

## LN3 Linear Series Low-Noise Drive



The LN3 drive is a self-contained bipolar linear amplifier microstepping drive. The unit's unique microprocessor controlled multilevel drive eliminates the noise problems associated with pulse width modulated drives without sacrificing performance. The drive's low EMI/RFI radiation makes it an ideal choice for noise-sensitive precision measurements.

The standard system has switch selectable resolutions from 400 to 51200 steps per revolution, yielding the resolution and smoothness required for critical applications. A wide range of motors are available offering torque from 60 to 400 oz-in.

Optically isolated step and direction inputs prevent ground loops with connected equipment. Current is programmable in 39 mA increments with a maximum current of 2.5A.

### Features

- Industry standard step and Direction Interface
- Short Circuit /temperature protection
- Remote disable command line
- Current waveform Selection
- Fan cooled enclosure
- Speeds to 50 rev/sec
- Virtually no radiated electrical noise
- Very low mechanical vibration
- 95-130/190-270 VAC  
50/60Hz AC line isolated supply

# Drive Specification

## Performance (unloaded motor)

Repeatability:  $\pm 5$  arc-seconds (unidirectional)

Accuracy:  $\pm 5$  arc-minutes (bidirectional)

Step-to-Step Accuracy:  $\pm 20$  arc-seconds (unidirectional)

**Inputs (optically isolated):** 5 VDC, TTL typical

Step: 250 nanosecond min.

Direction: 100 usec. setup and hold

Shutdown: 10msec min.

**Output (optically isolated):** 30VDC, 5mA max.

## Environmental – Operating

Driver: 0 to 60 °C measured at the heatsink

Motor: 80 °C measured at motor case

Ambient: 10 to 40 °C, 0 to 95% humidity, non-conducting

## Environmental- Storage

Motor + Driver: 0 to 60 °C, 0 to 95% humidity, non-conducting

**Power:** 95-130/190-260 VAC 50/60 Hz, 1.2A

# Optional Motor Specifications

Model	LN3-60	LN3-90	LN3-120	LN3-160	LN3-240	LN3-400
Static Torque(oz.in)	60	90	110	150	240	400
Motor size	23	23	23	34	34	34

Double shaft motors are standard, add –s suffix for single shaft

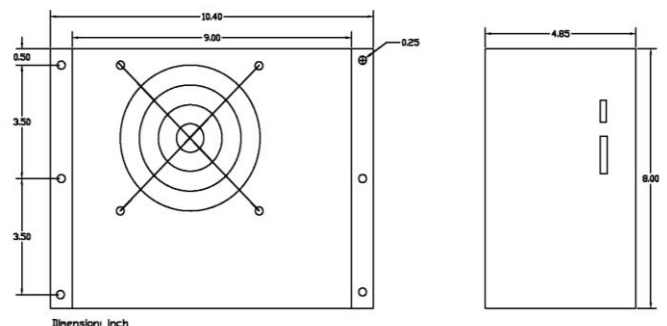
**Indexer connector:** 25 pin D

1. Step+
2. Direction+
9. Fault+
- 14 Step-
- 15 Direction-
- 16 Shutdown+
- 17 Shutdown-
- 21 Fault-

**Motor connector:** 5 pin terminal block

1. A+
2. A-
3. Ground
4. B+
5. B-

**LN3 dimension:** inch



# Precision Motion Controls

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