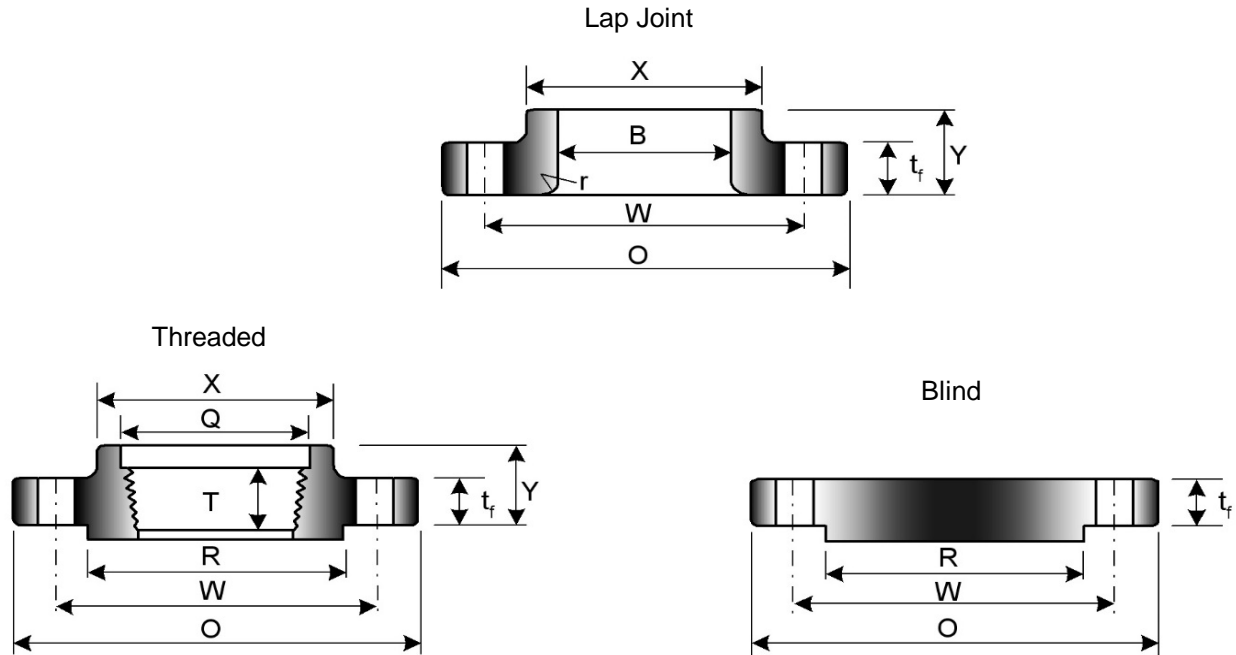


Nominal Pipe Size NPS	O.D. of Flange O	Thickness of Flange <sup>(1)</sup> $t_f$ (min)	Diameter of Hub X	Diameter at Bevel A	Length Through Hub			Diameter of Bore <sup>(2)</sup>			Thread Length <sup>(3)</sup> T (min)	Depth of Socket D
					W/N $\gamma$ <sup>(1)</sup>	S/O, Thrd. $\gamma$ <sup>(1)</sup>	Lap Joint $\gamma$ <sup>(1)</sup>	S/O, S/W B (min)	Lap Joint B (min)	Counter-bore Q (min)		
1/2	4.75	0.88	1.50	0.84	2.38	1.25	1.25	0.88	0.90	0.93	0.88	0.38
3/4	5.12	1.00	1.75	1.05	2.75	1.38	1.38	1.09	1.11	1.14	1.00	0.44
1	5.88	1.12	2.06	1.32	2.88	1.62	1.62	1.36	1.38	1.41	1.12	0.50
1 1/4	6.25	1.12	2.50	1.66	2.88	1.62	1.62	1.70	1.72	1.75	1.19	0.56
1 1/2	7.00	1.25	2.75	1.90	3.25	1.75	1.75	1.95	1.97	1.99	1.25	0.62
2	8.50	1.50	4.12	2.38	4.00	2.25	2.25	2.44	2.46	2.50	1.50	0.69
2 1/2	9.62	1.62	4.88	2.88	4.12	2.50	2.50	2.94	2.97	3.00	1.88	0.75
3	10.50	1.88	5.25	3.50	4.62	...	2.88	...	3.60	...	...	...
4	12.25	2.12	6.38	4.50	4.88	...	3.56	...	4.60	...	...	...
5	14.75	2.88	7.75	5.56	6.12	...	4.12	...	5.69	...	...	...
6	15.50	3.25	9.00	6.63	6.75	...	4.69	...	6.75	...	...	...
8	19.00	3.62	11.50	8.63	8.38	...	5.62	...	8.75	...	...	...
10	23.00	4.25	14.50	10.75	10.00	...	7.00	...	10.92	...	...	...
12	26.50	4.88	17.75	12.75	11.12	...	8.62	...	12.92	...	...	...
14	29.50	5.25	19.50	14.00	11.75	...	9.50	...	14.18	...	...	...
16	32.50	5.75	21.75	16.00	12.25	...	10.25	...	16.19	...	...	...
18	36.00	6.38	23.50	18.00	12.88	...	10.88	...	18.20	...	...	...
20	38.75	7.00	25.25	20.00	14.00	...	11.50	...	20.25	...	...	...
24	46.00	8.00	30.00	24.00	16.00	...	13.00	...	24.25	...	...	...

All dimensions are given in inches.



Corner Radius of Bore r	Diameter of RF R	Diameter of Bolt Circle W	Number of Bolt Holes	Diameter of Bolt Holes	Diameter of Bolts	Length of Studs <sup>(4)</sup>		Approximate Weight Each in Pounds				Nominal Pipe Size NPS
						0.25" RF	Ring Joint	Welding Neck	S/O, S/W, Threaded	Lap Joint	Blind	
0.12	1.38	3.25	4	0.88	3/4	4.25	4.25	5	4	4	4	1/2
0.12	1.69	3.50	4	0.88	3/4	4.50	4.50	6	5	5	6	3/4
0.12	2.00	4.00	4	1.00	7/8	5.00	5.00	9	8	8	8	1
0.19	2.50	4.38	4	1.00	7/8	5.00	5.00	10	9	9	9	1 1/4
0.25	2.88	4.88	4	1.12	1	5.50	5.50	13	12	12	13	1 1/2
0.31	3.62	6.50	8	1.00	7/8	5.75	5.75	25	25	25	25	2
0.31	4.12	7.50	8	1.12	1	6.25	6.25	36	36	35	35	2 1/2
0.38	5.00	8.00	8	1.25	1 1/8	7.00	7.00	48	...	47	48	3
0.44	6.19	9.50	8	1.38	1 1/4	7.75	7.75	73	...	75	73	4
0.44	7.31	11.50	8	1.62	1 1/2	9.75	9.75	130	...	140	140	5
0.50	8.50	12.50	12	1.50	1 3/8	10.25	10.50	165	...	170	160	6
0.50	10.62	15.50	12	1.75	1 5/8	11.50	11.75	275	...	285	300	8
0.50	12.75	19.00	12	2.00	1 7/8	13.25	13.50	455	...	485	510	10
0.50	15.00	22.50	16	2.12	2	14.75	15.25	690	...	630	690	12
0.50	16.25	25.00	16	2.38	2 1/4	16.00	16.75	940	...	890	975	14
0.50	18.50	27.75	16	2.62	2 1/2	17.50	18.50	1250	...	1150	1300	16
0.50	21.00	30.50	16	2.88	2 3/4	19.50	20.75	1625	...	1475	1750	18
0.50	23.00	32.75	16	3.12	3	21.25	22.25	2050	...	1775	2225	20
0.50	27.25	39.00	16	3.62	3 1/2	24.25	25.50	3325	...	2825	3625	24

**Notes:**

- (1) 1/4" RF not included in Flange Thickness (t<sub>f</sub>) and Length Through Hub (Y).
- (2) Bore diameter of Welding Neck Flange and small bore of Socket Weld Flange to be specified by purchaser.
- (3) Class 1500 Threaded Flanges are made with a counterbore. Threads are per ASME B1.20.1.
- (4) Stud lengths noted are thread to thread, and assume a 1/8" gasket thickness.