REFERENCE: MPCL 95 CAT PG23 REVISION C.O.N SYM DESCRIPTION DATE APPR'D DRAWN GENERAL DESCRIPTION MODEL CP-5UY IS A CONTACTLESS POTENTIOMETER WHICH FEATURES LINEAR OUTPUT SIGNAL FOR 300° SHAFT ROTATION. THE UNIT CONSISTS OF A SET OF STATIONARY MAGNETO-RESISTIVE ELEMENT AND PERMANENT MAGNET AND THE ROTATING "SPIRAL YOKE", MIDORI'S PROPRIETARY DESIGN. ATTACHED TO THE SHAFT TO CONVERT WIDE ANGLE MECHANICAL INPUT TO LINEAR ELECTRICAL OUTPUT SIGNAL. R31 MAX. ITS PRECISION CONSTRUCTION AND ULTRA RELIABLE OPERATING PEFORMANCE MAKE IT SUITABLE FOR PROCESS CONTROL AND INDUSTRIAL ROBOTIC APPLICATIONS. **ELECTRICAL SPECIFICATIONS: ELECTRICAL TRAVEL:** 300° (F.S.) 0.5%Vin/10° MIN. **OUTPUT SENSITIVITY:** INDEPENDENT LINEARITY: ±1% F.S. +0.00 -0.05 Ø47.60 INPUT IMPEDANCE: 30 kOHMS ±30% @Ta=25°C INPUT VOLTAGE: 14 Vdc MAX. ø52 **OUTPUT LOAD IMPEDANCE:** 10 megOHMS MIN. 100 megOHMS MIN. @500Vdc ø6.000+8:898 **INSULATION RESISTANCE:** DIELECTRIC STRENGTH: 500 Vrms. 50/60Hz. FOR ONE MINUTE. MECHANICAL SPECIFICATIONS: MECHANICAL ANGLE: 360° (ENDLESS) TORQUE: 2 gf-cm WEIGHT: APPROX. 90 q 9.5 ±1 -16.5±1-SERVO MOUNT CLEATS (3 pcs) TO BE SUPPLIED WITH EACH MOUNTING: FIGURE 1 OUTLINE DIMENSIONS UNIT. REFER TO FIGURE 4 FOR RECOMMENDED PANEL CUTOUT. \oplus ø62 **ENVIRONMENTAL SPECIFICATIONS: OPERATING TEMPERATURE:** -40°C to +100°C M3, TYP. -40°C to +100°C STORAGE TEMPERATURE: VIBRATION: 7 G's SHOCK: 100 G's Ta= 25°C +Vin ③ 60 OUTPUT in %Vin 47.61 +0.0021 INPUT (Vin) 50 OUTPUT FIGURE 4 PANEL CUTOUT FOR MOUNTING LINEAR RANGE ELECTRICAL ANGLE DRAWN COM (1) DATE SPECIFICATION DWG UNLESS OTHERWISE T. TSUGAWA 6/4/97 SPECIFIED, DIMENSIONS +150° **FOR** ARE IN mm(in). CHECKED DATE SHAFT POSITION FIGURE 2 SCHEMATIC **MODEL CP-5UY** TOLERANCES: FIGURE 3 TYPICAL OUTPUT APPROVED DATE CONTACTLESS POTENTIOMETER B-MAC-B03 CHARACTERISTICS APPROVED DATE SCALE: FILE: CP-5UY ΩF