

## NYLON 12

**Nylon 12** is the first material of nylon offerings, complementing the current portfolio of FDM materials and enabling new applications requiring: **repetitive snap fits, high fatigue resistance, strong chemical resistance and press (friction) fit inserts.** Nylon 12 is primarily used in **aerospace, automotive and consumer goods industries** to take on everything from tooling, jigs and fixtures to covers, panels and vibration resistant components.

### Mechanical Properties

	Test Method	English	Metric
Tensile Strength (Type 1, 0.125", 0.2"/min)	ASTM D638	7,700 psi	53 MPa
Tensile Modulus (Type 1, 0.125", 0.2"/min)	ASTM D638	190 kpsi	1,310 MPa
Elongation at Break (Type 1, 0.125", 0.2"/min)	ASTM D638	9.5%	9.5%
Flexural Strength (Method 1, 0.05"/min)	ASTM D790	10,200 psi	70 MPa
Flexural Modulus (Method 1, 0.05"/min)	ASTM D790	190 kpsi	1,310 MPa
Flexural Strain at Break	ASTM D790	No Break	No Break
IZOD Impact, notched (Method A, 23°C)	ASTM D256	2.8 ft-lb/in	150 J/m
IZOD Impact, un-notched (Method A, 23°C)	ASTM D256	>37.4 ft-lb/in	>2,000 J/m

### Thermal Properties

	Test Method	English	Metric
Heat Deflection (HDT) @ 66 psi annealed	ASTM D648	206.6°F	97°C
Heat Deflection (HDT) @ 66 psi unannealed	ASTM D649	167°F	75°C
Heat Deflection (HDT) @ 264 psi annealed	ASTM D650	179.6°F	82°C
Heat Deflection (HDT) @ 264 psi unannealed	ASTM D651	131°F	55°C
Melt Point	-----	352.4°F	178°C

#### Available Colors

■ Black