

# Electric Chain Hoists

CLN & CLW Series



Podemcrane has through experience in wire rope hoists and west European partner's know-how developed a range of electric chain hoists.

Available in the following:

- CLN series hoist, from 125 to 2000 kg
- CLW series hoist, from 1000 to 5000 kg

Both series are available with eye suspension, push or, electric power travel trolleys.

## Advantages:

- Safety
- High quality
- Extremely compact size giving the best possible closed headroom
- High reliability

## Technical features for both series:

### Lifting motor and hoist brake

- Cylindrical three phase motor: single or dual speed
- Cass F insulation
- FEM class: 2 m
- Electro magnetic brake which allows for quick and safe stopping
- Minimum IP54 protection CLN and IP55 for CLW series

### Reducer (Gear-box)

- Totally enclosed and lubricated with a permanent high performance grease (CLN)
- The gears are manufactured from high tensile steel and are hardened and heat treated for smooth operation and maximum life span
- A temperature range: -20 °C to +50 °C

### Overload by clutch

The slipping clutch is a safety device which limits both the up and down stroke of the chain hoist, by limiting a possible overload. It is constructed from asbestos free braking plates held under pressure by cup springs and is adjustable. Note: this is only a safety feature and should not be used as a working limit. The clutch is setting at 15% respect the nominal capacity of hoist for CLN series and 25% for heavy CLW series.

### Electrical control panel

High quality components mounted on a steel backing plate, a transformer for low voltage (24 V) guarantee up to 240 operations per hour.

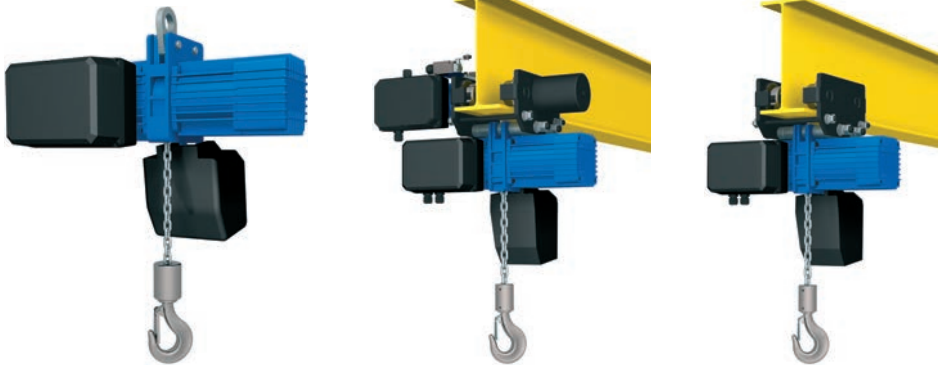
The panel are fully compatible and interchangeable with a full range of CLN hoist models.

### Guide chain

The hoists central body and patented chain guide are machined from one single casting, this allows precise positioning of the load chain into the load sprocket.

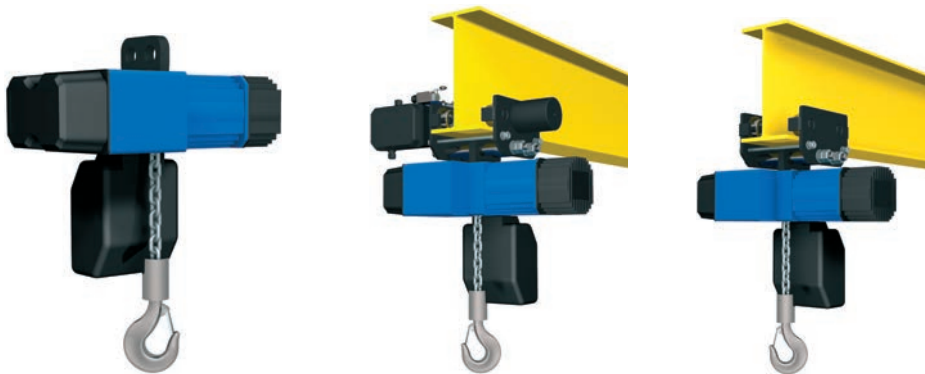
# Electric Chain Hoists

## CLN & CLW Series



### CLN Series

The CLN-series range of electric chain hoists can be distinguished by the following; its extremely compact size giving the best possible closed headroom, its exceptional quality and its high levels of reliability. All are achieved by having the highest quality manufacturing standards, continuous improvements and quality control. All mechanical parts are examined under stringent conditions and rigorously tested, including long term performance testing to ensure the highest quality, efficiency and extended product life.



### CLW Series

The heavy CLW series hoists are designed for a production environment with a high duty cycle and proven reliability. The hoist body is without plastic components.

The three phase motor is produced with single or double windings for single or dual speeds. Standard operating voltage's 230/400 V, 3 phase, 50 Hz, other voltages available on request. Hoist motor protected to IP 55 against ingress of dust and water, upgradeable to IP 65 upon request. The hoists 3000/4000/5000 have a standard fan assisted motor for better cooling and increased duty cycles.

CLW series hoists are supplied with upper and lower electric limit switches to prevent hook over travel and prevent the use the clutch as an ultimate limit and extending the life of the clutch and gearbox They are manufactured with two micro switches that operate on the auxiliary circuit of the hoist contactors cutting out operating contactor in the direction of lift. The hoists are also equipped with a slipping clutch that is set to 125% of the working load limit to prevent accidental overloading.

Due to the high quality of electrical contactors used and the 400 V AC brake Podem guarantee the WR series hoists for more than 240 operations per hour.

Hoist Features		
Features	CLN series	CLW series
Capacity	125 kg to 2000 kg	1000 kg to 5000 kg
FEM group	2 m	2 m
Electric motor	Cylindrical three phase motor	Cylindrical three phase motor with fan
Operating voltage	400 V (230 V upon request)	400 V
Hoist Brake	230DCV spring-activated el. magnetic	400 V AC electro magnetic
Number of starts per hour	240	240
Duty cycle	40% for single speed hoists 10+30% for dual speed hoists	55% for single speed hoists 15+40% for dual speed hoists
IP Protection of the el.motor	IP54	IP55 (IP65*)
IP protection of control panel	IP65	IP65
Overload limiter	Slipping clutch	Slipping clutch
End switch	Upper and lower electric limit switches*	Upper and lower electric limit switches
Chain type	Calibrated chain EN818-7	Calibrated chain EN818-7
Hook block	1/1 DIN15401, 2/1 DIN15401	1/1 DIN15401, 2/1 DIN15401

\* On request

# CLN Series

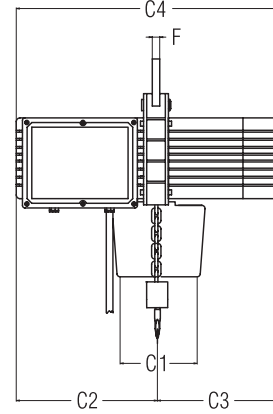
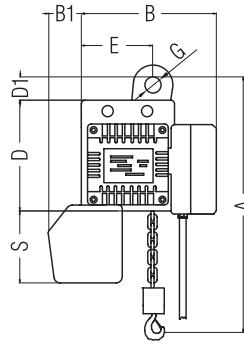
Capacity from 125 to 2000 kg

## CLN-E

Eye Suspension



0.1/0.2/0.5/1/2 CLN...E

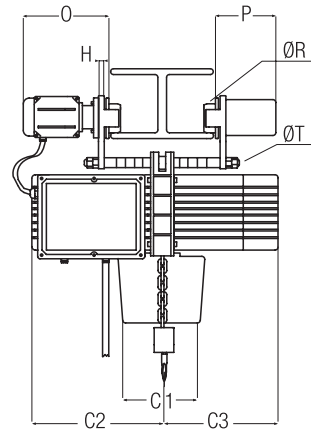
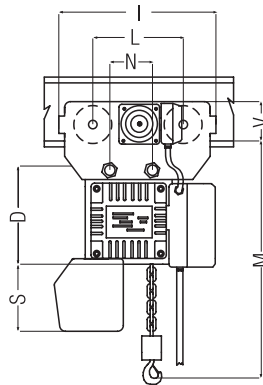


## CLN-N

Electric Trolley



0.1/0.2/0.5/1/2 CLN...N

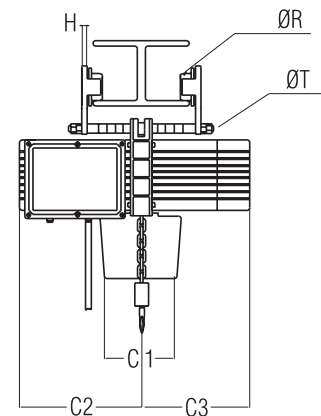
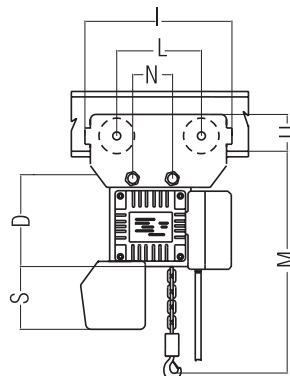


## CLN-P

Push Trolley



0.1/0.2/0.5/1/2 CLN...P





# CLW Series

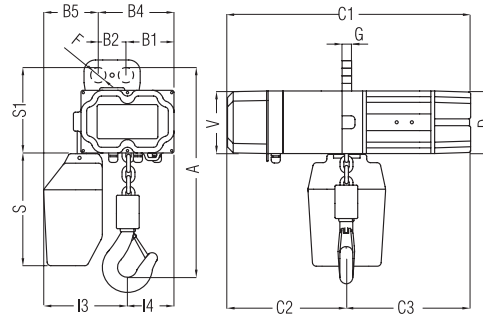
Capacity from 1000 to 5000 kg

## CLW-E

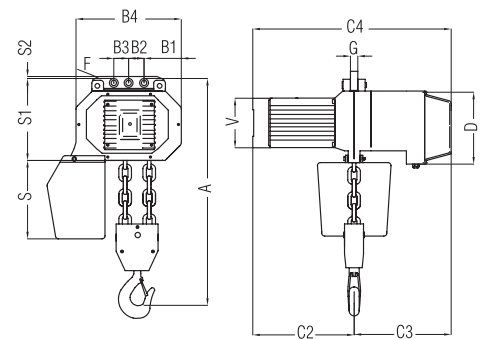
Eye Suspension



2 CLW...E



3.2/4/5 CLW...E

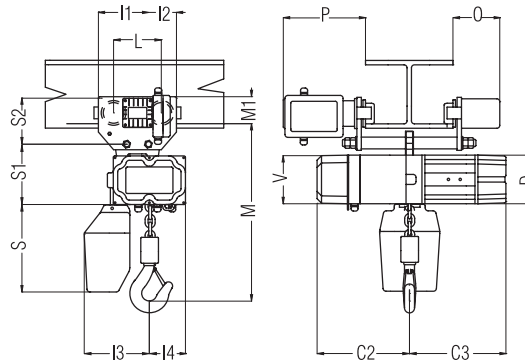


## CLW-N

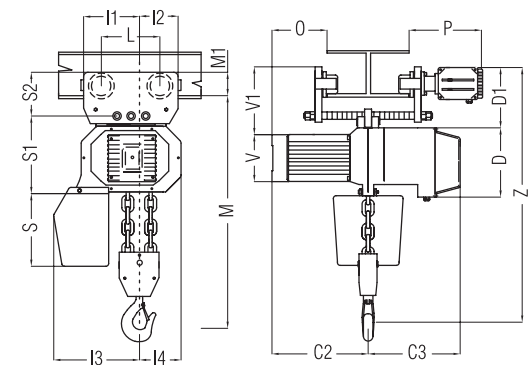
Electric Trolley



2 CLW...N



3.2/4/5 CLW...N

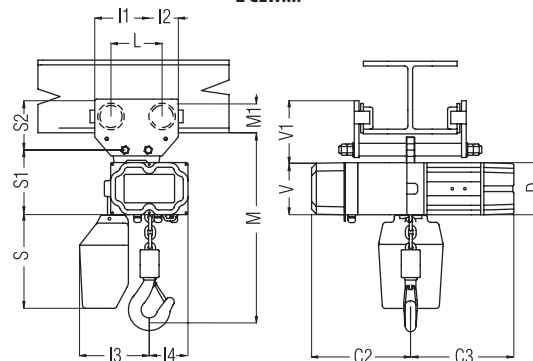


## CLW-P

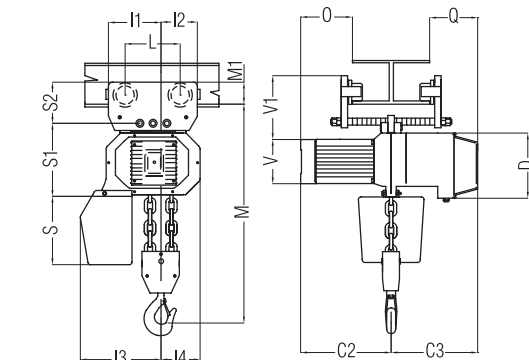
Push Trolley



2 CLW...P



3.2/4/5 CLW...P





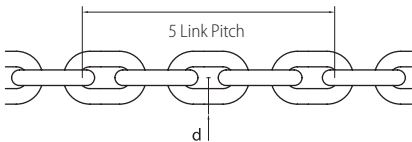
t	Series	Light Heavy Duty	m	m/min	Reeving	Micro (Double) Single	N (Normal) L (Low Headroom) E (Eye Bolt) P (Push Trolley)	Add. Code	m/min	No Special Execution	Standard (-20 +40 °C) F (Cold) T (Tropical) X (Chemical)
0,1	CL	N	H3	3	1/1	M	N	20	-	-	-
0,2		W	H4	4	2/1	S	L	21	7	-	X
0,5			H5	5			E	42	14		
1			...	8			P	44	14/4		
1,6			H15	12				52			
2								53			
3,2											
4											
5											

## Chain Hoist CL Series Code Breakdown

<b>Example</b>	1	CL	N	H6	V4	1/1	M	N	52	14	-	-
<b>Capacity</b>												
<b>Series</b>												
<b>Hoist Size</b>												
<b>Standard Height of Lift H</b>												
<b>Lifting Speed V</b>												
<b>Chain Falls</b>												
<b>Lifting Speed Type (Micro Speed 1/4 of Main Speed)</b>												
<b>Hoist Type</b>												
<b>Electro Equipment</b>												
<b>Trolley Speed</b>												
<b>Second Brake</b>												
<b>Special Climate Execution</b>												

## Chain

Chain EN818-7, DAT				
Nominal Diameter (mm)	Pitch (mm)	5 Link Pitch (mm)		Tolerance Limit (d)
		Standard	Limit	
4	12	60	62	3,6
5	15	75	77,5	4,5
7	22	110	113,5	6,3
10	28	140	135	9
11	31	155	149,5	9,9



## Trolley Models

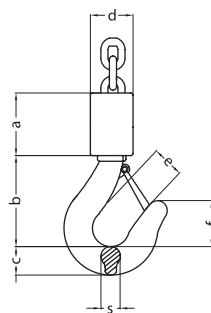
Monorail Trolley Range								
Hoist Capacity (kg)	Trolley Model	Type		Beams				
		N	P	Size b (mm)	IPN	IPE	HEA	HEB
125	P 250	No	Yes	42÷66	✓	✓	✗	✗
250	P 250	No	Yes	42÷66 *	✓	✓	✗	✗
500	P 500, ET 500	Yes	Yes	73÷160 *	✓	✓	✗	✗
1000	ET 1000, P1000	Yes	Yes	73÷160 *	✓	✓	✗	✗
1500	ET 2000, P2000	Yes	Yes	100÷200 *	✓	✓	✓	✓
2000	ET 2000, P2000	Yes	Yes	100÷200 *	✓	✓	✓	✓
2500	ET 3000	Yes	No	100÷200 *	✓	✓	✓	✓
3200	ET 3000	Yes	No	100÷200 *	✓	✓	✓	✓
4000	ET 5000	Yes	No	200÷300	✓	✓	✓	✓
5000	ET 5000	Yes	No	200÷300	✓	✓	✓	✓

## Hook Models

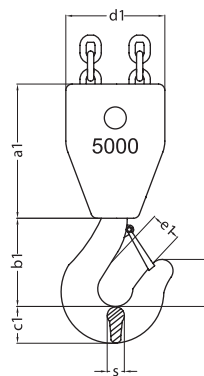
Hook Block 1/1 DIN 15401									
Hook №	Capacity (kg)	a	b	c	d	e	f	g	s
012	125	62	81	19	50	24	32	30	19
012	250	62	81	19	50	24	32	30	19
025	500	62	88	22	50	28	41	36	20
05	1000	72	110	29	50	34	45	43	29
1	2000	88	135	38	60	40	68	50	38
1	2500	114	135	38	78	40	68	50	38

Hook Block 2/1 DIN 15401									
Hook №	Capacity (kg)	a	b	c	d	e	f	g	s
1	1600	194	135	38	142	40	68	50	38
1	2000	194	135	38	142	40	68	50	38
1	3200	213	145	38	152	40	73	50	38
1,6	4000	213	145	45	152	45	73	56	45
1,6	5000	213	145	45	152	45	73	56	45

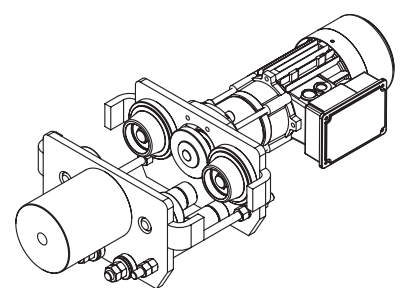
Hook Block 1/1 DIN 15401



Hook Block 2/1 DIN 15401



Monorail Trolley



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