

# Medium-Duty Hold-Down Release Mechanism

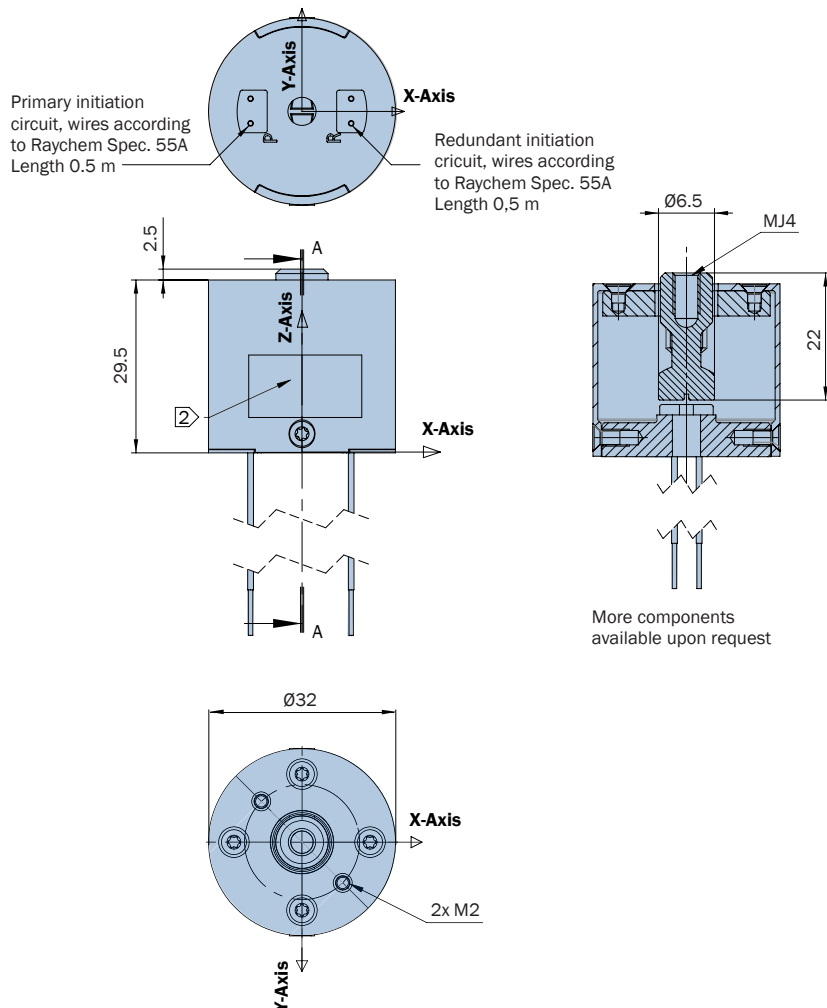
6 kN Release Preload  
Electrically and Mechanically Redundant



## HOLD-DOWN RELEASE MECHANISM, MEDIUM-DUTY



How To Order	
Part No.	GSS500-0006kN
Description	Medium Duty HDRM, 6 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
- Made by Glenair in Salem, Germany

### MATERIAL/FINISH

Aluminium alloy, Stainless steel, Polyamidimid GF30%

### NOTES

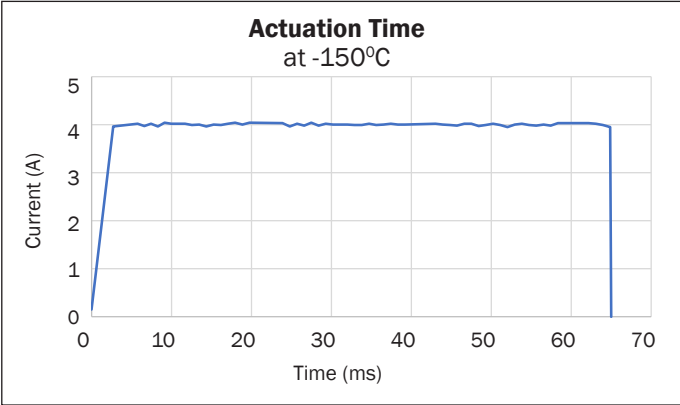
- Unit is identified with Glenair name, CAGE code, part number, and date code, space permitting. Primary initiation circuit identified with "P" and redundant with "R". See [2].
- Release preload: 6 kN
- Full qualification pending - expected capabilities shown next page are subject to change without notice



# Medium-Duty Hold-Down Release Mechanism

## 6 kN Release Preload

### Electrically and Mechanically Redundant



Expected Capability for GSS500-0006kN	
Nominal Preload	6 kN
Proof Preload	6.6 kN
Ultimate Load	>9 kN
Weight	Max 66 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 <sub>rms</sub>
Actuation Time	Max 70 ms @ 4.0 A at -150°C
Admissible 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°
Epoxy	Outgassing requirements per ECSS

