

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 (% weight)

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

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/cm ³ |
|--------------------|------------------------|------------------------------------|-------------------------------------|----------------------|------------------|-----------------------------|---------------------------|
| 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 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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