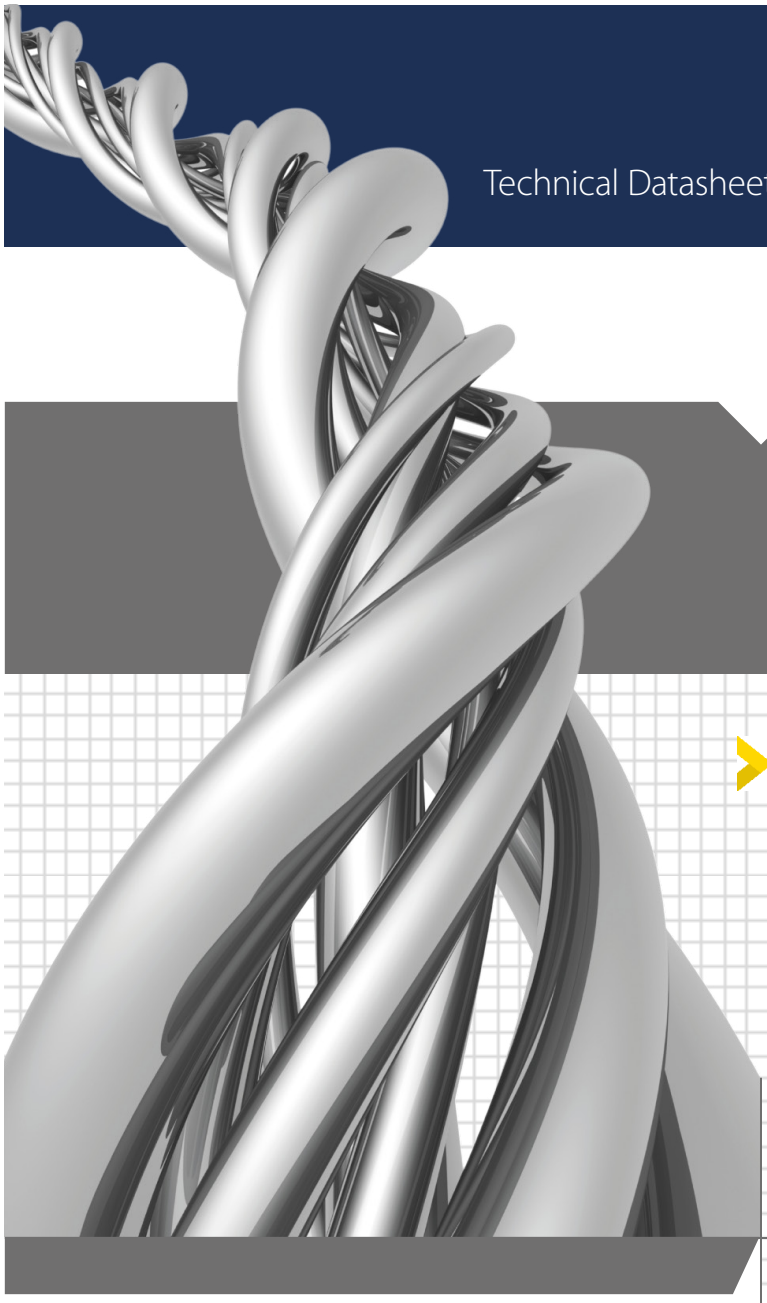


NICKEL® 200

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

IMPORTANT
We will manufacture to your required mechanical properties.

key advantages to you, *our customer*

RANGE
0.025mm to 21mm
(.001" to .827")

3m 3t
Order 3m to 3t
(10 ft to 6000 Lbs)

DELIVERY 3 WEEKS
Delivery:
within 3 weeks

Wire to your spec

E.M.S available

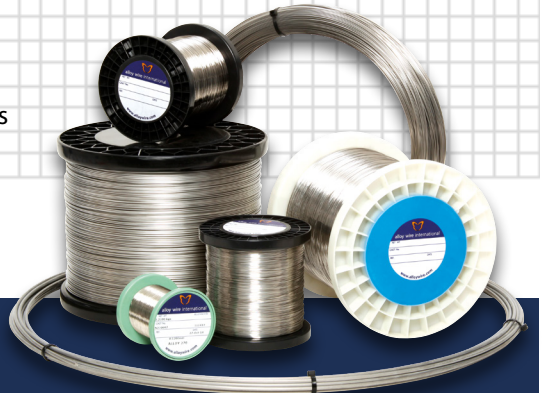
HOW CAN I HELP?
Technical support

NICKEL® 200 available in:-

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

Packaging

- Coils
- Spools
- Bars or lengths



*Trade name of Special Metals Group of Companies.

Technical Datasheet **AWS 070 Rev.2**

NICKEL® 200

alloy wire international

Chemical Composition		
Element	Min %	Max %
Ni	99.0	-
Cu	-	0.25
Fe	-	0.40
C	-	0.15
Si	-	0.35
Mn	-	0.35
Mg	-	0.20
Ti	-	0.10
S	-	0.01
Co	-	2.00

Specifications

ASTM B160
ASTM B162
BS 3075 NA11
BS 3076 NA11

Designations

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

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

Typical Applications

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

Density	8.89 g/cm^3	0.321 lb/in^3
Melting Point	1446 °C	2635 °F
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	81 kN/mm^2	11748 ksi
Modulus of Elasticity	204 kN/mm^2	29588 ksi

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

Thermal Conductivity	
70.2 W/m • °C	487 btu • in/ft^2 • h • °F

Properties			
Condition	**Approx. tensile strength**		**Approx. operating temperature**
	N/mm^2	**ksi**	
Annealed	<500	<73	Tensile strength and elongation drop significantly at temperatures above 315 °C (600 °F). Service temperature is dependent on environment, load and size range.
Hard Drawn	700 – 900	102 – 131	

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

Narrowboat Way, Hurst Business Park, Brierley Hill, West Midlands, DY5 1UF, UK
t +44 (0)1384 262022 e sales@alloywire.com w alloywire.com