

FLANGES



Available Materials

★ **Stainless Steel**

A182 F304/L, 304H
 F310, 310H
 F316/L, 316H
 F317/L
 F321/H
 F347/H
 F51
 F53
 F904L
 F44 (254SMO)

★ **Duplex & Super Duplex**

A182 F51, F53, F55, F60

★ **Nickel-base Alloy**

Alloy200, 400, K500, 600, 625, 800, 800H, 800HT, 825, alloy 20, alloy28, hastelloy C22, C276

★ **Other Grades**

Cu70Ni30(C71500, B30), Cu90Ni10(C70600, B10)
 Titanium & Titanium Alloy

★ **Carbon Steel**

A105, A105N

★ **Low Temperature Steel**

A350 LF2, LF3

★ **Alloy Steel**

A182 F5, F9, F11, F12, F22, F91, F911, FR

★ **High Yield**

A694 F42, F46, F50, F52, F56, F60, F65, F70

Note:

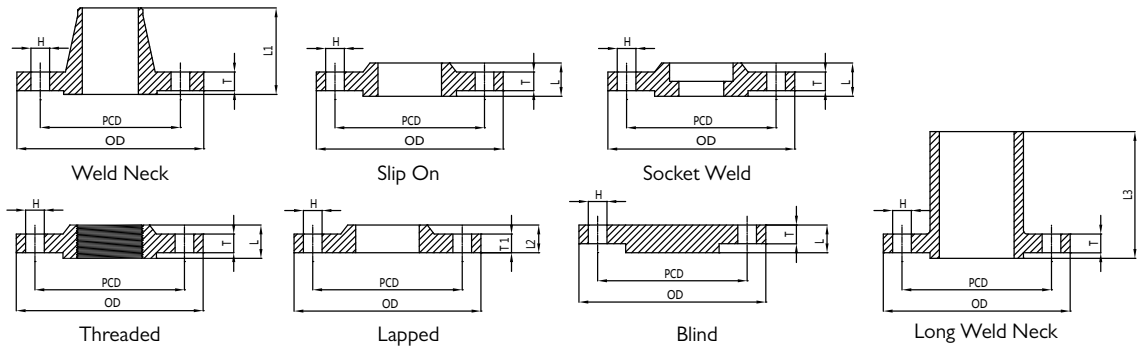
1. Equivalent grade from EN/DIN is available for above.
2. The list above is for your reference only. The actual enquiry will consider order quantity and delivery time.
3. If didn't find your material here, you are kindly requested to make a specific enquiry to sales@kaysuns.com .

ASME/ANSI B 16.5-2013 and B 16.47-2011

Tolerances on Flange Dimensions (ASME/ANSI B16.5 and B16.7, and MSS SP-44)

Dimension	Range	Tolerance	
		in	mm
General and Blind Flanges (For blind flange dimensions see page 8-23 for B16.5, page 8-46 for B16.47 Series A/ MSS SP-44 and page 8-51 for B16.47 Series B/ API 605):			
G (raised face diameter)	≤NPS 24	±0.03	±0.76
	≥NPS 26, with 0.06 in raised face	±0.08	±2.03
	≥NPS 26, with 0.25 in raised face	±0.04	±1.02
I (bolt hole diameter)	All	No tolerance in B16.5 or B 16.47	
J (bolt circle diameter)	All	±0.06	±1.52
Center to center of adjacent bolt holes	All	±0.03	±0.76
Eccentricity of bolt circle and machined facing diameters	≤NPS 2½	±0.03	±0.76
	≥NPS 3	±0.06	±1.52
Weld Neck Flanges I (For dimensions see page 8-10 for B 16.5, page 8-46 for B16.47 Series A/ MSS SP-44 and page 8-51 for B16.47 Series B/ API 605):			
D (overall length)	≤NPS 4	+0.06	+1.52
	NPS 5 to 10	+0.06,-0.12	+1.52,-3.05
	NPS 12 to 24	+0.12,-0.18	+3.05,-4.57
	≥NPS 26	±0.19	±4.83
Thickness of hub	All	> 87.5% of pipe nominal wall thickness	
Slip On (see page 8-17), Lap Joint (see page 8-32) and Socket Welding (see page 8-30 for dimensions) Flanges:			
B (inside diameter, or bore)	≤NPS 10	+0.03,-0.0	+0.76,-0.0
	≥NPS 12	+0.06,-0.0	+1.52,-0.0
Threaded Flanges (see page 8-40 for dimensions):			
B (counterbore) (Not applicable for Class 150 lb)	≤NPS 10	+0.03,-0.0	+0.76,-0.0
	≥NPS 12	+0.06,-0.0	+1.52,-0.0

ASME B 16.5-2013 Class 150

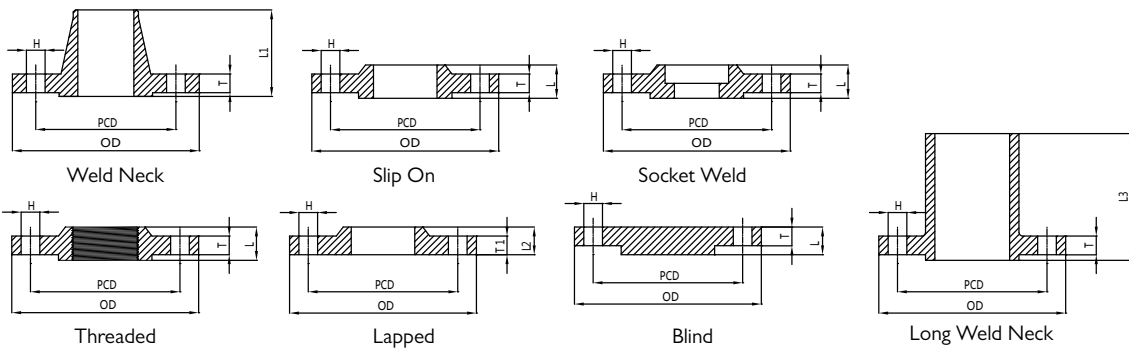


Class 150		Flange Thickness			Ltb				Drilline Data			Class 150	
Nominal Pipe Size		Flange Outside Diameter	Thickness of Flange Min	Thickness of Lap Min	Bossed Length	Weld Neck Length *	Lap Joint Length	Long Weld Neck Length	Pitch Circle Diameter	Bolt Hole Diameter	Number of Bolt Holes	Nominal Pipe Size	
MM	INCH	OD	T	T1	L	L1	L2	L3	PCD	H	#	MM	INCH
15	1/2	90	9.6	11.2	16	46	16	229	60.3	16	4	15	1/2
20	3/4	100	11.2	12.7	16	51	16	229	69.9	16	4	20	3/4
25	1	110	12.7	14.3	17	54	17	229	79.4	16	4	25	1
32	1 1/4	115	14.3	15.9	21	56	21	229	88.9	16	4	32	1 1/4
40	1 1/2	125	15.9	17.5	22	60	22	229	98.4	16	4	40	1 1/2
50	2	150	17.5	19.1	25	62	25	229	120.7	20	4	50	2
65	2 1/2	180	20.7	22.3	29	68	29	229	139.7	20	4	65	2 1/2
80	3	190	22.3	23.9	30	68	30	229	152.4	20	4	80	3
90	3 1/2	215	22.3	23.9	32	70	32	229	177.8	20	8	90	3 1/2
100	4	230	22.3	23.9	33	75	33	229	190.5	20	8	100	4
125	5	255	22.3	23.9	36	87	36	305	215.9	23	8	125	5
150	6	280	23.9	25.4	40	87	40	305	241.3	23	8	150	6
200	8	345	27	28.6	44	100	44	305	298.5	23	8	200	8
250	10	405	28.6	30.2	49	100	49	305	362	26	12	250	10
300	12	485	30.2	31.8	56	113	56	305	431.8	26	12	300	12
350	14	535	33.4	35	57	125	79	305	476.3	29	12	350	14
400	16	595	35	36.6	64	125	87	305	539.8	29	16	400	16
450	18	635	38.1	39.7	69	138	97	305	577.9	32	16	450	18
500	20	700	41.3	42.9	73	143	103	305	635	32	20	500	20
600	24	815	46.1	47.7	83	151	111	305	749.3	25	20	600	24

Note:

1. Pipe schedule for WN and SW flanges should to be indicated in the inquiry.
2. All dimensions are in mm. If you could not find the size, please [contact us](#).

ASME B 16.5-2013 Class 300

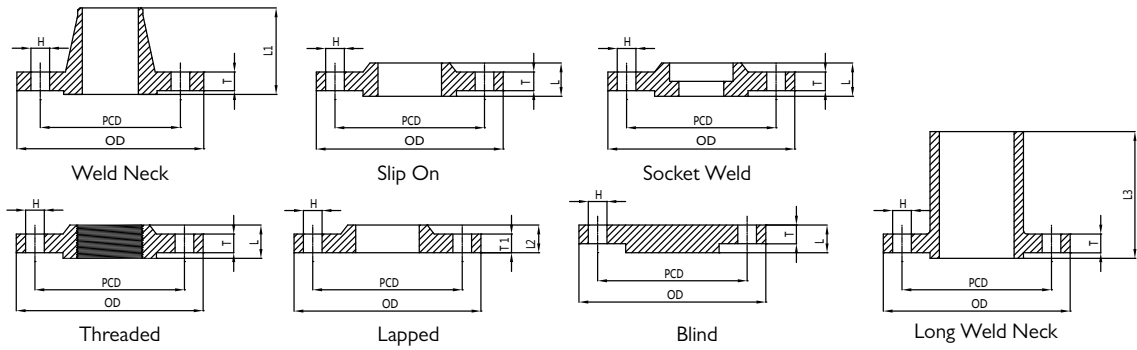


Class 300		Flange Thickness			Ltb				Drilline Data			Class 300	
Nominal Pipe Size		Flange Outside Diameter	Thickness of Flange Min	Thickness of Lap Min	Bossed Length	Weld Neck Length (Refer)	Lap Joint Length	Long Weld Neck Length (Refer)	Pitch Circle Diameter	Bolt Hole Diameter	Number of Bolt Holes	Nominal Pipe Size	
MM	INCH	OD	T	T1	L	L1	L2	L3	PCD	H	#	MM	INCH
15	1/2	95	12.7	14.3	21	51	22	229	66.7	16	4	15	1/2
20	3/4	115	14.3	15.9	24	56	25	229	82.6	20	4	20	3/4
25	1	125	15.9	17.5	25	60	27	229	88.9	20	4	25	1
32	1 1/4	135	17.5	19.1	25	64	27	229	98.4	20	4	32	1 1/4
40	1 1/2	155	19.1	20.7	29	67	30	229	114.3	23	4	40	1 1/2
50	2	165	20.7	22.3	32	68	33	229	127	20	8	50	2
65	2 1/2	190	23.9	25.4	37	75	38	229	149.2	23	8	65	2 1/2
80	3	210	27	28.6	41	78	43	229	168.3	23	8	80	3
90	3 1/2	230	28.6	30.2	43	79	44	229	184.2	23	8	90	3 1/2
100	4	255	30.2	31.8	46	84	48	229	200	23	8	100	4
125	5	280	33.4	35	49	97	51	305	235	23	8	125	5
150	6	320	35	36.6	51	97	52	305	269.9	23	12	150	6
200	8	380	39.7	41.3	60	110	62	305	330.2	26	12	200	8
250	10	445	46.1	47.7	65	116	95	305	387.4	29	16	250	10
300	12	520	49.3	50.8	71	129	102	305	450.8	32	16	300	12
350	14	585	52.4	54	75	141	111	305	514.4	32	20	350	14
400	16	650	55.6	57.2	81	144	121	305	571.5	35	20	400	16
450	18	710	58.8	60.4	87	157	130	305	628.6	35	24	450	18
500	20	775	62	63.5	94	160	140	305	685.8	35	24	500	20
600	24	915	68.3	69.9	105	167	152	305	812.8	42	24	600	24

Note:

- 1.Pipe schedule for WN and SW flanges should to be indicated in the inquiry.
- 2.All dimensions are in mm. If you could not find the size, please [contact us](#).

ASME B 16.5-2013 Class 400

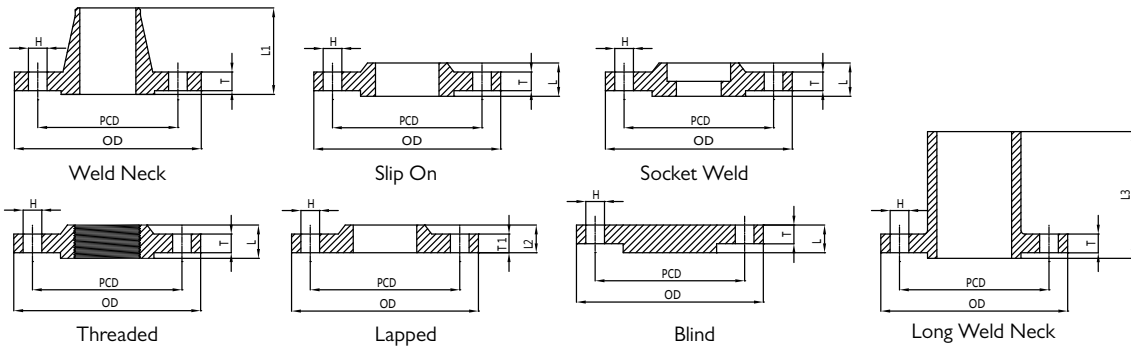


Class 400		Flange Thickness		Ltb				Drillline Data			Class 400	
Nominal Pipe Size		Flange Outside Diameter	Thickness of Flange Min	Bossed Length	Weld Neck Length *	Lap Joint Length	Long Weld Neck Length	Pitch Circle Diameter	Bolt Hole Diameter	Number of Bolt Holes	Nominal Pipe Size	
MM	INCH	OD	T & T1	L	L1	L2	L3	PCD	H	#	MM	INCH
15	1/2	95	14.3	29	59	22	229	66.7	16	4	15	1/2
20	3/4	115	15.9	32	64	25	229	82.6	20	4	20	3/4
25	1	125	17.5	34	69	27	229	88.9	20	4	25	1
32	1 1/4	135	20.7	36	74	29	229	98.4	20	4	32	1 1/4
40	1 1/2	155	22.3	39	77	32	229	114.3	22	4	40	1 1/2
50	2	165	25.4	44	80	37	229	127	20	8	50	2
65	2 1/2	190	28.6	48	86	41	229	149.2	22	8	65	2 1/2
80	3	210	31.8	53	90	46	229	168.3	22	8	80	3
90	3 1/2	230	35	56	93	49	229	184.2	26	8	90	3 1/2
100	4	255	35	58	96	51	229	200	26	8	100	4
125	5	280	38.1	61	109	54	305	235	26	8	125	5
150	6	320	41.3	64	110	57	305	269.9	26	12	150	6
200	8	380	47.7	75	124	68	305	330	30	12	200	8
250	10	445	54	80	131	102	305	387.4	32	16	250	10
300	12	520	57.2	86	144	108	305	450.8	35	16	300	12
350	14	585	60.4	91	156	117	305	514.4	35	20	350	14
400	16	650	63.5	101	159	127	305	571.5	38	20	400	16
450	18	710	66.7	105	172	137	305	628.6	38	24	450	18
500	20	775	69.9	109	175	146	305	685.8	42	24	500	20
600	24	915	76.2	121	182	159	305	812.8	48	24	600	24

Note:

- 1.Pipe schedule for WN and SW flanges should to be indicated in the inquiry.
- 2.All dimensions are in mm. If you could not find the size, please [contact us](#).

ASME B 16.5-2013 Class 600

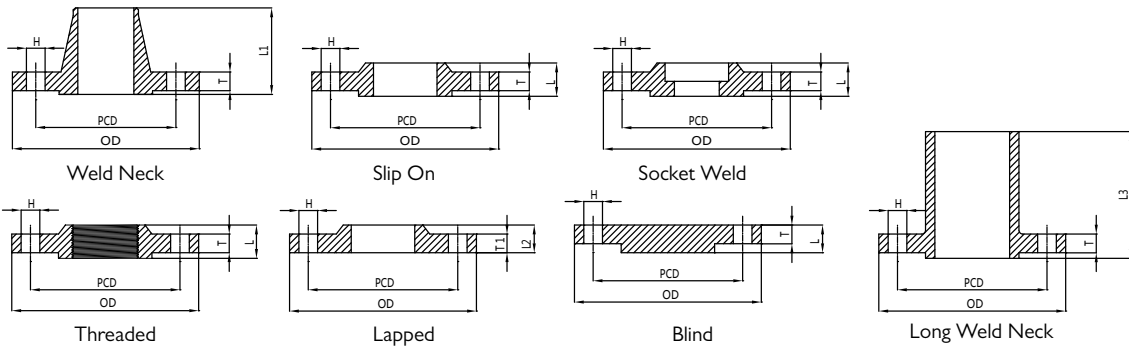


Class 600		Flange Outside Diameter	Flange Thickness	Ltb				Drillline Data			Class 600	
Nominal Pipe Size				Thickness of Flange Min	Bossed Length	Weld Neck Length *	Lap Joint Length	Long Weld Neck Length	Pitch Circle Diameter	Bolt Hole Diameter	Number of Bolt Holes	Nominal Pipe Size
MM	INCH	OD	T & T1	L	L1	L2	L3	PCD	H	#	MM	INCH
15	1/2	95	14.3	29	59	22	229	66.7	16	4	15	1/2
20	3/4	115	15.9	32	64	25	229	82.6	20	4	20	3/4
25	1	125	17.5	34	69	27	229	88.9	20	4	25	1
32	1 1/4	135	20.7	36	74	29	229	98.4	20	4	32	1 1/4
40	1 1/2	155	22.3	39	77	32	229	114.3	22	4	40	1 1/2
50	2	165	25.4	44	80	37	229	127	20	8	50	2
65	2 1/2	190	28.6	48	86	41	229	149.2	22	8	65	2 1/2
80	3	210	31.8	53	90	46	229	168.3	22	8	80	3
90	3 1/2	230	35	56	93	49	229	184.2	26	8	90	3 1/2
100	4	275	38.1	61	109	54	229	215.9	26	8	100	4
125	5	330	44.5	67	121	60	305	266.7	29	8	125	5
150	6	355	47.7	74	124	67	305	292.1	29	12	150	6
200	8	420	55.6	83	140	76	305	349.2	32	12	200	8
250	10	510	63.5	93	159	111	305	431.8	35	16	250	10
300	12	560	66.7	99	163	117	305	489	35	20	300	12
350	14	605	69.9	101	172	127	305	527	38	20	350	14
400	16	685	76.2	113	185	140	305	603.2	42	20	400	16
450	18	745	82.6	124	191	152	305	654	45	20	450	18
500	20	815	88.9	134	197	165	305	723.9	45	24	500	20
600	24	940	101.6	147	210	184	305	838.2	51	24	600	24

Note:

1. Pipe schedule for WN and SW flanges should be indicated in the inquiry.
2. All dimensions are in mm. If you could not find the size, please [contact us](#).

ASME B 16.5-2013 Class 900

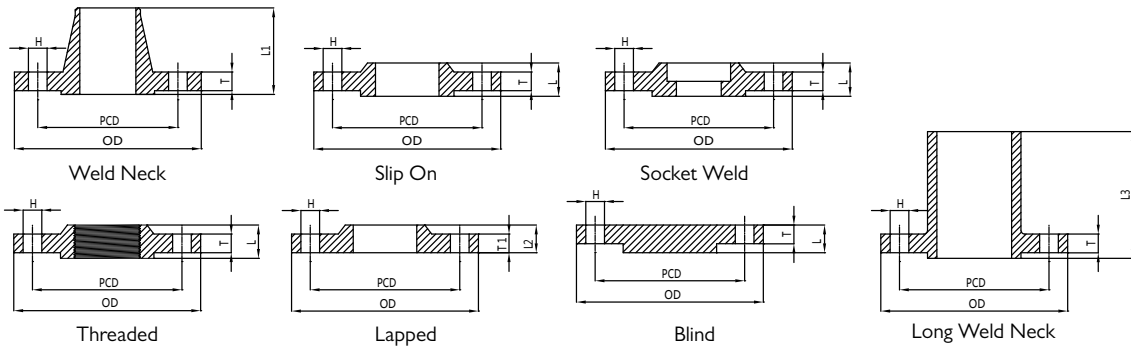


Class 900		Flange Outside Diameter	Flange Thickness	Ltb				Drillline Data			Class 900	
Nominal Pipe Size	Thickness of Flange Min			Bossed Length	Weld Neck Length *	Lap Joint Length	Long Weld Neck Length	Pitch Circle Diameter	Bolt Hole Diameter	Number of Bolt Holes	Nominal Pipe Size	
MM	INCH	OD	T & T I	L	L1	L2	L3	PCD	H	#	MM	INCH
15	1/2	120	22.5	39.0	67	32	229	82.6	22	4	15	1/2
20	3/4	130	25.5	42.0	77	35	229	88.9	22	4	20	3/4
25	1	150	29	48.0	80	41	229	101.6	26	4	25	1
32	1 1/4	160	29	48.0	80	41	229	111.1	26	4	32	1 1/4
40	1 1/2	180	32	51.0	90	44	229	123.8	29	4	40	1 1/2
50	2	215	38.5	64.0	109	57	229	165.1	26	8	50	2
65	2 1/2	245	41.5	71.0	112	64	229	190.5	29	8	65	2 1/2
80	3	265	38.1	61.0	109	54	229	190.5	26	8	80	3
100	4	290	44.5	77.0	121	70	229	235.0	32	8	100	4
125	5	350	50.8	86.0	134	79	305	279.4	35	8	125	5
150	6	380	55.6	93.0	147	86	305	317.5	32	12	150	6
200	8	470	63.5	109.0	169	114	305	393.7	38	12	200	8
250	10	545	69.9	115.0	191	127	305	469.9	38	16	250	10
300	12	610	79.4	124.0	207	143	305	533.4	38	20	300	12
350	14	640	85.8	137.0	220	156	305	558.8	42	20	350	14
400	16	705	88.9	140.0	223	165	305	616.0	45	20	400	16
450	18	785	101.6	159.0	236	190	305	685.8	51	20	450	18
500	20	855	108	166.0	255	210	305	749.3	54	20	500	20
600	24	1040	139.7	210.0	299	267	305	901.7	67	20	600	24

Note:

1. Pipe schedule for WN and SW flanges should to be indicated in the inquiry.
2. All dimensions are in mm. If you could not find the size, please [contact us](#).

ASME B 16.5-2013 Class 1500

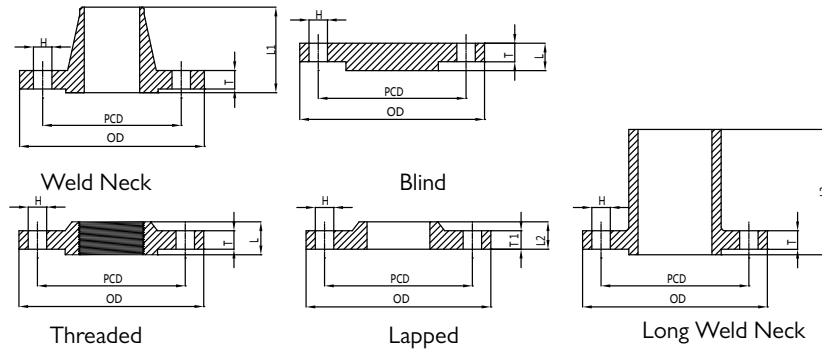


Class 1500		Flange Thickness		Ltb				Drillline Data			Class 1500	
Nominal Pipe Size		Flange Outside Diameter	Thickness of Flange Min	Bossed Length	Weld Neck Length *	Lap Joint Length	Long Weld Neck Length	Pitch Circle Diameter	Bolt Hole Diameter	Number of Bolt Holes	Nominal Pipe Size	
MM	INCH	OD	T & T1	L	L1	L2	L3	PCD	H	#	MM	INCH
15	1/2	120	22.5	39.0	67	32	229	82.6	22	4	15	1/2
20	3/4	130	25.5	42.0	77	35	229	88.9	22	4	20	3/4
25	1	150	29	48.0	80	41	229	101.6	26	4	25	1
32	1 1/4	160	29	48.0	80	41	229	111.1	26	4	32	1 1/4
40	1 1/2	180	32	51.0	90	44	229	123.8	29	4	40	1 1/2
50	2	215	38.5	64.0	109	57	229	165.1	26	8	50	2
65	2 1/2	245	41.5	71.0	112	64	229	190.5	29	8	65	2 1/2
80	3	265	48		124	73	229	203.2	32	8	80	3
100	4	310	54		131	90	229	241.3	35	8	100	4
125	5	375	73.5		163	105	305	292.1	42	8	125	5
150	6	395	83		178	119	305	317.5	38	12	150	6
200	8	485	92		220	143	305	393.7	45	12	200	8
250	10	585	108		261	178	305	482.6	51	12	250	10
300	12	675	124		290	219	305	571.5	54	16	300	12
350	14	750	133.5		305	241	305	635.0	60	16	350	14
400	16	825	146.5		318	260	311	704.8	67	16	400	16
450	18	915	162		334	276	327	774.7	73	16	450	18
500	20	985	178		363	292	356	831.8	79	16	500	20
600	24	1170	203.5		413	330	406	990.6	92	16	600	24

Note:

1. Pipe schedule for WN and SW flanges should to be indicated in the inquiry.
2. All dimensions are in mm. If you could not find the size, please [contact us](#).

ASME B 16.5-2013 Class 2500



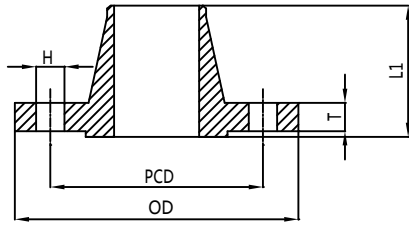
FLANGES

Class 2500		Flange Thickness		Ltb				Drillline Data			Class 2500	
Nominal Pipe Size		Flange Outside Diameter	Thickness of Flange Min	Bossed Length	Weld Neck Length *	Lap Joint Length	Long Weld Neck Length	Pitch Circle Diameter	Bolt Hole Diameter	Number of Bolt Holes	Nominal Pipe Size	
MM	INCH	OD	T & T1	L	L1	L2	L3	PCD	H	#	MM	INCH
15	1/2	135	30.2	47.0	80	40	229	88.9	22	4	15	1/2
20	3/4	140	31.8	50.0	86	43	229	95.2	22	4	20	3/4
25	1	160	35	55.0	96	48	229	108	26	4	25	1
32	1 1/4	185	38.1	59.0	102	52	229	130.2	29	4	32	1 1/4
40	1 1/2	205	44.5	67.0	118	60	229	146	32	4	40	1 1/2
50	2	235	50.9	77.0	134	70	229	171.4	29	8	50	2
65	2 1/2	265	57.2	86.0	150	79	229	196.8	32	8	65	2 1/2
80	3	305	66.7		175	92	229	228.6	35	8	80	3
100	4	355	76.2		197	108	305	273	42	8	100	4
125	5	420	92.1		235	130	305	323.8	48	8	125	5
150	6	485	108		280	152	305	368.3	54	8	150	6
200	8	550	127		324	178	305	438.2	54	12	200	8
250	10	675	165.1		426	229	406	539.8	67	12	250	10
300	12	760	184.2		471	254	406	619.1	73	12	300	12

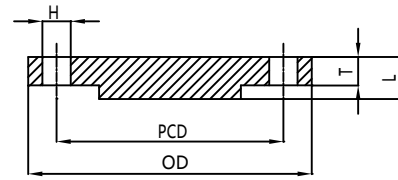
Note:

1. Pipe schedule for WN and SW flanges should be indicated in the inquiry.
2. All dimensions are in mm. If you could not find the size, please [contact us](#).

ASME B 16.47 - 2011 Class 150 Series A



Large Bore Weld Neck
Flanges ASME B16.47A



Large Bore Blind Flanges
ASME B16.47A

Class 150 Series.a		Flange Thickness			Ltb	Drilling Data				
Nominal Pipe Size		Flange Outside Diameter	Thickness of W/N Min	Thickness of Blind Min	Weld Neck Length	Pitch Circle Diameter	Bolt Hole Diameter	Number of Bolts Holes	Nominal Pipe Size	
MM	INCH	OD	T	TI	LI	PCD	H	#	MM	INCH
650	26	870	66.7	66.7	119	806.4	1(3/8)	24	650	26
700	28	925	69.9	69.9	124	863.6	1(3/8)	28	700	28
750	30	985	73.1	73.1	135	914.4	1(3/8)	28	750	30
800	32	1060	79.4	79.4	143	977.9	1(5/8)	28	800	32
850	34	1110	81	81	148	1028.7	1(5/8)	32	850	34
900	36	1170	88.9	88.9	156	1085.8	1(5/8)	32	900	36
950	38	1240	85.8	85.8	156	1149.4	1(5/8)	32	950	38
1000	40	1290	88.9	88.9	162	1200.2	1(5/8)	36	1000	40
1050	42	1345	95.3	95.3	170	1257.3	1(5/8)	36	1050	42
1100	44	1405	100.1	100.1	176	1314.4	1(5/8)	40	1100	44
1150	46	1455	101.6	101.6	184	1365.2	1(5/8)	40	1150	46
1200	48	1510	106.4	106.4	191	1422.4	1(5/8)	44	1200	48
1250	50	1570	109.6	109.6	202	1479.6	1(7/8)	44	1250	50
1300	52	1625	114.3	114.3	208	1536.7	1(7/8)	44	1300	52
1350	54	1685	119.1	119.1	214	1593.8	1(7/8)	44	1350	54
1400	56	1745	122.3	122.3	227	1651	1(7/8)	48	1400	56
1450	58	1805	127	127	233	1708.2	1(7/8)	48	1450	58
1500	60	1855	130.2	130.2	238	1759	1(7/8)	52	1500	60

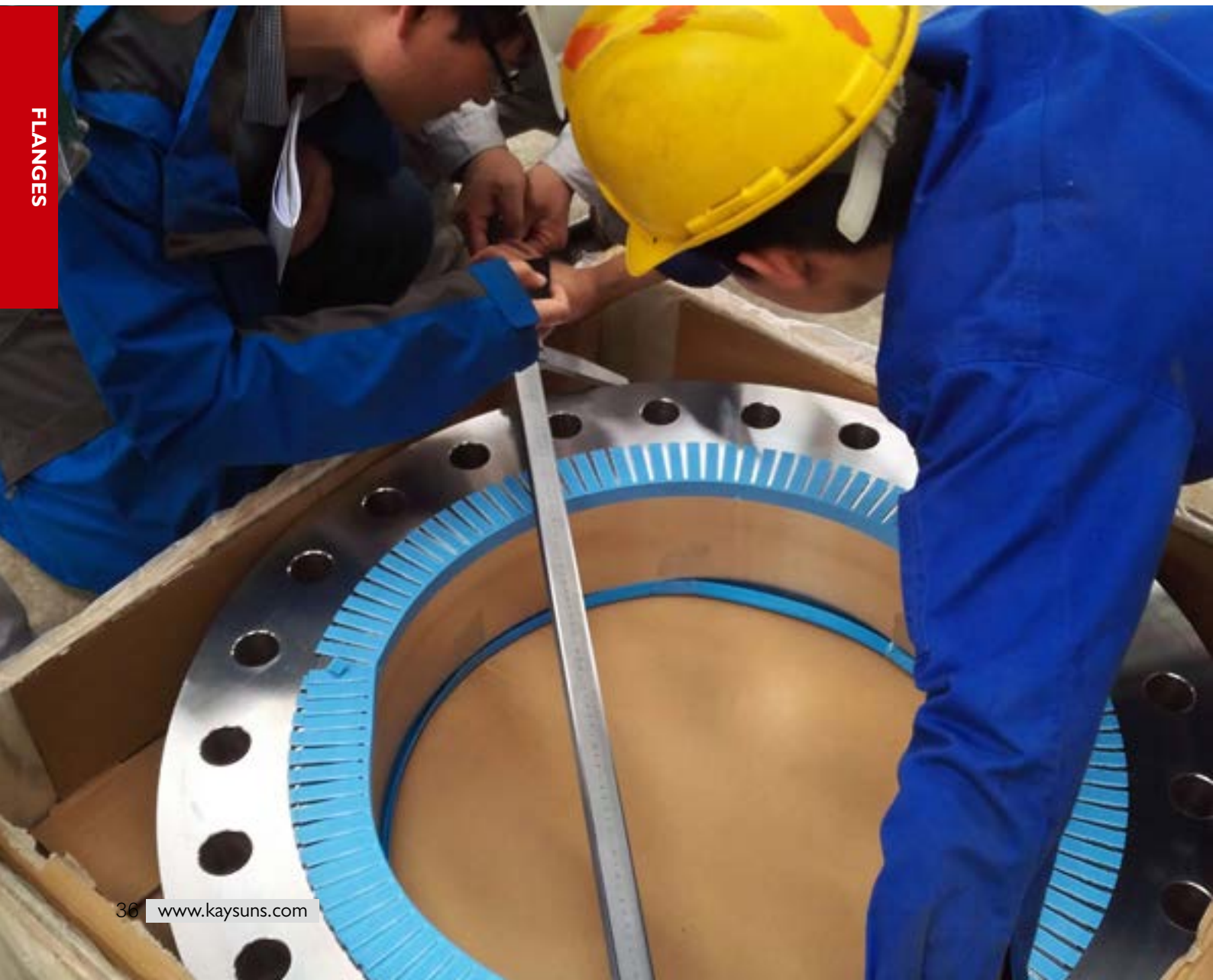
Note:

- 1.Pipe schedule for WN and SW flanges should to be indicated in the inquiry.
- 2.All dimensions are in mm. If you could not find the size, please [contact us](#).

ASME B 16.47- 2011 Ring Grooves Class 300-900

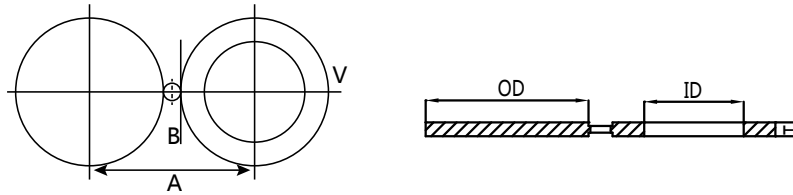
Nominal Pipe Size For Class			Groove Number	Pitch Diameter	Depth	Width	Radius At Base	Diameter Rf Section
300	600	900						
				A	B	C	D	E
650(26")	650(26")		R93	749.3	0.5	0.781	1.5	810
700(28")	700(28")		R94	800.1	0.5	0.781	1.5	861
750(30")	750(30")		R95	857.25	0.5	0.781	1.5	917
800(32")	800(32")		R96	914.4	0.562	0.906	1.5	984
850(34")	850(34")		R97	965.2	0.562	0.906	1.5	1035
900(36")	900(36")		R98	1022.35	0.562	0.906	1.5	1092
		650(26")	R100	749.3	0.688	1.188	2.3	832
		700(28")	R101	800.1	0.688	1.312	2.3	889
		750(30")	R102	857.25	0.688	1.312	2.3	946
		800(32")	R103	914.4	0.688	1.312	2.3	1003
		850(34")	R104	965.2	0.812	1.438	2.3	1067
		900(36")	R105	1022.35	0.812	1.438	2.3	1124

Note: All dimensions are in mm. If you could not find the size, please [contact us](#).



FLANGES

ASME B 16.48-2010 Spectacles, Spades & Spacers



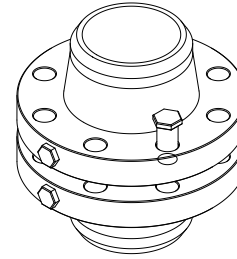
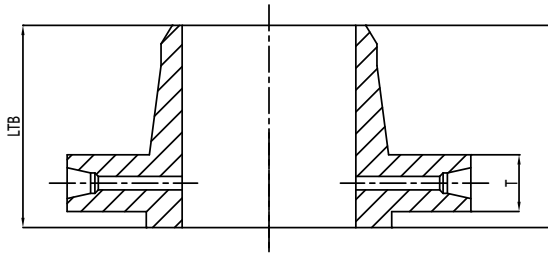
Spectacle Flanges(Figure 8 Flanges), Spades & Spacers

Class 150							Class 300					Class 600						
Nominal Pipe Size	Diameter	Outside Diameter	Centre Line Spacing	Thickness Min	Web Width		Inside Diameter	Outside Diameter	Centre Line Spacing	Thickness Min	Web Width	Inside Diameter	Outside Diameter	Centre Line Spacing	Thickness Min	Web Width	Nominal Pipe Size	
MM	INCH	ID	OD	A	T	B	ID	OD	A	T	B	ID	OD	A	T	B	MM	INCH
15	1/2	16	45	60	3	38	16	51	65	6.4	38	16	51	65	6.4	38	15	1/2
20	3/4	21	54	70	3	38	21	64	80	6.4	38	21	64	80	6.4	38	20	3/4
25	1	27	64	80	3	38	27	70	90	6.4	38	27	70	90	6.4	57	25	1
32	1 1/4	42	73	90	6.4	38	42	79	100	6.4	38	37	79	100	9.7	57	32	1 1/4
40	1 1/2	48	83	100	6.4	38	48	92	115	6.4	38	43	92	115	9.7	67	40	1 1/2
50	2	61	102	120	6.4	51	61	108	125	9.7	51	55	108	125	9.7	57	50	2
65	2 1/2	73	107	140	6.4	51	73	127	150	9.7	51	67	127	150	12.7	67	65	2 1/2
80	3	89	133	150	6.4	64	89	146	170	9.7	64	83	146	170	12.7	67	80	3
90	3 1/2	102	159	175	9.7	64	102	162	185	12.7	64	96	159	185	15.7	76	90	3 1/2
100	4	114	172	190	9.7	64	114	178	200	12.7	64	108	191	215	15.7	76	100	4
125	5	141	194	215	9.7	76	141	213	235	15.7	76	135	238	265	19.1	86	125	5
150	6	168	219	240	12.7	76	168	248	270	15.7	76	162	264	290	22.4	86	150	6
200	8	219	276	300	12.7	76	219	305	330	22.4	76	212	318	350	28.4	95	200	8
250	10	273	337	360	15.7	102	273	359	385	25.4	102	265	397	430	35.1	105	250	10
300	12	324	406	430	19.1	102	324	419	450	28.5	102	315	454	490	41.1	105	300	12
350	14	356	448	475	19.1	108	356	483	515	31.8	108	346	489	525	44.5	114	350	14
400	16	406	511	460	22.4	108	406	536	570	38.1	108	397	562	605	50.8	124	400	16
450	18	457	546	580	25.4	114	457	594	630	41.1	114	448	610	655	53.9	133	450	18
500	20	508	603	635	28.4	121	508	651	685	44.5	121	497	680	725	63.5	133	500	20
600	24	610	714	750	31.8	140	610	772	810	50.8	140	597	787	840	73.2	152	600	24

Class 900						Class 1500					Class 2500							
Nominal Pipe Size	Diameter	Outside Diameter	Centre Line Spacing	Thickness Min	Web Width		Inside Diameter	Outside Diameter	Centre Line Spacing	Thickness Min	Web Width	Inside Diameter	Outside Diameter	Centre Line Spacing	Thickness Min	Web Width	Nominal Pipe Size	
MM	INCH	ID	OD	A	T	B	ID	OD	A	T	B	ID	OD	A	T	B	MM	INCH
15	1/2	16	60	80	6.4	38	16	61	80	6.4	38	16	67	90	9.7	38	15	1/2
20	3/4	21	67	90	6.4	41	21	67	90	9.7	41	21	73	95	9.7	41	20	3/4
25	1	27	76	100	6.4	57	27	76	100	9.7	64	27	83	110	9.7	64	25	1
32	1 1/4	37	86	110	9.7	57	35	86	110	9.7	64	35	102	130	12.7	64	32	1 1/4
40	1 1/2	43	95	125	9.7	67	41	95	125	12.7	70	41	114	145	15.7	70	40	1 1/2
50	2	55	140	165	12.7	57	53	140	165	12.7	70	53	143	170	15.7	70	50	2
65	2 1/2	67	162	190	12.7	67	63	162	190	15.7	76	63	165	195	19.1	76	65	2 1/2
80	3	83	165	190	15.7	67	78	172	205	19.1	76	78	194	230	22.4	76	80	3
100	4	108	203	235	19.1	76	102	206	240	22.4	89	102	232	275	28.4	89	100	4
125	5	135	244	280	22.4	86	128	251	290	28.4	89	128	276	325	35.1	89	125	5
150	6	162	286	320	25.4	86	154	279	320	35.1	89	154	314	370	41.1	89	150	6
200	8	212	356	395	35.1	95	203	349	395	41.1	102	198	384	440	53.8	102	200	8
250	10	265	432	470	41.1	105	255	432	480	50.8	114	248	473	540	66.5	114	250	10
300	12	315	495	535	47.8	105	303	518	570	60.5	114	289	546	620	79.2	114	300	12
350	14	346	518	560	53.8	114	333	575	635	66.5	127	N/A	N/A	N/A	N/A	N/A	350	14
400	16	397	572	615	60.5	124	381	638	705	76.2	133	N/A	N/A	N/A	N/A	N/A	400	16
450	18	448	635	685	66.5	133	429	702	775	85.9	146	N/A	N/A	N/A	N/A	N/A	450	18
500	20	497	696	750	73.2	133	478	752	830	95.3	152	N/A	N/A	N/A	N/A	N/A	500	20
600	24	597	835	900	88.9	152	575	899	990	111.3	178	N/A	N/A	N/A	N/A	N/A	600	24

Note: All dimensions are in mm. If you could not find the size, please [contact us](#).

ASME B 16.36-2009 Orifice Flanges



Orifice Flanges

Nominal Pipe Size		Class 300		Class 600		Class 900		Class 1500		Class 2500		Nominal Pipe Size	
MM	INCH	Thickness Min	Length Thru Hub W/Neck	Thickness Min	Length Thru Hub W/Neck	Thickness Min	Length Thru Hub W/Neck	Thickness Min	Length Thru Hub W/Neck	Thickness Min	Length Thru Hub W/Neck	MM	INCH
25	1	36.6	83	36.6	83	38.1	89	38.1	89	38.1	98	25	1
40	1 1/2	36.6	86	36.6	86	38.1	95	38.1	95	44.5	117	40	1 1/2
50	2	36.6	86	36.6	86	38.1	108	38.1	108	50.8	133	50	2
65	2 1/2	36.6	89	36.6	89	41.3	111	41.3	111	57.2	149	65	2 1/2
80	3	36.6	89	36.6	89	38.1	108	47.7	123	66.7	174	80	3
100	4	36.6	92	38.1	109	44.5	120	54	130	76.2	196	100	4
150	6	36.6	100	47.8	124	55.6	146	82.6	177	108	279	150	6
200	8	39.7	112	55.6	140	63.5	168	92.1	219	127	324	200	8
250	10	46.1	118	63.5	159	69.9	190	108	260	165.1	425	250	10
300	12	49.3	131	66.7	163	79.4	206	123.9	289	184.2	170	300	12
350	14	52.4	143	69.9	172	85.8	219	133.4	304			350	14
400	16	55.6	146	76.2	185	88.9	222	146.1	317			400	16
450	18	58.8	159	82.6	191	101.6	235	162	333			450	18
500	20	62	162	88.9	197	108	254	177.8	362			500	20
600	24	68.3	169	101.6	210	139.7	298	203.2	412			600	24

Note: All dimensions are in mm. If you could not find the size, please [contact us](#).