# Keyless Locking Devices

### What is a KLD?

Keyless Locking Devices (KLDs) are mechanical bushings used to connect power transmission components onto rotating shafts.

#### **Eliminate Keyways**

Keyways introduce backlash, which over time leads to fretting corrosion and wallowing.

#### **Simplified Machining**

KLDs work with straight bores and generous tolerances, reducing component machining complexity and cost.

#### **Quick & Easy Installation**

KLDs are installed and removed using simple hand tools; no heat or high forces required.

#### **High-Capacity Interference Fit**

KLDs transmit high dynamic loads, including torque, thrust, bending, and combined loads. Excellent for applications with indexing motion profiles and/or high shock loads.



#### **Shrink Discs**

- ✓ Shrink discs mount on the outside of a hub or hollow shaft, compressing it onto the shaft
- ✓ Tapered rings work like wedges to convert locking screw clamp loads into radial contact pressure
- ✓ Component deformation is elastic, so all parts return to their original fit clearances upon removal
- ✓ Shrink disc outer rings are supplied zinc plated for added✓ corrosion protection





## Locking Assemblies

- ✓ Locking Assemblies install as bushings between the shaft and the component bore, creating a high-pressure mechanical interference fit
- ✓ As the annular high-strength screws are tightened, internal tapers simultaneously apply radial force on the shaft and the component bore
- ✓ No key means infinite radial and axial positioning for precise alignment and timing
- ✓ Self-locking tapers on most designs mean the connection will not loosen under dynamic loading, even high shock, reversing or vibration



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