

MSA-2907

Rotary Servo Actuator for UAV

The MSA-2907 is a high quality and accurate product. It has been optimized for UAV requirements, such as temperature range from -40°C to +71°C, EMI RFI shielding and high reliability. The MSA-2907 is a 28 VDC based electro-mechanical rotary servo actuator with a DC brushless motor, high efficiency gearbox and electronic control system. It has an input-output 19-pin connector interface with analog voltage input command proportional to required axial angle, and a motor current consumption indicator pin. It conforms to MIL-STD 461E, 704E & 454H.



Specifications

Parameters	Units	Values	Tolerances
Operating Voltage Range	VDC	18 - 32	-
Continuous Torque (at zero velocity)	Nm	16.5	-
Peak Torque	Nm	26	-
Load Spectrum	-	at 10 Nm, 95° /sec	-
No Load Speed	deg/sec	165	-
Mechanical Stroke CW, CCW	deg	50	±1
Electrical Stroke CW, CCW	deg	46	-
Mechanical Backlash	deg	0.3	±0.1
Bandwidth with Nominal Load and Command Amplitude ± 2.5°	Hz	8	-
Output Linearity	%	1	-
Operating Temperature	°C	-40 to +71	-
Non-Operating Temperature	°C	-54 to +85	-
Weight	Кg	1	-

19 Pin Connector Assignments

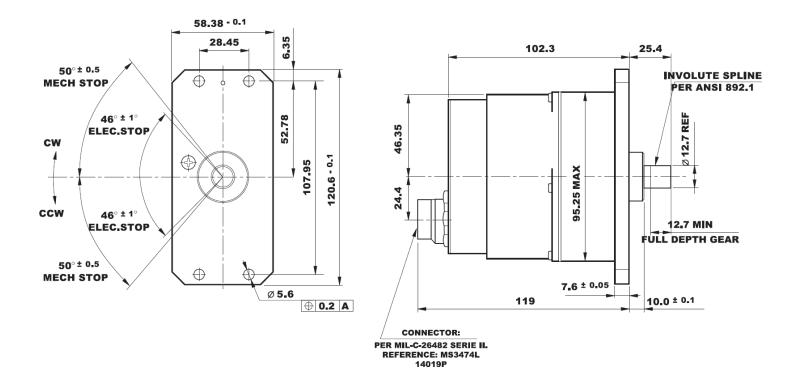
Pin #	Function	Pin #	Function	Pin #	Function		
А	PWR GND	Н	NC	R	STATUS SIGNAL		
В	+28 VDC	J	NC	S	CHASSIS GND		
С	+28 VDC	К	+ POSITION CMD	Т	NC		
D	NC	L	- POSITION CMD	U	FLOATING CMD		
E	RESERVED*	Μ	CURRENT SIGNAL OUT	V	NC		
F	RESERVED*	N	NC				
G	ANALOG GND	Р	NC				
* For the digital version (see MSA-2907-D)							

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MSA-2907 (continued)

Drawings



All dimensions are in mm

For Additional Information

To learn more about the MSA-2907 Electric Rotary Servo Actuator or to discuss any required modifications, contact MTC on +972 4 998 7772 or email marketing@mtcind.com

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