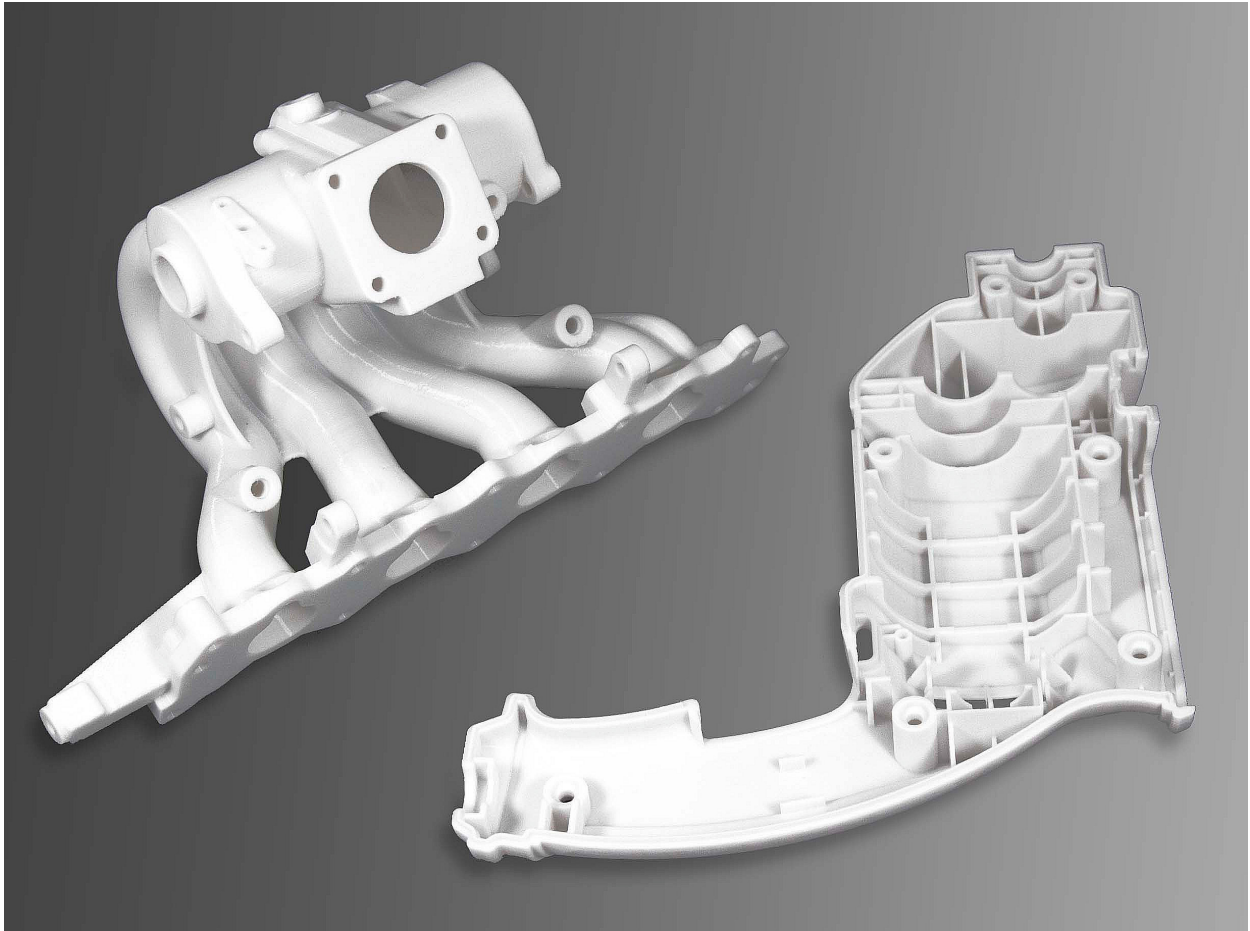


# PC (Polycarbonate)



## FDM Thermoplastic Filament

The information presented are typical values intended for reference and comparison purposes only. They should not be used for design specifications or quality control purposes.



## Overview

PC is a polycarbonate FDM® filament that brings the attributes of this industrial plastic to 3D printing applications. PC is characterized by its high strength and impact resistance, coupled with dimensional stability and heat resistance. These attributes make it a good choice for 3D printed prototypes, parts and tools that demand higher material properties than ABS or ASA.

FDM PC is available in white and is compatible with both breakaway and soluble support materials.

## Contents:

Physical Properties  
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## Physical Properties

Property	Test Method	Typical Values
Density	ASTM D792 (ISO 1183, GB/T1033)	1.18 - 1.20 (g/cm <sup>3</sup> at 21.5°C)
Tg (Glass Transition Temperature)	DSC, 10 °C/min	113 (°C)
Vicat Softening Temperature	ASTM D1525(ISO 306 GB/T 1633)	117 (°C)
Melt index	260 °C, 1.2 kg	6-8 (g/10 min)
Degradation temperature	TGA, 20 °C/min	>360 (°C)

## Mechanical Properties

Property	Test Method	Typical Values
Young's modulus(X-Y)	ASTM D638 (ISO 527, GB/T 1040)	2048 ± 66 (MPa)
Tensile Strength(X-Y)	ASTM D638 (ISO 527, GB/T 1040)	59.7 ± 1.8 (MPa)
Elongation at Break(X-Y)	ASTM D638 (ISO 527, GB/T 1040)	12.2 ± 1.4 (%)
Flexural Modulus	ASTM D790 (ISO 178, GB/T 9341)	2044 ± 55 (MPa)
Flexural Strength	ASTM 8D790 (ISO 178, GB/T 9341)	94.1 ± 0.9 (MPa)
Charpy impact strength	ASTM D256 (ISO 179, GB/T 1043)	25.1 ± 1.9 (kJ/m <sup>2</sup> )
Tensile Strength(Z)	ASTM D638 (ISO 527, GB/T 1040)	29.1 ± 4.1 (MPa)