

## BrushForm® 158 Strip - TM16 Temper

Materion Performance Alloys' BrushForm® 158 Strip is a high-performance, heat treated spinodal copper nickel tin alloy designed to provide optimal formability and strength characteristics. TM16 provides excellent flatness and stiffness coupled with high resistance to vibration, fatigue and impact loading. This makes it ideal for voice coil motor springs in optical image stabilization systems.

### CHEMICAL COMPOSITION (weight percent)

Alloy	Nickel	Tin	Copper
BrushForm® 158 Strip	14.5 - 15.5	7.5 - 8.5	Balance

### PHYSICAL PROPERTIES

Elastic Modulus	Density	Typical Electrical Conductivity	Coefficient of Thermal Expansion	Relative Magnetic Permeability	Poisson's Ratio
128 GPa	9.00 g/cm <sup>3</sup>	7% IACS 4 MS/m	16.4 ppm/°C	<1.01	0.3

### MECHANICAL PROPERTIES

Temper	Data Type	0.2% Offset Yield Strength (MPa)	Ultimate Tensile Strength (MPa)	Elongation (%) *	Hardness (HV)
TM16	Specification Range	1365-1462	1400-1510	1.0 min.	375-450
	Design/Engineering Nominal Value	1413	455	1.5	400

\* Percent elongation valid only for strip greater than 0.10 mm thick.

### STANDARD AVAILABILITY

Mill Hardened Tempered Strip: 0.025 mm – 0.12mm gauge.

### SPECIFICATIONS AND STANDARDS

UNS C72900, ASTM B740

## North American Service Centers – Sales Inquiries

For strip  $\leq 0.060$ " (1.5 mm) thick, wire  
and rod  $\leq 0.5$ " (12.7 mm) diameter:

### Elmhurst, IL

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## International Sales Offices

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## OTHER CONTACT INFORMATION

Technical Service	Properties, application and design assistance, fabrication and processing assistance, etc.	800-375-4205 +(1) 216-692-3108
International Sales World-wide Distribution	<a href="#">US distributors</a> <a href="#">International distributors</a>	

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### MATERION CORPORATION

[www.materion.com/alloys](http://www.materion.com/alloys)

### AD0119\_0817

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