SHOWN IN FORWARD EXTENDED SHAFT POSITION

**ENCODER RESOLUTION**
5.00 μm  0.000197 IN

**INTERMITTENT FORCE @ 10% DUTY CYCLE**
18.5 N   66.4 OZ

**CONTINUOUS FORCE**
5.8 N   21.0 OZ

**FORCE CONSTANT**
4.24 N/A  15.3 OZ/A

**BACK EMF CONSTANT**
4.24 V/M/S  0.11 V/N/S

**STROKE**
25.4 mm   1.000 IN

**MOVING MASS**
54 GR   1.91 OZ

**TOTAL MASS**
240 GR   8.5 OZ

**COIL RESISTANCE**
5.3 Ohms

**COIL INDUCTANCE @ 1000 Hz**
2.6 mH

**MAX CONTINUOUS POWER**
10.0 W

**MAX TOTAL SHAFT SIDE LOAD**
2.0 N   7.2 OZ

**LINEAR BEARING TYPE**
PLAIN BUSHING

3—MOTOR MAY BE SUPPLIED WITH OPTIONAL SPRINGS.
2—FOR PROPER HEAT DISSIPATION, THE MOTOR SHOULD BE MOUNTED ON A METALLIC BODY WITH ADEQUATE SURFACE AREA IN AN UNRESTRICTED FLOW OF AIR.
1—ALL VALUES AT 25°C

**COLOR**

<table>
<thead>
<tr>
<th>COLOR</th>
<th>DESCRIPTION</th>
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</thead>
<tbody>
<tr>
<td>ORANGE</td>
<td>+5 VDC POWER FOR OPTICAL ENCODER</td>
</tr>
<tr>
<td>GREEN</td>
<td>CHANNEL A OUTPUT OF OPTICAL ENCODER, TTL</td>
</tr>
<tr>
<td>WHITE</td>
<td>CHANNEL B OUTPUT OF OPTICAL ENCODER, TTL</td>
</tr>
<tr>
<td>BROWN</td>
<td>RETURN FOR OPTICAL ENCODER</td>
</tr>
<tr>
<td>BLACK</td>
<td>MOTOR MINUS</td>
</tr>
<tr>
<td>RED</td>
<td>MOTOR PLUS</td>
</tr>
<tr>
<td>GRAY</td>
<td>HOME INDICATOR, TTL, ACTIVE HIGH</td>
</tr>
</tbody>
</table>

**DIMENSIONS ARE IN INCHES (mm)**

<table>
<thead>
<tr>
<th>DEGREES</th>
<th>FRACTIONS</th>
<th>ANGLES</th>
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<tbody>
<tr>
<td>XXX</td>
<td>.XX</td>
<td>± 1/125 ± 1/2</td>
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<tr>
<td>± .005± .01</td>
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</tbody>
</table>

UNLESS OTHERWISE SPECIFIED

**FINISH**

**APPLICATION**

**MOTORCONT**
LINEAR DIRECT DRIVE MOTOR
WITH BUILT-IN ENCODER