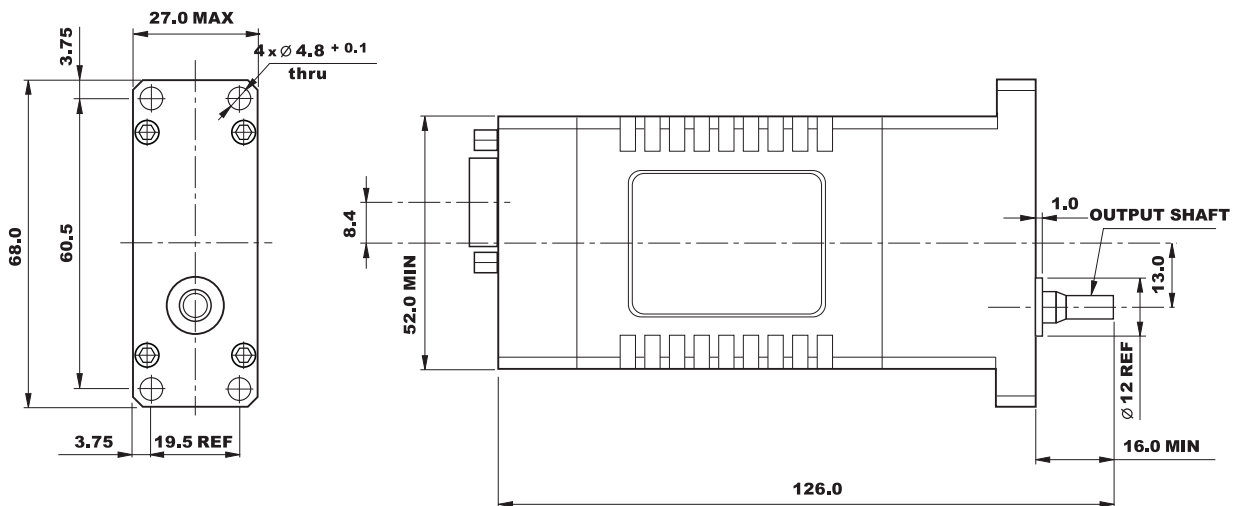
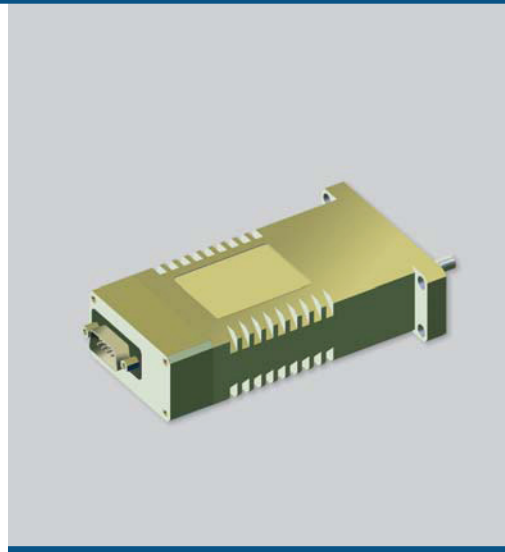


mtc MSA-3004

Small Servo Actuator for UAV

The MSA-3004 Small Servo Actuator is a high quality product, optimized for UAV requirements such as temperature range $-54^{\circ}\text{C} \div +71^{\circ}\text{C}$, EMI RFI shielding and high reliability. The MSA-3004 is a 28 V DC based actuator with brushless DC motor, high efficiency gearbox and electronic control system. It has a digital I/O communication version where the commands, position feedback and status are transmitted in digital CAN protocol. It has an input-output 9 pin connector interface (see table below) with analog voltage I/O pins proportional to axial angle. The MSA-3004 conforms to MIL-STD 461E, 704E & 454H.



Specification

Parameter	Unit	Value
Weight	kg	0.5
Mechanical stroke cw & ccw	deg	± 50
Electrical stroke cw & ccw	deg	± 45
Output linearity	%	1
Operating voltage	V DC	18 ÷ 32
Peak torque	Nm	10
Continuous torque	Nm	5
No load speed	deg/sec	150
Mechanical backlash	deg	0.3
Temperature, operating	°C	-40 ÷ +71
Non operating temperature	°C	-54 ÷ +85

Note: Above values can be adapted to customer requirements.

9 Pin connector assignments

Pin #	Function	Pin #	Function	Pin #	Function
1	28 RETURN	4	POSITION +	7	POSITION OUT
2	+ 28 V DC	5	POSITION -	8	GND
3	GND	6	CURRENT	9	ENABLE