



Cable Isolators

In Section 5, starting on page 5-23, we offer a large selection of cable isolators. These assemblies are made of aircraft-quality, stranded, stainless steel cable, helically wound into metal retaining bars suitable for surface mounting. Shock and vibration are damped as the result of friction between strands of cable under load (“flexure hysteresis”). Their superior characteristics include their ability to provide protection in compression, extension, shear and roll in all axes simultaneously.

All stainless steel and aluminum construction gives these units an excellent ability to resist corrosion and leads to extremely long maintenance-free life. Below are some of the applications where the cable isolators can be superior to any other type of vibration mounts.



General Characteristics and Uses

Application	Types of Equipment Protected	Sources of Vibration and Shock	Other Environmental Hazards	Critical Specifications (Limitations)	Needed Isolator Characteristics	Other Requirements
Shipboard Electronics	Navigation Displays, Radar Communication, Sonar	Nearby Blast, Ship's Inherent Vibration, Heavy Weather	Salt Water, Temperature Extremes	MIL-S-901D MIL-STD-167	Life of Installed Equipment, Corrosion Resistance, Maintenance-Free	Compliant in All Directions
Over-the-Road Vehicles	Instrumentation, Generators, Electronics	Irregular Terrain Poor Road Condition, Collision	Temperature Extremes, Ozone, Radioactivity, UV Radiation	Munson Rough Road Course, 10 g's Repeated Shock	Long Fatigue Life, Large Displacement	Minimum Space, Maintenance-Free for Inaccessible Locations
Shipping Containers	Jet Engines, Missiles, Gyroscopes, Electronics	Transit, Handling Drop, Loading / Unloading	Altitude Variations, Exposure to Moisture	Accidental Drop	Excellent Shock Mitigation	Indefinite Shelf Life, Repeated Use
Geophysical Equipment	Data Acquisition, Data Processing Electronics	Off-the-Road Vehicles, Transit Ship (Un)loading	Misaligned Installation, Rough Use	Severe Road Shock, Careless Handling	Maintenance-Free, No Replacement	Repeated Large Deflections Due to Load Shock
Chemical Processing Equipment	Centrifuge, Dryers, Pumps	Unbalanced Dynamic Loads, Fluid Hammer	Corrosive Environments, Chlorine, Sulfur	High Temperature, Corrosive Environments	Low Frequency Reponse	Maintenance-Free for Inaccessible Locations
Avionics	ECM, Communications, Reconnaissance	Rapid Maneuvering, Hard Landings, Turbulent Air	Temperature and Altitude Extremes	15-g 11ms Hard Landing MIL-STD-810	Long Fatigue Life, No Aging Deterioration, Lightweight	Low Profile, Dynamic Response Does Not Change with Temperature or Altitude
Ordnance Equipment	Missile Launcher, Tank Artillery, Computer Controls, Electronics	Off-Road Vehicles, Railroad Humping	Nearby Blast	Munson Rough Road Course, Railroad Humping	Excellent Shock Mitigation, Maintenance-Free	Use at Any Altitude
Medical Equipment	Mechanical Equipment Critical to Patient Care	Moving Parts, Moving Carts	—	Minimal Vibration	Easy to Maintain, No Outgassing	Can Be Sterilized