

Polyamide - HP PA 12

A robust multipurpose material, HP High Reusability PA 12 is a nylon powder with excellent long term stability and high chemical resistance. High strength, stiffness, and detail resolution, combined with a variety of finishing options allow for fully functional parts in prototyping or production applications.



Mechanical Properties

Property Description	Test Standard	Metric	English
Tensile Modulus	ASTM D638		
X Direction		1700 MPa	245,000 psi
Y Direction		1700 MPa	245,000 psi
Z Direction		1800 MPa	260,000 psi
Tensile Strength	ASTM D638		
X Direction		48 MPa	6960 psi
Y Direction		48 MPa	6960 psi
Z Direction		48 MPa	6090 psi
Elongation at Break	ASTM D638		
X Direction			20 %
Y Direction			20 %
Z Direction			15 %

Thermal Properties

Property Description	Test Standard	Metric	English
Heat Deflection Temperature (@ 0.45 MPA)	ASTM D648	175 °C	375 °F
Heat Deflection Temperature (@ 1.82 MPA)	ASTM D648	95 °C	203 °F
Density	ASTM D792	1.01 g/cm ³	0.036 lb/in ³

• Information provided by HP, Inc.