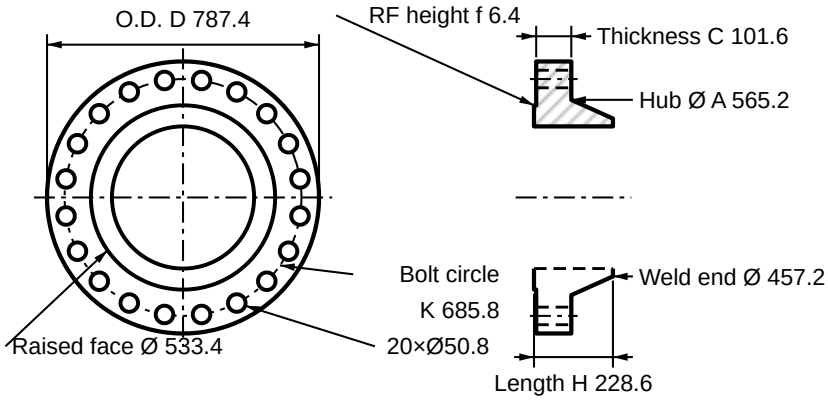
ASME B16.5 · ASME B16.5-2025

B16.5 Class 900 18″ Weld Neck

DN450 · Weld Neck · Dimensions mm · Weight kg

ASME B16.5 · 18″ (DN450) · Class 900 · Weld Neck Flange



Both views share one scale (1:15); schematic only

Unit: mm

Symbol	Item	Value
D	Outside diameter	787.4 mm
C	Flange thickness / blind thickness	101.6 mm
D2	Raised face diameter	533.4 mm
f	Raised face height	6.4 mm
K	Bolt circle diameter	685.8 mm
n	Number of bolt holes	20 pcs
d	Bolt hole diameter	50.8 mm
A	Hub diameter	565.2 mm
H	Hub length / overall length	228.6 mm
B	Welding-end diameter	457.2 mm
—	Approximate weight	308 kg

PRESSURE–TEMPERATURE RATINGS · CLASS 900 · GROUP 1.1

≤ 38 °C 153.1 bar	50 °C 149.3 bar	100 °C 140.1 bar	150 °C 135.2 bar
200 °C 131.5 bar	250 °C 125.9 bar	300 °C 119.7 bar	325 °C 116.0 bar
350 °C 112.9 bar	375 °C 109.2 bar	400 °C 103.9 bar	425 °C 86.2 bar
450 °C 68.9 bar	475 °C 52.5 bar	500 °C 34.6 bar	538 °C 17.4 bar

Source: Table 2-1.1 (printed p. 25) — pressure–temperature ratings for Group 1.1 materials, SI units; Group 1.1.

MATERIAL AND NOTES

Base material: ASTM A105 (North America, Middle East, South-East Asia)

Rating: ASME classes are not fixed pressures. For ASTM A105 (material group 1.1) the ASME B16.5-2025 ambient rating is 285 psi (19.6 bar) at Class 150, 740 psi (51.0 bar) at Class 300, 985 psi (68.0 bar) at Class 400, 1,480 psi (102.0 bar) at Class 600, 2,2…

Tolerances / marking: Tolerances, facing finish, material and marking requirements: ASME B16.5-2025 Sections 6 and 7.

NOTES / SPECIAL REQUIREMENTS

Work order _____ Inspector _____ Date _____ Travels with the part; file after inspection

Source: ASME B16.5-2025; dimensions transcribed from ASME B16.5-2025, verified 2026-11-04. Sheet #437.

This sheet is a factual compilation of published standards tables and is not a substitute for the standard itself. Verify dimensions and ratings against the edition named in your purchase specification before quoting, manufacturing or inspecting a critical part.

Scan to open