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
- Tooled 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
### PRO-5H HALL-EFFECT ORDERING INFORMATION

**Mechanical:**
- **Mechanical Life:** 20 million cycles
- **Gear Ratio:** 3.5:1
- **Handle Travel:** ±20°

**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:** Meets or exceeds CE EMC requirements

**Electrical:**
- **Hall-effect:**
  - Supply Voltage: 4.5 to 5.5VDC
  - Output Voltage: Ratiometric 0.5 – 2.5 – 4.5V ±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 ±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 ±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**
- Input (I)
- Ground (G)
- Ground (G)
- Output (O)

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

**REDUNDANT**
- Main input (I)
- Main ground (G)
- Main out (O)
- Redundant input (I)
- Redundant ground (G)
- Redundant out (O)
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

J.R. MERRITT
CONTROLS, INC.

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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