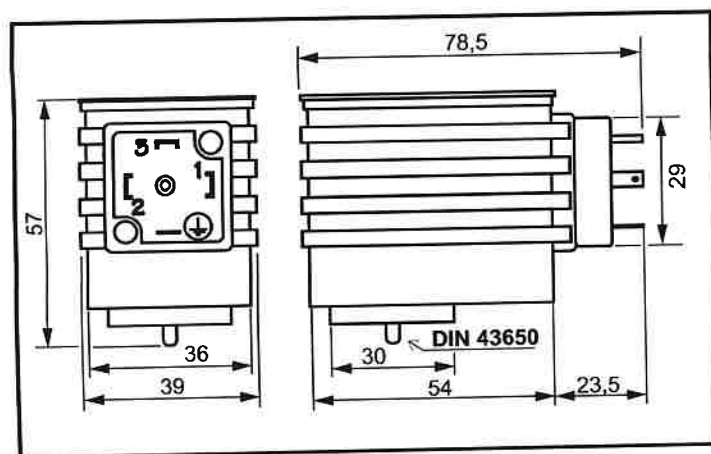


TECHNICAL DATA SHEET

DC Voltage supply ($\pm 10\%$)	12V <input type="checkbox"/> 24V <input type="checkbox"/>
Input impedance	100 k ohm
Voltage input signal	0÷1 V min - 0÷10 V max
Max. output current	2.5A
Ramps delay (independent)	0÷3 s (0.1÷10s -G version)
PWM Frequency	120 Hz (adjustable 50÷400 Hz)
Working room temperature	-10 ÷ +50 °C
Overall dimensions	see pictures
Protection class	IP65



FABER - COM s.r.l.

Via Romana, 36/1 - 42028 Poviglio - Reggio Emilia (ITALY)
 Tel.: +39 - 0522 - 96.04.28 Fax: +39 - 0522 - 96.96.44
 E-mail: info@fabercom.it
 P.I. 01629470350 - C.C.I.A.A. n.200438 - Iscr. Trib. n. 25362

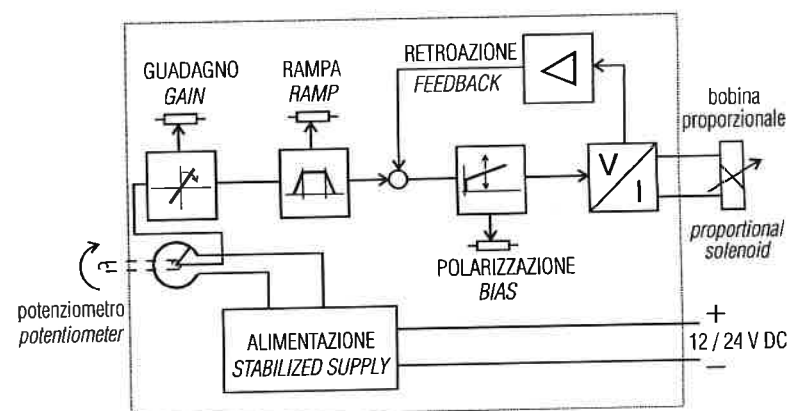
Ver. 1.02 - February 2011

VPC

Open ring electronic regulator for proportional solenoid valves



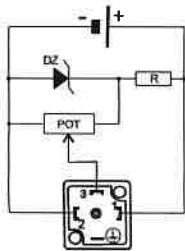
It can be used to control one proportional solenoid valve working in open ring regulated systems. The electronic circuit is placed inside the valve connector. It has PWM current output (pulse width modulated), proportional to the input voltage signal externally generated by a potentiometer or other. In the picture you can see a block diagram of the system.



FABER - COM

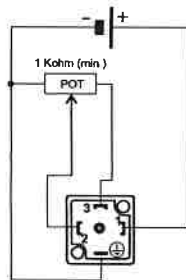
FABER - COM

VPC - STANDARD



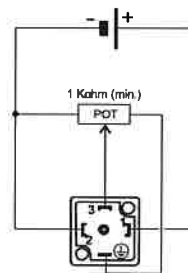
- 1 - Positive battery 24 - 12 Vcc $\pm 10\%$
 2 - Negative battery
 3 - Signal 0-10 Vcc
 ⊕ - Not utilized

VPC - AP

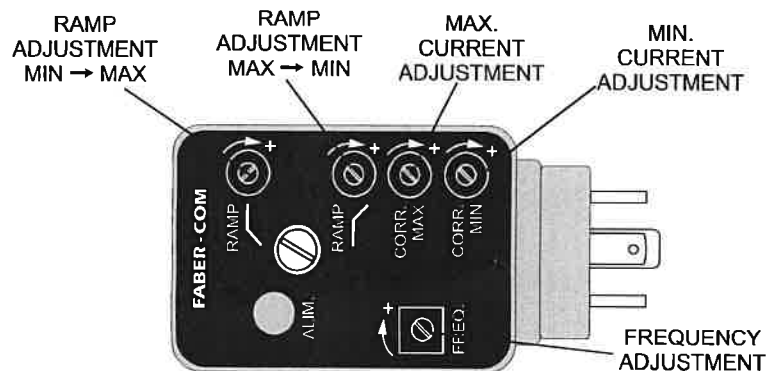
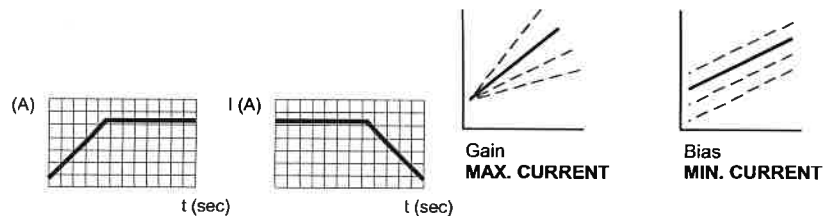


- 1 - Positive battery 24 - 12 Vcc $\pm 10\%$
 2 - Reference signal
 3 - +5V positive for potentiometer
 ⊕ - Negative battery

VPC - G



- 1 - Positive battery 24 - 12 Vcc $\pm 10\%$
 2 - Negative battery
 3 - Reference signal
 ⊕ - +5V positive for potentiometer



Device connections

See picture beside.

Function of trimmers and LEDs

RAMPS adjust: they independently adjust the two output signal delays (rise and fall).

Power supply LED: it is lit ON when the card is correctly fed.

MINIMUM CURRENT adjust: Minimum current of movement starting (**I min**).

MAXIMUM CURRENT adjust: Maximum current of maximum solenoid valve opening (**I max**).

Card adjustment

On the card two trimmers allow to regulate output current to the proportional solenoid valve, while two trimmers allow to adjust independently rise and fall delays of output signal.

- 1) The trimmer marked "**I MIN**" adjusts bias (OFFSET or dead band), i.e. the minimum current of solenoid valve opening.
- 2) The trimmer marked "**I MAX**" adjusts the gain (scale), i.e. the ratio between input signal and output signal to the solenoid valve; it calibrates the valve maximum opening current.

A standard calibration is made by test technician at the factory; probably this calibration is not exactly correct for your solenoid valve. Following these instructions you can slightly adjust the existing calibrations or starting with new calibration. To calibrate the current on the card you need a small screwdriver with flat blade:

- 1) turn counterclockwise the trimmer "**I MIN**", then move the proportional joystick (or potentiometer) to the position of movement start (approx. 5% of max value); turn clockwise the trimmer "**I MIN**" till, with joystick in the start position, the solenoid valve begins opening (actuator movement beginning).
- 2) move the joystick at full travel: adjust the trimmer "**I MAX**" till the maximum opening of solenoid valve (max. move speed of actuator). Do not turn the trimmer more.

Repeat adjustments till you obtain best calibration.