



Data Sheet

Product Description

EMS Material Designation	P3
ASTM Type	TM23
Number of layers	2
Standard Marking	TRUFLEX P3
Remarks	Uniform flexivity increase with increasing temperature



Chemical Composition

	Grade	Chemistry
High Expansion Alloy	Alloy P	72% Mn, 18% Cu, 10% Ni
Low Expansion Alloy	Alloy 30	42% Ni, Bal Fe

Thermostatic Properties

		ENGLISH		METRIC	
ASTM Flexivity	(50-200°F)	182	$\times 10^{-7}$ (in/in)/°F	--	
	(100-300°F)	185	$\times 10^{-7}$ (in/in)/°F	--	
Specific Curvature	(10-93°C)	--		32.8	$\times 10^{-6}$ (mm/mm)/°C
	(38-149°C)	--		33.3	$\times 10^{-6}$ (mm/mm)/°C
Maximum Sensitivity Temperature Range		200 to 600	°F	90 to 320	°C
Useful Deflection Temperature Range		-100 to 600	°F	-70 to 320	°C
Recommended Maximum Temperature		800	°F	430	°C
Electrical Resistivity @ 75°F (24°C)		542 to 588	OCMF*	0.901 to 0.977	μ ohms-m

Physical Properties

		ENGLISH		METRIC	
Density		0.276	Lb/in ³	7.64	g/cm ³
Modulus of Elasticity (E)		19.0	Msi	131	GPa

*Ohms-Circular-Mil / Foot