

## 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, 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

Switch Type:  
SPDT (Form C) V Series Microswitches

Max. Number:  
Up to 3 per axis

Contact Specifications  
Current Rating (AC):  
11A

Voltage Rating (AC):  
250

Termination:  
.187" x .20" male quick connect

Max. Wire Size:  
18 AWG

CANOpen, J1939 or basic CAN protocols

Can Specifications  
4 analog inputs  
8 digital inputs  
2 digital outputs

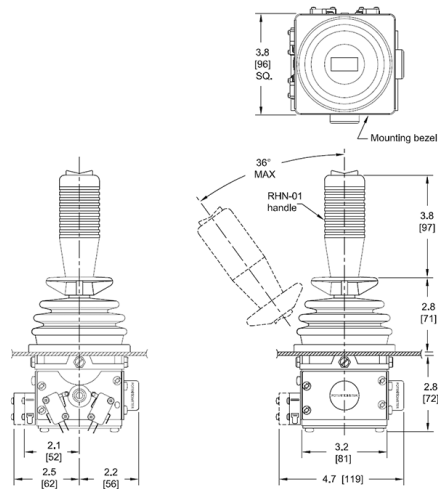
See a complete listing of CANbus technical data in ESS408 CAN Based Interface Module Board literature

Additional Specifications  
Reference product literature for additional specifications

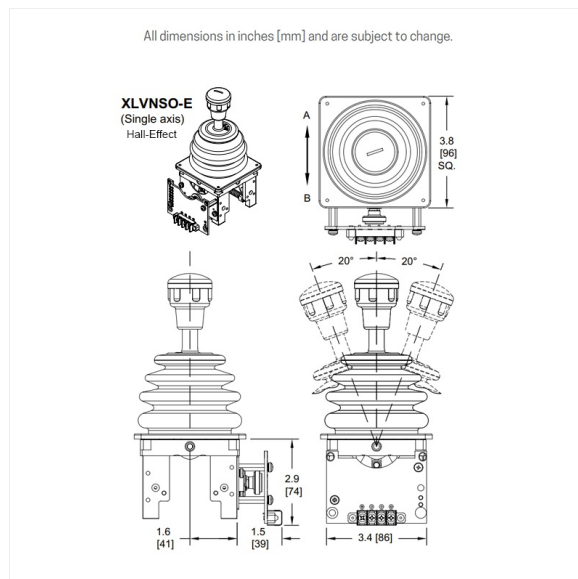
# Technical Drawings

## Dimensional

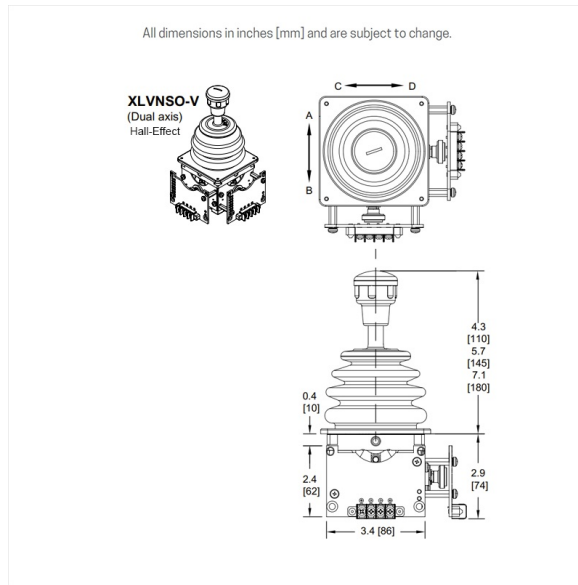
All dimensions in inches [mm] and are subject to change.



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



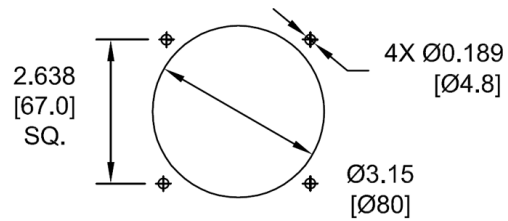
XL-VNSO-E single axis dimensions with hall-effect output. Shown with standard 2 piece handle.



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

### Mounting

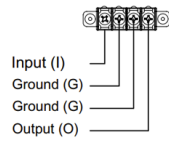
All dimensions in inches [mm] and are subject to change.



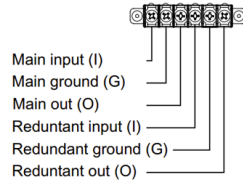
XL-VNSO Mounting details

## Wiring

### SINGLE SENSOR



### REDUNDANT



XL-VNSO hall-effect wiring details