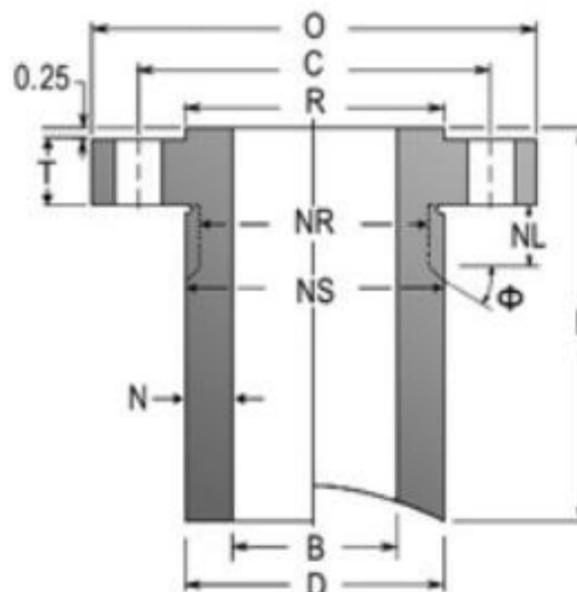
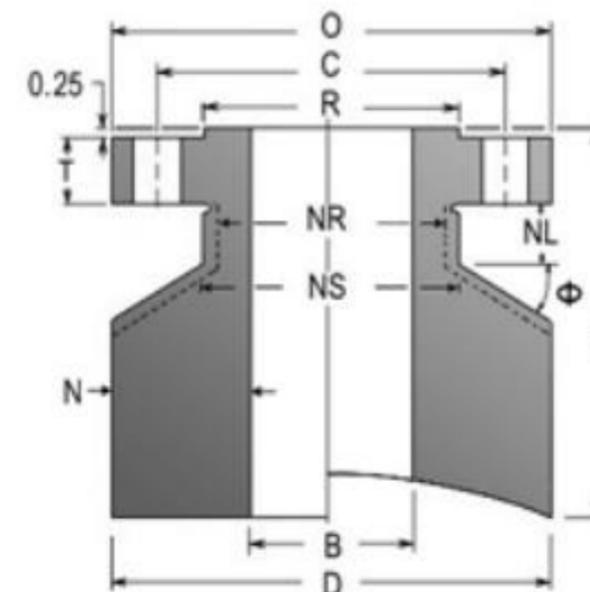


LONG WELD NECK "LWN"



HEAVY BARREL "HB"



EQUAL BARREL "E"

(enlarge)

(enlarge)

(enlarge)

Nom Size NPS	Flange O.D. O	Flange Thick. T	RF O.D. R	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	Bolt Circle C	Stop Dia. NS	Relief Dia. NR	Relief Length NL	Size	RF Length	RTJ Length	LWN		HB			E	
				D	D	D	B	B	N	N	N										Base	Per 1"	Base	Per 1"		Base	Per 1"
1/2	5.25	1.19	1.38	1.81	2.25	5.25	0.50	0.55	0.66	0.85	2.38	4	0.88	3.50	2.25	1.81	1.00	.75	4.75	4.75	11	0.7	14	1.1	45	6.1	9
3/4	5.50	1.25	1.69	2.06	2.50	5.50	0.75	0.74	0.66	0.88	2.38	4	0.88	3.75	2.50	2.06	1.00	.75	5	5	13	.08	17	1.3	49	6.6	9
1	6.25	1.38	2.00	2.25	2.81	6.25	1.00	0.76	0.63	0.93	2.63	4	1.00	4.25	2.81	2.25	1.12	.88	5.5	5.5	18	0.9	22	1.6	62	8.5	9
1 1/4	7.25	1.50	2.50	2.88	3.50	7.25	1.25	1.28	0.82	1.11	3.00	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	8.00	1.75	2.88	3.12	3.94	8.00	1.50	1.50	0.81	1.22	3.25	4	1.25	5.75	3.94	3.12	1.38	1.13	6.75	6.75	33	1.7	42	3.0	94	14	9
2	9.25	2.00	3.62	3.75	5.12	9.25	2.00	1.94	0.88	1.59	3.63	8	1.12	6.75	5.12	3.75	1.25	1	7	7	48	2.2	66	5.0	131	18	9
2 1/2	10.50	2.25	4.12	4.50	5.94	10.50	2.50	2.32	1.00	1.81	4.00	8	1.25	7.75	5.94	4.50	1.38	1.13	7.75	8	66	3.1	90	6.7	165	23	9
3	12.00	2.62	5.00	5.25	7.00	12.00	3.00	2.90	1.13	2.05	4.50	8	1.38	9.00	7.00	5.25	1.50	1.25	8.75	9	97	4.1	127	9	210	30	9
4	14.00	3.00	6.19	6.50	8.38	14.00	4.00	3.83	1.25	2.28	5.00	8	1.62	10.75	8.38	6.50	1.75	1.50	10	10.25	159	5.8	218	12	391	40	12
5	16.50	3.62	7.31	8.00	10.00	16.50	5.00	4.81	1.50	2.60	5.75	8	1.88	12.75	10.00	8.00	2.00	1.75	11.75	12.25	248	8.7	319	17	518	55	12
6	19.00	4.25	8.50	9.25	11.38	19.00	6.00	5.75	1.63	2.81	6.50	8	2.12	14.50	11.38	9.25	2.25	2	13.50	14	358	11	441	21	641	73	12
8	21.75	5.00	10.62	12.00	14.12	21.75	8.00	7.62	2.00	3.25	6.88	12	2.12	17.25	14.12	12.00	2.25	2	15	15.50	589	18	743	31	1167	92	16
10	26.50	6.50	12.75	14.75	17.38	26.50	10.00	9.56	2.38	3.91	8.25	12	2.62	21.25	17.38	14.75	2.75	2.50	19.25	20	997	26	1202	47	1625	134	16
12	30.00	7.25	15.00	17.38	20.12	30.00	12.00	11.38	2.69	4.37	9.00	12	2.88	24.38	20.12	17.38	3.00	2.75	21.25	22	1363	35	1609	61	1995	168	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