

MULTI JET FUSION

# PA11 SMOOTH GREY

[Supplier Data Sheet: HP 3D High Reusability PA11](#)



## PRODUCT DESCRIPTION

PA11 Smooth Grey provides excellent ductility and temperature resistance without sacrificing tensile strength. It offers one of the highest elongation break thresholds in the nylon family.

## APPLICATIONS

The material is suited for functional, moving parts with features like snap fits and living hinges. Its grey colour makes it desirable for optical applications due to low reflectivity.



## KEY PRODUCT BENEFITS

- High elongation at break
- Flexibility
- Uniform grey colour

## PROPERTIES

PROPERTY	TEST METHOD	VALUE
Colour	-	Grey
Sintered Density*	ASTM D792	1.05 ± 0.01 g/cm <sup>3</sup>
Surface Roughness**	DIN EN ISO 4287	Ra = 10-25 µm; Rz = 60-100 µm
E-Module (x-y plane)	DIN EN ISO 527, test speed 10mm/min	1800 ± 200 MPa
E-Module (z plane)		1800 ± 200 MPa
Tensile strength (x-y plane)		52 ± 4 MPa
Tensile strength (z plane)		52 ± 4 MPa
Elongation at break (x-y plane)		35% ± 5%
Elongation at break (z plane)		30% ± 5%
Heat deflection temperature @ 0.46 MPa*	ASTM D648 Test Method A	185 ± 5°C
Heat deflection temperature @ 1.82 MPa*		54 ± 5°C

\*From supplier data sheet

\*\*Surface roughness may vary depending on orientation

## TOLERANCES

For well-designed parts, tolerances of ± 0.25mm plus 0.002mm/mm can typically be achieved. Note that tolerances may change depending on part geometry

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