



Data Sheet

Product Description

EMS Material Designation	C1
ASTM Type	TM35
Number of layers	2
Standard Marking	TRUFLEX C1
Remarks	High strength, all purpose 0 to 300°F (-20 to 150°C)



Chemical Composition

	Grade	Chemistry
High Expansion Alloy	Alloy C	19.4% Ni, 2.25% Cr, 0.5% C, Bal Fe
Low Expansion Alloy	Alloy 10	36% Ni, Bal Fe

Thermostatic Properties

		ENGLISH		METRIC	
ASTM Flexivity	(50-200°F)	152	$\times 10^{-7}$ (in/in)/°F	--	
	(100-300°F)	150	$\times 10^{-7}$ (in/in)/°F	--	
Specific Curvature	(10-93°C)	--		27.4	$\times 10^{-6}$ (mm/mm)/°C
	(38-149°C)	--		27.0	$\times 10^{-6}$ (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 350	°C
Recommended Maximum Temperature	1000	°F		540	°C
Electrical Resistivity @ 75°F (24°C)	468 to 497	OCMF*		0.778 to 0.826	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