PYROTECHNIC CORD & WIRE CUTTERS

These cutters (or guillotines) primarily consist of a body (usually stainless steel) with an eyelet (to thread the cord or wire through), an end cap or anvil, a piston/cutter blade, shear pin(s) and an electrically fired actuator. The body housing the piston/cutter blade, provides for installation of the cartridge, and attachment of the anvil. The anvil is removable to facilitate removal and installation of either the guillotine or wire bundle. Lugs, for attaching the guillotine to the releasing structure, are an integral part of the guillotine body.

APPLICABLE SPECIFICATIONS

Operating Temperature: -54 °C to +71 °C (-65.2 °F to 159.8 °F)
Function Time: With the application of the All-Fire current, the cutter will completely sever the target in <20 milliseconds
Reliability: 99% at 95% confidence level
Altitude: 10,000 feet underwater to Deep Space
Estimated Weight: 27 to 173 grams
Target Materials: Cord/wires ranging from 1/16 to 7/16 inches

ELECTRICAL SPECIFICATIONS

Bridgewire Resistance 0.9 to 1.30 ohms
Insulation Resistance 100 megohms 500 VDC
No Fire 1 amp/ 1 Watt for 5 Minutes
Recommended All Fire 4.0 Amps for 50 millisecond duration
ESD 25KV Electrostatic discharge: 25 kV DC from 500 pF Cap thru a 5k ohm resistor – shorted pins to case and pin-to-pin
Electrical connections can be lead wire, bayonet or threaded connectors