

Cold rolled strip

Thermostatic bimetal - Corrosion Resistance & Protection

BIMETAL

Aperam BIMETAL "IN540" find very wide application regarding its corrosion resistance, and is suitable for use in contact with water or steam atmosphere.

IMPHY IN540 - IMPHY S68 - IMPHY S9 grade serie is particularly suited for snap-acton discs.

IMPHY BS - IMPHY BS9 grade serie is particularly suited for large linearity range at high temperature.

International standards

DIN-1715, ASTM-B388

Chemical composition

		Fe Ni19 Cr7	Active side Fe Ni22 Cr3	Fe Ni Mn6
		IMPHY IN540		
Passive side	Fe Ni38 Cr7			
	Ni 36			IMPHY BS IMPHY BS9 (+Copper)
	Ni 39		IMPHY S75	
	Ni 40		IMPHY S9 (+Copper)	
	Ni 42		IMPHY S68	

Standard delivery & dimensions available

Form of delivery	Marking	Thickness	Width	Length (Sheet)	Temper
> Strip in standard coil > Traverse wound spool > Sheet	By Etching 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 IN540	-	18.5 +/-4%	10	-20 to +200	500	0.85 +/-5%	8.1
IMPHY S75	-	26.1 +/-4%	13.9	-20 to +300	400	0.75 +/-5%	8.15
IMPHY S68	TM 30	21.5 +/-4%	11.45	-20 to +380	450	0.68 +/-5%	8.1
IMPHY S9	-	24.5 +/-4%	13	-20 to +380	400	0.09 +/-7%	8.3
IMPHY BS	TB 1170A	22.0 +/-4%	11.7	-20 to +380	450	0.70 +/-5%	8.1
IMPHY BS9	TB 1109	21.8 +/-4%	11.6	-20 to +380	400	0.09 +/-7%	8.25

©May 2025, Aperam Alloys Imphy
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.
IMPHY® is a registered trademark of Aperam Alloys Imphy



www.aperam.com
nickel.alloys@aperam.com



Aperam Alloys Imphy
B.P. 1
Avenue Jean Jaurès
F- 58160 Imphy

Aperam Alloys Imphy