



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



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



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.2





Chemical Composition			Specifications	Key Features	Typical Applications
Element	Min %	Max %	ASTM B196	Good conductor of electricity	Springs
Be	1.70	2.10	ASTM B197 BS 2873	Age hardenable Good mechanical properties	Electrical connectors and switches Electronic components
Fe	-	0.20	BS EN 12166		
Ni	-	0.30	Designations		
Со	-	0.30	W.Nr. 2.1247		
Cu	Cu BAL		UNS C17200 AWS 140		

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/mm²	6817 ksi	
Modulus of Elasticity	123 kN/mm²	17840 ksi	

Heat Treatment of Finished Parts							
Condition or complication Allera Miles	Туре	Temperature		Time - (11a)	Carlina.		
Condition as supplied by Alloy Wire		°C	°F	Time (Hr)	Cooling		
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				
Condition	N/mm²	ksi	°C	°F			
Annealed	<600	<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			

 $\label{thm:continuous} The above tensile strength \ ranges \ are \ typical. \ If \ you \ require \ different \ please \ ask.$

ISO 9001 Quality Management