

EC - PWM - A2 - MPC1 - H PWM Driver

Description

Microprocessor - based PWM electronic driver for remote control of a dual-coil proportional solenoid valve.

Operation

The EC-PWM-A2-MPC1 Proportional Valve driver supplies a double solenoid with a *PWM (Pulse Width Modulated)* current proportional to the input signal from a potentiometer, PLC or other control systems

Proportional valve A is controlled with an input command signal varying from 2.5 to 4.5 Volt

Proportional valve B is controlled with an input command signal varying from 2.5 to 0.5 Volt

An auxiliary ON-OFF type solenoid can be energised anytime the input signal goes out of the 2.25 - 2.75 V range

Features

- The current in the solenoid is independent from any change in the coil resistance or in the supply voltage
- The inherent superimposed dither frequency helps to overcome friction and stiction effects in the controlled device.
- Supply line is protected against reversed polarity.
- Input is protected against short circuits to GND and supply.
- Outputs are protected against short circuits, reversed polarity, over-current and over-temperature.
- The EC-PWM-A2 circuit is potted inside a plastic enclosure suitable for panel mounting by means of 2 set screws

Specifications

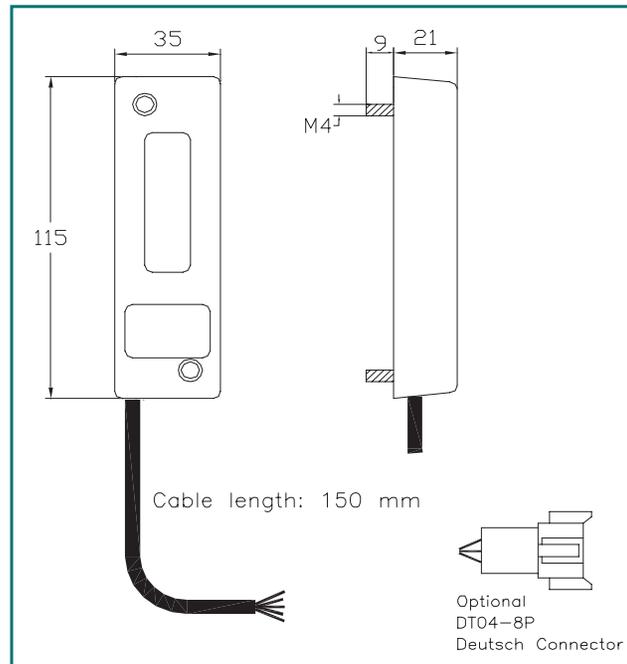
- Operating voltage: 8 - 32 Vdc
- Max current consumption: 100 mA (no load applied)
- Operating temperature: -25 / +85 °C
- Degree of protection: IP 68
- Analog input signal: 0.5 - 2.5 - 4.5 Vdc
- Input impedance: 40 kOhm
- Typical ctrl pot resistance: 2 - 10 kOhm
- Current output range (PWM): 100 -1500 mA
- Current on/off output: max 3A
- PWM dither frequency: 100 Hz
- Resolution: 10 bits
- Optional DT04-8P Deutsch connector

Applications

- 12 Vdc and 24 Vdc systems
- Remote control of proportional valves
- Field - adjustable applications
- Control of a proportional bi-directional valve with a venting valve



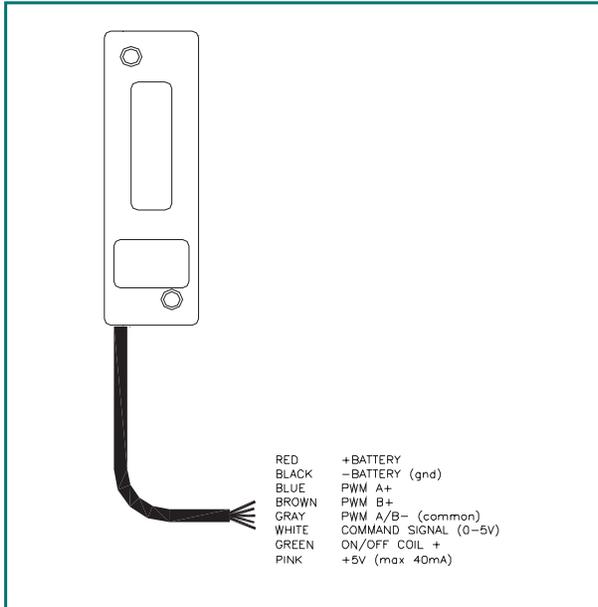
Dimensions



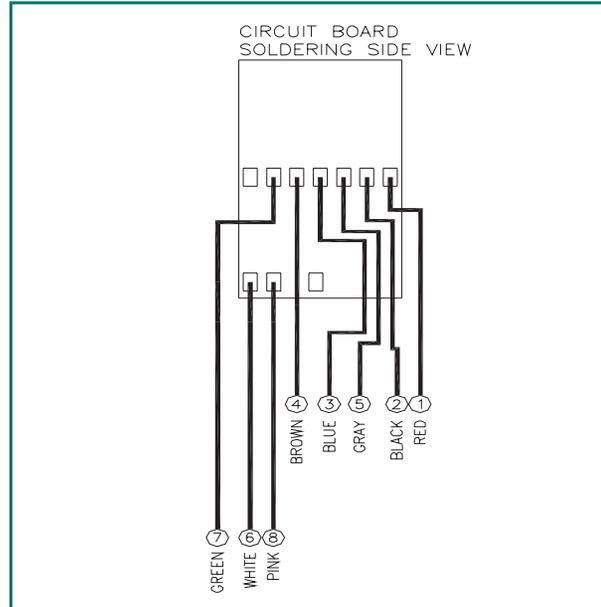
WARNING: The specifications/application data shown in our catalogs and data sheets are intended only as a general guide for the product described (herein). Any specific application should not be undertaken without independent study, evaluation, and testing for suitability.

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H Version - Wiring diagram



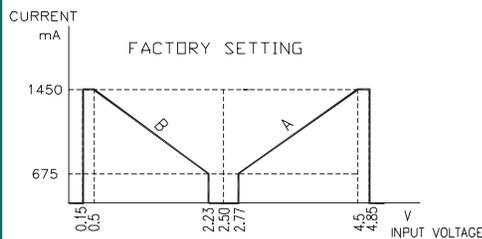
C Version - Wiring diagram



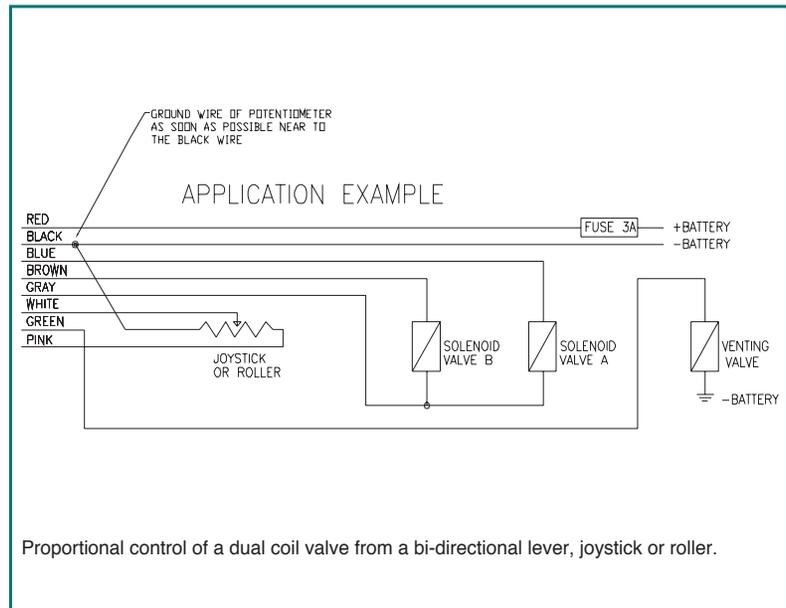
Adjustments

Two rotary trimmers are located on the rear potted surface to provide the following field adjustments:

- I_{min} (minimum output current)
- I_{max} (maximum output current)



Application example



Ordering Information:

EC - PWM - A2 - MPC1 - *

A = trimmer adjustable version

H = potted plastic Housing
 C = circuit board only

Part numbers

23.0409.138
23.0409.109

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