Engineered Materials Solutions
Wickeder Group

Data Sheet

Product Description

EMS Material Designation	**S363**
ASTM Type	**--**
Number of layers	**4**
Standard Marking	**--**
Remarks	**Good corrosion resistance in aqueous environments**

Chemical Composition

	Grade	**Chemistry**
Corrosion Resistant Layer	**S30500**	12% Ni, 18.5%Cr, 0.8%Mn, 0.5%Si
High Expansion Layer	**Alloy B**	22% Ni, 3% Cr, Bal Fe
Low Expansion Alloy	**Alloy 10**	36% Ni, Bal Fe
Corrosion Resistant Layer	**S30100**	7% Ni, 16.7% Cr, 0.9% Mn, 0.5% Si

Thermostatic Properties

	ENGLISH		**METRIC**	
ASTM Flexivity (100-300°F)	115	x 10^{-7} (in/in)/°F	--	
Specific Curvature (10-93°C)	--		20.7	X 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)	456 to 494	OCMF*	0.758 to 0.821	μohms-m

Physical Properties

	ENGLISH		**METRIC**	
Density	0.292	Lb/in^3	8.08	g/cm^3
Modulus of Elasticity (E)	25.0	Msi	172	GPa

***Ohms-Circular-Mil / Foot**

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