

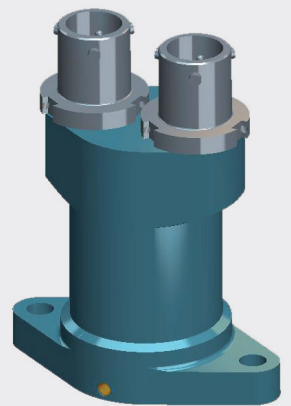
M6 SEPARATION NUT

P/N ME0031

Hold down and Release Mechanism designed and qualified for use on satellites

SPECIFICATIONS

- **Application:** To maintain a preload bolt that attaches separate components, and release it on electrical command
- **Nut size:** ISO M6 x 1
- **Bolt tension:**
 - by torque 3250N to 6250N
 - by pure tensile force Up to 13,000 N
- **Operating time:** ≤ 10 ms
- **Leak rate:** 10^{-4} scc/sec
- **Redundancy:** 2 initiators
- **Reliability:** > 0.9999 with 95% confidence level
- **Initiator:** 2 redundant NSI



ELECTRICAL CHARACTERISTICS

- **Bridge wire number:** 1 + 1
- **Bridge wire resistance:** $1.05 \pm 0.1 \Omega$
- **Insulation resistance:** $\geq 100 \text{ M}\Omega / 250 \text{ VDC}$

CURRENT RATINGS

- **Nominal firing current:** 3.5 A / 10 ms (-54°C, +150°C)
5 A / 10 ms (-162°C, -54°C)
- **“No fire” current:** 1.0 A/1W-5 min up to +150°C
- **“No fire” current test:** 0.02 A / 1 min max

MECHANICAL CHARACTERISTICS

- **Mass:** ≤ 120 g
- **Housing material:** Aluminum alloy
- **Nut material:** Steel (15-5-PH)

ENVIRONMENT

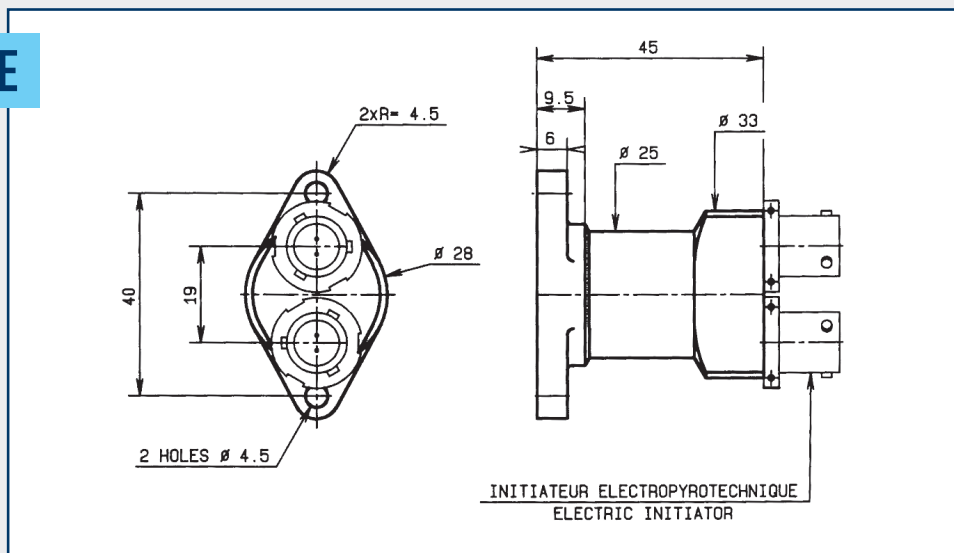
Random vibration: all axes, 2 min/axis
 10 – 100 Hz : + 6 dB/oct
 100 – 1000 Hz : 1 g²/Hz
 1000 - 2000 Hz : 0.3 g²/Hz
 Global: 36.0 g RMS

Thermal shock: 10 cycles -110°C up to +110°C

Thermal vacuum: 10⁻⁶ Torr

Operating temperature: -100°C to +100°C

INTERFACE



RECOMMENDED STORAGE CONDITIONS

Storage temperature: +10°C up to +30°C

Humidity: ≤ 60%

Storage lifetime: 10 years

Storage class: 1.4 S

UNO N°: 0173

UNO designation: Release devices, explosives