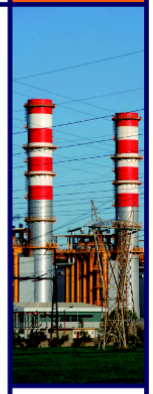
Oil Pressure Tables





ANSI B16.5 FLANGES 150 lb

OIL PRESSURE CHART		BOLT=Grade B7					25000 psi Residual Bolt Stress		30000 psi Residual Bolt Stress		35000 psi Residual Bolt Stress		40000 psi Residual Bolt Stress		45000 psi Residual Bolt Stress		50000 psi Residual Bolt Stress	
Flange Size	Flange Spec	Flange Rating	No of Bolts	Bolt Dia	Bolt Grip Length	Tool No	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)
inch				inch	mm		psi	bar	psi	bar	psi	bar	psi	bar	psi	bar	psi	bar
5	ANSI B16.5	Class 150	8	3/4	48	21	5,000	345	6,000	414	7,000	483	8,000	552	8,900	614	9,900	683
6	ANSI B16.5	Class 150	8	3/4	51	21	4,900	338	5,900	407	6,800	469	7,800	538	8,800	607	9,800	676
8	ANSI B16.5	Class 150	8	3/4	57	21	4,800	332	5,700	394	6,700	463	7,600	525	8,500	587	9,500	656
10	ANSI B16.5	Class 150	12	7/8	61	21	6,700	463	8,100	559	9,400	649	10,700	738	12,100	835	13,400	925
12	ANSI B16.5	Class 150	12	7/8	64	21	6,600	456	8,000	552	9,300	642	10,600	732	11,900	821	13,200	911
14	ANSI B16.5	Class 150	12	1	71	21	8,800	607	10,500	725	12,200	842	14,000	966	15,700	1,083	17,500	1,207
16	ANSI B16.5	Class 150	16	1	74	21	8,700	600	10.400	718	12,100	835	13,800	952	15,600	1,076	17,300	1,194
18	ANSI B16.5	Class 150	16	1-1/8	80	21	11,400	787	13,700	945	15,900	1,097	18,200	1,256	20,500	1,414		
20	ANSI B16.5	Class 150	20	1-1/8	86	21	11,200	773	13,400	925	15,600	1,076	17,800	1,228	20,100	1,387		
24	ANSI B16.5	Class 150	20	1-1/4	96	22	7,600	525	9,100	628	10,600	732	12,200	842	13,700	945	15,200	1,049

ANSI B16.5 FLANGES 300 lb

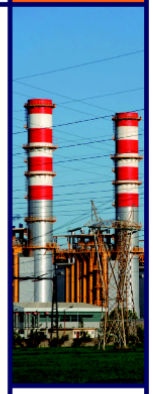
OIL PRESSURE CHART		BOLT=Grade B7					25000 psi Residual Bolt Stress		30000 psi Residual Bolt Stress		35000 psi Residual Bolt Stress		40000 psi Residual Bolt Stress		45000 psi Residual Bolt Stress		50000 psi Residual Bolt Stress	
Flange Size	Flange Spec	Flange Rating	No of Bolts	Bolt Dia	Bolt Grip Length	Tool No	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)
inch				inch	mm		psi	bar	psi	bar	psi	bar	psi	bar	psi	bar	psi	bar
1-1/2	ANSI B16.5	Class 300	4	3/4	42	21	5,200	359	6,200	428	7,300	504	8,300	573	9,300	642	10,400	718
2-1/2	ANSI B16.5	Class 300	8	3/4	51	21	4,900	338	5,900	407	6,800	469	7,800	538	8,800	607	9,800	676
3	ANSI B16.5	Class 300	8	3/4	57	21	4,800	332	5,700	394	6,700	463	7,600	525	8,500	587	9,500	656
3-1/2	ANSI B16.5	Class 300	8	3/4	61	21	4,700	325	5,600	387	6,600	456	7,500	518	8,400	580	9,300	642
4	ANSI B16.5	Class 300	8	3/4	64	21	4,600	318	5,600	387	6,500	449	7,400	511	8,300	573	9,200	635
5	ANSI B16.5	Class 300	8	3/4	71	21	4,500	311	5,400	373	6,300	435	7,200	497	8,100	559	9,000	621
6	ANSI B16.5	Class 300	12	3/4	74	21	4,500	311	5,400	373	6,300	435	7,200	497	8,100	559	9,000	621
8	ANSI B16.5	Class 300	12	7/8	83	21	6,300	435	7,500	518	8,700	600	10,000	690	11,200	773	12,500	863
10	ANSI B16.5	Class 300	16	1	96	21	8,100	559	9,800	676	11,400	787	13,000	897	14,600	1,007	16,200	1,118
12	ANSI B16.5	Class 300	16	1-1/8	102	21	10,700	738	12,900	890	15,000	1,035	17,200	1,187	19,300	1,332	21,400	1,476
14	ANSI B16.5	Class 300	20	1-1/8	108	21	10,600	732	12,700	876	14,800	1,021	16,900	1,166	19,100	1,318	21,200	1,463
16	ANSI B16.5	Class 300	20	1-1/4	115	22	7,300	504	8,800	607	10,200	704	11,700	807	13,100	904	14,600	1,007
18	ANSI B16.5	Class 300	24	1-1/4	121	22	7,200	497	8,700	600	10,100	697	11,500	794	13,000	897	14,400	994
20	ANSI B16.5	Class 300	24	1-1/4	127	22	7,200	497	8,600	594	10,000	690	11,400	787	12,800	883	14,300	987
24	ANSI B16.5	Class 300	24	1-1/2	140	22	10,800	745	13,000	897	15,100	1,042	17,300	1,194	19,500	1,345	21,600	1,490

BOLTIGHT
HYDRAULIC BOLT TENSIONING
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Oil Pressure Tables





ANSI B16.5 FLANGES 400 lb

OIL PRESSURE CHART		BOLT=Grade B7					25000 psi Residual Bolt Stress		30000 psi Residual Bolt Stress		35000 psi Residual Bolt Stress		40000 psi Residual Bolt Stress		45000 psi Residual Bolt Stress		50000 psi Residual Bolt Stress	
Flange Size	Flange Spec	Flange Rating	No of Bolts	Bolt Dia	Bolt Grip Length	Tool No	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)
inch				inch	mm		psi	bar	psi	bar	psi	bar	psi	bar	psi	bar	psi	bar
4	ANSI B16.5	Class 400	8	7/8	71	21	6,500	449	7,800	538	9,000	621	10,300	711	11,600	800	12,900	890
5	ANSI B16.5	Class 400	8	7/8	77	21	6,400	442	7,600	525	8,900	614	10,100	697	11,400	787	12,700	876
6	ANSI B16.5	Class 400	12	7/8	83	21	6,300	435	7,500	518	8,700	600	10,000	690	11,200	773	12,500	863
8	ANSI B16.5	Class 400	12	1	96	21	8,100	559	9,800	676	11,400	787	13,000	897	14,600	1,007	16,200	1,118
10	ANSI B16.5	Class 400	16	1-1/8	108	21	10,600	732	12,700	876	14,800	1021	16,900	1,166	19,100	1,318	21,200	1,463
12	ANSI B16.5	Class 400	16	1-1/4	115	22	7,300	504	8,800	607	10,200	704	11,700	807	13,100	904	14,600	1,007
14	ANSI B16.5	Class 400	20	1-1/4	121	22	7,200	497	8,700	600	10,100	697	11,500	794	13,000	897	14,400	994
16	ANSI B16.5	Class 400	20	1-3/8	127	22	9,000	621	10,800	745	12,500	863	14,300	987	16,100	1111	17,900	1,235
18	ANSI B16.5	Class 400	24	1-3/8	134	22	8,900	614	10,700	738	12,400	856	14,200	980	16,000	1,104	17,700	1,221
20	ANSI B16.5	Class 400	24	1-1/2	140	22	10,800	745	13,000	897	15,100	1,042	17,300	1,194	19,500	1,345	21,600	1,490
24	ANSI B16.5	Class 400	24	1-3/4	153	23	8,400	580	10,000	690	11,700	807	13,400	925	15,000	1,035	16,700	1,152

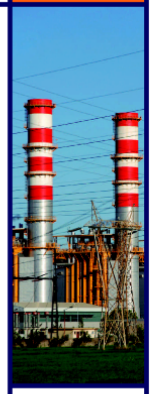
ANSI B16.5 FLANGES 600 lb

OIL PRESSURE CHART		BOLT=Grade B7					25000 psi Residual Bolt Stress		30000 psi Residual Bolt Stress		35000 psi Residual Bolt Stress		40000 psi Residual Bolt Stress		45000 psi Residual Bolt Stress		50000 psi Residual Bolt Stress	
Flange Size	Flange Spec	Flange Rating	No of Bolts	Bolt Dia	Bolt Grip Length	Tool No	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)
inch				inch	mm		psi	bar	psi	bar	psi	bar	psi	bar	psi	bar	psi	bar
1-1/2	ANSI B16.5	Class 600	4	3/4	45	21	5,100	352	6,100	421	7,100	490	8,100	559	9,100	628	10,100	697
2-1/2	ANSI B16.5	Class 600	8	3/4	57	21	4,800	332	5,700	394	6,700	463	7,600	525	8,500	587	9,500	656
3	ANSI B16.5	Class 600	8	3/4	64	21	4,600	318	5,600	387	6,500	449	7,400	511	8,300	573	9,200	635
3-1/2	ANSI B16.5	Class 600	8	7/8	71	21	6,500	449	7,800	538	9,000	621	10,300	711	11,600	800	12,900	890
4	ANSI B16.5	Class 600	8	7/8	77	21	6,400	442	7,600	525	8,900	614	10,100	697	11,400	787	12,700	876
5	ANSI B16.5	Class 600	8	1	89	21	8,300	573	9,900	683	11,600	800	13,200	911	14,900	1,028	16,500	1,138
6	ANSI B16.5	Class 600	12	1	96	21	8,100	559	9,800	676	11,400	787	13,000	897	14,600	1,007	16,200	1,118
8	ANSI B16.5	Class 600	12	1-1/8	112	21	10,500	725	12,600	869	14,700	1,014	16,800	1,159	18,900	1,304	21,000	1,449
10	ANSI B16.5	Class 600	16	1-1/4	127	22	7,200	497	8,600	594	10,000	690	11,400	787	12,800	883	14,300	987
12	ANSI B16.5	Class 600	20	1-1/4	134	22	7,100	490	8,500	587	9,900	683	11,300	780	12,700	876	14,100	973
14	ANSI B16.5	Class 600	20	1-3/8	140	22	8,800	607	10,600	732	12,300	849	14,100	973	15,800	1,090	17,600	1,214
16	ANSI B16.5	Class 600	20	1-1/2	153	22	10,600	732	12,800	883	14,900	1,028	17,000	1,173	19,100	1318	21,200	1,463
18	ANSI B16.5	Class 600	20	1-5/8	166	23	7,000	483	8,300	573	9,700	669	11,100	766	12,500	863	13,900	959
20	ANSI B16.5	Class 600	24	1-5/8	178	23	6,900	476	8,200	566	9,600	663	10,900	752	12,300	849	13,700	945
24	ANSI B16.5	Class 600	24	1-7/8	204	23	9,300	642	11,200	773	13,100	904	14,900	1,028	16,800	1,159	18,600	1,283

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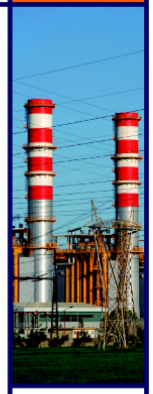
ANSI B16.5 FLANGES 900 lb

OIL PRESSURE CHART		BOLT=Grade B7					25000 psi Residual Bolt Stress		30000 psi Residual Bolt Stress		35000 psi Residual Bolt Stress		40000 psi Residual Bolt Stress		45000 psi Residual Bolt Stress		50000 psi Residual Bolt Stress	
Flange Size	Flange Spec	Flange Rating	No of Bolts	Bolt Dia	Bolt Grip Length	Tool No	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)
inch				inch	mm		psi	bar	psi	bar	psi	bar	psi	bar	psi	bar	psi	bar
3	ANSI B16.5	Class 900	8	7/8	77	21	6,400	442	7,600	525	8,900	614	10,100	697	11,400	787	12,700	876
4	ANSI B16.5	Class 900	8	1-1/8	89	21	11,100	766	13,300	918	15,500	1,069	17,700	1,221	19,900	1,373		
5	ANSI B16.5	Class 900	8	1-1/4	102	22	7,500	518	9,000	621	10,500	725	12,000	828	13,500	932	15,000	1,035
6	ANSI B16.5	Class 900	12	1-1/8	112	21	10,500	725	12,600	869	14,700	1,014	16,800	1,159	18,900	1,304	21,000	1,449
8	ANSI B16.5	Class 900	12	1-3/8	127	22	9,000	621	10,800	745	12,500	863	14,300	987	16,100	1,111	17,900	1,235
10	ANSI B16.5	Class 900	16	1-3/8	140	22	8,800	607	10,600	732	12,300	849	14,100	973	15,800	1,090	17,600	1,214
12	ANSI B16.5	Class 900	20	1-3/8	159	22	8,600	594	10,300	711	12,000	828	13,700	945	15,400	1,063	17,100	1,180
14	ANSI B16.5	Class 900	20	1-1/2	172	22	10,400	718	12,500	863	14,500	1,000	16,600	1,145	18,700	1,290	20,800	1,435
16	ANSI B16.5	Class 900	20	1-5/8	178	23	6,900	476	8,200	566	9,600	663	10,900	752	12,300	849	13,700	945
18	ANSI B16.5	Class 900	20	1-7/8	204	23	9,300	642	11,200	773	13,100	904	14,900	1,028	16,800	1,159	18,600	1,283
20	ANSI B16.5	Class 900	20	2	216	23	10,600	732	12,800	883	14,900	1,028	17,000	1,173	19,100	1,318	21,200	1,463
24	ANSI B16.5	Class 900	20	2-1/2	280	24	10,600	732	12,700	876	14,800	1,021	16,900	1,166	19,000	1,311	21,100	1,456

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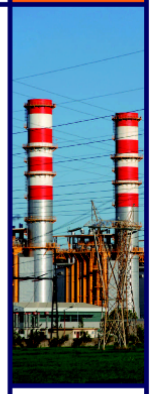
ANSI B16.5 FLANGES 1500 lb

OIL PRESSURE CHART		BOLT=Grade B7					25000 psi Residual Bolt Stress		30000 psi Residual Bolt Stress		35000 psi Residual Bolt Stress		40000 psi Residual Bolt Stress		45000 psi Residual Bolt Stress		50000 psi Residual Bolt Stress	
Flange Size	Flange Spec	Flange Rating	No of Bolts	Bolt Dia	Bolt Grip Length	Tool No	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)
inch				inch	mm		psi	bar	psi	bar	psi	bar	psi	bar	psi	bar	psi	bar
1/2	ANSI B16.5	Class 1500	4	3/4	45	21	5,100	352	6,100	421	7,100	490	8,100	559	9,100	628	10,100	697
3/4	ANSI B16.5	Class 1500	4	3/4	51	21	4,900	338	5,900	407	6,800	469	7,800	538	8,800	607	9,800	676
1	ANSI B16.5	Class 1500	4	7/8	57	21	6,800	469	8,200	566	9,500	656	10,900	752	12,300	849	13,600	938
1-1/4	ANSI B16.5	Class 1500	4	7/8	57	21	6,800	469	8,200	566	9,500	656	10,900	752	12,300	849	13,600	938
1-1/2	ANSI B16.5	Class 1500	4	1	64	21	9,000	621	10,800	745	12,600	869	14,400	994	16,200	1,118	18,000	1,242
2	ANSI B16.5	Class 1500	8	7/8	77	21	6,400	442	7,600	525	8,900	614	10,100	697	11,400	787	12,700	876
2-1/2	ANSI B16.5	Class 1500	8	1	83	21	8,400	580	10,100	697	11,800	814	13,400	925	15,100	1,042	16,800	1,159
3	ANSI B16.5	Class 1500	8	1-1/8	96	21	10,900	752	13,100	904	15,200	1,049	17,400	1,200	19,600	1,352	21,700	1,497
4	ANSI B16.5	Class 1500	8	1-1/4	108	22	7,400	511	8,900	614	10,300	711	11,800	814	13,300	918	14,800	1,021
5	ANSI B16.5	Class 1500	8	1-1/2	147	22	10,700	738	12,900	890	15,000	1,035	17,100	1,180	19,300	1,332	21,400	1,476
6	ANSI B16.5	Class 1500	12	1-3/8	166	22	8,500	587	10,200	704	11,900	821	13,600	938	15,300	1,056	17,000	1,173
8	ANSI B16.5	Class 1500	12	1-5/8	184	23	6,800	469	8,200	566	9,500	656	10,900	752	12,200	842	13,600	938
10	ANSI B16.5	Class 1500	12	1-7/8	216	23	9,200	635	11,100	766	12,900	890	14,800	1,021	16,600	1,145	18,400	1,269
12	ANSI B16.5	Class 1500	16	2	248	23	10,400	718	12,500	863	14,500	1,000	16,600	1,145	18,700	1,290	20,700	1,428
14	ANSI B16.5	Class 1500	16	2-1/4	267	24	8,400	580	10,100	697	11,700	807	13,400	925	15,100	1,042	16,700	1,152
16	ANSI B16.5	Class 1500	16	2-1/2	293	24	10,500	725	12,600	869	14,700	1,014	16,800	1,159	18,900	1,304	21,000	1,449
18	ANSI B16.5	Class 1500	16	2-3/4	325	25	8,900	614	10,600	732	12,400	856	14,200	980	15,900	1,097	17,700	1,221
20	ANSI B16.5	Class 1500	16	3	356	25	10,600	732	12,700	876	14,900	1,028	17,000	1,173	19,100	1,318	21,200	1,463
24	ANSI B16.5	Class 1500	16	3-1/2	407	26	10,700	738	12,900	890	15,000	1,035	17,100	1,180	19,300	1,332	21,400	1,476

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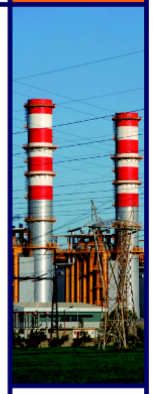
ANSI B16.5 FLANGES 2500 lb

OIL PRESSURE CHART		BOLT=Grade B7					25000 psi Residual Bolt Stress		30000 psi Residual Bolt Stress		35000 psi Residual Bolt Stress		40000 psi Residual Bolt Stress		45000 psi Residual Bolt Stress		50000 psi Residual Bolt Stress	
Flange Size	Flange Spec	Flange Rating	No of Bolts	Bolt Dia	Bolt Grip Length	Tool No	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)
inch				inch	mm		psi	bar	psi	bar	psi	bar	psi	bar	psi	bar	psi	bar
1/2	ANSI B16.5	Class 2500	4	3/4	61	21	4,700	325	5,600	387	6,600	456	7,500	518	8,400	580	9,300	642
3/4	ANSI B16.5	Class 2500	4	3/4	64	21	4,600	318	5,600	387	6,500	449	7,400	511	8,300	573	9,200	635
1	ANSI B16.5	Class 2500	4	7/8	71	21	6,500	449	7,800	538	9,000	621	10,300	711	11,600	800	12,900	890
1-1/4	ANSI B16.5	Class 2500	4	1	77	21	8,600	594	10,300	711	12,000	828	13,700	945	15,400	1,063	17,100	1,180
1-1/2	ANSI B16.5	Class 2500	4	1-1/8	89	21	11,100	766	13,300	918	15,500	1,069	17,700	1,221	19,900	1,373		
2	ANSI B16.5	Class 2500	8	1	102	21	8,000	552	9,600	663	11,200	773	12,800	883	14,400	994	16,000	1,104
2-1/2	ANSI B16.5	Class 2500	8	1-1/8	115	21	10,500	725	12,600	869	14,700	1,014	16,700	1,152	18,800	1,297	20,900	1,442
3	ANSI B16.5	Class 2500	8	1-1/4	134	22	7,100	490	8,500	587	9,900	683	11,300	780	12,700	876	14,100	973
4	ANSI B16.5	Class 2500	8	1-1/2	153	22	10,600	732	12,800	883	14,900	1,028	17,000	1,173	19,100	1,318	21,200	1,463
5	ANSI B16.5	Class 2500	8	1-3/4	184	23	8,100	559	9,700	669	11,300	780	12,900	890	14,500	1,000	16,100	1,111
6	ANSI B16.5	Class 2500	8	2	216	23	10,600	732	12,800	883	14,900	1,028	17,000	1,173	19,100	1,318	21,200	1,463
8	ANSI B16.5	Class 2500	12	2	254	23	10,300	711	12,400	856	14,500	1,000	16,500	1,138	18,600	1,283	20,600	1,421
10	ANSI B16.5	Class 2500	12	2-1/2	331	24	10,300	711	12,300	849	14,400	994	16,400	1,132	18,500	1,276	20,500	1,414
12	ANSI B16.5	Class 2500	12	2-3/4	369	25	8,700	600	10,400	718	12,100	835	13,900	959	15,600	1,076	17,300	1,194

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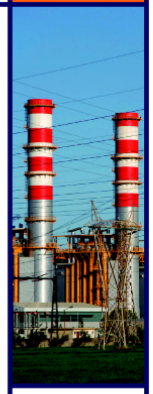
MSS SP44 FLANGES 150lb

OIL PRESSURE CHART		BOLT=Grade B7					25000 psi Residual Bolt Stress		30000 psi Residual Bolt Stress		35000 psi Residual Bolt Stress		40000 psi Residual Bolt Stress		45000 psi Residual Bolt Stress		50000 psi Residual Bolt Stress	
Flange Size	Flange Spec	Flange Rating	No of Bolts	Bolt Dia	Bolt Grip Length	Tool No	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)
inch				inch	mm		psi	bar	psi	bar	psi	bar	psi	bar	psi	bar	psi	bar
12	MSS SP 44	Class 150	12	7/8	64	21	6,600	456	8,000	552	9,300	642	10,600	732	11,900	821	13,200	911
14	MSS SP 44	Class 150	12	1	71	21	8,800	607	10,500	725	12,200	842	14,000	966	15,700	1,083	17,500	1,207
16	MSS SP 44	Class 150	16	1	74	21	8,700	600	10,400	718	12,100	835	13,800	952	15,600	1,076	17,300	1,194
18	MSS SP 44	Class 150	16	1-1/8	80	21	11,400	787	13,700	945	15,900	1,097	18,200	1,256	20,500	1,414		
20	MSS SP 44	Class 150	20	1-1/8	86	21	11,200	773	13,400	925	15,600	1,076	17,800	1,228	20,100	1,387		
22	MSS SP 44	Class 150	20	1-1/4	92	22	7,700	532	9,200	635	10,700	738	12,300	849	13,800	952	15,300	1,056
24	MSS SP 44	Class 150	20	1-1/4	96	22	7,600	525	9,100	628	10,600	732	12,200	842	13,700	945	15,200	1,049
26	MSS SP 44	Class 150	24	1-1/4	137	22	7,100	490	8,500	587	9,900	683	11,300	780	12,700	876	14,100	973
28	MSS SP 44	Class 150	28	1-1/4	143	22	7,000	483	8,400	580	9,800	676	11,200	773	12,600	869	13,900	959
30	MSS SP 44	Class 150	28	1-1/4	150	22	6,900	476	8,300	573	9,700	669	11,100	766	12,500	863	13,800	952
32	MSS SP 44	Class 150	28	1-1/2	162	22	10,500	725	12,600	869	14,700	1,014	16,800	1,159	18,900	1,304	21,000	1,449
34	MSS SP 44	Class 150	32	1-1/2	166	22	10,500	725	12,600	869	14,700	1014	16,700	1,152	18,800	1,297	20,900	1,442
36	MSS SP 44	Class 150	32	1-1/2	181	22	10,300	711	12,400	856	14,400	994	16,500	1,138	18,500	1,276	20,600	1,421
38	MSS SP 44	Class 150	32	1-1/2	175	22	10,400	718	12,400	856	14,500	1,000	16,600	1,145	18,600	1,283	20,700	1,428
40	MSS SP 44	Class 150	36	1-1/2	181	22	10,300	711	12,400	856	14,400	994	16,500	1,138	18,500	1,276	20,600	1,421
42	MSS SP 44	Class 150	36	1-1/2	194	22	10,200	704	12,200	842	14,300	987	16,300	1,125	18.300	1,263	20,300	1,400
44	MSS SP 44	Class 150	40	1-1/2	204	22	10,100	697	12,100	835	14,100	973	16,200	1,118	18,200	1,256	20,200	1,394
46	MSS SP 44	Class 150	40	1-1/2	207	22	10,100	697	12,100	835	14,100	973	16,100	1,111	18,100	1,249	20,100	1,387
48	MSS SP 44	Class 150	44	1-1/2	216	22	10,000	690	12,000	828	14,000	966	16,000	1,104	18,000	1,242	20,000	1,380
50	MSS SP 44	Class 150	44	1-3/4	223	23	7,800	538	9,300	642	10,900	752	12,400	856	14,000	966	15,500	1,069
52	MSS SP 44	Class 150	44	1-3/4	232	23	7,700	532	9,300	642	10,800	745	12,300	849	13,900	959	15,400	1.063
54	MSS SP 44	Class 150	44	1-3/4	242	23	7,700	532	9,200	635	10,700	738	12,300	849	13,800	952	15,300	1,056
56	MSS SP 44	Class 150	48	1-3/4	248	23	7,700	532	9.200	635	10,700	738	12,200	842	13,700	945	15,300	1,056
58	MSS SP 44	Class 150	48	1-3/4	258	23	7,600	525	9,100	628	10,600	732	12,200	842	13,700	945	15,200	1,049
60	MSS SP 44	Class 150	52	1-3/4	264	23	7,600	525	9,100	628	10,600	732	12,100	835	13,600	938	15,100	1,042

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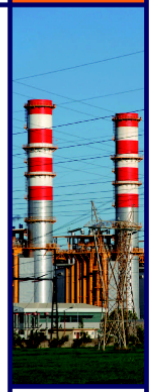
MSS SP44 FLANGES 300lb

OIL PRESSURE CHART		BOLT=Grade B7					25000 psi Residual Bolt Stress		30000 psi Residual Bolt Stress		35000 psi Residual Bolt Stress		40000 psi Residual Bolt Stress		45000 psi Residual Bolt Stress		50000 psi Residual Bolt Stress	
Flange Size	Flange Spec	Flange Rating	No of Bolts	Bolt Dia	Bolt Grip Length	Tool No	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)
inch				inch	mm		psi	bar	psi	bar	psi	bar	psi	bar	psi	bar	psi	bar
12	MSS SP 44	Class 300	16	1-1/8	102	21	10,700	738	12,900	890	15,000	1,035	17,200	1,187	19,300	1,332	21,400	1,476
14	MSS SP 44	Class 300	20	1-1/8	108	21	10,600	732	12,700	876	14,800	1.021	16,900	1,166	19,100	1,318	21,200	1,463
16	MSS SP 44	Class 300	20	1-1/4	115	22	7,300	504	8,800	607	10,200	704	11,700	807	13,100	904	14,600	1,007
18	MSS SP 44	Class 300	24	1-1/4	121	22	7,200	497	8,700	600	10,100	697	11,500	794	13,000	897	14,400	994
20	MSS SP 44	Class 300	24	1-1/4	127	22	7,200	497	8,600	594	10,000	690	11,400	787	12,800	883	14,300	987
22	MSS SP 44	Class 300	24	1-1/2	134	22	10,900	752	13,100	904	15,300	1,056	17,500	1,207	19,700	1,359		
24	MSS SP 44	Class 300	24	1-1/2	140	22	10,800	745	13,000	897	15,100	1,042	17,300	1,194	19,500	1,345	21,600	1,490
26	MSS SP 44	Class 300	28	1-5/8	159	23	7,000	483	8,400	580	9,800	676	11,200	773	12,600	869	14,000	966
28	MSS SP 44	Class 300	28	1-5/8	172	23	6,900	476	8,300	573	9,600	663	11,000	759	12,400	856	13,700	945
30	MSS SP 44	Class 300	28	1-3/4	184	23	8,100	559	9,700	669	11,300	780	12,900	890	14,500	1,000	16,100	1,111
32	MSS SP 44	Class 300	28	1-7/8	198	23	9,400	649	11,300	780	13,100	904	15,000	1,035	16,900	1,166	18,700	1,290
34	MSS SP 44	Class 300	28	1-7/8	204	23	9,300	642	11,200	773	13,100	904	14,900	1,028	16,800	1,159	18,600	1,283
36	MSS SP 44	Class 300	32	2	210	23	10,700	738	12,800	883	15,000	1,035	17,100	1,180	19,200	1,325	21,400	1,476
38	MSS SP 44	Class 300	32	1-1/2	216	22	10,000	690	12,000	828	14,000	966	16,000	1,104	18,000	1,242	20,000	1,380
40	MSS SP 44	Class 300	32	1-5/8	229	23	6,600	456	7,900	545	9,200	635	10,500	725	11,800	814	13,100	904
42	MSS SP 44	Class 300	32	1-5/8	239	23	6,500	449	7,800	538	9,100	628	10,400	718	11,700	807	13,000	897
44	MSS SP 44	Class 300	32	1-3/4	248	23	7,700	532	9,200	635	10,700	738	12,200	842	13,700	945	15,300	1,056
46	MSS SP 44	Class 300	28	1-7/8	258	23	9,000	621	10,800	745	12,500	863	14,300	987	16,100	1,111	17,900	1,235
48	MSS SP 44	Class 300	32	1-7/8	267	23	8,900	614	10,700	738	12,500	863	14,200	980	16,000	1,104	17,800	1,228
50	MSS SP 44	Class 300	32	2	280	23	10,200	704	12,200	842	14,200	980	16,300	1,125	18,300	1,263	20,300	1,400
52	MSS SP 44	Class 300	32	2	290	23	10,100	697	12,200	842	14,200	980	16,200	1,118	18,200	1,256	20,200	1,394
54	MSS SP 44	Class 300	28	2-1/4	305	24	8,200	566	9,800	676	11,500	794	13,100	904	14,700	1,014	16,400	1,132
56	MSS SP 44	Class 300	28	2-1/4	308	24	8,200	566	9,800	676	11,500	794	13,100	904	14,700	1,014	16,400	1,132
58	MSS SP 44	Class 300	32	2-1/4	318	24	8,200	566	9,800	676	11,400	787	13,000	897	14,700	1,014	16,300	1,125
60	MSS SP 44	Class 300	32	2-1/4	328	24	8,100	559	9,700	669	11,400	787	13,000	897	14,600	1,007	16,200	1,118

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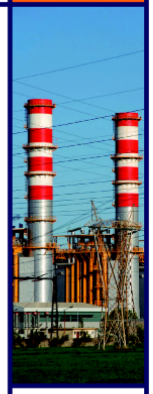
MSS SP44 FLANGES 400lb

OIL PRESSURE CHART		BOLT=Grade B7					25000 psi Residual Bolt Stress		30000 psi Residual Bolt Stress		35000 psi Residual Bolt Stress		40000 psi Residual Bolt Stress		45000 psi Residual Bolt Stress		50000 psi Residual Bolt Stress	
Flange Size	Flange Spec	Flange Rating	No of Bolts	Bolt Dia	Bolt Grip Length	Tool No	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)
inch				inch	mm		psi	bar	psi	bar	psi	bar	psi	bar	psi	bar	psi	bar
12	MSS SP 44	Class 400	16	1-1/4	115	22	7,300	504	8,800	607	10,200	704	11,700	807	13,100	904	14,600	1,007
14	MSS SP 44	Class 400	20	1-1/4	121	22	7,200	497	8,700	600	10,100	697	11,500	794	13,000	897	14,400	994
16	MSS SP 44	Class 400	20	1-3/8	127	22	9,000	621	10,800	745	12,500	863	14,300	987	16,100	1,111	17,900	1,235
18	MSS SP 44	Class 400	24	1-3/8	134	22	8,900	614	10,700	738	12,400	856	14,200	980	16,000	1,104	17,700	1,221
20	MSS SP 44	Class 400	24	1-1/2	140	22	10,800	745	13,000	897	15,100	1,042	17,300	1,194	19,500	1,345	21,600	1,490
22	MSS SP 44	Class 400	24	1-5/8	147	23	7,100	490	8,500	587	10,000	690	11,400	787	12,800	883	14,200	980
24	MSS SP 44	Class 400	24	1-3/4	153	23	8,400	580	10,000	690	11,700	807	13,400	925	15,000	1,035	16,700	1,152
26	MSS SP 44	Class 400	28	1-3/4	178	23	8,100	559	9,700	669	11,300	780	12,900	890	14,600	1,007	16,200	1,118
28	MSS SP 44	Class 400	28	1-7/8	191	23	9,500	656	11,300	780	13,200	911	15,100	1,042	17,000	1,173	18,900	1,304
30	MSS SP 44	Class 400	28	2	204	23	10,800	745	12,900	890	15,100	1,042	17,200	1,187	19,300	1,332	21,500	1,483
32	MSS SP 44	Class 400	28	2	216	23	10,600	732	12,800	883	14,900	1,028	17,000	1,173	19,100	1,318	21,200	1,463
34	MSS SP 44	Class 400	28	2	223	23	10,600	732	12,700	876	14,800	1,021	16,900	1,166	19,000	1,311	21,100	1,456
36	MSS SP 44	Class 400	32	2	229	23	10,500	725	12,600	869	14,700	1,014	16,800	1,159	18,900	1,304	21,000	1,449
38	MSS SP 44	Class 400	32	1-3/4	248	23	7,700	532	9,200	635	10,700	738	12,200	842	13,700	945	15,300	1,056
40	MSS SP 44	Class 400	32	1-7/8	261	23	9,000	621	10,700	738	12,500	863	14,300	987	16,100	1,111	17,900	1,235
42	MSS SP 44	Class 400	32	1-7/8	267	23	8,900	614	10,700	738	12,500	863	14,200	980	16,000	1,104	17,800	1,228
44	MSS SP 44	Class 400	32	2	280	23	10,200	704	12,200	842	14,200	980	16,300	1,125	18,300	1,263	20,300	1,400
46	MSS SP 44	Class 400	36	2	293	23	10,100	697	12,100	835	14,100	973	16,200	1,118	18,200	1,256	20,200	1,394
48	MSS SP 44	Class 400	28	2-1/4	305	24	8,200	566	9.800	676	11,500	794	13,100	904	14,700	1,014	16,400	1,132
50	MSS SP 44	Class 400	32	2-1/4	315	24	8,200	566	9,800	676	11,400	787	13,100	904	14,700	1,014	16,300	1,125
52	MSS SP 44	Class 400	32	2-1/4	325	24	8,100	559	9,800	676	11,400	787	13,000	897	14,600	1,007	16,200	1,118
54	MSS SP 44	Class 400	28	2-1/2	340	24	10,200	704	12,300	849	14,300	987	16,400	1,132	18,400	1,269	20,400	1,407
56	MSS SP 44	Class 400	32	2-1/2	350	24	10,200	704	12,200	842	14,300	987	16,300	1,125	18,300	1,263	20,400	1,407
58	MSS SP 44	Class 400	32	2-1/2	356	24	10,200	704	12,200	842	14,200	980	16,200	1,118	18,300	1,263	20,300	1,400
60	MSS SP 44	Class 400	32	2-3/4	372	25	8,700	600	10,400	718	12,100	835	13,800	952	15,600	1,076	17,300	1,194

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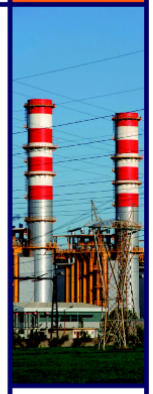
MSS SP44 FLANGES 600lb

OIL PRESSURE CHART		BOLT=Grade B7					25000 psi Residual Bolt Stress		30000 psi Residual Bolt Stress		35000 psi Residual Bolt Stress		40000 psi Residual Bolt Stress		45000 psi Residual Bolt Stress		50000 psi Residual Bolt Stress	
Flange Size	Flange Spec	Flange Rating	No of Bolts	Bolt Dia	Bolt Grip Length	Tool No	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)
inch				inch	mm		psi	bar	psi	bar	psi	bar	psi	bar	psi	bar	psi	bar
12	MSS SP 44	Class 600	20	1-1/4	134	22	7,100	490	8,500	587	9,900	683	11,300	780	12,700	876	14,100	973
14	MSS SP 44	Class 600	20	1-3/8	140	22	8,800	607	10,600	732	12,300	849	14,100	973	15,800	1,090	17,600	1,214
16	MSS SP 44	Class 600	20	1-1/2	153	22	10,600	732	12,800	883	14,900	1,028	17,000	1,173	19,100	1,318	21,200	1,463
18	MSS SP 44	Class 600	20	1-5/8	166	23	7,000	483	8,300	573	9,700	669	11,100	766	12,500	863	13,900	959
20	MSS SP 44	Class 600	24	1-5/8	178	23	6,900	476	8,200	566	9,600	663	10,900	752	12,300	849	13,700	945
22	MSS SP 44	Class 600	24	1-3/4	191	23	8,000	552	9,600	663	11,200	773	12,800	883	14,400	994	16,000	1,104
24	MSS SP 44	Class 600	24	1-7/8	204	23	9,300	642	11,200	773	13,100	904	14,900	1,028	16,800	1,159	18,600	1,283
26	MSS SP 44	Class 600	28	1-7/8	216	23	9,200	635	11,100	766	12,900	890	14,800	1,021	16,600	1,145	18,400	1,269
28	MSS SP 44	Class 600	28	2	223	23	10,600	732	12,700	876	14,800	1,021	16,900	1,166	19,000	1,311	21,100	1,456
30	MSS SP 44	Class 600	28	2	229	23	10,500	725	12,600	869	14,700	1,014	16,800	1,159	18,900	1,304	21,000	1,449
32	MSS SP 44	Class 600	28	2-1/4	235	24	8,600	594	10,300	711	12,000	828	13,700	945	15,400	1,063	17,100	1,180
34	MSS SP 44	Class 600	28	2-1/4	242	24	8,600	594	10,300	711	12,000	828	13,700	945	15,400	1,063	17,100	1,180
36	MSS SP 44	Class 600	28	2-1/2	248	24	10,800	745	13,000	897	15,100	1,042	17,300	1,194	19,500	1,345	21,600	1,490
38	MSS SP 44	Class 600	28	2-1/4	305	24	8,200	566	9,800	676	11,500	794	13,100	904	14,700	1,014	16,400	1,132
40	MSS SP 44	Class 600	32	2-1/4	318	24	8,200	566	9,800	676	11,400	787	13,000	897	14,700	1,014	16,300	1,125
42	MSS SP 44	Class 600	28	2-1/2	337	24	10,300	711	12,300	849	14,300	987	16,400	1,132	18,400	1,269	20,500	1,414
44	MSS SP 44	Class 600	32	2-1/2	346	24	10,200	704	12,300	849	14,300	987	16,300	1,125	18,400	1,269	20,400	1,407
46	MSS SP 44	Class 600	32	2-1/2	359	24	10,200	704	12,200	842	14,200	980	16,200	1,118	18,300	1,263	20,300	1,400
48	MSS SP 44	Class 600	32	2-3/4	378	25	8,600	594	10,400	718	12,100	835	13,800	952	15,500	1,069	17,200	1,187
50	MSS SP 44	Class 600	28	3	394	25	10,400	718	12,500	863	14,600	1,007	16,700	1,152	18,800	1,297	20,800	1,435
52	MSS SP 44	Class 600	32	3	407	25	10,400	718	12,500	863	14,500	1,000	16,600	1,145	18,700	1,290	20,700	1,428
54	MSS SP 44	Class 600	32	3	420	25	10,300	711	12,400	856	14,500	1,000	16,500	1,138	18,600	1,283	20,600	1,421
56	MSS SP 44	Class 600	32	3-1/4	435	26	9,200	635	11,100	766	12,900	890	14,700	1,014	16,600	1,145	18,400	1,269
58	MSS SP 44	Class 600	32	3-1/4	445	26	9,200	635	11,000	759	12,900	890	14,700	1,014	16,500	1,138	18,300	1,263
60	MSS SP 44	Class 600	28	3-1/2	467	26	10,500	725	12,600	869	14,700	1,014	16,700	1,152	18,800	1,297	20,900	1,442

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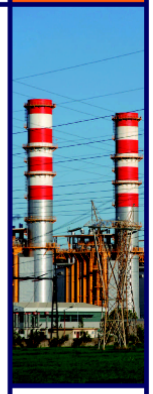
MSS SP44 FLANGES 900lb

OIL PRESSURE CHART		BOLT=Grade B7					25000 psi Residual Bolt Stress		30000 psi Residual Bolt Stress		35000 psi Residual Bolt Stress		40000 psi Residual Bolt Stress		45000 psi Residual Bolt Stress		50000 psi Residual Bolt Stress	
Flange Size	Flange Spec	Flange Rating	No of Bolts	Bolt Dia	Bolt Grip Length	Tool No	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)
inch				inch	mm		psi	bar	psi	bar	psi	bar	psi	bar	psi	bar	psi	bar
12	MSS SP 44	Class 900	20	1-3/8	159	22	8,600	594	10,300	711	12,000	828	13,700	945	15,400	1,063	17,100	1,180
14	MSS SP 44	Class 900	20	1-1/2	172	22	10,400	718	12,500	863	14,500	1,000	16,600	1,145	18,700	1,290	20,800	1,435
16	MSS SP 44	Class 900	20	1-5/8	178	23	6,900	476	8,200	566	9,600	663	10,900	752	12,300	849	13,700	945
18	MSS SP 44	Class 900	20	1-7/8	204	23	9,300	642	11,200	773	13,100	904	14,900	1,028	16,800	1,159	18,600	1,283
20	MSS SP 44	Class 900	20	2	216	23	10,600	732	12,800	883	14,900	1,028	17,000	1,173	19,100	1,318	21,200	1,463
24	MSS SP 44	Class 900	20	2-1/2	280	24	10,600	732	12,700	876	14,800	1,021	16,900	1,166	19,000	1,311	21,100	1,456
26	MSS SP 44	Class 900	20	2-3/4	280	25	9,100	628	10,900	752	12,700	876	14,600	1,007	16,400	1,132	18,200	1,256
28	MSS SP 44	Class 900	20	3	286	25	11,100	766	13,300	918	15,500	1,069	17,700	1,221	19,900	1,373		
30	MSS SP 44	Class 900	20	3	299	25	11,000	759	13,200	911	15,300	1,056	17,500	1.207	19,700	1,359		
32	MSS SP 44	Class 900	20	3-1/4	318	26	9,800	676	11,700	807	13,600	938	15,600	1,076	17,500	1,207	19,500	1,345
34	MSS SP 44	Class 900	20	3-1/2	331	26	11,200	773	13,400	925	15,600	1,076	17,800	1,228	20,100	1,387		
36	MSS SP 44	Class 900	20	3-1/2	343	26	11,100	766	13,300	918	15,500	1,069	17,700	1,221	19,900	1,373		
38	MSS SP 44	Class 900	20	3-1/2	381	26	10,900	752	13,000	897	15,200	1,049	17,300	1,194	19,500	1,345	21,700	1,497
40	MSS SP 44	Class 900	24	3-1/2	394	26	10,800	745	12,900	890	15,100	1,042	17,200	1,187	19,400	1,338	21,500	1,483
42	MSS SP 44	Class 900	24	3-1/2	413	26	10,700	738	12,800	883	15,000	1,035	17,100	1,180	19,200	1,325	21,400	1,476
44	MSS SP 44	Class 900	24	3-3/4	429	27	11,800	814	14,100	973	16,500	1,138	18,800	1,297	21,200	1,463		
46	MSS SP 44	Class 900	24	4	452	27	13,500	932	16,200	1,118	18,900	1,304	21,600	1,490				
48	MSS SP 44	Class 900	24	4	467	27	13,400	925	16,100	1,111	18,800	1,297	21,400	1,476				

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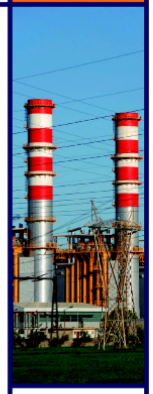
API 605 FLANGES

OIL PRESSURE CHART		BOLT=Grade B7					25000 psi Residual Bolt Stress		30000 psi Residual Bolt Stress		35000 psi Residual Bolt Stress		40000 psi Residual Bolt Stress		45000 psi Residual Bolt Stress		50000 psi Residual Bolt Stress	
Flange Size	Flange Spec	Flange Rating	No of Bolts	Bolt Dia	Bolt Grip Length	Tool No	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)
inch				inch	mm		psi	bar	psi	bar	psi	bar	psi	bar	psi	bar	psi	bar
36	API 605	Class 75	40	3/4	74	21	4,500	311	5,400	373	6,300	435	7,200	497	8,100	559	9,000	621
42	API 605	Class 75	48	3/4	80	21	4,400	304	5,300	366	6,200	428	7,100	490	7,900	545	8,800	607
48	API 605	Class 75	44	7/8	92	21	6,100	421	7,300	504	8,500	587	9,800	676	11,000	759	12,200	842
54	API 605	Class 75	48	7/8	99	21	6,000	414	7,200	497	8,400	580	9,600	663	10,800	745	12,000	828
60	API 605	Class 75	44	1	112	21	7,900	545	9,500	656	11,100	766	12,600	869	14,200	980	15,800	1,090
26	API 605	Class 150	36	3/4	83	21	4,400	304	5,300	366	6,100	421	7,000	483	7,900	545	8,700	600
28	API 605	Class 150	40	3/4	89	21	4,300	297	5,200	359	6,100	421	6,900	476	7,800	538	8,600	594
30	API 605	Class 150	44	3/4	89	21	4,300	297	5,200	359	6,100	421	6,900	476	7,800	538	8,600	594
32	API 605	Class 150	48	3/4	93	21	4,300	297	5,200	359	6,000	414	6,900	476	7,700	532	8,600	594
34	API 605	Class 150	40	7/8	99	21	6,000	414	7,200	497	8,400	580	9,600	663	10,800	745	12,000	828
36	API 605	Class 150	44	7/8	105	21	6,000	414	7,200	497	8,300	573	9,500	656	10,700	738	11,900	821
42	API 605	Class 150	48	1	118	21	7,800	538	9,400	649	10,900	752	12,500	863	14,100	973	15,600	1,076
54	API 605	Class 150	56	1-1/8	143	21	10,100	697	12,100	835	14,100	973	16,100	1,111	18,100	1,249	20,100	1,387
60	API 605	Class 150	52	1-1/4	153	22	6,900	476	8,300	573	9,700	669	11,000	759	12,400	856	13,800	952
26	API 605	Class 300	32	1-1/4	178	22	6,800	469	8,100	559	9,400	649	10,800	745	12,100	835	13,500	932
28	API 605	Class 300	36	1-1/4	178	22	6,800	469	8,100	559	9,400	649	10,800	745	12,100	835	13,500	932
30	API 605	Class 300	36	1-3/8	188	22	8,400	580	10,000	690	11,700	807	13,300	918	15,000	1,035	16,700	1,152
32	API 605	Class 300	32	1-1/2	207	22	10,100	697	12,100	835	14,100	973	16,100	1,111	18,100	1,249	20,100	1,387
34	API 605	Class 300	36	1-1/2	207	23	10,100	697	12,100	835	14,100	973	16,100	1,111	18,100	1,249	21,100	1,387
36	API 605	Class 300	32	1-5/8	207	23	6,700	463	8,000	552	9,300	642	10,700	738	12,000	828	13,300	918
42	API 605	Class 300	36	1-3/4	239	23	7,700	532	9,200	635	10,800	745	12,300	849	13,800	952	15,400	1,063
48	API 605	Class 300	40	1-7/8	258	23	9,000	621	10,800	745	12,500	863	14,300	987	16,100	1,111	17,900	1,235
54	API 605	Class 300	48	1-7/8	274	23	8,900	614	10,700	738	12,400	856	14,200	980	16,000	1,104	17,700	1,221
60	API 605	Class 300	40	2-1/4	302	24	8,200	566	9,900	683	11,500	794	13,100	904	14,800	1,021	16,400	1,132

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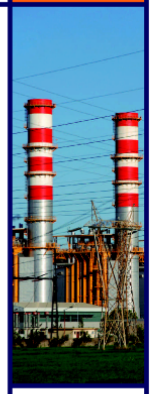
ASME B16.47 FLANGES 150 lb Series A

OIL PRESSURE CHART Series A Flanges			BOLT=Grade B7				25000 psi Residual Bolt Stress		30000 psi Residual Bolt Stress		35000 psi Residual Bolt Stress		40000 psi Residual Bolt Stress		45000 psi Residual Bolt Stress		50000 psi Residual Bolt Stress	
Flange Size	Flange Spec	Flange Rating	No of Bolts	Bolt Dia	Bolt Grip Length	Tool No	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)
inch				inch	mm		psi	bar	psi	bar	psi	bar	psi	bar	psi	bar	psi	bar
26	ASME B16.47 A	Class 150	24	1-1/4	137	22	7,100	490	8,500	587	9,900	683	11,300	780	12,700	876	14,100	973
28	ASME B16.47 A	Class 150	28	1-1/4	143	22	7,000	483	8,400	580	9,800	676	11,200	773	12,600	869	13,900	959
30	ASME B16.47 A	Class 150	28	1-1/4	150	22	6,900	476	8,300	573	9,700	669	11,100	766	12,500	863	13,800	952
32	ASME B16.47 A	Class 150	28	1-1/2	163	22	10,500	725	12,600	869	14,700	1,014	16,800	1,159	18,900	1,304	21,000	1,449
34	ASME B16.47 A	Class 150	32	1-1/2	166	22	10,500	725	12,600	869	14,700	1,014	16,700	1,152	18,800	1,297	20,900	1,442
36	ASME B16.47 A	Class 150	32	1-1/2	181	22	10,300	711	12,400	856	14,400	994	16,500	1,138	18,500	1,276	20,600	1,421
38	ASME B16.47 A	Class 150	32	1-1/2	175	22	10,400	718	12,400	856	14,500	1,000	16,600	1,145	18,600	1,283	20,700	1,428
40	ASME B16.47 A	Class 150	36	1-1/2	181	22	10,300	711	12,400	856	14,400	994	16,500	1,138	18,500	1,276	20,600	1,421
42	ASME B16.47 A	Class 150	36	1-1/2	194	22	10,200	704	12,200	842	14,300	987	16,300	1,125	18,300	1,263	20,300	1,400
44	ASME B16.47 A	Class 150	40	1-1/2	204	22	10,100	697	12,100	835	14,100	973	16,200	1,118	18,200	1,256	20,200	1,394
46	ASME B16.47 A	Class 150	40	1-1/2	207	22	10,100	697	12,100	835	14,100	973	16,100	1,111	18,100	1,249	20,100	1,387
48	ASME B16.47 A	Class 150	44	1-1/2	216	22	10,000	690	12,000	828	14,000	966	16,000	1,104	18,000	1,242	20,000	1,380
50	ASME B16.47 A	Class 150	44	1-3/4	223	23	7,800	538	9,300	642	10,900	752	12,400	856	14,000	966	15,500	1,069
52	ASME B16.47 A	Class 150	44	1-3/4	232	23	7,700	532	9,300	642	10,800	745	12,300	849	13,900	959	15,400	1,063
54	ASME B16.47 A	Class 150	44	1-3/4	242	23	7,700	532	9,200	635	10,700	738	12,300	849	13,800	952	15,300	1,056
56	ASME B16.47 A	Class 150	48	1-3/4	248	23	7,700	532	9,200	635	10,700	738	12,200	842	13,700	945	15,300	1,056
58	ASME B16.47 A	Class 150	48	1-3/4	258	23	7,600	525	9,100	628	10,600	732	12,200	842	13,700	945	15,200	1,049
60	ASME B16.47 A	Class 150	52	1-3/4	264	23	7,600	525	9,100	628	10,600	732	12,100	835	13,600	938	15,100	1,042

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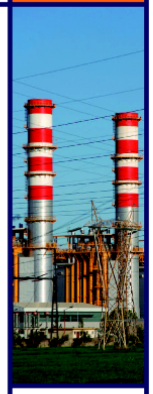
ASME B16.47 FLANGES 150 lb Series B

OIL PRESSURE CHART Series B Flanges		BOLT=Grade B7					25000 psi Residual Bolt Stress		30000 psi Residual Bolt Stress		35000 psi Residual Bolt Stress		40000 psi Residual Bolt Stress		45000 psi Residual Bolt Stress		50000 psi Residual Bolt Stress	
Flange Size	Flange Spec	Flange Rating	No of Bolts	Bolt Dia	Bolt Grip Length	Tool No	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)
inch				inch	mm		psi	bar	psi	bar	psi	bar	psi	bar	psi	bar	psi	bar
26	ASME B16.47 B	Class 150	36	3/4	83	21	4,400	304	5,300	366	6,100	421	7,000	483	7,900	545	8,800	607
28	ASME B16.47 B	Class 150	40	3/4	89	21	4,300	297	5,200	359	6,100	421	6,900	476	7,800	538	8,600	594
30	ASME B16.47 B	Class 150	44	3/4	89	21	4,300	297	5,200	359	6,100	421	6,900	476	7,800	538	8,600	594
32	ASME B16.47 B	Class 150	48	3/4	92	21	4,300	297	5,200	359	6,000	414	6,900	476	7,700	532	8,600	594
34	ASME B16.47 B	Class 150	40	7/8	99	21	6,000	414	7,200	497	8,400	580	9,600	663	10,800	745	12,000	828
36	ASME B16.47 B	Class 150	44	7/8	105	21	6,000	414	7,200	497	8,300	573	9,500	656	10,700	738	11,900	821
38	ASME B16.47 B	Class 150	40	1	108	21	8,000	552	9,500	656	11,100	766	12,700	876	14,300	987	15,900	1,097
40	ASME B16.47 B	Class 150	44	1	112	21	7,900	545	9,500	656	11,100	766	12,600	869	14,200	980	15,800	1,090
42	ASME B16.47 B	Class 150	48	1	118	21	7,800	538	9,400	649	10,900	752	12,500	863	14,100	973	15,600	1,076
44	ASME B16.47 B	Class 150	52	1	121	21	7,800	538	9,300	642	10,900	752	12,400	856	14,000	966	15,500	1,069
46	ASME B16.47 B	Class 150	40	1-1/8	124	21	10,300	711	12,400	856	14,400	994	16,500	1,138	18,500	1,276	20,600	1,421
48	ASME B16.47 B	Class 150	44	1-1/8	131	21	10,200	704	12,300	849	14,300	987	16,300	1,125	18,400	1,269	20,400	1,407
50	ASME B16.47 B	Class 150	48	1-1/8	137	21	10,100	697	12,200	842	14,200	980	16,200	1,118	18,200	1,256	20,200	1,394
52	ASME B16.47 B	Class 150	52	1-1/8	140	21	10,100	697	12,100	835	14,100	973	16,100	1,111	18,100	1,249	20,200	1,394
54	ASME B16.47 B	Class 150	56	1-1/8	143	21	10,100	697	12,100	835	14,100	973	16,100	1,111	18,100	1,249	20,100	1,387
56	ASME B16.47 B	Class 150	60	1-1/8	147	21	10,000	690	12,000	828	14,000	966	16,000	1,104	18,000	1,242	20,000	1,380
58	ASME B16.47 B	Class 150	48	1-1/4	150	22	6,900	476	8,300	573	9,700	669	11,100	766	12,500	863	13,800	952
60	ASME B16.47 B	Class 150	52	1-1/4	153	22	6,900	476	8,300	573	9,700	669	11,000	759	12,400	856	13,800	952

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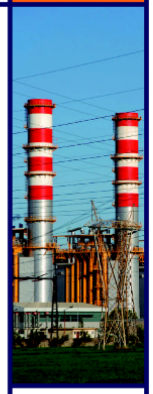
ASME B16.47 FLANGES 300 lb Series A

OIL PRESSURE CHART Series A Flanges		BOLT=Grade B7					25000 psi Residual Bolt Stress		30000 psi Residual Bolt Stress		35000 psi Residual Bolt Stress		40000 psi Residual Bolt Stress		45000 psi Residual Bolt Stress		50000 psi Residual Bolt Stress	
Flange Size	Flange Spec	Flange Rating	No of Bolts	Bolt Dia	Bolt Grip Length	Tool No	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)
inch				inch	mm		psi	bar	psi	bar	psi	bar	psi	bar	psi	bar	psi	bar
26	ASME B16.47 A	Class 300	28	1-5/8	159	23	7,000	483	8,400	580	9,800	676	11,200	773	12,600	869	14,000	966
28	ASME B16.47 A	Class 300	28	1-5/8	172	23	6,900	476	8,300	573	9,600	663	11,000	759	12,400	856	13,700	945
30	ASME B16.47 A	Class 300	28	1-3/4	184	23	8,100	559	9,700	669	11,300	780	12,900	890	14,500	1,000	16,100	1,111
32	ASME B16.47 A	Class 300	28	1-7/8	198	23	9,400	649	11,300	780	13,100	904	15,000	1,035	16,900	1,166	18,700	1,290
34	ASME B16.47 A	Class 300	28	1-7/8	204	23	9,300	642	11,200	773	13,100	904	14,900	1,028	16,800	1,159	18,600	1,283
36	ASME B16.47 A	Class 300	32	2	210	23	10,700	738	12,800	883	15,000	1,035	17,100	1,180	19,200	1,325	21,400	1,476
38	ASME B16.47 A	Class 300	32	1-1/2	216	22	10,000	690	12,000	828	14,000	966	16,000	1,104	18,000	1,242	20,000	1,380
40	ASME B16.47 A	Class 300	32	1-5/8	229	23	6,600	456	7,900	545	9,200	635	10,500	725	11,800	814	13,100	904
42	ASME B16.47 A	Class 300	32	1-5/8	239	23	6,500	449	7,800	538	9,100	628	10,400	718	11,700	807	13,000	897
44	ASME B16.47 A	Class 300	32	1-3/4	248	23	7,700	532	9,200	635	10,700	738	12,200	842	13,700	945	15,300	1,056
46	ASME B16.47 A	Class 300	28	1-7/8	258	23	9,000	621	10,800	745	12,500	863	14,300	987	16,100	1,111	17,900	1,235
48	ASME B16.47 A	Class 300	32	1-7/8	267	23	8,900	614	10,700	738	12,500	863	14,200	980	16,000	1,104	17,800	1,228
50	ASME B16.47 A	Class 300	32	2	280	23	10,200	842	12,200	842	14,200	980	16,300	1,125	18,300	1,263	20,300	1,400
52	ASME B16.47 A	Class 300	32	2	290	23	10,100	697	12,200	842	14,200	980	16,200	1,118	18,200	1,256	20,200	1,394
54	ASME B16.47 A	Class 300	28	2-1/4	305	24	8,200	566	9,800	676	11,500	794	13,100	904	14,700	1,014	16,400	1,132
56	ASME B16.47 A	Class 300	28	2-1/4	308	24	8,200	566	9,800	676	11,500	794	13,100	904	14,700	1,014	16,400	1,132
58	ASME B16.47 A	Class 300	32	2-1/4	318	24	8,200	566	9,800	676	11,400	787	13,000	897	14,700	1,014	16,300	1,125
60	ASME B16.47 A	Class 300	32	2-1/4	328	24	8,100	559	9,700	669	11,400	787	13,000	897	14,600	1,007	16,200	1,118

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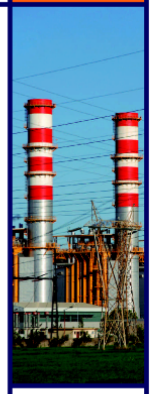
ASME B16.47 FLANGES 300 lb Series B

OIL PRESSURE CHART Series B Flanges		BOLT=Grade B7					25000 psi Residual Bolt Stress		30000 psi Residual Bolt Stress		35000 psi Residual Bolt Stress		40000 psi Residual Bolt Stress		45000 psi Residual Bolt Stress		50000 psi Residual Bolt Stress	
Flange Size	Flange Spec	Flange Rating	No of Bolts	Bolt Dia	Bolt Grip Length	Tool No	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)
inch				inch	mm		psi	bar	psi	bar	psi	bar	psi	bar	psi	bar	psi	bar
26	ASME B16.47 B	Class 300	32	1-1/4	178	22	6,800	469	8,100	559	9,400	649	10,800	745	12,100	835	13,500	932
28	ASME B16.47 B	Class 300	36	1-1/4	178	22	6,800	469	8,100	559	9,400	649	10,800	745	12,100	835	13,500	932
30	ASME B16.47 B	Class 300	36	1-3/8	188	22	8,400	580	10,000	690	11,700	807	13,300	918	15,000	1,035	16,700	1,152
32	ASME B16.47 B	Class 300	32	1-1/2	207	22	10,100	697	12,100	835	14,100	973	16,100	1,111	18,100	1,249	20,100	1,387
34	ASME B16.47 B	Class 300	36	1-1/2	207	22	10,100	697	12,100	835	14,100	973	16,100	1,111	18,100	1,249	20,100	1,387
36	ASME B16.47 B	Class 300	32	1-5/8	207	23	6,700	463	8,000	552	9,300	642	10,700	738	12,000	828	13,300	918
38	ASME B16.47 B	Class 300	36	1-5/8	223	23	6,600	456	7,900	545	9,200	635	10,500	725	11,800	814	13,100	904
40	ASME B16.47 B	Class 300	40	1-5/8	232	23	6,600	456	7,900	545	9,200	635	10,500	725	11,800	814	13,100	904
42	ASME B16.47 B	Class 300	36	1-3/4	239	23	7,700	532	9,200	635	10,800	745	12,300	849	13,800	952	15,400	1,063
44	ASME B16.47 B	Class 300	40	1-3/4	254	23	7,600	525	9,100	628	10,700	738	12,200	842	13,700	945	15,200	1,049
46	ASME B16.47 B	Class 300	36	1-7/8	258	23	9,000	621	10,800	745	12,500	863	14,300	987	16,100	1,111	17,900	1,235
48	ASME B16.47 B	Class 300	40	1-7/8	258	23	9,000	621	10,800	745	12,500	863	14,300	987	16,100	1,111	17,900	1,235
50	ASME B16.47 B	Class 300	44	1-7/8	277	23	8,900	614	10,600	732	12,400	856	14,200	980	15,900	1,097	17,700	1,221
52	ASME B16.47 B	Class 300	48	1-7/8	286	23	8,800	607	10,600	732	12,400	856	14,100	973	15,900	1,097	17,600	1,214
54	ASME B16.47 B	Class 300	48	1-7/8	274	23	8,900	614	10,700	738	12,400	856	14,200	980	16,000	1,104	17,700	1,221
56	ASME B16.47 B	Class 300	36	2-1/4	308	24	8,200	566	9,800	676	11,500	794	13,100	904	14,700	1,014	16,400	1,132
58	ASME B16.47 B	Class 300	40	2-1/4	308	24	8,200	566	9,800	676	11,500	794	13,100	904	14,700	1,014	16,400	1,132
60	ASME B16.47 B	Class 300	40	2-1/4	302	24	8,200	566	9,900	683	11,500	794	13,100	904	14,800	1,021	16,400	1,132

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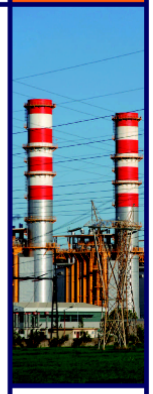
ASME B16.47 FLANGES 400 lb Series A

OIL PRESSURE CHART Series A Flanges		BOLT=Grade B7					25000 psi Residual Bolt Stress		30000 psi Residual Bolt Stress		35000 psi Residual Bolt Stress		40000 psi Residual Bolt Stress		45000 psi Residual Bolt Stress		50000 psi Residual Bolt Stress	
Flange Size	Flange Spec	Flange Rating	No of Bolts	Bolt Dia	Bolt Grip Length	Tool No	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)
inch				inch	mm		psi	bar	psi	bar	psi	bar	psi	bar	psi	bar	psi	bar
26	ASME B16.47 A	Class 400	28	1-3/4	159	23	8,300	573	10,000	690	11,600	800	13,300	918	14,900	1,028	16,600	1,145
28	ASME B16.47 A	Class 400	28	1-7/8	172	23	9,700	669	11,600	800	13,500	932	15,400	1,063	17,400	1,200	19,300	1,332
30	ASME B16.47 A	Class 400	28	2	184	23	11,000	759	13,200	911	15,400	1,063	17,600	1,214	19,700	1,359		
32	ASME B16.47 A	Class 400	28	2	198	23	10,800	745	13,000	897	15,100	1,042	17,300	1,194	19,500	1,345	21,600	1,490
34	ASME B16.47 A	Class 400	28	2	204	23	10,800	745	12,900	890	15,100	1,042	17,200	1,187	19,300	1,332	21,500	1,483
36	ASME B16.47 A	Class 400	32	2	210	23	10,700	738	12,800	883	15,000	1,035	17,100	1,180	19,200	1,325	21,400	1,476
38	ASME B16.47 A	Class 400	32	1-3/4	216	23	7,800	538	9,400	649	10,900	752	12,500	863	14,000	966	15,600	1,076
40	ASME B16.47 A	Class 400	32	1-7/8	229	23	9,100	628	11,000	759	12,800	883	14,600	1,007	16,400	1,132	18,200	1,256
42	ASME B16.47 A	Class 400	32	1-7/8	239	23	9,100	628	10,900	752	12,700	876	14,500	1,000	16,300	1,125	18,100	1,249
44	ASME B16.47 A	Class 400	32	2	248	23	10,400	718	12,500	863	14,500	1,000	16,600	1,145	18,700	1,290	20,700	1,428
46	ASME B16.47 A	Class 400	36	2	258	23	10,300	711	12,400	856	14,400	994	16,500	1,138	18,500	1,276	20,600	1,421
48	ASME B16.47 A	Class 400	28	2-1/4	267	24	8,400	580	10,100	697	11,700	807	13,400	925	15,100	1,042	16,700	1,152
50	ASME B16.47 A	Class 400	32	2-1/4	280	24	8,300	573	10,000	690	11,600	800	13,300	918	15,000	1,035	16,600	1,145
52	ASME B16.47 A	Class 400	32	2-1/4	290	24	8,300	573	9,900	683	11,600	800	13,200	911	14,900	1,028	16,500	1,138
54	ASME B16.47 A	Class 400	28	2-1/2	305	24	10,400	718	12,500	863	14,600	1,007	16,700	1,152	18,700	1,290	20,800	1,435
56	ASME B16.47 A	Class 400	32	2-1/2	308	24	10,400	718	12,500	863	14,600	1,007	16,600	1,145	18,700	1,290	20,800	1,435
58	ASME B16.47 A	Class 400	32	2-1/2	318	24	10,400	718	12,400	856	14,500	1,000	16,500	1,138	18,600	1,283	20,700	1,428
60	ASME B16.47 A	Class 400	32	2-3/4	328	25	8,900	614	10,600	732	12,400	856	14,100	973	15,900	1,097	17,700	1,221

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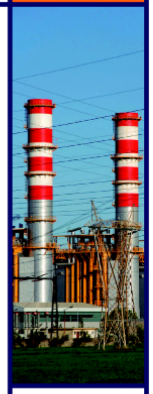
ASME B16.47 FLANGES 400 lb Series B

OIL PRESSURE CHART Series B Flanges		BOLT=Grade B7					25000 psi Residual Bolt Stress		30000 psi Residual Bolt Stress		35000 psi Residual Bolt Stress		40000 psi Residual Bolt Stress		45000 psi Residual Bolt Stress		50000 psi Residual Bolt Stress	
Flange Size	Flange Spec	Flange Rating	No of Bolts	Bolt Dia	Bolt Grip Length	Tool No	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)
inch				inch	mm		psi	bar	psi	bar	psi	bar	psi	bar	psi	bar	psi	bar
26	ASME B16.47 B	Class 400	28	1-3/8	178	22	8,400	580	10,100	697	11,800	814	13,500	932	15,100	1,042	16,800	1,159
28	ASME B16.47 B	Class 400	24	1-1/2	178	22	10,300	711	12,400	856	14,500	1,000	16,500	1,138	18,600	1,283	20,600	1,421
30	ASME B16.47 B	Class 400	28	1-1/2	188	22	10,200	704	12,300	849	14,300	987	16,400	1,132	18,400	1,269	20,400	1,407
32	ASME B16.47 B	Class 400	28	1-5/8	207	23	6,700	463	8,000	552	9,300	642	10,700	738	12,000	828	13,300	918
34	ASME B16.47 B	Class 400	32	1-5/8	207	23	6,700	463	8,000	552	9,300	642	10,700	738	12,000	828	13,300	918
36	ASME B16.47 B	Class 400	28	1-5/8	207	23	6,700	463	8,000	552	9,300	642	10,700	738	12,000	828	13,300	918
38	ASME B16.47 B	Class 400	32	1-3/4	223	23	7,800	538	9,300	642	10,900	752	12,400	856	14,000	966	15,500	1,069
40	ASME B16.47 B	Class 400	32	1-7/8	232	23	9,100	628	10,900	752	12,800	883	14,600	1,007	16,400	1,132	18,200	1,256
42	ASME B16.47 B	Class 400	32	1-7/8	239	23	9,100	628	10,900	752	12,700	876	14,500	1,000	16,300	1,125	18,100	1,249
44	ASME B16.47 B	Class 400	32	2	254	23	10,300	711	12,400	856	14,500	1,000	16,500	1,138	18,600	1,283	20,600	1,421
46	ASME B16.47 B	Class 400	36	2	258	23	10,300	711	12,400	856	14,400	994	16,500	1,138	18,500	1,276	20,600	1,421
48	ASME B16.47 B	Class 400	28	2-1/4	258	24	8,500	587	10,100	697	11,800	814	13,500	932	15,200	1,049	16,900	1,166
50	ASME B16.47 B	Class 400	32	2-1/4	277	24	8,300	573	10,000	690	11,700	807	13,300	918	15,000	1,035	16,600	1,145
52	ASME B16.47 B	Class 400	32	2-1/4	286	24	8,300	573	10,000	690	11,600	800	13,300	918	14,900	1,028	16,600	1,145
54	ASME B16.47 B	Class 400	28	2-1/2	274	24	10,600	732	12,700	876	14,900	1,028	17,000	1,173	19,100	1,318	21,200	1,463
56	ASME B16.47 B	Class 400	32	2-1/2	308	24	10,400	718	12,500	863	14,600	1,007	16,600	1,145	18,700	1,290	20,800	1,435
58	ASME B16.47 B	Class 400	32	2-1/2	308	24	10,400	718	12,500	863	14,600	1,007	16,600	1,145	18,700	1,290	20,800	1,435
60	ASME B16.47 B	Class 400	32	2-3/4	302	25	9,000	621	10,800	745	12,600	869	14,300	987	16,100	1,111	17,900	1,235

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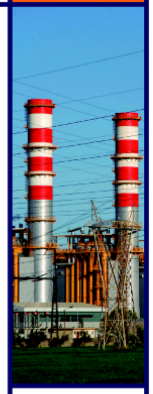
ASME B16.47 FLANGES 600 lb Series A

OIL PRESSURE CHART Series A Flanges		BOLT=Grade B7					25000 psi Residual Bolt Stress		30000 psi Residual Bolt Stress		35000 psi Residual Bolt Stress		40000 psi Residual Bolt Stress		45000 psi Residual Bolt Stress		50000 psi Residual Bolt Stress	
Flange Size	Flange Spec	Flange Rating	No of Bolts	Bolt Dia	Bolt Grip Length	Tool No	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)
inch				inch	mm		psi	bar	psi	bar	psi	bar	psi	bar	psi	bar	psi	bar
26	ASME B16.47 A	Class 600	28	1-7/8	216	23	9,200	635	11,100	766	12,900	890	14,800	1,021	16,600	1,145	18,400	1,269
28	ASME B16.47 A	Class 600	28	2	223	23	10,600	732	12,700	876	14,800	1,021	16,900	1,166	19,000	1,311	21,100	1,456
30	ASME B16.47 A	Class 600	28	2	229	23	10,500	725	12,600	869	14,700	1,014	16,800	1,159	18,900	1,304	21,000	1,449
32	ASME B16.47 A	Class 600	28	2	235	23	10,500	725	12,600	869	14,700	1,014	16,700	1,152	18,800	1,297	20,900	1,442
34	ASME B16.47 A	Class 600	28	2-1/4	242	24	8,600	594	10,300	711	12,000	828	13,700	945	15,400	1,063	17,100	1,180
36	ASME B16.47 A	Class 600	28	2-1/2	248	24	10,800	745	13,000	897	15,100	1,042	17,300	1,194	19,500	1,345	21,600	1,490
38	ASME B16.47 A	Class 600	28	2-1/4	305	24	8,200	566	9,800	676	11,500	794	13,100	904	14,700	1,014	16,400	1,132
40	ASME B16.47 A	Class 600	32	2-1/4	318	24	8,200	566	9,800	676	11,400	787	13,000	897	14,700	1,014	16,300	1,125
42	ASME B16.47 A	Class 600	28	2-1/2	337	24	10,300	711	12,300	849	14,300	987	16,400	1,132	18,400	1,269	20,500	1,414
44	ASME B16.47 A	Class 600	32	2-1/2	346	24	10,200	704	12,300	849	14,300	987	16,300	1,125	18,400	1,269	20,400	1,407
46	ASME B16.47 A	Class 600	32	2-1/2	359	24	10,200	704	12,200	842	14,200	980	16,200	1,118	18,300	1,263	20,300	1,400
48	ASME B16.47 A	Class 600	32	2-3/4	378	25	8,600	594	10,400	718	12,100	835	13,800	952	15,500	1,069	17,200	1,187
50	ASME B16.47 A	Class 600	28	3	394	25	10,400	718	12,500	863	14,600	1007	16,700	1,152	18,800	1,297	20,800	1,435
52	ASME B16.47 A	Class 600	32	3	407	25	10,400	718	12,500	863	14,500	1,000	16,600	1,145	18,700	1,290	20,700	1,428
54	ASME B16.47 A	Class 600	32	3	420	25	10,300	711	12,400	856	14,500	1,000	16,500	1,138	18,600	1,283	20,600	1,421
56	ASME B16.47 A	Class 600	32	3-1/4	435	26	9,200	635	11,100	766	12,900	890	14,700	1,014	16,600	1,145	18,400	1,269
58	ASME B16.47 A	Class 600	32	3-1/4	445	26	9,200	635	11,000	759	12,900	890	14,700	1,014	16,500	1,138	18,300	1,263
60	ASME B16.47 A	Class 600	28	3-1/2	467	26	10,500	725	12,600	869	14,700	1,014	16,700	1,152	18,800	1,297	20,900	1,442

BOLTIGHT
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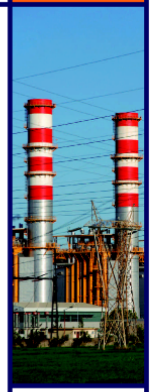
ASME B16.47 FLANGES 600 lb Series B

OIL PRESSURE CHART Series B Flanges		BOLT=Grade B7					25000 psi Residual Bolt Stress		30000 psi Residual Bolt Stress		35000 psi Residual Bolt Stress		40000 psi Residual Bolt Stress		45000 psi Residual Bolt Stress		50000 psi Residual Bolt Stress	
Flange Size	Flange Spec	Flange Rating	No of Bolts	Bolt Dia	Bolt Grip Length	Tool No	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)
inch				inch	mm		psi	bar	psi	bar	psi	bar	psi	bar	psi	bar	psi	bar
26	ASME B16.47 B	Class 600	28	1-5/8	223	23	6,600	456	7,900	545	9,200	635	10,500	725	11,800	814	13,100	904
28	ASME B16.47 B	Class 600	28	1-3/4	232	23	7,700	532	9,300	642	10,800	745	12,300	849	13,900	959	15,400	1,063
30	ASME B16.47 B	Class 600	28	1-7/8	251	23	9,000	621	10,800	745	12,600	869	14,400	994	16,200	1,118	18,000	1,242
32	ASME B16.47 B	Class 600	28	2	261	23	10,300	711	12,400	856	14,400	994	16,500	1,138	18,500	1,276	20,600	1,421
34	ASME B16.47 B	Class 600	24	2-1/4	283	24	8,300	573	10,000	690	11,600	800	13,300	918	14,900	1,028	16,600	1,145
36	ASME B16.47 B	Class 600	28	2-1/4	293	24	8,300	573	9,900	683	11,600	800	13,200	911	14,800	1,021	16,500	1,138
38	ASME B16.47 B	Class 600	28	2-1/4	305	24	8,200	566	9,800	676	11,500	794	13,100	904	14,700	1,014	16,400	1,132
40	ASME B16.47 B	Class 600	32	2-1/4	318	24	8,200	566	9,800	676	11,400	787	13,000	897	14,700	1,014	16,300	1,125
42	ASME B16.47 B	Class 600	28	2-1/2	337	24	10,300	711	12,300	849	14,300	987	16,400	1,132	18,400	1,269	20,500	1,414
44	ASME B16.47 B	Class 600	32	2-1/2	346	24	10,200	704	12,300	849	14,300	987	16,300	1,125	18,400	1,269	20,400	1,407
46	ASME B16.47 B	Class 600	32	2-1/2	359	24	10,200	704	12,200	842	14,200	980	16,200	1,118	18,300	1,263	20,300	1,400
48	ASME B16.47 B	Class 600	32	2-3/4	378	25	8,600	594	10,400	718	12,100	835	13,800	952	15,500	1,069	17,200	1,187
50	ASME B16.47 B	Class 600	28	3	394	25	10,400	718	12,500	863	14,600	1,007	16,700	1,152	18,800	1,297	20,800	1,435
52	ASME B16.47 B	Class 600	32	3	407	25	10,400	718	12,500	863	14,500	1,000	16,600	1,145	18,700	1,290	20,700	1,428
54	ASME B16.47 B	Class 600	32	3	420	25	10,300	711	12,400	856	14,500	1,000	16,500	1,138	18,600	1,283	20,600	1,421
56	ASME B16.47 B	Class 600	32	3-1/4	435	26	9,200	635	11,100	766	12,900	890	14,700	1,014	16,600	1,145	18,400	1,269
58	ASME B16.47 B	Class 600	32	3-1/4	445	26	9,200	635	11,000	759	12,900	890	14,700	1,014	16,500	1,138	18,300	1,263
60	ASME B16.47 B	Class 600	28	3-1/2	467	26	10,500	725	12,600	869	14,700	1,014	16,700	1,152	18,800	1,297	20,900	1,442

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ASME B16.47 FLANGES 900 lb Series A

OIL PRESSURE CHART Series A Flanges		BOLT=Grade B7					25000 psi Residual Bolt Stress		30000 psi Residual Bolt Stress		35000 psi Residual Bolt Stress		40000 psi Residual Bolt Stress		45000 psi Residual Bolt Stress		50000 psi Residual Bolt Stress	
Flange Size	Flange Spec	Flange Rating	No of Bolts	Bolt Dia	Bolt Grip Length	Tool No	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)
inch				inch	mm		psi	bar	psi	bar	psi	bar	psi	bar	psi	bar	psi	bar
26	ASME B16.47 A	Class 900	20	2-3/4	280	25	9,100	628	10,900	752	12,700	876	14,600	1,007	16,400	1,132	18,200	1,256
28	ASME B16.47 A	Class 900	20	3	286	25	11,100	766	13,300	918	15,500	1,069	17,700	1,221	19,900	1,373		
30	ASME B16.47 A	Class 900	20	3	299	25	11,000	759	13,200	911	15,300	1,056	17,500	1,207	19,700	1,359		
32	ASME B16.47 A	Class 900	20	3-1/4	318	26	9,800	676	11,700	807	13,600	938	15,600	1,076	17,500	1,207	19,500	1,345
34	ASME B16.47 A	Class 900	20	3-1/2	331	26	11,200	773	13,400	925	15,600	1,076	17,800	1,228	20,100	1,387		
36	ASME B16.47 A	Class 900	20	3-1/2	343	26	11,100	766	13,300	918	15,500	1,069	17,700	1,221	19,900	1,373		
38	ASME B16.47 A	Class 900	20	3-1/2	381	26	10,900	752	13,000	897	15,200	1,049	17,300	1,194	19,500	1,345	21,700	1,497
40	ASME B16.47 A	Class 900	24	3-1/2	394	26	10,800	745	12,900	890	15,100	1,042	17,200	1,187	19,400	1,338	21,500	1,483
42	ASME B16.47 A	Class 900	24	3-1/2	413	26	10,700	738	12,800	883	15,000	1,035	17,100	1,180	19,200	1,325	21,400	1,476
44	ASME B16.47 A	Class 900	24	3-3/4	429	27	11,800	814	14,100	973	16,500	1,138	18,800	1,297	21,200	1,463		
46	ASME B16.47 A	Class 900	24	4	452	27	13,500	932	16,200	1,118	18,900	1,304	21,600	1,490				
48	ASME B16.47 A	Class 900	24	4	467	27	13,400	925	16,100	1,111	18,800	1,297	21,400	1,476				

ASME B16.47 FLANGES 900 lb Series B

OIL PRESSURE CHART Series B Flanges		BOLT=Grade B7					25000 psi Residual Bolt Stress		30000 psi Residual Bolt Stress		35000 psi Residual Bolt Stress		40000 psi Residual Bolt Stress		45000 psi Residual Bolt Stress		50000 psi Residual Bolt Stress	
Flange Size	Flange Spec	Flange Rating	No of Bolts	Bolt Dia	Bolt Grip Length	Tool No	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)	Oil Pressure (B)
inch				inch	mm		psi	bar	psi	bar	psi	bar	psi	bar	psi	bar	psi	bar
26	ASME B16.47 B	Class 900	20	2-1/2	270	24	10,700	738	12,800	883	14,900	1,028	17,000	1,173	19,100	1,318	21,300	1,469
28	ASME B16.47 B	Class 900	20	2-3/4	296	25	9,000	621	10,800	745	12,600	869	14,400	994	16,200	1,118	18,000	1,242
30	ASME B16.47 B	Class 900	20	3	311	25	10,900	752	13,100	904	15,200	1,049	17,400	1,200	19,600	1,352	21,700	1,497
32	ASME B16.47 B	Class 900	20	3	321	25	10,800	745	13,000	897	15,100	1,042	17,300	1,194	19,400	1,338	21,600	1,490
34	ASME B16.47 B	Class 900	20	3-1/4	343	26	9,600	663	11,500	794	13,400	925	15,400	1,063	17,300	1,194	19,200	1,325
36	ASME B16.47 B	Class 900	24	3	346	25	10,700	738	12,800	883	14,900	1,028	17,000	1,173	19,200	1,325	21,300	1,469
38	ASME B16.47 B	Class 900	20	3-1/2	381	26	10,900	752	13,000	897	15,200	1,049	17,300	1,194	19,500	1,345	21,700	1,497
40	ASME B16.47 B	Class 900	24	3-1/2	394	26	10,800	745	12,900	890	15,100	1,042	17,200	1,187	19,400	1,338	21,500	1,483
42	ASME B16.47 B	Class 900	24	3-1/2	413	26	10,700	738	12,800	883	15,000	1,035	17,100	1,180	19,200	1,325	21,400	1,476
44	ASME B16.47 B	Class 900	24	3-3/4	429	27	11,800	814	14,100	973	16,500	1,138	18,800	1,297	21,200	1,463		
46	ASME B16.47 B	Class 900	24	4	452	27	13,500	932	16,200	1,118	18,900	1,304	21,600	1,490				
48	ASME B16.47 B	Class 900	24	4	467	27	13,400	925	16,100	1,111	18,800	1,297	21,400	1,476				

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