

PA6G 85 Shore D natural white

Homopolymere, based on caprolactam - Polyamide

Polyamide has great stiffness, hardness and high strength. It has excellent sliding properties and good temperature resistance.

Mechanical, physical and thermal properties

Material code: 0701H

Properties	Condition	Standard	Unit	Unit	
Color				natural white	
Hardness	23°C	ISO 868	Shore D	85 ± 3	
Density	23°C	ISO 1183	g/cm ³	1,31	kg/m ³ 1130
Ball indentation hardness	23°C	ISO 2039 Part 1 (f:358)	MPa	165	psi 23930
Tensile strength	23°C	DIN 527	MPa	≥80	psi ≥11600
Elongation at break	23°C	DIN 527	%	≥40	
Compression strength	23°C	DIN 53 455	MPa		Psi
Thermal conductivity	23°C	DIN 52 612	$\frac{J \times 10^3}{M \times h \times K}$	0,29	
Coefficient of therm. Expansion	23°C-200°C		K ⁻¹ x 10 ⁻⁵	8	
Coefficient of friction*	23°C		μ	0,4	
Minimum service temperature			°C	-40	°F -40
Maximum service temperature			°C	110	°F 230
Young's modulus	23°C	ISO 527	MPa	3000	Psi 435000

*dynamic coefficient of friction, dry, steel, 16MnCr5: v= 0,6 m/s; p=0,05 MPa; t=5h

Resistant to: ketones and esters, solvents, fuels, lubricants, greases and natural oils, mineral oils and fats, alcohol, aliphatic and aromatic hydrocarbons

Not resistant to: strong acids and lyes