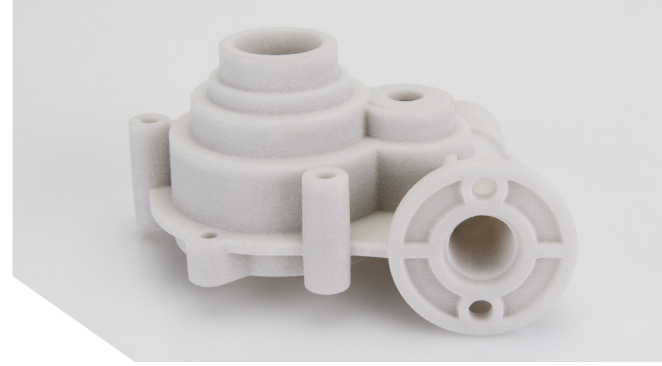


SELECTIVE LASER SINTERING PA 12 MINERAL-FILLED

Current Supplier's Material: PA 620-MF

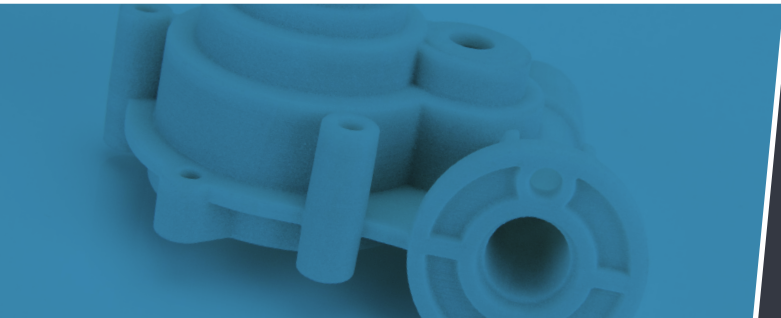


PRODUCT DESCRIPTION

This 25% mineral-filled nylon offers the highest stiffness among Protolabs' 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 ³
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.