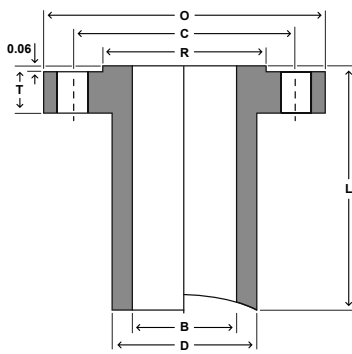
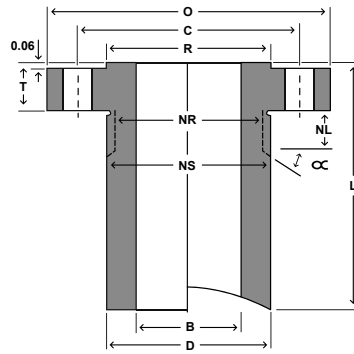


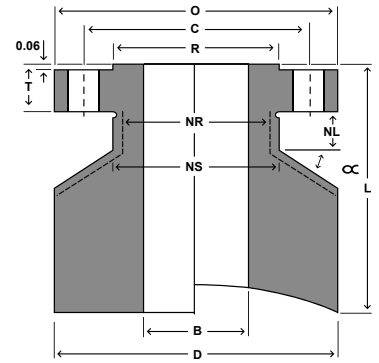
Class 150 Standard Connection Specifications



LONG WELD NECK "LWN"



HEAVY BARREL "HB"

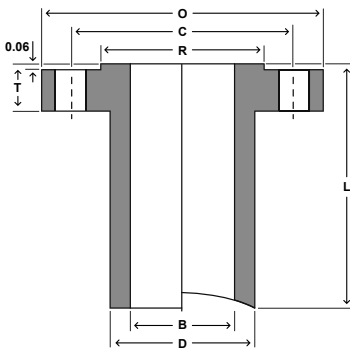


EQUAL BARREL "E"

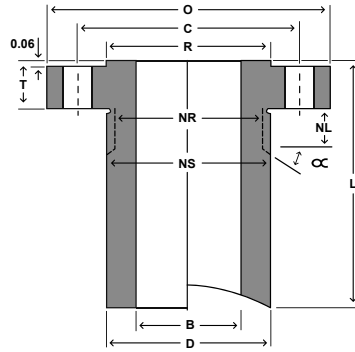
Size			Flange			Barrel OD			Bolting			Nut			Stud Bolt			Weights						Length
Nom	Bore LWN & E	Bore HB	OD	Thk.	RF of OD	LWN	HB	E	# of Holes	Hole Size	Bolt Circle	Stop Dia	Relief Dia	Relief Length	Size	RF Length	RTJ Length	LWN		HB		E		Base
	B	B	O	T	R	D	D	D			C	NS	NR	NL				Base	Per 1"	Base	Per 1"	Base	Per 1"	L
1/2	0.50	0.55	3.50	0.44	1.38	1.25	1.50	3.50	4	0.62	2.38	1.50	1.25	0.75	1/2	2 1/4	2 3/4	3	0.3	5	0.4	21	2.7	9
3/4	0.75	0.74	3.88	0.50	1.69	1.62	1.88	3.88	4	0.62	2.75	1.88	1.62	0.75	1/2	2 1/2	3	5	0.5	7	0.7	27	3.2	9
1	1.00	0.96	4.25	0.56	2.00	2.00	2.25	4.25	4	0.62	3.12	2.25	2.00	0.75	1/2	2 1/2	3	7	0.7	10	0.9	30	3.8	9
1 1/4	1.25	1.28	4.62	0.62	2.50	2.38	2.62	4.62	4	0.62	3.50	2.62	2.38	0.75	1/2	2 3/4	3 1/4	10	0.9	12	1.2	36	4.4	9
1 1/2	1.50	1.50	5.00	0.69	2.88	2.62	3.00	5.00	4	0.62	3.88	3.00	2.62	0.75	1/2	2 3/4	3 1/4	12	1	16	1.5	41	5.1	9
2	2.00	1.94	6.00	0.75	3.62	3.06	3.69	6.00	4	0.75	4.75	3.69	3.06	0.88	5/8	3 1/4	3 3/4	15	1.2	23	2.2	57	7.1	9
2 1/2	2.50	2.32	7.00	0.88	4.12	3.75	4.44	7.00	4	0.75	5.50	4.44	3.75	0.88	5/8	3 1/2	4	22	1.7	34	3.2	79	10	9
3	3.00	2.90	7.50	0.94	5.00	4.25	4.94	7.50	4	0.75	6.00	4.94	4.25	0.88	5/8	3 1/2	4 1/4	25	2	38	3.6	86	11	9
3 1/2	3.50	3.36	8.50	0.94	5.50	4.88	5.94	8.50	8	0.75	7.00	5.94	4.88	0.88	5/8	3 1/2	4 1/4	32	2.6	55	5.3	110	13	9
4	4.00	3.83	9.00	0.94	6.19	5.50	6.44	9.00	8	0.75	7.50	6.44	5.50	0.88	5/8	3 1/2	4 1/4	47	3.2	78	6	164	14	12
5	5.00	4.81	10.00	0.94	7.31	6.50	7.25	10.00	8	0.88	8.50	7.25	6.50	1.00	3/4	3 3/4	4 1/2	57	3.8	87	6.5	189	17	12
6	6.00	5.76	11.00	1.00	8.50	7.75	8.25	11.00	8	0.88	9.50	8.25	7.75	1.00	3/4	4	4 1/2	75	5.4	103	7.8	216	19	12
8	8.00	7.62	13.50	1.12	10.62	9.75	10.50	13.50	8	0.88	11.75	10.50	9.75	1.00	3/4	4 1/4	4 3/4	102	6.9	157	11	292	26	12
10	10.00	9.56	16.00	1.19	12.75	12.00	12.81	16.00	12	1.00	14.25	12.81	12.00	1.12	7/8	4 3/4	5 1/4	143	9.8	214	16	382	35	12
12	12.00	11.38	19.00	1.25	15.00	14.38	15.56	19.00	12	1.00	17.00	15.56	14.38	1.12	7/8	4 3/4	5 1/2	205	14	329	25	535	48	12
14	14.00	14.00	21.00	1.38	16.25	16.00	17.12	21.00	12	1.12	18.75	17.12	16.00	1.25	1	5 1/4	6	211	13	296	22	585	55	12
16	16.00	16.00	23.50	1.44	18.50	18.00	19.62	23.50	16	1.12	21.25	19.62	18.00	1.25	1	5 1/2	6	246	15	388	29	714	66	12
18	18.00	18.00	25.00	1.56	21.00	20.00	20.94	25.00	16	1.25	22.75	20.94	20.00	1.38	1 1/8	6	6 1/2	270	17	362	25	711	67	12
20	20.00	20.00	27.50	1.69	23.00	22.00	23.19	27.50	20	1.25	25.00	23.19	22.00	1.38	1 1/8	6 1/4	7	311	19	434	31	840	79	12
24	24.00	24.00	32.00	1.88	27.25	26.25	27.50	32.00	20	1.38	29.50	27.50	26.25	1.50	1 1/4	7	7 3/4	423	25	574	40	1046	100	12

DIMENSIONS ARE IN INCHES | WEIGHTS ARE IN POUNDS

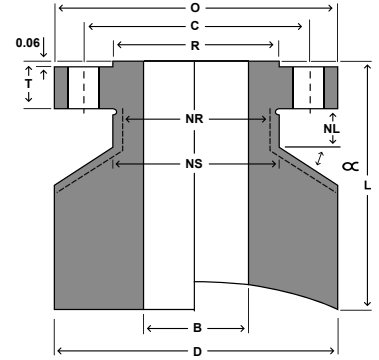
Class 300 Standard Connection Specifications



LONG WELD NECK "LWN"



HEAVY BARREL "HB"

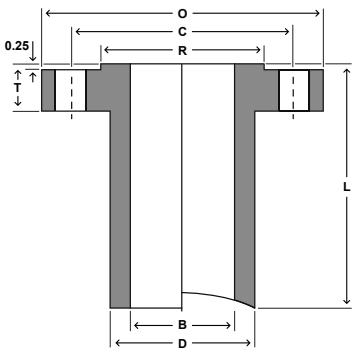


EQUAL BARREL "E"

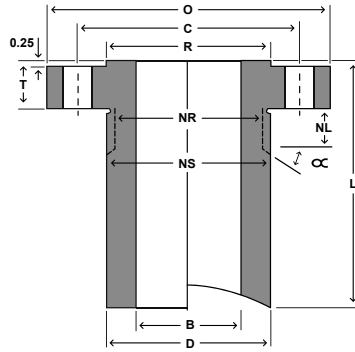
Size			Flange			Barrel OD			Bolting			Nut			Stud Bolt			Weights						Length
Nom	Bore LWN & E	Bore HB	OD	Thk	RF of OD	LWN	HB	E	# of Holes	Hole Size	Bolt Circle	Stop Dia	Relief Dia	Relief Length	Size	RF Length	RTJ Length	LWN		HB		E		Base
	B	B	O	T	R	D	D	D			C	NS	NR	NL				Base	Per 1"	Base	Per 1"	Base	Per 1"	L
1/2	0.50	0.55	3.75	0.56	1.38	1.50	1.75	3.75	4	0.62	2.62	1.75	1.50	0.75	1/2	2 1/2	3	5	0.4	7	0.6	24	3.1	9
3/4	0.75	0.74	4.62	0.62	1.69	1.88	2.19	4.62	4	0.75	3.25	2.19	1.88	0.88	5/8	3	3 1/2	9	0.7	11	0.9	37	4.6	9
1	1.00	0.96	4.88	0.69	2.00	2.12	2.44	4.88	4	0.75	3.50	2.44	2.12	0.88	5/8	3 1/4	3 1/2	9	0.8	12	1.1	40	5.1	9
1 1/4	1.25	1.28	5.25	0.75	2.50	2.50	2.81	5.25	4	0.75	3.88	2.81	2.50	0.88	5/8	3 1/4	3 3/4	13	1	15	1.4	45	5.8	9
1 1/2	1.50	1.50	6.12	0.81	2.88	2.75	3.25	6.12	4	0.88	4.50	3.25	2.75	1.00	3/4	3 1/2	4	15	1.2	21	1.9	61	7.8	9
2	2.00	1.94	6.50	0.88	3.62	3.31	3.94	6.50	8	0.75	5.00	3.94	3.31	0.88	5/8	3 1/2	4 1/4	20	1.5	28	2.6	68	8.5	9
2 1/2	2.50	2.32	7.50	1.00	4.12	3.94	4.62	7.50	8	0.88	5.88	4.62	3.94	1.00	3/4	4	4 1/2	25	2.1	38	3.6	89	11	9
3	3.00	2.90	8.25	1.12	5.00	4.62	5.38	8.25	8	0.88	6.62	5.38	4.62	1.00	3/4	4 1/4	5	35	2.7	49	4.6	106	13	9
3 1/2	3.50	3.36	9.00	1.19	5.50	5.25	6.00	9.00	8	0.88	7.25	6.00	5.25	1.00	3/4	4 1/4	5	42	3.4	59	5.5	122	15	9
4	4.00	3.83	10.00	1.25	6.19	5.75	6.62	10.00	8	0.88	7.88	6.62	5.75	1.00	3/4	4 1/2	5 1/4	62	3.8	91	6.5	207	19	12
5	5.00	4.81	11.00	1.38	7.31	7.00	8.00	11.00	8	0.88	9.25	8.00	7.00	1.00	3/4	4 3/4	5 1/4	84	5.3	124	9.1	241	21	12
6	6.00	5.76	12.50	1.44	8.50	8.12	9.38	12.50	12	0.88	10.62	9.38	8.12	1.00	3/4	4 3/4	5 3/4	105	6.7	165	12	303	27	12
8	8.00	7.62	15.00	1.62	10.62	10.25	11.56	15.00	12	1.00	13.00	11.56	10.25	1.12	7/8	5 1/2	6 1/4	148	9.1	228	17	405	36	12
10	10.00	9.56	17.50	1.88	12.75	12.62	13.62	17.50	16	1.12	15.25	13.62	12.62	1.25	1	6 1/4	7 1/4	210	13	291	21	499	46	12
12	12.00	11.38	20.50	2.00	15.00	14.75	15.94	20.50	16	1.25	17.75	15.94	14.75	1.38	1 1/8	6 3/4	7 1/2	275	16	392	28	651	61	12
14	14.00	14.00	23.00	2.12	16.25	16.75	18.44	23.00	20	1.25	20.25	18.44	16.75	1.38	1 1/8	7	7 3/4	324	19	456	32	785	74	12
16	16.00	16.00	25.50	2.25	18.50	19.00	20.50	25.50	20	1.38	22.50	20.50	19.00	1.50	1 1/4	7 1/2	8 1/2	404	23	529	37	914	88	12
18	18.00	18.00	28.00	2.38	21.00	21.00	22.75	28.00	24	1.38	24.75	22.75	21.00	1.50	1 1/4	7 3/4	8 1/4	465	26	630	43	1066	102	12
20	20.00	20.00	30.50	2.50	23.00	23.12	25.00	30.50	24	1.38	27.00	25.00	23.12	1.50	1 1/4	8 1/4	9 1/4	549	30	741	50	1228	118	12
24	24.00	24.00	36.00	2.75	27.25	27.62	29.62	36.00	24	1.62	32.00	29.62	27.62	1.75	1 1/2	9 1/4	10 1/4	778	42	1016	67	1627	160	12

DIMENSIONS ARE IN INCHES | WEIGHTS ARE IN POUNDS

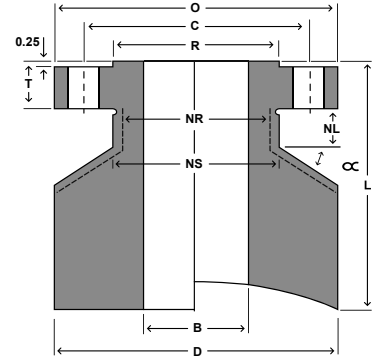
Class 400 Standard Connection Specifications



LONG WELD NECK "LWN"



HEAVY BARREL "HB"

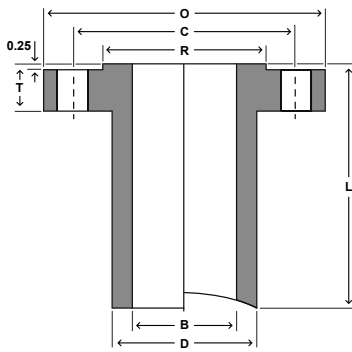


EQUAL BARREL "E"

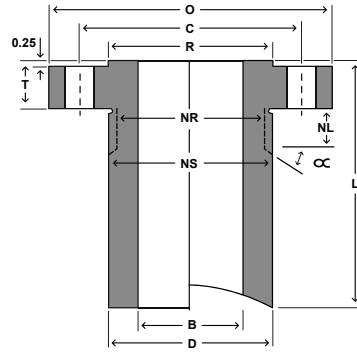
Size			Flange			Barrel OD			Bolting			Nut			Stud Bolt			Weights					Length	
Nom	Bore LWN & E	Bore HB	OD	Thk.	RF of OD	LWN	HB	E	# of Holes	Hole Size	Bolt Circle	Stop Dia	Relief Dia	Relief Length	Size	RF Length	RTJ Length	LWN		HB		E		Base
B	B	O	T	R	D	D	D			C	NS	NR	NL				Base	Per 1"	Base	Per 1"	Base	Per 1"	Base	L
1/2	0.50	0.55	3.75	0.56	1.38	1.50	1.75	3.75	4	0.62	2.62	1.75	1.50	0.75	1/2	3	3	5	0.4	7	0.6	24	3.1	9
3/4	0.75	0.74	4.62	0.62	1.69	1.88	2.19	4.62	4	0.75	3.25	2.19	1.88	0.88	5/8	3 1/2	3 1/2	8	0.7	11	0.9	37	4.6	9
1	1.00	0.96	4.88	0.69	2.00	2.12	2.44	4.88	4	0.75	3.50	2.44	2.12	0.88	5/8	3 1/2	3 1/2	9	0.8	12	1.1	40	5.1	9
1 1/4	1.25	1.28	5.25	0.81	2.50	2.50	2.81	5.25	4	0.75	3.88	2.81	2.50	0.88	5/8	3 3/4	3 3/4	13	1	15	1.4	45	5.8	9
1 1/2	1.50	1.50	6.12	0.88	2.88	2.75	3.25	6.12	4	0.88	4.50	3.25	2.75	1.00	3/4	4 1/4	4 1/4	16	1.2	21	1.9	61	7.8	9
2	2.00	1.94	6.50	1.00	3.62	3.31	3.94	6.50	8	0.75	5.00	3.94	3.31	0.88	5/8	4 1/4	4 1/4	20	1.5	29	2.6	68	8.5	9
2 1/2	2.50	2.32	7.50	1.12	4.12	3.94	4.63	7.50	8	0.88	5.88	4.63	3.94	1.00	3/4	4 3/4	4 3/4	27	2.1	39	3.6	88	11	9
3	3.00	2.90	8.25	1.25	5.00	4.62	5.38	8.25	8	0.88	6.62	5.38	4.62	1.00	3/4	5	5	36	2.7	50	4.6	104	13	9
3 1/2	3.50	3.36	9.00	1.38	5.50	5.25	5.81	9.00	8	1.00	7.25	5.81	5.25	1.12	7/8	5 1/2	5 1/2	45	3.4	61	5.5	116	15	9
4	4.00	3.83	10.00	1.38	6.19	5.75	6.44	10.00	8	1.00	7.88	6.44	5.75	1.12	7/8	5 1/2	5 1/2	65	3.8	93	6.5	197	19	12
5	5.00	4.81	11.00	1.50	7.31	7.00	7.81	11.00	8	1.00	9.25	7.81	7.00	1.12	7/8	5 3/4	5 3/4	88	5.3	127	9.1	229	22	12
6	6.00	5.76	12.50	1.62	8.50	8.12	9.19	12.50	12	1.00	10.62	9.19	8.12	1.12	7/8	6	6	110	6.7	169	12	286	27	12
8	8.00	7.62	15.00	1.88	10.62	10.25	11.38	15.00	12	1.12	13.00	11.38	10.25	1.25	1	6 3/4	6 3/4	154	9.1	233	17	379	36	12
10	10.00	9.56	17.50	2.12	12.75	12.62	13.44	17.50	16	1.25	15.25	13.44	12.62	1.38	1 1/8	7 1/2	7 1/2	218	13	298	21	475	46	12
12	12.00	11.38	20.50	2.25	15.00	14.75	15.75	20.50	16	1.38	17.75	15.75	14.75	1.50	1 1/4	8	8	285	16	401	28	627	62	12
14	14.00	14.00	23.00	2.38	16.25	16.75	18.25	23.00	20	1.38	20.25	18.25	16.75	1.50	1 1/4	8 1/4	8 1/4	336	19	467	32	758	74	12
16	16.00	16.00	25.50	2.50	18.50	19.00	20.31	25.50	20	1.50	22.50	20.31	19.00	1.62	1 3/8	8 3/4	8 3/4	418	23	542	37	884	88	12
18	18.00	18.00	28.00	2.62	21.00	21.00	22.56	28.00	24	1.50	24.75	22.56	21.00	1.62	1 3/8	9	9	482	26	645	43	1033	102	12
20	20.00	20.00	30.50	2.75	23.00	23.12	24.63	30.50	24	1.62	27.00	24.63	23.12	1.75	1 1/2	9 1/2	9 3/4	568	30	759	50	1165	118	12
24	24.00	24.00	36.00	3.00	27.25	27.62	29.25	36.00	24	1.88	32.00	29.25	27.62	2.00	1 3/4	10 1/2	11	804	42	1040	67	1540	160	12

DIMENSIONS ARE IN INCHES | WEIGHTS ARE IN POUNDS

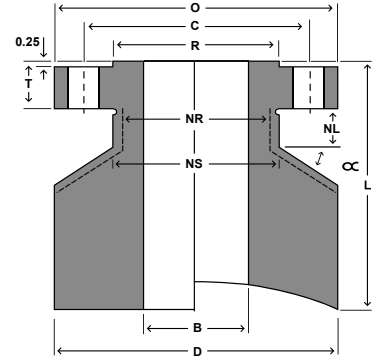
Class 600 Standard Connection Specifications



LONG WELD NECK "LWN"



HEAVY BARREL "HB"

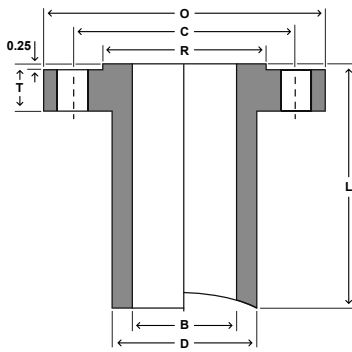


EQUAL BARREL "E"

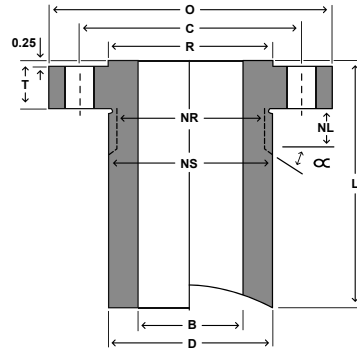
Size		Flange					Barrel OD			Bolting			Nut			Stud Bolt			Weights					Length
Nom	Bore LWN & E	Bore HB	OD	Thk	RF of OD	LWN	HB	E	# of Holes	Hole Size	Bolt Circle	Stop Dia	Relief Dia	Relief Length	Size	RF Length	RTJ Length	LWN		HB		E		Base
	B	B	O	T	R	D	D	D		C	NS	NR	NL				Base	Per 1"	Base	Per 1"	Base	Per 1"	L	
1/2	0.50	0.55	3.75	0.56	1.38	1.50	1.75	3.75	4	0.62	2.62	1.75	1.50	0.75	1/2	3	3	5	0.4	7	0.6	24	3.1	9
3/4	0.75	0.74	4.62	0.62	1.69	1.88	2.19	4.62	4	0.75	3.25	2.19	1.88	0.88	5/8	3 1/2	3 1/2	8	0.7	11	0.9	36	4.6	9
1	1.00	0.96	4.88	0.69	2.00	2.12	2.44	4.88	4	0.75	3.50	2.44	2.12	0.88	5/8	3 1/2	3 1/2	9	0.8	12	1.1	39	5.1	9
1 1/4	1.25	1.28	5.25	0.81	2.50	2.50	2.81	5.25	4	0.75	3.88	2.81	2.50	0.88	5/8	3 3/4	3 3/4	13	1	15	1.4	44	5.8	9
1 1/2	1.50	1.50	6.12	0.88	2.88	2.75	3.25	6.12	4	0.88	4.50	3.25	2.75	1.00	3/4	4 1/4	4 1/4	16	1.2	21	1.9	59	7.8	9
2	2.00	1.94	6.50	1.00	3.62	3.31	3.94	6.50	8	0.75	5.00	3.94	3.31	0.88	5/8	4 1/4	4 1/4	20	1.5	29	2.6	67	8.5	9
2 1/2	2.50	2.32	7.50	1.12	4.12	3.94	4.62	7.50	8	0.88	5.88	4.62	3.94	1.00	3/4	5	4 3/4	27	2.1	39	3.6	85	11	9
3	3.00	2.90	8.25	1.25	5.00	4.62	5.38	8.25	8	0.88	6.62	5.38	4.62	1.00	3/4	5	5 1/4	36	2.7	50	4.6	104	13	9
3 1/2	3.50	3.36	9.00	1.38	5.50	5.25	5.81	9.00	8	1.00	7.25	5.81	5.25	1.12	7/8	5 1/2	5 1/2	45	3.4	57	5	116	15	9
4	4.00	3.83	10.75	1.50	6.19	6.00	7.06	10.75	8	1.00	8.50	7.06	6.00	1.12	7/8	5 3/4	6	77	4.5	113	7.8	238	22	12
5	5.00	4.81	13.00	1.75	7.31	7.50	8.88	13.00	8	1.12	10.50	8.88	7.50	1.25	1	6 1/2	6 1/2	123	7	180	12	336	32	12
6	6.00	5.76	14.00	1.88	8.50	8.75	9.88	14.00	12	1.12	11.50	9.88	8.75	1.25	1	6 3/4	7	152	9	207	14	373	36	12
8	8.00	7.62	16.50	2.19	10.62	10.75	11.94	16.50	12	1.25	13.75	11.94	10.75	1.38	1 1/8	7 3/4	8	207	11	277	19	478	46	12
10	10.00	9.56	20.00	2.50	12.75	13.50	15.00	20.00	16	1.38	17.00	15.00	13.50	1.50	1 1/4	8 1/2	8 3/4	324	18	433	30	683	67	12
12	12.00	11.38	22.00	2.62	15.00	15.75	17.25	22.00	20	1.38	19.25	17.25	15.75	1.50	1 1/4	8 3/4	9	393	23	533	37	779	76	12
14	14.00	14.00	23.75	2.75	16.25	17.00	18.56	23.75	20	1.50	20.75	18.56	17.00	1.62	1 3/8	9 1/4	9 1/2	471	21	631	33	1149	82	16
16	16.00	16.00	27.00	3.00	18.50	19.50	21.38	27.00	20	1.62	23.75	21.38	19.50	1.75	1 1/2	10	10 1/4	638	28	856	45	1471	105	16
18	18.00	18.00	29.25	3.25	21.00	21.50	23.19	29.25	20	1.75	25.75	23.19	21.50	1.88	1 5/8	10 3/4	11	731	31	941	48	1628	118	16
20	20.00	20.00	32.00	3.50	23.00	24.00	25.94	32.00	24	1.75	28.50	25.94	24.00	1.88	1 5/8	11 1/2	11 3/4	916	39	1180	61	1920	139	16
24	24.00	24.00	37.00	4.00	27.25	28.25	30.06	37.00	24	2.00	33.00	30.06	28.25	2.12	1 7/8	13	13 1/2	1210	49	1486	73	2376	176	16

DIMENSIONS ARE IN INCHES | WEIGHTS ARE IN POUNDS

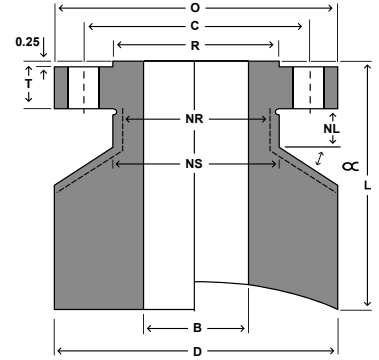
Class 900 Standard Connection Specifications



LONG WELD NECK "LWN"



HEAVY BARREL "HB"

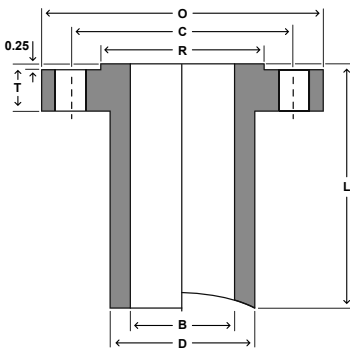


EQUAL BARREL "E"

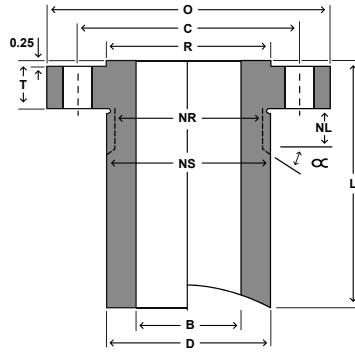
Size			Flange			Barrel OD			Bolting			Nut			Stud Bolt			Weights						Length
Nom	Bore LWN & E	Bore HB	OD	Thk	RF of OD	LWN	HB	E	# of Holes	Hole Size	Bolt Circle	Stop Dia	Relief Dia	Relief Length	Size	RF Length	RTJ Length	LWN		HB		E		Base
	B	B	O	T	R	D	D	D			C	NS	NR	NL				Base	Per 1"	Base	Per 1"	Base	Per 1"	L
1/2	0.50	0.55	4.75	0.88	1.38	1.56	2.00	4.75	4	0.88	3.25	2.00	1.56	1.00	3/4	4 1/4	4 1/4	8	0.5	10	0.8	37	5	9
3/4	0.75	0.74	5.12	1.00	1.69	1.81	2.25	5.12	4	0.88	3.50	2.25	1.81	1.00	3/4	4 1/2	4 1/2	10	0.6	13	1	42	5.7	9
1	1.00	0.96	5.88	1.12	2.00	2.12	2.56	5.88	4	1.00	4.00	2.56	2.12	1.12	7/8	5	5	13	0.8	17	1.3	54	7.5	9
1 1/4	1.25	1.28	6.25	1.12	2.50	2.50	2.94	6.25	4	1.00	4.38	2.94	2.50	1.12	7/8	5	5	17	1	20	1.6	61	8.3	9
1 1/2	1.50	1.50	7.00	1.25	2.88	2.75	3.25	7.00	4	1.12	4.88	3.25	2.75	1.25	1	5 1/2	5 1/2	21	1.2	26	1.9	77	10	9
2	2.00	1.94	8.50	1.50	3.62	4.12	5.06	8.50	8	1.00	6.50	5.06	4.12	1.12	7/8	5 3/4	5 3/4	42	2.9	56	4.9	115	15	9
2 1/2	2.50	2.32	9.62	1.62	4.12	4.88	5.88	9.62	8	1.12	7.50	5.88	4.88	1.25	1	6 1/4	6 1/4	56	3.9	75	6.5	144	19	9
3	3.00	2.90	9.50	1.50	5.00	5.00	6.06	9.50	8	1.00	7.50	6.06	5.00	1.12	7/8	5 3/4	5 3/4	51	3.6	71	6.3	139	18	9
4	4.00	3.83	11.50	1.75	6.19	6.25	7.44	11.50	8	1.25	9.25	7.44	6.25	1.38	1 1/8	6 3/4	6 3/4	93	5.1	133	9.1	270	26	12
5	5.00	4.81	13.75	2.00	7.31	7.50	9.00	13.75	8	1.38	11.00	9.00	7.50	1.50	1 1/4	7 1/2	7 1/2	135	7	194	13	376	37	12
6	6.00	5.76	15.00	2.19	8.50	9.25	10.69	15.00	12	1.25	12.50	10.69	9.25	1.38	1 1/8	7 1/2	7 3/4	191	11	259	18	436	42	12
8	8.00	7.62	18.50	2.50	10.62	11.75	13.31	18.50	12	1.50	15.50	13.31	11.75	1.62	1 3/8	8 3/4	8 3/4	297	16	389	27	626	62	12
10	10.00	9.56	21.50	2.75	12.75	14.50	16.31	21.50	16	1.50	18.50	16.31	14.50	1.62	1 3/8	9 1/4	9 1/4	422	25	558	39	824	81	12
12	12.00	11.38	24.00	3.12	15.00	16.50	18.81	24.00	20	1.50	21.00	18.81	16.50	1.62	1 3/8	10	10	518	29	715	50	984	96	12
14	14.00	14.00	25.25	3.38	16.25	17.75	19.62	25.25	20	1.62	22.00	19.62	17.75	1.75	1 1/2	10 3/4	11	624	26	817	42	1368	98	16
16	16.00	16.00	27.75	3.50	18.50	20.00	21.69	27.75	20	1.75	24.25	21.69	20.00	1.88	1 5/8	11 1/4	11 1/2	750	32	942	48	1573	114	16
18	18.00	18.00	31.00	4.00	21.00	22.25	24.06	31.00	20	2.00	27.00	24.06	22.25	2.12	1 7/8	12 3/4	13 1/4	950	38	1169	57	1898	142	16
20	20.00	20.00	33.75	4.25	23.00	24.50	26.38	33.75	20	2.12	29.50	26.38	24.50	2.25	2	13 3/4	14 1/4	1121	43	1378	66	2182	164	16
24	24.00	24.00	41.00	5.50	27.25	29.50	31.62	41.00	20	2.62	35.50	31.62	29.50	2.75	2 1/2	17 1/4	18	1865	65	2160	94	3084	246	16

DIMENSIONS ARE IN INCHES | WEIGHTS ARE IN POUNDS

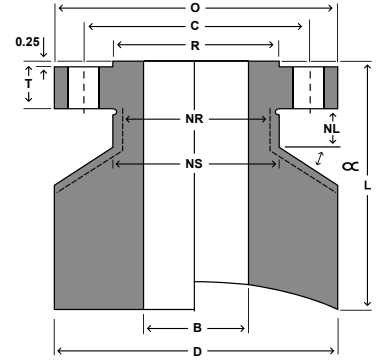
Class 1500 Standard Connection Specifications



LONG WELD NECK "LWN"



HEAVY BARREL "HB"

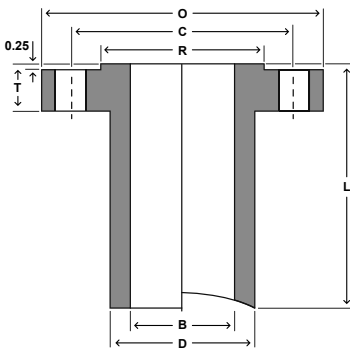


EQUAL BARREL "E"

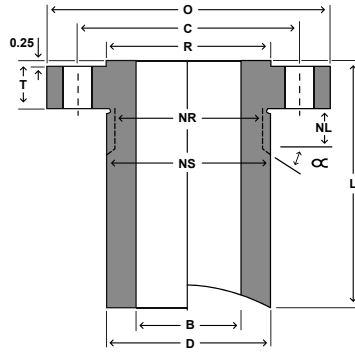
Size			Flange			Barrel OD			Bolting			Nut			Stud Bolt			Weights					Length	
Nom	Bore LWN & E	Bore HB	OD	Thk	RF of OD	LWN	HB	E	# of Holes	Hole Size	Bolt Circle	Stop Dia	Relief Dia	Relief Length	Size	RF Length	RTJ Length	LWN		HB		E		Base
	B	B	O	T	R	D	D	D			C	NS	NR	NL				Base	Per 1"	Base	Per 1"	Base	Per 1"	L
1/2	0.50	0.55	4.75	0.88	1.38	1.56	2.00	4.75	4	0.88	3.25	2.00	1.56	1.00	3/4	4 1/4	4 1/4	8	0.5	10	0.8	37	5	9
3/4	0.75	0.74	5.12	1.00	1.69	1.81	2.25	5.12	4	0.88	3.50	2.25	1.81	1.00	3/4	4 1/2	4 1/2	10	0.6	13	1	42	5.7	9
1	1.00	0.96	5.88	1.12	2.00	2.12	2.56	5.88	4	1.00	4.00	2.56	2.12	1.12	7/8	5	5	13	0.8	17	1.3	54	7.5	9
1 1/4	1.25	1.28	6.25	1.12	2.50	2.50	2.94	6.25	4	1.00	4.38	2.94	2.50	1.12	7/8	5	5	17	1	20	1.6	61	8.3	9
1 1/2	1.50	1.50	7.00	1.25	2.88	2.75	3.25	7.00	4	1.12	4.88	3.25	2.75	1.25	1	5 1/2	5 1/2	21	1.2	26	1.9	77	10	9
2	2.00	1.94	8.50	1.50	3.62	4.12	5.06	8.50	8	1.00	6.50	5.06	4.12	1.12	7/8	5 3/4	5 3/4	42	2.9	56	4.9	115	15	9
2 1/2	2.50	2.32	9.62	1.62	4.12	4.88	5.88	9.62	8	1.12	7.50	5.88	4.88	1.25	1	6 1/4	6 1/4	56	3.9	75	6.5	144	19	9
3	3.00	2.90	10.50	1.88	5.00	5.25	6.19	10.50	8	1.25	8.00	6.19	5.25	1.38	1 1/8	7	7	67	4.1	84	6.7	161	23	9
4	4.00	3.83	12.25	2.12	6.19	6.38	7.50	12.25	8	1.38	9.50	7.50	6.38	1.50	1 1/4	7 3/4	7 3/4	110	5.5	147	9.3	302	30	12
5	5.00	4.81	14.75	2.88	7.31	7.75	9.12	14.75	8	1.62	11.50	9.12	7.75	1.75	1 1/2	9 3/4	9 3/4	181	7.8	233	13	414	43	12
6	6.00	5.76	15.50	3.25	8.50	9.00	10.31	15.50	12	1.50	12.50	10.31	9.00	1.62	1 3/8	10 1/4	10 1/2	215	10	272	16	445	46	12
8	8.00	7.62	19.00	3.62	10.62	11.50	12.94	19.00	12	1.75	15.50	12.94	11.50	1.88	1 5/8	11 1/2	12 3/4	337	15	417	24	629	67	12
10	10.00	9.56	23.00	4.25	12.75	14.50	16.06	23.00	12	2.00	19.00	16.06	14.50	2.12	1 7/8	13 1/4	13 1/2	546	25	651	37	888	97	12
12	12.00	11.38	26.50	4.88	15.00	17.75	19.38	26.50	16	2.12	22.50	19.38	17.75	2.25	2	14 3/4	15 1/4	946	38	1148	55	1683	127	16
14	14.00	14.00	29.50	5.25	16.25	19.50	21.50	29.50	16	2.38	25.00	21.50	19.50	2.50	2 1/4	16	16 3/4	1116	41	1308	59	1929	150	16
16	16.00	16.00	32.50	5.75	18.50	21.75	23.88	32.50	16	2.62	27.75	23.88	21.75	2.75	2 1/2	17 1/2	18 1/2	1371	48	1588	70	2238	178	16
18	18.00	18.00	36.00	6.38	21.00	23.50	26.25	36.00	16	2.88	30.50	26.25	23.50	3.00	2 3/4	19 1/2	20 3/4	1674	51	1959	81	2629	216	16
20	20.00	20.00	38.75	7.00	23.00	25.25	28.12	38.75	16	3.12	32.75	28.12	25.25	3.25	3	21 1/4	22 1/4	1943	53	2241	87	2868	245	16
24	24.00	24.00	46.00	8.00	27.25	30.00	33.62	46.00	16	3.62	39.00	33.62	30.00	3.75	3 1/2	24 1/4	25 1/2	2936	72	3334	123	3819	343	16

DIMENSIONS ARE IN INCHES | WEIGHTS ARE IN POUNDS

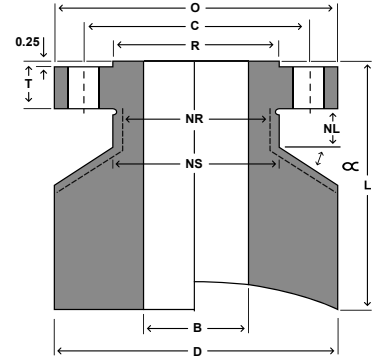
Class 2500 Standard Connection Specifications



LONG WELD NECK "LWN"



HEAVY BARREL "HB"



EQUAL BARREL "E"

Size		Flange				Barrel OD			Bolting			Nut			Stud Bolt			Weights						Length
Nom	Bore LWN & E	Bore HB	OD	Thk	RF of OD	LWN	HB	E	# of Holes	Hole Size	Bolt Circle	Stop Dia	Relief Dia	Relief Length	Size	RF Length	RTJ Length	LWN		HB		E		Base
	B	B	O	T	R	D	D	D			C	NS	NR	NL				Base	Per 1"	Base	Per 1"	Base	Per 1"	L
1/2	0.50	0.55	5.25	1.19	1.38	1.81	2.25	5.25	4	0.88	3.50	2.25	1.81	1.00	3/4	4 3/4	4 3/4	11	0.7	14	1.1	45	6.1	9
3/4	0.75	0.74	5.50	1.25	1.69	2.06	2.50	5.50	4	0.88	3.75	2.50	2.06	1.00	3/4	5	5	13	0.8	17	1.3	49	6.6	9
1	1.00	0.96	6.25	1.38	2.00	2.25	2.81	6.25	4	1.00	4.25	2.81	2.25	1.12	7/8	5 1/2	5 1/2	18	0.9	22	1.6	62	8.5	9
1 1/4	1.25	1.28	7.25	1.50	2.50	2.88	3.50	7.25	4	1.12	5.12	3.50	2.88	1.25	1	6	6	27	1.5	32	2.4	84	11	9
1 1/2	1.50	1.50	8.00	1.75	2.88	3.12	3.94	8.00	4	1.25	5.75	3.94	3.12	1.38	1 1/8	6 3/4	6 3/4	33	1.7	42	3	94	14	9
2	2.00	1.94	9.25	2.00	3.62	3.75	5.12	9.25	8	1.12	6.75	5.12	3.75	1.25	1	7	7	48	2.2	66	5	131	18	9
2 1/2	2.50	2.32	10.50	2.25	4.12	4.50	5.94	10.50	8	1.25	7.75	5.94	4.50	1.38	1 1/8	7 3/4	8	66	3.1	90	6.7	165	23	9
3	3.00	2.90	12.00	2.62	5.00	5.25	7.00	12.00	8	1.38	9.00	7.00	5.25	1.50	1 1/4	8 3/4	9	97	4.1	127	9	210	30	9
4	4.00	3.83	14.00	3.00	6.19	6.50	8.38	14.00	8	1.62	10.75	8.38	6.50	1.75	1 1/2	10	10 1/4	159	5.8	218	12	391	40	12
5	5.00	4.81	16.50	3.62	7.31	8.00	10.00	16.50	8	1.88	12.75	10.00	8.00	2.00	1 3/4	11 3/4	12 1/4	248	8.7	319	17	518	55	12
6	6.00	5.76	19.00	4.25	8.50	9.25	11.38	19.00	8	2.12	14.50	11.38	9.25	2.25	2	13 1/2	14	358	11	441	21	641	73	12
8	8.00	7.62	21.75	5.00	10.62	12.00	14.12	21.75	12	2.12	17.25	14.12	12.00	2.25	2	15	15 1/2	589	18	743	31	1167	92	16
10	10.00	9.56	26.50	6.50	12.75	14.75	17.38	26.50	12	2.62	21.25	17.38	14.75	2.75	2 1/2	19 1/4	20	997	26	1202	47	1625	134	16
12	12.00	11.38	30.00	7.25	15.00	17.38	20.12	30.00	12	2.88	24.38	20.12	17.38	3.00	2 3/4	21 1/4	22	1363	35	1609	61	1995	168	16

DIMENSIONS ARE IN INCHES | WEIGHTS ARE IN POUNDS