
J1939 & CANbus 4-WAY HALL EFFECT TECHNOLOGY JOYSTICK

The JH Series Joystick is designed around the rugged mechanism of a traditional 4-way hydraulic joystick, but it utilizes non-contacting Hall technology for increased life and more dependable performance in the field. This combination provides performance and features never before available in an electronic joystick. The JH series uses OTTO's field-proven dual magnet configuration found in OTTO's HPL linear output Hall Effect switches. The Hall Effect sensors are fully protected against electromagnetic and radio frequency interference (EMI and RFI) up to 100 volts per meter. Programmable sensors with built-in magnetic temperature compensation logic insure consistent and repeatable operation. The JH Series is designed for maximum flexibility in features and in tactile feel. A wide variety of input and output configurations are available to satisfy different applications. The modular electronic package can be configured for both standard and custom I/O requirements including CANbus and PWM protocols.

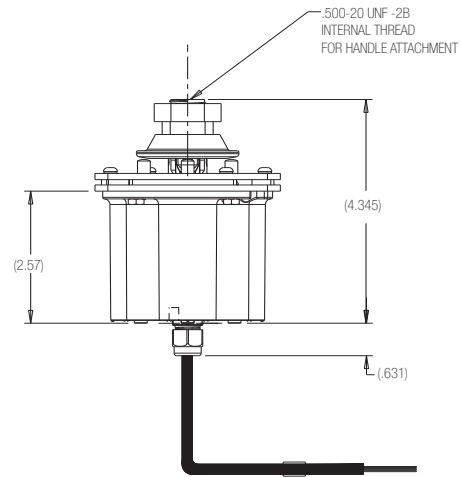
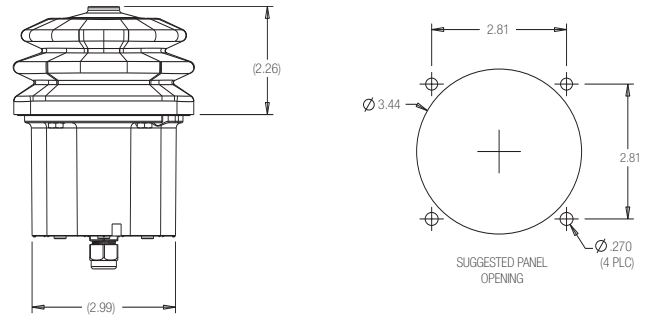
Quality Features:

- **Adapts to a wide variety of shaft styles**
- **15 million cycle life**
- **300 lb. overhang**
- **IP68 submersible rating**
- **20 degrees up to 25 degrees angle of operation**
- **EMI/RFI shielding up to 100 volts per meter**
- **Factory programmable pretravel and overtravel**
- **PWM, CANbus and custom output options available**
- **Redundant outputs available**
- **Fail safe and neutral indicator**

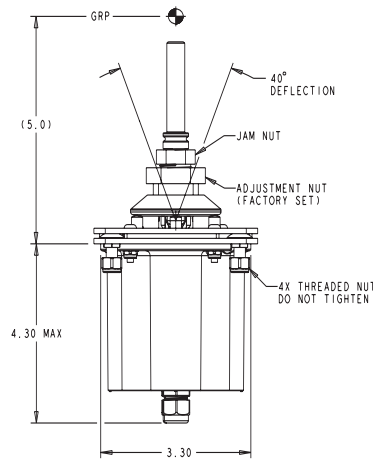
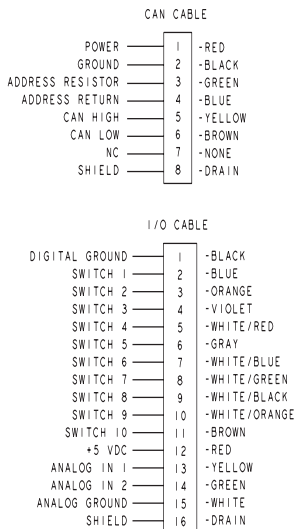


JH Joystick shown with OTTO Medium Universal Grip, K1 Rocker and P3 Pushbutton switches.

JH Series Joystick Specifications	
GENERAL	
Sensor type	Hall Analog, 1 or 2 outputs per axis
Design	Contactless sensing, 2 sensors per axis, operation in 360°, rugged
Sensor type	Factory programmed with temperature compensation, ground and supply line break detection, overvoltage and reverse voltage protection at all pins
Magnet	Dual bar permanent magnet
Bellows	EPDM 15 million cycle life
Housing	Polypehylene blend
Cable	Six conductor shielded cable, 22 AWG, PVC/Polyurethane jacket
ELECTRICAL	
Input	5.0 Vdc to 12Vdc ± 0.5 (12 typ 8 min/18 max VDC)
Output Options	
1	0.5 - 4.5 Vdc
2	1-4 Vdc
3	4.5-0.5 Vdc
4	4-1Vdc
Dual axis joystick with Z axis option Reverse Voltage Protection -5V max. Fail Safe indicator Neutral indicator	
MECHANICAL	
Operating Force	3.0 min to 6.5 max*
Maximum Force	300 lbs. *
Angular Travel	16° - 25° (20° typ)
Cycle Life	15 Million
Pre-travel Deadband	2° standard. ¹
Overtravel	1° standard. ¹
ENVIRONMENTAL	
Electronic Seal	IP68 with and without bellows
Temperature Rating	-45 to +85° C
RFI	100 Volt/Meter
EMI	Per MIL-STD-461D
* Measured at grip reference point, 5" above mounting surface ¹ Contact factory for additional options	



Hall Joystick



Canbus Technology Joystick

