

Prosilas

PC [Polycarbonate]

FDM MATERIAL

		XZ Orientation ⁽¹⁾	ZX Orientation ⁽¹⁾
Tensile Properties: ASTM D638			
Yield Strength	MPa	57.9 (1.6)	No yield
	psi	8390 (240)	No yield
Elongation @ Yield	%	4.9 (0.12)	No yield
Strength @ Break	MPa	57.3 (1.6)	35.5 (9.0)
	psi	8310 (240)	5150 (1300)
Elongation @ Break	%	5.2 (0.38)	2.0 (0.63)
Modulus (Elastic)	GPa	2.25 (0.050)	2.13 (0.11)
	ksi	327 (7.3)	310 (16)

Flexural Properties: ASTM D790, Procedure A			
Strength @ Break	MPa	No break	75.0 (5.4)
	psi	No break	10900 (780)
Strength @ 5% Strain	MPa	90.0 (1.7)	-
	psi	13100 (240)	-
Strain @ Break	%	No break	4.58 (0.41)
Modulus	GPa	2.15 (0.042)	1.88 (0.071)
	ksi	312 (6.1)	273 (10)

Prosilas

Additive Manufacturing Service & Consulting

+39 0733 892665
info@prosilas.com
www.prosilas.com

Compression Properties: ASTM D695			
Yield Strength	MPa	244 (13)	290 (19)
	psi	35400 (1900)	42100 (2800)
Modulus	GPa	1.95 (0.051)	2.11 (0.090)
	ksi	283 (7.4)	306 (13)

Impact Properties: ASTM D256, ASTM D4812			
Notched	J/m	76.8 (11)	26.9 (7.7)
	ft*lb/in.	1.44 (0.21)	0.503 (0.14)
Unnotched	J/m	761 (110)	233 (70)
	ft*lb/in.	14.2 (2.0)	4.36 (1.3)

¹Values in parentheses are standard deviations.

Prosilas

Additive Manufacturing Service & Consulting

+39 0733 892665
info@prosilas.com
www.prosilas.com