

Xytron™ G4010E (P952N)

PPS-I-GF40

40% Glass Reinforced, Improved Impact

Print Date: 2019-10-17

Properties	Typical Data	Unit	Test Method
Rheological properties			
	Value		
Molding shrinkage (parallel)	0.2	%	ISO 294-4
Molding shrinkage (normal)	0.5	%	ISO 294-4
Mechanical properties			
	Value		
Tensile modulus	12000	MPa	ISO 527-1/-2
Tensile modulus (120°C)	6100	MPa	ISO 527-1/-2
Tensile modulus (160°C)	3900	MPa	ISO 527-1/-2
Tensile modulus (200°C)	3000	MPa	ISO 527-1/-2
Stress at break	160	MPa	ISO 527-1/-2
Stress at break (120°C)	65	MPa	ISO 527-1/-2
Stress at break (160°C)	50	MPa	ISO 527-1/-2
Stress at break (200°C)	40	MPa	ISO 527-1/-2
Strain at break	2.4	%	ISO 527-1/-2
Strain at break (120°C)	3.9	%	ISO 527-1/-2
Strain at break (160°C)	4.4	%	ISO 527-1/-2
Strain at break (200°C)	4.5	%	ISO 527-1/-2
Flexural modulus	10000	MPa	ISO 178
Flexural strength	230	MPa	ISO 178
Flexural modulus (120°C)	8500	MPa	ISO 178
Flexural modulus (160°C)	4600	MPa	ISO 178
Flexural modulus (200°C)	3100	MPa	ISO 178
Charpy impact strength (+23°C)	55	kJ/m ²	ISO 179/1eU
Charpy impact strength (-30°C)	65	kJ/m ²	ISO 179/1eU

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Charpy notched impact strength (+23°C)	16	kJ/m ²	ISO 179/1eA
Charpy notched impact strength (-30°C)	12	kJ/m ²	ISO 179/1eA
Izod impact strength (+23°C)	60	kJ/m ²	ISO 180/1U
Izod notched impact strength (+23°C)	17.5	kJ/m ²	ISO 180/1A
Izod notched impact strength (-40°C)	13	kJ/m ²	ISO 180/1A

Thermal properties

Value

Melting temperature (10°C/min)	280	°C	ISO 11357-1/-3
Temp. of deflection under load (1.80 MPa)	258	°C	ISO 75-1/-2
Coeff. of linear therm. expansion (parallel)	0.15	E-4/°C	ISO 11359-1/-2
Coeff. of linear therm. expansion (normal)	0.55	E-4/°C	ISO 11359-1/-2
Coef. of lin. therm expansion, parallel, above Tg	0.11	E-4/°C	ISO 11359-1/-2
Coef. of lin. therm expansion, normal, above Tg	1.1	E-4/°C	ISO 11359-1/-2

Electrical properties

Value

Volume resistivity	>1E13	Ohm*m	IEC 60093
Electric strength	33	kV/mm	IEC 60243-1
Comparative tracking index	175	V	IEC 60112
Dissipation factor (5GHz)	55	E-4	IEC 60250
Relative permittivity (5GHz)	3.8	-	IEC 60250

Other properties

Value

Density	1530	kg/m ³	ISO 1183
Humidity absorption	0.04	%	Sim. to ISO 62