FLASHFORGE 3D PRINTER

3D Printing Filament

www.flashforge.com

Professional filament manufacturer

6000 m^2

Occupied area

1200 Tons/Year

Production capacity

15

Automated production lines

Various Colors

Customized service

30-Day Guarantee

For your satisfaction

Basic

PLA-based

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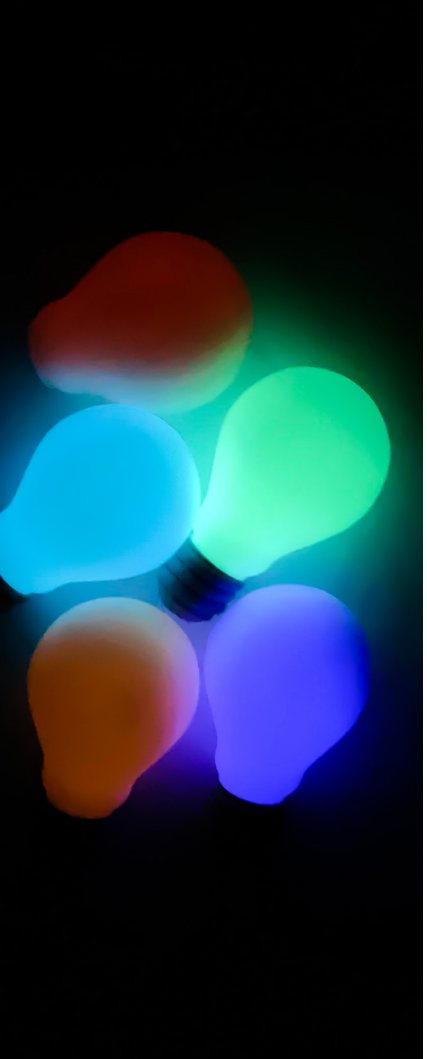


PLA

Easy to print | Reliable | Safe

Flashforge's PLA is an easy-to-use, stable, environmentally-friendly and safe 3D printing filament, suitable for all major FFF 3D printers.
Produced with high-quality raw materials, our product has improved on the tenacity and printing smoothness through adjustments of the production process and formulation.
The raw materials we use are FDA approved, food-contact compliant and biodegradable, meeting environmental and safety requirements.

Color

Extruder temperature
190~220℃

Platform temperature
25~60℃

Print speed
40~60mm/s

Cooling fan
On

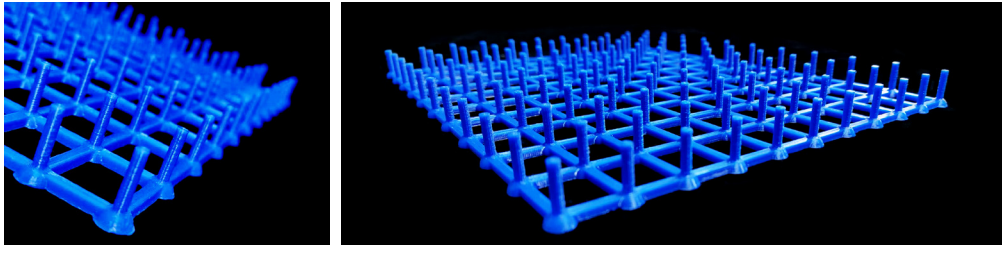
Filament diameter
1.75/2.85/3.0mm

PLA Pro

High tenacity | Easy to print | Neat arrangement

Flashforge's PLA Pro is a high-tenacity, easy-to-use, stable, environmentally-friendly and safe 3D printing filament, suitable for all major 3D printers.
PLA Pro has excellent tenacity, and the notched impact strength more than 6 times that of the raw material, and can be used to print general models as well as functional models that require a certain level of mechanical strength.
PLA Pro filament can be 100% neatly arranged, preventing the filament from tangling, and ensuring smoother filament feeding during printing.

Color



Extruder temperature
190~220℃

Platform temperature
25~60℃

Print speed
40~60mm/s

Cooling fan
On

Filament diameter
1.75/2.85/3.0mm

HS PLA

High fluidity | High-speed printing

Flashforge's HS PLA is a high-fluidity 3D printing filament, specially developed for high-speed FFF 3D printers.

Produced with high-quality raw materials, our product has improved on the fluidity through adjustments of the production process and formulation.

The raw materials we use are FDA approved, food-contact compliant and biodegradable, meeting environmental and safety requirements.

Color

Extruder temperature
190~220℃

Platform temperature
25~60℃

Print speed
60~150mm/s

Cooling fan
On

Filament diameter
1.75/2.85/3.0mm

PLA SE

Easy to print | High cost performance | High tenacity

Flashforge's PLA SE is a very cost-effective and easy-to-use 3D printing filament, suitable for all major 3D printers.

The raw materials we use are FDA approved and biodegradable, meeting environmental and safety requirements.

Color

Extruder temperature
190~220℃

Platform temperature
25~60℃

Print speed
40~60mm/s

Cooling fan
On

Filament diameter
1.75mm

PLA Matte

Matte texture | Easy to print | Less layer lines | Easy support removal

Flashforge's PLA Matte is a reliable and easy-to-use 3D printing filament offering matte finish and less layer lines, suitable for various major 3D printers.
Produced with high-quality PLA material, our product has improved on the tenacity and fluidity through adjustments of the production process and formulation. It is as easy to use as PLA filament.

Color

Extruder temperature
190~220℃

Platform temperature
25~60℃

Print speed
40~60mm/s

Cooling fan
On

Filament diameter
1.75mm

PLA Metal

Metallic texture | Easy to print

Flashforge's Metal Filled filament is a 3D printing filament produced with PLA and metal powder as main raw materials, suitable for various major FFF 3D printers.
Through the formulation adjustment and process control, it adopts 0.023mm surface activated metal powder, which enhances the dispersion effect of metal powder and solves the clogging problem caused by metal powder deposited in the nozzle during the use of filaments.
The printed model has metallic finish and luster, and amazing results can be achieved after further polishing and post-processing.

Color

Extruder temperature
180~220℃

Platform temperature
25~60℃

Print speed
40~60mm/s

Cooling fan
On

Filament diameter
1.75/2.85mm

PLA Rainbow

Flashforge's PLA Rainbow is a multicolor PLA 3D printing filament with 4 different colors appearing in gradient color shifts in the same coil of filament, suitable for all major FFF 3D printers.
Produced with high-quality raw materials, our product has improved on the tenacity and fluidity through adjustments of the production process and formulation.
The raw materials we use are FDA approved, food-contact compliant and biodegradable, meeting environmental and safety requirements.

Color

Extruder temperature
190~220℃

Platform temperature
25~60℃

Print speed
40~60mm/s

Cooling fan
On

Filament diameter
1.75mm

PLA Color Change

Flashforge's PLA Color Change is a temperature-sensitive color-changing and easy-to-use PLA 3D printing filament, suitable for all major FFF 3D printers.
Color change depending on the temperature: when the temperature is under 33℃, it shows a darker color; when the temperature is above 33℃, it shows a lighter color.
The raw materials we use are FDA approved, food-contact compliant and biodegradable, meeting environmental and safety requirements.

Extruder temperature
190~220℃

Platform temperature
25~60℃

Print speed
40~60mm/s

Cooling fan
On

Filament diameter
1.75/2.85/3.0mm

PLA Silk

Flashforge's PLA Silk is a super glossy and easy-to-use PLA 3D printing filament, suitable for all major FFF 3D printers.

The surface of the model printed with this filament has ultra-high glossy finish similar to silk.

Color

Extruder temperature
190~220℃

Platform temperature
25~60℃

Print speed
40~60mm/s

Cooling fan
On

Filament diameter
1.75mm

PLA Marble

Marble-like effect | Easy to print

Flashforge's PLA Marble is an easy-to-use PLA 3D printing filament with marble-like surface effect, suitable for all major FFF 3D printers.

The raw materials we use are FDA approved, food-contact compliant and biodegradable, meeting environmental and safety requirements.

Extruder temperature
190~220℃

Platform temperature
25~60℃

Print speed
40~60mm/s

Cooling fan
On

Filament diameter
1.75mm

PLA-A (Advertisement)

Environmentally friendly | Safe | Easy to print

Flashforge's PLA-A is an easy-to-use 3D printing filament for indoor advertising words with low temperature resistance, and is suitable for making luminous channel letters for indoor use.
PLA-A is divided into two types: transparent and opaque. The raw materials we use are FDA approved and biodegradable, meeting environmental and safety requirements.

Color

Extruder temperature
190~220℃

Platform temperature
25~60℃

Print speed
40~60mm/s

Cooling fan
On

Filament diameter
1.75/2.85mm

PLA-CF

Flashforge's PLA-CF is a 3D printing filament produced with PLA and carbon fiber, suitable for various major FFF 3D printers.

PLA-CF filament is as easy to use as normal PLA filament. By adding carbon fiber, the strength of the material is improved. The model printed with this filament has certain mechanical properties.

56Mpa	89Mpa	2%
Tensile Strength	Bending Strength	Elongation at Break

Extruder temperature
200~230℃

Platform temperature
25~60℃

Print speed
40~60mm/s

Cooling fan
On

Filament diameter
1.75mm

ABS

Flashforge's ABS is a very cost-effective 3D printing filament, characterized by excellent tenacity and temperature resistance.

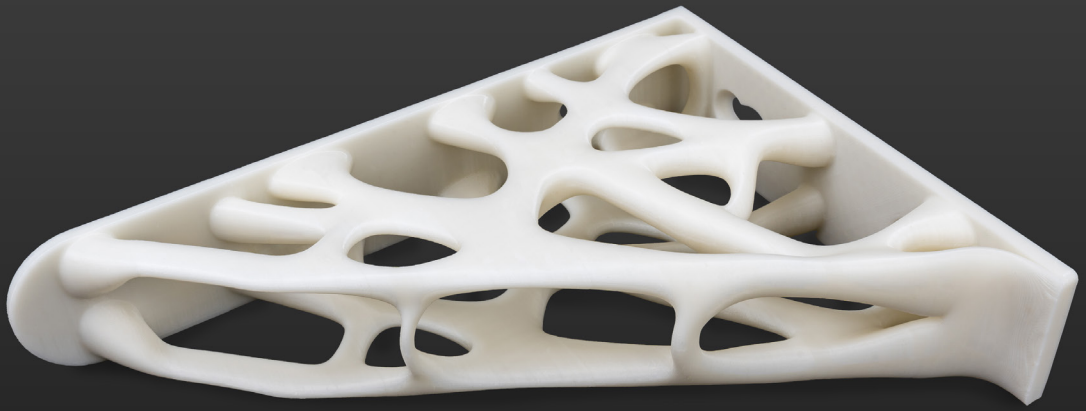
Extruder temperature
220~240℃

Platform temperature
100~110℃

Print speed
40~60mm/s

Cooling fan
Off

Filament diameter
1.75/2.85/3.0mm



ABS Matte

Flashforge's ABS Matte is a modified ABS 3D printing filament with low gloss.

Extruder temperature
190~220℃

Platform temperature
100~110℃

Print speed
40~60mm/s

Cooling fan
On

Filament diameter
1.75/2.85mm

ABS Pro

Flashforge's ABS Pro is an improved ABS 3D printing filament. Compared with normal ABS filament, it has lower shrinkage, less odor, milder printing conditions, better mechanical properties. Thus it is not easy to warp and crack, and is reliable and easy to use.

Color

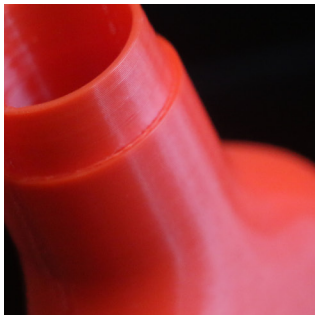
Extruder temperature
220~240℃

Platform temperature
80~100℃

Print speed
40~60mm/s

Cooling fan
Off

Filament diameter
1.75/2.85/3.0mm



PETG

Safe | Temperature resistant | High glossy

Flashforge's PETG is a reliable and easy-to-use 3D printing filament with balanced mechanical and thermal properties. Its printing performance is as good as PLA filament, and its performance is as strong as ABS filament.

The raw materials we use are FDA approved and food-contact compliant, meeting safety requirements.

Color

14 solid colors / 7 transparent colors / 2 luminous colors (weight / color / diameter customizable)

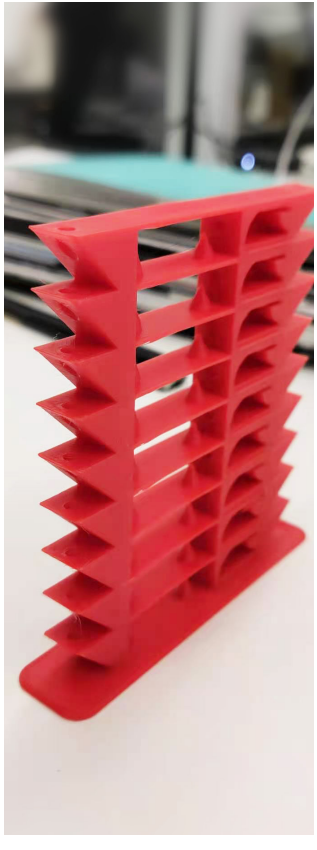
Extruder temperature
220~240℃

Platform temperature
70~80℃

Print speed
40~60mm/s

Cooling fan
On

Filament diameter
1.75/2.85/3.0mm



PETG Pro

Easy to print | Safe | High glossy

Flashforge's PETG Pro is an improved PETG 3D printing filament, which not only has balanced mechanical and thermal properties, but also improves the usability of filaments and reduces the printing temperature.
The raw materials we use are FDA approved and food-contact compliant.

Color

Extruder temperature
220~240℃

Platform temperature
70~80℃

Print speed
40~60mm/s

Cooling fan
On

Filament diameter
1.75/2.85/3.0mm

PETG-A (Advertisement)

Easy to print | Safe

Flashforge's PETG-A is an easy-to-use 3D printing filament for outdoor advertising words, which has excellent anti-aging performance and high heat-resistant temperature, and is suitable for making luminous channel letters for outdoor use.

PETG-A is divided into two types: transparent and opaque.

The raw materials we use are FDA approved, meeting safety requirements.

Color

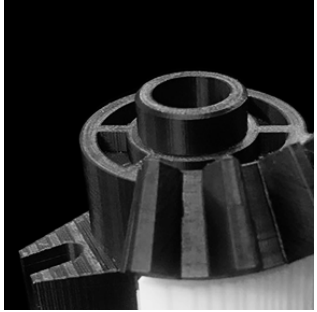
Extruder temperature
230~250℃

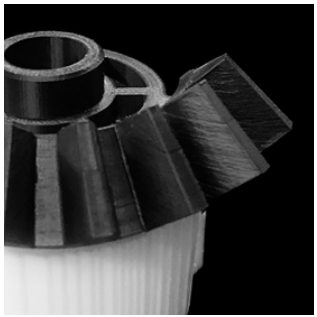
Platform temperature
70~80℃

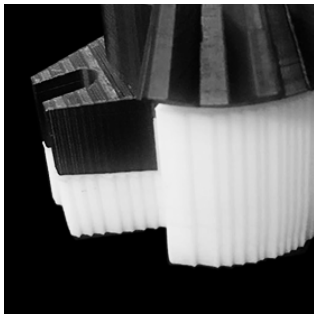
Print speed
40~60mm/s

Cooling fan
On

Filament diameter
1.75/2.85mm







HIPS

Flashforge's HIPS is a very cost-effective 3D printing filament with excellent tenacity and temperature resistance. With the smooth filament extrusion, it is not easy to cause nozzle clogging. The surface of the printed model is smooth. It can be used to replace ABS filament.

HIPS is completely soluble in limonene, and can be used as the support material for 3D printing.

Color

Extruder temperature
220~240℃

Platform temperature
100~110℃

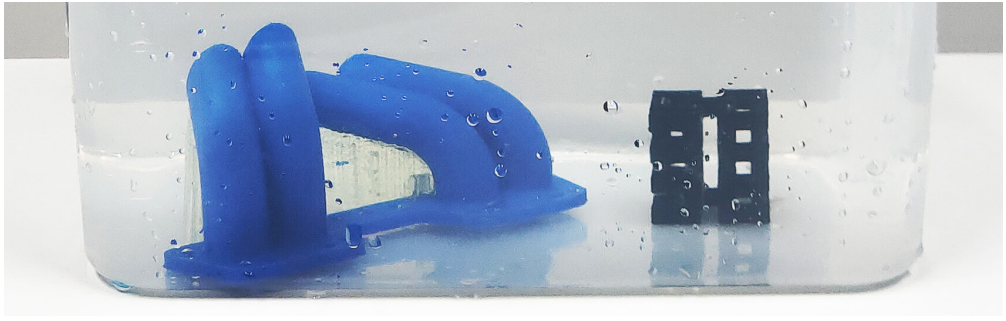
Print speed
40~60mm/s

Cooling fan
Off

Filament diameter
1.75/2.85/3.0mm

PVA

Flashforge's PVA is a water-soluble 3D printing filament produced with polyvinyl alcohol. Our product has improved on the printing performance and fluidity through adjustments of the production process and formulation.
As a support material, it can be used with PLA, Pearl, Wood, Metal Filled, Marble, Flexible, TPU, PA, PETG and other materials to print models with complex structures, and the contact surface is smooth.
PVA has excellent solubility in water, and can be completely dissolved within 75 minutes at room temperature with sufficient dissolved water and full contact between the filament and water.



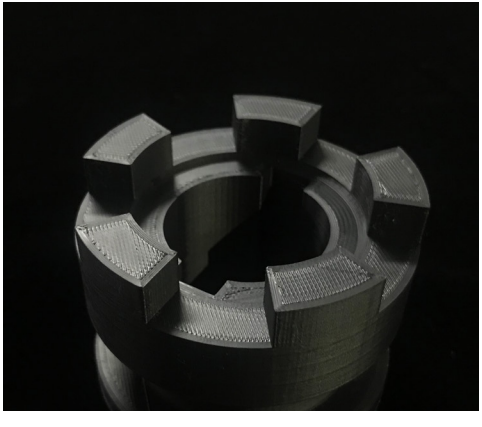
Extruder temperature
190~220℃

Platform temperature
25~60℃

Print speed
40~60mm/s

Cooling fan
On

Filament diameter
1.75/2.85mm



ASA

The material properties of ASA are similar to those of ABS, with excellent tenacity and temperature resistance.
The printing requirements of ASA filament are also close to those of ABS filament.
ASA has better temperature resistance and ultraviolet resistance, and can be used outdoors for a long time.

Color

Extruder temperature
240~260℃

Platform temperature
100~120℃

Print speed
40~60mm/s

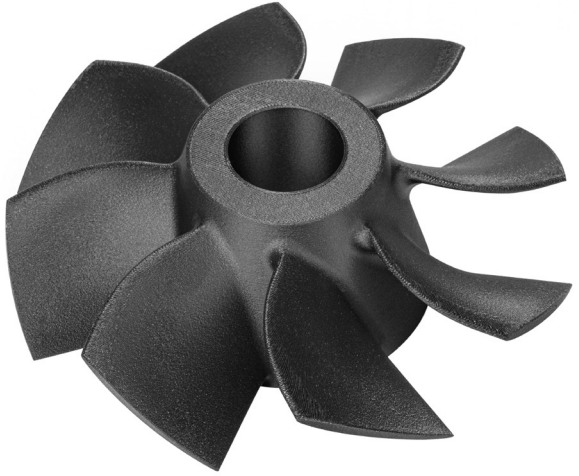
Cooling fan
Off

Filament diameter
1.75mm

ASA-CF10

High strength | Temperature resistance | Weather resistance

Flashforge's ASA-CF10 is a 3D printing filament, which is produced using ASA modified material containing 10% carbon fiber. It is generally suitable for most major FFF 3D printers.
ASA-CF10 has excellent dimensional stability and strength, with the ability to be printable on non-heated chamber FFF 3D printers. It has excellent temperature resistance and weather resistance, and allows continuous use in outdoor environment for a long time.



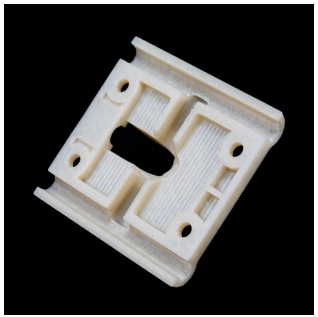
Extruder temperature
250~280℃

Platform temperature
100~110℃

Print speed
40~60mm/s

Cooling fan
Off

Filament diameter
1.75mm



PA6/66

Flashforge's PA is an affordable, reliable, easy-to-use, entry-level and high-performance 3D printing filament, suitable for various major 3D printers.
Produced with PA6 and PA66 copolymer, our product has improved on the shrinkage and fluidity through adjustments of the production process and formulation. With PA's excellent properties such as high tenacity, wear resistance and oil resistance, the printed model has excellent surface finish and dimensional stability, thus it can be well used in engineering applications.

Color

Extruder temperature
220~260℃

Platform temperature
80~110℃

Print speed
40~60mm/s

Cooling fan
Off

Filament diameter
1.75/2.85mm

PA1010

Flashforge's PA1010 is a highly transparent 3D printing filament with the light transmittance above 88%.

The transparent nylon filament is produced with PA1010, which has the characteristics of low water absorption, higher dimensional stability and temperature resistance.

Extruder temperature
220~260℃

Platform temperature
60~100℃

Print speed
40~60mm/s

Cooling fan
Off

Filament diameter
1.75mm

PC

Flashforge's PC is an affordable, reliable and easy-to-use 3D printing filament. Produced with food-grade PC as raw materials and bisphenol A not contained, our product has improved on the shrinkage and fluidity through adjustments of the production process and formulation. The printed model is not easy to warp, and has good layer adhesion.
The material itself has excellent heat resistance, and thus the printed model can be used for a long time in the environment above 100℃.

Extruder temperature
240~260℃

Platform temperature
100~120℃

Print speed
40~60mm/s

Cooling fan
Off

Filament diameter
1.75mm

PP

Flashforge's PP is a 3D printing filament produced with PP, characterized by low density, high impact resistance and chemical resistance.

Produced with homo-polypropylene as raw materials, our product has improved on the dimensional stability through adjustments of the production process and formulation, in order to prevent the model from warping and cracking during printing.

PP has excellent tenacity, with the elongation at break up to 500%. PP has a strong resistance against corrosion and most organic solvents. The model printed with PP filament also has high impact resistance and corrosion resistance.

Extruder temperature
200~240℃

Platform temperature
100℃

Print speed
30~60mm/s

Cooling fan
Off

Filament diameter
1.75mm

PC-ABS

Flashforge's PC-ABS is a 3D printing filament with high impact strength and super high heat resistance.

Produced with PC and ABS alloy materials, PC-ABS not only has the high impact resistance and high temperature resistance of PC, but also has the excellent electrochemical characteristics of ABS.

56Mpa
Tensile Strength

89Mpa
Bending Strength

120℃
Heat Deflection Temperature

Extruder temperature
240~260℃

Platform temperature
100~120℃

Print speed
40~60mm/s

Cooling fan
Off

Filament diameter
1.75mm

FLEXIBLE

Flashforge's flexible filament is a soft, high-gloss, reliable and easy-to-use 3D printing filament, suitable for various major FFF 3D printers.
The product is soft and of high tenacity, and it can be stretched to more than 4 times the original length. The layer adhesion of the printed model is excellent, and the strength in the Z-axis direction is not weaker than that in the X- and Y-axis directions.
The raw materials we use are FDA approved, food-contact compliant and biodegradable, meeting environmental and safety requirements.

Color

Extruder temperature
190~230℃

Platform temperature
25~60℃

Print speed
20~40mm/s

Cooling fan
On

Filament diameter
1.75/2.85mm

TPU 95A (ELASTIC)

Flashforge's elastic filament is a soft 3D printing filament with high tenacity and high resilience, suitable for most direct-drive FFF 3D printers.

This product is produced with thermoplastic polyurethane with the shore hardness of 95A, and can be stretched to more than three times the original length.

The layer adhesion of the printed model is excellent, and the strength in the Z-axis direction is not weaker than that in the X-and Y-axis directions. It has good wear resistance, chemical resistance and weather resistance. It can be used in a wide temperature range of -30~100℃.

Color

Extruder temperature	Platform temperature	Print speed
180~230℃	25~60℃	20~40mm/s

Cooling fan	Filament diameter
On	1.75/2.85mm

PA12-CF

≥50MPa
Tensile Strength

≥60MPa
Flexural Strength

≥1500MPa
Modulus of Elasticity

≥105J/m (ASTM D256)
Izod Notched Impact Strength
(IZOD,23℃)

≥150%
Elongation at Break

≥100℃
Heat Deflection Temperature

Flashforge's PA-CF is a high-performance 3D printing filament specially developed for industrial applications. It has the characteristics of high strength, high wear resistance and high temperature resistance.
It is produced with carbon fiber reinforced nylon materials based on PA12. Through the formulation adjustment, the water absorption of the material is reduced to 1/10 of that of normal PA filament; Through the carbon fiber reinforcement, not only the rigidity of the material is improved, but also the shrinkage of the material is greatly reduced. When printing, a model with stable size, good layer adhesion and smooth surface can be obtained only by using a common hot bed (no heated chamber required), which greatly improves the printability of filaments and reduces the difficulty of obtaining models for industrial applications.
It also has excellent temperature resistance, and allows continous use up to 150℃ for a long time.

Extruder temperature
270~290℃

Platform temperature
80~100℃

Print speed
40~60mm/s

Cooling fan
Off

Filament diameter
1.75mm

LEHVOSS Group lehmann& voss&co cooperation

PETG-CF

≥68MPa
Tensile Strength

≥98MPa
Flexural Strength

≥50%
Elongation at Break

Flashforge's PETG-CF is a high-performance 3D printing filament with high strength and high wear resistance.
It is produced with PETG and carbon fiber. By adding carbon fiber not only the strength of the material is increased, but also the shrinkage of the material is greatly reduced.
When printing, only a common hot bed is needed (no heated chamber required), and a model with stable size, good layer adhesion and smooth surface can be obtained.

Extruder temperature
230~250℃

Platform temperature
60~80℃

Print speed
40~60mm/s

Cooling fan
On

Filament diameter
1.75mm

PP-CF

≥50MPa
Tensile Strength

≥60MPa
Flexural Strength

≥1500MPa
Modulus of Elasticity

≥105J/m (ASTM D256)
Izod Notched Impact Strength
(IZOD,23℃)

≥150%
Elongation at Break

LEHVOSS Group lehmann& voss&co cooperation

Flashforge's PP-CF is a 3D printing filament produced with carbon fiber reinforced polypropylene, which enhances the strength and temperature resistance of the material without changing the excellent impact resistance of PP.
By strengthening the carbon fiber, not only the rigidity of the material is improved, but also the shrinkage of the material is greatly reduced.
When printing, a model with stable size, good layer adhesion and smooth surface can be obtained only by using a common hot bed (no heated chamber required), which greatly improves the printability of filaments and reduces the difficulty of obtaining models for industrial applications.
It also has good temperature resistance, and allows continous use up to 130℃ for a long time.
The density of PP-CF is only 1g/cm^3, making it suitable for printing lightweight mechanical models with strength requirements.

Extruder temperature
240~260℃

Platform temperature
80~100℃

Print speed
40~60mm/s

Cooling fan
Off

Filament diameter
1.75mm

PAHT

Easy to print | High rigidity | Low shrinkage

Flashforge's PAHT is a FFF 3D printing filament, which is produced using LUVOCOM® 3F PAHT 9875 NT. PAHT is a long-chain polyimide modified material, characterized by low hygroscopicity and low shrinkage, with the ability to be printable on non-heated chamber FFF 3D printers. It has excellent tensile strength and impact strength, and allows continuous use up to 160℃ for a long time while retaining 50% of its mechanical properties.

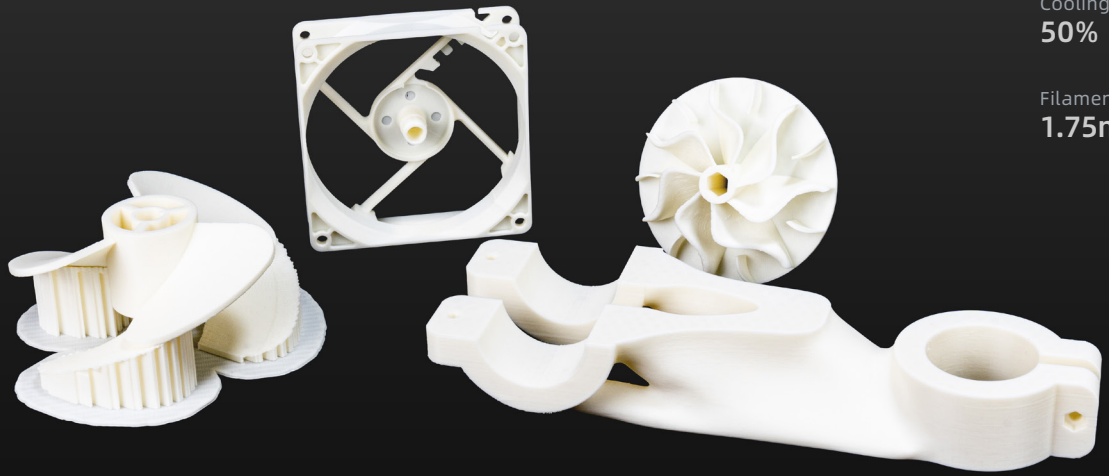
Extruder temperature
260~280℃

Platform temperature
80~110℃

Print speed
40~60mm/s

Cooling fan
50%

Filament diameter
1.75mm



PA6-CF10

Dimensional stability | High strength | High rigidity | Temperature resistance

Flashforge's PA6-CF10 is a FFF 3D printing filament, which is produced using a polycaprolactam modified material containing 10% carbon fiber.
PA6-CF10 has excellent dimensional stability, strength and rigidity, with the ability to be printable on non-heated chamber FFF 3D printers. It has excellent tensile and bending strength, and allows continuous use up to 180℃ for a long time.

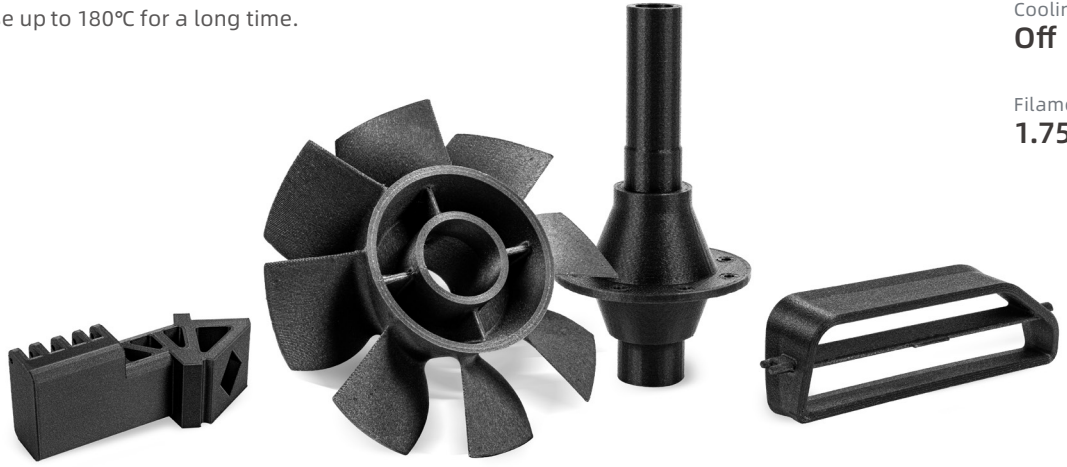
Extruder temperature
270~300℃

Platform temperature
90~120℃

Print speed
40~60mm/s

Cooling fan
Off

Filament diameter
1.75mm



PA6/66-CF10

Dimensional stability | High tenacity | High impact resistance | Temperature resistance

Flashforge's PA6/66-CF10 is a 3D printing filament, which is produced using a copolymerized lactam modified material containing 10% carbon fiber.
PA6/66-CF10 has excellent dimensional stability and tenacity, excellent Z-axis strength, with the ability to be printable on non-heated chamber FFF 3D printers. It has excellent tensile strength and impact-resistant strength, and allows continuous use up to 120℃ for a long time.

Extruder temperature
250~300℃

Platform temperature
90~120℃

Print speed
40~60mm/s

Cooling fan
50%

Filament diameter
1.75mm

Filament Mate

Spool rack | Waterproof | Dust-free

It can help you get rid of various printing problems caused by long-term exposure of 3D printing filaments to the air.
For example: bubbles, stringing, rough model surface, poor layer adhesion, clogging issues

FLASHFORGE
3D PRINTER

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