SHOWN IN FORWARD EXTENDED SHAFT POSITION

2-56 UNC-2B X 0.20 [5.1] MIN DP BOTH SIDES
6-32 UNC-2B X 0.40 [10.1] MIN DP (2) BOTH SIDES

0.250 [6.4]
0.500 [12.7]
1.000 [25.4]

18.00 [457] MIN LEADS
24 AWG RED & BLACK POWER
28 AWG ALL OTHERS

0.125 [3.2]

1.125±0.015 [28.6±0.4]

ENCODER RESOLUTION
5.00 um 0.000197 IN

INTERMITTENT FORCE @ 10% DUTY CYCLE
18.6 N 67.0 OZ

CONTINUOUS FORCE
5.9 N 21.2 OZ

FORCE CONSTANT
4.4 N/A 15.9 OZ/A

BACK EMF CONSTANT
4.4 V/M/S 0.11 V/IN/S

STROKE
12.7 mm 0.500 IN

MOVING MASS
39 GR 1.38 OZ

TOTAL MASS
170 GR 6.0 OZ

COIL RESISTANCE
4.5 Ohms

COIL INDUCTANCE @ 1000 Hz
1.7 mH

MAX CONTINUOUS POWER
8.0 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

NOTES:
UNLESS OTHERWISE SPECIFIED

<table>
<thead>
<tr>
<th>COLOR</th>
<th>DESCRIPTION</th>
</tr>
</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>BLUE</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>YELLOW</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)
TOLERANCES ON:
DECIMALS FRACTIONS ANGLES
.000 .001 ±1/125 ±1/2
±.005±.01 UNLESS OTHERWISE SPECIFIED

MATERIAL

CONTRACT
DRN
CHKD
APPVD
APPVD

USED ON NEXT ASSY
APPLICATION

3—LINEAR DIRECT DRIVE MOTOR
WITH BUILT-IN ENCODER

4-4-3-21

1/1 SHEET 1 OF 1

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