MAKERVERSE

Data Sheet: SLS-PA12 Aluminum Filled

Thermal Properties

Property	Unit	Value	Norm
Heat Deflection [i]	°C	144	ISO 75-1/-2
Vicat Softening Temperature [i]	°C	169	ISO 306

Mechanical Properties

Property	Unit	Value	Norm
Tensile Strength[ii]	MPa	48	ISO 527
Tensile Modulus[ii]	MPa	3800	ISO 527
Charpy-Notched Impact Strength	kJ/m^2	4.6	ISO 179/1eA
Charpy – Impact Strength	kJ/m^2	29	ISO 179
Flexural Modulus	MPa	3600	ISO 178
Shore -D Hardness	D	76	ISO 868
Elongation at Break[ii]	%	4	ISO 527

Physical Properties

Property	Unit	Value
Density	kg/m^3	1360

Tolerances

Property	Unit	Value As Built
Achievable Part Accuracy[iii]	mm %	+/- 0.3 mm for parts up to 100 mm +/- 0.3 % for beyond 100 mm
Min. Wall Thickness	mm	1.0

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AVAILABLE FINISHES WITH PROPERTIES DEFINED IN THIS DATA SHEET

1 | STANDARD

As built and removing access material by blasting with air.

AVAILABLE FINISHES FOR SURFACE REQUIREMENTS

2 | SEALED

As built and removing access material by blasting with air including additional sealing to achieve air- and watertight geometries.

3 | SMOOTHED

As built and removing access material by blasting with air including additional chemical smoothing to achieve a homogeneous, smooth surface roughness.

4 | TUMBLED

As built and removing access material by blasting with air including mechanical tumbling to achieve a smoother surface roughness across all exposed surfaces of the part.

AVAILABLE FINISHES FOR COLOR REQUIREMENTS

5 | PAINTED

As built and removing access material by blasting with air including a color of choice applied to the part. Surfaces that require painting and the RAL color code should be specified on the technical drawing or in the comment field on the MakerVerse platform.

AVAILABLE COMBINATIONS OF FINISHES

Many finishes can be combined or tuned to specific requirements. Please select "custom" in the "finish" dropdown on the MakerVerse platform and specify your requirements to request a quote for alternative finishing options.

MAXIMUM BUILD CHAMBER SIZE

700 mm x 380 mm x 580 mm

[i] At 1.8 MPa as per ISO 75-1/-2, At 50°/h , 50N as per ISO 306

[ii] Depending on build direction

[iii] As a result of the part's geometry, strong tensions may cause distortion in the part which may lead to greater deviation.