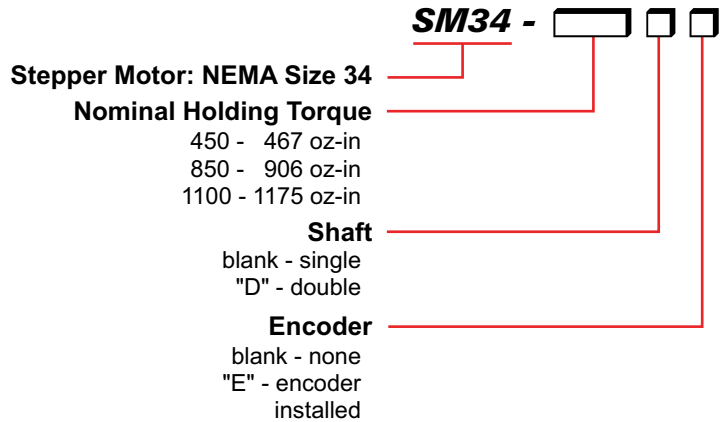


SM34 Stepper Motor Specification Sheet

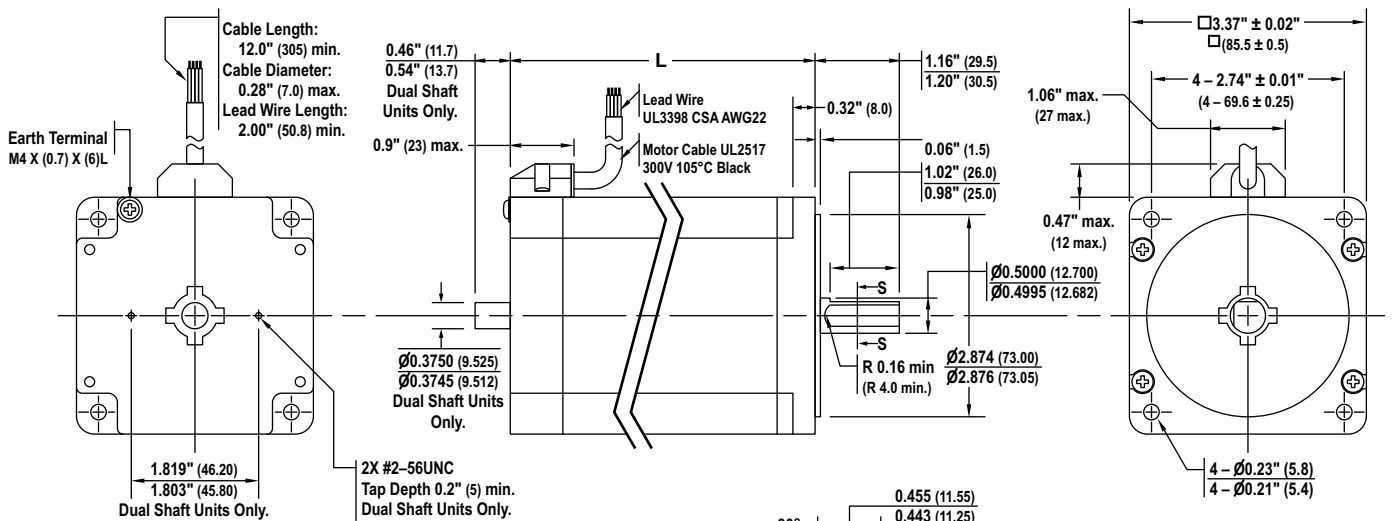
SHEET # 940-2S042

DESCRIPTION

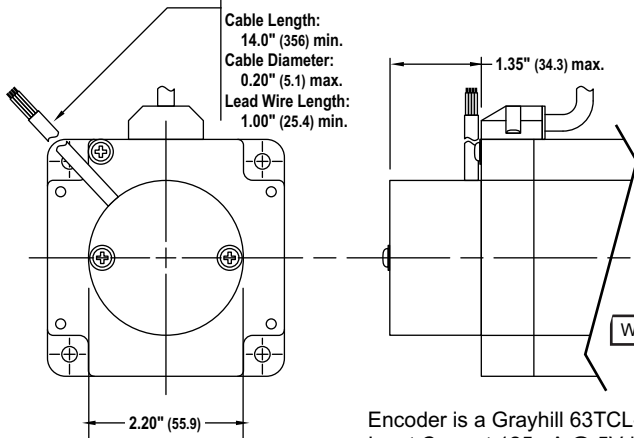
Our line of NEMA 34 size motors are selected to perfectly match AMCI's line of stepper drives. The NEMA size 34 motors are available in single or double shaft configurations. An optional 1000 line optical encoder can be factory installed on the double shaft motors. All motors have four leads to simplify wiring. The output shaft is 1/2", and the optional rear shaft is 3/8".



DIMENSIONAL DRAWING



ENCODER OPTION



Part #	Holding Torque	Motor Current	Motor Length	Rotor Inertia x10 ³ oz-in-sec ²	Motor Weight
SM34-450xy	467 oz-in	4.00 A	2.6" (66)	20.96	3.9 lb
SM34-850xy	906 oz-in	4.00 A	3.8" (97)	42.48	6.3 lb
SM34-1100xy	1175 oz-in	4.00 A	5.0" (127)	63.73	8.8 lb

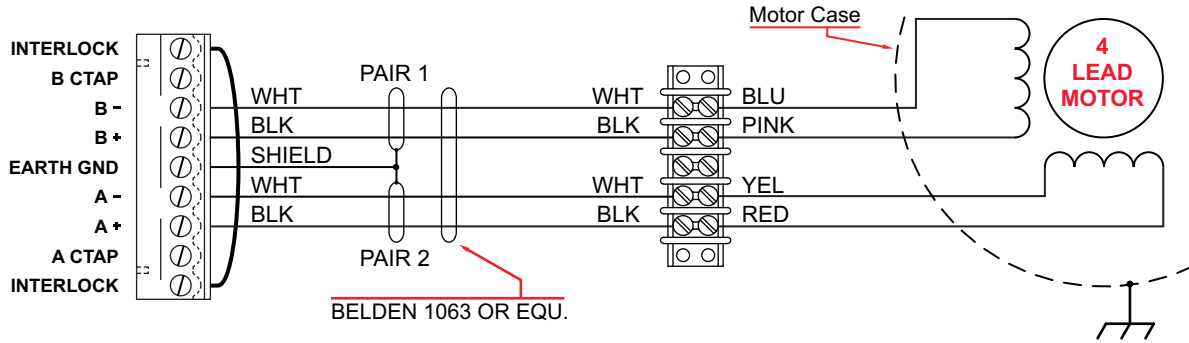
ENCODER SIGNAL										
+5Vdc	COM	+A	-A	+B	-B	+Z	-Z	SHLD	CASE	
WIRE COLOR	RED	BLK	BRN	WHT	BLU	GRN	ORN	YEL	Drain	WHT/Blk

Encoder is a Grayhill 63TCL-1-3-0-1-1
 Input Current 125mA @ 5Vdc + Interface Loads
 All Encoder signals are 5V differential.
 (AM26LS31 Line Driver)

Frequency Response: 200KHz
 Maximum Shaft Speed: 8000 RPM
 Extension Cable: Belden 8304 or equ.

SM34 Stepper Motor Specification Sheet

WIRING DIAGRAM



Motor Connections shown for CW rotation. (Facing mounting flange.) For CCW rotation, reverse Stepper Drive B+ and B- connections.

Extending the Motor Cable

AMCI recommends installing the drive as close as possible to the motor. This will decrease the chance of forming a ground loop, and has the added benefit of limiting the amount of power loss in the motor cable. If you must extend the cable, you should use a cable with twisted pairs 18 AWG or larger and an overall shield, such as the Belden 1063.

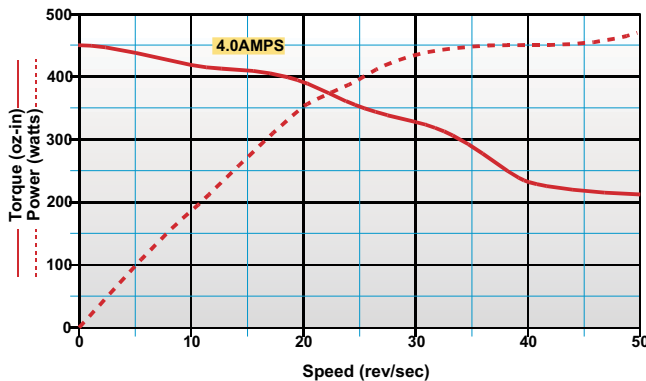
Installing the Motor Cable

All of the motor connections are high power, high voltage signals. The cable from the motor can be installed in conduit along with ac/dc power lines or high power ac/dc I/O as long as safety codes are followed. It cannot be installed in conduit with low power cabling such as cabling from the drive to the indexer, communication cables, or low power ac/dc I/O lines.

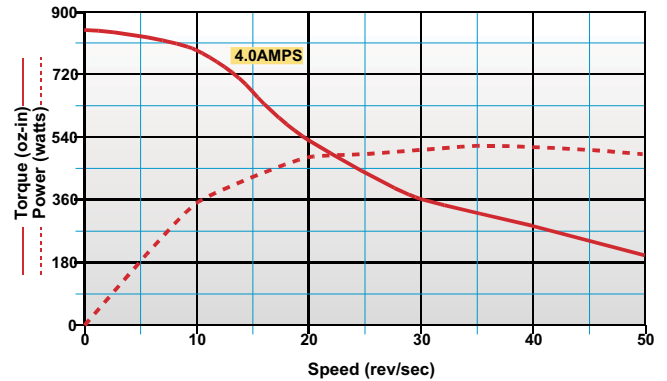
If you are extending the motor cable, treat the shield as a signal carrying conductor when installing the motor cable. Do not connect the shield to earth ground at any junction box.

TORQUE CURVES

SM34-450



SM34-850



SM34-1100

