

# Medium-Duty Hold-Down Release Mechanism

18 kN release preload

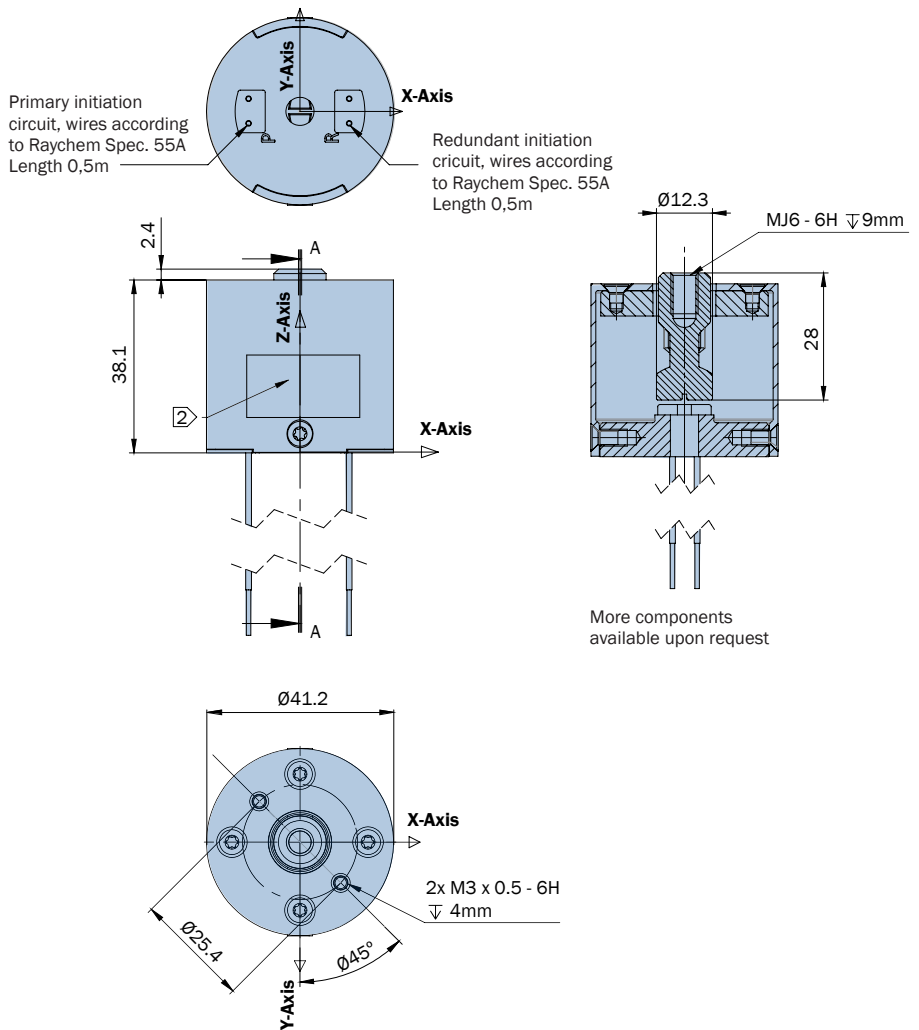
Electrically and Mechanically redundant



## 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](#)

Mechanical release unit for ground testings available upon request

### MATERIAL/FINISH

Aluminium alloy, Stainless steel, Polyamidimid GF30%

### NOTES

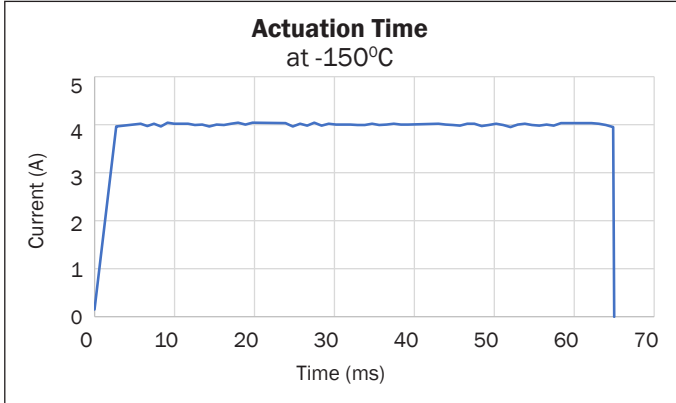
- Unit is identified with Glenair name, CAGE code, part number, and date code, space permitting. Primary initiation circuit identified with "P" and redundant with "R". See [2](#).
- Release preload: 18 kN
- Reference Glenair P/N GSS501-000002 for refurbishment initiator



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Tested Capability for GSS500-000001	
Nominal Release Preload	18 kN
Proof Preload	19.8 kN
Ultimate Load	32.8 kN
Weight	161,9 g with 0.5 m Harness
Electrical Resistance	0,3 -2.0 ohms max
Sine Vibration 3 orthogonal axes	25 g's
Random Vibration 3 orthogonal axes	50.9 g <sub>rms</sub>
Actuation Time	Under 70 ms @ 4.0 Amps at -150°C
Shock Input	2849 g's at 5000 Hz
Source Shock	Under 300 g's with 18 kN preload
Life Test	Product qualified for 10 times use and an expected continued usage
Temperature	-150°C to +150°C (1x10 <sup>-5</sup> hPa)
Preload drop	<1.5 % loss, at a preload of 18 kN over 6 months at ambient temperature
Allowable Angular misalignment	2°
Epoxy	Outgassing requirements per ECSS

