# Medium-Duty Hold-Down Release Mechanism

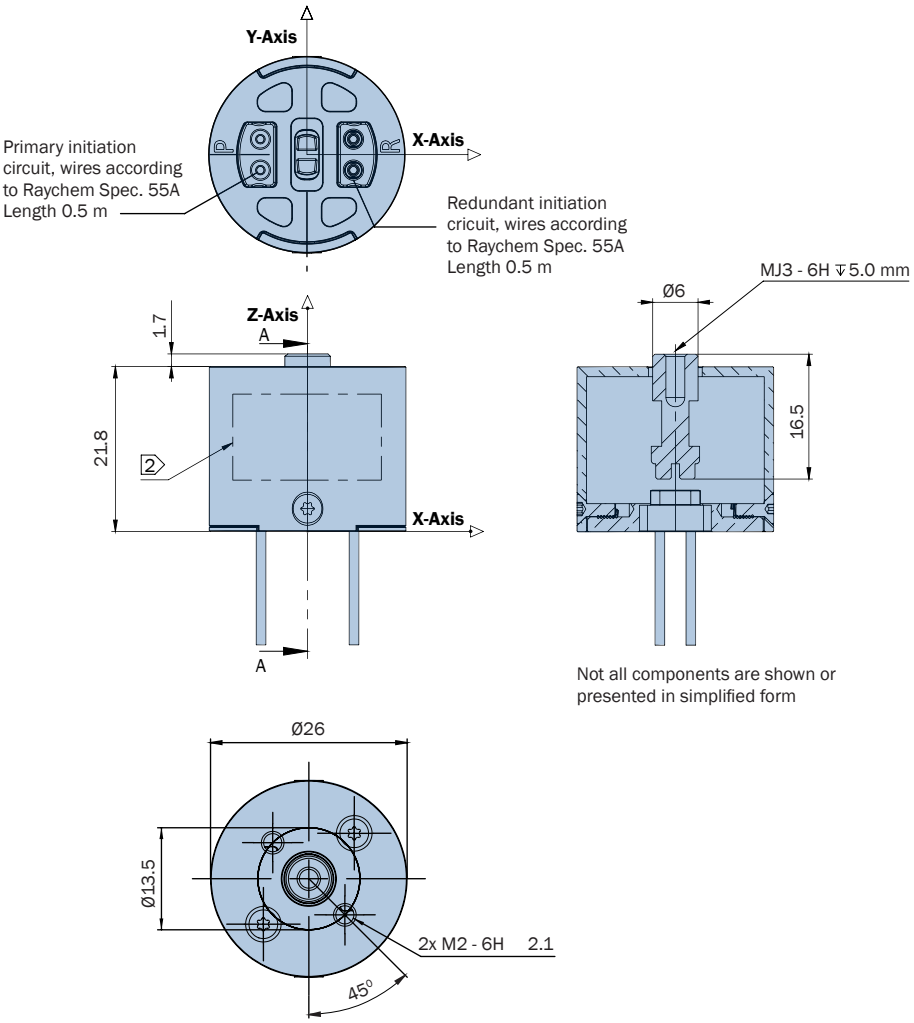
## 3 kN Release Preload
## Electrically and Mechanically Redundant

HDRM
HOLD DOWN RELEASE MECHANISM
EU series™

### HOLD-DOWN RELEASE MECHANISM, MEDIUM-DUTY


| How To Order | |
|---|---|
| Part No. | GSS500-000016 |
| Description | Medium Duty HDRM, 3 kN |

- **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 GSS501-000009**
- **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: 3 kN
- Reference Glenair P/N GSS501-000009 for refurbishment initiator


*Dimensions in millimeters are subject to change without notice.*

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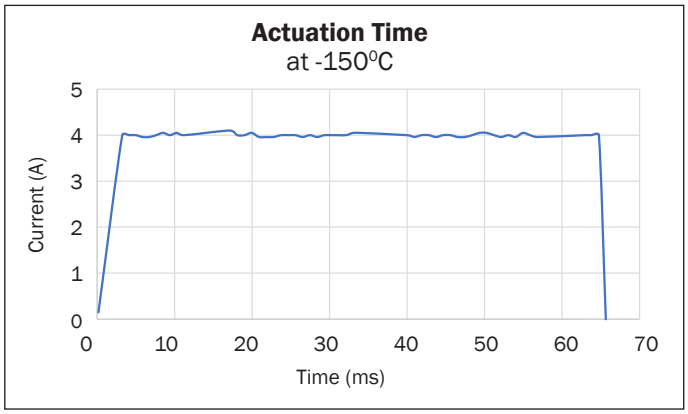
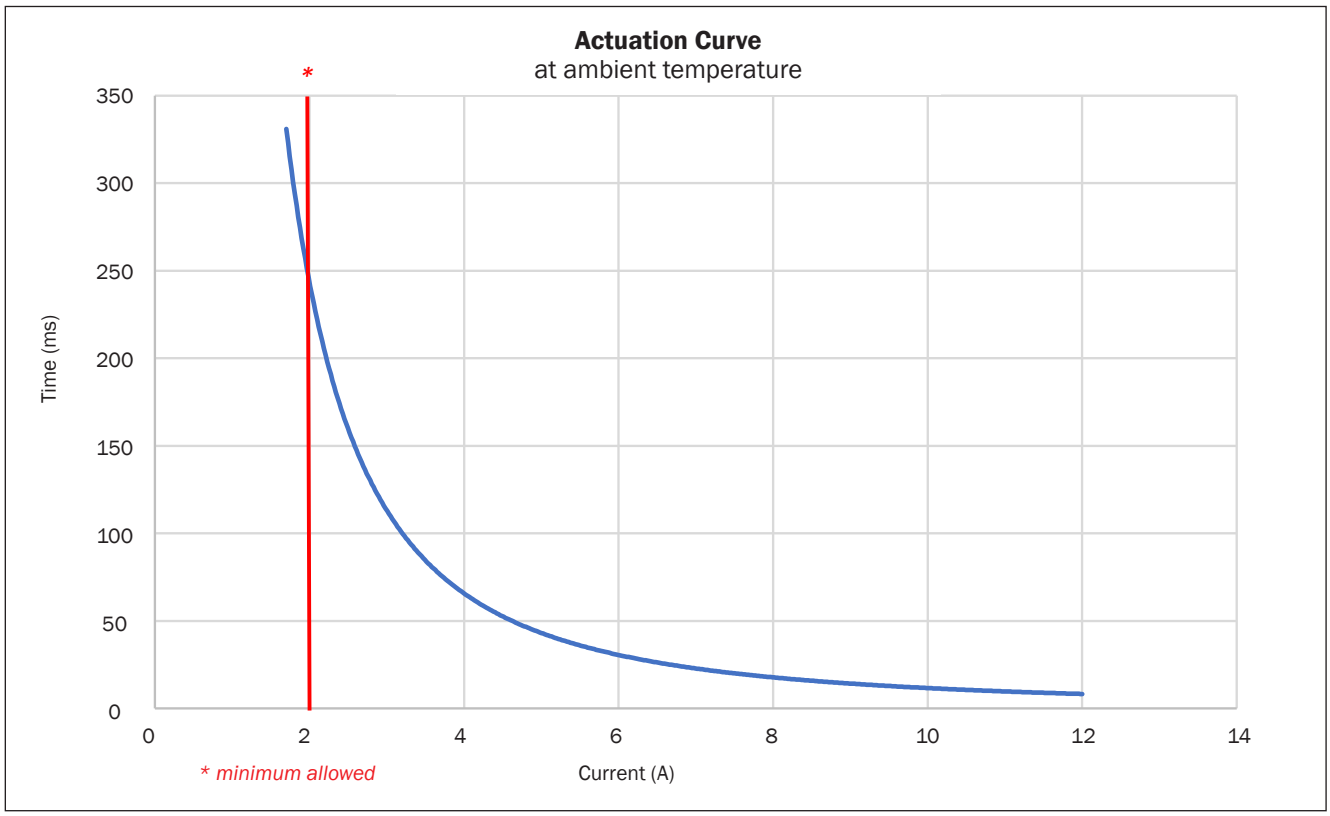



| Tested Capability for GSS500-000016 | |
|---|---|
| Nominal Preload | 3 kN |
| Proof Preload | 3.3 kN |
| Ultimate Load | 7.4 kN |
| Weight | Max 46 g with 0.5 m Harness |
| Electrical Resistance | 0.3 – 2.0 Ω |
| Sine Vibration<br>3 orthogonal axes | 25 g's |
| Random Vibration<br>3 orthogonal axes | 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 100 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 | <5.0% loss at nominal preload |
| Allowable Angular misalignment | 2° |
| Epoxy | Outgassing requirements per ECSS |





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