

SELECTIVE LASER SINTERING TPU-88A BLACK



PRODUCT SPECIFICATIONS

PRODUCT DESCRIPTION

This thermoplastic polyurethane (TPU) combines rubber-like elasticity and elongation with good abrasion and impact resistance. It can be leveraged to produce both prototypes and functional parts.

APPLICATIONS

The material's rubber-like quality is ideal for seals, gaskets, grips, hoses, or any other application where excellent resistance under dynamic loading is required.

KEY PRODUCT BENEFITS

- Flexibility
- Tear and abrasion resistance
- Durability

PROPERTIES

PROPERTY	TEST METHOD	VALUE
Color	-	Black
Flexural Modulus 20°C	ISO 6721-1, 1Hz, 2 °C/min	27 ± 6 MPa
Flexural Modulus 60°C		72 ± 16 MPa
Tensile strength (x plane)	DIN 53504	20 ± 5 MPa
Tensile strength (z plane)		15 ± 4 MPa
Elongation at break (x plane)		520% ± 50%
Elongation at break (z plane)		500% ± 50%
Compression strength (x plane)	ISO 604	33 ± 5 MPa
Compression strength (z plane)		40 ± 6 MPa
Vicat softening temperature	ISO 306	90 °C
Water absorption, 23 °C, 24 h	-	< 0,5%

TOLERANCES

For well-designed parts, tolerances of ± 0.30 mm plus ± 0.002 mm/mm can typically be achieved. For parts bigger than 100 mm, tolerance will be $\pm 0.3\%$ of nominal dimension. Note that tolerances may change depending on part geometry.