

AEBI

Viatrac/Transporter



- Hydrostatic power-split drive
- High payload
- Free DC break
- Multifunctional
- Economically
- Smart-working



The company Aebi

An ASH Group company

The ASH Group has a total of 1650 employees and manufactures its products at facilities in Switzerland, Germany, the Netherlands, Norway, Poland and USA. As part of the group, the Aebi Division in Burgdorf, Switzerland, is a leading global manufacturer of machines for the safe mechanical management and maintenance of steep slopes and particularly challenging terrain.

Heading for success with innovative technology

As a traditional Swiss company, Aebi has been manufacturing innovative implement carriers and vehicles for more than 130 years. These decades of comprehensive experience and the employees' technical know-how make Aebi a reliable and competent partner for customers around the world.

Swiss quality – more than a promise

Aebi offers an extensive range of vehicles and machines for challenging green space maintenance as well as municipal and winter service operations. Our products meet the highest requirements and, in this, have only one goal: your satisfaction. Swiss quality is thus more than a promise – it is our conviction.

Sustainable

Sustainable means the long service life that Aebi products are known for and a guaranteed supply of spare parts over many years. For us, sustainability begins in the development of our products. State-of-the-art technologies help to ensure that energy consumption is kept as low as possible during production. Saving energy and thus reducing CO₂ emissions, avoiding waste and optimising the waste flows, as well as using renewable energy sources, is part of our daily responsibility.

Our service is wherever you are

We want our customers to receive all-round great care even after making their purchase. The efficient Aebi spare parts centres and the close-knit network of dealers ensure prompt service in your proximity. We work hard to ensure that the Aebi service technicians receive regular and comprehensive training, and are thus always on the cutting edge of technology.



Welcome to your new comfort zone





Brilliant - Aebi VT450 Vario

Continuously variable

- Continuously variable operating speed without changing gears
- Four driving modes precisely adapted to the specific operation
- Speed can be split up into several steps using TipTronic
- Smooth, shock-free start without clutch drag
- Quick change of direction thanks to purely hydrostatic reversing up to 7 km/h
- Working at creep speed with high engine speed possible
- Hydrostatic power-split drive with high efficiency

Environmentally friendly, clean, economical and powerful

- Powerful turbo diesel engine with 80 kW / 109 HP Euro 6
- High torque of 420 Nm at 1100 – 1400 1/min
- Excellent torque increase of 43%

Multifunctional

- Quick change of equipment via four quick-fit couplings
- Hydraulic quick-fit couplings at rear (optional)
- Attachment at front via mounting plate or front lifting frame (optional)
- Hydraulic PTO drives (optional)
- Vast variety of individual and versatile de-mountable and attachable equipment

Economical

- ECO drive saves fuel by automatically reducing the engine speed
- AdBlue technology in the Euro 6 engine reduces fuel consumption
- High payload at a total weight of 8.5 t or optionally 9.5 t
- ADC (Automatic Drive Control)





Intelligent operating concept

- Large colour display shows all important parameters
- Programmable quick-access button for frequently used functions
- Display indicates rear axle load
- Vehicle diagnosis via on-board computer
- Multifunctional control lever with colour-coded buttons
- Smart Navigator (optional)

Ride comfort

- Hydropneumatic independent suspension with double transverse links
- All-wheel steering for outstanding manoeuvrability
- Ergonomically designed, spacious driver's cab with comfort seats
- adjustable free DC break with 40l pump (option)

Easy to maintain

- Low-maintenance turbo diesel engine
- Easy access to components that require maintenance
- Easy filling of liquid tanks

Enhanced safety

- Permanent all-wheel drive
- Positive engagement between diesel engine and wheels is never interrupted
- 100% centre differential and differential locks at front and rear
- Permanently acting hydraulic transverse stabiliser on the rear axle
- Wheel load-dependent lowering of suspension in extreme situations
- Speed-dependent level control system
- Disc brakes at front and rear
- Automatic spring-loaded brake
- Progressive torsion damping with high reset force
- Enhanced braking force with low heat generation and use „all with one lever“ with free DC break (option)



AEBI VT450 Varlo

AEBI



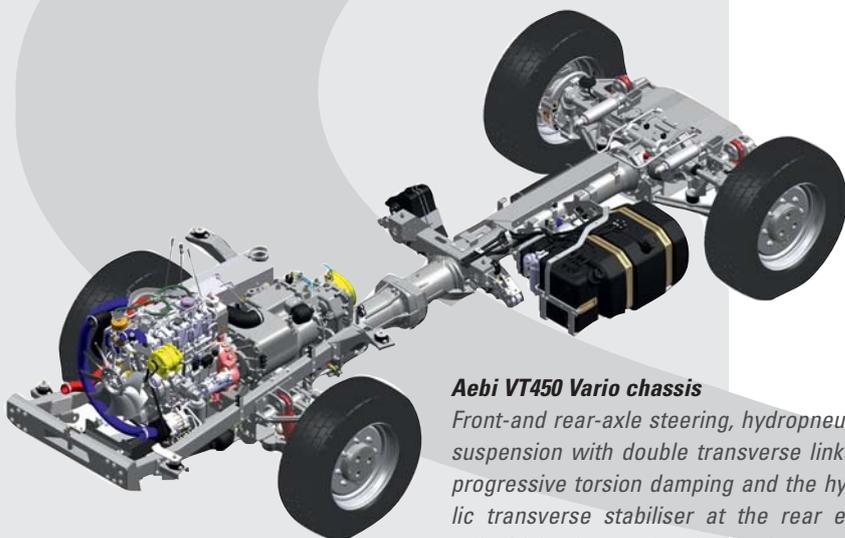
Working with the one-of-a-kind Aebi VT450 Vario is not only smooth and comfortable but also always environmentally friendly.

Masters any challenge – with the greatest of ease, at variable speed and environmentally friendly!



Aebi VT450 Vario

The continuously variable, power-split drive, the hydropneumatic suspension with double transverse links and the clean Euro 6 turbo diesel engine makes the Aebi VT 450 Vario the indisputably most advanced municipal transporter in the market. The Vario transmission is highly efficient. The speed can be precisely adapted to the specific application. Swift working within the optimum speed range is easy while saving fuel at the same time. The multifunctional control lever makes it possible to change the direction of travel without clutching. The new operating concept with the large colour display and the drive lever with colour-coded buttons make the work even easier. This abundance of unique features offers exceptional ride comfort and ease of operation in practical application.



Aebi VT450 Vario chassis

Front and rear axle steering, hydropneumatic suspension with double transverse links, the progressive torsion damping and the hydraulic transverse stabiliser at the rear enable safe driving in any situation, optimum adaptation to the terrain and maximum suspension comfort. Both wheels always absorb shocks in a straight line from the ground without changing the wheelbase.

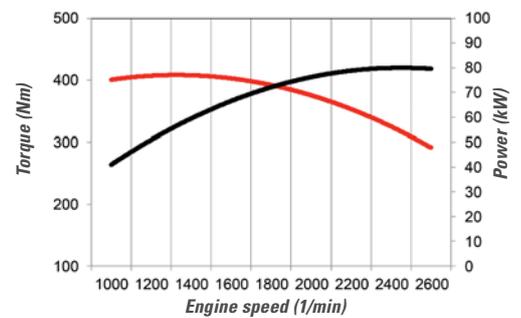


The Euro 6 / Stage-IV turbo diesel engine

The high-performance turbo diesel engine boasts a high torque of 420 Nm and excellent torque increase. The best torque is available between 1100 and 1400 1/min. Within this speed range, the turbo diesel runs very smoothly and economically. Even with heavy loads, there is still power in reserve, and toxic emissions are minimised thanks to the diesel particulate filter, SCR and AdBlue.

The Aebi VT450 Vario is the cleanest transporter ever!

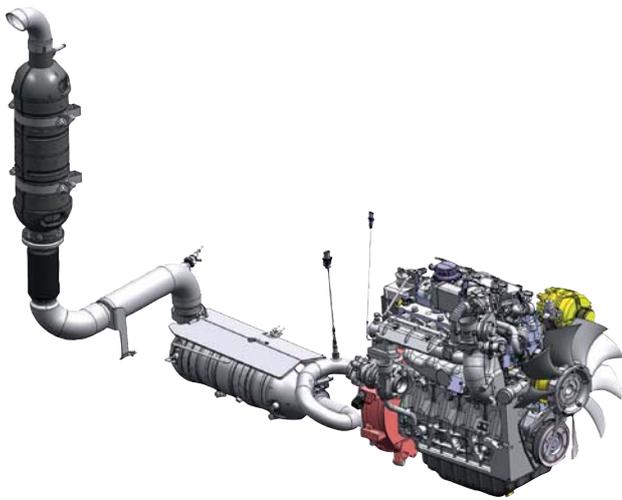
**Engine power and torque curves
VM R754 EU6 VT450 Vario**



euro 6



Aebi VT450 Vario: Environmentally friendly

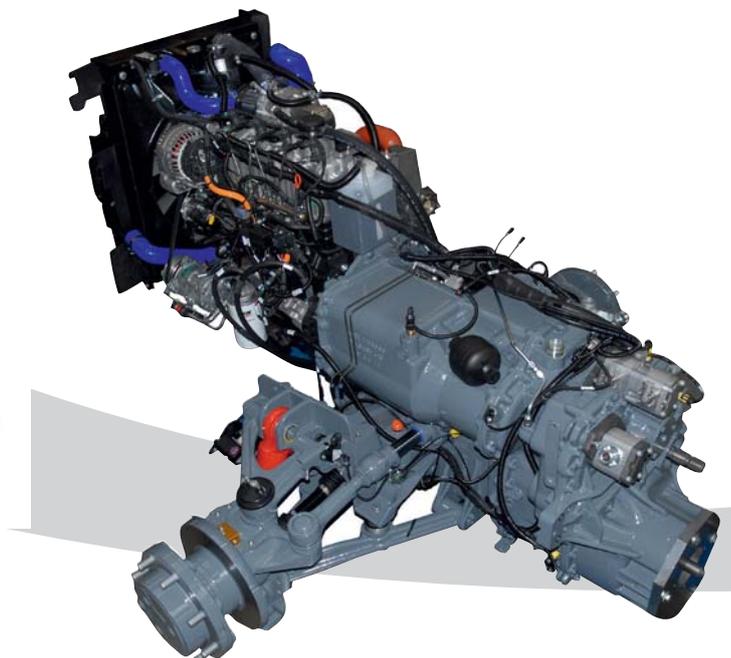
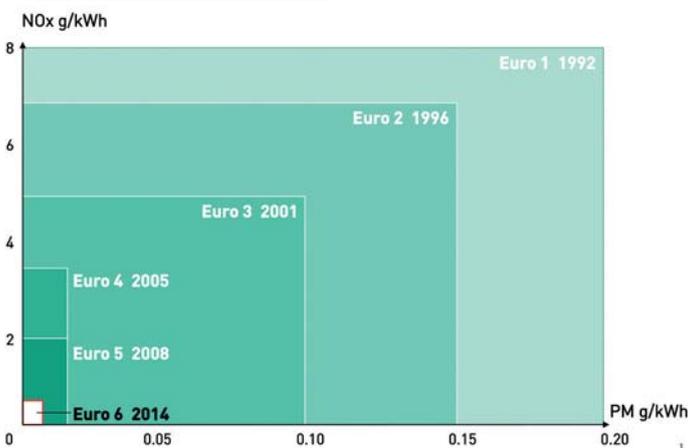


Cutting-edge engine technology and even more power

The new turbo diesel engine complies with the Euro 6/ Stage-IV emission standard and delivers a strong 80 kW (109 HP) at 2600 1/min. The maximum torque of 420 Nm is reached within 1100 – 1400 1/min. The torque increase of 43% is extraordinary. These excellent key performance data once again increase the road performance of the Aebi VT450 Vario significantly at reduced fuel consumption. The turbo diesel engine is equipped with a particulate filter and SCR (Selective Catalytic Reduction). The exhaust gas recirculation and SCR processes are continuously adjusted and monitored electronically, ensuring optimum emission control.

AdBlue is used for exhaust gas purification. This urea solution neutralises nitrogen oxides, converting them into harmless nitrogen and water vapour. AdBlue is additionally very inexpensive and biodegradable

The Euro 6 development stage markedly and impressively reduces exhaust gases and particulate matter.

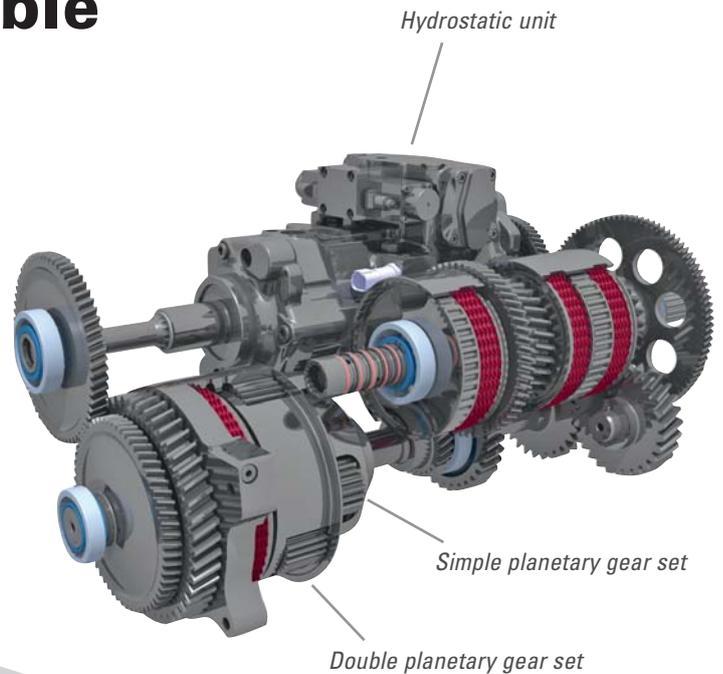




and continuously variable

Components of the variable-speed drive

The variable-speed, power-split drive consists of a compact hydrostatic unit with variable displacement pump, a fixed-displacement motor and a manual transmission with two gear ratios. The transmission output features two planet gear sets, a «Variable-Twin-Planet» double planet gear set and a single planet gear set. The combination of hydrostatic and mechanical components guarantees high traction and, thanks to the dry-sump lubrication and the power-split principle, also high efficiency. The power flow with this new continuously variable transmission is never interrupted (no drive clutch), which offers a constantly high level of safety.



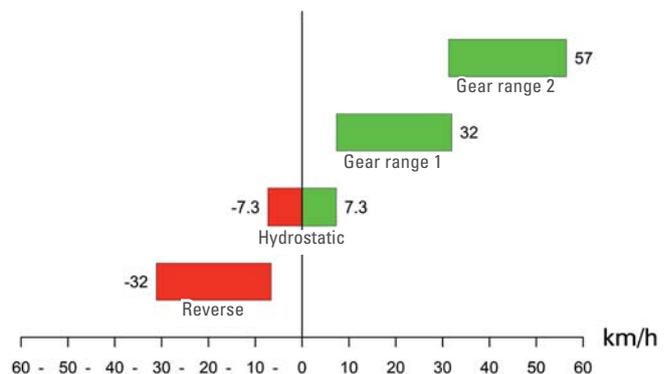
Functional principle

The variable-speed drive comprises four gear ranges: pure hydrostatic, power-split 1, power-split 2 and power-split reverse. From 0 to 7.3 km/h, the variable-speed drive is purely hydrostatic. The Vario transmission works in the power-split range 1 between 7.4 km/h and 32 km/h and in the power-split range 2 between 32 km/h and maximum speed. The hydrostatic and mechanical portions of the power flow are added up in the single planet gear set, thus acting on the drive train together.

The maximum speed of 30, 40, 45 and 50 km/h is set electronically, depending on the specific vehicle registration in the respective country.

The concept of this unique variable-speed drive is ingenious. The electronic control system allows for selecting various driving modes tailored to the respective operation. This not only increases user friendliness and ride comfort, but also facilitates particularly efficient operation with considerably reduced fuel consumption. The best thing about it: The above-described processes in the Vario transmission are continuously variable and fully automatic.

Gear ranges of the Vario transmission with maximum technically feasible speed





The Aebi VT450 Vario: Intelligent and comfortable

Hydraulic unit

The rear hydraulic connections are located in the left-hand corner of the driver's cab and the hydraulic hoses can be easily connected. Hydraulic connections integrated in the front bumper are available as an option.

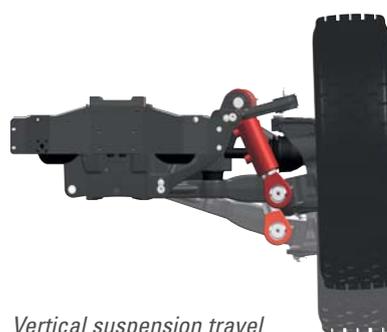
Steering modes

On request, the front steering fitted as a standard can be complemented with all-wheel, rear and crab steering modes. The addition of these features increases the VT450 Vario's manoeuvrability even more, while also offering advantages in special applications. The various steering modes can be selected at the touch of a button and the wheels can be automatically locked in neutral position.

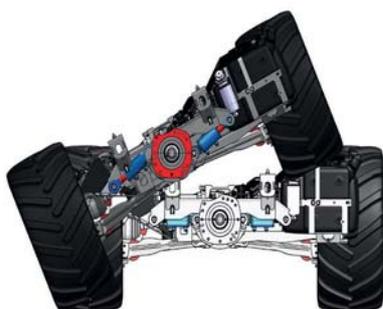
Intelligent and comfortable suspension

The hydropneumatic independent suspension has a suspension travel of 100 mm and offers exceptional ride comfort. The suspension comfort reaches the level of an off-roader. During cornering or emergency turns, the rear axle is automatically stabilised in real time by the permanently acting hydraulic transverse stabiliser. At low speed, the speed-dependent level control system also continuously corrects the level. The torsion with hydraulic damping between front and rear end additionally ensures extraordinary off-road capability. If a massive overload occurs in the contour line, the suspension is lowered first on the wheels facing up-hill and then on the wheels facing downhill, thereby shifting the vehicle's centre of gravity towards the slope. In extremely challenging terrain, the suspension can be lowered and locked in place manually, whereby the

centre of gravity is moved even closer to the ground and remains permanently low. During cushioning, the double wishbone axle changes neither the wheelbase nor the camber, thereby preventing tension in the drive train and significantly reducing tyre wear.



Vertical suspension travel



Hydraulic torsion damping at the rear end, extremely twisted in horizontal direction



Rear end extremely twisted in relation to the driver's cab (max. $\pm 30^\circ$)



Portable

Attractive and spacious

The driver's cab is flexibly mounted and the straightforward, modern and ergonomically designed driver's cab creates a pleasant atmosphere. The handling is easy and logical. The large colour display continuously informs the driver of all important parameters, making it possible for him to immediately respond to any warnings. Various air-cushioned comfort seats are available. The comfortable driver's cab is fitted with a heating and defroster system as a standard. The doors have sliding windows and the rear window can be tilted. The plastic roof features integrated work lamps and winter service lighting. An air-conditioning system and a hinged roof window can be delivered as options. Depending on the vehicle's registration, various outside rear-view mirrors can be ordered.



Handy file holder, toolbox and integrated battery and on-board electronic system behind the cover





Aebi VT450 Vario: Cutting-edge technology a

Changing gears is a thing of the past. Aebi is on the move with variable-speed drives!

- Simultaneous actuation of hydraulics and drive without changing hands by using the multifunctional control lever offers unmatched ease of operation and ride comfort. The need for clutching and changing gears is eliminated, enabling the driver to fully concentrate on his work.
- Continuous adjustment of driving speed to the respective operation increases efficiency and saves fuel.
- Constant wheel traction and considerably improved brake action of the hydrostatic drive compared to manual gears substantially increase safety.
- Precise manoeuvrability and change of direction with the greatest of ease. In practical application, this yields a significant increase in operating speed.

Multifunctional drive lever

TipTronic

- Hydraulic weight transfer
- Vibration damping
- Proportional hydraulic system
- Front, all-wheel, rear and crab steering modes
- Centre differential lock

Continuously variable driving speed
Hydraulic functions



Drive programmes

- Road operation
- Operating mode 1
- Operating mode 2
- Proportional / Automotive

Differential locks at front/rear
ECO drive ADC

Select the optimum driving mode at the touch of a button

Road operation:

100% of the engine output acts on the drive. The full torque of 6200 kg is already available at 1100 1/min.

Operating mode 1:

30-70% of the engine output acts on the drive. Full torque at 1400 1/min.

Operating mode 2:

10-30% of the engine output acts on the drive. Full torque at 2000 1/min.

Proportional:

30-70% of the engine output acts on the drive.



and premium ride comfort



TipTronic

The TipTronic speed ranges can be programmed individually from 6 (standard setting) to 40. The TipTronic ranges can be changed at the touch of a button.

ECO drive

The engine speed is reduced while the driving speed remains constant, resulting in reduced fuel consumption and a lower noise level.

Automatic Drive Control (ADC)

The ADC automatically adjusts the maximum driving speed to the power requirements of the de-mountable or attachable equipment. At maximum overloading, the drive power is reduced and the engine speed is increased again as soon as the power requirement on the PTO shaft is reduced. The VT450 Vario's driving speed is increased again without the driver having to intervene, enabling the engine to run economically within the optimum speed range.

Large colour display

Automatic operations can be programmed easily and individually. The driver continuously receives detailed information on the performance parameters, settings and the vehicle's condition via the large colour display.





AEBI

AEBI TP420

Low unladen weight, suspension comfort,
a powerful engine and easy handling make the TP420 easily manoeuvrable.

Hard work, high performance – and unlimited power in reserve





Aebi TP420: Exciting features

Safety in any situation

- Permanent all-wheel drive
- Disc brakes at front and rear
- 100% lockable centre differential
- 100% differential locks at front and rear
- Parking brake acting on the cardan shaft
- Hill-hold function (optional)
- Progressive torsion damping with high reset force (optional)
- Enhanced braking force with low heat generation and use „all with one lever“ with free DC break (option)

Exceptional ride comfort

- Air-cushioned driver's seat with 3-point safety belts (optional)
- Ergonomically designed control panel with advanced display instrument
- Straightforward operating concept via levers and buttons

Quick change of equipment

- Easy change of de-mountable equipment
- Minimum adaptations required to make existing de-mountable equipment compatible
- Saving potential as existing de-mountable equipment is usually compatible

A good investment

- Excellent price-performance ratio
- Durable, sturdy design
- High resale value





Attractive, straightforward and easily manoeuvrable

- State-of-the-art, prize-winning design
- Excellent all-round visibility
- Front steering with 42° steering angle

Environmentally friendly, clean, economical and powerful

- Stage-IIIB turbo diesel with 80 kW / 109 HP
- High torque of 420 Nm at 1100 – 1400 1/min
- Torque increase of 43%

Gentle on the ground and high load-bearing capacity

- Wide-profile tyres for maximum grip
- Twin tyres can be fitted at front and rear
- 8 t total weight and 2950 kg unladen weight (basic version)

Finely graduated transmission

- 16 gears with reversing
- Split gears and multiple gear change can be preselected

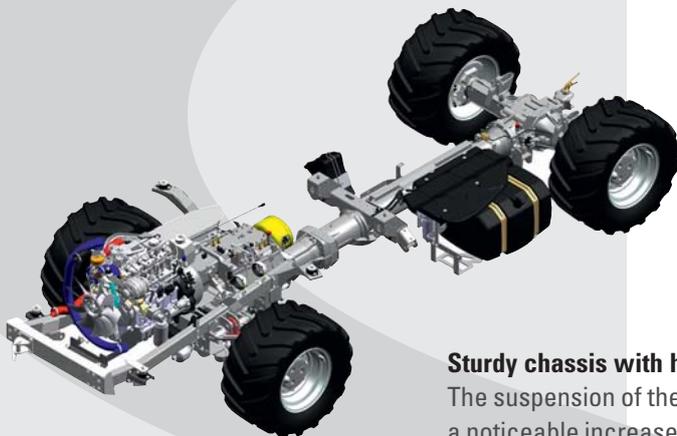
Aebi TP420 full-suspension variant with the additional comfort of a Viatrac

- Hydropneumatic full suspension at front and rear
- Independent suspension with double transverse links at front and rear
- Permanently acting hydraulic transverse stabiliser on the rear axle, e.g. during cornering
- Speed-dependent level control system
- Wheel load-dependent lowering of suspension in extreme situations
- High load-bearing capacity at a total weight of up to 8.5 t
- Ease of operation through hydraulic quick-fit couplings on the rear axle
- All-wheel, rear and crab steering modes for even better manoeuvrability (optional)



Aebi TP420: The powerful Transporter

Directly derived from the Transporter top-class model, the Aebi TP420 mainly has the same technical equipment. The attractive design of the driver's cab and a great number of components are nearly identical. Sturdy design, high performance, high payload and a simplified user concept combined with first-class ride comfort characterise this Transporter. With its powerful and clean engine and excellent price-performance ratio, the Aebi TP420 is the absolute front-runner in its class.



Sturdy chassis with hydropneumatic front-axle suspension

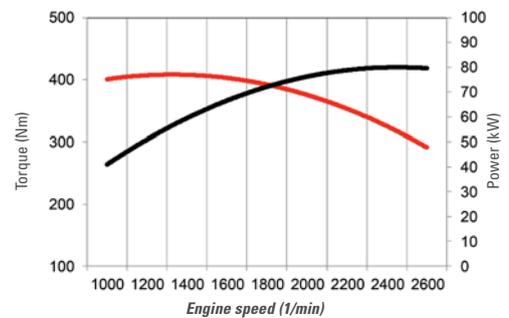
The suspension of the front axle with a suspension travel of 100 mm brings a noticeable increase in comfort for both the driver and the passenger. The difference to full suspension is remarkably small. This is not surprising since the models with full suspension feature identical axles. The wheel suspension is designed according to the double transverse link principle. All wheels always absorb shocks in a straight line from the ground without changing the wheelbase.

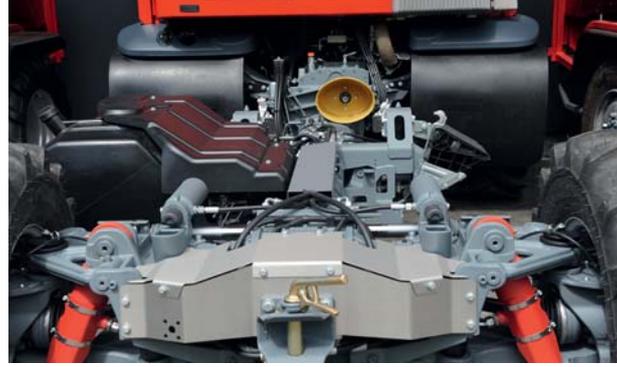


Clean and extremely powerful

The turbo diesel engine generates a muscular 80 kW (109 HP), has a torque of 420 Nm between 1100 und 1400 1/min and a torque increase of 43%. These key performance data promise a great deal of power in practical application. In addition, the engine complies with the stage-IIIB emission standard and is very easy on the environment, thanks to the integrated particulate filter and catalytic converter. Due to its sturdy drive train design, the TP420 is able to completely use the enormous torque of the turbo diesel.

Engine power and torque curves VM R754 IE4 TP420





Aebi TP420: Safe, intelligent and comfortable

Hydraulic system

The rear connections are located in the left-hand corner of the driver's cab and the hydraulic hoses can be easily connected. Hydraulic connections integrated in the front bumper are available as an option.

Chassis with full suspension and torsion damping

The full-suspension variant of the Aebi TP420 reaches the high ride comfort level of the VT450 Vario and, owing to the optionally available all-wheel, rear and crab steering modes, also its outstanding manoeuvrability.

The long suspension travel and the torsion damping ensure that all wheels are always in contact with the ground, thereby providing for excellent traction. The progressive torsion damping uses the weight of the front end to stabilise the load, thus counteracting overturning.

During emergency turns, the hydraulic transverse stabiliser automatically pulls the centre of gravity closer to the ground. At low speed, the speed-dependent level control system also continuously corrects the level, making it possible for the driver to drive safely from the slope line to the contour line in sloping terrain when the suspension is active. Each wheel is monitored individually by means of the rear-axle scales. If a massive overload occurs in the contour line, the suspension is lowered first on the wheels facing up-hill and then on the wheels facing downhill, thereby shifting the vehicle's centre of gravity towards the slope. In extremely challenging terrain, the suspension can be lowered and locked in place manually, whereby the centre of gravity is moved even closer to the ground and remains permanently low. During cushioning, the double wishbone axle changes neither the wheelbase nor the camber, thereby preventing tension in the drive train and significantly reducing tyre wear. The hydraulic quick-fit couplings on the rear axle can be actuated from the driver's cab.

Finely graduated

The H-pattern shifter works smoothly and precisely. The 4-speed transmission with ranges, split gears and reversing has a total of 16 forward and 16 reverse gears. The ranges and split gears can be preselected and are shifted electrohydraulically. The shifting time for the split gears is a record-breaking 1/10 of a second.

Swift on the road

Depending on the vehicle's registration, four speed ranges are available: 2-30 km/h, 2-40 km/h, 2-45 km/h and 2-50 km/h.

Safe grip on all wheels

Permanent all-wheel drive via centre differential with 50/50% torque distribution. The centre and axle differentials can be locked completely at the front and rear and are actuated electrohydraulically. When the vehicle is parked, the centre differential locks automatically and the parking brake acts on the front and rear axles via the cardan shaft. This represents a considerable addition to safety, while increasing the vehicle's stability in difficult terrain.



Deluxe driver's cab

The functions in the driver's cab are actuated via levers and buttons. All control elements are arranged ergonomically within easy reach. The advanced display instrument accommodating a colour display informs the driver of the most important parameters. The plastic roof features integrated work lamps and comes with a glass pop-top roof on request. The heating and defroster system ensures a pleasant temperature and prevents the windows from fogging up. An air-conditioning system can be delivered as option.





Large-displacement diesel engine, sturdy chassis
and straightforward operating concept – the entry-level class

The classic model – handy, efficient, versatile





Aebi TP48P: Straight-, forward, sturdy and

Finely graduated and fast

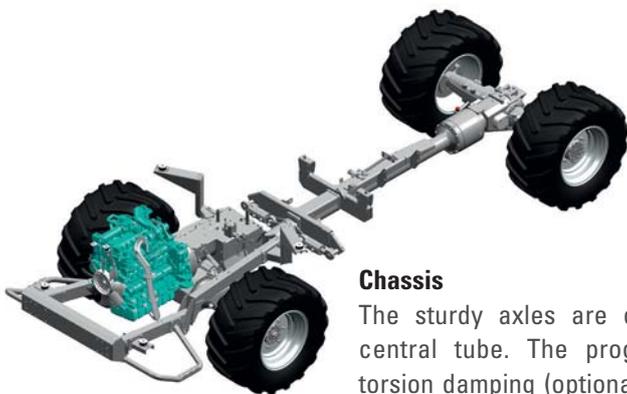
- 16 gears with reversing, split gears can be preselected, multiple gear change, Vmax 40 km/h

Safety in any situation

- Permanent all-wheel drive
- Hydraulic torsion damping between the axles (optional)
- Dual-circuit brake system and hill-hold function
- Centre differential lockable via multiple-disc clutch
- Spring-loaded brake (optional)

Highly manoeuvrable

- Hydrostatic steering with 45° steering angle



Chassis

The sturdy axles are connected via the central tube. The progressive hydraulic torsion damping (optional) enhances safety by actively preventing the front and rear ends from overturning. The permanent all-wheel drive, 100% lockable axle differentials at the front and rear as well as the high locking effect of the centre differential via the multiple-disc clutch guarantees excellent traction in any situation.



The large-displacement, economical and high-torque diesel engines generate 55.4 kW / 75.3 HP. Even with high loads, the transporter stay on the fast track.



reliable



Quick change of equipment

- Easy change of de-mountable equipment

High-performance

- 3.3 l diesel engine with 75.3 HP

Spacious and straightforward

- Deluxe driver's cab cushioned against vibrations
- All buttons and switches are arranged within easy reach

High payload

- 6.5 t total weight allows high payload

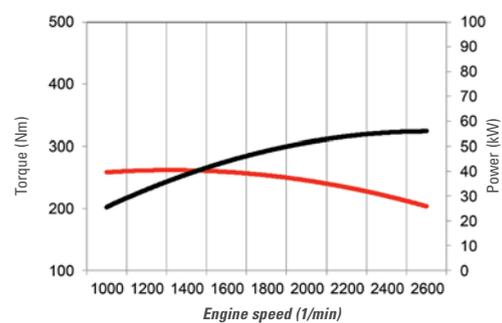
Gentle on the ground

- Wide-profile tyres for maximum grip and low ground contact pressure

A good investment

- Excellent price-performance ratio
- Durable, sturdy design
- High resale value

Engine power and torque curves Kubota V 3307-DI-T-EU2 TP48P

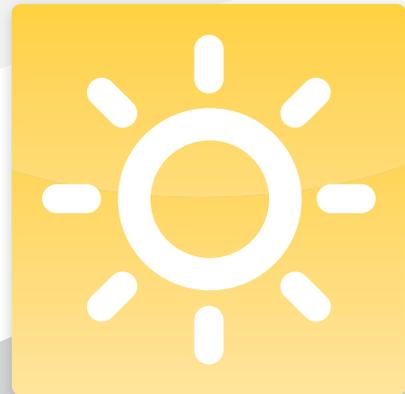




Strong all-rounders that suit your needs

Viatrac and Transporter – Unbeatable versatility

Viatrac and Transporter are sturdy industrial vehicles that are highly versatile in use when fitted with individual de-mountable and attachable equipment. Whether equipped with single-purpose or multi-purpose equipment for a wide range of tasks, these durable all-wheel drive vehicles handle challenging tasks efficiently and at any time of the year. In practical application, this versatility allows particularly economical operation. In addition, the Aebi Viatrac Vario Euro 6, in particular, is not only a high-performance all-round transporter, but also offers drivers exceptional ease of use and maximum ride comfort, while also being easy on the environment.



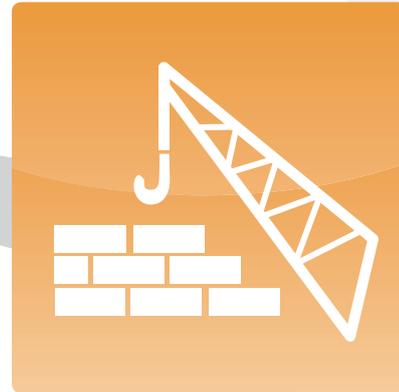
Summer service



Winter service



Municipal service



Building and construction



Special tasks



Summer & Municipal service

Individual diversity

By changing the de-mountable equipment, the Aebi Viatrac/Transporter can handle various tasks. This polyvalence considerably adds to the vehicle's value. Attachable and de-mountable equipment can be changed quickly. For regular application, for example with sweepers, however, the equipment can also be attached permanently.

Sweepers

Fitted with a de-mountable sweeper, the Aebi VT450 Vario is particularly efficient in cleaning streets and squares in inner city areas or municipalities with narrow and steep streets.

Transporters

The high payload and traction allow for a wide range of transport operations to be executed in difficult and sloping terrain.

Mowers

The front-mounted side flail mower makes it easy to maintain roadsides and road embankments.

Irrigation

Dirty streets and areas can be cleaned or swept using a water tank and a front-mounted spray bar. Irrigation of flowerbeds in inner city areas or parks can also be performed.





Winter service

No chance for snow and ice

Aebi's municipal transporters have a sturdy design, are powerful and easily manoeuvrable, and are thus perfectly suited to fight snow and black ice. The all-wheel drive guarantees excellent traction and, combined with powerful engines, allows for clearing large amounts of snow with ease. The great variety of de-mountable spreaders is ideally suited to combat black ice. The amount of spreading material applied is controlled electronically, automatically reducing the consumption to a minimum. This both saves costs and protects the environment. The ASH Aebi Schmidt Group manufactures high-quality winter service equipment tailored to your individual needs.

Multi-blade snow ploughs

The multi-blade snow ploughs like Schmidt MPC, CPM, SNK or Tarron Compact adapt to the road surface by means of the special blade guidance system, which is why they are extremely gentle on the ground.

Spreaders

Common areas of application of de-mountable spreaders include car parks as well as roads in residential areas and municipalities. Schmidt offers with the Stratos or Syntos spreader suitable equipment for every need and in different sizes.

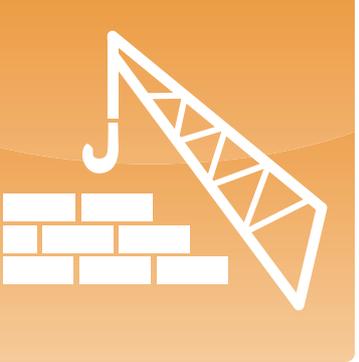
Front-mounted brushes

Front-mounted like Schmidt VKS 26 or VKS 24 are used to remove small amounts of snow and coarse dirt from large areas.

Snow cutters

Fitted with a variable-speed, power-split drive, a performance hydraulic system and a front lifting gear, the Aebi VT450 Vario can also be used in combination with a snow cutter.





Building and construction

Optimum payload and manoeuvrability

Where space is confined, e.g. at building sites or on narrow inner city streets, the all-wheel steering makes it possible to reach even seemingly inaccessible corners. In addition, the high payload of the Aebi VT450 Vario offers great benefits. Equipped with a skip handler or hooklift, large carrier vehicles can be supported, thereby minimising their downtimes. Once the skip with the load is set down, the next transport operation can be started immediately, making it possible to use the vehicle to maximum capacity for enhanced flexibility.

Three-way tippers

The possibility of transporting a wide range of building materials using the three-way tipper and safe driving at building sites enabled by the all-wheel drive and the large ground clearance makes the Aebi Viatrac and Transporter the perfect building vehicles.

Hooklifts

The hooklift pulls low-profile skips with mini-excavators or building implements onto the carrier vehicle and sets them down again at the building site. In addition to simple skips, tipper body/crane combinations can also be mounted via the hooklift.

Skip handlers

Skips can be mounted and demounted, and can also be tilted for discharge.

Cranes

Cranes can be mounted either behind the driver's cab or on the tipper body at the rear. The VT/TP are also eminently suitable for loading and unloading the vehicle. Owing to the broad support, the crane can be extended to a respectable distance.





Special tasks

Cutting-edge technology for special cases

Extraordinary off-road capability, outstanding manoeuvrability, high payload and the ingenious variable-speed, power-split drive make the Aebi VT450 Vario a one-of-a-kind carrier vehicle for special applications. Individual customer requests can be met using the corresponding de-mountable equipment. Whether fitted with conventional manual transmission or variable-speed drive – Aebi offers you the best possible carrier vehicle.

Disposal

The waste collection body or waste skip ensure waste disposal in smaller municipalities in mountain regions even in unfavourable road conditions or in winter.

Sewer cleaning

The special sewer cleaning body makes it possible to perform plenty of tasks including sludge extraction and flushing of sewer lines.

Power line construction

The possibility of fitting the vehicles with dual wheels all-round brings noticeable benefits during the construction or maintenance of overhead lines in challenging terrain. When equipped accordingly, the Aebi Viatrac is ideally suited for use in sloping terrain, is gentle on the ground and is capable of reaching even the most difficult places.



Aebi VT450 Vario:

Experience fantastic ride quality at variable speed!







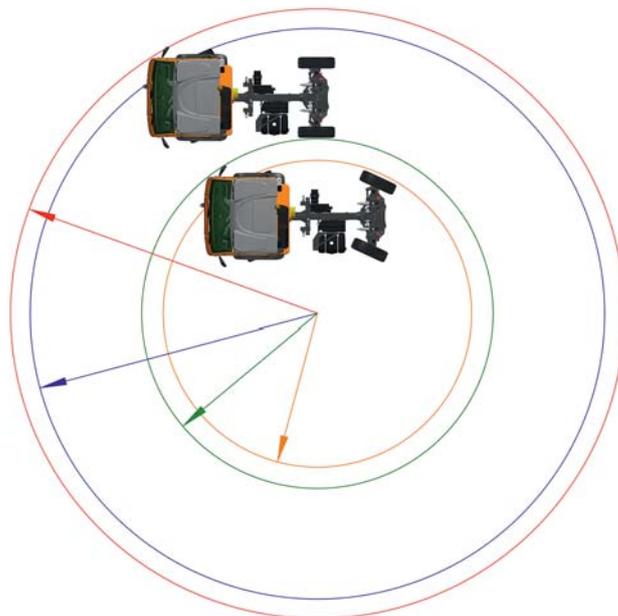
Highly manoeuvrable

Turning circle measured over outside wheel:

Wheelbase	Front steering / Turning circle mm			All-wheel steering / Turning circle	
	TP48P	TP420	VT450 Vario	TP420 full suspension	VT450 Vario
2750	5700	5700	-	4000	-
2850	-	-	5800	-	4100
3150	6400	6400	-	4300	-
3250	-	-	6500	-	4400

Turning circle measured over driver's cab:

Wheelbase	Front steering / Turning circle mm			All-wheel steering / Turning circle mm	
	TP48P	TP420	VT450 Vario	TP420 full suspension	VT450 Vario
2750	6100	6200	-	4500	-
2850	-	-	6300	-	4600
3150	6800	6900	-	4800	-
3250	-	-	7000	-	4900





Tyre variants

TP48/TP48P		Rear:	
Front:		15.0/55-17	Width: 1.84 m
15.0/55-17	Width: 1.93 m	425/55 R17	Width: 1.88 m
425/55 R17	Width: 2.11 m	425/55 R17 and 7.50-18/17	Width: 2.35 m
		425/55 R17 and 285/80 R16	Width: 2.50 m



425/55R17 AS Profil



285/80R16 twin tyre



7.5 - 18/17 twin tyre

TP420		Rear:	
Front:		425/55 R17	Width: ET20 1.90 m
425/55 R17	Width: ET20 2.11 m	285/70 R19.5	Width: ET80 1.96 m
285/70 R19.5	Width: ET25 1.95 m		
TP420 full suspension / VT450 Vario		Rear:	
Front:		285/70 R19.5	Width: 1.96 m
285/70 R19.5	Width: 1.95 m	15.5/55 R18	Width: 2.05 m
15.5/55 R18	Width: 2.04 m	425/55 R17	Width: ET20 2.12 m
425/55 R17	Width: ET20 2.11 m		



285/70 R19.5



15.5/55 R18



440/50R17 terra profile

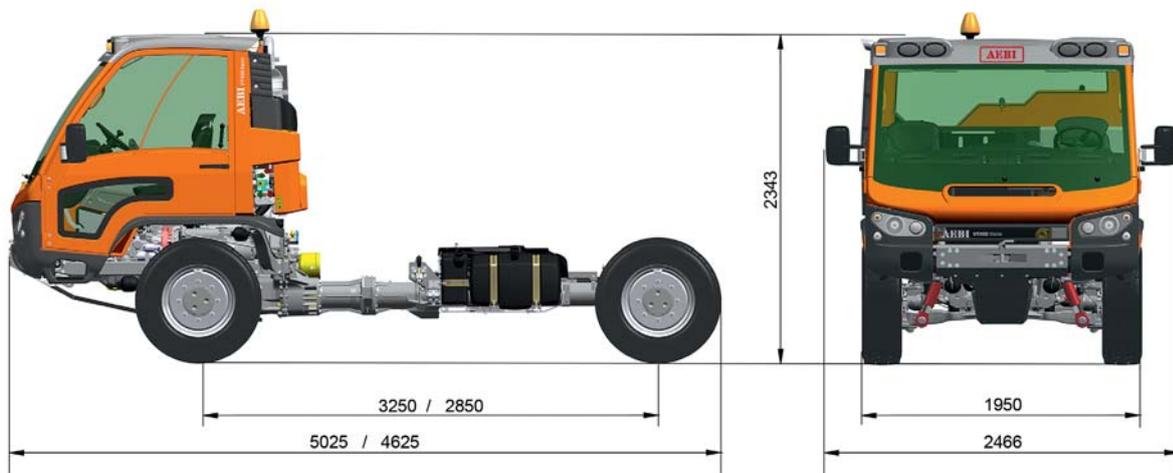


425/55R17 AS profile

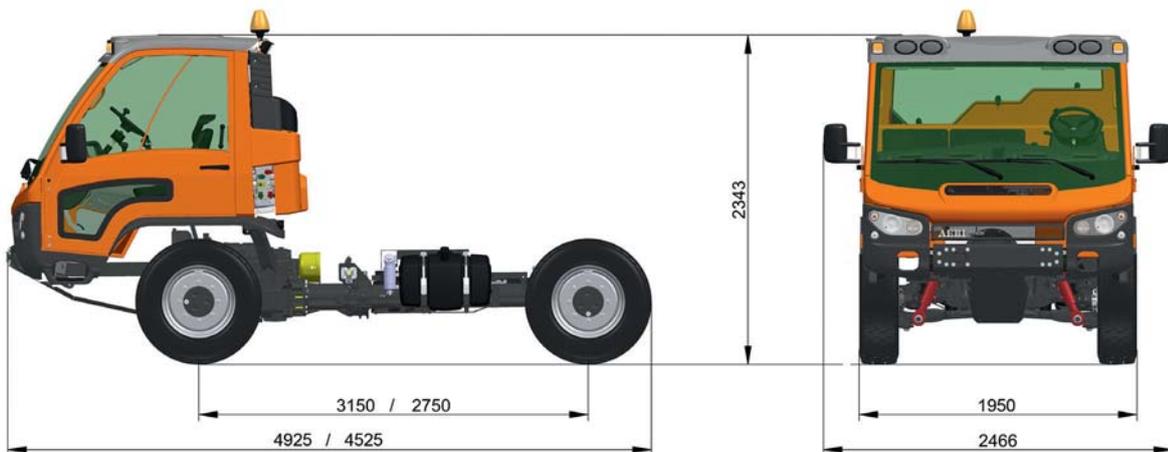


Dimensions

Aebi VT450 Vario

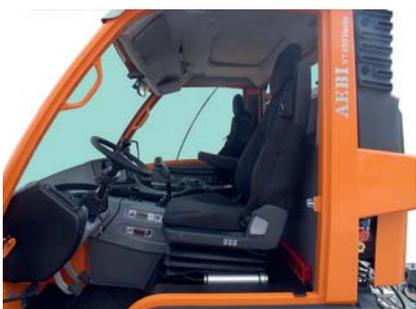
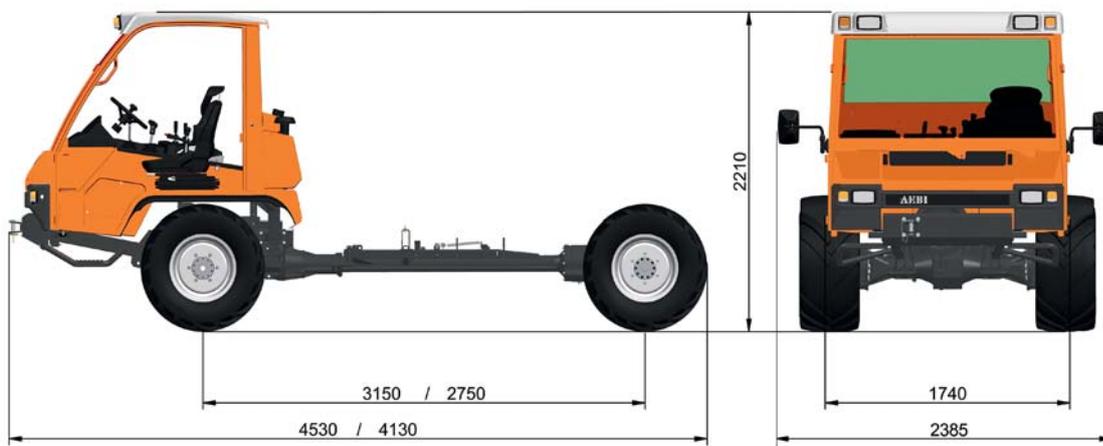


Aebi TP420 / TP420 full-suspension variant





Aebi TP48P



3-point comfort driver's seat (optional) for VT450 Vario and TP420



Air-cushioned comfort seat (optional) for VT450 Vario, TP420 and TP48P

Comfort seat

The air-cushioned comfort seats represent a useful option, making the driver's work easier. Strong shocks are absorbed and the lateral grip on sloping terrain is excellent. Depending on the model, the seat can be adjusted either manually or electrically.



Hydraulic front lifting gear (optional) for VT450 Vario



Easily accessible rear hydraulic connections in the left-hand corner of the driver's cab in the VT450 Vario and the TP420

Technical specifications Transporter / Viatrac

Engine and drive

Engine type / Emission standard		
Engine		kW / PS / 1/min
Cylinders / Cubic capacity		/ cm ³
Max. torque / Torque increase / at rpm		Nm / % / 1/min
Consumption		l/h
Reversing transmission forward / reverse / Vario power-split		
Speed forward / reverse () only AT, DE		km/h
PTO speed at rear		1/min
Load-switchable rear PTO shaft		

Chassis and tyres

Centre differential with lock / with lock via multiple-disc clutch		
Hydropneumatic suspension front / front and rear		
Hydraulic torsion damping		
Front / all-wheel, rear and crab steering mode		
Turning circle front steering wheelbase short / long		mm
Turning circle all-wheel steering wheelbase short / long		mm
Basic tyres		
Twin tyres front and rear		

Driver's cab and equipment

Fully glazed driver's cab with heating and defrosting system		
Radio preparation		
On-board computer / Air-conditioning unit		
Multifunctional control lever		
Hydraulic dual-circuit brake system/Hill-hold function/Parking brake mechanical/hydraulic		
Free DC break		

Hydraulic system

Basic hydraulic system		l/min /bar
Optional equipment: auxiliary / performance hydraulic system		l/min /bar
Lifting capacity of front lifting gear (optional)		kg

Dimensions and weights

Unladen weight / Total weight		kg
Tankvolumen Diesel / AdBlue (Euro 6) Tank capacity diesel / AdBlue (Euro 6)		
Width / Height over driver's cab		mm
Width over tyres		mm
Wheelbase and length short / long (without de-mountable equipment)		mm



Aebi TP48P



Aebi TP420



Aebi VT450 Vario

Kubota V3307-DI-T / IIIA	VM R754IE4 / IIIB	VM R754EU6 / Euro 6 / IV
Diesel / 55 / 75 / 2600	Turbo diesel / 80 / 109 / 2600	Turbo diesel / 80 / 109 / 2600
4 / 3331	4 / 2970	4 / 2970
268 / 32 / 1500	420 / 43 / 1100-1400	420 / 43 / 1100-1400
4.2	6.6	6.6
16 / 16	16 / 16	variable-speed power-split
2,3 – 37 / 2,2 - 35	2 - 40 (50) / 1,9 – 38	0 -30 -40 -45 (-50) / 0 - 31
600	600 / 750	600 / 1000
✓	✓	✓
- / ✓	✓ / -	✓ / -
- / -	✓ / Variante	- / ✓
Option	Option	✓
✓ / -	✓ / Option*	✓ / Option
5700 / 6400	5700 / 6400	5800 / 6500
- / -	4000 / 4300*	4100 / 4400
11.5/80-15.3 15.0/55-17 425/55 R17 AS	285/70 R19.5 425/55R17 AS 440/50R17 Terra 15.5/55-R18 PG7	285/70 R19.5 425/55R17 AS 440/50R17 Terra 15.5/55-R18 PG7
✓	✓	✓
Option	Option	✓
Option	✓	✓
- / -	- / Option	✓ / Option
-	-	- ✓
✓ / ✓ / ✓ / Option	✓ / Option / ✓ / -	✓ / - / - / ✓
-	Option (break + 40l/min pump)	Option (break + 40l/min pump; break + 40l/min pump + power hydraulic)
25 / 175	40 / 200	40 / 200
- / -	- / -	40/200 / 100/300
-	-	2000
2300 / 6500	2950/8000 / 3200/8500*	3500 / 8500 (9500)
1700 / 2210	1900 / 2300	1900 / 2300
2110 - 2500	1950 – 2500 (2800*)	1950 – 2800
2750-4567 / 3150-4967	2750-4684 / 3150-5084	2850-4784 / 3250-5184



Aebi VT450 Vario waste collection container



Aebi VT450 Vario tipper body and rear-mounted crane



Aebi VT450 Vario hooklift



Aebi VT450 Vario snow plough and de-mountable spreader by Schmidt



Aebi VT450 Vario spray bar



Aebi VT450 Vario with crawler tracks and tipper body



Aebi VT450 Vario hedge trimmer



Aebi VT450 Vario side flail mower



Aebi VT450 Vario de-mountable skip



Aebi VT450 Vario crane and trailer



Aebi VT450 Vario crane with earth drill



Aebi VT450 Vario tipper body, rear-mounted crane and underfloor winch



Aebi VT450 Vario with tipper body



Aebi TP420 tanker



Aebi TP420 log skidder



Aebi TP420 three-way tipper

Aebi Schmidt Holding AG
Marketing and Communication



Scan and experience ASH
Group on YouTube

Subject to technical changes.
Photographs not binding.

We are happy to advise you!