

TORQUE



Applimotion
Motors & Actuators

Omni™ Series Motors

Low-Profile Direct Drive
Motors for the World's
Machines and Robots

The Omni Series enables OEMs to design high performance, reliable, small and lightweight systems using flexible and easy-to-integrate rotary motor components.

› CELERAMOTION.COM



Omni™ Series Motors

Low-Profile Direct Drive Motors for the World's Machines and Robots



Compact and Powerful.

Designed for easy integration into OEM assemblies, the Omni Series is offered in a wide range of low-profile form factors with a large through hole for convenient routing of cables, optics, and other system elements. Frameless direct drive kit construction enables easy integration into machinery, robot joints, rotary stages and actuators.

Built using state-of-the-art magnetic designs, the Omni Series delivers high torque density, low cogging and low stator and rotor mass in a thermally efficient package. Direct drive technology provides high speeds and accelerations with good mechanical stiffness and zero backlash, reducing settling times and increasing system performance and throughput.

Three models of the Omni Series motors are available: ULT for low-mid range torque requirements; UTH for high torque requirements; and UTO for applications that require an outside rotating configuration. All models are compatible with a wide range of controllers and drives. Windings and form factors can be customized to meet application requirements.

Benefits

- High torque density in low-profile form factors enables small footprint
- Large through hole for convenient routing of cables, optics, plumbing and other system elements
- High mechanical stiffness and low rotor inertia for efficient control of highly dynamic axes
- Low cogging for accurate and smooth motion
- Easy integration into system design
- Compatible with wide range of drives and controllers
- Custom windings and form factors available to meet application requirements

Specifications	Units	ULT Models	UTH Models	UTO Models
Continuous Torque:	Nm	0.04 to 6.581	0.537 to 4.569	0.014 to 0.353
Peak Torque:	Nm	0.12 to 19.744	1.610 to 13.706	0.042 to 1.059
Diameter:	mm	25 to 165 (Stator OD)	63 to 127 (Stator OD)	20 to 52 (Rotor OD)
Through Hole:	mm	11.6 to 109.2 (Rotor ID)	12.68 to 53.34 (Rotor ID)	9 to 17.8 (Stator ID)
Rated Speed at 24V:	rpm	up to 12,200	up to 4,600	up to 28,000

Product groups listed and corresponding data are provided as a reference. Actual motor attributes are model and configuration specific. Standard and custom models are available within each group. Peak torque output is based on a 3:1 peak to continuous current ratio, and is based on limited duty cycle. Operating voltage up to 300V. Contact Celera Motion for torque-speed specifications. Specifications subject to change.



Applimotion
Motors & Actuators

3900 Atherton Road, Suite 110 | Rocklin, CA 95765 USA
Tel.: 781.266.5200 | innovation@celeramotion.com | celeramotion.com