

TYPE 3 ROTARY INCREMENTAL ACTUATOR



The Type 3 actuator is one of our more popular designs, with hundreds of units delivered and successfully operating on-orbit. The standard design is based on the heritage actuator concept, a compact coaxially-nested motor and harmonic drive gear system. The most popular version incorporates a potentiometer for position sensing with a redundant 3 phase motor. As with all Moog actuator products, incorporating optional equipment based on

the application is possible. This flexible design can accommodate hard stops, 2 or 3 phase stepper motors, brushless DC motors, a variety of position sensors, cable management systems or other application-specific options. These actuators are commonly used in Antenna Pointing Mechanism applications. The actuators can be incorporated into a biaxial gimbal configuration to fit your application. Contact Moog application engineers for assistance with actuator selection and design options.



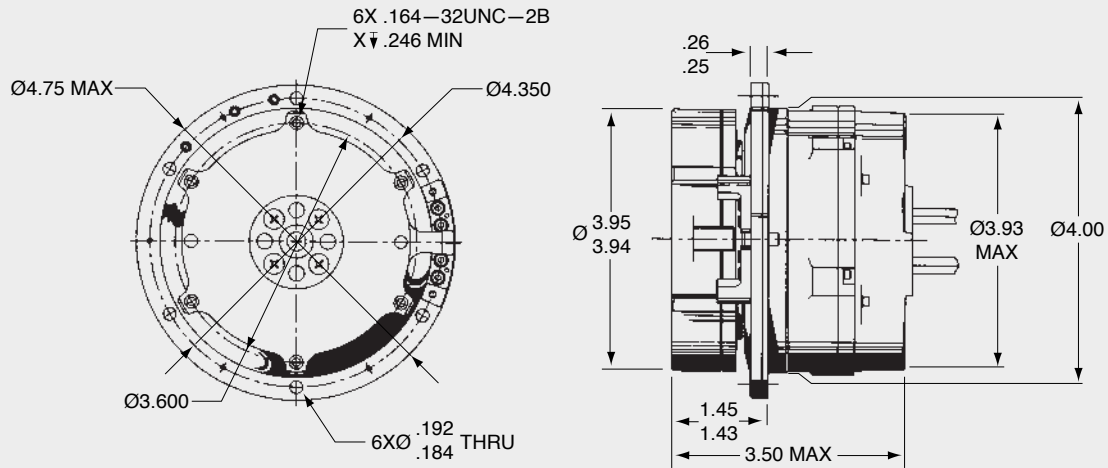
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PERFORMANCE CHARACTERISTICS

Parameter	Units	Basis	Data
Output Step Angle	Degrees	Standard	0.009375
Steps/Revolution	–	Standard	38,400
Harmonic Drive ratio	–	Standard	160:1
Motor Step Angle	Degrees	Standard	1.5
Max. Output Step Rate	Step/Sec (Deg/Sec)	Maximum	350 (3.28)
Torsional Stiffness	lb-in/rad	Typical	140,000
	N-m/rad	Typical	15,800
Shaft Load Capability Axial	lb	Maximum	2,500
	N	maximum	11,000
Traverse Load Capability	lb	Maximum	2,100
	N	Maximum	9,400
Moment Load Capability	lb-in	Maximum	1800
	N-m	Maximum	203
Moment Stiffness	lb-in/rad	Typical	370,000
Power	Watts	Typical	14
Inertial Capability	Kg-m2	Typical	35
		High	100
Output Torque	lb-in	Typical	350
	N-m	Typical	39.5
Holding Torque: Powered	lb-in	Typical	500
	N-m	Typical	56.5
Holding Torque: Unpowered	lb-in	Typical	300
	N-m	Typical	33.9
Total Assembly Weight (with potentiometer)	lb	Typical	4.3
	kg	Typical	2

Please contact Moog application engineers to discuss optional actuator performance requirements.

PRODUCT DIMENSIONS



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