



Data Sheet

Product Description

EMS Material Designation	E3
ASTM Type	TM3
Number of layers	2
Standard Marking	TRUFLEX E3
Remarks	Good all purpose 200° to 600°F (93° to 316°C)



Chemical Composition

	<u>Grade</u>	<u>Chemistry</u>
High Expansion Alloy	Alloy E	25% Ni, 8.5% Cr, Bal Fe
Low Expansion Alloy	Alloy 30	42% Ni, Bal Fe

Thermostatic Properties

		ENGLISH		METRIC	
ASTM Flexivity	(50-200°F)	103	$\times 10^{-7}$ (in/in)/°F	--	
	(100-300°F)	106	$\times 10^{-7}$ (in/in)/°F	--	
Specific Curvature	(10-93°C)	--		18.5	$\times 10^{-6}$ (mm/mm)/°C
	(38-149°C)	--		19.1	$\times 10^{-6}$ (mm/mm)/°C
Maximum Sensitivity Temperature Range	200 to 600	°F		90 to 320	°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)	422 to 458	OCMF*		0.701 to 0.761	μ ohms-m

Physical Properties

		ENGLISH		METRIC	
Density	0.295	Lb/in ³		8.17	g/cm ³
Modulus of Elasticity (E)	25.0	Msi		172	GPa

*Ohms-Circular-Mil / Foot