



C197 High Performance Alloy Wire

Alloy C197 is a high conductivity copper alloy possessing an excellent combination of strength, conductivity and softening resistance. This alloy can be substituted for medium tempers of brass and bronze when higher electrical conductivity is required or better solderability is needed. Alloy C197 is an improved version of alloy C194 and has substantially greater conductivity at the same strength levels.

Mechanical Properties				
Round Wire				
TEMPER NAME	TEMPER CODE	TENSILE STRENGTH (ksi)		MILL LIMITS
		MIN	MAX	
Annealed		39	47	.0010 - .1285 inch
1/4 Hard	H01	50	65	
1/2 Hard	H02	60	75	
3/4 Hard	H03	70	85	
Hard	H04	80	95	
Spring	H08	90		
Square Wire				
TEMPER NAME	TEMPER CODE	TENSILE STRENGTH (ksi)		MILL LIMITS
		MIN	MAX	
Annealed		39	47	.0100 - .0808 inch
1/4 Hard	H01	50	65	
1/2 Hard	H02	60	75	
3/4 Hard	H03	70	85	
Hard	H04	80	95	
Spring	H08	90		
Rolled Flat				
TEMPER NAME	TEMPER CODE	TENSILE STRENGTH (ksi)		MILL LIMITS
		MIN	MAX	
Annealed		43	53	Thickness: .0100 - .0500 inch Width: .0150 - .2500 inch
1/2 Hard	H02	53	63	
Hard	H04	60	70	
Spring	H08	70	76	
Physical Properties				
Melting Point (Liquidus)		1986°F		
Melting Point (Solidus)		1956°F		
Density		0.319 lbs/cu in		
Electrical Resistivity (Annealed)		15 ?(cir mil/ft) @ 68°F		
Electrical Conductivity (Annealed)		80		
Coefficient of Thermal Expansion		0.0000097°F (68-572°F)		
Modulus of Elasticity (Tension)		17200 ksi		

Custom constructions are available, please contact the sales department

The information provided on this page is for reference purposes only.

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