg)

DN	Nominal Pressure	Butterfly Valve / Bare Shaft					Butterfly Valve / Gear Operated				
		A*	B*	C*	D*	E*	A*	B*	C*	D*	E*
300	PN 10	135	-	-	106	-	161	-	-	132	-
	PN 16	135	-	-	106	-	161	-	-	132	-
	PN 25	135	-	-	106	-	176	-	-	132	-
	PN 40	135	-	-	157	-	189	-	-	211	-
	ANSI 150	-	82	106	-	132	-	108	132	-	158
	ANSI 300	-	93	157	-	203	-	147	211	-	253
350	PN 10	168	-	-	151	-	195	-	-	178	-
	PN 16	168	-	-	151	-	195	-	-	178	-
	PN 25	168	-	-	226	-	211	-	-	226	-
	PN 40	168	-	-	226	-	224	-	-	226	-
	ANSI 150	-	94	151	-	-	-	121	178	-	-
	ANSI 300	-	120	226	-	-	-	176	282	-	-
400	PN 10	239	-	-	227	-	280	-	-	284	-
	PN 16	239	-	-	227	-	296	-	-	284	-
	PN 25	239	-	-	318	-	296	-	-	404	-
	PN 40	239	-	-	318	-	325	-	-	404	-
	ANSI 150	-	132	227	-	-	-	189	284	-	-
	ANSI 300	-	172	318	-	-	-	258	404	-	-
450	ANSI 150	-	249	281	-	-	-	320	352	-	-
	ANSI 300	-	325	407	-	-	-	436	518	-	-
500	PN 10	359	-	-	316	-	418	-	-	388	-
	PN 16	359	-	-	316	-	431	-	-	388	-
	PN 25	359	-	-	463	-	447	-	-	575	-
	PN 40	359	-	-	463	-	471	-	-	575	-
	ANSI 150	-	319	316	-	-	-	391	388	-	-
	ANSI 300	-	400	463	-	-	-	512	575	-	-
600	PN 10	554	-	-	506	-	664	-	-	596	-
	PN 16	554	-	-	736	-	664	-	-	939	-
	PN 25	554	-	-	736	-	664	-	-	939	-
	ANSI 150	-	545	506	-	-	-	635	596	-	-
	ANSI 300	-	770	736	-	-	-	973	939	-	-

A*: Lug Type Body DIN 3202-K3 (EN 558-1, Basic Series 16)

B*: Lug Type Body API 609 Tab. 2

C*: Double Flange Body ISO 5752 Tab. 4 short

D*: Double Flange Body DIN 3202-F16 (EN 558-1, Basic Series 13)

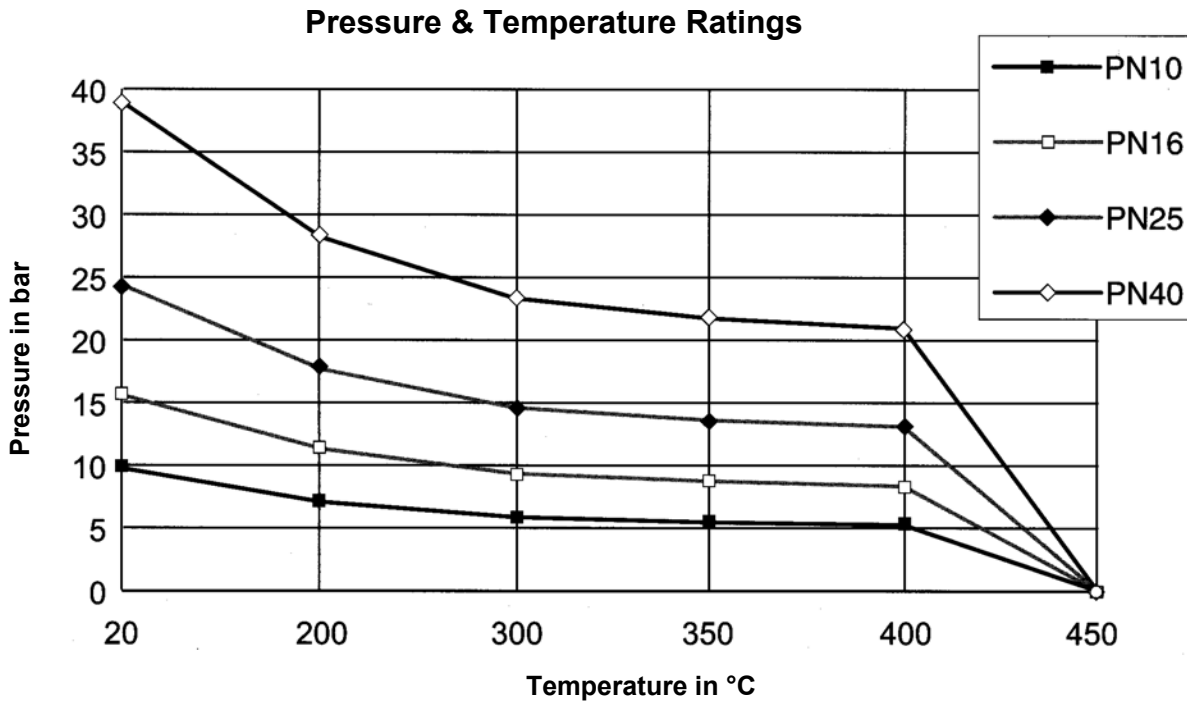
E*: Double Flange Body ANSI B16.10

XOMOX Severe Service Butterfly Valves - Series 9000

Lug Type Body DIN / Double Flange Body DIN Pressure-/Temperature Ratings for Carbon Steel

Temperature in °C	Max. Operating Pressure in bar GP 240GH / P265GH			
	PN 10	PN 16	PN 25	PN 40
20	9.74	15.6	24.4	39.0
200	7.11	11.4	17.8	28.4
300	5.89	9.4	14.7	23.5
350	5.48	8.8	13.7	21.9
400	5.28	8.4	13.2	21.1
450	-	-	-	-
500	-	-	-	-
550	-	-	-	-

Note: Values acc. to EN 12516, Tab. 3 EO



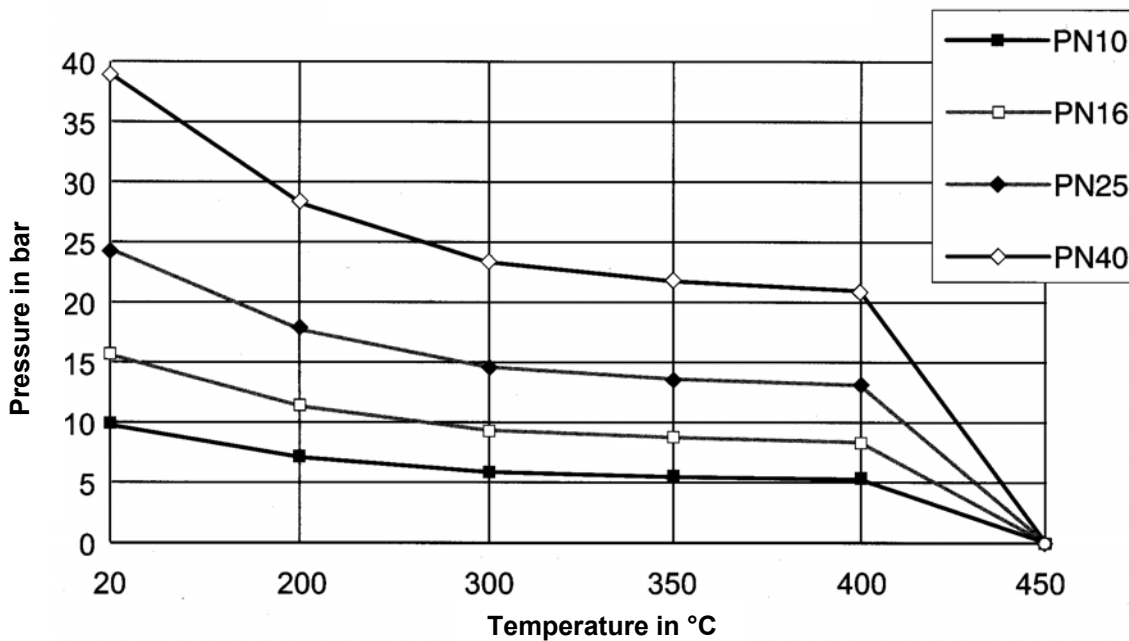
XOMOX Severe Service Butterfly Valves - Series 9000

Lug Type Body DIN / Double Flange Body DIN Pressure-/Temperature Ratings for Stainless Steel

Temperature in °C	Max. Operating Pressure in bar GP 240GH / P265GH			
	PN 10	PN 16	PN 25	PN 40
20	9.47	15.2	23.7	37.9
200	7.34	11.7	18.4	29.4
300	6.5	10.3	16.1	25.8
350	6.2	9.9	15.4	24.6
400	5.9	9.5	14.8	23.7
450	5.78	9.2	14.4	23.1
500	5.57	8.9	13.9	22.3
550	4.67	7.5	11.7	18.7

Note: Values acc. to EN 12516, Tab. 3 EO

Pressure-Temperature-Ratings



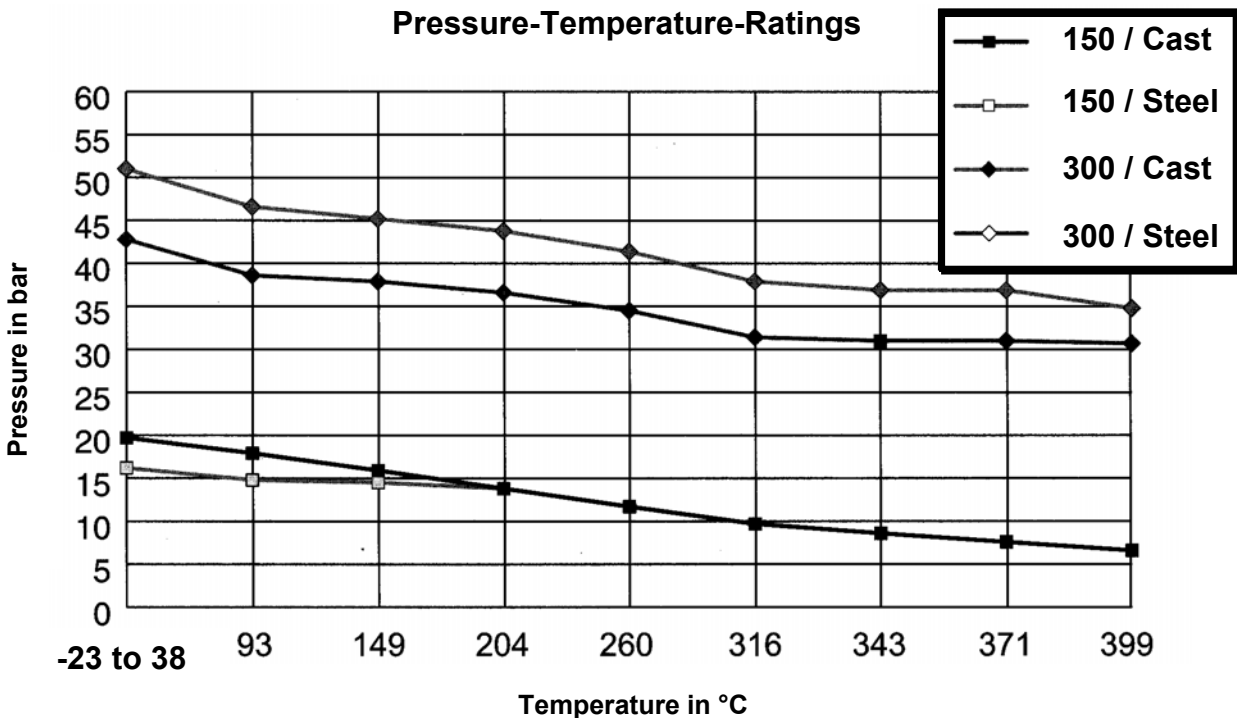
XOMOX Severe Service Butterfly Valves - Series 9000

Lug Type Body ANSI / Double Flange Body ISO /
 Double Flange Body ANSI
 Pressure-/Temperature Ratings for Carbon Steel

Temperature		max. Operating Pressure in psig / bar ANSI class 150 Steel				max. Operating Pressure in psig / bar ANSI class 300 Steel			
		Cast A216 WCB		Steel *) A516 Gr.60		Cast A216 WCB		Steel *) A516 Gr.60	
°F	°C	psig	bar	psig	bar	psig	bar	psig	bar
-20 to 100	-29 to 38	285	19.7	235	16.2	740	51.0	620	42.8
200	93	260	17.9	215	14.8	675	46.6	560	38.6
300	149	230	15.9	210	14.5	655	45.2	550	37.9
400	204	200	13.8	200	13.8	635	43.8	530	36.6
500	260	170	11.7	170	11.7	600	41.4	500	34.5
600	316	140	9.7	140	9.7	550	37.9	455	31.4
650	343	125	8.6	125	8.6	535	36.9	450	31.0
700	371	110	7.6	110	7.6	535	36.9	450	31.0
750	399	95	6.6	95	6.6	505	34.8	445	30.7
800	427	-	-	-	-	-	-	-	-
850	454	-	-	-	-	-	-	-	-
900	482	-	-	-	-	-	-	-	-
950	510	-	-	-	-	-	-	-	-
1000	538	-	-	-	-	-	-	-	-

Note: Values acc. to ANSI B16.34

*) Used only for lug design ANSI up to DN 150; Sizes above DN 200 body in carbon steel.



XOMOX Severe Service Butterfly Valves - Series 9000

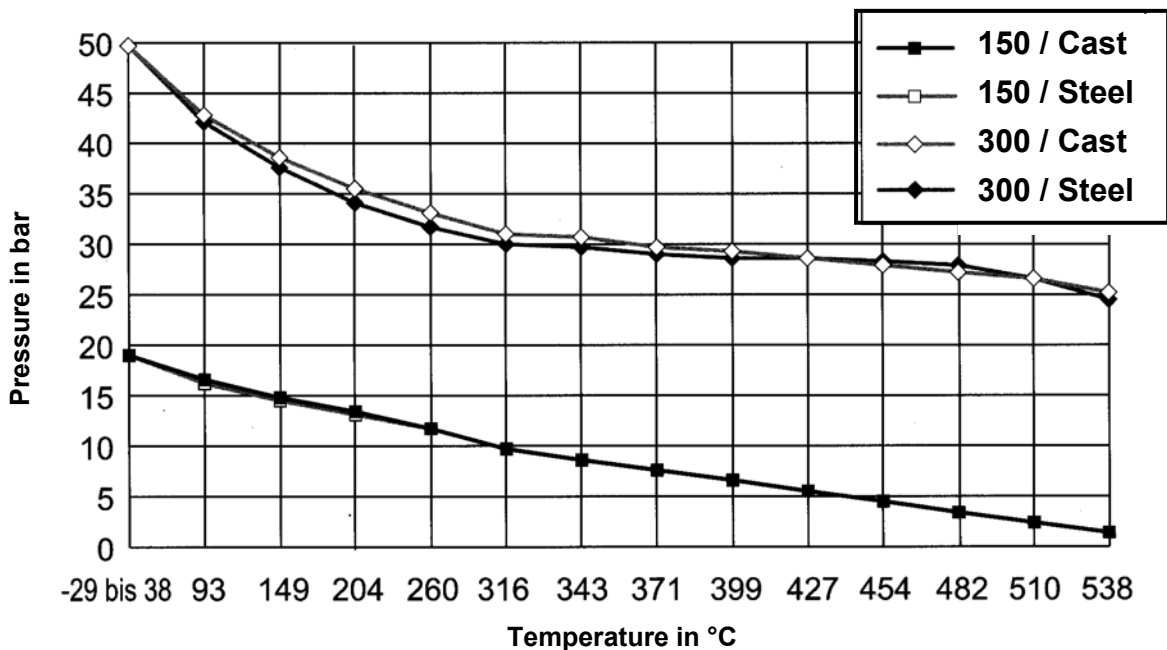
Pressure-/ Temperature Ratings for Stainless Steel

Temperature		Max. Pressure in psig / bar ANSI class 150 High-grade steel				Max. Pressure in psig / bar ANSI class 300 High-grade steel			
		Cast		Steel ^{*)}		Cast		Steel ^{*)}	
		A351 CF 8M psig	8M bar	A240 Type 321 psig	321 bar	A351 CF 8M psig	8M bar	A240 Type 321 psig	321 bar
°F	°C								
-20 to 100	-29 to 38	275	19.0	275	19.0	720	49.7	720	49.7
200	93	240	16.6	235	16.2	620	42.8	610	42.1
300	149	215	14.8	210	14.5	560	38.6	545	37.6
400	204	195	13.4	190	13.1	515	35.5	495	34.1
500	260	170	11.7	170	11.7	480	33.1	460	31.7
600	316	140	9.7	140	9.7	450	31.0	435	30.0
650	343	125	8.6	125	8.6	445	30.7	430	29.7
700	371	110	7.6	110	7.6	430	29.7	420	29.0
750	399	95	6.6	95	6.6	425	29.3	415	28.6
800	427	80	5.5	80	5.5	415	28.6	415	28.6
850	454	65	4.5	65	4.5	405	27.9	410	28.3
900	482	50	3.4	50	3.4	395	27.2	405	27.9
950	510	35	2.4	35	2.4	385	26.6	385	26.6
1000	538	20	1.4	20	1.4	365	25.2	355	24.5

Notes: Values acc. to ANSI B16.34

^{*)} Used only for lug type body ANSI up to DN 150; Sizes above DN 200 body in stainless steel.

Pressure-Temperature-Ratings



XOMOX Severe Service Butterfly Valves - Series 9000

Torque Values

DN		Max. differential pressure Δp in bar for butterfly valves in closed position								
		10	16	20	25	30	35	40	45	50
80	3"	44	64	77	94	110	127	143	160	176
100	4"	79	114	137	165	194	223	251	280	309
125	5"	132	185	221	266	311	355	400	445	490
150	6"	274	373	439	521	603	685	768	850	932
200	8"	290	464	580	725	870	1015	1160	1305	1450
250	10"	488	750	925	1144	1363	1581	1800	2019	2238
300	12"	795	1107	1315	1575	1835	2095	2355	2615	2875
350	14"	1286	1817	2171	2614	3057	3500	3943	4386	4829
400	16"	1450	2230	2750	3400	4050	4700	5350	6000	6650
450	18"	1900	2770	3350	4075	4800	5525	6250	6975	7700
500	20"	2600	3680	4400	5300	6200	7100	8000	8900	9800
600	24"	4460	6176	7320	8750	10180	11610	13040	14470	15900

The torques shown above are actuator sizing torques. They include a safety factor and can be used for all applications irrespective of whether the high pressure is acting in the preferred direction (shaft side) or reverse direction (disc side).

kv-Values

DN		Opening Angle							
		90°	80°	70°	60°	50°	40°	30°	20°
80	3"	102	98	79	59	44	32	21	12
100	4"	195	187	150	113	84	60	41	23
125	5"	340	326	262	197	146	105	71	41
150	6"	560	538	431	325	241	174	118	67
200	8"	1270	1219	978	737	546	394	267	152
250	10"	2000	1920	1540	1160	860	620	420	240
300	12"	3000	2880	2310	1740	1290	930	630	360
350	14"	4600	4416	3542	2668	1978	1426	966	552
400	16"	6400	6144	4928	3712	2752	1984	1344	768
450	18"	8700	8352	6699	5046	3741	2697	1827	1044
500	20"	11000	10560	8470	6380	4730	3410	2310	1320
600	24"	17000	16320	13090	9860	7310	5270	3570	2040

Standard Spare Parts

Item	Part	Material
3	Laminated Seal	1.4541 / Graphite
4	Gasket	Graphite
7	Cover Seal	Graphite
19/20	Gland Packing	3 Graphite Rings, 2 Rings instead of Carbon Fibre

More technical information on request.

Subject to technical modifications

XOMOX Model Numbers

currently under review.



A Crane Co. Company