

Beam Couplings for Encoder Feedback Systems



P- and MW-Series beam couplings offer backlash-free operation with low bearing loads.

Ruland beam couplings are machined from a single piece of aluminum or stainless steel and feature multiple spiral cuts. This beam pattern provides higher torque capabilities and greatly reduces wind-up when compared to commodity style single beam couplings. The two sets of beams allow the coupling to accommodate all types of misalignment: angular, parallel, axial motion, and complex. Ruland is also the only manufacturer to offer balanced beam couplings as a standard.

Ruland four beam couplings come in two styles, P-Series and MW-Series, for choices in size and performance. Both series are manufactured in aluminum for added flexibility and low inertia or stainless steel for higher torque and increased corrosion resistance. Bore sizes are available in inch, metric, and inch to metric combinations ranging from 3/32" to 1/2" and 3mm to 12mm.

Beam couplings are part of Ruland's complete line of shaft collars, rigid couplings with precision honed bores, and zero-backlash couplings including: beam, bellows, disc, jaw, and oldham. All products are carefully manufactured in our Marlborough, Massachusetts USA facility under strict controls using proprietary processes. 3-D CAD files, full product specifications, and additional technical information, are all available at the new and improved ruland.com.

Ruland manufactures beam couplings designed specifically for encoder feedback systems. These couplings offer high misalignment capabilities with low bearing loads and are torsionally stiffer than single beam couplings allowing for greater accuracy and repeatability.



Four beam couplings are available in bore sizes ranging from 3/32" to 1/2" and 3mm to 12mm.

Why Ruland Encoder Couplings?

- Balanced for high speed and reduced vibration
- Zero backlash for accuracy of motion
- Accommodate all types of misalignment
- Special designs & materials available on request
- All products are RoHS and REACH compliant
- Carefully made in our Marlborough, MA USA factory with large stocks for immediate delivery

Shaft Collar

Superior fit, finish, and holding power
Precise face/bore perpendicularity for proper alignment
Steel, aluminum, plastic, 303 & 316 stainless steel



Quick Clamping Shaft Collar

Designed for quick set up and easy repositioning
Innovative clamp design requires no tools
Light weight anodized aluminum



Rigid Coupling

Nypatch® anti-vibration hardware
Precision honed bores for proper fit and alignment
1 and 2 piece styles with or without keyway



Bellows Coupling

Zero-backlash, aluminum hubs for low inertia
Stainless steel bellows for high torsional stiffness
Balanced design for speeds up to 10,000 RPM



Beam Coupling

Zero-backlash, suitable for all types of misalignment
Multiple beams for improved torsional rigidity and torque
Available in aluminum and stainless steel



Oldham Coupling

Zero-backlash, low bearing loads, low inertia
Good overall performance, electrically isolating
High parallel misalignment capability



Jaw Coupling

Zero-backlash, dampens impulse loads
Elastomer element in choice of 3 durometers
Easily combine inch to metric and keyed to keyless



Disc Coupling

Zero-backlash, high torsional stiffness
Single disc style for compact installations
Double disc style for high misalignment

