

ADVANCED INDUSTRIAL

HIGH PERFORMANCE PLASTIC SHAPES // PRECISION CNC MACHINED COMPONENTS



TECHNICAL DATA SHEET

PTFE

G400

Properties	Unit	Method	Extruded	Molded
PHYSICAL - MECHANICAL				
Density	g/cm ³	ASTM D792	2.14 - 2.18	2.14 - 2.18
Hardness - Shore D	Points	ASTM D2240	51 - 60	60 - 65
Tensile strength	psi	ASTM D4894	> 2901	3625 - 4496
Elongation at break	%	ASTM D4894	> 200	300 - 400
Compressive strength at 1% deformation	psi	ASTM D695	580 - 725	580 - 725
Deformation under load at room temperature 24 hours at 2000 psi	%	ASTM D621	14 - 17	14 - 17
Permanent deformation as above after releasing of 24 hours at room temperature	%	ASTM D621	7 - 8	7 - 9
Deformation under load at 500°F 24 hours at 600 psi	%	ASTM D621	/	30 - 32
Permanent deformation as above after releasing of 24 hours at room temperature	%	ASTM D621	/	17 - 19
Impact strength Izod	ft-lb/ft	ASTM D256	/	34.405
Coefficient of friction (dynamic)	/	ASTM D1894	0.06	0.06
Wear factor (K)	in ³ min 10 ⁻¹⁰ / lb ft h	ASTM D3702	/	24.462
PV limit at 10 ft/min at 100 ft/min at 1000 ft/min	psi x ft/min	/	/	1142.03 1998.56 2712.33
THERMAL				
Service Temperature (min - max)	°F	/	- 328 / + 500	
Thermal expansion coefficient (linear) 77 - 212°F	10 ⁻⁵ / °F	ASTM D696	6.625 - 7.206	6.625 - 7.206
ELECTRICAL				
Dielectric strength (specimen 1968.5 mil thick)	V/mil	ASTM D149	/	508 - 1016
Volume Resistivity	x cm	ASTM D256	/	10 ¹⁸
Surface Resistivity		ASTM D256	/	10 ¹⁷