



Data Sheet

Product Description

EMS Material Designation	E1
ASTM Type	TM36
Number of layers	2
Standard Marking	TRUFLEX E1
Remarks	Good all purpose 0 to 300°F(-20 to 150°C) Higher Resistivity



Chemical Composition

High Expansion Alloy

Chemistry

25% Ni, 8.5% Cr, Bal Fe

Low Expansion Alloy

36% Ni, Bal Fe

Thermostatic Properties

	ENGLISH		METRIC	
ASTM Flexivity (100-300°F)	148	$\times 10^{-7}$ (in/in)/°F	--	
Specific Curvature (38-149°C)	--		23.9	$\times 10^{-6}$ (mm/mm)/°C
Maximum Sensitivity Temperature Range	0 to 300	°F	-20 to 150	°C
Useful Deflection Temperature Range	-100 to 700	°F	-70 to 370	°C
Recommended Maximum Temperature	1000	°F	540	°C
Electrical Resistivity @ 75°F (24°C)	485 to 515	OCMF*	0.806 to 0.856	μ ohms-m

Physical Properties

	ENGLISH		METRIC	
Density	0.295	Lb/in ³	8.16	g/cm ³
Modulus of Elasticity (E)	25	Msi	172	GPa

*Ohms-Circular-Mil / Foot

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