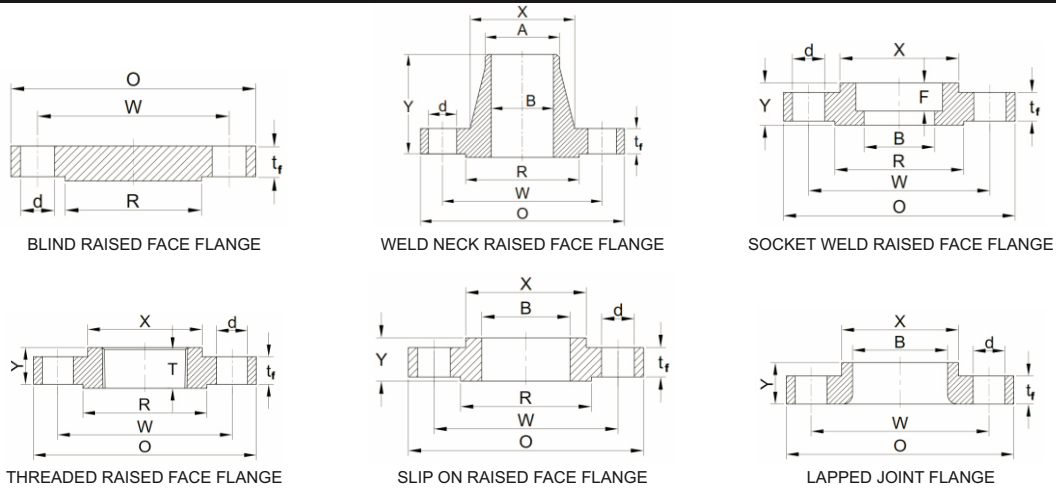


Flanges



Types	<ul style="list-style-type: none"> • Weldneck • SORF • BLRF • Slipon • High Hub • Socket Weld • Flat Face • Threaded • Ring Type Joint • Groove & Tongue • Expander • Spectacle
Standards	<ul style="list-style-type: none"> • ASME B16.5 • ASME B16.36 • ASME B16.47 • API 6A • EN 1092-1 • EN 1098 • BS 10 • B2291 • JIS B2220.
Size	1/2" - 24"
Pressure Rating	Class 150 to Class 2500 • PN 6 - PN 100 • Table D, E, F.
Features	<ul style="list-style-type: none"> • Heat code traceability • 100% material annealed & passivated • High quality steel finish • Three chambers cleaning system (Surface preparation, Ultrasonic Degreasing, Hot Dry Air.)



DIMENSION OF CLASS 150 FLANGES

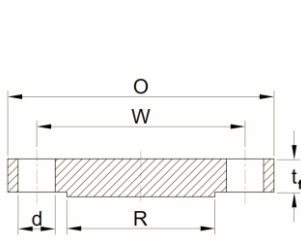
NB	NPS	O	W	d	n	t _f		R	X	A _h	T	Y	Y	Y	B	B	B	F
						N - 2	L/J											
15	1/2	90	60.3	5/8	4	9.6	11.2	35	30	21.3	16	14	46	16	22.2	15.8	22.9	10
20	3/4	100	69.9	5/8	4	11.2	12.7	43	38	26.7	16	14	51	16	27.7	20.9	28.2	11
25	1	110	79.4	5/8	4	12.7	14.3	51	49	33.4	17	16	54	17	34.5	26.6	34.9	13
32	1 1/4	115	88.9	5/8	4	14.3	15.9	64	59	42.2	21	19	56	21	43.2	35.1	43.7	14
40	1 1/2	125	98.4	5/8	4	15.9	17.5	73	65	48.3	22	21	60	22	49.5	40.9	50.0	16
50	2	150	120.7	3/4	4	17.5	19.1	92	78	60.3	25	24	62	25	61.9	52.5	62.5	17
65	2 1/2	180	139.7	3/4	4	20.7	22.3	105	90	73.0	29	27	68	29	74.6	62.7	75.4	19
80	3	190	152.4	3/4	4	22.3	23.9	127	108	88.9	30	29	68	30	90.7	77.9	91.4	21
90	3 1/2	215	177.8	3/4	8	22.3	23.9	140	122	101.6	32	30	70	32	103.4	90.1	104.1	...
100	4	230	190.5	3/4	8	22.3	23.9	157	135	114.3	33	32	75	33	116.1	102.3	116.8	...
125	5	255	215.9	7/8	8	22.3	23.9	186	164	141.3	36	35	87	36	143.8	128.2	144.4	...
150	6	280	241.3	7/8	8	23.9	25.4	216	192	168.3	40	38	87	40	170.7	154.1	171.4	...
200	8	345	298.5	7/8	8	27.0	28.6	270	246	219.1	44	43	100	44	221.5	202.7	222.2	...
250	10	405	362.0	1	12	28.6	30.2	324	305	273.0	49	48	100	49	276.2	254.6	277.4	...
300	12	485	431.8	1	12	30.2	31.8	381	365	323.8	56	54	113	56	327.0	304.8	328.2	...
350	14	535	476.3	1 1/8	12	33.4	35.0	413	400	355.6	57	56	125	79	359.2	Note (5)	360.2	...
400	16	595	539.8	1 1/8	16	35.0	36.6	470	457	406.4	64	62	125	87	410.5	Note (5)	411.2	...
450	18	635	577.9	1 1/4	16	38.1	39.7	533	505	457.0	68	67	138	97	461.8	Note (5)	462.3	...
500	20	700	635.0	1 1/4	20	41.3	42.9	584	559	508.0	73	71	143	103	513.1	Note (5)	514.4	...
600	24	815	749.3	1 3/8	20	46.1	47.7	692	663	610.0	83	81	151	111	616.0	Note (5)	616.0	...

DIMENSION OF CLASS 300 FLANGES

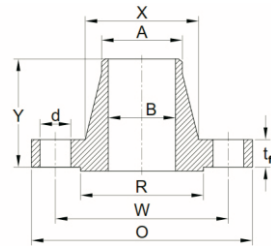
NB	NPS	O	W	d	n	t _f		R	X	A _h	T	Y	Y	Y	B	B	B	F
						N - 2,3													S/O & S/W	W/N	L/J	S/O & S/W	W/N & S/W	L/J
15	1/2	95	66.7	5/8	4	12.7	14.3	35	38	21.3	16	21	51	22	22.2	15.8	22.9	10
20	3/4	115	82.6	3/4	4	14.3	15.9	43	48	26.7	16	24	56	25	27.7	20.9	28.2	11
25	1	125	88.9	3/4	4	15.9	17.5	51	54	33.4	18	25	60	27	34.5	26.6	34.9	13
32	1 1/4	135	98.4	3/4	4	17.5	19.1	64	64	42.2	21	25	64	27	43.2	35.1	43.7	14
40	1 1/2	155	114.3	7/8	4	19.1	20.7	73	70	48.3	23	29	67	30	49.5	40.9	50.0	16
50	2	165	127.0	3/4	8	20.7	22.3	92	84	60.3	29	32	68	33	61.9	52.5	62.5	17
65	2 1/2	190	149.2	7/8	8	23.9	25.4	105	100	73.0	32	37	75	38	74.6	62.7	75.4	19
80	3	210	168.3	7/8	8	27.0	28.6	127	117	88.9	32	41	78	43	90.7	77.9	91.4	21
90	3 1/2	230	184.2	7/8	8	28.6	30.2	140	133	101.6	37	43	79	44	103.4	90.1	104.1	...
100	4	255	200.0	7/8	8	30.2	31.8	157	146	114.3	37	46	84	48	116.1	102.3	116.8	...
125	5	280	235.0	7/8	8	33.4	35.0	186	178	141.3	43	49	97	51	143.8	128.2	144.4	...
150	6	320	269.9	7/8	12	35.0	36.6	216	206	168.3	47	51	97	52	170.7	154.1	171.4	...
200	8	380	330.2	1	12	39.7	41.3	270	260	219.1	51	60	110	62	221.5	202.7	222.2	...
250	10	445	387.4	1 1/8	16	46.1	47.7	324	321	273.0	56	65	116	95	276.2	254.6	277.4	...
300	12	520	450.8	1 1/4	16	49.3	50.8	381	375	323.8	61	71	129	102	327.0	304.8	328.2	...
350	14	585	514.4	1 1/4	20	52.4	54.0	413	425	355.6	64	75	141	111	359.2	Note (5)	360.2	...
400	16	650	571.5	1 3/8	20	55.6	57.2	470	483	406.4	69	81	144	121	410.5	Note (5)	411.2	...
450	18	710	628.6	1 3/8	24	58.8	60.4	533	533	457.0	70	87	157	130	461.8	Note (5)	462.3	...
500	20	775	685.8	1 3/8	24	62.0	63.5	584	587	508.0	74	94	160	140	513.1	Note (5)	514.4	...
600	24	915	812.8	1 5/8	24	68.3	69.9	692	702	610.0	83	105	167	152	616.0	Note (5)	616.0	...

NOTES: (For 150# & 300# Class)

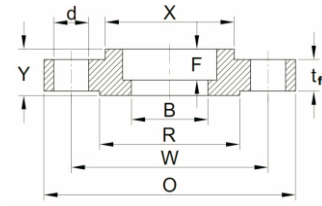
- (1) This dimension is for large end of hub, which may be straight or tapered. Taper shall not exceed 7 deg on threaded, slip-on, socket-welding, and lapped flanges. This dimension is defined as the diameter at the intersection between the hub taper and back face of the flange.
- (2) The minimum thickness of these loose flanges, in sizes NPS 3 1/2 and smaller, is slightly greater than the thickness of flanges on fittings, which are reinforced by being cast integral with the body of the fitting.
- (3) For Class 300 these flanges may be supplied with a flat face. The flat face may be either the full t_f dimension of thickness plus 2 mm or the t_f dimension thickness without the raised face height.
- (4) Dimensions in Column 15 correspond to the inside diameters of pipe as given in ASME B36.10M for standard wall pipe. Thickness of standard wall is the same as Schedules.
- (5) To be specified by the Purchaser.
- (6) 2.0 mm (0.06 in.) raised face for Class 150 and 300 raised face flanges



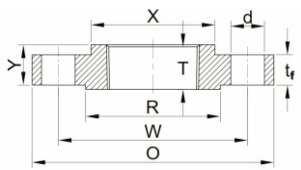
BLIND RAISED FACE FLANGE



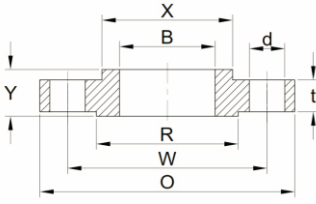
WELD NECK RAISED FACE FLANGE



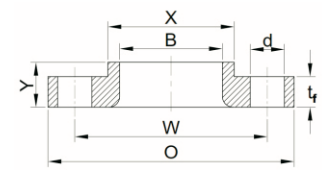
SOCKET WELD RAISED FACE FLANGE



THREADED RAISED FACE FLANGE



SLIP ON RAISED FACE FLANGE



LAPPED JOINT FLANGE

DIMENSION OF CLASS 600 FLANGES

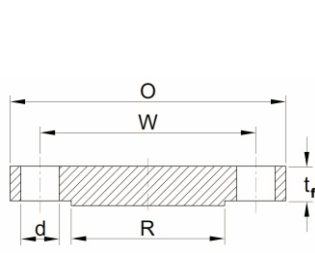
NB	NPS	O	W	d	n	t _f	R	X	A _n	T	Y	Y	Y	B	B	B	F
											S/O & S/W	W/N	L/J	S/O & S/W	W/N	L/J	
15	1/2	95	66.7	5/8	4	14.3	35	38	21.3	16	22	52	22	22.2	Note (2)	22.9	10
20	3/4	115	82.6	3/4	4	15.9	43	48	26.7	16	25	57	25	27.7	Note (2)	28.2	11
25	1	125	88.9	3/4	4	17.5	51	54	33.4	18	27	62	27	34.5	Note (2)	34.9	13
32	1 1/4	135	98.4	3/4	4	20.7	64	64	42.2	21	29	67	29	43.2	Note (2)	43.7	14
40	1 1/2	155	114.3	7/8	4	22.3	73	70	48.3	23	32	70	32	49.5	Note (2)	50.0	16
50	2	165	127.0	3/4	8	25.4	92	84	60.3	29	37	73	37	61.9	Note (2)	62.5	17
65	2 1/2	190	149.2	7/8	8	28.6	105	100	73.0	32	41	79	41	74.6	Note (2)	75.4	19
80	3	210	168.3	7/8	8	31.8	127	117	88.9	35	46	83	46	90.7	Note (2)	91.4	21
90	3 1/2	230	184.2	1	8	35.0	140	133	101.6	40	49	86	49	103.4	Note (2)	104.1	...
100	4	275	215.9	1	8	38.1	157	152	114.3	42	54	102	54	116.1	Note (2)	116.8	...
125	5	330	266.7	1 1/8	8	44.5	186	189	141.3	48	60	114	60	143.8	Note (2)	144.4	...
150	6	355	292.1	1 1/8	12	47.7	216	222	168.3	51	67	117	67	170.7	Note (2)	171.4	...
200	8	420	349.2	1 1/4	12	55.6	270	273	219.1	58	76	133	76	221.5	Note (2)	222.2	...
250	10	510	431.8	1 3/8	16	63.5	324	343	273.0	66	86	152	111	276.2	Note (2)	277.4	...
300	12	560	489.0	1 3/8	20	66.7	381	400	323.8	70	92	156	117	327.0	Note (2)	328.2	...
350	14	605	527.0	1 1/2	20	69.9	413	432	355.6	74	94	165	127	359.2	Note (2)	360.2	...
400	16	685	603.2	1 5/8	20	76.2	470	495	406.4	78	106	178	140	410.5	Note (2)	411.2	...
450	18	745	654.0	1 3/4	20	82.6	533	546	457.0	80	117	184	152	461.8	Note (2)	462.3	...
500	20	815	723.9	1 3/4	24	88.9	584	610	508.0	83	127	190	165	513.1	Note (2)	514.4	...
600	24	940	838.2	2	24	101.6	692	718	610.0	93	140	203	184	616.0	Note (2)	616.0	...

DIMENSION OF CLASS 900 FLANGES

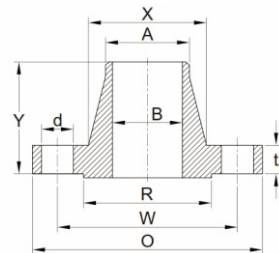
NB	NPS	O	W	d	n	t _f	R	X	A _n	T	Y	Y	Y	B	B	B	
											N - 2	N - 3	S/O & THR.	W/N	L/J	S/O & S/W	N - 4	L/J
Size ½ to 2 ½ are identical to class 1500																	
80	3	240	190.5	1	8	38.1	127	127	88.9	42	54	102	54	90.7	Note (2)	91.4	
100	4	290	235.0	1 1/4	8	44.5	157	159	114.3	48	70	114	70	116.1	Note (2)	116.8	
125	5	350	279.4	1 3/8	8	50.8	186	190	141.3	54	79	127	79	143.8	Note (2)	144.4	
150	6	380	317.5	1 1/4	12	55.6	216	235	168.3	58	86	140	86	170.7	Note (2)	171.4	
200	8	470	393.7	1 1/2	12	63.5	270	298	219.1	64	102	162	114	221.5	Note (2)	222.2	
250	10	545	469.9	1 1/2	16	69.9	324	368	273.0	72	108	184	127	276.2	Note (2)	277.4	
300	12	610	533.4	1 1/2	20	79.4	381	419	323.8	77	117	200	143	327.0	Note (2)	328.2	
350	14	640	558.8	1 5/8	20	85.8	413	451	355.6	83	130	213	156	359.2	Note (2)	360.2	
400	16	705	616.0	1 3/4	20	88.9	470	508	406.4	86	133	216	165	410.5	Note (2)	411.2	
450	18	785	685.8	2	20	101.6	533	565	457.0	89	152	229	190	461.8	Note (2)	462.3	
500	20	855	749.3	2 1/8	20	108.0	584	622	508.0	93	159	248	210	513.1	Note (2)	514.4	
600	24	1040	901.7	2 5/8	20	139.7	692	749	610.0	102	203	292	267	616.0	Note (2)	616.0	

NOTES:

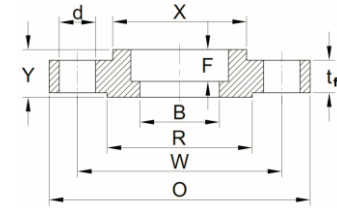
- (1) This dimension is for the large end of the hub, which may be straight or tapered. Taper shall not exceed 7 deg on threaded, slip-on, socket-welding, and lapped flanges. This dimension is defined as the diameter at the intersection between the hub taper and back face of the flange.
- (2) To be specified by the Purchaser.
- (3) 7.0 mm (0.06 in.) raised face for Class 600 and 900 raised face flanges
- (4) Socket welding flanges may be provided in NPS ½ to NPS 2 ½ , using Class 1500 dimensions.



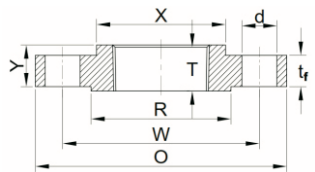
BLIND RAISED FACE FLANGE



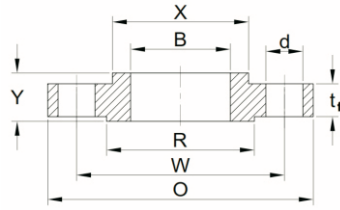
WELD NECK RAISED FACE FLANGE



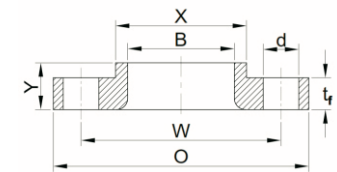
SOCKET WELD RAISED FACE FLANGE



THREADED RAISED FACE FLANGE



SLIP ON RAISED FACE FLANGE



LAPPED JOINT FLANGE

DIMENSION OF CLASS 1500 FLANGES

NB	NPS	O	W	d	n	t _f	R	X	A _h	T	Y	Y	Y	B	B	B	F
											S/O & S/W	W/N	L/J	S/O & S/W	W/N	L/J	
15	½	120	82.6	7/8	4	22.3	35	38	21.3	23	32	60	32	22.2	Note (2)	22.9	10
20	¾	130	88.9	7/8	4	25.4	43	44	26.7	26	35	70	35	27.7	Note (2)	28.2	11
25	1	150	101.6	1	4	28.6	51	52	33.4	29	41	73	41	34.5	Note (2)	34.9	13
32	1 ¼	160	111.1	1	4	28.6	64	64	42.2	31	41	73	41	43.2	Note (2)	43.7	14
40	1 ½	180	123.8	1 1/8	4	31.8	73	70	48.3	32	44	83	44	49.5	Note (2)	50.0	16
50	2	215	165.1	1	8	38.1	92	105	60.3	39	57	102	57	61.9	Note (2)	62.5	17
65	2 ½	245	190.5	1 1/8	8	41.3	105	124	73.0	48	64	105	64	74.6	Note (2)	75.4	19
80	3	265	203.2	1 ¼	8	47.7	127	133	88.9	...	...	117	73	...	Note (2)	91.4	...
100	4	310	241.3	1 3/8	8	54.0	157	162	114.3	...	...	124	90	...	Note (2)	116.8	...
125	5	375	292.1	1 5/8	8	73.1	186	197	141.3	...	...	156	105	...	Note (2)	144.4	...
150	6	395	317.5	1 ½	12	82.6	216	229	168.3	...	...	171	119	...	Note (2)	171.4	...
200	8	485	393.7	1 ¾	12	92.1	270	292	219.1	...	...	213	143	...	Note (2)	222.2	...
250	10	585	482.6	2	12	108.0	324	368	273.0	...	...	254	178	...	Note (2)	277.4	...
300	12	675	571.5	2 1/8	16	123.9	381	451	323.8	...	...	283	219	...	Note (2)	328.2	...
350	14	750	635.0	2 3/8	16	133.4	413	495	355.6	...	...	298	241	...	Note (2)	360.2	...
400	16	825	704.8	2 5/8	16	146.1	470	552	406.4	...	...	311	260	...	Note (2)	411.2	...
450	18	915	774.7	2 7/8	16	162.0	533	597	457.0	...	...	327	276	...	Note (2)	462.3	...
500	20	985	831.8	3 1/8	16	177.8	584	641	508.0	...	...	356	292	...	Note (2)	514.4	...
600	24	1170	990.6	3 5/8	16	203.2	692	762	610.0	...	...	406	330	...	Note (2)	616.0	...

DIMENSION OF CLASS 2500 FLANGES

NB	NPS	O	W	d	n	t _f	R	X	A _h	T	Y	Y	Y	B	B
											S/O & S/W	W/N	L/J	W/N	L/J
15	½	135	88.9	7/8	4	30.2	35	43	21.3	29	40	73	40	Note (2)	22.9
20	¾	140	95.2	7/8	4	31.8	43	51	26.7	32	43	79	43	Note (2)	28.2
25	1	160	108.0	1	4	35.0	51	57	33.4	35	48	89	48	Note (2)	34.9
32	1 ¼	185	130.2	1 1/8	4	38.1	64	73	42.2	39	52	95	52	Note (2)	43.7
40	1 ½	205	146.0	1 ¼	4	44.5	73	79	48.3	45	60	111	60	Note (2)	50.0
50	2	235	171.4	1 1/8	8	50.9	92	95	60.3	51	70	127	70	Note (2)	62.5
65	2 ½	265	196.8	1 ¼	8	57.2	105	114	73.0	58	79	143	79	Note (2)	75.4
80	3	305	228.6	1 3/8	8	66.7	127	133	88.9	...	...	168	92	Note (2)	91.4
100	4	355	273.0	1 5/8	8	76.2	157	165	114.3	...	...	190	108	Note (2)	116.8
125	5	420	323.8	1 7/8	8	92.1	186	203	141.3	...	...	229	130	Note (2)	144.4
150	6	485	368.3	2 1/8	8	108.0	216	235	168.3	...	...	273	152	Note (2)	171.4
200	8	550	438.2	2 1/8	12	127.0	270	305	219.1	...	...	318	178	Note (2)	222.2
250	10	675	539.8	2 5/8	12	165.1	324	375	273.0	...	...	419	229	Note (2)	277.4
300	12	760	619.1	2 7/8	12	184.2	381	441	323.8	...	...	464	254	Note (2)	328.2

NOTES:

- (1) This dimension is for the large end of the hub, which may be straight or tapered. Taper shall not exceed 7 degree on threaded, slip-on, socket-welding and lapped flanges. This dimension is defined as the diameter at the intersection between the hub taper and back face of the flange.
- (2) To be specified by the Purchaser.
- (3) 7.0 mm (0.06 in.) raised face for Class 600 and 900 raised face flanges
- (4) Socket welding flanges may be provided in NPS ½ to NPS 2 ½ , using Class 1500 dimensions.

APPROX. WEIGHTS OF FLANGES

Size		Weld Neck Flanges						Slip On Flanges						Blind Flanges					
		Class						Class						Class					
DN	NPS	150	300	600	900	1500	2500	150	300	600	900	1500	2500	150	300	600	900	1500	2500
15	1/2	0.5	0.9	0.9	...	1.9	3.6	0.4	0.7	0.8	...	1.7	...	0.4	0.7	0.7	...	1.8	3.0
20	3/4	0.7	1.5	1.5	...	2.6	4.0	0.7	1.1	1.4	...	2.3	...	0.7	1.2	1.2	...	2.4	4.5
25	1	1.1	1.9	1.9	...	3.8	6.0	0.8	1.4	1.6	...	3.4	...	0.9	1.5	1.5	...	3.6	5.0
32	1 1/4	1.5	2.6	2.6	...	4.4	9.0	1.1	1.8	2.1	...	3.9	...	1.3	2.0	2.0	...	4.1	8.0
40	1 1/2	1.8	3.3	3.3	...	6.1	13.0	1.4	2.6	3.1	...	5.4	...	1.6	2.9	3.2	...	5.8	11.0
50	2	2.7	3.6	4.7	...	11.1	19.0	2.2	3.4	3.7	...	9.8	...	2.6	3.4	4.3	...	10.1	17.0
65	2 1/2	4.4	5.4	6.5	...	15.5	24.0	3.6	4.4	5.4	...	13.7	...	4.1	5.1	6.0	...	14.0	25.0
80	3	5.2	7.4	8.7	15.0	20.4	43.0	4.1	6.1	7.3	11.6	18.0	...	5.0	7.0	8.0	13.1	19.0	39.0
100	4	7.5	11.9	18.1	24.0	30.5	66.0	5.6	10.1	15.8	19.8	27.8	...	7.1	11.8	18.0	22.1	30.0	60.0
150	5	9.2	16.0	30.5	37.0	58.0	111.0	6.3	12.5	24.5	32.0	52.0	...	9.0	15.5	28.5	36.5	58.0	101.0
200	6	11.0	20.2	36.2	50.0	70.0	172.0	7.5	14.1	29.5	41.0	61.0	...	11.8	21.3	35.5	47.4	72.0	156.0
250	8	18.3	31.0	56.5	85.0	125.0	261.0	12.6	24.6	43.0	78.0	104.0	...	21.0	35.2	58.0	82.5	122.0	242.0
300	10	25.0	44.3	91.0	127.0	204.0	485.0	18.5	37.1	70.0	110.0	175.0	...	30.0	57.0	98.0	123.0	210.0	465.0
350	12	39.0	64.0	105.0	170.0	303.0	730.0	28.0	50.0	86.0	149.0	264.0	...	45.0	82.0	125.0	174.0	315.0	665.0
400	14	51.0	88.0	127.0	198.0	427.0	...	36.0	70.0	100.0	181.0	...	...	59.0	106.0	151.0	231.0	423.0	...
450	16	60.0	113.0	178.0	224.0	570.0	...	46.0	90.0	142.0	194.0	...	...	79.0	140.0	215.0	280.0	590.0	...
500	18	71.0	134.0	216.0	300.0	740.0	...	50.0	112.0	175.0	274.0	...	...	97.0	178.0	287.0	400.0	795.0	...
550	20	88.0	171.0	268.0	374.0	935.0	...	64.0	133.0	232.0	332.0	...	...	124.0	223.0	366.0	503.0	1030.0	...
600	24	119.0	238.0	380.0	680.0	1515.0	...	89.0	208.0	330.0	637.0	...	...	188.0	345.0	532.0	950.0	1650.0	...

Size		Lapped Flanges						Threaded Flanges						Socket Welding Flanges					
		Class						Class						Class					
DN	NPS	150	300	600	900	1500	2500	150	300	600	900	1500	2500	150	300	600	900	1500	2500
15	1/2	0.4	0.7	0.8	...	1.7	3.0	0.4	0.7	1.0	...	1.7	3.0	0.4	0.7	1.0	...	1.7	...
20	3/4	0.7	1.1	1.4	...	2.3	4.0	0.7	1.2	1.6	...	2.4	4.0	0.7	1.2	1.6	...	2.4	...
25	1	0.8	1.4	1.6	...	3.4	5.0	0.9	1.4	1.8	...	3.5	5.0	0.8	1.4	1.8	...	3.5	...
32	1 1/4	1.1	1.8	2.1	...	3.9	8.0	1.2	1.9	2.6	...	4.0	8.0	1.1	1.9	2.6	...	4.0	...
40	1 1/2	1.4	2.6	3.1	...	5.4	11.0	1.5	2.8	3.3	...	5.5	11.0	1.4	2.8	3.3	...	5.5	...
50	2	2.2	3.4	3.7	...	9.8	17.0	2.3	3.3	3.9	...	10.0	17.0	2.2	3.3	3.9	...	10.0	...
65	2 1/2	3.6	4.4	5.4	...	13.7	25.0	3.7	4.6	6.0	...	13.9	25.0	3.6	4.6	6.0	...	13.9	...
80	3	4.1	6.1	7.3	11.6	18.0	38.0	4.2	6.3	7.4	11.9	...	...	4.1	6.3	7.4	...	...	...
100	4	5.6	10.1	15.8	19.8	27.8	58.0	5.9	10.2	17.0	20.0	...	...	...	...	...	...	...	...
150	5	6.3	12.5	24.5	32.0	52.0	95.0	7.0	12.9	26.5	32.5	...	...	...	...	...	...	...	...
200	6	7.5	14.1	29.5	41.2	61.0	146.0	8.4	18.0	32.0	41.7	...	...	...	...	...	...	...	...
250	8	12.6	24.8	43.0	75.0	104.0	220.0	13.0	26.0	46.0	77.5	...	...	...	...	...	...	...	...
300	10	18.5	42.0	77.0	115.0	220.0	420.0	17.8	37.5	74.0	110.0	...	...	...	...	...	...	...	...
350	12	28.0	64.0	92.0	155.0	287.0	500.0	29.5	52.0	90.0	149.0	...	...	...	...	...	...	...	...
400	14	42.0	84.0	114.0	170.0	405.0	...	39.0	72.0	108.0	181.0	...	...	...	...	...	...	...	...
450	16	52.0	114.0	160.0	210.0	525.0	...	42.0	100.0	150.0	194.0	...	...	...	...	...	...	...	...
500	18	58.0	134.0	192.0	298.0	670.0	...	54.0	126.0	188.0	274.0	...	...	...	...	...	...	...	...
550	20	74.0	168.0	260.0	370.0	810.0	...	68.0	148.0	230.0	332.0	...	...	...	...	...	...	...	...
600	24	101.0	250.0	368.0	710.0	1290.0	...	93.0	222.0	325.0	637.0	...	...	...	...	...	...	...	...

Ordering Information

As Per Our Design

1) Materials	
Type Of Materials	Nomen.
S S310	S1
SS304 / ASTM A182 Gr. F304	S4
SS304 L	S4L
SS316	S6
SS316L	S6L
SS317	S7
SS321	S21
SS446	S46
Monal 400	M4
Incoloy 625	I6
Incoloy 825	I8
Carbon Steel	CS
A105	A1
Alloy 20	A20
ASTM A182 F51 (Duplex F51)	F51
ASTM A182 F60 (Duplex F60)	F60
ASTM A182 F53 (Super Duplex F53)	F53
ASTM A312 TP 304L	P4L
ASTM A182 F11	F11
ASTM A182 Gr. F5	F5
ASTM A312 TP 304	TP4
Hastelloy C276	HC2
A350 Gr. LF1/ LF2/ LF3	LF2
SS410	S41
ASTM A240 TP 316L	P6L
Inconel-600	I60
ASTM A234 Gr. WPB	WPB
Mild Steel	MS
Nickel Alloy	NA
Galvanized	GLV

2) Sizes	
Size	Nomen.
1/8"	6
1/4"	8
3/8"	10
1/2"	15
3/4"	20
1"	25
1 1/4"	32
1 1/2"	40
2"	50
2 1/2"	65
3"	80
4"	100
5"	125
6"	150
8"	200
10"	250
12"	300
14"	350
16"	400
18"	450
20"	500
22"	550
24"	600
26"	650
28"	700
30"	750
32"	800
36"	900

3) Type of End Connections.	
Type	Nomen.
Flange End	FL
Butt Weld End	BW
Socket Weld End	SW
Tounge & Groove	TG
Ring Type Joint	RTJ
NPT Threaded	NT
BSPT Threaded	BT
SW NPT	SN

4) Type Of Face	
Type	Nomen.
Flat Face	FF
Raised Face	RF
Ring Type	RTJ
Groove	GR
Tounge	TNG

5) Type Of Class	
Types	Nomen.
Class 150	#150
Class 300	#300
Class 400	#400
Class 600	#600
Class 900	#900
Class 1500	#1500
Class 2500	#2500
Class 4500	#4500
Sch 10	S10
Sch 20	S20
Sch 40	S40
Sch 80	S80
Sch 160	S160
Sch XXS	SXXS
Table F	F
Table E	E
Table D	D

Ex. 6" Slipon Raised Face #150 ASTM A182 SS 304 = ___-6-SO-RF-#150-___