

BrushForm® 96 Cold Rolled 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. It is 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 106 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*

As Rolled Temper Designations for BrushForm® 96								
Standard Designation	ASTM Designation	Heat Treatment	0.2% YS ksi (MPa)	UTS ksi (Mpa)	Minimum Elongation (%)	Hardness (HV)	Minimum 90° Bend Formability R/T Ratio	
							Good Way (Longitudinal)	Bad Way (Transverse)
A	TB00	Cold Rolled	37 (255)	60 (414)	30	100 - 150	0.0	0.0
1/4H	TD01		53 (365)	75 (517)	16	125 min.	1.1	1.7
1/2H	TD02		67 (461)	85 (586)	8	-	1.5	2.0
H	TD04		88 (607)	100 (689)	3	175 - 275	3.0	6.0
EH	TD08		92 (634)	110 (758)	-	-	-	-
AT	TX00	2 hours @ 700° F (375°C)	75 (517)	100 (689)	15	250 - 340	-	-
1/4HT	TS01		90 (621)	115 (793)	10	230 - 330	-	-
1/2HT	TS02		100 (689)	125 (862)	6	280 - 330	-	-
HT	TS04		120 (827)	135 (931)	4	300 - 370	-	-

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

STANDARD AVAILABILITY Cold Rolled Temper 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.

North American Service Centers – Sales Inquiries

For strip, wire and rod under 0.4" (10 mm) diameter

Elmhurst, IL

TOLL FREE: 800.323.2438

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For plate, tube, bar, and rod 0.4" (10 mm) diameter and over

Warren, MI

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To obtain a complete list of Materion's global distributor/agent network, visit us online at www.materion.com/BrushAlloys/ContactUs.

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MATERION CORPORATION

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AD0081_0311

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