

# SELECTIVE LASER SINTERING PA 12 MINERAL-FILLED

Current Supplier's Material: PA 620-MF



## PRODUCT DESCRIPTION

This 25% mineral-filled nylon offers the highest stiffness among China Metal Parts' selective laser sintering materials. It's an excellent choice when stiffness and high temperature resistance are the most important requirements.

## APPLICATIONS

The material's stiffness and temperature resistance makes it suited for components like armatures and mounting plates.

## KEY PRODUCT BENEFITS

- Excellent strength to weight performance
- High temperature resistance
- Parts can be oriented to achieve maximum strength in X-build direction

## PROPERTIES

PROPERTY	TEST METHOD	VALUE
Color	-	Light Gray
Sintered Density*	ASTM D792	1.20 g/cm <sup>3</sup>
E-Module (x-y plane)	ASTM D638, test speed 10mm/min	3100 ± 400 MPa
E-Module (z plane)		2500 ± 400 MPa
Tensile strength (x-y plane)		38 ± 5 MPa
Tensile strength (z plane)		32 ± 7 MPa
Elongation at break (x-y plane)		3% ± 1%
Elongation at break (z plane)		2% ± 1.5%
Heat deflection temperature @ 0.45 MPa *	ASTM D648	184 °C
Heat deflection temperature @ 1.82 MPa*		179 °C

\*From supplier data sheet

## TOLERANCES

For well-designed parts, tolerances of ±0.010 in. plus ±0.0015 in./in. for each additional inch can typically be achieved. Note that tolerances may change depending on part geometry.

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