

Technical Product Specification

Component: High-Flex Mechanical Spring Shaft / Segmented Coupling

Component	Flexible Drive Core /	Document	July 1, 2026
Type:	Interlocking Spring	Date:	
Application:	Torque Transmission & Flexible Routing	Document Ref:	FDS-TS-2026-X1

1. MULTI-AXIS GEOMETRIC VIEWS & PROJECTIONS

Comprehensive structural profile illustrating the outer protective wound coil layers (Front/Back/Top views) alongside an internal multi-strand helical mesh configuration visible from the side perspective.



2. STRUCTURAL ANALYSIS & MECHANICAL PARAMETERS

End Fitting Configuration	Precision machined solid-core terminal collar with dual-stage diameter step-downs designed for direct rigid chuck or collet engagement.
Coil Outer Wrap	Dense, close-pitched helical square wire armor maximizing torsional stiffness while preserving cross-axial structural flexibility.
Internal Core Profile	Multi-filar opposing wind helical wire configuration (revealed in Side View) optimized for bi-directional torque distribution and anti-kinking behavior.
Terminal spline geometry	Rear-termination utilizes an interlocking segmented collar setup providing absolute anti-slip indexing during high-RPM operations.