



Double Shaft Stepper Motor Encoder Specifications

A 1000 line encoder can be added to all of AMCI double shaft SM23, SM34, and SM42 motors. The following information shows both the encoder's wiring and its specifications.

Note: There are two possible wiring configurations, depending on when you purchased your motor / encoder combination. Newer motors will have an encoder with an 18-inch cable while older motors will have an encoder with a 10-foot cable.

The wiring information for both the older and newer wiring configurations are shown below.

Please note that using the wrong wiring configuration will not damage the encoder, however, it will not operate correctly.

Function	Wire Color 18 inch cable
+5vdc	Red
GND	Black
CH A	Brown
CH A NOT	White
CH B	Blue
CH B NOT	Green
INDEX	Orange
INDEX NOT	Yellow

Function	Wire Color 10 foot cable
+5vdc	Red
GND	Black
CH A	White
CH A NOT	Yellow
CH B	Green
CH B NOT	Blue
INDEX	Orange
INDEX NOT	Brown

ELECTRICAL SPECIFICATIONS:

Output: square -wave, two channel quadrature with index (gated with A 180° + or - 45°)

Supply Voltage: 5 Vdc

Nominal Power Requirements: 135 mA @ 5 Vdc

Output Sinks & Sources: 20mA

Output Circuit : AM26LS31

Output Frequency: Up to 200 KHz

Flutter: 1% max

Resolution: 1000

ENVIRONMENTAL SPECIFICATIONS:

Operating Temperature : -10°C to +100°C

Storage Temperature: -30°C to +110°C

Shock: 50 G's for 11ms duration

Vibration: 5-2000Hz @ 10 G's

Humidity: 90% relative (non-condensing)

A Beldin 8304 or equivalent is recommended to extend the encoder's cable