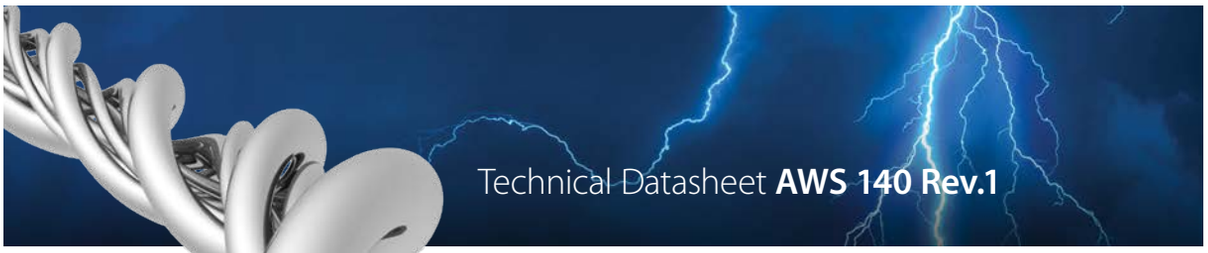


Technical Datasheet **AWS 140 Rev.1**

alloy wire international

BERYLLIUM COPPER CB 101

Key Features

Good conductor of electricity

Age hardenable

Good mechanical properties

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

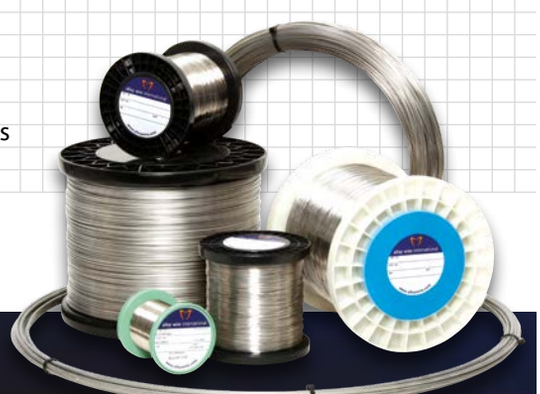
HOW CAN I HELP?
Technical support

BERYLLIUM COPPER CB 101 available in:-

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

Packaging

- Coils
- Spools
- Bars or lengths



Technical Datasheet **AWS 140 Rev.1**

BERYLLIUM COPPER CB 101

alloy wire international

Chemical Composition		
Element	Min %	Max %
Be	1.70	2.10
Fe	-	0.20
Ni	-	0.30
Co	-	0.30
Cu	BAL	

Specifications

ASTM B196
ASTM B197
BS 2873
BS EN 12166

Designations

W.Nr. 2.1247
UNS C17200
AWS 140

Key Features

Good conductor of electricity
Age hardenable
Good mechanical properties

Typical Applications

Springs
Electrical connectors and switches
Electronic components

Density	8.25 g/cm^3	0.298 lb/in^3
Melting Point	980 °C	1800 °F
Coefficient of Expansion	17.8 µm/m °C (20 – 100 °C)	9.9 x 10^{-6} in/in °F (70 – 212 °F)
Modulus of Rigidity	47 kN/mm^2	6817 ksi
Modulus of Elasticity	123 kN/mm^2	17840 ksi

Heat Treatment of Finished Parts					
Condition as supplied by Alloy Wire	**Type**	**Temperature**		**Time (Hr)**	**Cooling**
		°C	**°F**		
Annealed	Age Harden	315 – 320	600 – 610	3	Air
Spring Temper	Age Harden	315 – 320	600 – 610	2	Air

Properties				
Condition	**Approx. tensile strength**		**Approx. operating temperature**	
	N/mm^2	**ksi**	**°C**	**°F**
Annealed	400 – 600	58 – 87	up to +200	up to +390
Annealed + Aged	800 – 1200	116 – 174	up to +200	up to +390
Spring Temper	800 – 1200	116 – 174	up to +200	up to +390
Spring Temper + Aged	1200 – 1600	174 – 232	up to +200	up to +390

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

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