

Akulon® Ultraflow K-FHGM35

PA6-(GF+MD)40

15% Glass Reinforced, 25% Mineral Reinforced, Heat Stabilized, High Flow

Print Date: 2018-12-13

Properties	Typical Data	Unit	Test Method
Rheological properties			
	dry / cond		
Molding shrinkage (parallel)	0.3 / *	%	ISO 294-4
Molding shrinkage (normal)	0.9 / *	%	ISO 294-4
Mechanical properties			
	dry / cond		
Tensile modulus	9000 / 6000	MPa	ISO 527-1/-2
Stress at break	120 / 65	MPa	ISO 527-1/-2
Strain at break	2.5 / 5	%	ISO 527-1/-2
Flexural modulus	7700 / -	MPa	ISO 178
Flexural strength	165 / -	MPa	ISO 178
Charpy impact strength (+23°C)	35 / 45	kJ/m ²	ISO 179/1eU
Charpy impact strength (-30°C)	30 / 30	kJ/m ²	ISO 179/1eU
Charpy notched impact strength (+23°C)	5 / 6	kJ/m ²	ISO 179/1eA
Charpy notched impact strength (-30°C)	4 / 4	kJ/m ²	ISO 179/1eA
Thermal properties			
	dry / cond		
Melting temperature (10°C/min)	220 / *	°C	ISO 11357-1/-3
Temp. of deflection under load (1.80 MPa)	205 / *	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	215 / *	°C	ISO 75-1/-2
Coeff. of linear therm. expansion (parallel)	0.35 / *	E-4/°C	ISO 11359-1/-2
Coeff. of linear therm. expansion (normal)	0.5 / *	E-4/°C	ISO 11359-1/-2
Electrical properties			
	dry / cond		
Relative permittivity (100Hz)	3.5 / 14	-	IEC 60250

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Relative permittivity (1 MHz)	3.3 / 4.5	-	IEC 60250
Dissipation factor (100 Hz)	50 / 3200	E-4	IEC 60250
Dissipation factor (1 MHz)	140 / 1200	E-4	IEC 60250
Volume resistivity	1E12 / 1E10	Ohm*m	IEC 60093
Surface resistivity	* / 1E13	Ohm	IEC 60093
Electric strength	35 / 30	kV/mm	IEC 60243-1
Other properties	dry / cond		
Water absorption	5.5 / *	%	Sim. to ISO 62
Humidity absorption	1.7 / *	%	Sim. to ISO 62
Density	1500 / *	kg/m ³	ISO 1183