

# COMMERCIAL TRAILER COMPONENTS HIGHLIGHTS FOR THE CONSTRUCTION SECTOR



# AL-KO VEHICLE TECHNOLOGY

## QUALITY FOR LIFE



### ABOUT THE AL-KO VEHICLE TECHNOLOGY GROUP

The AL-KO Vehicle Technology Group is a globally active technology group and a business unit of DexKo Global. With high-quality chassis and suspension components for trailers, leisure and commercial vehicles, as well as construction and agricultural vehicles, the group represents the best in functionality, maximum comfort as well as innovations to ensure greater driving safety.

Founded in 1931 the group today has around 3,800 employees and more than 40 locations worldwide.

Better together: AL-KO Vehicle Technology Group is part of DexKo Global, one of the world's quality leaders in trailer axles and chassis components and related product groups.

Member of **DEXKO**  
G L O B A L

# IN GOOD HANDS – WORLDWIDE



## WE'RE RIGHT WHERE YOU NEED US

With over 40 production sites and sales offices as well as roughly 1,000 service stations around the world, our network guarantees constant presence and personal contact. Our sophisticated logistics

network around the entire globe optimises our flow of goods and guarantees a global 'just-in-time' presence. AL-KO quality and service are assured everywhere. You can count on that!

## AL-KO VEHICLE TECHNOLOGY AND ITS BRANDS



# COMMERCIAL TRAILER COMPONENTS

**YOUR RELIABLE COMPANION  
IN EVERY SITUATION**

WHEEL CHOCKS Page 22

CABLE WINCHES Page 19

OVERRUN DEVICES Pages 8–11

TOWBAR CONNECTIONS

COUPLINGS

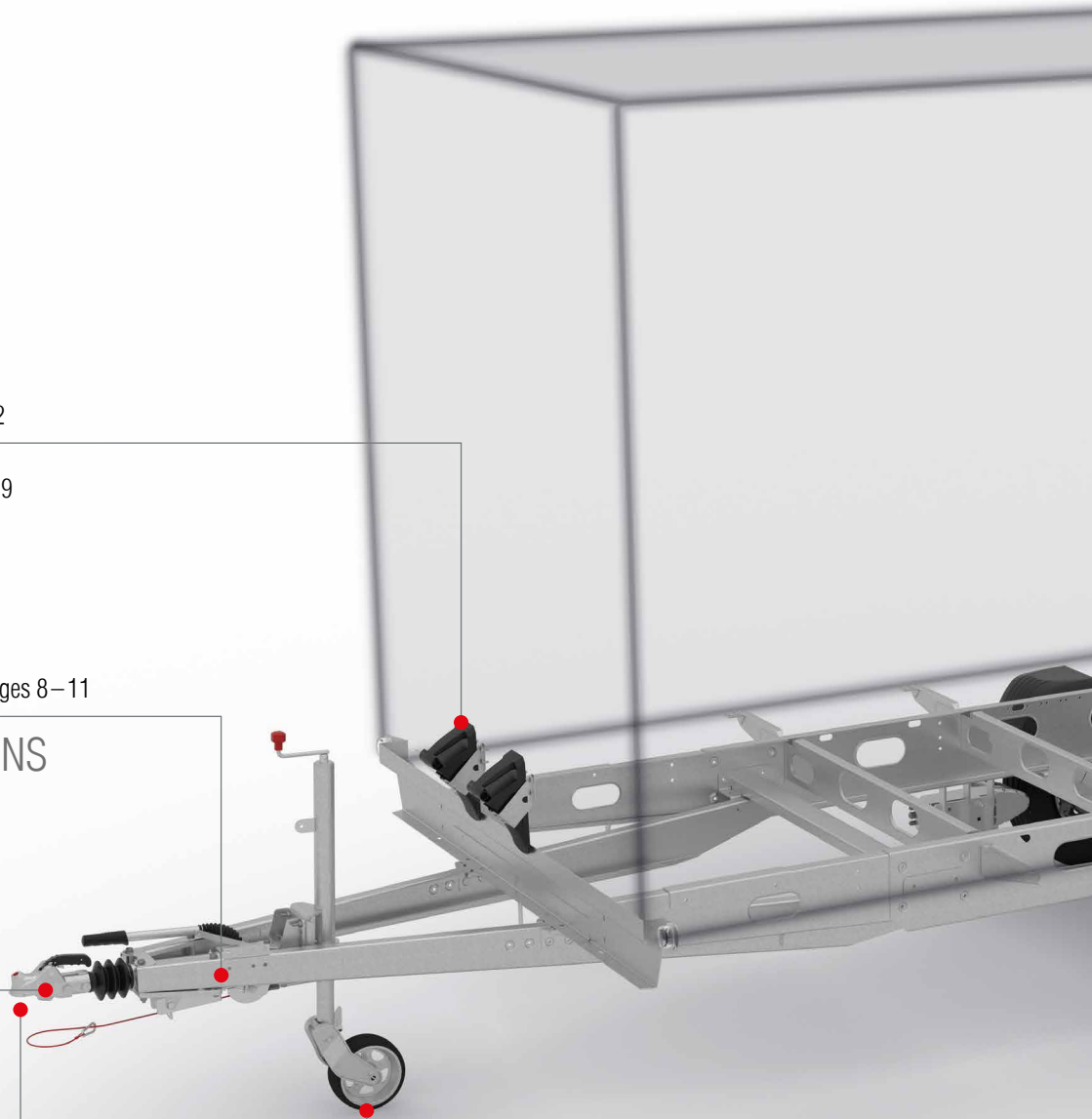
Pages 12–14

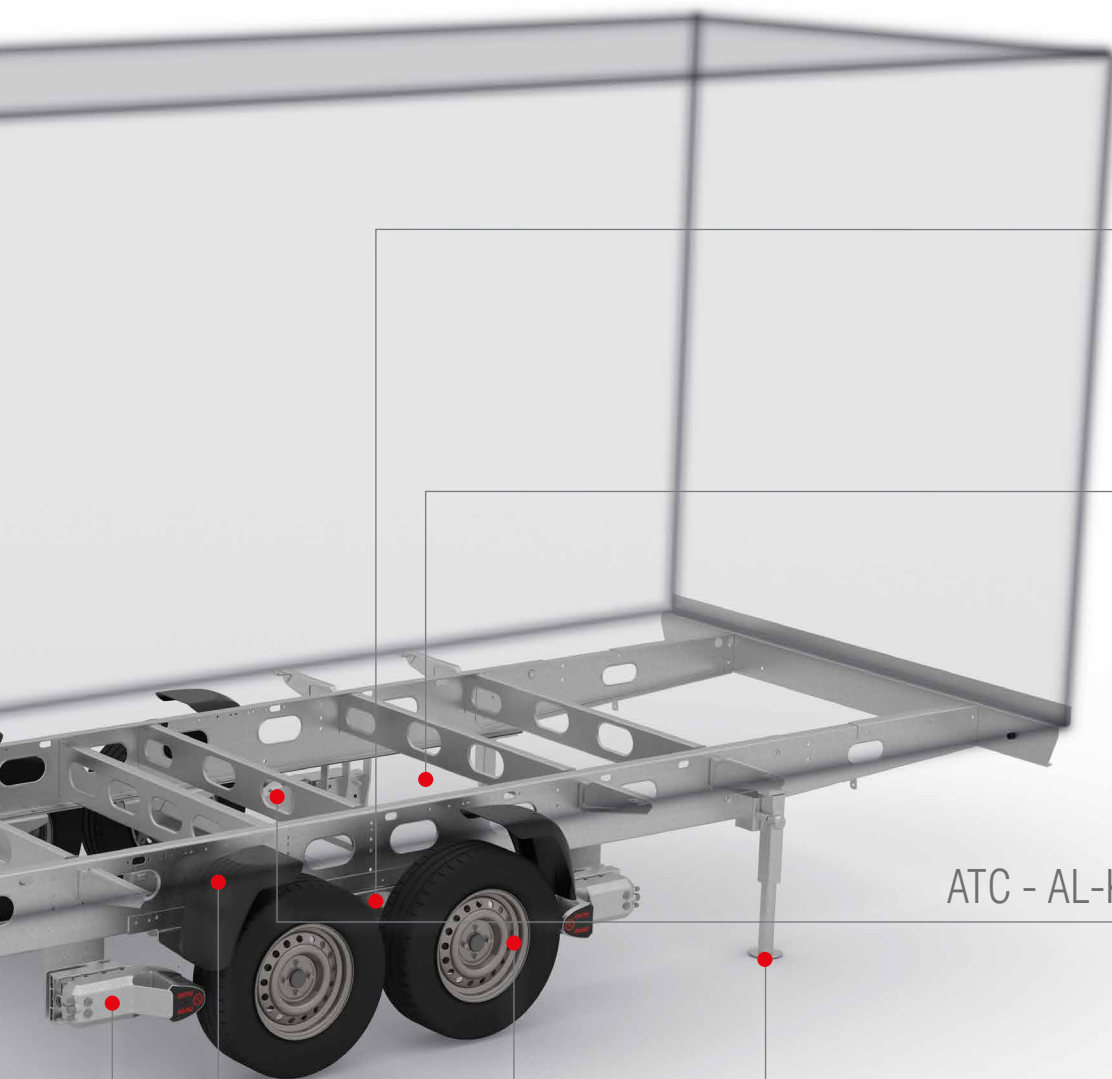
ANTI-THEFT  
PROTECTION

Page 15

JOCKEY WHEELS

Page 20





AXLES Pages 6–7

SHOCK ABSORBERS

BOWDEN CABLES

ATC - AL-KO TRAILER CONTROL

Page 16–17

STEADY LEGS

Page 21

MUDGUARDS

WHEEL BRAKES

MANOEUVRING SYSTEM

MAMMUT CTRAIL Page 18

# TRAILER AXLES

## GREATER DRIVING SAFETY AND COMFORT FOR EVERY NEED

Our trailer axles are the result of continuous development work. Processing and materials meet the needs of modern vehicle technology. We have a wide range of axles for a huge spectrum of requirements. Our components are designed to work together perfectly according to the application and weight range.

### **Braked axles with hexagonal rubber suspension**

With PROFI LONGLIFE axle Bowden cables as standard

#### **Options:**

- | Watertight bearing
- | AAA automatic brake adjustment
- | Wheel brake flushing system

Range: EA 750/1,000/1,350/1,500/1,600/1,800/  
2,000/2,500/3,000/3,500 kg

Driving comfort: ★★

Driving safety: ★★



For durability and high operating performance, the various axle components are equipped with permanent corrosion protection. The axle bodies are hot-dip galvanised, and other components such as brake back plates are galvanised. The brake pads also offer high load capacities and corrosion resistance. In addition, for the pads we use asbestos-free materials exclusively.

### **Braked axles with drive shaft on one side**

Trailer independent from towing vehicle  
(no PTO connection required on towing vehicle),  
Wheel brake left cpl. prepared with drive shaft  
(spline shaft profile: DIN ISO 14– 6 x 21 x 25)

#### **Application examples:**

- | Gritter trailer
- | Trailer with cooling unit (rolling energy is converted into electricity by the drive shaft)



### Square braked axles (SWING rubber suspension axles)

Range: EA 850/1,050/1,350/1,500/1,800/2,000/

2,500/3,000 kg

Driving comfort: ★

Driving safety: ★



### Braked axles with steel suspension (RONDO torsion bar axles)

Range: 1,050/1,350/1,500/1,800/2,100/2,500/3,000/3,500 kg

Driving comfort: ★★★

Driving safety: ★★★



### Axles for trailers with pneumatic brakes

Brake drum with sensor wheel spline profile (to decrease the rotary motion), brake back plate with pressed-in bush (e.g. ABS sensor)

Range:

Hexagonal rubber suspension EA 1,800/3,000 kg,

TA 3,500/5,000/6,000 kg, Tridem 4,300/5,400 kg

Steel suspension EA 4,000 kg, TA 7,500 kg



### Braked straight axles with leaf suspension

With PROFILONGLIFE axle Bowden cables as standard

**Options:**

| Watertight bearing

| AAA automatic brake adjustment

| Wheel brake flushing system

Range: EA 1,500/1,800 kg

Driving comfort: ★★

Driving safety: ★★



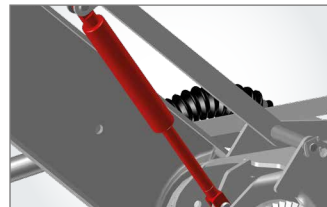
# HEIGHT-ADJUSTABLE OVERRUN DEVICES

## VB-2 OPTIMA FOR TRANSPORT TRAILERS IN PROFESSIONAL USE



### MODERN, ROBUST TECHNOLOGY WITH STUR- DY RECTANGULAR SECTION

- | One-person height adjustment assisted by a gas spring
- | Two pairs of toothed lock washers reinforce the highly stressed adjustment range at the top and bottom
- | Easy-extending telescopic handbrake lever (AL-KO patent) without pushbutton, i.e. easily adjusted
- | The flat construction of the overrun device permits:
  - Minimum hitching height of approx. 280 mm
  - Low hitching under the truck loading platform
- | The spring pack for the handbrake lever and the brake rod is positioned protected in the drawbar section
- | Quick-change system drawbar eyes for almost all European country versions
- | Range: 1,600 kg, 2,700 kg, 3,500 kg
- | Surface treatment: hot-dip galvanised



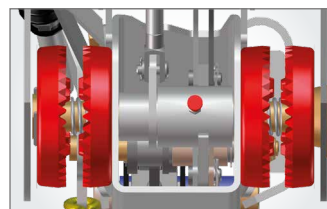
#### GAS SPRING

permits one-person height adjustment



#### ADJUSTMENT RANGE TOP

reinforced by two pairs of toothed lock washers



#### ADJUSTMENT RANGE BOTTOM

reinforced by two pairs of toothed lock washers



#### QUICK-CHANGE SYSTEM

for different hitches and eyes



## T-POLE CHASSIS

TA 3,500 kg, without frame



## RECTANGULAR SECTION

robust and sturdy technology

## HANDBRAKE LEVER

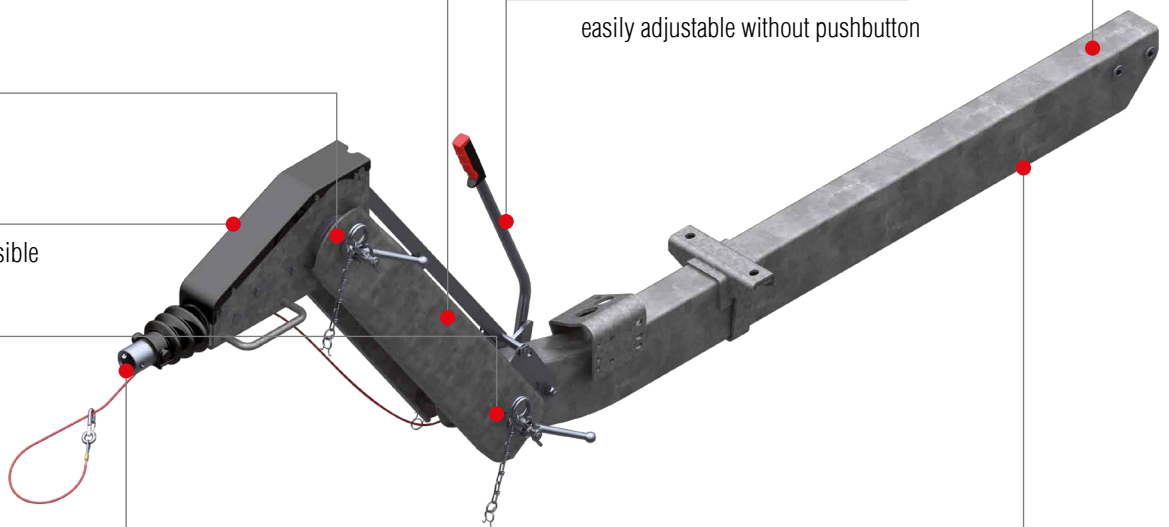
easily adjustable without pushbutton

## FLAT DESIGN

makes low hitching possible

## BRAKE ROD ROUTING

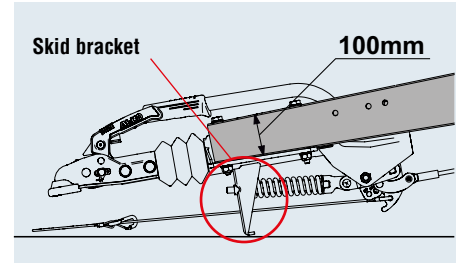
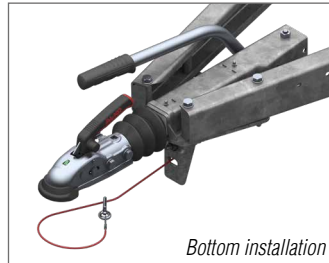
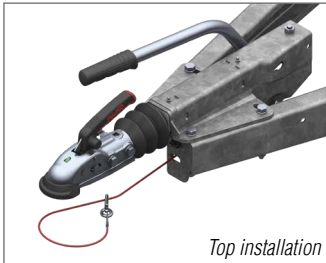
protected in the drawbar section



# NEW: OVERRUN DEVICE V 161 S, 251 S and 251 G

## 750 to 3,000 kg

The drawbar struts can be installed at the top and bottom.

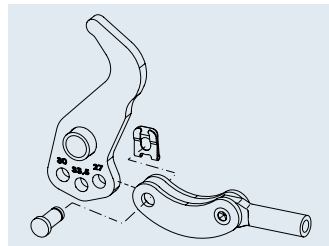
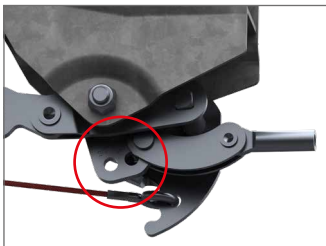


A cable guide is integrated in the skid bracket as standard so that the breakaway cable can activate the handbrake lever in an emergency.

In bottom installation, the maximum permissible drawbar height is 100mm.

The skid bracket integrated in the housing of the drawbar installation prevents any contact of the handbrake lever and the hitch/drawbar eye in an emergency.

## Relay lever



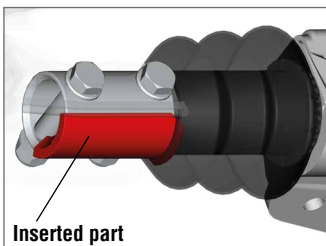
The relay lever can be simply changed over through existing holes as necessary.

90:27 = 1636G, 1637, 2051

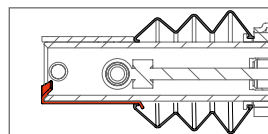
90:30 = 2361

90:33.5 = 3062, 3081

## Bellows

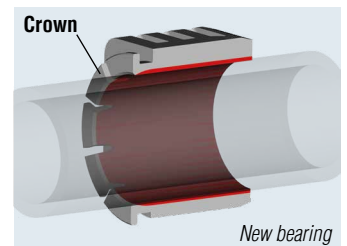
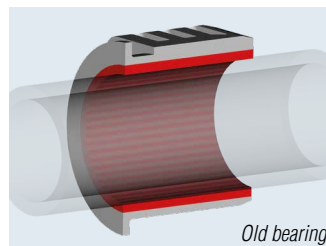


The inserted part at the bottom of the drawbar secures the bellows against slipping backwards.



The bellows are suitable for all coupling heads or drawbar eyes that can be used on this new overrun device.

## Drawbar tube bearing

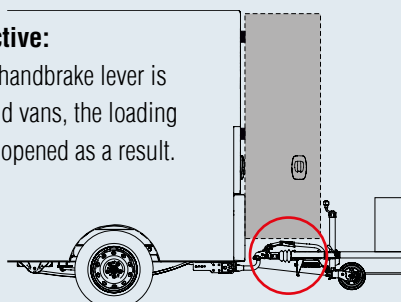


The optimised bearing bush geometry (crown in the front bearing bush with preload) and the modified machining process made it possible to reduce the bearing clearance.

## Parking brake/handbrake

### Handbrake not active:

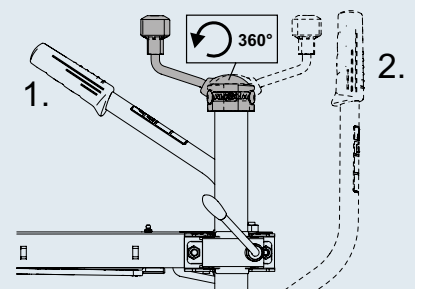
In this position, the handbrake lever is very flat. For cars and vans, the loading door can usually be opened as a result.

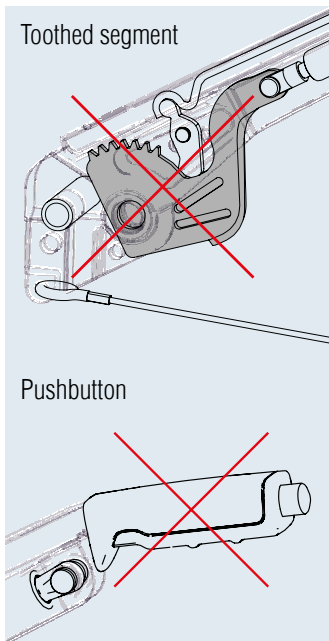


### Handbrake active:

Despite the active handbrake, the jockey wheel crank can be moved freely.

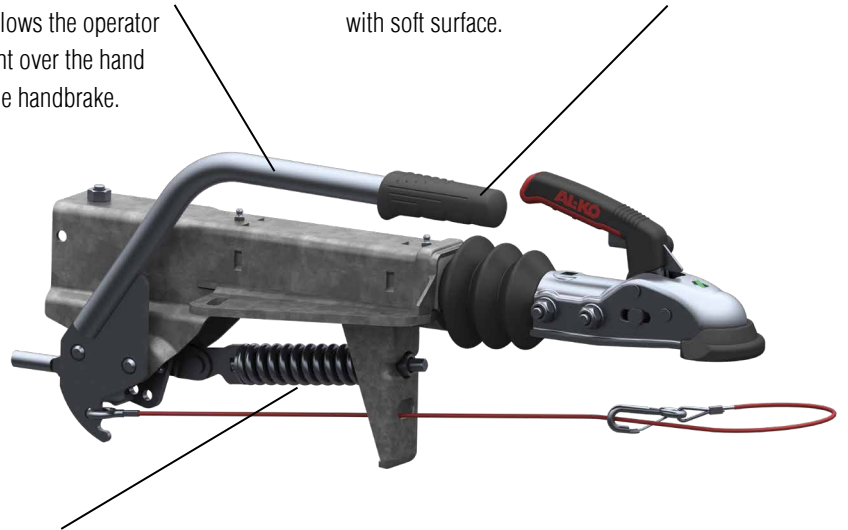
1. Parking brake forwards
2. Parking brake backwards





Sturdy tubular handbrake lever, galvanised.  
 The flat arrangement allows the operator to place his body weight over the hand lever when releasing the handbrake.

Ergonomic, extended hand grip with soft surface.



The pressure spring dead-point mechanism eliminates the need for a toothed segment and pushbutton. This enables sensitive adjustment when coupling the trailer, e.g. on downhill gradients.

## DRAWBAR EYES FOR OVERRUN DEVICES

Nose load 350 kg

Can be used with:

**Overrun devices height-adjustable**

**Overrun devices V**

**Overrun devices □**

Types 351 VB, 351 VB-2 Optima, 350 VB BASIC

Type AE 3500 (cast-iron version), AE 2.8 VB/1-C (steel version)

Type AE 2.8 VB/1-C (steel version)



Drawbar eye UK E30/B



Drawbar eye DIN D40/G



Drawbar eye UK E40/B



Drawbar eye Italy I45/G



Drawbar eye DIN D50



Drawbar eye UK E50/B



Drawbar eye France F68/F



Drawbar eye DIN D50

### Important:

The drawbar eyes are only tested and approved for the overrun devices stated in the order overview.

No liability will be accepted for other uses.

# STABILISERS

## AK 161 / AK 270 COUPLING HEAD – THE SAFEST OF ITS KIND

### SAFETY ADVANTAGE 1

#### Open position

The hand grip points diagonally upwards and indicates to the operator that it is open.



### SAFETY

The AL-KO Safety anti-theft device has been developed especially for the AK 161 / AK 270 coupling head.



### SOFT TOUCH GRIP

A soft and therefore adhesive plastic mixture is used in the red area of the hand grip. In addition, the projection on the end of the hand grip serves as an anti-slip protection.

### SAFETY ADVANTAGE 2

#### Closed position

The vehicle's ball is fully inserted and has released the securing lever. Only now does the hand grip assume the horizontal position and indicate to the operator that a secure connection has been created.



Securing lever  
for flawless hitching

### WEAR INDICATOR

As long as the marking is in the positive range, the tow hitch is OK.



### SOFT-DOCK AS STANDARD

- | Protection against scratching
- | Shin protection

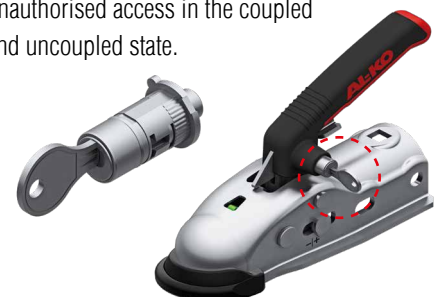
### SAFETY ADVANTAGE 3

#### Indicator for correct hitching

In the closed position, the green safety indicator is additionally pushed out by the vehicle's coupling head, and is therefore visible. It once again indicates to the operator that the trailer is securely connected to the vehicle. This prevents unsuccessful locking. The journey may now start.

### OPTIONAL LOCK ACCESSORY

Effective protection against rapid unauthorised access in the coupled and uncoupled state.



# STABILISERS

## PROFESSIONAL COUPLING HEAD – FOR TRAILERS UP TO 3,500 kg



### SAFE HITCHING UP

#### Clear open position

The hand grip points diagonally upwards and indicates to the operator:

**Hitch is not yet locked!**

Protective cover for safe hitching



#### Wear indicator

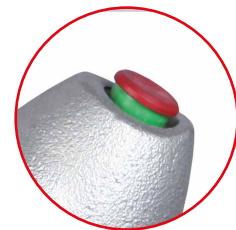
Provides information about the status of your trailer's hitch as well as the towing hitch of your car.



#### Clear closed position

The car's towing hitch engages. Only at this point does the hand grip move to the horizontal position, and indicate to the user:

**Hitch is locked!**



#### Safety indicator

If the green cylinder is visible in hitched condition, you know that the hitch has been positioned correctly on your towing vehicle's ball.

### MORE SAFETY – MORE PROTECTION



#### "Safety-Ball" option for when the trailer is stationary

1. When the trailer is unhitched, simply insert the Safety-Ball into the hitch. The hitch handle automatically moves to the "Closed" position.
2. The hitch can now be secured with the key to prevent quick access.  
(For details, see instructions for use).



#### "Anti-theft device" option for towing and when stationary

Insert key into lock barrel and secure it.  
(For details, see instructions for use).



#### "Soft-Dock" option

(Ramming protection) Protects the rear of the vehicle against damage.

# STABILISERS

## AKS™ 3004

### FOUR FRICTION LININGS FOR BETTER LANE HANDLING

#### THE NUMBER 1 IN EUROPE!

Snaking or pitching movements of the trailer are effectively suppressed before they become serious.

As the only anti-snaking coupling on the market, the AKS™ 3004 has four friction linings.

The coupling and stabilisation handles are separate from one another. This means the stabilisation function can be easily deactivated with a simple manual action when manoeuvring. The trailer remains safely coupled at all times.



#### IMPROVED ERGONOMICS

Closing the stabilisation handle presses the four friction linings against the car's towball from all sides. The four-fold increased friction suppresses snaking and pitching movements. This also means that the vehicle combination comes to rest significantly quicker even in an emergency situation.



#### VISIBLE CONTROL

- 1 Wear indicator for friction pads
- 2 When the green cylinder is visible the AKS™ 3004 is correctly placed
- 3 Wear indicator for coupling



## WS 3000 – FRICTION-TYPE STABILISER

Specially developed friction elements are pressed axially under high spring pressure against the towball of the car, resulting in the enormous stability of the vehicle combination. As a result, the critical speed at which a vehicle combination becomes unstable and starts to yaw is permanently increased by up to 30%. A safety advantage!

# ANTI-THEFT PROTECTION

## SAFETY LOCKS – THE EFFECTIVE DETERRENT AGAINST THEFT



### SAFETY FOR AK 161 / AK 270

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The AL-KO Safety anti-theft protection for the AK 161/ AK 270 coupling head also meets the highest international safety requirements such as the criteria of "Sold Secure Gold" (Great Britain), "SBSC" (Sweden) and "SCM" (Netherlands). AL-KO Safety can be used both in stationary and driving modes, and is supplied with two keys.



### SAFETY PREMIUM

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The Safety Premium also meets the safety requirements of "Sold Secure Gold" (Great Britain), "SBSC" (Sweden) and "SCM" (Netherlands). The sturdy steel construction with powder-coated housing and a solid galvanised bolt (free of chromium(VI)) is supplied with two keys.



### SAFETY-BALL

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The Safety Ball supplements the AL-KO anti-theft devices on the towbar in stationary use. The hard plastic safety catch drops into the coupling heads when uncoupled and prevents the spherical head engaging, thus also preventing unauthorised coupling.



### SAFETY BOX

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The Winterhoff Safety Box prevents the coupling and decoupling of the trailer, including when in motion. The Safety Box is supplied with a high-quality stainless steel Diskus padlock and is especially easy to use. It fits all standard coupling heads.

# ATC – AL-KO TRAILER CONTROL

## **NEW: LIKE DRIVING ON RAILS – THE AL-KO SAFETY SYSTEM FOR COMMERCIAL TRAILERS**

### SIMPLY CLEVER

The ATC constantly controls the trailer's driving response. The sensors detect dangerous lateral movements directly on the trailer axle, even before any ESP system for trailers installed in the car is able to sense the pendulum movement. The trailer will immediately – without any action on the part of the driver – brake gently and return to a stable driving condition.



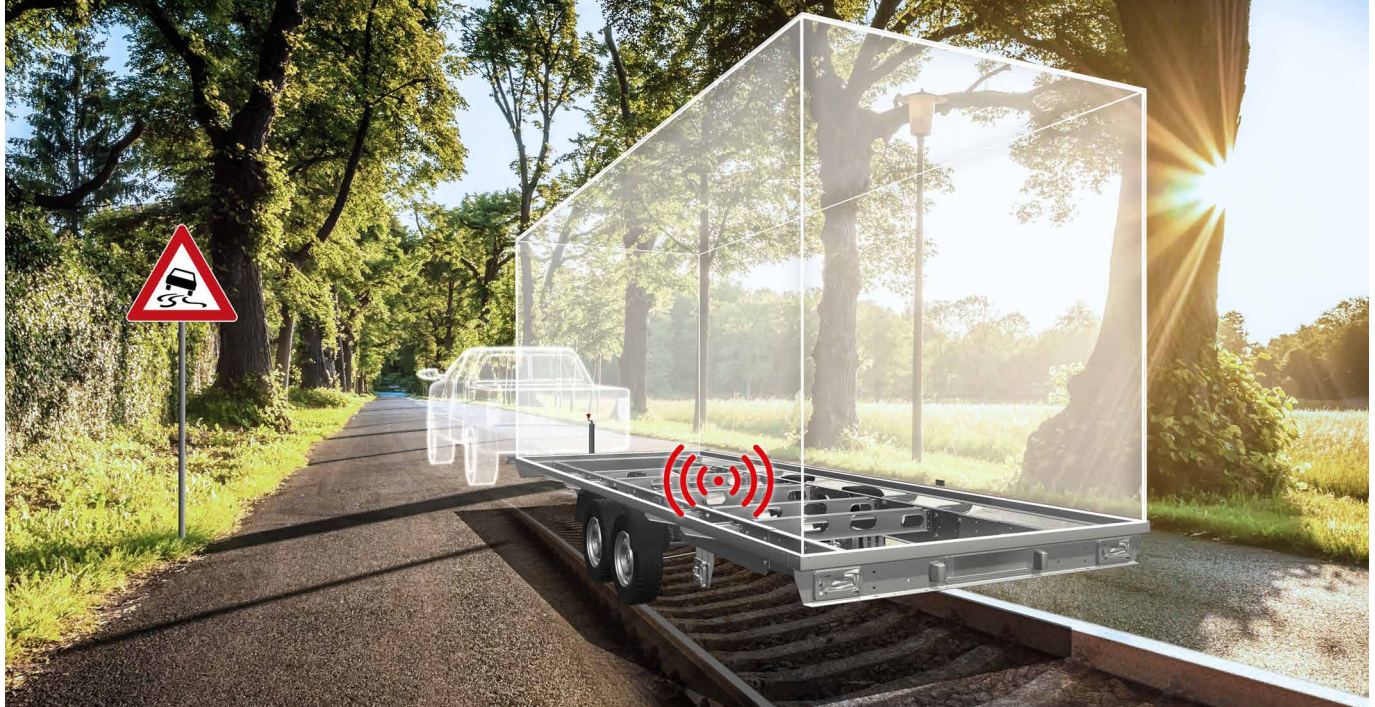
### NOW EVEN BETTER

The tried and tested safety system from AL-KO with improved responsiveness has now been released and is available for all trailer types. The continuous signal evaluation as well as “attention mode”, which the system switches to in the case of an imminent danger, allows the ATC to respond faster than ever.

- | Responds quickly and effectively to all common hazardous situations such as
  - | Avoidance manoeuvres
  - | Changing lanes
  - | Overtaking
  - | Gusts of wind
  - | Ruts
  - | Overloading
- | Faster brake access
- | Use up to GA of 3.5 tonnes
- | Optimised weight & design
- | Horizontal installation (more installation space and ground clearance)
- | General operating permit (ABE) available
- | Meets all requirements according to ECE R10 (EMC) and ECE R13

NOTICE: The ATC for commercial trailers is not capable of mitigating, nor designed to mitigate, grossly negligent driving behaviour or unfavourable loading conditions (e.g. high centre of gravity with a narrow trailer) to such an extent that accidents can always be completely prevented. The ATC for commercial trailers never releases the driver from due diligence.

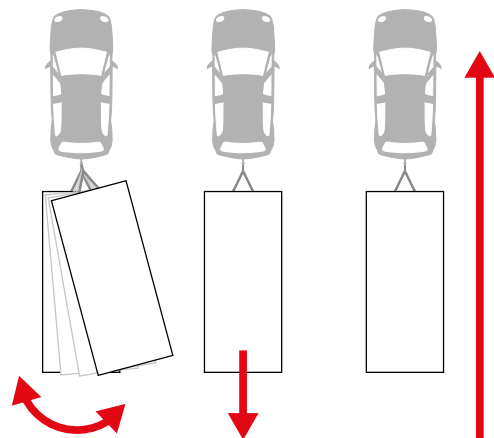




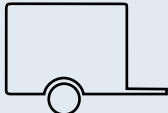
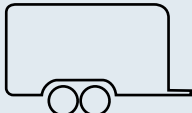
## KEEP SAFELY IN THE TRAFFIC LANE

The emergency system reacts automatically when the vehicle combination's swaying exceeds limit values.

- | Sensors react even to slight lateral accelerations.
- | The trailer immediately brakes automatically. The driver barely notices this correction.
- | Braking automatically puts the trailer back on track, i.e. there is little risk of a rear-end collision due to sudden, sharp braking, and an overtaking manoeuvre is not affected.



## INSTALLATION <sup>1)</sup>

| AL-KO chassis   | Gross weight <sup>2)</sup><br>min. – max. [kg] | Designation           | Part no. |
|---|--|-----------------------|----------|
|  | 750 – 1,300                                    | ATC-2 CT EA 750-1300  | 1733031  |
|   | 1,301 – 1,500                                  | ATC-2 CT EA 1301-1500 | 1733032  |
|   | 1,501 – 1,800                                  | ATC-2 CT EA 1501-1800 | 1733033  |
|   | 1,801 – 2,000                                  | ATC-2 CT EA 1801-2000 | 1733034  |
|   | 2,001 – 2,500                                  | ATC-2 CT EA 2001-2500 | 1733035  |
|   | 2,501 – 3,000                                  | ATC-2 CT EA 2501-3000 | 1733036  |
|  | 3,001 – 3,500                                  | ATC-2 CT EA 3001-3500 | 1733037  |
|   | 1,300 – 1,600                                  | ATC-2 CT TA 1300-1600 | 1733038  |
|   | 1,601 – 2,000                                  | ATC-2 CT TA 1601-2000 | 1733039  |
|   | 2,001 – 2,500                                  | ATC-2 CT TA 2001-2500 | 1733040  |
|   | 2,501 – 2,800                                  | ATC-2 CT TA 2501-2800 | 1733041  |
|   | 2,801 – 3,500                                  | ATC-2 CT TA 2801-3500 | 1733042  |

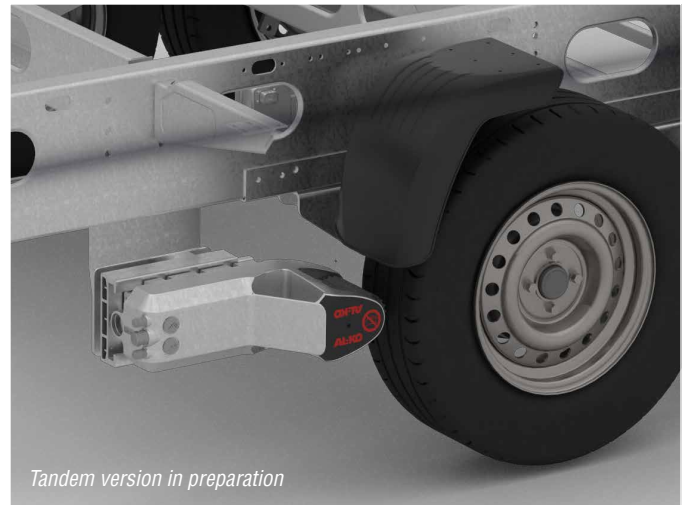
<sup>1)</sup> The ATC may only be mounted on commercial trailers with an **AL-KO axle** and **AL-KO wheel brake**.

<sup>2)</sup> The weight range must correspond to the trailer's **maximum permissible gross weight**.

# MAMMUT CTRAIL

## THE MANOEUVRING SYSTEM FOR COMMERCIAL TRAILERS UP TO 2.5t

The AL-KO MAMMUT CTRAIL manoeuvring system makes light work of positioning your trailer. Whether on rough ground or slopes, the system moves the vehicle easily and effectively. With just your thumb and without having anyone to help you.



Tandem version in preparation

### OPTIMUM GRIP

Two motors are integrated into every drive unit: one for the positioning drive and one for the wheel drive. One push of the button on the remote control and the sturdy sandblasted drive rollers mounted in double bearings press against the wheels. The permanent electronic control of the contact pressure ensures optimum grip under all conditions.



The sturdy aluminium housing of the MAMMUT CTRAIL is spray water-proof (IP65) and guarantees reliable function at all times even under adverse conditions.



Powerful, robust, compact: Powerful electric motors in each unit drive the trailer wheels.



### FINGERTIP MANOEUVRING

Only the AL-KO MAMMUT CTRAIL offers a manoeuvring system with joystick control. Contrary to button operation, you can use one hand to easily steer, accelerate and brake.



360° turns



Soft start  
Soft stop



Obstacles up to 4 cm



Inclines up to 28%



Infinitely variable control (single axle trailer)

# WINCHES FOR TRAILERS

## STRONG HELPER FOR TOWING, PULLING AND LIFTING

For 35 years, AL-KO cable winches have proved to be effective helpers in the commercial and leisure sectors. Experience from over 2 million units sold speaks for itself.

The steel console-mounted winches with gear drive and plastic cover are robust and reliable. Smart details such as the load pressure brake, the automatic unwinder or the removable crank facilitate operation and protect the loads to be moved. The unusual design and high-quality corrosion protection guarantee convenient use, even in the long-term.

### AL-KO cable winches meet the following requirements:

- | EC standard EN 13157
- | CE Directive
- | Machinery Directive

## CABLE WINCHES BASIC

### with automatic load pressure brake

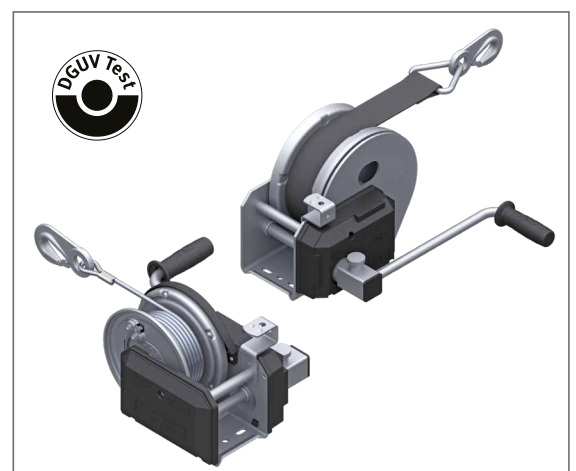
- | Automatic load pressure brake
- | Automatic unwinder for rope or band (optional)
- | Removable crank (optional)
- | Plastic gear cover
- | Range: 450 and 900 kg
- | Surface treatment: Galvanised



## CABLE WINCHES PLUS

### with automatic load pressure brake

- | Modern design
- | High-quality corrosion protection
- | Automatic load pressure brake
- | Cable drum with plain bearing
- | Automatic unwinder for rope or band (optional)
- | Removable crank (optional)
- | Plastic gear cover
- | Range: 350 / 500 / 900 / 1,150 kg
- | Surface treatment: High-quality zinc-nickel coating



# JOCKEY WHEELS

## THE STABLE MANOEUVRING AID



### PREMIUM JOCKEY WHEEL

---

- | Stationary nose load: max. 300 kg
- | Thanks to the integrated swing arm suspension, runs over uneven ground with suspension
- | Integrated wheel load indicator
- | The special spherical wheel allows easier manoeuvring on any surface
- | The built-in thrust bearing under the crank facilitates operation
- | The high hot-dip galvanised coat thickness of up to 70 µm ensures high-quality corrosion protection. Abrasion of the zinc coat during height adjustment with the clamp is thus not critical. The structure of the zinc coating is uneven.



### FULLY AUTOMATIC JOCKEY WHEEL

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- | Stationary nose load: max. 800 kg
- | Ideal for truck and agricultural trailers
- | Stable design thanks to thick-walled steel tubes, rolled spindles, ball thrust bearings and wheels on plastic bearings
- | Function: When raising by turning, the inside tube with support shoe and wheel are guided into the outside tube by a spindle according to the adjustment stroke. The wheel with support shoe must now be hooked in by the operator.



### FULLY AUTOMATIC JOCKEY WHEEL

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- | Stationary nose load: max. 500 kg
- | Long version for greater adjustment stroke
- | Jockey wheel flange welded on low so there is greater swivel room for the support shoe when moving up
- | Wide and crowned wheel 230 x 80 mm with very good manoeuvring properties and a modern design, small contact surface on hard ground, large contact surface on soft ground

#### The right wheel for all applications

With our wide range of AL-KO and WINTERHOFF brand jockey wheels, we offer the perfect solution for every use!

**AL-KO**  
QUALITY FOR LIFE

  
**WINTERHOFF**  
QUALITY TRAILER SYSTEMS

# STEADY LEGS

## FOR GREATER STABILITY ON ANY SURFACE

### SF 60 MODEL STEADY LEGS

- | Very stable steady legs with pivot and swivel functions
- | Static carrying capacity per support approx. 1,300 kg
- | Galvanised
- | Pivoting to save space



#### The following versions are available:

- | SF 60: Adapter with pin for pivot function, operated using hexagon or crank handle
- | SF 60-D: Integrated adapter with automatic pivot function, operated using hexagon, various adapter sizes available



SF 60 – Length 280 mm



SF 60 – Length 400 mm



SF 60-D – Length 280 mm

# WHEEL CHOCKS

## SAFE, LIGHT, STRIKINGLY ELEGANT

### BASIC WHEEL CHOCKS

Wheel chocks from the BASIC product range are perfect for everyday use. Crafted from Sendzimer-galvanised steel plate, the chocks only offer limited resistance to all weather conditions.



Wheel chock UK 36 St  
Wheel load per chock: 1,600 kg



Wheel chock UK 46 St  
Wheel load per chock: 5,000 kg



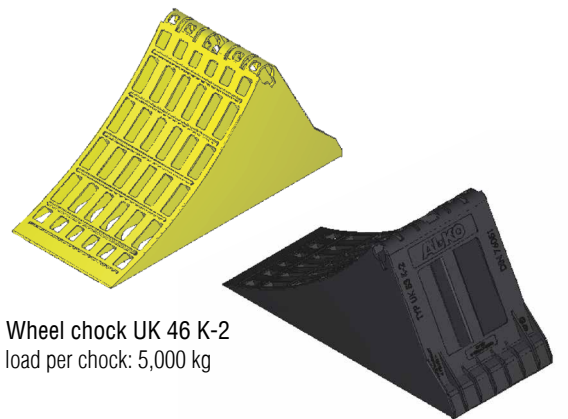
Wheel chock UK 53 St  
Wheel load per chock: 6,500 kg

### PLUS WHEEL CHOCKS

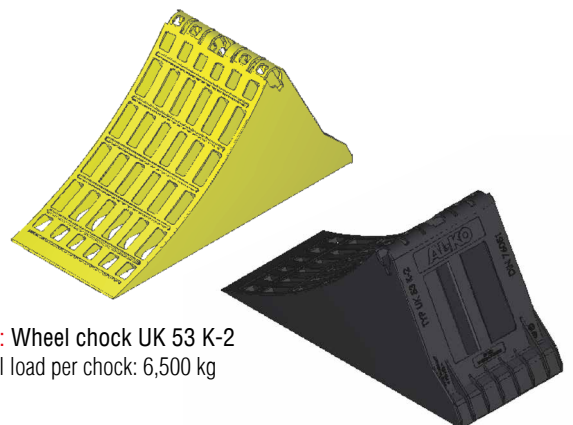
The PLUS version is especially robust and is designed for high loads. These plastic wheel chocks have a low intrinsic weight, offer excellent weather-resistance and permanent corrosion protection.



Wheel chock UK 36 KL  
Wheel load per chock: 1,600 kg



**NEW:** Wheel chock UK 46 K-2  
Wheel load per chock: 5,000 kg



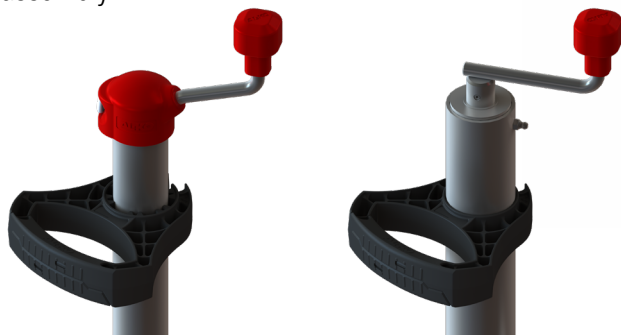
**NEW:** Wheel chock UK 53 K-2  
Wheel load per chock: 6,500 kg

# ACCESSORIES

## MANEUVERING HANDLES

### NEW: MANEUVERING HANDLE

- | New modern design
- | Available for jockey wheels with Ø 48mm and Ø 60
- | Better ergonomic
- | Fast assembly



## STORAGE BOXES FOR CAR TRAILER

### NEW: V-BOX PROFI

- | Double-walled
- | High quality design
- | High quality metal lock (lockable)
- | Protected against splash water due to rubber seal in the lid
- | 25 kg load suspended
- | Can be mounted suspended or on the drawbar



# AL-KO

QUALITY FOR LIFE

Member of  DEXKO  
GLOBAL

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