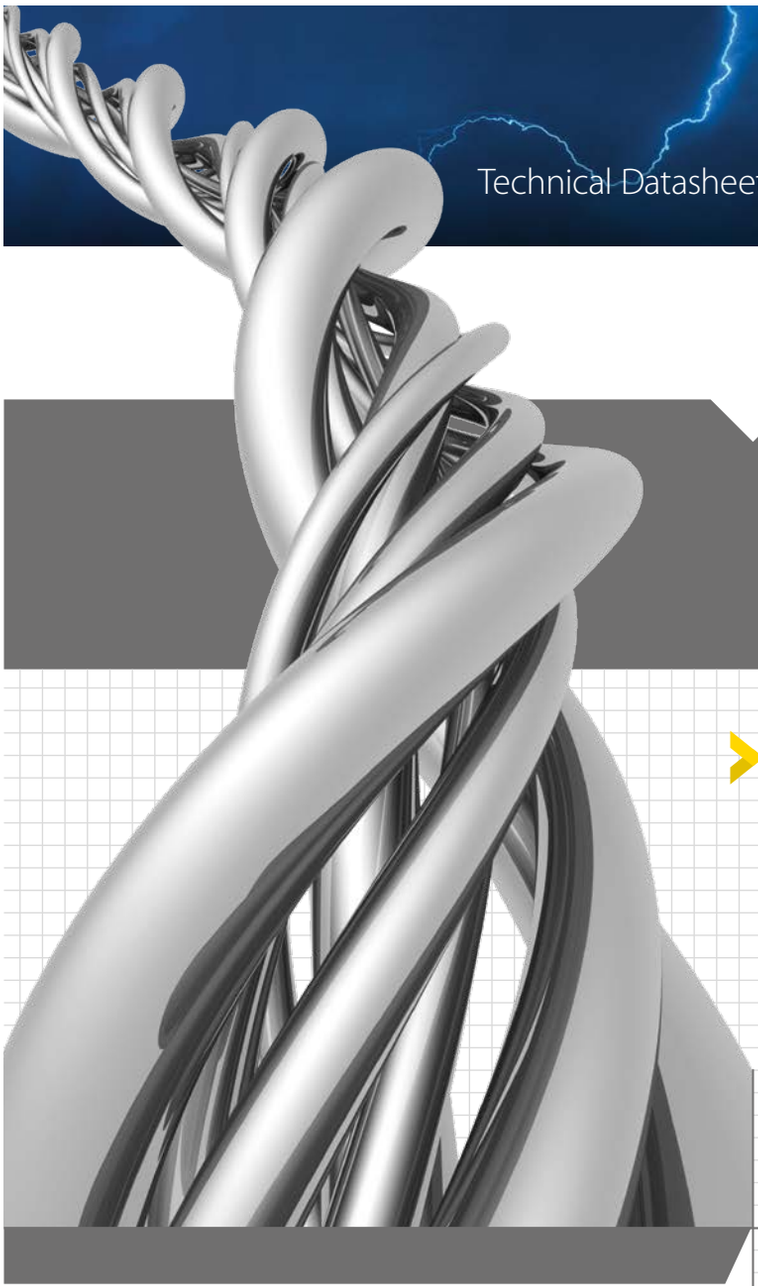
alloy wire® international



NICKEL® 201

Key Features

Low-carbon version of Nickel 200

Preferred to Nickel 200 for applications involving exposure to temperatures above 315 °C (600 °F)

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® 201 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 071 Rev.1**

NICKEL® 201

alloy wire international

Chemical Composition		
Element	Min %	Max %
Ni	99.0	-
Cu	-	0.25
Fe	-	0.40
C	-	0.02
Si	-	0.35
Mn	-	0.35
Mg	-	0.20
Ti	-	0.10
S	-	0.01
Co	-	2.00

Specifications

ASTM B160
ASTM B162
BS 3076 NA12

Designations

W.Nr. 2.4061
W.Nr. 2.4068
UNS N02201
AWS 071

Key Features

- Low-carbon version of Nickel 200
- Preferred to Nickel 200 for applications involving exposure to temperatures above 315 °C (600 °F)
- 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	13.1 µm/m °C (20 – 100 °C)	7.3 x 10^{-6} in/in °F (70 – 212 °F)
Modulus of Rigidity	82 kN/mm^2	11893 ksi
Modulus of Elasticity	207 kN/mm^2	30000 ksi

Electrical Resistivity	
8.5 µΩ • cm	51 ohm • circ mil/ft

Thermal Conductivity	
79.3 W/m • °C	550 btu • in/ft^2 • h • °F

Properties			
Condition	**Approx. tensile strength**		**Approx. operating temperature**
	N/mm^2	**ksi**	
Annealed	400 – 500	58 – 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