Medium-Duty Hold-Down Release Mechanism

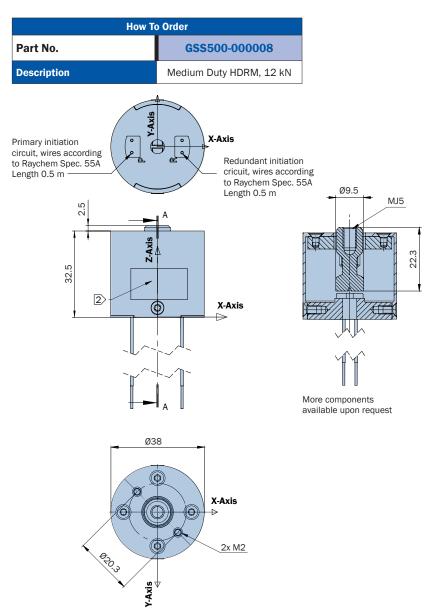
12 kN Release Preload Electrically and Mechanically Redundant



HOLD-DOWN RELEASE MECHANISM, MEDIUM-DUTY



- Pyrotechnic-free alternative (low-shock fuse-wire) for single-event release of deployable space systems
- Electrical actuation:4 Amperes
- User-serviceable and refurbishable units
- Ruggedized against transient and noise (EMI/EMP/ESD/RFI) inputs
- Extended temperature ranges: -150°C to +150°C
- Easy 15-minute on-site refurbish, order refurbishment initiator P/N GSS501-000006
- Made by Glenair in Salem, Germany



MATERIAL/FINISH

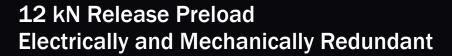
Aluminium alloy, Stainless steel, Polyamidimid GF30%

NOTES

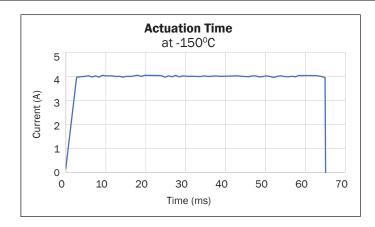
- Unit is identified with Glenair name, CAGE code, part number, and date code, space permitting. Primary initiation circuit identified with "P" and redundant with "R". See 2.>
- Release preload: 12 kN
- Full qualification pending expected capabilities shown next page are subject to change without notice



Medium-Duty Hold-Down Release Mechanism







| Expected Capability for GSS500-000008 | |
|---------------------------------------|--|
| Nominal Preload | 12 kN |
| Proof Preload | 13.2 kN |
| Ultimate Load | >16.5 kN |
| Weight | Max 107 g with 0.5 m Harness |
| Electrical Resistance | 0.3 - 2.0 Ω |
| Sine Vibration 3 orthogonal axes | 25 g's |
| Random Vibration 3 orthogonal axes | 50.9 g _{rms} |
| Actuation Time | Max 70 ms @ 4.0 A at -150°C |
| Admissbile Shock Input | 2849 g's at 5 kHz |
| Source Shock | Max 300 g's at nominal preload |
| Life Test | Mechanical components qualified for 10 times use with refurbishment initiators |
| Operating temperature range | -150°C to +150°C |
| Preload drop over 6 months | <3.0% loss at nominal preload |
| Allowable Angular misalignment | 2° |
| Ероху | Outgassing requirements per ECSS |
| | |

