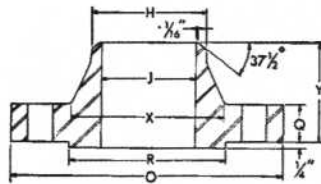
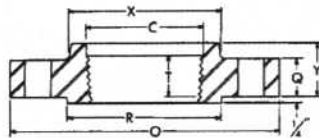


400 lb. flange

welding neck



threaded



manufacture: ★150 lb flanges are carbon steel furnished to ASTM specifications A105 grade 1. ASTM A105 is the same as Boiler Construction Code Specification SA105. Flanges furnished faced, drilled, and spot faced or back faced

dimensions: All dimensions are in inches and in accordance with ASA B16.5 where applicable. 22 inch is an interpolated dimension as given in MSS-SP-44. Sizes 26" to 42" have same flange drilling dimensions as 125 lb class cast iron flanges. ASA B16.1.

◆Flanges bored to dimensions shown, unless otherwise specified. Dimensions shown correspond to ASA B36.10 inside diameter of standard wall pipe.

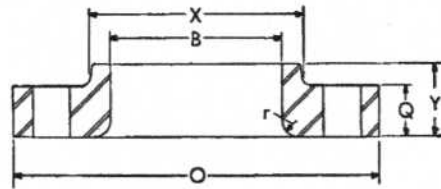
→ Thread lengths for 150 lb flanges are American Standard for Pipe Threads ASA B2.1. Add depths or height of facing to thread length.

→ Length shown does not include thickness of lap. For lapped to lapped, add thickness of both laps; for lapped to 1/8 inch raised face add one thickness of lap; for lapped to any other facing, add amount that such facing and one lap will cause the flanges to be separated.

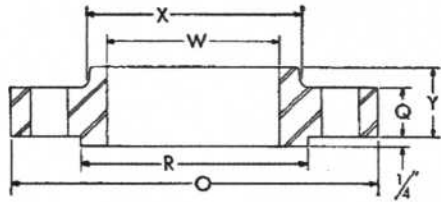
nominal pipe size	outside diam. of flange O	thickness of flange Q (min)	diam. of raised face R	diam. of hub at base X	no. of bolt holes	diam. of bolts ^m	diam. of bolt circle	length of bolts			length thru hub		
								stud ⁺		male & female, tongue & groove	welding neck Y	slip-on, th'rd Y	lap joint Y
								1/4" raised face	ring joint				
1/2	3 3/4	3/8	1 3/8	1 1/2	4	1/2	2 5/8	3	3	2 3/4	2 1/8	3/8	3/8
3/4	4 3/8	5/8	1 11/16	1 7/8	4	5/8	3 1/4	3 3/4	3 3/4	3	2 1/4	1	1
1	4 7/8	1 1/8	2	2 1/8	4	3/4	3 1/2	3 1/2	3 1/2	3 3/4	2 3/8	1 1/8	1 1/8
1 1/4	5 1/4	1 1/8	2 1/2	2 1/2	4	3/4	3 3/8	3 3/4	3 3/4	3 1/2	2 5/8	1 1/8	1 1/8
1 1/2	6 1/8	7/8	2 7/8	2 3/4	4	3/4	4 1/2	4	4	3 3/4	2 3/4	1 1/4	1 1/4
2	6 1/2	1	3 5/8	3 5/8	8	5/8	5	4	4 1/4	3 3/4	2 7/8	1 3/8	1 3/8
2 1/2	7 1/2	1 1/8	4 1/8	3 3/8	8	3/4	5 7/8	4 1/2	4 3/4	4 1/4	3 3/8	1 5/8	1 5/8
3	8 1/4	1 1/4	5	4 5/8	8	3/4	6 5/8	4 3/4	5	4 1/2	3 3/4	1 3/8	1 3/8
3 1/2	9	1 3/8	5 1/2	5 1/4	8	7/8	7 1/4	5 1/4	5 1/2	5	3 3/8	1 3/8	1 3/8
4	10	1 3/8	6 3/8	5 3/4	8	7/8	7 7/8	5 1/4	5 1/2	5	3 1/2	2	2
5	11	1 1/2	7 3/8	7	8	7/8	9 1/4	5 1/2	5 3/4	5 1/4	4	2 1/8	2 1/8
6	12 1/2	1 5/8	8 1/2	8 1/8	12	7/8	10 5/8	5 3/4	6	5 1/2	4 1/8	2 1/4	2 1/4
8	15	1 7/8	10 5/8	10 1/4	12	1	13	6 1/2	6 3/4	6 1/4	4 5/8	2 11/16	2 11/16
10	17 1/2	2 1/8	12 3/4	12 5/8	16	1 1/8	15 1/4	7 1/4	7 1/2	7	4 3/8	2 7/8	4
12	20 1/2	2 3/4	15	14 3/4	16	1 1/4	17 3/4	7 3/4	8	7 1/2	5 3/8	3 3/8	4 1/4
14	23	2 5/8	16 3/4	16 3/4	20	1 1/4	20 1/4	8	8 1/4	7 3/4	5 7/8	3 3/8	4 5/8
16	25 1/2	2 7/8	18 1/2	19	20	1 3/8	22 1/2	8 1/2	8 3/4	8 1/4	6	3 11/16	5
18	28	3	21	21	24	1 5/8	24 3/4	8 3/4	9	8 1/2	6 1/2	3 7/8	5 3/8
20	30 1/2	3 1/4	23	23 1/8	24	1 3/4	27	9 1/2	9 3/4	9 1/4	6 3/8	4	5 3/4
22	33	3 1/2	25 1/4	25 1/4	24	1 7/8	29 1/4	10	10 1/2	9 3/4	6 3/4	4 1/4	6
24	36	3 3/4	27 1/4	27 3/8	24	1 7/8	32	10 1/2	11	10 1/4	6 3/8	4 1/2	6 1/4
26	38 1/4	4	29 1/2	28 5/8	28	1 3/4	34 1/2	11 1/2	12	-----	7 5/8	7 5/8	-----
28	40 3/4	4 1/4	31 1/2	30 13/16	28	1 7/8	37	12 1/4	12 3/4	-----	8 3/8	8 3/8	-----
30	43	4 1/2	33 3/4	32 15/16	28	2	39 1/4	13	13 1/2	-----	8 7/8	8 7/8	-----
32	45 1/4	4 3/4	36	35	28	2	41 1/2	13 1/2	14 1/4	-----	9 1/4	9 1/4	-----
34	47 1/2	4 5/8	38	37 3/8	28	2	43 1/2	13 3/4	14 1/2	-----	9 1/2	9 1/2	-----
36	50	4 3/4	40 1/4	39 3/8	32	2	46	14	14 3/4	-----	9 3/8	9 3/8	-----

400 lb. flange

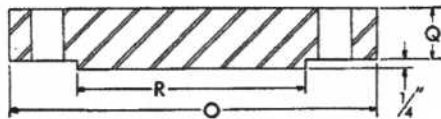
lap joint



slip-on



blind



nominal pipe size	diameter of bore				minimum thread length T+	diam. of hub at point of welding H	radius r	weight (approx.) lb			
	threaded counter bore C	lap joint B	slip-on W	welding neck J				welding neck	slip-on and threaded	lap joint	blind
1/2	.93	.90	.88	.55	3/8	.84	1/8	3	3	3	2
3/4	1.14	1.11	1.09	.74	3/8	1.05	1/8	4	3	3	3
1	1.41	1.38	1.36	.96	1/2	1.32	1/8	5	4	4	4
1 1/4	1.75	1.72	1.70	1.28	5/8	1.66	3/16	7	6	6	6
1 1/2	1.99	1.97	1.95	1.50	3/4	1.90	1/4	10	7	7	8
2	2.50	2.46	2.44	1.94	1 1/8	2.38	3/16	12	9	9	10
2 1/2	3.00	2.97	2.94	2.32	1 1/4	2.88	3/16	18	13	12	15
3	3.63	3.60	3.57	2.90	1 3/8	3.50	3/8	23	16	15	20
3 1/2	4.13	4.10	4.07	3.36	1 3/8	4.00	3/8	26	21	20	29
4	4.63	4.60	4.57	3.83	1 7/8	4.50	3/8	35	26	25	33
5	5.69	5.69	5.66	4.81	1 7/8	5.56	3/8	43	31	29	44
6	6.75	6.75	6.72	5.76	1 3/4	6.63	1/2	57	44	42	61
8	8.75	8.75	8.72	7.63	2	8.63	1/2	89	67	64	100
10	10.88	10.92	10.88	9.75	2 3/8	10.75	1/2	126	91	112	155
12	12.94	12.92	12.88	11.75	2 3/8	12.75	1/2	177	129	152	226
14	14.19	14.18	14.14	13.00	2 1/2	14.00	1/2	233	191	210	310
16	16.19	16.19	16.16	15.00	2 11/16	16.00	1/2	294	253	280	398
18	18.19	18.20	18.18	17.00	2 3/4	18.00	1/2	360	310	345	502
20	20.19	20.25	20.20	19.00	2 7/8	20.00	1/2	445	378	420	621
22	22.19	22.25	22.22	21.00	3 1/8	22.00	1/2	465	464	455	685
24	24.19	24.24	24.25	23.00	3 1/4	24.00	1/2	640	539	615	936
26	.....	.....	26.25	as	.....	26 3/8	.....	750	650	.....	1125
28	.....	.....	28.25	speci-	.....	28 3/8	.....	880	780	.....	1425
30	.....	.....	30.25	ified	.....	30 3/8	.....	1000	900	.....	1675
32	.....	.....	32.25	by	.....	32 3/8	.....	1150	1025	.....	1975
34	.....	.....	34.25	pur-	.....	34 3/8	.....	1300	1150	.....	2250
36	.....	.....	36.25	chaser	.....	36 3/8	.....	1475	1325	.....	2525