Akulon® Ultraflow K-FPG8

PA6-I-GF40

Glass Reinforced, High Flow

Print Date: 2019-06-05

Properties	Typical Data	Unit	Test Method
Rheological properties	dry / cond		
Molding shrinkage (parallel)	0.36 / *	%	ISO 294-4
Molding shrinkage (normal)	0.89 / *	%	ISO 294-4
Mechanical properties	dry / cond		
Tensile modulus	11500 / 7300	MPa	ISO 527-1/-2
Stress at break	175 / 110	MPa	ISO 527-1/-2
Strain at break	3.5 / 7	%	ISO 527-1/-2
Charpy impact strength (+23°C)	90 / 100	kJ/m²	ISO 179/1eU
Charpy impact strength (-30°C)	90 / 95	kJ/m²	ISO 179/1eU
Charpy notched impact strength (+23°C)	20 / 30	kJ/m²	ISO 179/1eA
Charpy notched impact strength (-30°C)	13 / 13	kJ/m²	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)	200 / *	°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)	0.2 / *	E-4/°C	ISO 11359-1/-2
Coeff. of linear therm. expansion (normal)	0.65 / *	E-4/°C	ISO 11359-1/-2
Electrical properties	dry / cond		
Relative permittivity (100Hz)	3.5 / 14	-	IEC 60250
Relative permittivity (1 MHz)	3.3 / 4.5	-	IEC 60250
Dissipation factor (100 Hz)	90 / 3000	E-4	IEC 60250

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Dissipation factor (1 MHz)	150 / 1200	E-4	IEC 60250
Volume resistivity	>1E13 / 1E11	Ohm*m	IEC 60093
Surface resistivity	* / 1E14	Ohm	IEC 60093
Electric strength	25 / 20	kV/mm	IEC 60243-1
Comparative tracking index	- / 600	V	IEC 60112
Other properties	dry / cond		
Water absorption	5.7 / *	%	Sim. to ISO 62
Humidity absorption	1.7 / *	%	Sim. to ISO 62
Density	1410 / -	kg/m³	ISO 1183