

GENERAL DESCRIPTION:

MODEL LP-10H, MIDORI "ORANGE" POT", LINEAR CONTACTLESS POSITION SENSOR, IS DESIGNED WITH A METAL HOUSING, ø3 STAINLESS SHAFT 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 $T_A=25^\circ\text{C}$, $V_{in}=5\text{ Vdc}$, REFER TO 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: $\pm 50\text{ mV MAX. OUTPUT DEVIATION @ } 100\text{ V/m, } 10\text{ kHz to } 1\text{GHz}$
 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 TRAVEL: $11 \pm 1\text{ mm}$
 FRICTION: 30 gf MAX.
 SEAL COMPLIANT: IP-50 (DUST PROOF)
 WEIGHT: APPROX. xx g

PRELIMINARY
INFORMATION



GUEMISA
 Sta. Virgilia 3-b ; 1ºF 28033 Madrid
 Tfno.: 91 764 21 00 Fax.: 91 764 21 32
 Email: info@guemisa.com

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
CHECKED		DATE	
APPROVED		DATE	
APPROVED		DATE	

SPECIFICATION DWG
 FOR
 MODEL LP-10H
 CONTACTLESS LINEAR
 POSITION SENSOR

Midori America Corporation
 FULLERTON, CA
B-MAC-B65

SCALE: FILE: LP-10H 1 OF 1

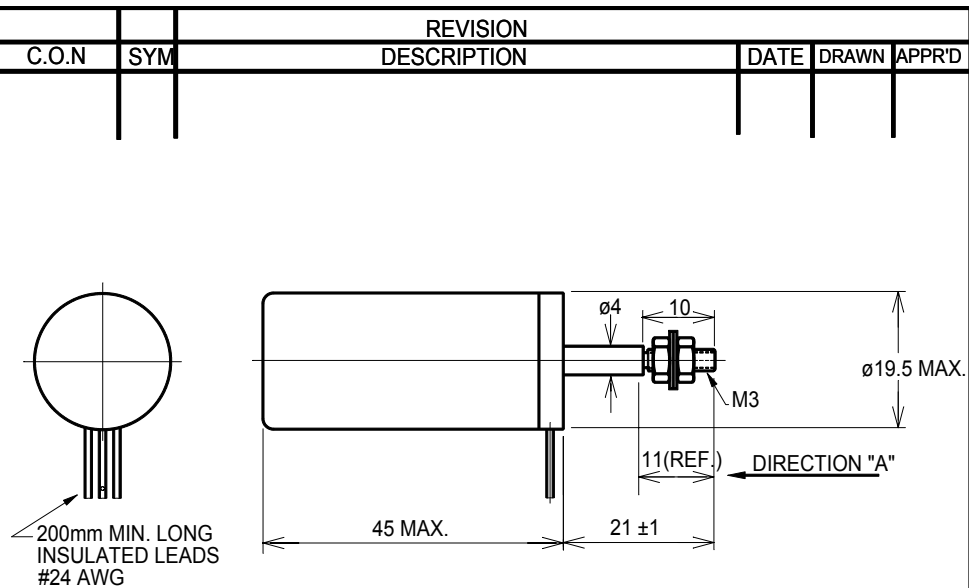


FIGURE 1 OUTLINE DIMENSION

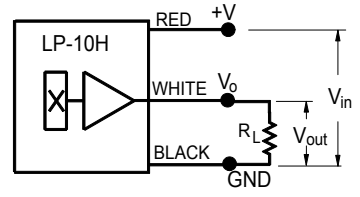


FIGURE 2 SCHEMATIC

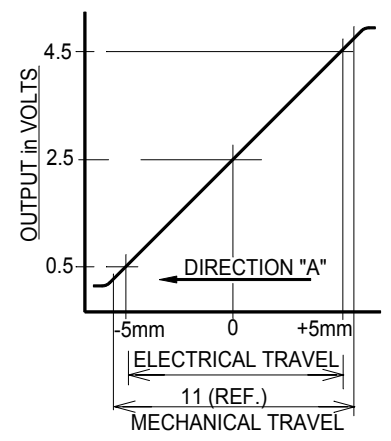


FIGURE 3 TYPICAL OUTPUT CHARACTERISTICS