

Durethan® BKV40H2.0EF 900116
PA6-GF40

Envalior

Injection Molding, 40% Glass Reinforced, Heat Stabilized, Improved flow

ISO 1043 PA6-GF40

Rheological properties	dry / cond	Unit	Test Standard
ISO Data			
Molding shrinkage, parallel	0.2 / *	%	ISO 294-4, 2577
Molding shrinkage, normal	0.7 / *	%	ISO 294-4, 2577
Mechanical Properties			
ISO Data			
Tensile Modulus	12200 / 7200	MPa	ISO 527
Stress at Break	190 / 110	MPa	ISO 527
Strain at Break	3 / 5	%	ISO 527
Impact Strength (Charpy), +23°C	90 / 90	kJ/m ²	ISO 179/1eU
Impact Strength (Charpy), -30°C	70 / 70	kJ/m ²	ISO 179/1eU
Notched Impact Strength (Charpy), +23°C	13 / 20	kJ/m ²	ISO 179/1eA
Notched Impact Strength (Charpy), -30°C	12 / 12	kJ/m ²	ISO 179/1eA
Puncture - maximum force, +23°C	900 / -	N	ISO 6603-2
Puncture - maximum force, -30°C	770 / -	N	ISO 6603-2
Puncture energy, +23°C	3.5 / -	J	ISO 6603-2
Puncture energy, -30°C	2.7 / -	J	ISO 6603-2
Thermal Properties			
ISO Data			
Melting Temperature (10°C/min)	220 / *	°C	ISO 11357-1/-3
Temp. of deflection under load (1.80 MPa)	210 / *	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	220 / *	°C	ISO 75-1/-2
Coeff. of Linear Therm. Expansion, parallel	15 / *	E-6/K	ISO 11359-1/-2
Coeff. of Linear Therm. Expansion, normal	100 / *	E-6/K	ISO 11359-1/-2
Other Properties			
ISO Data			
Water Absorption	5.8 / *	%	Sim. to ISO 62
Humidity absorption	1.7 / *	%	Sim. to ISO 62
Density	1450 / -	kg/m ³	ISO 1183
Test specimen production			
ISO Data			
Injection Molding, melt temperature	280	°C	ISO 294
Injection Molding, mold temperature	80	°C	ISO 294

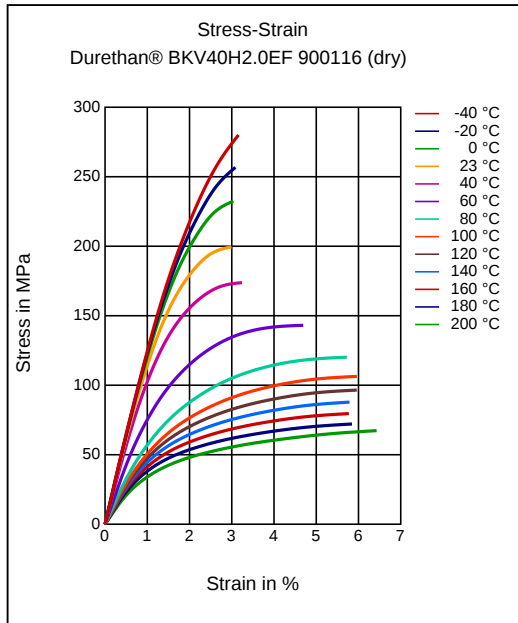
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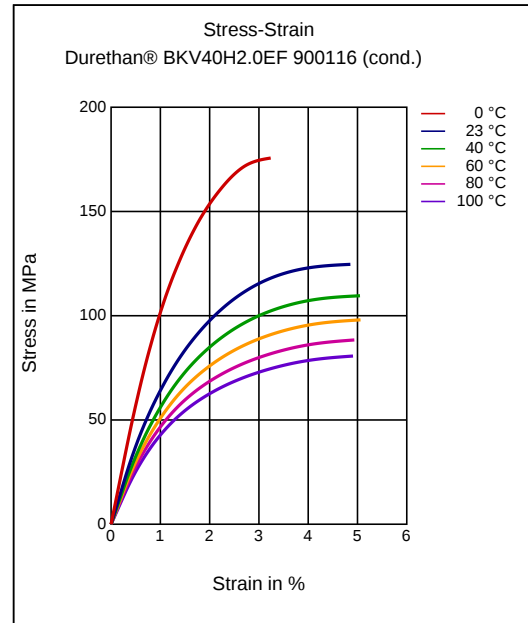
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Diagrams

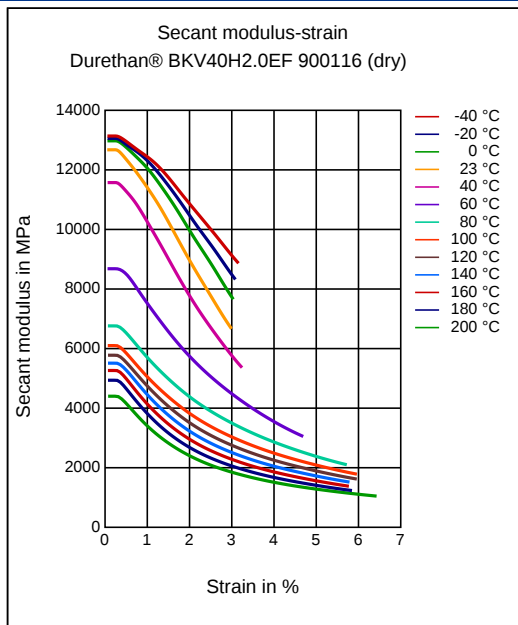
Stress-strain



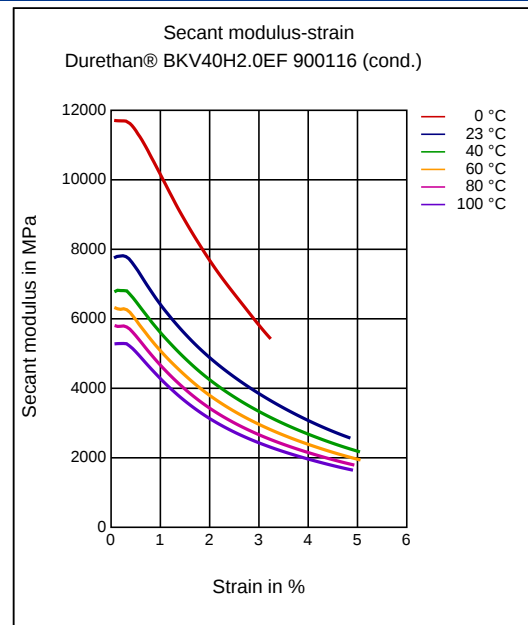
Stress-strain



Secant modulus-strain



Secant modulus-strain



Characteristics

Processing

Injection Molding

Delivery form

Pellets

Injection Molding

PREPROCESSING

Special Characteristics

Heat aging stabilized

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Residual moisture content: 0.03 - 0.12%
Drying temperature dry air dryer: 80 °C

Drying time dry air dryer 2 - 6 h

PROCESSING

Melt temperature (Tmin - Tmax): 270 - 290 °C

Mold temperature: 80 - 120 °C
