

Integrated Motor Packages

3-in-1 Motor + Drive + Controllers



EtherNet/IP™

Modbus

PROFI
NET

EtherCAT®

► PLC-Based by Design

AMCI products are uniquely designed to provide the best PLC integration available. Unlike other products that require a separate software package for configuration or operation, AMCI's PLC-based products are programmed using your PLC's software - nothing new to buy or learn! Our expertise with the leading PLC manufacturers is unmatched when it comes to high performance Motion Control technology.

Network Features

Dual-Port Networking - An embedded network switch simplifies product daisy chaining, adds flexibility to any network architecture, and supports redundant protocols like DLR (device level ring) and MRP (media redundancy protocol).

Web Server - A quick and simple screen allows you to select your network type and configure your IP address

Native Software - Programming is performed by the same software used by your host PLC/PAC, eliminating the need to learn new software and/or language foreign to your controls environment. The results are seamless integration, intuitive troubleshooting, and valuable time savings.

- Use your PLCs native software
- No new software to buy or learn
- Tightest integration available



Resources

AMCI provides a myriad of resources on their website in an effort to provide the best PLC integration possible. Available resources include configuration files, sample programs, 2D & 3D drawings, User-Defined Function Blocks (UDFB's), Add-On Instructions (AOI's), informative webinars & tutorials, and much more.

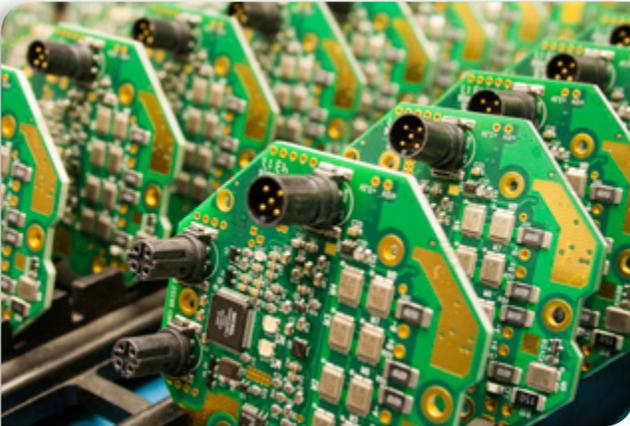
Resources Include

- Configuration Files (EDS, GSDML)
- Sample Programs
- 2D & 3D Drawings
- Webinars & Tutorials
- and much more...



Integrated Motors At-A-Glance

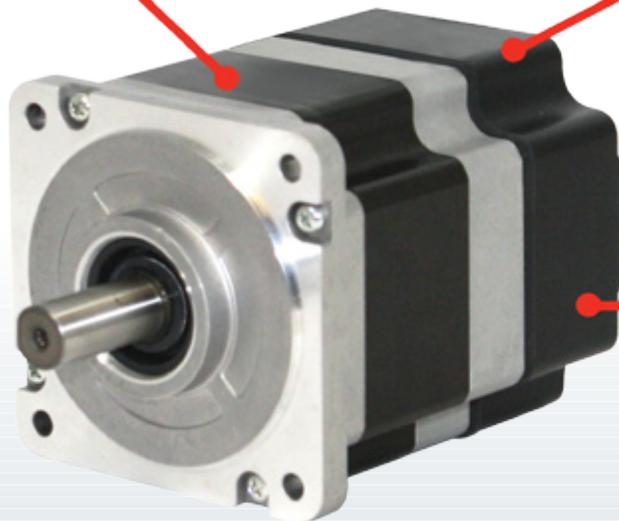
Advances in motor and drive technology have enabled smarter, more affordable PLC-based automation. AMCI's integrated stepper and servo motor packages provide a motion control solution that is designed to streamline the proposal, installation, and commissioning of your motion axis. For over 10 years, AMCI has been engineering integrated motion technologies that fill a gap in the market like no other product.



We manufacture and 100% test all integrated motors in-house to ensure reliability and the fastest turnaround.

Motor
Stepper or Servo

Controller
Fully Programmable



Drive
DC-Powered



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Modbus

PROFI
NET

EtherCAT®

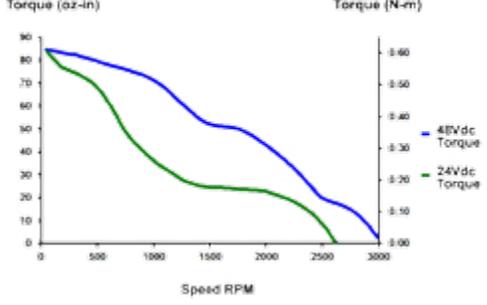
► Integrated Stepper Motors

SMD17X



Input Voltage: 24 to 48 Vdc
Motor Current: 2.0 Amp/phase
Package Size: NEMA 17
Holding Torque: 80 oz-in torque
Encoder: Incremental or Absolute

SMD17X-80

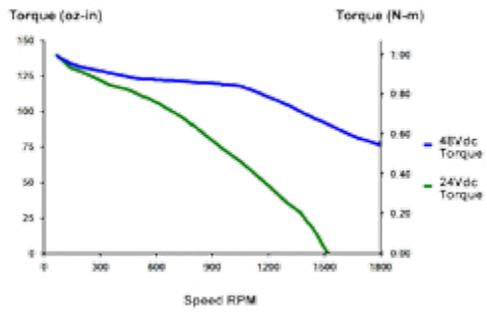


SMD23X & SMD24X

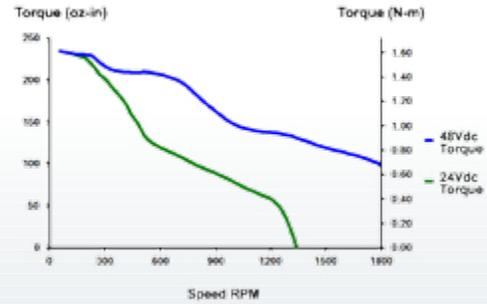


Input Voltage: 24 to 48 Vdc
Motor Current: 3.4 Amp/phase
Package Size: NEMA 23 or 24
Holding Torque: 130 oz-in to 350 oz-in
Encoder: Incremental or Absolute

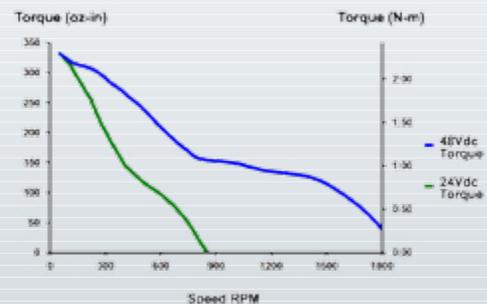
SMD23X-130



SMD23X-240



SMD24X-350

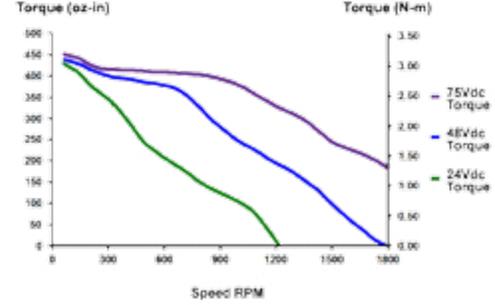


SMD34X

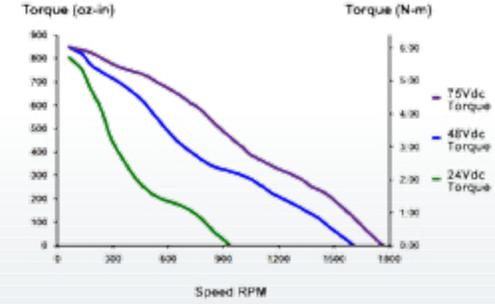


Input Voltage: 24 to 80 Vdc
Motor Current: 5.4 Amp/phase
Package Size: NEMA 34
Holding Torque: 450 oz-in to 1100 oz-in
Encoder: Incremental or Absolute

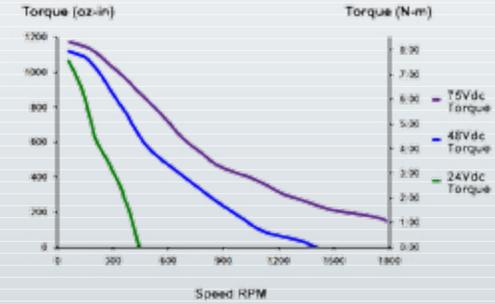
SMD34X-450



SMD34X-850



SMD34X-1100



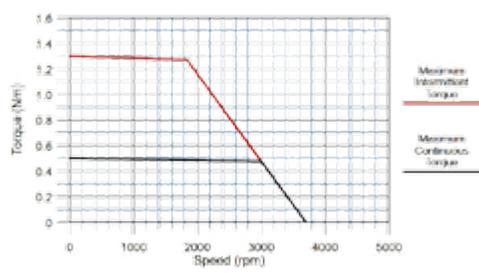
► Integrated Servo Motors

SV160X



Input Voltage: 48 to 80 Vdc
Motor Current: 10.5 Amps Peak
Package Size: 60 mm
Torque: 0.5 Nm Continuous
1.3 Nm Peak
Encoder: Absolute

SV160X

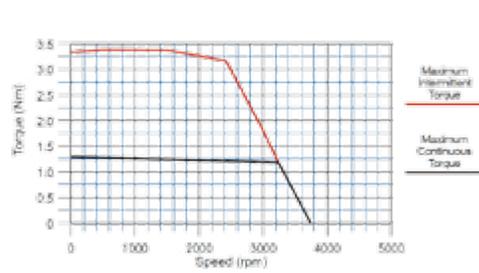


SV400X



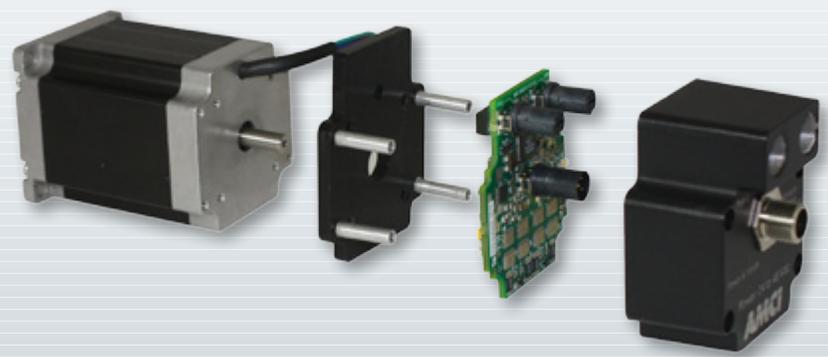
Input Voltage: 48 to 80 Vdc
Motor Current: 25.7 Amps Peak
Package Size: 60 mm
Torque: 1.3 Nm Continuous
3.5 Nm Peak
Encoder: Absolute

SV400X



► What's Inside Our Integrated Motors?

We take the drive and motor out of the cabinet and put them right on the motor, reducing wiring and system costs.





Features

All of AMCI's integrated motor packages offer the following options:

- Encoder: Incremental* or Absolute Multi-turn
- Connector: M12
- Protection: IP50, IP64, or IP67*
**only available with integrated stepper (not servo)*
- Embedded Switch
 - EtherNet/IP supports Device Level Ring (DLR)
 - Profinet supports Media Redundancy Protocol (MRP)

Compact Size



Integrated motors provide a single compact unit for measurable space savings that can reduce the size of your machine footprint.

Industries

Integrated motors benefit many different industries including:

- | | | |
|------------------|------------------|---------------------|
| • Medical | • Lab Automation | • Packaging |
| • Pharmaceutical | • Imaging | • Material handling |
| • Life Sciences | • Printing | • Labeling |

Benefits

- full torque at rest
- smooth motion
- cost effective
- real time control
- excellent repeatability
- low maintenance

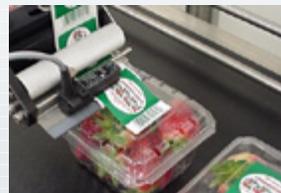
Application Examples

Rapid Changeover



The low cost of integrated motors provides a path for automating manual operations without the high cost of other motion solutions.

Packaging



Integrated motors are a great choice for the simple, repetitive motion profiles of packaging applications. Plus, benefit from plug and play PLC integration that cannot be matched.

Vision Systems



The SMD Series' microstepping delivers precise positioning and full torque at rest. This eliminates the dither present in other motion solutions for crisp, repeatable imaging.

Medical Equipment

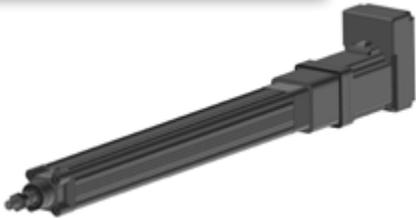


Integrated motors supply loads of power for tight spaces. The compact design eliminates the separate drive and controller reducing cabinet space.

► What's New At AMCI

Transform your factory with AMCI's space-saving, energy-improving integrated motors paired with linear actuators that provide guaranteed compatibility.

L3 Series Actuator



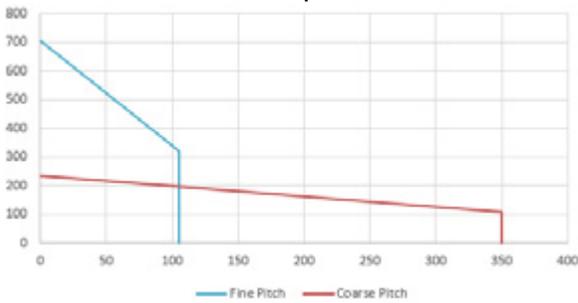
Input Voltage: 48 Vdc

Actuator Pitch

Coarse Pitch: 10mm | Fine Pitch: 3mm

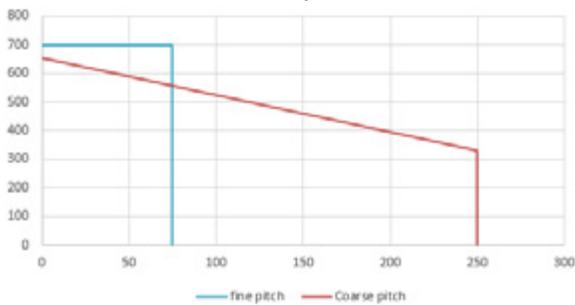
SMD17X-80-L3

Force (N) vs Speed (mm/s)



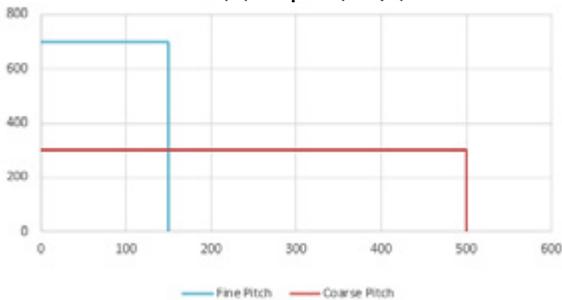
SMD23X-240-L3

Force (N) vs Speed (mm/s)



SV160X-L3

Force (N) vs Speed (mm/s)



L4 Series Actuator



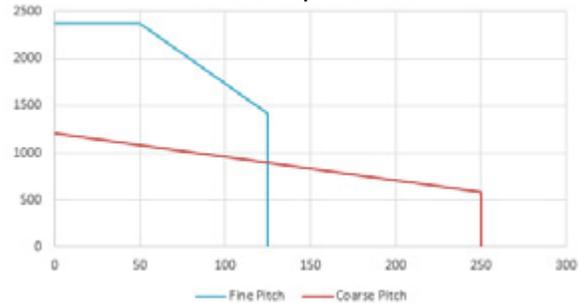
Input Voltage: 48 Vdc

Actuator Pitch

Coarse Pitch: 12.7mm | Fine Pitch: 5mm

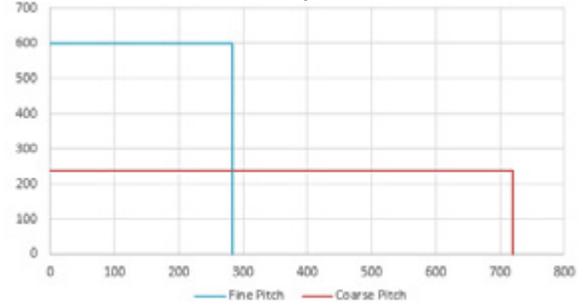
SMD34X-450-L4

Force (N) vs Speed (mm/s)



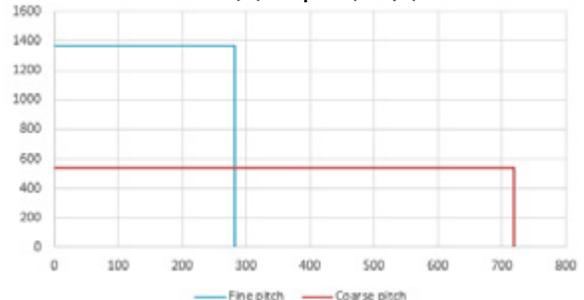
SV160X-L4

Force (N) vs Speed (mm/s)



SV400X-L4

Force (N) vs Speed (mm/s)



► Delivering a Complete Solution

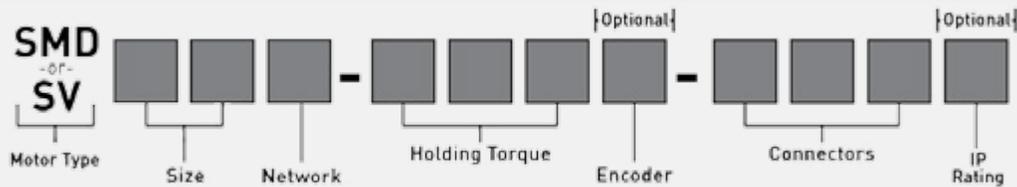
AMCI's selection of gearboxes, connectors, and approved cord sets simplify the ordering process and guarantee 100% compatibility.

Available Accessories:

- Linear Actuators
- Gearboxes
- Cord sets
- Connectors



Ordering Information



Stepper

Motor Type	SMD = Integrated Stepper Motor Package	
Size	17 = NEMA size 17 23 = NEMA size 23	24 = NEMA size 24 34 = NEMA size 34
Network	E2 = EtherNet/IP, Modbus-TCP, and Profinet w/Embedded Switch K = EtherCat w/Embedded Switch	
Holding Torque	80 = 80 oz-in torque rating (NEMA 17) 130 = 130 oz-in torque rating (NEMA 23) 240 = 240 oz-in torque rating (NEMA 23) 350 = 350 oz-in torque rating (NEMA 24)	450 = 450 oz-in torque rating (NEMA 34) 850 = 850 oz-in torque rating (NEMA 34) 1100 = 1100 oz-in torque rating (NEMA 34)
Encoder	E = Incremental encoder A = Absolute multi-turn encoder <i>blank</i> = no encoder	
Connectors	M12 = M12 connectors	
IP Rating	P = IP67 rating S = IP64 rating <i>blank</i> = IP50 rating (not available with NEMA 34)	

Servo

Motor Type	SV = Integrated Servo Motor Package	
Size	160 = 160 watt	400 = 400 watt
Network	E2 = EtherNet/IP, Modbus-TCP, and Profinet w/Embedded Switch	

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