

# ASME B16.47 Series A Class 150 Flange Dimensions (NPS 26 to NPS 60)

Mounting dimensions for ASME B16.47 Series A Class 150 large-diameter weld-neck flanges: flange outside diameter, bolt-circle diameter, number of bolts, bolt-hole size and stud size.

ASME B16.47 covers steel pipe flanges from NPS 26 to NPS 60, the range above the NPS 24 ceiling of ASME B16.5. It defines two non-interchangeable series: Series A (the larger, more robust flange, formerly MSS SP-44) and Series B (a more compact flange with more, smaller bolts). The two series share neither the outside diameter nor the bolt pattern at a given NPS and rating, so the series must be confirmed before a flange is ordered or matched. The values below are the Series A Class 150 dimensions, cross-checked across two independent reference tables.

NPS	Flange OD O (mm)	Bolt circle (mm)	No. of bolts	Bolt hole (mm)	Stud size
NPS 26	870	806.4	24	35	1 1/4 in
NPS 28	925	863.6	28	35	1 1/4 in
NPS 30	985	914.4	28	35	1 1/4 in
NPS 32	1060	977.9	28	41.3	1 1/2 in
NPS 34	1110	1028.7	32	41.3	1 1/2 in
NPS 36	1170	1085.8	32	41.3	1 1/2 in
NPS 38	1240	1149.4	32	41.3	1 1/2 in
NPS 40	1290	1200.2	36	41.3	1 1/2 in
NPS 42	1345	1257.3	36	41.3	1 1/2 in
NPS 44	1405	1314.4	40	41.3	1 1/2 in
NPS 46	1455	1365.2	40	41.3	1 1/2 in
NPS 48	1510	1422.4	44	41.3	1 1/2 in
NPS 50	1570	1479.6	44	47.6	1 3/4 in
NPS 52	1625	1536.7	44	47.6	1 3/4 in
NPS 54	1685	1593.8	44	47.6	1 3/4 in
NPS 56	1745	1651.0	48	47.6	1 3/4 in
NPS 58	1805	1708.2	48	47.6	1 3/4 in
NPS 60	1855	1759.0	52	47.6	1 3/4 in

Bolt holes are drilled on the bolt circle, straight through the flange. The 35 mm (1 3/8 in) hole takes a 1 1/4 in stud. Outside-diameter figures are nominal; the thickness is given in the ASME B16.47 Series A table or the ASME B16.47 Series B table.

## Reading the dimensions

- Flange OD O — the overall diameter of the flange.
- Bolt circle — the diameter of the circle through the centers of the bolts. This is the figure to lay out or check when ordering a flange.
- Number of bolts — equally spaced bolts at NPS 26 to 52 at NPS 60.
- Bolt hole — the drilled hole diameter for the bolts on the flanges up.
- Stud size — the diameter of the studs used to bolt the flanges up. Use the full set; do not part-populate.

Flange thickness and hub dimension are not shown in the table. The published columns differ between ASME B16.47 Series A table or the ASME B16.47 Series B table.

## Selecting and matching

Two flanges bolt together only when the flange dimensions match.

before ordering. A B16.47 Series A flange is a common choice where a Series A flange saves weight and bolt-up effort when (Class 150 here) sets the bolt circle dimensions above are for the weld-neck diameter, bolt circle, bolt hole, bolt circle

---

Reference compiled by cBallast from ASME reference tables. Dimensions are nominal and the specific flange maker's current data sheet owners.