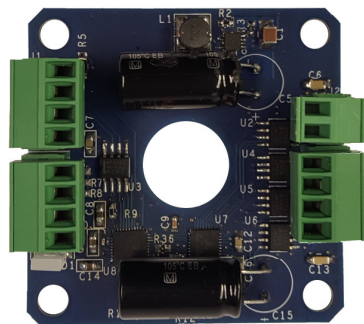


# DATASHEET



## OMD24

### Integrated Single Axis Drive & Control

The OMD24 is an advanced stepper motor drive and motion controller in one small compact size. Through a simple RS485 communications interface you can control a stepper motor with exceptional control and accuracy. Selectable acceleration ramps at velocities up to 1M steps/sec. Motor step size resolution is selectable from full step up to 1/265 microstep. Its small design is compatible to mount on a NEMA 23 stepper motor or remotely, and includes a hole in the center so the shaft of a linear actuator motor can pass through when mounted on the motor.

#### FEATURES

- Advanced motion control capabilities
- Commands are intuitive ASCII characters
- Simple communications through RS485 interface
- Communication speed = 115.2K Baud
- Velocity = 0 to 1M steps per second
- Microstep resolutions include full, 1/2, 1/4, 1/8, 1/16, 1/64, 1/128, 1/256
- Exceptional accuracy: +/- 0% position, 2% velocity (full-steps)
- Single supply voltage +12V to +50V
- 0 to 2.5 amp phase current for high torque motors
- Center pass-through hole for linear actuator stepper motors
- No heat-sink required for typical current
- Motor current set through the interface
- Matches the NEMA 23 dimension for direct motor mounting
- Use existing motors or select the optimum motor for the application for cost control and best performance
- Screw-terminal connector plugs for convenient wiring
- LED indicator for status
- Positive and negative limit inputs as well as Home input
- Exceptional value

*“The Company in Motion”™*

**OMS Motion, a Pro-Dex Company**

15201 NW Greenbrier Pkwy, B-1  
Beaverton, Oregon 97006

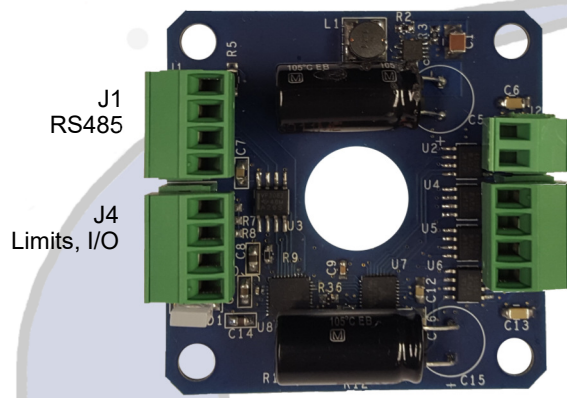
503-629-8081, Fax: 503-629-0688

E-mail: [SalesOR@OMSmotion.com](mailto:SalesOR@OMSmotion.com)

**[www.OMSmotion.com](http://www.OMSmotion.com)**

# OMD24

## Connector Pin-out



J1  
RS485

J4  
Limits, I/O

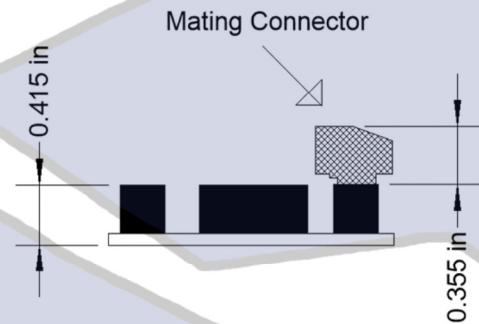
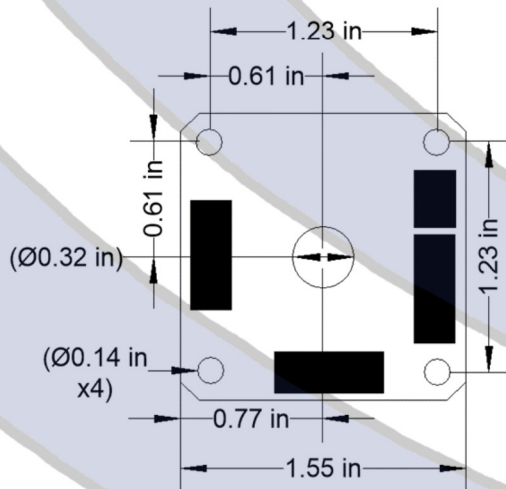
J2  
Pin 1: +12 to +50VDC  
Pin 2: Ground

J3  
Pin 1: Phase 1A  
Pin 2: Phase 1B  
Pin 3: Phase 2A  
Pin 4: Phase 2B

## Typical Application



## Dimensions



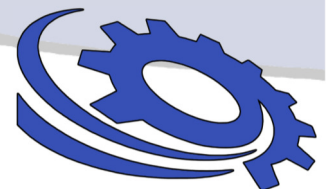
ISO 9001  
QMI-SAI Global

## ORDERING INFORMATION

Model	Description
OMD24	Controller & MicroStep Driver, Size 23

**OMS Motion,**  
a Pro-Dex Company  
15201 NW Greenbrier Pkwy, B-1  
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