



C151 Zirconium Copper Alloy Wire

Alloy C151 has excellent solderability, high conductivity, and good strength. C151 has superior softening resistance compared to pure copper C110, which will soften upon heating, limiting the application environment. Applications can be found in high current interconnects, pin grids, welding wire, or other elevated temperature applications.

Mechanical Properties

Round Wire				
TEMPER NAME	TEMPER CODE	TENSILE STRENGTH (ksi)		MILL LIMITS
		MIN	MAX	
Annealed	OS015	34	40	.0010 - .1285 inch
1/4 Hard	H01	40	55	
1/2 Hard	H02	50	62	
Hard	H04	60	72	
Spring	H08	70		

Square Wire				
TEMPER NAME	TEMPER CODE	TENSILE STRENGTH (ksi)		MILL LIMITS
		MIN	MAX	
Annealed	OS015	34	40	.0100 - .0808 inch
1/4 Hard	H01	40	55	
1/2 Hard	H02	50	62	
Hard	H04	60	72	
Spring	H08	70		

Rolled Flat				
TEMPER NAME	TEMPER CODE	TENSILE STRENGTH (ksi)		MILL LIMITS
		MIN	MAX	
Annealed	OS015	37	42	Thickness: .0100 - .0500 inch Width: .0150 - .2500 inch
1/2 Hard	H02	43	51	
Hard	H04	53	62	
Spring	H08	64	71	

Physical Properties	
Melting Point (Liquidus)	2008°F
Melting Point (Solidus)	1886°F
Density	0.323 lbs/cu in
Electrical Resistivity (Annealed)	11.5 μ (cir mil/ft) @ 68°F
Electrical Conductivity (Annealed)	95% IACS @ 68°F
Coefficient of Thermal Expansion	0.0000098°F (68-572°F)
Modulus of Elasticity (Tension)	17500 ksi
Modulus of Rigidity	6730 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