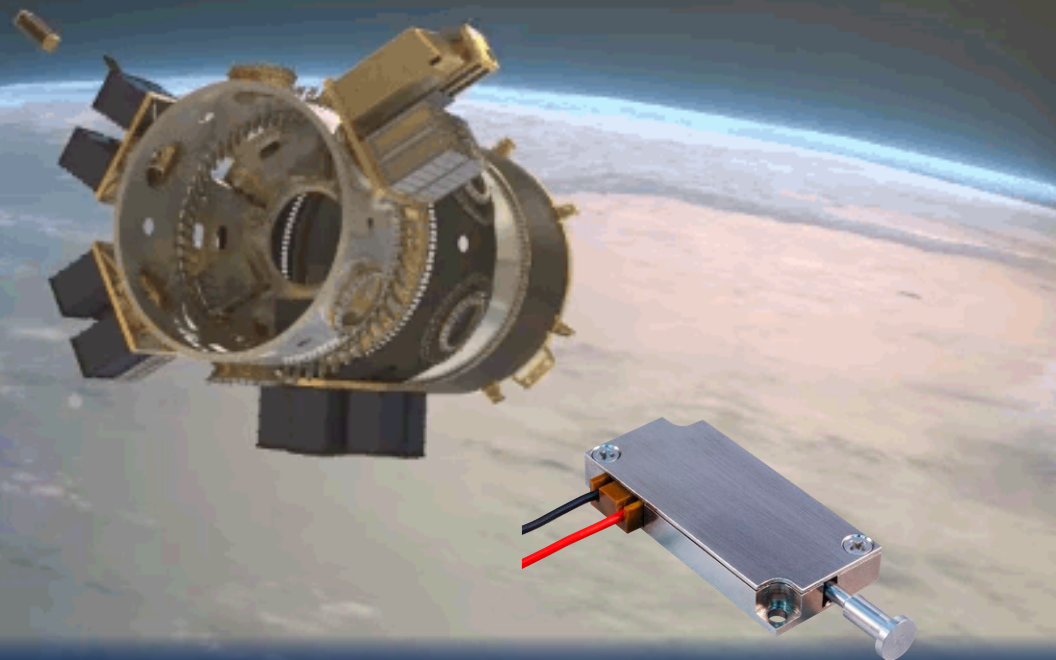




Non-Pyrotechnic Hold Down and Release Mechanisms (HDRMs)

Space Mechanisms
and HDRMs



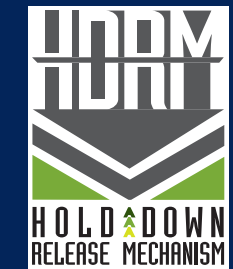
Customer-Refurbishable, Fused-Wire Based Technology

Hold down release mechanisms are used to secure and deploy satellites and satellite appendages including solar arrays, reflector antenna, booms, and masts. Historically, release devices of this type have included explosive release nuts, bolt cutters, separation nuts, as well as wire and pyro cable cutters. Glenair non-explosive HDRMs employ a fusible wire-actuated nut technology that solves many of the problems associated with explosive hold down and release devices, including easy on-site refurbishment after test. Glenair Space Systems designed and manufactured HDRMs are not subject to US ITAR or Commerce Department restrictions.

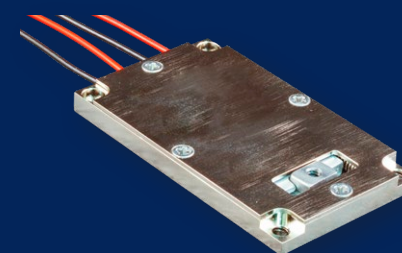
SCALABLE SOLUTIONS

- Packaging options include both cylindrical and rectangular housings
- Lightweight materials, unique shapes and profiles
- Standard and non-standard mounting dimensions IAW customer requirements
- Scalable designs with as little as 5 lbs. (22 N) of release pre-load and as much as 20,000 lbs. (9000 N)
- Separation nut designs as well as pin pullers and pin pushers

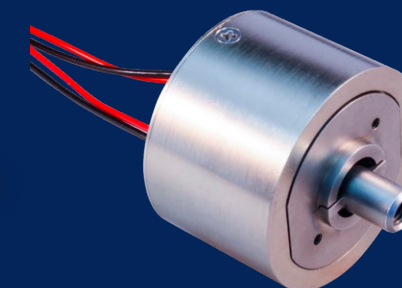
NON-PYROTECHNIC
Hold Down and Release Mechanisms
ITAR and non-ITAR controlled solutions
with flight heritage



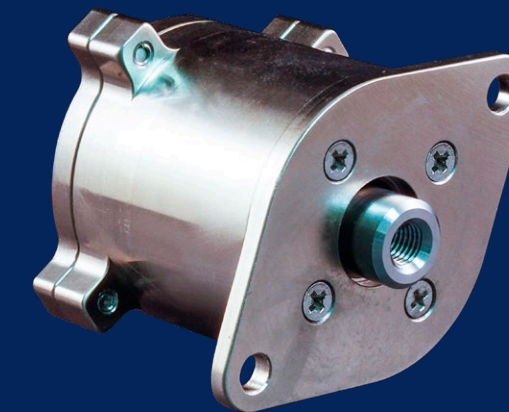
HDRM DUTY CLASSES



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



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

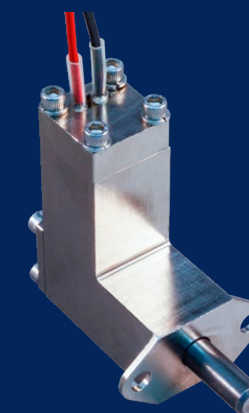


Heavy-Duty HDRM
Redundant circuit,
5000 – 20,000 lb release preload

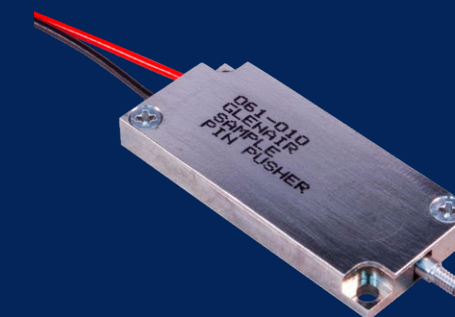
HDRM RELEASE TYPES



Separation nut



Pin puller



Pin pusher

NORTH AMERICAN AND EUROPEAN (NON-ITAR-CONTROLLED) 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. Independently and locally engineered and certified for use in NASA, ESA, and private exoatmospheric applications, these flight-heritage, proven HDRM technologies are now available to our European partners without US Defense or Commerce department restrictions.