

 **EXPERT** Crane Components



# OFFSHORE

## OIL-GAS-SEA-WIND



Range of high performance  
lifting material for Offshore

 **VERLINDE**<sup>®</sup>

LIFTING EQUIPMENT

[www.verlinde.com](http://www.verlinde.com)

Ref : 01 2015 136 UGB

# Verlinde, leader in lifting equipment in Europe and worldwide

Each product bearing the VERLINDE brand is the outcome of production facilities that are constantly improved and adapted to cutting-edge design techniques.

The materials and components used for the manufacture of our products are subjected to the most stringent checks.

At its various production plants, VERLINDE mass produces wire rope, chain, belt electric winches, together with travelling crane components.

Sales agents well-acquainted with hoisting techniques analyse the problems set



by each installation project (10 agencies in France and other agencies and commercial operations in over 92 countries throughout the world).

A rapid answer to your problems : our sales agents can respond immediately to any request for standard equipment, whilst for more specialised queries, our Engineering Service will respond very rapidly.

Rush, one-off deliveries : the planning schedule is a key instrument in our activity - our plants are organised to meet out-of-the-ordinary requests.

## Top quality materials for extremes conditions

The VERLINDE's range of lifting equipment for Offshore application is specially designed for use on maritim area, petrol platform, wind turbine, boats.

By procuring all the components of your lifting rig (jib, hoist, winch, cable, etc.) from the same supplier, you can be sure of the rigorous quality and perfect match-up of the entire assembly.

Once the lifting rig is installed, you will discover that servicing is kept to a strict minimum. The combination of materials that are both extremely robust



and lightweight, along with the ease-of-use of our products, facilitates not only maintenance but also keeps down the number of operators required for doing the work.

The Offshore range from VERLINDE are made of non-corroding materials, and have an extra layer of protection (on certain models of the range) via a coat of ceramic treatment, polyester, epoxy, epoxy-polyester paint.

This choice of sturdy materials and the unique design of our lifting rigs makes them easy to use and reliable.



# A wide choice of lifting solutions dedicated to your need

## HAND CHAIN BLOCK

For vertical lifting without horizontal motion. Hand chain block compact design offers safety together with reduced weight. Ideal for construction and maintenance applications.

## HAND CHAIN BLOCK WITH LOW HEADROOM BUILT IN TROLLEY

For vertical lifting and horizontal motion of the load. The low headroom conception of hoist and trolley combination extremely optimize the height of lift in reduced area.

## ELECTRIC HOISTS

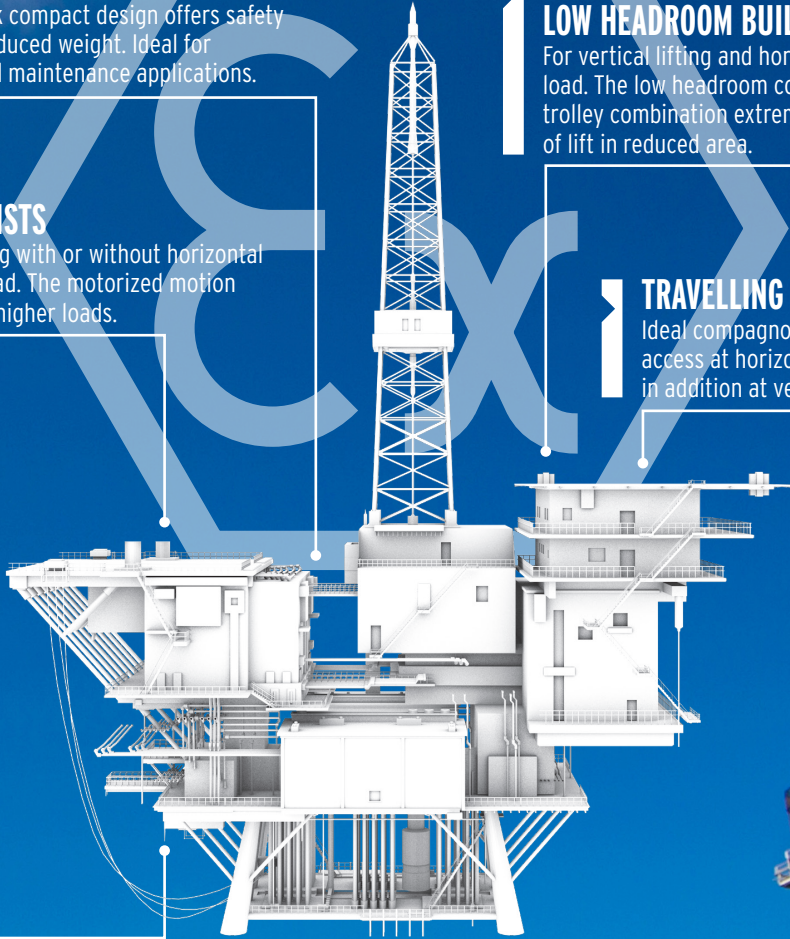
For vertical lifting with or without horizontal motion of the load. The motorized motion is dedicated for higher loads.

## TRAVELLING TROLLEYS

Ideal compaign of electric hoist to access at horizontal motion of the load in addition at vertical movement.

## JIB CRANES

Used in addition to lifting units (electric or manual hoist) to support horizontal or rotation motion of the load.



# ELECTRIC HOIST

S.W.L  
**25/5**  
TONNES  
Job No : V40921  
Tag No : BB 0813  
CE : 2008

VERLINDE

# EUROBLOC VT<sup>®</sup>

## Electric wire rope hoists for loads from 800 to 80,000 kg

VERLINDE has always been among the first companies to introduce new ideas for the innovation of hoisting units with a hook (more than 70 patents taken out in France and around the world). The new EUROBLOC VT electric wire rope hoist has been created within this avant-garde spirit, as it accounts for a total of 13 patents on its own.

The EUROBLOC VT electric wire rope hoist is, as of now, the only hoisting unit with wire rope and a hook that offers, in its standard version:

- > The pulley block presents only a slight lateral shift during hoisting motion (virtually vertical lifting) (fig. 1).
- > Hook approach, "C" dimensions and the "F" approach distance of the hoist are the smallest available on the market (fig. 2).
- > The possibility to adjust speed while travelling (fig. 3).

### ► Technical characteristics

- > 2-speed hoisting motor (ratio 1-6) with bimetal sensors 60 % operating factor.
- > Maintenance-free DC disc brake.
- > 4-position limit switch (up, down, high position deceleration, reversed phase protection).
- > Load limiter.
- > 3 to 20 m/min variable speed travelling motor.
- > Electrical cabinet with low voltage transformer and switchgear Safety on/off.
- > Standard 380V/400V/415V/50Hz, 440V/460V/60Hz power supply.
- > IP55 / Class F protection system for motors.
- > Tropicalised for travelling and lifting.
- > Cable guide for difficult environments.
- > Time counter.

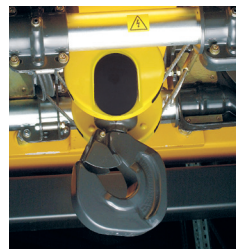
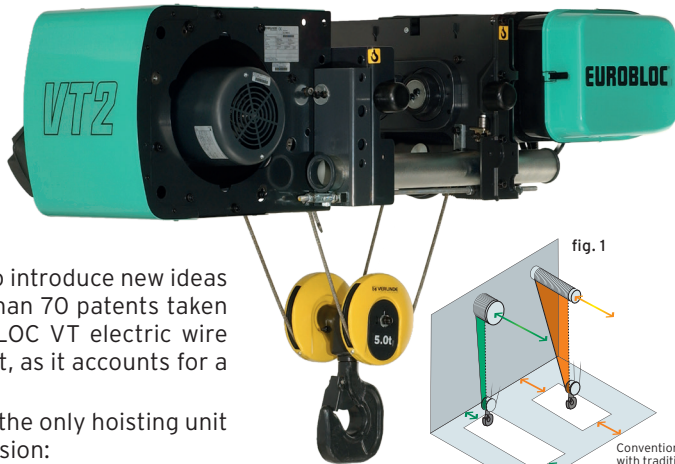


fig. 2

### ► Options

- > Offshore paint coating.
- > Stainless steel lifting cable.
- > Special lifting hooks (ramshok, electrically insulated, RSN,...).
- > Rain cover.
- > Special electric cubicle (Stainless steel, IP66,...).
- > Heating systems (pendant,...).
- > IP66 motors.
- > Zone 22.

fig. 3



# EUROBLOC VT<sup>®</sup> Ex

## Electric sparkproof wire rope hoist for loads from 800 to 80 000 kg

### ► Technical characteristics

- > Protection rating : Ex II 3G c IIB T3 (Zone 2) as standard.
- > 2-speed hoisting motor with thermistors.
- > Hoist upper and lower limit switches operated by the rope guide.
- > Electro-mechanical overload protector.
- > Hoist electrics with main contactor and 48 V contactor control.
- > Motor protection IP66 according to EN 60 529.
- > Push button box with an emergency "stop" button.
- > Ergonomical hook with safety latch.
- > Galvanised wire rope.
- > Operation hours meter.



### ► Options

- > Same list as Eurobloc VT above.
- > Offshore paint coating.



# EUROCHAIN VR<sup>®</sup>

## Electric chain hoist for loads from 63 to 5,000 kg

Completely innovative, top of the range design, its fluid, contemporary and elegant lines confirm the power of this electric chain hoist. This new generation of EUROCHAIN VR hoists is the result of innovative technology ; new materials, new operating concepts, can adapt to each specific need.



### + power

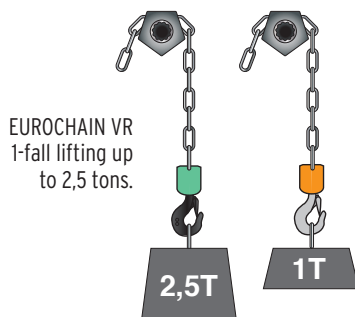
#### Lifting capacities.

The load spectra for each hoist body have been revised upwards to optimise your lifting equipment investment.

#### 1-fall lifting up to 2.5 tons in FEM 2m.

This product advantage offers you the possibility of working at greater lifting heights, with the following benefits :

- > Reduction in chain bag dimensions, with a more compact lifting unit.
- > Reduction in maintenance costs (fewer lifting chains to be replaced if necessary during maintenance operations).
- > Elimination of lifting hook tip-over risks.
- > High lifting speeds preserved.



EUROCHAIN VR  
1-fall lifting up  
to 2,5 tons.

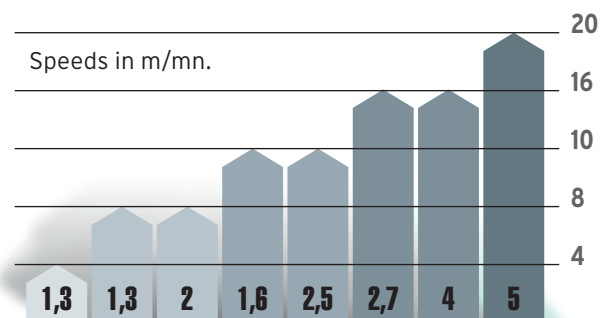
On other hoists  
brands the  
maximum  
capacity is  
often limited to  
1 ton with 1 fall.

### + speed

#### Wide range of speeds.

25% quicker than the previous generation: 4/1,3; 8/1,3; 8/2; 10/1,6; 10/2,5; 16/2,7; 16/4; 20/5.

The lifting speed ranges have been considerably expanded to enable them to better meet your production constraints and increase productivity, performance, safety and usage on a daily basis.



#### FEM user group up to 3m.

For intensive use of your hoist, up to 300 start-ups per hour !

#### Long lifetime.

Lifetime of hoist components is extremely high in order to optimize your return on investment.



## + safety

### Clutch concept.

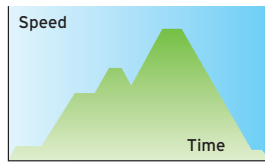
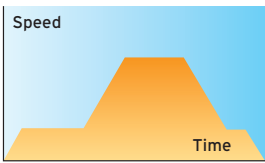
The clutch position in the reducer ensures the load is held by the brake regardless of the machine's daily operating conditions.

### Low voltage or direct voltage command.

Enables perfect operation for your usage context (operation in industrial environment, stage lifting, etc.).

### Variable speed electric travelling.

The variable speed travelling combined with the high lifting speeds enables flexible and quick working in complete safety for the operator.



## + savings

Maintenance operations are now simpler, quicker and more economical:

- > Easy access to the brake setting.
- > Easy access to the clutch setting.
- > Easy access to the fuse.
- > Access (workspace) and easy removal of the electric boards by removable plug.

### Technical characteristics

- > New lifting nut concept with intermediate teeth for perfect chain drive.
- > Torque limiter.
- > Disk lifting brake.
- > 3 m standard lifting height.
- > Dual-speed lifting.
- > Safety electric end of run for up and down position.
- > IP55 lifting and travelling motor.
- > Thermal protection on lifting motor.
- > Tropic-proof protection (lifting and steering - 90 to 95 %).
- > Galvanised lifting chain.
- > Disconnectable command cable.
- > 2-buttons unit on fixed hoist or push steering carriage.
- > 4-buttons unit on hoist coupled to electric steering carriage.
- > Emergency stop button.
- > 400V/3Ph/50Hz or 415V/3Ph/50 Hz or 460V/3 Ph/60 Hz power supply.



### Options

- > Offshore paint coating.
- > Stainless steel lifting chain.
- > Stainless steel lifting hook.

# EUROCHAIN®

Electric sparkproof chain hoist from 125 to 10,000 kg

### Technical characteristics

- > Hook suspended model or with push or electric trolley.
- > Protection rating as standard : Zone 1, EEx de IIB T4 in compliance with EN/DIN.
- > Standard height of lift 3 m.
- > 2 hoist speeds (standard XCC : 2 speeds).
- > 2 trolley motor speeds (standard XCC : 2 speeds).
- > IP55-speed hoisting motors with thermistors.
- > Galvanised load chain.
- > Stainless steel hand chain if chain travel trolley.
- > Pendant push button box + control cable 2.5 m.
- > 4 buttons pendant for hoist attached to electric trolley.



# MANUAL HOISTS ZHR





# ZHR<sup>®</sup>

## Hand chain block for loads from 500 to 20,000 kg

### ► Technical characteristics

- › Overload limiter is standard equipment.
- › Four-bearing lifting mechanism.
- › Offshore high-resistance RAL 7021 powder coating, 220 µ thick.
- › Machined chain sprocket and gears provide smoother, more efficient operation.
- › 3 meters standard lift. Hand chain is 0.5 meters less than lift chain. Non-standard lifts available.
- › High strength grade 80 alloy steel load chain with corrosion-resistant galvanized (complies with standard EN 818, safety factor 4). Made in Europe.
- › Galvanized hand chain made in Europe.
- › ZHR's compact design offers safety together with reduced weight. Ideal for construction and maintenance applications.
- › Steel casing solidly protects chain sprocket, gearcase and handwheel cover.
- › Upper and lower alloy steel ISO hooks with safety latches.
- › Weston-type load brakes.
- › Delivered with CE certificate, and hook and chain certificate.

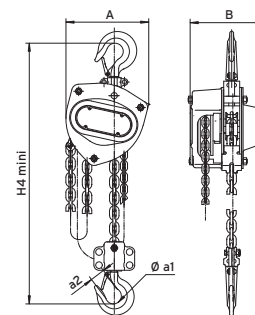
### ► Options

A wide range of options is available for this hand chain block :

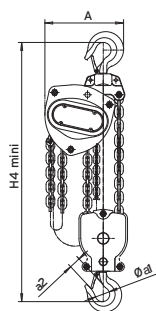
- › ZHR with stainless steel load and hand chain.
- › Chain bag.
- › ZHR HPN with normal headroom.
- › ZHR HPR with short headroom trolley.



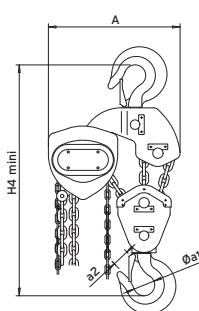
Load	A	B	Øa1	a2	H4 min	Chain	Number of falls	Pulling force (kg)	Net weight (kg)
500 kg	148	132	35	23	345	5 x 15	1	35	11
1000 kg	172	151	40	27	376	6 x 18	1	25	12,5
1500 kg	196	173	45	33	442	7,1 x 21	1	35	17,8
2000 kg	210	175	50	35	470	8 x 24	1	35	19,5
3000 kg	255	205	55	39	548	10 x 28	1	40	35
5000 kg	280	189	65	45	688	9 x 27	2	36	41,3
7500 kg	433	189	47	67	688	9 x 27	3	38	62
10000 kg	463	189	75	57	765	9 x 27	4	38	78,5
12500 kg	430	220	75	54	835	9 x 27	5	38,4	110
16000 kg	718	200	95	71	900	9 x 27	6	38,7	135
20000 kg	840	200	106	85	950	9 x 27	8	38,7	192



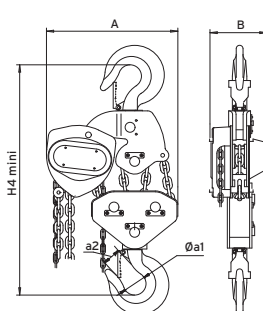
ZHR 1 fall



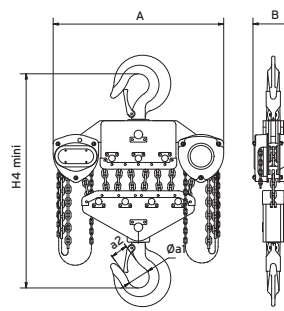
ZHR 2 fall



ZHR 3 fall



ZHR 4 fall



ZHR 5, 6 and 8 fall



# ZHR-HPR<sup>®</sup>

Low headroom version  
manual travelling trolley  
hoist for loads from  
**500 to 20,000 kg**

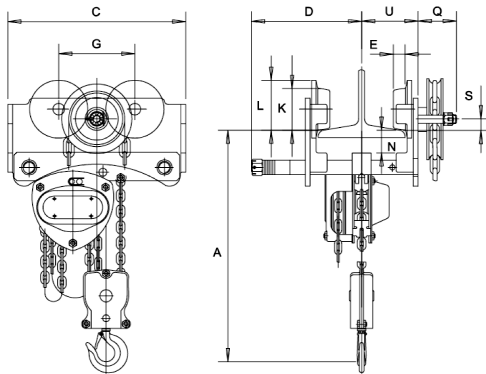
Especially designed for use in areas where optimal use of short headroom is essential.

## ► Technical characteristics

- › Characteristics of the hand chain block : see ZHR page 9.
- › Controlled via handwheel and chain.
- › Easy to adjust for different flange widths up to 305 mm.
- › Trolley body made of high-resistance steel.
- › Side plates finished with RAL 7021 dark gray coating, 70 µ thick.
- › Steel rollers machined for smooth movement.
- › Rollers compatible with all types of I and H beams.
- › Wheel ball bearings are moisture-tight and maintenance free.
- › Galvanized hand chain.
- › Fall-prevention brackets and rubber stops.
- › Loads up to 20 tons.
- › Serial number inscribed on chassis.

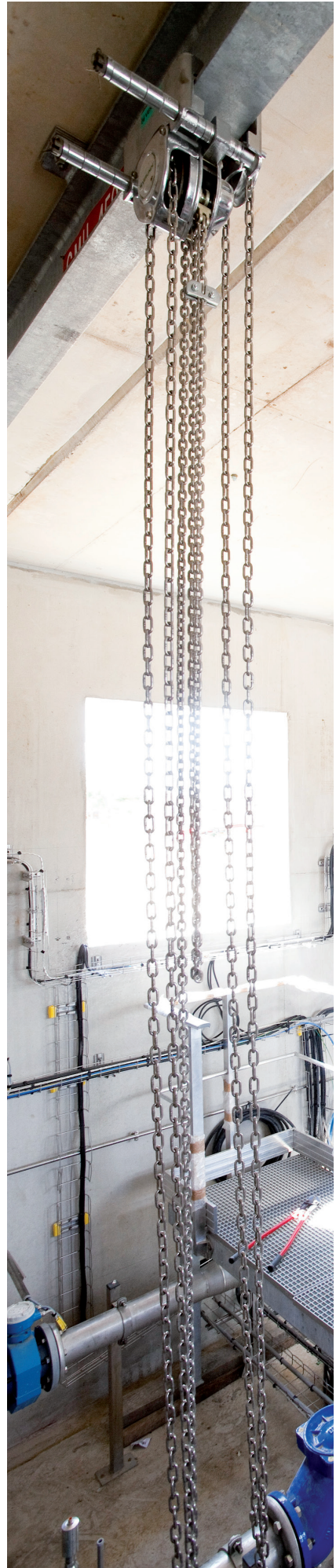
## ► Options

- › Ex version with ATEX Marking.
- › Stainless steel lift and hand chains.
- › Chain bag.



Dimensions in mm

Load	Dimensions in mm											Num. of falls	Range	Weight without chain (kg)	Additional weight per m of lifting height (kg)	Pulling force (N)
	A	C	D	E	G	K	L	N	Q	S	U					
<b>500 kg</b>	299	258	119	17	100	55	67	29	57	9	95	1	50-203	19	1.6	240
<b>1000 kg</b>	331	292	150	18	125	68	82	37	57	18	125	1	64-305	37	2.1	265
<b>1500 kg</b>	383	319	156	20	130	74	88	38	57	18	125	1	74-305	37	2.1	265
<b>2000 kg</b>	410	358	159	22	135	80	94	38	57	18	129	1	88-305	50	2.4	335
<b>3000 kg</b>	461	434	167	25	158	100	115	40	59	8	132	1	100-305	65	2.5	372
<b>5000 kg</b>	655	448	177	34	170	108	126	42	59	25	138	2	114-305	91	4.8	360
<b>7500 kg</b>	750	624	186	39	190	130	153	45	66	20	146	3	124-305	135	7.2	365
<b>10000 kg</b>	755	636	189	40	200	134	155	45	66	35	148	4	124-305	153	9.6	380
<b>12500 kg</b>	830	668	191	43	200	150	170	50	66	26	150	5	124-305	242	12	420
<b>16000 kg</b>	930	791	222	50	272	166	196	50	77	8	193	2 x 3	136-305	278	14.4	400
<b>20000 kg</b>	950	891	229	52	272	172	198	58	77	5	193	2 x 4	136-305	353	19.2	440



# MANUAL HOISTS ZHV



# ZHV<sup>®</sup>

## Manual chain hoist for loads from 500 to 50,000 kg

### ► Technical characteristics

- › Epoxy Painting (min. 50 µm).
- › Machined chain sprocket and gears provide smoother, more efficient operation.
- › High strength alloy steel load chain with corrosion-resistant galvanized
- › Galvanized hand chain.
- › ZHV's compact design offers safety together with reduced weight. Ideal for construction and maintenance applications.
- › Steel casing solidly protects chain sprocket, gearcase and handwheel cover.
- › Upper and lower alloy steel ISO hooks with safety latches.
- › Delivered with CE certificate.

### ► Options available (according models)

- › ZHV with EX ATEX marking (bronze coated hook, polyester paint,...)
- › ZHV full stainless steel (hoist frame, chain, hook,...)
- › ZHV with Aluminum Ceramic Coat (min. 30 µm).
- › ZHV with Aluminum Ceramic Coat (min. 30 µm) and additional polyester paint.
- › ZHV with Offshore paint coating.
- › Locking device on trolley, activated by hand chain.
- › ZHV with normal headroom trolley (HPN).
- › ZHV with short headroom trolley (HPR).
- › ZHV with trolley for curved beam (HPNB).
- › ZHV with short headroom trolley (HPR).

Large range of surface treatment may be apply. See page 17.



◀ ZHV with Aluminum Ceramic Coat



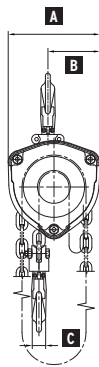
◀ Hand chain block EX ATEX with coat of polyester paint and brass hook



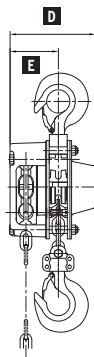
◀ ZHV full stainless steel (500 & 1,000 kg)



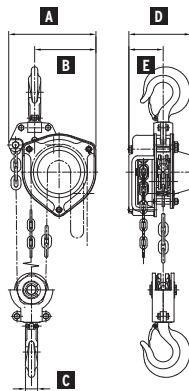
Load (kg)	Dimensions in mm					Standard height of lift (m)	Length of hand chain (m)	Lifting chain size (mm)	Number of falls	Weight (kg)
	A	B	C	D	E					
500	150	85	22	140	79	2,5	2,0	Ø 6,3 x P 19,0	1	10,5
1000	150	85	22	140	79	2,5	2,0	Ø 6,3 x P 19,0	1	10,5
1000	163	92,5	22	149,5	84,75	2,5	2,0	Ø 7,1 x P 20,2	1	12
1500	163	92,5	24	149,5	84,8	2,5	2,0	Ø 7,1 x P 20,2	1	13
1500	193	110,5	28	162,3	90,25	2,5	2,0	Ø 7,9 x P 23,0	1	18
2000	193	110,5	28	162,3	90,3	3,0	2,5	Ø 7,9 x P 23,0	1	20
2000	224	130	33	175	94,5	3,0	2,5	Ø 9,5 x P 28,6	1	25,5
3000	228,5	160,5	32	162,3	90,25	3,0	2,5	Ø 7,9 x P 23,0	2	28,5
5000	291,5	190,5	45	162,3	90,25	3,0	3,0	Ø 7,9 x P 23,0	3	44
8000	423	285	68	191	102	3,5	3,5	Ø 11,1 x P 33,3	3	91
10000	423	285	68	191	102	3,5	3,5	Ø 11,1 x P 33,3	3	91
15000	465	293	92,4	251	149	3,5	3,5	Ø 11,1 x P 33,3	5	181
20000	798	399	92,4	310	155	3,5	3,5	Ø 11,1 x P 33,3	6	235
30000	834	417	110	437	218,5	3,5	3,5	Ø 11,1 x P 33,3	10	492
40000	862	431	130	554	277	3,5	3,5	Ø 11,1 x P 33,3	14	800
50000	936	468	156	727	363,5	3,5	3,5	Ø 11,1 x P 33,3	18	1880



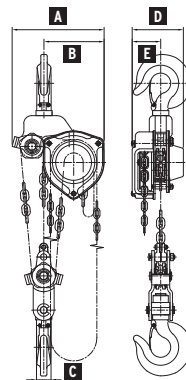
ZHV 1 fall



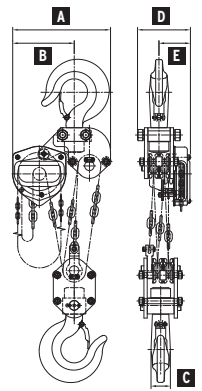
ZHV 2 fall



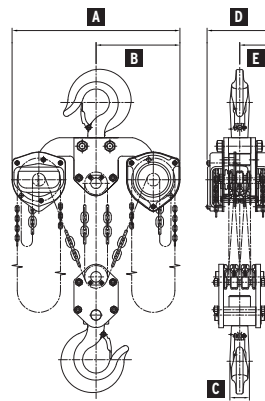
ZHV 3 fall



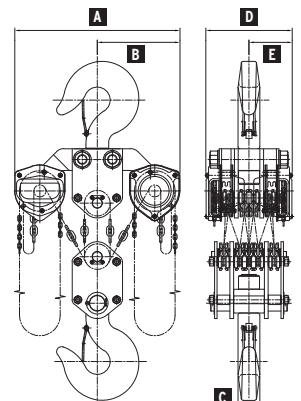
ZHV 5 fall



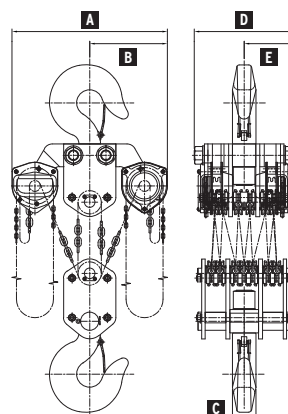
ZHV 6 fall



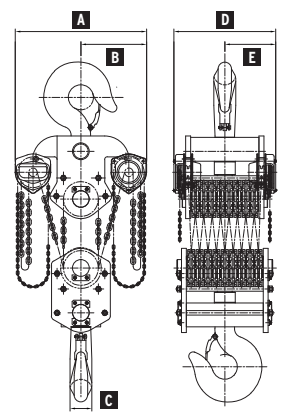
ZHV 10 fall



ZHV 14 fall



ZHV 18 fall



# ZHV-HPR<sup>®</sup>

## Hand chain block with low headroom trolley construction for loads from 500 to 50,000 kg

### ► Technical characteristics

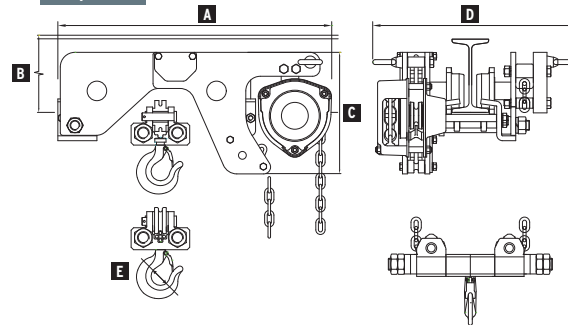
- Epoxy Painting (min. 50 µm).
- Machined chain sprocket and gears provide smoother, more efficient operation.
- High strength alloy steel load chain with corrosion-resistant galvanized.
- Galvanized hand chain.
- ZHV's compact design offers safety together with reduced weight. Ideal for construction and maintenance applications.
- Steel casing solidly protects chain sprocket, gearcase and handwheel cover.
- Upper and lower alloy steel ISO hooks with safety latches.
- Delivered with CE certificate.

### ► Options

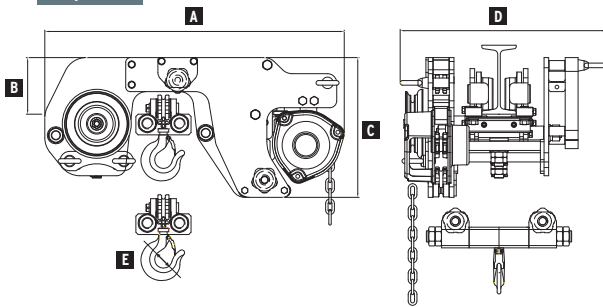
- See options of ZHV-CHZ.



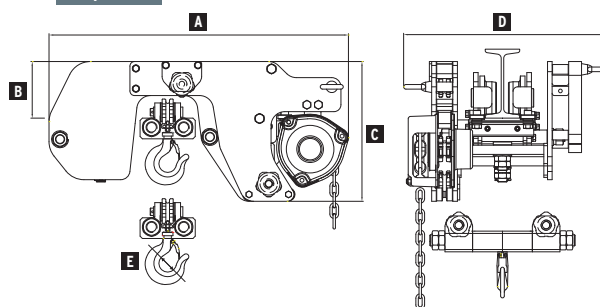
Layout 1



Layout 2



Layout 3



Load (kg)	Dimensions in mm				Standard height of lift (m)	Length of hand chain (m)	Lifting chain size (mm)	Number of falls	Flange width (mm)	Min radius (mm)	Weight (kg)	
	A	B	C	D								
<b>Layout 1 : Hand chain block ZHR with short headroom push trolley (HPR)</b>												
1000	561	150	-	418	38	2,5	2,0	Ø 6,3 x P19,0	2	75 ~ 125	2900	61
2000	560,5	150	285	372,5	41	3,0	2,5	Ø 7,1 x P20,2	2	75 ~ 150	3200	64
<b>Layout 2 : Hand chain block ZHR with short headroom geared trolley (HPR)</b>												
1000	652	150	304	448	38	2,5	2,0	Ø 6,3 x P 19,0	2	75 ~ 125	2900	59
2000	560,5	150	285	463	41	3,0	2,5	Ø 7,1 x P 20,2	2	75 ~ 150	3200	63
3000	691	300	370	568	58	3,0	2,5	Ø 7,9 x P 23,0	2	100 ~ 150	3500	150
5000	794	300	407	644	64	3,0	3,0	Ø 11,1 x P 33,3	2	125 ~ 175	-	195
10000	995	350	643	640	86	3,5	3,5	Ø 11,1 x P 33,3	4	150 ~ 190	-	460
20000	1460	285	660	1100	-	3,5	3,5	Ø 11,1 x P 33,3	6	150 ~ 190	-	850
30000	1650	600	655	894	130	3,5	3,5	Ø 11,1 x P 33,3	10	175 ~ 190	-	1320
<b>Layout : Hand chain block ZHR with short headroom geared trolley for curved beam (HPNB)</b>												
1000	652	123	304	448	-	2,5	2,0	Ø 6,3 x P 19,0	2	75 ~ 125	1000	98
<b>Layout 3 : Hand chain block ZHR with short headroom push trolley for curved beam (HPNB)</b>												
1000	652	123	304	448	-	2,5	2,0	Ø 6,3 x P 19,0	2	75 ~ 125	1000	93



# TROLLEYS CHZ





# CHZ<sup>®</sup>

## Manual travel trolley for loads from 1,000 to 100,000 kg

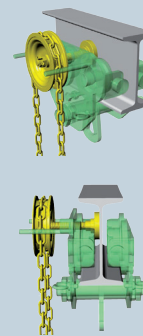


### ► Technical characteristics

- > Can be used with any type of overhead hooked lifting device.
- > Operated by directly pushing the load (CHZD models) or using a handwheel and chain (CHZDD models).
- > Epoxy Painting (min. 50 µm).
- > Easily adjustable to fit beams.
- > Steel rollers machined for smooth movement.
- > Trolley body made of high-resistance steel.

- > Rollers compatible with all sorts of I and H beams.
- > Wheel ball bearings are moisture-tight and maintenance free.
- > Galvanized hand chain on CHZDD type.
- > Loads up to 100 tons.
- > Delivered with CE certificate.

Locking device on trolley



### ► Options

- > EX ATEX CHV trolley (bronze coated load wheels, polyester paint,...).
- > CHV trolley full stainless steel (frame, load wheels,...).
- > CHV trolley with Aluminum Ceramic Coat (min. 30 µm).
- > CHV trolley with Aluminum Ceramic Coat (min. 30 µm) and additional polyester paint.
- > CHV trolley Offshore paint.

- > Locking device on trolley.
- > CHV normal headroom trolley (HPN).
- > CHV short headroom trolley (HPR).
- > ZHV with trolley for curved beam (HPNB)
- > CHV short headroom trolley for curved beam (HPNB).

### Surface treatment definition

• **Aluminum Ceramic Coat.** This treatment consist into apply a thin layer of Aluminum Ceramic Coat (3 µm) on the components in order to allow an increase in the hardness of the order of 30GPa (pressure of 3 tons per mm<sup>2</sup>).

The advantages of this ceramic surface treatment are :

- > Reduction of the friction between the parts between them for a increase the service life of parts.
- > A reduction of oxidation and corrosion.
- > A surface hardness.
- > Electrical isolation.

• **Aluminum Ceramic Coat and additional polyester paint.** This double treatment consists of depositing a layer of Pigmented polyester on the treatment ceramic in order to offer enhanced corrosion protection (Navy atmosphere).





# EUROSTYLE®

## Range of manual and motorized jib cranes

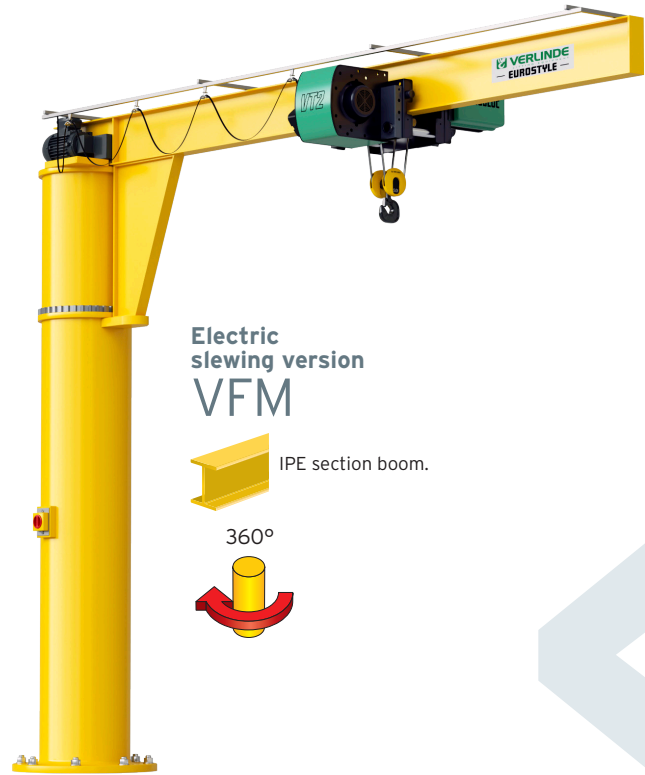
Handling facilities made-to-measure for each workstation is indispensable and enables production halts caused by using the overhead travelling crane in service in the workshop to be avoided.

VERLINDE offers you a wide choice of rugged, eyepleasing designs and high performance jib cranes equipped with the full range of EUROCHAIN VR, EUROBLOC VT hoists. Whether wall-mounted or on mast posts, jib cranes are rational and low-cost handling facilities the installation of which does not require any modifications to the building.

They are compact, whilst at the same time enabling loads to be moved in every direction.

They can be used in every sector of industry : foundry, boilerplating, mechanical engineering, papermaking, etc.

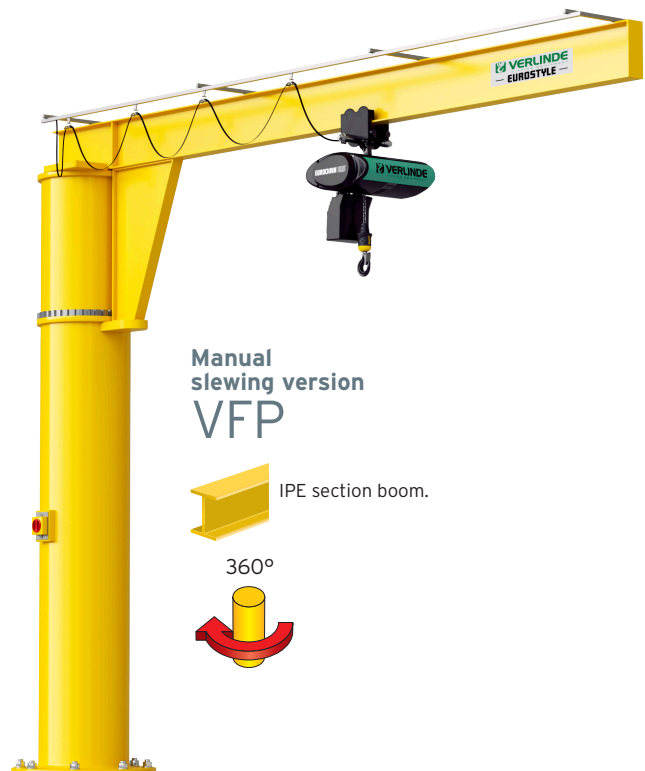
They are the ideal companion for overhead travelling cranes covering the workshop as a whole. They increase the autonomy and efficiency of every workstation.



Electric slewing version  
**VFM**

IPE section boom.

360°



Manual slewing version  
**VFP**

IPE section boom.

360°

