

REF. NO:

REVISION

CON	SYM	DESCRIPTION	DATE	DRAWN	APPROD
A		1) INPUT IMPEDANCE FOR PMP-S20LX-1 WAS 30KOHMS/50%.	02/08/89	T.TSUGAWA	

**1.0 GENERAL DESCRIPTION:**  
 MODEL PMP-SxxLX-1-TCX IS A COMPACT, CONTACTLESS, TEMPERATURE COMPENSATED INCLINOMETER, MADE WITH MAGNETO-RESISTIVE ELEMENT, PATENTED SPRING PLATE PENDULUM, SILICON DAMPER OIL AND TEMPERATURE COMPENSATION CIRCUIT. ELECTRICAL INPUT/OUTPUT ARE TERMINATED WITH 140 mm LONG, NO. 30 AWG INSULATED WIRES.

**2.0 ENVIRONMENTAL SPECIFICATIONS:**

- 2.1 OPERATING TEMPERATURE: -20°C to +80°C
- 2.2 STORAGE TEMPERATURE: -40°C to +80°C
- 2.3 TEMPERATURE CYCLE: -55°C to +85°C, 5 CYCLES PER MIL-STD 202F, 107C.
- 2.4 VIBRATION: 7 G's
- 2.5 SHOCK: 100 G's

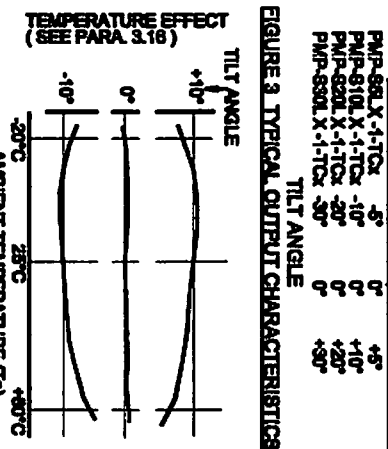
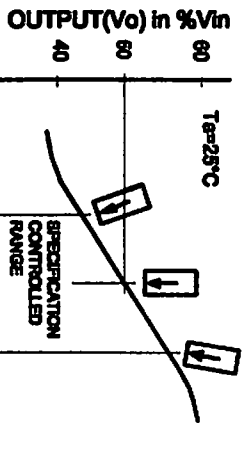
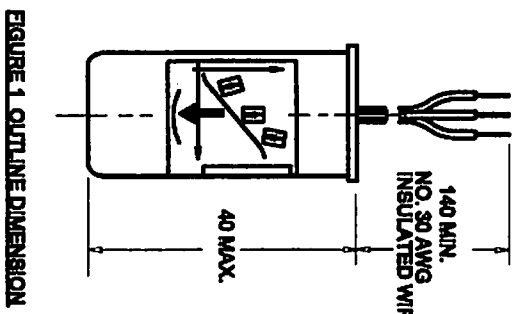
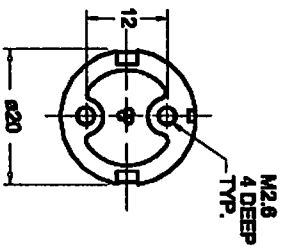
**3.0 ELECTRICAL AND MECHANICAL SPECIFICATIONS. REFER TO FIGURES 1, 2 AND 3.**

- 3.1 INPUT VOLTAGE (V<sub>in</sub>): 14 Vdc MAX.
- 3.2 OUTPUT LOAD IMPEDANCE: 10 meg OHMS MIN.
- 3.3 INSULATION RESISTANCE: 100 meg OHMS @ 500 Vdc
- 3.4 DIELECTRIC STRENGTH: 500 Vrms @ 50/60 Hz for ONE MINUTE SILICON OIL 200 CST
- 3.5 DAMPER OIL: APPROX. 35g
- 3.6 WEIGHT: (60±3)% Vm
- 3.7 INDEX POINT:

	PMP-S9LX-1 30 KOHMS ±30%	PMP-S10LX-1 ②/25 KOHMS ±30%	PMP-S20LX-1 30 KOHMS ±30%	PMP-S30LX-1 30 KOHMS ±30%
3.9 TILT ANGLE, ELECTRICAL:	±5° (FS=10°)	±10° (FS=20°)	±20° (FS=40°)	±30° (FS=60°)
3.10 TILT ANGLE, MECHANICAL:	±8° MIN.	±12° MIN.	±24° MIN.	±40° MIN.
3.11 ZERO-BASED LINEARITY:	±1% FS	±1% FS	±1% FS	±1.3% FS
3.12 CONFORMITY, SINE WAVE:	±0.5% FS	±0.5% FS	±0.5% FS	±0.6% FS
3.13 TILT SENSIBILITY:	0.005° MAX. (1.24±0.30)%/Mm per 1°	0.01° MAX. (0.74±0.19)%/Mm per 1°	0.02° MAX. (0.57±0.11)%/Mm per 1°	0.03° MAX. (0.20±0.07)%/Mm per 1°
3.14 OUTPUT SENSITIVITY:				

- 3.15 TEMPERATURE EFFECT: REFER TO FIGURES 2 AND 4 FOR CLARIFICATION.
- AT 0° TILT ANGLE:
  - TCX (T<sub>a</sub> = -20° to +80°)
  - ±0.7% FS MAX.
- AT MAX. TILT ANGLE:
  - TCX (T<sub>a</sub> = -20° to +80°)
  - ±1.7% FS MAX.
  - ±10% FS MAX.

REFER TO FIGURES 1 AND 2. EACH UNIT SHALL BE LABELED WITH "MIDORU" NAME, MODEL NO. AND SERIAL NO.(or DATE CODE).



**4.0 ELECTRICAL CONNECTION:**

**5.0 MARKING:**

UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN mm(IN).	DRAWN T. TSUGAWA	DATE 02/08/89	SPECIFICATION DWG FOR MODEL PMP-SxxLX-1-TCX TEMPERATURE COMPENSATED INCLINOMETER	Midort America Corporation FULTON, CA
TOLERANCES: ANGLES: ±1.0° Ø10 mm: ±0.25 Ø100 mm: ±0.5 Ø100 mm: ±1	CHECKED	DATE		
APPROVED	DATE	APPROVED		

SCALE: FILE: PMP-SxxLX-1-TCX

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