

EC-PWM-A2-MPC1-* PWM DRIVER**DESCRIPTION**

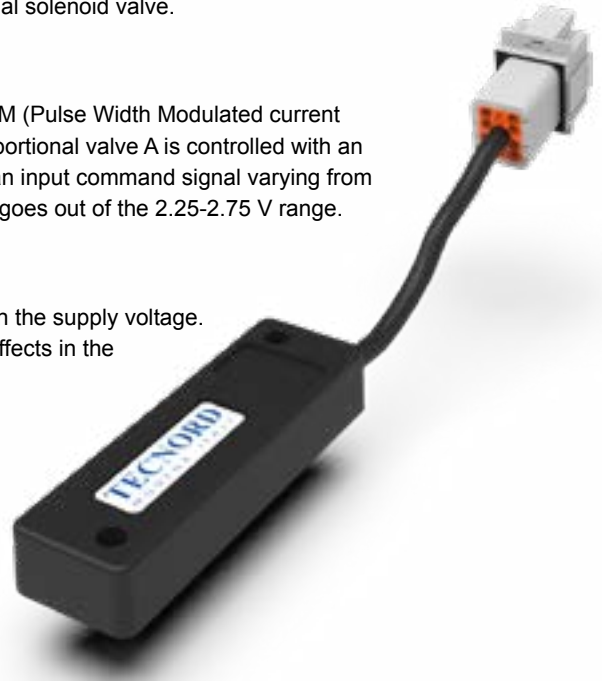
Microprocessor-based PWM electronic driver for remote control of a dual-coil proportional solenoid valve.

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

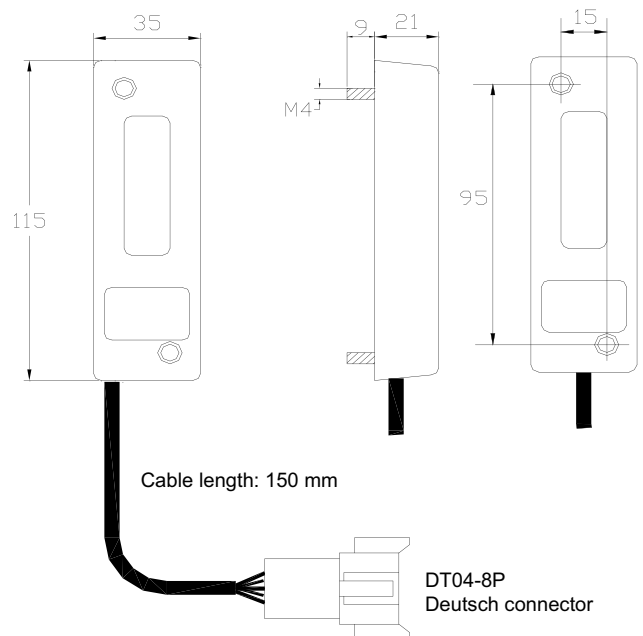
- The current in the solenoid is independent from any change in the coil resistance or in the supply voltage.
- The inherent superimposed dither frequency helps to overcome friction and stiction effects in the controlled device.
- Supply line is protected against reversed polarity.
- Input is protected 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)	

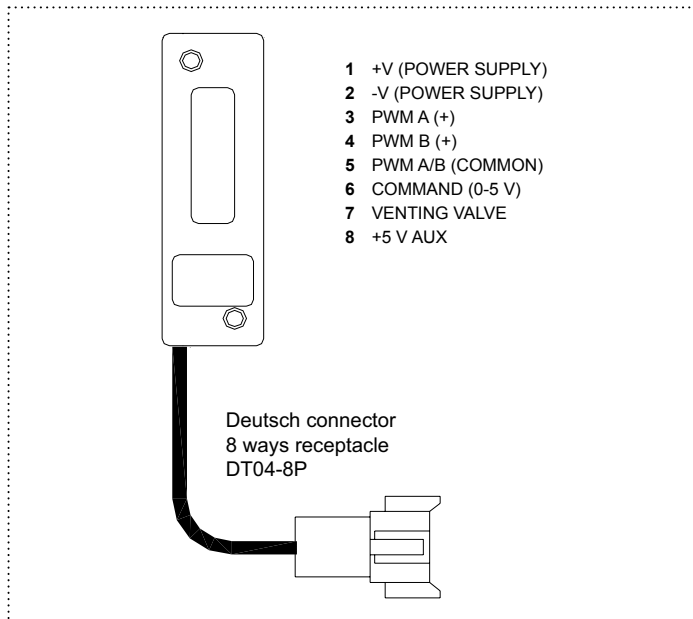
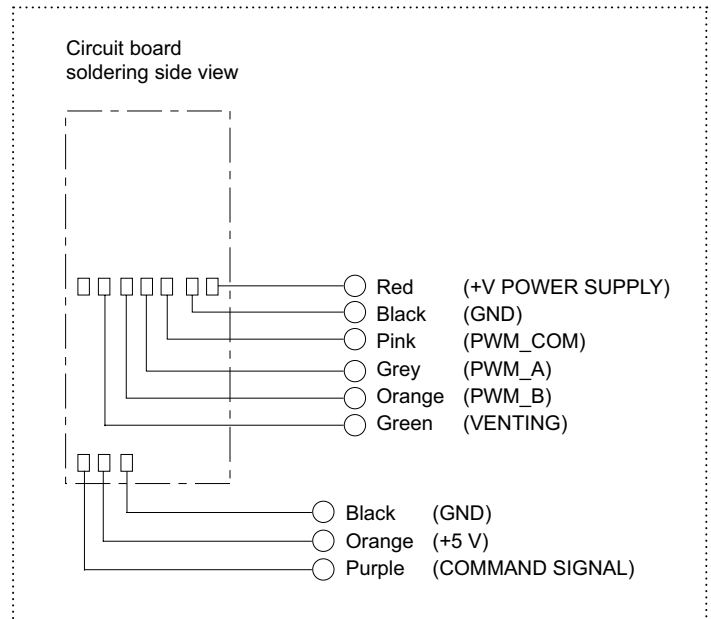
APPLICATIONS

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

DIMENSIONS

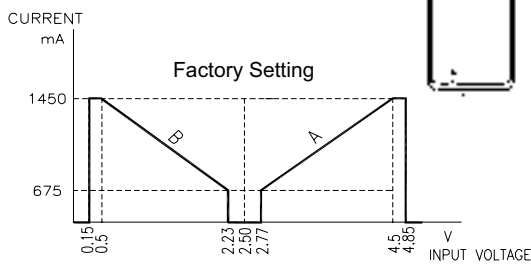
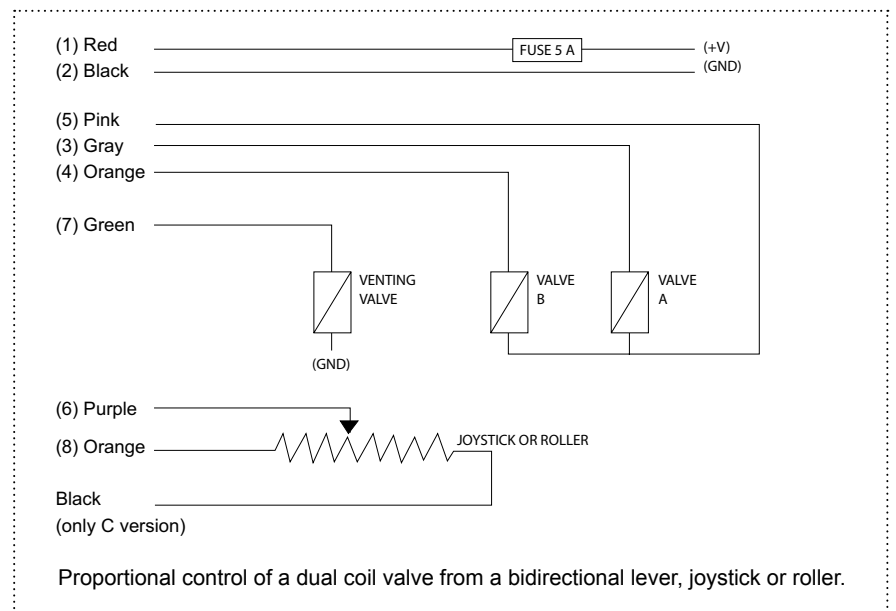
WARNING: the specifications/application data shown in our catalogs and data sheets are intended only as a general guide for the product described (herein). Any specific application should not be undertaken without independent study, evaluation, and testing for suitability.

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EC-PWM-A2-MPC1-* PWM DRIVER**H VERSION - PINOUT****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	Version
23.0409.138	H
23.0409.109	C

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