Nominal Properties for All Alloys

Melting Point 1300°C (2370°F)
Thermal Conductivity 0.18 W/(cm·°C) (10.4 BTU/(hr· ft· °F))
Specific Heat 0.2 cal/(g·°C) (0.2 BTU/(lb·°F))
Coefficient of Thermal Expansion 11x10^{-6}/°C (6.1x10^{-6}/°F)
Poisson's Ratio 0.33
Electrical Resistivity 9x10^{-6}ohm-cm (35x10^{-6}ohm-in)
Magnetic? No
Magnetic Permeability <1.002
Magnetic Susceptibility 3x10^6 emu/g
Corrosion Similar to 300 series stainless steel. For specific compatibility data, consult Intrinsic Devices.

Austenitic Mechanical Properties

Yield Strength 415MPa (60kpsi)
Ultimate Tensile Strength 800MPa (115kpsi)
Elongation to Failure 25%
Young’s Modulus in Tension 75GPa (11x10^6psi)
Hardness 65 Ra

Alloy Specific Properties

<table>
<thead>
<tr>
<th>Alloy</th>
<th>C</th>
<th>H</th>
<th>D</th>
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</thead>
<tbody>
<tr>
<td>Composition (wt%)</td>
<td>Ti 45, Ni 52, Fe 3</td>
<td>Ti 38, Ni 48, Nb 14</td>
<td>Ti 45, Ni 55</td>
</tr>
<tr>
<td>Density</td>
<td>6.5g/cm³ (0.235 lb/in³)</td>
<td>6.74g/cm³ (0.244 lb/in³)</td>
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</table>

Note: All properties given are nominals for initial design purposes. Testing is required to qualify performance in specific applications. Always test for adequate clamping force at the minimum operating temperature of the assembly.

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