

PN25 Flange Dimensions (EN 1092-1 Type 11, DN10 to DN350)

Mounting dimensions for PN25 weld-neck flanges to EN 1092-1: flange outside diameter, bolt-circle diameter, bolt-hole size, number of bolts and bolt size.

PN25 is the EN 1092-1 pressure rating for a nominal 25 bar flange and a common medium-pressure rating for water, steam and process service that sits between PN16 and PN40. The PN number fixes the bolt pattern, so a PN25 DN100 flange from any maker shares the same 235 mm outside diameter, 190 mm bolt circle and eight M20 bolts. The values below are the EN 1092-1 nominal dimensions for the Type 11 raised-face weld-neck flange across the common DN10 to DN350 range, cross-checked across two independent reference tables.

DN	Flange OD D (mm)	Bolt circle K (mm)	Bolt hole (mm)	No. of bolts	Bolt size
DN10	90	60	14	4	M12
DN15	95	65	14	4	M12
DN20	105	75	14	4	M12
DN25	115	85	14	4	M12
DN32	140	100	18	4	M16
DN40	150	110	18	4	M16
DN50	165	125	18	4	M16
DN65	185	145	18	8	M16
DN80	200	160	18	8	M16
DN100	235	190	22	8	M20
DN125	270	220	26	8	M24
DN150	300	250	26	8	M24
DN200	360	310	26	12	M24
DN250	425	370	30	12	M27
DN300	485	430	30	16	M27
DN350	555	490	33	16	M30

Bolt holes are drilled on the bolt circle. 14 mm holes take M12, 18 mm M16, 22 mm M20, 26 mm M24, 30 mm M27, 33 mm M30. From DN100 to DN150 the two divergent holes are 12 x M27 on 320 mm).

Reading the dimensions

- D (flange outside diameter) — the gasket retainer envelope.
- K (bolt circle diameter) — the distance from the center of the flange to the center of the bolt hole. Use this figure to lay out or check the bolt pattern.
- Bolt hole — the drilled hole diameter.
- Number of bolts — always 4 for DN10 to DN50, 8 for DN65 to DN150, 12 for DN200, 16 for DN250 to DN300, 16 for DN350. Mating flanges share the same bolt pattern.
- Bolt size — the metric thread size.

Flange thickness is not tabled in EN 1092-1. The smaller DN, so a single thickness is used for all DN from the controlling EN 1092-1.

Selecting and matching

Two flanges bolt together only
four before ordering. A PN25
the same — the bolt circle, h
EN 1092-1 share the same K
dimensionally interchangeable
rating. EN 1092-1 also define
group, which set the gasket a
Type 11 weld-neck flange; bli
count and bolt size.

Reference compiled by cBallast fro
tables. Dimensions are nominal an
flange maker's current data sheet l