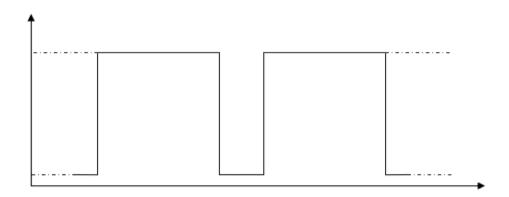


# **Pierburg CWA Pumps**

Pierburg's PWM interface for the CWA pump range.



## Input frequency:

50 Hz -1000 Hz

#### Input level:

Power supply → U<sub>b</sub> = 8 to 16V

• PWM high  $\rightarrow$  Min 0.6 U<sub>b</sub> / Max U<sub>b</sub> + 3V

 • PWM low  $\rightarrow$  Min GND - 3V / Max 0.4  $U_{\scriptscriptstyle b}$ 

### Note:

To ensure the pump awakes correctly an uninterrupted high pulse of 3ms must be applied.

(For example: 50% duty at 150 Hz)

## **Duty Cycle:**

• 0-1%  $\rightarrow$  Stop

• 1 – 7% → Emergency running (about 95% speed)

• 8-12%  $\rightarrow$  Stop / Error Reset

• 13 - 85%  $\rightarrow$  Controlled operation from min to max speed

• 86 - 97%  $\rightarrow$  Maximum speed

• 98 – 100% → Emergency running (about 95% speed)