
B3031 PWM Proportional Solenoid Driver Model Selection

B **3** **0** **3** **1** - **A** **A** **A** - **B** **B** **B** - **C** **C** **C** - **D** **E**

MODEL SERIES: _____ **SUFFIX IDENTIFIER:** _____

B3031 = Pulse width modulated proportional solenoid driver, single solenoid, DIN plug construction

AAA = INPUT POWER SUPPLY VOLTAGE:

100 = Plus 10 to 30 volts dc.

BBB = RATED INPUT VOLTAGE OR CURRENT SIGNAL:

050 = Plus 5 volts dc.

100 = Plus 10 volts dc

120 = Plus 12 volts dc.

240 = Plus 24 volts dc.

CCC = RATED OUTPUT COIL CURRENT SIGNAL:

251 = Plus 250 ma.

501 = Plus 500 ma.

102 = Plus 1000 ma. (1.0 amp.)

152 = Plus 1500 ma. (1.5 amp.)

202 = Plus 2000 ma. (2.0 amp.)

302 = Plus 3000 ma. (3 amp.)

D = PULSE WIDTH MODULATED SWITCHING FREQUENCY:

0 = 200 Hz.

1 = 100 Hz.

2 = 400 Hz.

3 = 1000 Hz.

4 = 2200 Hz.

X = Special, factory assigned number.

E FACTORY INSTALLED OPTION:

0 = Standard, no additional options.

X = Special features, factory assigned number.

NOTES:

- 1) This pulse width modulated proportional solenoid valve driver is designed for use on those applications that do not have a system control panel. It is mounted directly on the valve body. As such, it is exposed to dirt, moisture, heat and vibration. None of these tends to extend the life or contribute to the reliable operation of any electronic device. In addition, when the command signal wires are extended over a long distance from the valve driver they may to be exposed to large amounts of electrical noise that is radiated from other devices in the control system and the user's plant environment. All extended control signal wires shall be shielded and routed away from all other non-signal wires for best operation.
- 2) The model series B3031 pulse width modulated solenoid valve driver will operate reliably when mounted directly on the solenoid valve body. However, those users who have space in a system control panel, they may wish to consider the use of the model series C2478 pulse width modulated solenoid valve driver in place of the model series

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B3031. The model series C2478, when mounted in a control panel enclosure, will reduce the valve drivers exposure to detrimental environmental conditions and most of the external electrical noise. In addition, the number of wires that must be run to the solenoid valve coil will be minimized.

- 3) The optimum pulse width modulated (PWM) switching frequency for a specific valve coil is generally specified by the valve manufacturer. In the event that this frequency value is not available, you can select the 2200 Hz. value (suffix D = 4). This frequency will drive all proportional solenoids, however the valve response may be less than the best available when operated at the manufacturers recommended value.

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