

SELECTIVE LASER SINTERING

PA 12 WHITE

[Supplier Data Sheet: EOS PA 2200 Balance 1.0](#)

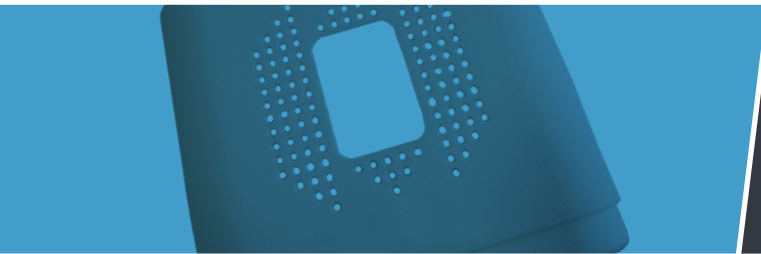


PRODUCT DESCRIPTION

PA 12 White is an economical material choice for functional prototypes and end-use parts. It offers high impact and temperature resistance, is very durable, and remains stable under a range of environmental conditions. The nylon material exhibits a white finish with a slightly rougher surface texture compared to other nylons.

APPLICATIONS

The material's high strength is ideal for jigs and fixtures, housings, and other functional parts. It also has a low coefficient of friction, making it suitable for many types of gears and bearings.



KEY PRODUCT BENEFITS

- Strength and stiffness
- Well-balanced material properties

PROPERTIES

PROPERTY	TEST METHOD	VALUE (Standard Finish)	VALUE (Vapour Smooth)	
Colour	-	White	White	
Sintered Density*	ASTM D792	0,93 g/cm ³	0,93 g/cm ³	
Surface Roughness**	DIN EN ISO 4287	Ra = 15-30 µm; Rz = 90-160 µm	Ra = 5-15 µm; Rz = 25-65 µm	
Water absorption, 20 °C, 50% Relative Humidity	DIN EN ISO 62	0.5 ± 0.2%	0.5 ± 0.2%	
Water absorption, 24 hrs. in boiling water		2.0 ± 0.3%	2.0 ± 0.3%	
E-Module (x-y plane)	DIN EN ISO 527, test speed 10mm/min	2000 ± 200 MPa	1900 ± 200 MPa	
E-Module (z plane)		1900 ± 200 MPa	1900 ± 200 MPa	
Tensile strength (x-y plane)		50 ± 4 MPa	46 ± 4 MPa	
Tensile strength (z plane)		42 ± 5 MPa	42 ± 4 MPa	
Elongation at break (x-y plane)		11% ± 4%	15 ± 4%	
Elongation at break (z plane)		4% ± 2%	6 ± 2%	
Vicat Softening Point*		ISO 306 (50°C/h 50N)	163 °C	163 °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.