Nylon PA 12 White Datasheet

Overview

Nylon PA 12 White is suitable for selective laser sintering, enabling the production of precise and durable parts. It is perfect for creating functional prototypes and end-use components, such as jigs, fixtures, gears, and bearings.

As-printed Part's Tolerance: ±300μm or 0.3%

Maximum Printing Size: 645*325*520mm

Properties

Thermal Properties	Metric	Method
Heat Deformation (0.46 MPa)	180.85℃	ASTM D648M
Heat Deformation (1.82 MPa)	115.4℃	ASTM D648M
Mechanical Properties	**Metric**	**Method**
Tensile Strength	50MPa	ASTM D638M
Tensile Modulus	2000MPa	ASTM D638M
Elongation at Break	11.5%	ASTM D638M
Flexural Properties	**Metric**	**Method**
Flexural Modulus	1900MPa	ASTM D790
Flexural Strength	60MPa	ASTM D790
Impact Properties	**Metric**	**Method**
Notched Impact Strength	21 J/m	ASTM D256
Unnotched impact strength	294 J/m	ASTM D256
Density Properties	**Metric**	**Method**
Density	0.95 g/cm³	DIN 53466

Pros

PA 12 White printed using SLS 3D technology provides excellent impact resistance, temperature stability, and durability in diverse environmental conditions.

Cons

This material is susceptible to shrinkage and warping, often needing significant post-processing to obtain a smooth finish. Items printed from powdered materials typically have a rough, grainy texture.

Applications

Automotive Components Structural and High-stress Parts Gears

Electrical Connectors Enclosures and Housings Jigs and Fixtures

Sensor Components Surgical Tools Brackets and Gaskets