PYROTECHNIC ACTUATOR

A pyrotechnic actuator (or explosive piston actuator) can pierce a pressurized vessel (to release gasses), eject flares, unlatch devices, remove devices and push mechanical devices from point A to point B. Achieve your mission-critical goal through an active stroke of an internal rod or piston to induce or control the desired motion. As an innovator in the motion control sector, we have led application advancement to initiate devices by any number of methods.

The power for such devices is provided by pressure cartridges or gas generators. Pressure produced by the cartridge drives a piston creating mechanical motion. Pyrotechnic actuators are used for opening pressure vessels, ejecting flares, unlatching and any other operation where a high energy, relatively short duration, mechanical motion is required.

APPLICABLE SPECIFICATIONS

All-Fire:
- Within 20 milliseconds @ 3.5 amp (when electrically initiated)
- Within 10 milliseconds from ETL input stimulus

No-Fire:
- 5 Minutes @ 1 amp/1 watt (when electrically initiated)

Operating Temperature: -90 °F to +220 °F (typical)
Piston Travel Distance: 0.15 to 0.5 inches typical
Side Loads: 100 – 1,700 lbs. force typical

FUNCTIONS

- Fire suppression
- Landing gear emergency blow down systems
- Missile guidance seeker coolant release
- Missile canister cover removal
- Door release on helicopters and space capsules
- Fin and wing release
- Satellite release systems
- Aircraft egress systems