Yale®

Hoisting Equipment

Catalogue 14

Yale Industrial
Products GmbH

Yale®

At a glance

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Versatile, all round tools for moving, positioning and constraining loads.

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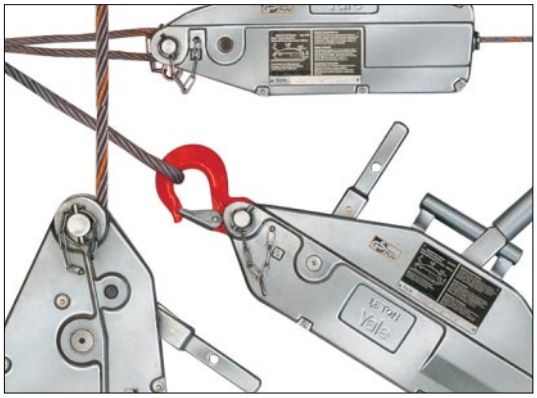
Hand chain hoist

Simple to operate hoisting equipment - suitable for loads between 500 - 20.000 kg



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Manual cable pullers

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Electric and pneumatic chain hoists

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They can be commissioned directly in almost any position making them strong helpers for lifting and pulling loads.

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Ratchet lever hoists

Ratchet lever hoists for lifting, pulling, lashing and tensioning

Yale Hand Lever Hoists are versatile, portable units for pulling, tensioning, lashing and lifting of loads. The operation of the Hand Lever hoists is easy and safe.

Light weight, robust malleable cast iron model, free chaining, slip clutch, stamped steel- or aluminium housing, low operating effort - in the Yale product range you will always find an optimal hoist for every type of operation.

The brake system of all Yale hand lever hoists are based on the original Yale patent of the British engineer Thomas A. Weston dating back to 1875. All parts of the load brake are made of high quality materials and are protected against corrosion. The engineering principle behind the **load brake** finds its rightful place in all hand lever hoists world wide. Yale exclusively uses **asbestos free friction discs** in all their hoists. The surface protected **zinc plated alloy steel chains** fulfil all the requirements of national and international standards and regulations. In accordance with safety regulations, the **chain stops** are designed to withstand double the rated capacity to ensure the chain does not unintentionally run free.

The **drop forged load and suspension hooks** that yield under overload instead of breaking, are made of high tensile steel and are standard for all Yale hoists. The hooks are fitted with robust safety latches and rotate 360°. Every Yale ratchet lever hoist is factory tested with overload.

The units are supplied with a **test certificate** showing the serial-No. Operating instructions which contain an EC declaration of conformity are also attached to each unit.

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Ratchet lever hoists

Pul-Lift C/D85

Pul-Lift model D85 with link chain

Capacities 750 - 10.000 kg

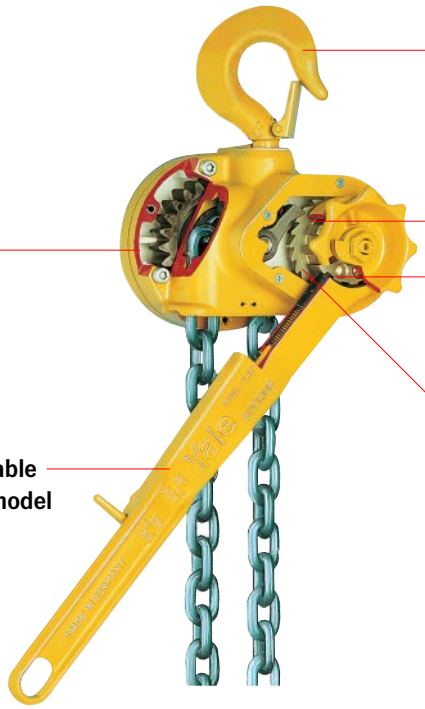
Pul-Lift model C85 with roller chain

Capacities 750 - 10.000 kg

Enclosed housing with housing cover, hand lever and lower block made from **high tensile white malleable cast iron** for an overall rugged construction. The **graphite cast iron** load sheave for the link chain has precision machined chain pockets for accurate fit and durability of the load chain. The **roller chain sprocket** is made from heat treated **chromium-molybdenum steel** with precision machined teeth to ensure smooth chain movement.

Optional

- All models can be optionally equipped with an overload prevention device in the form of a **slip clutch,** which is factory preset to approx. 25 % ± 15 % overload.
- **Free chaining** device to quickly attach the load or to pull the chain through the hoist in both directions.



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Ratchet lever hoists

Pul-Lift D95

Pul-Lift model D95 with link chain

Capacities 1.500 - 3.000 kg

The D 95 has taken its technical features from the proven D85 but excels in its **cast malleable iron design, low tare** weight and an extremely small measurement between suspension and load hooks. It has an automatically acting load pressure brake which works on the self-locking principal. For example, when used to secure loads, an unintentional loosening of the brake is prevented when the load vibrates. The **standard free chaining device** to quickly attach the load or to pull the chain through the hoist in both directions. The body and hand lever are made from impact resistant malleable cast iron. The short ergonomic hand lever is fitted with a rubber grip.

Optional

- All models can be optionally equipped with an overload prevention device in the form of a **slip clutch** which is factory preset to approx. 25 % ±15 % overload.
- Hoist with sling chain (see pictures)

Application

The virtually unlimited application possibilities in Industry, work shops, mining, construction and shipyards, confirm the reliability and stability in every area of application.
The ideal unit for moving or positioning of heavy machinery or for securing of heavy transport loads. Simplifies the laying of pipes in ducts or ditches.

Overload prevention device optional

Pul-Lift D95
with sling chain

Load brake

All the load brakes used in Yale lever hoists are based on the Yale patents by the engineer Thomas A. Weston from 1875.
The engineering principle behind the load brake is still used, world wide, in every hand hoist.
In the load brake principle the axial brake pressure is generated by the load itself and is, therefore, proportional to the size of the load.
The load is held secure in any position.
To lower the load the difference between the brake moment and load moment has to be overcome.

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Ratchet lever hoists

AL

Ratchet lever hoist model AL

Capacities 750 - 3.000 kg

The **enclosed housing**, hand lever and hand wheel are made from **high quality aluminium.** Due to precise needle bearings the hoist can be operated with little effort. Its low tare weight is an advantage. when the hoist has to be frequently carried over longer distances to different assignments. This universal ratchet hoist should not be missing in any service truck. The **chain guide is cast into the body** to ensure faultless chain movement.
The standard free chaining device serves to quickly attach the load or to pull the chain through the hoist in both directions.

Yale hoists and trolleys are not designed for passenger elevation applications and must not be used for this purpose!

Modell AL
Pulling application

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Ratchet lever hoists PT

Ratchet lever hoist model PT

Capacities 800 - 6.300 kg

The new generation of ratchet lever hoists model PT features improved techniques and ergonomical styling. The advantages of the predecessor range have been maintained and further optimized.
The proven stamped steel housing provides extremely low weight without limiting the reliability and sturdiness of the unit.
The **free chaining device is standard,** low handle pull in spite of increased capacities as well as small hook-to-hook dimensions are further outstanding features.

Optional

- All models can be optionally equipped with an overload prevention device in the form of a **slip clutch** which is factory preset to approx. 25 % ±15 % overload.

Slip clutch

Slip clutches fitted to Yale hoists reliably ensure that hoists are not subject to overloads during operation. When a pre-defined/adjustable overload value is reached the component parts of the slip clutch, in accordance with engineering principle of the slip clutch, slide against each other and prevent a further overloading of the hoist.
When the slip clutch operates the load is still held secure by the independent load brake. Thus, the slip clutch provides double safety: firstly it protects the operator from applying a mis-judged prohibited overload and secondly it increases the working life of the hoist.

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Ratchet lever hoists

UNO

Ratchet lever hoist model UNO

Capacities 750 - 6.000 kg

A hand lever hoist with a robust stamped steel construction and compact design. It comes equipped with a hard chromium plated hand wheel and a sturdy bottom block with encapsulated bolt connections to prevent shearing and loosening of nuts. The Chain guide is integrated into the housing to eliminate fouling and jamming of the chain on the load sheave. Due to optimized gearing a minimum effort is required to operate the short hand lever. **The standard free chaining device** serves to quickly attach the load or to pull the chain through the hoist in both directions. The low tare weight and a smooth free-chaining device make the UNO a handy, universal tool.

Free chaining

Yale lever hoists are either fitted with the free chaining feature as standard or it can be retrofitted in the field. With the free chaining feature the load chain can be pulled freely through the hoist (in both lifting and lowering directions). The advantage is that with high lifting heights the load chain can be quickly pulled through the hoist to achieve the required chain length and pretension.
All free chaining devices fitted to Yale hoists operate automatically, this means that when a load is applied or exceeds a defined value the screw and disc type brake operates and holds the load safely.

Ratchet lever hoists

Yale*handy*

Ratchet lever hoist Yale*handy*

Capacities 250 - 500 kg

This hoist is the smallest, lightest Yale ratchet lever hoist for professional applications. Due to the multitude of application possibilities this new ratchet lever hoist is an indispensable tool e.g. in industry, trade and service. The extreme low tare weight and the very compact design make the hoist easy to use even in confined working conditions. The enclosed design protects the internal parts against the ingress of dust, foreign particles and corrosion. The short and ergonomic hand lever makes the hoist easy to operate. The standard free chaining device serves to quickly attach the load or to pull the chain through the hoist in both directions. The drop forged suspension and load hooks that yield under overload instead of breaking are made from non-ageing, high tensile alloy steel. The hooks are fitted with robust safety latches and are free to rotate 360°. All parts of the disc type load brake are manufactured from high quality materials and are corrosion protected.

Smallest hook dimensions:
240 mm (250 kg capacity)

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Ratchet lever hoists

Technical data





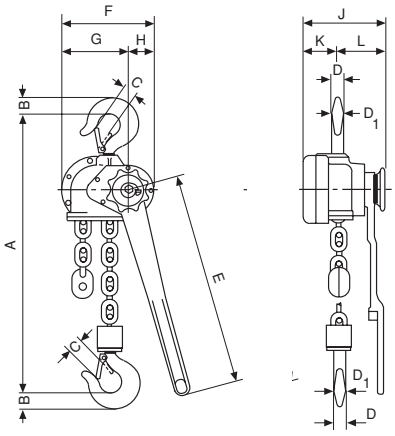

Model	Capacity kg	Number of chain falls	Chain dimensions d x p in mm	Lift with one full lever turn mm	Handle pull at WLL daN	Weight with std. lift kg
Pul-Lift D85	750	1	6 x 18,5	111	38	8,2
	1500	1	9 x 27	45	31	16,3
	3000	1	11 x 31	33	40	19,6
	6000	2	11 x 31	17	42	32,9
	10000	3	11 x 31	11	37	60
Pul-Lift C85	750	1	5/8“ x 3/8“	115	38	8,7
	1500	1	1“ x 1/2“	45	31	17
	3000	1	1 1/4“ x 5/8“	36	40	22,2
	6000	2	1 1/4“ x 5/8“	18	44	38
	10000	3	1 1/4“ x 5/8“	12	44	67
Pul-Lift D95	1500	1	6,2 x 18,5	35	27	9,9
	3000	1	9 x 27,2	38	49	16,5
AL	750	1	6,3 x 19,1	30	16	6,4
	1000	1	6,3 x 19,1	30	22	6,6
	1500	1	7,1 x 21,2	16	18	10
	3000	1	10 x 30,2	14	28	18
PT	800	1	5,6 x 17,1	24	26	5,5
	1600	1	7,1 x 21,2	23	30	9,6
	3200	1	9 x 27,2	16	38	16
	6300	2	9 x 27,2	8	39	31
UNO	750	1	6 x 18	20	14	7
	1500	1	8 x 24	22	22	11
	3000	1	10 x 30	17	34	21
	6000	2	10 x 30	9	35	30
Yale*handy*	250	1	4 x 12	80	25	2,2
	500	1	4 x 12	40	25	2,8

Dimensions ratchet lever hoists

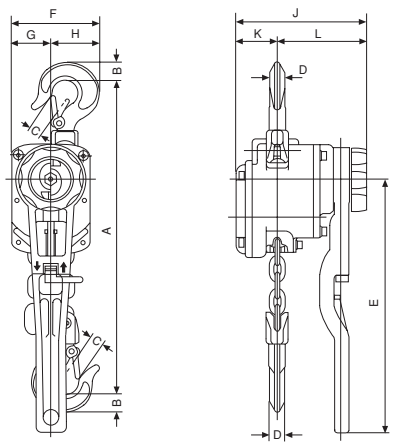
Model	Capacity in kg	$A_{min.}$ mm	B mm	C mm	D mm	D_1 mm	E mm	F mm	G mm	H mm	J mm	K mm	L mm
Pul-Lift D85	750	322	21	27	15	17	443	112	56	56	142	39	103
	1500	389	27	30	20	23	443	189	134	55	171	72	99
	3000	403	35	34	25	25	570	197	142	55	179	76	103
	6000	532	48	46	40	40	570	197	142	55	218	76	142
	10000	805	61	54	40	45	570	305	163	142	218	76	142
Pul-Lift C85	750	322	21	27	15	17	443	112	56	56	142	39	103
	1500	389	27	30	20	23	443	189	134	55	171	72	99
	3000	403	35	34	25	25	570	197	142	55	179	76	103
	6000	560	48	46	40	40	570	197	142	55	218	76	142
	10000	785	61	54	40	45	570	305	163	142	218	76	142
Pul-Lift D95	1500	314	23	23	18	18	315	156	112	44	141	49,5	92
	3000	376	30	25	22	22	443	189	134	55	177	72	105
AL	750	315	20	22	14	–	300	106	47	59	154	49	105
	1000	325	23	23	16	–	300	109	47	62	154	49	105
	1500	380	27	26	20	–	300	138	60	78	177	74	103
	3000	455	36	33	24	–	400	168	75	93	212	94	118
PT	800	290	21	24	13	–	235	120	38	82	142	52	90
	1600	330	27	31	20	–	370	138	41	97	163	65	98
	3200	430	36	35	24	–	370	177	53	124	185	83	102
	6300	580	53	46	43	–	3750	259	85	174	185	83	102
UNO	750	295	21	24	13	–	235	111	33	78	142	55	87
	1500	380	29	32	20	–	350	140	49	91	166	66	100
	3000	420	37	35	24	–	350	174	60	114	184	79	105
	6000	570	54	44	43	–	350	239	77	162	184	79	105
Yale*handy*	250	240	20	21	14	–	160	72	33	39	98	21	77
	500	282	17	24	12	–	160	104	38	66	116	36	80

Pul-Lift C/D85
750 - 10.000 kg

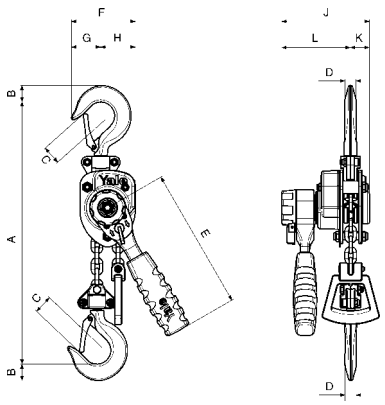
Pul-Lift D95
1.500 - 3.000 kg



Model AL
750 - 3.000 kg

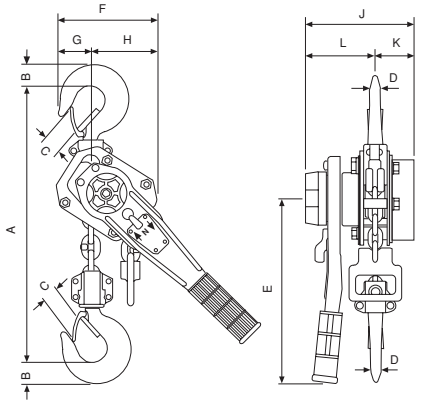


Model Yale*handy*
250 - 500 kg



Model PT
800 - 6.300 kg

Model UNO
750 - 6.000 kg




20 TE
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Yale®

Hand chain hoists

Hand chain hoists for lifting, lowering, tensioning and pulling

1877 Linus Yale produced the first spur geared hand chain hoist with incorporated Weston screw-and-disc type load break. This principle is still used in nearly all manual hoists.
Our product range starting from our top model Yale*lift 360* to our well established VS and its successer VS*plus* offers you the optimal solution for your application problem!
All parts of the load brake are made of high quality materials and are protected against corrosion.
Yale exclusively uses **asbestos free friction discs** in all their hoists. The surface protected **zinc plated alloy steel chains** fulfil all the requirements of national and international standards and regulations. In accordance with safety regulations, the **chain stops** are designed to withstand double the rated capacity to ensure the chain does not unintentionally run free.
The **drop forged load and suspension hooks** that yield under overload instead of breaking, are made of high tensile steel and are standard for all Yale hoists. The hooks are fitted with robust safety latches and rotate 360°.
Every Yale ratchet lever hoist is factory tested with overload. The units are supplied with a test certificate showing the serial-No.
Operating instructions which contain an EC declaration of conformity are also attached to each unit.

Yale®

Hand chain hoist

VS*plus*

Model VS*plus* with optional chain container

Hand chain hoist model VS*plus*

Capacities 500 - 5.000 kg

The new Yale hand chain hoist VS*plus* is through further technical development the successor of our proven VS model. We set new standards with the extremely robust all-steel construction and high quality bearings for drive pinion, load chain sheave and gearbox.
A maximum of corrosion prevention and maintenance friendliness are special features of this model.

Features

- 4 strong bolts between the side plates and the reinforced housing covers ensure increased stability.
- Precision machined guide rollers ensure smooth running of the load chain
- Encapsulated, life-time lubricated bearings ensure a long service life.
- Brake system protected against the ingress of dust, foreign particles and corrosion.

Optional

- Chain container
- Corrosion and acid resistant load and hand chains
- For units above 1.000 kg work load overload protection available

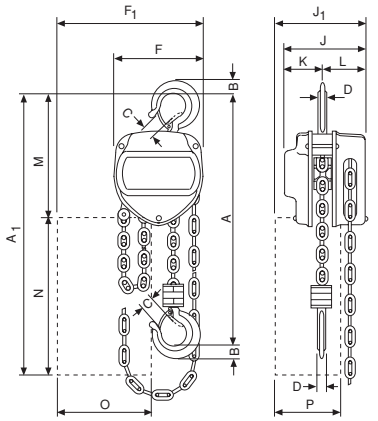
Model	Capacity kg	Number of chain falls	Chain dimensions d x p in mm	Hand chain overhaul for 1 m lift m	Lift per 1 m hand chain overhaul mm	Pull on hand chain at WLL daN	Net weight at std. lift kg
VS*plus* 0,5/1	500	1	6 x 18	28	35	26	9
VS*plus* 1/1	1000	1	6 x 18	42	23	36	11
VS*plus* 2/1	2000	1	8 x 24	54	18	54	18
VS*plus* 2/2	2000	2	6 x 18	84	12	37	15
VS*plus* 3/1	3000	1	10 x 30	83	12	52	28
VS*plus* 3/2	3000	2	8 x 24	108	9	41	25
VS*plus* 5/2	5000	2	10 x 30	165	6	44	39
VS 8/4	8000	4	10 x 30	329	3	38	69
VS 10/4	10000	4	10 x 30	329	3	46	69
VS 15/8	15000	8	10 x 30	659	1	2 x 35	157
VS 20/8	20000	8	10 x 30	659	1	2 x 46	157

Dimensions VS*plus*/VS in mm

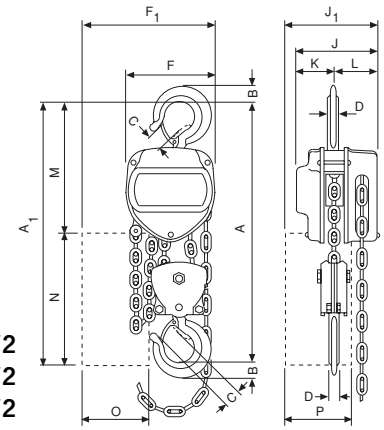
Dimension	VS*plus* 0,5/1	VS*plus* 1/1	VS*plus* 2/1	VS*plus* 2/2	VS*plus* 3/1	VS*plus* 3/2	VS*plus* 5/2	VS 8/4	VS 10/4	VS 15/8	VS 20/8
A_{min}	320	370	450	530	530	620	620	735	735	1000	1000
A_1	455	484	596	491	644	596	644	–	–	–	–
B	17	15	33	31	38	41	48	60	60	85	85
C	29	30	33	34	38	37	43	52	52	74	74
D	11	15	23	24	27	24	33	40	40	56	56
F	125	147	183	147	215	183	215	360	360	590	590
F_1	213	232	314	232	333	314	333	–	–	–	–
G	–	–	–	–	–	–	–	252	252	–	–
H	–	–	–	–	–	–	–	108	108	108	108
J	115	125	142	125	163	142	163	163	163	198	198
J_1	146	153	174	153	179	174	179	–	–	–	–
K	51	57	68	57	79	68	79	79	79	–	–
L	64	68	74	68	84	74	84	84	84	99	99
M	195	224	266	231	316	286	334	–	–	–	–
N	260	260	310	260	310	310	310	–	–	–	–
O	140	140	200	140	200	200	200	–	–	–	–
P	110	110	130	110	130	130	130	–	–	–	–
Chain m*	12	12	12	12	10	12	10	–	–	–	–

*maximal content of chain container

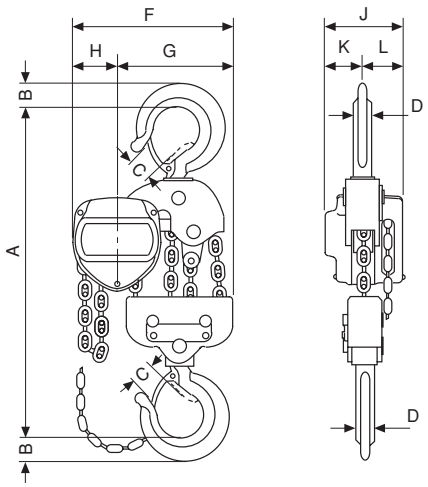
Model VS*plus* 0,5/1
Model VS*plus* 1/1
Model VS*plus* 2/1
Model VS*plus* 3/1



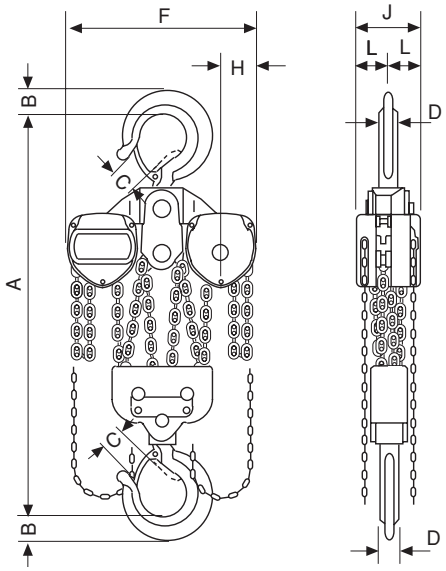
Model VS*plus* 2/2
Model VS*plus* 3/2
Model VS*plus* 5/2



Model VS 8/4
Model VS 10/4



Model VS 15/8
Model VS 20/8



Yale®

Hand chain hoist

Yale*lift* 360

design award winner 2003

Hand chain hoist model Yale*lift* 360

Capacities 500 - 20.000 kg

Areas of operation as well as operator conditions have been improved in trail-blazing fashion, which goes far beyond the classical hand chain hoist.

- The revolutionary 360° rotating hand chain guide allows the operator to work from virtually any position, in confined spaces or above the load. The Yale*lift* can even be operated from the side of the load which also makes it possible to use the hoist for horizontal pulling or tensioning. Due to the additional flexibility, the operator is no longer forced to work in the danger zone near the load.
- The new patented brake system is extremely quiet and guarantees operational safety and improved serviceability due to omission of the vulnerable ratchet pawls.
  All parts are made of high quality materials, additionally galvanised or yellow-chromated to increase corrosion prevention.
- The enclosed robust stamped steel housing protects all internal components even in the toughest conditions.
- The hardened load sheave with four precision machined pockets ensures accurate movement of the load chain.
- The extremely low headroom allows maximum use of the lifting height.

Optional extras

- All models can be equipped with an overload prevention device.
- Chain container, special sizes upon request
- Corrosion and acid resistant load and hand chains

Chain guide

The patented Yale brake system
low noise and reduced wear.

High quality encapsulated ball bearings and sliding bushes
for smooth and effortless operation.

Hand chain hoist *Towerlift ES*

Hand chain hoist model *Towerlift*

Capacities 1.000 - 2.000 kg

The *Towerlift* is the inverted version of the Yale*lift 360* and specifically designed for operation on traversing tower systems.

- The unit is provided with a special chain guide and a totally enclosed housing.
- The basic version of the *Towerlift* offers capacities of 1.000 kg and 2.000 kg.
- Black powder coat finish as standard.

For applications that require additional corrosion prevention e.g. food processing, dairies, sewage treatment etc.
see page 22-23

The robust stamped steel housing
with four stay bolts is resistant to the toughest working conditions.

The precisely machined load sheave
ensures accurate movement of the load chain.

Hand chain hoist *Towerlift ES*

Capacity 1.000 kg

The *Towerlift ES* is a further development of the *Towerlift*. Like the *Towerlift* the model *ES* is provided with a chain reeving system specifically designed for the stage/entertainment industry. This allows operation in standard hoist configuration as well as in inverted mode.

- The hoist comes with revolving chain container which can be fully used in standard hoist configuration as well as in inverted mode.
- Black powder coat finish.

Hand chain hoist

Yale*lift IT*

Illustrated rubber buffers optionally available!

Hand chain hoist with integrated push type trolley model Yale*lift ITP*

Capacities 500 - 5.000 kg

Hand chain hoist with integrated geared type trolley model Yale*lift ITG*

Capacities 500 - 5.000 kg

The combination of the Yale*lift 360* with a low headroom manual trolley provides even more flexibility in the application of the Yale*lift 360*.

- All units of this series up to a capacity of 3.000 kg are provided with single chain fall and the min. headroom (Dim. A) has been further reduced. Ideal for applications with low ceilings and limited headroom.
- The manual trolleys are adjustable to fit a wide range of beam profiles (e.g. INP, IPE, IPB). Depending on the beam flange width an adjustment up to 300 mm can be made easily.
- The trolley wheels are designed for a max. beam profile incline of 14 % (DIN 1025 - part 1), excellent rolling features are guaranteed by pre-lubricated, encapsulated ball bearings.
- Anti-tilt and anti-drop devices are standard.
- A subsequent conversion of a Yale*lift 360* into a Yale*lift IT* with integrated trolley is easily possible at any time.

Optional equipment and accessories are given on pages 22 and 23!

Hand chain hoist

Yale*lift LH*

Hand chain hoist with integrated push type trolley (Low headroom) model Yale*lift LHP*

Capacities 500 - 10.000 kg

Hand chain hoist with integrated geared type trolley (Low headroom) model Yale*lift LHG*

Capacities 500 - 10.000 kg

The hand chain hoist Model Yale*lift LH* with integrated low headroom manual trolley is the consequent further development of the Yale*lift IT.* Wherever an even smaller headroom is essential, the Yale*lift LH* is the ideal choice.

- The specially developed chain reeving system and chain guide allow the bottom block to be pulled laterally to the hoist even further up and almost against the beam flange.
- The integrated design of the innovative Yale*lift LH* uses the same manual trolleys as incorporated in the Yale*lift IT* series.
- All models of the *LH* series up to 3.000 kg capacity are provided with single chain fall.
- The proven and almost stepless adjustment system allows quick and easy assembly of the trolley.
- The low headroom version of the Yale*lift IT* is adjustable to fit a wide range of beam profiles (e.g. INP, IPE, IPB).
- The trolley wheels are designed for a max. beam profile incline of 14 % (DIN 1025 - Part 1).
- Excellent rolling features due to machined steel wheels mounted on pre-lubricated, encapsulated ball bearings.
- Anti-tilt and anti-drop devices as standard.
- The trolleys are offered for two beam ranges. Range A for a flange width up to 180 mm is standard and covers approx. 80 % of all requirements. Conversion to range B for beam width up to 300 mm can be easily accomplished.
- A subsequent conversion of a Yale*lift 360* into a Yale*lift LH* with integrated trolley is also easily possible.

Illustrated rubber buffers and chain container optionally available!

Corrosion resistance *CR* Accessories

Corrosion resistance *CR*

Added lifetime

All models of the Yalelift Vario programme can be supplied with corrosion resistant features which include zinc-plated load chains and stainless steel hand chain as standard.

Illustrated rubber buffers optionally available!

Corrosion protection

Corrosion starts on the surface of components due to reaction of environmental influences. This affects the mechanical properties of the components, e.g. breaking strength and total ultimate elongation. Many components are supplied in black (unmachined), bright (machined) or painted condition. This offers certain protection but after only a short period of time corrosion can begin.

With the application of a protective coating, the development of corrosion can be reduced and delayed, thus extending the service life of the treated components.

Applications for corrosion resistant units and zinc-plated resp. stainless steel load chains

Completely corrosion resistant units with either zinc-plated or stainless steel load chains should be used in all conditions with increased requirements towards corrosion protection.
Typical applications are in food processing (e.g. dairy, abattoir, etc.), chemical industries (e.g. paper, dye industries), farming and sewage treatment.

All units available in corrosion resistant version!

Spark resistant features

Added safety

All models of the Yalelift Vario programme can be provided with the following optional features for additional protection against sparking:

- Load and hand chains from stainless steel
- Units completely corrosion resistant
- Bronze-plated suspension and load hooks
- Solid bronze trolley wheels
- Rubber buffers
- Chain containers

Solid bronze trolley wheels

Bronze-plated suspension and load hooks

Spark resistance

In nearly all industrial areas, and not only in the chemical industry, plants are operated in explosion endangered environments. Because of the great damage an explosion could cause to people and material, stringent legal and technical requirements are imposed, particularly on electrical equipment used in explosion endangered environments.

Applications

Paint factories, paint shops, foundries, on-/offshore, refineries, oil depots, electro-plating, automobile factories, on ships and docks, printers, textile and paper factories, food industries, glass and ceramic industries, wood working industries and hardening shops, etc.

Overload protection

Added control

The overload protection device of the Yalelift Vario programme reliably prevents excessive load take-up of the hoist during operation. When reaching the pre-set overload value, the unit will jam and stop operation in the lifting direction. Lowering of the load is still possible at any time.
The overload protection device provides additional safety with regard to possible false estimation of the load weight and thus increases the lifetime of the hoist. The new design principle allows excellent adjustability and response.

Beam locking device

Added security

Yale trolleys can be optionally provided with beam locking device to secure the unloaded trolley in fixed position on the beam (park position e.g. on ships).

Chain container

Added comfort

The chain containers for the Yalelift Vario programme consist of a robust, powder-coated steel frame with a flexible chain bag made from high tensile Cordura textile fabric. Available in different sizes. Special sizes on request.

Yale®

Hand chain hoist

Yale*lift* *360*

Model	Capacity in kg/ Number of chain falls	Chain dimensions d x p in mm	Hand chain overhaul for 1 m lift m	Pull on hand chain at WLL daN	Net weight at std. lift (3 m) kg
Yale*lift 360*	500/1	5 x 15	30	21	9
	1000/1	6 x 18	49	30	13
	2000/1	8 x 24	71	32	20
	3000/1	10 x 30	87	38	29
	5000/2	10 x 30	174	34	38
	10000/3	10 x 30	261	44	71
	20000/6	10 x 30	522	2 x 44	196
Towerlift	1000/1	6 x 18	49	30	14
	2000/1	8 x 24	71	32	21
Tower*lift ES*	1000/1	6 x 18	49	30	15

Model	Capacity in kg/ Number of chain falls	Beam range	Beam flange width b mm	Beam flange thickness t max. mm	Min. radius curve m	Net weight in kg for 3 m lift			
								with locking device	
						-P	-G	-P	-G
Yale*lift IT*	500/1	A	50 - 180	19	0,90	20	24	26	31
	500/1	B	180 - 300	19	0,90	21	25	27	32
	1000/1	A	50 - 180	19	0,90	27	32	35	40
	1000/1	B	180 - 300	19	0,90	29	33	37	41
	2000/1	A	58 - 180	19	1,15	44	49	52	57
	2000/1	B	180 - 300	19	1,15	46	50	54	58
	3000/1	A	74 - 180	27	1,40	77	82	86	91
	3000/1	B	180 - 300	27	1,40	79	84	88	93
	5000/2	A	98 - 180	27	1,80	125	130	135	140
	5000/2	B	180 - 300	27	1,80	129	134	139	144
Yale*lift LH*	500/1	A	60 - 180	19	0,90	27	31	33	38
	500/1	B	180 - 300	19	0,90	27	32	34	38
	1000/1	A	70 - 180	19	0,90	35	40	43	48
	1000/1	B	180 - 300	19	0,90	36	41	44	49
	2000/1	A	82 - 180	19	1,15	61	65	69	73
	2000/1	B	180 - 300	19	1,15	62	67	70	75
	3000/1	A	100 - 180	19	1,40	107	112	116	121
	3000/1	B	180 - 300	19	1,40	109	114	118	123
	5000/2	A	110 - 180	27	1,80	152	157	162	167
	5000/2	B	180 - 300	27	1,80	156	161	166	171
	10000/3	B	125 - 310	40	1,80	on request			

The Vario programme Yale*lift 360*

Always different. Always with Yale*lift* 360.

Yale*lift 360* for operation from all positions ✓

Towerlift for application on traversing tower systems ✓

Towerlift ES for operation in standard or inverted mode ✓

Yale*lift IT* with integrated manual trolley ✓

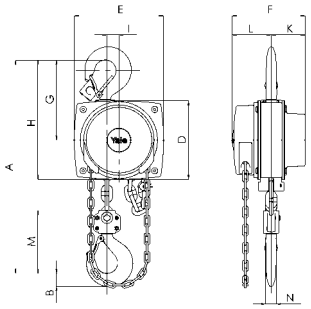
Yale*lift LH* to meet extremely low headroom requirements ✓

Optional:

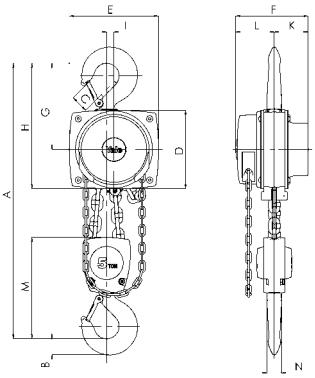
CR corrosion resistant version of all models ✓

Accessories

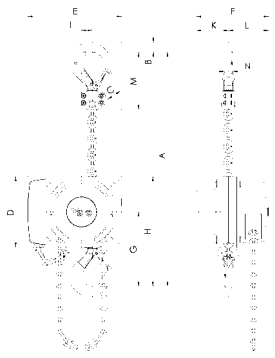
- Spark resistant features ✓
- Overload protection ✓
- Beam locking device ✓
- Chain containers ✓



Yale*lift 360* 0,5 t - 3,0 t

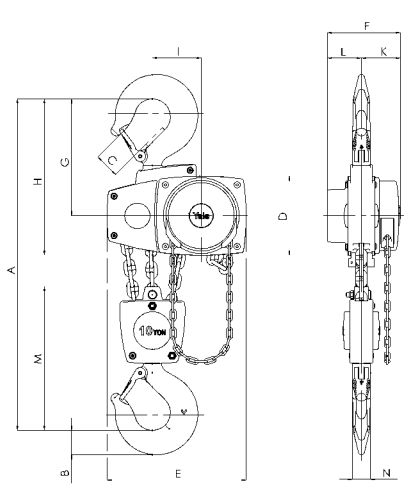


Yale*lift 360* 5,0 t

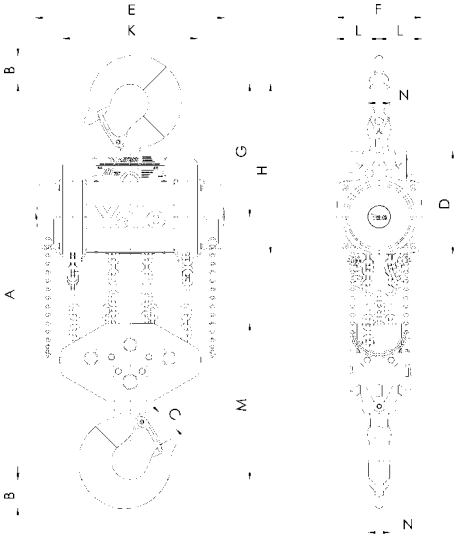


Towerlift

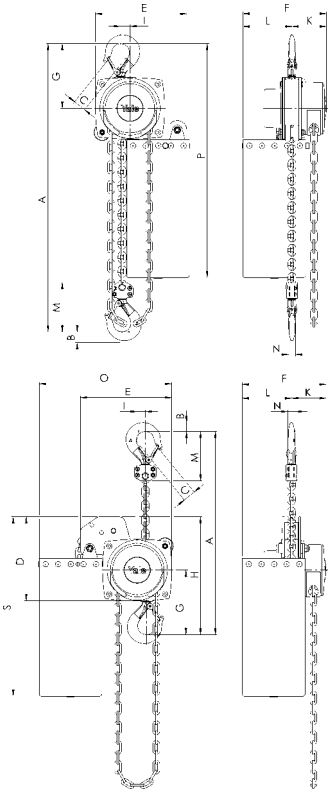
Dimensions in mm	Yale*lift 360* 500	Yale*lift 360* 1000	Yale*lift 360* 2000	Yale*lift 360* 3000	Yale*lift 360* 5000	Yale*lift 360* 10000	Yale*lift 360* 20000	*Towerlift* 1000	*Towerlift* 2000	*Towerlift ES* 1000
$A_{min.}$	300	335	395	520	654	825	980	335	395	335
B	17	22	30	38	45	68	85	22	30	22
C	24	29	35	40	47	68	74	29	35	29
D	133	156	182	220	220	220	303	156	182	213
E	148	175	203	250	250	383	555	205	243	232
F	139	157	183	204	204	204	250	157	183	212
G	139	164	192	225	242	326	391	164	192	164
H	206	242	283	335	352	436	501	242	283	299
I	24	24	31	34	21	136	–	24	31	24
K	61	70	83	95	95	95	396	70	83	124
L	79	87	100	109	109	109	125	87	100	88
M	110	125	156	178	285	401	461	125	156	125
N	14	19	22	30	37	50	56	19	22	19
O	–	–	–	–	–	–	–	–	–	335
P	–	–	–	–	–	–	–	–	–	593
S	–	–	–	–	–	–	–	–	–	455



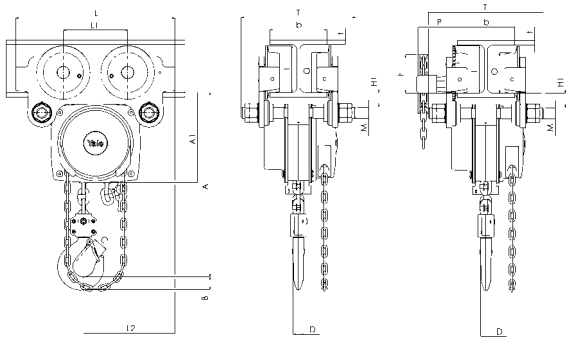
Yale*lift 360* 10,0 t



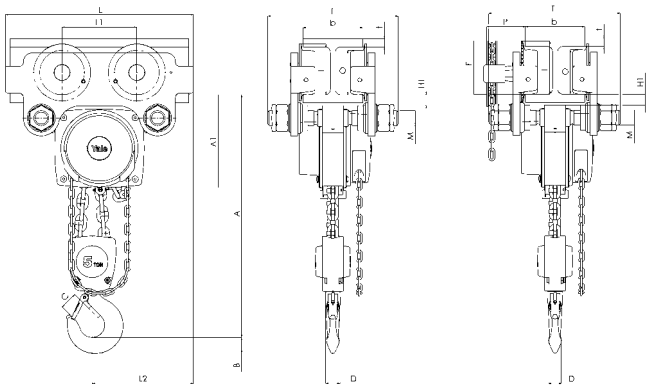
Yale*lift 360* 20,0 t



Towerlift ES

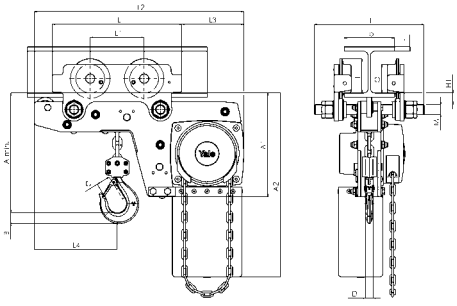


Yale*lift ITP/G* 0,5 t - 3,0 t **Yale*lift ITG***

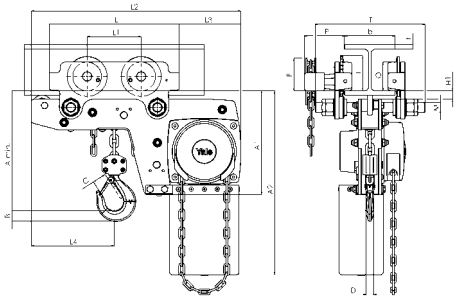


Yale*lift ITP/G* 5,0 t **Yale*lift ITG***

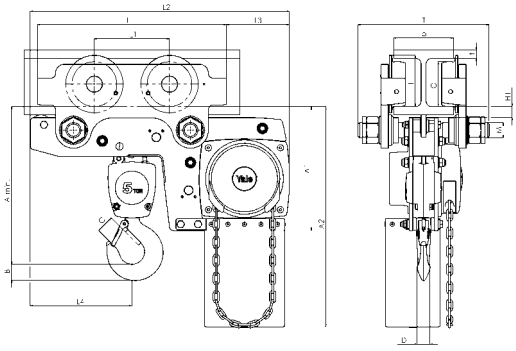
Dimensions in mm	Yale*lift IT* 500	Yale*lift IT* 1000	Yale*lift IT* 2000	Yale*lift IT* 3000	Yale*lift IT* 5000	Yale*lift LH* 500	Yale*lift LH* 1000	Yale*lift LH* 2000	Yale*lift LH* 3000	Yale*lift LH* 5000
$A_{min.}$	245	272	323	382	550	188	211	264	316	425
A_1	158	178	205,5	252	260,5	223	250	289	346	345
A_2	–	–	–	–	–	381	427	511	614	612
B	17	22	30	38	45	17	22	30	38	45
C	24	29	35	40	47	24	29	35	40	47
D	14	19	22	30	37	14	19	22	30	37
F (geared)	92	92	91	107	149,5	92	92	91	107	150
H_1	24,5	24	23,5	32	30,5	24	24	24	32	31
I (pushed)	71,5	71,5	95,5	131	142,5	72	72	96	131	143
I (geared)	76,5	76,5	98	132,5	148,5	77	77	98	133	149
L	270	310	360	445	525	270	310	360	445	525
L_1	130	130	150	180	209	130	130	150	180	209
L_2	159	175	207	256	283	444	488	582	690	720
L_3	–	–	–	–	–	124	135	172	203	175
L_4	–	–	–	–	–	184	201	230	265	283
M	M 18	M 22	M 27	M 30	M 42	M 18	M 22	M 27	M 30	M 42
O	60	60	80	112	125	60	60	80	112	125
P (geared)	108	110	112	112	117	108	110	112	112	117
T (Range A)	280	290	305	320	364	280	290	305	320	364
T (Range B)	400	410	425	440	484	400	410	425	440	484



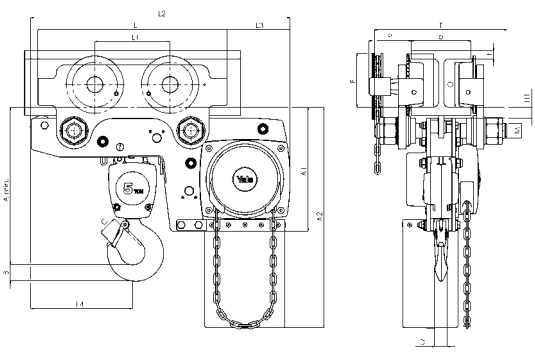
Yale*lift LHP* 0,5 t - 3,0 t



Yale*lift LHG* 0,5 t - 3,0 t



Yale*lift LHP* 5,0 t



Yale*lift LHG* 5,0 t

Yale®

Low headroom trolley hoist

VLR

Yale swivel truck
Low headroom trolley hoist
VLRP with plain trolley drive

Capacities 250 - 6.000 kg

VLRG with geared trolley drive

Capacities 250 - 6.000 kg

The hand chain hoist series VLR with integrated manual trolley drive features extremely low headroom capabilities and provides optimal usage of the available storage space in confined areas. Hand wheel and gear case are positioned outside the reach of the bottom flange, thus allowing the bottom block to be raised almost until the under-side of the beam.
The swivel truck feature of the trolley suspension enables travelling on extremely short radius curves.

Workmanship and features

- All-steel construction with zinc-plated load and hand chains.
- The integrated swivel truck trolley suspension permits application on runways with extremely narrow radii.
- All units are built to order for a predetermined beam dimension. They cannot be adjusted retroactively to other beam sizes.
- Anti-drop devices and anti-tilt devices are standard features.
- The rotating hand chain guide allows side-pull of the trolley hand chain in travel direction.

Optional equipment

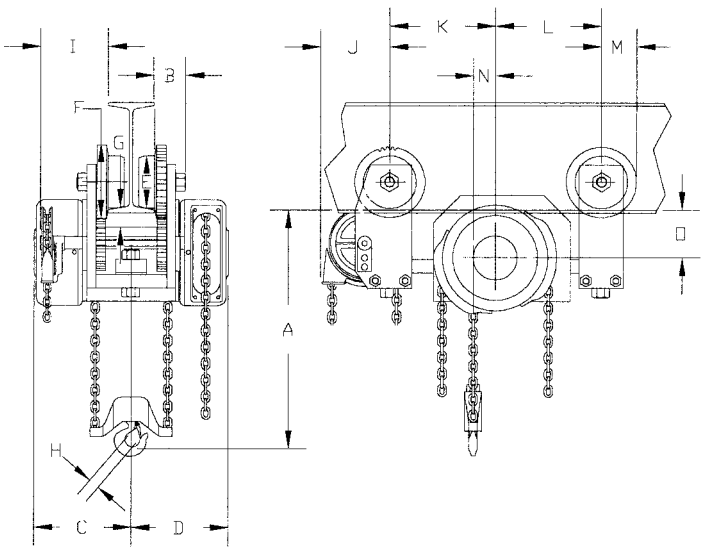
- Rubber buffers available on request
- Chain containers
- Overload prevention device

Technical data

Model	Capacity kg	Beam flange width min. mm	Flange width max. mm	Max. flange thickness mm	Min. radius curve mm	Pull on hand chain at WLL daN	Net weight VLRP kg	Net weight VLRG kg
VLRP/G	250	67	117	16	533	8	58	66
VLRP/G	500	67	117	16	533	16	58	66
VLRP/G	1000	76	117	16	533	32	58	66
VLRP/G	1500	86	140	16	762	26	113	122
VLRP/G	2000	86	140	16	762	35	115	123
VLRP/G	3000	102	178	16	1066	19	158	172
VLRP/G	4000	102	178	16	1066	27	160	175
VLRP/G	5000	117	203	22	1219	33	213	227
VLRP/G	6000	117	203	22	1219	41	213	227

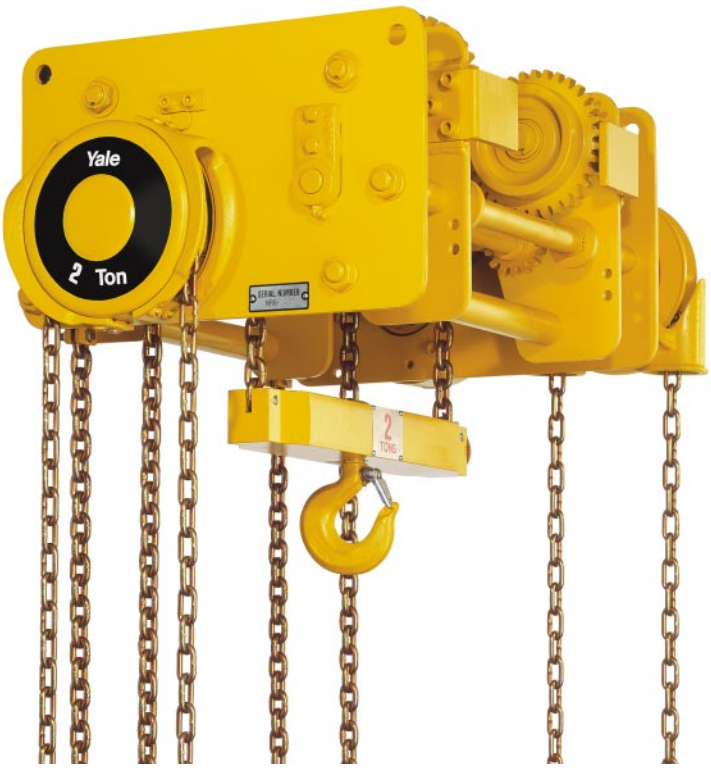
Dimensions

Capacity kg	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	I VLRG mm	J VLRG mm	K mm	L mm	M mm	N mm	O mm
250	157	51	167	167	95	127	22	25	119	95	184	165	64	35	75
500	157	51	167	167	95	127	22	25	119	95	184	165	64	35	75
1000	157	51	167	167	95	127	22	25	119	95	184	165	64	35	75
1500	171	56	220	220	114	152	16	29	182	159	289	194	77	77	48
2000	171	56	220	220	114	152	16	29	182	159	289	194	77	77	48
3000	210	68	250	250	162	203	24	34	206	155	294	195	101	77	87
4000	234	65	250	250	162	203	24	42	206	155	294	195	101	77	87
5000	252	71	257	257	182	229	22	42	216	176	294	223	114	77	98
6000	252	71	257	257	182	229	22	42	216	176	294	223	114	77	98



Beam profile and dimension as well as curve radius must always be specified when ordering.

Compact low headroom trolley hoist VNR



Yale compact low headroom trolley hoist

VNRP with plain trolley drive

Capacities 1.500 - 24.000 kg

VNRG with geared trolley drive

Capacities 1.500 - 24.000 kg

On account of a special chain reeving system and corresponding chain guide the trolley hoist series VNR offers minimum headroom and maximum usage of the available room height.
These hoists have been specially designed for heavy industrial applications.

Workmanship and features

- All-steel construction with zinc-plated load and hand chains.
- All units are built to order for a predetermined beam dimension. They cannot be adjusted retroactively to other beam sizes.
- Anti-drop devices and anti-tilt devices are standard features.

Optional equipment

- Rubber buffers available on request.
- Chain containers

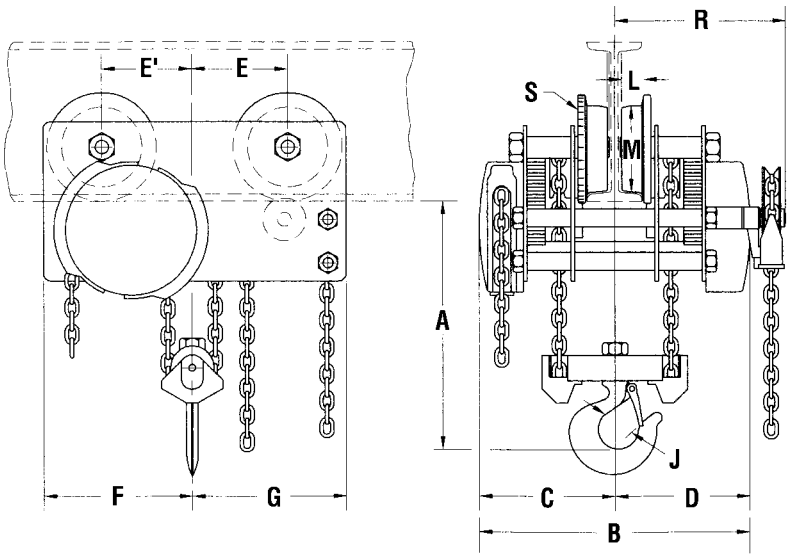
Technical data

Model	Capacity kg	Lowest headroom hook dim. A mm	Min. radius curve mm	Pull on hand chain at WLL daN	Net weight VNRP kg	Net weight VNRG kg
VNRP/G	1500	159	1982	19	95	105
VNRP/G	2000	159	1982	25	96	107
VNRP/G	3000	159	1982	20	140	153
VNRP/G	4000	203	2287	26	141	156
VNRP/G	5000	222	2592	36	263	290
VNRP/G	6000	222	2592	43	263	290
VNRP/G	8000	279	2897	30	298	354
VNRP/G	10000	292	3050	40	469	507
VNRP/G	12000	292	*	47	469	507
VNRP/G	16000	346	*	31	734	771
VNRP/G	20000	438	*	40	895	968
VNRP/G	24000	438	*	47	895	968

*For capacities over 10 t we recommend use only on straight beams.

Dimensions

Capacity kg	A mm	B mm	C mm	D mm	E mm	E' mm	F mm	G mm	J mm	L mm	M mm	R mm	S mm
1500	159	518	259	259	130	130	222	210	29	29	114	332	152
2000	159	518	259	259	130	130	222	210	29	29	114	332	152
3000	159	518	259	259	168	168	270	270	34	34	162	332	203
4000	203	518	259	259	168	168	270	270	34	34	162	332	203
5000	222	667	333	333	187	187	305	305	34	36	183	419	229
6000	222	667	333	333	187	187	305	305	34	36	183	419	229
8000	279	667	333	333	225	225	356	343	52	43	210	419	254
10000	292	667	333	333	216	248	397	365	57	44	248	419	297
12000	292	667	333	333	216	248	397	365	57	44	248	419	297
16000	346	772	386	386	302	302	473	473	76	51	298	477	343
20000	438	772	386	386	308	314	489	483	92	51	298	468	343
24000	438	772	386	386	308	314	489	483	92	51	298	468	343



Beam profile and dimension as well as curve radius must always be specified when ordering.


Mod. CTP 2 - A 199
Tragfähigkeit S.W.L. kg
Ser. No.
Flanschbreite Flange Range (mm)
A B
2000kg 75 – 200 200 – 300
3000kg 75 – 200 200 – 320
CE
Yale
Yale Industrial Products GmbH
D – 42549 Velbert Germany
Yale

Trolleys and beam clamps

Trolleys and beam clamps

Yale trolleys and beam clamps can be supplied in many different designs and are used to support and mount hoisting equipment for fixed or traversing applications.
The threaded spindle principle makes for **quick and easy attachment** without the need to fit spacer washers. Yale trolleys and beam clamps have a **min. fracture security of 5:1** in accordance with the UVV (German Accident Prevention Act) and machinery directives.
They are tested with overload and supplied with a test certificate and an operating instructions manual which contains an EC declaration of conformity.

Yale®

Manual trolleys HTP/G

Push type model HTP

Capacities 500 - 5.000 kg

Geared type model HTG

Capacities 500 - 20.000 kg

The trolley enables the exact positioning or easy traversing of large loads with either manual or powered hoisting equipment. It has excellent rolling features due to machined steel wheels mounted on prelubricated, encapsulated ball bearings. Adjustable to fit a wide range of beam widths and profiles (e.g. INP, IPE and IPB). The trolley wheels are designed for a max. beam profile incline of 14%. Adjustments are made by rotating the clevis load bar which also ensures the centred positioning of the hoist in the clevis - no creeping to the left or the right. Anti-tilt and wheel fracture support devices according to DIN 15018 and the machinery directives are standard.

Optional

- Buffers can be fitted.
- Locking device to secure the trolley in position on the beam (park position e.g. on ships).
- Rust and acid resistant hand chains.

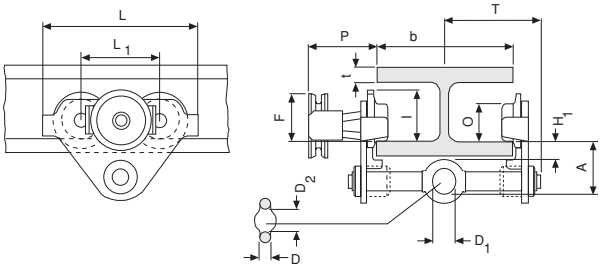
Technical Data

Model	Capacity kg	Size	Beam flange width b mm	Max. flange thickness t mm	Min. radius curve m	Effort at WLL daN	Net weight in kg		with locking device	
							HTP	HTG*	HTP	HTG*
HTP/G	500	A B	50 - 220 160 - 300	25 40	0,90	3	8,0 10,6	9,7 12,6	14,5 17,1	16,2 19,1
HTP/G	1000	A B	50 - 220 160 - 300	25 40	0,90	6	9,0 12,0	11,2 14,1	17,0 20,0	19,2 22,1
HTP/G	2000	A B	66 - 220 160 - 300	25 40	1,15	7	16,0 19,3	18,0 21,3	24,0 27,3	26,0 29,3
HTP/G	3000	A B	74 - 220 160 - 300	25 40	1,40	7	32,0 35,8	35,4 39,2	41,2 45,0	44,6 48,4
HTP/G	5000	A B	90 - 220 180 - 300	25 40	1,80	9	48,0 52,2	51,8 56,0	58,5 62,7	62,3 66,5
HTG **HTG**	10000 20000	B B	125 - 310 125 - 310	40 40	1,80 5,00	14 29	– –	104,0 230,0	– –	– –

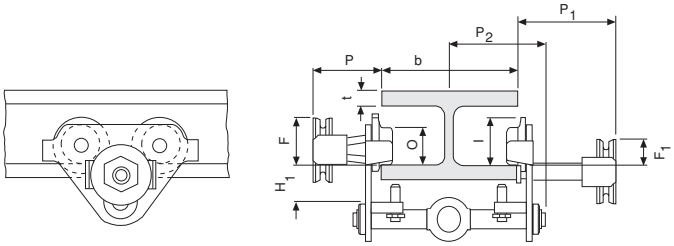
*without hand chain

Dimensions HTP/G in mm

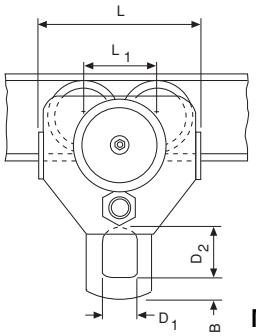
Dimension	HTP/G 500		HTP/G 1000		HTP/G 2000		HTP/G 3000		HTP/G 5000		HTG 10000	HTG 20000
	A	B	A	B	A	B	A	B	A	B	B	B
A	77,0	92,0	82,5	97,5	98,5	113,5	114,0	129,0	132,5	147,5	276,0	270,0
B	–	–	–	–	–	–	–	–	–	–	52	70
D	16	16	17	17	22	22	26	26	33	33	30	35
D_1	25	25	30	30	40	40	48	48	60	60	80	110
D_2	30	30	35	35	47	47	58	58	70	70	114	155
F (HTG)	91,5	91,5	91,5	91,5	90,5	90,5	107,5	107,5	149,5	149,5	113,0	113,0
F_1	46,0	46,0	46,0	46,0	46,0	46,0	46,0	46,0	45,5	45,5	–	–
H_1	30,5	45,5	30,5	45,5	30,5	45,5	30,0	45,0	30,0	45,0	45,0	45,0
I (HTP)	71,5	71,5	71,5	71,5	95,5	95,5	131,0	131,0	142,5	142,5	–	–
I (HTG)	76,5	76,5	76,5	76,5	98,0	98,0	132,5	132,5	148,5	148,5	170,0	170,0
L	260	260	260	260	310	310	390	390	450	450	430	870
L_1	130	130	130	130	150	150	180	180	209	209	200	200
L_2	–	–	–	–	–	–	–	–	–	–	–	115
O	60	60	60	60	80	80	112	112	125	125	150	150
P (HTG)	110	110	110	110	110	110	110	110	110	110	163	163
P_1	168	168	168	168	168	168	168	168	168	168	–	–
P_2	146,0	146,0	150,0	150,0	155,0	155,0	160,0	160,0	167,5	167,5	–	–
T	146,0	187,0	150,0	187,0	155,0	189,5	160,0	191,5	167,5	191,5	270,0	270,0

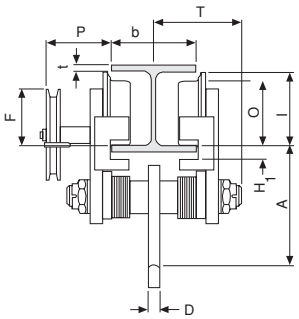


Model HTP/G
500 - 5.000 kg

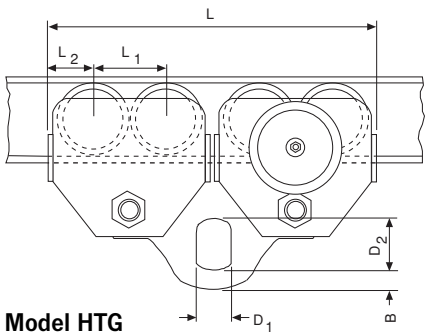


Model HTP/G
with locking device
500 - 5.000 kg





Model HTG
10.000 kg



Model HTG
20.000 kg

Yale®

Beam clamp
YC

Beam clamp model YC

Capacities 1.000 - 10.000 kg

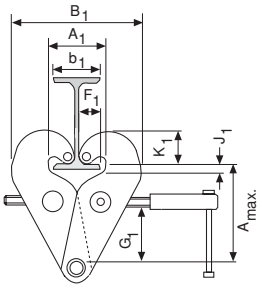
Provides a quick and versatile rigging point for hoisting equipment, pulley blocks or loads.
Flexible application due to wide adjustment range.
The central threaded spindle allows easy attachment and a safe and secure grip.
The spindle can be secured against loosening.

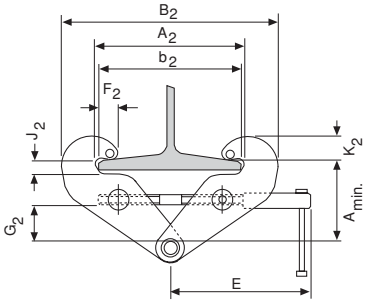
Optional: can be supplied with shackle.

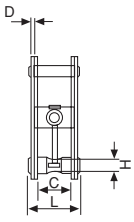
Flattened, reinforced version for use on beams with reduced web height available on request

Model	Capacity	Flange width	Weight
	kg	mm	kg
YC 1	1000	75 - 230	3,8
YC 2	2000	75 - 230	4,6
YC 3	3000	80 - 320	9,2
YC 5	5000	90 - 320	11,0
YC 10	10000	90 - 320	17,2

Capacity	$A_{min.}$	$A_{max.}$	A_1	A_2	B_1	B_2	b_1	b_2	C	D	E	F_1	F_2	G_1	G_2	H	J_1	J_2	K_1	K_2	L
kg	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
1000	115	150	78	246	186	350	75	230	50	4	215	34	17	82	44	20	14	21	48	31	84
2000	115	150	78	246	186	350	75	230	50	6	215	35	18	82	44	20	14	21	50	32	94
3000	180	225	80	320	232	455	80	320	70	8	255	35	21	120	75	22	30	34	60	40	122
5000	180	225	90	310	242	445	90	310	70	10	255	35	21	116	75	28	30	34	60	42	129
10000	175	220	90	320	268	480	90	320	70	14	275	35	20	110	66	38	34	35	60	40	146







Clamp with shackle

Special design

Trolley clamp
CTP

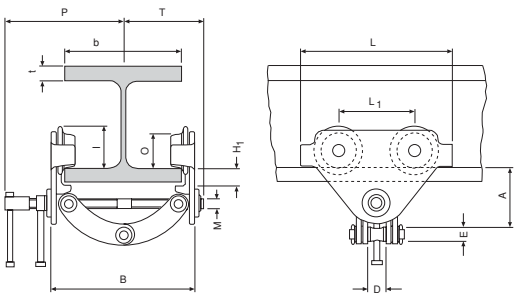
Trolley clamp model CTP

Capacities 1.000 - 3.000 kg

The easy installation to any beam makes the CTP suitable for affixing and moving hoists, pulleys and loads. It can be adjusted quickly to the beam width by turning the main spindle.
Safety is ensured by the special locking lever.
The spindle and snap-pin stops are galvanized to protect against corrosion.

Model	Capacity kg	Flange width b mm	Min. curve radius m	Weight kg
CTP 1 - A	1000	60 - 150	0,6	2,5
CTP 2 - A	2000	75 - 200	0,9	9,9
CTP 2 - B	2000	200 - 300	0,9	10,3
CTP 3 - A	3000	75 - 200	1,15	17,5
CTP 3 - B	3000	200 - 320	1,15	19,5

Capacity kg	Size	A mm	D mm	E mm	H_1 mm	I mm	L mm	L_1 mm	M mm	O mm	P mm	T mm	t max. mm
1000	A	82 - 109	26	22	20	53	160	75	M12	46	153	105	15
2000	A	106 - 155	42	20	30,0	71,5	260	130	M18	60	205	139	25
2000	B	136 - 191	42	20	30,0	71,5	260	130	M18	60	255	189	25
3000	A	128 - 171	50	22	30,5	95,5	310	150	M24	80	220	155	25
3000	B	150 - 212	50	22	30,5	95,5	310	150	M24	80	280	215	25



Yale®

Swivel truck trolley

VLH

Yale swivel truck trolley with low headroom and extremely short radius curve

VLHP plain trolley

Capacities 250 - 6.000 kg

VLHG geared trolley

Capacities 250 - 6.000 kg

The manual trolley series VLH features extremely low headroom. The swivel truck construction allows negotiation of very short radius curves.

Workmanship and features

- All-steel construction with low headroom.
- The swivel truck feature permits application on runways with very short radius curves.
- All units are variably adjustable to individual beam sizes.
- Anti-drop devices and anti-tilt devices are standard features.

Optional equipment

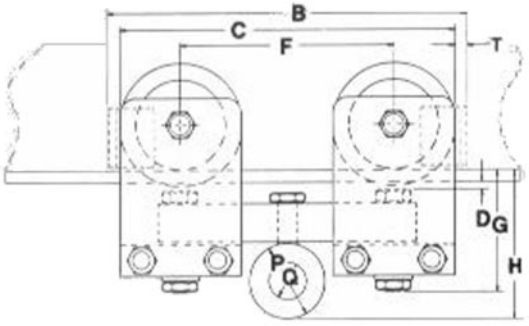
- Rubber buffers available on request.
- Large variety of special versions on request.

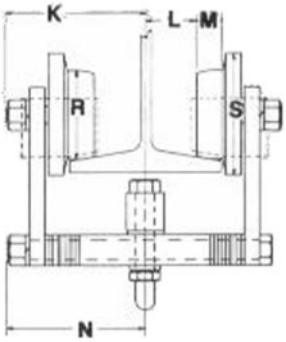
Beam profile and dimension as well as curve radius must always be specified when ordering.

Model	Capacity kg	Beam flange width min. mm	Flange width max. gerader Träger mm	Max. flange thickness mm	Min. radius curve mm	Net weight VLHP kg	Net weight VLHG kg
VLHP/G 0,25	250	67	117	16	251	20	29
VLHP/G 0,5	500	67	117	16	251	20	29
VLHP/G 1	1000	76	117	16	251	27	35
VLHP/G 1,5	1500	86	140	16	495	38	48
VLHP/G 2	2000	86	140	16	495	38	48
VLHP/G 3	3000	102	178	16	391	71	85
VLHP/G 4	4000	102	178	16	391	71	85
VLHP/G 5	5000	117	203	22	860	125	140
VLHP/G 6	6000	117	203	22	860	125	140

Dimensions plain trolley VLHP

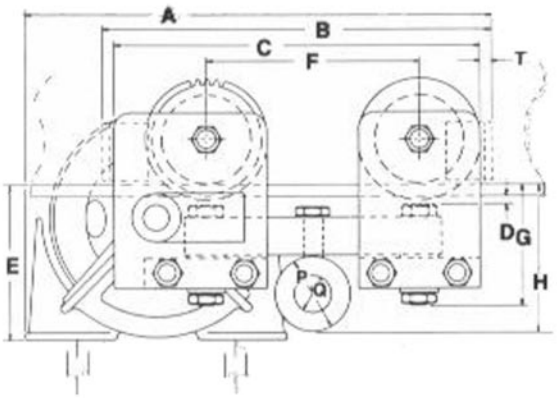
Capacity in kg	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	I mm	J mm	K mm	L mm	M mm	N mm	O mm	P mm	Q mm	R mm	S mm	T mm
250	–	298	279	8	–	178	103	124	–	–	114	41	22	110	–	64	32	73	92	10
500	–	298	279	8	–	178	103	124	–	–	114	41	22	110	–	64	32	73	92	10
1000	–	330	305	8	–	178	111	130	–	–	121	32	28	111	–	64	32	95	127	25
1500	–	413	362	6	–	210	114	140	–	–	127	44	29	127	–	76	38	114	152	25
2000	–	413	362	6	–	210	114	140	–	–	127	44	29	127	–	76	38	114	152	25
3000	–	476	445	6	–	241	165	204	–	–	152	52	34	152	–	95	51	162	203	29
4000	–	476	445	6	–	241	165	204	–	–	152	52	34	152	–	95	51	162	203	29
5000	–	565	527	5	–	298	194	264	–	–	194	68	48	191	–	140	76	183	229	64
6000	–	565	527	5	–	298	194	264	–	–	194	68	48	191	–	140	76	183	229	64

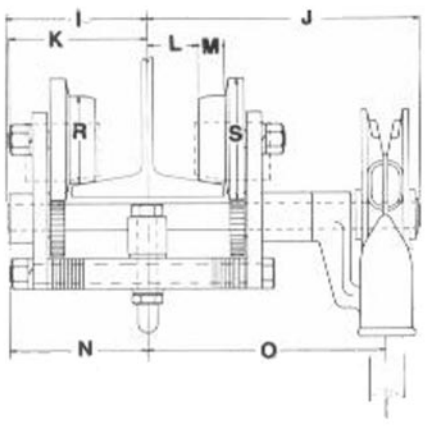




Dimensions geared trolley VLHG

Capacity in kg	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	I mm	J mm	K mm	L mm	M mm	N mm	O mm	P mm	Q mm	R mm	S mm	T mm
250	391	324	305	6	130	178	103	124	113	232	114	40	22	110	200	64	32	73	102	10
500	391	324	305	6	130	178	103	124	113	232	114	40	22	110	200	64	32	73	102	10
1000	402	343	316	8	135	178	111	130	113	232	121	32	28	111	200	64	32	95	127	25
1500	451	413	362	6	135	210	114	140	122	222	127	44	28	127	200	76	38	114	152	25
2000	451	413	362	6	135	210	114	140	122	222	127	44	28	127	200	76	38	114	152	25
3000	527	476	445	6	168	241	165	204	149	248	152	52	29	152	216	95	51	162	203	29
4000	527	476	445	6	168	241	165	204	149	248	152	52	29	152	216	95	51	162	203	29
5000	649	565	527	6	214	298	194	264	173	287	194	68	37	191	254	140	76	183	229	64
6000	649	565	527	6	214	298	194	264	173	287	194	68	37	191	254	140	76	183	229	64





Electric trolley
VTE-U

Yale hoists and trolleys are not designed for passenger elevation applications and must not be used for this purpose!

Electric trolley model VTE-U

Capacities 1.000 - 5.000 kg

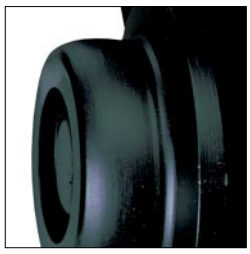
Specially recommended for loads over 1.000 kg, for transporting over long distances and/or when used frequently. Suitable for almost all hoists with suspension hook due to universal shackle connection. Travel motor with worm gear transmission ensures smooth start and self braking - a separate motor brake is not required. Compact, robust frame with low overall height.
Motors protected to IP 55, operating voltage 400 V / 50 Hz / 3-phase. Single speed motors can be switched to 230 V.

Features

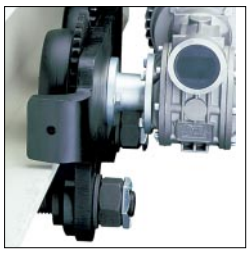
- Wheels manufactured from fracture-proof steel. Smooth running due to machined surfaces and ball bearing mounting. Cambered profile suitable for parallel and inclined beam profiles.
- Wheel fracture supports (according to DIN 15018 and machinery directives) and anti-tilt devices are fitted as standard.
- Easily adjusted to fit to a wide range of beam widths and profiles due to threaded spindles.

Optional

- Low voltage control (42 V) available.
- All trolleys can be fitted with rubber buffers.



Wheel with cambered profile



Wheel fracture supports with option to fit buffers

Threaded spindle

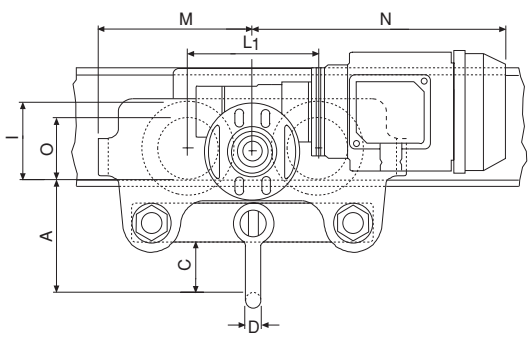
Technical data

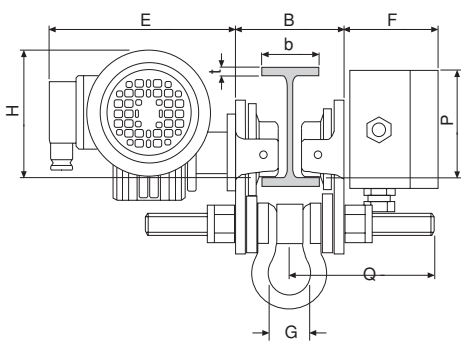
Model	Capacity kg	Travel speed m/min	Motor kW	Beam flange width mm	Flange thickness t max. mm	Min. curve radius m	Net weight kg
VTE 1-A-18/U*	1000	18 or 18/4,5	0,18 or 0,18/0,06	58 - 180	19	0,90	19,5
VTE 1-B-18/U*	1000	18 or 18/4,5	0,18 or 0,18/0,06	180 - 300	19	0,90	25,2
VTE 2-A-18/U*	2000	18 or 18/4,5	0,18 or 0,18/0,06	58 - 180	19	1,15	26,0
VTE 2-B-18/U*	2000	18 or 18/4,5	0,18 or 0,18/0,06	180 - 300	19	1,15	30,2
VTE 3-A-11/U	3000	11 or 11/2,8	0,37 or 0,3/0,09	74 - 180	27	1,40	51,0
VTE 3-B-11/U	3000	11 or 11/2,8	0,37 or 0,3/0,09	180 - 300	27	1,40	53,0
VTE 5-A-11/U	5000	11 or 11/2,8	0,37 or 0,3/0,09	98 - 180	27	1,80	77,0
VTE 5-B-11/U	5000	11 or 11/2,8	0,37 or 0,3/0,09	180 - 300	27	1,80	80,0

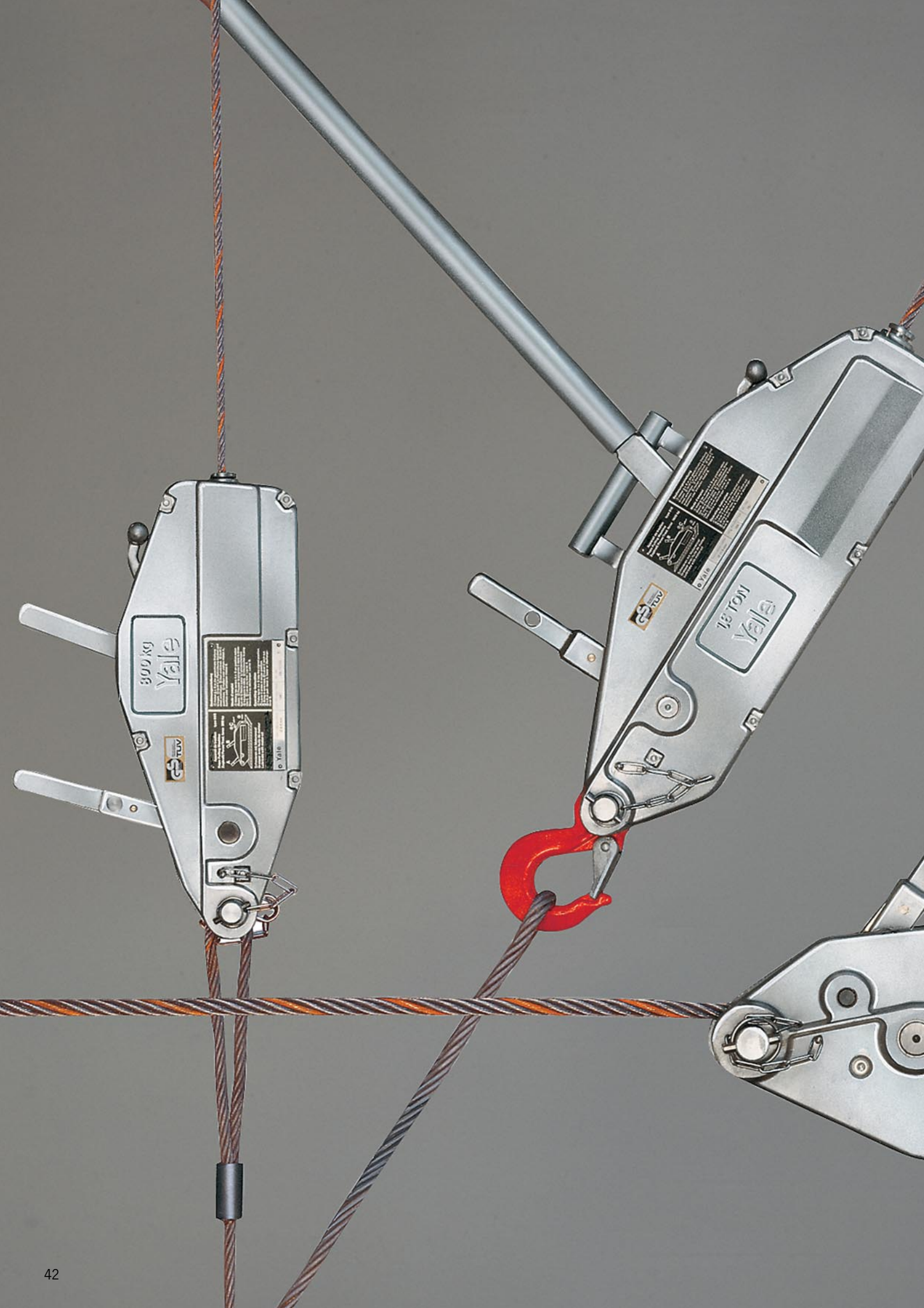
*11 or 11/2,8 m/min travel speed on request

Dimensions in mm

Dimension	**VTE 1-A-18/U**	**VTE 1-B-18/U**	**VTE 2-A-18/U**	**VTE 2-B-18/U**	**VTE 3-A-11/U**	**VTE 3-B-11/U**	**VTE 5-A-11/U**	**VTE 5-B-11/U**
A	113	113	115	115	139	139	161	161
B	b + 50	b + 50	b + 54	b + 54	b + 60	b + 60	b + 70	b + 70
C	49	49	47	47	57	57	60	60
D	16	16	16	16	19	19	22	22
E	187	187	187	187	202	202	202	202
F	97	97	97	97	97	97	97	97
G	43	43	43	43	51	51	58	58
H	129	129	128	128	144	144	178	178
I	77	77	98	98	133	133	149	149
L1	130	130	150	150	180	180	209	209
M	155	155	180	180	208	208	263	263
N 1G	255	255	255	255	292	292	292	292
N 2G	263	263	263	263	296	296	296	296
O	60	60	80	80	112	112	125	125
P	125	125	110	110	126	126	118	118
Q	145	205	153	213	160	220	182	242






300 kg
Yale
1/8 TON
Yale

Yale®

Cable pullers

Yaletrac cable puller

800 kg · 1.600 kg · 3.200 kg

The portable Yaletrac cable puller is a versatile tool for pulling, lifting, lowering, tensioning and securing loads over long distances. It has been specially designed for applications in industry, building construction, civil engineering, power line construction, ship building and oil refineries etc.
The Yaletrac cable puller is almost service free – easy to use and safe. The standard unit comprises of the Yaletrac cable puller with handlever and a 20 m resp. 10 m length of wire rope mounted on a hand reel. The original Yaletrac wire rope has six strands with a steel core and is identified by an orange strand. Only this special wire rope will ensure proper functioning.
Every Yaletrac cable puller is factory tested with overload. The units are supplied with a test certificate showing the serial number and an operating instructions manual which contains an EC declaration of conformity.

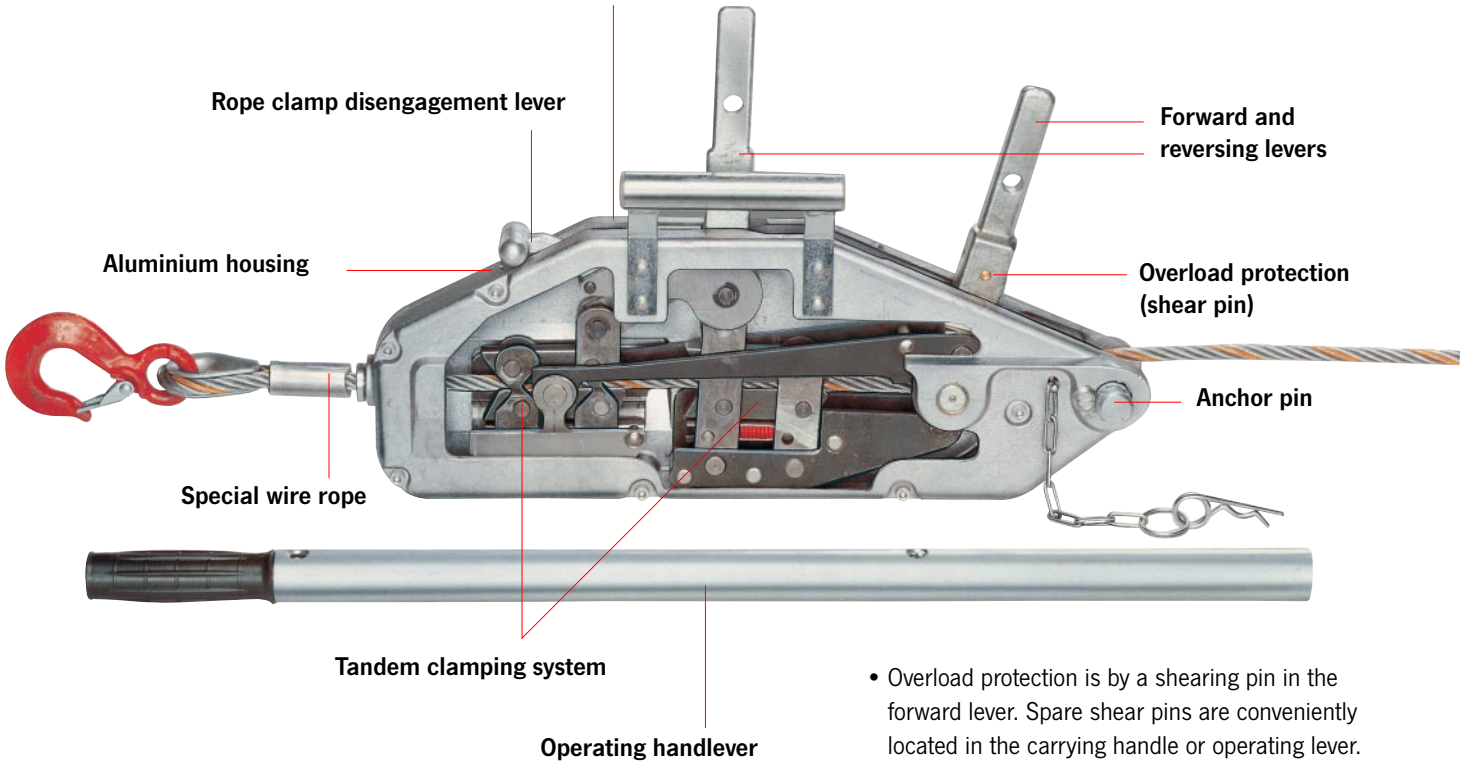
Yaletrac cable pullers have been tested and approved by many national and international safety and inspection organisations.

Yale®

Cable puller
Yaletrac

Features

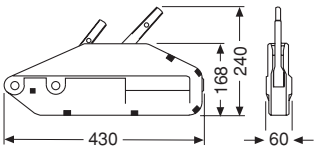
- Light weight, compact, high strength aluminium housing. Smooth contour design with large, flat bottom surface for increased stability in horizontal and vertical working position.
- Forward and reversing levers in tandem provide slim design and assure power transfer along the centre line.



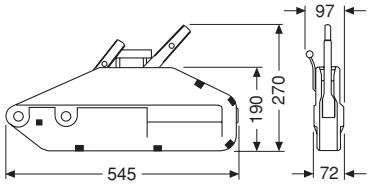
- Overload protection is by a shearing pin in the forward lever. Spare shear pins are conveniently located in the carrying handle or operating lever. A broken pin can be replaced without removing the load.
- A lever disengages the rope clamp system allowing easy, smooth installation of the wire rope.
- Yaletrac uses a special flexible wire rope. It has six strands with a steel core and is identified by an orange strand. The rope is tapered at one end for easy threading and fitted with a safety hook on the other end.
- The parallel arrangement of the clamping system protects the wire rope by distributing the clamping forces evenly. A long rope advance per each lever stroke increases the working speed.
- The large opening in the top of the unit allows easy cleaning: simply flush the unit with water, apply motor oil for lubrication and the Yaletrac is again ready for use.

As shown in the drawings all models can be fitted with safety clevis hooks.

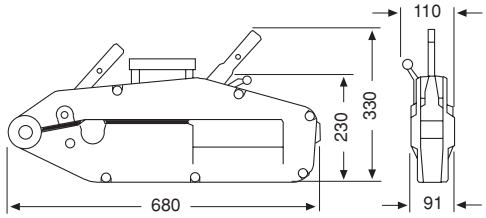
Model	Capacity (WLL) kg	Rope advance per double stroke mm	Lever pull at WLL daN	Lever length mm	Wire rope Ø mm	Weight without rope kg	Rope weight kg/m
Yaletrac Y 08	800	60	24	800	8,4	7,0	0,29
Yaletrac Y 16	1600	60	30	790/1190	11,5	14,0	0,53
Yaletrac Y 32	3200	40	50	790/1190	16,0	21,0	1,0



Yaletrac Y08



Yaletrac Y16



Yaletrac Y32

Also accepted for passenger elevation purposes!

Yaletrac accessories

Sling rope DIN 3088

for model		Y 08	Y 16	Y 32
Wire rope Ø	mm	10	14	18
Length	m	1,0	1,5	2,0
Length	m	2,0	2,5	3,0

Hand reel

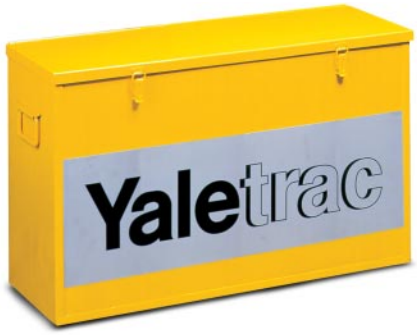
for model		Y 08	Y 16	Y 32
For max. rope length	m	50	30	20

Drum reel

for model		Y 08	Y 16	Y 32
For max. rope length	m	100	80	60

Yaletrac storage box

Steel plate 74 x 26 x 45 cm



Clevis hook with safety latch

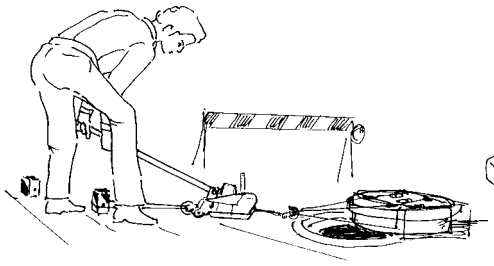
Yale®

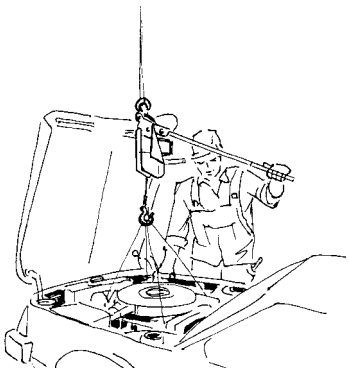
Cable puller
LP

Yale cable puller LP

Capacity 500 kg

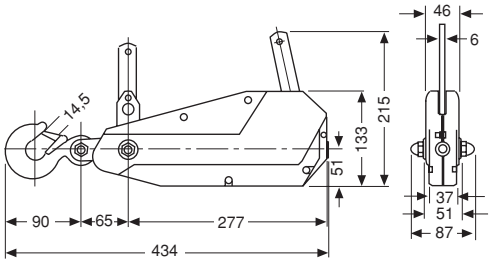
A practical aid for pulling, lifting, tensioning, lowering in many applications in- and outdoors. A compact, handy tool - ideal for service and assembly, for workshops and recreation. The stamped steel housing is lightweight and efficient. The complete set comprises of cable puller with anchor bolt and clevis hook, telescope operating lever, 10 metres of wire rope, carrying handle and a 1 metre length anchor webbing sling.





Capacity (WLL) kg	Rope advance per double stroke mm	Lever pull at WLL daN	Lever length mm	Wire rope Ø mm	Weight without rope and lever kg	Rope weight kg/m
500	35	15	600	8,3	4,0	0,29

Yale hoists and trolleys are not designed for passenger elevation applications and must not be used for this purpose!



Cable puller
LM

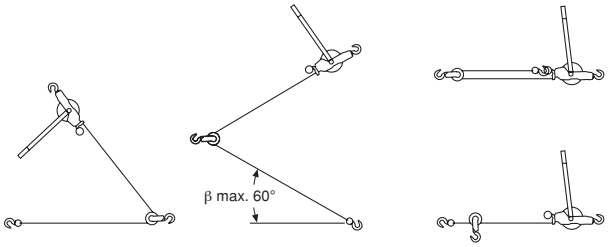
Yale cable puller LM

Pulling force 500 - 1.800 daN

The use of aluminium alloy castings provide a lightweight, corrosion resistant pulling and tensioning unit. The double interlocking pawl system ensures safe function, all load bearing shafts are mounted on prelubricated bearings to reduce wear. All springs and shafts are manufactured from stainless steel. The lifting medium is a non-twisting, zinc plated, special steel cable. The cable pullers are fitted with fracture resistant suspension and load hooks. The hooks are fitted with safety latches and are free to rotate through 360°.
The cable puller LM can be used in single or double fall configuration. In double fall configuration the pulling force is doubled and the lifting height is halved.

Model	Single fall			Double fall			Net weight kg	Lever length mm	Hook opening mm	Rope Ø mm
	Pulling force daN	Hook path m	Headroom mm	Pulling force daN	Hook path m	Headroom mm				
115 D VB	500	4,6	550	1000	2,3	700	4,5	420	22	4,8
202 WN VB	500	6,0	525	1000	3,0	690	5,2	520	22	4,8
434 WN VB	500	9,0	550	1000	4,5	710	5,8	530	22	4,8
S 434 WN VB	700	6,0	565	1400	3,0	725	6,0	530	22	5,6
S 404 WN VB	900	5,2	575	1800	2,6	720	5,9	635	22	6,4

Rigging configurations



Attention!
Reduced capacity

The units may only be used for pulling and tensioning. Lifting and lowering of loads is not permitted.

Yale®

Cable grip
LMG

Little Mule® cable grip LMG

Pulling force 2.000 - 5.000 daN

The LITTLE MULE® cable grip is a device for gripping, pulling and tensioning unsheathed wire ropes, cables and metal rods in all forms up to a tensile strength of 1770 N/mm^2 but is dependant on the diameter and surface intergrity.
The parallel jaws provide a firm, non-slip grip without causing damage to the wire rope.
A special spring-loaded guide prevents the grip from dropping off the wire rope and allows instant release without jamming.
The model LMG II-X is supplied with grooved jaws and is suitable for wire ropes with a tensile strength of up to 1960 N/mm^2, but is dependant on the rope diameter and surface integrity.

Technical Data

Model		**LMG I**	**LMG II**	**LMG II-X**	**LMG III**
Pulling force	daN	2000	3000	3000	5000
For cable Ø	mm	5-15	8-20	8-20	18-32
Eye opening	mm	31 x 44	31 x 44	31 x 44	66 x 93
Weight	kg	1,6	2,9	2,9	9,5

Pulley blocks, hinged, with single steel sheave

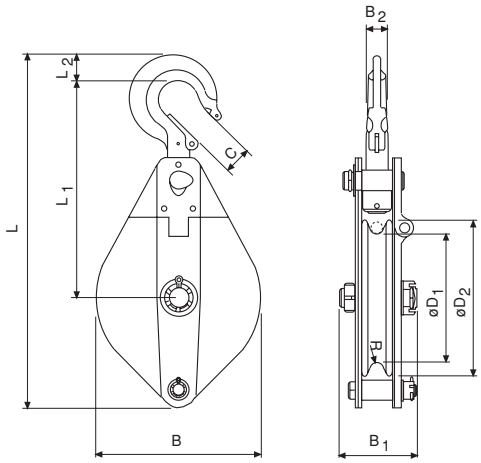
Capacities 1.000 - 6.400 kg

One side of the Yale pulley blocks is hinged and can be opened for easy and quick positioning of the wire rope on the sheave.
It can also provide a quick and versatile rigging point or redirect a wire rope.
Swinging the hook in the direction of pull securely locks the pulley block. The high quality cast steel sheaves have machined grooves and are fitted with Permaglide® bushes.
When choosing and classifying pulley blocks, take the „Principles for Rope Drives“ DIN 15020 into consideration

Dimensions in mm

Capacity kg	B mm	B_1 mm	B_2 mm	C mm	ø D_1 mm	ø D_2 mm	L mm	L_1 mm	L_2 mm	R mm	Rope ø mm	Weight kg
1000	118	76	17	23	85	105	305	200	23	4	7	3,3
2000	199	92	24	27	150	190	425	263	30	7	13	8,9
3200	230	108	28	31	180	220	496	295	40	9	15	15,5
6400	270	116	35	42	210	260	655	375	47	10	18	26,5

Optional
Can be supplied with a clevis fitting.




Yale

Powered chain hoists

Electric and pneumatic chain hoists

Yale chain hoists convince through their compact, elegant design, low tare weight and their robust construction. A **precision machined, case hardened load chain sheave** perfectly matched to the load chain, oilbath lubricated gearbox with hardened gears and high quality encapsulated bearings ensure smooth, quiet operation.
The **adjustable slip clutch**, fitted as an overload safety device, is engineered for low maintenance and also serves as an **overrun protection** for the highest and lowest load hook positions.
The pendant control is fitted with an **EMERGENCY-STOP** switch as standard.
Forged suspension and load hooks, manufactured from non-ageing, high alloy tempering steel, yield under overload instead of breaking.
Apart from the stationary configurations (hook suspension) **manual push, geared and electric trolleys** are available. The trolleys are suitable for all commercial beam profiles e.g. INP, IPE and IPB. The compact connection between trolley and hoist produce an **optimal low headroom** dimension.
The electric trolleys are fitted with a self-braking worm gearbox. The surface protected, high tensile load chains are in accordance with national and international standards and regulations (DIN EN 818).
All electric and air powered hoists are factory tested with overload. They are supplied with a test certificate showing the serial number and an operating instructions manual which contains an EC declaration of conformity.

Yale®

Electric chain hoists CPS

Chain container optionally available!

Optional

- robust chain container
- stainless steel load chain (no reduction of working load limit)
- festooned cable system
- manual and powered trolleys with clevis or shackle to fit top hook suspended chain hoists
- Contactor control 48 V

Electric chain hoist model CPS with top hook suspension

Capacities 125 - 500 kg

The new model CPS is the smallest and lightest within the family of Yale electric chain hoists. Reliability and compact design make it ideal for numerous applications in the construction industry, service companies and many industrial areas for moving small and medium loads.

Features

- **Extremely low headroom**
- The **10-pocket load sheave** ensures a smooth running of the chain and minimizes chain wear
- **2 year warranty** (excluding wear parts)
- **Thermal overload protection** as standard
- Electromagnetic spring pressure brake holds the load safely even in the event of power failure
- Robust aluminium housing, powder coated
- Classification 1 Am resp. 1 Bm. As required the model CPS (with appropriate changes to lifting capacity resp. duty cycle) can also be graded up to higher classifications. Motor protected to IP 54
- Standard operating current:
  Euro-voltage 400 V, 50 Hz, 3-phase.
  125 kg capacity also available for 230 V, 50 Hz, single phase
- The standard version comes with direct control
- Pendant control protected to IP 65 against ingression of dust and water
- The case hardened and zinc plated load chain has been specially adopted to the load sheave to avoid wear and increase operating safety. In accordance with national and international standards
- Forged top and bottom hooks made from age resistant alloy steel. They open up in case of excessive load without fracture. The top hook does not rotate in order to prevent the power cables from twisting.
  The bottom hook can rotate 360°.
- The overload protection (slip clutch) avoids overloading and extends the lifetime of the hoist

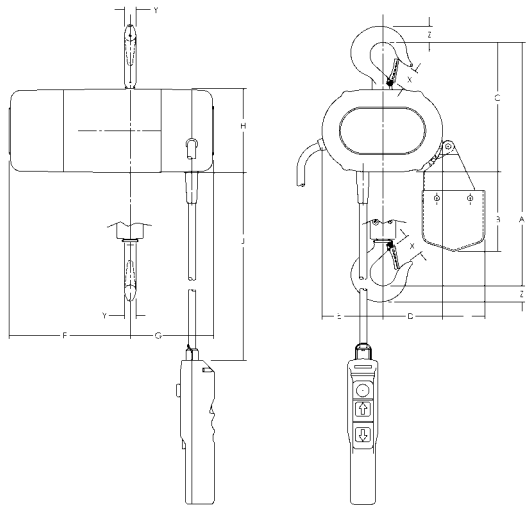
Technical data

Model	Capacity kg	Chain strands	Standard lifting height m	Chain dimensions d x p in mm	Lifting speed m/min	Hoist motor kW	Weight kg	Operating current
CPS 1-4	125	1	3	4 x 12,2	4	0,10	11,5	230V/1Ph/50Hz
CPS 1-10	125	1	3	4 x 12,2	10	0,25	11,5	400V/3Ph/50Hz
CPS 2-6	250	1	3	4 x 12,2	6	0,28	11,5	400V/3Ph/50Hz
CPS 5-3	500	2	3	4 x 12,2	3	0,28	12,5	400V/3Ph/50Hz

*Weight for standard 3 m lift. Other lifting heights available.

Capacity in kg	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	I mm	J* mm	X mm	Y mm	Z mm
125	276	98	159	75	76	160	227	103	52	1905	25	14	21
250	276	98	159	75	76	160	227	103	52	1905	25	14	21
500	303	146	159	60	91	160	227	103	52	1905	25	14	21

*Dimensions for standard 3 m lift



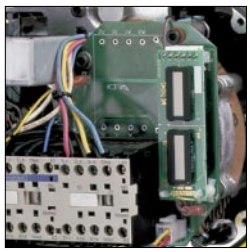
Yale®

Electric chain hoists CPM

Optional

- The models CPM 1-8, 2-8 (single chain fall), 5-4 (2 chain falls), 10-4 (single chain fall) and 20-2 (2 chain falls) are alternatively available in 230 V, 50 Hz, single phase (not available for CPM with electric trolley)
- Counters for operating hours and number of starts for advanced operation monitoring
- Other operating voltages on request
- Stainless steel load chain
- Chain container
- Festooned cable systems (see page 68)

Standard: Limit switches



Optional: Counter for operating hours and starts

Electric chain hoist model CPM with suspension hook

Capacities 125 kg - 2.000 kg

Electric chain hoist model CPM with integral trolley

Capacities 125 kg - 2.000 kg

The model CPM is a robust, reliable and easy to service unit with a long service life.
The whole range is fitted with many standard features that were usually only available as extras.
The **integral limit switches** for the **highest and lowest hook positions** considerably extend the working life span of the slip clutch, motor and gearbox.

Features

- Classification 1 Am. As required the model CPM (with appropriate changes to lifting capacity resp. duty cycle) can also be graded up to the classification 3 m. All known domestic and European regulations of the classification according to FEM, ISO or BS are complied with resp. exceeded.
- Main contactor as standard, for increased safety.
- **Thermal overload protection** as standard for the whole range.
- Duty cycle 50 % ED for single speed.
- Electromagnetic, spring pressure brake holds the load safely even in the event of power failure.
- Motors according to VDE 0530 protected to IP55, against ingression of dust and water.
- Standard operating voltage: Euro-voltage 400 V, 50 Hz, 3-phase.
- Increased operating safety through 48 V control voltage (contactor control) and an encapsulated pendant control to IP 65.

Technical data

Model	Capacity in kg/ chain falls	Chain dimensions d x p in mm	Lifting speed Main lift m/min	Lifting speed Fine lift m/min	Hoist motor kW	Motor rating ED %	Net weight* Hook suspension kg	Net weight* Push** trolley kg	Net weight* Electric*** trolley kg
CPM 1-8	125/1	5 x 15	8	–	0,4	50	21	32	41
CPMF 1-8	125/1	5 x 15	8	2	0,4/0,1	33/16	24	35	44
CPM 1-12	160/1	5 x 15	12	–	0,4	50	21	32	41
CPMF 1-12	160/1	5 x 15	12	3	0,4/0,1	33/16	24	35	44
CPM 2-8	250/1	5 x 15	8	–	0,4	50	21	32	41
CPMF 2-8	250/1	5 x 15	8	2	0,4/0,1	33/16	24	35	44
CPM 3-6	320/2	5 x 15	6	–	0,4	50	23	34	43
CPMF 3-6	320/2	5 x 15	6	1,5	0,4/0,1	33/16	26	37	48
CPM 3-12	320/1	6 x 18	12	–	0,8	50	33	44	53
CPMF 3-12	320/1	6 x 18	12	3	0,8/0,2	33/16	41	52	61
CPM 5-4	500/2	5 x 15	4	–	0,4	50	23	34	43
CPMF 5-4	500/2	5 x 15	4	1	0,4/0,1	33/16	26	37	46
CPM 5-8	500/1	6 x 18	8	–	0,8	50	33	44	53
CPMF 5-8	500/1	6 x 18	8	2	0,8/0,2	33/16	41	52	61
CPM 6-6	630/2	6 x 18	6	–	0,8	50	36	47	56
CPMF 6-6	630/2	6 x 18	6	1,5	0,8/0,2	33/16	44	55	64
CPM 6-12	630/1	8 x 24	12	–	1,6	50	51	63	78
CPMF 6-12	630/1	8 x 24	12	3	1,6/0,4	33/16	62	80	89
CPM 10-4	1000/2	6 x 18	4	–	0,8	50	36	47	56
CPMF 10-4	1000/2	6 x 18	4	1	0,8/0,2	33/16	44	55	64
CPM 10-8	1000/1	8 x 24	8	–	1,6	50	51	63	78
CPMF 10-8	1000/1	8 x 24	8	2	1,6/0,4	33/16	62	80	89
CPM 12-6	1250/2	8 x 24	6	–	1,6	50	58	76	85
CPMF 12-6	1250/2	8 x 24	6	1,5	1,6/0,4	33/16	69	87	96
CPM 20-4	2000/2	8 x 24	4	–	1,6	50	58	76	85
CPMF 20-4	2000/2	8 x 24	4	1	1,6/0,4	33/16	69	87	96

*Weight for standard 3m lift. Other lifting heights available.

**For trolleys type A and B: Additional weight for geared trolley (VTG): 2,5 kg
***For electric trolley (VTE) with 2 speeds 2,0 kg.

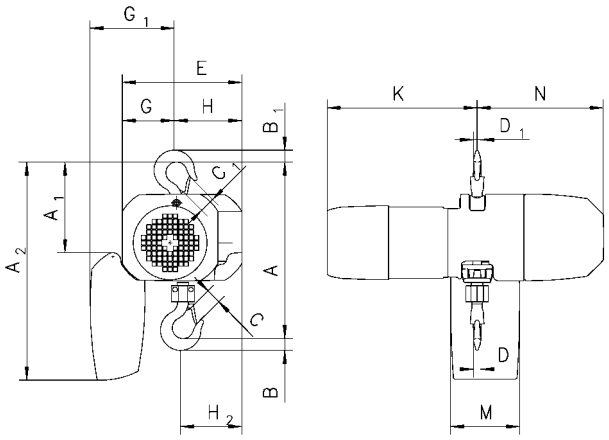
Technical data trolleys

Suitable for **Model**	Capacity kg	Size	Flange width mm	Curve radius min. m	Electric trolleys Travel speed m/min at 50 Hz	Electric trolleys Travel motor kW at 50 Hz
from **CPM 1-8**	1000	A	58 - 180	0,90	18 or 18/4,5	0,18 or 0,18/0,06
to **CPMF 10-4**	1000	B	180 - 300	0,90	18 or 18/4,5	0,18 or 0,18/0,06
from **CPM 10-8**	2000	A	58 - 180	1,15	18 or 18/4,5	0,18 or 0,18/0,06
to **CPMF 20-4**	2000	B	180 - 300	1,15	18 or 18/4,5	0,18 or 0,18/0,06

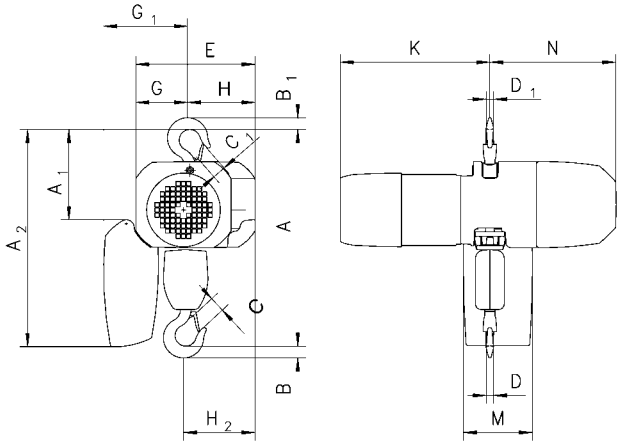
Dimensions CPM/CPMF in mm

Dimension	CPM/ CPMF 1-8	CPM/ CPMF 1-12	CPM/ CPMF 2-8	CPM/ CPMF 3-6	CPM/ CPMF 3-12	CPM/ CPMF 5-4	CPM/ CPMF 5-8	CPM/ CPMF 6-6	CPM/ CPMF 6-12	CPM/ CPMF 10-4	CPM/ CPMF 10-8	CPM/ CPMF 12-6	CPM/ CPMF 20-4
A	317	317	317	397	365	397	365	480	455	480	455	565	565
A_1	167	167	167	167	205	167	205	205	252	205	252	252	252
A_2 (8 m)	409	409	409	409	–	409	–	–	589	–	589	589	589
A_2 (9 m)	–	–	–	–	497	–	497	497	–	497	–	–	–
B	22	22	22	22	22	22	22	29,5	29,5	29,5	29,5	40,5	40,5
B_1	22	22	22	22	29,5	22	29,5	29,5	40,5	29,5	40,5	40,5	40,5
C	27	27	27	27	27	27	27	32	32	32	32	40	40
C_1	27	27	27	27	32	27	32	32	40	32	40	40	40
D	14	14	14	14	14	14	14	14	19,5	19,5	19,5	26,5	26,5
D_1	14	14	14	14	14	14	19,5	14	26,5	19,5	26,5	26,5	26,5
E	225	225	225	225	250	225	250	250	280	250	280	280	280
G	102	102	102	102	110	102	110	110	127	110	127	163	163
G_1 (8 m)	163	163	163	163	–	163	–	–	237	–	237	237	237
G_1 (9 m)	–	–	–	–	179	–	179	179	–	179	–	–	–
H	123	123	123	123	140	123	140	140	153	140	153	117	117
K (CPM)	285	285	285	285	285	285	285	285	345	285	345	345	345
K (CPMF)	310	310	310	310	365	310	365	365	390	365	390	390	390
M (8 m)	130	130	130	130	–	130	–	–	180	–	180	180	180
M (9 m)	–	–	–	–	150	–	150	150	–	150	–	–	–
N	240	240	240	240	294	240	294	294	295	294	295	295	295

Model CPM
with suspension hook, single fall
125 - 1.000 kg



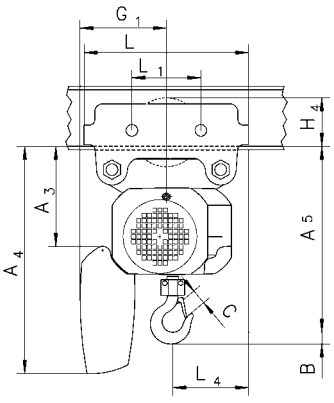
Model CPM
with suspension hook, double fall
320 - 2.000 kg

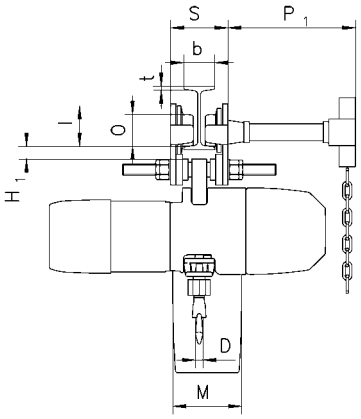


Dimensions CPM/CPMF in mm

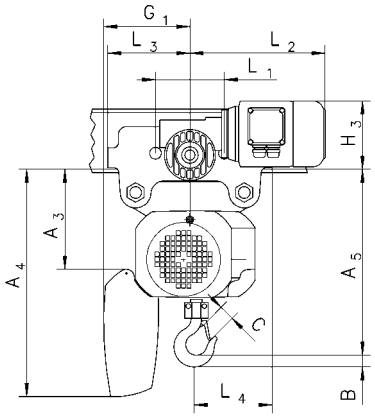
Dimension	CPM/ CPMF 1-8	CPM/ CPMF 1-12	CPM/ CPMF 2-8	CPM/ CPMF 3-6	CPM/ CPMF 3-12	CPM/ CPMF 5-4	CPM/ CPMF 5-8	CPM/ CPMF 6-6	CPM/ CPMF 6-12	CPM/ CPMF 10-4	CPM/ CPMF 10-8	CPM/ CPMF 12-6	CPM/ CPMF 20-4
A_3	185	185	185	185	205	185	205	205	193	205	193	193	193
A_4 (8 m)	427	427	427	427	–	427	–	–	530	–	530	530	530
A_4 (9 m)	–	–	–	–	497	–	497	497	–	497	–	–	–
A_5	335	335	335	415	365	415	365	480	396	480	396	506	506
H_1	24	24	24	24	24	24	24	24	23,5	24	23,5	23,5	23,5
H_2	111	111	111	132	122	132	122	144	152	144	152	116	116
H_3	129	129	129	129	129	129	129	129	128	129	128	128	128
H_4 VTG	91,5	91,5	91,5	91,5	91,5	91,5	91,5	91,5	90,5	91,5	90,5	90,5	90,5
H_4 VTE	125	125	125	125	125	125	125	125	110	125	110	110	110
I	76,5	76,5	76,5	76,5	76,5	76,5	76,5	76,5	98	76,5	98	98	98
L VTP/VTG	310	310	310	310	310	310	310	310	360	310	360	360	360
L VTE (CPM)	410	410	410	410	410	410	410	410	435	410	435	435	435
L VTE (CPMF)	420	420	420	420	420	420	420	420	445	420	445	445	445
L_1	130	130	130	130	130	130	130	130	150	130	150	150	150
L_2 (CPM)	255	255	255	255	255	255	255	255	255	255	255	255	255
L_2 (CPMF)	265	265	265	265	265	265	265	265	265	265	265	265	265
L_3	155	155	155	155	155	155	155	155	180	155	180	180	180
L_4	143	143	143	164	137	164	137	159	179	159	179	179	179
O	60	60	60	60	60	60	60	60	80	60	80	80	80
P	187	187	187	187	187	187	187	187	187	187	187	187	187
P_1	295	295	295	295	295	295	295	295	295	295	295	295	295
S	b + 50	b + 50	b + 50	b + 50	b + 50	b + 50	b + 50	b + 50	b + 54	b + 50	b + 54	b + 54	b + 54
T	97	97	97	97	97	97	97	97	97	97	97	97	97
t	19	19	19	19	19	19	19	19	19	19	19	19	19

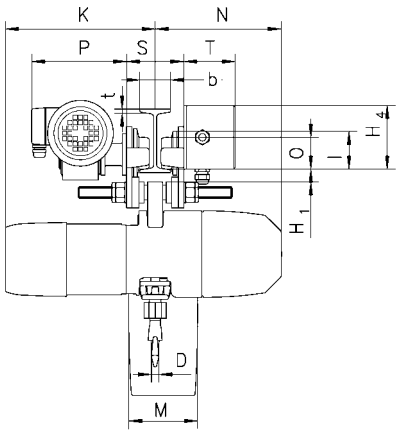
Model CPM
with integral manual
push or geared trolley





Model CPM
with integral electric trolley





Yale®

Electric chain hoists CPE

Electric chain hoist model CPE with suspension hook

Capacities 1.600 - 10.000 kg

Electric chain hoist model CPE with integral trolley

Capacities 1.600 - 10.000 kg

The CPE series is a range of high quality products for professional applications. They are highly efficient and engineered for a long working life. The hoists are composed of three main component parts which makes service easy and inexpensive.

Features

- The standard, **oil bath lubricated planetary gearbox** is particularly smooth running and enables a **low overall height** (see dimension A in the dimension table on page 62).
- The standard version comes with direct control. Contactor control (42 V) is optionally available.
- The **5-pocket load chain sheave**, manufactured from wear resistant case hardening steel, is matched perfectly to the load chain to guarantee smooth and precise chain motion.
- Case hardened and zinc plated link chain.
- The heavy duty squirrel cage motor has an adjustable spring pressure brake that holds the load secure even in the event of a power failure.
- The **motor** is designed **for high duty cycles**.
- **Motor** fitted **with** a bimetallic **thermal protection** (useable in connection with optional low voltage control).
- 400 or 230 V, 3-phase, 50 Hz - Euro-voltage, resp. 460 or 230 V, 3-phase 60 Hz.
  Versions with two speed trolley
  VTEF 400 V, 50 Hz resp. 460 V, 60 Hz.
- Motor protected to IP 54, Insulation class F

The units are certified by the employer's liability insurance association and fulfil the requirements of the machinery directive 98/37 EWG.

Optional

- 42 V low voltage control
- Other operating voltages on request
- Suspension hook rotated 90°
- Motor with stainless steel brake
- Stainless steel load chain
- Flexible chain container
- Limit switches for highest and lowest hook positions

Twin hoist model CPE 100-2

Capacity 10.000 kg

The model CPE 100-2 consists of two CPE 50-2 units. They are connected by a framework. Hook suspension, geared or electric trolleys are available. Integral limit switches for highest and lowest hook positions are standard.

Festooned cable systems
see page 68-69

5-pocket load chain sheave
machined for smooth, precise chain motion

Universal connection
to suspension hook, trolley or steel structures

Double fall bottom block
for capacities up to 5t

Hoist connected directly to trolley
with electric drive. Manual pull and geared trolleys also available

Optional: Flexible chain container
made from wear resistant textile fabric

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Technical data CPE

Model	Capacity in kg/ chain falls	Chain dimensions d x p in mm	Lifting speed Main lift m/min	Lifting speed Fine lift m/min	Hoist motor kW	Motor rating ED %	Net weight* Suspension hook kg	Net weight* Push trolley kg	Net weight* Geared trolley kg	Net weight* Electric** trolley kg
CPE 16-8	1600/1	11 x 31	8	–	2,3	40	88	150	154	164
CPEF 16-8	1600/1	11 x 31	8	2	2,3/0,58	40/20	93	155	159	169
CPE 20-8	2000/1	11 x 31	8	–	2,8	25	88	150	154	164
CPEF 20-8	2000/1	11 x 31	8	2	2,8/0,7	25/15	93	155	159	169
CPE 25-5	2500/1	11 x 31	5	–	2,3	40	88	150	154	164
CPEF 25-5	2500/1	11 x 31	5	1,25	2,3/0,58	40/20	93	155	159	169
CPE 30-5	3000/1	11 x 31	5	–	2,8	25	88	150	154	164
CPEF 30-5	3000/1	11 x 31	5	1,25	2,8/0,7	25/15	93	155	159	169
CPE 32-4	3200/2	11 x 31	4	–	2,3	40	107	169	173	182
CPEF 32-4	3200/2	11 x 31	4	1	2,3/0,58	40/20	112	174	178	187
CPE 40-4	4000/2	11 x 31	4	–	2,8	25	107	169	173	182
CPEF 40-4	4000/2	11 x 31	4	1	2,8/0,7	25/15	112	174	178	187
CPE 50-2	5000/2	11 x 31	2,5	–	2,3	40	107	169	173	182
CPEF 50-2	5000/2	11 x 31	2,5	0,6	2,3/0,58	40/20	112	174	178	187
CPE 100-2	10000/4	11 x 31	2,5	–	2 x 2,3	40	282	–	385	406
CPEF 100-2	10000/4	11 x 31	2,5	0,6	2 x 2,3/0,58	40/20	287	–	390	411

*Weight for standard 3m lift. Other lifting heights on request. **Additional weight for 2 speed version 2,0 kg
Chain container for CPE 16-8 to CPEF 50-2: 13 resp. 21m chain, for CPE/CPEF 100-2: 2 x 21m chain

Technical data trolleys

Capacity kg	Size	Flange width mm	Curve radius min. m	Electric trolley Travel speed m/min at 50 Hz	Electric trolley Motor kW at 50 Hz
1600 - 5000	A	98 - 180	1,8	11 or 11/2,8	0,37 or 0,3/0,09
1600 - 5000	B	180 - 300	1,8	11 or 11/2,8	0,37 or 0,3/0,09
10000	B	125 - 310	1,8	5 or 5/1,25	0,55 or 0,55/0,12

Yale®

Fax-Service Questionnaire

Questionnaire for choosing a suitable electric chain hoist

Company _____

Contact _____

Street/Code/City _____

Telephone/Telefax _____

Details about intended use

_____

_____

_____

_____

Required capacity

_____

Lifting height

_____

Ambient conditions

- ☐ Normal
- ☐ Humidity
- ☐ Dust
- ☐ Dirt
- ☐ Particular temperatures °C
- ☐ Increased rel. humidity %

Other

_____

How long is the hoist in operation

_____ Load cycles per hour

_____ Hours per day

_____ Days per week

_____ Distance covered per lifting cycle

Unusual operating conditions that could be important for the choice and function of the electric chain hoist

Type of load

- ☐ Permanent
- ☐ Changing
- ☐ Shocks
- ☐ Vibration
- ☐ Static

Trolley drive

- ☐ Motor
- ☐ Manual

Operating voltage

- ☐ 400 V
- ☐ 230 V
- ☐ 3-phase a.c.
- ☐ 1-phase a.c.

Power frequency

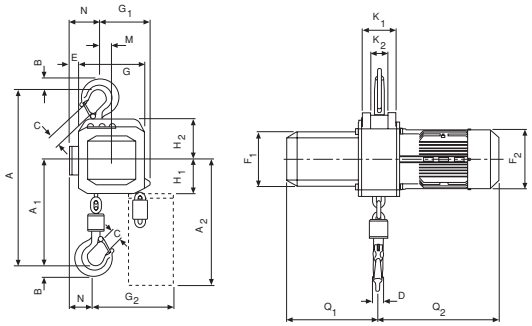
- ☐ 50 Hz
- ☐ 60 Hz

Protection

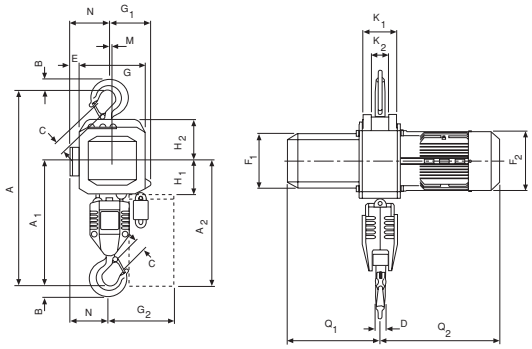
- ☐ IP 54
- ☐ Other

Dimensions CPE/CPEF in mm

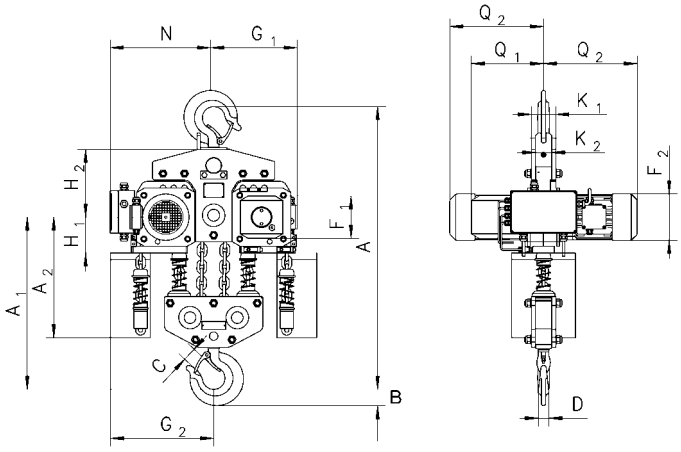
Dimension	CPE/CPEF 16-8	CPE/CPEF 20-8	CPE/CPEF 25-5	CPE/CPEF 30-5	CPE/CPEF 32-4	CPE/CPEF 40-4	CPE/CPEF 50-2	CPE/CPEF 100-2
A	516	516	516	516	681	681	681	1068
A_1	286	286	286	286	428	428	428	651
A_2 (13 m)	430	430	430	430	430	430	430	–
A_2 (21 m)	530	530	530	530	530	530	530	555
B	35	35	35	35	45	45	45	60
C	37	37	37	37	46	46	46	52
D	24	24	24	24	30	30	30	40/45
E	24	24	24	24	24	24	24	–
F_1	160	160	160	160	160	160	160	160
F_2	178	178	178	178	178	178	178	178
G	220	220	220	220	220	220	220	705
G_1	180	180	180	180	140	140	140	315
G_2 (13 m)	257	257	257	257	218	218	218	–
G_2 (21 m)	277	277	277	277	238	238	238	408
H_1	110	110	110	110	110	110	110	135
H_2	135	135	135	135	135	135	135	256
K_1	100	100	100	100	100	100	100	92
K_2	51	51	51	51	51	51	51	62
M	50,0	50,0	50,0	50,0	9,6	9,6	9,6	–
N	84	84	84	84	124	124	124	390
Q_1	280	280	280	280	280	280	280	280
Q_2 (CPE)	362	362	362	362	362	362	362	362
Q_2 (CPEF)	417	417	417	417	417	417	417	417



Model CPE with suspension hook, single fall
1.600 - 3.000 kg



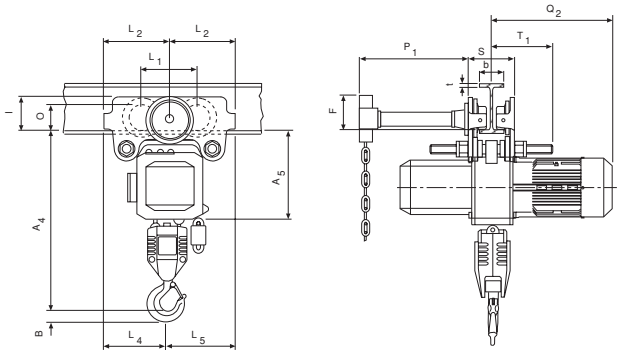
Model CPE with suspension hook, double fall
3.200 - 5.000 kg



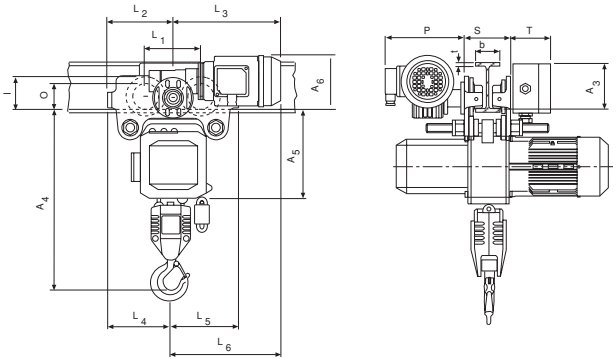
Model CPE 100-2 with suspension hook
10.000 kg

Dimensions CPE/CPEF in mm

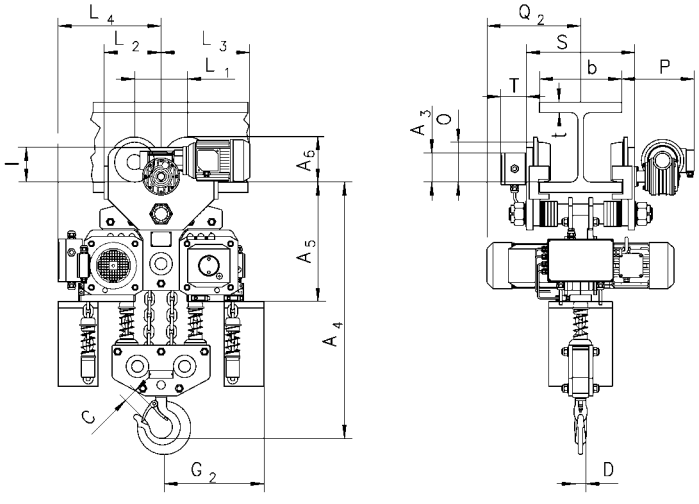
Dimension	CPE/CPEF 16-8	CPE/CPEF 20-8	CPE/CPEF 25-5	CPE/CPEF 30-5	CPE/CPEF 32-4	CPE/CPEF 40-4	CPE/CPEF 50-2	CPE/CPEF 100-2
A_3	143	143	143	143	143	143	143	110
A_4	465	465	465	465	615	615	615	965
A_5	298	298	298	298	298	298	298	450
A_6	178	178	178	178	178	178	178	170
b	A = 98 - 180 / B = 180 - 300							
F	150	150	150	150	150	150	150	103
I	142,5	142,5	142,5	142,5	142,5	142,5	142,5	130
L_1	209	209	209	209	209	209	209	200
L_2	262,5	262,5	262,5	262,5	262,5	262,5	262,5	215
L_3 (VTE)	292	292	292	292	292	292	292	335
L_3 (VTEF)	296	296	296	296	296	296	296	335
L_4	213	213	213	213	253	253	253	390
L_5	312	312	312	312	272	272	272	215
L_6 (VTE)	342	342	342	342	302	342	342	–
L_6 (VTEF)	346	346	346	346	306	306	306	–
O	125	125	125	125	125	125	125	150
P (VTE)	197	197	197	197	197	197	197	273
P (VTEF)	205	205	205	205	205	205	205	280
P_1	229	229	229	229	229	229	229	110
S	b + 70	b + 70	b + 70	b + 70	b + 70	b + 70	b + 70	b + 98
t	27	27	27	27	27	27	27	40
T	97	97	97	97	97	97	97	97



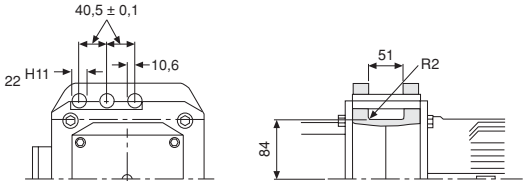
Model CPE
with integral push or geared trolley



Model CPE
with integral electric trolley



Model CPE 100-2, with integral electric trolley
10.000 kg



Yale®

Technical information

General information about electric chain hoists

Apart from the usual criterion such as lifting capacity, lifting speed and dimensions also consider following:

1. Choosing a motor according to FEM 9.682

In addition to the torque the decisive criterion for rating an electric motor is the heat it generates. Here we differentiate between two operational modes.

1.1 Intermittent duty

In this case the motor is designed for a series of equal cycles consisting of duty periods with constant load and rest periods. The heat generation depends on the relative duty cycle, that is, the relationship between operating period under load, total operating time and the number of starts/hour.

$$\text{Duty rating ED} = \frac{\text{Operating period}}{\text{Operating period + rest periods}} \%$$

The number of cycles that can be made under full load is calculated as follows:

$$S \approx 0{,}3 \times \frac{ED \times V}{H}$$

S = Cycles per hour
ED = Duty rating in %
V = Lifting speed in m/min.
H = Average lifting height in m

A cycle consists of a motion of lifting, lowering and the rest periods. One must ensure that the lifting height does not exceed the value permitted by the percentage duty cycle referred to a cycle period of 10 minutes

$$H \leq \frac{ED \times V}{20}$$

and that simultaneously the permissible number of starts is not exceeded. It is generally accepted that a cycle consists of 6 starts.

1.2 Short time duty

Where special duty conditions exist (e.g. long hook path) the operating period must be of such length that the admissible temperature limit of the motor is not exceeded. For such cases intermittent duty must be replaced by short time duty. That is, the motor may be operated for up to 10 starts over a certain period (usually 15 min.). Thereafter the motor must cool down to room temperature.

1.3 Calculation example intermittant duty

Electric hoist	:	CPM 5-8
Lifting speed	:	8 m/min.
Lifting height	:	2,8 m
Duty rating ED	:	50 %
c/h	:	180

Number of cycles per hour

$$S = 0{,}3 \times \frac{50 \times 8}{2{,}8} = 42{,}8$$

Max. lifting height

$$H = 2{,}8 \leq \frac{50 \times 8}{20} = 20 \text{ m}$$

Number of starts

$$N = \frac{25 \text{ cycles}}{\text{hour}} \times \frac{6 \text{ starts}}{\text{cycle}} = 150$$

2. Classification of hoisting equipment according to FEM 9.511

To choose an optimal hoist the lifting capacity and also the classification group must be known.
The classification group indicates the theoretical operating time of the mechanical components under full load:

Classification group	1Bm	1Am	2m
Operating time in h	400	800	1600

If the hoist is operated as classified an actual operating time of around 10 years can be expected. After this period a general overhaul is necessary.

To define the classification group following values must be determined:

2.1 Average operating time per day

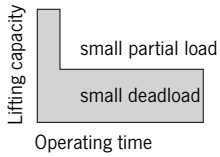
The average operating time can be estimated or calculated as follows:

$$\text{Operating time/day} = \frac{2 \times \text{average hook path} \times \text{cycles /hour} \times \text{operating time/day}}{60 \times \text{lifting speed}}$$

Electric hoists provided with counters for operating hours and number of starts simplifiy the classification (see CPM page 54)

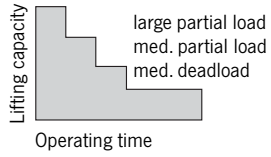
2.2 Load spectrum

The load spectrum indicates to what extent a hoist or part thereof is subject to maximal stress or whether it is subject to smaller loads only. It can be calculated or estimated according to the diagrams on the right:



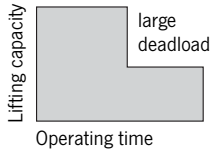
1 light

Hoists or parts thereof usually subject to very small loads and in exceptional cases only to maximum loads.



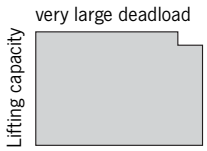
2 medium

Hoists or parts thereof usually subject to small loads but rather often to maximum loads.



3 heavy

Hoists or parts thereof usually subject to medium loads but frequently to maximum loads.



4 very heavy

Hoists or parts thereof usually subject to maximum or almost maximum loads.

2.3 Classification

The classification group is defined by operating hours and load spectrum:

Load spectrum	Aver. op. hours per working day		
1 light	up to 2	2-4	4-8
2 medium	up to 1	1-2	2-4
3 heavy	up to 0,5	0,5-1	1-2
4 very heavy	up to 0,25	0,25-0,5	0,5-1
Classification group acc. to FEM/DIN 15020	1Bm	1Am	2m

Protection

Degrees of protection according to EN 60529

Depending on the operating and environmental conditions the damaging effect of water, foreign particles and dust and the contact with live or moving parts inside a motor is to be prevented by choosing a suitable protection.
The marking used to indicate the degree of protection consists of the letters IP followed by two characteristic numerals.
The marking applies to the unit as it is supplied and the defined or usual location of the unit.
The protection can change if the unit is located or fitted differently.

	1st digit for protection against ingress of solid foreign particles	2nd digit for protection against ingress of liquid
IP	0 to 6	0 to 8

Motor cooled internally

Protection	1st digit contact protection	ingress of solid foreign particles	2nd digit ingress of liquid
IP 00	no protection	no protection	no protection
IP 02	no protection	no protection	drops of water when tilted up to 15° from vertical
IP 11	large surface contact	foreign bodies over 50 mm Ø	vertical water drops
IP 12			drops of water when tilted up to 15° from vertical
IP 13			spray water when tilted up to 60° from vertical
IP 21	contact with fingers	foreign bodies over 12 mm Ø	vertical water drops
IP 22			drops of water when tilted up to 15° from vertical
IP 23			spray water when tilted up to 60° from vertical

Motor surface cooled

IP 44	contact with tools or similar	against solid foreign bodies over 1 mm Ø	spray water from all directions
IP 54			spray water from all directions
IP 55	complete protection against contact	damaging dust deposits	water jet from all directions
IP 56			momentarily flooding
IP 65	complete protection against contact	against ingress of dust	water jet from all directions

Terminal boxes are usually supplied with protection IP 54 resp. IP 55.

Protection against contact and solid foreign particles

First digit 0

No protection

No protection of persons against contact with live or moving parts inside the enclosure. No protection of equipment against ingress of solid foreign particles.

First digit 1

Protection against large solid foreign particles

Protection against accidental or inadvertent contact with live or moving parts inside the enclosure by a large surface of the human body, e.g. hand, but not protected against deliberate access to such parts.

First digit 2

Protection against medium size solid foreign particles

Protection against contact with live or moving parts inside the enclosure by fingers. Protection against ingress of medium size solid foreign particles of diameter greater than 12 mm.

First digit 3

Protection against small solid foreign particles

Protection against contact with live or moving parts inside the enclosure by tools, wires or such objects of thickness greater than 2.5 mm. Protection against ingress of small solid foreign particles of diameter greater than 2,5 mm.

First digit 4

Protection against granular structured foreign particles

Protection against contact with live or moving parts inside the enclosure by tools, wires or such objects of thickness greater than 1 mm. Protection against ingress of granular structured solid foreign particles of diameter greater than 1 mm.

First digit 5

Protection against dust deposits

Complete protection against contact with live or moving parts inside the enclosure. Protection against harmful deposits of dust. The ingress of dust is not totally prevented, but dust cannot enter in an amount sufficient to interfere with the satisfactory operation of the equipment enclosed.

First digit 6

Complete protection

Complete protection against contact with live or moving parts inside the enclosure. Protected against the ingress of dust.

[2] In certain cases water should not ingress. As required this is defined on the follow-on page of the unit in question.

Protection against liquids

Second digit 0

No protection

No particular protection.

Second digit 1

Protection against vertical water drops

Drops of condensed water falling on the enclosure shall have no harmful effects

Second digit 2

Protection against diagonal falling water drops

Protection against drops of liquid. Drops of falling liquid shall have no harmful effect when the enclosure is tilted at any angle up to 15° from the vertical.

Second digit 3

Protection against spray water

Protection against drops of liquid. Water falling in rain at an angle equal to or smaller than 60° with respect to the vertical shall have no harmful effect.

Second digit 4

Protection against splashing

Liquid splashed from any direction shall have no harmful effect.

Second digit 5

Protection against water jets

Water projected by a nozzle from any direction under stated conditions shall have no harmful effect.

Second digit 6

Protection against flooding

Protection against conditions on ships decks (deck watertight equipment). Water from heavy seas shall not enter the enclosure under prescribed conditions [2].

Second digit 7

Protection against immersion in water

It shall not be possible for water to enter the enclosure under stated conditions of pressure and time [2].

Second digit 8

Protection against indefinite immersion

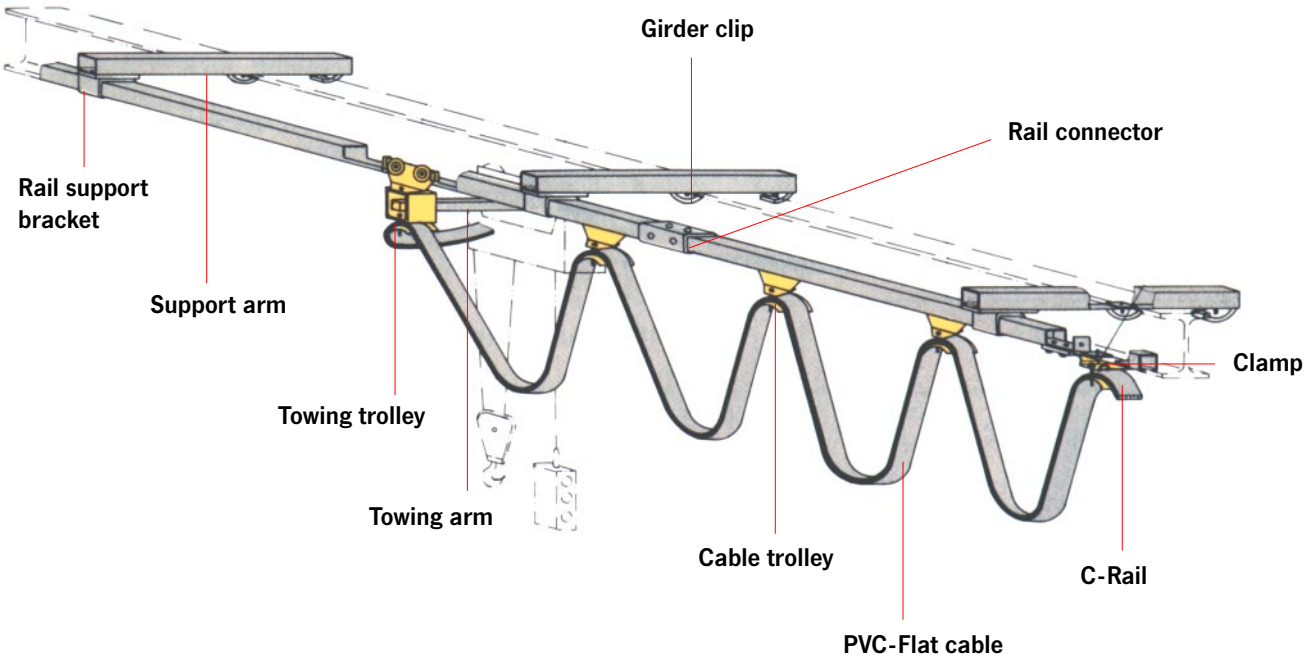
Protection against indefinite immersion in water.
Under specific pressure it shall not be possible for water to enter the enclosure [2].

Yale®

Festooned cable systems

Festooned cable systems

The Yale festooned cable system kit contains all the parts necessary to install a power supply. The PVC flat cable 4 x 2.5 mm² is suitable for all electric hoists with a power consumption of up to 25 A. The line sag is 700 mm. The cable and towing trolleys are made from plastic and can withstand loads of up to 10 daN.
The rollers are fitted with bronze bushes resp. ball bearings. The C-rail, rail support brackets and rail connectors are zinc plated for added protection against corrosion.



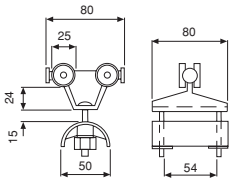
Quantity of units' dependant on track length

• C-rails track length	m	4	6	8	10	12	14	16	18	20
max. transport distance	m	3,5	5,4	7,3	9,2	11,0	12,9	14,8	16,7	18,5
• PVC flat cable	m	9	11	13	15	17	19	21	23	25
• Nos. of cable trolleys		2	3	5	6	8	9	11	12	14
• Nos. of rail support brackets		4	5	6	7	8	9	10	11	12
• Nos. of rail connectors		–	1	1	2	2	3	3	4	4

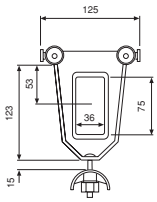
The base kit includes:

- 1 End clamp
- 1 End stop
- 1 Towing trolley
- 2 End caps
- 2 FI-fittings with locknuts
- 1 Mains switch 400 V, 50 Hz

Cable trolley

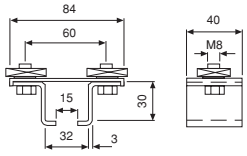


Towing trolley

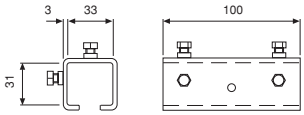


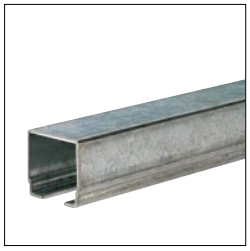
Mains switch

Rail support bracket

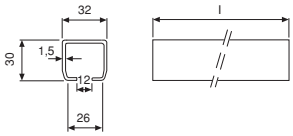


Rail connector





C-Rail

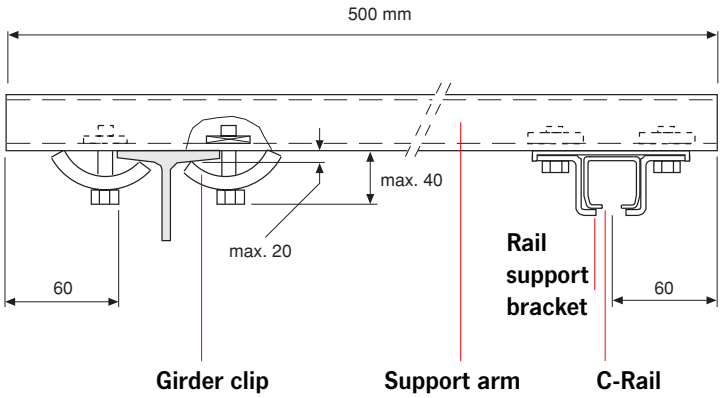


Mounting kit

consisting of support arm and girder clips for connection to the beam

Towing arm

for towing trolley



Yale®

Pneumatic chain hoist CPA

Pneumatic chain hoist model CPA

Capacities 125 - 990 kg

The motors with integrated brake function are designed for continuous operation with an unlimited number of work and duty cycles. These units excel through their extremely quiet operation and robust aluminium housing. Low and easy maintenance due to reduced number of components. On account of its compact, lightweight design and low headroom the CPA is very handy and easy to carry.

- Operating pressure 6 bar
- Suitable for operation in hazardous areas according to ⟨Ex⟩ II 3 GD IIA T4
- Extremely sensitive direct control with emergency stop. Max. control drop 6 m.
- Chain containers up to 8 m lifting height are included as standard.

Optional

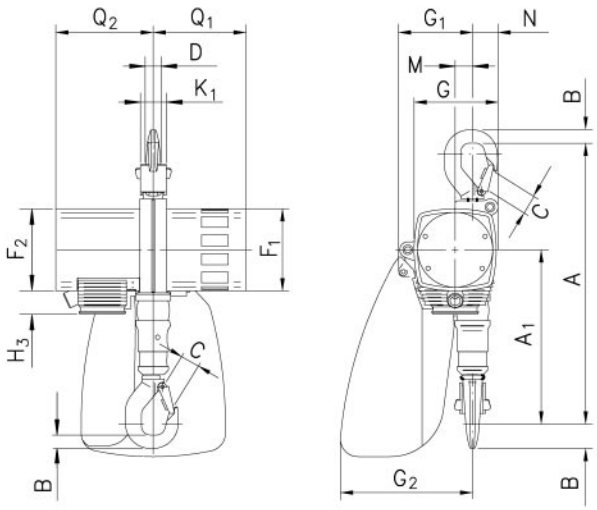
- Manual trolleys for top hook suspension of pneumatic chain hoists.
- Pressure limiting valves to prevent unintentional overloading.
- Maintenance unit for main air supply pipe (Pressure regulator, manometer, lubricator and support)

To ensure faultless operation the compressed air supply must be filtered and oiled!

Model	Capacities in kg/ Number of chain falls	Lifting speed with rated load* m/min	Lifting speed without load* m/min	Lowering speed with rated load* m/min	Air consumption with rated load* m^3/min	Motor kW	Weight for standard 3 m lift kg
CPA 1-15	125/1	15	40	30	0,5	0,4	9,5
CPA 2-8	250/1	8	20	16	0,5	0,4	10,5
CPA 5-10	500/1	10	20	18	1,2	1,0	21
CPA 10-5	990/1	5	10	10	1,2	1,0	23

*Values for 6 bar (flow pressure) and 2 m control drop. Speeds will be reduced in case of longer control length.

Dimension/mm	**CPA 1-15**	**CPA 2-8**	**CPA 5-10**	**CPA 10-5**
A	328	328	458	458
A_1	210	210	290	290
B	17	17	26	26
C	19	19	28	28
D	13	13	22	22
F_1	92	92	122	122
F_2	92	92	122	122
G	115	115	155	155
G_1	83	83	119	119
G_2	148	148	194	194
H_3	30	30	45	45
K_1	30	30	50	50
M	20	20	25	25
N	29	29	40	40
Q_1	104	104	144	144
Q_2	109	109	148	148



Yale®

Pneumatic chain hoist CPA

To ensure faultless operation the compressed air supply must be filtered and oiled!

Pneumatic chain hoist model CPA with suspension hook

Capacities 2.000 - 10.000 kg

Pneumatic chain hoist model CPA with integral trolley

Capacities 2.000 - 10.000 kg

The conception is in accordance with the design of the model CPE.
With 100% duty rating and an unlimited number of starts the model CPA is suitable for heavy duty applications.
It is insusceptible to contamination, humidity and aggressive mediums from the outside.
The hoists are composed of three main components which makes service easy and inexpensive.

Features

- **Robust rotating piston motor** has an adjustable spring pressure brake that holds the load secure even in the event of an air failure.
- High starting torque due to switching valves in the motor body.
- **Sensitive control** by means of 2 resp. 4 button pendant control with emergency stop.
- Low noise emission due to large dimension silencer.
- Designed for **operating pressures of 4 to 6 bar**
- The standard, **oil bath lubricated planetary gearbox** is particularly smooth running and enables a low overall height (see dimension A in the dimension table, page 74-75).
- The **5-pocket load chain sheave,** manufactured from wear resistant case hardening steel, is matched perfectly to the load chain to guarantee smooth and precise chain motion.
- The replaceable chain guide is robust and precision machined.
- Pneumatic trolleys for top hook or rigid attachment on request.
- Pull cord control optionally available.

Technical data CPA

Model	Capacity in kg/ chain falls	Lifting speed with rated load* m/min	Lifting speed without load* m/min	Lowering speed with rated load* m/min	Motor kW	Weight for standard 3m lift** Suspension hook kg	Push trolley kg	Geared trolley kg	Motor trolley kg
CPA 20-8	2000/1	7,4	9,9	11	2,6	121	184	188	199
CPA 30-6	3000/1	6,0	9,9	13	3,2	121	184	188	199
CPA 40-4	4000/2	3,7	5	5,5	2,6	140	202	206	218
CPA 50-3	5000/2	3,4	5	6,0	3,0	140	202	206	218
CPA 60-3	6000/2	3,0	5	6,5	3,2	140	202	206	218
CPA 100-2	on request								

*Value for 6 bar (flow pressure), air consumption with rated load 4,7m³/min, **Other lifting heights available.

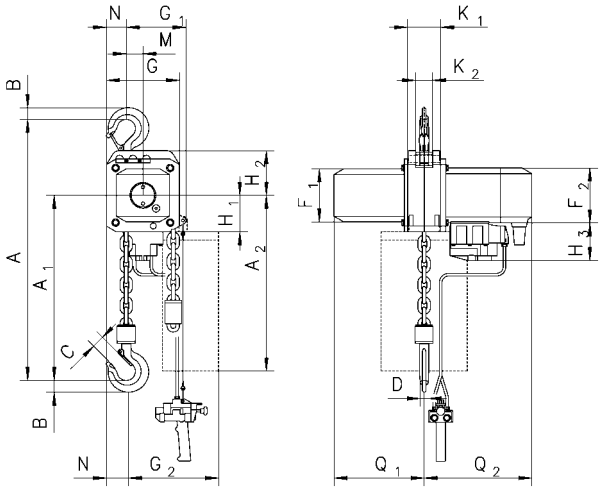
Technical data pneumatic trolleys

Capacity kg	Flange width mm	Size	Curve radius min. m	Pneumatic trolley Travel speed m/min	Motor kW
2000 - 6000	98 - 180	A	1,8	18	0,55
2000 - 6000	180 - 300	B	1,8	18	0,55
10000	on request				

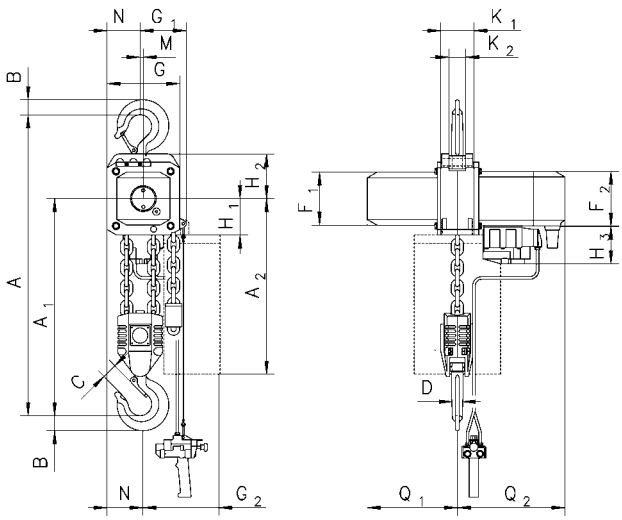
Dimensions CPA in mm

Dimension	CPA 20-8	CPA 30-6	CPA 40-4	CPA 50-3	CPA 60-3
A	516	516	681	681	681
A_1	286	286	428	428	428
B	35	35	45	45	47
C	37	37	46	46	42
D	24	24	30	30	30
F_1	160	160	160	160	160
F_2	165	165	165	165	165
G	220	220	220	220	220
G_1	180	180	140	140	140
G_2 (13 m)	258	258	218	218	218
G_2 (21 m)	278	278	238	238	238
H_1	110	110	110	110	110
H_2	135	135	135	135	135
H_3	115	115	115	115	115
K_1	100	100	100	100	100
K_2	51	51	51	51	51
M	50	50	9,6	9,6	9,6
N	60	60	100	100	100
Q_1	272	272	272	272	272
Q_2	325	325	325	325	325

Model CPA
with suspension hook, single fall
2.000 - 3.000 kg

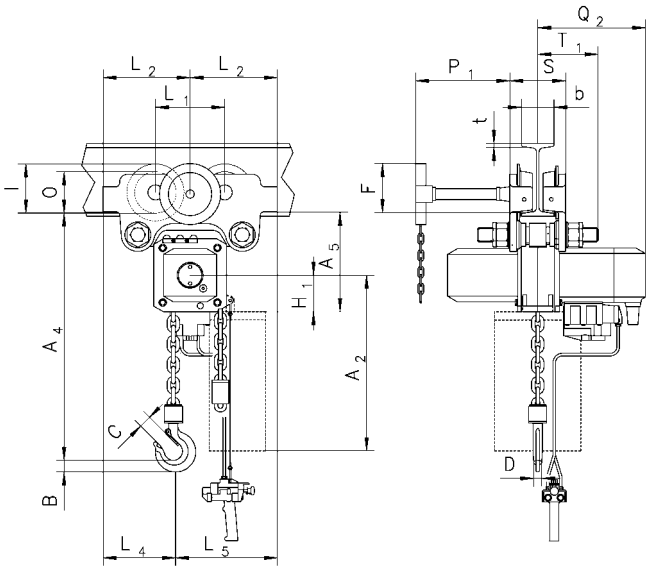


Model CPA
with suspension hook, double fall
4.000 - 6.000 kg

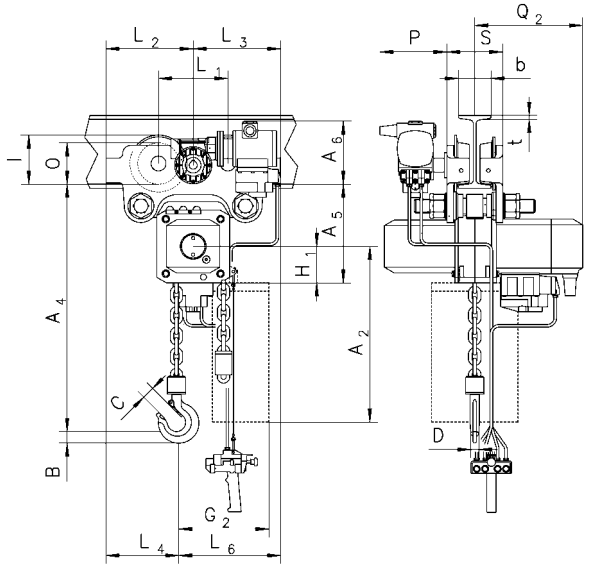


Dimensions CPA in mm

Dimension	CPA 20-8	CPA 30-6	CPA 40-4	CPA 50-3	CPA 60-3
A_2 (13 m)	430	430	430	430	430
A_2 (21 m)	530	530	530	530	530
A_4	465	465	615	615	615
A_5	298	298	298	298	298
A_6	190	190	190	190	190
b	A = 98 - 180 / B = 180 - 300				
F	150	150	150	150	150
I	142,5	142,5	142,5	142,5	142,5
L_1	209	209	209	209	209
L_2	262,5	262,5	262,5	262,5	262,5
L_3	265	265	265	265	265
L_4	213	213	253	253	253
L_5	312	312	272	272	272
L_6	315	315	275	275	275
O	125	125	125	125	125
P	208	208	208	208	208
P_1	284	284	284	284	284
S	b + 70	b + 70	b + 70	b + 70	b + 70
t	27	27	27	27	27
T size A	182	182	182	182	182
T size B	242	242	242	242	242



Model CPA
with integral manual
push or geared trolley



Model CPA
with integral pneumatic trolley

Wire rope winches

Manual, electric and pneumatic wire rope winches

Yale wire rope winches series MWS, MWW, RPE and RPA are designed explicitly for performance, efficiency and safety and offer many advantages and options.
RPE‘s and RPA‘s extremely compact, practical cube design and universal rope lead-offs allow individual applications in almost any position and make them powerful aids for lifting and pulling loads.
The winches are designed to DIN 15020, classification 1Bm, safety regulation BGV D8 (winch, lift and pull equipment) and, of course, the EC machinery directives.
MWS and MWW manual winches are characterized by an automatic load pressure brake for safe holding and extremely sensitive lowering of the load. Unintentional brake release is prevented even with swinging loads. They have a self-locking, back stroke proof, adjustable crank handle for fast lifting of smaller loads, resulting in lowest possible handle effort and rapid winding of the rope. They are suitable for operation in ambient temperatures of -20° through +40°C and manufactured in compliance with the German Safety Regulations for Winches, Lifting and Pulling Equipment BGV D8.
Every winch is factory tested with overload.
The units are supplied with a test certificate showing the unit’s serial-no. and an operating instructions manual which contains a manufacturer’s declaration.

Manual wire rope winch

MWS
MWW

Manual wire rope winch with spur gear drive model MWS

Capacities 125 - 2.000 kg

- Enclosed gear drive for protection of internal parts, even under tough working conditions
- Spur gears on roller bearings, rope drum on plain bearings
- Compact design
- Easy and quick mounting onto walls, poles, towers etc.

Optional

- Corrosion protected design
- Grooved rope drum for improved guidance of the wire rope
- Separation webs for operation with several wire ropes

Manual wire rope winch with worm gear drive model MWW

Capacities 250 - 5.000 kg

- Worm shaft on roller bearings, rope drum on plain bearings
- Small dimensions, compact design, larger rope take-up
- Two rope directions for operation from different positions
- Two lifting speeds by means of different setting of the crank handle for capacities of 2.000 kg and above
- Automatic load pressure brake for safe holding and extremely sensitive lowering of the load

Optional

- Free wheeling device for quick unwinding of the unloaded wire rope for capacities of 2.000 kg and above

Model	Pulling force 1st rope layer daN	Pulling force top rope layer daN	Crank effort 1st rope layer daN	Rope advance per one crank rotation 1st rope layer 1st/2nd speed in mm	Ratio	Weight without wire rope kg	Recommended rope diametre* mm
MWS 125	125	55	11	120	1:1	7	3
MWS 300	300	120	7	21	1:7,4	10	5
MWS 500	500	323	13	30	1:7,4	11	6
MWS 1000	1000	684	15	21	1:17	28	9
MWS 2000	2000	1712	24	16	1:25,7	32	13
MWW 250	250	95	5	17/–	1:10	13	5
MWW 500	500	239	9	20/–	1:12	16	6
MWW 1000	1000	542	14	13/–	1:26	26	9
MWW 1500	1500	845	21	13/–	1:26	28	10
MWW 2000	2000	1129	12/20	5,5/11	1:76/38	60	13
MWW 3000	3000	1861	17/30	5/10	1:104/52	78	16
MWW 5000	5000	3165	34/61	6/12	1:120/60	115	20

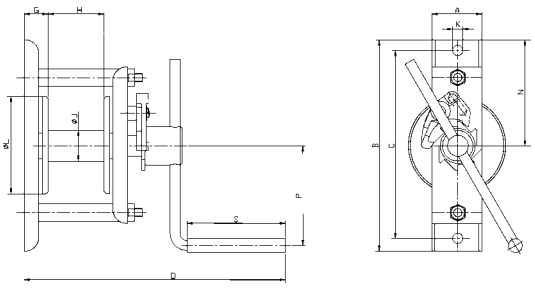
*acc. DIN 3060 FE-znk 1770sZ-spa

Model	Breaking load of wire rope min. kN	Wire rope storage max. m	Number of rope layers max.
MWS 125	5,7	52	18
MWS 300	15,9	26	9
MWS 500	22,9	12	5
MWS 1000	51,0	27	5
MWS 2000	106,0	7	2
MWW 250	15,9	63	11
MWW 500	22,9	77	9
MWW 1000	51	55	7
MWW 1500	63	49	6
MWW 2000	106	46	6
MWW 3000	161	52	5
MWW 5000	252	40	5

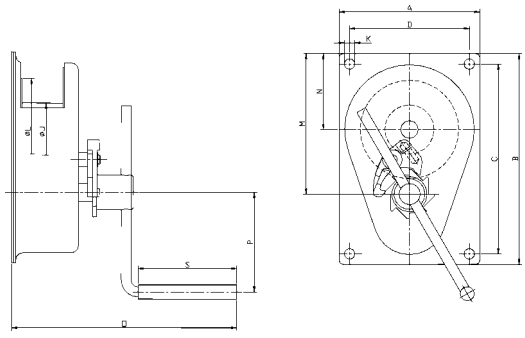
Dimensions MWS in mm

Dimension	**MWS 125**	**MWS 300**	**MWS 500**	**MWS 1000**	**MWS 2000**
A	70	200	200	230	230
B	305	300	300	340	340
C	270	268	268	280	280
D	–	168	168	180	180
G	40	15	15	27	27
H	85	60	60	126	126
ØJ	32	50	70	102	121
K	14	12	12	17	17
ØL	141	140	140	212	212
M	–	198	198	266	288
N	153	108	108	118	118
O	325	263	263	425	425
P	300	250	250	250	250
S	128	128	128	128	128

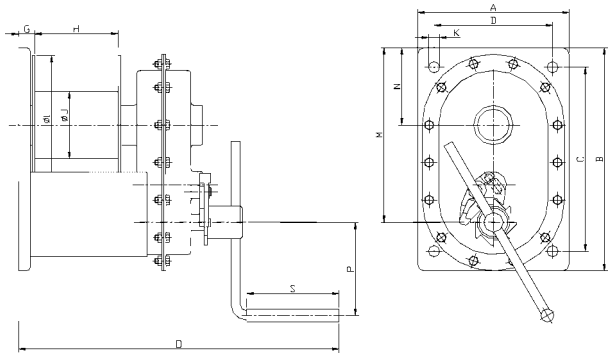
Model MWS
with spur gear drive
Capacity 125 kg



Model MWS
with spur gear drive
Capacities 300 - 500 kg



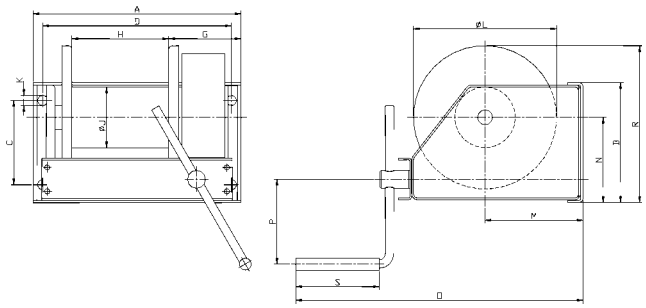
Model MWS
with spur gear drive
Capacities 1.000 - 2.000 kg



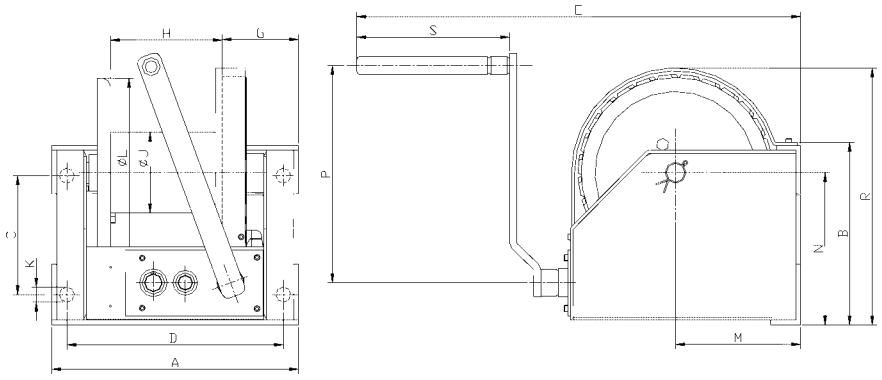
Dimensions MWW in mm

Dimension	MWW 250	MWW 500	MWW 1000	MWW 1500	MWW 2000	MWW 3000	MWW 5000
A	293	313	348	378	410	436	436
B	140	164	201	238	295	356	421
C	82	106	141	178	196	251	316
D	261	281	316	346	360	386	386
G	123	125	127	127	137	137	138
H	107	129	160	185	180	205	200
ØJ	48	70	102	102	133	165	219
K	17	17	17	17	25	25	25
ØL	160	190	240	240	312	376	437
M	121	138	164	164	208	260	298
N	88	96	140	142	249	308	335
O	410	440	490	490	740	825	865
P	350	350	350	350	380	380	380
R	170	190	260	263	419	550	613
S	140	140	140	140	250	250	250

Model MWW
with worm gear drive
Capacities 250 - 1.500 kg



Model MWW
with worm gear drive
Capacities 2.000 - 5.000 kg



Yale®

Electric wire rope winch RPE

Electric wire rope winch model RPE

Features

- Compact dimensions due to internal brake motor, Standard: Euro-voltage 230/400 V, 50 Hz., 3-phase, protected to IP 54, Insulation class F.
- Adjustable slip clutch to protect the winch from overloading (1000 kg capacity only).
- Spur gear transmission with helical first gear ensures smooth motion. Lubricated by grease and can, therefore, be used in any position.
- Spring pressure disc brake incorporated in the motor holds the load secure even in the event of a power failure.
- Plain rope drum standard.
- The rope is secured to the drum in a recess so that the rope can be wound onto the drum in several layers without damage.
- Direct control as standard.

Rope attachment

Spring pressure disc brake

Gearbox with slip clutch (1000 kg capacity)

Brake motor

Special design according to BGV C1 for theater stage applications available.

Technical Data

Model	Pulling force in the upper layer daN	Lifting speed m/min	Rope Ø mm	Motor performance kW	ED at 120 c/h %	Useable rope length in the upper layer in m	Weight without rope kg
RPE 2-13	250	13,0	4	0,55	40	54,5	31,8
RPE 5-6	500	6,5	6	0,55	40	38,8	32,8
RPE 5-12	500	12,0	6	1,10	40	55,4	41,0
RPE 9-6	990	6,0	8	1,10	40	37,4	76,0
RPE 10-6**	1000	6,0	8	1,10	40	37,4	76,9

**with slip clutch

Optional

- Different drum designs, e.g. extended to accommodate longer rope, machined grooves for exact reeling, with separation web and 2nd rope outlet for working with two ropes, traversing operation.
- Gearbox end switches to limit rope motion in both directions.
- Single-phase A.C. motor 230 V, 50 Hz, for mobile application of the winch.
- Control by means of pendant control including control switch with emergency stop and 2 m long control cable.
- Contactor control with 42 V control voltage when using end or slack rope switches.
- Slack rope switch to automatically stop the winch when rope tension eases e.g. when the load touches down.
- Frequency converter for stepless speed control.

Different drum designs

Single-phase A.C. motor

Geared limit switches

Plain standard drum (longer useable rope length)

Pulling force in all layers daN	Lifting speed upper layer m/min.	Drum size	Max rope length upper layer m
250	13,0	2	80
500	6,5	2	58
990/1000	6,0	2	56
250	13,0	3	200
500	6,5	3	140
500	12,0	3	140
990/1000	6,0	3	100

Grooved drum (larger drum diameter) only for single layer operation

			1st layer/m
250	13,0	1	8,6
500	6,5	1	5,8
990/1000	6,0	1	6,8
250	13,0	2	15
500	6,5	2	10,7
500	12,0	2	10,7
990/1000	6,0	2	12,7
250	13,0	3	44
500	6,5	3	31
500	12,0	3	31
990/1000	6,0	3	29

Yale®

Pneumatic wire rope winch RPA

Pneumatic wire rope winch model RPA

With 100% duty rating and an unlimited number of starts the model RPA is suitable for heavy duty applications. It is insusceptible to contamination, humidity and aggressive mediums from the outside.

Features

- Robust rotating piston motor with high starting torque, designed for operating pressures 4 to 6 bar.
- Spring pressure disc brake incorporated in the motor holds the load secure even in the event of an air failure.
- Sensitive control by means of direct acting valves in the control switch.
- The conception is in accordance with the design of the model RPE but is not supplied with an emergency stop button.

Optional

- Different drum designs, e.g. extended to accommodate longer rope, machined grooves for exact reeling, with separation web and 2nd rope outlet for working with two ropes, traversing operation.

Technical Data

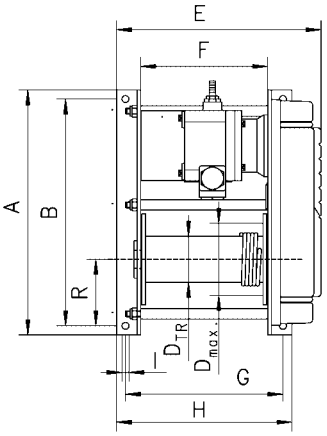
Model	Pulling force in the upper layer daN	Lifting speed with rated load* m/min	Lifting speed without load* m/min	Lowering speed with rated load* m/min	Useable rope length upper layer in m	Weight without rope kg
RPA 2-13	250	12,5	20,0	22,0	54,5	36,7
RPA 5-6	500	6,2	10,0	11,0	38,8	36,7

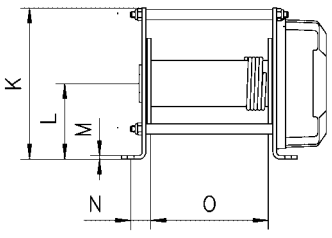
*Value for 6 bar, air consumption 0,75 m³/Min, motor performance 0,55 kW

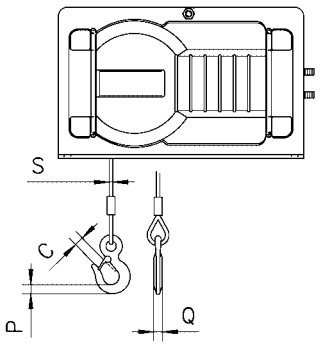
To ensure faultless operation the compressed air supply must be filtered and oiled!

Dimensions RPE/RPA in mm

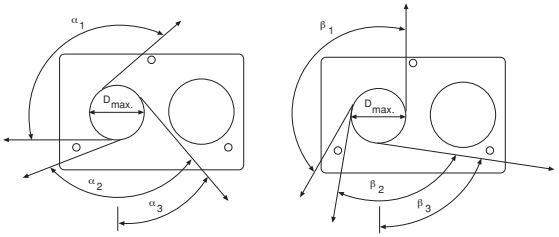
Dimension	RPE 2-13	RPE 5-6	RPE 5-12	RPE 9-6	RPE 10-6	RPA 2-13	RPA 5-6
A	405	405	405	525	525	405	405
B	375	375	375	485	485	375	375
C	18	18	18	25	25	18	18
D_{TR}	76	76	76	108	108	76	76
D_{max}	104	118	118	148	148	104	118
D_A	150	150	150	180	180	150	150
E	336	336	426	465	465	336	336
F	210	210	300	270	270	210	210
G	260	260	350	345	345	260	260
H	290	290	380	380	380	290	290
I	11	11	11	13	13	11	11
K	250	250	250	340	340	250	250
L	125	125	125	170	170	125	125
M	6	6	6	10	10	6	6
N	33,0	33,0	33,0	47,5	47,5	33,0	33,0
O	194	194	284	250	250	194	194
P	19	19	19	24	24	19	19
Q	13	13	13	19	19	13	13
R	125	125	125	170	170	125	125
S	4	6	6	8	8	4	6
$\alpha 1$	130°	130°	130°	145°	145°	130°	130°
$\alpha 2$	110°	110°	110°	125°	125°	90°	90°
$\alpha 3$	40°	40°	40°	50°	50°	20°	20°
$\beta 1$	150°	150°	150°	155°	155°	150°	150°
$\beta 2$	90°	90°	90°	100°	100°	70°	70°
$\beta 3$	80°	80°	80°	83°	83°	60°	60°



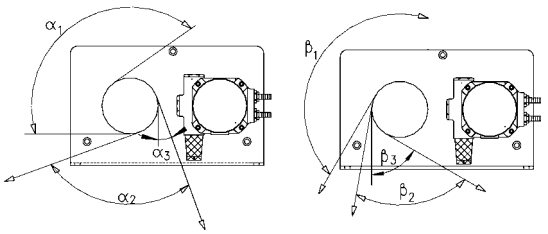




Rope lead-offs for **electric** rope winch RPE



Rope lead-offs for **pneumatic** rope winch RPA



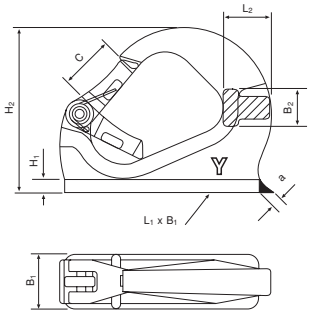
Yale®

Accessories

Weld-on hooks

Capacities 1.000 - 8.000 kg

Yale weld-on hooks model ASH are universal attachments for use on trucks, excavators, low loaders and spreader beams, etc.
The forged safety latch has high lateral stability and an ergonomic form.
Every weld-on hook has an identification number so that its history can be traced back through forging to the origin of the material. The hook can be welded without any special preparation, e.g. prewarming.
The hook and safety latch are epoxy resin coated for added corrosion protection, the return spring is made from stainless steel.



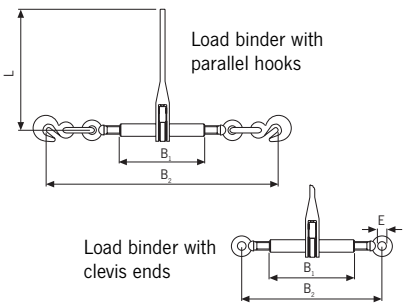
Capacity kg	Weld size a	L_1 x B_1 mm	B_2 mm	C mm	H_1 mm	H_2 mm	L_2 mm	Weight kg
1000	4	90 x 25	17	24	6	76	22	0,40
3000	5	130 x 35	24	29	8	105	28	1,25
5000	5	160 x 45	30	37	10	132	47	2,35
8000	7	170 x 50	40	47	10	138	50	3,60

Load binders

The Yale load binder is an universal tool to restrain and secure loads and freight. Manual operation of the binder lever extends or retracts the threaded spindles. Tension is upheld by the self-locking trapezoid threads.
The load binder is fitted with parallel hooks for direct attachment to chains or with clevis ends for use with existing fastening devices.

Optional

The load binders can be supplied with locking devices which prevent unintentional loosening of the threaded spindles.



Capacity kg	Design	Chain size min mm	Chain size max mm	B_1 mm	B_2 min mm	B_2 max mm	E mm	L mm	Weight kg
2150	Parallel hooks	8	10	253	580	780	-	353	4,7
3750	Parallel hooks	10	13	253	600	800	-	353	5,5
5000	Clevis	-	-	253	330	530	25	353	3,8

Ratchet jack
Yale*taurus*

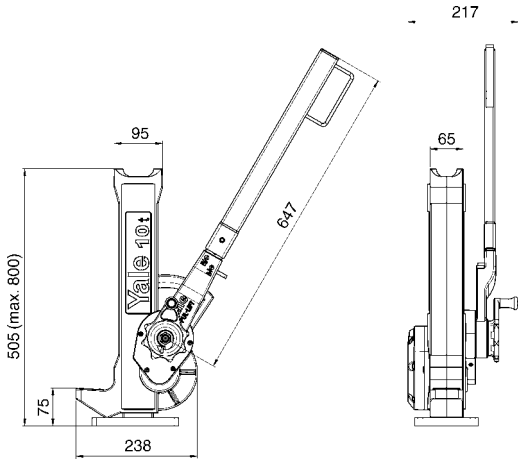
Ratchet Jack
model Yale*taurus*
Capacity 10.000 kg

Mechanical ratchet jacks with lifting claw are designed for operation in confined areas where space below the load is restricted, thus preventing the use of traditional lifting equipment.
In spite of its capacity of 10.000 kg the Yale*taurus* has a weight of just 30 kg and the integrated carrying handle makes it a portable, versatile tool. With a hand force of 45 kg on the detachable hand lever, the Yale*taurus* will lift, press, push or lower a load of 10.000 kg in any direction. A standard crank hand wheel will bring the jack quickly to the required position. The Yale*taurus* is the result of Yale's consequent application of high quality materials and workmanship.

- Automatic screw-and-disc type load brake. The axial brake pressure is generated by the load itself and is, therefore, proportional to the size of the load. The load is held secure in any position.
- Single part housing made from spheroidal cast iron with integrated lifting claw
- The **standard crank hand wheel** for quick positioning of the ratchet jack
- Operating lever with hand protection, detachable and easy lockable
- Versatile application and stability on account of the large floor plate
- Encapsulated design for added protection against corrosion and foreign particles

Areas of application

An extremely versatile and robust unit for almost unlimited use for moving, positioning and securing of loads under extreme conditions.



Capacity on the head kg	Capacity on the claw kg	Max. stroke mm	Lever pull at nominal load kg	Net weight kg
10000	5000	295	45	31,1

Training

We offer many different training seminars in our new training centre in Velbert. The centre offers not only product training but also seminars that provide the trainee with up-to-date insider information and a consolidated knowledge in the usage of rope, lifting and lashing practices.
Modern communication technologies, hands-on experience and well designed training documentation guarantee a quick and lasting training success.
As required all training seminars can also be held at other locations.
Seminars on special themes on request.

Training to become a competent person for the inspection of Yale hoisting equipment according to UVV BGV D8

According to German laws and standards all hoisting equipment must be subjected to a mandatory inspection at least once a year.
The inspection must be performed by a competent person.
In this seminar the participants are trained according to the safety regulations and by hands-on repair to be qualified to perform the safety inspections.


Yale Industrial Products GmbH

Zertifikat

Herr Hans Mustermann
World Industries
Globusstrasse 4-8,
54321 Velbert

hat am 30. April 2003
an einer Sachkundigenschulung für

Winden, Hub- und Zuggeräte

mit Erfolg teilgenommen.

Er wurde gemäß der BGV D8 unterwiesen.

Velbert, 30. April 2003

Yale Industrial Products GmbH

Target group

Members from all industrial areas who are entrusted with the inspection, service and repair of hoisting equipment.

Basic slinging practices

The German safety pamphlet (Sicherheitslehrbrief für Anschläger), issued by the employer's liability insurance association (Berufsgenossenschaft), provides useful information for attaching loads in day to day operations. To protect oneself and others from the dangers of attached loads the rules contained in this pamphlet must be complied with at all times. The rules and their application are described in great detail.

Target group

Members from all industrial areas who are entrusted with attaching loads.

Issued by:
Arbeitsgemeinschaft der Metall-Berufsgenossenschaften

Hütten- und Walzwerks-Berufsgenossenschaft, Düsseldorf
Maschinenbau- und Metall-Berufsgenossenschaft, Düsseldorf
Norddeutsche Metall-Berufsgenossenschaft, Hannover
Süddeutsche Metall-Berufsgenossenschaft, Mainz
Edel- und Unedelmetall-Berufsgenossenschaft, Stuttgart

Can be obtained from:
Carl Heymanns Verlag KG
Luxemburger Straße 449, 50939 Köln

Securing loads on trucks

Serious accidents are often caused because the people responsible for tying/lashing down loads are not properly trained to recognise all implications of this process.
In this seminar the participants are trained to use lashing equipment correctly.

Target group

Members from all industrial areas who are entrusted with lashing loads.

Introducing Yale . . . .

The trademark Yale dates back to Linus Yale jnr. who invented and developed the revolutionary pin-tumbler cylinder lock, world renowned as the Yale lock.

1868 Together with his partner Henry R. Towne Linus Yale jnr. establishes the first Yale lock factory in Stamford, Connecticut named The Yale and Towne Manufacturing Company.

1875 Acquisition of the patents right to the Weston differential pulley block and the start of Yale hoist production.

1877 Yale designs the first spur geared hand chain hoist with incorporated Weston screw-and-disc type load brake.

1904 Yale sets up first sales operations in Germany, England and France.

1927 Concentration of production and distribution in Velbert. Acquisition of the lock manufacturing company Boge & Kasten, Solingen and access to the marketing rights under the trademark BKS.

1936 Start of hoist manufacture in Velbert with production of the world renowned Yale Pul-Lift® ratchet lever hoist. This robust and reliable tool was (and still is) the key product establishing Yale's reputation in hoisting technology in Europe and abroad. Until now more than one million Yale Pul-Lift® units have been built at the Velbert plant alone.

1963 Merger between Eaton Corporation and Yale & Towne Manufacturing.

1983 In USA Eaton Corporation sells the Yale hoist product line to Yale Industrial Products, Inc.

1985 Production and distribution of Yale hoisting equipment in Europe is taken over by Yale Industrial Products GmbH in Velbert, Germany with representations in various countries and subsidiaries in the U.K, France and Austria. During the following years the product offering of Yale Industrial Products GmbH was enlarged by

1988 Hydraulic Jacks and Tools

1994 Flat Webbing & Round Slings, Ratchet Lashings

1999 Tigrip® Lifting Clamps and Weighing Systems

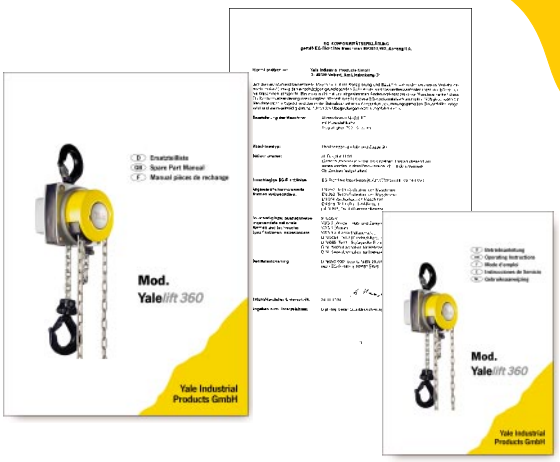
design award winner 2003

2002

Yale Industrial Products GmbH set new standards with the innovative and patented design of the **Yale***lift 360* .

Yale Industrial Products GmbH

Today Yale Industrial Products GmbH of Velbert is a member of a worldwide operating enterprise in the field of materials handling equipment. The company manufactures and distributes a comprehensive range of hoists and lifting clamps, textile slings and ratchet lashings, dynamometer systems and crane weighers as well as a wide range of hydraulic jacks and tools. Qualified personnel at the Yale locations in Germany, the U.K., Spain, France, Austria, the Netherlands and South Africa as well as representations in Europe, America and Asia provide competent know-how and service.
Yale logistics with worldwide distribution allows short lead times and international availability.
Yale Industrial Products GmbH is known for a market and product orientated policy, a number of strong product names and a leading European market position in the field of standard manual hoisting equipment.



Product Documentation

Every unit is delivered with operating instruction, CE declaration of conformity resp. manufacture and a works test certificate, which confirms the perfect tested status of the product.
Additional documentation, e.g. spare parts manuals or maintenance and repair instructions are available on request.

DIN EN ISO 9001

Yale Industrial Products GmbH manufactures world wide according to uniform, controlled standards of DIN EN ISO 9001. All Yale locations are certified. This is a guarantee for our business partners that given standards in design and development, manufacturing, assembly and service are complied with.

ZERTIFIZIERTES DIN EN ISO 9001 QUALITÄTSSICHERUNGSSYSTEM
Reg. Nr. 151

Certified since November 1991

Special Documentation

Additional inspections with test report 2.2 resp. inspection certificate 3.1.B according to DIN EN 10204 or specific pre-shipment inspections e.g. by DNV or GL can be carried out at cost on request.

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