EC-PWM-A2-MPC1-* 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 V. Proportional valve B is controlled with an input command signal varying from 2.5 to 0.5 V. An auxiliary on-off type solenoid can be energised anytime the input signal goes out of the 2.25-2.75 V range.



FEATURES

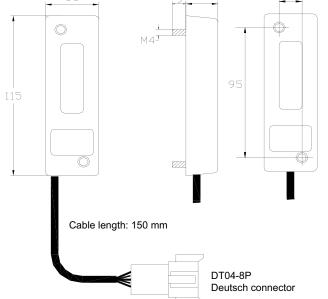
- · The current in the solenoid is independent from any change in the coil resistance or in the supply voltage.
- · The inherent superimposed dither frequency helps to overcome friction and stiction effects in the controlled device.
- · Supply line is protected against reversed polarity.
- · Input is 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.
- Electro Magnetic Compatibility (EMC): EN 61000-6-2 (Immunity), EN 61000-6-3 (Emissions).

SPECIFICATIONS	
Operating voltage:	8÷32 VDC
Max current consumption:	100 mA (no load applied)
Operating temperature:	-25°C / +85°C
Degree of protection:	IP 68
Input impedance:	40 kΩ
Analog input signals:	0.5 - 2.5 - 4.5 VDC
Typical ctrl pot resistance:	2÷10 kΩ
Current output range (PWM):	100÷1500 mA
Current on-off output:	max 1800 mA
PWM dither frequency:	100 Hz
Resolution:	10 bits

DT04-8P Deutsch connector (male contacts)

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DIMENSIONS



APPLICATIONS

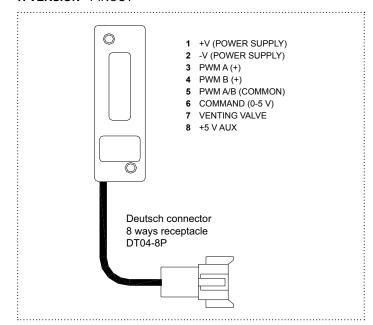
- · 12 VDC and 24 VDC systems.
- · Remote control of proportional valves.
- Field-adjustable applications.
- · Control of a proportional bidirectional valve with a venting valve.

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.

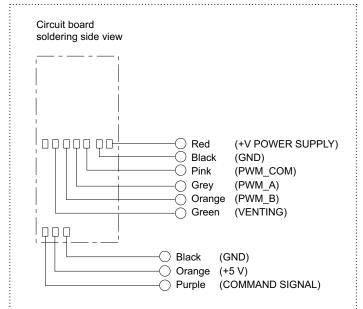


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H VERSION - PINOUT



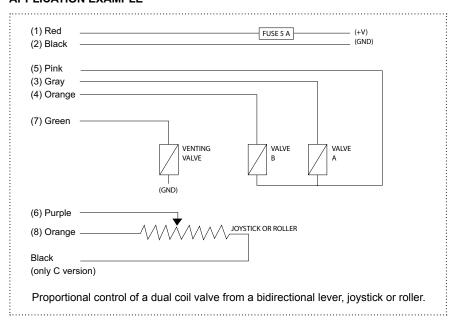
C VERSION - WIRING DIAGRAM



ADJUSTMENTS

Two rotary trimmers are located on the rear potted surface to provide the following field adjustments: • Imin (minimum output current) • Imax (maximum output current) Factory Setting Factory Setting Factory Setting

APPLICATION EXAMPLE



ORDERING INFORMATION



Part numbers	Version
23.0409.138	Н
23.0409.109	С

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