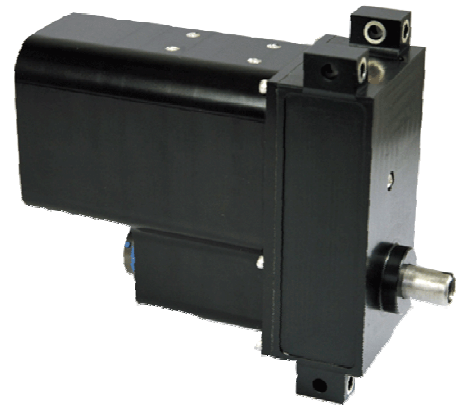


ERSA-0311

Redundant Electric Rotary Servo Actuator

The ERSA-0311 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 ERSA is a 28 VDC based electro-mechanical rotary servo actuator with **redundant** electronics, dual DC brushless motor, 3-ganged potentiometer and high efficiency gearbox. It has a high torque, low weight and is available with digital or analog status feedback.

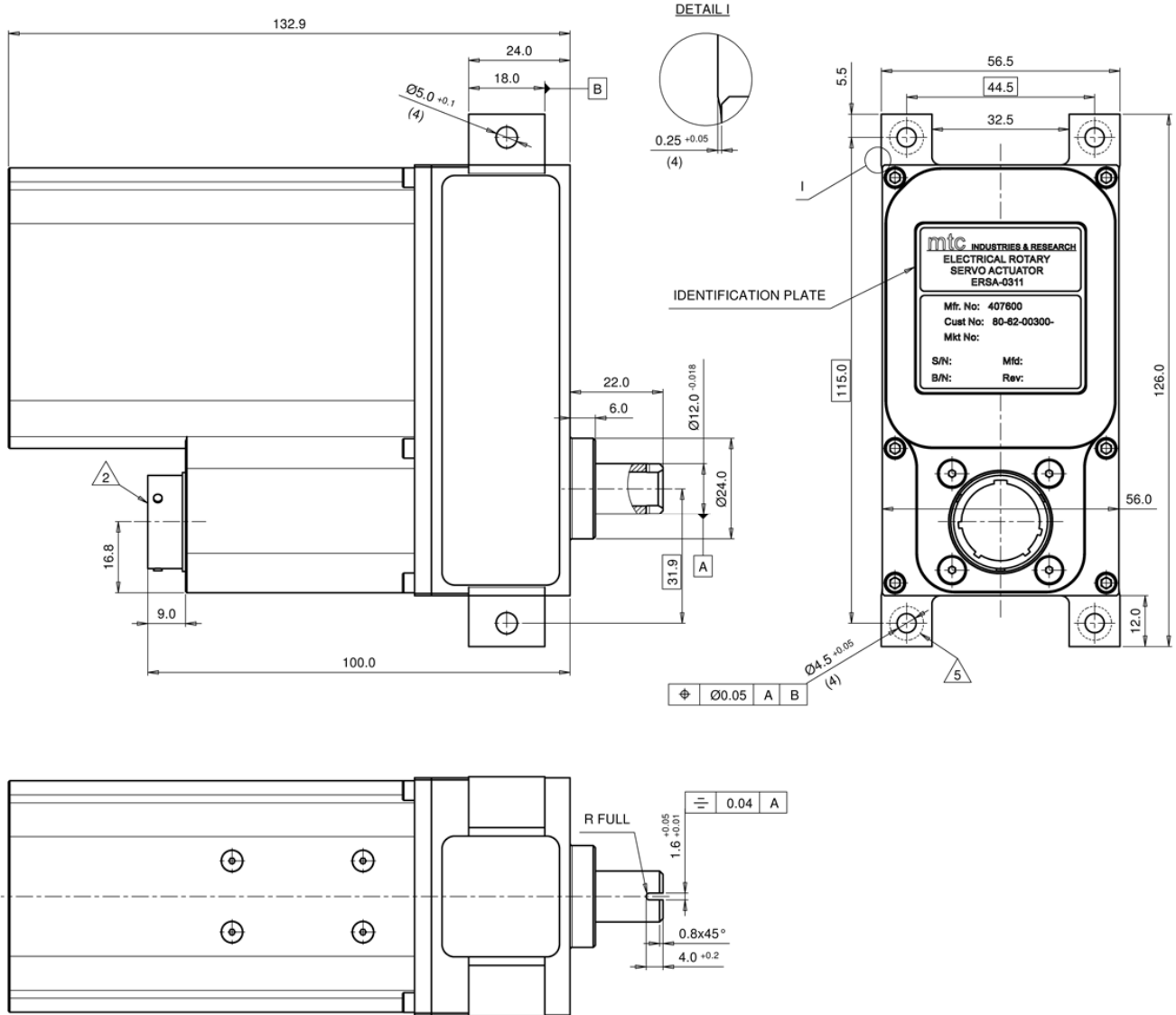


Specifications

Parameters	Units	Values	Tolerances
Nominal Voltage	VDC	28	-
Nominal Operating Voltage Range	VDC	24 – 32	-
Current @ 28 VDC, 20°C, 5 Nm Load	A	1.1	max
Stall Current @ 28 VDC, 20°C	A	4.5	max
Nominal Load, inertia 0.015 kg*m Balanced spring type, 0 Nm in mid position Continuous Load @28 V, 71°C	Nm/deg	0.2	-
○ Unbalanced Torque, 2 Hz Sinusoidal 5° Command	Nm	4 (unlimited time)	-
	Nm	8 (15 minutes)	-
Maximum Torque @ 28 VDC, 20°C	Nm	25	-
Slew Rate	deg/sec		
○ No Load		160	-
○ For Torque 5 Nm		130	-
Useful Angular Stroke CW, CCW	deg	45	-
Angular Backlash	deg	0.5	max
Bandwidth with Nominal Load and Command Amplitude ± 4°	Hz	3	min
Positioning Accuracy in Range ± 45°	deg	±0.6	-
Friction Torque	Nm	1.5	-
Stiffness with Resistance 1 Nm	deg	1.2	max
Operating Temperature	°C	-40 to +71	-
Operating Life @ 28 VDC, 25°C	Hours	6,000	-
Altitude Operating Limits (Above Sea Level)	Feet	1,500 – 35,000	-
Weight	Kg	0.875	±0.015
Isolated Reference and Separated Ground	V	5	-
Communications	16 Actuators 12 Actuators (Self-Selected)	RS-485 HIS (PWM)	
EMI	MIL-STD-461F		
ESD	IEC61000-4-2 Standard to 25KV levels		

ERSA-0311 (continued)

Drawings



For Additional Information

To learn more about the ERSA-0311 Redundant Electric Rotary Servo Actuator or other MTC products, contact MTC on **+972 4 998 7772** or email **marketing@mtcind.com**