



## Data Sheet

### Product Description

EMS Material Designation	E4
ASTM Type	TM4
Number of layers	2
Standard Marking	TRUFLEX E4
Remarks	Best all purpose 250° to 700°F (120° to 370°C)



### Chemical Composition

	Grade	Chemistry
High Expansion Alloy	Alloy E	25% Ni, 8.5% Cr, Bal Fe
Low Expansion Alloy	Alloy 40	45% Ni, Bal Fe

### Thermostatic Properties

		ENGLISH		METRIC	
ASTM Flexivity	(50-200°F)	86	$\times 10^{-7}$ (in/in)/°F	--	
	(100-300°F)	86	$\times 10^{-7}$ (in/in)/°F	--	
Specific Curvature	(10-93°C)	--		15.5	$\times 10^{-6}$ (mm/mm)/°C
	(38-149°C)	--		15.5	$\times 10^{-6}$ (mm/mm)/°C
Maximum Sensitivity Temperature Range		250 to 700	°F	120 to 370	°C
Useful Deflection Temperature Range		-100 to 1000	°F	-70 to 540	°C
Recommended Maximum Temperature		1000	°F	540	°C
Electrical Resistivity @ 75°F (24°C)		384 to 416	OCMF*	0.638 to 0.691	$\mu$ ohms-m

### Physical Properties

	ENGLISH		METRIC	
Density	0.296	Lb/in <sup>3</sup>	8.18	g/cm <sup>3</sup>
Modulus of Elasticity (E)	25.0	Msi	172	GPa

\*Ohms-Circular-Mil / Foot