

# PRO-4 SINGLE AXIS JOYSTICK CONTROLLER

**PRO-4 – Single Axis Joystick**  
**PRO-4H – Hall-effect Joystick**  
**PRO-4N – VNSO Contact block**  
**PRO-4B/B – Bang / Bang**

## Construction:

The ultra-rugged PRO-4 provides precise proportional or discrete control for electro-hydraulic valves and AC/DC variable speed drives. Your specific control requirements can be accommodated by a variety of standard and custom engineered configurations.

Also available with Hall-effect or VNSO contact blocks.

The versatile design of the PRO-4 accommodates a variety of handle options including mechanical interlock and lever actuated deadman as well as proportional and discrete outputs including 11A micro-switches, potentiometers, Hall-effect, PWM, CAN Bus, and bang / bang.

## Application:

For use on Scissor Lifts, Work Platforms, Bucket Trucks, Cranes, Agricultural, Mining and Forestry equipment.

## Features:

- Versatile design
- Heavy duty construction
- Long life, compression type return spring system
- 20 Million cycle mechanical operating life
- Rugged 10mm diameter handle shaft
- Tooled fixed cams

## Options:

- Multiple mounting systems
- Friction held handle
- Large variety of optional handle configurations including; deadman and mechanical interlock options
- Stepped detents
- Large selection of proportional outputs including potentiometer, Hall-effect, PWM and CAN Bus
- Hall-effect, output meets or exceeds CE EMC Requirements



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Pub. # 24.C1

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# PRO-4N ORDERING INFORMATION

**Drive Arrangement:** Single Axis  
**Basic Assembly:** 3.25" shaft length and boot supplied standard  
**Handle:** 1.25" diameter round ball  
**Handle Action:** Spring Return  
**Output:** Proportional, discrete, stepped  
**Output Devices:** Potentiometer, 16A 300VAC contact block

## PRO-4N Technical Data

### Mechanical:

- **Mechanical Life:** 20 million cycles
- **Gear Ratio:** 3.5:1
- **Detented Positions:** Up to 5-0-5
- **Handle Travel:**  $\pm 36^\circ$  for proportional  
 $\pm 10^\circ$  first step and  $\pm 6.5^\circ$  every step thereafter for detented positions
- **Potentiometer Rotation:**  $\pm 126^\circ$

### Environmental:

- **Operating Temperature:** -25 to  $+70^\circ$  C
- **Storage Temperature:** -40 to  $+70^\circ$  C
- **Protection above the panel:** IP55

### Electrical:

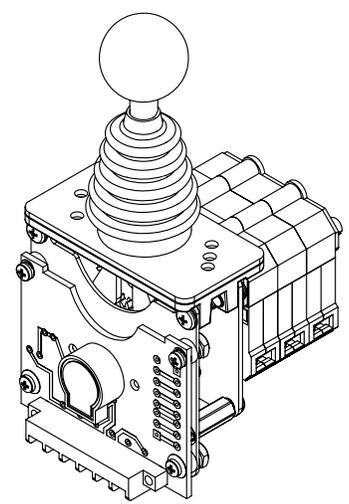
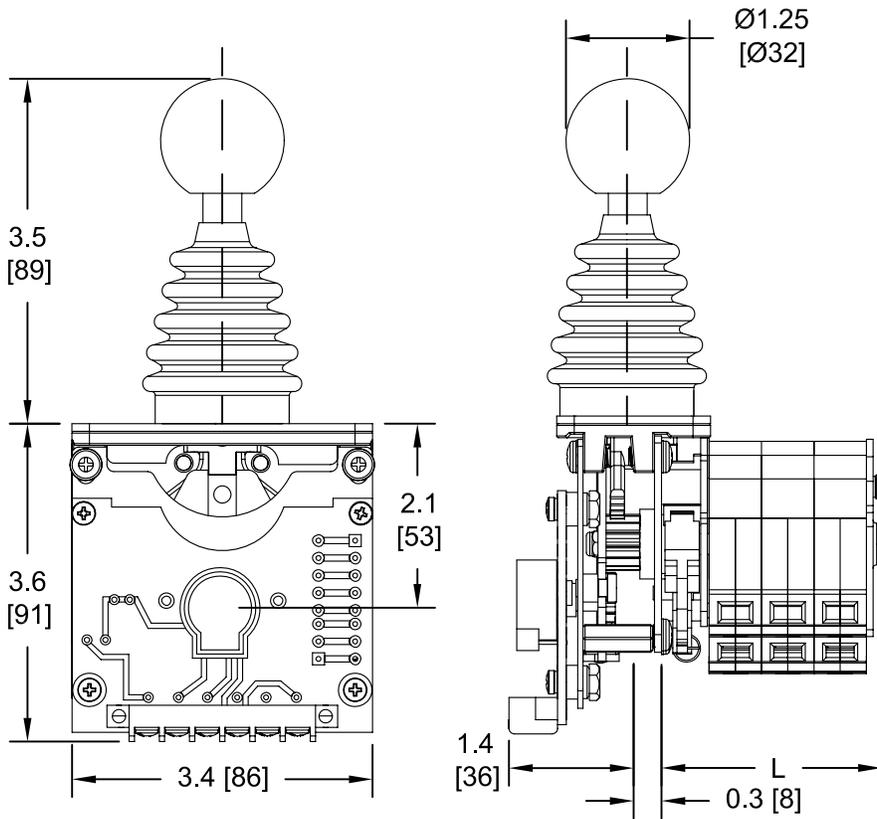
- **Contacts:** 16A, 240 VAC double pole contact block (PRO-4N) (3 max.) with dead front saddle clamp terminals
- **Potentiometers:** 0.5 watt 5K 3-wire or 4-wire center tap, 5 million Revolutions.  
Connections: 6 position terminal block with #6 screw terminal

### Options:

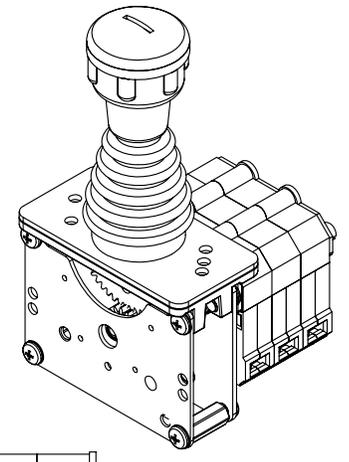
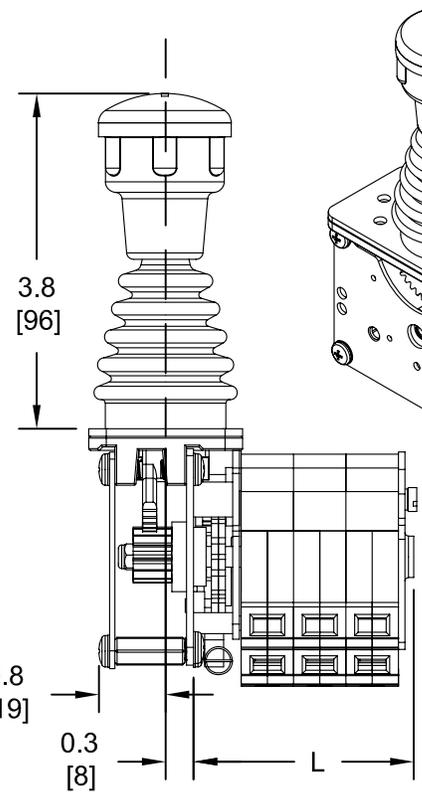
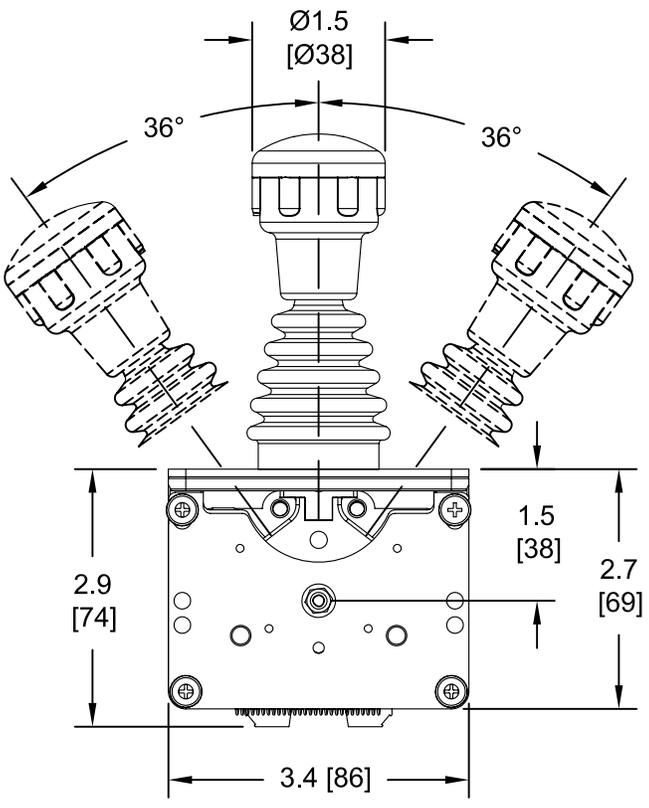
- **Handle:** See handle section for a selection of handle options
- **Handle Action:** Friction Brake or Maintained action
- **Mounting:** See mounting section for a selection of mounting options
- **Special Pots:** Please consult factory with special potentiometer requirements  
Connections: 6 position terminal block with #6 screw terminal

**Please consult factory for other available options not listed.**

# PRO-4N OVERALL DIMENSIONS



Number of double contact blocks	1	2	3
L	1.38 [35]	1.97 [50]	2.56 [65]



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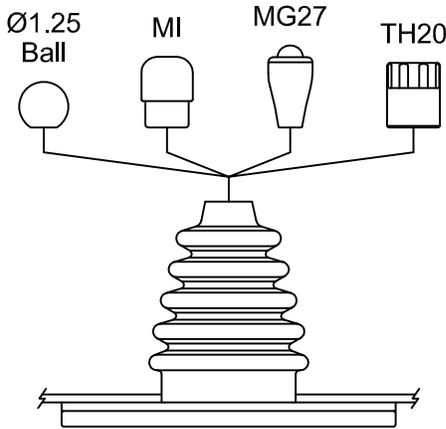
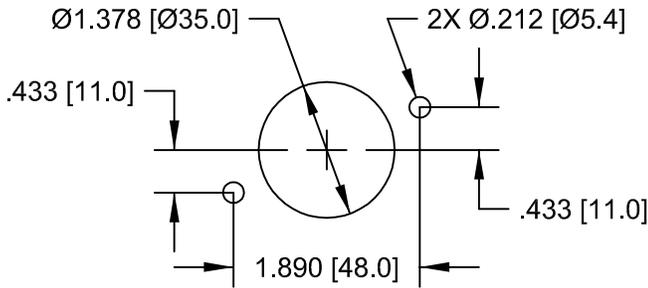
(Consult factory for other handle options)

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# PRO-4 MOUNTING DIMENSIONS

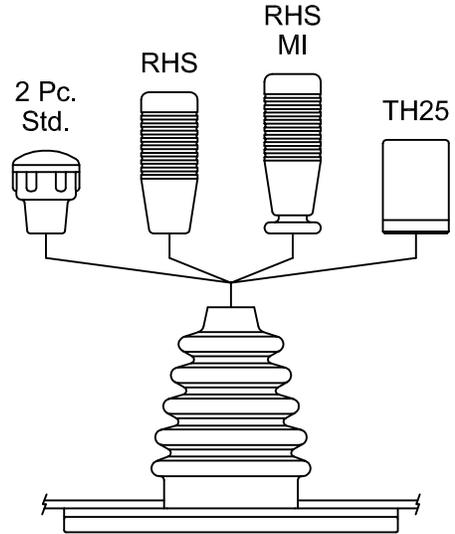
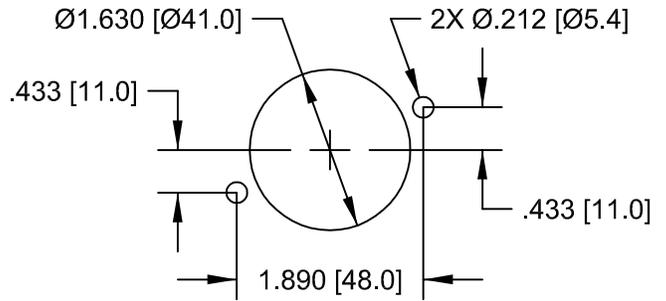
## MOUNTING STYLE 1

Standard (3) holes w/ $\varnothing$ 1.380 [ $\varnothing$ 35.0] center hole



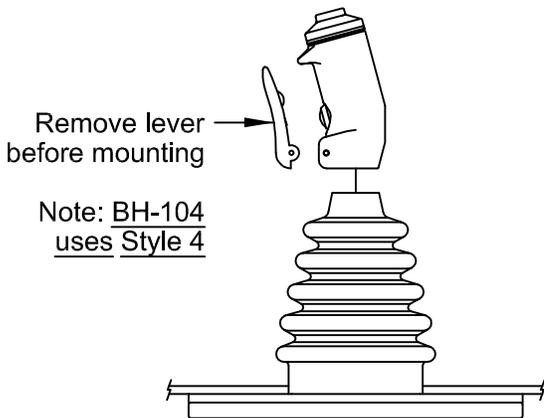
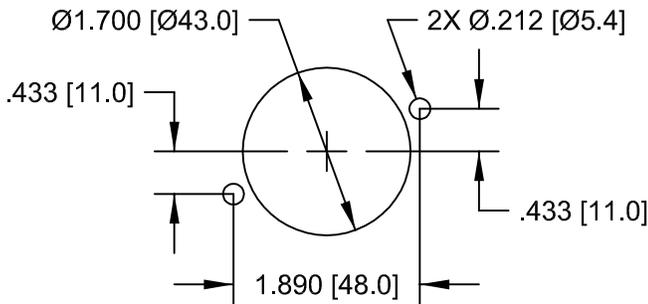
## MOUNTING STYLE 2

Standard (3) holes w/ $\varnothing$ 1.630 [ $\varnothing$ 41.0] center hole

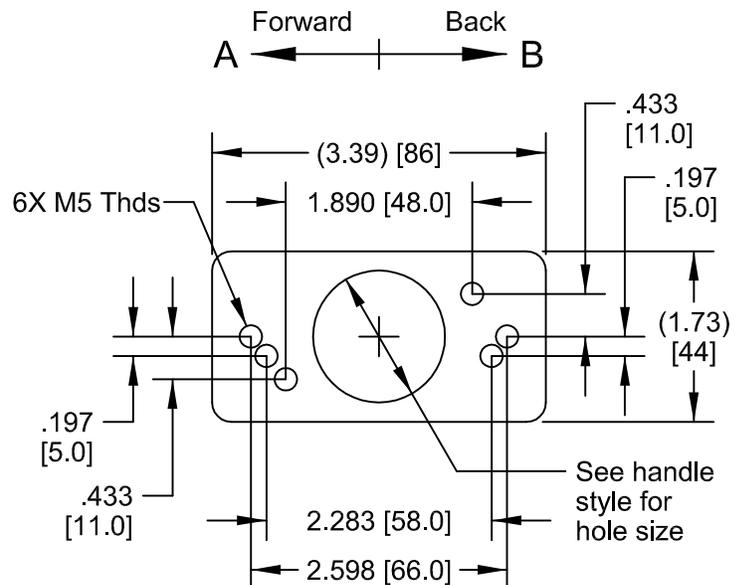


## MOUNTING STYLE 3

Standard (3) holes w/ $\varnothing$ 1.700 [ $\varnothing$ 43.0] center hole



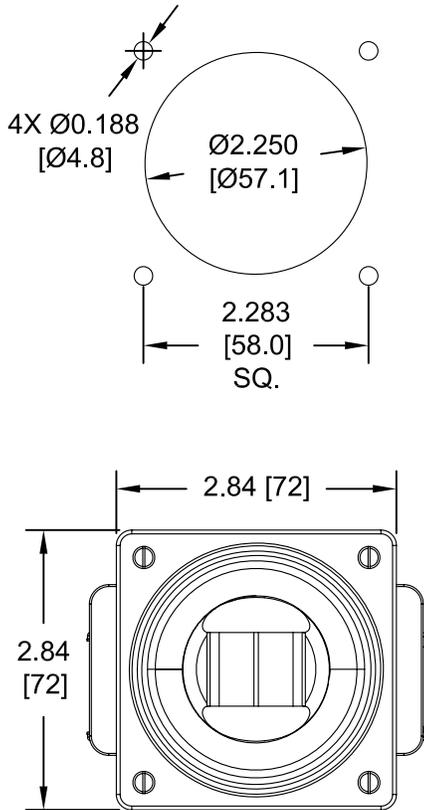
## OPTIONAL MOUNTING HOLES



# PRO-4 MOUNTING DIMENSIONS

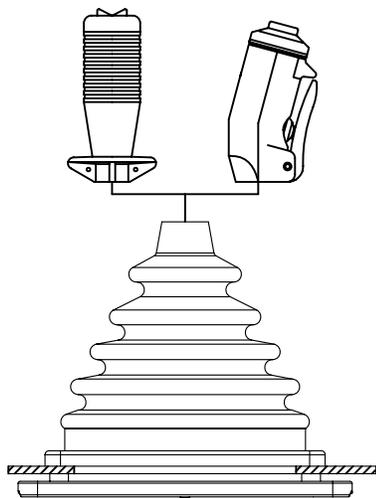
## MOUNTING STYLE 4:

5 Holes With  
2.250[35] Center Hole



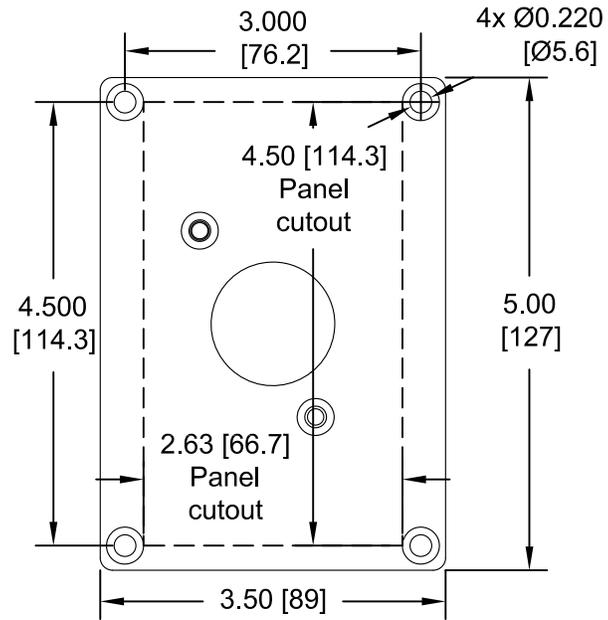
RHN

BH



## MOUNTING STYLE 5:

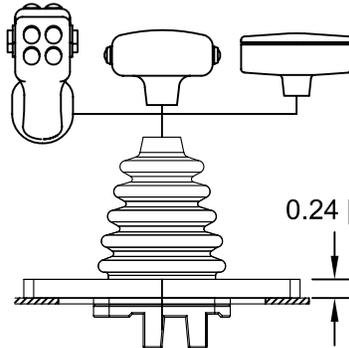
5 Holes With  
4.50[114.3] X 2.625[66.7] Center Cut



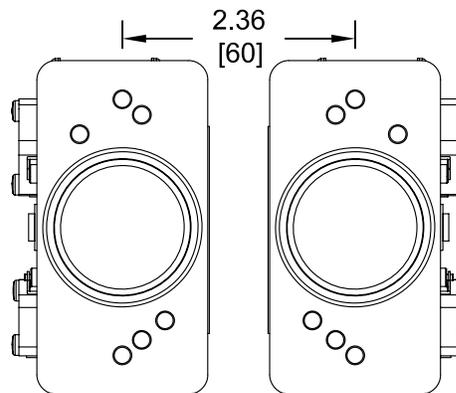
FG3

MG13

MG1



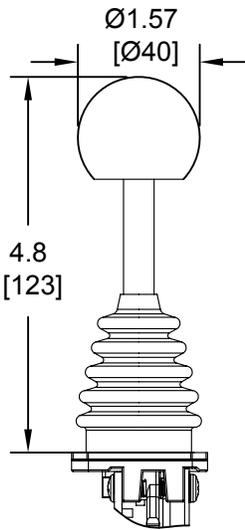
## MINIMUM MOUNTING DIMENSIONS WITH POTENTIOMETERS AND 2 MICROSWITCHES



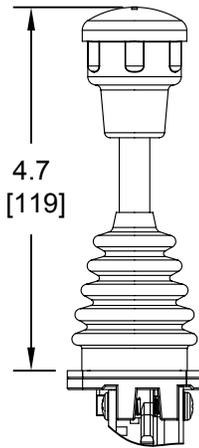
(Consult factory for other handle options)

# PRO-4 OVERALL HANDLE OPTION DIMENSIONS

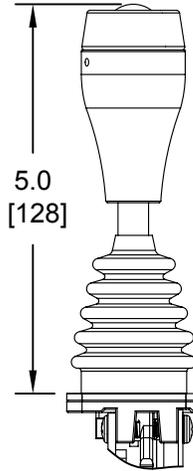
**ROUND BALL 1.57 [40]Ø  
4.5 [115] SHAFT**



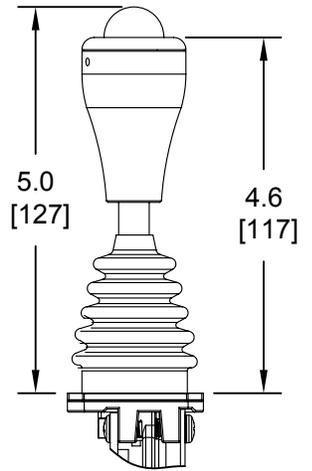
**2 PIECE HANDLE  
4.5 [115] SHAFT**



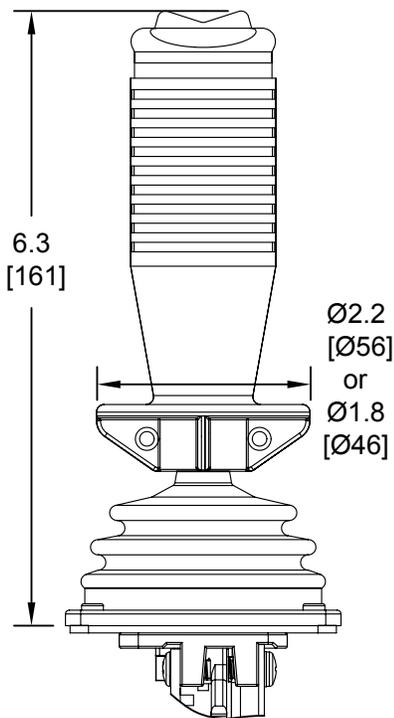
**MG27V  
4.5 [115] SHAFT**



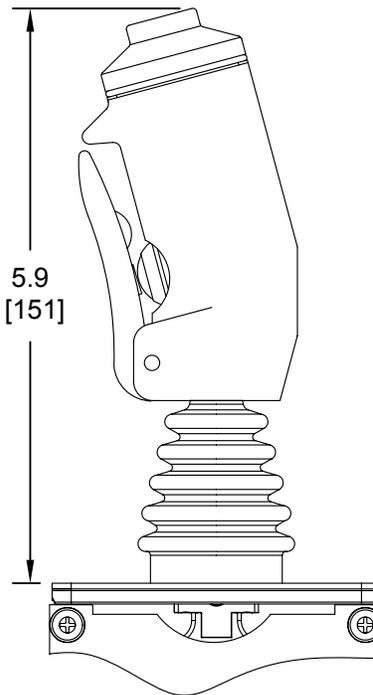
**MG27  
4.5 [115] SHAFT**



**RHN-01 HANDLE  
3.7 [95] SHAFT**



**BH HANDLE  
3.3 [85] SHAFT**



**RHS HANDLE  
1.57 [40] Ø BOOT  
3.4 [87] SHAFT**

