



## C194 Copper-Iron Alloy Wire

Alloy C194 is a first generation high performance alloy used worldwide. C194 combines good electrical conductivity with high tensile strength, good solderability and plateability. Applications include connectors, semiconductor pins and leadframes, sockets and mass terminations.

Mechanical Properties				
Round Wire				
TEMPER NAME	TEMPER CODE	TENSILE STRENGTH (ksi)		MILL LIMITS
		MIN	MAX	
Annealed		40	58	.0010 - .1285 inch
1/4 Hard	H01	50	65	
1/2 Hard	H02	60	75	
Hard	H04	70	85	
Extra Hard	H06	80	95	
Spring	H08	90		
Square Wire				
TEMPER NAME	TEMPER CODE	TENSILE STRENGTH (ksi)		MILL LIMITS
		MIN	MAX	
Annealed		40	58	.0100 - .0808 inch
1/4 Hard	H01	50	65	
1/2 Hard	H02	60	75	
Hard	H04	70	85	
Extra Hard	H06	80	95	
Spring	H08	90		
Rolled Flat				
TEMPER NAME	TEMPER CODE	TENSILE STRENGTH (ksi)		MILL LIMITS
		MIN	MAX	
Annealed		40	63	Thickness: .0100 - .0500 inch Width: .0150 - .2500 inch
1/2 Hard	H02	53	63	
Hard	H04	60	70	
Extra Hard	H06	67	73	
Spring	H08	70	76	
Extra Spring	H10	73	80	
Physical Properties				
Melting Point (Liquidis)		1990°F		
Melting Point (Solidus)		1980°F		
Density		0.322 lbs/cu in		
Electrical Resistivity (Annealed)		15 ?(cir mil/ft) @ 68°F		
Electrical Conductivity (Annealed)		65% IACS @ 68°F		
Thermal Conductivity (Solutionized-Aged)		150 Btu ft/sq ft hr °F @ 68°F		
Coefficient of Thermal Expansion		0.0000098°F (68-572°F)		
Modulus of Elasticity (Tension)		17500 ksi		
Modulus of Rigidity		6600 ksi		

**Custom constructions are available, please contact the sales department**

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

Fisk Alloy Wire, Inc. • P.O. Box 26 • 10 Thomas Road • Hawthorne, NJ 07507 U.S.A.  
Phone: 855-4PERCON (855-473-7266) • Fax (973) 427-4585 • E-mail: sales@fiskalloy.com