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InElec® PA612CF13IM

Product Description 13% CARBON FIBER REINFORCED AND IMPACT MODIFIED NYLON 6/12

Material Status Commercial: Active

Availability Africa & Middle East, Asia Pacific, Europe, Latin America, North America

Filler / Reinforcement Carbon Fiber, 13% Filler by Weight

Additive Impact Modifier

Features Filled, Good Dimensional Stability, High Impact Resistance, High Stiffness, High Strength, Impact Modified, Low Temperature Toughness, Permanent Antistatic

Uses Closures, Connectors, Consumer Applications, Electrical/Electronic Applications, Engineering Parts, Household Goods, Industrial Applications, Industrial Parts, Office Automation Equipment, Outdoor Applications

Forms Pellets

Processing Method Injection Molding

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.11	g/cm³	ASTM D792
Molding Shrinkage - Flow (3.18 mm)	0.30 to 0.60	%	ASTM D955

Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	8960	MPa	ASTM D638
Tensile Strength	141	MPa	ASTM D638
Tensile Elongation (Break)	4.0	%	ASTM D638
Flexural Modulus	8270	MPa	ASTM D790
Flexural Strength	214	MPa	ASTM D790

Impact	Nominal Value	Unit	Test Method
Notched Izod Impact	110	J/m	ASTM D256

Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			ASTM D648
1.8 MPa, Unannealed	210	°C	

Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	< 1.0E+6	ohms	ASTM D257

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Polyamide 6/12 Copolymer

Injection	Nominal Value	Unit
Drying Temperature	79	°C
Drying Time	4.0	hr
Processing (Melt) Temp	266 to 277	°C
Mold Temperature	93	°C
Back Pressure	0.345 to 0.689	MPa
Screw Speed	40 to 70	rpm

Notes

[1] Typical properties: these are not to be construed as specifications.