

SINGLE AXIS HALL EFFECT JOYSTICK WITH FRICTION HOLD



The JHS-F0001 is a single axis, friction hold joystick that was designed for the construction equipment and off-road vehicle market. The key feature of the JHS-F0001 joystick is that the lever does not return to center when released. Designed for use in applications where the output is used to control the speed and direction of the machine or mechanism, allowing the operator to set the speed of movement to focus on steering or other tasks. Favored for its compact size, strength and reliability, the JHS-F0001 is manufactured with non-contacting Hall Effect sensors; the electronics are sealed to IP68S. It offers excellent resistance to RFI at 100V/M and EMI per MIL-STD-461D/SAE J1113-22; standard 0.5 to 4.5VDC proportional output and a mechanical life of 500,000 cycles.

Features:

- Rugged compact design
- Hall Effect contactless sensing
- Electronics sealed to IP68S
- Excellent proportional control
- Outstanding EMI/RFI immunity
- RoHS & WEEE compliant
- Redundant output available

Standard Characteristics/Ratings:

ELECTRICAL RATINGS: Vcc = 5V @ 20°C Load = 1mA

Electrical

	Units	Min	Typ	Max
Supply Voltage	VDC	4.5	5	5.5
Output at Full Travel Direction 1 (+ Travel)	VDC @ 5V Vcc	4.25	4.5	4.65
Output at Full Travel Direction 2 (- Travel)	VDC @ 5V Vcc	0.35	0.50	0.75
Supply Current Per Sensor (B = 0, Vcc = 5V, Io = 0)	mA	N/A	N/A	10

ELECTRONICS:

Seal Integrity: Electronics watertight per IP68S

MECHANICAL:

Mechanical Life: 500,000 cycles

Travel Angle: 25° typical, 24° min to 26° max

Operating Force: 3.5 lbs. typical, 2.5 lbs. min to 4.5 lbs. max

ENVIRONMENTAL:

Operating Temp Range: -40°C to +85°C

Storage Temp Range: -65°C to 105°C

Humidity: 96% RH, 70°C, 96 hours

Drop: 3 feet max to concrete

Vibration: Per MIL-810F min integrity

RFI: Withstand 100V/M, 14KHz to 1GHz

EMI: Withstand per MIL-STD-461D/SAE J1113-22

MATERIALS:

Basic Handle: Polyphenylene Blend

Housing: Thermoplastic

Bellows: EPDM, black (typical)

Cable: 3/22 AWG (19 strands of 34 AWG TSC)
PVC/Polyurethane blend outer jacket

Mounting Hardware: 10-24 x 3/4 carriage bolts, self-locking nuts

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