

Cold Rolled Strip

Thermostatic bimetal (large temperature range with higher degree of hardness)



Description, standards & chemical

Aperam BIMETALS “AS... series” has the same physical properties as “AS series”. One of the main difference between these two types, is the higher degree of hardness of active component. “R series” find very wide application regarding its high constant deflection, and its good transformation performance.

International standards

ASTM - B388

Chemical composition (% weight)

Passive Component	Fe Ni36
Intermediate layer	Fe - Ni - Cu
Active Component	Fe Ni22 Cr3

Standard delivery & dimensions available

Form of delivery	Marking	Thickness	Width	Length	Temper
<ul style="list-style-type: none"> Strip in standard coil Traverse wound spool Sheet 	By Etching or Stamping	0.10 to 2.0 mm	1.0 to 200 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 R80	TM 1	26.5 +/-4%	14.3	-20 to +200	450	0.79 +/-4%	8.1
IMPHY R50S	TM 15	26.1 +/-4%	13.9	-20 to +200	450	0.50 +/-5%	8.1
IMPHY R40S	TM 14	27.5 +/-4%	13.9	-20 to +200	450	0.42 +/-5%	8.2
IMPHY R30S	TM 12	24.8 +/-4%	13.9	-20 to +200	450	0.30 +/-5%	8.2
IMPHY R25	TM 11	24.2 +/-4%	12.9	-20 to +200	450	0.25 +/-5%	8.4
IMPHY R16	-	26.5 +/-4%	14.2	-20 to +200	350	0.168 +/-7%	8.3
IMPHY R15	TM 22	18.5 +/-4%	9.8	-20 to +200	450	0.158 +/-6%	8.5
IMPHY R11	-	26.1 +/-4%	14.0	-20 to +175	350	0.115 +/-7%	8.2
IMPHY R 8	-	26.1 +/-4%	13.9	-20 to +175	350	0.081 +/-7%	8.3
IMPHY R 6	-	25.5 +/-4%	13.5	-20 to +175	350	0.058 +/-7%	8.4
IMPHY R 4	-	24.7 +/-4%	13.0	-20 to +175	350	0.041 +/-7%	8.5

The data enclosed in this document are only 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.

Aperam Alloys Imphy

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

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