

## 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	Kg	1	-

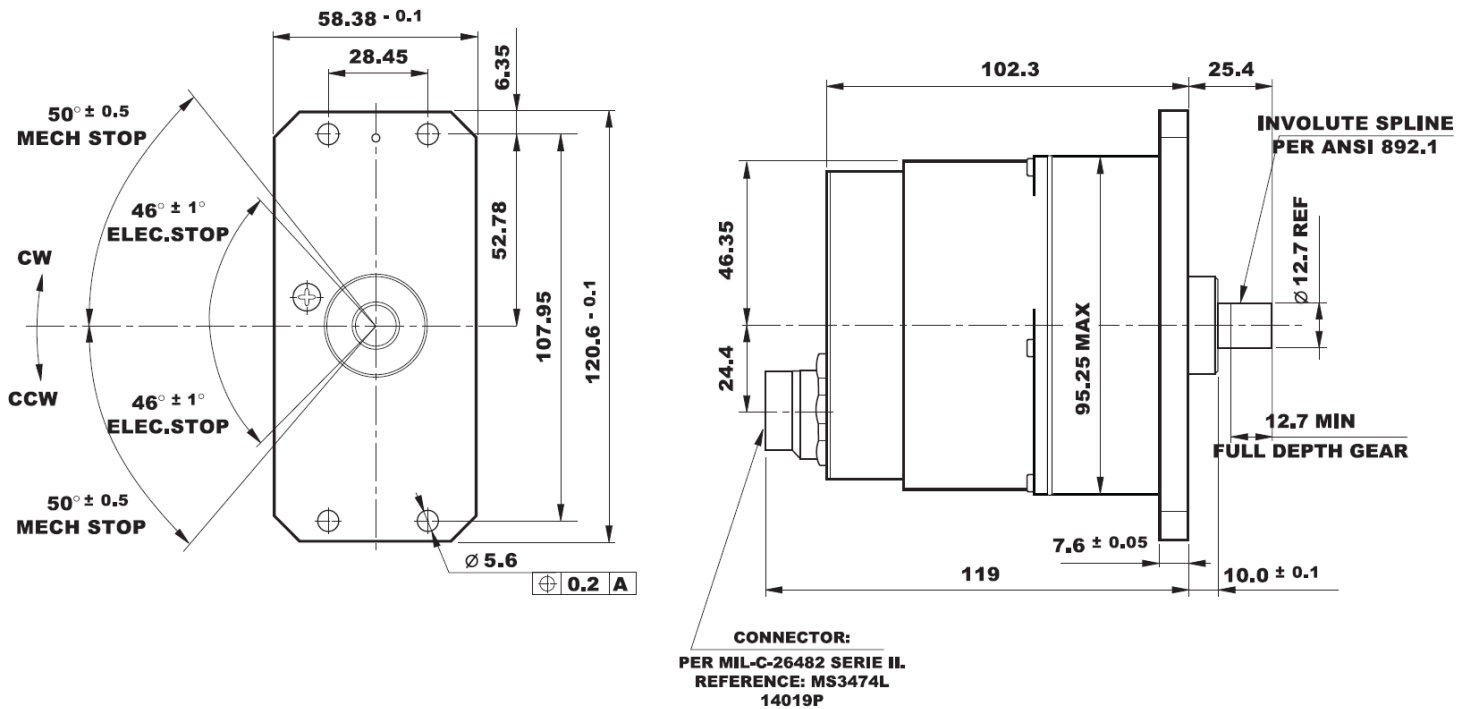
### 19 Pin Connector Assignments

Pin #	Function	Pin #	Function	Pin #	Function
A	PWR GND	H	NC	R	STATUS SIGNAL
B	+28 VDC	J	NC	S	CHASSIS GND
C	+28 VDC	K	+ POSITION CMD	T	NC
D	NC	L	- POSITION CMD	U	FLOATING CMD
E	RESERVED*	M	CURRENT SIGNAL OUT	V	NC
F	RESERVED*	N	NC		
G	ANALOG GND	P	NC		

\* For the digital version (see MSA-2907-D)

## 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](mailto:marketing@mtcind.com)