

EUROCHAIN VL



**Electric chain hoist
with variable lifting speed
for loads of 500 to 2000 kg**

VERLINDE is:

- The leading French constructor and exporter of hoisting and mechanical handling equipment.
- A group employing 5,000 staff.
- A large range hoisting equipment from 125 to 80.000 kg
- ISO 9001 quality control certified.
- Easily-accessible consultants in over 80 countries.

In France

9 Sales offices, 18 after sale service centres, 11 manufacturing plants for EUROPONT travelling cranes and a national distribution network.

World wide

Branches in Germany, Holland, Belgium, Italy and distributors in Africa, Germany, Argentina, Austria, Brazil, Chilli, Korea, Ireland, United Kingdom, Sweden, Norway, Denmark, China, Thailand, Indonesia, Malaysia, United States, etc



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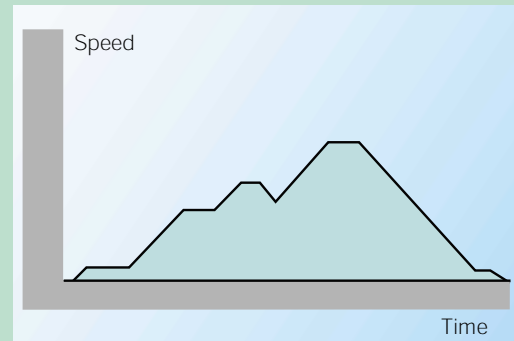
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FASTER LIFTING

Why vary the speed of your lifting equipment?

- Speed variation enables the operator to move his load with more precision and flexibility.
- The VLH 002 inverter enables the speed of the movement to be adapted to the load, the knowledge of the user of the lifting system and the production process.
- It helps to prevent loads from swinging.
- It lengthens the mechanical endurance of the metal frame carrying the hoist (jib crane, monorail track, overhead travelling crane, overhead handling system, gantry frame...)



Speed variation technology

The EUROCHAIN VL10 variable lifting speed electric chain hoist offers the following features as standard:

- Built-in VLH 002 lifting speed variator
- Sensor bearing
- Brake resistance
- Brake control relay and rectifier
- Speed control system:
 - Stall control: if the motor does not rotate, the system inhibits hoisting movement,
 - Overspeed control: if the motor rotates at over 120% of nominal speed, the system disables hoisting movement.



Internal view of electric cabinet with its inverter.

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MORE ACCURATE MOVEMENT

Safety

Continuous speed control system.

Protection in the event of seizure or overspeed. Friction torque limiter. Guaranteeing use of the hoist without overload.

Lifting hook. Rotating hook in special steel compliant with DIN standards, equipped with a safety catch.

Limit switch. Electric limit switch of top and bottom position, ensuring that the hoist operates in full safety.

Pushbutton box. 48V very low voltage control, emergency stop (palm switch type).

Economy

Electric brake. Used as priority system when slowing down, before cutting in the mechanical brake. This system enables brake lining wear to be decreased.

Disc brake. Electromagnetic, linings tested for the lifetime of the hoist in its application group.

Load limiter. the EUROCHAIN VL is equipped as standard with a torque limiter (protection against overload of the hoist), making for longer service life.

Surface treatment. Dual-component 80-micron thick coat of epoxy paint for greater corrosion protection.

LOWER MAINTENANCE COST

HIGH-TECH TECHNOLOGY

MAXIMUM SAFETY

High technology

Chain Guide. Ensure perfect position of the chain on the lifting unit.

Electric cabinet. In generously-dimensioned steel, the VLH 002 speed variator is built-in as standard. A Time totalizer functionality is available from the inverter.

Hoisting unit. With 5 positioning points for to spread the load more evenly.

Less maintenance

Lifting motor. Installation class F, protection IP 55. The motor is cooled by heat-exchange. Thermal protection of lifting motors

Lifting chain. Electro-zinc plated and calibrated, treated for high strength (800 N/mm²). Special chains as optional extra (low lubrication chain, stainless steel chain...).

Ergonomics

Pushbutton box. Sealed, IP 65 protection with 2, 4 or 6 pushbuttons. Situated on the side of the hoist, offering ready access.

Options

- Version suspended from hook
- Version with manual travel trolley
- Version variable speed travel trolley
- Special travel trolley
- Thermal protection of travelling motors
- Non-standard power supply
- Radio control system (EUROMOTE / MICROMOTE)
- Extra cam limit switch
- Stainless steel hook and lifting chain
- Special lifting chain
- Protection level up to IP 55 or better

Hoist type	Load (kg)	Number of falls	Lifting speeds (m/min) ⁽⁴⁾	Duty group		Max lifting height (m)
				ISO	FEM	
VL 10 508 v2	500	1	0,5→8	M5	2M	50
VL 10 5016 v2	500	1	1→16	M5	2M	30 ⁽¹⁾
VL 10 1008 v1	1000	1	0,5→8	M3	1Bm	30 ⁽²⁾
VL 10 2004 v1	2000	2	0,25→4	M3	1Bm	15 ⁽³⁾

⁽¹⁾ Maximum 50 metres with 450 kg load or speed of 12.5 metres per minute
⁽²⁾ Maximum 50 metres with 900 kg load or speed of 6.3 metres per minute
⁽³⁾ Maximum 25 metres with 1800 kg load or speed of 3.2 metres per minute
⁽⁴⁾ The speed can be increased by 20% by a power supply at a voltage of over 460 V

GREATER PRODUCTIVITY

• **Greater ease of use.** Continuous speed control makes it easier to control the load – movements will be more reliable and more accurate. The lifting speed variation offers you a minimum speed of close to 0.25 m/min (depending on the model) for better positioning accuracy. For operators with less experience, the risk of damaging the load through lack of acquired skill will occur less often since they can adjust the speed to the skill level they have attained.

• **Greater productivity.** Continuous speed control offers starting without jerking, rapid accelerations and gentler stopping, to optimise load-handling operations. The production process cycles are hence shorter, resulting in better productivity (alternating use of slow speed for accuracy and high speed for rapidity).

• **Low maintenance costs.** Continuous speed control enables electric braking to be used as priority when decelerating before applying the mechanical brake. Electric braking reduces brake wear since the mechanical brake is used only as holding brake (parking brake).

• **Longer service life.** Continuous speed control reduces mechanical impacts thanks to gradual starting and gentler stopping. The lower numbers and extents of impacts on the components of the bridge or structure considerably lengthen the service life of the frame.

• **An economic power supply.** Continuous speed control offers high efficiency and a good mechanical advantage. It also enables smaller power supply components to be used thanks to low starting current proportional to the acceleration torque needed.

• **Speed monitoring.** The system has a speed-monitoring unit separate from the variator. This safety circuit is used in hoisting applications to control the speed of the motor. Should there be any difference in speed, overspeeding or seizure, it immediately stops movement.

• **Prevention of swinging loads.** The combination of lifting speed variation and travel speed variation also reduces swinging of the loads during travel over and above the advantages offered by speed variation.

• **Compliance with standards:** EMC level. Electromagnetic emission level complies with standard EN 61800-3 A11 (2000).