

# Amilan™ CM3004G-30 Nylon 66

## TECHNICAL DATA

### Product Description

Halogen, GF30%

### Uses

- Appliances
- Automotive Applications
- Automotive Electronics
- 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-GF30FR(17)<

### Type

- Nylon66/Flame retardant

### ASTM & ISO Properties

Physical	Dry	Water Absorption	Unit	Test Method
Density (23°C)	1.59	--	g/cm <sup>3</sup>	ISO 1183
Molding Shrinkage <sup>1</sup>				Internal Method
Across Flow : 3.00 mm	0.60 to 0.90	--	%	
Flow : 3.00 mm	0.20 to 0.50	--	%	
Water Absorption <sup>2</sup>				ISO 62
24 hr, 23°C	0.60	--	%	
Saturation, 23°C	4.0	--	%	
Mechanical	Dry	Water Absorption	Unit	Test Method
Tensile Strength				ISO 527-2
-40°C	190	--	MPa	
23°C	165	135	MPa	
80°C	110	--	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	10200	--	MPa	
23°C	9300	6500	MPa	
80°C	5500	--	MPa	
Flexural Stress				ISO 178
-40°C	275	--	MPa	
23°C	250	200	MPa	
80°C	150	--	MPa	
Taber Abrasion Resistance				ISO 9352
1000 Cycles	26	--	mg	

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Impact	Dry	Water Absorption	Unit	Test Method
Charpy Notched Impact Strength				ISO 179
-40°C	7.0	--	kJ/m <sup>2</sup>	
23°C	9.5	14.0	kJ/m <sup>2</sup>	
Charpy Unnotched Impact Strength				ISO 179
23°C	65.0	70.0	kJ/m <sup>2</sup>	
Hardness	Dry	Water Absorption	Unit	Test Method
Rockwell Hardness R-Scale, 23°C	121	--		ISO 2039-2
Thermal	Dry	Water Absorption	Unit	Test Method
Deflection Temperature Under Load				ISO 75-2/A
1.8 MPa, Unannealed	251	--	°C	
Melting Temperature	265	--	°C	DSC
Coefficient of Linear Thermal Expansion	2	--	cm <sup>-5</sup> /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	38	33	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)	200	--	V	UL 746A
Flammability	Dry	Water Absorption	Unit	Test Method
Flame Rating (0.38 mm)	V-0	V-0		UL 94
<b>Additional Information</b>				
Dry	Water absorption Moisture Content 1.0%			

**Notes**

<sup>1</sup> 80x80x3mm

<sup>2</sup> in water

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