

TP/VT 470 Vario

Multipurpose transporter



Equipped with the new high-torque 100 kW engine (136 hp) in accordance with the Euro 6e emissions standard, the all-terrain Aebi TP/VT 470 Vario Transporter is ready for the widest range of agricultural and municipal applications throughout all seasons. The Aebi operating concept Vision Control offers the driver a constant overview of all relevant parameters, and in sweep mode it provides simple operation of all functions via the integrated drive selector lever. In combination with the unique Vario gear, this ensures continuously variable, comfortable and environmentally friendly work.

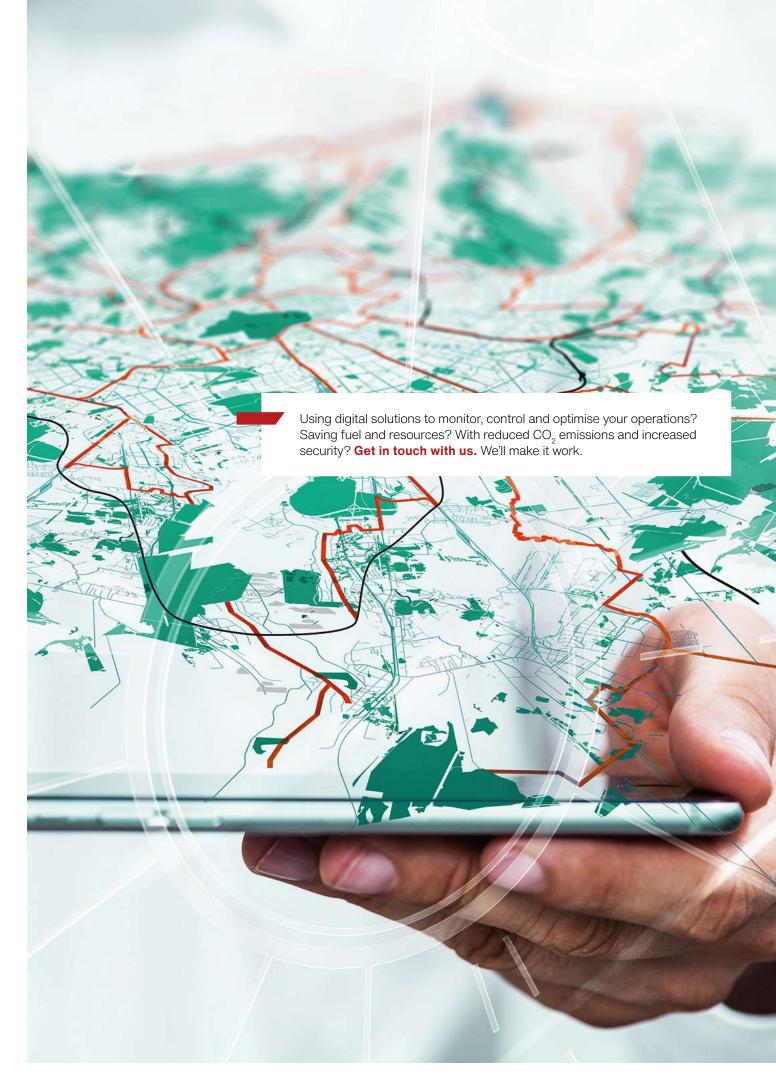
Highlights

- Powerful 100 kW engine (136 hp) for gentle work
- High payload owing to the maximum weight of 10,000 kg
- Continuously adjustable driving speed for efficient work
- Cruise control and low speed concept enable fuel savings and noise reduction
- Intuitive operating concept Vision Control with 12-inch touch display and the established Aebi drive selector lever

Your benefits

- Active suspension: permanent all-wheel drive, the power train between the engine and wheels is never interrupted, 100% automatic locking differentials, permanent anti-roll stabilisation of the rear axle
- Safe work: high level of driving comfort and safety thanks to the automatic steering mode control
- Easy access: The cooler and filter are mounted in a particularly maintenance-friendly manner, easy access to components that require servicing
- Unobstructed view: generously sized cabin with allaround visibility, wide-angle mirrors integrated in the main mirror and LED vehicle lighting as standard
- Environmentally friendly technology: clean Euro 6e emissions standard turbo diesel with 100 kW (136 hp) and 500 Nm torque





Performance features

Engine

The turbo diesel engine fulfils the requirements of both the **Euro 6e emissions standard** and Stage V. The engine boasts a powerful **100 kW** (136 hp) at 2,600 rpm. The maximum torque of 500 Nm is reached at a speed of 1,400 rpm. The turbo diesel engine is equipped with particle filters and an SCR catalytic converter (selective catalytic reduction). The diesel particle filters and SCR processes are continuously coordinated and monitored electronically.

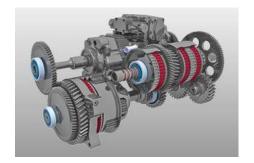


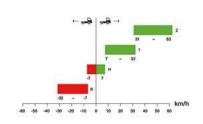
Continuously variable drive

- Engaging the clutch and shifting are a thing of the past. The patented, continuously variable, split power drive train of the Aebi TP/VT 470 Vario combines comfort and efficiency. The driver's hand can always stay on the drive selector lever, enabling them to fully concentrate on their work.
- The permanent traction of the wheels and the considerably better braking effect of the **hydrostatic drive** significantly increase driving safety compared to a mechanical gear.
- Precise manoeuvring and changing the direction of travel are easy. In practice, this means a considerable increase in working speed.

The continuously variable drive comprises four gear ranges: purely hydrostatic (H), split power 1 (1), split power 2 (2) and split power reverse (R). The continuously variable drive works purely hydrostatically from 0 to 8 km/h. The Vario gear works in the split power range 1 from 8 to 35 km/h and in the split power range 2 from 34 km/h up to top speed. The hydrostatic and mechanical components of the power flow are combined in the simple planetary gear set and act together on the drive train.

The Aebi TP/VT 470 Vario can be configured with a top speed of 30, 40, 45 or 50 km/h as desired by the customer.





Ride qualities

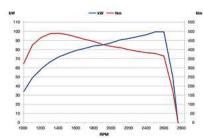
Suspension with automatic, hydraulic anti-roll stabilisation

Steered front and rear axles, hydro-pneumatic spring-damper system with double transverse links, progressive torsion damping and hydraulic anti-roll stabilisation on the rear axle result in **reliable driveability** in every situation. Thanks to the unique design of the double transverse link single wheel suspension, all wheels always spring straight to the surface without affecting the drive train. The TP/VT 470 Vario thus offers the **best traction** and incomparable soil protection.



Automatic drive control (ADC)

The ADC automatically regulates the maximum driving speed according to the varying power requirement of the attachment or implement. The travel drive is regulated depending on the power consumption at the PTO shaft. The TP/VT 470 Vario thus automatically regulates the working speed without driver intervention. This ensures that the engine always works within the ideal range.



Optimum drive mode at the touch of a button

• Road travel: 100% of the power output acts on the drive. The maximum tractive force is already available at 1,400 rpm. The desired driving speed can be maintained via cruise control. In addition, the ECO drive function can be activated to drive at particularly low speeds.

- **Work mode:** 30–70% of the power output acts on the drive. The full tractive force is already available at 1,400 rpm (ideal for hay loaders, manure spreaders and slurry tanks).
- **PTO mode:** This mode is for attachments which require a fixed speed. This can be configured on the display with which the gear controls the drive so that the speed is kept constant. The desired speed can also be set using the cruise control.
- **Proportional:** 30–70% of the power output acts on the drive.
- **ECO drive** (activated for road travel): The engine speed is reduced while the speed remains unchanged. The fuel consumption and the noise level are reduced accordingly.

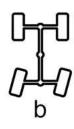
Tiptronic

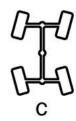
The Tiptronic drive positions can be programmed from 6 (standard setting) up to 40 individual drive positions and adjusted at the touch of a button.

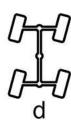
Steering modes

The steering system has front (a), rear (b), all-wheel (c) and crab (d) steering mode. This means that the TP/VT 470 Vario achieves outstanding **manoeuvrability and agility**. In addition, from 25 km/h, there is an **automatic changeover** from all-wheel to front-wheel steering, thus increasing driving comfort and safety. The steering modes can also be conveniently selected at the touch of a button.





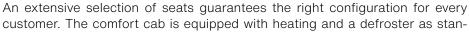




Workplace

Cockpit

Working with the TP/VT 470 Vario is a low-noise and vibration-free experience thanks to the decoupled driver's cab, which is built on hybrid rubber bearings. With the **revised operating concept Vision Control**, we offer the latest generation of a control unit that provides a unique overview, including a distinct ease of use. The modern and **simple operation** can be freely programmed, tailored to the user. The large 12-inch touch display provides the driver with constant information about all key parameters.





dard. The doors feature large sliding windows. The rear window increases the excellent all-around visibility and can be opened if necessary. LED working lights and winter service lighting are integrated in the cab roof. The extensive basic configuration can optionally be supplemented with a powerful air conditioning system. This means that **ergonomic, efficient and flexible work** is possible with the transporter TP/VT 470 Vario.

A drive selector lever without compromise

Hop in and drive off immediately, **change the direction of travel quickly and easily without stopping**, or precisely and quickly control the work devices with just one finger – this is made possible by the Aebi drive selector lever. Depending on the equipment variant or requirement, it can be integrated in the engine cover or the armrest, thus enabling a relaxed posture in every situation. This makes not only ergonomic but also **safe working conditions** possible.



Hydraulics

The hydraulic connections are located on the left behind the cab. This allows the hydraulic hoses to be conveniently connected and disconnected. If desired, the hydraulic connections can be pulled to the front of the vehicle. Hydraulics variants:

- Basic hydraulics
- Auxiliary hydraulics 40 l/min / 200 bar
- Power hydraulics 100 l/min / 300 bar





Central lubrication bar

The new optional central lubrication bar combines 43 lubrication points from the chassis of the TP/VT 470 Vario and enables fast and safe lubrication. This saves operating costs and increases the longevity of your machine. The advantages of the central lubrication bar option at a glance:

- **Extends service life:** Your TP/VT 470 Vario is supplied with the right amount of lubricant in the right place. This minimises wear and increases the service life of the machine.
- •Reduces maintenance costs: Thanks to more efficient operation, lubrication can be carried out more frequently. Regular lubrication extends the life of wear parts and you save on spare parts and maintenance costs in the long run.
- Reduces downtime: Compared to lubricating individual lubrication points, the operation via the central lubrication bar requires significantly less time and effort. This reduces machine downtime and increases your overall productivity.
- Ensures safe operation: Individual machine parts are difficult to access with a grease gun or require climbing on the machine, sometimes even while it is running. The central lubrication bar is easily accessible and eliminates any safety risks.

Agriculture

Versatility increases cost-effective operation

The Aebi TP 470 Vario has a wide range of agricultural applications. The solid construction, the anti-skid all-wheel drive and the large number of attachments and implements that can be changed quickly and effortlessly enable use at any time of the year. This means the transporter can be better utilised, thereby increasing profitability in the long term.

Attachments and implements:

- Loading wagons
 (Further information: https://www.aebi-schmidt.com/en/products-solutions/more/#aebi-loading-wagons)
- Manure spreader
- Slurry tank
- 3-way tipper
- Individual special structures







Municipal service

Summer operation

The powerful engine, the solid construction and the option of installing a wide variety of attachments and implements quickly and effortlessly make the municipal transporter Aebi VT 470 Vario the ideal partner for summer operation. Attachments and implements:

- **Sweeper:** The VT 470 Vario cleans streets and squares with attachable sweepers (e.g. Schmidt VKS or LKS).
- **Watering technology:** The water tank and front spray beam allow the cleaning of polluted streets and surfaces (including dust control).
- **Transport:** A wide variety of transport work can be carried out thanks to the 3-way tipper or hook device.



Winter operation

The municipal transporter Aebi VT 470 Vario is robustly built, powerful and manoeuvrable, making it ideal for combating snow and black ice. The optimally coordinated all-wheel drive in combination with the patented Vario gear ensures excellent traction. The 100 kW engine provides the required power for effortless clearing of large amounts of snow.

Attachments and implements:

- Multi-blade **ploughs**, e.g. Schmidt MPC, CP, SNK or Tarron Compact
- Spreader, e.g. Schmidt Stratos or Syntos
- Front brushes for removing small amounts of snow, e.g. Schmidt VKS
- Snow blowers







Construction industry

In challenging spaces, such as on construction sites, in narrow inner-city alleys or in tunnels, the activated all-wheel steering makes even seemingly impossible-to-reach corners accessible. In addition, the high payload of the Aebi VT 470 Vario makes it possible to transport large quantities of material or heavy equipment.

Attachments and implements:

- Three-way tipper
- Hook lift
- Tipper
- Crane







Special tasks

- Waste management: A waste disposal superstructure or skip ensures waste disposal in smaller communities and towns in mountainous regions even in poor driving conditions.
- **Sewer cleaning:** Sludge extraction, flushing of sewers and many other applications are made possible by the special apparatus.
- **Construction of power lines:** The possibility of mounting special apparatus brings advantages when building or maintaining overhead power lines in rough terrain.

Gallery













Variants

TP 470 Vario



The TP 470 Vario is designed for working in the steepest of terrains. Its versatility makes it the ideal companion for all work situations in and around agricultural operations and offers distinct working comfort.

VT 470 Vario



The VT 470 Vario is specifically designed for the needs of city and municipal administrations. Owing to the user-friendly operating concept, it can be controlled intuitively and offers an inviting workplace.

Related products

MTMultipurpose transporter



TP 420Multipurpose transporter



TP 410Multipurpose transporter



Technical data

	TP 470 Vario	VT 470 Vario
Chassis		
Longitudinal differential with lock	yes	yes
Hydropneumatic suspension front and rear	yes	yes
Hydraulic rotation damping	yes	yes
Orive system - Engine		
Engine type	FCA R754EU6EH	FCA R754EU6EH
Number of cylinders	4	4
Exhaust emission	Euro 6e	Euro 6e
Displacement	2,970 cm ³	2,970 cm ³
Fuel	Diesel	Diesel
Performance	100 kW (136 HP) @ 2,600 1/min	100 kW (136 HP) @ 2,600 1/min
Max. torque at speed	1,400 1/min @ 500 Nm	1,400 1/min @ 500 Nm
Forque rise	36 %	36 %
Fuel tank	100 l	100 l
AdBlue tank	14 I	14
Fuel consumption	215 g/kWh	215 g/kWh
/ario split-power stepless	yes	yes
Forward speed	50 km/h	50 km/h
Reverse speed	34 km/h	34 km/h
Rear power take-off shaft speed	998 1/min	998 1/min
Powershift rear take-off shaft	yes	yes
Electrics	,	
Electrical system	12 V, Alternator 180 A	12 V, Alternator 180 A
Battery capacity	100 Ah	100 Ah
Hydraulic system		
Standard hydraulics flow rate	40 l/min / 200 bar	40 l/min / 200 bar
Additional hydraulics flow rate	40 I/min / 200 bar	40 l/min / 200 bar
Power hydraulics flow rate	100 I/min / 300 bar	100 l/min / 300 bar
Front lifting mechanism (optional) lifting force	2,000 kg	2,000 kg
Brakes	2,000 kg	2,000 kg
Brakes	Dual circuit disc hydraulic brake system with load control on the rear axle	Dual circuit disc hydraulic brake system with load control on the rear axle
Dual-circuit brake system	yes	yes
Hill-holder function	yes	yes
Parking brake mechanical	no	no
Parking brake hydraulic	yes	yes
Wear-free brake	option	option
Steering	орион	орион
Front steering	yes	yes
All-wheel steering	•	-
*	yes	yes
Rear steering Crab steering	yes yes	yes yes
Front-wheel steering turning circle radius (short wheelbase)	5,800 mm	5,800 mm
Front-wheel steering turning circle radius (long wheelbase)	6,500 mm	6,500 mm
Four-wheel steering turning circle radius (short wheelbase)	4,100 mm	4,100 mm
Four-wheel steering turning circle radius (long wheelbase)	4,400 mm	4,400 mm
Tyres		
Double tyres front and rear	option	option
Equipment		
Fully glazed driver's cab, heating/defrosting unit	yes	yes
Radio pre-installation	yes	yes
On-board computer	yes	yes
Air conditioning	option	option
<u> </u>	- Jr	P



	TP 470 Vario	VT 470 Vario
Dimensions		
Width by tyres	1,950 - 2,800 mm	1,950 - 2,800 mm
Width by cabin	1,900 mm	1,900 mm
Length	4,784 / 5,184 mm	4,784 / 5,184 mm
Wheelbase	2,850 / 3,250 mm	2,850 / 3,250 mm
Weights		
Empty weight without mounting	3,550 kg	3,550 kg
Total weight	8,500 / 10,000 kg	8,500 / 10,000 kg
Max. permissible front axle load	4,900 kg	4,900 kg
Max. permissible rear axle load (tyre dependent)	5,500 kg	5,500 kg



© Aebi Schmidt Group www.aebi-schmidt.com

Aebi Schmidt Holding AG CH-8050 Zurich, Switzerland

All rights reserved. Technical data is subject to change. Illustrations are not binding. Errors and amendments excepted.

Document created on 1 MAY 2024







