

Medium-Duty Hold-Down Release Mechanism

11 kN release preload

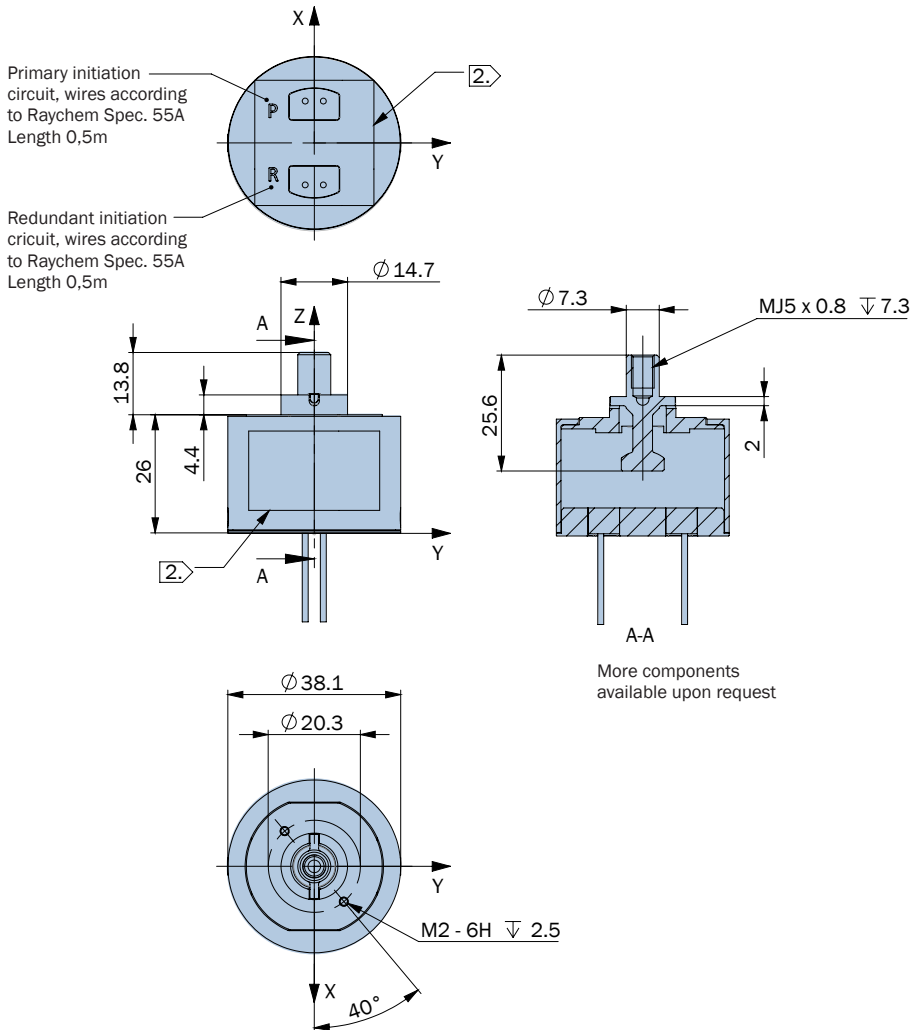
Electrically and Mechanically redundant



HOLD-DOWN RELEASE MECHANISM, MEDIUM-DUTY



How To Order	
Part No.	GSS500-000001
Description	Medium Duty HDRM, 11 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 GSS501-000001

Mechanical release unit for ground testings available upon request

MATERIAL/FINISH

Aluminium alloy, Stainless steel, Polyamidimid GF30%

NOTES

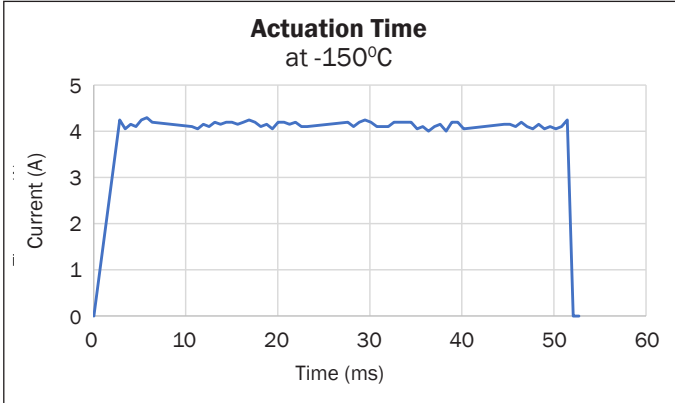
- Unit is identified with Glenair name, CAGE code, part number, and date code, space permitting. Primary initiation circuit identified with "P" and redundant with "R". See 2.
- Release preload: 11 kN
- Reference Glenair P/N GSS501-000001 for refurbishment initiator



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Tested Capability for GSS500-000001	
Nominal Release Preload	11 kN
Proof Preload	12.1 kN
Ultimate Load	15.5 kN
Weight	84.9g with 0.5 m Harness
Electrical Resistance	0.5 – 1.5 ohms max
Sine Vibration 3 orthogonal axes	25 g's
Random Vibration 3 orthogonal axes	50.9 g _{rms}
Actuation Time	Under 60 ms @ 4.0 Amps at -150°C
Shock Input	2849 g's at 5000 Hz
Source Shock	Under 300g's with 11 kN preload
Life Test	Product qualified for 10 times use and an expected continued usage
Temperature	-150°C to +150°C (1x10 ⁻⁵ hPa)
Preload drop	<3.0% loss, at a preload of 11 kN over 6 months at ambient temperature
Allowable Angular misalignment	2°
Epoxy	Outgassing requirements per ECSS

