Sheet

2

Propel

Digital control unit for proportional valves

Propel is a digital control unit for proportional valves particularly innovative. The electronic control has been designed to drive a proportional valve with **single selenoid** or **double selenoid** antagonist, without any integrated position transducer. Compared to traditional systems, it offers an extremely fine and precise control. It can be driven by both analogical references, 4 – 20 mA, 0 – 5V, 0 – 10V, or digital references, On/Off type, as well as by messages through RS232 communication door. It is possible to set up the electric current parameters concerning the valves, the transfer functions of the control and the ditter, which can be scheduled between 50 and 400Hz and of which can be also specified the contenuto harmonic content. The dressing can be with octal or undecal connection (eight small feets for the single selenoid version and eleven small feets for the double selenoid version). Easy parameterization and calibration.



Propel double selenoid with undecal connection

- Operational program totally upgradeble.
- Inputs with analogical references 4 – 20 mA, 0 – 5V, 0 – 10V.
- Programmable directly through the trimmer.
- Short-circuit and over-temperature protection on all of the outputs.
- Two available versions: one to drive proportional valves with single selenoid (octal connection) and one to drive proportional valves with double selenoid antagonist (undecal connection).

Working conditions

Operational supply voltage:	**+6V - +36V**
Operational absorption logic circuit:	**< 0,5A**
Working temperature:	**-20°C - +85°C**
Maximum working temperature:	**-40°C - +105°C**

Inputs and outputs

Digital inputs:	**1**
Analogical inputs 4-20 mA 10 bit resolution:	**1**
Analogical inputs 0-5V/0-10V 10 bit resolution:	**1**
Current feedback input 10 bit resolution:	**1**
PWM* digital outputs 2,5A max:	**1** o **2**

*Pulse Width Modulation

1 PWM digital output with the single selenoid version and 2 PWM digital outputs with the double selenoid version.

Processing

Microprocessor:	**16 bit**
Operational rate:	**16 MHz**
Flash memory program:	**32 Kbytes**

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