



DATA SHEET

BrushForm® 96 Mill Hardened Tempers

Materion Brush Performance Alloys' BrushForm® 96 Strip is a high-performance, heat treatable spinodal copper nickel tin alloy designed to provide optimal formability and strength characteristics in conductive spring applications such as electronic connectors, switches, and sensors available in both pre-heat treated (mill hardened) and heat treatable (age hardenable) forms.

CHEMICAL COMPOSITION (weight percent)

Alloy	Nickel	Tin	Copper
BrushForm® 96	8.5 - 9.5	5.5 - 6.5	Balance

PHYSICAL PROPERTIES*

Elastic Modulus	Density	Typical Electrical Conductivity	Coefficient of Thermal Expansion	Relative Magnetic Permeability	Poisson's Ratio
18.0 x 10 ⁶ psi 124 GPa	0.322 lb/in ³ 8.91 g/cm ³	10% IACS 5.8 MS/m	9.0 ppm/°F 16.2 ppm/°C	<1.01	0.3

MECHANICAL PROPERTIES*

Temper	0.2% Offset Yield Strength ksi (MPa)	Ultimate Tensile Strength ksi (Mpa)	Minimum Elongation (%)*	Hardness (HV)	Minimum 90° Bend Formability R/T Ratio	
					Good Way (Longitudinal)	Bad Way (Transverse)
TM00	55 - 85 (379 - 586)	90 - 110 (621 - 758)	16	180 - 280	0.2	0.2
TM02	70 - 100 (483 - 689)	100 - 120 (689 - 827)	12	200 - 300	0.5	0.5
TM04	85 - 115 (586 - 793)	110 - 130 (758 - 896)	8	230 - 300	1.0	1.0
TM06	90 - 130 (621 - 896)	120 - 140 (827 - 965)	4	240 - 360	2.5	3.0
TM08	100 - 140 (689 - 965)	130 - 160 (896 - 1103)	-	260 - 380	5.0	7.0

*Percent elongation valid for strip 0.004" (0.10 mm) and thicker.

STANDARD AVAILABILITY

Mill Hardened Tempered Strip: 0.0015" (0.04mm) – 0.020" (0.5mm) gauge

SPECIFICATIONS

UNS C72700, ASTM B740

RELATED INFORMATION

Additional information on BrushForm® 96 availability, size capability and pricing can be obtained by calling 800-375-4205.