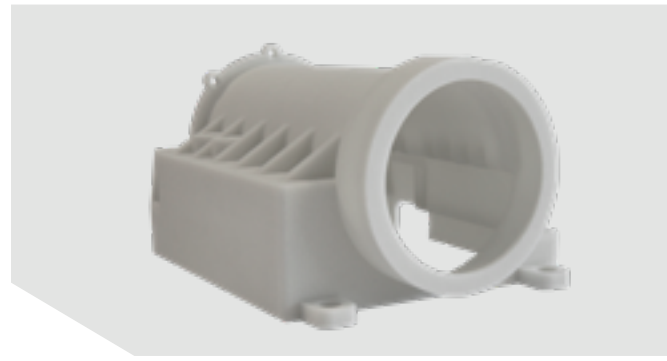


# SELECTIVE LASER SINTERING PA12-GF SMOOTH WHITE

[Supplier Data Sheet: EOS PA 3200 GF](#)



## PRODUCT DESCRIPTION

PA12-GF Smooth White is a polyamide powder loaded with glass spheres that add stiffness and dimensional stability. The material possesses higher thermal resistance than unfilled polyamides and exhibits excellent long-term wear resistance. Due to the glass additive, it has decreased impact and tensile strengths compared to other nylons.

## APPLICATIONS

The material's stiffness and temperature resistance makes it suited for components in high-heat environments such as automotive engine components or tooling applications



## KEY PRODUCT BENEFITS

- Stiffness and dimensional stability
- Long-term wear resistance
- High temperature resistance

## PROPERTIES

PROPERTY	TEST METHOD	VALUE
Colour	-	White
Sintered Density*	ASTM D792	1.22 g/cm <sup>3</sup>
Surface Roughness**	DIN EN ISO 4287	Ra = 10-25 µm; Rz = 60-120 µm
Water absorption, 20 °C, 50% Relative Humidity	DIN EN ISO 62	0.5 ± 0.2%
Water absorption, 24 hrs. in boiling water		2.0 ± 0.3%
E-Module (x-y plane)	DIN EN ISO 527, test speed 10mm/min	3600 ± 400 MPa
E-Module (z plane)		3600 ± 400 MPa
Tensile strength (x-y plane)		50 ± 4 MPa
Tensile strength (z plane)		46 ± 4 MPa
Elongation at break (x-y plane)		5% ± 2%
Elongation at break (z plane)		3% ± 2%
Heat deflection temperature @ 0.46 MPa *	DIN EN ISO 75	157 °C
Heat deflection temperature @ 1.82 MPa*		96 °C

\*From supplier data sheet

\*\* Surface roughness may vary depending on orientation

## TOLERANCES

For well-designed parts, tolerances of ± 0.20mm plus 0.002mm/mm can typically be achieved. Note that tolerances may change depending on part geometry

