

MODEL HT1 ROTARY INCREMENTAL ACTUATOR



The Moog Type HT-1 Rotary Incremental Actuator is a new addition to the rotary actuator product line. It is a compact, closely integrated coaxial design composed of a small size permanent magnet stepper motor driving the output stage through a gear transmission consisting of a larger size harmonic drive. The actuator provides relatively high holding and running torque for its size. This actuator is optimized for low weight and relatively high

torsional stiffness. Co-axial nesting of the motor and transmission drive elements gives the unit a low profile geometry. Nested new technology coarse and fine potentiometers provide high resolution, telemetry with noise-free operation.

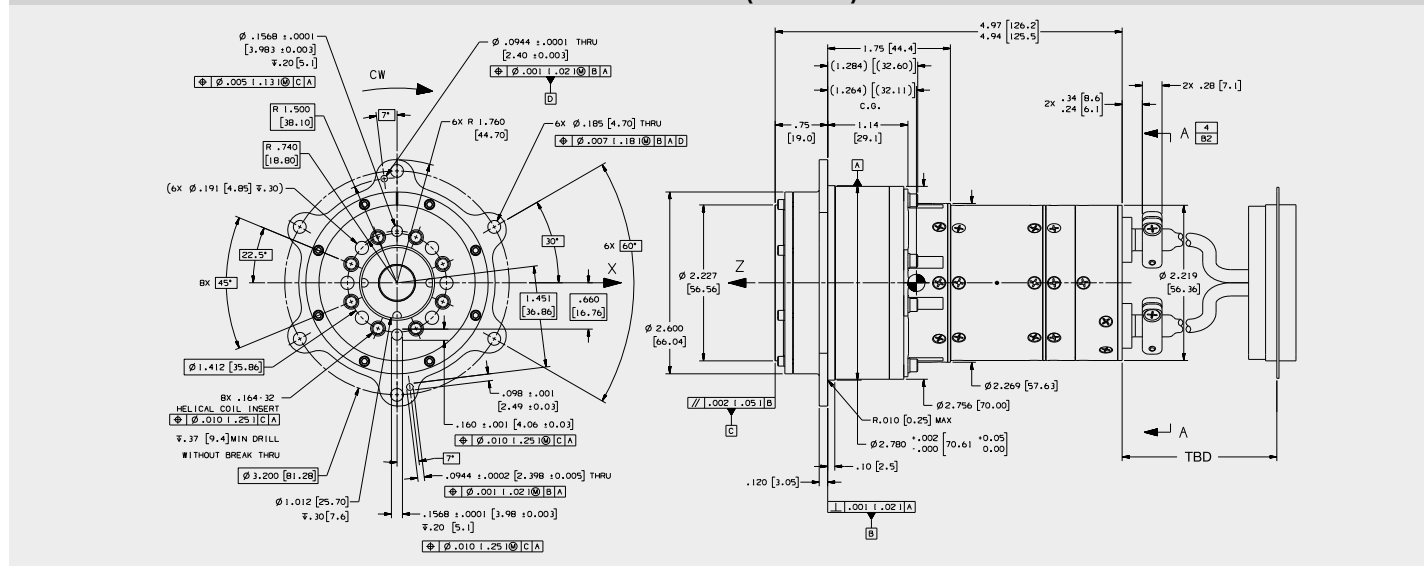


MODEL HT1 ROTARY INCREMENTAL ACTUATOR

SPECIFICATIONS

Parameter	Units	Basis	Data
Output Step Angle	Degrees	Standard	0.0039
Steps per Revolution	Steps	Standard	92160
Max. Output Step Rate	Steps/sec (Deg/sec)	Maximum	400 (1.56)
Backlash	Degrees	Maximum	<0.01°
Operating Temperature Range	°C	Maximum	-70 to +105
Torsional Stiffness	lb-in/Rad	Minimum	125,000
Bending Stiffness	lb-in/Rad	Minimum	250,000
Axial Stiffness	lb/in	Minimum	88,000
Radial Stiffness	lb/in	Minimum	80,000
Output Load Capability Axial	lbf	Nominal	370
Transverse	lbf	Nominal	370
Moment	Lb-in	Nominal	430
Fine Potentiometer	Primary/Redundant	352° min. Electrical Travel	1% Linearity
Coarse Potentiometer	Non-Redundant	192° min. Electrical Travel	.25%
Output Torque	Lb-in	Minimum	300
Unpowered Holding Torque	Lb-in	Minimum	300
Powered Holding Torque	Lb-in	Minimum	>450
Power	Watts	Maximum	10
Total Assembly Weight	Lb	Maximum	2.10
Inertia Capability	kg-m ²	Minimum	800 kg-m ²

DIMENSIONS (INCHES)



MOOG
SPACE AND DEFENSE GROUP

21339 Nordhoff Street, Chatsworth, California 91311 USA
+1.818.734.6700 Fax: +1.818.341.3884
www.moog.com



linkedin.com/
company/moog-sdg



facebook.com/
MoogSDG.USA



twitter.com/
MoogSDG

Equipment described herein falls under the jurisdiction of the EAR and may require US Government Authorization for export purposes. Diversion contrary to US law is prohibited.

© 2018 Moog, Inc. All rights reserved.
Product and company names listed are trademarks or trade names of their respective companies.

Form 500-1077 0918