

## COMPACT DESIGN



The JHT-00004 miniature series Hall Effect joystick's compact design and robust construction is the ideal solution where space is limited and precision control is required. Ideal applications include: robotics, construction equipment, hydraulic controls, medical and surgery equipment, security and video cameras. The JHT-00004 has been tested to 1 million cycles with no degradation of electrical performance or boot wear. Electronics are sealed to IP68S and the EMI/RFI withstand are per SAE J1113 specifications.

### Features:

- Compact design excellent for armrest and panel mounting
- Proven contactless analog output Hall Effect technology
- 1 million operational cycles in all directions
- Electronics sealed per IP68S
- Dual axis available

### Standard Characteristics/Ratings:

#### GENERAL:

**Sensor Type:** Hall Effect analog, factory programmed ground and supply line break detection; over voltage and reverse voltage protection

**Design:** Contactless sensing

#### ELECTRICAL RATINGS: $V_{cc} = 5V$ @ $20^{\circ}C$ Load = 1mA (4-7K $\Omega$ )

Electrical	Units	Min	Typ	Max
Supply Voltage	VDC	4.5	5	5.5
Output Voltage +Y, -Y, +X, -X 0° Deflection	VDC @ 5V Vcc	2.25	2.5	2.75
Output at Full Travel -X, -Y Direction	VDC @ 5V Vcc	0.25	0.5	0.75
Output at Full Travel +X, +Y Direction	VDC @ 5V Vcc	4.25	4.5	4.75
Supply Current* (B = 0, Vcc = 5V, Io = 0)	N/A	N/A	10	12
Output Impedance	k $\Omega$	N/A	1	N/A

\*Single output per axis. Dual axis per output available. Supply current 20mA typical.

#### MECHANICAL:

<b>Mechanical Life:</b>	1,000,000 cycles in all directions
<b>Travel Angle:</b>	19° min to 21° max, 20° typical
<b>Overtravel Angle:</b>	0.5° min to 1.5° max, 1° typical
<b>Operating Force:</b>	With bellows, at grip 0.5 lb. min to 1.5 lbs. max over temperature range

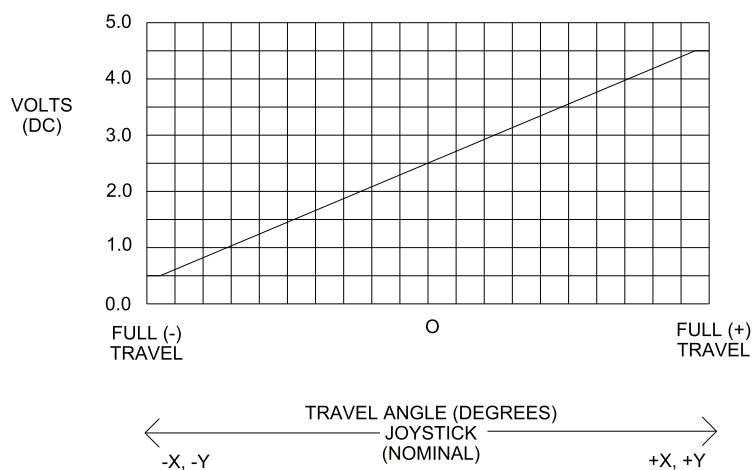
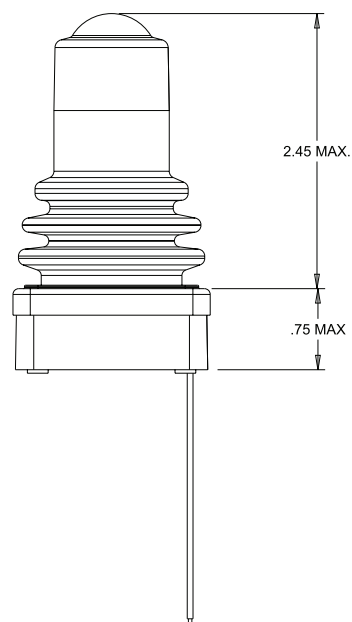
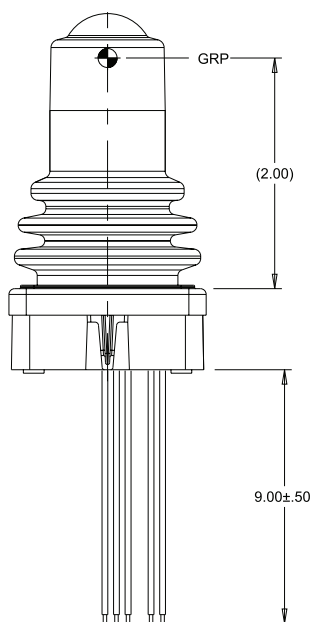
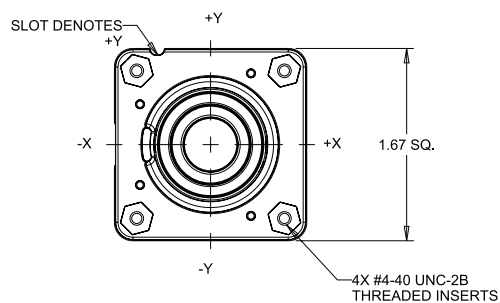
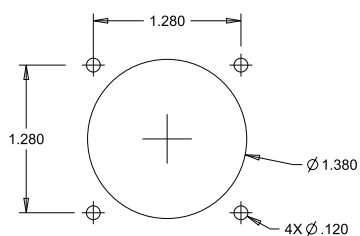
#### ENVIRONMENTAL:

<b>Operating Temp Range:</b>	-40°C to +85°C
<b>Drop:</b>	1 meter max to concrete
<b>Seal:</b>	Electronics seal to IP68S
<b>RFI/EMI:</b>	Withstand per SAE J1113

#### MATERIALS:

<b>Housing:</b>	Thermoplastic, black
<b>Bellows:</b>	Silicone, black. Additional materials available, contact factory.
<b>Wires:</b>	24 AWG (19/36) per MIL-W-16878

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