ITT Cannon K-Lock Ultra High-Vibration Locking Coupling System

We connect in the harshest shock environments. Shaking. Vibrating. Rattling. In the harshest shock environments, even the most reliable ratcheting coupling systems can decouple. A loss of power and control in critical applications could be catastrophic. Only the ITT Cannon K-Lock Ultra High-Vibration Locking Coupling System drastically reduces the risk of decoupling, ensuring uninterrupted electrical connectivity.

The coupling mechanism is a sliding ratcheting coupling nut that securely locks in position when mated, delivering unmatched reliability to critical connections.

- Secure twist and lock coupling
- Eliminates the need for pinning or wiring of coupling nuts because of its internal locking mechanism
- Easy pull and twist decoupling

To make it even stronger and more resilient, it’s made of stainless steel to inhibit corrosion in exposed environments, especially those with extreme heat and moisture. It’s this innovation that all adds up to the ITT Cannon K-Lock Ultra High-Vibration Locking Coupling System difference.

The Cannon Difference:

- Locking coupling without risk of decoupling
- Drastically reduces the risk of catastrophic failure—greatly minimizing the possibility that electrical connectivity will be lost
- Eliminates needs for pinning or wiring
- Easily decouples when needed through pull and twist mechanism

Key features:

- Stainless steel construction for extreme durability
- Twist and lock functionality
- Ratcheting coupling nut
- Resistant to +100 g of shock
- Resistant to +2,000 Hz of vibration
- Withstands exposure to 2,000 hours of salt spray
- 500 mating cycles

It couples with any standard receptacle, and making a secure connection is easy. Simply twist and lock the coupling nut, the same as any standard connector. When you need to decouple, just pull and twist the coupling nut.

Applications

- AIRCRAFT
  - WHEEL WELLS | ENGINES | APUs
- LAND VEHICLES
  - ENGINE ENVIRONMENTS | EXPOSED AREAS OF UNDERCARRIAGE
- SHIPS
  - MUNITIONS WEAPONS FIRING AREAS
- SPACE
  - LAUNCH VEHICLES | EXPOSED AREAS OF SATELLITES
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Intermateable with and integratable into the following connector styles:

- **KJB 38999-Style**
- **Composite 38999-Style**
- **Aluminum Hermetic 38999-Style**
- **MKJ Miniature 38999-Style**

• High density #22 signal contacts
• Up to 99 contact positions
• Combination arrangements power contacts to 40 amps RF contacts
• High speed ethernet contacts fiber optics

• High density layouts with up to 128 data connections and power contacts rated up to 23 amps
• Triple-start coupling with anti-decoupling ratchet for high vibration applications
• Cadmium and electroless nickel platings
• 100% scoop-proof contacts
• Rated to 1,500 mating cycles
• Designed to be comparable to 38999-Style Series III Composite connector

• Lightweight aluminum shell
• Provides low pressure sealing of 0.01 micron cubic feet per hour for a pressure differential of 15 psi
• Sealed to 1 meter of water
• Low resistivity copper contacts
• 38999-Style Series III compatible
• Available with crimp piggyback contacts

• High density 2 mm (.078") pitch
• Rear release #23 snap-in contacts
• Superior shielding of 50 dB at 1.0 GHz rear grommet stress relief and sealing
• 4 to 85 contacts per connector at 5 to 13 amps/contact

WFB 5015 Firewall

• Complete moisture sealing
• Rugged metal clip retention system
• Improved contact alignment and stability
• Front release contacts
• Optional self-locking coupling nut
• WFB connectors are qualified to Boeing BACC63CD and CE

Why ITT

ITT is a focused, multi-industrial company that designs and manufactures highly engineered critical components and customized technology solutions.

ITT Cannon is a leading global manufacturer of connector products serving international customers in the aerospace and defense, industrial and medical end markets. We design and engineer a variety of interconnect solutions that make it possible to transfer data, signal and power in an increasingly connected world.

Connect with your ITT Cannon representative today or visit us at www.ittcannon.com

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