

PWM Valve Driver Board



Compact, highly responsive driver boards for long life operation of PML valve driver joysticks. Smooth centering, EMC protection and a host of safety features built-in.

PML Pulse Width Modulated Boards are precision engineered for use with PML valve driver joysticks. In particular, they are compatible with many applications for direct drive of proportional operated actuators. This, together with various safety features, allows PML to offer complete system integrity from joystick right through to actuator controller.

Originally developed to meet the stringent safety criteria of the crane industry, this product appeals to today's broader markets, whilst retaining the necessary safety features for strict industry use.

The low profile, low mass characteristics of the surface mount components have been utilised to make the board less sensitive to mechanically harsh environments. Full cycle current sensing and extended current sensing widen the scope of fault detection, and visual indication of conditions is possible using the additional LED. Over voltage shutdown minimises power dissipation and low-end voltage operation has also been improved.

FEATURES

- Simple Installation
- Factory preset
- · Increased productivity on assembly
- Matched technology controller to joystick
- · Commonality of parts

BENEFITS

- Compact design
- Long life
- Built-in safety features
- **EMC** protected
- Highly responsive
- Smooth centering
- Low profile Simple installation

TYPICAL APPLICATIONS

PWM Valve Driver Boards and complementary joysticks are suitable for rugged control in applications such as:

- Heavy plant machinery
- Cranes
- · Off road vehicles
- · Land moving machines
- Excavators
- Lift platforms

For further information ➤



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SPECIFICATIONS

Operating Temperature Input Voltage Range (Vin)

ELECTRONIC SPECIFICATION -40°C to +85°C -24V to 130V

Operating Voltage Range 9V to 16V @12V 21V to 32.0V@24V

Max Reverse Voltage 800V Current Consumption 30mA

Threshold Current Range Adjustable 0 to 1.5A Threshold Position Set On Test 0-100% Deflection

Maximum Current Range Adjustable 0 to 1.5A **Maximum Position** Set On Test 0-100% Deflection

Float Position

Modulation Frequency

Output Characteristic Linear

Ramp Time

Set On Test 0-2secs Fault Detection

Over Voltage Overange Over Current (Short Circuit) Joystick Out of Centre at Start Joystick Dual Decode Joystick Disconnected Over-ride

Set On Test 100Hz +/-5Hz

Non-Sacrificial Fail-Safe **Environmental Requirements SAE J1455**

EMC Requirements 95/54 EC Emissions and Immunity ISO 10605 Electrostatic Discharge ISO 7637 Transients

Technology Through Hole Surface Mount PERFORMANCE CHARACTERISTICS AND DATA