NON-PYROTECHNIC

Hold Down and Release Mechanisms

High-reliability, non-explosive (split-spool) HDRMs, separation nuts, and pin pullers/pushers for dependable preload retention and release of deployable space systems

- Pyrotechnic-free alternative (low-shock fuse-wire) for single-event release of deployable space systems
- Configurable electrical initiation with no (amperage) upper limit
- Near-simultaneous release dependent on temperature and power
- User-serviceable and refurbishable units
- Redundant or non-redundant actuation circuit
- Not susceptible to transient and noise (EMI/EMP/ESD/RFI) inputs
- Extended temperature ranges: -150°C to +150°C

Glenair pyrotechnic-free release mechanisms offer near-simultaneous release time, low shock performance, with relatively low initiation power input.

HDRM Series includes separation nuts, pin pushers, and pin pullers—direct wired or connectorized—with a broad range of preload carrying capacity.
NON-PYROTECHNIC
Hold Down and Release Mechanisms
Separation nut, pin puller, and pin pusher configurations with flight heritage

**HDRM DUTY CLASSES**

- **Light-Duty HDRM**
  - Redundant circuit,
  - 5 – 75 lb release preload

- **Medium-Duty HDRM**
  - Redundant circuit,
  - 300 – 4000 lb release preload

- **Heavy-Duty HDRM**
  - Redundant circuit,
  - 5000 – 20,000 lb release preload

**HDRM RELEASE TYPES**

- **Separation nut**
- **Pin puller**
- **Pin pusher**

**NORTH AMERICAN AND EUROPEAN HDRM SOLUTIONS**

Glenair is pleased to offer both our North American and European customers access to our innovative hold-down release mechanism technologies. These non-pyrotechnic space mechanisms are ideally suited for satellite, payload fairing, antenna array, solar array, and boom and mast deployment. Glenair medium-duty HDRMs and pin pullers can ship to most customers without an export license, although light- and heavy-duty HDRMs do typically require one. Certain designs may be manufactured by Glenair Space Systems in Salem, Germany. Consult factory for complete information.