

REF. NO: MPCL DWG A-MPE-B72

REVISION

C.O.N	SYM	DESCRIPTION	DATE	DRAWN	APPR'D
	A	(1) WAS CP-10SRB. (2) ADDED TABLE 1 TO INCLUDE 5 MODEL SPEC. VARIATIONS. (3) WAS 0.1% MAX. (4) WAS 1 WATT@70°C.	07/12/02	T.TSUGAWA	Y.N.

**GENERAL:**

MODEL CP-2F-xxS-RB IS A MULTI-TURN POTENTIOMETER, DESIGNED WITH A CONDUCTIVE PLASTIC RESISTIVE ELEMENT AND PRECISION ANTI-BACKLASH WORM GEARS IN A COMPACT PACKAGE, OFFERING RELIABLE WIDE ANGLE POSITION SENSING SOLUTIONS.

**ELECTRICAL CHARACTERISTICS:**

ELECTRICAL TRAVEL: SEE TABLE 1  
 TOTAL RESISTANCE: 0.5, 1, 2, 5, 10 KOHMS ±20%  
 LINEARITY (INDEPENDENT): ±1.1%  
 REPEATABILITY: <sup>(A3)</sup>0.5% MAX. (INCLUDING BACKLASH)  
 OUTPUT SMOOTHNESS: 0.1% MAX.  
 POWER RATING: <sup>(A4)</sup>0.5 WATTS @50 °C  
 INSULATION RESISTANCE : 100 meg OHMS MIN. @1,000 Vdc  
 DIELECTRIC STRENGTH: 1,000 Vrms @50/60 Hz for 1 MINUTE

**MECHANICAL SPECIFICATIONS:**

MECHANICAL TRAVEL: CONTINUOUS  
 GEAR RATIO: SEE TABLE 1  
 TORQUE: 4 mN-M (0.56 in-oz) MAX.  
 WEIGHT: APPROX. 30g  
 LIFE: SEE TABLE 1  
 ( X10<sup>6</sup> SHAFT REVOLUTIONS MIN.)

TABEL 1 <sup>(A2)</sup>

MODEL NO.	CP-2F-5S-RB	CP-2F-10S-RB	CP-2F-24S-RB	CP-2F-35S-RB	CP-2F-50S-RB
ELECTRICAL TRAVEL	1,700 ±10°	3,400 ±20°	8,160 ±48°	11,900 ±70°	17,000 ±100°
GEAR RATIO	5 : 1	10 : 1	24 : 1	35 : 1	50 : 1
LIFE	10	20	48	70	100

**ENVIRONMENTAL SPECIFICATIONS:**

OPERATING TEMPERATURE: -40°C to +120°C  
 VIBRATIONS: 15 Gs, 2,000 Hz  
 SHOCK: 50Gs, 11 ms

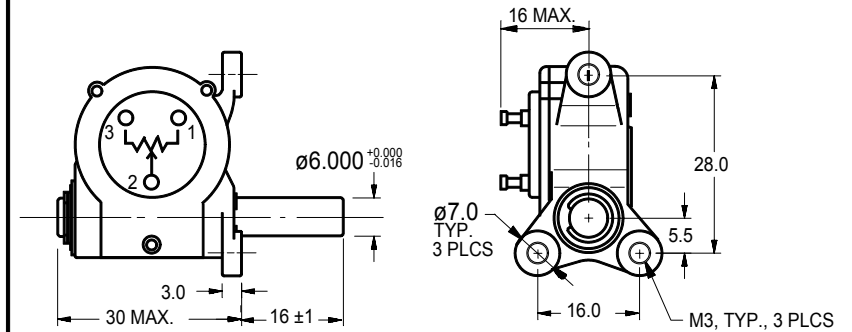


FIGURE 1 OUTLINE DIMENSION

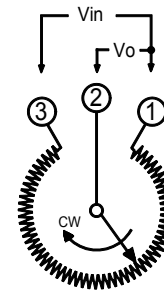


FIGURE 2 WIRING DIAGRAM

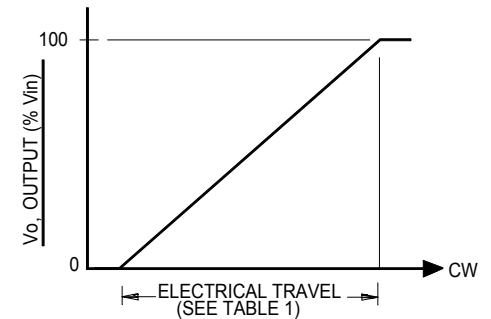


FIGURE 3 OUTPUT CHARACTERISTICS

UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN mm(in).  
 TOLERANCES:  
 ANGLES ±1.5°  
 <10 mm: ±0.25  
 <100 mm: ±0.5  
 >100 mm: ±1

DRAWN T.TSUGAWA	DATE 8/21/96
CHECKED Y. NAKAMURA	DATE 8/21/96
APPROVED	DATE
APPROVED	DATE
SCALE:	FILE: CP-2F-xxSRB

SPECIFICATION DWG  
 FOR  
<sup>(A1)</sup>CP-2F-xxS-RB  
 POTENTIOMETER  
 ( WITH GEAR HEAD )

Midori America Corporation  
 FULLERTON, CA

A-MAC-B81 | A  
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