



Data Sheet

Product Description

EMS Material Designation	C11
ASTM Type	TM19
Number of layers	2
Standard Marking	TRUFLEX C11
Remarks	High strength, all purpose 150 to 450 °F (65 to 232 °C)



Chemical Composition

	<u>Grade</u>	<u>Chemistry</u>
High Expansion Alloy	Alloy C	19.4% Ni, 2.25% Cr, 0.5% C, Bal Fe
Low Expansion Alloy	Alloy 11	38.65% Ni, Bal Fe

Thermostatic Properties

	ENGLISH		METRIC	
ASTM Flexivity (100-300 °F)	141	$\times 10^{-7}$ (in/in)/°F	--	
Specific Curvature (10-93 °C)	--		25.4	$\times 10^{-6}$ (mm/mm)/°C
Maximum Sensitivity Temperature Range	150 to 450	°F	66 to 232	°C
Useful Deflection Temperature Range	-100 to 900	°F	-73 to 482	°C
Recommended Maximum Temperature	1000	°F	540	°C
Electrical Resistivity @ 75 °F (24 °C)	433 to 479	OCMF*	0.720 to 0.796	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

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