

**FSA102-0000-00**

# ROTARY SERVO ACTUATOR



## APPLICATIONS

FSA102 rotary servo actuators are used to position the primary and secondary flight control surfaces on unmanned platforms. These actuators are currently in use in various unmanned platforms, with accumulated flight hours over 60,000.



Unmanned Platforms - Primary flight control surface, secondary flight control surface

Urban Air Mobility Vehicles - Flight control surfaces

## STANDARDS

**MIL-STD-461E**

**MIL-STD-810G**

## KEY FEATURES

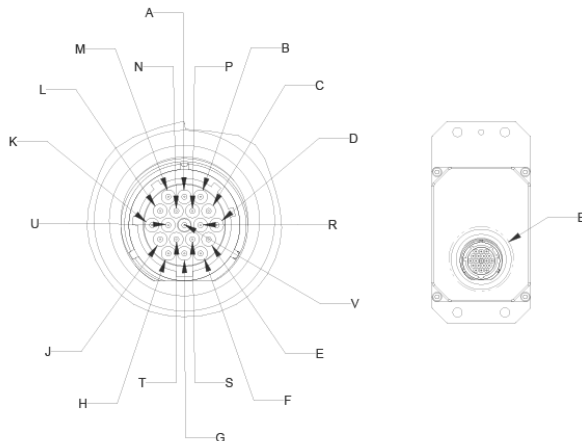
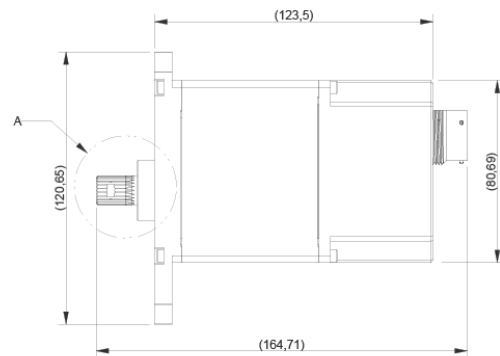
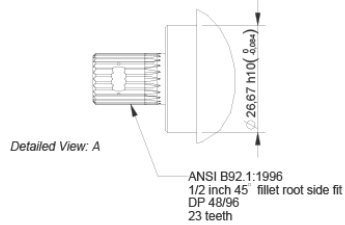
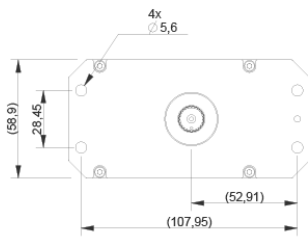
- > Primary & secondary flight control surface servo actuator
- > Flight-proven, 60,000+ flight hours
- > In-flight health monitoring
- > Lightweight structure (Actuator + Controller)
- > Compatible with MIL-STD-461E ve MIL-STD-810G

## Actuator Specifications

Size	58.9 x 80.7 x 123.5
Operating Voltage	28 V
Standby Current	0.03 A
No Load Speed	180°/s
Speed at Nominal Torque	170°/s
Rated Torque	26Nm
Peak Torque	40Nm
Current at Nominal Torque	2.9 A
Stall Current	3.5 A
Output Resolution	0.022°
Hysteresis max	0.3°
Mechanical Backlash	≤ 0.6°
Weight	≤ 1325 g
Electrical Limit	±45° (configurable)
Mechanical Limit	±75°
Frequency Response	≥6 Hz

## Environmental Features

Operating Temperatures	-40/+71 °C
Storage Temperatures	-54/+85 °C
Altitude	40000 ft
Vibration	MIL-STD-810G
Mechanical Shock	MIL-STD-810G
RE102	MIL-STD-461F
RS103	MIL-STD-461F
CS114	MIL-STD-461F



Pin	Signal
A	Power Ground
B	Power Ground
C	+28 VDC
D	+28 VDC
E	Current Telemetry
F	Velocity Telemetry
G	Signal Return
H	Transmit High
J	Transmit Low
K	Receive High
L	Receive Low
M	Temperature Telemetry
N	Unit ID 'A'
P	Unit ID 'B'
R	Temperature Return
S	Chassis Ground
T	Unit ID 'C'
U	Unit ID 'D'
V	Unit ID Return