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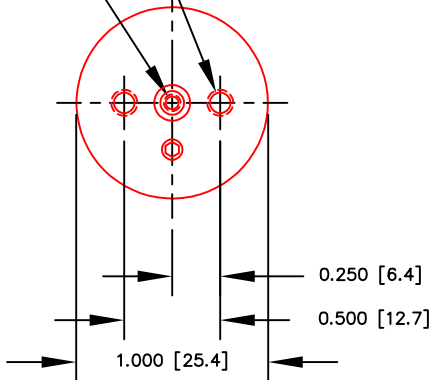
SHOWN IN FORWARD EXTENDED SHAFT POSITION

REVISIONS

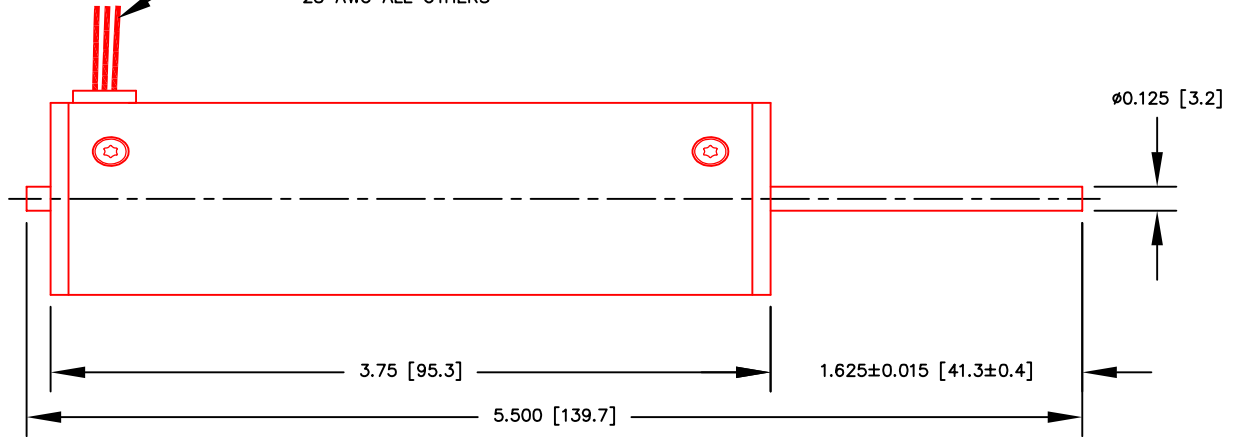
| ZONE | LETTER | DESCRIPTION | DATE | CHECKED | APPROVED |
|------|--------|-------------|------|---------|----------|
|------|--------|-------------|------|---------|----------|

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

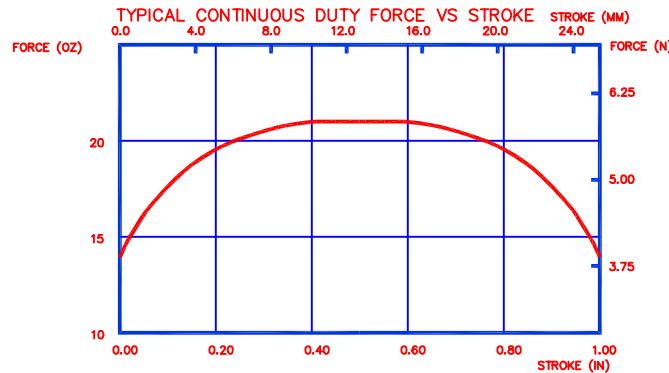
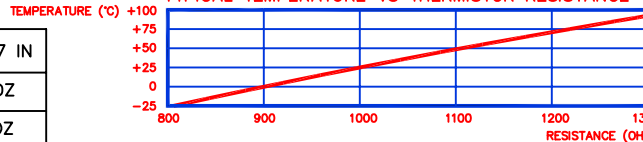


18.00 [457] MIN LEADS  
24 AWG RED & BLACK POWER  
28 AWG ALL OTHERS



|                                    |               |             |
|------------------------------------|---------------|-------------|
| ENCODER RESOLUTION                 | 5.00 um       | 0.000197 IN |
| INTERMITTENT FORCE @10% DUTY CYCLE | 18.5 N        | 66.4 OZ     |
| CONTINUOUS FORCE                   | 5.8 N         | 21.0 OZ     |
| FORCE CONSTANT                     | 5.0 N/A       | 18.0 OZ/A   |
| BACK EMF CONSTANT                  | 5.0 V/M/S     | 0.13 V/IN/S |
| STROKE                             | 25.4 mm       | 1.000 IN    |
| MOVING MASS                        | 54 GR         | 1.91 OZ     |
| TOTAL MASS                         | 240 GR        | 8.5 OZ      |
| COIL RESISTANCE                    | 7.4 Ohms      |             |
| COIL INDUCTANCE @ 1000 Hz          | 3.7 mH        |             |
| MAX CONTINUOUS POWER               | 10.0 W        |             |
| MAX TOTAL SHAFT SIDE LOAD          | 2.0 N         | 7.2 OZ      |
| LINEAR BEARING TYPE                | PLAIN BUSHING |             |

TYPICAL TEMPERATURE VS THERMISTOR RESISTANCE



| WIRE COLOR | DESCRIPTION                               |
|------------|---|
| ORANGE     | +5 VDC POWER FOR OPTICAL ENCODER          |
| GREEN      | CHANNEL A+ OUTPUT OF OPTICAL ENCODER, TTL |
| BLUE       | CHANNEL A- OUTPUT OF OPTICAL ENCODER, TTL |
| WHITE      | CHANNEL B+ OUTPUT OF OPTICAL ENCODER, TTL |
| YELLOW     | CHANNEL B- OUTPUT OF OPTICAL ENCODER, TTL |
| BROWN      | RETURN FOR OPTICAL ENCODER AND THERMISTOR |
| BLACK      | MOTOR MINUS                               |
| RED        | MOTOR PLUS                                |
| GRAY       | HOME INDICATOR, TTL, ACTIVE HIGH          |
| PURPLE     | THERMISTOR RELATIVE TO RETURN             |

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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

|   |                  |
|---|------------------|
| DIMENSIONS ARE IN INCHES (mm)           |                  |
| TOLERANCES ON:                          |                  |
| DECIMALS                                | FRACTIONS ANGLES |
| .XXX .XX                                | ± 1/125 ± 1/2'   |
| ± .005 ± .01 UNLESS OTHERWISE SPECIFIED |                  |
| USED ON                                 | NEXT ASSY        |
| APPLICATION                             |                  |

|          |          |  |
|----------|----------|--|
| MATERIAL | CONTRACT |  |
| FINISH   | DRN      |  |
|          | CHKD     |  |
|          | APPVD    |  |
|          | APPVD    |  |

|   |      |                    |      |
|---|------|--------------------|------|
| <b>MOTICONT</b>                                 |      |                    |      |
| LINEAR DIRECT DRIVE MOTOR WITH BUILT-IN ENCODER |      |                    |      |
| SIZE  | CODE | DWG. NO.           | REV. |
| A   |      | SDLM-025-095-01-05 | 4    |
| SCALE: 1 / 1                                    |      | SHEET 1 OF 1       |      |

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