FilaFlexible40 Filament

FilaFlexible40 – Flexible 3D Printing Filament

FilaFlexible Filaments are flexible and rubber-like material developed by Filatech for special engineering purposes where superior properties are needed compare to other flexible filaments like TPU or TPE

Compare to normal flexible filaments (TPU or TPE based Filaments), FilaFlexible has higher resilience (more rubbery), better performance in wide range of temperature, easier and more stable printing, higher chemical resistance and also UV resistance.

FilaFlexible Filaments are high performance engineering compound filaments which have both properties of rubbers and engineering plastics.

FilaFlexible Filaments are available in three different grades according to their hardness FilaFlexible30, FilaFlexible40 and FilaFlexible55.

FilaFlexible withstands up to 50 °C of working temperature for the softer grade FilaFlexible30 and up to 105 °C of working temperature for the hardest grade FilaFlexible55.

FilaFlexible filaments for 3D Printing are available in a wide range of colors in both 1.75mm and 2.85mm diameter.

OPTIONS:

Size:	1.75	mm -/+ 0.03 mm
	2.85	mm -/+ 0.03 mm
Color:	Full Color Range (Special Colors By Order)	
Packaging:	0.5	Kg Spools
	1.0	Kg Spools
	6.0	Kg Spools

FEATURES:

TPEE-based Engineering compound
Excellent Flexibility
Superior Resilience
Good Performance in wide range of temperature
Easy and Stable Printing
Excellent Chemical Resistance
Excellent printing quality at low process temperature
Easy to Print in ordinary 3D printers
Heated Bed is not necessary
UV Resistance
Extra low moisture absorption

SPECIFICATIONS:

Filament Material:	FilaFlexible40	
Specific Gravity:	1.22	gr/cm^3
Size:	1.75	mm -/+ 0.03 mm
	2.85	mm -/+ 0.03 mm
Printing Information:	Extruder: 220 – 240 °C	
	Bed:	50 – 60 °C (not necessary)
Working Temperature:	Up to 50 °C	

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ENGINEERING PROPERTIES:

Properties	Test Method	Unit	Value
Specific Gravity	ASTM D792	gr/cm^3	1.22
Hardness	ASTM D2240	Shore D	40
Moisture Absorption Factor	ASTM D570	%	<0.2
Tensile Strength @ 100% *50mm/min (2 inch/min)*	ASTM D638	kgf/cm^2	80
Tensile Strength @ 200% *50mm/min (2 inch/min)*	ASTM D638	kgf/cm^2	90
Tensile Strength @ 300% *50mm/min (2 inch/min)*	ASTM D638	kgf/cm^2	100
Elongation @ Break *50mm/min (2 inch/min)*	ASTM D638	%	>400
Flexural Strength *2.8mm/min*	ASTM D790	kgf/cm^2	45
Izod Impact Test *Notched @ 23 °C*	ASTM D256	J/m	No Break
Heat Distortion Temperature *@0.455 Mpa (66 psi)*	ASTM D648	°C	50
Melting Temperature	ASTM 3418	°C	160

CERTIFICATES:

Management : BS EN ISO 9001:2015
Quality: CE (CE–2924)
Environment: RoHS (UQ-5724)