

Amilan™ CM3004G-20 Nylon 66

TECHNICAL DATA

Product Description

Halogen, GF20%

Uses

- Appliances
- Camera Applications
- Cell Phones
- Communication Applications
- Computer Components
- Connectors
- Displays
- Electrical Housing
- Electrical/Electronic Applications
- Insulation
- Lighting Applications
- Office Automation Equipment
- Printer
- Switches
- Video Equipment
- White Goods & Small Appliances

Processing Method

- Injection Molding

ISO Designation

- >PA66-GF20FR(17)<

Type

- Nylon66/Flame retardant

ASTM & ISO Properties

Physical	Dry	Water Absorption	Unit	Test Method
Density (23°C)	1.50	--	g/cm³	ISO 1183
Molding Shrinkage ¹				Internal Method
Across Flow : 3.00 mm	0.80 to 1.20	--	%	
Flow : 3.00 mm	0.40 to 0.60	--	%	
Water Absorption ²				ISO 62
24 hr, 23°C	0.40	--	%	
Saturation, 23°C	4.5	--	%	
Mechanical	Dry	Water Absorption	Unit	Test Method
Tensile Strength				ISO 527-2
-40°C	150	--	MPa	
23°C	130	105	MPa	
80°C	85	--	MPa	
Tensile Strain				ISO 527-2
Break, -40°C	2.5	--	%	
Break, 23°C	3.0	3.0	%	
Break, 80°C	4.5	--	%	
Flexural Modulus				ISO 178
-40°C	7700	--	MPa	
23°C	7000	4200	MPa	
80°C	4200	--	MPa	
Flexural Stress				ISO 178
-40°C	225	--	MPa	
23°C	210	155	MPa	
80°C	135	--	MPa	
Taber Abrasion Resistance				ISO 9352
1000 Cycles	25	--	mg	

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Impact	Dry	Water Absorption	Unit	Test Method
Charpy Notched Impact Strength				ISO 179
-40°C	7.0	--	kJ/m ²	
23°C	9.5	12.0	kJ/m ²	
Charpy Unnotched Impact Strength				ISO 179
23°C	50.0	60.0	kJ/m ²	
Hardness	Dry	Water Absorption	Unit	Test Method
Rockwell Hardness				ISO 2039-2
R-Scale, 23°C	120	--		
Thermal	Dry	Water Absorption	Unit	Test Method
Deflection Temperature Under Load				ISO 75-2/A
1.8 MPa, Unannealed	245	--	°C	
Melting Temperature	265	--	°C	DSC
Coefficient of Linear Thermal Expansion	4	--	cm ⁻⁵ /cm/°C	ISO 11359-2
Electrical	Dry	Water Absorption	Unit	Test Method
Volume Resistivity	1.0E+13	1.0E+11	ohms·m	IEC 60093
Electric Strength	31	26	kV/mm	IEC 60243-1
Dielectric Constant				IEC 60250
23°C, 1 MHz	4.0	--		
Dissipation Factor (23°C, 1 MHz)	0.010	--		IEC 60250
Arc Resistance	70	--	sec	UL 746
Comparative Tracking Index (CTI)	210	--	V	UL 746A
Flammability	Dry	Water Absorption	Unit	Test Method
Flame Rating (0.38 mm)	V-0	V-0		UL 94
Additional Information				
Dry	Water absorption Moisture Content 1.3%			

Notes

¹ 80x80x3mm

² in water

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