

## Technical datasheet

# colorFabb PA-CF low warp

Date of issue: June 18, 2018  
Version: v1.0



ColorFabb PA-CF low warp is a one of a kind polyamide formulation with the ability to print nearly warp free on non-heated buildplatforms. PA-CF Low Warp excels in tensile and impact strength and allows continues use at 120°C while retaining sufficient mechanical properties.

### TYPICAL MATERIAL PROPERTIES

Physical properties	Unit	Value	Method
Density	g/cm <sup>3</sup>	1,4	ISO 1183
Humidity absorption (23°C,50%RH)	%	<2,0	
Tensile Strength	MPa	107	ISO 527
Tensile Elongation@break	%	2,0	ISO 527
Flexural Strength	MPa		ISO 178
Flexural Modulus	GPa		ISO 178
Charpy Impact strength, notched	kJ/m <sup>2</sup>		ISO 179
Charpy Impact strength, unnotched	kJ/m <sup>2</sup>	37	ISO 179
Continuous Service Temp.	°C	120	UL 746B

### FILAMENT SPECIFICATION

Nominal diameter:	Diameter tolerance	Ovality
1,75 mm	± 0,1	≥ 95%
2,85 mm	± 0,1	≥ 95%

**Netto filament weight** 700 grams / 2000 grams

### GUIDELINE FOR PRINT SETTINGS

Advised 3D printing temperature	260-280 °C
Advised bed temperature	Cold bed (low infill prints); 40 – 50 °C (high infill prints)
Bed surface / modification	buildTak, Glass plate
Active cooling fan	50%
Advised 3D printing speed	30 – 40 mm/sec

### ADDITIONAL INFORMATION

The addition of carbon fibers makes this filament highly abrasive for regular brass nozzle. We recommend users to use abrasive resistant nozzles, such as E3D hardened steel nozzles or Olsson Ruby nozzle.

#### Disclaimer

The product- and technical information provided in this datasheet is correct to the best of our knowledge. The information given is provided as a guidance for good use, handling and processing and is not to be considered as a quality specification. The information only relates to the specific product and the material properties.