aperan

Cold rolled strip Thermostatic bimetal - High Flexivity

BIMETAL

Aperam BIMETALS "SP series" are thermally the most active bimetal types. They are principally used in case where large deflection is required by a moderate temperature change of a small active length.

International standards

DIN-1715, ASTM-B388

Chemical composition

Passive Component Intermediate layer Active Component Fe Ni36 Fe Cu Mn Cu18 Ni10

Standard delivery & dimensions available

Form of delivery Marking		Thickness	Width	Length (Sheet)	Temper	
 Strip in standard coil Traverse wound spool Sheet 	By Etching I or Stamping	0.10 to 2 mm	1 to 300 mm	500 to 3500 mm	Hard	

Nominal values at room temperature

Aperam designation	Designation DIN (ASTM)	Spec thermal curvature (10e-06/K°)	Spec thermal deflection (10e-06/K°)	Linearity range (°C)	Upper limit (°C)	Electrical resistivity μΩ.m	Density g/cm3
IMPHY 108SP	TB20110 (TM2)	39.0 +/-4%	20.8	-20 to +200	350	1.10 +/-4%	7.6
IMPHY 140SP	(TM8)	28.6 +/-4%	15.5	-20 to +200	350	1.40 +/-5%	7.4
IMPHY 60SPS	TB2060	38.5 +/-4%	20.5	-20 to +200	350	0.580 +/-5%	7.8
IMPHY 50SPS	TB2050	38.5 +/-4%	20.5	-20 to +200	350	0.500 +/-5%	7.8
IMPHY 40SPS	TB2040	37.5 +/-4%	20.5	-20 to +200	350	0.415 +/-5%	7.8
IMPHY 30SP	TB2030	38.5 +/-4%	20.5	-20 to +200	350	0.300 +/-7%	7.8
IMPHY 25SP	TB2025	38.5 +/-4%	20.5	-20 to +200	350	0.250 +/-7%	7.8
IMPHY 20SP	TB2020	38.5 +/-4%	20.5	-20 to +200	350	0.208 +/-7%	7.8
IMPHY 15SP	TB2015	38.2 +/-4%	20.4	-20 to +200	350	0.150 +/-7%	7.8
IMPHY 11SP	TB2011	38.2 +/-4%	20.4	-20 to +200	350	0.115 +/-7%	7.9
IMPHY 10SP	TB2010	38.0 +/-4%	20.2	-20 to +200	350	0.010 +/-7%	7.9
IMPHY 8SP	TB2008	38.0 +/-4%	20.2	-20 to +200	350	0.082 +/-9%	8.0
IMPHY 5SP	TB1805 (TM31)	33.8 +/-4%	17.9	-20 to +200	350	0.048 +/-9%	8.2

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The data enclosed in this document are given as indicative values and correspond to our standard product. Different specific requirements are subject to discussion and formal approval by Aperam Alloys Imphy. For further information or special request, please contact us.

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