

Flange Quick Reference

ASME B16.5 scope and field-selection checklist

What ASME B16.5 covers

ASME B16.5 covers pressure-temperature ratings, materials, dimensions, tolerances, marking, testing, bolting, gaskets and flange joints for NPS 1/2 through 24. Classes include 150, 300, 400, 600, 900 and 1500 through NPS 24, and Class 2500 through NPS 12.

Item to confirm	Why it matters
NPS + pressure class	Defines the dimensional/rating family.
Flange facing	RF, FF, RTJ and other facing details affect gasket/joint selection.
Material group	Pressure-temperature rating depends on material group and temperature.
Design temperature	Do not treat pressure class as a fixed PSI rating.
Bolt count/diameter + bolt circle	Needed for field fit-up, bolting and flange identification.
Gasket type/material	Must suit facing, fluid, temperature and project requirements.
Applicable standard edition	Project specifications may invoke a particular edition/addenda.

Use: Field/office quick reference only. Verify the governing project specification, current code/standard edition, material, temperature, manufacturer data, and operator requirements before design, fabrication, bolting, pressure testing, or valve selection.

Official source: ASME B16.5-2025, Pipe Flanges and Flanged Fittings. This sheet intentionally does not reproduce proprietary dimensional tables.