



## SHOCKLESS AND RAPID HOLD DOWN RELEASE ACTUATOR

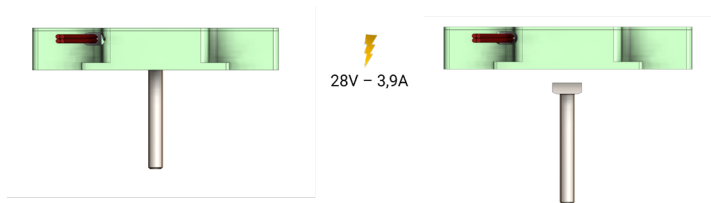
**TRL 4**  
*Qualification 2025*

HIGH-PERFORMANCE SMART ACTUATOR  
FOR SPACE APPLICATIONS

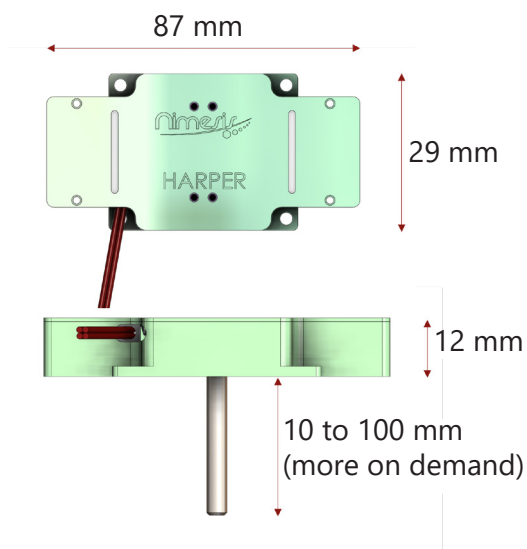
- |                    |             |                 |            |
|--------------------|-------------|-----------------|------------|
| ✓ Reusable by user | ✓ Low shock | ✓ Lightweight   |            |
| ✓ Flat             | ✓ Compact   | ✓ Non explosive | ✓ Reliable |



## ACTIVATION



## DIMENSIONS

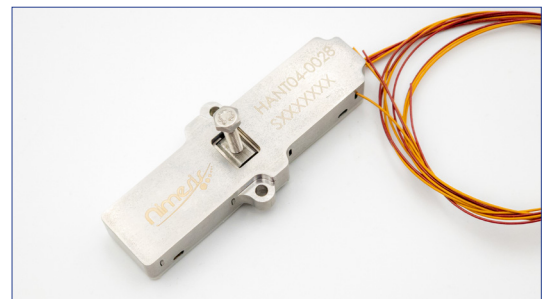


## OVERVIEW

- Low shock actuation
- Compatible with a wide range of satellites and launchers
- No variation of size between armed and actuated position
- Operational temperature range from -120 to +80°C  
On demand up to -120°C to +120°C
- Reusable by user

## FEATURES

- Preload up to 4 kN
- Actuation time <100 ms
- Redundancy of SMA/trigger
- Synchronisable with other Harpers <50 ms



## TECHNICAL DATA

*Customization on demand*

	HANT04-0028	HANT20-0028
Maximal axial preload (N)	< 4 000 N	
Mass (g)	56	
Resettable In Situ	Up to 10 cycles	
Operational temperature range	[-120°C ; +80°C (up to +120°C on demand)]	under development
Actuation time	100 ms	
Voltage (V)	28V	
Current (A)	3.9	
Energy (J)	10.3	



# HARPER