

# Hand grip with PWM A+B direct command of solenoid



### Description

PCG is a hand grip with an integrated electronic card with two PWM outputs to directly control a couple of PWM solenoid valves.

The proportional thumbwheel can be horizontal or vertical on request.

A couple of pushbutton can command digital outputs (max 3A).

Optional: capacitive deadman.

### Signaling

A multicolor LED on the grip front panel provides work status information. In case of errors makes troubleshooting easier thanks to a coded series of colored flashes.

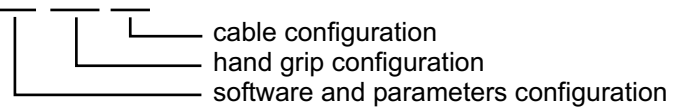
### Other versions

Two other versions are available:

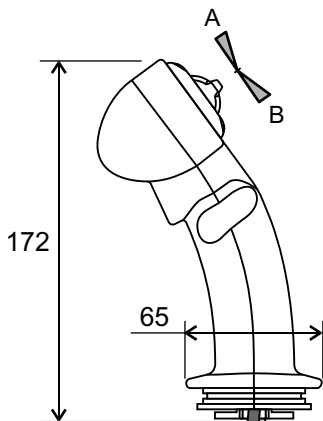
- PCG with signal output (fixed range or ratiometric);
- PCG with CAN output.

Example of ordering codes:

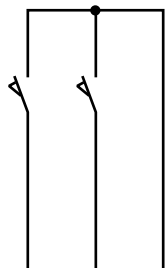
**PCGP aaa bbb ccc**



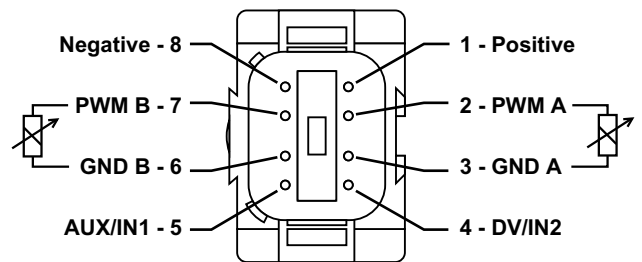
### DIMENSIONS (in millimeters)



### Connections



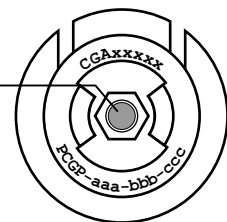
Pushbuttons



Mounting: M10 thread - L=15 mm

Buttons cable:  
sheath with free wires L=20 cm

PWM cable:  
cable with Deutsch connector DT6-8 L=20 cm



**Working mode**

PCG with PWM outputs is designed to directly control two proportional solenoid valves (one section of an electrically controlled hydraulic distributor).

Main characteristics:

- one proportional section (A+B) direct control (2 PWM outputs max 2.5A);
- adjustable minimum/maximum current for each direction (A+B);
- adjustable rise/fall timeramp up to 25 seconds (step 0.1s);
- adjustable PWM frequency from 50 to 300 Hz;
- digital input for:
  - speed reduction (calibration adjustable for each side);
  - block one or both output sides;
  - deadman feature (to be activated before moving the thumbwheel).
- digital output for:
  - "fault" output;
  - DV digital output (active when PWM output is on).
- output curve shape: linear or parabolic (selectable);
- all working parameters are adjustable through a serial port and the Windows® SepSim program using a special serial port adapter (AISR);
- the simple adjustment of the current range can be done using the simple 4-keys programmer PRG2R.

The inner electronic card is protected against short-circuits of the load.

The PWM command of the coils is feedback controlled, in order to guarantee the current stability independently to external factors (power supply voltage, coil temperature, ...).

It can be necessary to modify the original preset values, in order to achieve better performances in various applications (with different supply voltages or with different kind of proportional solenoid valves).

**Accessories:**

- Kit with male mating connector Deutsch DT6-8 way (with female contacts).  
Code: **PCVMDT8**



- AISR: serial port adapter with M8 connector (to adjust settings).  
Code: **PISPR**



- PRG2R programmer with M8 connector (to adjust just Imin and Imax).  
Code: **PPRG2R**



**Technical specifications**

Power supply voltage	10 ÷ 30 Vdc
Working temperature range	-40 ÷ +70 °C
PWM output minimum current	100 ÷ 2500 mA
PWM output maximum current	100 ÷ 2500 mA
PWM frequencies	50 ÷ 300 Hz
DV and AUX output maximum current	2000 mA
Ingress protection rating	IP2x (indoor use only)
EMC compatibility	ISO EN 14982:2009