



PA 606-FR

NYLON 12

The only commercially available Fire Retardant Nylon 12 that meets the FAR 25.853 60 second burn specification.

HIGHLIGHTS

- Smooth Surface Finish
- Fine-Feature Resolution
- Accurate, Repeatable Part Quality

APPLICATIONS

- Aerospace and automotive ducts
- Snap fit components and multisectional bonding requirements
- Prototypes requiring durability, accuracy and end-use functionality



HEADQUARTERS

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NYLON 12

Easy to process across most laser sintering platforms.

TYPICAL PHYSICAL PROPERTIES			
PROPERTY	TEST METHOD	IMPERIAL	METRIC
Color/Appearance	Visual	Dark Grey	Dark Grey
Bulk Density	ASTM D1895	0.266 oz/in ³	0.46 g/cm ³
Average Particle Size (D50)	Laser Diffraction	0.002 inches	55 microns
Particle Size Range (D10-D90)	Laser Diffraction	0.001 - 0.004 inches	30 - 100 microns
Sintered Part Density	ASTM D792	0.590 oz/in ³	1.02 g/cm ³
Heat Deflection Temperature	ASTM D648	203°F at 264 psi	95°C at 1.82 MPa
Heat Deflection Temperature	ASTM D648	356°F at 66 psi	180°C at 0.45 MPa
Ultimate Tensile Strength (XY)	ASTM D638	6,962 psi	48 MPa
Tensile Modulus (XY)	ASTM D638	247,000 psi	1,700 MPa
Flexural Modulus (XY)	ASTM D790	217,000 psi	1,500 MPa
Elongation at Break (XY)	ASTM D638	24%	24%
Izod Impact Strength - Notched (XY)	ASTM D256	0.6 ft-lb/in	32 J/m
Izod Impact Strength - Unnotched (XY)	ASTM D256	6.3 ft-lb/in	336 J/m
Flammability 60 Second Burn	FAR 25.853	Pass	Pass
Hardness (Shore D)	Pass	73	73

The material properties provided herein are for reference purposes only. Actual values may vary significantly as they are dramatically affected by part geometry and process parameters. Material specifications are subject to change without notice.