

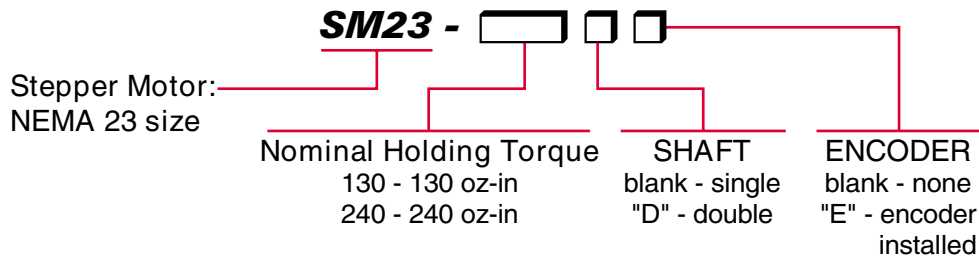
SM23 Stepper Motor Specification Sheet

SHEET # 940-2S021

DESCRIPTION

Our line of NEMA 23 size motors are selected to perfectly match AMCI's line of stepper drives. Available in either single or double shaft configurations, an optional optical encoder can be factory installed on the double shaft motors. All motors have eight leads to allow series or parallel connection. Both the output and optional back end shafts are 1/4", with the output shaft having a flat milled in it.

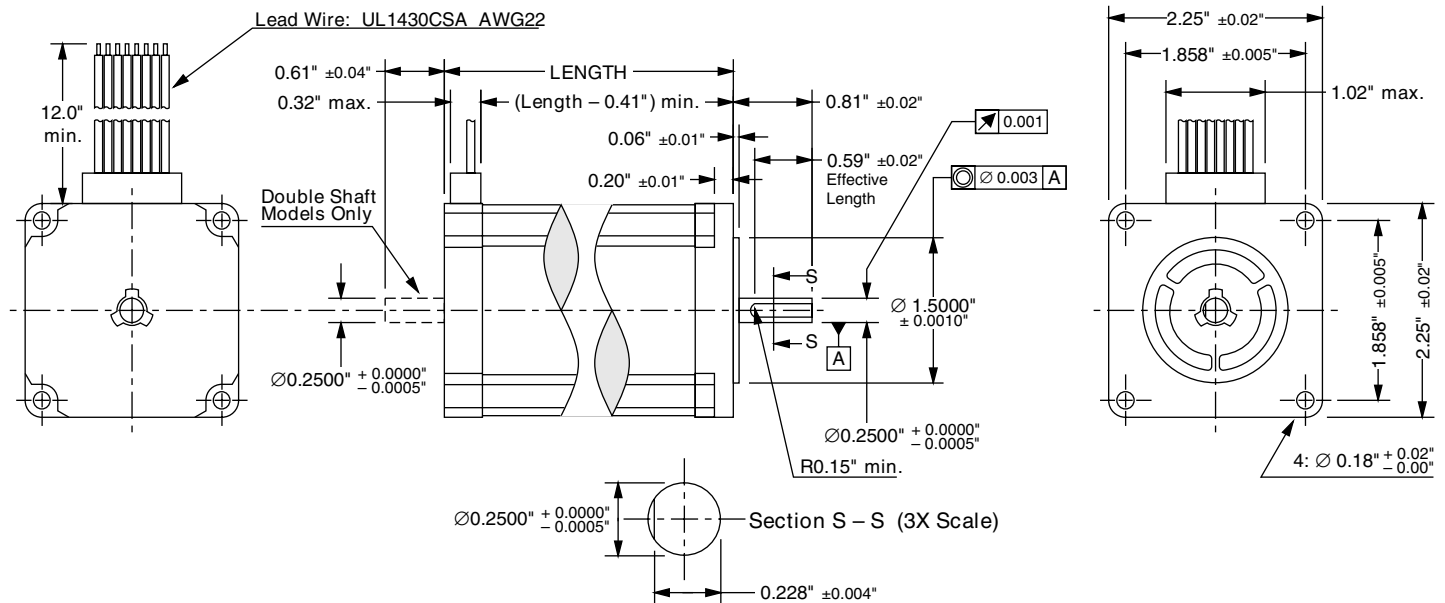
PART NUMBERS



Sample Part Numbers
 SM23-240
 SM23-240D
 SM23-240DE

NOTE: If you want the factory installed encoder, you must order a double shaft motor. (SM23-240DE is valid number, SM23-240E is not.)

DIMENSIONAL DRAWING

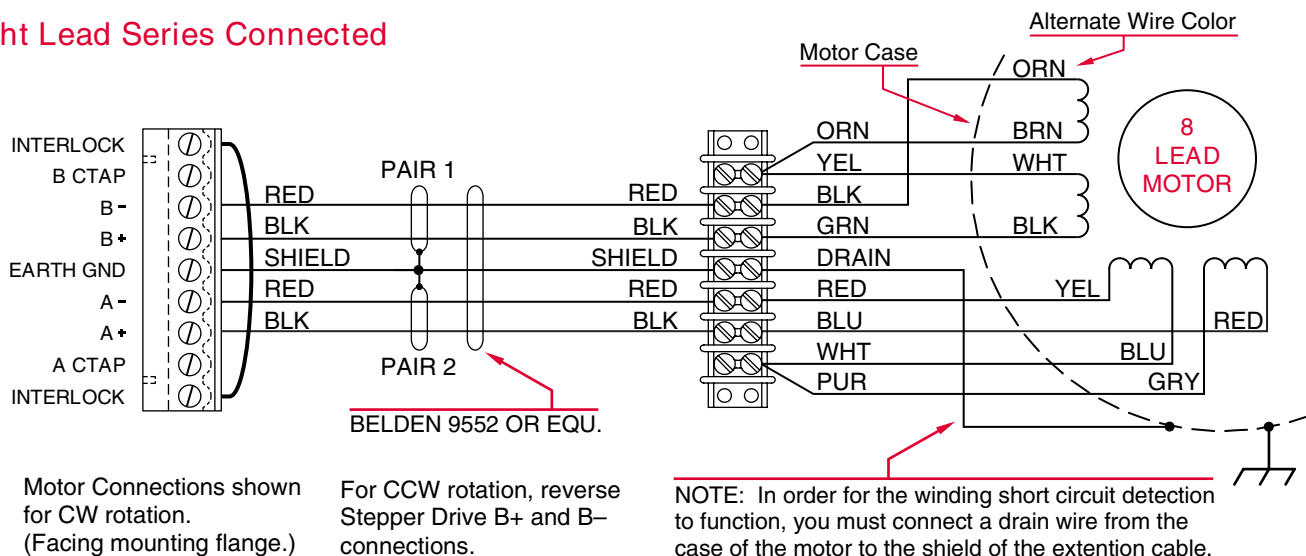


Part #	Holding Torque	Parallel Current	Series Current	Motor Length	Rotor Inertia x10 ⁻³ oz-in-sec ²	Motor Weight
SM23-130xy	130 oz-in	4.00 A	2.00 A	2.25"	2.98	1.4 lb
SM23-240xy	240 oz-in	4.00 A	2.00 A	3.23"	5.10	2.2 lb

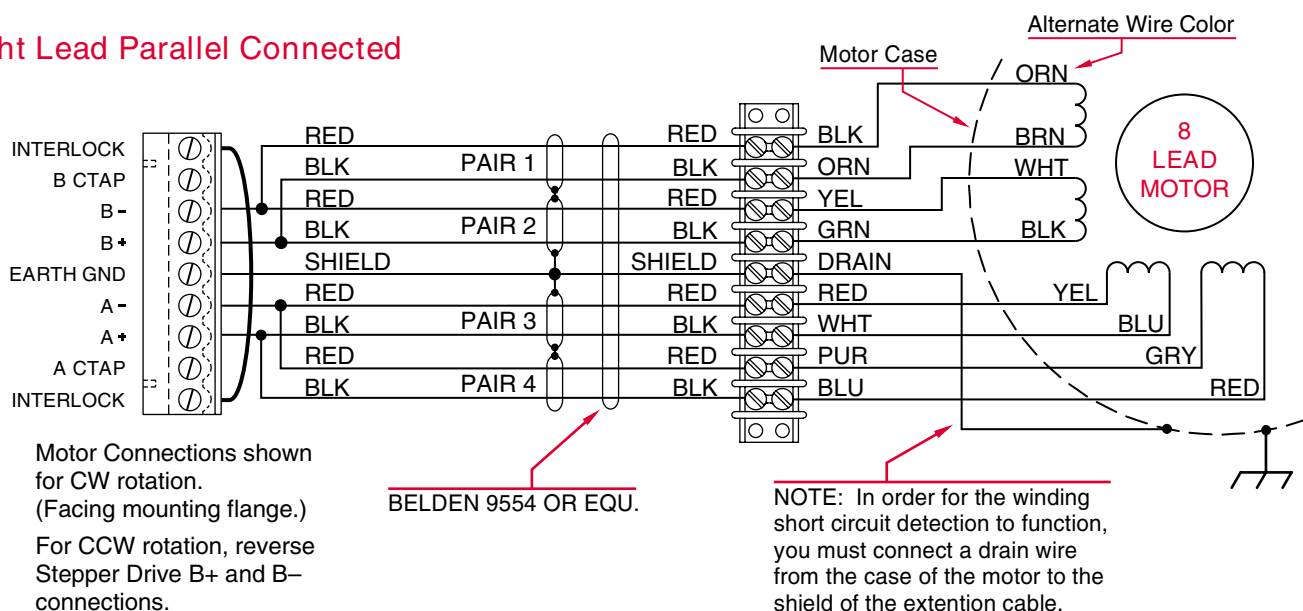
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WIRING DIAGRAMS

Eight Lead Series Connected



Eight Lead Parallel Connected



Extending the Motor Cable

As you extend the motor cable, you increase the chances of forming a ground loop between the motor and the drive. In order to keep this possibility to a minimum, connect motor and drive to the same point on your earth grounding system.

Even though it is possible to extend the cable length up to forty feet, 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. Belden 9552 (four wire) and 9554 (six wire) meet these specifications.

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.

When 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.