

PRO-5

COMPACT RUGGED CAST DESIGN SINGLE AXIS JOYSTICK CONTROLLER FOR HARSH ENVIRONMENTS

PRO-5 – Single axis cast housing joystick

PRO-5H – Single axis cast housing Hall-effect joystick

PRO-5B/B – Single axis cast housing bang / bang joystick

Construction:

The cast housing construction of the PRO-5 is suitable for use in wet and dirty environments. The PRO-5 provides precise proportional 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.

The versatile design of the PRO-5 accommodates a variety of handle options including mechanical interlock and lever actuated deadman as well as proportional and discrete outputs including; 11A snap action switches, potentiometers, Hall-effect, PWM, CAN Bus, and bang / bang.

Application:

This weatherproof design is ideal for use on scissor lifts, work platforms, bucket trucks, cranes, agricultural, mining and forestry equipment where control of electro-hydraulic proportional valves or variable speed drives is desired.

Features:

- Rugged cast construction
- Gasketing for outdoor use with blind mounting hardware
- Versatile design
- Long life, compression type return spring system
- 20 Million cycle mechanical operating life
- Rugged 10mm diameter handle shaft
- Toolled fixed cams

Options:

- Multiple mounting systems (mounting holes are interchangeable with other popular controllers, on request)
- Friction held handle
- Large variety of optional handle configurations including; deadman and mechanical interlock options
- 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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PRO-5H HALL-EFFECT ORDERING INFORMATION

Drive Arrangement:	Single axis cast housing
Basic Assembly:	5.25" handle height off of panel and cast housing supplied standard
Handle:	1.25" diameter round ball
Handle Action:	Spring Return
Output:	Proportional
Output Devices:	Hall-effect
Immunity:	Meets or exceeds CE EMC requirements

PRO-5H Hall-effect Technical

Mechanical:

- **Mechanical Life:** 20 million cycles
- **Gear Ratio:** 3.5:1
- **Handle Travel:** $\pm 20^\circ$

Environmental:

- **Operating Temperature:** -25 to +70° C
- **Storage Temperature:** -40 to +70° C
- **Protection above the panel:** IP66
- **Hall-effect EMC Emissions:**
Complies with EN61000-6-4:2007
Class A Group 1, 80 – 1000 MHz
- **Hall-effect EMC Immunity:**
Complies with or exceeds **EN61000-6-2:2005**
expanded to include:
RFI Immunity of 100 V/M @ 80 – 1000 MHz
ESD Immunity of 15 Kv air, 8 Kv contact

Electrical:

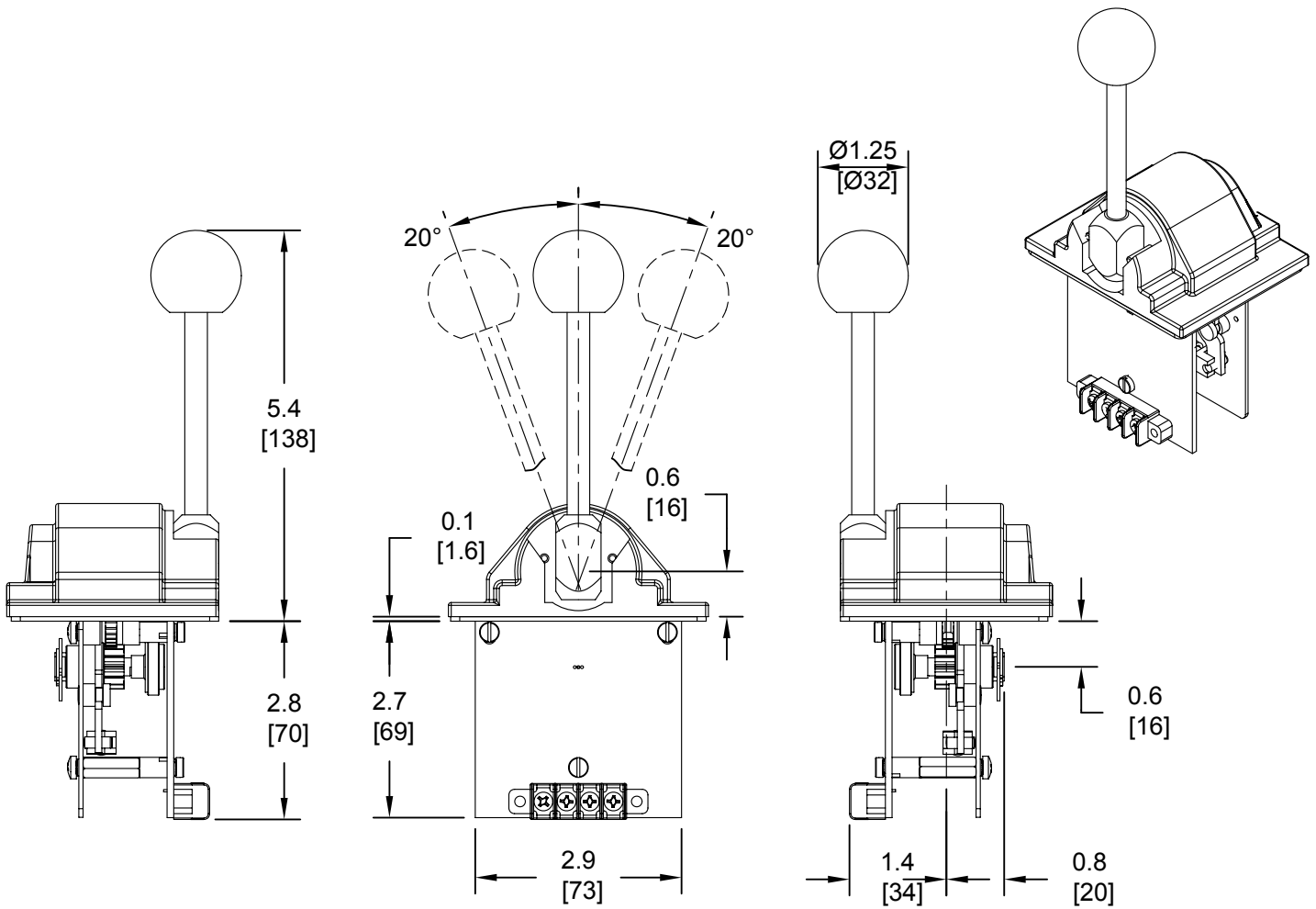
- **Hall-effect:**
Supply Voltage: 4.5 to 5.5VDC
Output Voltage: Ratiometric 0.5 – 2.5 – 4.5V
 $\pm 0.15V$ @ 5.0V supply
Output Current: 10 mA
Power Consumption: 20 mA @ full load
Connections: 4 position terminal block with #6 screw terminal

Options:

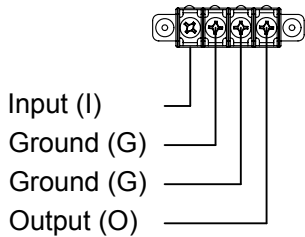
- **Handle:** See handle section for a selection of handle options
- **Handle Action:** Friction brake
- **Mounting:** See mounting section for a selection of mounting options
- **Hall-effect:**
Option 1: Supply Voltage: 7 to 30VDC
Output Voltage: 0.5 – 2.5 – 4.5V $\pm 0.15V$
Connections: 4 position terminal block with #6 screw terminal
Option 2: Supply Voltage: 4.5 to 5.5VDC
Output Voltage: Redundant - Ratiometric 0.5 – 2.5 – 4.5V $\pm 0.15V$ complementary @ 5.0V supply
Connections: 6 position terminal block with #6 screw terminal
- **Electronics:** CAN bus
Connections: Varies with product

Please consult factory for other available options not listed.

PRO-5H HALL-EFFECT OVERALL DIMENSIONS

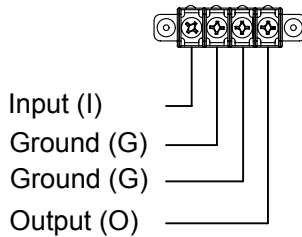


SINGLE SENSOR

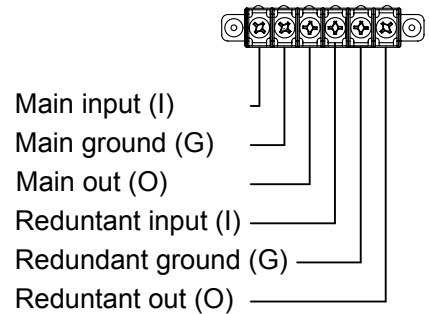


REGULATED

Input voltage: 7 to 30 VDC
Output voltage: 0.5 - 2.5 - 4.5V (regulated)

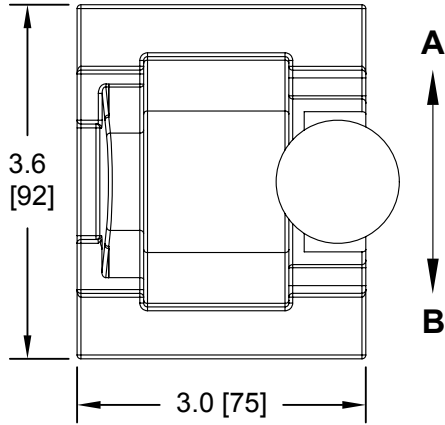


REDUNDANT

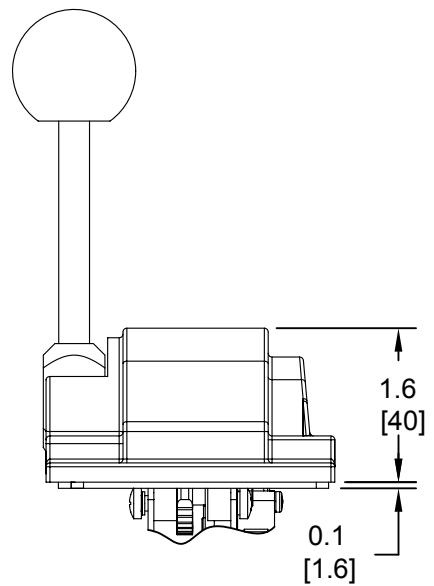
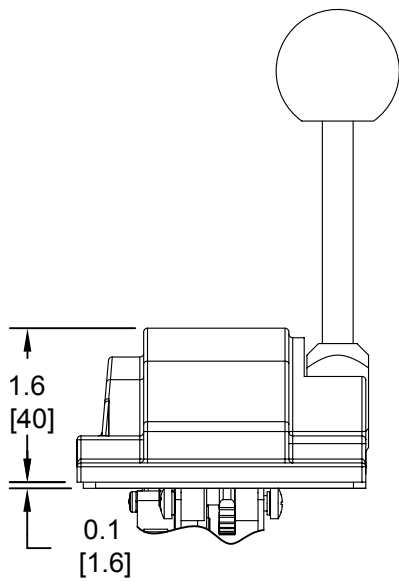
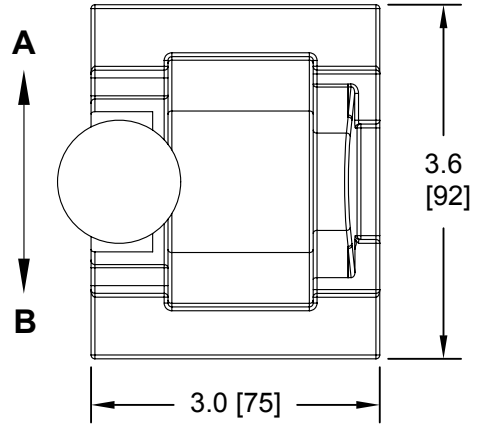


PRO-5 MOUNTING DIMENSIONS

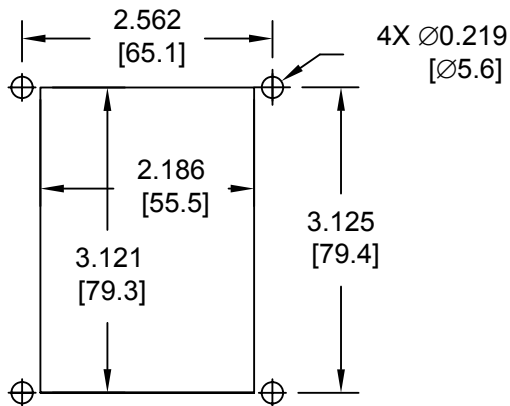
LEFT SIDE MOUNTING



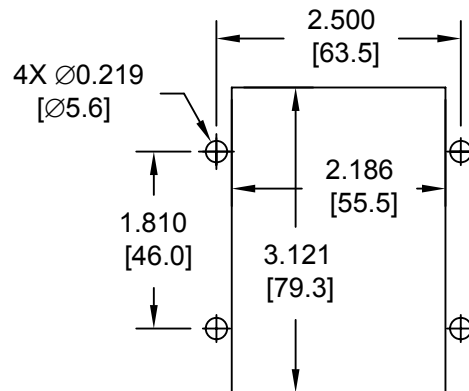
RIGHT SIDE MOUNTING



OPTIONAL PANEL CUT-OUT FOR IP55 PROTECTION ABOVE THE PANEL

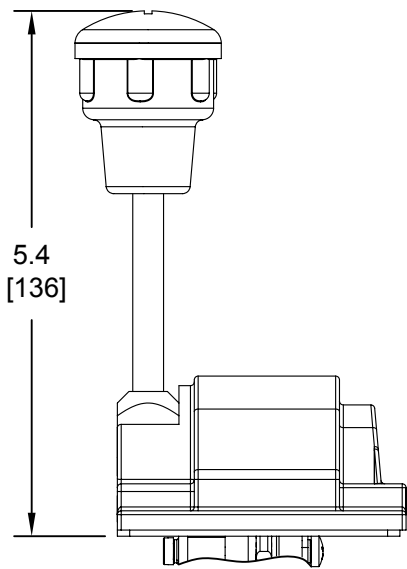


STANDARD PANEL CUT-OUT FOR IP66 PROTECTION ABOVE THE PANEL

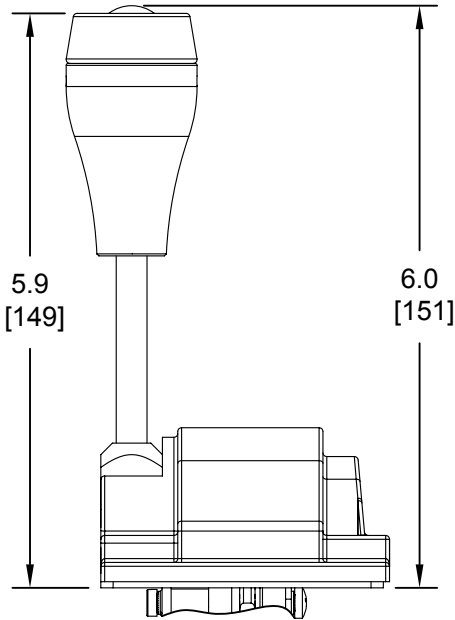


PRO-5 OVERALL HANDLE OPTION DIMENSIONS

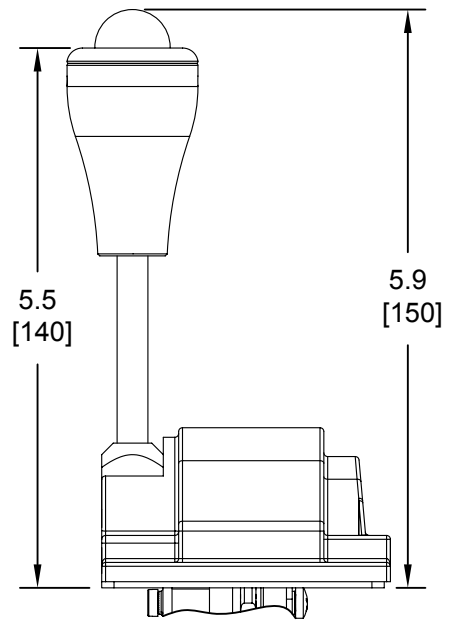
**2 PIECE HANDLE
4.5 [115] SHAFT**



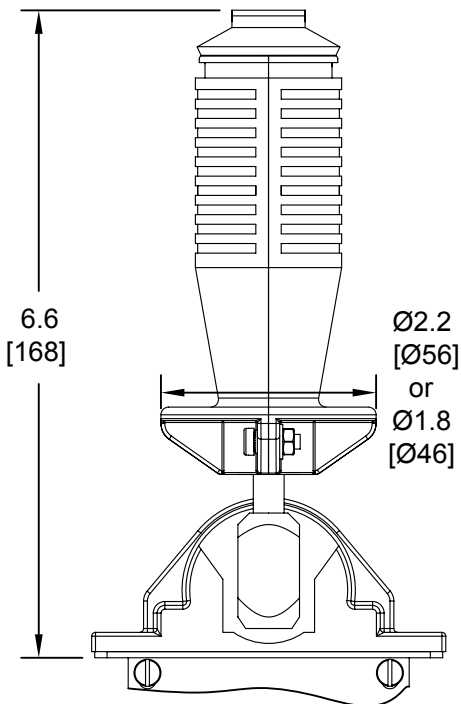
**MG27V
4.5 [115] SHAFT**



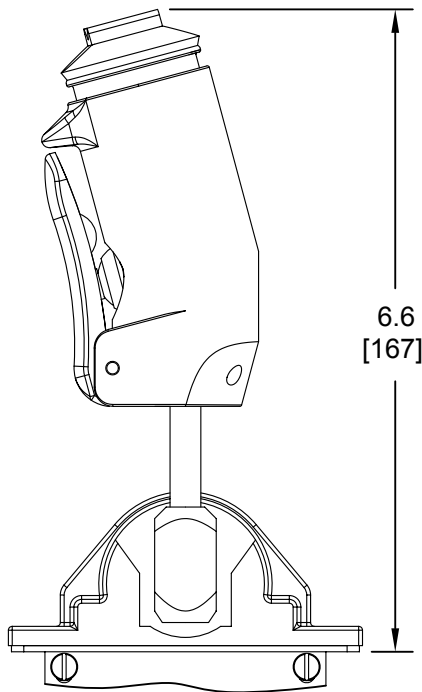
**MG27
4.5 [115] SHAFT**



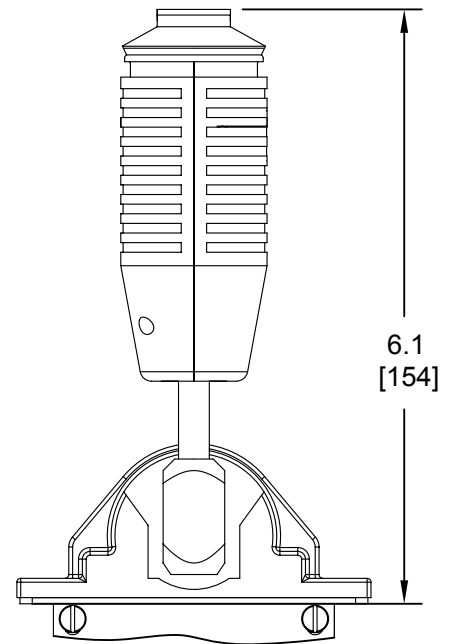
**RHN-01 HANDLE
3.13 [79] SHAFT**



**BH HANDLE
3.13 [79] SHAFT**



**RHS HANDLE
3.13 [79] SHAFT**



(Consult factory for other handle options)
See handle section for handle degree of protection