

MEDIUM HALL EFFECT JOYSTICK

UP TO 10 MILLION OPERATIONAL CYCLES IN ALL DIRECTIONS



JHM with Center P9 Switch



JHM with Hall Effect Rocker

The JHM series Medium Hall Effect Joystick is a full function operator control in a package that will fit in an armrest or on a panel. It utilizes OTTO's patented Hall effect technology for unmatched life and reliability. Electronics are sealed and it has an operational life of ten million cycles in all directions. Additional options include CANopen® and CAN J1939 versions, multiple analog and digital auxiliary control outputs, redundant sensors and a variety of output configurations, along with a variety of grip and switch options.

Features:

- **Designed for armrest & panel mounting**
- **Proven contactless analog output Hall effect technology**
- **Electronics sealed to IP68S**
- **Up to 10 million operational cycles in all directions**
- **Available with a variety of grip & switch options**
- **Redundant sensors available**
- **Various output configurations**
 - CANopen®
 - CAN J1939
 - USB
 - Serial
 - Analog
- **5V standard, 12V & 24V available**
- **Also available in gated and frictional travel versions**
- **RoHS/WEEE/Reach compliant**

Standard Characteristics/Ratings:

GENERAL:

Sensor Type: Hall effect analog, factory programmed with temperature compensation, and ground and supply line break detection, over voltage and reverse voltage protection options.

Design: Contactless sensing

Magnet: Dual bar permanent magnet

ELECTRICAL RATINGS: Rated at 5V @ 20°C Load = 1ma (4.7kΩ)

Electrical	Units	Min	Typ	Max
Supply Voltage	VDC	4.5	5	5.5
Output Voltage Tolerance +Y, -Y, +X, -X 0° Deflection	VDC @ 5V Vcc	-0.25	N/A	+0.25
Output Voltage Tolerance at Full Travel +Y, -Y, +X, -X Direction	VDC @ 5V Vcc	-0.25	N/A	+0.25
Supply Current Per Sensor	mA	N/A	N/A	10
Output Source Current Limit	mA	-1	N/A	1

MECHANICAL:

Mechanical Life: In all directions, 1,000,000 cycles min up to 10,000,000 cycles depending on configuration

Travel Angle: 18° min to 22° max

Operating Force: With bellows, 20°C to 85°C at grip 0.5 lb. min to 3.5 lbs. max

ENVIRONMENTAL:

Operating Temp Range: Low force -20°C to +85°C
High force -40°C to +85°C

Electronics: Sealed to IP68S

RFI: Withstand per SAE J1113

EMI: Withstand per SAE J1113

MATERIALS:

Housing: Thermoplastic, black

Bellows: Neoprene or silicone, black

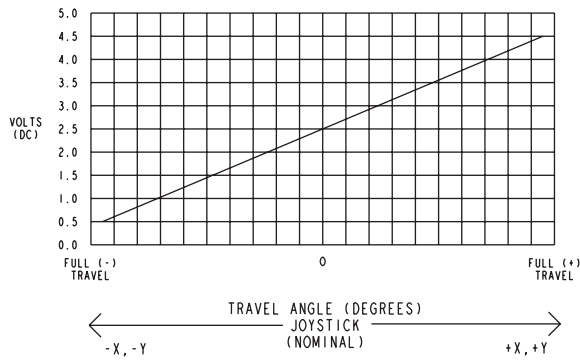
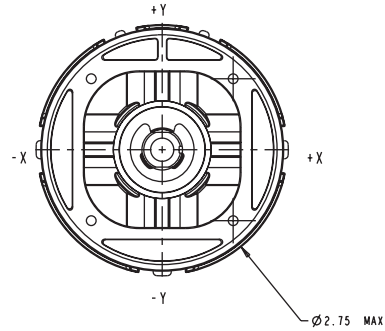
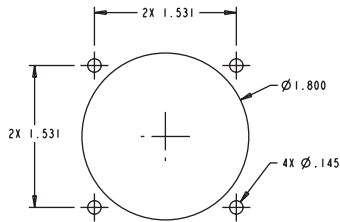
Wires: Per customer application

Mounting Hardware: Panhead screws

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SUGGESTED PANEL OPENING:
RECOMMENDED PANEL THICKNESS: .050 TO .150



Shown is an example of one output per axis configuration. For additional output configurations, contact factory. Redundant sensors are available, please contact factory.

