ASME B16.34 Pressure-Temperature Ratings Guide

BRONZE FARTAK INDUSTRIAL VALVE & PIPING SOLUTIONS

DOC CODE: STD-BF-ASME-1634 | CATEGORY: Standard Specification Reference | DATE: OCTOBER 2026

Design Standard: ASME B16.34 - 2020 Edition

Quality Verification: Certified 100% Hydrostatic & Pneumatic Tested under API 598 / ISO 5208

1. OVERVIEW & SCOPE

Engineering tables and calculation formulas for minimum body wall thicknesses, allowable stress, and pressure-temperature class boundaries across alloy groups.

2. TECHNICAL SPECIFICATIONS & DESIGN PARAMETERS

PARAMETER / CHARACTERISTIC	ENGINEERING VALUE / STANDARD RATING
Code Authority	The American Society of Mechanical Engineers (ASME)
Material Groups	Group 1 (Carbon Steels), Group 2 (Stainless), Group 3 (Non-Ferrous/Bronze)
Pressure Classes	Class 150, 300, 600, 900, 1500, 2500, 4500
End Flange Dimensions	Reference to ASME B16.5 and ASME B16.47 Series A & B
Butt-Weld End Prep	Reference to ASME B16.25 standard weld profiles
Special Class Rating	Calculations for non-destructive examined body castings

3. QUALITY ASSURANCE & INSPECTION CRITERIA

[+] Minimum Wall Thickness Verification

Calculated with strict safety coefficients to prevent deformation during pipeline loading.

[+] Aluminium Bronze Group 3.8 Rating

Specific pressure ratings defined for C95800 material from cryogenic to 260 deg C.

[+] NDT Radiographic Sampling

Volumetric examination rules applied to critical valve boundary castings.