



PA12 Smooth

High surface quality

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



General information

	Material type	Nylon 12
	Granulation	18 - 90 [µm]
	Color	Navy Grey
	Material refreshing ratio ¹	30 [%]
	Compatible with ²	Lisa & Lisa Pro

Method

Parameters

Tensile Strength	41 [MPa]	PN-EN ISO 37:2007
Elongation at Break	13 [%]	PN-EN ISO 37:2007
Impact resistance (Charpy test / unnotched)	15 - 20 [KJ/m ²]	Internal procedure
Shore hardness in type D scale	74	PN-EN ISO 868:2005

Thermal properties

Softening point (Vicat method type A50 / B50)	172 / 155 [°C]	PN-EN ISO 306:2014-02
Melting point	182 [°C]	Internal procedure
Heat deflection temperature B	143 [°C]	PN-EN ISO 75-2:2013-06
Printout density	1.00 [g/cm ³]	PN-EN ISO 845:2010

Applications

Detailed printouts, structural or mechanical (with complicated internal geometry) elements, functional prototypes or final parts.

Charpy U- and V-notched impact testing

N°	notch	KJ/m ²
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].

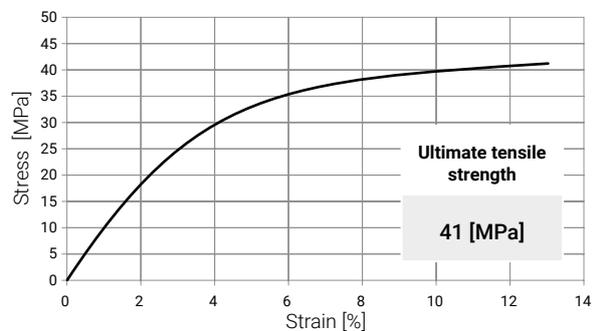
Surface roughness

Roughness parameter	side surface	top surface
Ra	9.680 [µm]	6.470 [µm]
Rz	54.184 [µm]	31.633 [µm]

Roughness of test specimens surfaces printed with layer thickness of 100 [µm].



Tensile testing



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

² Available as part of the appropriate profile purchased.