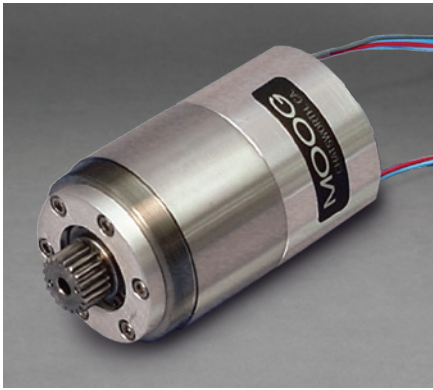
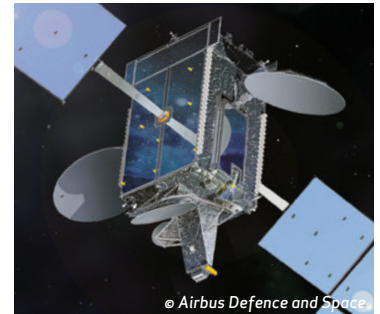


## TYPE M8 ROTARY INCREMENTAL ACTUATOR



The Moog Type M8 rotary incremental actuator is a compact, closely integrated design made up of two key elements: a motor and a harmonic drive speed reducer. The motor is a small angle permanent magnet stepper with relatively high holding torque. The harmonic drive speed reducer offers a large reduction ratio (100:1), low weight, zero backlash and high torsional stiffness. Co-axial nesting of the motor and harmonic drive

elements gives the unit low profile geometry. The actuator can be made available in two and three phase motors with optional features such as potentiometer/resolver output position feedback. All of the electrical elements such as motors and position sensors can be redundant with little or no change in actuator envelope.



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# TYPE M8 ROTARY INCREMENTAL ACTUATOR

## SPECIFICATIONS

Description	Units	Basis	Data
Output Step Angle	Degrees	Standard	0.1875
Steps Revolution	Steps	Standard	1,920
Harmonic Drive Ratio	–	Standard	80:1
Motor Step Angle	Degrees	Standard	15
Max. Output Step Rate	Step/sec (Deg/sec)	Maximum	640 (120)
Torsional Stiffness	Lb-in/rad	Standard	3,440
Shaft Load Capability Axial	lbf	Maximum	170
Transverse	lbf	Maximum	240
Moment	Lb-in	Maximum	100
Output Torque	Lb-in	Maximum	13
Unpowered Holding Torque	Lb-in	Maximum	7
Body Diameter	Inch	Standard	1.400
Body Length	Inch	Standard	1.850
Power	Watts	Maximum	10
Through-hole Capability	Inch	Maximum	0.120
Total Assembly Weight	Lb (grams)	Maximum	0.44 (200)



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