



LVL :
Self Levelling Unit
for Aerial Work
Platforms

LVL : BASKET SELF-LEVELLING UNIT

The basket levelling unit LVL constantly checks and corrects angular differences in the platform's basket automatically. The LVL unit, with dual microcontroller (**redundant**) and full digital control circuits as per the **Machinery Safety Directive**, is sealed in a robust aluminum cast casing in **IP67** protection class. The LVL electronic control unit includes reverse current, short circuit and high current **protection relay**.



There are signal outputs for hydraulic systems with On/Off **Safety Valve** or **Power-Pack** hydraulic-motor.

The microcontroller in the LVL computes the signal that will adjust the optimal basket position with advanced proportional algorithms and **closed-loop PID algorithms**. Thus, the signal of correcting according to the speed of travel of the vehicle and the hydraulic oil temperature is constantly updated. The correction signal is transmitted to the electro-hydraulic basket balancing valve as **on/off** or **PWM**.

The LVL unit is delivered with the most frequently used parameters loaded. However, when fine tuning is required for each machine and hydraulic system, it is possible to calibrate with easy-to-use and **free LVL Calibration software**.

If the basket hydraulic system is independent from main hydraulic system, the basket power-pack unit (or Poppet Valve) is activated before the levelling starts. After the levelling is complete, the power unit is automatically switched off.

If basket folding is available on the vehicle, the basket is folded at the desired angle with the aid of an external switch.

C24.LVL is proposed as an independent basket balancing unit both on its own and as a subcomponent of a system on aerial work platforms and fire trucks.

