D2452 PWM Proportional Solenoid Driver Model Selection

MODEL SERIES: — | D|2|4|5|2| - |A|A|A| - B|B|B| - C|C|C| - D|E|

SUFFIX IDENTIFIER:

D2452 = Pulse width modulated proportional solenoid driver, dual solenoid

AAA = INPUT POWER SUPPLY VOLTAGE:

100 = Plus 10 to 30 volts dc.

BBB = RATED INPUT VOLTAGE SIGNAL:

030 = Plus 3 volts dc. 050 = Plus 5 volts dc

100 = Plus 10 volts dc.

CCC = RATED OUTPUT COIL CURRENT SIGNAL:

251 = Plus 250 ma. 501 = Plus 500 ma.

102 = Plus 1000 ma. (1 amp.) 202 = Plus 2000 ma. (2 amp.)

302 = Plus 3000 ma. (3 amp.) 402 = Plus 4000 ma. (4 amp.)

502 = Plus 5000 ma. (5 amp.)

D = PULSE WIDTH MODULATED SWITCHING FREQUENCY:

0 = 2200 Hz. 1 = 100 Hz. 2 = 200 Hz. 3 = 400 Hz.

4 = 1000 Hz. X = Special, factory assigned number.

E FACTORY INSTALLED OPTION:

0 = Standard, with internal command potentiometer, no additional options.

1 = Standard, without internal command potentiometer, no additional options.

X = Special features, factory assigned number.

NOTES:

- 1) The rated input signal (suffix BBB) defines the customer supplied voltage value to be applied to the "A" and "B" tabs. Voltage applied to the "A" tab will drive the "A" solenoid. The "B" solenoid will be off. Voltage applied to the "B" tab will drive the "B" solenoid. The "A" solenoid will be off. Voltage should not be applied to the "A" and "B" tabs at the same time. All models will accept a plus 5 volt dc signal applied to the "W" tab.
- 2) When the "W" tab is used for the input command signal, the valve driver will operate in the bidirectional mode. In this mode the zero current signal for both solenoids will be plus 2.5 volts dc. As the voltage is decreased from 2.5 to 0 volts, the output to solenoid "A" will change from the minimum to the maximum coil current.. The "B" solenoid will be off. As the voltage is increased from 2.5 to 5 volts dc, the output to solenoid "B" will

Datatran

D2452 PWM Proportional Solenoid Driver Model Selection

change from the minimum to the maximum coil current. The "A" solenoid will be off.

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 = 0). 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.

FOR TECHNICAL ASSISTANCE CONTACT DATATRAN LABS, INC. P.O. BOX 384 SUSSEX, NJ, 07461

TEL: (845)-856-4313 FAX (845) 858-2824

Datatran