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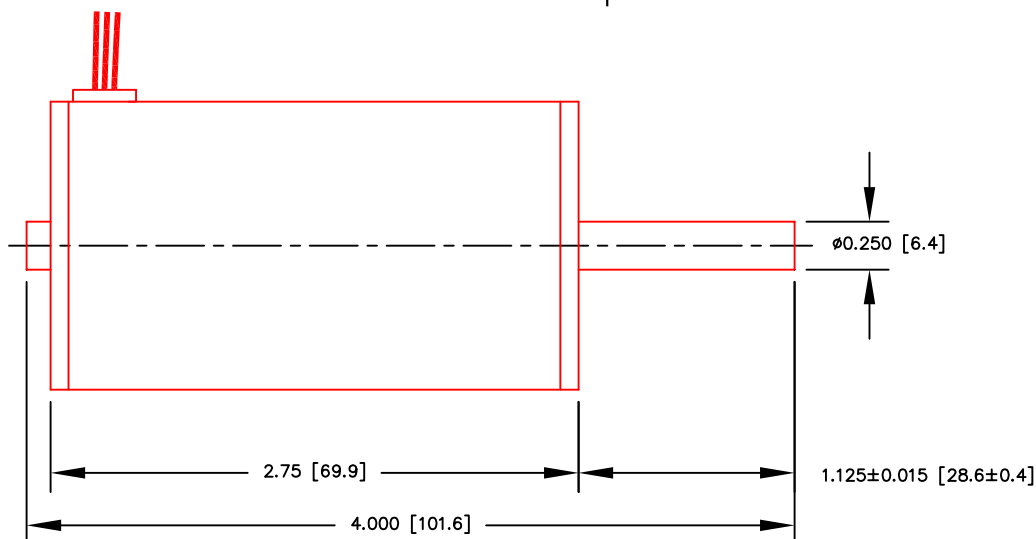
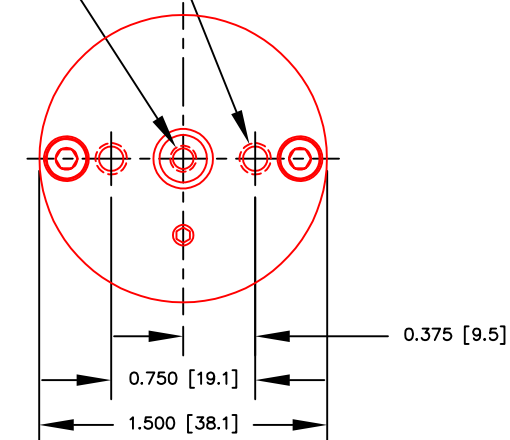
2

1

SHOWN IN FORWARD EXTENDED SHAFT POSITION

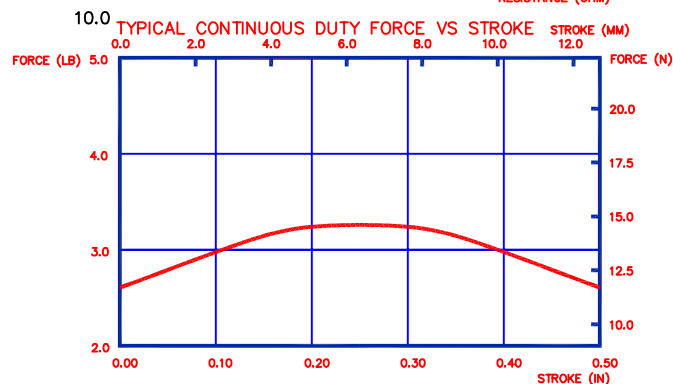
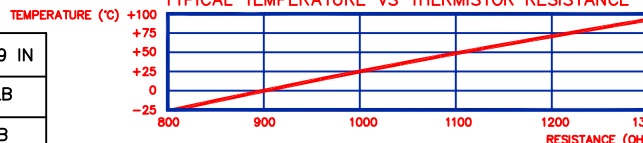
REVISIONS

ZONE	LETTER	DESCRIPTION	DATE	CHECKED	APPROVED

M3.5X0.6 0.40 [10.1] MIN DP
BOTH SIDESM4X0.7 0.40 [10.1] MIN DP (2)
BOTH SIDES

ENCODER RESOLUTION	1.25 μ m	0.000049 IN
INTERMITTENT FORCE @10% DUTY CYCLE	45.8 N	10.3 LB
CONTINUOUS FORCE	14.5 N	3.3 LB
FORCE CONSTANT	6.03 N/A	1.35 LB/A
BACK EMF CONSTANT	6.03 V/M/S	0.153 V/IN/S
STROKE	12.7 mm	0.500 IN
MOVING MASS	118 GR	0.26 LB
TOTAL MASS	400 GR	0.88 LB
COIL RESISTANCE	1.9 Ohms	
COIL INDUCTANCE @ 1000 Hz	1.2 mH	
MAX CONTINUOUS POWER	11 W	
MAX TOTAL SHAFT SIDE LOAD	24.0 N	5.4 Lb
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

FINISH

CONTRACT

DRN

CHKD

APPVD

APPVD

MOTICONT

LINEAR DIRECT DRIVE MOTOR
WITH BUILT-IN ENCODERSIZE
A

CODE

DWG. NO.
SDLM-038-070-01-01MREV.
1

SCALE: 1 / 1 SHEET 1 OF 1

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