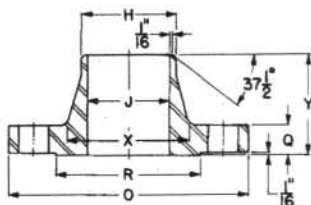
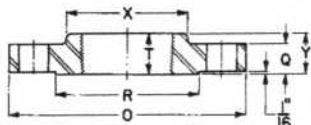


# 150 lb. flanges

## 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.

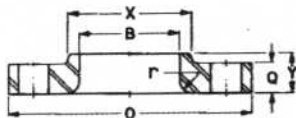
‡Lengths of alloy steel stud bolts include the thickness of two nuts, but do not include height of points.

‡Length shown does not include thickness of lap. For lapped to lapped, add thickness of both laps; for lapped to 1/16 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.

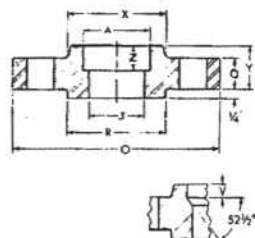
nominal pipe size	outside diam. of flange O	thick-ness of flange Q (min.)	diam. of raised face R	diam. of hub at base X	no. of bolt holes	diam. of bolts <sup>†</sup>	diam. of bolt circle	length of bolts			length thru hub		
								stud <sup>‡</sup>	ring joint	machine	weld- ing neck Y	slip-on, th'rd. socket Y	lap joint Y
1/2	3 1/2	3/16	1 3/8	1 3/16	4	1/2	2 3/8	2 1/4	-----	1 3/4	1 7/8	5/8	5/8
3/4	3 3/8	1/2	1 11/16	1 1/2	4	1/2	2 3/4	2 1/4	-----	2	2 1/16	3/8	3/8
1	4 1/4	5/16	2	1 15/16	4	1/2	3 1/8	2 1/2	3	2	2 3/16	1/16	1/16
1 1/4	4 3/8	3/8	2 1/2	2 3/16	4	1/2	3 1/2	2 1/2	3	2 1/4	2 1/4	1 3/16	1 3/16
1 1/2	5	1/16	2 7/8	2 3/16	4	1/2	3 3/8	2 3/4	3 1/4	2 1/4	2 2/16	7/8	7/8
2	6	3/4	3 3/8	3 1/16	4	3/8	4 3/4	3	3 1/2	2 3/4	2 1/2	1	1
2 1/2	7	7/8	4 1/8	3 3/16	4	3/8	5 1/2	3 1/4	3 3/4	3	2 3/4	1 1/8	1 1/8
3	7 1/2	1 1/16	5	4 1/4	4	3/8	6	3 1/2	4	3	2 3/4	1 3/16	1 3/16
3 1/2	8 1/2	1 1/16	5 1/2	4 13/16	8	3/8	7	3 1/2	4	3	2 13/16	1 1/4	1 1/4
4	9	1 1/16	6 3/16	5 3/16	8	3/8	7 1/2	3 1/2	4	3	3	1 3/16	1 3/16
5	10	1 1/16	7 3/16	6 3/16	8	3/4	8 1/2	3 3/4	4 1/4	3 1/4	3 1/2	1 3/16	1 3/16
6	11	1	8 1/2	7 1/16	8	3/4	9 1/2	3 3/4	4 1/4	3 1/4	3 1/2	1 3/16	1 3/16
8	13 1/2	1 1/4	10 3/8	9 11/16	8	3/4	11 3/4	4	4 1/2	3 1/2	4	1 3/4	1 3/4
10	16	1 3/16	12 3/4	12	12	7/8	14 1/4	4 1/2	5	3 3/4	4	1 5/16	1 5/16
12	19	1 1/4	15	14 3/8	12	7/8	17	4 1/2	5	4	4 1/2	2 3/16	2 3/16
14	21	1 3/8	16 3/4	15 3/4	12	1	18 3/4	5	5 1/2	4 1/4	5	2 1/4	3 1/8
16	23 1/2	1 3/16	18 1/2	18	16	1	21 1/4	5 1/4	5 3/4	4 1/2	5	2 1/2	3 1/16
18	25	1 3/16	21	19 7/8	16	1 1/8	22 3/4	5 3/4	6 1/4	4 3/4	5 1/2	2 11/16	3 13/16
20	27 1/2	1 11/16	23	22	20	1 1/8	25	6	6 1/2	5 1/4	5 11/16	2 7/8	4 1/16
22	29 1/2	1 3/8	25 1/4	24	20	1 1/4	27 1/4	6 1/2	7	5 1/2	5 7/8	3 1/8	4 1/4
24	32	1 3/8	27 1/4	26 1/8	20	1 1/4	29 1/2	6 3/4	7 1/4	5 3/4	6	3 1/4	4 3/8
26	34 1/4	2	29 1/4	28 1/2	24	1 1/4	31 3/4	7	-----	6	5	3 3/8	-----
28	36 1/2	2 1/16	31 1/4	30 3/4	28	1 1/4	34	7	-----	6	5 1/16	3 3/16	-----
30	38 3/4	2 1/8	33 3/4	32 3/4	28	1 1/4	36	7 1/4	-----	6 1/4	5 1/8	3 1/2	-----
32	41 3/4	2 1/4	35 3/4	35	28	1 1/2	38 1/2	8	-----	6 3/4	5 1/4	3 3/8	-----
34	43 3/4	2 3/16	37 3/4	37	32	1 1/2	40 1/2	8	-----	7	5 5/16	3 11/16	-----
36	46	2 3/8	40 1/4	39 1/4	32	1 1/2	42 3/4	8 1/4	-----	7	5 3/8	3 3/4	-----
42	53	2 3/8	47	46	36	1 1/2	49 1/2	8 3/4	-----	7 1/2	5 3/8	4	-----

# 150 lb. flanges

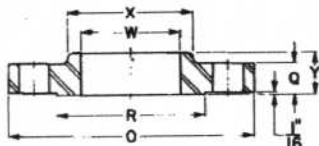
lap joint



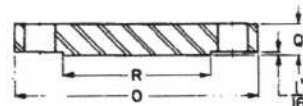
socket type



slip-on



blind



nominal pipe size	diameter of bore			minimum thread length T+	diam. of hub at point of welding H	radius r	depth of socket Z	depth of socket V	weight (approx.) lb				
	lap joint B	slip-on socket W	welding neck socket J						welding neck	slip-on and threaded	lap joint	blind	socket
1/2	.90	.88	.62	3/8	.84	1/8	3/8	3/16	2	2	2	2	2
3/4	1.11	1.09	.82	3/8	1.05	1/8	3/8	1/8	2	2	2	2	2
1	1.38	1.36	1.05	1/2	1.32	1/8	1/2	1/8	2 1/2	2	2	2	2
1 1/4	1.72	1.70	1.38	13/16	1.66	3/16	3/8	3/16	2 1/2	3	3	3	3
1 1/2	1.97	1.95	1.61	3/8	1.90	1/4	3/8	3/16	4	3	3	3	3
2	2.46	2.44	2.07	1	2.38	3/16	1/2	1/4	6	5	5	4	5
2 1/2	2.97	2.94	2.47	1 1/8	2.88	3/16	3/4	1/4	10	7	7	7	7
3	3.60	3.57	3.07	1 3/16	3.50	3/8	13/16	1/4	11 1/4	8	8	9	8
3 1/2	4.10	4.07	3.55	1 1/4	4.00	3/8	3/4	3/16	12	11	11	13	11
4	4.60	4.57	4.03	1 3/8	4.50	3/16	1 1/2	3/8	15	13	13	17	13
5	5.69	5.66	5.05	1 3/8	5.56	3/16	1 3/4	1/2	19	15	15	20	15
6	6.75	6.72	6.07	1 3/8	6.63	1/2	1 7/8	3/16	24	19	19	26	19
8	8.75	8.72	7.98	1 3/4	8.63	1/2	2 1/4	3/8	39	30	30	45	30
10	10.92	10.88	10.02	1 7/8	10.75	1/2	2 3/4	3/4	52	43	43	70	43
12	12.92	12.88	12.00	2 1/16	12.75	1/2	3 1/8	1/2	80	64	64	110	64
14	14.18	14.14	13.25	2 1/4	14.00	1/2	3 1/2	3/8	120	85	99	131	85
16	16.19	16.16	15.25	2 1/2	16.00	1/2	3 3/4	1/2	127	93	128	170	93
18	18.20	18.18	17.25	2 5/8	18.00	1/2	4 1/8	1/2	140	120	146	209	120
20	20.25	20.20	19.25	2 3/4	20.00	1/2	4 1/2	1 1/8	170	155	185	272	155
22	22.25	22.22	21.25	3 1/8	22.00	1/2	4 3/4	1 1/4	224	159	245	333	185
24	24.25	24.25	23.25	3 1/4	24.00	1/2	5 1/8	1 1/2	260	210	260	411	210
26	-----	26.25	-----	-----	26.00	-----	-----	-----	300	250	-----	525	-----
28	-----	28.25	-----	-----	28.00	-----	-----	-----	315	285	-----	620	-----
30	-----	30.25	-----	-----	30.00	-----	-----	-----	360	315	-----	720	-----
32	-----	32.25	-----	-----	32.00	-----	-----	-----	435	395	-----	870	-----
34	-----	34.25	-----	-----	34.00	-----	-----	-----	465	420	-----	990	-----
36	-----	36.25	-----	-----	36.00	-----	-----	-----	520	480	-----	1125	-----
42	-----	42.25	-----	-----	42.00	-----	-----	-----	750	680	-----	1625	-----

as specified by purchaser