

# EUROCHAIN VL



**Electric chain hoist  
for load from 60 up to 7 500 kg**

 **VERLINDE**  
LIFTING EQUIPMENT

# The leading French manufacturer of lifting equipment

Leading french manufacturer of lifting equipment. **VERLINDE** produce in large batches electric wire rope hoist, electric chain hoist, electric belt hoist, electric winches, jib cranes, and cranes components in their fully modernized and enlarged production center of VERNOUILLET (France).

From CAD/CAM design to production by machines amongst the most modern in Europe combined with know-how from a skilled staff, each lifting equipment showing the **VERLINDE** brand ensures reliability and quality to users.



## New style, New concept

**VERLINDE** introduce the **EUROCHAIN VL**, a range of high-tech lifting units. Compact and in-line designed, the **EUROCHAIN VL** can suit any specific requirement : capacities from 60 to 7500 kg, 1 or 2 speed hoisting, manual or electric trolley with adjustable speed, height of lift, FEM group 1Bm or 2m.

**EUROCHAIN VL** is designed to provide users with maximum safety, and is fitted as standard with a torque limiter, a low voltage control, a hoisting disc brake and as option an upper and lower limit switch. The unit fully complies European Machinery Directive 98/37/CEE.

**EUROCHAIN VL** is available as :

- Hook suspended.
- Hooked or fitted onto a push or chain driven trolley.
- Fitted into Eurosystem trolley.
- Hooked or fitted into a motor-driven trolley.

In addition many optional features are available.



**EUROCHAIN VL**  
is available in 7 models :

**VL1** from 60 to 250 kg

**VL2** from 125 to 500 kg

**VL5** from 250 to 1000 kg

**VL10** from 500 to 2000 kg

**VL16** from 1000 to 3200 kg

**VL20** from 1600 to 6300 kg

**VL25** from 1600 to 7500 kg

# EUROCHAIN VL

Electric chain hoist for load from 60 up to 7 500 kg

## CUSTOMISED INSTALLATIONS



### Hook suspended.

These hoists are not equipped with a trolley and are used in applications where horizontal displacement is not required.



### Hooked or fitted onto a push or chain driven trolley.

These hoists for load up to 7 500 kg are equipped with a trolley and are used in applications where horizontal movement is required.



### Hooked or fitted into a motor-driven trolley.

These hoists for load up to 7 500 kg are fitted equipped a trolley and are used in applications where horizontal movement is required



### Fitted into Eurosystem trolley.

These hoists are fitted with a manually-operated or electric trolley and are used for horizontal movements along tracks such as the Eurosystem type.

### Fitted into a motor-driven short headroom trolley.



These hoists for load up to 5 000 kg are fitted equipped a trolley and are used in applications where horizontal movement is required with a maximum high of lift.



### Fitted into a motor-driven boogie trolley.

These hoists for load up to 5 000 kg are fitted equipped a trolley and are used in applications where horizontal movement is required on curved track

# EUROCH

## Electric chain hoist for load

### Gear box



Improved hoist compactness. Low noise level while in use thanks to pinions lubricated with plenty of grease and its rectified and treated straight teeth.

### Load wheel



5 or 6 pockets (depending on model), treated and rectified, machined in a single operation.

### Hoist body



Made with moulded injected aluminium, making the hoist lighter, the fins on the motor section provide good thermal exchange. The chassis is painted with one Coat of 2-component epoxy paint with 80 microns that is highly resistant to corrosive agents.

### Safety

**Friction torque limiter.** It guarantees use of the hoist without overload.

**Lifting hook.** Rotating hook made with special steel, conforming to DIN standards, with a safety latch.

**Limit switch.** Electric limit switch for upper and lower limits, providing safe operation of the hoist (provided as a standard feature on VL 16, 20 and 25).

**Push button box.** Very low voltage command, 48 Volts, emergency stop (large button).

### Savings

**Disk brake.** Electro-magnetic, brake linings tested for longevity of the hoist within its use group.

**Load limiter.** As a standard, all EUROCHAIN VLs are equipped with a torque limiter (Safety feature to prevent hoist) For greater longevity.

**Treated surface.** Two-component epoxy paint with 80 microns for better protection against corrosive agents

### Ergonomics

**Push button box.** Water-proof, IP 65 protection, with 2, 4 or 6 buttons.

**Electrical cubicle.** Located on the side of the hoist, easy to access.

New  
technology



# CHAIN VL

Load from 60 up to 7 500 kg



## High safety

## High technology

**Chain guide.** Ensures perfect positioning of the chain around load wheel.

**Electrical cubicle.** Very spacious, and equipped as a standard with an electric plate that can be fitted with an optional an hour time counter, etc...

**Hoisting motor.** Optional mono-phase version available.

**Load wheel.** With 5 or 6 pockets for better distribution of the load.

**BGV C1 (VGB 70).** Optional BGV C1 version available.

## Easy maintenance

**Hoisting motor.** 1 or 2 speeds, speed ratio: HS /LS 1/4 power of the motors with 0,2/0,5 to 3,5/0,9 kW, F insulation class, IP 55 protection. The motor is cooled by means of thermal exchange.

**Lifting chain.** Zinc coated and calibrated, with high tensile strength, treated (800 N/mm<sup>2</sup>). Special chains available as option: reduced lubrication chain, stainless chain, ...)

## Disk brake



Electro-magnetic type with linings material for hoist FEM groups lifetime, designed for easy to access and simple adjustment.

## Chain bag



Moulded, steel or made out fabric, adapted to lifting height (several capacities).

## Electric control panel



Quite large, built into the piece of equipment, it contains all of the component (plate, connectors, transformer, etc.) and is easy to access for maintenance purposes, IP55 protection.

# EUROCHAIN VL

Electric chain hoist for load from 60 up to 7 500 kg

## Options

In addition to standard equipment each EUROCHAIN VL can be fitted with mechanical or electrical optional features in order to satisfy your specific requirements:

- Upper and lower limit switches.
- Non standard main voltage.
- Hour counter.
- Radio or infra-red remote control.
- IP55 travelling protection.
- Hoisting and travelling motors thermal protection.
- Travelling limit switches.
- Boogies trolley.
- Short headroom trolley.
- Stainless steel chain and hook
- Hand tight positioner on push button type DIGICHAIN.
- Rain cover.
- Hoist according to VGB70. (BGV C1).
- Explosion proof and / or spark proof version.
- Gear limit switch.
- Built-in encoder.
- Additional brake.
- Stagemaker version for entertainment industry.



## Standards and hoisting regulations



**CE directive.** Since 1st January 1995, the European Machinery Directive 98/37/ EEC obliges that machine constructors ensure that their machinery complies with certain regulations, standards, national legislations and technical specifications.

Every VERLINDE product is CE labelled and is delivered with an CE compliance certificate (annex IIA) or with an incorporation certificate (annex IIB).

**FEM:** European lifting equipment association.

**SWP:** A Safe Working Period is calculated for each electrical hoists unit according to the average operating time of the hoisting equipment, load capacity and class of application. After this period, a general service carried out by the constructor is necessary.

**Class of operation.** According to FEM classification, two fundamental criteria must be taken into account : the type of duty and the class

of duty (according to average daily operation time average load).

**ISO standard.** Classes of operation can also be defined according to ISO grouping (1Am = M4, 2m = M5, 3m = M6, etc.).

**Type of duty. Light service.** Equipment rarely subject to maximum load and frequently to very little load. **Medium service.** Equipment quite often subject to maximum load and frequently to very little load. **Heavy service.** Equipment frequently subject to maximum load and frequently to medium load. **Very heavy service.** Equipment frequently subject to maximum or near maximum load.

Average daily operating time (hours)			0,5		1		2		4		8		16		
			V0,25	T2	V0,5	T3	V1	T4	V2	T5	V3	T6	V4	T7	
Type of service	1	L1	Light					1Bm	M3	1Am	M4	2 m	M5	V4	M6
	2	L2	Medium			1B m	M3	1Am	M4	2 m	M5	3 m	M6		
	3	L3	Heavy	1Bm	M3	1A m	M4	2 m	M5	3 m	M6				
	4	L4	Very heavy	1Am	M4	2 m	M5	3 m	M6						

Group					1Bm	M3	1A m	M4	2 m	M5	3 m	M6
Duty factor*					25 %		30 %		40 %		50 %	
Number of star starts per hour					150		180		240		300	

■ FEM 9511 standards classification. ■ ISO standards classification.

\* Duty factor in % =  $\frac{\text{Hoisting time} + \text{lowering time}}{\text{Hoisting time} + \text{idle time} + \text{lowering time} + \text{idle time}} \times 100$

# EUROCHAIN VL

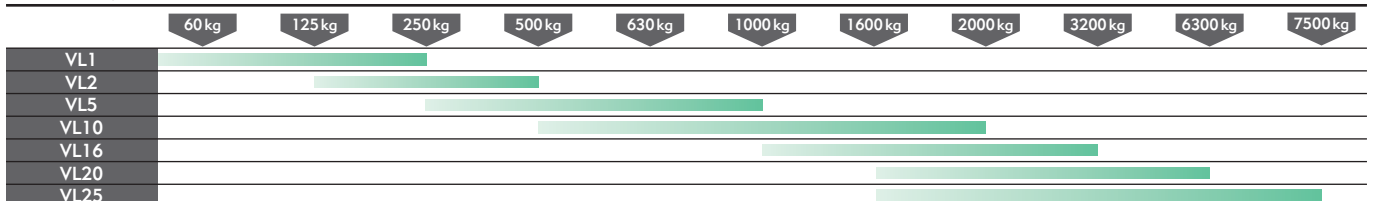
Electric chain hoist for load from 60 up to 7 500 kg

## Technical characteristics

S.W.L. (kg)	HOIST type	F.E.M.	Lifting speeds (m/mn)	Number of falls	Hoisting motor power (kW)	Fix hook susp. unit	Monorail trolley unit					Chain 800 N/mm <sup>2</sup>
							Manual travelling		Motorized travelling			
							push trolley unit	chain trolley unit	One speed	Two speed	Variable speed	
60	VL1 0616 b1	1Bm	16 / 4	1	0,2/0,05	•	•	•	•	•	•	3,1 x 9,3
	VL1 068 b2	2m	8 / 2	1	0,2/0,05	•	•	•	•	•	•	3,1 x 9,3
80	VL1 088 b2	2m	8 / 2	1	0,2/0,05	•	•	•	•	•	•	3,1 x 9,3
	VL1 128 b1	1Bm	8 / 2	1	0,2/0,05	•	•	•	•	•	•	3,1 x 9,3
125	VL1 124 b2	2m	4 / 1	2	0,2/0,05	•	•	•	•	•	•	3,1 x 9,3
	VL2 124 m2	2m	4	1	0,4	•	•	•	•	•	•	4,8 x 12,7
	VL2 128 m2	2m	8	1	0,4	•	•	•	•	•	•	4,8 x 12,7
	VL2 128 b2	2m	8 / 2	1	0,4/0,1	•	•	•	•	•	•	4,8 x 12,7
	VL2 1216 b2	2m	16 / 4	1	0,8/0,2	•	•	•	•	•	•	4,8 x 12,7
250	VL1 254 b1	1Bm	4 / 1	2	0,2/0,05	•	•	•	•	•	•	3 x 9
	VL2 254 m1	1Bm	4	1	0,4	•	•	•	•	•	•	4,8 x 12,7
	VL2 258 m1	1Bm	8	1	0,4	•	•	•	•	•	•	4,8 x 12,7
	VL2 258 b1	1Bm	8 / 2	1	0,4/0,1	•	•	•	•	•	•	4,8 x 12,7
	VL5 2516 b1	1Bm	16 / 4	1	0,8/0,2	•	•	•	•	•	•	4,8 x 12,7
	VL5 254 b2	2m	4 / 1	2	0,4/0,1	•	•	•	•	•	•	4,8 x 12,7
	VL5 254 m2	2m	4	1	0,4	•	•	•	•	•	•	4,8 x 12,7
	VL5 258 m2	2m	8	1	0,8	•	•	•	•	•	•	4,8 x 12,7
500	VL5 258 b2	2m	8 / 2	1	0,8/0,2	•	•	•	•	•	•	4,8 x 12,7
	VL2 504 m1	1Bm	4	2	0,4	•	•	•	•	•	•	4,8 x 12,7
	VL5 504 m1	1Bm	4	1	0,4	•	•	•	•	•	•	4,8 x 12,7
	VL2 504 b1	1Bm	4 / 1	2	0,4/0,1	•	•	•	•	•	•	4,8 x 12,7
	VL5 508 m1	1Bm	8	1	0,8	•	•	•	•	•	•	4,8 x 12,7
	VL5 508 b1	1Bm	8 / 2	1	0,8/0,2	•	•	•	•	•	•	4,8 x 12,7
	VL10 5016 b1	1Bm	16 / 4	1	1,7/0,4	•	•	•	•	•	•	6,8 x 17,8
	VL5 502 m2	2m	2	2	0,4	•	•	•	•	•	•	4,8 x 12,7
	VL5 504 m2	2m	4	2	0,8	•	•	•	•	•	•	4,8 x 12,7
	VL5 504 b2	2m	4 / 1	2	0,8/0,2	•	•	•	•	•	•	4,8 x 12,7
1000	VL10 504 m2	2m	4	1	0,8	•	•	•	•	•	•	6,8 x 17,8
	VL10 508 m2	2m	8	1	1,7/0,4	•	•	•	•	•	•	6,8 x 17,8
	VL10 508 b2	2m	8 / 2	1	1,7/0,4	•	•	•	•	•	•	6,8 x 17,8
	VL5 1002 m1	1Bm	2	2	0,8	•	•	•	•	•	•	4,8 x 12,7
	VL5 1004 m1	1Bm	4	2	0,8	•	•	•	•	•	•	4,8 x 12,7
	VL5 1004 b1	1Bm	4 / 1	2	0,8/0,2	•	•	•	•	•	•	4,8 x 12,7
	VL10 1004 m1	1Bm	4	1	0,8	•	•	•	•	•	•	6,8 x 17,8
	VL10 1008 m1	1Bm	8	1	1,7	•	•	•	•	•	•	6,8 x 17,8
1600	VL10 1004 m2	2m	4	2	1,7	•	•	•	•	•	•	6,8 x 17,8
	VL10 1008 b1	1Bm	8 / 2	1	1,7/0,4	•	•	•	•	•	•	6,8 x 17,8
	VL10 1004 b2	2m	4 / 1	2	1,7/0,4	•	•	•	•	•	•	6,8 x 17,8
	VL16 1008 b 2	2m	8 / 2	1	3,5/0,9	•	•	•	•	•	•	9 x 27
	VL10 1602 m1	1Bm	2	2	0,8	•	•	•	•	•	•	6,8 x 17,8
	VL10 1604 m1	1Bm	4	2	1,7	•	•	•	•	•	•	6,8 x 17,8
	VL10 1604 b1	1Bm	4 / 1	2	1,7/0,4	•	•	•	•	•	•	6,8 x 17,8
2000	VL16 1608 b1	1Bm	8 / 2	1	3,5/0,9	•	•	•	•	•	•	9 x 27
	VL25 1606 b2	2m	6,3 / 1,6	1	3,5/0,9	•	•	•	•	•	•	11,3 x 31
	VL10 2002 m1	1Bm	2	2	0,8	•	•	•	•	•	•	6,8 x 17,8
	VL10 2004 m1	1Bm	4	2	1,7	•	•	•	•	•	•	6,8 x 17,8
2500	VL10 2004 b1	1Bm	4 / 1	2	1,7/0,4	•	•	•	•	•	•	6,8 x 17,8
	VL16 2004 b2	2m	4 / 1	2	3,5/0,9	•	•	•	•	•	•	9 x 27
	VL20 2008 b1	1Bm	8 / 2	1	3,5/0,9	•	•	•	•	•	•	11,3 x 31
	VL16 2504 b1	1Bm	4 / 1	2	3,5/0,9	•	•	•	•	•	•	9 x 27
3200	VL20 2504 b2	2m	4 / 1	2	3,5/0,9	•	•	•	•	•	•	11,3 x 31
	VL25 2506 b1	1Bm	6,3 / 1,6	1	3,5/0,9	•	•	•	•	•	•	11,3 x 31
4000	VL16 3204 b1	1Bm	4 / 1	2	2,5/0,64	•	•	•	•	•	•	9 x 27
	VL25 3203 b2	2m	3,2 / 0,75	2	3,5/0,9	•	•	•	•	•	•	11,3 x 31
5000	VL20 4004 b1	1Bm	4 / 1	2	3,5/0,9	•	•	•	•	•	•	11,3 x 31
	VL20 4002 b1	2m	2,7 / 0,7	3	3,5/0,9	•	•	•	•	•	•	11,3 x 31
6000	VL25 5003 b1	1Bm	3,2 / 0,75	2	3,5/0,9	•	•	•	•	•	•	11,3 x 31
	VL25 5002 b2	2m	2,1 / 0,5	3	3,5/0,9	•	•	•	•	•	•	11,3 x 31
7500	VL20 6302 b1	1Bm	2,7 / 0,7	3	3,5/0,9	•	•	•	•	•	•	11,3 x 31
	VL25 7502 b1	1Bm	2,1 / 0,5	3	3,5/0,9	•	•	•	•	•	•	11,3 x 31

• : Available in this version - : Not available in this version

## Load Range



## Code of EUROCHAIN VL

VL5	250	8	b	2
Hoist body type	Load/10	Lifting speed	2-speed	FEM Group 1 = 1 Bm, 2 = 2