

Yale **ERGO 360**[®] UT

Ratchet lever hoist
with safety gear

Utility!



Safety Gear

In accordance with EN 1808 -
Safety requirements for suspended
access equipment, 8.9.2

SPECIAL APPLICATIONS SUCH AS OVERHEAD LINE CONSTRUCTION REQUIRE SPECIAL LIFTING EQUIPMENT. WE TOOK UP THIS CHALLENGE.

Before our engineers could throw themselves into new tasks, the following needed to be explored first:

How could the fields of application for the YaleERGO 360® be expanded?
And what conditions would have to be created for this?

To solve this, several companies active in overhead line construction were contacted and the requirements for a such hoist were specified in a joint dialogue. It was quickly established that there was a need for an integrated, independent braking/safety device.

Taking this information into account, the new YaleERGO 360® UT, based on the already proven YaleERGO 360®, has been optimised for use in overhead line construction.

This innovative safety gear, patent-pending, which prevents a sudden load drop works when a certain speed is exceeded during use as well as during inactive phases - especially when the device is tensioned for a long period of time.

The system safely absorbs the load and thus prevents the creation of larger dynamic forces which could cause further damage.

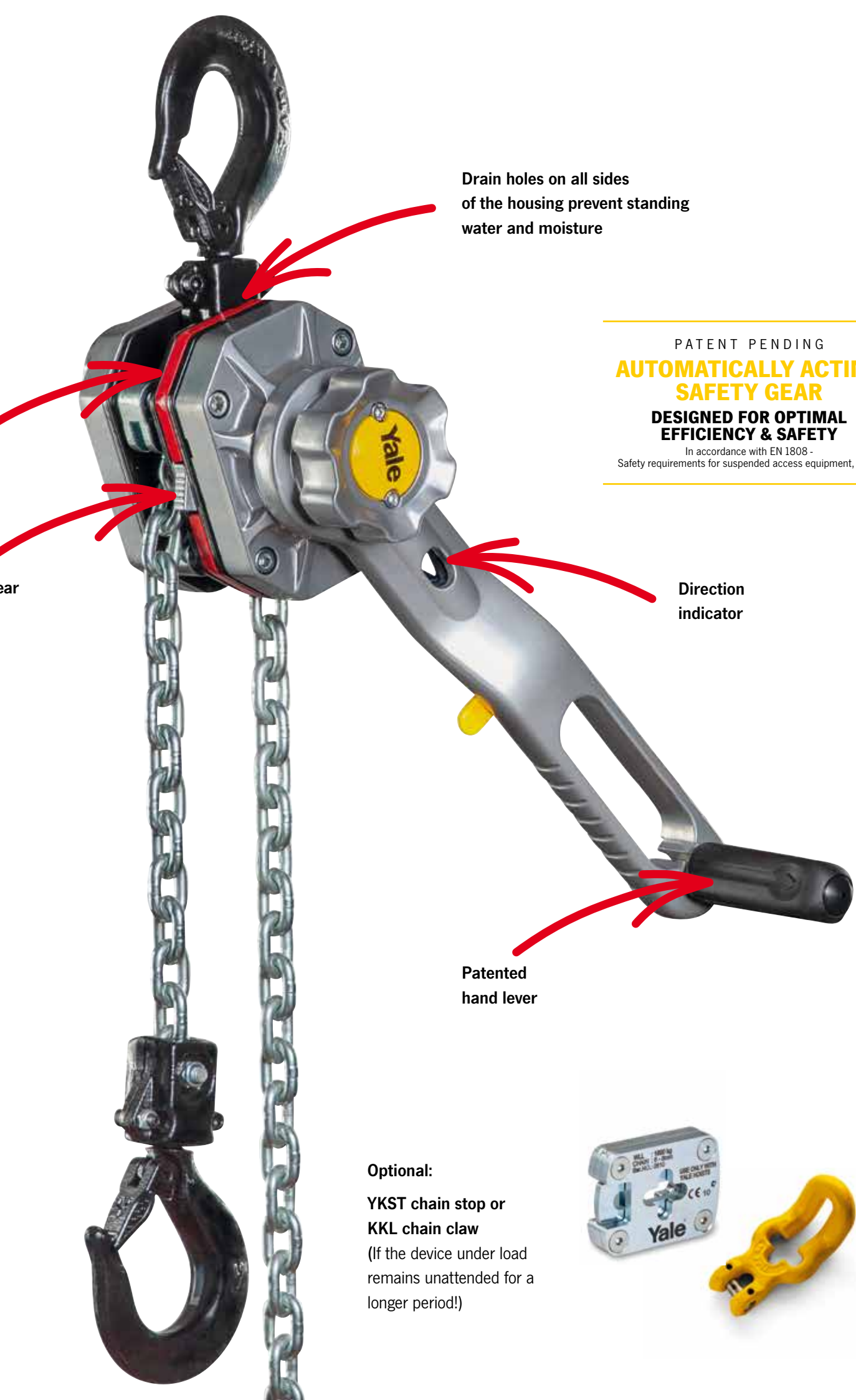
Another highlight is the possibility of being able to lift at any time - even after the safety gear has been triggered due to safety reasons.

By turning the hand lever by a full turn in lifting direction, the safety gear is automatically unlocked. It can then be returned to its original position at the push of a button.

This means that the device can be removed and checked at any time without much effort

Automatically
acting safety gear

Push button to
fully reset the safety gear



Drain holes on all sides of the housing prevent standing water and moisture

PATENT PENDING
**AUTOMATICALLY ACTING
SAFETY GEAR**

**DESIGNED FOR OPTIMAL
EFFICIENCY & SAFETY**

In accordance with EN 1808 -
Safety requirements for suspended access equipment, 8.9.2

Direction
indicator

Patented
hand lever

Optional:
YKST chain stop or
KKL chain claw
(If the device under load
remains unattended for a
longer period!)



Yale **ERGO 360[®] UT**

Utility!

The Yale **ERGO 360[®] UT** is now also redefining the world of hoists for overhead line construction. The automatically acting safety gear, with a pending patent, once more increases the safety of use.

Here, too, the ergonomic and safety enhancing design of the device and the revolutionary, patented hand lever enable efficient work at any angle, for lifting and pulling applications.

CAPACITIES 1500 - 6000 KG

BENEFITS & FEATURES

AUTOMATICALLY ACTING SAFETY GEAR

The Yale **ERGO 360[®] UT** has a unique, automatically locking safety device to prevent a sudden drop (patent pending). It guarantees permanent monitoring and is active during operation as well as during inactive moments without the user having to activate it.

In case of emergency, i.e. after failure of the load pressure brake and consequently exceeding the specified speed, the safety gear will automatically activate. It safely absorbs the load, preventing the creation of larger dynamic forces which could cause further damage.

Due to its design, the device remains in a safe state even in the event of an error (e.g. rusted ratchet pawl, broken springs or other influences such as basic corrosion or dirt).

EXCELLENT CORROSION PROTECTION

A housing optimized for outdoor applications (incl. water drainage holes on all sides) prevents a build up of water and the influence of moisture in extreme conditions (e.g. rain, fluctuations in temperature)

External components such as the chain guide and the stripper are zinc plated. Some of the internal moving parts such as the drive pinion, the ratchet pawl, the load chain wheel and the ratchet are MKS coated (Zinc flake coating)

PATENTED CRANK HANDLE

It guarantees the ideal power transmission for every application. Its folding lever-handle enables a working range of 360°, which increases productivity and reduces the risk of injury to the operator.

DIRECTION INDICATOR IN THE LEVER

A highly visible direction indicator located on the handle clearly shows the operating direction by means of arrow symbols.

EASY & SMOOTH FREE CHAINING

For quick take up and positioning of the slack chain – even with one hand. Designed not to accidentally free chain while under load.

BUILT TO LAST

Even with intensive use, the Yale **ERGO 360[®] UT** impresses with its lightweight aluminium housing and high-quality bearings. The durable and high-quality powder coating of the surface offers additional protection in harsh environmental conditions.

EASY-TO-INSPECT SWIVEL HOOKS

Forged Hooks and cast safety latches provide for a positive and secure load engagement, as they can yield without breaking. Bolt on hooks with nyloc nuts simplify the inspection process

OPTIONS

CHAIN STOP & CHAIN CLAW*

Optionally, the devices can be equipped with our proven and tested YKST chain stop or the KKL chain claw.

With both options, the Yale **ERGO 360[®] UT** does not need to be readjusted after the individual steps but is only required in neutral mode.

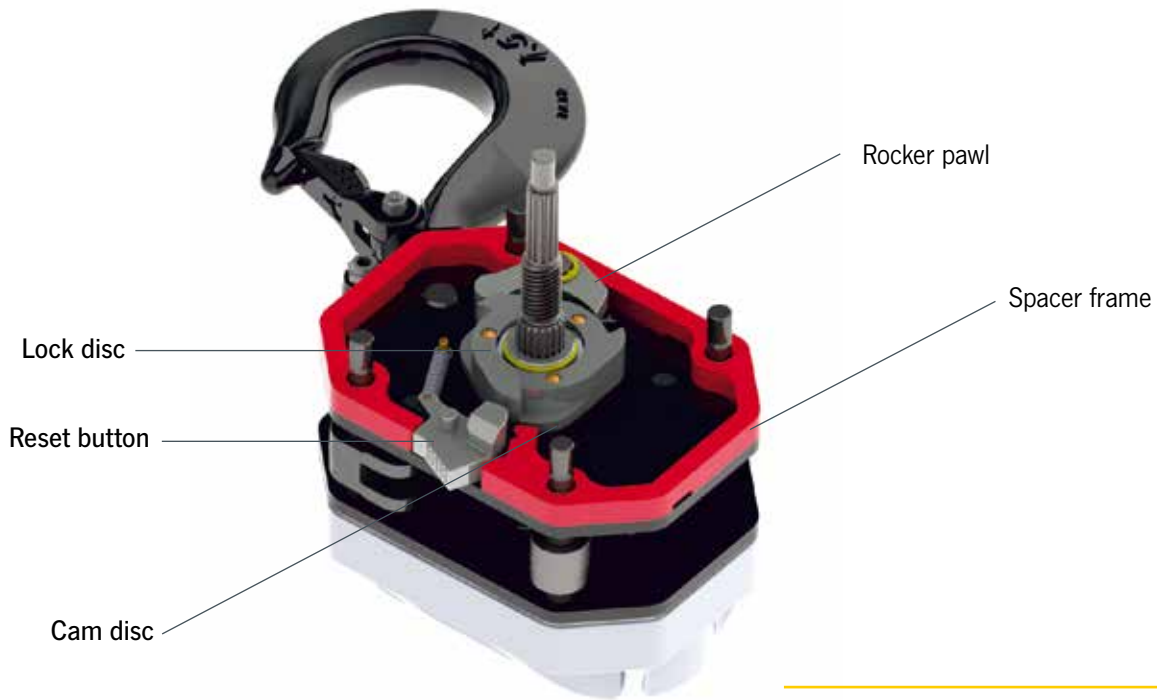
*The usage is based on each country's specific regulations.

SLIP CLUTCH (OVERLOAD DEVICE)

The slip clutch prevents damage to the unit, the handle rotates freely when hoist is overloaded. It reacts when the permissible load capacity is exceeded by 25%.

Units with internal load limiter feature a black hand wheel for easy identification.

STRUCTURE & FUNCTIONALITY OF THE AUTOMATIC SAFETY GEAR



PATENT PENDING
AUTOMATICALLY ACTING SAFETY GEAR

DESIGNED FOR OPTIMAL EFFICIENCY & SAFETY

In accordance with EN 1808 - Safety requirements for suspended access equipment, 8.9.2

REQUIREMENTS FOR THE REDUNDANT SAFETY GEAR

In accordance with EN 1808 - Safety requirements for suspended access equipment, 8.9.2

- shall automatically engage in the event of overspeed (more than 0.5 m/s)
- the stopping distance must not exceed 500 mm
- shall be capable of being reset
- shall be capable of being tested
- shall permit lifting at any time

In any cases the load is caught exceeding a speed of 0.5 m/s.

Speeds below 0.5 m/s (corresponds to 2 km/h) are not safety relevant according to EN 1808.

FUNCTION: NORMAL OPERATION

Speed < 0.5 m/s

The rocker pawl moves continuously along the contours of the cam disc and lock disc.

FUNCTION: ABSORPTION

Speed > 0.5 m/s

As soon as the speed exceeds 0.5 m/s, the rocker pawl engages the lock disc and safely absorbs the load.



Yale **ERGO 360**® UT

CAPACITIES 1500 - 6000 KG

Utility!

FOR ALL CIRCUMSTANCES

THREE USEFUL CAPACITIES
FOR OPTIMAL APPLICABLE USE



Capacity
1500 kg

Shortest hook space (A min.) 375 mm
Handle pull at WLL
- crank lever handle operation 26.5 daN
- traditional lever operation 27.5 daN
Weight 9.8 kg



Capacity
3000 kg

Shortest hook space (A min.) 445 mm
Handle pull at WLL
- crank lever handle operation 36.0 daN
- traditional lever operation 41.0 daN
Weight 18.1 kg



Capacity
6000 kg

Shortest hook space (A min.) 563 mm
Handle pull at WLL
- crank lever handle operation 38.0 daN
- traditional lever operation 42.0 daN
Weight 29.8 kg

ERGONOMIC DESIGN DELIVERS OPTIMAL OPERATOR SAFETY



Hoist design allows the operator to work in a **safe and ergonomic** position.



Patented crank handle enables smooth 360° operation, **reducing repetitive wrist action** experienced with traditional ratchet lever hoists.



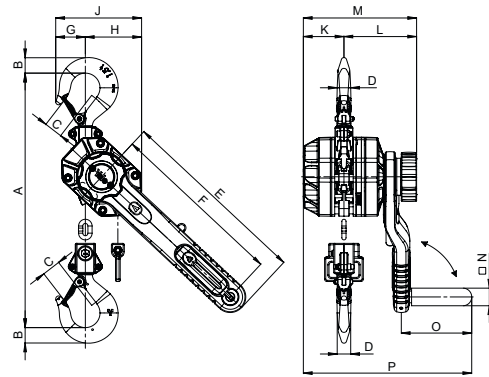
Double reduction gearing and high-quality bearings **decrease required pull force by up to 30%**, reducing operator fatigue.

Technical data YaleERGO 360® UT

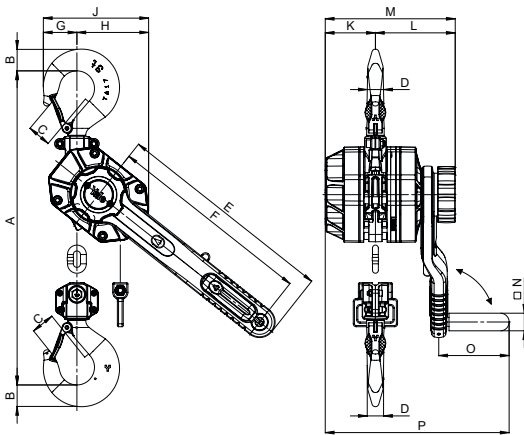
| Model | Art-No. | Capacity kg | Number of chain falls | Chain dimensions d x p mm | Lift with one full lever turn mm | Handle pull at WLL daN | Weight at standard lift (1.5m) kg |
|----------------------|-----------|----------------|--------------------------|------------------------------------|---|------------------------------|--|
| YaleERGO 360 UT 1500 | 192069625 | 1500 | 1 | 7.1x21 | 21.7 | 26.5 | 9.8 |
| YaleERGO 360 UT 3000 | 192069671 | 3000 | 1 | 10x28 | 20.1 | 36.0 | 18.1 |
| YaleERGO 360 UT 6000 | 192071416 | 6000 | 2 | 10x28 | 10.1 | 38.0 | 29.8 |

Dimensions YaleERGO 360® UT

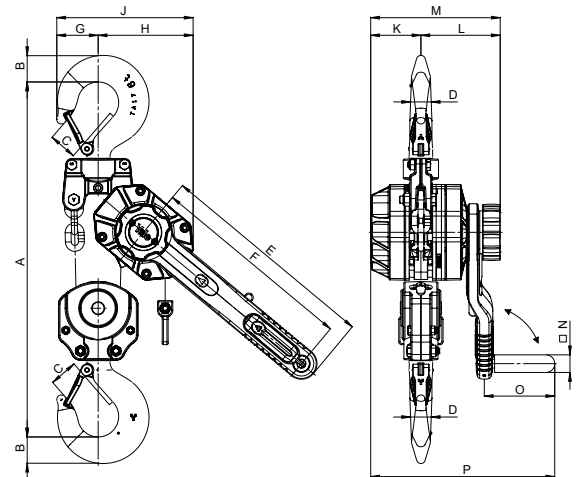
| Model | YaleERGO 360 UT 1500 | YaleERGO 360 UT 3000 | YaleERGO 360 UT 6000 |
|------------|-------------------------|-------------------------|-------------------------|
| A min., mm | 375 | 445 | 563 |
| B, mm | 26 | 37 | 45 |
| C, mm | 31 | 40 | 47 |
| D, mm | 21 | 28 | 35 |
| E, mm | 327 | 377 | 377 |
| F, mm | 300 | 350 | 350 |
| G, mm | 51 | 57 | 71 |
| H, mm | 96 | 123 | 162 |
| J, mm | 147 | 180 | 233 |
| K, mm | 69 | 86 | 86 |
| L, mm | 124 | 136 | 136 |
| M, mm | 193 | 222 | 222 |
| N mm | 30 | 30 | 30 |
| O, mm | 120 | 120 | 120 |
| P, mm | 287 | 314 | 314 |



YaleERGO 360® UT, 1500 kg, single fall



YaleERGO 360® UT, 3000 kg, single fall



YaleERGO 360® UT, 6000 kg, double fall

EXTREME CORROSION PROTECTION

Comprehensive corrosion protection measures of the individual components of the safety gear, tested during a salt spray test, guarantee the correct functioning of the safety gear even when used for a long time under unfavourable weather conditions. The illustration on the right shows the core components of the safety gear after the salt spray test with a test duration of 720 h.



OPTIONAL EQUIPMENT

In addition to the automatically running safety gear, the hand lever hoist can also be equipped with a chain stop or a chain claw.

YALE CHAIN STOP - SAFE & PROVEN

The Yale chain stop – Proven in use for more than 10 years!

Especially where oscillations and vibrations could cause the load chain to slip, chain stops can reliably increase safety! It can only guarantee optimal safety if it is positioned as close as possible to the housing of the device., so that the lowest possible dynamic occurs.

As an exceptional function, the YKST locks itself on the chain by means of spring force and can only be actively unlocked by a release mechanism. This prevents accidental loosening during operations.

The YKST was developed especially for the requirements in overhead line construction and was then dynamically tested by an independent body!



CHAIN CLAW - FAST & PRACTICAL

The chain claw - the simple alternative.

The KKL also offers the operator additional safety with dynamic loads!

Due to the lack of additional mechanical locking, the chain claw can be moved faster than the chain stop. It replaces the chain end piece and thus saves additional weight!

Here too, the attachment point should be as close to the housing as possible, for optimal safety.



INCREASED PRODUCTIVITY

Due to the automatic safety gear, a constant readjustment of the chain stop and the chain claw during the work process is not necessary anymore!

Fixing the chain with a chain stop is recommended if the device remains under load and unattended for a longer period of time, e.g. after interruptions of work or overnight



RATCHET LEVER HOIST WITH SAFETY GEAR - SECURITY WITH DYNAMIC FORCES



Overhead line construction



Aerial construction



Construction of contact lines



Positioning work with dynamic loads
Especially when using multi-fall chain slings (e.g. installation of turbines)

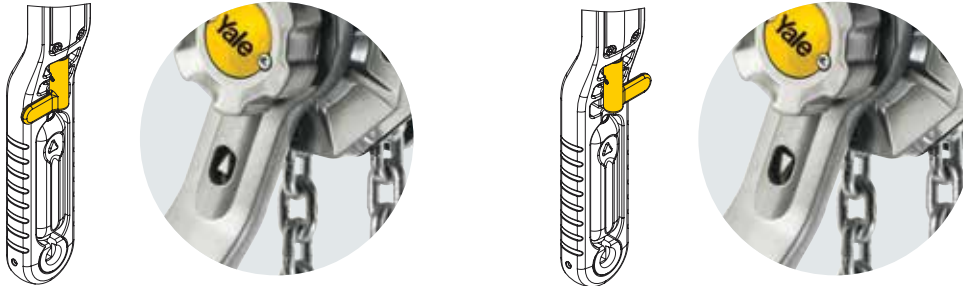


Cable car construction

EASY-TO-USE DIRECTIONAL CONTROL & FREE CHAINING

CONVENIENT DIRECTIONAL INDICATOR

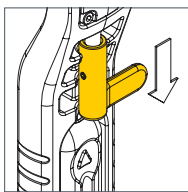
Easy-to-use, highly visible directional indicator window located in the handle clearly shows the operating direction as LIFTING (▲), LOWERING (▼) or NEUTRAL (N).



EASY & SMOOTH FREE CHAINING

Allows for quick take up and positioning of slack chain – even with one-handed use. Designed not to accidentally free chain while under load. Cast chain end stop allows the user to quickly position the chain in free-chaining mode and prevents it from entering the liftwheel and jamming the hoist.

In this mode of operation, the chain can be pulled through the hoist in either direction by hand for quick attachment to the load. To engage the free chaining feature, remove the load and move the directional lever to the neutral (N) position.



SAFE & SECURE SELECTOR LEVER LOCKS IN PLACE TO PREVENT ACCIDENTALLY SWITCHING.

Pull down on the selector lever to unlock it, turn it to the desired direction, and release it into the locking position.

EASIER MAINTENANCE & INSPECTION

Qualified persons can, after a short briefing, carry out all necessary inspections on this model under their own responsibility.

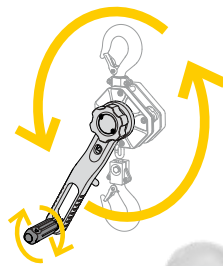
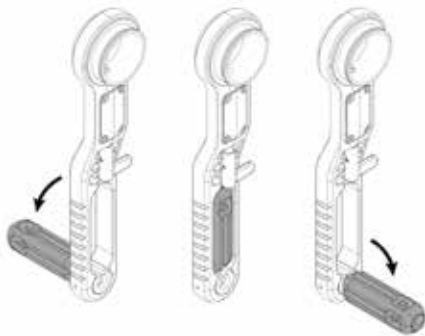
Apart from the operating instructions and the accident prevention act valid for the respective country and area where the product is used, the commonly accepted regulations for safe and professional work must also be adhered to.



THE REVOLUTIONARY CRANK HANDLE

CONSTRUCTION CONCEPT

- 360° rotation increases efficiency, allowing operators to work up to 12 times faster than with a conventional ratchet lever hoist.
- Operations requires 30 % less pull force.
- Easy and effective operation from any angle with handle that folds down and locks into position on either side of the lever.
- Design keeps the operator's body aligned with the load chain, reducing the risk of the twist effect – when a hoist twists around the chain. No need to use a second hand to stabilize the hoist.
- Operator can securely grip the grooved, no-slip handle, also when covered in lubricants and dirt.
- Crank handle made of durable polyamide with a heavy-duty steel core for rugged use.



**DISTINCTIVE
(((CLICKING SOUND)))**

**ENSURES THE HANDLE
IS LOCKED INTO POSITION**

To return handle to upright position,
simply pull the handle outward
and snap into place inside the lever.



EASILY CHANGE YOUR GRIP TO SUIT THE APPLICATION

In addition to its conventional use, the Yale ERGO 360[®] UT ratchet lever hoist offers the user completely new and alternative applications. This gives operators ultimate flexibility.

