

Rotary Servo Actuator

KASA-04-783



Standard Features

- 4 Stage Metal gear train assembly, Spur gear type
- Stainless steel output shaft
- High Temperature Capability
- Machined aluminum structure and housing
- NTC thermistor in servo for temp sensing (optional)
- Outputs for current , temperature and position (optional)
- Signal interface is digital RC PWM (standard), RS-485 electrical protocol (optional)
- Wear free position sensing system makes the KASA-04-783 immune to wear, vibrations and shock loads

Typical Applications

- The “ muscle“ servo for RPV, UAV projects
- Used in R/C planes having wingspans of over three meters
- Marine: On boats, ships and oil rigs actuators
- Target drones - surface control, speed brakes
- Robotics

Benefits

- Ruggedly designed and built for hostile environments
- Low backlash design
- Operating Temperature Range : [-30 °c to +70°c]
- Water resistant
- Fail Safe Position in case of PWM command signal lost

General Specifications

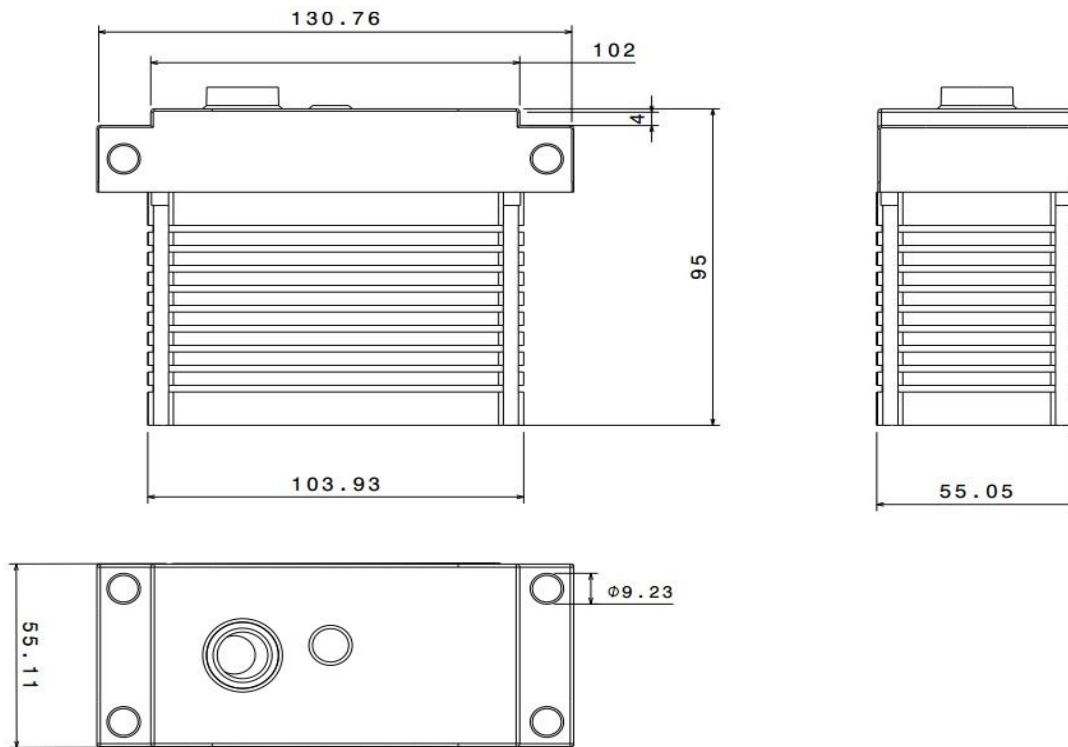
Input signal	R / C PWM, TTL Level, Optically Isolated
Pulse Length	1.100 to 1.900 msec
Null Position	1.500 msec ,10-20ms period
Loss of Communication	Returns to Null Position
Mechanical Travel(s)	±45°(standard), ±25(optional), ±60° (optional), ±90(optional)
Sensor travel angle	360°
Housing material	Aluminum
Gear Set Material	Hardened Steel
Position Feedback	Contactless 14 Bit Resolution Shaft Encoder

Performance Specifications

Operating Range	24 - 30 VDC
Typical Supply Voltage	28 VDC
Standby Current	< 0.10 A
Stall Torque	510 kgcm
Stall Current	< 3300 mA
Rated torque	50 kgcm
Rated Speed	72°/sec @28 VDC
Rated torque current	520±10 mA
No Load Speed	78.2°/sec @28 VDC
No load current	250 ±10 mA
Frequency Response	2.5 Hz
Unpowered Backdrive Torque	25 kgcm
Mechanical Backlash	Less than 60 arcmin
Durability (MTBF)	More than 300,000 cycles
Weight	1150±15 g
Resolution	0.35 °

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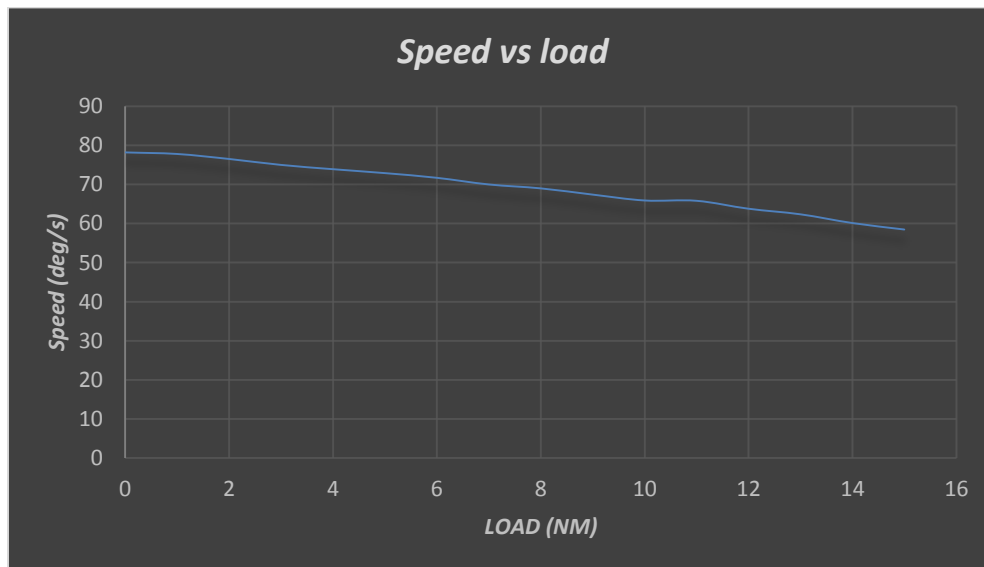
Environmental	
Designed To MIL-STD-810E	
Operating Temp	-30°C to +70°C
Storage Temp	-40°C to +80°C
Altitude	0 ft to 25,000 ft MSL
Vibration	20 - 2000 Hz, 5 min & 0.04 g ² /hz
Mechanical shock	10g Shock Duration:11ms, 5 times, Each Direction

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Performance Diagrams

Speed curve: This graph shows a plot of speed versus load. As the load is increased the output shaft's angular speed will be reduced.



Current curve: This graph shows a plot of current versus load. As the load is increased the amount of current drawn is increased..

