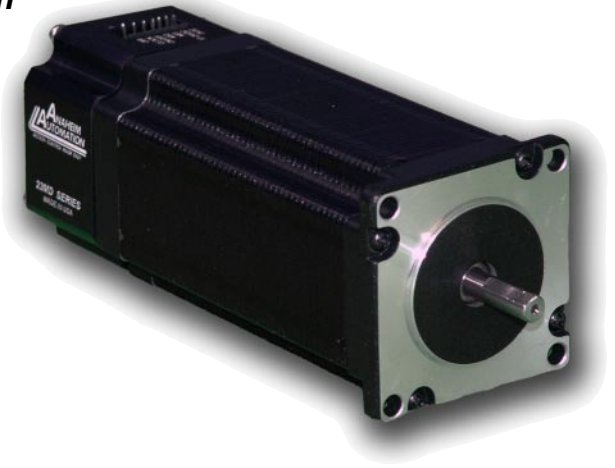


23MD Series - Integrated Stepper Motor/Drivers



FEATURES

- Stepper Motor / Microstep Driver Combination
- Eliminates Motor Wires
- Encoder Options Available
- Microstep Divisors of 8, 4, 2, or Full Step
- Compact Package
- 12-24V Power Requirement
- TTL Logic or 24V Level Inputs Available
- Ideal for Precise Positioning
- 0.225° Resolution at Eighth Step
- Efficient and Durable
- RoHS Compliant



DESCRIPTION

The 23MD Series is a compact construction that implements a microstepping driver and a stepper motor in one streamline package. With the two parts combined into one casing, the need to include motor wires has been eliminated. The high-torque step motor can generate up to 230 oz-in of torque. The microstepping driver will operate off 12VDC minimum to 24VDC maximum with a maximum power intake of 40W. The inputs are capable of running from either open collector or TTL level logic outputs, or sourcing 24VDC outputs from PLCs. The microstepping driver features resolutions from 200 - 1600 steps/revolution, providing smooth rotary operation. The 23MD series comes in either a single shaft version or a double shaft version with optional encoder and motor stack lengths of 1/2, 1, 2, or 3 allowing for varying amounts of start-up torque and inertia. The 23MD series features include built in over temperature and short circuit shut down, automatic 70% reduction in current after clock pulses stop being received, and status LED's to indicate power on (green LED) and clocks being received (yellow LED).

SPECIFICATIONS

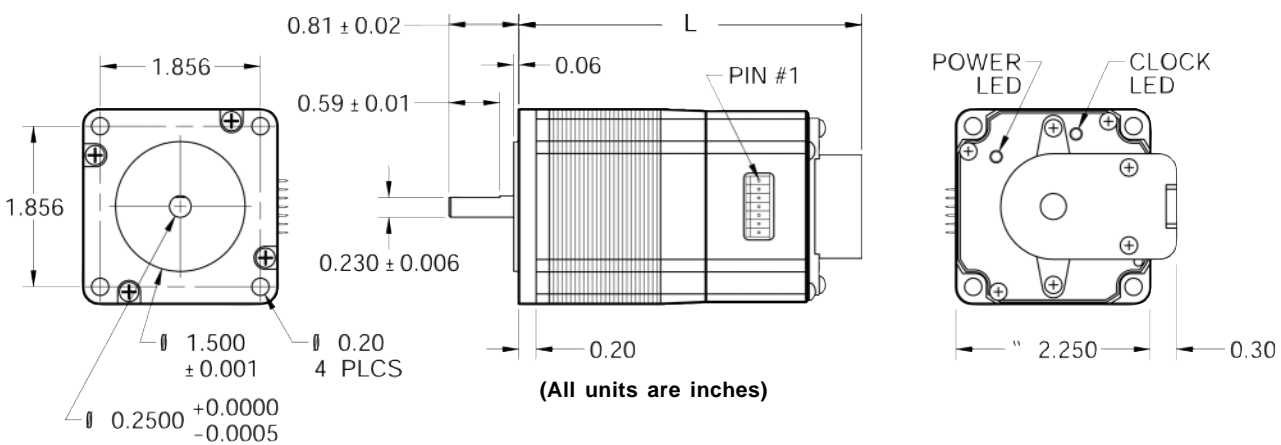
Example:

23MD106S-10-24-00

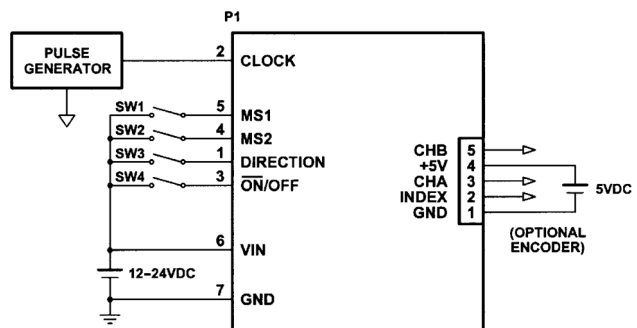


Note: Other Speed Options, Custom leadwires, cables, connectors, and windings are available upon request.

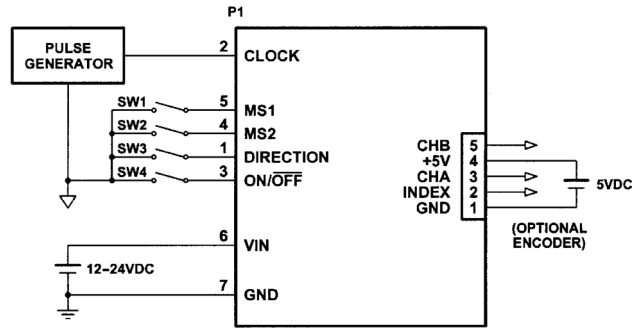
L010413



Terminal Block Pin	Description	CBL-AA4031 Wire Color
1	Direction	Brown
2	Clock	Red
3	On/Off	Orange
4	MS2	Yellow
5	MS1	Green
6	12VDC-24VDC	Blue
7	0VDC (Gnd)	Violet



23MD SERIES (SOURCING INPUTS)



23MD SERIES (SINKING INPUTS)

Step Angle:	1.8°	Insulation Resistance:	100M ohm Min., 500 VDC
Step Angle Accuracy:	+/- 5%	Dielectric Strength:	500 VAC for on minute
Resistance Accuracy:	+/- 10%	Shaft Radial Play:	0.02 Max. (1 lbs load)
Inductance Accuracy:	+/- 20%	Shaft Axial Play:	0.08 Max. (1 lbs load)
Temperature Rise:	80° C Max. (rated current, 2 phase on)	Max. Radial Force:	16.9 lbs (0.79 in from the flange)
Ambient Temperature:	-20°C to +50°C	Max. Axial Force:	3.37 lbs