

ALM PA 640-GSL

Selective Laser Sintering | PA12-GF | powder

Compiled by FabDigit from manufacturer technical data. Values below belong to this named product; unreported properties are omitted.

Manufacturer: ALM

Source revision: Not stated in the catalog; check the original document.

Recorded system family: EOS FORMIGA P 110 / P 396 / P 500 / P 770

As-printed colour: Gray. Dark gray; hollow glass sphere and carbon fiber filled

Test values are typical reported results, not guaranteed design allowables or finished-part certification. Review the complete source for specimen preparation, orientation and conditioning.

Mechanical

PROPERTY	VALUE	TEST / CONDITION
Tensile Strength (Ultimate)	49 MPa	per EOS Store typical part properties
Elongation at Break	3 %	per EOS Store typical part properties
Elastic (Young's) Modulus	3.816 GPa	per EOS Store typical part properties

Thermal

PROPERTY	VALUE	TEST / CONDITION
Heat Deflection Temp. @ 1.8 MPa	170 deg C	per EOS Store typical part properties
Heat Deflection Temp. @ 0.45 MPa	180 deg C	per EOS Store typical part properties

Physical

PROPERTY	VALUE	TEST / CONDITION
Density	0.82 g/cm3	per EOS Store typical part properties

Selection and finishing

A lightweight ALM/EOS PA12 filled with hollow glass spheres and carbon fibre for stiff, dimensionally stable SLS parts on the EOS P396.

Design: Avoid snaps and sharp notches, keep the process on the documented P396 route, and validate the actual load direction. Check that the unusually low density and filler description remain current at purchase.

Finishing: Dark gray is the as-printed surface and the row is not dyeable. Blasting or coating should be sampled because exposed filler and surface texture can affect appearance and adhesion.

Source and document scope

ALM manufacturer source reference

<https://store.eos.info/products/pa-640-gsl>

FabDigit product page: <https://www.fabdigit.com/materials/polymer-pa12/alm-pa-640-gsl/>

FabDigit is the publisher of this reference summary. The named manufacturer remains the source of the material data. This document is not a manufacturer-issued TDS, a certificate of conformity or a test report for an ordered part. Confirm the exact product, system, orientation, conditioning and final finish with the quote.