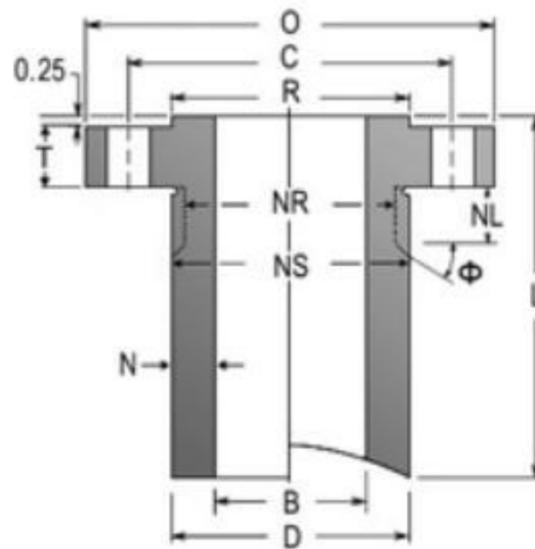
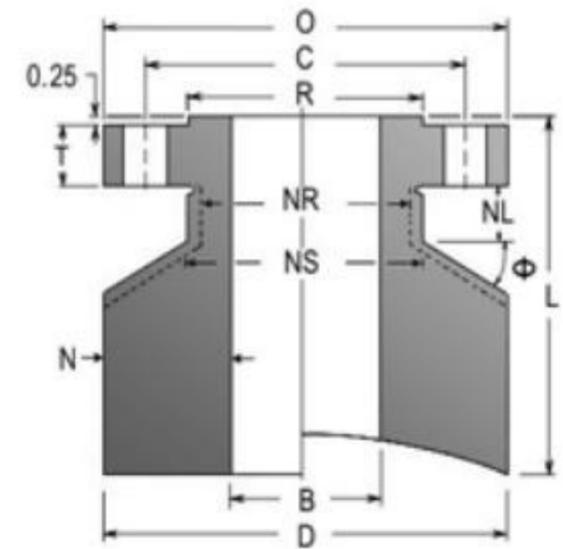


LONG WELD NECK "LWN"



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		
				LWN	HB	F	LWN/F	HB	LWN	HB	F	No. of Holes	Hole Size	Bolt Circle	Stop Dia.	Relief Dia.	Relief Length	Size	RF Length	RTJ Length	LWN		HB			E	
NPS	O	T	R	D	D	D	B	B	N	N	N		C	NS	NR	NL				Base	Per 1"	Base	Per 1"	Base	Per 1"	L	
1/2	4.75	0.88	1.38	1.56	2.00	4.75	0.50	0.55	0.53	0.73	2.13	4	0.88	3.25	2.00	1.56	1.00	.75	4.25	4.25	8	0.5	10	0.8	37	5.0	9
3/4	5.12	1.00	1.69	1.81	2.25	5.12	0.75	0.74	0.53	0.76	2.19	4	0.88	3.50	2.25	1.81	1.00	.75	4.50	4.50	10	0.6	13	1.0	42	5.7	9
1	5.88	1.12	2.00	2.12	2.56	5.88	1.00	0.96	0.56	0.80	2.44	4	1.00	4.00	2.56	2.12	1.12	.88	5	5	13	0.8	17	1.3	54	7.5	9
1 1/4	6.25	1.12	2.50	2.50	2.94	6.25	1.25	1.28	0.63	0.83	2.50	4	1.00	4.38	2.94	2.50	1.12	.88	5	5	17	1.0	20	1.6	61	8.3	9
1 1/2	7.00	1.25	2.88	2.75	3.25	7.00	1.50	1.50	0.63	0.88	2.75	4	1.12	4.88	3.25	2.75	1.25	1	5.50	5.50	21	1.2	26	1.9	77	10	9
2	8.50	1.50	3.62	4.12	5.06	8.50	2.00	1.94	1.06	1.56	3.25	8	1.00	6.50	5.06	4.12	1.12	.88	5.75	5.75	42	2.9	56	4.9	115	15	9
2 1/2	9.62	1.62	4.12	4.88	5.88	9.62	2.50	2.32	1.19	1.78	3.56	8	1.12	7.50	5.88	4.88	1.25	1	6.25	6.25	56	3.9	75	6.5	144	19	9
3	10.50	1.88	5.00	5.25	6.19	10.50	3.00	2.90	1.13	1.65	3.75	8	1.25	8.00	6.19	5.25	1.38	1.13	7	7	67	4.1	84	6.7	161	23	9
4	12.25	2.12	6.19	6.38	7.50	12.25	4.00	3.83	1.19	1.84	4.13	8	1.38	9.50	7.50	6.38	1.50	1.25	7.75	7.75	110	5.5	147	9.3	302	30	12
5	14.75	2.88	7.31	7.75	9.12	14.75	5.00	4.81	1.38	2.16	4.88	8	1.62	11.50	9.12	7.75	1.75	1.50	9.75	9.75	181	7.8	233	13	414	43	12
6	15.50	3.25	8.50	9.00	10.31	15.50	6.00	5.76	1.50	2.28	4.75	12	1.50	12.50	10.31	9.00	1.62	1.38	10.25	10.50	215	10	272	16	445	46	12
8	19.00	3.62	10.62	11.50	12.94	19.00	8.00	7.62	1.75	2.66	5.50	12	1.75	15.50	12.94	11.50	1.88	1.63	11.50	12.75	337	15	417	24	629	67	12
10	23.00	4.25	12.75	14.50	16.06	23.00	10.00	9.56	2.25	3.25	6.50	12	2.00	19.00	16.06	14.50	2.12	1.88	13.25	13.50	546	25	651	37	888	97	12
12	26.50	4.88	15.00	17.75	19.38	26.50	12.00	11.38	2.88	4.00	7.25	16	2.12	22.50	19.38	17.75	2.25	2	14.75	15.25	946	38	1148	55	1683	127	16
14	29.50	5.25	16.25	19.50	21.50	29.50	14.00	14.00	2.75	3.75	7.75	16	2.38	25.00	21.50	19.50	2.50	2.25	16	16.75	1116	41	1308	59	1929	150	16
16	32.50	5.75	18.50	21.75	23.88	32.50	16.00	16.00	2.88	3.94	8.25	16	2.62	27.75	23.88	21.75	2.75	2.50	17.50	18.50	1371	48	1588	70	2238	178	16
18	36.00	6.38	21.00	23.50	26.25	36.00	18.00	18.00	2.75	4.13	9.00	16	2.88	30.50	26.25	23.50	3.00	2.75	19.50	20.75	1674	51	1959	81	2629	216	16
20	38.75	7.00	23.00	25.25	28.12	38.75	20.00	20.00	2.63	4.06	9.38	16	3.12	32.75	28.12	25.25	3.25	3	21.25	22.25	1943	53	2241	87	2868	245	16
24	46.00	8.00	27.25	30.00	33.62	46.00	24.00	24.00	3.00	4.81	11.00	16	3.62	39.00	33.62	30.00	3.75	3.50	24.25	25.50	2936	72	3334	123	3819	343	16

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