

## Zero Backlash Jaw Couplings for Machine Vision Systems



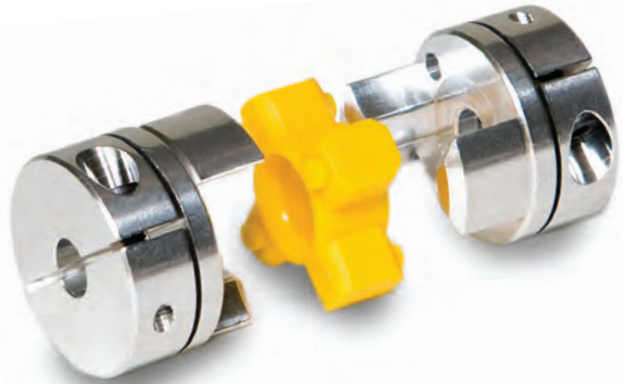
**Machine vision systems benefit from the high dampening characteristics of the jaw coupling.**

Jaw couplings are a three piece design comprised of two aluminum hubs and an elastic element called the "spider." Made of an advanced polyurethane material, the spider provides dampening of impulse loads, minimizing shock to the motor and other sensitive equipment. Available in three durometers, the spider allows the user to tailor the jaw coupling's performance, such as torsional stiffness, misalignment, and dampening requirements, to their application. For added customization metric and inch hubs (set screw, clamp style, keyed, or keyless) are interchangeable and can be combined into a single coupling.

Ruland jaw couplings feature a curved profile hub which press fits onto the spider assuring zero backlash operation. The curved jaw profile concentrates the forces to the center of the spider's limbs, improving the effectiveness of the elastomer material. Raised contact points on the spider limbs help maintain proper spacing between the two hubs, assuring electrical isolation and full angular misalignment capabilities.

All Ruland products are RoHS and REACH compliant. Zero backlash jaw couplings are part of Ruland's complete product line which includes shaft collars, rigid couplings, and motion control couplings: beam couplings, bellows couplings, oldham couplings, and disc couplings.

*Ruland offers zero backlash jaw couplings for the demanding requirements of start and stop machine vision systems used in industries such as semiconductor, medical, solar, and packaging. The dampening characteristics of Ruland's jaw couplings reduce settling time and shock loads, making them ideal for these environments.*



**Jaw couplings offer a high level of customization to match application requirements.**

### Why Ruland Jaw Couplings?

- Strong dampening capability
- Highly customizable to fit system needs
- Carefully made in our Marlborough, MA USA factory with large stocks for immediate delivery
- All products are RoHS and REACH compliant
- Special designs available upon request

### 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

