DATASHEET





"Servotorg" Integrated Servo Motor

FEATURES

- All-In-One, Precision, Direct-Drive Motion
- Class-Leading Positional Accuracy and Repeatability
- Ultra Smooth and Silent
- Zero Backlash
- Low Size, Weight and Power
- 0.04Nm Output Torque
- Exceptional Reliability



Compact, Smooth and Accurate Motion for Advanced Sensor Positioning

Part of the **Servotorq** series of Integrated Servo Motors and designed for applications requiring exceptional positional accuracy and repeatability, **Titan** delivers ultra-smooth, fast, silent and precise motion in a compact, standalone package. Its small footprint makes it ideal for integration in to a wide variety of sensor position applications including video conferencing cameras and small PTZ surveillance cameras.

Fully Integrated Solution

Eliminating the need for a separate motor, servo controller and cabling, Titan combines a BLDC motor, advanced control electronics, a high-performance servo and a precision rotary position encoder into a fully integrated, direct-drive, motion control solution.

Easy Integration

Titan has been designed with simplicity for the integrator from the forefront and supported by its simple connectivity via a standard I²C interface and supply voltage, significantly reduces product development effort and overall system costs, which means that time-to-market and production efficiencies can be significantly improved for the integrator. Titan's compact design, just 62mm at its widest point, also supports integrators in the design of simpler and more attractive end products.

Best in Class Performance

Titan has a wide dynamic speed range of between 0.05°s and 720°s. Integrated drive control electronics and software provide closed-loop servo control, delivering velocity and acceleration control. Titan also provides rapid and precise positional control, with 0.0055° repeatability and zero backlash and is robust to external dynamic disturbances, especially impulses and vibrations.

Technical Specification

Part Number	OVU00212 (End Stop)
OVU00213 (Continuous Rotation) Electrical Specifications	
Nominal Voltage	12V DC
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Current at max. torque at 12v	510mA
Initialisation Current	600mA
Idle, no load, current	90mA
Position command & readback resolution	0.0055°
Maximum speed	720°/s
Min. non-zero speed	0.05°/s
Mechanical Specifications	
Weight	96g
Dimensions (LxWxH)	64.8mm x 56mm x 21.5mm (End Stop) 64.8mm x 56mm x 18.5mm (Cont.)
Rotor moment of inertia	140gcm²
Stall torque	0.04Nm
Moving Torque (at 360°s ⁻¹)	0.036Nm
Perpendicularity	<+/-0.5°
Maximum radial load	102N
Maximum axial load	19N
Bearing Type	Deep groove ball bearing (shielded)
Rotation Range	Configurations to provide continuous or limited rotation as required
Hollow Spindle bore internal dia.	8mm
Environmental Specifications	
Operational Temperature Range	-20°C to +70°C
Humidity Range (Standard Operation)	5% to 90% RH (non-condensing)

Titan is part of the Servotorq series of Integrated Servo Motors, designed, developed and manufactured by Overview Ltd. Other models in the range include: Juno™, Leto™, Miranda™, Atlas™ and Artemis™. Note: Specifications subject to change without notice.



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