



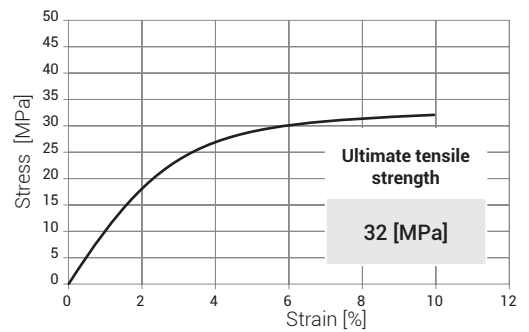
# PA12 Smooth <sup>v2</sup>

High surface quality

Good quality to price ratio | Excellent surface quality and high level of recreated details | High chemical resistance



## Tensile testing



## General information

## Method

Material type	Nylon 12
Granulation	18 - 90 [ $\mu\text{m}$ ]
Color	Navy Grey
Material refreshing ratio <sup>1</sup>	22 [%]
Compatible with <sup>2</sup>	Lisa & Lisa Pro

## Parameters

Tensile Strength	32 [MPa]	PN-EN ISO 527-2:2012
Elongation at Break	10 [%]	PN-EN ISO 527-2:2012
Impact resistance (Charpy test / unnotched)	16 [KJ/m <sup>2</sup> ]	PN-EN ISO 179-1/1eU:2010
Shore hardness in type D scale	74	PN-EN ISO 868:2005

## Thermal properties

Melting point	185 [ $^{\circ}\text{C}$ ]	Internal procedure
Printout density	0.92 [g/cm <sup>3</sup> ]	PN-EN ISO 845:2010

## Applications

Rapid prototyping, detailed objects, functional parts of highest quality, low volume production of low stress parts, working mechanisms.

## Functions

High details, smooth surface, high chemical resistance, regular mechanical properties.

## Charpy U- and V-notched impact testing

N <sup>o</sup>	notch	KJ/m <sup>2</sup>
1.	U	5.23
2.	V	3.28

Charpy impact test results for specimens tested using pendulum of maximum energy of 50 [J], weight of 6.8 [kg] and length of 380 [mm].

## Surface roughness

Roughness parameter	side surface	top surface
Ra	9.680 [ $\mu\text{m}$ ]	6.470 [ $\mu\text{m}$ ]
Rz	54.184 [ $\mu\text{m}$ ]	31.633 [ $\mu\text{m}$ ]

Roughness of test specimens surfaces printed with layer thickness of 100 [ $\mu\text{m}$ ].

<sup>1</sup> Material refreshing ratio - percent of Fresh powder which has to be mixed with Used (unsintered) powder - to be reused during next print.

<sup>2</sup> Available as part of the appropriate profile purchased.

Information provided within this document are average values for reference and comparison only. Parameters presented in this specification are subject to change. Final part properties may vary based on printed part design and print orientation.