

## XL-VNSO JOYSTICK

The XL-VNSO joystick shares the same rugged construction and long-life as the standard VNSO, but in a more compact size. This high-duty joystick is often used in applications with space constraints that still require heavy duty construction and operation. Unlike the VNSO, the XL-VNSO can be configured with microswitches, hall-effect and PWM output types.



## SPECIFICATIONS

### GENERAL DATA

# of Axis	Single, Dual or Three* *Third axis is achieved via a twist handle function or thumbwheel.
Output Options	Potentiometer, Microswitches, Hall-Effect, PWM & CAN
Joystick Action	Spring Return
Handle Travel	+/- 36 degrees each axis (potentiometer) +/- 20 degrees each axis (bang/bang and hall-effect)
Gate	Open or Cross
Handle Compatibility	Standard Handles, Round Ball, Mechanical Interlock, FG-3, FG-4, FG-5, RH, RHS, BH, MG1, MG2, MG13, MG9 / MG25, MG27, G56
Life	20 million cycles
Materials	Aluminum body and nickel chromium yoke.
Est. Shipping Weight	5 lbs.
Est. Shipping Dimensions	13 in. x 10 in. x 8 in.

### MOUNTING DATA

Mounting Style	Panel (from below)
Mounting Footprint	3.78" x 3.78" See literature for additional mounting specifications

ENVIRONMENTAL DATA

IP Rating	IP54
Operating Temperature	-13 to +158 degrees F [-25 to +70 degrees C]
Storage Temperature	-40 to +158 degrees F [-40 to +70 degrees C]

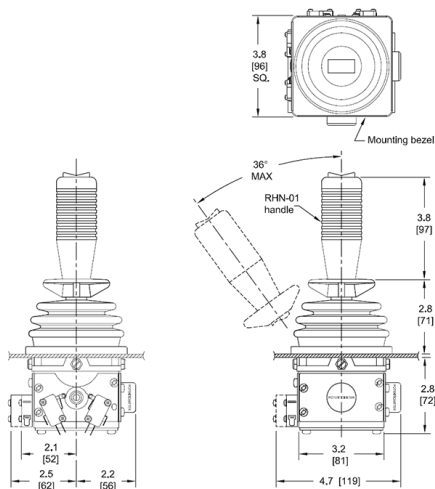
ELECTRICAL DATA

Contact Specifications	Switch Type: SPDT (Form C) V Series Microswitches
	Max. Number: Up to 3 per axis
	Current Rating (AC): 11A
	Voltage Rating (AC): 250
	Termination: .187" x .20" male quick connect
	Max. Wire Size: 18 AWG
Can Specifications	CANOpen, J1939 or basic CAN protocols
	4 analog inputs 8 digital inputs 2 digital outputs
	See a complete listing of CANbus technical data in ESS408 CAN Based Interface Module Board literature
Additional Specifications	Reference product literature for additional specifications

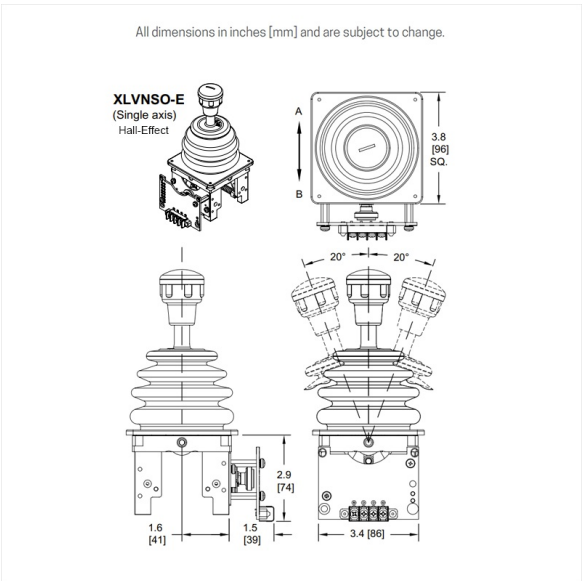
Technical Drawings

Dimensional

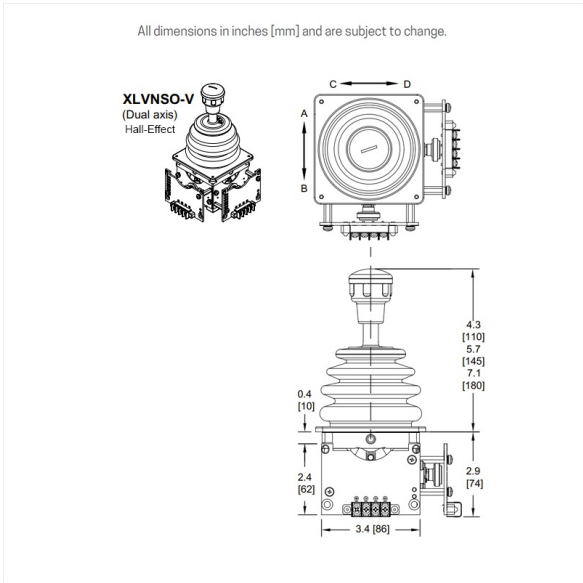
All dimensions in inches [mm] and are subject to change.



Overall dimensions with potentiometer and microswitches. Shown with RH rocker handle.

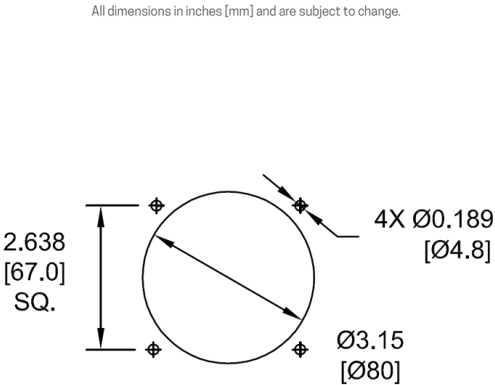


XL-VNSO-E single axis dimensions with hall-effect ouput. Shown with standard 2 piece handle.



XL-VNSO-V dual axis dimensions with hall-effect output. Shown with standard 2 piece handle.

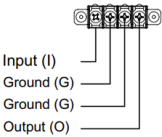
Mounting



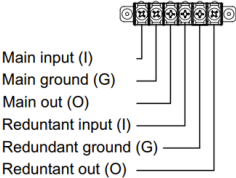
XL-VNSO Mounting details

Wiring

SINGLE SENSOR



REDUNDANT



XL-VNSO hall-effect wiring details