

Specification

DESIGN

Triple offset structure design, high sealing, long life, can be used for cutting, can also be used for adjustment.

DESIGN CRITERIA

API 609, EN 593; ASME B16.34; EN 12516;

FLANGE STANDARD

ASME B16.5/ASME B16.47; EN 1092-1; GB/T 9124;

STRUCTURAL LENGTH STANDARD

ISO 5752 & EN 558; ASME B16.10; EN 609;

BUTT WELDING END

ASME B16.25; EN 12627;

CONNECTIONS

Wafer, Lug, Flange, Weld

PRESSURE APERTURE RANGE

3"~104"(150LB)/3"~60"(300LB)/3"~56"(600LB)
3"~24"(900LB)/3"~24"(1500LB)

The above information is for reference only and Aisenberg reserves the right to alter without prior notice

TEMPERATURE

Standard: -29~260°C

High temperature: -29~700°C

Low temperature: -196~100°C

MATERIALS

Valve body: WCB/A105, CF8/F304, CF8M/F316, CF3M/F316L, 2205/F51, 2507/F53

Disc: WCB/A105, CF8/F304, CF8M/F316, CF3M/F316L, 2205/F51, 2507/F53

Seal ring: SS+H60, SS+STL

Valve stem sleeve: 316+H60, high temperature bearing

Stem: S17400 (17-4PH), S20910 (XM-19)

Packing: flexible graphite

ACTUATOR: handle, turbine, pneumatic actuator, electric actuator

OPTIONS:

Bidirectional seal

High temperature fin type

Low temperature extension type

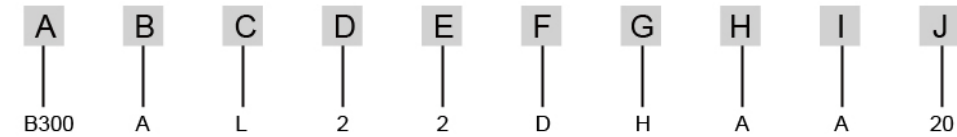
Insulated jacket type



Type:
B300/B310/B320
Triple offset butterfly valve
150Lb~2500Lb
PN6~PN420

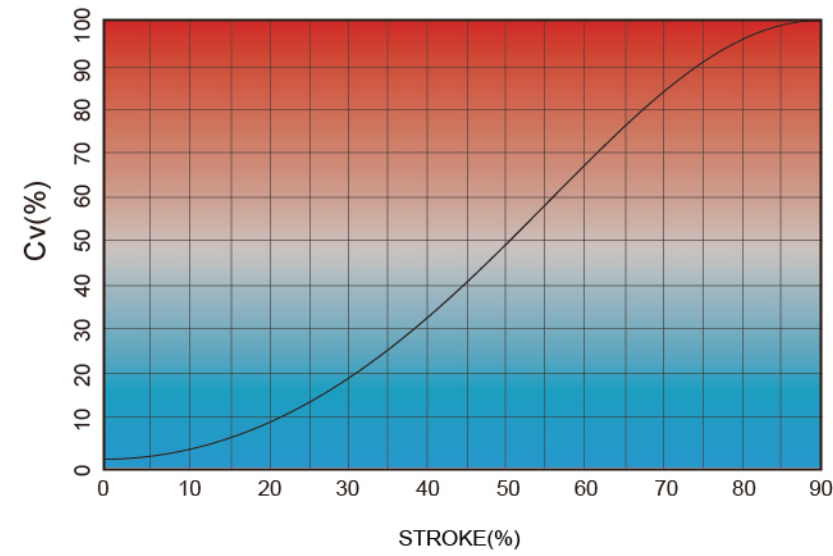
WCB
CF8
CF8M

Model code



A. Product	B. Control	C. Type of actuator	D. Body
B300=Wafer Triple Offset Butterfly Valve B310=Lug Triple Offset Butterfly Valve B320=Flange Triple Offset Butterfly Valve B320=Weld Triple Offset Butterfly Valve	A=Manual B=Pneumatic Piston Actuator P=Basic Electric Actuator 0=None	L=Lever W=Handwheel U=ISO5211 Lever D=Double Acting S=Single Acting FC P=Single Acting FO E=220VAC Electric Actuator(ON/OFF) F=24VDC Electric Actuator(ON/OFF) M=380VAC Electric Actuator(ON/OFF) G=220VAC Electric Actuator(Control) H=24VDC Electric Actuator(Control) J=380VAC Electric Actuator(Control) K=220VAC Explosion Proof Electric Actuator(ON/OFF) N=24VDC Explosion Proof Electric Actuator(ON/OFF) Q=380VAC Explosion Proof Electric Actuator(ON/OFF) R=220VAC Explosion Proof Electric Actuator(Control) T=24VDC Explosion Proof Electric Actuator(Control) V=380VAC Explosion Proof Electric Actuator(Control) 0=None	2=WCB 4=CF8 6=CF8M 9=Duplex Steel

E. Trim	F. Seal	G. Packing	H. Pressure	I. Connection	J. Valve size
2=WCB 4=304 6=316 9=Duplex Steel	D=METAL L=STL	H=GRAPHITE	A=PN10 B=PN16/150LB C=PN25 D=PN40/300LB E=PN100/600LB F=PN150/900LB G=PN250/1500LB H=PN420/2500LB X=PN6	A=ASME Flange B=Weld C=GB Flange D=DIN Flange	20=3" (DN80) 37=38"(DN950) 21=4" (DN100) 38=40"(DN1000) 22=5" (DN125) 39=44"(DN1100) 23=6" (DN150) 40=58"(DN1200) 24=8" (DN200) 41=52"(DN1300) 25=10" DN250 42=56"(DN1400) 26=12" DN300 43=60"(DN1500) 27=14" DN350 44=64"(DN1600) 28=16" DN400 45=68"(DN1700) 29=18" (DN450) 46=72"(DN1800) 30=20"(DN500) 47=76"(DN1900) 31=24"(DN600) 48=80"(DN2000) 32=28"(DN700) 49=84"(DN2100) 33=30"(DN750) 50=88"(DN2200) 34=32"(DN800) 51=92"(DN2300) 35=34"(DN850) 52=96"(DN2400) 36=36"(DN900)

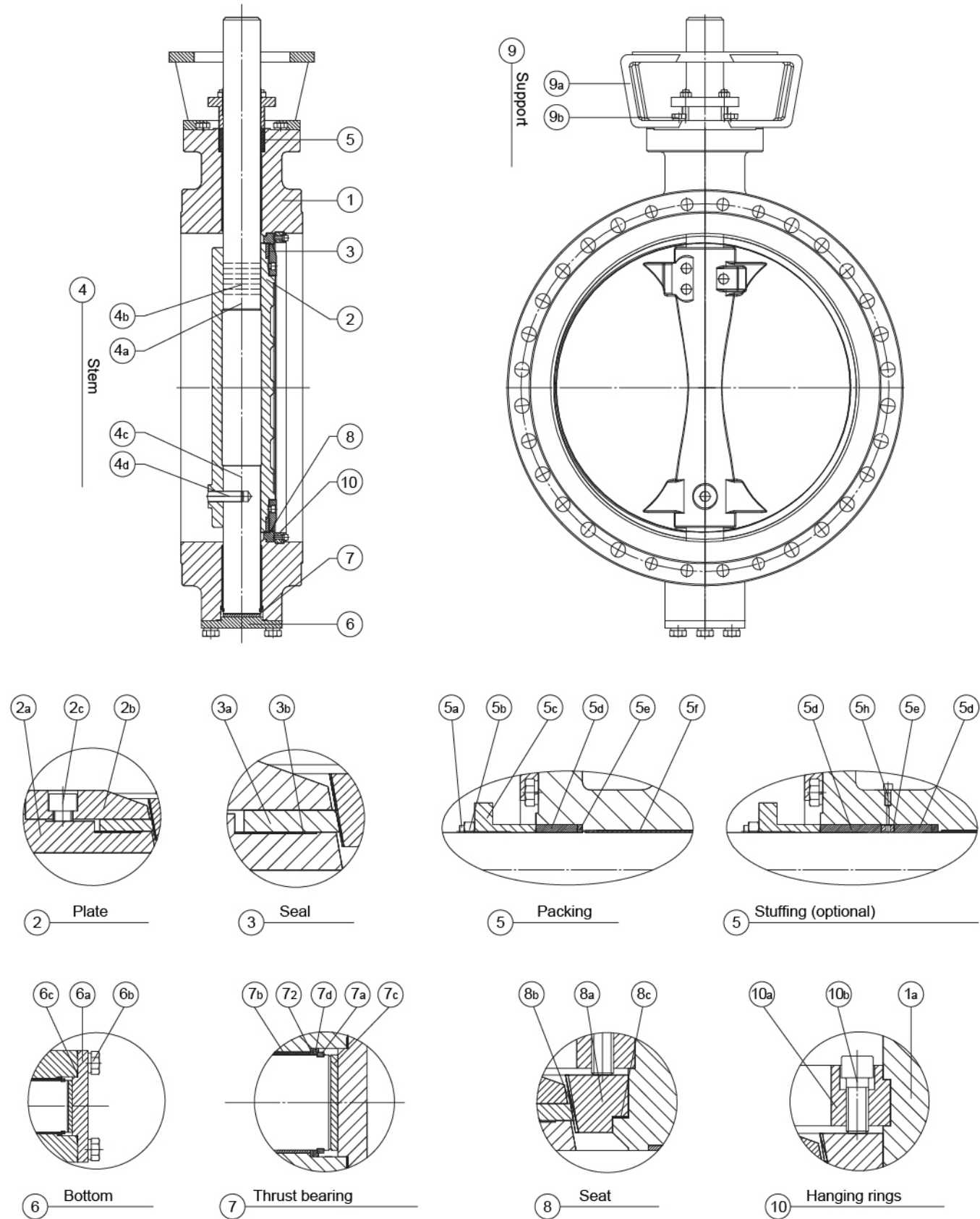


**Cv Values
150Lb**

Valvesize		5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°
mminch																			
80	3	1	6	14	23	31	39	47	54	62	71	82	96	112	128	143	156	163	165
100	4	2	12	26	42	57	72	85	98	113	130	150	176	205	234	262	285	299	302
150	6	16	31	45	59	76	101	134	178	233	297	369	448	531	616	698	758	796	796
200	8	30	57	82	108	140	185	246	327	427	544	676	821	974	1130	1280	1390	1460	1460
250	10	52	99	142	187	242	320	426	566	739	942	1170	1420	1690	1960	2220	2410	2530	2530
300	12	78	147	212	279	362	478	636	846	1100	1410	1750	2120	2520	2920	3310	3600	3780	3780
350	14	106	201	289	380	493	651	866	1150	1500	1920	2380	2890	3430	3980	4510	4890	5140	5140
400	16	165	313	451	594	769	1020	1350	1800	2350	2990	3720	4510	5350	6210	7040	7640	8020	8020
450	18	217	413	594	782	1010	1340	1780	2370	3090	3940	4890	5940	7050	8180	9270	10100	10600	10600
500	20	268	509	733	965	1250	1650	2200	2920	3820	4860	6040	7340	8710	10100	11400	12400	13000	13000
600	24	386	734	1060	1390	1800	2380	3170	4210	5500	7000	8700	10600	12500	14500	16500	17900	18800	18800
700	28	559	1060	1530	2010	2610	3450	4590	6100	7960	10100	12600	15300	18200	21100	23900	25900	27200	27200
750	30	630	1200	1720	2270	2940	3880	5160	6870	8960	11400	14200	17200	20400	23700	28900	29200	30700	30700
800	32	719	1370	1970	2590	3360	4440	5900	7840	10200	13000	16200	19700	23300	27100	30700	33300	35000	35000
900	36	884	1680	2420	3180	4120	5450	7250	9630	12600	16000	19900	24200	28700	33300	37700	40900	43000	43000
1000	40	1170	2220	3190	4210	5450	7210	9580	12700	16600	21200	26300	31900	37900	44000	49800	54100	56900	56900
1050	42	1230	2340	3370	4440	5760	7610	10100	13400	17600	22400	27800	33700	40000	46500	52600	57100	60000	60000
1200	48	1640	3120	4490	5920	7670	10100	13500	17900	23400	29800	37000	45000	53400	61900	70100	76100	80000	80000

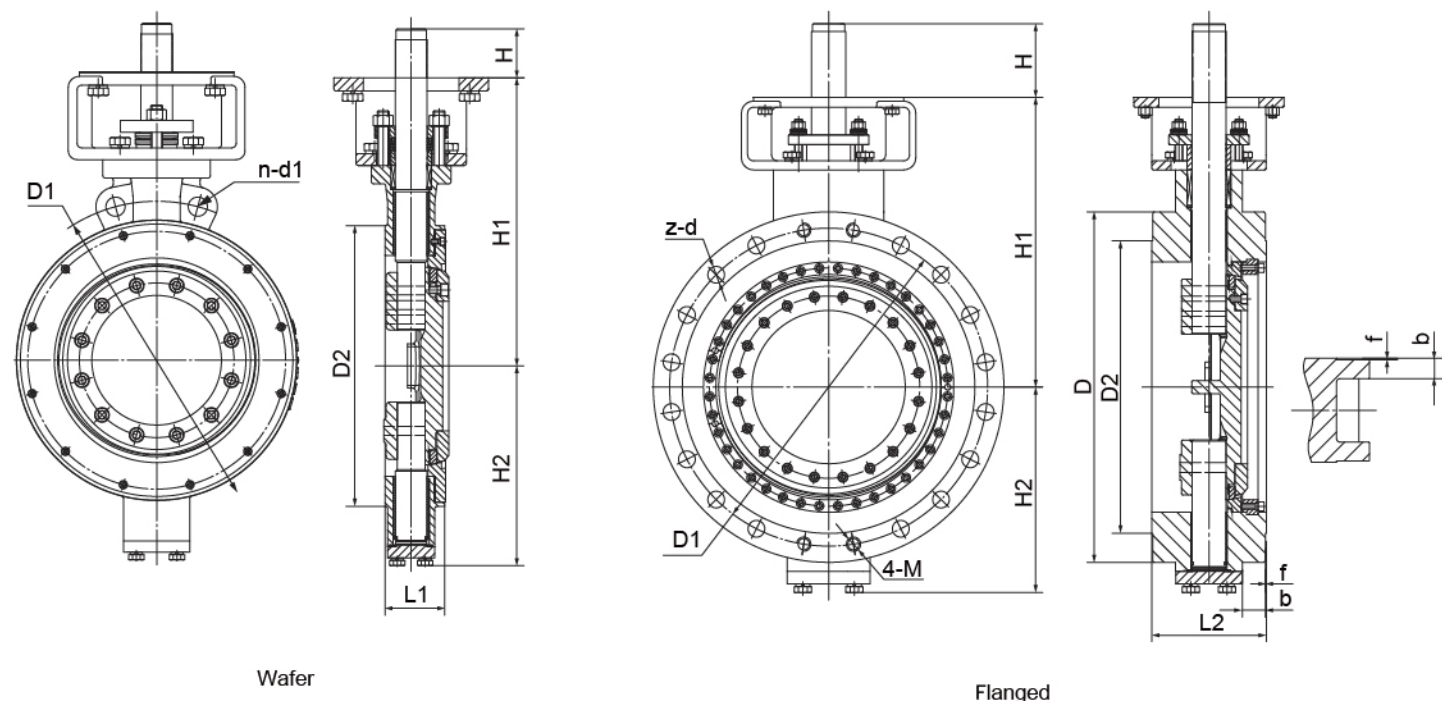
**Cv Values
300Lb**

Valvesize		5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°
mminch																			
80	3	1	6	14	23	31	39	47	54	62	71	82	96	112	128	143	156	163	165
100	4	2	12	26	42	57	72	85	98	113	130	150	176	205	234	262	285	299	302
150	6	6	25	41	54	69	91	121	162	212	268	334	407	482	559	634	689	725	725
200	8	11	45	74	98	126	166	222	298	389	492	613	746	884	1030	1160	1260	1330	1330
250	10	19	82	135	178	229	301	402	540	705	891	1110	1350	1600	1860	2110	2290	2410	2410
300	12	29	122	202	266	342	450	601	807	1050	1330	1660	2020	2400	2780	3150	3420	3600	3600
350	14	39	167	274	363	466	613	818	1100	1430	1810	2260	2750	3260	3780	4290	4660	4900	4900
400	16	58	248	408	539	692	910	1220	1630	2130	2690	3360	4090	4840	5610	6370	6920	7280	7280
450	18	77	326	537	710	911	1200	1600	2150	2810	3550	4420	5380	6380	7400	8390	9110	9590	9590
500	20	95	403	663	876	1130	1480	1980	2650	3460	4380	5460	6640	7880	9130	10400	11300	11800	11800
600	24	136	580	955	1260	1620	2130	2850	3820	4990	6310	7860	9570	11300	13100	14900	16200	17100	17100
700	28	199	844	1390	1840	2360	3100	4150	5560	7260	9190	11400	13900	16500	19100	21700	23600	24800	24800
750	30	232	986	1620	2150	2750	3620	4840	6490	8480	10700	13400	16300	19300	22400	25400	27500	29000	29000
800	32	261	1110	1830	2420	3100	4080	5450	7310	9550	12100	15000	18300	21700	25200	28600	31000	32600	32600
900	36	332	1410	2320	3070	3940	5190	6930	9300	12100	15400	19100	23300	27600	32000	36300	39400	41500	41500
1000	40	399	1700	2790	3690	4740	6230	8330	11200	14600	18400	23000	28000	33200	38400	43600	47400	49900	49900
1050	42	457	1940	3200	4230	5430	7140	9540	12800	16700	21100	26300	32000	38000	44000	50000	54200	57100	57100
1200	48	480	2040	3360	4440	5700	7500	10000	13400	17500	22200	27700	33700	39900	46300	52500	57000	60000	60000



No	Name	Body Material(WCB)	Body Material(SS)
1a	Body	ASTM A216 WCB/EN10213 1.0619	ASTM A351 CF8M/EN10213 1.4408
2a	Disc	ASTM A216 WCB/EN10213 1.0619	ASTM A351 CF8M/EN10213 1.4408
2b	Retainer ring	ASTM A276 420	ASTM A182 Type F316/EN10222-5 1.4401
2c	Screws	UNS S31600	UNS S31600
3a	Sealing ring	ASTM A182 Type F304/EN10222-T5	ASTM A182 Type F316/EN10222-5 1.4401
3b	Graphite gasket	UNS S31600+ (graphite)	UNS S31600+ (graphite)
4a	Upper stem	UNS S17400(17-4PH)	UNS S17400(17-4PH)
4b	Pin	UNS S17400(17-4PH)	UNS S17400(17-4PH)
4c	Lower stem	UNS S17400(17-4PH)	UNS S17400(17-4PH)
4d	Pin	UNS S17400(17-4PH)	UNS S17400(17-4PH)
5a	Double headed stud	ISO3506 A4(AISI316)	ISO3506 A4(AISI 316)
5b	Nut	UNS S31600	UNS S31600
5c	Packing gland	ASTM A216 WCB/EN10213 1.0619	ASTM A351 CF8M/EN10213 1.4408
5d	Packing	Graphite	Graphite
5e	Packing ring	UNS S31600	UNS S31600
5f	Upper shaft sleeve	UNS S31600+H60	UNS S31600+H60
5h	Plug	UNS S31600	UNS S31600
6a	Bottom flange	A105	ASTM A182 Type F316/EN10222-5 1.4401
6b	Screws	UNS S31600	UNS S31600
6c	Winding gaskets	UNS S31600+ (graphite)	UNS S31600+ (graphite)
7a	Locking ring	UNS S31600	UNS S31600
7b	Lower shaft sleeve	UNS S31600+H60	UNS S31600+H60
7c	Backing block	A105	UNS S31600
7d	Thrust bearing	A105	UNS S31600
7e	Thrust bearing gasket	A105	UNS S31600
8a	Seat ring	ASTM A182 Type F304/EN10222-T5	ASTM A182 Type F316/EN10222-5 1.4401
8b	Valve seat surface hardening treatment	Stellite*gr.21	Stellite* gr.21
8c	Graphite gasket	UNS S31600+ (graphite)	UNS S31600+ (graphite)
9a	Support	ASTM A216 WCB/EN10213 1.0619	ASTM A216 WCB/EN10213 1.0619
9b	Yoke	UNS S31600	UNS S31600
10a	Hanging rings	ASTM A276 420	ASTM A182 Type F316/EN10222-5 1.4401
10b	Screws	UNS S31600	UNS S31600

Dimension



PN10

DN	L1	L2	D	D1	D2	n	d1	z-d	H	H1	H2	M	f	b
80	49	114	200	160	138	-	-	4-Ø18	25	221	118	16	2	20
100	56	127	220	180	158	2	Ø18	4-Ø18	30	243	130	16	2	22
125	64	140	250	210	188	2	Ø18	4-Ø18	35	261	153	16	2	22
150	70	140	285	240	212	2	Ø22	4-Ø22	40	273	165	20	2	24
200	71	152	340	295	268	2	Ø22	4-Ø22	45	309	198	20	2	24
250	76	165	395	350	320	2	Ø22	8-Ø22	50	337	235	20	2	26
300	83	178	445	400	370	2	Ø22	8-Ø22	67	382.5	274.5	20	2	26
350	92	190	505	460	430	4	M20	12-Ø22	81	435	314	20	2	26
400	102	216	565	515	482	4	M24	12-Ø26	87	457	344	24	2	26
450	114	222	615	565	532	4	M24	16-Ø26	98	510	369	24	2	28
500	127	229	670	620	585	4	M24	16-Ø26	105	579	410.5	24	2	28
600	154	267	780	725	685	4	M27	16-Ø30	117	635	472.5	27	2	34
700	165	292	895	840	800	4	M27	20-Ø30	117	671	529.5	27	5	34
800	190	318	1015	950	905	4	M30	20-Ø33	120	800	648	30	5	36
900	200	330	1115	1050	1005	4	M30	24-Ø33	128	862	708.2	30	5	38
1000	216	410	1230	1160	1110	4	M33	24-Ø36	170	955	766.2	33	5	38
1200	276	470	1455	1380	1330	4	M36	28-Ø39	182	1088	884	36	5	44
1400	390	530	1675	1590	1535	4	M39	32-Ø42	202	1188	1022	39	5	48
1600	440	600	1915	1820	1760	4	M45	36-Ø48	245	1227	1095	45	5	52
1800	490	670	2115	2020	1960	4	M45	40-Ø48	245	1300	1165	45	5	56
2000	540	760	2325	2230	2170	4	M45	44-Ø48	245	1390	1280	45	5	60

PN6

DN	L1	L2	D	D1	D2	n	d1	z-d	H	H1	H2	M	f	b
80	49	114	190	150	128	-	-	4-Ø18	25	221	118	16	2	18
100	56	127	210	170	148	2	Ø18	4-Ø18	30	243	130	16	2	18
125	64	140	240	200	178	2	Ø18	4-Ø18	35	261	153	16	2	18
150	70	140	265	225	202	2	Ø18	4-Ø18	40	273	165	16	2	20
200	71	152	320	280	258	2	Ø18	4-Ø18	45	309	198	16	2	22
250	76	165	375	335	312	2	Ø18	8-Ø18	50	337	235	16	2	24
300	83	178	440	395	365	2	Ø22	8-Ø22	67	382.5	274.5	20	2	24
350	92	190	490	445	415	2	Ø22	8-Ø22	81	435	314	20	2	24
400	102	216	540	495	465	4	M20	12-Ø22	87	457	344	20	2	24
450	114	222	595	550	520	4	M20	12-Ø22	98	510	369	20	2	24
500	127	229	645	600	570	4	M20	16-Ø22	105	579	410.5	20	2	26
600	154	267	755	705	670	4	M24	16-Ø26	117	635	472.5	24	2	26
700	165	292	860	810	775	4	M24	20-Ø26	117	671	529.5	24	5	26
800	190	318	975	920	880	4	M27	20-Ø30	120	800	648	27	5	26
900	200	330	1075	1020	980	4	M27	20-Ø30	128	862	708.2	27	5	26
1000	216	410	1170	1120	1080	4	M27	24-Ø30	170	955	766.2	27	5	26
1200	276	470	1405	1340	1295	4	M30	28-Ø33	182	1088	884	30	5	28
1400	390	530	1630	1560	1510	4	M33	32-Ø36	202	1188	1022	33	5	32
1600	440	600	1830	1760	1710	4	M33	36-Ø36	245	1227	1095	33	5	34

PN16

DN	L1	L2	D	D1	D2	n	d1	z-d	H	H1	H2	M	f	b
80	49	114	200	160	138	-	Ø18	4-Ø18	25	221	118	16	2	20
100	56	127	220	180	158	2	Ø18	4-Ø18	30	243	130	16	2	22
125	64	140	250	210	188	2	Ø18	4-Ø18	35	261	153	16	2	22
150	70	140	285	240	212	2	Ø22	4-Ø22	40	273	165	20	2	24
200	71	152	340	295	268	2	Ø22	8-Ø22	45	309	198	20	2	24
250	76	165	405	355	320	2	Ø26	8-Ø26	50	337	235	24	2	26
300	83	178	460	410	378	2	Ø26	8-Ø26	67	382.5	274.5	24	2	28
350	92	190	520	470	438	4	M24	12-Ø26	81	435	314	24	2	30
400	102	216	580	525	490	4	M27	12-Ø30	87	457	344	27	2	32
450	114	222	640	585	550	4	M27	16-Ø30	98	510	369	27	2	34
500	127	229	715	650	610	4	M30	16-Ø33	105	579	410.5	30	2	36
600	154	267	840	770	725	4	M33	16-Ø36	117	635	472.5	33	2	38
700	165	292	910	840	795	4	M33	20-Ø36	117	671	529.5	33	5	40
800	190	318	1025	950	900	4	M36	20-Ø39	120	800	648	36	5	42
900	200	330	1125	1050	1000	4	M36	24-Ø39	128	862	708.2	36	5	44
1000	216	410	1255	1170	1115	4	M39	24-Ø42	170	955	766.2	39	5	46
1200	276	470	1485	1390	1330	4	M45	28-Ø48	182	1088	884	45	5	52
1400	390	530	1685	1590	1530	4	M45	32-Ø48	202	1188	1022	45	5	58
1600	440	600	1930	1820	1750	4	M52	36-Ø55	245	1227	1095	52	5	64
1800	490	670	2130	2020	1950	4	M52	40-Ø55	245	1300	1165	52	5	68
2000	540	760	2345	2230	2150	4	M56	44-Ø60	245	1390	1280	56	5	70

Dimension

PN25

DN	L1	L2	D	D1	D2	n	d1	z-d	H	H1	H2	M	f	b
80	49	114	200	160	138	-	-	4-Ø18	25	221	118	16	2	24
100	56	127	235	190	162	2	Ø22	4-Ø22	30	243	130	20	2	24
125	64	140	270	220	188	2	Ø26	4-Ø26	35	261	153	24	2	26
150	70	140	300	250	218	2	Ø26	4-Ø26	40	273	165	24	2	28
200	71	152	360	310	278	2	Ø26	8-Ø26	45	309	198	24	2	30
250	76	165	425	370	335	2	Ø30	8-Ø30	50	337	235	27	2	32
300	83	178	485	430	395	4	M27	12-Ø30	67	382.5	274.5	27	2	34
350	92	190	555	490	450	4	M30	12-Ø33	81	435	314	30	2	38
400	102	216	620	550	505	4	M33	12-Ø36	87	457	344	33	2	40
450	114	222	670	600	555	4	M33	16-Ø36	98	510	369	33	2	46
500	127	229	730	660	615	4	M33	16-Ø36	105	579	410.5	33	2	48
600	154	267	845	770	720	4	M36	16-Ø39	117	635	472.5	36	2	58
700	165	292	960	875	820	4	M39	20-Ø42	117	671	529.5	39	5	50
800	190	318	1085	990	930	4	M45	20-Ø48	120	800	648	45	5	54
900	200	330	1185	1090	1030	4	M45	24-Ø48	128	862	708.2	45	5	58
1000	216	410	1320	1210	1140	4	M52	24-Ø55	170	955	766.2	52	5	62
1200	276	470	1530	1420	1350	4	M52	28-Ø55	182	1088	884	52	5	70
1400	390	530	1755	1640	1560	4	M56	32-Ø60	245	1171	985	56	5	76
1600	440	600	1975	1860	1780	4	M56	36-Ø60	245	1237	1075	56	5	84
1800	490	670	2195	2070	1985	4	M64	40-Ø68	245	1390	1190	64	5	90
2000	540	760	2425	2300	2210	4	M64	44-Ø68	245	1515	1305	64	5	96

PN40

DN	L1	L2	D	D1	D2	n	d1	z-d	H	H1	H2	M	f	b
80	49	180	200	160	138	2	Ø18	4-Ø18	34	165	135	16	2	24
100	56	190	235	190	162	2	Ø22	4-Ø22	34	204	155	20	2	24
125	64	200	270	220	188	2	Ø26	4-Ø26	34	230	175	24	2	26
150	70	210	300	250	218	2	Ø26	4-Ø26	64	270	195	240	2	28
200	71	230	375	320	285	4	M27	8-Ø30	64	304	235	27	2	34
250	76	250	450	385	345	4	M30	8-Ø33	79	319	275	30	2	38
300	83	270	515	450	410	4	M30	12-Ø33	79	409	310	30	2	42
350	127	290	580	510	465	4	M33	12-Ø36	109	499	350	33	2	46
400	140	310	660	585	535	4	M36	12-Ø39	109	515	400	36	2	50
450	160	330	685	610	560	4	M36	16-Ø39	109	486	410	36	2	57
500	170	350	755	670	615	4	M39	16-Ø42	129	531	455	39	2	57
600	200	390	890	795	735	4	M45	16-Ø48	129	629	530	45	2	72

Dimension

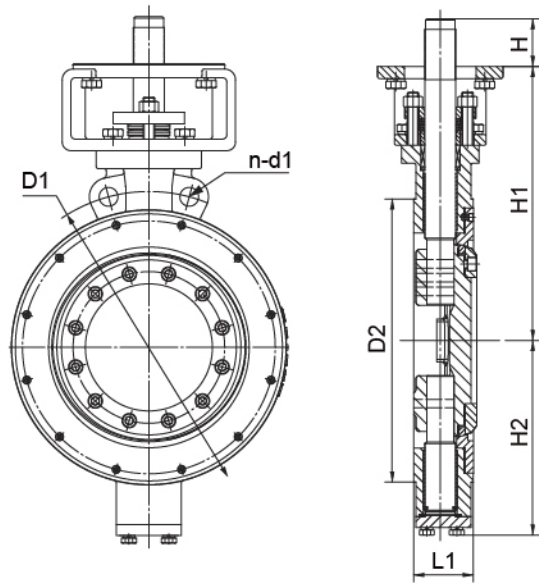
PN63

DN	L1	L2	D	D1	D2	n	d1	z-d	H	H1	H2	M	f	b
80	64	180	215	170	138	-	-	4-Ø22	34	175	145	20	2	28
100	64	190	250	200	162	4	M24	4-Ø26	34	214	165	24	2	30
125	70	200	295	240	188	4	M27	4-Ø30	64	250	195	27	2	34
150	76	210	345	280	218	4	M30	4-Ø33	64	300	225	30	2	36
200	89	230	415	345	285	4	M33	8-Ø36	79	334	265	33	2	42
250	114	250	470	400	345	4	M33	8-Ø36	79	339	295	33	2	46
300	114	270	530	460	410	4	M33	12-Ø36	109	424	325	33	2	52
350	127	290	600	525	465	4	M36	12-Ø39	109	414	365	36	2	56
400	140	310	670	585	535	4	M39	12-Ø42	129	520	405	39	2	60
500	170	350	800	705	615	4	M45	16-Ø48	129	556	480	45	2	68
600	200	390	930	820	735	4	M52	16-Ø56	179	654	555	52	2	76

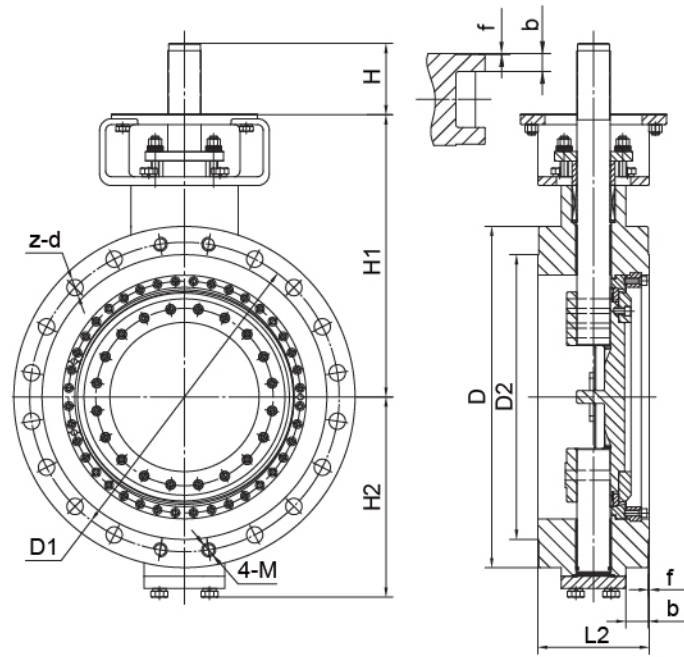
PN100

DN	L1	L2	D	D1	D2	n	d1	z-d	H	H1	H2	M	f	b
80	64	180	230	180	138	-	M24	4-Ø26	34	165	135	24	2	32
100	64	190	265	210	162	4	M27	4-Ø30	34	194	145	27	2	36
125	70	200	315	250	188	4	M30	4-Ø33	34	215	160	30	2	40
150	76	210	355	290	218	4	M30	8-Ø33	34	255	180	30	2	44
200	89	230	430	360	285	4	M33	8-Ø36	64	279	210	33	2	52
250	114	250	505	430	345	4	M36	8-Ø39	64	294	240	36	2	60
300	114	270	585	500	410	4	M39	12-Ø42	79	330	265	39	2	68
350	127	290	655	560	465	4	M45	12-Ø48	79	370	295	45	2	74
400	140	310	715	620	535	4	M45	12-Ø48	79	460	330	45	2	82
500	170	350	870	780	615	4	M52	16-Ø56	109	496	385	52	2	94
600	200	390	990	875	735	4	M56	16-Ø62	109	584	440	56	2	102

Dimension



Wafer



Flanged

150LB

DN	L1	L2	D	D1	D2	n	d1	b(Min)	f	Z-Ød	M(in)	H1	H2	H
80	48	114	190	152.4	127	-	-	22.3	2	4-Ø19	5/8-11UNC-2B	221	118	25
100	54	127	230	190.5	157.2	2	Ø19	22.3	2	4-Ø19	5/8-11UNC-2B	243	130	30
125	56	140	255	215.9	185.7	2	Ø22	22.3	2	4-Ø22	3/4-10UNC-2B	261	153	35
150	57	140	280	241.3	215.9	2	Ø22	23.9	2	4-Ø22	3/4-10UNC-2B	273	165	40
200	64	152	345	298.5	269.9	2	Ø22	27	2	4-Ø22	3/4-10UNC-2B	309	198	45
250	71	165	405	362	323.8	2	Ø26	28.6	2	8-Ø26	7/8-9UNC-2B	337	235	50
300	81	178	485	431.8	381	2	Ø26	30.2	2	8-Ø26	7/8-9UNC-2B	382.5	274.5	67
350	92	190	535	476.3	412.8	4	1-8UNC-2B	33.4	2	8-Ø29	1-8UNC-2B	435	314	81
400	102	216	595	539.8	469.9	4	1-8UNC-2B	35	2	12-Ø29	1-8UNC-2B	457	344	87
450	114	222	635	577.9	533.4	4	1-1/8-8UN-2B	38.1	2	12-Ø32	1-1/8-8UN-2B	510	369	98
500	127	229	700	635	584.2	4	1-1/8-8UN-2B	41.3	2	16-Ø32	1-1/8-8UN-2B	579	410.5	105
600	154	267	815	749.3	692.2	4	1-1/4-8UN-2B	46.1	2	16-Ø35	1-1/4-8UN-2B	635	472.5	117
700	165	292	925	863.6	800	4	1-1/4-8UN-2B	69.9	2	24-Ø35	1-1/4-8UN-2B	671	529.5	117
800	200	318	1060	977.9	914	4	1-1/2-8UN-2B	79.4	2	24-Ø42	1-1/2-8UN-2B	800	648	120
900	200	330	1170	1085.8	1022	4	1-1/2-8UN-2B	88.9	2	28-Ø42	1-1/2-8UN-2B	862	708.2	128
1000	251	410	1290	1200.2	1124	4	1-1/2-8UN-2B	88.9	2	32-Ø42	1-1/2-8UN-2B	955	766.2	170
1200	276	470	1510	1422.4	1359	4	1-1/2-8UN-2B	106.4	2	40-Ø42	1-1/2-8UN-2B	1088	884	182

300LB

DN	L1	L2	D	D1	D2	n	d1	b(Min)	f	Z-Ød	M(in)	H1	H2	H
80	48	180	210	168.3	127	-	-	27	2	4-Ø22	3/4-10UNC-2B	159	145	34
100	54	190	255	200	157.2	2	Ø22	30.2	2	4-Ø22	3/4-10UNC-2B	194	165	34
125	56	200	280	235	185.7	2	Ø22	33.4	2	4-Ø22	3/4-10UNC-2B	269	200	64
150	59	210	320	269.9	215.9	2	Ø22	35	2	8-Ø22	3/4-10UNC-2B	269	200	64
200	73	230	380	330.2	269.9	2	Ø26	39.7	2	8-Ø26	7/8-9UNC-2B	285	235	79
250	83	250	445	387.4	323.8	4	1-8UNC-2B	46.1	2	12-Ø29	1-8UNC-2B	325	275	79
300	92	270	520	450.8	381	4	1-1/8-8UN-2B	49.3	2	12-Ø32	1-1/8-8UN-2B	387	315	79
350	117	290	585	514.4	412.8	4	1-1/8-8UN-2B	52.4	2	16-Ø32	1-1/8-8UN-2B	410	350	79
400	133	310	650	571.5	469.9	4	1-1/4-8UN-2B	55.6	2	16-Ø35	1-1/4-8UN-2B	465	385	109
450	149	330	710	628.6	533.4	4	1-1/4-8UN-2B	58.8	2	20-Ø35	1-1/4-8UN-2B	528	415	109
500	159	350	775	685.8	584.2	4	1-1/4-8UN-2B	62	2	20-Ø35	1-1/4-8UN-2B	561	450	129
600	181	390	915	812.8	692.2	4	1-1/2-8UN-2B	68.3	2	20-Ø42	1-1/2-8UN-2B	636	530	129
700	229	430	1035	939.8	800	4	1-5/8-8UN-2B	84.2	2	24-Ø45	1-5/8-8UN-2B	800	590	199
800	241	470	1150	1054.1	914	4	1-7/8-8UN-2B	96.9	2	24-Ø52	1-7/8-8UN-2B	860	720	199
900	241	510	1270	1168.4	1022	4	2-8UN-2B	103.2	2	28-Ø54	2-8UN-2B	940	780	199
1000	300	550	1240	1155.7	1086	4	1-5/8-8UN-2B	112.8	2	28-Ø45	1-5/8-8UN-2B	910	750	199
1200	360	630	1465	1371.6	1302	4	1-7/8-8UN-2B	131.8	2	28-Ø52	1-7/8-8UN-2B	1000	850	249

600LB

DN	L1	L2	D	D1	D2	n	d1	b(Min)	f	Z-Ød	M(in)	H1	H2	H
80	54	180	210	168.3	127	-	-	31.8	7	4-Ø22	3/4-10UNC-2B	202	145	44
100	64	190	275	215.9	157.2	4	7/8-9UNC-2B	38.1	7	4-Ø26	7/8-9UNC-2B	208	180	44
125	70	200	330	266.7	185.7	4	1-8UNC-2B	44.5	7	4-Ø29	1-8UNC-2B	235	210	79
150	78	210	355	292.1	215.9	4	1-8UNC-2B	47.7	7	8-Ø29	1-8UNC-2B	302	225	79
200	102	230	420	349.2	269.9	4	1-1/8-8UN-2B	55.6	7	8-Ø32	1-1/8-8UN-2B	315	265	79
250	117	250	510	431.8	323.8	4	1-1/4-8UN-2B	63.5	7	12-Ø35	1-1/4-8UN-2B	376	310	79
300	140	270	560	489	381	4	1-1/4-8UN-2B	66.7	7	16-Ø35	1-1/4-8UN-2B	442	340	109
350	155	290	605	527	412.8	4	1-3/8-8UN-2B	69.9	7	16-Ø39	1-3/8-8UN-2B	457	365	109
400	178	310	685	603.2	469.9	4	1-1/2-8UN-2B	76.2	7	16-Ø42	1-1/2-8UN-2B	561	410	129
450	200	330	745	654	533.4	4	1-5/8-8UN-2B	82.6	7	16-Ø45	1-5/8-8UN-2B	610	450	129
500	216	350	815	723.9	584.2	4	1-5/8-8UN-2B	88.9	7	20-Ø45	1-5/8-8UN-2B	645	485	129
600	232	390	940	838.2	692.2	4	1-7/8-8UN-2B	101.6	7	20-Ø52	1-7/8-8UN-2B	730	555	178

Dimension

900LB

DN	L1	L2	D	D1	D2	n	d1	b(Min)	f	Z-Ød	M(in)	H1	H2	H
100	80	235	290	235	157.2	4	1-1/8-8UN-2B	44.5	7	4-Ø32	1-1/8-8UN-2B	240	181	64
150	104	250	380	317.5	215.9	4	1-1/8-8UN-2B	55.6	7	8-Ø32	1-1/8-8UN-2B	315	238	79
200	112	310	470	393.7	269.9	4	1-3/8-8UN-2B	63.5	7	8-Ø39	1-3/8-8UN-2B	360	281	79
250	135	350	545	469.9	323.8	4	1-3/8-8UN-2B	69.9	7	12-Ø39	1-3/8-8UN-2B	412	358	109
300	170	380	610	533.4	381	4	1-3/8-8UN-2B	79.4	7	16-Ø39	1-3/8-8UN-2B	475	383	109
350	173	400	640	558.8	412.8	4	1-1/2-8UN-2B	85.8	7	16-Ø42	1-1/2-8UN-2B	512	419	128
400	210	430	705	616	469.9	4	1-5/8-8UN-2B	88.9	7	16-Ø45	1-5/8-8UN-2B	610	455	129
450	228	460	785	685.8	533.4	4	1-7/8-8UN-2B	101.6	7	16-Ø52	1-7/8-8UN-2B	660	503	178
500	250	490	855	749.3	584.2	4	2-8UN-2B	108	7	16-Ø54	2-8UN-2B	685	550	178
600	275	530	1040	901.7	692.2	4	2-1/2-6UN-2B	139.7	7	16-Ø67	2-1/2-6UN-2B	790	656	199

1500LB

DN	L1	L2	D	D1	D2	n	d1	b(Min)	f	Z-Ød	M(in)	H1	H2	H
150	160	290	395	317.5	215.9	4	1-3/8-8UN-2B	82.6	7	8-Ø39	1-3/8-8UN-2B	347	257	109
200	180	330	485	393.7	269.9	4	1-5/8-8UN-2B	92.1	7	8-Ø45	1-5/8-8UN-2B	405	307	109
250	200	390	585	482.6	323.8	4	1-7/8-8UN-2B	108	7	8-Ø52	1-7/8-8UN-2B	510	371	129
300	230	430	675	571.5	381	4	2-8UN-2B	123.9	7	12-Ø54	2-8UN-2B	545	414	129
350	250	470	750	635	412.8	4	2-1/4-8UN-2B	133.4	7	12-Ø61	2-1/4-8UN-2B	610	493	178
400	265	510	825	704.8	469.9	4	2-1/2-6UN-2B	146.1	7	12-Ø67	2-1/2-6UN-2B	655	530	199
450	300	550	915	774.7	533.4	4	2-3/4-6UN-2B	162	7	12-Ø74	2-3/4-6UN-2B	750	591	199
500	340	630	985	831.8	584.2	4	3-6UN-2B	177.8	7	12-Ø80	3-6UN-2B	810	664	199
600	400	710	1170	990.6	692.2	4	3-1/2-6UN-2B	203.2	7	12-Ø94	3-1/2-6UN-2B	950	780	249