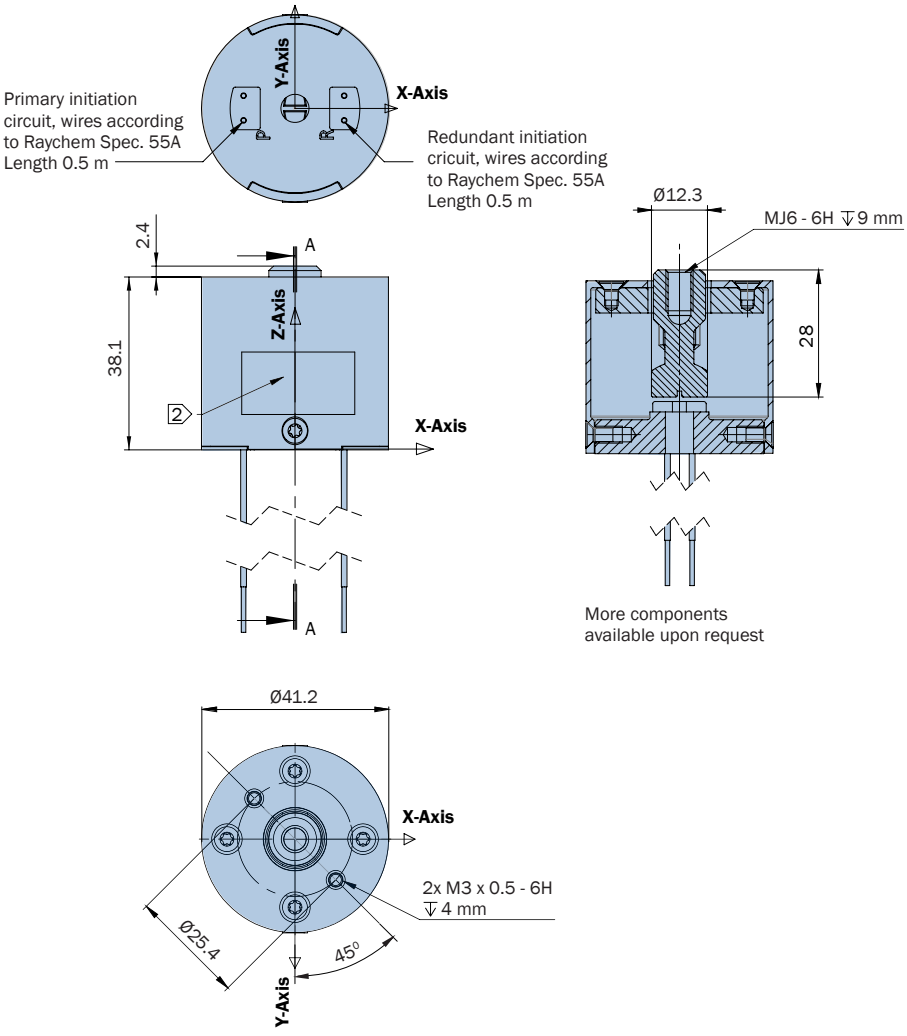
Medium-Duty Hold-Down Release Mechanism

18 kN Release Preload
Electrically and Mechanically Redundant

HOLD-DOWN RELEASE MECHANISM, MEDIUM-DUTY

How To Order	
Part No.	GSS500-000003
Description	Medium Duty HDRM, 18 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 GSS501-000002**
- **Made by Glenair in Salem, Germany**

Mechanical release unit for ground testings available upon request

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: 18 kN
- Reference Glenair P/N GSS501-000002 for refurbishment initiator

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Dimensions in millimeters are subject to change without notice.

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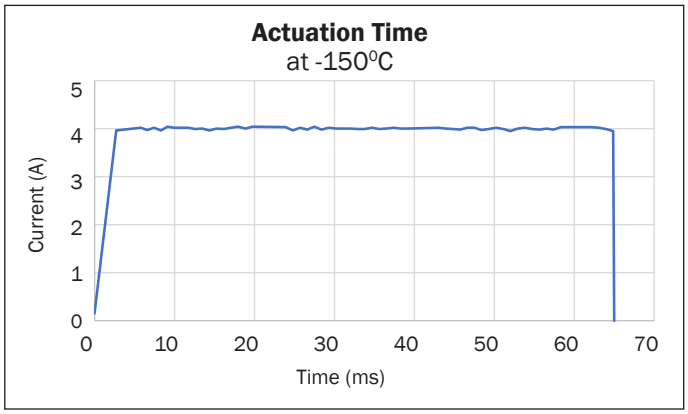
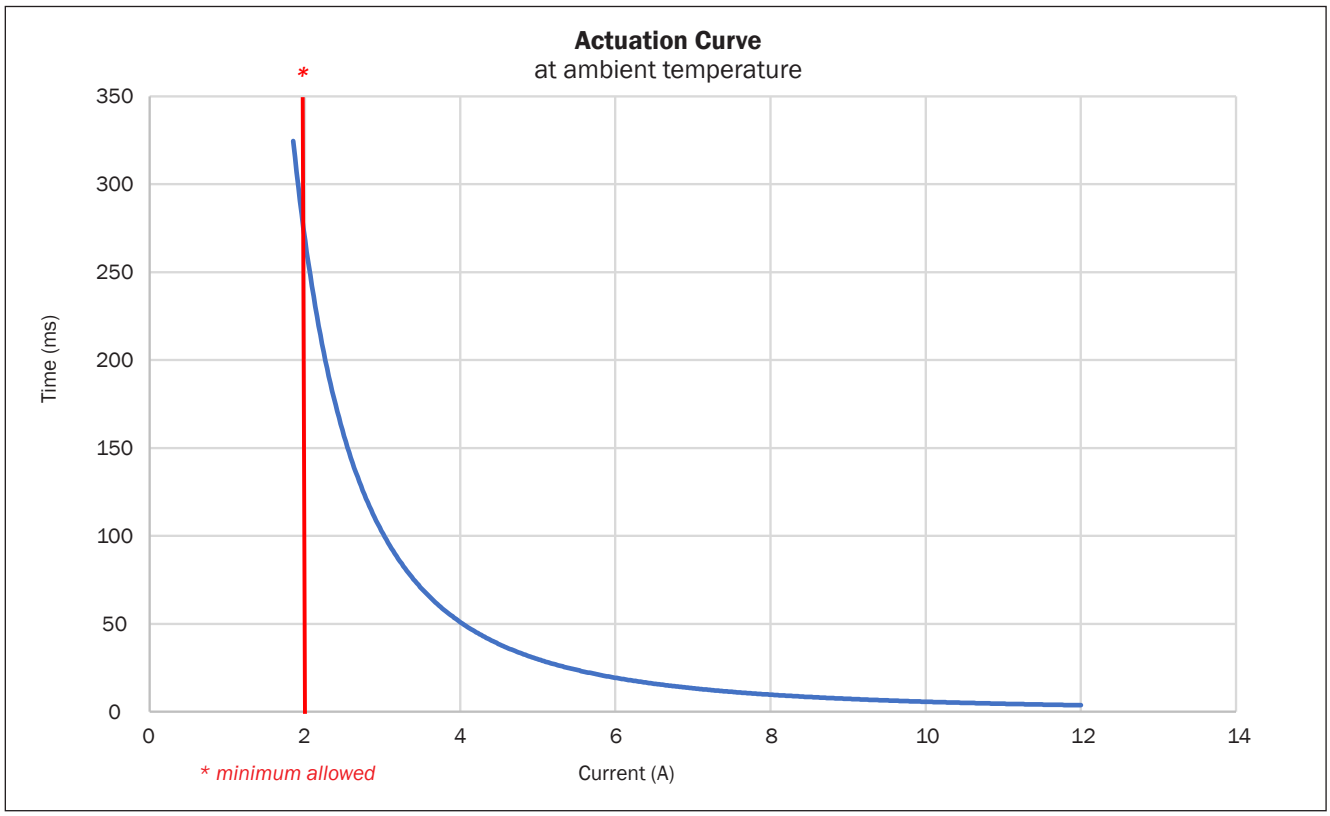


Tested Capability for GSS500-000003	
Nominal Preload	18 kN
Proof Preload	19.8 kN
Ultimate Load	32.8 kN
Weight	Max 163 g with 0.5 m Harness
Electrical Resistance	0.3 – 2.0 Ω
Sine Vibration 3 orthogonal axes	25 g's
Random Vibration 3 orthogonal axes	50.9 g_{rms}
Actuation Time	Max 70 ms @ 4.0 A at -150 °C
Admissbile Shock Input	2849 g's at 5 kHz
Source Shock	Max 300 g 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	<1.5% loss at nominal preload
Allowable Angular misalignment	2°
Epoxy	Outgassing requirements per ECSS



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