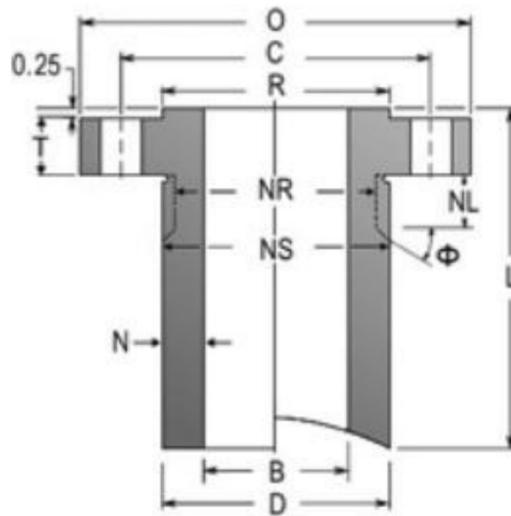
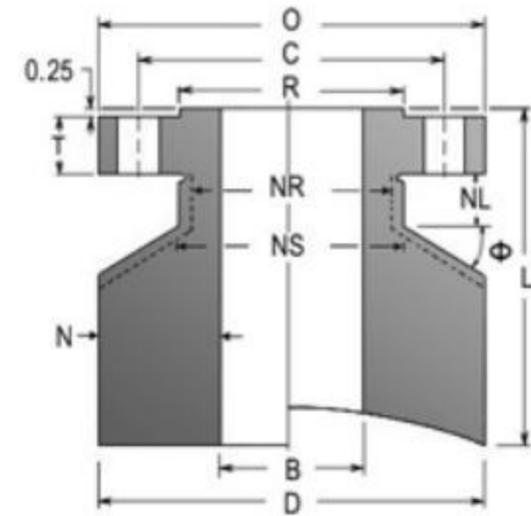


LONG WELD NECK "LWN"



HEAVY BARREL "HB"



EQUAL BARREL "E"

(enlarge)

(enlarge)

(enlarge)

Nom Size	Flange O.D.	Flange Thick.	RF O.D.	Barrel O.D.			Bore			Neck Thickness			Bolting		Nut			Stud Bolt			Weights						Length Base L
				LWN	HB	F	LWN/F	HB	LWN	HB	F	No. of Holes	Hole Size	Stop Dia.	Relief Dia.	Relief Length	Size	RF Length	RTJ Length	LWN		HB		E			
				D	D	D	B	B	N	N	N	C	NS	NR	NL	Base	Per 1"	Base	Per 1"	Base	Per 1"	Base	Per 1"				
1/2	3.75	0.56	1.38	1.50	1.75	3.75	0.50	0.55	0.50	0.60	1.63	4	0.62	2.62	1.75	1.50	0.75	.50	3	3	5	0.4	7	0.6	24	3.1	9
3/4	4.62	0.62	1.69	1.88	2.19	4.62	0.75	0.74	0.57	0.73	1.94	4	0.75	3.25	2.19	1.88	0.88	.63	3.50	3.50	8	0.7	11	0.9	37	4.6	9
1	4.88	0.69	2.00	2.12	2.44	4.88	1.00	0.96	0.56	0.74	1.94	4	0.75	3.50	2.44	2.12	0.88	.63	3.50	3.50	9	0.8	12	1.1	40	5.1	9
1 1/4	5.25	0.81	2.50	2.50	2.81	5.25	1.25	1.28	0.63	0.77	2.00	4	0.75	3.88	2.81	2.50	0.88	.63	3.75	3.75	13	1.0	15	1.4	45	5.8	9
1 1/2	6.12	0.88	2.88	2.75	3.25	6.12	1.50	1.50	0.63	0.88	2.31	4	0.88	4.50	3.25	2.75	1.00	.75	4.25	4.25	16	1.2	21	1.9	61	7.8	9
2	6.50	1.00	3.62	3.31	3.94	6.50	2.00	1.94	0.66	1.00	2.25	8	0.75	5.00	3.94	3.31	0.88	.63	4.25	4.25	20	1.5	29	2.6	68	8.5	9
2 1/2	7.50	1.12	4.12	3.94	4.63	7.50	2.50	2.32	0.72	1.15	2.50	8	0.88	5.88	4.63	3.94	1.00	.75	4.75	4.75	27	2.1	39	3.6	88	11	9
3	8.25	1.25	5.00	4.62	5.38	8.25	3.00	2.90	0.81	1.24	2.63	8	0.88	6.62	5.38	4.62	1.00	.75	5	5	36	2.7	50	4.6	104	13	9
3 1/2	9.00	1.38	5.50	5.25	5.81	9.00	3.50	3.36	0.88	1.23	2.75	8	1.00	7.25	5.81	5.25	1.12	.88	5.50	5.50	45	3.4	61	5.5	116	15	9
4	10.00	1.38	6.19	5.75	6.44	10.00	4.00	3.83	0.88	1.31	3.00	8	1.00	7.88	6.44	5.75	1.12	.88	5.50	5.50	65	3.8	93	6.5	197	19	12
5	11.00	1.50	7.31	7.00	7.81	11.00	5.00	4.81	1.00	1.50	3.00	8	1.00	9.25	7.81	7.00	1.12	.88	5.75	5.75	88	5.3	127	9.1	229	22	12
6	12.50	1.62	8.50	8.12	9.19	12.50	6.00	5.76	1.06	1.72	3.25	12	1.00	10.62	9.19	8.12	1.12	.88	6	6	110	6.7	169	12	286	27	12
8	15.00	1.88	10.62	10.25	11.38	15.00	8.00	7.62	1.13	1.88	3.50	12	1.12	13.00	11.38	10.25	1.25	1	6.75	6.75	154	9.1	233	17	379	36	12
10	17.50	2.12	12.75	12.62	13.44	17.50	10.00	9.56	1.31	1.94	3.75	16	1.25	15.25	13.44	12.62	1.38	1.13	7.50	7.50	218	13	298	21	475	46	12
12	20.50	2.25	15.00	14.75	15.75	20.50	12.00	11.38	1.38	2.19	4.25	16	1.38	17.75	15.75	14.75	1.50	1.25	8	8	285	16	401	28	627	62	12
14	23.00	2.38	16.25	16.75	18.25	23.00	14.00	14.00	1.38	2.13	4.50	20	1.38	20.25	18.25	16.75	1.50	1.25	8.25	8.25	336	19	467	32	758	74	12
16	25.50	2.50	18.50	19.00	20.31	25.50	16.00	16.00	1.50	2.16	4.75	20	1.50	22.50	20.31	19.00	1.62	1.38	8.75	8.75	418	23	542	37	884	88	12
18	28.00	2.62	21.00	21.00	22.56	28.00	18.00	18.00	1.50	2.28	5.00	24	1.50	24.75	22.56	21.00	1.62	1.38	9	9	482	26	645	43	1033	102	12
20	30.50	2.75	23.00	23.12	24.63	30.50	20.00	20.00	1.56	2.32	5.25	24	1.62	27.00	24.63	23.12	1.75	1.50	9.50	9.75	568	30	759	50	1165	118	12
24	36.00	3.00	27.25	27.62	29.25	36.00	24.00	24.00	1.81	2.63	6.00	24	1.88	32.00	29.25	27.62	2.00	1.75	10.5	11	804	42	1040	67	1540	160	12

**Codes:** All connections are manufactured in compliance with ASME Section II, Section VIII, Div. 1, and ASME B16.5. Products may be ordered to special requirements or other standard codes such as ASME Section I, III and Section VIII, Div. 2, ASME B31.1 and B16.47 Series A&B, API and ASTM.

**Materials:** SA 105 in accordance with ASME Section II. Other material grades and compositions available upon request. See technical section.

**Bores:** Bore sizes listed are standard, smaller or larger bores are available upon request.

**Facing:** The flange thickness "T" excludes 0.25 inch raised face per ASME B16.5. This differs on Class 150 and 300. Special facing can be supplied as needed upon request.

**Nut Relief:** All connections except standard LWN's will be supplied with a "nut stop O.D." unless a "nut relief O.D." is specified.

**Lengths:** Listed lengths are standards used for base weight calculations. Other lengths are available upon request.

Φ 30° Sect VIII DIV 1 • 45° Sect VIII DIV 2

Complete general notes on standard and variable body connections.