10721 REFERENCE: MPCL UCP201-129

REVISION					
C.O.N	SYM	DESCRIPTION	DATE	DRAWN	APPR'D

1.0 GENERAL DESCRIPTION:

MODEL CP-2UK-R250 IS A CONTACTLESS POTENTIOMETER (±10° EFFECTIVE ANGLE), DESIGNED WITH RUGGEDIZED HOUSING AND TEMPERATURE COMPENSATION AND SIGNAL CONDITIONING CIRCUITS.
ITS SEALED CONSTRUCTION (EXCEPT SHAFT EXIT) AND OPTIMIZED OUTPUT CHARACTERISTICS MAKE IT SUITABLE FOR APPLICATIONS REQUIRING OPERATION IN SEVERE ENVIRONMENT.

2.0 ENVIRONMENTAL SPECIFICATIONS:

2.1	OPERATING TEMPERATURE:	-40°C to +100°C
2.2	VIBRATION:	10 Gs, 2,000 Hz
2.3	SHOCK:	100 Gs, 11 mS
2.4	WATER RESISTANT:	JIS D 0203 S1 (EXCEPT SHAFT EXIT)

3.0 ELECTRICAL SPECIFICATIONS: (REFER TO FIGURES 2, 3 AND 4)

3.1	ELECTRICAL ANGLE:	±10° (20° F.S.)
3.2	INPUT VOLTAGE (Vin):	4.5 Vdc to 10.5 Vdc
3.3	OUTPUT VOLTAGE RANGE:	10% to 90% Vin
3.4	OUTPUT SENSITIVITY:	4%Vin/1° NOM.
3.5	ACCURACY:	1.55% F.S. @Ta=25°C
3.6	INSULATION RESISTANCE:	100 meg OHMS @ 500 Vdc
3.7	DIELECTRIC STRENGTH:	N/A
3.8	POWER DISSIPATION:	0.2 WATTS MAX.
3.9	LOAD IMPEDANCE:	100 kOHMS OR HIGHER

3.10 TEMPERATURE EFFECT (DEVIATION IS EXPRESSED IN EQUIVALENT ANGLE): REFER TO FIGURE 4 FOR CLARIFICATION.

(Ta=-20°C to +70°C)

AT 0° POSITION:	±0.5° MAX.
AT ±20° POSITION:	±0.79° MAX.

4.0 MECHANICAL SPECIFICATIONS:

4.1	MECHANICAL ANGLE:	360° (ENDLESS)
4.2	TORQUE:	20 g-cm MAX.
4.3	WEIGHT:	APPROX. 80 g

5.0 ELECTRICAL CONNECTIONS: SEE FIGURES 1 AND 2.

6.0 MARKING:

6.1 UNIT SHALL BE LABELED WITH MIDORI NAME, MODEL NO. AND SERIAL NO.

1 6.2 THE DOT ON SHAFT END SHOWN IN FIGURE 1 IS PROVIDED FOR SETTING THE SHAFT POSITION FOR APPROXIMATE MID POINT(50% Vin).

7.0 MATERIAL:

HOUSING;	CARBON STEEL, ZINC COATED
SHAFT:	STAINLESS STEEL
MOUNTING FLANGE:	ALUMINUM, ANODIZED

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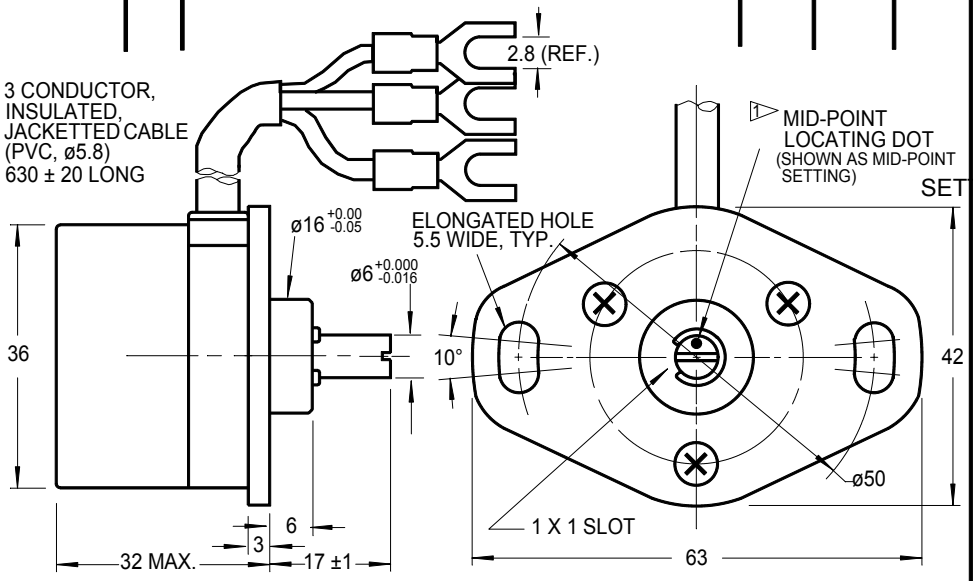

FIGURE1 OUTLINE DIMENSIONS

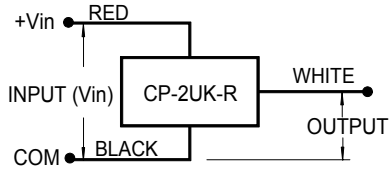

FIGURE2 SCHEMATIC

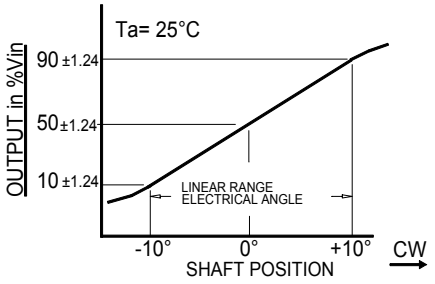

FIGURE 3 OUTPUT CHARACTERISTICS

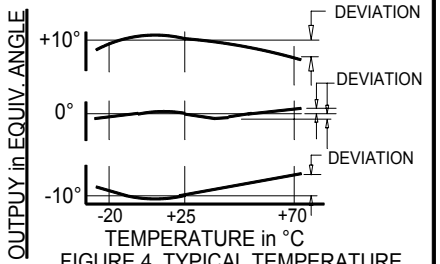

FIGURE 4 TYPICAL TEMPERATURE CHARACTERISTICS

UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN mm(in). TOLERANCES: ANGLES ±1.5° <10 mm: ±0.25 <100 mm: ±0.5 >100 mm: ±1	DRAWN S. SASAKI	DATE 06/19/00	SPECIFICATION DWG FOR MODEL CP-2UK-R250 CONTACTLESS POSITION SENSOR (SIG. COND./TEMP. COMPENSATED)	Midori America Corporation FULLERTON, CA
	CHECKED H. KOMABA	02/17/01		B-MAC-B53
	APPROVED	DATE		
	APPROVED	DATE		
	SCALE:		FILE: CP-2UK-R250	1 OF 1