



Conductor Facts / Conversion Factors

MULTIPLY	BY	TO OBTAIN
Tensile Strength – US/English		
Kilopounds per square inch (ksi)	0.7031	Kilograms per square millimeter (kg/mm ²)
Ohm-square millimeter per meter (Ω-mm ² /m)	6.8948	Megapascals (MPa) or Newtons per square millimeter (N/mm ²)
Tensile Strength – Metric		
Kilograms per square millimeter (kg/mm ²)	1422.3	Pounds per square inch (psi)
Megapascals (MPa)	0.145	Kilopounds per square inch (ksi)
Force – US/English		
Pound force (lb)	4.4482	Newton (N)
Force –Metric		
Newton (N)	0.22481	Pound force (lb)
Resistance – US/English		
Ohms per 1000 ft (Ω/mft)	3.2808	Ohms per kilometer (Ω/km)
Ohms per mile (Ω/mile)	0.62137	Ohms per kilometer (Ω/km)
Resistance – Metric		
Ohms per kilometer (Ω/km)	0.3048	Ohms per 1000 ft (Ω/mft)
Ohms per kilometer (Ω/km)	1.6093	Ohms per mile (Ω/mile)
Resistivity – US/English		
Ohm-circular mil per foot (Ω-cmil/ft)	0.16624	Micro-ohm centimeter (mΩ-cm)
Ohm-circular mil per foot (Ω-cmil/ft)	0.0016624	Ohm-square millimeter per meter (Ω-mm ² /m)
Ohm-circular mil per foot (Ω-cmil/ft)	0.065450	Micro-ohm inch (mΩ-in)
Micro-ohm-inch (mΩ-in)	15.279	Ohm-circular mil per foot (Ω-cmil/ft)
% IACS	1037.1 ÷ %IACS	Ohm-circular mil per foot (Ω-cmil/ft)

Custom constructions are available, please contact the sales department

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

MULTIPLY	BY	TO OBTAIN
Resistivity – Metric		
Micro-ohm centimeter (mΩ-cm)	6.0153	Ohm-circular mil per foot (Ω-cmil/ft)
Micro-ohm centimeter (mΩ-cm)	0.39370	Micro-ohm inch (mΩ-in)
Micro-ohm centimeter (mΩ-cm)	0.0100	Ohm-square millimeter per meter (Ω-mm ² /m)
Ohm-square millimeter per meter (Ω-mm ² /m)	601.54	Ohm-circular mil per foot (Ω-cmil/ft)
% IACS	172.41 ÷ %IACS	Micro-ohm centimeter (mΩ-cm)
Weight – US/English		
Pounds per 1000 ft (lbs/mft)	1.4882	Kilograms per kilometer (kg/km)
Weight – Metric		
Kilograms per kilometer (kg/km)	0.67197	Pounds per 1000 ft (lbs/mft)
Density – US/English		
Pounds per cubic inch (lb/in ³)	27.68	Grams per cubic centimeter (gm/cm ³)
Density – Metric		
Grams per cubic centimeter (gm/cm ³)	0.03613	Pounds per cubic inch (lb/in ³)
Cross-Sectional Area – US/English		
Circular mils (CMA or cmil)	0.0005067	Square millimeter (mm ²)
Square inches (in ²)	645.16	Square millimeter (mm ²)
Circular mils (CMA or cmil)	0.0000007854	Square inches (in ²)
Square inches (in ²)	1273240	Circular mils (CMA or cmil)
Cross-Sectional Area – Metric		
Square millimeter (mm ²)	1973.6	Circular mils (CMA or cmil)
Square millimeter (mm ²)	0.00155	Square inches (in ²)

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