Description

AIB metal filament is a material that allows you to create decorative elements with the look and weight of metal. Printed details should be subjected to a grinding and polishing process to give the surface a shiny appearance. Filament designed for FFF/FDM printers, both with Bowden and Direct extruders.

Advantages

- Printed models look, feel and feel like metal
- High density
- Very good weather resistance

Identification

Name	AIB METAL
Color	Gray
Net weight	1 Kg
Diameter	1,75 ± 0,05 mm
Producer	AIB S.A

Recommended Print Settings

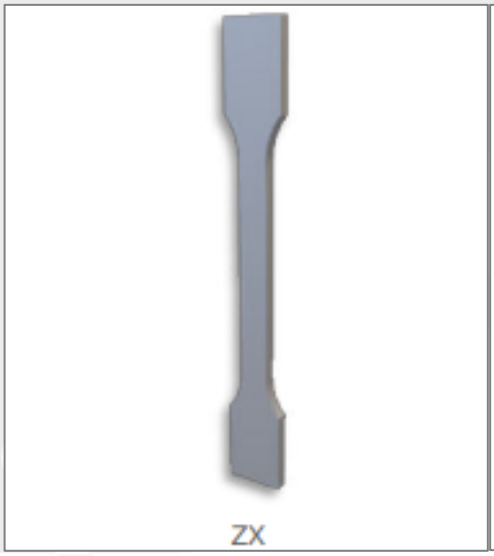
Nozzle temperature [°C]	235-250
Table temperature [°C]	80
Chamber temperature [°C]	Not required
Print speed [mm/s]	up to 150
Print cooling	Standard

Due to differences in the design of printers, the above data should be treated as guidelines and the appropriate values should be determined experimentally.

Technical data

Parameter	Method	Value
Tensile strength XY [MPa]	ISO 527-1	35 ± 2
Tensile strength ZX [MPa]	ISO 527-1	19 ± 2
Youngs Modulus [GPa]	ISO 527-1	1,5 ± 0,1
Elongation at Yield Point [%]	ISO 527-1	5,1 ± 0,1
Flexural Strength [MPa]	ISO 178	66 ± 2
Deflection at Flexural Strength [mm]	ISO 178	9,0 ± 0,1
Impact Strength Charpy Notched [kJ/m2]	ISO 179-1	6 ± 1
Density [g/cm^3]	ISO 1183	4,00
Glass Transition Temp. [°C]	DSC, ISO 11357	81

The Bambu Lab P1S printer was used to print the samples with the following settings: Layer height: 0.12 mm; Infill density: 100%; Infill pattern: Parallel lines; Number of strokes: 3; Compact top and bottom layers: 0; Nozzle temperature: 240 °C; Bed temperature: 80 °C; Other default parameters.



Waste management

The raw material from which the product was made is not classified as hazardous, and does not contain hazardous substances. Waste should be treated as plastic waste.

Safety tips

When using the product, general occupational health and safety guidelines apply.

Disclaimer

The results in this sheet are for informational and comparative purposes only. The results achieved depend largely on the print settings, operator experience and environmental conditions. Each person is responsible for determining the possibility of using the printed parts and the consequences. AIB SA assumes no liability for any bodily injury or material loss or any other damage related to the use of the material.