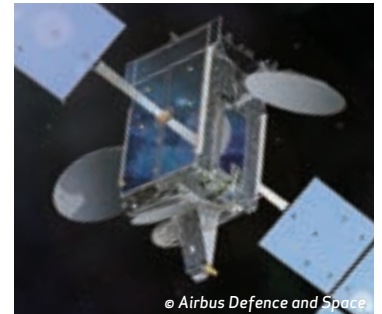


## HIGH GEAR RATIO M8 ROTARY INCREMENTAL ACTUATOR



The Moog High Torque M8 rotary incremental actuator is a compact, closely integrated design made up of two key elements: a motor and a multi-stage speed reducer. The motor is a small angle permanent magnet stepper with relatively high holding torque. The multi-stage speed reducer offers a large reduction ratio (6400:1), low weight, zero backlash and high torsional stiffness. Co-axial nesting of the motor and transmission 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.



# HIGH GEAR RATIO M8 ROTARY INCREMENTAL ACTUATOR

## SPECIFICATIONS

Description	Units	Basis	Data
Output Step Angle	Degrees	Standard	0.0030
Steps Revolution	Steps	Standard	122,880
Harmonic Drive Ratio	-	Standard	5,120:1
Motor Step Angle	Degrees	Standard	15
Max. Output Step Rate	Step/sec (Deg/sec)	Maximum	690 (1.92)
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	360
Unpowered Holding Torque	Lb-in	Maximum	160
Body Diameter	Inch	Standard	1.400
Body Length	Inch	Standard	4.25
Power	Watts	Maximum	10
Through-hole Capability	Inch	Maximum	0.120



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