

80/20 Ni Cr Electrical Resistance Wire

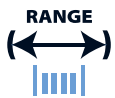
Key Features

Heating elements in both domestic and industrial appliances and in control resistors

IMPORTANT

We will manufacture to your required mechanical properties.

key advantages to you, *our customer*



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

80/20 Ni Cr available in:-

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

Packaging

- Coils
- Spools
- Bars or lengths



80/20 Ni Cr Electrical Resistance Wire

Chemical Composition			Designations	Typical Applications
Element	Min %	Max %	W.Nr. 2.4869 UNS N06003 AWS 180	Heating elements in both domestic and industrial appliances and in control resistors
C	-	0.15		
Si	0.50	2.00		
Mn	-	1.00		
P	-	0.02		
S	-	0.015		
Cr	19.00	21.00		
Ni	75.00	-		
Al	-	0.30		
Cu	-	0.50		
Fe	-	1.00		

Density	8.31 g/cm ³	0.300 lb/in ³
Electrical Resistivity at 20 °C	108 microhm • cm	650 ohm • Circ • mil/ft
Maximum Operating Temperature For use as a Heating Element For use in Hot Cutting, Fabrication – Line Bending	1200 °C 300 °C	2200 °F 572 °F
Melting Point	1400 °C	2550 °F
Coefficient of Expansion	12.5 µm/m °C (20 – 100 °C)	7.0 x 10 ⁻⁶ in/in °F (70 – 212 °F)

Temperature-Resistance Factor (F) At:												
20 °C	100 °C	200 °C	300 °C	400 °C	500 °C	600 °C	700 °C	800 °C	900 °C	1000 °C	1100 °C	1200 °C
68 °F	212 °F	392 °F	572 °F	752 °F	932 °F	1112 °F	1292 °F	1472 °F	1652 °F	1832 °F	2012 °F	2192 °F
1.00	1.006	1.015	1.028	1.045	1.065	1.068	1.057	1.051	1.052	1.062	1.071	1.080