

LV vs DC

Explaining the difference between Low Voltage (LV) and Direct Control (DC)

Low Voltage (LV)

LV hoists have control equipment (transformer and reversing contactors) fitted internally which allow a normal operating handset/pickle to operate at a lower, safer voltage.

These hoists have both a power and control cable fitted. Usually a 400v power cable and either a 110v or 42v control cable.

Electrical limit switches are generally only available with Low Voltage hoists, these are a major safety and design feature as they stop the hook travel at set points.

Direct Control (DC)

DC hoists are less expensive because they do not have controls and limit switches inside as mentioned above. This also makes them simpler to operate and maintain (service).

Direct hoists us a power cable only.

The travel (on DC hoists) is stopped by the hook or chain stop contacting the chain hoist body, at this point the overload clutch device engages.

Chain stops can also be used (on some hoists) where in an emergency, stopping travel movement mechanically is necessary.



Prolonged/repetitive use of the stops/clutch as an indication of the end of travel should be avoided and can cause wear to the component.

When a hoist controller is built for direct control hoists, it is more complex and expensive than the Low Voltage hoist type controller (as the features fitted into a LV type hoist need to be incorporated into the controller) – so part of the saving when buying Direct Control hoists is offset in the purchase of a more expensive controller.

The DC hoists will not work with Low Voltage controllers and vice versa

If in doubt, please contact your local reseller or LoadGuard[®] technical support.