SM2340 Stepper Motor Specification Sheet

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 four leads, simplifying installation. Both the output and optional back end shafts are 1/4"., with the output shaft having a flat milled in it.

PART NUMBERS

<table>
<thead>
<tr>
<th>PART NUMBERS</th>
<th>SM2340 -</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Stepper Motor:</td>
<td>NEMA 23 size</td>
<td>4.0Arms max.</td>
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<tr>
<td>Nominal Holding Torque</td>
<td>130 - 130 oz-in</td>
<td>240 - 240 oz-in</td>
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<tr>
<td>SHAFT</td>
<td>blank - single</td>
<td>&quot;D&quot; - double</td>
</tr>
<tr>
<td>ENCODER</td>
<td>blank - none</td>
<td>&quot;E&quot; - encoder installed</td>
</tr>
</tbody>
</table>

Sample Part Numbers

SM2340-130
SM2340-130D
SM2340-130DE

NOTE: If you want the factory installed encoder, you must order a double shaft motor. (SM2340-130DE is a valid number, SM2340-130E is not.)

DIMENSIONAL DRAWING

Sample Part Numbers

SM2340-130
SM2340-130D
SM2340-130DE

NOTE: If you want the factory installed encoder, you must order a double shaft motor. (SM2340-130DE is a valid number, SM2340-130E is not.)

ENCODER OPTION

All Encoder signals are 5V differential. (AM26LS31 Line Driver)

Input Current 125mA @ 5Vdc + Interface Loads
Frequency Response: 200KHz
Maximum Shaft Speed: 8000 RPM
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 meets 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.

If 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

All torque curves generated with SD17040 or SD17060 Stepper Driver