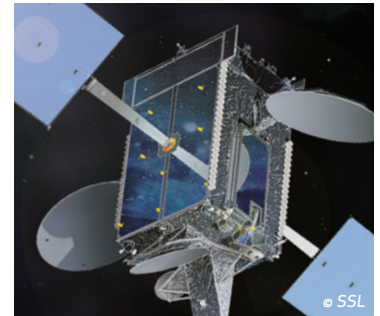


## HIGH POWER TYPE 5 SOLAR ARRAY DRIVE ASSEMBLY



The single axis High Power Solar Array Drive Assembly (SADA) is based on the Type 5 Rotary Incremental Actuator. This standard SADA meets up to 9 kilowatts of power transfer. The design is configured with a Harmonic Drive gear set driven by a Moog discrete permanent magnet stepper motor, potentiometer for position sensing and a high power slip ring assembly for power transfer.

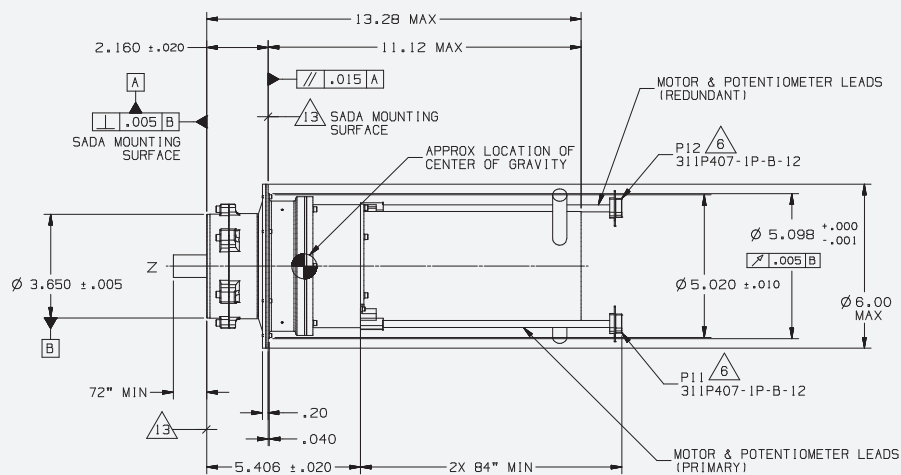


# HIGH POWER TYPE 5 SOLAR ARRAY DRIVE ASSEMBLY

## SPECIFICATIONS

Parameter	Units	Basis	Data
Output Step Angle	Degrees	Standard	0.0075
Steps per Revolution	Steps	Standard	48000
Max. Output Step Rate	Steps/sec (Deg/sec)	Maximum	300 (2.25)
Backlash	Degrees	Maximum	zero backlash
Operating Temperature Range	°C	Maximum	-50 to +70
Torsional Stiffness	lb-in/Rad	Minimum	250,000
Moment Stiffness	lb-in/Rad	Minimum	500,000
Axial Stiffness	lb/in	Minimum	200,000
Radial Stiffness	lb/in	Minimum	800,000
Output Load Capability Axial	lbf	Nominal	370
Radial Stiffness	lbf	Nominal	370
Moment	Lb-in	Nominal	430
Output Torque	Lb-in	Minimum	400
Mechanical Accuracy	Degrees	Better than	+/- 0.02
Unpowered Holding Torque	Lb-in	Minimum	300
Powered Holding Torque	Lb-in	Minimum	600
Slip-Ring Signal Circuits	16 Rings derated at 1 A each		
Actuator Power Consumption	Watts	Maximum	20
SADA Weight (without Harness)	Lb	Maximum	11.00

## DIMENSIONS



**MOOG**  
SPACE AND DEFENSE GROUP

21339 Nordhoff Street, Chatsworth, CA 91311  
Sandra Browne - sbrowne@moog.com (International)  
Scott Reynolds - sreynolds@moog.com (USA & Canada)  
+1.818.734.6700 • www.moog.com



Moog Space and Defense



@MoogSDG



@MoogSDG



@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.

© 2019 Moog, Inc. All rights reserved.  
Product and company names listed are trademarks or trade names of their respective companies.

Form 500-1078 0619