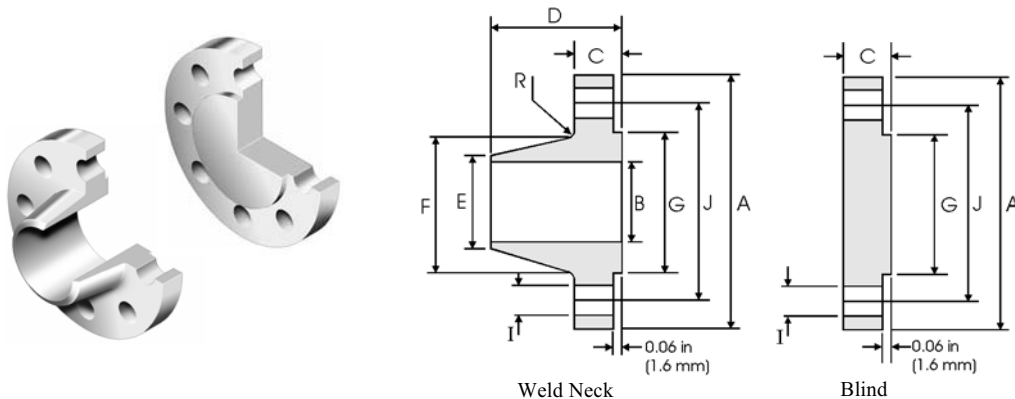


ASME B16.47 Series A (MSS SP-44) Flanges

ASME B16.47 (Large Diameter Steel Flanges) is a standard for large diameter steel pipe flanges sized from NPS 26 Through NPS 60. The latest version provides dimensions and ratings in both metric and inch units. The ASME B16.47 incorporate MSS SP-44: Steel Pipeline Flanges and API 605: Large Diameter Carbon Steel Flanges. Therefore, **the MSS SP-44** flanges are designated as **ASME B16.47 Series A flanges**, while API 605 flanges are designated as ASME B16.47 Series B flanges within this standard. Materials covered in this standard are as that in ASME B16.5 except for nickel alloys which means they share the same pressure-temperature chart for the selection of flange materials.



Class 150 lb

Pipe	Flange Data				Hub Data			Raised Face	Drilling Data			Radius
Nominal Pipe Size	A	C		D	E	F	G	H	I	J	R	
	Overall Diameter	WNF Flange Thickness min	Blind Flange Thickness min	Overall Length WNF	Diameter at Weld Bevel	Hub Diameter	Face Diameter	Number of Holes	Bolt Hole Diameter	Diameter of Circle of Holes	Fillet	
	in mm	in mm	in mm	in mm	in mm	in mm	in mm		in mm	in mm	in mm	
22	29.50 749.30	1.81 45.97	1.81 45.97	5.88 149.35	22.00 558.80	24.00 609.60	25.25 641.35	20	1.38 35.05	27.25 692.15	0.38 9.65	
26	34.25 869.95	2.69 68.33	2.69 68.33	4.75 120.65	26.00 660.40	26.62 676.15	29.50 749.30	24	1.38 35.05	31.75 806.45	0.38 9.65	
28	36.50 927.10	2.81 71.37	2.81 71.37	4.94 125.48	28.00 711.20	28.62 726.95	31.50 800.10	28	1.38 35.05	34.00 863.60	0.44 11.18	
30	38.75 984.25	2.94 74.68	2.94 74.68	5.38 136.65	30.00 762.00	30.75 781.05	33.75 857.25	28	1.38 35.05	36.00 914.40	0.44 11.18	
32	41.75 1060.5	3.19 81.03	3.19 81.03	5.69 144.53	32.00 812.80	32.75 831.85	36.00 914.40	28	1.62 41.15	38.50 977.90	0.44 11.18	
34	43.75 1111.3	3.25 82.55	3.25 82.55	5.88 149.35	34.00 863.60	34.75 882.65	38.00 965.20	32	1.62 41.15	40.50 1028.7	0.50 12.70	
36	46.00 1168.4	3.56 90.42	3.56 90.42	6.19 157.23	36.00 914.40	36.75 933.45	40.25 1022.4	32	1.62 41.15	42.75 1085.9	0.50 12.70	
38	48.75 1238.3	3.44 87.38	3.44 87.38	6.19 157.23	38.00 965.20	39.00 990.60	42.25 1073.2	32	1.62 41.15	45.25 1149.4	0.50 12.70	
40	50.75 1289.1	3.56 90.42	3.56 90.42	6.44 163.58	40.00 1016.0	41.00 1041.4	44.25 1124.0	36	1.62 41.15	47.25 1200.2	0.50 12.70	
42	53.00 1346.2	3.81 96.77	3.81 96.77	6.75 171.45	42.00 1066.8	43.00 1092.2	47.00 1193.8	36	1.62 41.15	49.50 1257.3	0.50 12.70	
44	55.25 1403.4	4.00 101.60	4.00 101.60	7.00 177.80	44.00 1117.6	45.00 1143.0	49.00 1244.6	40	1.62 41.15	51.75 1314.5	0.50 12.70	
46	57.25 1454.2	4.06 103.12	4.06 103.12	7.31 185.67	46.00 1168.4	47.12 1196.9	51.00 1295.4	40	1.62 41.15	53.75 1365.3	0.50 12.70	
48	59.50 1511.3	4.25 107.95	4.25 107.95	7.56 192.02	48.00 1219.2	49.12 1247.7	53.50 1358.9	44	1.62 41.15	56.00 1422.4	0.50 12.70	

Notes

- ASME B16.47 Series A flanges (\geq NPS 26) are MSS SP-44 flanges. MSS SP-44 also covers NPS 12 to NPS 24 flanges which are equivalent to ASME B16.5. MSS SP-44 is the only source for the NPS 22 flange dimensions above.
- Dimension B is to be specified by the purchaser. It corresponds to the pipe inside diameter.
- Flat face flanges may be provided at full thickness, C, or with raised face removed (the latter is nonstandard).
- WNF = Weld Neck Flange.
- The large end of the hub may be straight or tapered.
- For ring joint facings see page 8-6. For weld end bevel see page 8-5.
- For tolerances see page 8-4.