PN40 Flange Dimensions (EN 1092-1 Type 11, DN10 to DN350)

Mounting dimensions for PN40 weld-neck flanges to EN 1092-1: flange outside diameter, bolt-circle diameter, bolt-hole size, number of bolts and bolt size.

PN40 is the EN 1092-1 pressure rating for a nominal 40 bar flange and a common rating for higher-pressure water, steam and process service. The PN number fixes the bolt pattern, so a PN40 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 three 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	375	320	30	12	M27
DN250	450	385	33	12	M30
DN300	515	450	33	16	M30
DN350	580	510	36	16	M33

Bolt holes are drilled on the bolt ci
mm holes take M12, 18 mm M16,
matches PN16 and PN25; PN40 th
DN350.

Reading the dimensions

- D (flange outside diameter)
gasket retainer envelope.
- K (bolt circle diameter) — t
figure to lay out or check the
- Bolt hole — the drilled hole
flanges up.
- Number of bolts — always
mating flanges share the sam
- Bolt size — the metric threa

Flange thickness is not tablec
tables at the smaller DN, so a
a given DN from the controllin

Selecting and matching

Two flanges bolt together onl
four before ordering. A PN40
the bore is the same — the b
patterns in EN 1092-1 share
circle and bolt size. EN 1092-
flange material group, which
above are for the Type 11 we
bolt hole, bolt count and bolt

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