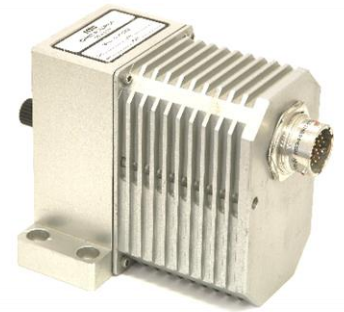


MSA-2411

Rotary Servo Actuator for UAV

The MSA-2411 Servo Actuator is a high quality, accurate product, optimized for UAV requirements such as: temperature range from -40° C to + 71°C, EMI RFI shielding and high reliability. The MSA-2411 is a 28 VDC based actuator with brushless DC motor, high efficiency gearbox and electronic control system. It is characterized by high torque and light weight. The MSA-2411 has an input-output 19pin connector interface, shown in table below, with RS422/485 half duplex communication link. The MSA-2411 received position command and transmits position feedback and status. Voltage input command proportional to the required axial angle, and the motor current consumption indication pin. It conforms to MIL-STD 461E, MIL-STD 704E, and MIL-STD 454H.



Specifications

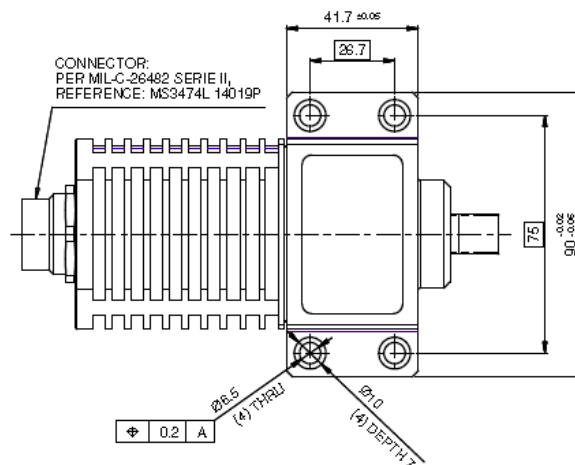
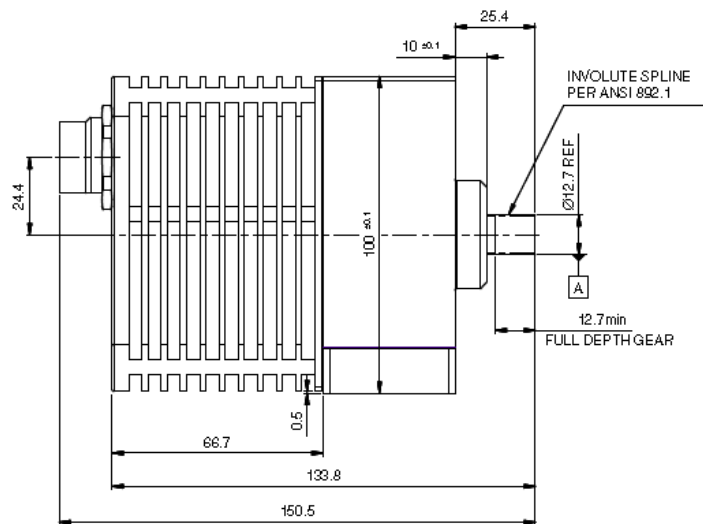
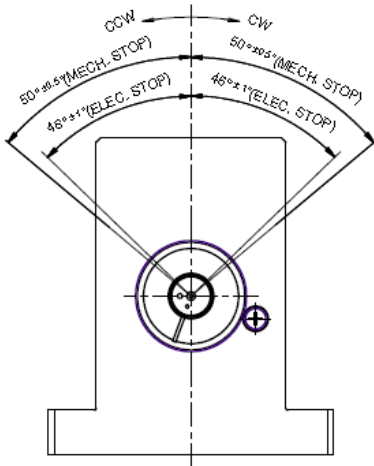
Parameters	Units	Values	Tolerances
Nominal Voltage	VDC	28	-
Operating Voltage Range	VDC	18 – 32	-
Peak Torque (at stall)		26	-
Load Spectrum	Nm	at 10 Nm@95° /sec (min)	-
No Load Speed (min)	deg/sec	165	-
Mechanical Stroke CW, CWW	deg	50°	±0.5°
Electrical Stroke CW, CWW	deg	46°	±1°
Mechanical Backlash	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	Kg	1.1	-

19 Pin Connector Assignments

Pin #	Function	Pin #	Function	Pin #	Function
A	PWR GND	H	RS-485/422 Rx(+)	R	POSITION OUT
B	+28 VDC	J	RS-485/422 Rx(-)	S	CHASSIS GND
C	+28 VDC	K	RESERVED	T	RESERVED
D	PWR GND	L	RESERVED	U	FLOAT (+)
E	RESERVED	M	CURRENT SIGNAL OUT	V	FLOAT (-)
F	RESERVED	N	RESERVED		
G	ANALOG GND	P	RESERVED		

MSA-2411 (continued)

Drawings



All dimensions are in mm

For Additional Information

To learn more about the MSA-2411 Electric Rotary Servo Actuator or to discuss any required modifications, contact MTC on **+972 4 998 7772** or email **marketing@mtcind.com**