

SPECIFICATIONS

1. MECHANICAL

- 1.1 WEIGHT: 1.0 OZ (0.028 KG) MAX
- 1.2 ANGULAR DEFLECTION: $20^{\circ} \pm 3^{\circ}$ MAX FROM CENTER ALL AROUND
- 1.3 BREAK OUT FORCE: SEE CHART 1 & FIGURE 1
APPLIED PERPENDICULAR TO HANDLE AXIS AT POINT SHOWN IN SHEET 1.
- 1.4 FORCE AT MAX DEFLECTION: SEE CHART 1 & FIGURE 1
APPLIED PERPENDICULAR TO HANDLE AXIS AT POINT SHOWN IN SHEET 1.
- 1.5 MAXIMUM ALLOWABLE FORCE ON HANDLE: 8 LBS (35.6N)

CHART 1

MODEL	BREAKOUT FORCE (F1)	FORCE AT MAX. DEFLECTION (F2)
5000CL-1	0.20 \pm 0.15 LBS [0.89 \pm 0.67 N]	0.50 \pm 0.25 LBS [2.22 \pm 1.11 N]
5000CL-2	0.20 \pm 0.15 LBS [0.89 \pm 0.67 N]	1.00 \pm 0.30 LBS [4.45 \pm 1.34 N]
5000CL	0.20 \pm 0.15 LBS [0.89 \pm 0.67 N]	1.00 \pm 0.30 LBS [4.45 \pm 1.34 N]

2. ELECTRICAL

- 2.1 POWER REQUIREMENT: +5.00 VDC $\pm 5\%$ AT 21 mA MAX
- 2.2 NUMBER OF AXES: 2 (X AND Y) (FIGURE 2)
- 2.3 SIGNAL OUTPUT: NULL: NEUTRAL (CENTER) POSITION IS $50 \pm 5\%$ OF APPLIED VOLTAGE.
FULL SCALE: +X, +Y MIN, IS 90% OF APPLIED VOLTAGE.
-X, -Y MAX, IS 10% OF APPLIED VOLTAGE.
- 2.4 WIRES: 28 AWG

3. ENVIRONMENTAL

- 3.1 OPERATING TEMPERATURE RANGE: -32°C TO $+85^{\circ}\text{C}$
- 3.2 STORAGE TEMPERATURE RANGE: -40°C TO $+85^{\circ}\text{C}$
- 3.3 SEALING: IP67 ABOVE PANEL
IP55 BELOW PANEL
- 3.4 SHOCK: PEAK ACCELERATION 200 G, 1 MILLISECOND, HALF-SINE, 1 SHOCK IN EACH OF X, Y, AND Z AXES IN BOTH DIRECTIONS
- 3.5 VIBRATION: RANDOM PSD 0.002 G²/HZ FROM 20 HZ TO 2,000 HZ, 1 HOUR IN EACH AXIS
- 3.6 ESD IMMUNITY: $>15\text{KV}$ AT HANDLE AND BOOT
- 3.7 LIFE: >10 MILLION CYCLES

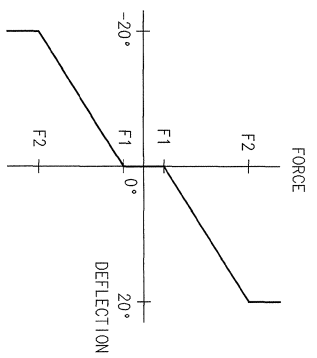


FIGURE 1 NOMINAL FORCE CHARACTERISTICS

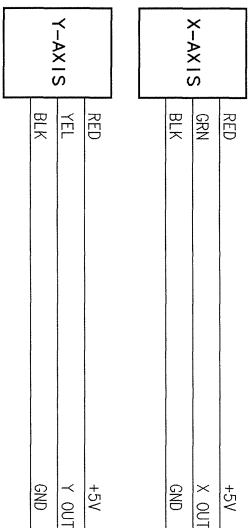


FIGURE 2 SCHEMATIC

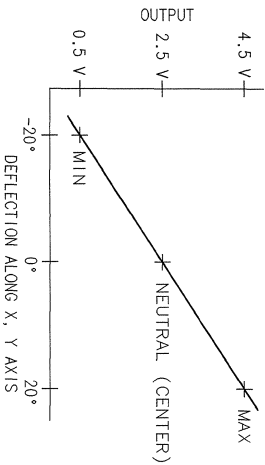


FIGURE 3 NOMINAL OUTPUT CHARACTERISTICS

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Ultra ELECTRONICS		MEASUREMENT SYSTEMS INC	
SIZE	CAGE CODE NO.	DWG NUMBER	REV
C	22978	3426607	B
SCALE	NONE	I-DEAS	SHEET 2 OF 2

3426607