Acetal Copolymer (POM-C)

POM-C offers low friction and high dimensional stability for CNC parts.

Mechanical properties

Ultimate tensile strength	60 - 70 MPa
Yield strength	60 - 67 MPa
Young's modulus (modulus of elasticity)	2.5 - 2.7 GPa
Elongation at break	30 - 32 %
Hardness	88 HRM

Physical properties

UV resistance	Good

Thermal properties

Maximum service temperature	82 - 90 °C
Thermal expansion coefficent	90 - 97 10^-6/ºC
Thermal conductivity	0.31 - 0.39 W/(m·°C)

Electrical properties

ESD Safety	No

Common applications

Snap fits	
Chemical pumps	

POM-C CNC Machining Applications & Parts

POM-C is our go-to material for crafting high-precision, low-friction components that need to perform reliably without lubrication. We excel at machining it to tight tolerances, overcoming its tendency to warp if not handled correctly.

Typical Parts We Machine from POM-C:

- **Precision Gears & Transmission Components:** Silent, wear-resistant gears, worm gears, and camshafts for automotive interiors, conveyors, and precision instruments.
- **Low-Friction Bushings & Bearings:** Self-lubricating bushings, slide bearings, and rollers for food packaging machinery, automotive assemblies, and furniture.
- **Fluid Handling System Parts:** Reliable valve bodies, pump impellers, and meter components that resist chemicals and wear.
- **Robust Jigs & Fixtures:** Durable, lightweight gauges, jigs, and assembly fixtures for production lines.

Slinar's Machining Edge:

We leverage sharp, specialized tooling and optimized cooling to achieve a superior finish and prevent deformation, ensuring your acetal parts fit perfectly and perform smoothly from the first unit.

Get an Instant Quote for your custom POM-C parts today.