

NYLON 12

TECHNOLOGY: FDM

APPLICATIONS: Aerospace & Automotive / Snap-Fit Panel Prototypes /
Impact-Protective Components

DESCRIPTION:

Nylon 12 parts built on a Fortus 3D Production System are the toughest in the industry, exhibiting 100-300 percent better elongation at break and superior fatigue resistance over any other additive manufacturing technology. Nylon offers the best Z-axis lamination and highest impact strength of any FDM thermoplastic, as well as excellent chemical resistance. Ideal material for conceptual modeling, functional prototyping, manufacturing tools, and end-use-parts. ABS-M30 has greater tensile, impact, and flexural strength than standard ABS.

FDM Nylon 12 is ideal for applications that demand high fatigue endurance, including repetitive snap fits and friction-fit inserts. Aerospace and automotive applications include custom production tooling, jigs and fixtures, and prototypes for interior paneling, low-heat air-intake components and antenna covers. For product development in consumer goods, FDM Nylon 12 makes durable prototypes for snap-fit panels and impact-protective components.

TECHNICAL DATA

PROPERTY	ASTM	METRIC UNITS
Flexural Modulus*	D790	1,276 MPA
Flexural Strength*	D790	61 MPA
Elongation at Break	D638	30 %
Tensile Strength Yield*	D638	32 MPA
Tensile Modulus*	D638	1,282 MPA

* Along XZ Axis