

GENERAL DESCRIPTION:

MODEL LP-10HB, MIDORI "ORANGE" POT", LINEAR CONTACTLESS POSITION SENSOR, IS DESIGNED WITH A METAL HOUSING, $\phi 4$ STAINLESS SHAFT WITH RETURN SPRING AND STATE OF THE ART MICRO-ELECTRONIC SENSOR, FEATURING SUPERIOR PERFORMANCE IN SEVERE OPERATING CONDITIONS. THE SENSORS ARE SUITABLE FOR WIDE RANGE OF APPLICATIONS SUCH AS IN AUTOMOTIVE, OFF-ROAD, MARINE, PROCESS CONTROL AND CONSTRUCTION EQUIPMENT.

ENVIRONMENTAL SPECIFICATIONS:

OPERATING TEMPERATURE: -30°C to +100°C
 STORAGE TEMPERATURE: -40°C to +125°C
 VIBRATION: 20 G's, 5 Hz to 400 Hz
 SHOCK: 50 G's, 11 ms

ELECTRICAL SPECIFICATIONS: (UNLESS OTHERWISE SPECIFIED $T_A=25^\circ\text{C}$, $V_{in}=5\text{ Vdc}$, REFERTO FIGURES 1, 2, AND 3)

ELECTRICAL TRAVEL: 10 mm (FS)
 INPUT VOLTAGE (V_{in}): $5.0 \pm 0.5\text{ Vdc}$
 SUPPLY CURRENT: 10 mA MAX.
 OUTPUT SENSITIVITY: $400 \pm 50\text{ mV/mm}$
 LOAD RESISTANCE (R_L): 100 KOHMS MIN.
 INDEPENDENT LINEARITY: $\pm 2\%$ FS
 EMS: $\pm 50\text{ mV MAX. OUTPUT DEVIATION @100 V/m, 10 kHz to 1GHz}$

TEMPERATURE EFFECT: ($T_{REF}=25^\circ\text{C}$, $T_A=-30^\circ\text{C to }+100^\circ\text{C}$)

@ 0 mm SHAFT POSITION: $\pm 1.5\%$ FS
 @ $\pm 5\text{ mm}$ SHAFT POSITION: $\pm 3\%$ FS

INSULATION RESISTANCE: 100 megOHMS MIN. @50Vdc
 OPERATIONAL LIFE: 50×10^6 CYCLES (NO SHAFT LOAD, $\pm 5\text{ mm}$ STROKE)

MECHANICAL SPECIFICATIONS:

MECHANICAL STROKE: $11 \pm 1\text{ mm}$
 SPRING FORCE: 5 N MAX.
 SEAL COMPLIANT: IP-50 (DUST PROOF)
 WEIGHT: APPROX. xx g

HARDWARE:

M2.6 X 5 MOUNTING SCREWS (2 pcs) TO BE SUPPLIED WITH EACH UNIT.

PRELIMINARY
INFORMATION

REVISION					
C.O.N	SYM	DESCRIPTION	DATE	DRAWN	APPR'D
	A	1) FIGURE1: ADDED M2.6, 4 DEEP, $\phi 12$ 2) ADDED NOTE:"HARDWARE"	12/03/03	TSUGAWA	

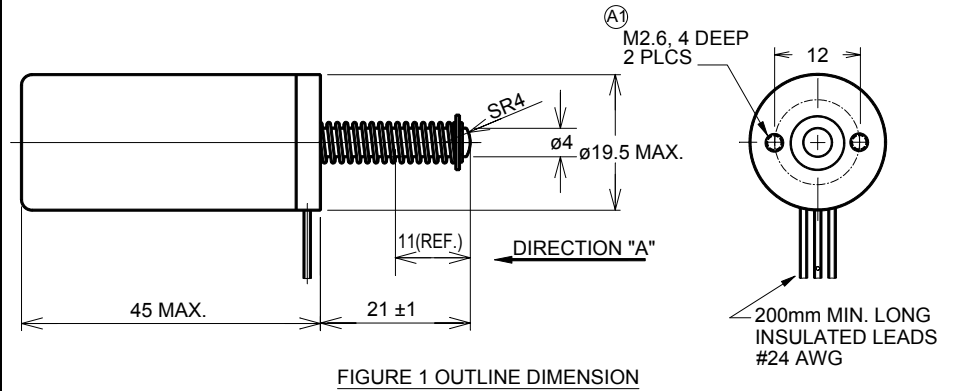


FIGURE 1 OUTLINE DIMENSION

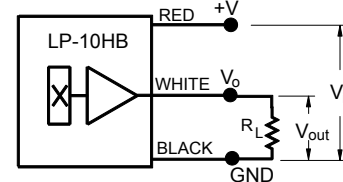


FIGURE 2 SCHEMATIC

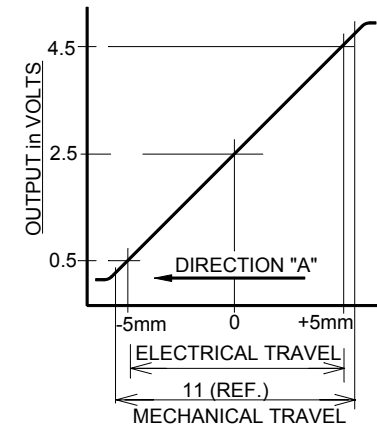


FIGURE 3 TYPICAL OUTPUT CHARACTERISTICS

UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN mm (in). TOLERANCES: ANGLES: $\pm 1.5^\circ$ <10 mm: ± 0.25 <100 mm: ± 0.5 >100 mm: ± 1	DRAWN T. TSUGAWA	DATE 02/10/03	SPECIFICATION DWG FOR MODEL LP-10HB CONTACTLESS LINEAR POSITION SENSOR	Midori America Corporation <small>FULLERTON, CA</small>	
	CHECKED	DATE			
	APPROVED	DATE		B-MAC-B66	A
	APPROVED	DATE			
SCALE:	FILE: LP-10HB		1 OF 1		