Key Features

- Commercially pure nickel
- Resistant to various reducing chemicals & caustic alkalies
- Good magnetostrictive properties
- High electrical and thermal conductivity
- Good ductility and low work hardening rate
- Good weldability and solderability

NICKEL® 200 available in:-

- Round wire
- Bars or lengths
- Flat wire
- Shaped wire
- Rope/Strand

Packaging

- Coils
- Spools
- Bars or lengths

Important
We will manufacture to your required mechanical properties.

Key advantages to you, our customer

- Range: 0.025mm to 21mm (.001" to .827")
- Order: 3m to 3t (10 ft to 6000 Lbs)
- Delivery: within 3 weeks
- Wire to your spec
- E.M.S available
- Technical support

*Trade name of Special Metals Group of Companies.

Manufacturing quality, delivering reliability | alloywire.com

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## Chemical Composition

<table>
<thead>
<tr>
<th>Element</th>
<th>Min %</th>
<th>Max %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ni</td>
<td>99.0</td>
<td>-</td>
</tr>
<tr>
<td>Cu</td>
<td>-</td>
<td>0.25</td>
</tr>
<tr>
<td>Fe</td>
<td>-</td>
<td>0.40</td>
</tr>
<tr>
<td>C</td>
<td>-</td>
<td>0.15</td>
</tr>
<tr>
<td>Si</td>
<td>-</td>
<td>0.35</td>
</tr>
<tr>
<td>Mn</td>
<td>-</td>
<td>0.35</td>
</tr>
<tr>
<td>Mg</td>
<td>-</td>
<td>0.20</td>
</tr>
<tr>
<td>Ti</td>
<td>-</td>
<td>0.10</td>
</tr>
<tr>
<td>S</td>
<td>-</td>
<td>0.01</td>
</tr>
<tr>
<td>Co</td>
<td>-</td>
<td>2.00</td>
</tr>
</tbody>
</table>

## Specifications

- ASTM B160
- ASTM B162
- BS 3075 NA11
- BS 3076 NA11
- UNS N02200
- AWS 070

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## Typical Applications

- Electronic components
- Electrical components
- Lead in wires for heating elements
- Battery connections/terminals
- Chemical processing
- Aerospace components
- Food processing
- Synthetic fibre processing

## Designations

- W.Nr. 2.4060
- W.Nr. 2.4066
- UNS N02200
- AWS 070

## Density

| Density | 8.89 g/cm³ | 0.321 lb/in³ |

## Melting Point

| Melting Point | 1446 °C | 2635 °F |

## Coefficient of Expansion

| Coefficient of Expansion | 13.3 μm/m °C (20 – 100 °C) | 7.4 x 10⁻⁶ in/in °F (70 – 212 °F) |

## Modulus of Rigidity

| Modulus of Rigidity | 81 kN/mm² | 11748 ksi |

## Modulus of Elasticity

| Modulus of Elasticity | 204 kN/mm² | 29588 ksi |

## Electrical Resistivity

| Electrical Resistivity | 9.6 μΩ • cm | 58 ohm • circ mil/ft |

## Thermal Conductivity

| Thermal Conductivity | 70.2 W/m • °C | 487 btu • in/ft² • h • °F |

## Properties

<table>
<thead>
<tr>
<th>Condition</th>
<th>Approx. tensile strength N/mm²</th>
<th>Approx. operating temperature ksi</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annealed</td>
<td>400 – 500</td>
<td>58 – 73</td>
</tr>
<tr>
<td>Hard Drawn</td>
<td>700 – 900</td>
<td>102 – 131</td>
</tr>
</tbody>
</table>

The above tensile strength ranges are typical. If you require different please ask.