Klaas

Power of Aluminium

Alufiver

Alu5fiver

klaas.com

09/2018 EN

Alu5fiver

5 good reasons

Whether it is used for firefighting or on builder's yards, this Klaas all-rounder is impressive across the whole range. The ways that the Alufiver can be used are as varied as the cases dealt with every day by the fire brigade and technical support services.

The Alufiver is designed so that firefighters can work efficiently and easily with the appliance even under the most difficult conditions. The automatic set-up and dismounting system enables a simple and safe procedure especially in precarious situations. Its compact dimensions and variable support widths make even places that are difficult to reach accessible.

The new Alufiver benefits from our decades of experience as the market leader in the field of mobile cranes with aluminium booms and scores highly with tremendous performance characteristics.

- The telescopic articulated boom made of resilient aluminium ensures a low weight along with full functionality.
- The Alufiver reaches a rescue height of 30 m on a chassis with a total permitted weight of 12 t.
- With a full basket payload, the elevating rescue platform has a range of action of 18 m.

1 Elevating Rescue platform

The 3-person basket made of special aluminium alloy constantly remains balanced and is able to transport the rescue team directly to a great height from the vehicle podium once it has been levelled. The maximum basket load capacity is 300 kg. It can be pivoted horizontally in both directions by 20°. Thanks to the programmed collision protection, the driver's cab is protected against impact from the basket, whilst the impact sensors fitted in the basket give it further protection when in action. An automatic set-up and dismounting system for the boom enables the operator to proceed easily and safely especially in stressful situations. Using the Klaas dual controls, the platform can be operated both at a distance of up to 100 m and from the platform itself. The basket is equipped with several 24 V LED headlights, meaning that work can be performed safely from the basket even under adverse lighting conditions. Thanks to a constant weight check, the control system's display always indicates the current basket payload.

2 Extinguishing arm

The water supply integrated in the boom and the ability to control the monitor easily and safely using the remote control unit make it possible to extinguish fires from great heights. Due to the telescopic water supply pipe integrated in the boom, the extinguishing monitor can be used as soon as the boom has been positioned. A time-consuming process to supply water via hoses is therefore not necessary. The extinguishing monitor can be precisely operated with the Klaas remote control without having to take persons up in the basket. The monitor is also designed for tackling fires with foam. Other connection options are provided in the basket.

3 Crane function

Using the crane hook attached to the end of the boom, loads up to 2,000 kg can be safely lifted. The crane function was specially adapted for the diverse conditions for fighting fires and use on builder's yards in order to be able to act quickly and easily. By means of the mobile radio remote control, attached loads can be viewed safely from several perspectives.

4 Light tower

Different operation areas can be quickly illuminated and without laying cables. Six LED headlights (24 Volts) integrated in the work platform can be adjusted vertically using the remote control. Additional 230 V (AC) or 24 V (DC) light sources can be installed with the help of multifunctional mounts if required.

5 Power supply

The basket is supplied with power coming from a 230 V generator in the upper structure via the tower. The basket is equipped with two shockproof sockets meaning that electrical appliances can easily be connected. Furthermore, a wired voice communication system to the upper structure helps procedures to run smoothly.

Alu5fiver

One for all purposes

1 Rescuing persons

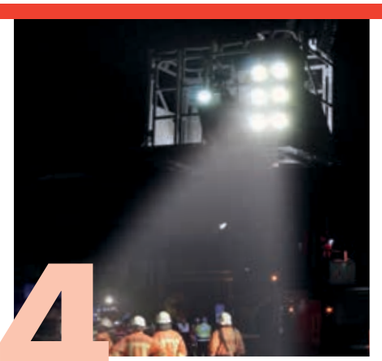
With the 3-person basket, persons can be rescued from great heights and emergency situations. The locking mechanism for a stretcher ensures that injured persons can be rescued and optimally cared for. The additional basket articulation allows the elevating rescue platform to fully take advantage of the multi-part telescopic mast. Obstacles can be bypassed and positions moved to that cannot be reached with a conventional turntable ladder. The basket can be set down e.g. behind a parapet or on a flat roof. The necessary emergency evacuation from the basket is achieved as standard by means of an abseiling device. An emergency evacuation via a ladder attached on the side is also possible on the Alufiver, based on a 15-tonne chassis.

2 Extinguishing fires

The Alufiver is ready to extinguish fires in no time at all. Simply supply it with water – done! Via the monitor, it has an output of 2,000 l/min without the need for rescue personnel in the basket. The boom and monitor can be operated at a safe distance (up to 100 m) using the radio remote control. The monitor can be adjusted vertically and horizontally. In addition, the monitor nozzle can be infinitely adjusted from a full jet to a fine spray jet. From a great discharge height, large distances of up to around 50 m can be achieved with the full jet or dusts and gases can be tackled in a targeted manner with the help of the spray jet. The addition of foam is also possible.

3 Rescue and use on builder's yards

In practice the Alufiver's crane function proves to be an ideal helper, with which all kinds of challenges can be overcome: attachments for PPE to prevent falls, clearing storm damage, setting boats down in water or securing road accidents – with the crane function, countless forms of use are possible especially when it comes to technical support. The Alufiver can also be used for the diverse jobs on a builder's yard.



4 Illuminating an operation area

Good visibility counts for everything when in action! The Alufiver can therefore be used as a light mast for operations in the dark. The rescue basket is equipped with six powerful LED headlights, which provide excellent illumination for any operation site. Due to the enormous boom range of action it is possible to effectively illuminate any scene of an accident from a height of up to 30 m and across other conditions (emergency vehicles, railway lines, buildings etc.). The light beam can also be vertically and individually controlled via the remote control. In addition, the multifunctional mounts allows a light bridge with 230 V headlights to be adapted.

5 Power supply

The 230 V power supply allows auxiliary devices, e.g. an electric chainsaw, to be operated. Thanks to the additional basket articulation, the Alufiver is ideally suitable for cutting trees, as it is easily possible to access the lower crown of a tree. Due to the universal hubs on the basket defence system and in the area of the rescue ladder, additional holders for appliances (such as high-power fans, additional headlights) can be individually adapted depending on the situation.

Alu5fiver offers more service as standard

Handling

The basket control station is designed exactly the same way as the main control station. It is possible to operate it both via the radio remote control (handheld transmitter) and by means of the basket transmitter (CAN BUS connector). In this respect, all movements and numerous other functions (start-stop generator etc.) can be activated from the manual and basket control station. An additional cable connection also ensures everything can work independently of the radio remote control. The diagnostics mode also provides quick assistance.

Safety concept

All safety-relevant signals are designed redundantly and controlled by CAN-BUS. The support pressure is permanently monitored by the CAN-BUS control system and can be queried during operations via the manual or basket control station. The emergency discharge of the boom in case the vehicle engine fails is ensured by an extra electrohydraulic pump (230 V), and by an emergency operating lever if the electrics fail.

Support

The horizontal-vertical support (H-support) enables an individual support width depending on the space available. With the aid of the automatic support system fitted as standard, the Alufiver automatically levels itself, whereby a manual procedure is still possible. The support control stations in the rear work in the hold-to-run method and, together with the constant ground pressure recording, generate maximum safety.

The Alufiver is based on a 15-tonne chassis

If a truck with a total permitted weight of 15 t is chosen as a carrier vehicle, other options can be added:

Water pump

Using the fire-extinguishing rotary pump integrated in the superstructure, which is driven by the truck's auxiliary drive, it is possible to extinguish fires directly without additional equipment.

Rescue ladder

The descent ladder fixed on the side of the boom replaces the abseiling device (emergency evacuation) and represents a direct means of descent but also ascent.

Chassis

All comparable chassis types in its class can be chosen from a wide variety of manufacturers (here: TM 32 on MAN TGL 12.250). Other options such as crew (1/1 or 1/2), route assistance or gearbox and engine versions can be individually adapted.

Podium

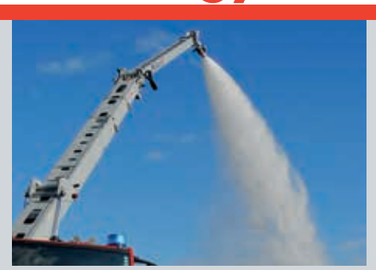
Thanks to the podium, the standard load according to DIN EN 14043 can be transported in the Alufiver and even considerably increased.

Klaas Firefighting technology

Klaas has been successfully involved in the field of firefighting technology since the year 2000. The Multistar, a height rescue and extinguishing unit, was first developed working together with Magirus. Since then it has been used successfully worldwide, with over 120 units sold. Soon afterwards, Klaas presented the next development in the field of firefighting technology with the Alufiver. Now in its third generation, the high-performance multifunctional vehicle supports fire departments and technical support services in their operations all over the world.

Multistar

The multifunctional vehicle, which combines the properties of a turntable ladder and a fire engine, is the optimal appliance for fire departments and technical support services in any situation. The joint project developed with Magirus is variable, fast and totally safe. Further information under www.magirusgroup.com.



Extinguishing arm

In 2012 Klaas developed a telescopic articulated mast for industrial fire engines, which is used and sold by a reputable truck body manufacturer of firefighting vehicles. This vehicle can deliver 4,000 l/min of water at a height of 25 m and is preferably used in plant fire departments. Further information under www.empl.de.

Technical specifications

Platform operation:

max. working height:	32 m
max. range of action with 300 kg:	18 m
max. range of action with 200 kg:	20 m
max. range of action with 100 kg:	22 m
Pivot angle:	360° infinite

Extinguishing mode:

Max. water capacity:	2,000 l/min
Throwing distance:	ca. 50 m

Crane operation:

max. load at 7 m range of action:	2,000 kg
max. load at 11 m range of action:	1,000 kg
max. load at 15 m range of action:	500 kg

Utility mode:
Generator dimensions:
700 x 440 x 580 mm with min. 5 kVA

Light mast operation:

Headlights:	6 x LED 24V/45W (vertically adjustable)
other headlight can be adapted as an option	
Basket lighting:	24 V-LED lamps
Boom and periphery lighting:	24 V-LED lamps

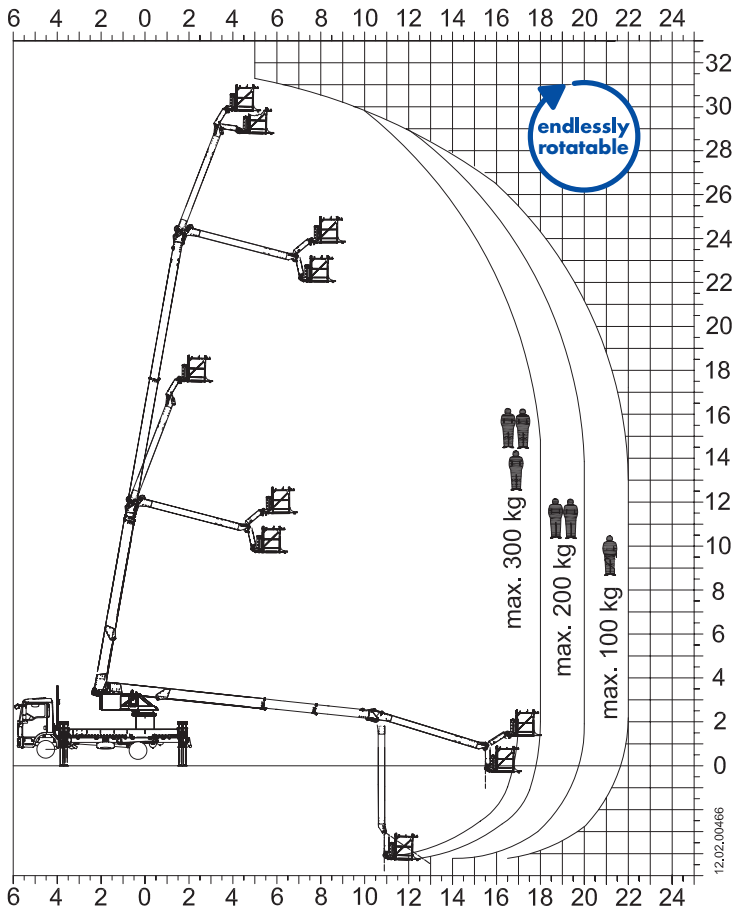
Chassis:

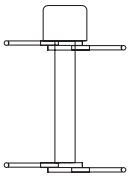
Vehicle dimensions: (L x B x H)	9.5 x 2.49 x 3.5 m (incl. roof lowering)
Total weight:	12 t

Podium structure:
stainless steel base frame with perforated plate for individual arrangement of the appliances

Equipment space loading: DL DIN loading

Working Range Diagram Alufiver TM 32





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