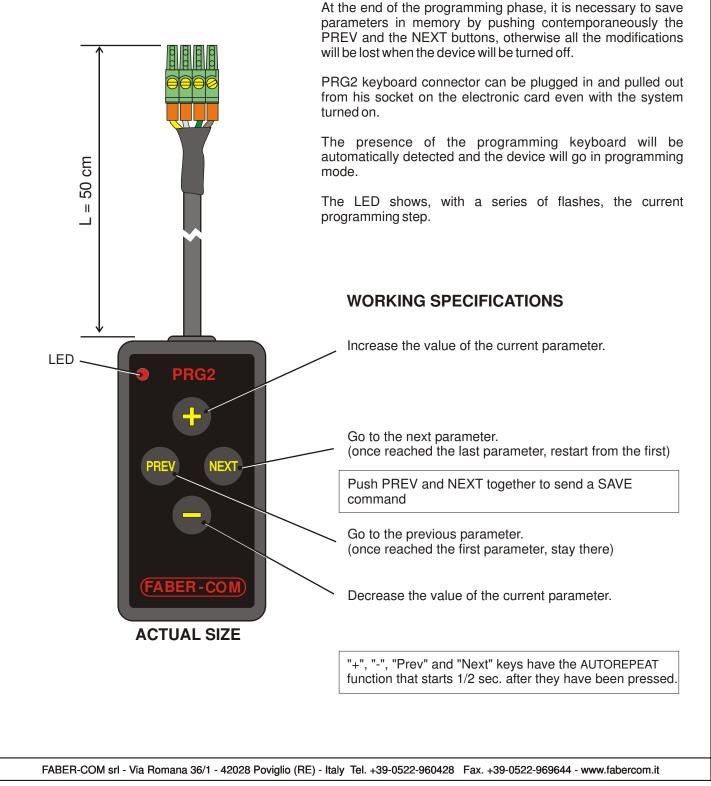
PRG2 Serial Programming Keyboard

FABER-COM

DESCRIPTION

The PRG2 keyboard is the simplest device that can be used to tune working parameters of FABER-COM microcontroller electronic cards.

With PRG2 keyboard and the help of the flashing LED on it, you will be able to scroll the working parameters and tune them at will.



2 / 3 axis joystick with power outputs (PWM)



PROGRAMMING MODE

To adjust JP working parameters, it is necessary to plug the PRG2 programming keyboard into the appropriate connector. JP automatically recognise PRG2 connected and modify his working way to allow current calibration as described below.

Adjustable parameters:

The number of flashes of the programming keyboard LED indicates the programming step in which you are. As PRG2 is connected You are in step no. 1.

By the pressure of "PREV" and "NEXT" push buttons you are able to navigate through the programming steps; otherwise, by the pressure of "+" "-" push buttons you are able to increase and decrease the parameter corresponding to the actual programming step.

At the end of the programming procedure, you have to push "PREV" and "NEXT" push buttons at the same time to save in memory the new parameters value. If You do not give the SAVE command all modification will be loose when JP is turned off.

Step 1: minimum current regulation (manoeuvres start up speed)

Step 2: maximum current regulation (manoeuvres max speed)

Step 3: rise timeramp regulation (manoeuvres acceleration speed)

Step 4: fall timeramp regulation (manoeuvres deceleration speed)

Step 5: bypass delay regulation (bypass delay time when all the manoeuvres stop)

Step 6: PWM frequency regulation (to reduce the solenoid valves histeresis)

For the programming steps from 1 to 4 it is necessary move the joystick to choose the manoeuvre which has to be regulated. Actually, it is possible to set different values of min/max currents, rise/fall timeramp for each movement (semi-axis).

During the programming mode, joystick continues to work normally to give you a real time feedback of the changes done.

The only programming step which modifies joystick behaviour is step number 1, in which you regulate the manoeuvres start up speeds. When the joystick is into this programming step, when you move the joystick the manoeuvres will be turned on only at their start up speed; You have to adjust start speed until all manoeuvres will start to move very slowly or are near to start.

When You move into programming step number 2, to tune maximum speed, You can verify the complete range of the output currents from the minimum speed (regulated in the programming step number 2) to the maximum speed (regulated here).

While the programming steps for 1 to 5 give you a real time feedback of the modifications, the programming step number 6 (PWM frequency regulation) does not. If you cannot estimate the effects of the modifications, you have to do a "blind" regulation.

So you have to know the right frequency value for the solenoid valve that you are using (usually indicated by manufacturer). Find in the following table the index that correspond to the requested frequency.

When you are in programming step number 6, press for at least 2 seconds the "-" button (in this way you reach the 0 value of the frequency parameter). Then push the "+" button a number of times equal to the desired frequency corresponding number.

NOTE: Remember to save parameters before turning off the joystick.

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