



A true industrial thermoplastic, PC (polycarbonate) is widely used in automotive, aerospace, medical and many other applications. PC offers accuracy, durability and stability, creating strong parts that withstand functional testing. A PC part manufactured on a FDM mc™ series system is 5-60 percent stronger than a part made on previous FDM systems. It also has superior mechanical properties to ABS and a number of other thermoplastics. When combined with a Stratasys FDM system, PC gives you Real Parts™ for conceptual prototyping through direct digital manufacturing.

Mechanical Properties <sup>1</sup>	Test Method	Imperial	Metric
Tensile Strength (Type 1, 2"/min)	ASTM D638	9,800 psi	68 MPa
Tensile Modulus	ASTM D638	330,000 psi	2,280 MPa
Tensile Elongation	ASTM D638	4.8%	4.8%
Flexural Strength (Method 1, 0.05"/min)	ASTM D790	15,100 psi	104 MPa
Flexural Modulus	ASTM D790	324,000 psi	2,234 MPa
Flexural Elongation	ASTM D790	>80%	>80%
IZOD Impact, notched (Method A, 23°C)	ASTM D256	1 ft-lb/in	53 J/m
IZOD impact, un-notched	ASTM D256	6 ft-lb/in	320 J/m

Thermal Properties <sup>3</sup>	Test Method	Imperial	Metric
Heat Deflection Temperature (HDT) @ 66 psi	ASTM D648	280°F	138°C
Heat Deflection Temperature (HDT) @ 264 psi	ASTM D648	261°F	127°C
Vicat Softening	ASTM D1525	282°F	139°C
Glass Transition (T <sub>g</sub> )	DMA (SSYS)	322°F	161°C
Melt Point	-----	Not Applicable <sup>2</sup>	Not Applicable <sup>2</sup>

Other <sup>3</sup>	Test Method	Value
Specific Gravity	ASTM D792	1.2
Vertical Burning Test	UL94	V2, 1.1 mm
Coefficient of Thermal Expansion	-----	3.8E-05 in/in/F
Rockwell Hardness	ASTM D785	R115
Dielectric S (kV/mm)	IEC 60112	15.0
Dielectric C (60 Hz)	IEC 60250	3.17
Dielectric C (1 Mhz)	IEC 60250	2.96

► See reverse for system availability.

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. End-use material performance can be impacted (+/-) by, but not limited to, part design, end-use conditions, test conditions, etc. Actual values will vary with build conditions. Tested parts were built on FDM 400mc @ 0.10" (0.254 mm) slice. Product specifications are subject to change without notice.

<sup>1</sup> Build orientation is on side long edge. <sup>2</sup> Due to amorphous nature, material does not display a melting point. <sup>3</sup> Literature value unless otherwise noted.

System Availability	Layer Thickness Capability	Support Structure	Color
FDM 360mc FDM 400mc FDM 900mc	0.013 inch (0.330 mm) 0.010 inch (0.254 mm) 0.007 inch (0.178 mm)	BASS	<input type="checkbox"/> White

For more information about Stratasys systems and materials, contact your representative at +1 888.480.3548 or visit [www.stratasys.com](http://www.stratasys.com)

**Stratasys Inc.**  
7665 Commerce Way  
Eden Prairie, MN 55344-2080  
+1 888 480 3548 (US Toll Free)  
+1 952 937 3000 (Main)  
+1 952 937 0070 (Fax)  
[www.stratasys.com](http://www.stratasys.com)  
[info@stratasys.com](mailto:info@stratasys.com)

**Stratasys GmbH**  
Weismüllerstrasse 27  
60314 Frankfurt am Main  
Germany  
+49 69 420 9943 0 (Tel)  
+49 69 420 9943 33 (Fax)  
[europe@stratasys.com](mailto:europe@stratasys.com)

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