

Adept MotionBlox™-10 Servo Kit



Deliverables

- MotionBlox-10
- MotionBlox-10 Mounting Bracket
- Cable Kit - Amp to Amp
- User Manual

Options

- Power Distribution Unit 3
- IO-Blox
- Cable Kit - Amp to Motors

Power Distribution Unit

The Power Distribution Unit 3 (PDU3) performs multiple functions:

- Supplies switched AC power to the MotionBlox-10 amps
- Provides AC power filtering and surge protection
- Supplies 24 VDC power to the MB-10 amps and optional IO Blox devices
- Provides CAT-3 E-Stop functionality

The Adept MotionBlox-10 Servo Kits offer convenient and economical scalability to add one or more axis to any Adept Robot or Adept Controller system. The kits are plug compatible with Adept's SmartServo™ distributed servo network. The SmartServo network utilizes the IEEE 1394 protocol to provide real-time communications with each axis.



Adept MotionBlox-10

The Adept MotionBlox-10 is a distributed servo amplifier that can be mounted close to the motor, thereby eliminating the panel space typically required for servo amplifiers. This also simplifies installation and reduces the cables required to interface with the mechanism. Optional motor and encoder extension harnesses made from high-flex robotic cable are available. The MotionBlox-10 features an on-board PowerPC™ processor that executes the advanced servo loop at an 8kHz rate, resulting in exceptional path control and fast settling times. The MotionBlox-10 is compatible with single-phase nominal AC voltage input of 200-240V, 50 or 60 Hz.

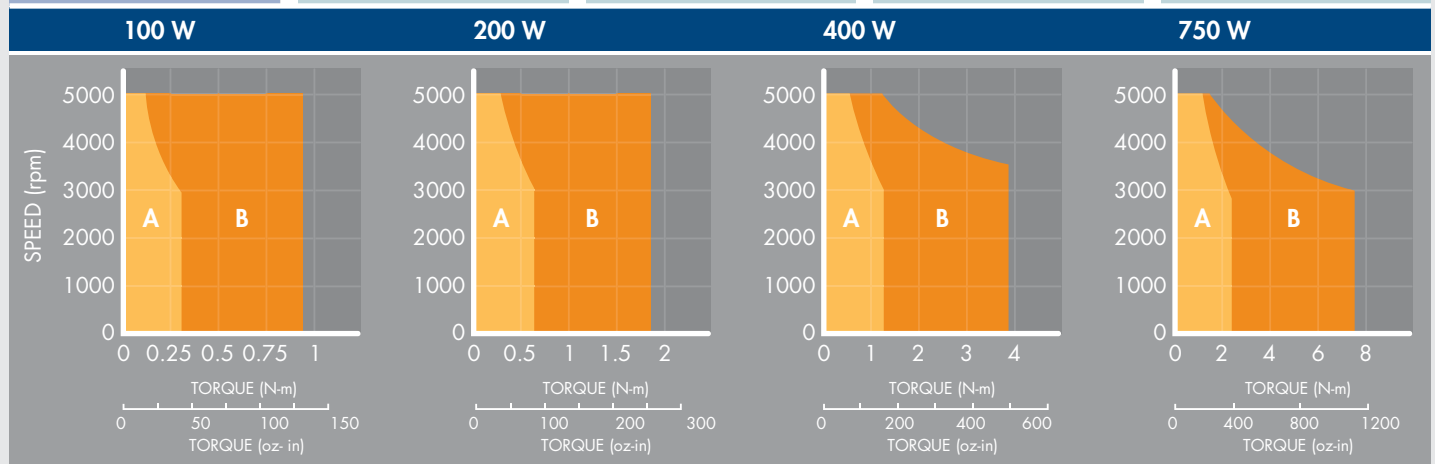


Servo Motors

The AC Brushless servo motors are compact, CE compliant, low noise, high speed, and high power. Each motor features an absolute encoder that eliminates the need for homing. Encoder resolution is 65,536 counts per revolution. Additionally, the motors are totally enclosed and self-cooled by natural convection when mounted in an appropriate ambient environment. The servo motors are available in four sizes: 100W, 200W, 400W, and 750W. Motors are available with or without brakes.

Adept MotionBlox™-10 Servo Kit

Adept Servo Kits				
	100W	200W	400W	750W
Rated Power* (W)	100	200	400	750
Rated Torque (N-m)	0.318	0.637	1.27	2.39
Peak Torque (N-m)	0.96	1.91	3.82	5.55
Rated Speed (rpm)	3000	3000	3000	3000
Max Speed (rpm)	5000	5000	5000	5000
Moment of Inertia (kg*m ² x 10 ⁻⁴)	0.364/0.0449	0.106/0.164	0.173/0.231	0.671/0.811
Weight w/Encoder no/with brake (kg)	0.5/0.5	1.1/1.6	1.7/2.2	3.5/4.3
Radial Load Rating (N)	78	245	245	343
Thrust Load Rating (N)	54	74	74	98
Operating Temp (deg C)	0 to 40	0 to 40	0 to 40	0 to 40
Encoder Resolution (counts/rev)	65,536	65,536	65,536	65,536
Shaft Diameter (mm)	8	14	14	16
Mounting Flange (mm)	40	60	60	80
Length, no brake (mm)	94.5	96.5	124.5	145.0
Length, w/brake (mm)	135.0	136.0	164.0	189.5



* Rated power may be duty-cycle limited by the motor or amplifier. Variables that affect rated power include ambient temperature, motor mount configuration, load inertia, cycle dynamics, and gravity.

A Continuous Duty Zone **B** Intermittent Duty Zone



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Specifications subject to change without notice.

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Downloads:

Various CAD file formats and additional information are available at www.adept.com