



(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	
				D	D	D	B	B	N	N	N	C	NS	NR	NL	Per 1"	Per 1"	Per 1"	Per 1"	Per 1"	Per 1"	Per 1"	L				
1/2	3.75	0.56	1.38	1.50	1.75	3.75	0.50	0.55	.050	.060	1.63	4	0.62	2.62	1.75	1.50	0.75	.50	2.50	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	3.50	9	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	3.25	3.50	9	0.8	12	1.1	40	5.1	9
1 1/4	5.25	0.75	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	3.25	3.75	13	1.0	15	1.4	45	5.8	9
1 1/2	6.12	0.81	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	3.50	4	15	1.2	21	1.9	61	7.8	9
2	6.50	0.88	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	3.50	4.25	20	1.5	28	2.6	68	8.5	9
2 1/2	7.50	1.00	4.12	3.94	4.62	7.50	2.50	2.32	0.72	1.15	2.50	8	0.88	5.88	4.62	3.94	1.00	.75	4	4.50	25	2.1	38	3.6	89	11	9
3	8.25	1.12	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	4.25	5	35	2.7	49	4.6	106	13	9
3 1/2	9.00	1.19	5.50	5.25	6.00	9.00	3.50	3.36	0.88	1.32	2.75	8	0.88	7.25	6.00	5.25	1.00	.75	4.25	5	42	3.4	59	5.5	122	15	9
4	10.00	1.25	6.19	5.75	6.62	10.00	4.00	3.83	0.88	1.40	3.00	8	0.88	7.88	6.62	5.75	1.00	.75	4.50	5.25	62	3.8	91	6.5	207	19	12
5	11.00	1.38	7.31	7.00	8.00	11.00	5.00	4.81	1.00	1.60	3.00	8	0.88	9.25	8.00	7.00	1.00	.75	4.75	5.25	84	5.3	124	9.1	241	21	12
6	12.50	1.44	8.50	8.12	9.38	12.50	6.00	5.76	1.06	1.81	3.25	12	0.88	10.62	9.38	8.12	1.00	.75	4.75	5.75	105	6.7	165	12	303	27	12
8	15.00	1.62	10.62	10.25	11.56	15.00	8.00	7.62	1.13	1.97	3.50	12	1.00	13.00	11.56	10.25	1.12	.88	5.50	6.25	148	9.1	228	17	405	36	12
10	17.50	1.88	12.75	12.62	13.62	17.50	10.00	9.56	1.31	2.03	3.75	16	1.12	15.25	13.62	12.62	1.25	1	6.25	7.25	210	13	291	21	499	46	12
12	20.50	2.00	15.00	14.75	15.94	20.50	12.00	11.38	1.38	2.28	4.25	16	1.25	17.75	15.94	14.75	1.38	1.13	6.75	7.50	275	16	392	28	651	61	12
14	23.00	2.12	16.25	16.75	18.44	23.00	14.00	14.00	1.38	2.22	4.50	20	1.25	20.25	18.44	16.75	1.38	1.13	7	7.75	324	19	456	32	785	74	12
16	25.50	2.25	18.50	19.00	20.50	25.50	16.00	16.00	1.50	2.25	4.75	20	1.38	22.50	20.50	19.00	1.50	1.25	7.50	8.50	404	23	529	37	914	88	12
18	28.00	2.38	21.00	21.00	22.75	28.00	18.00	18.00	1.50	2.38	5.00	24	1.38	24.75	22.75	21.00	1.50	1.25	7.75	8.25	465	26	630	43	1066	102	12
20	30.50	2.50	23.00	23.12	25.00	30.50	20.00	20.00	1.56	2.50	5.25	24	1.38	27.00	25.00	23.12	1.50	1.25	8.25	9.25	549	30	741	50	1228	118	12
24	36.00	2.75	27.25	27.62	29.62	36.00	24.00	24.00	1.81	2.81	6.00	24	1.62	32.00	29.62	27.62	1.75	1.50	9.25	10.25	778	42	1016	67	1627	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" includes 0.06 inch raised face per ASME B16.5. This differs on Class 400 and above. 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 I • 45° Sect VIII DIV 2

[Complete general notes on standard and variable body connections.](#)