

Durethan® BG60XXF 900116
PA6-(GF+GB)40

Envalior

Injection Molding, 60% Glass Fiber/Glass Beads, Heat Stabilized, Improved flow, Low Warpage

ISO 1043 PA6-(GF+GB)60

Rheological properties	dry / cond	Unit	Test Standard
ISO Data			
Molding shrinkage, parallel	0.3 / *	%	ISO 294-4, 2577
Molding shrinkage, normal	0.4 / *	%	ISO 294-4, 2577

Mechanical Properties	dry / cond	Unit	Test Standard
ISO Data			
Tensile Modulus	19000 / 12300	MPa	ISO 527
Stress at Break	210 / 135	MPa	ISO 527
Strain at Break	2.2 / 3.3	%	ISO 527
Impact Strength (Charpy), +23°C	85 / 75	kJ/m²	ISO 179/1eU
Impact Strength (Charpy), -30°C	75 / 70	kJ/m²	ISO 179/1eU
Notched Impact Strength (Charpy), +23°C	15 / 20	kJ/m²	ISO 179/1eA
Notched Impact Strength (Charpy), -30°C	15 / 15	kJ/m²	ISO 179/1eA

Thermal Properties	dry / cond	Unit	Test Standard
ISO Data			
Melting Temperature (10°C/min)	221 / *	°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)	218 / *	°C	ISO 75-1/-2
Coeff. of Linear Therm. Expansion, parallel	11 / *	E-6/K	ISO 11359-1/-2
Coeff. of Linear Therm. Expansion, normal	85 / *	E-6/K	ISO 11359-1/-2

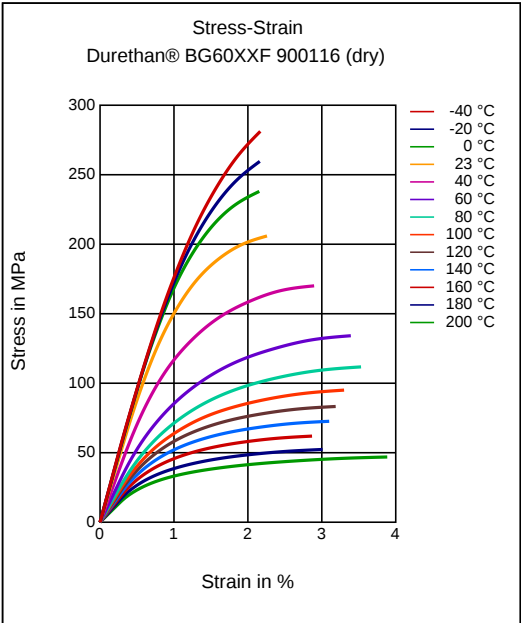
Other Properties	dry / cond	Unit	Test Standard
ISO Data			
Density	1680 / -	kg/m³	ISO 1183

Test specimen production	Value	Unit	Test Standard
ISO Data			
Injection Molding, melt temperature	270	°C	ISO 294
Injection Molding, mold temperature	80	°C	ISO 294

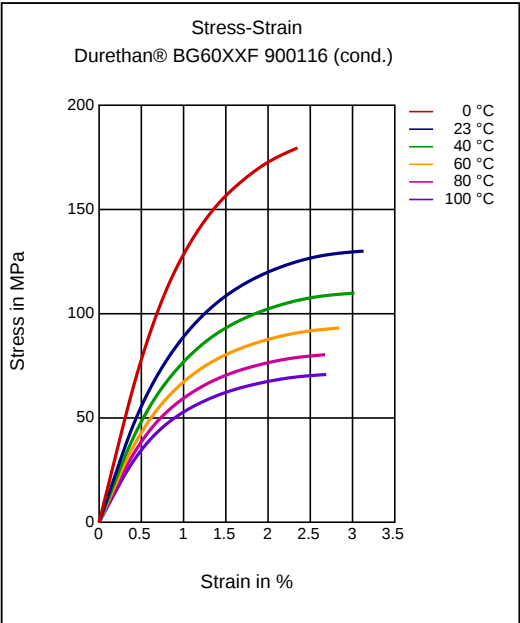
Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	80	°C	-
Pre-drying - Time	2 - 6	h	-
Processing humidity	≤0.15	%	-
Melt temperature	270 - 290	°C	-
Mold temperature	80 - 120	°C	-

Diagrams

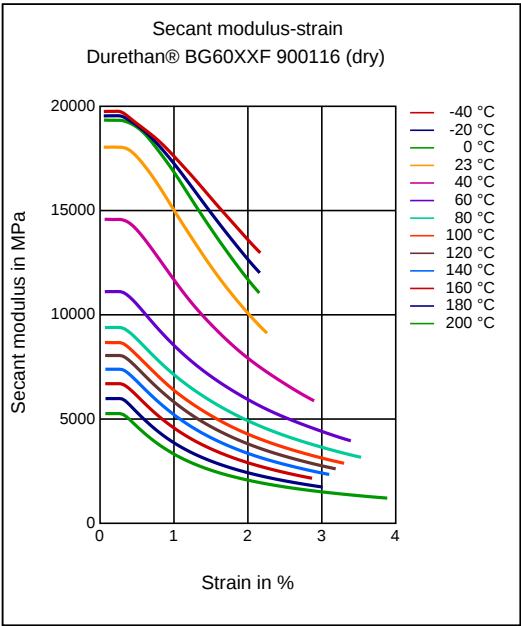
Stress-strain



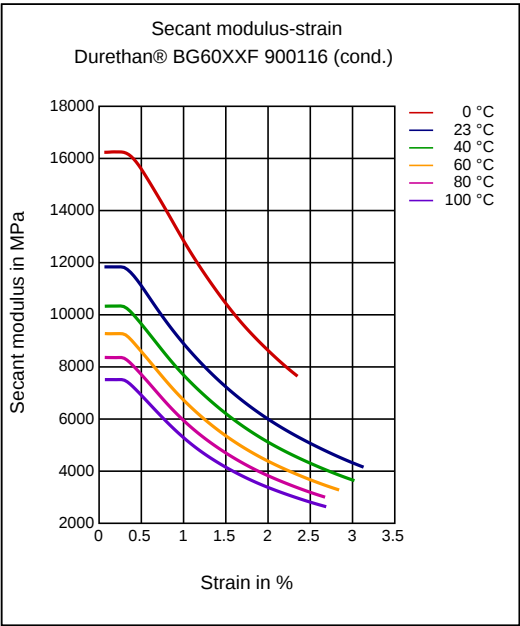
Stress-strain



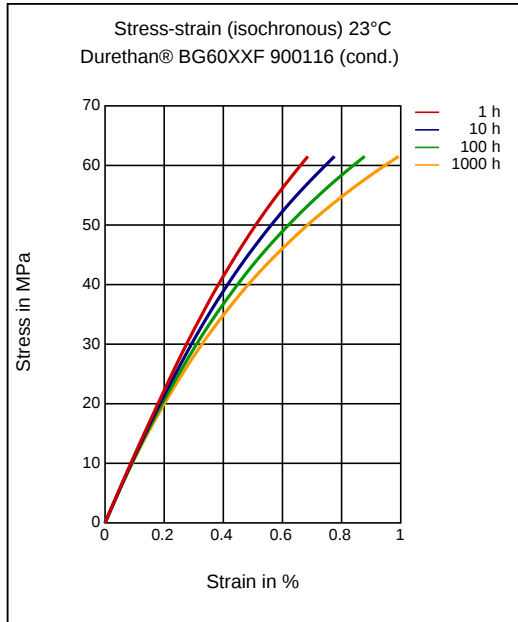
Secant modulus-strain



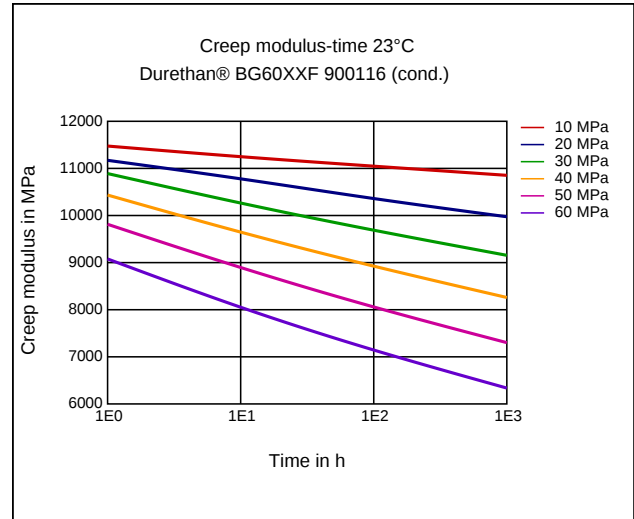
Secant modulus-strain



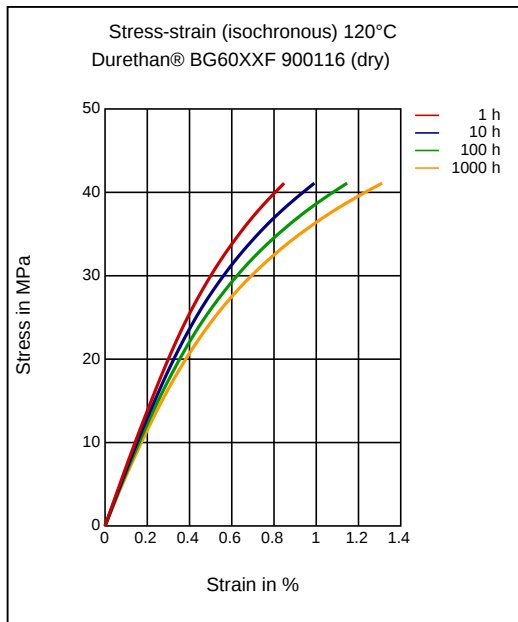
Stress-strain (isochronous) 23°C



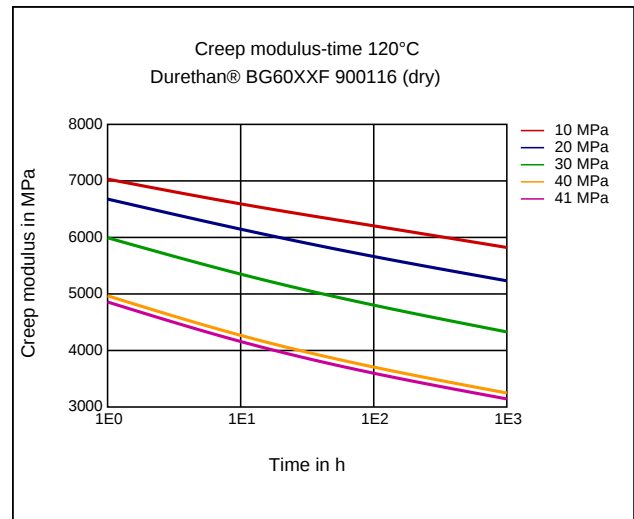
Creep modulus-time 23°C



Stress-strain (isochronous) 120°C



Creep modulus-time 120°C



Characteristics

Processing

Injection Molding

Delivery form

Pellets

Injection Molding

PREPROCESSING

Residual moisture content: 0.05 - 0.15%

Special Characteristics

Heat aging stabilized

Features

Low Warpage

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

Disclaimer

Liability Exclusion

These guide values are measured and provided by the product manufacturer and have been determined on standardised test specimens and can be affected by pigmentation, mould design and processing conditions. M-Base has taken the guide values from the producer's original Technical Data Sheet. **ALBIS AND M-BASE ARE THEREFORE NOT RESPONSIBLE FOR THE ACCURACY OF THE GUIDE VALUES AND CANNOT GIVE ANY WARRANTY WITH REGARD TO THEIR CORRECTNESS.**

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