

Fendt 1000 Vario Gen3

Status 06/2021





Fendt 1000 Vario Gen3

Moto Řated power ECE R 120 Max. Torque at 1100 - 1

1038 Vario 1042 Vario 1046 Vario 1050 Vario

20	kW/PS	291/396	320/435	350/476	380/517
1500 rpm	Nm	1910	2108	2305	2420

Product presentation

Fendt 1000 Vario Gen3.



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Fendt 1000 Vario Gen3 - Quick overview

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Fendt 1000 Vario Gen3

At a glance.

Fendt 1000 Vario - ONE IS SIMPLE: FendtONE

Conditions in agriculture are becoming increasingly challenging: from extreme weather events to stricter legal guidelines.

With the Fendt 1000 Vario with FendtONE, on the other hand, we offer you something that makes your work easier - both on the machine and during preparation and follow-up work in the field.

As a high-performance standard tractor, the Fendt 1000 Vario combines all the advantages for use in the field and on the road.

- Power segment 380 517 hp
- FendtONE operating philosophy:
- new driver workstation (onboard)
- Planning and management functions with FendtONE offboard
- •14 t unladen weight with up to 23 t permissible gross weight*.
- •60" (1.5 m) track width**
- Fendt iD low-speed concept
- Fendt VarioDrive variable all-wheel drive
- Full roadworthiness up to 60 km/h*
- •Optional rear PTO 1000, 1000E and 1300
- Integrated tyre pressure control system VarioGrip with Fendt Grip Assistant
- Reversing device

Value depends on country-specific legal requirements.

** Depending on the country variant.





Performance.

Concept

Innovations of the Gen3

Spotlights

Areas of application

Equipment lines







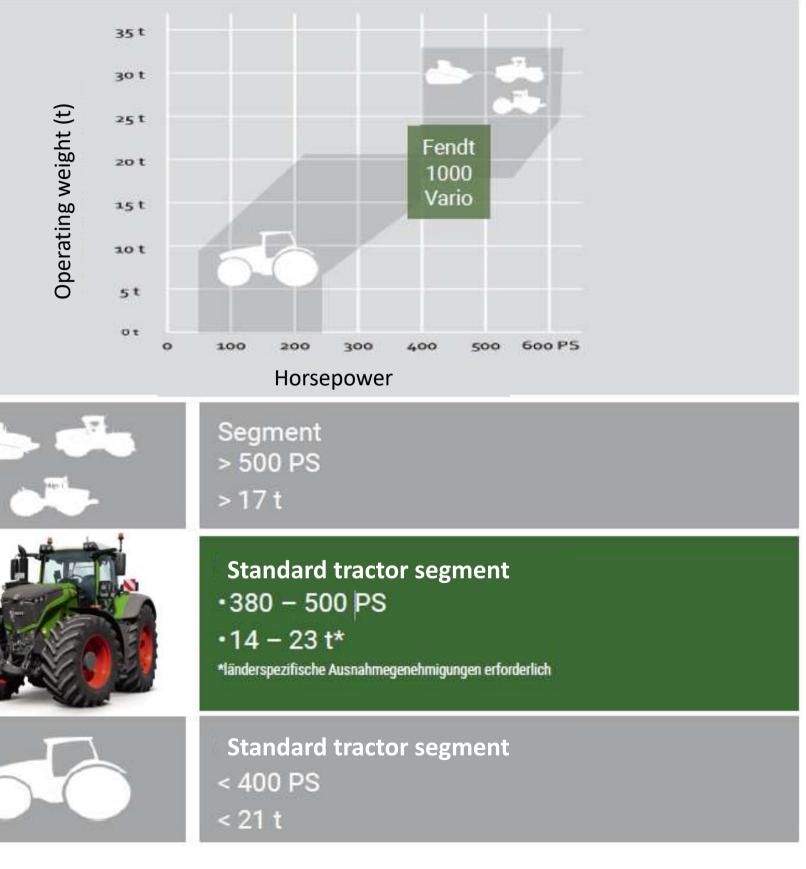
Concept.

Big. Strong. Unique

- Standard tractor with a power range of 396 to 517 hp and a permissible gross weight of 14 to 23 t*; clear demarcation from the competition at the bottom and at the top
- System tractors and articulated tractors that are significantly above the 500 hp power range are not in direct comparison with the Fendt 1000 Vario
- Intelligent, versatile large tractor with efficient power transmission
- Lightweight basic machine with flexible ballasting option
- High driving comfort in the field and on the road
- Higher operational utilisation due to diverse application possibilities
- Low fuel consumption per hectare
- Convincing performance, driving and operating comfort and efficiency

* Country-specific exemptions required





Concept.

Versatile large tractor for a global market

- •6-cylinder engine with state-of-the-art engine technology
- •Comprehensive low-speed concept Fendt iD
- Stepless VarioDrive driveline with intelligent all-wheel drive
- Pioneering engine/transmission tuning
- •Maximum speed 60 km/h
- •2-circuit high-performance hydraulic system with two LS pumps
- Integrated tyre pressure regulation system
- •Tyres with 2.35 m diameter
- •4-point air-suspended large-capacity cab
- High variability thanks to reversing device
- •Block construction, thus 60" (1524 mm) track possible (available country-specific)
- Compact design and modular construction (e.g. without rear linkage, without rear PTO; Front linkage or comfort ballast support)
- Fulfilment of global requirements





Fendt 1000 Vario Gen3 - Concept

Concept

Classification compared to other tractor concepts in this power range

Tractor concepts from 400 hp:
• Twin tracked tractor
• Half tracked tractor
• Articulated (with/without tracks)
• System tractors+ Light
+ "Intel
• Lo
• Hi
+ Vari
+ Vari
+ Vari
+ Hight
• Pure draft machines
• Low driving comfort on field and road+ Hight
+ Hight
+ Hight
• No continuously variable transmission

• Poor overview of the rear and front area due to the design



Fendt solution:

- + High horsepower tractor concept for this power range
 - Lightweight basic machine with flexible ballasting option
- + "Intelligent tractor"
 - Low ballasting at high speeds (> 10 km/h)
 - High ballasting at lower speeds (< 10 km/h)
- + VarioDrive driveline
- + High ride comfort in the field and on the road
- + Higher operational utilisation due to diverse application possibilities

Innovations of Gen3.

FendtONE operating philosophy

- New driver workstation (onboard) for more functionality, customisation and ergonomics
- Perform planning and management functions with FendtONE offboard from anywhere.

Self-cleaning air filter (automatic dust extraction)

• Active cleaning of the air filter while driving

Row Crop tyres VF 480/95 R54

- Development from Trelleborg (both tyre and rim)
- Diameter of 2.35 m
- Ex works as twin tyres with integrated tyre pressure control system VarioGrip

Further innovations

- 4 camera connections (2x digital, 2x analogue)
- Rigid tractor linkage locking the rear linkage
- External operation for comfort ballast pick-up





Fendt 1000 Vario Gen3 - Spotlights

Here you will find the special Fendt solutions, the so-called Fendt Spotlights, which make the difference and simply make your work better every day.

9 1. Fendt iD low-speed concept

- Perfect tuning of all vehicle components such as engine. transmission, fan and hydraulics and all auxiliary consumers to ideal speeds
- Reaching the highest torque already at low speeds
- Low fuel consumption
- Extended life

2. FendtONE driver's workstation

- new armrest with Fendt-known elements
- Flexible key assignment via the Individual Operation -Manager (IOM)
- Up to three display options available: 10" dashboard, -12" terminal on armrest, 12" terminal retractable into cab liner
- Colour coding of the different function groups, also for function reassignment
- 3L joystick with reverse button

O 3. intelligent VarioDrive drive

- Independent drive of front and rear axle
- No manual all-wheel drive selection necessary
- Optimum engine/transmission matching in conjunction with Fendt iD low-speed concept
- Smallest possible turning circle due to pull-in turn effect
- No need to change the driving range -
- Change transmission oil only every 2,000 operating hours
- No special oil necessary -

9 4. bonnet camera

- Direct view of the front linkage

4

Easier mounting and dismounting of front weights

5. self-cleaning air filter

- Air filter is blown out while driving by means of short air blasts
- Reduced maintenance effort

6

- cornering
- comfort



9 6. Fendt Stability Control

Automatically reduces lateral inclination at driving speeds above 20 km/h and actively suppresses rolling when

Increased safety and improved ride



9 10. smart farming modules - individually selectable

- Four modules from which you can choose as required: Example - Agronomy - Telemetry - Machine control - each module consists of a basic package with all necessary start-up applications

- Can be extended as required with options: Fendt Contour Assistant, Fendt TI Headland, Fendt Section Control and Fendt Variable Rate Control, etc.

9. optional reverse drive

- Expansion of the areas of application
- Quick 180° rotation of the entire operator's platform thanks to pneumatically assisted rotation device
- Optimum view of implements in the rear

9 8. two hydraulic pumps with a volume flow of 430 l/min

Supply of two consumers with different pressure and oil flow rates possible

9 7. optional, integrated tyre pressure control system VarioGrip

- Fully integrated tyre pressure control system with on-board valve and air Example technology
- No risk of air lines being torn off thanks to protected construction
- Simple operation via the terminal

Areas of application.

- High flexibility through standard tractor concept in the power range from 380 to 500 hp
- Designed for heavy-duty towing and universal use
- •Numerous features integrated for optimum power transmission (tyre pressure control system, large tyres, all-wheel drive management, ...)
- •Optimum ballasting and flexible tyres for heavy soil cultivation
- Reverse drive unit for special applications (forestry, municipal work, ...)
- Available with or without rear linkage
- Available with or without front linkage
- •Wide range of trailer systems
- •Row Crop variant with 60" track (not approved for European markets)
- Excellent driving comfort and safety at high maximum speeds (up to 60 km/h) due to front axle suspension with Fendt Stability Control and cab suspension
- Smart Farming modules offer all possibilities for large farms and contractors

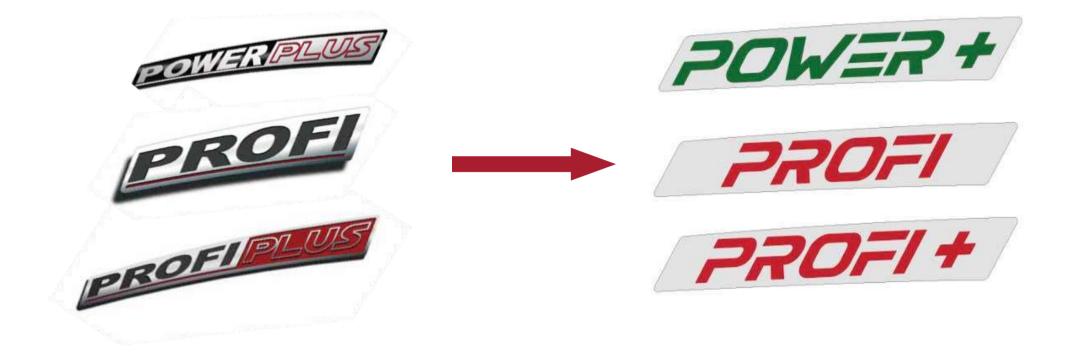




Equipment lines.

3 different equipment lines

- •Power+
- Profi
- Profi+
- with "+" always Example preparation (Example basic package) included
- Two different settings (Setting 1 and Setting 2) can be selected for each equipment line.
- Selection of the desired equipment line right at the beginning of the vehicle configuration
- •New design as an identification mark that the vehicle is equipped with the new FendtONE driver's workstation.



Коп	figuration	Zusamment	fassung Te	echnische Daten			
<	Linie	n Motor	Getriebe	Kraftheber	Hydraulik	Kabine	Spurführ
	Bezeichnu	ng					C
0	Profi Versio	n					
0	ProfiPlus Ve	rsion					
	PowerPlus \	/ersion					





Lettering on the driver's door

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Details	Serie	M	enge
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Equipment lines.



Power+ equipment

- Multifunction control lever with • 13 freely assignable buttons
- 12" terminal on the armrest •
- Digital 10" Dashboard
- Hydraulic pump 165 l/min, optional 220 l/min max. 4 spools
- Example basic package incl. • Fendt Guide
- Machine control Basic package • for controlling ISOBUS implements

Optional.

- Front linkage cat. 2 Single acting with position control
- Fendt Contour Assistant



Additional equipment Profi

• Max. 6 spools

Optional

- Hydraulic pump 220 l/min or 2 hydraulic pumps with 220 + 210 l/min
- 12" terminal in the roof ٠
- Infotainment package + 4.1 sound system
- Bonnet camera ٠





Additional equipment Profi+

- Example basic package incl. • Fendt Guide
- Agronomy basic package incl. Fendt Task Doc

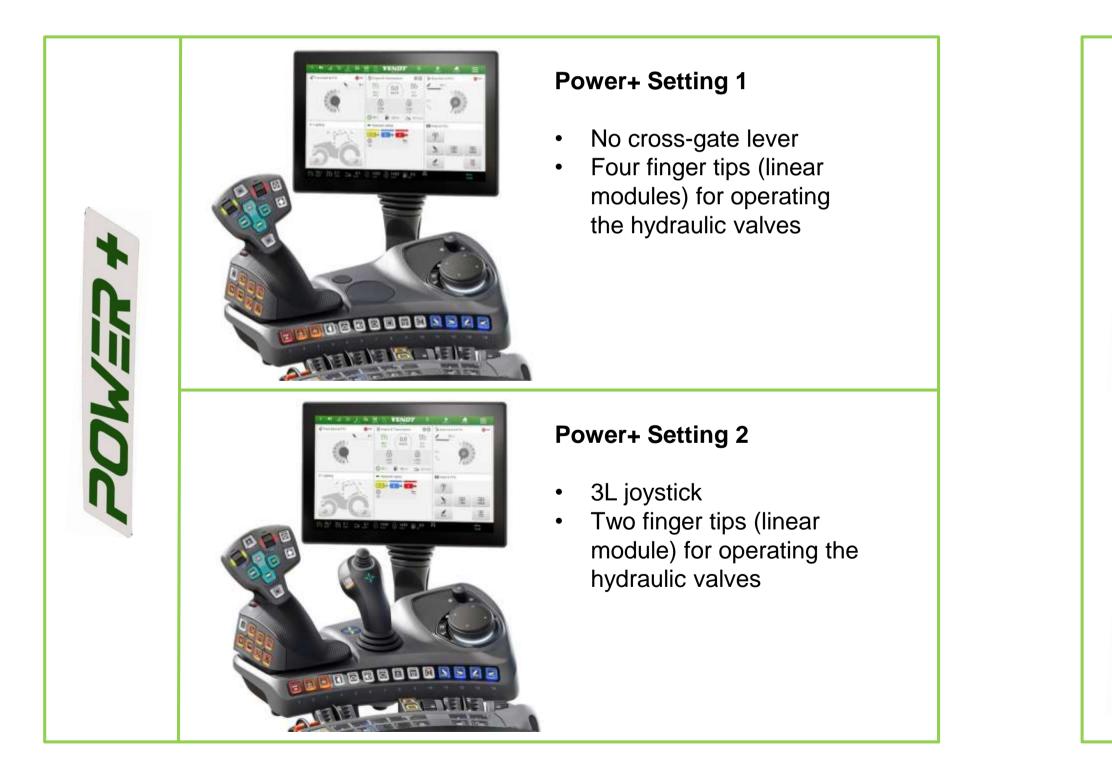
Optional

• Fendt TI Headland

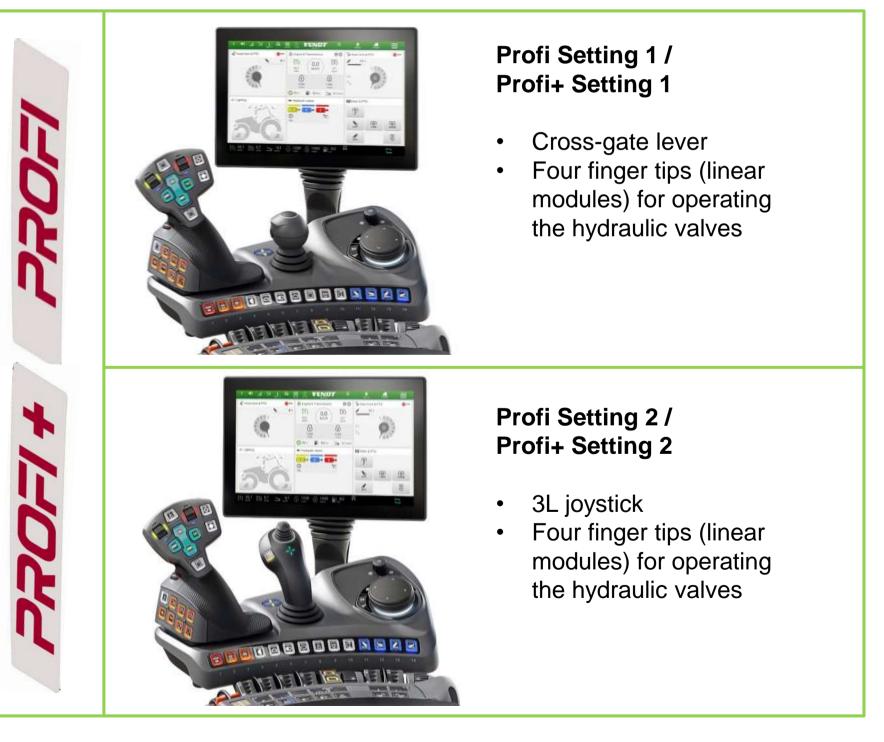
Settings.

Equipment lines with different settings

Two different settings can be selected for each equipment variant. All illustrations show standard equipment and optionally available front and rear linkage.

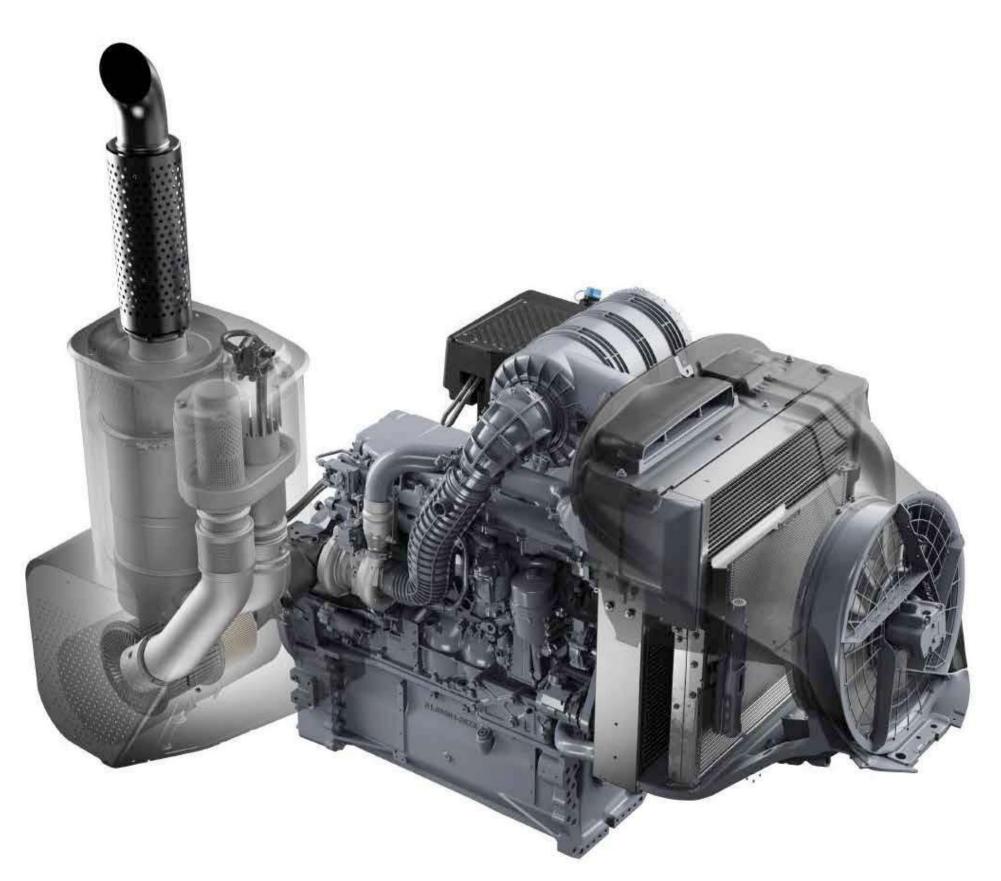






Engine.

Concept
Characteristics
Exhaust gas aftertreatment
Air filter
Tank
Cooling





Concept.

Features

- •MAN engine 12.4 litre capacity; 6 cylinders; 4-valve technology, hydro tappet
- •Fendt iD technology (low speed concept) speed range from 650 1700 rpm
- Turbocharging through VTG turbocharger (Variable Turbine Geometry)
- Engine braking via VTG turbocharger, up to 250 kW engine braking power
- Hydraulic tappet for automatic valve lash adjustment and smooth, lowvibration engine running

- + Maximum fuel efficiency through low-speed concept Fendt iD
- + Optimum turbocharging through VTG turbocharger
- + Very high torques and power reserves
- + Low noise level of the motor even in full load operation
- + Reduced maintenance thanks to hydraulic tappet



VTG turbocharger



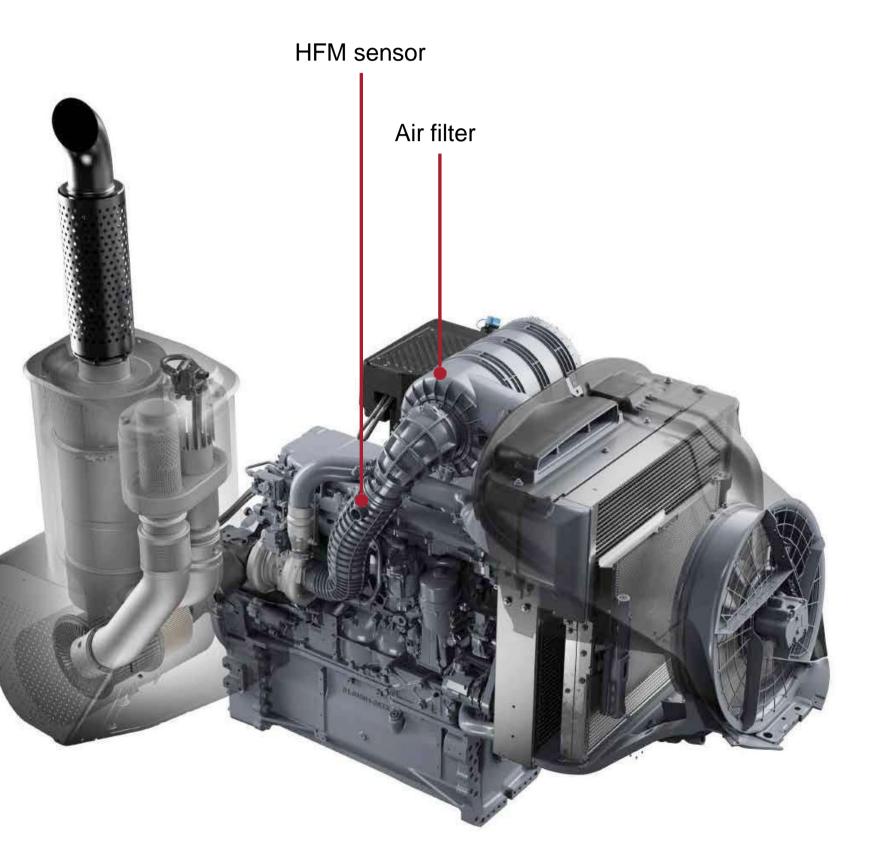
Concept.

Features

- •MAN / Bosch common rail system with 1800 bar injection pressure
- Electronically controlled exhaust gas recirculation
- Low idling speed of 650 rpm (850 rpm for 900 Vario)
- Mass air flow meter (HFM = hot film mass air flow meter) controls entire combustion process

- + Optimised combustion through high injection pressure
- + Quiet and fuel-saving idling
- + HFM regulates combustion process and provides optimal conditions for exhaust gas aftertreatment with lowest possible AdBlue consumption





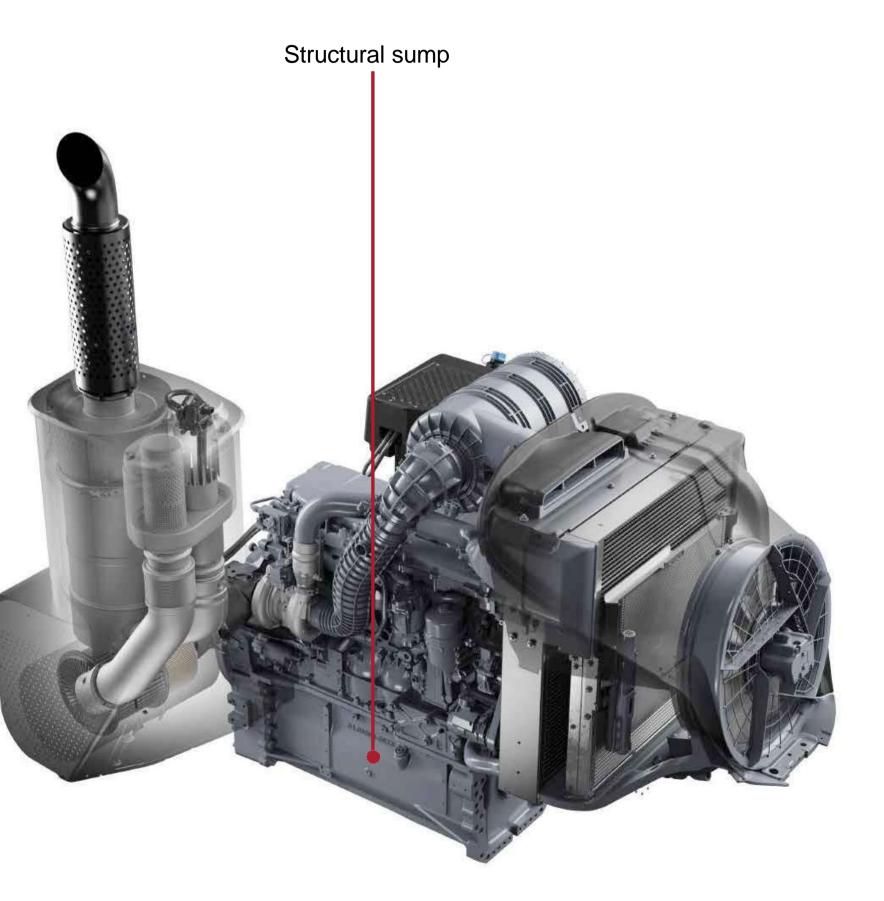
Concept.

Features

- Engine sump has a load-bearing function. The sump is part of the vehicle design and was developed by Fendt.
- Functions:
- Connects front axle and transmission and absorbs the forces
- Engine body is very narrow towards the bottom thus excellent manoeuvrability (space for the front wheels to turn in)

- + Stable design due to oil pan
- + Very manoeuvrable at the front despite 38" wheels
- + Fendt's own design, thus optimally matched to the application
- + Very good overview
- + Narrow engine design, therefore very manoeuvrable



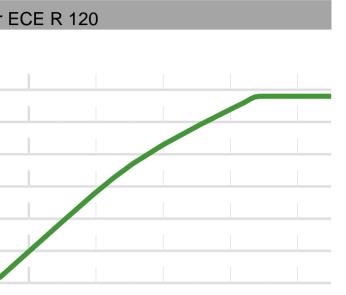


Characteristics.

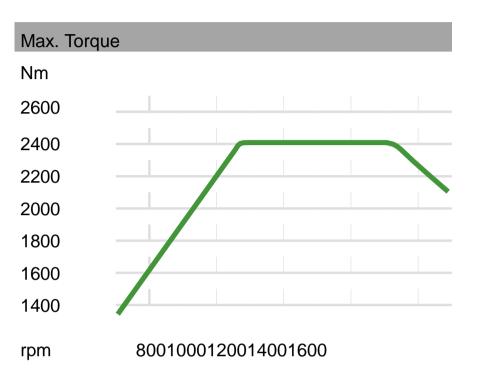
Specially adapted for Fendt 1000 Vario.	Rated powe	۶r
opecially adapted for rende 1000 vario.	kW/PS	
	400	_
 Tried and tested engine from the truck industry 	350	
 Tuned for high full-load share (possible due to power reserves) 	300	_
 Engine in tractor range exclusively for Fendt/AGCO only 	250	_
 Max. Torque at low 1200 rpm 	200	
	150	-
	100	
 Full torque curve, especially in the lower rev range 	rpm	

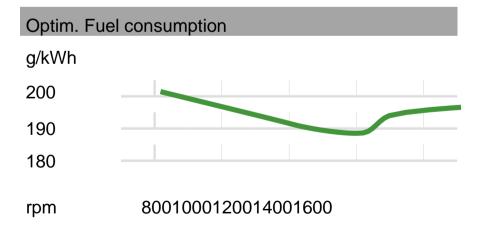
- + Engine can always be run in the optimum range Fendt iD low-speed concept
- + High torque even at low speeds
- + More dynamics and speed stability





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Characteristics.

- High maximum torque; 2400 Nm / 1200 rpm (compare 939 S4: 1538 Nm / 1450 rpm)
- Final speed at reduced engine speed
 - 40 km/h at 950 rpm
 - 50 km/h at 1200 rpm
 - 60 km/h at 1450 rpm
- Simple, compact engine design
- Engine oil change interval: 1000 hrs (country-specific restrictions due to different available engine oil qualities*).

*see operating instructions

- + Low engine speeds for low fuel consumption, lower noise levels and less wear and tear, also on peripheral equipment.
- + Extended engine oil change interval of 1,000 h

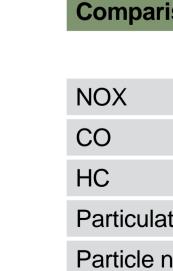




Exhaust gas aftertreatment.

Stage V / Tier 5 (only for EU)

- In addition, exhaust gas stage V requires a measurement of the particle number (maximum 10¹² particles per kWh allowed)
- Exhaust gas aftertreatment takes place in this order:
 - Diesel Oxidation Catalyst (DOC)
 - Diesel Particulate Filter (DPF)
 - Selective catalytic reduction (SCR) with AdBlue
- Various components and exhaust aftertreatment systems in the markets (Tier 4 final/Stage IV: North America, Tier 3 for EEA)







rison	Limit values [Class 130 - 560 kW]		
	Previous Level IV (EU)	New: Level V (EU)	
	0,4	0,4	
	3,5	3,5	
	0,19	0,19	
ate matter	0,025	0,015	
number [1/kWh]	Not regulated	1×10 ¹²	

Exhaust gas aftertreatment.

- Diesel oxidation catalyst (DOC) reduces carbon monoxide and hydrocarbons
- Diesel particulate filter ensures reduction of particles
- Thanks to common rail high-pressure injection and electronic engine control, combustion is optimised, reducing the number of soot particles to a minimum.
- Diesel particulate filter regenerates itself under normal operating conditions
- Standstill regeneration possible
- •SCR technology (Selective Catalytic Reduction) removes the main proportion of nitrogen oxides (NOx)



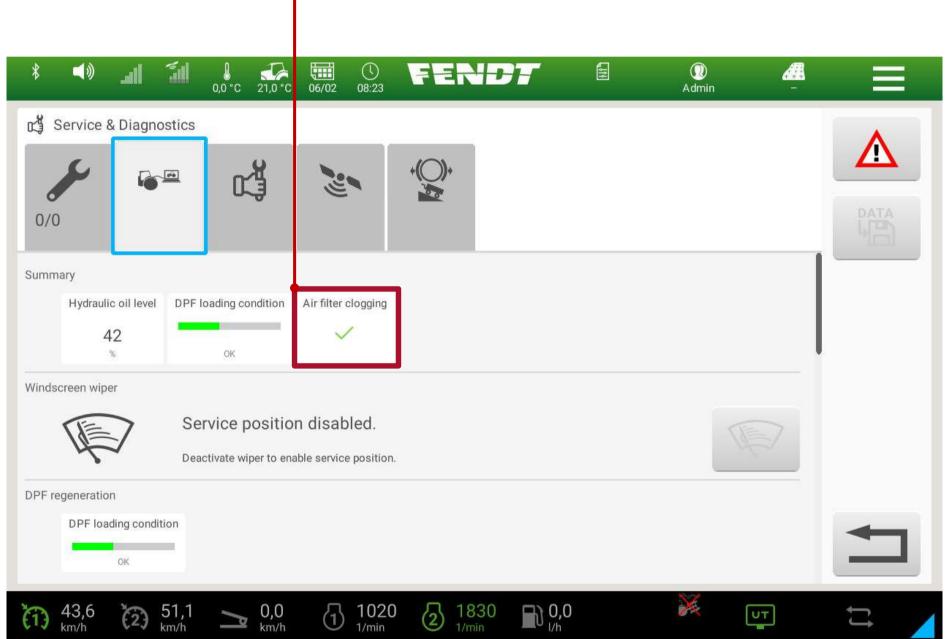


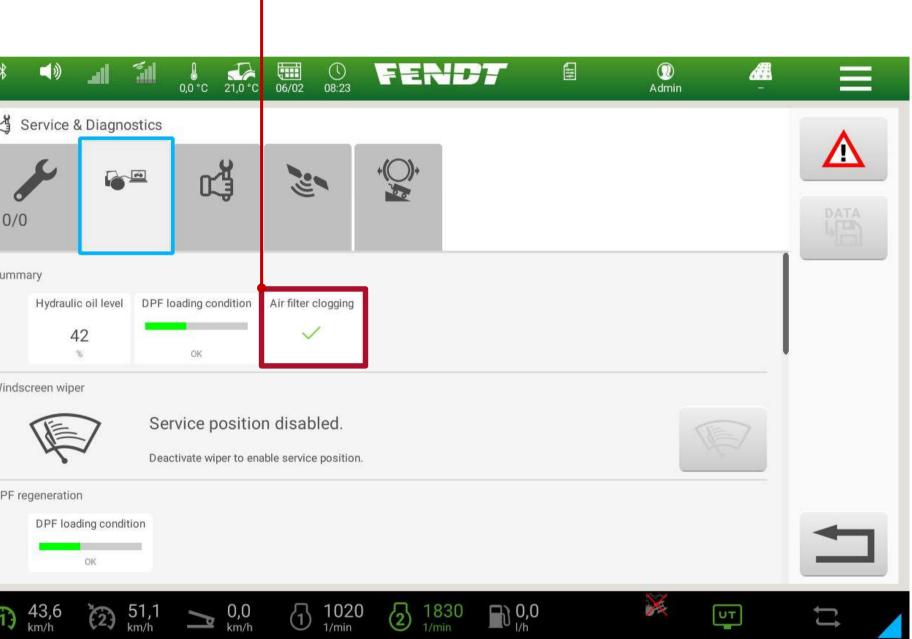
Air filter.

High-performance filter and cooling water

- Long filter life due to highly efficient round air filter
- Pollution level is displayed in the terminal
- Degree of contamination is detected by negative pressure between air filter and VTG turbocharger
- Permanent dust extraction
- High air flow rate
- •Automatic cooling water level display in the terminal
- A self-cleaning air filter is optionally available

- Maintenance-friendly due to display in the terminal +
- Low susceptibility to dirt due to intensive preseparation
- Less downtime due to extended maintenance +intervals









Display degree of contamination of the air filter

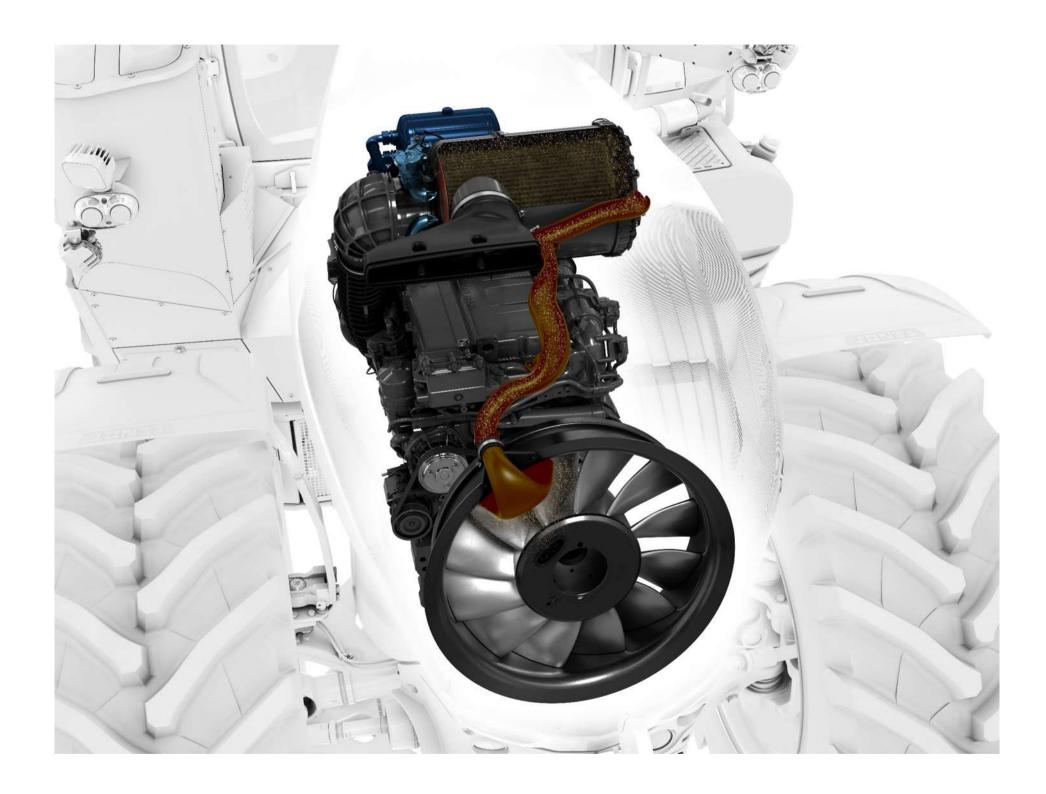
Example picture of the Fendt 700 Vario

Air filter.

Self-cleaning air filter

- Patented solution from Mann & Hummel
- Total cleaning takes approx. 30 sec.: two short blasts of air blow the air filter free
- Own compressed air tank with 12 bar; control of the compressed air flow via two pulse valves and a solenoid valve
- 10 to 15 times the service life until the air filter has to be tapped out
- Filter cleaning possible while driving
- Filter replacement every two years
- Manual mode and Auto mode
 - Manual: if the air filter is closed, a pop-up message appears in the terminal, which must be confirmed for cleaning
 - Auto: if the air filter is closed, it is blown out automatically
- Not retrofittable

+ Reduced maintenance effort





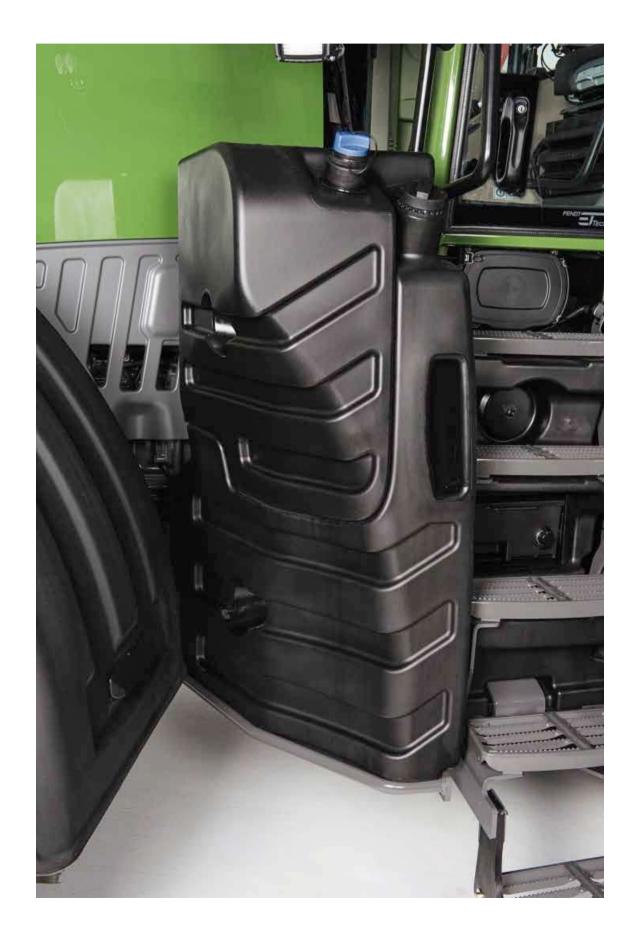
Tank.

Optimised fuel tank with high tank volume

- Full use of the available installation space
- AdBlue tank (85 I) fully integrated in fuel tank (750 I for Stage V, 800 I for Stage IV)
- •Clearances on the front axle adapted for the use of twin wheels
- Electrically heated fuel prefilter
- Fuel prefilter draws in part of the (preheated) diesel return again via a thermostatic valve in icy temperatures

- + Full use of twin wheels due to large wheel turn-in
- + Safe cold start behaviour due to heated fuel prefilter with a bypass for return temperature increase





Cooling.

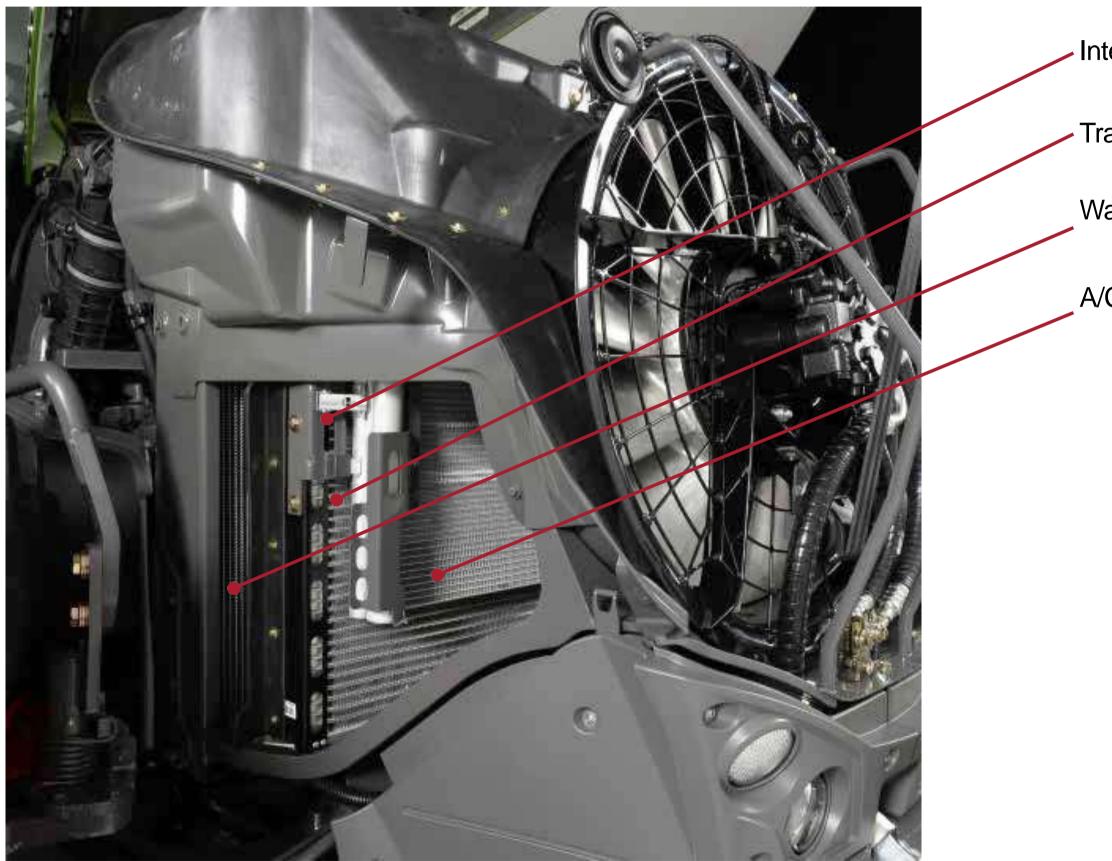
Concentric Air System (CAS) cooling technology

- Efficiency increase of up to 50 % due to new architecture
- With the previous system, the radiator surface would be significantly larger and cause less manoeuvrability and poorer forward visibility
- Fan drive power reduced by up to 70%
- Fan sits in front of the cooling package, thus cold air is forced through the cooler (previously hot air was sucked through the cooler)
- Low air temperature and thus higher air density at the fan blades increase efficiency
- Fan with large power reserves. Cooling system designed for 45 °C outside temperature
 - + Very good overview to the front
 - + High overall efficiency due to fan and intake
 - + Low noise level due to low fan speed
 - + Low power requirement of the fan





Cooling.



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Intercooler (air - air)

Transmission oil cooler

Water cooler

A/C condenser

Cooling.

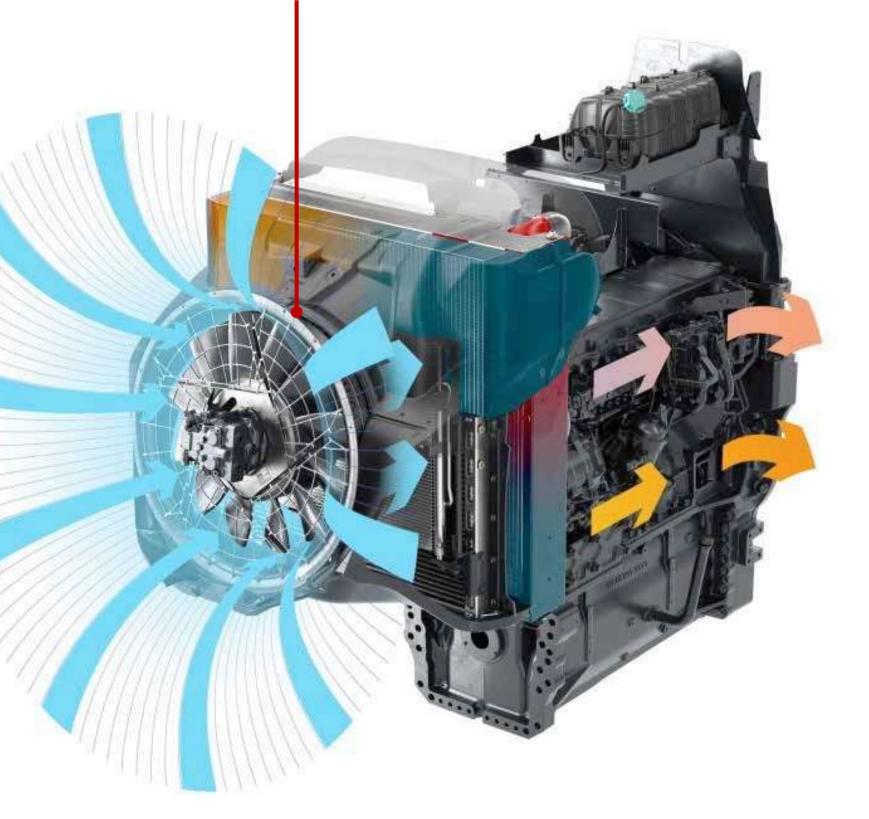
Hydraulically driven fan

- Each cooler can control the fan separately (cooling management)
- Due to the hydraulic drive, the speed of the fan is decoupled from the motor
- Fan has excellent efficiency (50 % above standard fans) due to the blade geometry and the small gap to the cowl (1 2 mm)
- Fan is slightly tilted upwards and thus does not suck in crop residues on the ground

- + Optimum cooling of the units by adjusting the air flow
- + Low fan speed with low cooling demand Low fuel consumption
- No suction effects due to wide air intake, thus less contamination on the cooling grilles of the engine bonnet
- + Even with a lot of crop residues in the field, low suction due to inclined fan geometry



Fan guard rounded to the outside, thus wide air intake also from the side



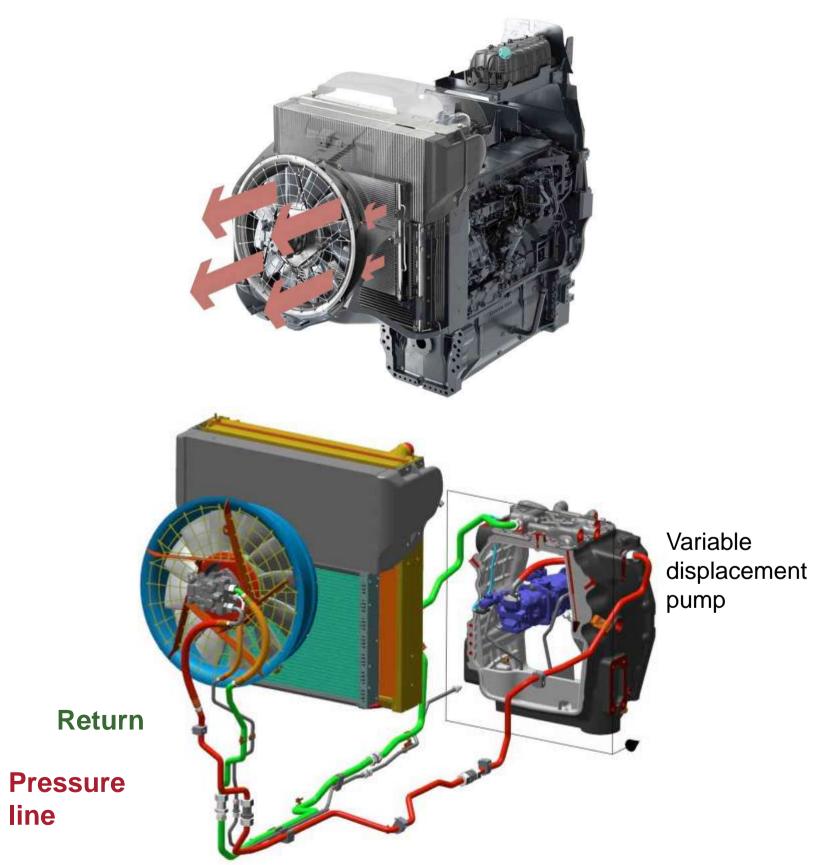
Cooling.

Reversible fan

- Reversing fan drive Variable displacement pump (axial piston pump, electrically adjustable)
- Reversing motor (axial piston motor, electrically adjustable)
- •Normal operation: normal direction of rotation
- Reverse: Motor is adjusted in reverse direction of rotation

- Optimal for dusty conditions, e.g. mowing, straw baling, non-agricultural use
- Automation: interval-controlled reversible fan +function possible - time-dependent programmable in the terminal
- + Maximum comfort through integration in the Fendt TI headland management system
- Highest fuel efficiency also with the reversible fan by +adapting the cooling capacity to the demand of the individual units





Transmission.

Concept

Function

Customer benefits

Maintenance/Diagnosis





Fendt VarioDrive



Concept.

VarioDrive driveline

- •Revolutionary further development of the proven Fendt Vario transmission
- •Well-known and 100 % proven in the Fendt 1000 Vario
- Maximum traction in every situation
- •No travel range switching
- Stepless travel drive from 20 m/h to 60 km/h (at reduced engine speed)
- •Separate hydraulic motors for front and rear axle, which act on the respective axle
- •Fully automatic power distribution between front and rear axle with intelligently controlled all-wheel drive
- •Large high-performance hydrostats with very high efficiency (370 cm³; previously 233 cm³)
- Pull-in turn effect when cornering, especially in difficult situations in the field



Fendt 1000 Vario Gen3 - Transmission

Concept.

Components





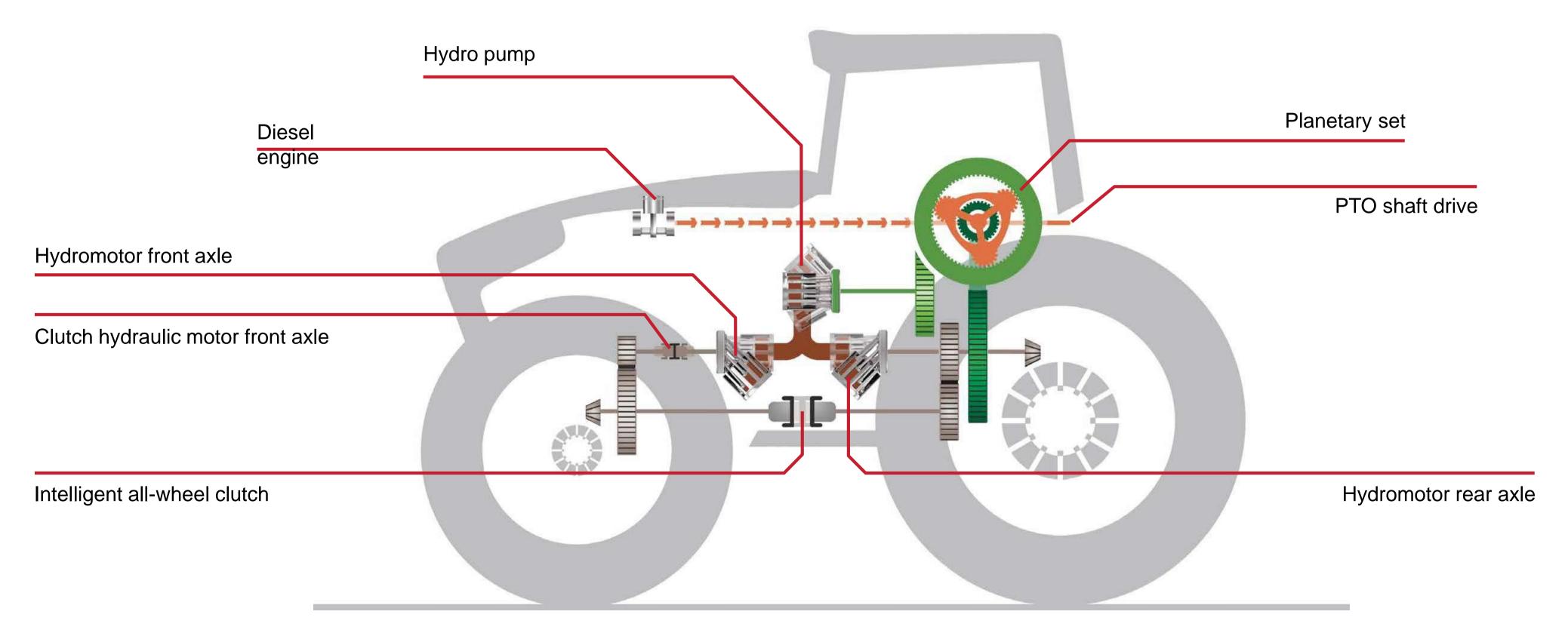
Coupling hydromotor front axle

All-wheel drive clutch (4WD)

Hydromotor front axle

Fendt 1000 Vario Gen3 - Transmission

Concept.



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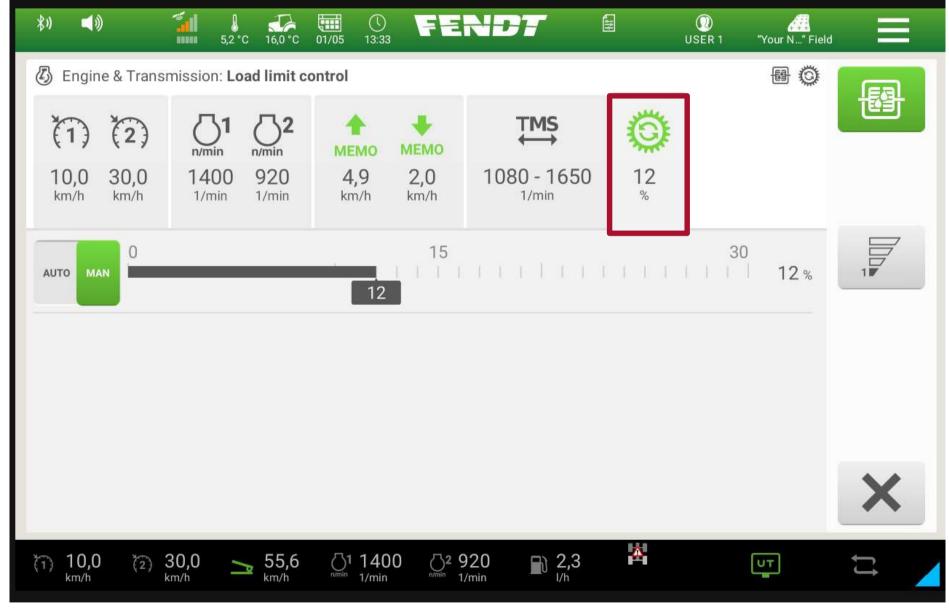


Concept.

Automatic load limit 2.0

- Load limit control determines how far the engine speed may drop under load before the transmission readjusts.
- Fully automatic adjustment of the load limit and thus the engine load
- Control depending on set speed (with TMS or cruise control activation) or engine load (without TMS/ cruise control).
- Manual adjustment still possible

- + Faster achievement of the set speed
- + better maintenance of the set speed
- + zippier driving under load
- + Higher average speed with optimum consumption





Example picture of the Fendt 700 Vario

Fendt 1000 Vario Gen3 - Transmission

Function.





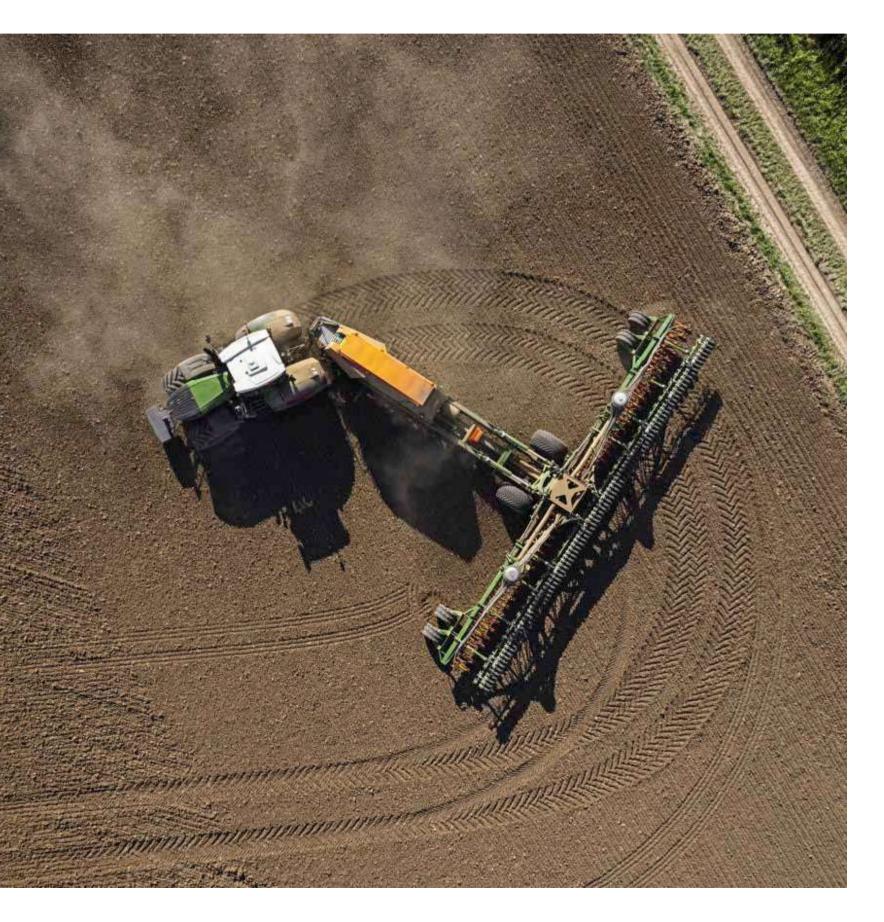
Fendt VarioDrive Animation

Customer benefits.

Variable all-wheel drive through Fendt Torque Distribution - field use

- Tractive power always where it is needed. Torque is dynamically distributed to the front and rear axles depending on ground conditions
- Stress-free all-wheel drive due to separate drive of the front axle
- During heavy towing work, the all-wheel clutch closes (detection via transmission pressure).
- •The driver's workload is reduced, as he no longer has to engage and disengage the all-wheel drive.
- •When driving around an obstacle or cornering, always apply full tractive force to the front axle.



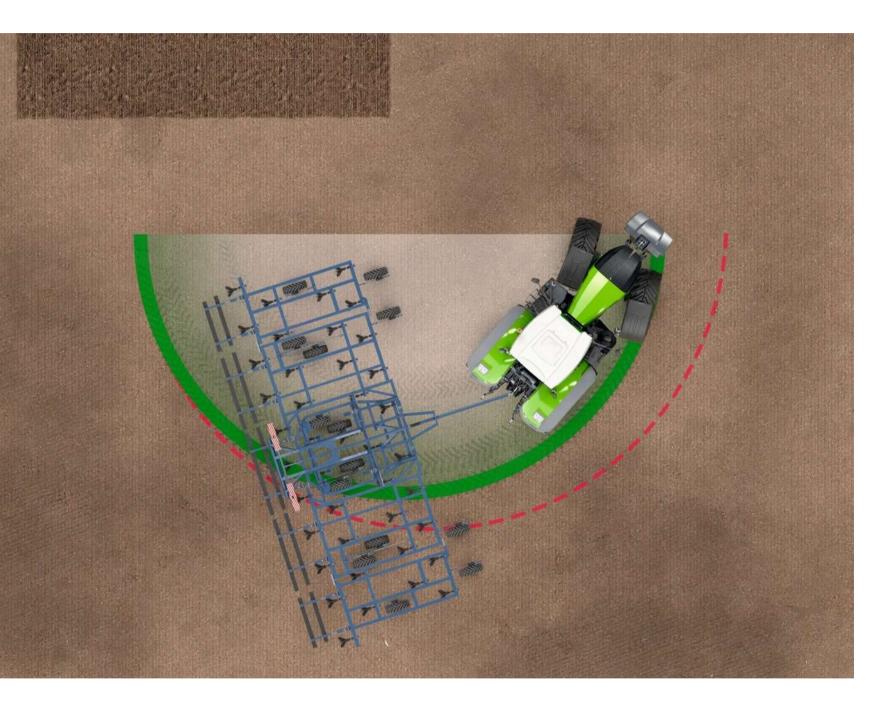


Customer benefits.

Variable all-wheel drive through Fendt Torque Distribution - Manoeuvrability pull-in turn

- •The front axle "pulls" the tractor around the bend and achieves a "pull-in turn" effect.
- •Comparable vehicle has 10 % larger turning circle in the field without VarioDrive
- •Always the smallest turning circle with full traction on the front axle
- Facilitates e.g. turning at the headland
- •Less manoeuvring due to always optimal turning circle





Customer benefits.

Improved comfort

Concentration on the essentials

- •No travel range switching; entire power range is travelled through in one travel range
- •No manual all-wheel drive gearbox required
- Intelligently controlled all-wheel drive clutch automatically adjusts the tractive force distribution without the driver having to intervene.



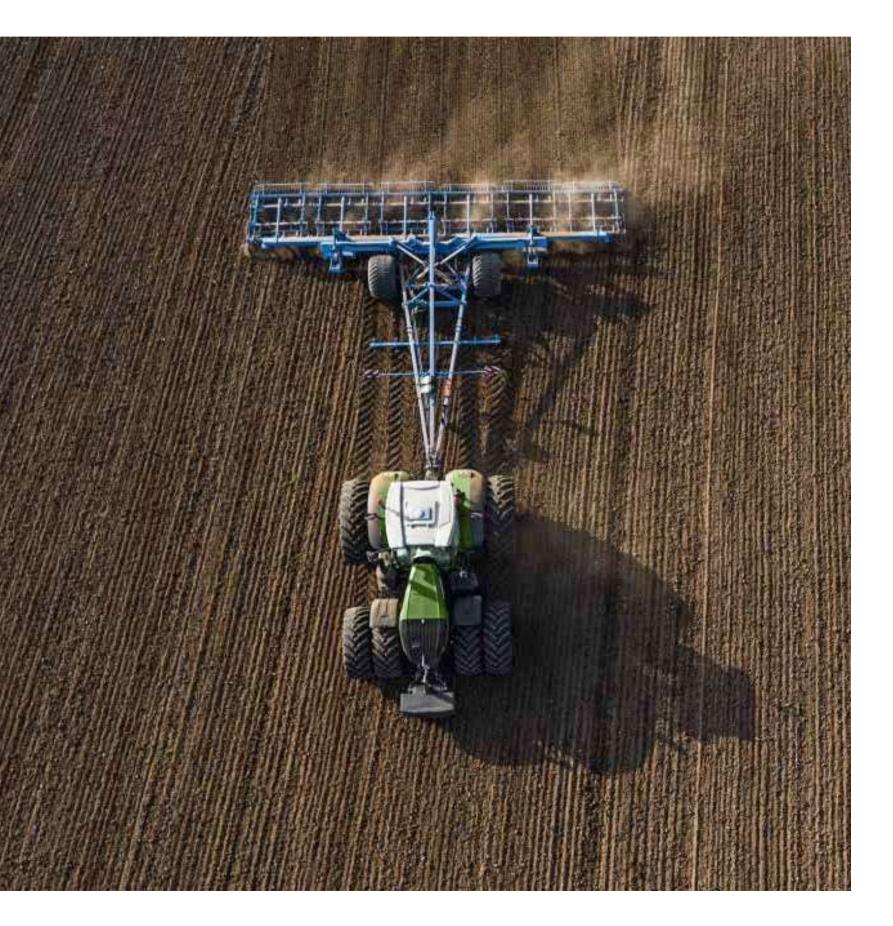


Customer benefits.

Higher efficiency and effectiveness

- Rear-axle hydromotor and mechanical power split are directly connected to the rear-axle drive Elimination of the driving range selection button
- Front axle hydro motor is directly connected to front axle
- Front axle hydro motor is decoupled from approx. 25 km/h
 - Large efficiency gain of up to 25 kW
 - Especially in transport, more usable power and thus lower fuel consumption
 - Maximum tractive force and highest efficiency



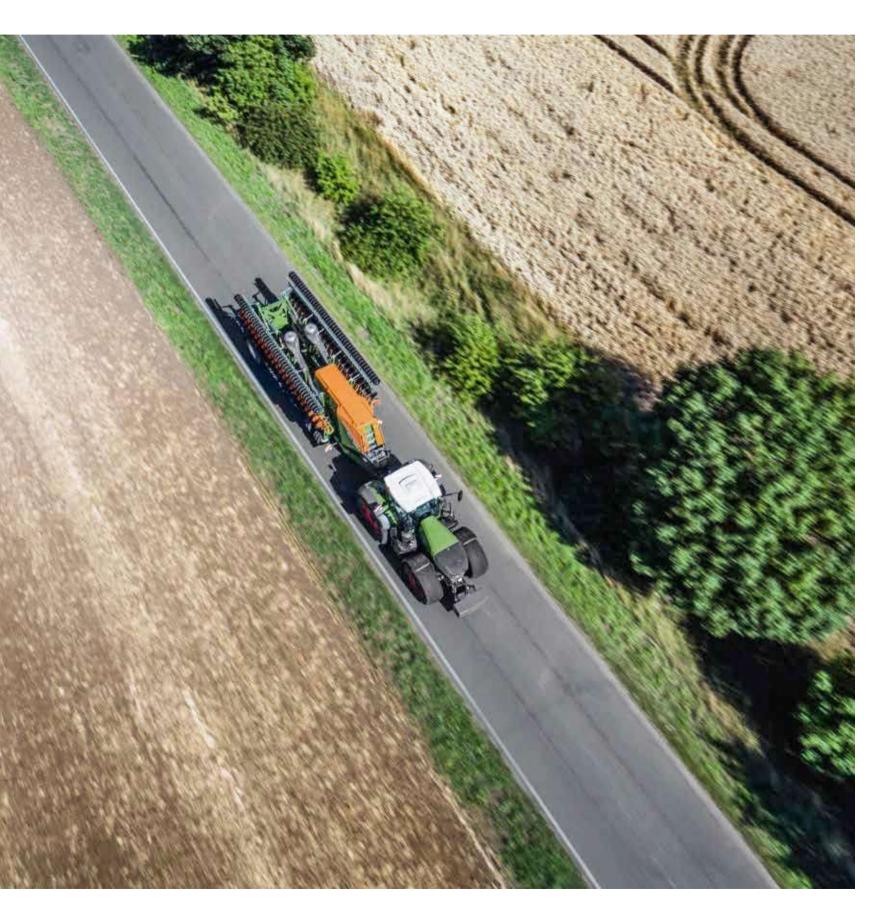


Customer benefits.

Full road capability

- Lightweight basic vehicle for high payload
- •40 km/h at 950 rpm, 50 km/h at 1200 rpm, 60 km/h at 1450 rpm, thus fast and cost-saving moving with e.g. forestry mulcher or wood chipper
- Torsion-free all-wheel drive, even on the road and when cornering
- •No power loss between front and rear axle, thus less tyre wear and fuel consumption





Customer benefits.

Advantages

- + Front and rear axle are driven independently
- + No manual all-wheel drive, driver is relieved of workload
- Hydromotor on the front axle is swung back at approx. 25 km/h and is decoupled
- + Optimum engine-transmission matching in conjunction with Fendt iD low-speed concept
- + Always the smallest possible turning circle due to pull-in turn effect
- + Change transmission oil every 2000 operating hours
- + No special oil necessary
- + No additional super creeper gearbox necessary
- + Universal application possibilities





Maintenance/Diagnosis.

Tuned for low costs

- •Separate gearbox and hydraulic oil reservoir
- •Change transmission oil every 2,000 operating hours
- Remote measuring points on the gearbox
 — Quick and easy troubleshooting without dismantling the wheel
 — Cost reduction for the customer

- + No dirt entry into the transmission due to contaminated hydraulic oil
- + Low maintenance costs, few downtimes due to long maintenance intervals
- + Simplified diagnostic option that reduces time and costs



PTO.

Concept





Concept.

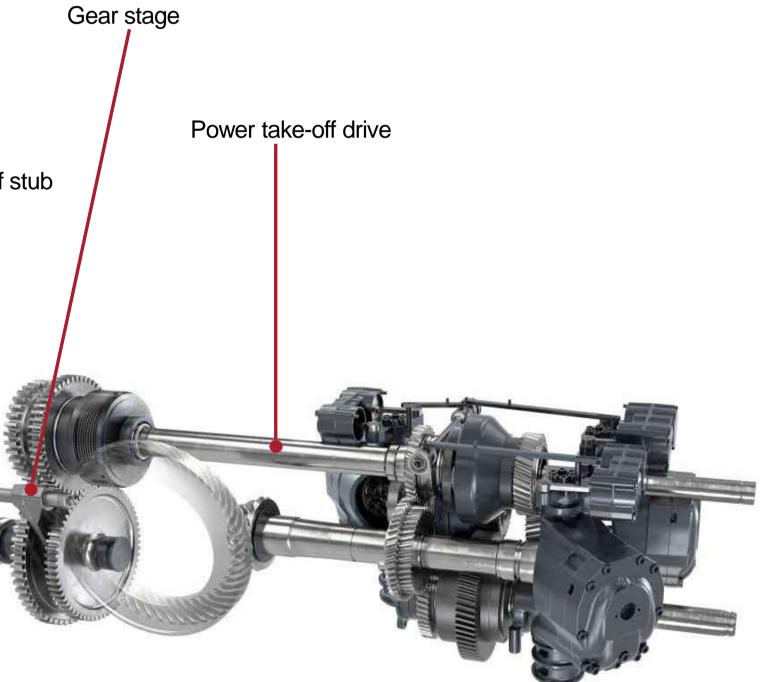
Dual PTO

- •1000 and 1000E or 1300
- •Connection crankshaft and PTO stub only via one gear stage
- High efficiency
- •Electro-hydraulic speed preselection
- •External operation on both sides of the mudguard
- PTO stub detection

Power take-off stub

- + PTO implements can be operated at constant speed and at the same time variable travel speed
- + Replacement of various PTO stubs





Concept.

PTO speed standard from 1300 rpm

- Torque is reduced through higher speed
- Same gear ratio for 1300 and 1000E PTO, therefore no extra gear pairing
- •1300 PTO revolutions are available at an engine speed of 1630 rpm (compare 1000E at 1250 rpm)

- + Smaller torque, thus more power can be transmitted
- + Lighter/smaller cardan shafts
- + Easier coupling of the PTO shaft





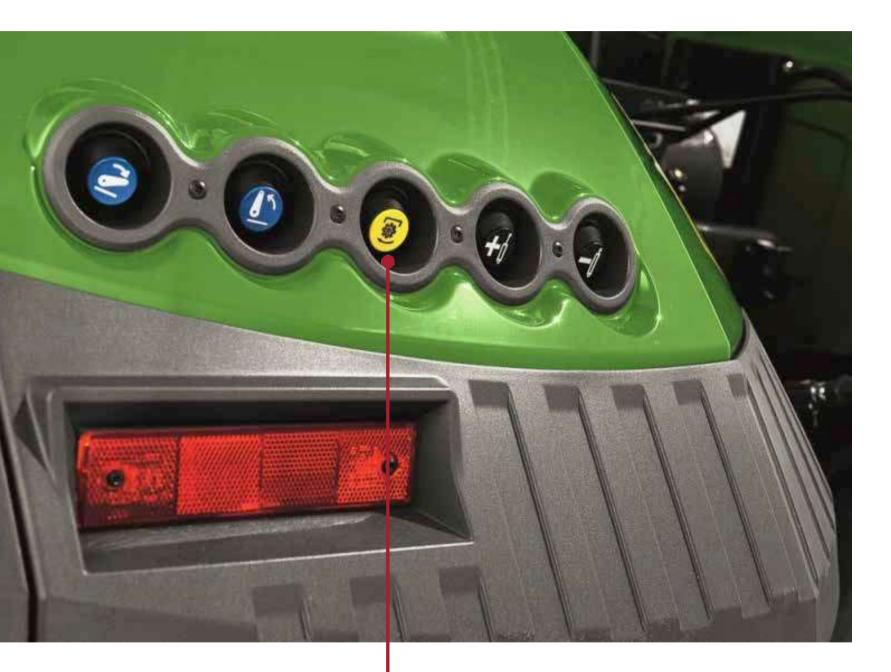
Concept.

Automatic functions PTO

- Switching the rear PTO on and off can be done by pressing the Go/End button on the multifunction joystick.
- The PTO is switched on and off automatically at preset positions of the rear linkage
- •Switch on/off point of the PTO can be altered via the terminal
- Starting an adjustable engine speed when activating the PTO on the mudguard (slurry automatics)
- Fully integrated into the Fendt TI headland management system

- + Simplified operation due to the connection of power lift and PTO shaft
- + Simplified operation on the multifunction joystick



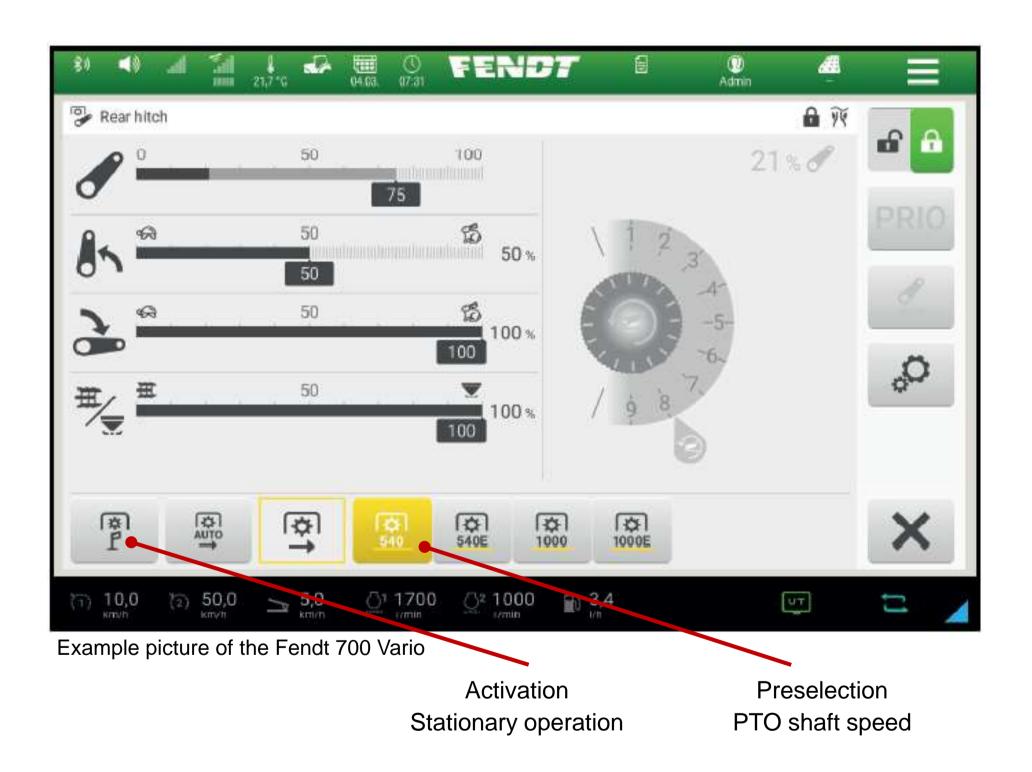


External rear PTO operation

Concept.

Stationary operation PTO

- For safety reasons, the PTO must switch off within 7 seconds when the driver leaves the seat
- In so-called stationary mode, the PTO is not switched off when the driver leaves the seat
- •Activation of the stationary operation:
 - Preselect PTO shaft speed in the terminal
 - Activate stationary operation by clicking on the "Stationary operation" symbol.
 - Press the control button twice to activate the rear PTO.
 - In stationary mode, the driver can leave the seat without the PTO disconnecting
 - Stationary mode can only be activated when PTO shafts are off
 - Stationary operation is not possible when the PTO automatic function is active.
- Stationary mode does not have to be activated to switch the PTO on/off via the external actuation on the mudguard.





Front and rear linkage.

Rear linkage

Front linkage

External operation





Rear linkage.

- •EHR with comfort operation
- High lifting force: 12,900 daN max. and 9,850 daN continuous
- Possible up to cat. 4
- •No draft measuring pins necessary, linkage is controlled via transmission pressure sensors
- •Rear operation on the left and right mudguards
- Active vibration damping for road travel with attachments (control via pressure sensors on the lift cylinders)
- Mechanical side stabilisation
- •Rear linkage optionally available

- + Country-specific structure possible
- + Vibration damping
- + External operation on both sides
- + Pressing rear hydraulics
- + Simple operation and adjustment via linkage operating module and terminal







Rear linkage.

Parking position

- Toolless raising of the lower links: By repositioning a pin and pushing the lower links up until they engage, the lifting struts are shortened and the lower links are brought into parking position
- •15 cm more clearance between lower link and PTO shaft / drawbar

- + Larger steering angle possible
- + Relieves driver
- + Tool-free conversion
- + Damage to safety-relevant components (PTO shafts/drawbars) is prevented:
 - more safety
 - less downtime
 - less repair costs







Front linkage.

Front linkage with cast lower links and lower link frame

- High lifting force: 5,584 daN max. , 4,019 daN continuous
- •Leakage oil reservoir for front connections integrated in cross pipe support
- Separate hydraulic valve for front linkage (separate from working hydraulics)
- Easy unit attachment due to camera in the bonnet (optional)

Variants:

- 1. Comfort ballast support
- 2. Front linkage Single acting with position control
- 3. Front linkage with position control and relief control

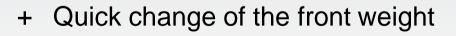




Front linkage.

Comfort ballast support

- Easy attaching of front weights without front linkage
- •Cost-effective solution for farms without front implements
- •Weight can be attached/removed by raising/lowering the front suspsension
- •Same load distance as for ballasting with front power lift
- •New external control for simplified attachment/detachment of the front weight



- + Possible with all weights
- + Flexible ballasting possible without front power lift

Status 06/2021



Example picture of the Fendt 900 Vario



For external operation, there are buttons on the front panel.

Front linkage.

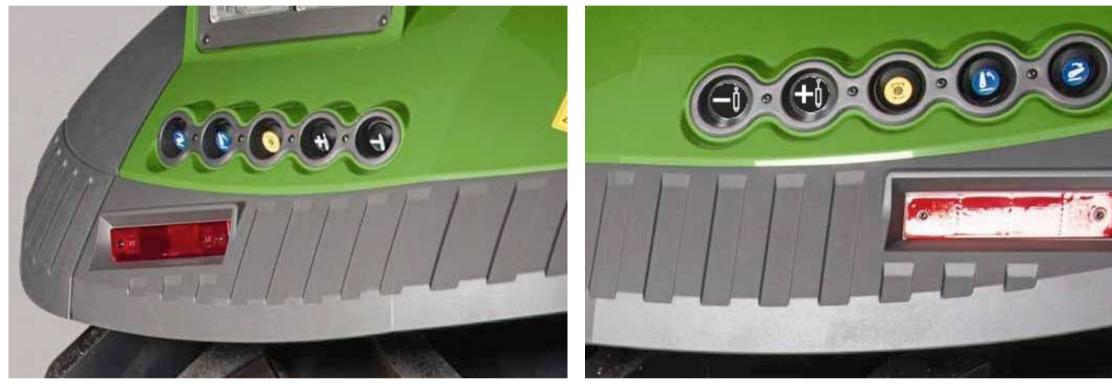
Advantages

- + Integrated design, foldable/removable
- + High lifting capacity for a wide range of applications
- + Front linkage has its own valve meaning there is no restrictions on the working hydraulics
- + Vibration damping
- + External operation
- + Simple operation and adjustment via the linkage control module and terminal
- + Distance between centre of steering wheel and coupling point only 3060 mm





External operation.





Tractor front

•Linkage operation





Tractor rear

Both mudguards:

- Linkage operation •
- **PTO** activation •
- Valve actuation •

Hydraulics.

Concept





Fendt 1000 Vario Gen3 - Hydraulics

Concept.

Features	
 Three pump options: 165 I/min, 220 I/min and 430 I/min At 430 I/min, two LS pumps with two separate hydraulic circuits are 	+ Hig volu + Hig and
installed • 1. pump 220 I/min • 2nd pump 210 I/min	+ Low + Ene pre
 Pilot pressure generation via LS pump instead of via power steering pump (gear pump) 	+ Ver con
 High removable oil quantity of 100 litres Separate transmission and hydraulic oil balance with heat exchanger concept 	+ Hig con + Full
 Extended hydraulic oil change intervals of 2000 operating hours or 2 years (biohydraulic oil 1000 h or 2 years) 	+ No(



- gh pump capacity of up to 430 l/min for work with high oil lume at low engine speed
- gh operational reliability for units with large oil requirements d various consumers (e.g. air seeder)
- w maintenance costs due to long oil change intervals
- ergy saving of up to 2 kW due to low energy concept for pilot essure
- ery good steering response, even with parallel nsumption
- gh removable oil quantity ensures secure supply for large nsumers
- Il biohydraulic oil suitability due to separate oil reservoir
- (s) oil mixing/dirt ingress

Working hydraulics

- •Hydraulic block with interchangeable cartridge inserts (1/2"; 3/4"; 5/8" FFC)
- •Max. 6 double acting valves at the rear and 1 double acting valve at the front
- High flow rate of 140 l/min standard
- 3rd and 4th control unit with 170 l/min (optional)
- •With two LS pumps, the left and the right valve block are each supplied by one pump (2-circuit hydraulics)
- DUDK (lever) couplings
- Flat Face Coupling (FFC) flat sealing couplings available ex works

- Simple, sensitive operation via finger tip spools, +cross-gate lever and multifunction joystick
- Compact design with good accessibility and high +coupling comfort
- + High flow rate for various consumers



2-circuit high-performance hydraulics

- •1. LS pump supplies the left hydraulic block as well as front linkage, rear linkage and the Power Beyond connection.
- •2. LS pump (optional) supplies the right hydraulic block
- •Two independent prio functions possible with two pumps
- •With two LS pumps, unit functions can be connected specifically according to their oil requirements. Example:
 - A connection with low oil demand and high pressure
 - A connection with large oil demand and low pressure Connections are distributed to both pumps. Each pump supplies only the oil required - there are no throttling losses.

• Power Beyond connection:

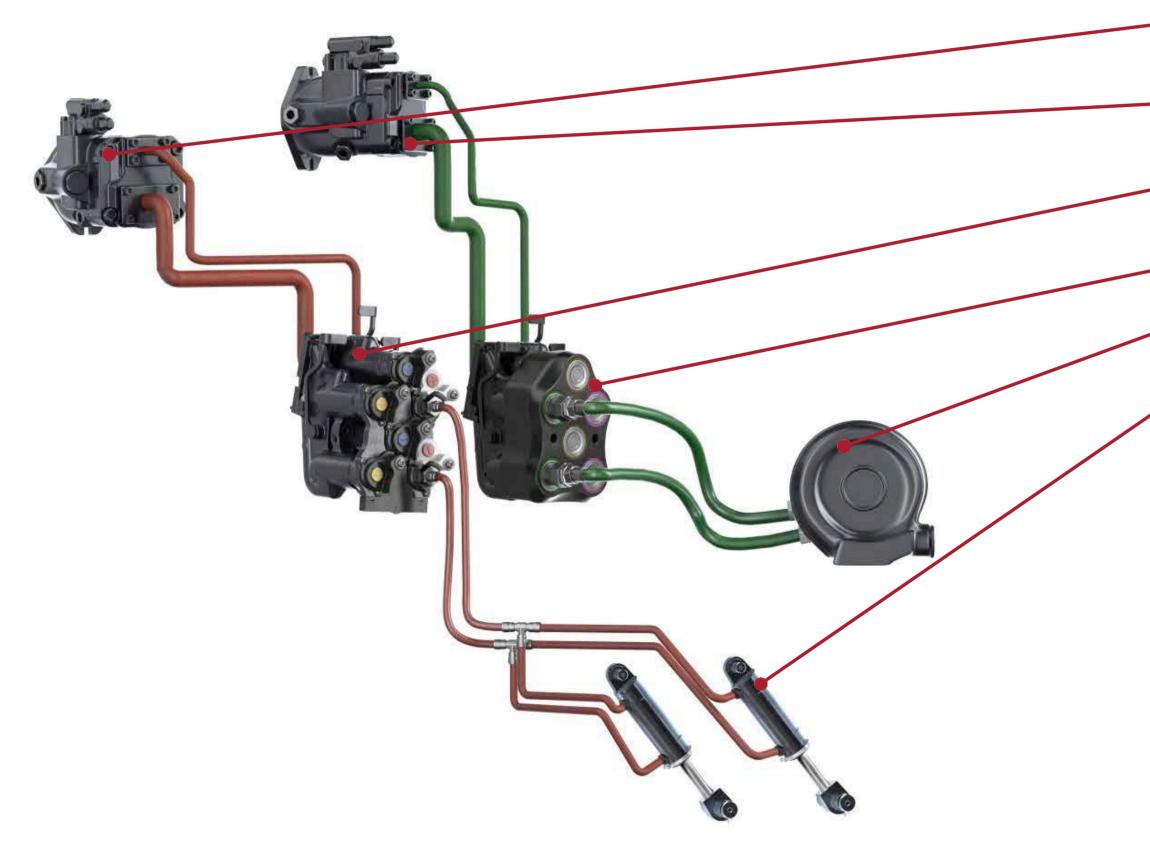
- Power Beyond connection is fed by the 1st pump, which also supplies the left control block.
- Further appliance functions should be connected on the right-hand hydraulic block. This way, the second pump supplies as needed for the other consumers
- •Customers need to be informed in order to take advantage of the system

- Low energy consumption
- Very efficient and fuel-saving system due to separate control of the two pumps



With correct connection, greatly reduced choke losses

Connection example Air Seeder





Load Sensing Pump 1

- Load Sensing Pump 2
- Tractor connection left side
 - Connection Tractor Right Side & Power Beyond
- Consumer 2: Fan
- Consumer 1: hydraulic cylinders

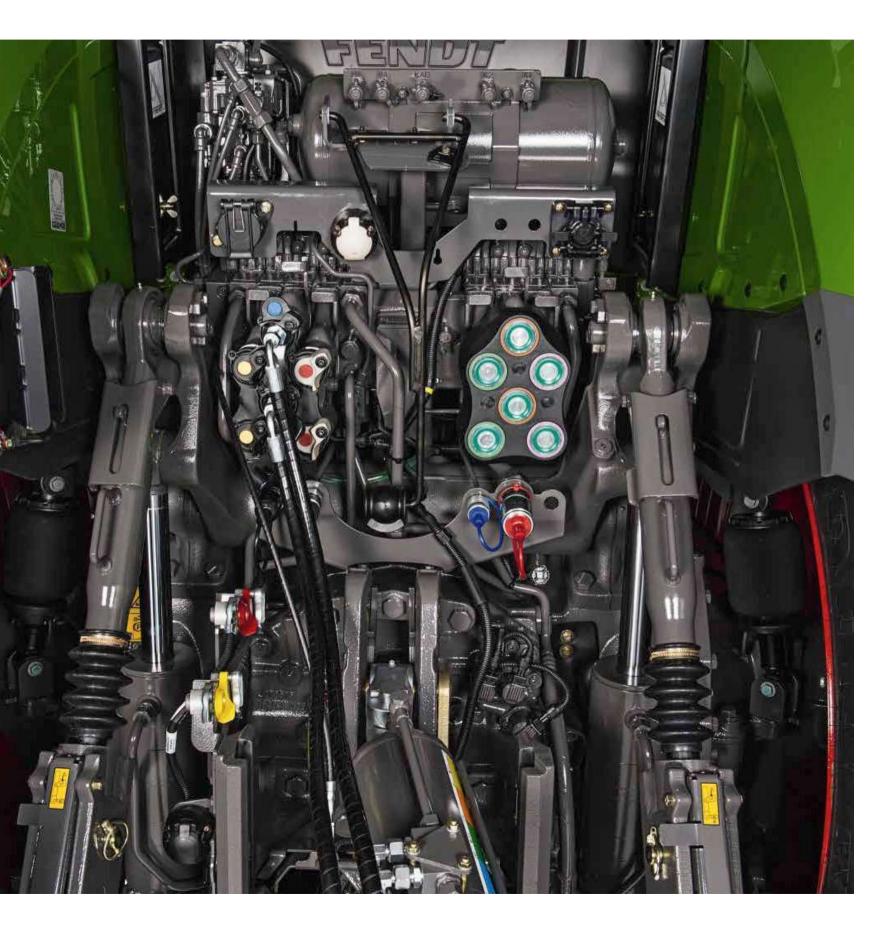
Fendt 1000 Vario Gen3 - Hydraulics

Concept.

Equipment options

- •Max. Valves with Power+: 4
- •Max. Valves for Profi/Profi+: 7 (6/1)
- DUDK lever couplings as standard
- Left and right manifold can be independently equipped with FFC (Flat Face Coupling), either standard or FFC couplings available on one manifold
- •170 I at 3rd and 4th valve with 3/4" and 5/8" FFC respectively
- •With double pump 3rd and 4th valve always with 170 I capacity
- •FFC always as 5/8" cartridge





Flat-sealing hydraulic coupling system

- •5/8" Flat Face Coupling (FFC)
- •Can be coupled on both sides under full pressure
- Combination of different cartridges technically possible
- Convenient lever operation
- Proven colour coding of the connections
- Easy to clean surface
- Tear-off function
 - + No dirt entry into the system due to smooth, easy-to-clean surface
 - + In combination with device memory in the terminal, always the same operation
 - + Various cartridge inserts possible
 - + Leakage-free
 - Breakaway function, system remains closed, no pressure loss or leaking oil
 - + Quick coupling with coupling plate











Plug & Work (P&W) coupling plate

- P&W coupling plate in combination with FFC
- •Max. 4 hoses for 2 additional control units are combined on one coupling plate
- •Coupling plugs are guided in the sliding sleeves of the coupling plate during coupling
- •Coupling plate is always correctly aligned and centred via two small pins
- •Confusion-proof design: plugs can only actually be coupled when correctly aligned
- •Max. 2 coupling plates can be ordered and used on one tractor
- Possibility of colour coding the coupling plates labels with the valve colours
- •Coupling plate patented Fendt unique selling proposition

+ -





+ Always correct assignment, even with changing drivers Simple coupling by guiding the plug in the sliding sleeve + Cleaner and faster handling, as hoses are in the package Fendt 1000 Vario Gen3 - Hydraulics

Concept.



LS pump 1, rear valve connections (1 - 3)



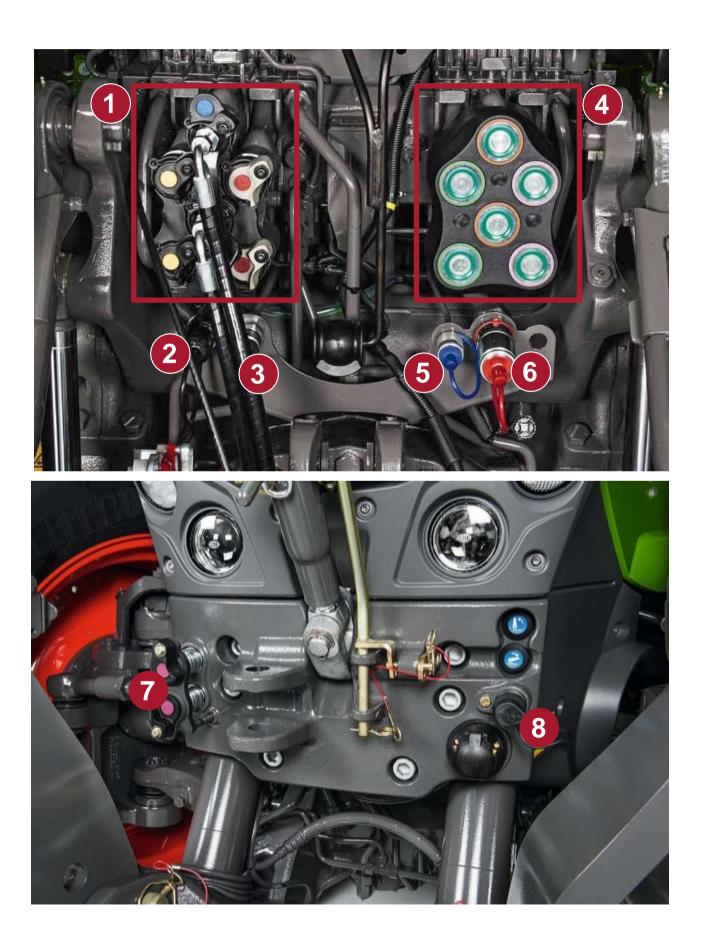
2 Unpressurised rear return



3 Leakage oil line



7 Front valve connection











6 Power Beyond connection



8 Front pressureless return

Vehicle build.

Concept

Front axle

Rear axle and brakes

Trailer systems

VarioGrip tyre pressure control system

Ballasting

Compressed air system





- Independent wheel suspension for highest tractive power in the field
- Completely overhauled front axle with new bearings, seals and new housing
- Hydropneumatic independent wheel suspension with level control on both sides
- Maintenance-free double wishbone axle with +180/-120 mm suspension travel
- Dual circuit brake system with integrated brake in the front axle on each wheel
- Suspension completely lockable with existing sway bar
- •FSC (Fendt Stability Control) roll support
- Permissible axle load: field 11 t, road 10 t
- Supporting central housing with integrated FKH
- Total suspension travel of +180/-120 mm can be passed through manually: easy tyre change, twin wheel mounting or ballast pick-up without front power lift
- Front axle designed for the total power of the tractor
- Full integration of a rotating union as well as holes for tyre pressure control system





Front axle.

Fendt Stability Control (FSC)

- Speed-dependent, self-activating system for lateral stabilisation
- •The integrated FSC stabilises the tractor by damping the lateral inclination.
- •FSC ensures maximum steering precision, driving stability and braking safety in all applications.
- From 20 km/h, the Fendt Stability Control (FSC) locks the balance between the right and left side of the front axle suspension, ensuring maximum steering precision, driving stability and braking safety in all applications.



Without FSC

FSC ensures maximum steering precision, driving +stability and braking safety in all applications



Example picture of the Fendt 900 Vario

Tractor gets off track

With FSC Tractor keeps the track

Front axle.

Advantages front axle concept

- Tuned for optimum tractive power transmission: Compared to an unsprung front axle, independent wheel suspension ensures up to 6 % more tractive power in the field
- + Always optimal grip of the front wheels by avoiding powerhopping
- + Optimum driving stability at 60 km/h
- + High braking capacity each wheel is braked individually
- Compact design, thus very good steering angle and the possibility of a 60" track (for NA)
- + Complete suspension travel can be passed through when stationary, e.g. for changing wheels or front ballast pick-up
- + Front axle is driven separately from the gearbox and is designed for very high power transmission
- + Maintenance-free bearings and joints on the front axle
- + High permissible axle loads, even with twin tyres
- + Increasing the overall ride comfort

Speed (k

Max. per

Rear axle

(flange/st

Fendt St

* Country-specific exemptions required



2-circuit brake system Options

km/h)	40	50	60
erm. total weight (to)	23*	21*	18
le stub)	F/S	F/S	F
tability Control	Option	Series	Series

Front axle.

VarioActive superimposed steering

- VarioActive uses the Fendt Guide steering valve
- In conjunction with Power+/Profi+ equipment
- •Activation of VarioActive changes the transmission ratio of the steering system
- •Maximum driving speed with active superimposed steering is 25 km/h
- Up to 8 km/h full superimposed steering, from 8 km/h to 18 km/h the superimposed effect reduces linearly

Without VarioActive:

With VarioActive:

- Fast, comfortable turning at the headland
- Very good ground protection in conjunction with the driven front axle



2 steering wheel turns necessary for full steering angle

Full steering angle with one turn of the steering wheel



Front axle.

Intelligently controlled allwheel drive

- Tractor controls the all-wheel drive fully automatically
- •Manual all-wheel drive gearstick completely omitted
- Fendt Torque Distribution: intelligent torque distribution between front and rear axle
- •All-wheel drive clutch is closed when high tractive effort is required
- •No conventional all-wheel disengagement and engagement (e.g. steering angle controlled when cornering).
- •Always full tractive power on the front axle, especially in critical situations

- + High tractive force transmission in every situation
- Driver is relieved, tractor controls all-wheel drive fully automatically
- Fendt Torque Distribution ensures higher impact +force through optimum tractive force transmission



Front axle.

Differential lock

- Automatic differential lock in combination with 100 % multidisc differential lock
- Locking via hydraulic force, opening via spring assembly
- Automatic function: Switch-off from a speed above 20 km/h (no re-engagement); from a steering angle of 12° and with and when the brake is applied with re-engagement

Differential lock 100 %

Differential lock Automatic

- + 100% power transmission to all four wheels
- + Automatic differential lock for maximum driving safety and vehicle protection





Rear axle and brakes.

Concept

- •Max. Rear axle loads technical
- •15 t up to 25 km/h
- •13 t up to 40 km/h
- •Large tyres with max. diameter of 2.35 m for more tractive force transmission
- Arrangement of the compressed air tank in the rear of the tractor
- •Wet brakes with compressed air control
- Pneumatic brake actuation via 2 Tristop cylinders
 - + Brake system with truck comfort
 - Optimised braking forces for high performance and speeds
 - + Comfort due to lower actuating forces
 - + Components for tyre pressure control fully integrated and protected





Rear axle and brakes.

Concept

- •Also with 900 tyres under 3 m external width
- •60" (1524 mm) track possible (NA only)
- Twin and triple tyres (with Row Crop variant) possible
- For 60" track max. tyre width 480 mm
- 3 rear axle variants:
- Flanged rear axle
- Stub rear axle 2500 mm
- Stub rear axle 3000 mm*
- •Radial rotary unions as well as lines and bores for tyre pressure control system can be integrated on flanged axle

* Country-specific exemptions required

- No components in the rim, therefore less +susceptible to soiling
- Many tyre options for different uses +



Rear axle and brakes.

Tyres







Rear axle and brakes.

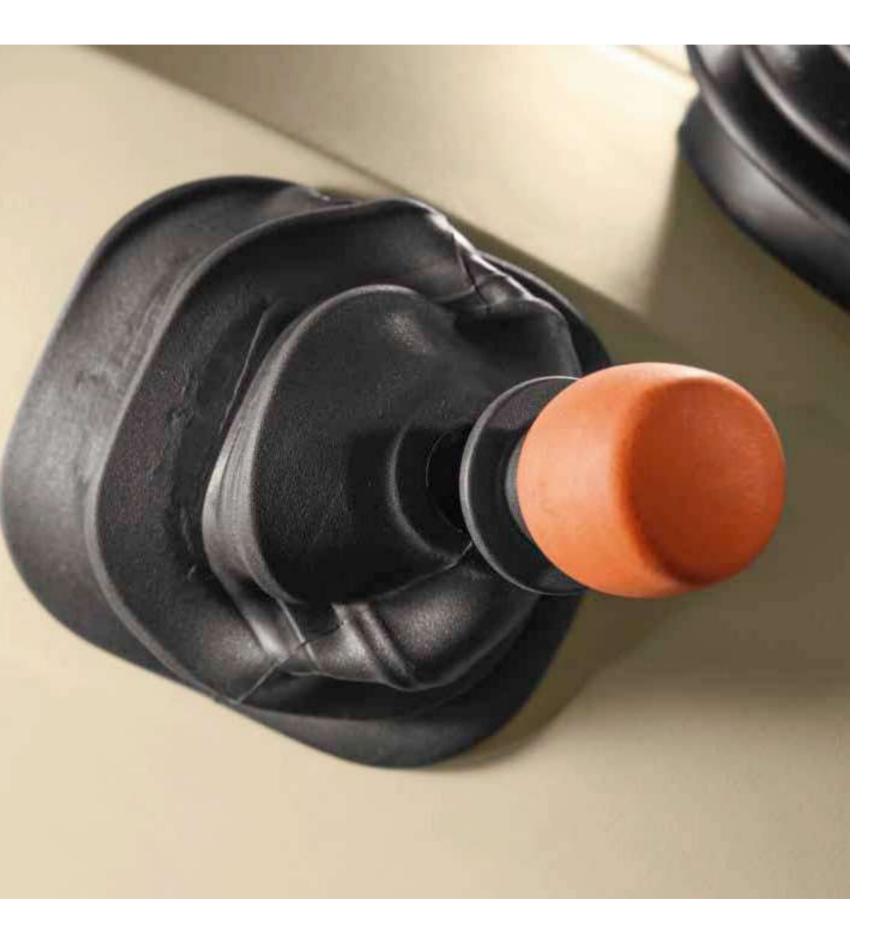
Parking brake

- 2 different variants from the driver's point of view:
- Mechanical (opened or closed purely pneumatically via lever)
- Fully automatic (3 lever positions and an intelligent automatic function controlled electro-pneumatically).
 - Three positions of the operating lever:
 - 1. Open
 - 2. Automatic
 - 3. Closed

Automatic function:

- Automatic engagement of the parking brake when leaving the the driver's seat
- •Automatic release of the parking brake when moving off (forwards and backwards)
 - + Automatic parking brake for more comfort and safety
 - + Driver-relieving automatic brake system
 - + Ergonomic arrangement





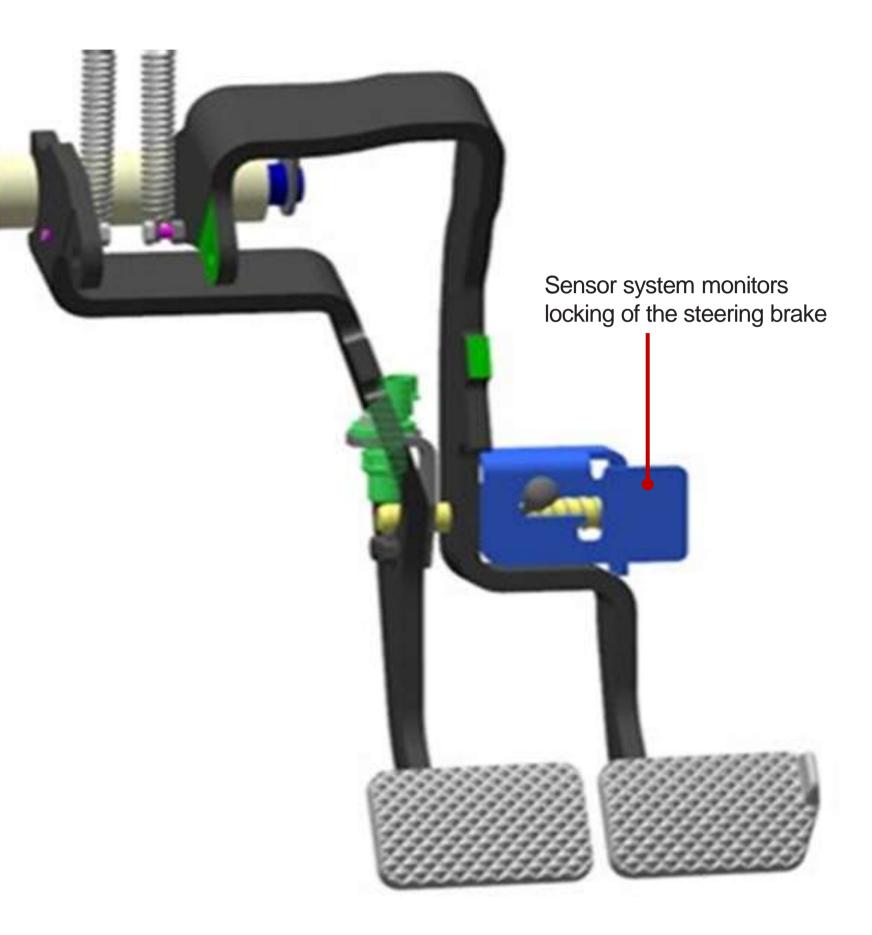
Rear axle and brakes.

Steering brake monitoring

- If the steering brake is not locked, the final speed is electronically reduced to 40 km/h
- •When the brake pedals are unlocked, a warning message appears in the dashboard shortly before reaching 40 km/h

+ Sensor-supported steering brake monitoring to prevent incorrect operation

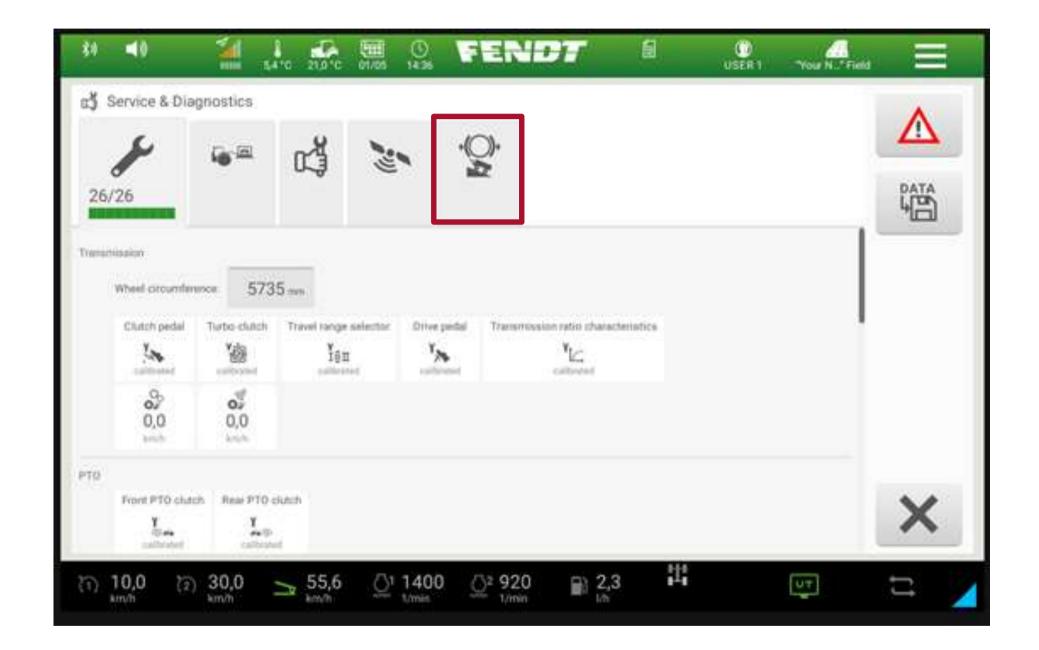




Rear axle and brakes.

Function for checking the braking force of the parking brake (EC control position)

- Function ensures that the tractor parking brake can hold the traction on the slope if the air pressure in the brake circuit escapes or the trailer spring accumulator is too weak
- Trailer brake can be released separately from tractor parking brake





Hitch options.

Concep





Quick Hitch frame

Rear linkage with quick coupler







Without rear linkage, without rear power take-off shaft

Hitch options.

Towing devices (country-specific)

- Common, height-adjustable trailer couplings in the sledge with 2 t drawbar load
- Modular system for lower towing (strength for up to 6 t drawbar load, homologated to 4 or 3 t according to StVZO and 50 t towing capacity with K80 short)
- •Rear power lift parking position for sufficient clearance with lower hitching
- Fall-through protection for height-adjustable trailer couplings
- Mudguard serves as PTO cover

- + Highest flexibility through modularity
- + Towing parts can be used with different tractors
- Different coupling variants can be used modularly on one tractor
- + High towing capacity with ball coupling





Hitch options.



Ball head coupling short (with/without connection points forced steering)



Ball head coupling long (with/without connection points forced steering)



Pull rod extendable cat 4 bolts 50 mm



Hitch





Piton Fix drawbar



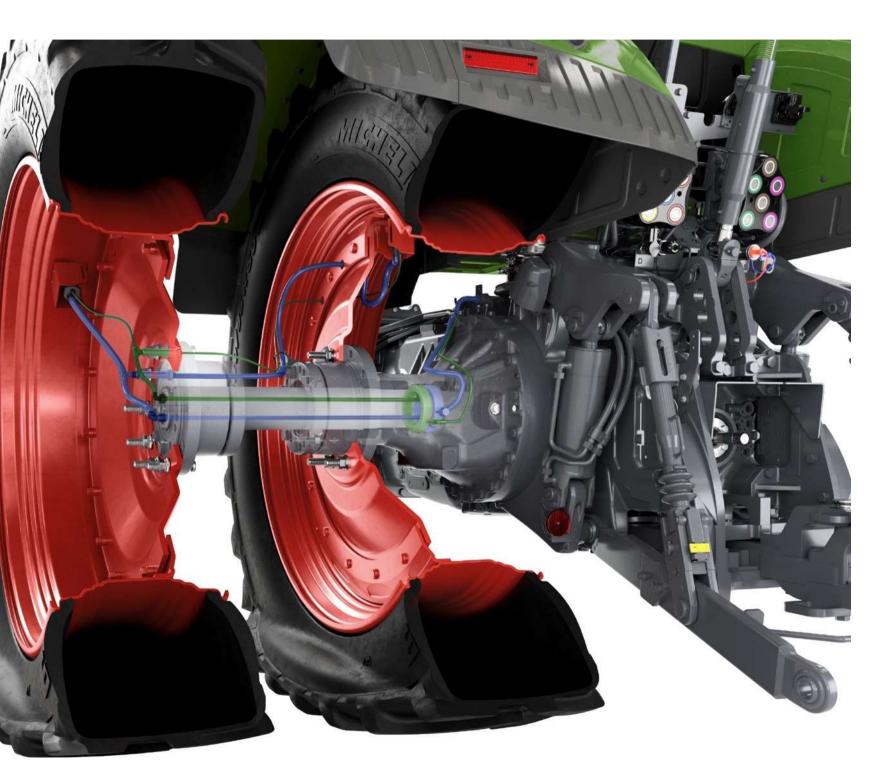
Piton Fix Heavy duty

VarioGrip tyre pressure control system.

VarioGrip for flange and stub axle

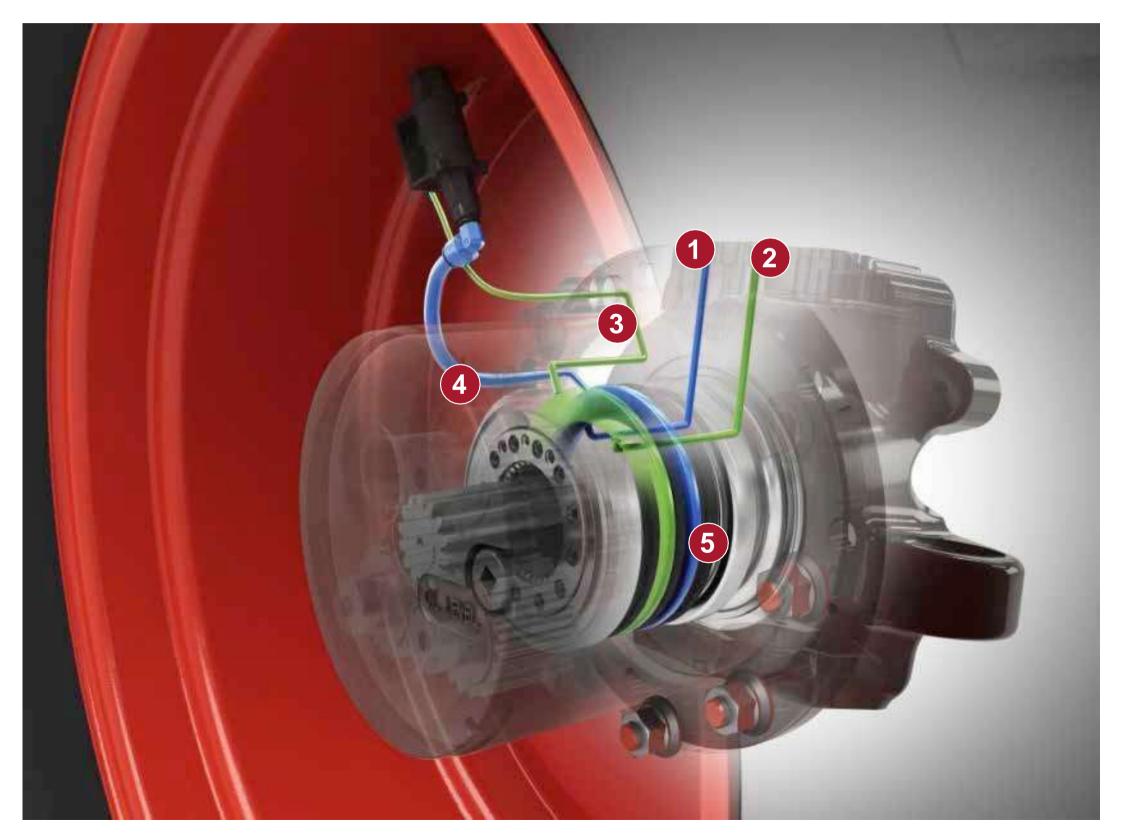
- VarioGrip available for flange and stub axle. With Row Crop variant, pressure adjustment can also be realised with twin tyres
 unique
- •Complete integration with on-board valve and air Example technology
- Complete solution with water-cooled high-performance compressor (dual compressor) with 720 cm³ air flow rate
- •Fendt's own development with radial rotary unions on front and rear axle
- Two-wire technology with control and filling line
- Control line opens tyre valve; filling line is used for filling and releasing pressure
- •Operation via terminal with integrated Fendt Grip Assistant
- •Two pressures for front and rear axle can be stored and recalled
- System air pressure is only present during air pressure control/measurement
- •Air pressure control also possible at full speed





VarioGrip tyre pressure control system.

Technical implementation on the front axle

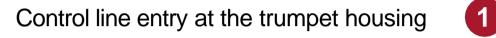




- Inflation line – entry at stub axle
- 2 Control line entry as stub axle
- 3 Control line to the valve
- Inflation line to the valve 4
- **5** Radial rotary feed through for front axle

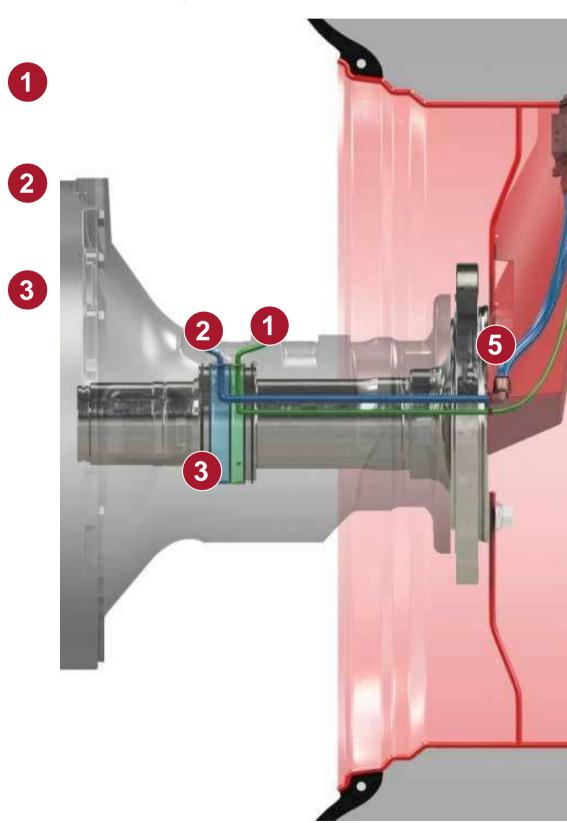
VarioGrip tyre pressure control system.

Technical implementation on the rear axle (flange)



Inflation line entry at the trumpet housing

Radial rotary feed through at rear axle





4 Control line to the valve

5 Inflation line to the valve

83

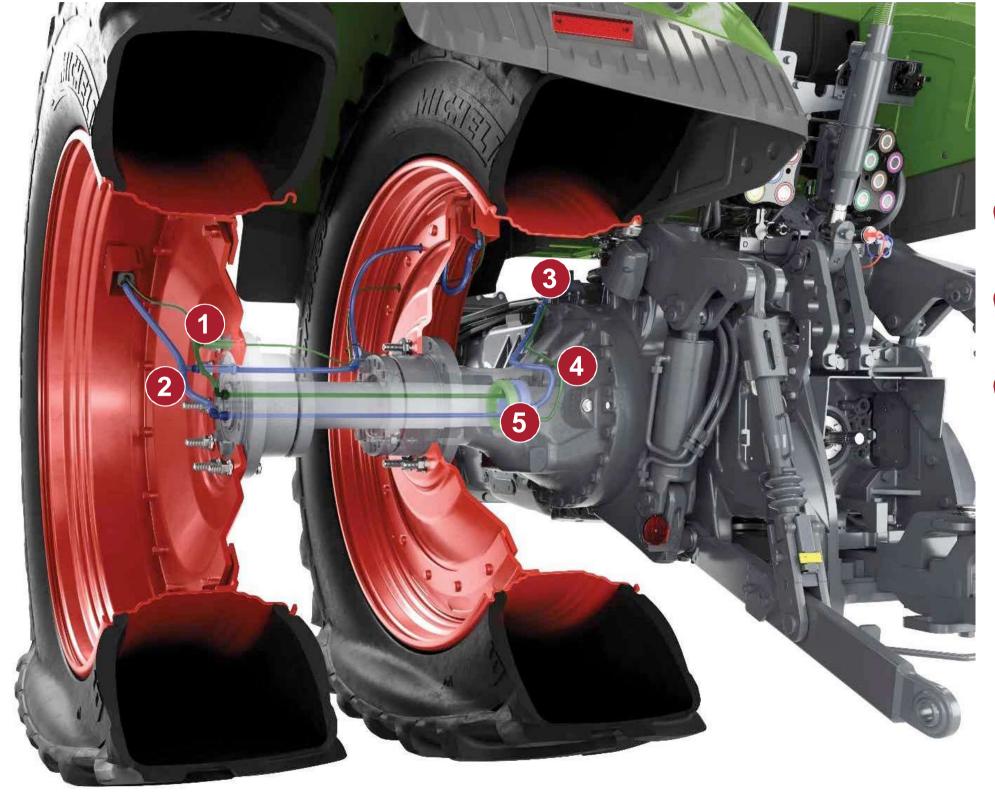
VarioGrip tyre pressure control system.

Technical implementation for Row Crop on the rear axle (stub)

Control line to valve

Inflation line to the valve







- **3** Inflation pipe (blue)
- 4 Control line (green)
- 5 Radial rotary feed through rear axle

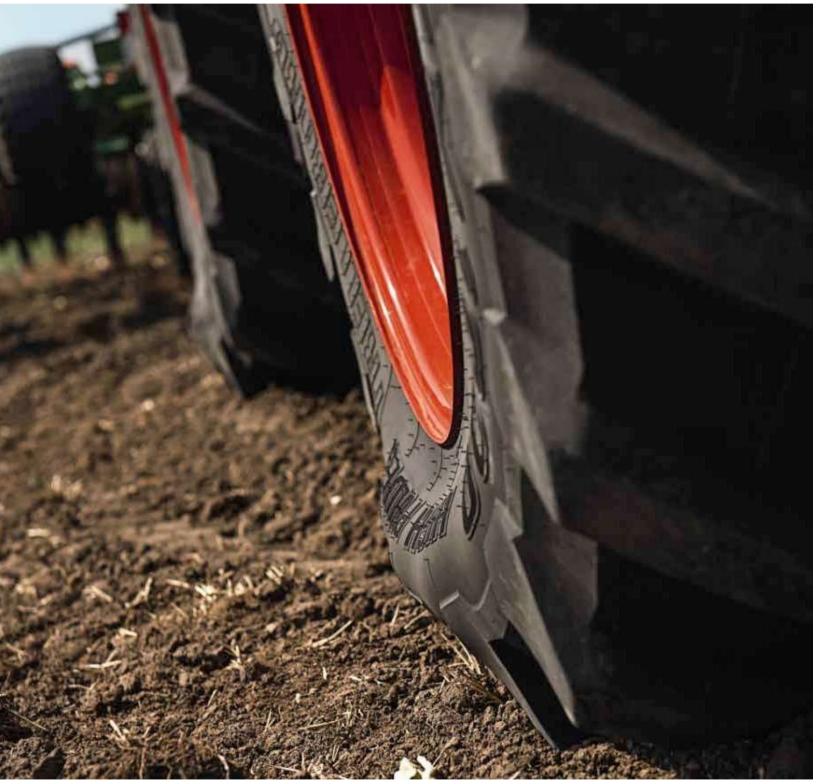
VarioGrip tyre pressure control system.

- + Full integration into the vehicle concept with modified vehicle compressor and own valve technology
- Up to 10 % more tractive power and reduction of fuel consumption by up to 8 % with 8 % more area output*.
- Optimum tuning of the entire vehicle in conjunction with Fendt Grip Assistant
- No blanket air pressure, but individually adapted tyre pressure for use and ground conditions
- + Increased driving stability and safety during transport work
- Reduction of rolling resistance to reduce fuel consumption
- + Tyre protection for low operating costs
- + Maximum convenience through simple operation in the terminal
- + Significant reduction of surface pressure for soil conservation
- + Flexibility of use due to fast filling and draining times

University of Applied Sciences South Westphalia; Agricultural Economics Soest







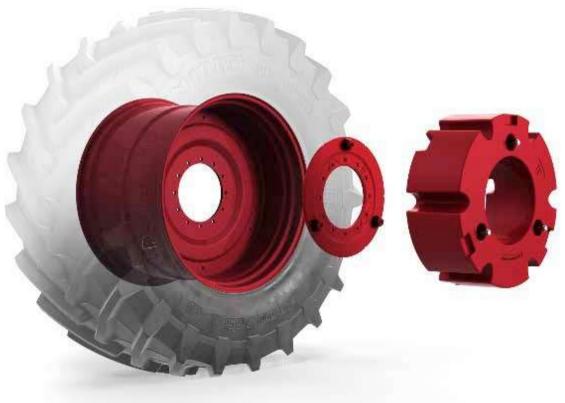
Ballasting.

Possibilities for ballasting the rear axle:

2x 650 kg



2x 1000 kg



Increased tractive force due to large tyre dimensions

- •Rear: 900/65 R46 Ø 2350 mm
- •Front: 710/60 R38
- •Rear: 750/75 R46 Ø 2350 mm
- •Front: 650/65 R38



2x 1250 kg



Ballasting.

Possibilities for ballasting the front axle:



870 kg

1250 kg

1800 kg





2500 kg

3300 kg

Ballasting.

Fendt Grip Assistant

- More than one third of the max. permissible gross weight of 23 t* is variable (unladen weight from 14 t)
- •Ballasting of up to 7 t possible*.
- Tractor should be optimally ballasted for each application
- Correct distribution of the additional weights necessary
- Working speed plays an essential role
- Fendt Grip Assistant in conjunction with VarioGrip gives the driver the optimum Example
- Two different modes: "Speed selection" and "Ballast selection".
- Integrated system
- * Country-specific exemptions required



- + Ex
- + Flexibility through two different modes
- + All important parameters are already stored, thus easy operation
- + Targeted support for the driver with learning effect



Expert knowledge stored in the system (data from field testing)

Ballasting.

Fendt Grip Assistant - Correct ballasting

- •Weights must be properly distributed on the vehicle
- •Ballasting must be adapted to the respective application
- •The max. ballasting is not useful/necessary for every application.
- Distinction between heavy tillage, such as ploughing, at speeds below 10 km/h and work at higher speeds
- Do not look at universal solutions, but at system solutions

*Country-specific exemptions required

- + Lightweight basic vehicle
- Unladen weight of 14 t and permissible gross weight of 23 t* allow 7 t ballast with full roadworthiness
- + Fendt Grip Assistant assists with correct ballasting







Ballasting.

Fendt Grip Assistant - Mode: Speed selection

- •The optimum ballasting and the optimum tyre pressure are determined at a given speed
- •The required tyre pressure is determined and can be transferred directly to the VarioGrip menu.



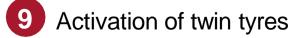
+ Tractor can be optimally ballasted with weights

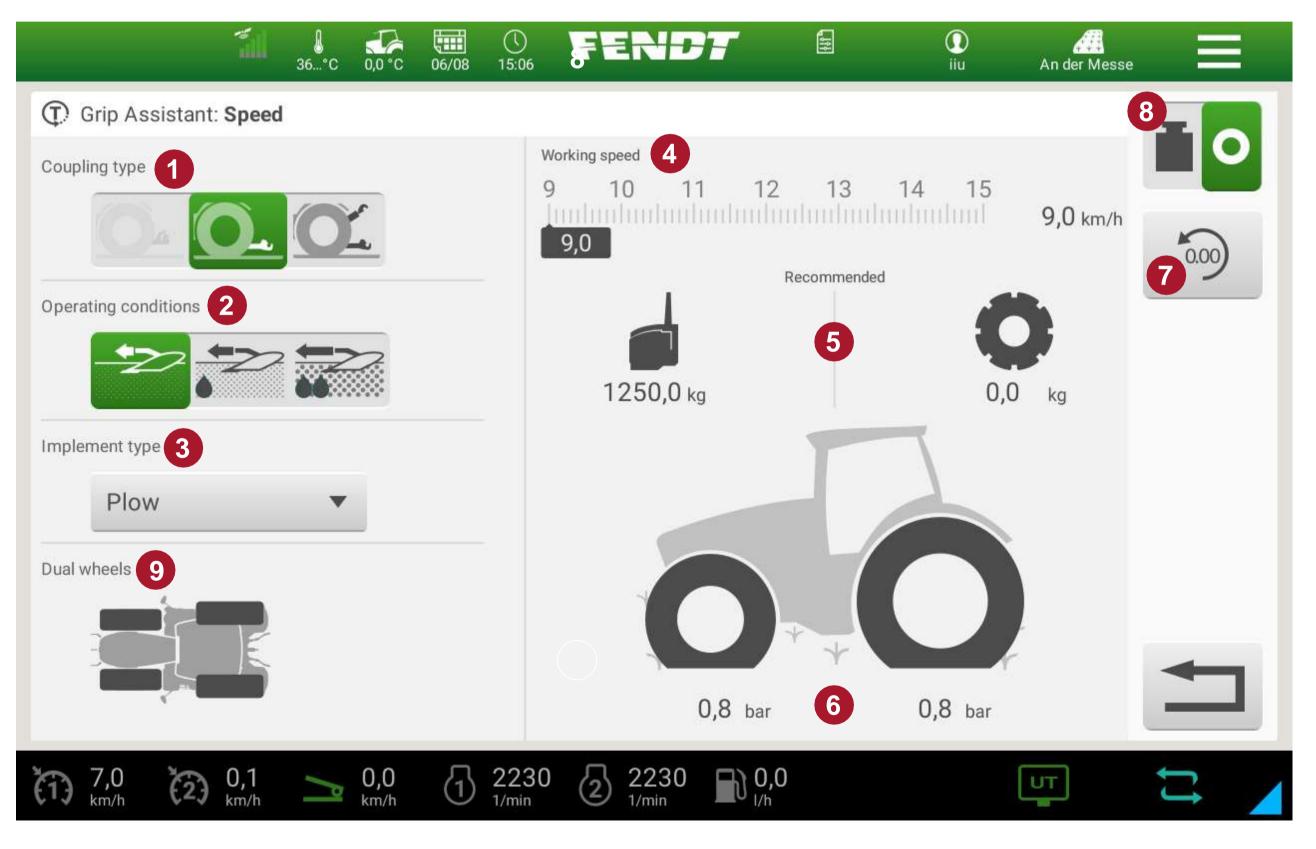


Ballasting.

Fendt Grip Assistant - Mode: Speed selection

- 1 Selection of hitch type: ball/drawbar, lower link, three-point
- 2 Selection of operating conditions: light, medium, heavy
- Choice of implement type: plough, subsoiler, cultivator, disc harrow, compactor, power harrow, sowing combination
- 4 Selection of the working speed
- **5** Ballasting recommendation for selected speed
- 6 Air pressure recommendation for selected vehicle configuration
 - Restore initial state
- 8 Switch between speed selection or ballast selection







Ballasting.

Fendt Grip Assistant - Mode: Ballast selection

- If the tractor is ballasted, the optimum working speed and tyre pressure can be determined.
- •No need to change the weights
- •The required tyre pressure is determined and can be transferred directly to the RDRA menu.



- + Tractor does not have to be completely re-ballasted for every use
- + Flexible use with quick change of the attachment



Ballasting.

Fendt Grip Assistant - Mode: Ballast selection

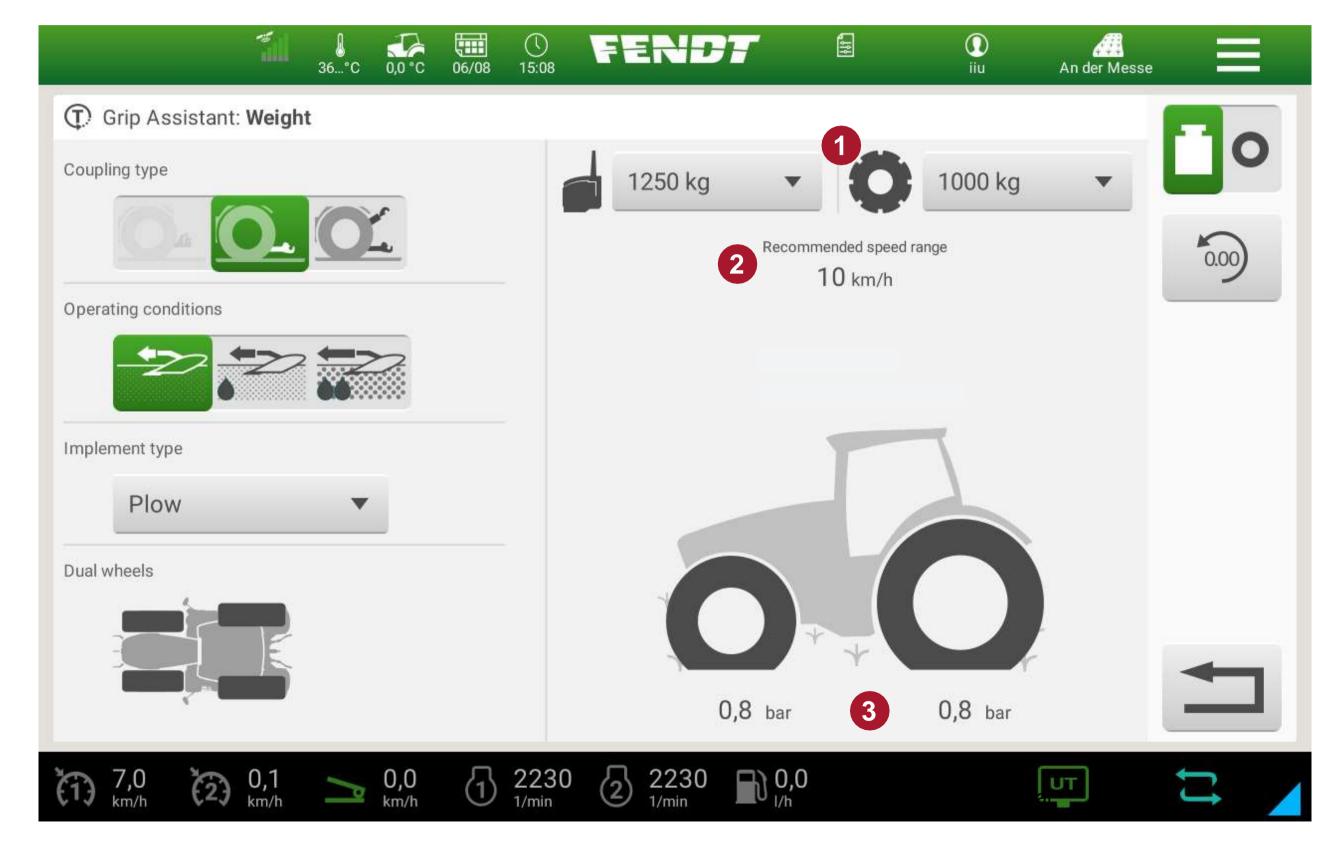


Input of the currently attached ballasting



Recommendation of the most efficient speed range

3 Air pressure recommendation for selected vehicle configuration





Ballasting.

Road registration over 18 t in Germany

- In Germany, the maximum permissible weight of a two-axle motor vehicle in the standard case is 18 t.
- •1000 Vario: special permit required for 21 t at 50 km/h or 22 t [10 t VA, 12 t HA] at 40 km/h
- Technically permissible rear axle load of 13 t [40km/h] cannot be exhausted, as single axle load in Germany is limited to max. 12 t.
- Special permit possible in combination with 1,800 kg, 2,500 kg or 3,300 kg FENDT ballast weight, if this is registered as an "attachment".

Procedure for obtaining the special permit:

- •Certificate from an officially recognised expert, e.g. TÜV / DEKRA: The FENDT weight must be described in the certificate as an "attachment". (Attachment) devices that are not registered are not permitted.
- Exemption according to StVZO § 70: With the expert report, the end customer can apply to the state authority for an exemption according to StVZO § 70. It is recommended to refer to the FKT Special Committee "Agricultural Vehicles (FKT-SA-lof)" of the Federal Ministry of Transport (BMVI).
- Permit according to StVO § 29 Para. 3: After presentation of the exemption according to § 70, the lower road traffic authority may issue a permit according to StVO § 29 for excessive road use. This permit may contain conditions.
- It is at the discretion of the authorities involved to grant these permits



Compressed air system.

- •System pressure raised from 8 bar to 12.5 bar
- Proven technology from the truck segment, where 12 bar operating pressure is standard
- •Number of compressed air tanks could be reduced from four to three
- •Arrangement of the compressed air tanks, no tanks in the rims
- •Reduction valves for trailers with 8.5 bar system pressure, thus no restrictions or compatibility problems
- •Remote measuring points in the rear area

+ Thanks to 12 bar system pressure, safe and smooth braking process, as the pressure drop during braking no longer affects the braking behaviour

- + More space on the vehicle due to the reduction of the compressed air tanks
- + No tanks in the rear axle, reduces dirt build up
- + Very good accessibility for technical inspection of the brake system by remote measuring points
- + No restrictions due to 12 bar system pressure





Cabin.

Concept

Equipment

Lighting

FendtONE operating philosophy





Concept.

Fendt Life Cab - Concept

- Large-capacity cabin
- Infotainment packages and sound system available
- Rear and lateral visible edges lowered
- Comfort passenger seat moved to the rear
- Entrance in the lower area 465 mm wide (+85 mm compared to the x5 cabin)
- External dimensions based on x5 cabin
- Glass area increased by 8
- Mechanical or pneumatic suspension

- + More comfort for the driver
- + Wider tyres possible with smaller outer width
- Better view to the sides and to the rear mounting space due to lowered visible edges







Concept.

•Fendt Life Cab - Exterior

- •Wiper on the right side window with 220° wiping field
- •Cab roof design with cross-illuminated work lights
- 3rd brake light above licence plate in roof optionally available
- Mudguards for large tyres and Quick Hitch frame (NA)
- •Cab roll-over protection load (ROPS) increased to 14.5 t
- Integrated bonnet camera available in the Dieselross emblem

- + Optimum visibility to the right thanks to side window wipers
- + No shadowing by e.g. exhaust due to worklights shining crosswise
- + Better recognisable for other road users due to 3rd brake light
- + Good view of the front attachment thanks to camera in the bonnet
- + High ROPS roll-over protection value enables construction site approval up to 2 t operating weight without additional frame





Concept.

Key variants, immobiliser & locking system

- •Without immobiliser & without security locking system
 - Simple, green key without immobiliser
 - Uniform key
 - This key locks the cab door, ignition lock, bonnet and fuel tank on all machines without immobiliser.
- •With immobiliser and safety locking system
 - Silver key with FENDT embossing and transponder for immobiliser
 - Individual key
 - Key closes car door, ignition lock, bonnet and fuel tank individually for each vehicle
- •AdBlue tank retains separate key due to increased risk of corrosion
 - + All-round security package: security locking system and immobiliser combined
 - + Highest security against machine theft and unauthorised fuel removal







Concept.

Fendt Life Cab - Interior

- Soft-touch surfaces
- •Numerous storage options; storage box with active cooling
- Dashboard swivels with steering column
- •Comfort driver seats with adaptive backrest (Dualmotion) and leather upholstery
- •Comfort passenger seat with table function and document holder
- Large cool box on the right side
- Sun blinds front, right and rear
- Auxiliary device holder as rail
- Tablet holder and smartphone holder available
- Several 12 V connections, e.g. for mobile phone, radio, cool box
 - + Cabin designed for long periods of use
 - + Easy handling when reversing (e.g. : Cooler box does not have to be removed; comfort passenger seat also with reverse drive version).
 - + Comfortable shading from the sun with roller blinds
 - + Air conditioning concept especially for very hot regions for excellent cooling







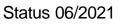
Concept.

Better overview thanks to larger glass surfaces

- •Lowered visible edges on the mudguards
- •Better visibility of the rear mounting area
- •All panes are glued
- •Heated windscreen made of laminated safety glass available ex works

270° segment windscreen wiper on the windscreen and 220° side window wiper

- •Larger wiping angle
- More breakaway torque
- •Washing nozzle integrated in the wiper arm
 - + Torsion-resistant
 - Repair of small stone chips possible with laminated safety glass
 - + Exclusive 270° clear view on front window and 220° on side window
 - + Clear view also of the wheel inlets







Concept.

Cabin suspension

3 Different variants to choose from:

- Mechanical: conical suspension at the front, mechanical cab suspension at the rear
- pneumatic: conical suspension at the front, pneumatic cabin suspension at the rear
- Pneumatic comfort: 3-fold pneumatic cab suspension
- Even greater ride comfort compared to 3-point suspension
- Suspension is supported behind the rear axle, thus better spring deflection behaviour during braking and acceleration
- Supply via compressed air system
- Integrated level control in the spring elements

- + Maximum driving comfort for long working days, even under extreme conditions
- + Choice of different suspensions to suit every application





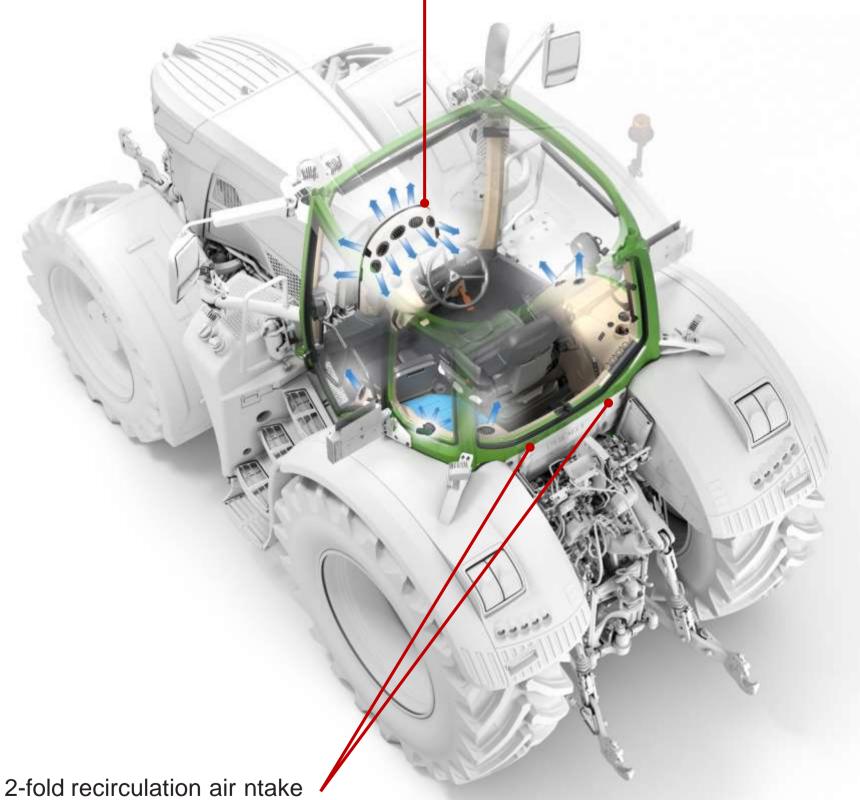


Equipment.

Efficient air conditioning

- •Air conditioning was designed for extremely hot regions (up to 45 °C outside temperature)
- Two fans for even air distribution, additional separate fresh air fan
- Larger evaporator
- •2-fold recirculating air intake
- Front wall air diffuser with more outlets and better air distribution at the windscreen
- Ventilation outlets also at the rear of the cabin especially for RüFa applications

- Relaxed work even under extreme +conditions
- Better distribution of the ventilation outlets in the +cabin





Example picture of the Fendt 900 Vario

Front windscreen air distributor

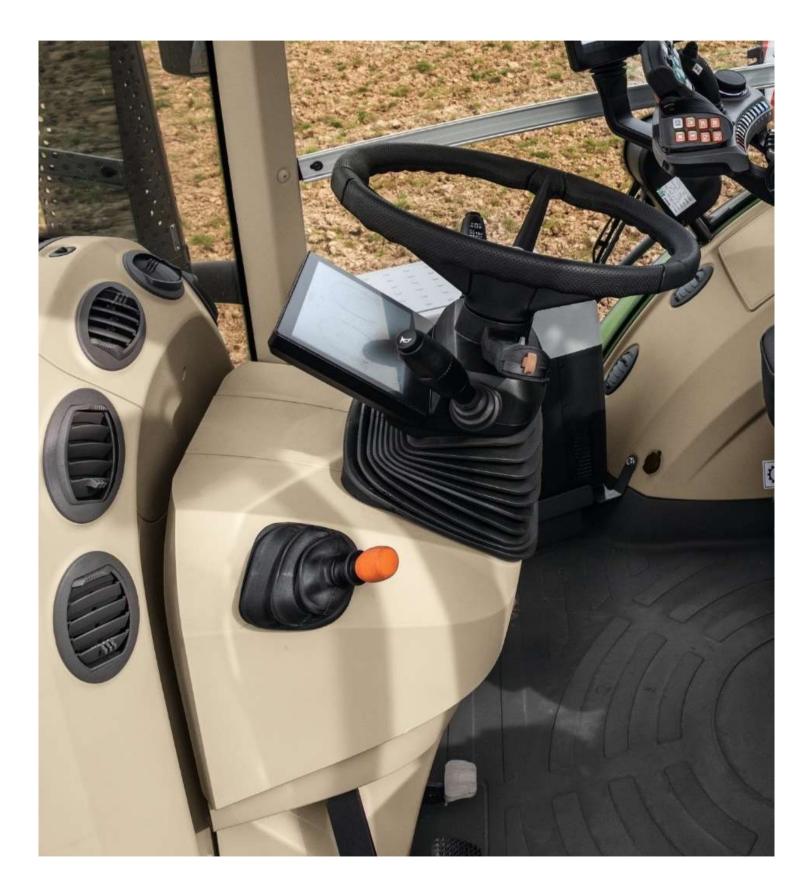
Equipment.

Pivoting steering column with digital dashboard

- Steering column with integrated instrument cluster (digital dashboard)
- Digital dashboard swivels when the steering wheel is adjusted
- Individual adjustment of height and inclination
- Handbrake directly next to steering column on left side
- Lighting (dimmer) for digital dashboard is controlled via daylight and is independent of the driving light

- + Perfect ergonomic adjustment
- + Optimal view and avoidance of reflections on dashboard through height and tilt adjustment





Equipment.

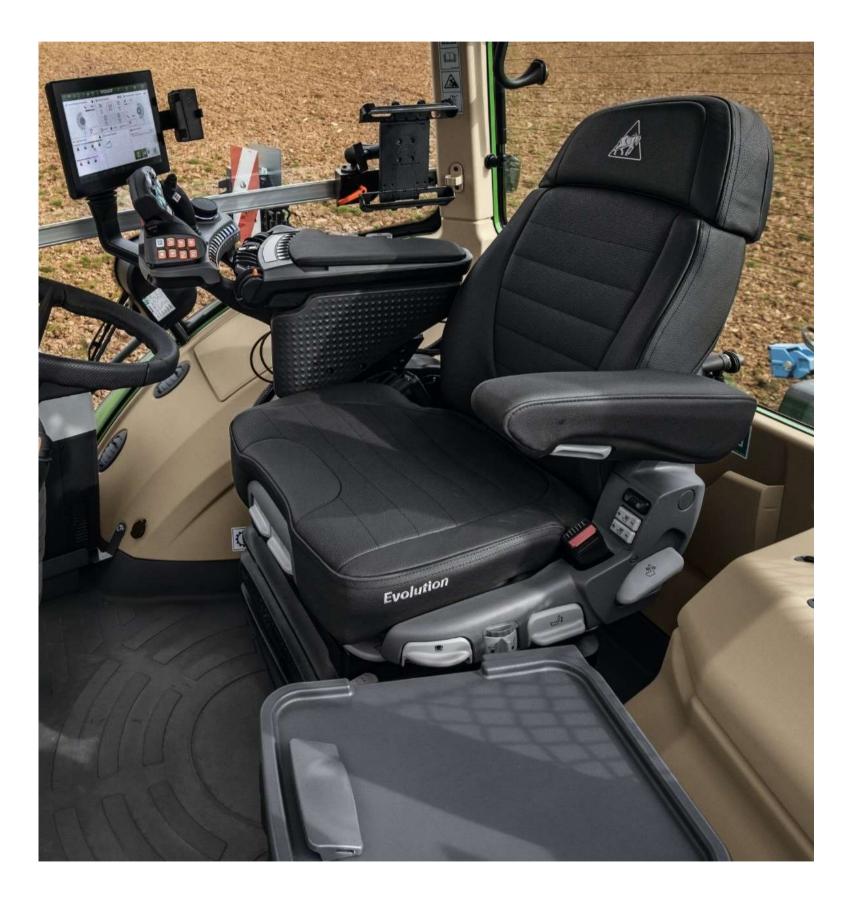
Comfort driver's seats

4 different driver seats are available:

- 1. Super comfort seat with air suspension: Seat heating, pneumatic lumbar support
- 2. Super comfort seat Evolution dynamic / DL: seat climate control, seat heating, pneumatic lumbar support, side horizontal suspension, compressed air supply via vehicle compressor, dynamic damping
- 3. Super comfort seat Evolution dynamic Dualmotion: with adaptive backrest
- 4. Super comfort seat Evolution dynamic Dualmotion leather: Genuine leather incl. leather steering wheel

- + High seating comfort for driver and passenger
- + Leather version possible
- + Dualmotion backrest actively adapts to a turning movement of the driver and supports the driver's back





Equipment.



Super comfort seat with air suspension



Super comfort seat Evolution dynamic



Super comfort seat Evolution dynamic DuMo with fabric



Super comfort seat Evolution dynamic DuMo with leather, incl. leather steering wheel and armrest in leather

Equipment.

Comfort passenger seat

- •Comfort passenger seat is standard
- Backrest with table function and clipboard function (with reverse drive: narrower backrest without additional functions)
- Due to the wider entry, the passenger seat was moved backwards

- + More space in the entry area due to the passenger seat being moved backwards
- + Passenger seat also available in leather version
- + More legroom for passengers
- + Easy turning at RüFa
- + Practical additional function integrated in backrest





Equipment.

Reverse drive

- Pneumatically assisted, the entire driver's platform can be rotated by 180°.
- •Use for special tasks (forestry work, municipal work, ...)
- •Cooler box on the right-hand side has been placed at a slight angle and no longer needs to be removed when turned
- •Comfort passenger seat also possible with reversing device

- + Absolute versatility
- + All operating elements are swivelled along
- Same comfort forwards and backwards +-
- Faster turning, as the cool box and passenger seat + are not in the swivelling range



Equipment.

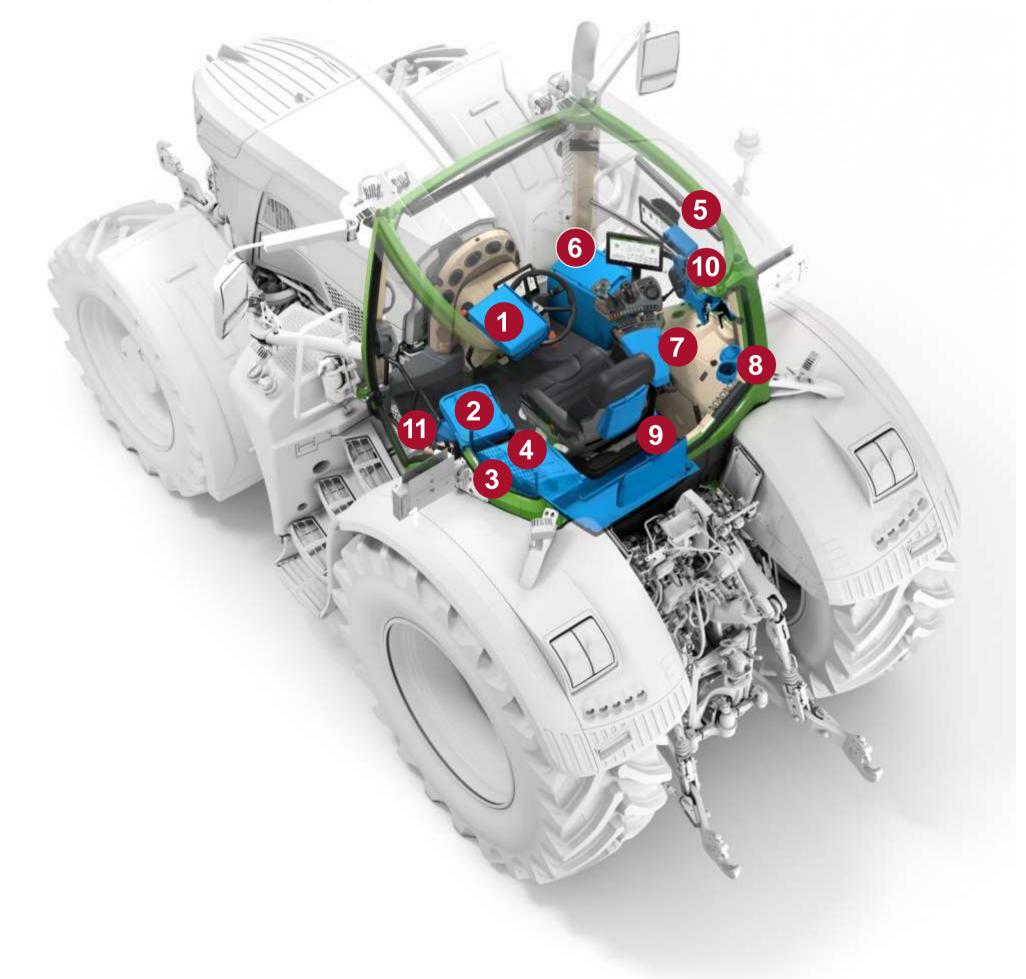
Storage options

1 Storage box, cab liner, left

2 Document holder Table function Passenger seat backrest

3 Cooled storage compartment

4 Cup holder







Equipment.

Holder for terminals and tablets



Auxiliary device holder

- Stable holder for terminals on the right side of the cabin; visibility-optimised arrangement
- Variably adjustable due to guide in rail





Example picture of the Fendt 500 Vario

Tablet holder

- Secure and precisely fitting attachment for tablets of different sizes on the right-hand side of the cabin; attachment of the holder to the terminal bracket

- Very variably adjustable due to Example in a rail as well as bearing in a ball joint

Equipment.

Infotainment - Overview

Electronic platform for entertainment and communication Infotainment package includes four integrative components:

- High-end hands-free kit
- Highest quality radio reception worldwide
- Connection of a wide range of external audio sources
- Fully integrated operation via terminal or rotary knob on the armrest

Sound system in various expansion stages:

Infotainment Package includes four integrative components:

- Infotainment package: 4 premium speakers
- Infotainment package + 4.1 sound system (from Profi): 4 premium speakers plus subwoofer integrated in sound bar
- + Future-oriented infotainment system with many expansion options
- + Perfectly balanced sound in the cabin
- + maximum operating comfort
- + Complete integration into the vehicle





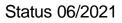


Equipment.

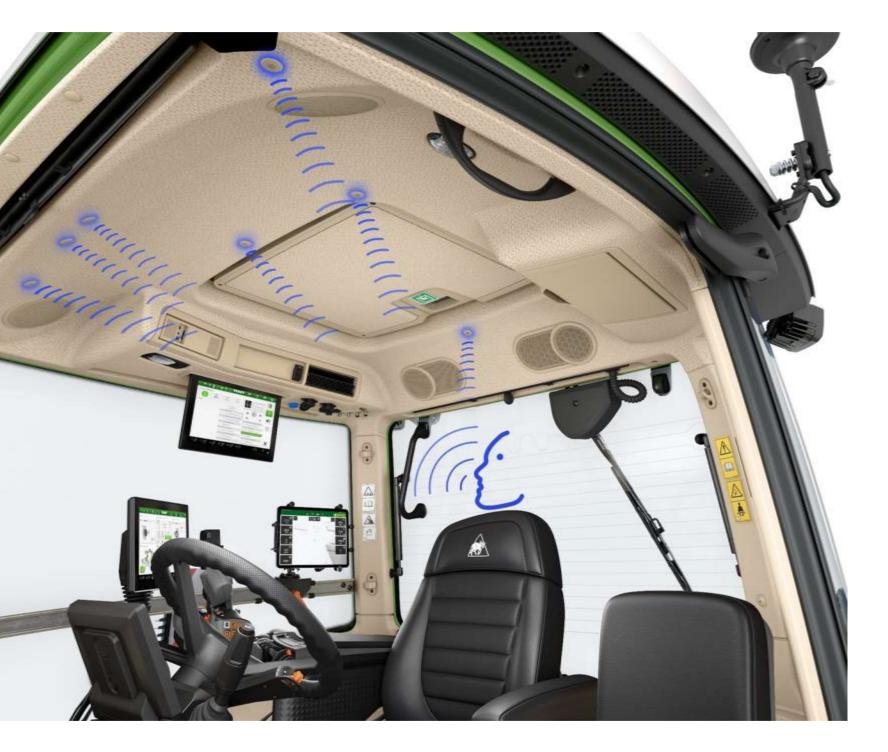
Infotainment - High-end hands-free kit

- 8 microphones fully integrated and optimally distributed in the headliner
- Microphones communicate with each other for best voice recording and maximum noise reduction
- Elimination of background noise
- Operation of the hands-free system via central rotary knob (volume/mute) on the armrest and terminal

+ Best reception and transmission quality for hands-free talking due to optimal distribution of the microphones in the headliner





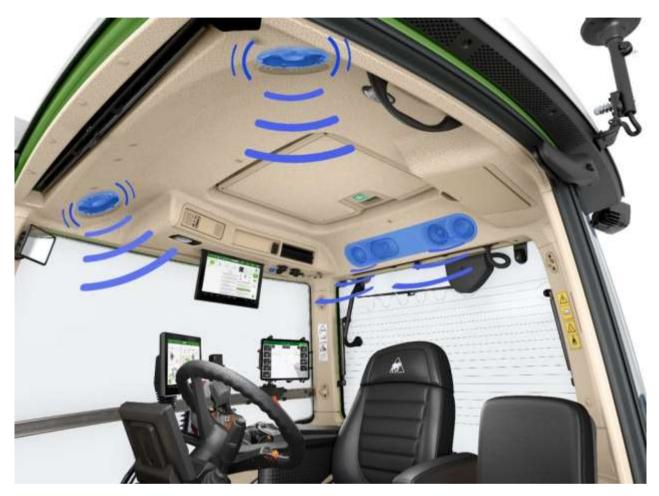


Equipment.

Infotainment - Entertainment & Radio Reception

- Multi-antenna system with vertical and horizontal antennas in roof and side window
 - Best radio reception regardless of driving direction
 - Maximum availability of radio stations
 - Automatic(r) station search and tuning
- Reception of a wide range of frequency bands worldwide
 - FM/AM/DAB+/HD
 - FMHD
 - Satellite radio preparation
- Connection of a wide range of audio sources via Bluetooth or cablebased via USB or AUX-IN connection on the infotainment module
- •Operation via rotary knob on the armrest and terminal
 - + Best radio reception quality
 - + Music streaming via smartphone or other audio sources
 - + Maximum ease of use







Connection of external audio sources via Bluetooth or cablebased via USB or AUX-IN connection

Equipment.

Electrically adjustable comfort rear view mirror

- •3 different variants to choose from:
 - Electric rear-view mirror adjustment & mechanical wide-angle mirror
 - Comfort mirror: rear-view and wide-angle mirrors electrically adjustable
 - Comfort mirror telescopic: rear-view and wide-angle mirrors electrically adjustable & mirror holder extendable and retractable
- •As LIN mirror complete integration in vehicle electronics
- •Operation in the terminal
- Time function for simultaneous retraction of both mirrors
- Position lights in mirror housing in conjunction with comfort mirrors (EU)
- •Best overview of dangerous zones when turning
- Mirror heating





+ No more blind spot

Highest safety, as the driver can adjust mirrors comfortably and easily

Best overview even with large attachments in tight spaces Vehicle dimension easily recognisable by other road users due to position lights

Lighting.

- •Working lights can be selected as required
- Daytime running lights and work lights in bonnet (optional)
- In conjunction with the bonnet lighting front camera in the Dieselross emblem
- •Lighting optional in LED version
- •LED flashers as rotating beacons
- •Coming Home Light
- Illuminated ascent
- •Memo function of the working lights when switching between road and field

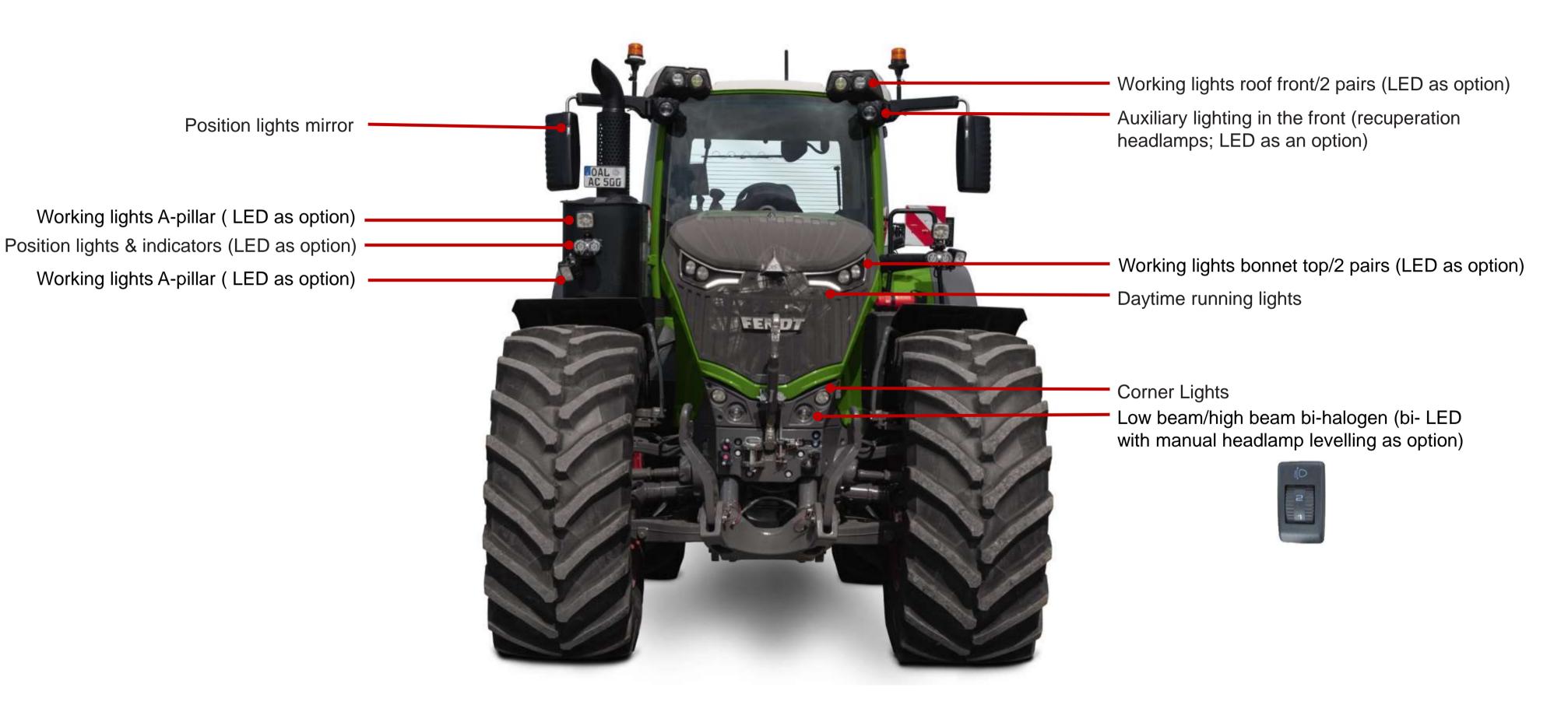
- + Best illumination for high safety and comfortable working even at night
- + Extended service life and energy saving through LED technology
- + Safe ascent and descent even in the dark





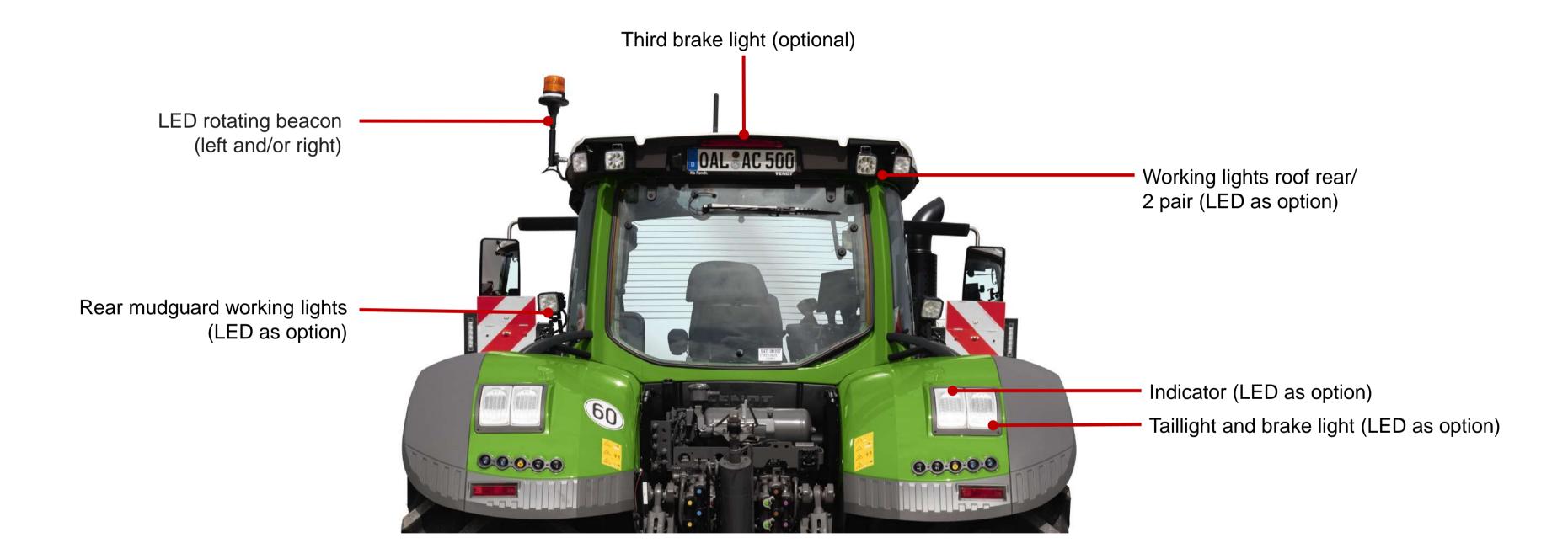


Lighting.





Lighting.





FendtONE operating philosophy.



Previous driver's workplace

- Multiple operating locations
- One display surface

Operating elements







FendtONE driver's workplace

- + Centralisation of all operating locations
- + Up to three display surfaces
- + Reorganisation of functional areas
- + Simple menu structure due to two operating levels in the terminal
- + Individualisation of the entire workplace

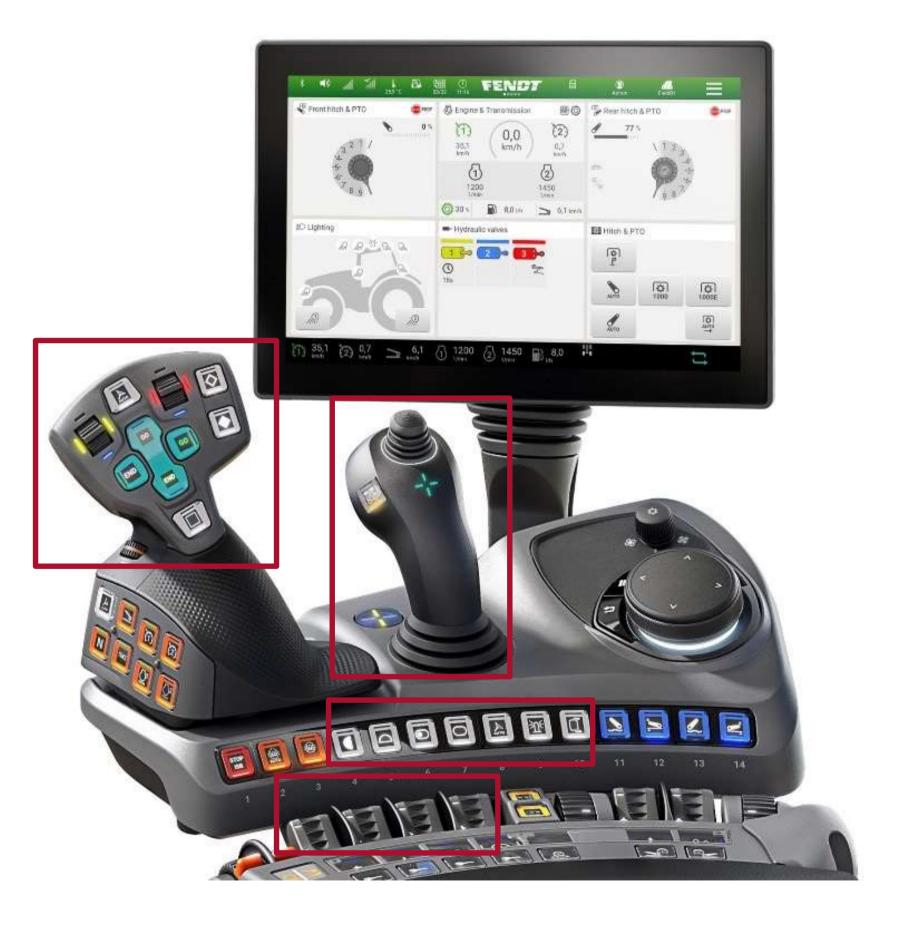
FendtONE operating philosophy.

Greater individualisation of operation

Individualisation of the workplace with FendtONE

For the first time, operating locations with:

- Tractor functions
- ISOBUS functions
- Teach In functions can be assigned





FendtONE operating philosophy.

Expansion of the display areas to show relevant functions



Previous driver's workplace

- Central terminal for operation -
- Decentralised computing unit in the terminal
- No interaction between terminals possible -
- Dashboard not integrated into the operating concept



- Additional retractable terminal in the headliner

Status 06/2021





FendtONE driver's workplace

- Network of up to 3 display options
- digital dashboard
- 12" terminal on the armrest

- Central Display Control Unit (DCU): Functions can be displayed simultaneously on 3 terminals and operated alternately - Roof terminal can be retracted halfway into the headlining Enhanced display through digital dashboard - Switching the displayed functions between terminals

Unique selling points

Freely programmable armrest - The first on the market

- + free assignment of the keys
- + Individualisation via Individual Operation Manager (IOM)
- Unique colour concept for a better overview
- + logical and dynamic colour concept
- + Optimum overview thanks to colours assigned to the function groups

Extension of the display area - terminal network

First operating concept on the market with terminal network and central computer unit ex works

+ Real-time synchronisation of content on all terminals

The only consistent operating philosophy on the market

+ First holistic operating approach on the market

+ No change in operation between driver's workstation and offboard system in the office





FendtONE operating philosophy.







- 1. more display areas
- Digital 10" dashboard: flexible display of ir data such as on-board computer, key assign etc.
- 12" terminal on armrest and headliner: individual display of tractor operation, track Example, ISOBUS devices, infotainment etc.
- 2. more operating options
- Multi-function control lever: more freely assignable buttons (also for ISOBUS functions)
- 3L joystick: up to 27 functions distributed over up to three operating levels (also for ISOBUS functions and operation of the front loader with a 3rd valve)
- Freely assignable buttons on the armrest
- No additional operating elements (terminals, joysticks) necessary

3. customisable

- Creation of user profiles to save settings for changing drivers
- Assignment of admin rights
- Individualisation of the display surfaces
- Free assignment of keys and visual feedback to avoid operating errors





mportant	
signment,	

4. simple operation

- All controls centrally in one place
- Intuitive operation (similar to smartphones and tablets)
- Flat menu structure for easy finding of individual functions
- Colour coding of the different function groups
- Proportional operation of the power lifts
- Proportional operation of the hydraulic valves on the multifunction travel lever
- Display of messages in plain text

5. future-proof

- Large storage capacity
- More interfaces
- High connectivity

Colour and lighting concept

- Colour concept: operating buttons have different colours depending on their function
- each function group is assigned to a specific colour:
 - orange: driveline or transmission functions
 - yellow: power take-off functions
 - blue: hydraulic and power lift functions
 - white: general functions
 - teal: teach-in, ISOBUS functions, multiple functions
 - White and teal-coloured keys are freely assignable

- + Quick orientation and easy operation due to colour coding of the different function groups
- + High degree of customisability thanks to large number of freely assignable keys





FendtONE operating philosophy.

Colour and lighting concept

- White and teal-coloured keys can be freely assigned -
- In the case of function reassignment, newly assigned functions are displayed in the colour of the respective function group
- LEDs on buttons give corresponding feedback: -
 - lower LED: shows the colour of the respective function group
 - upper LED: shows the status of the function (on/off)

Assignment ex works:

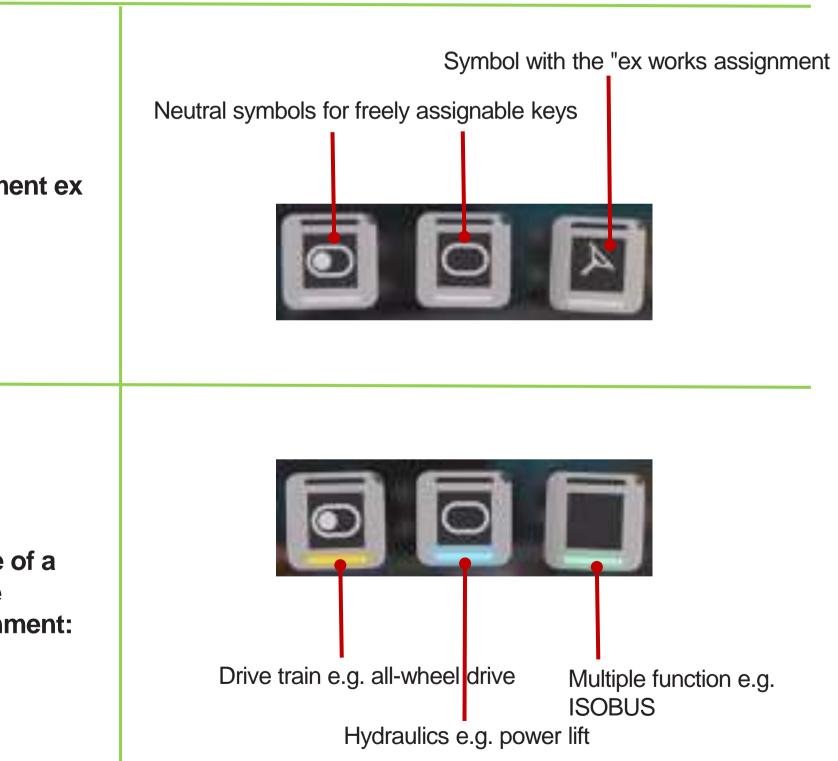
Optical feedback in case of function reassignment and thus avoidance of operating errors

Example of a possible reassignment:





Optical feedback



FendtONE operating philosophy.

Digital dashboard

- 10.1" large display (no touch) -
- Fixed to the steering column, can be swivelled along with the steering column
- different display modes: -
 - Road and field mode
 - Day and night mode
- Display of messages (3 levels):
 - 1) Message
 - 2) Warning message
 - 3) Alarm
- Choice between different views, e.g. hydraulic valves, key assignment, _ fuel consumption etc.
 - Flexible display of important data such as on-board +computer, key assignment, etc.
 - even when changing the standard view, the data +relevant to the road traffic regulations continue to be displayed









FendtONE operating philosophy.

Reverser on the steering column

Stop-and-go function in conjunction with TMS:

- Press and hold the rocker IN the direction of travel:
 - Tractor decelerates to a standstill

- After releasing the rocker switch, it accelerates in the same direction of travel.

- Press and hold the rocker switch AGAINST the direction of travel:
 - Tractor decelerates to a standstill

- After releasing the rocker switch, the tractor accelerates in the opposite direction of travel.





Multifunction control lever

- Redesigned multifunction control lever for improved ergonomics
- Basic functions (reversing, activation of cruise control and acceleration/deceleration) have not changed
- 4 additional keys with the possibility of function reassignment
- Rotary wheel on the driving lever for adjusting the cruise control speed while driving
- Further transmission functions such as driving range change, TMS, etc. arranged in the lateral lower area

- + New shape and arrangement for improved ergonomics
- Basic functions have not changed quick orientation for Fendt drivers
- + Possibility of individualisation thanks to freely assignable keys
- + Less reaching around necessary thanks to central arrangement of the functions on the drive lever





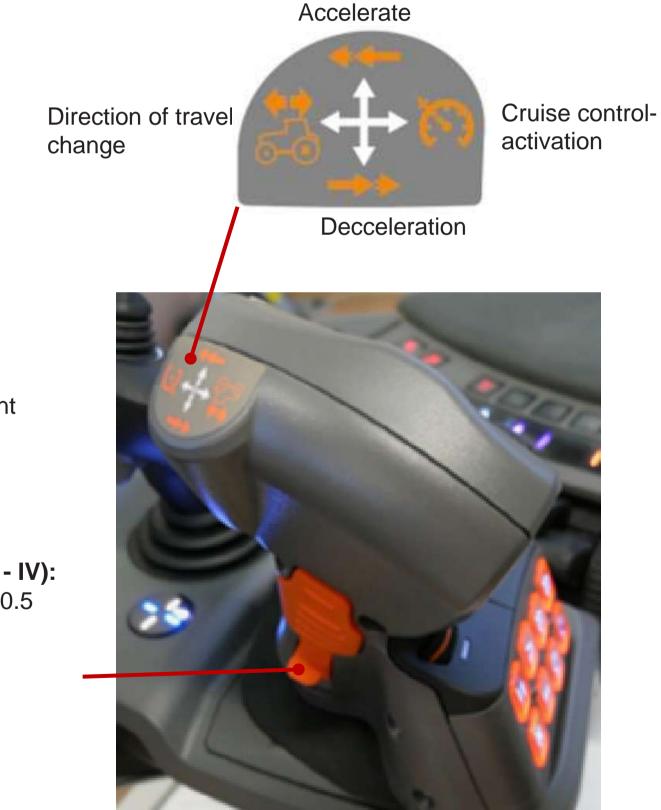
FendtONE operating philosophy.

Multifunction control lever



Status 06/2021





activation, possibility of reassignment

Acceleration ramps (I - IV):

- Ramp I: 0.02 km/h - 0.5 km/h (adjustable) Ramp II: 0.5 km/h Ramp III: 1.0 km/h Ramp IV: 2.0 km/h

FendtONE operating philosophy.

3L joystick

- Optional 3L joystick (for Power+, Profi and Profi+ each Setting 2)
- for operating the 3rd and 4th hydraulic control unit
- Fully ISOBUS-capable
- Up to 27 functions distributed over up to three operating levels (3L 3 levels)
- additional reverse key
- Functions can be reassigned via the IOM; colour feedback
- Entire 3L joystick can be locked for safety reasons



- + No need to reach around thanks to reversing button
- + Freely customisable through function reassignment
- + Locking of the 3L joystick possible: prevention of unintentional operation





FendtONE operating philosophy.

Rotary-push dial

- for operating the terminals/dashboard (terminals can also be operated by touch)
- 4 Access keys for quick navigation

Switching between terminals/dashboard

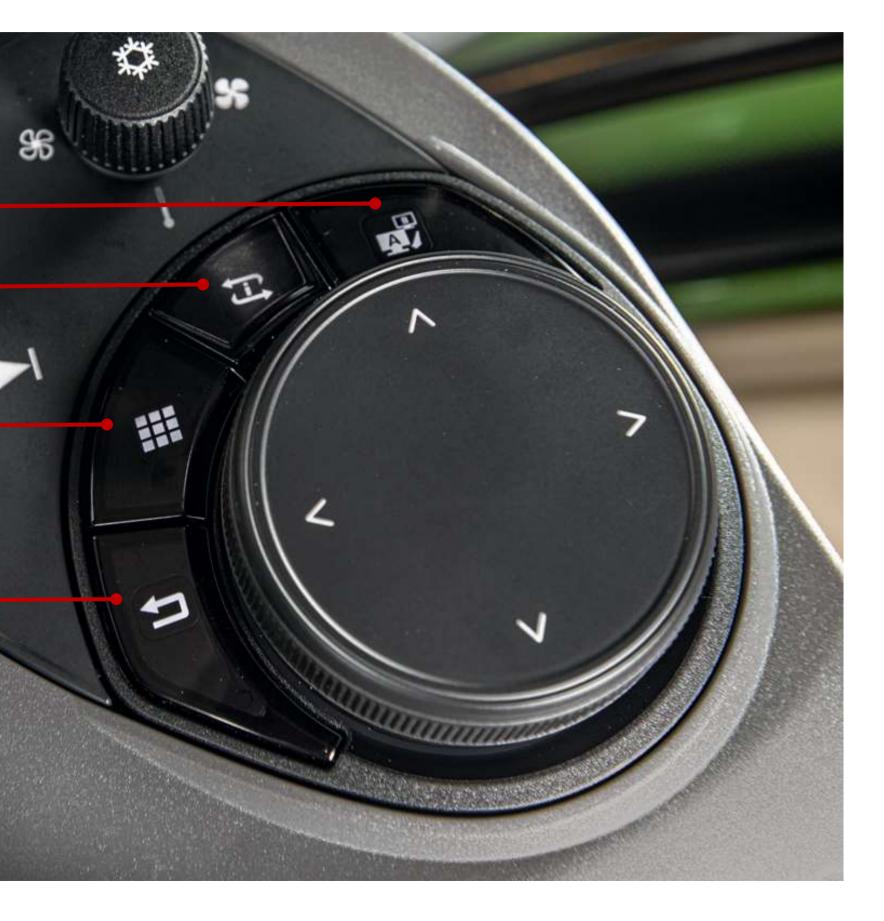
Individual Operation Manager (IOM)

Launchpad

- + Fast navigation thanks to access keys
- + In addition to touch operation of the terminals, complete operation via rotary push plates is also possible

Back button -





Operating buttons

- 14 function keys, colour-coded according to function groups
- Some of the white buttons are assigned to general functions such as mirror adjustment at the factory, but they can be reassigned.
- Visual feedback when functions are reassigned thanks to sophisticated lighting concept



- + White keys can be customised through function reassignment
- + Quick orientation and avoidance of operating errors thanks to well thought-out colour and lighting concept



FendtONE operating philosophy.

12" terminal on the armrest

- Standard across all equipment variants
- Can be operated by touch and rotary-push dial
- Up to six freely configurable tiles per page
- Creation of user profiles to save page views and settings for changing drivers
- Operable by touch and/or rotary-push dial
- Integrated day and night design

- + larger display area (12" instead of 10.7")
- + intuitive operation (similar to smartphones and tablets)
- + Flat menu structure for easy finding of individual functions
- + Possibility of individualisation through freely configurable pages or tiles







FendtONE operating philosophy.

12" terminal in the roof

- Additional 12" terminal in the roof for even more display space
- Functions correspond to the terminal on the armrest
- Can be half retracted into the headlining: lower half is still visible even in retracted position

- + More display area: no additional external terminals necessary
- + When not in use, it is possible to retract the terminal halfway into the headliner.





12" terminal

- Consistent header and footer even with changing page views
- Header with general status information such as reception, time, date, general settings, etc.
- Footer with important information such as cruise control speeds, engine speeds, fuel consumption, etc.
- Click on the respective symbol in the header or footer to open the corresponding menu (fullscreen).
- Factory default: Terminal pages with 6 tiles

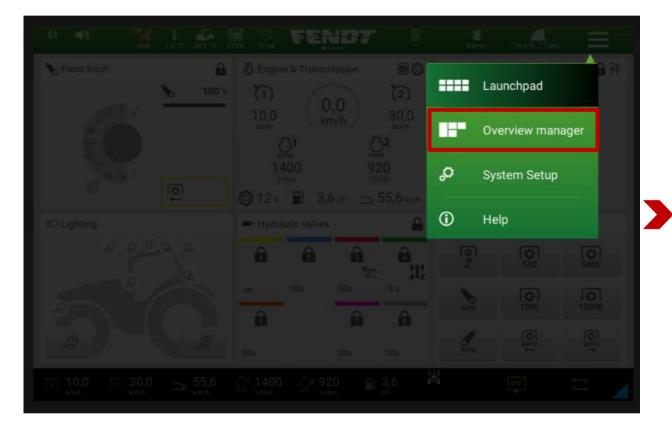
- + Important information is always displayed regardless of the terminal view
- + Access by clicking on header or footer





FendtONE operating philosophy.

Overview manager



Overview manager for customising the terminal pages

+ more display area with up to 6 tiles per page (instead of 4 tiles so far)

+ Individual creation of up to 15 overview pages per user

+ intuitive customisation of the terminal pages through

Drag & Drop



Factory default setting with 6 tiles can be changed as desired

- The various tiles and pages can be changed via drag & drop



For a better overview

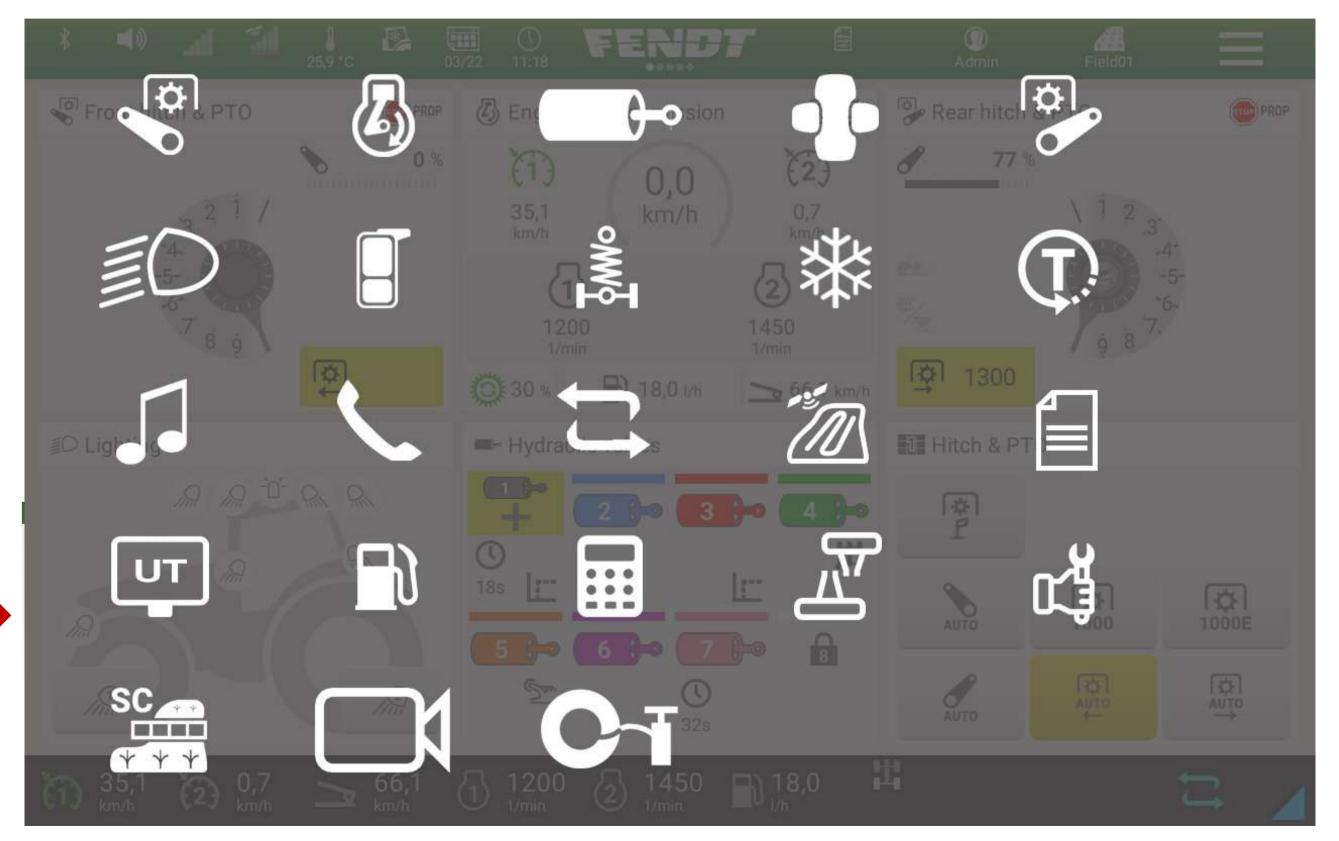
- Functions can, for example, also be displayed on 4 tiles, such as track Example here.
- Click on the respective tile to open the corresponding menu in fullscreen mode.

FendtONE operating philosophy.

Launchpad

- Overview page in the terminal for quick access to all functions
- Comparable to a home button on a smartphone
- Access button on the rotary-push dial







FendtONE operating philosophy.

Linkge operation

Front linkage:

Float position mode front linkage

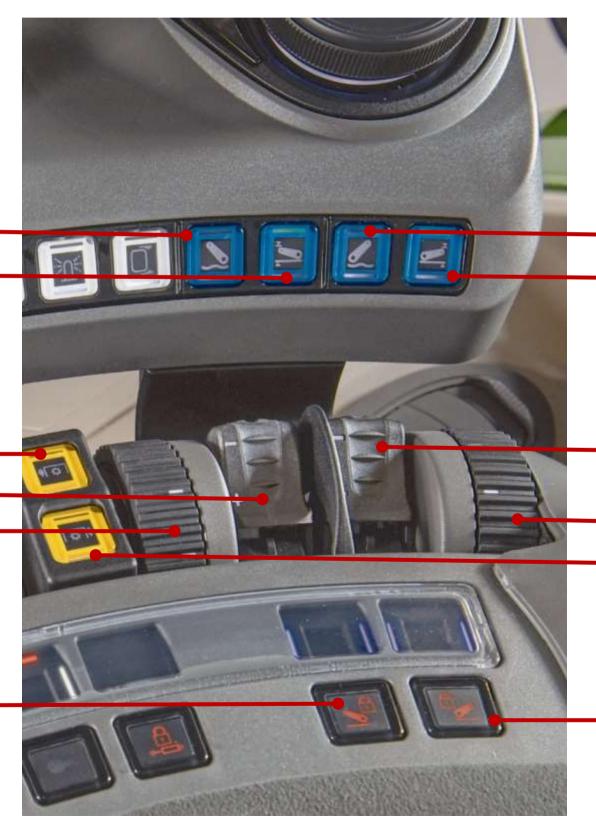
Control mode front linkage: storage of the currently set depth as a new MEMO setpoint value

Front PTO (on/off)

Front linkage (lift/lower/quick draw)

Scroll wheel (infinite): Working depth front hydraulics

Lock/unlock front linkage



Example picture of the Fendt 700 Vario



Rear linkage:

Float position mode rear linkage

- Control mode rear linkage: Storage of the currently set depth as a new MEMO setpoint value
- Rear linkage (lifting/lowering/rapid retraction)
- Scroll wheel (infinite): Working depth rear linkage Rear PTO (on/off)

Lock/unlock rear linkage

FendtONE operating philosophy.

Terminal - Front linkage

Setting/activation of:

- Lifting height
- Lifting speed
- Lowering speed
- Relief control







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FendtONE operating philosophy.

Terminal - rear linkage

Setting/activation of:

- Lifting height
- Lifting speed
- Lowering speed
- Rear PTO speed
- Rear PTO automatic
- Stationary operation rear PTO
- Side stabilisers
- Draft and position control







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Terminal - Engine & Transmission

- 2 cruise control speeds can be stored optimum speed adjustment independent of engine speed
- 2 motor speeds can be stored -
- Setting for changing the direction of travel (memo function) -
- TMS consumption-optimised automatic control of engine speed and transmission ratio (operation via multifunction control lever and accelerator pedal)
- automatic load limit control 2.0 -

- Simple and safe adjustment by touch and/or rotary-+push dial
- Quick activation of functions (memo function, turbo +coupling function...)





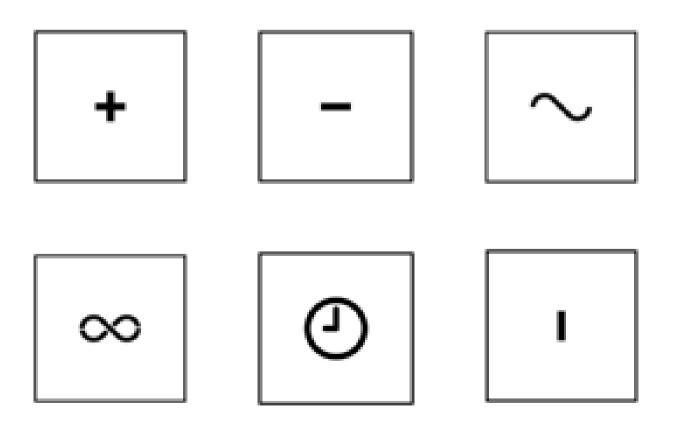


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									×
(2) { k	30,0	■ 55,6 _{km/h}		02 9	920 1, 2,3			UT	tt

Finger tip (linear modules) for operating the hydraulic valves

Each finger tip has four positions:

- 1) Plus
- Minus 2)
- 3) Floating position
- Without function (as of 02/2020) 4)
 - Permanent flow (can be activated via terminal)
 - Time function (can be activated via terminal)



Lock/unlock all finger tipstogether

Lock/unlock respective finger tips separately



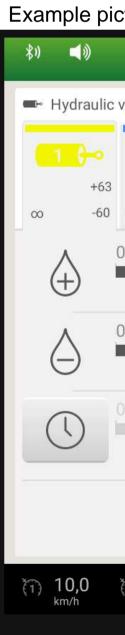




FendtONE operating philosophy.

Terminal - Hydraulic valves

- Clear status display of all hydraulic valves
- With two LS pumps, the valves in the terminal are assigned to the respective pump
- Setting/activation of:
 - Oil quantity
 - Time function
 - Start-up control
 - Valve selection for external operation
 - Priority function
 - Automatic steering axle lock







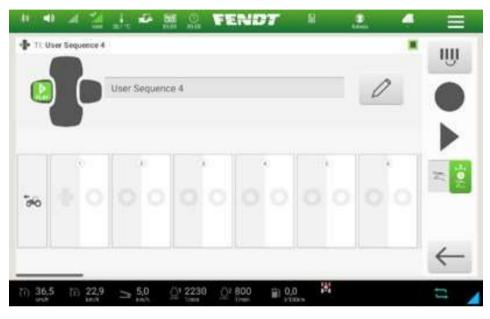
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FendtONE operating philosophy.

Headland management Fendt TI

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T) 10	0,0 (2)	30,0 km/h	h	55,6 km/h	011	400	2 920	12,4	11		UT	t

1) Selection of the respective sequence by clicking in the field



2) Open EDIT offline menu



3) Selection of the trigger or the function







4) Adding the desired function by drag & drop

FendtONE operating philosophy.

Terminal - Lighting

Setting of:

- 2 storable lighting modes, e.g. street and field mode
- Coming home function

Switch on the reversing lever for activating/ switching between Switching between the two stored lighting modes

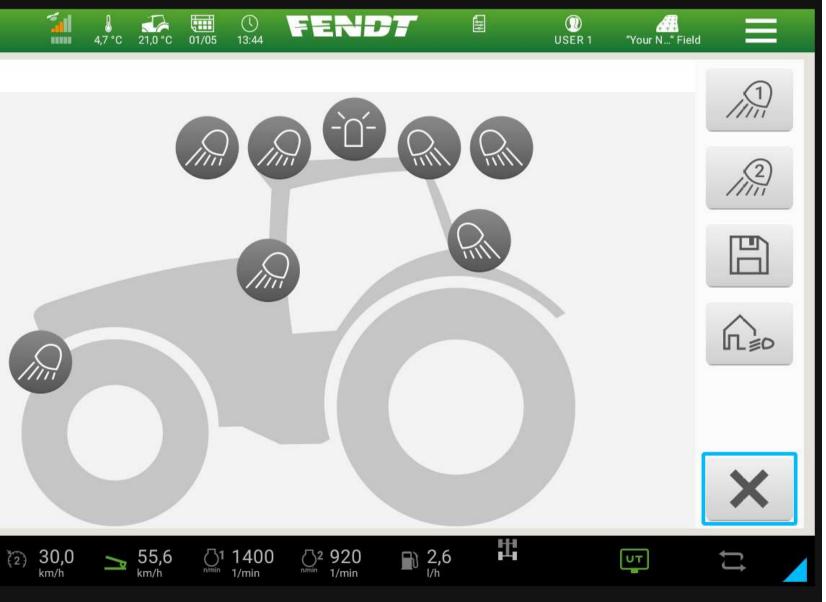


N ↓

+ Quickly switch between two stored lighting modes







FendtONE operating philosophy.

Terminal - Mirror settings

- Adjustment of the electrically adjustable rear-view mirrors by touch (arrow keys) or via rotary-push dial
- Activating the mirror heating

+ Convenient adjustment of the mirrors via the terminal (no additional button below the armrest flap necessary)





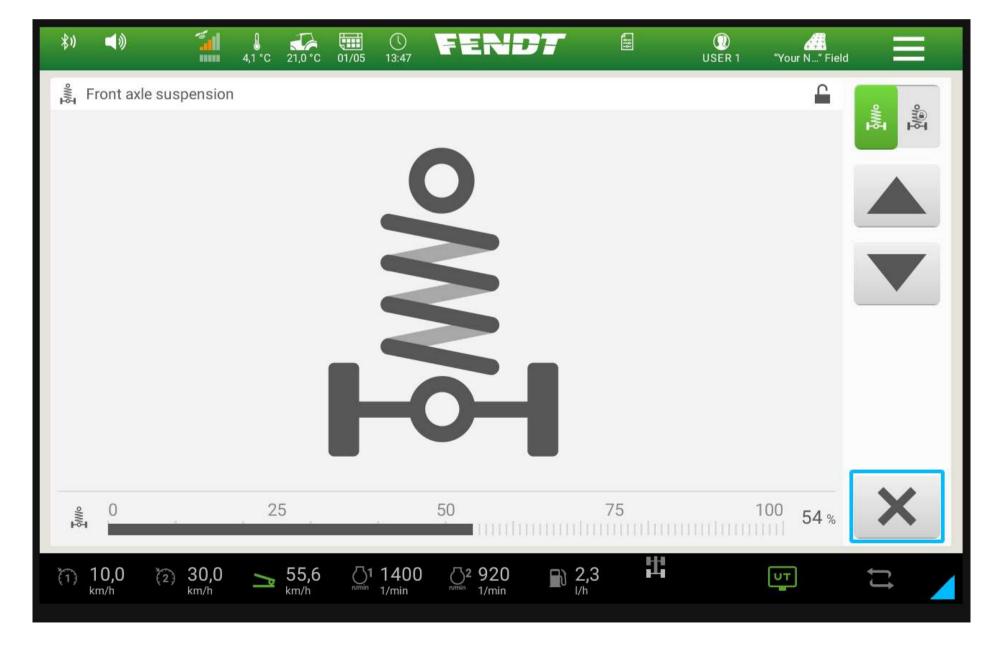


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FendtONE operating philosophy.

Terminal - Front axle suspension

- Locking function for precise device Example
- Raising and lowering the suspension







FendtONE operating philosophy.

Ventilation/air conditioning

- Operation via rotary knob on the armrest or via touch in the terminal
- Quick setting via rotary knob:
 - Switch to the left or right: Fan up/down
 - Turn: Temperature up/down
 - Press: Activate automatic mode
 - Press longer: Defroster mode (highest temperature & highest fan speed)





+ No need to reach up to the headliner thanks to central control on the armrest





FendtONE operating philosophy.

Terminal - Media

- Rotary knob on the armrest for quick adjustment:
 - To the left or to advance or rewind the radio station/song title.
 - Turn: Volume up/down
 - Press: mute
- Audio source selection:
 - AUX
 - Bluetooth
 - USB
 - Radio (AM or FM/DAB+)

+ No need to reach up to the headliner thanks to central control on the armrest



	\$v ⊲ »)
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	ALPENWEL
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BAYERN	DAB+	DIE 6 RICHTIGEN raten	
Schw	DAB+ 🔶 📩	und Jackpot gewinnen!	
Т	DAB+	BAYERN 1 Schw	Ö
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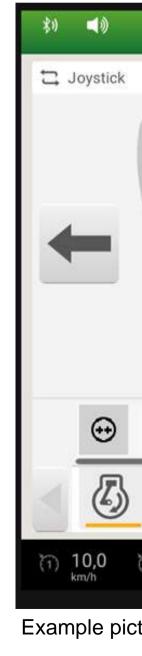
FendtONE operating philosophy.

Flexible key assignment via IOM (Individual Operation Manager)

- The key assignment can be conveniently managed via the IOM
- Functions can be placed in the best possible operating location for the driver
- The functions can be placed at the respective operating location by dragging and dropping in the IOM menu.
- Individual key assignment is stored in the respective user profile -> each driver can quickly call up his settings again
- 2 ways to access the IOM in the terminal:
 - Access button on the rotary-push dial
 - via the icon on the launchpad

- + Best possible driver-specific individualisation of the workplace
- + Simple and intuitive function reassignment by drag & drop







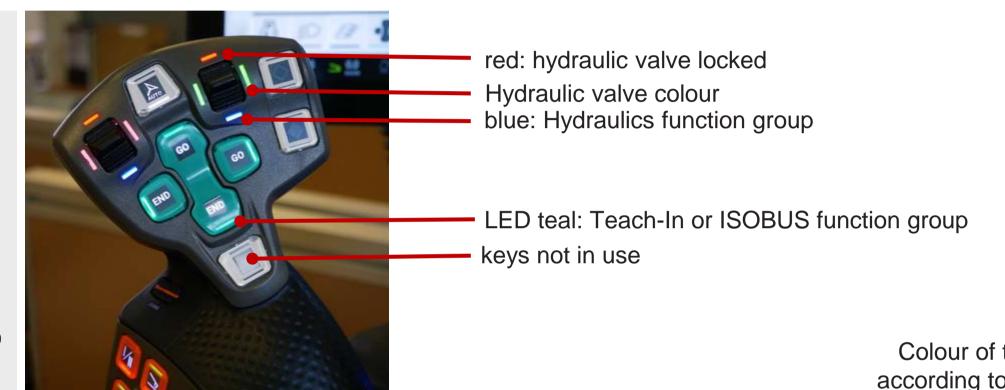


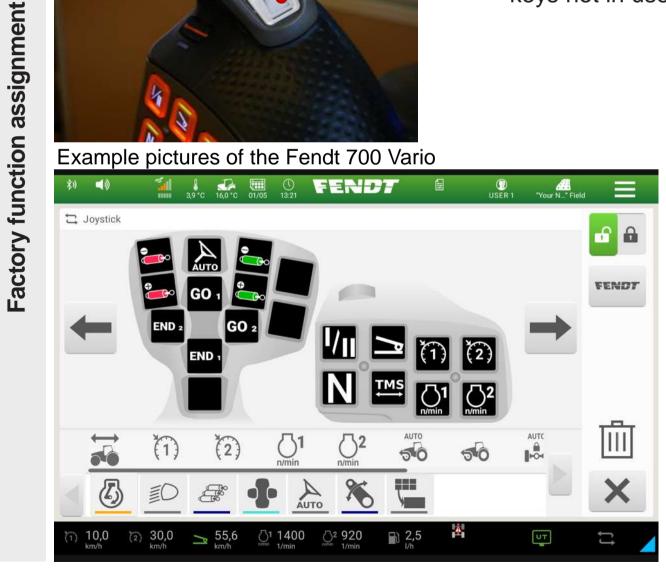
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٥	Ê	•					×
(2) 30,0	→ 55,6 km/h	01 1400	0 <u></u> ² 920 ∫	⊇ <u>2,2</u>		UΤ	5

Example picture of the Fendt 700 Vario

FendtONE operating philosophy.

Multifunction control lever - IOM





Status 06/2021



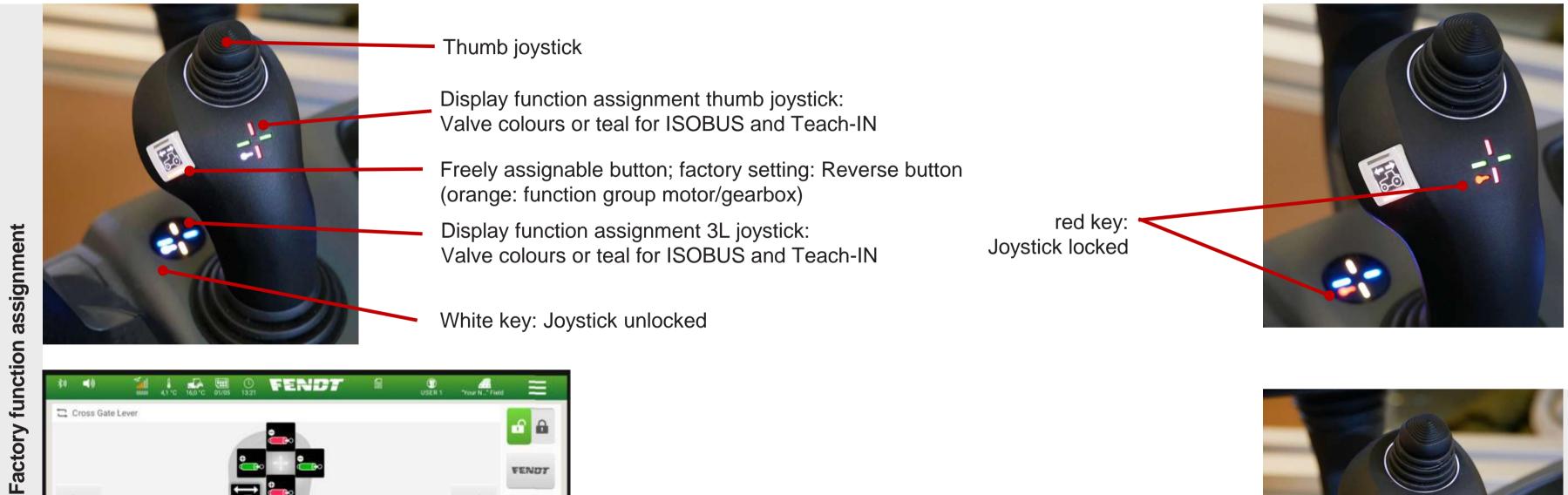


Colour of the LEDs changes according to the reassignment

Go/end symbol disappears on reassignment -

FendtONE operating philosophy.

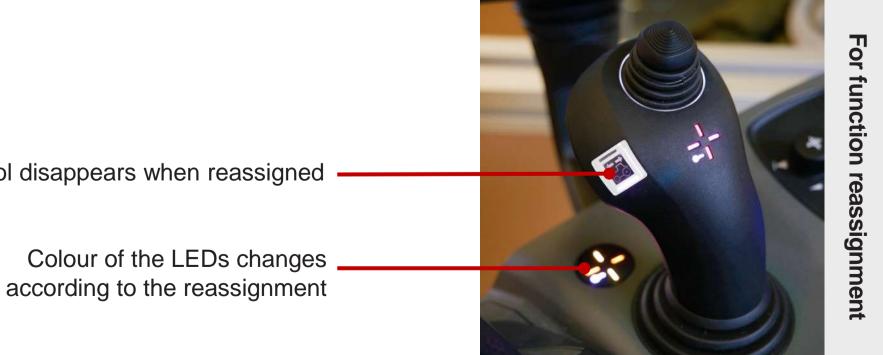
3L joystick - IOM





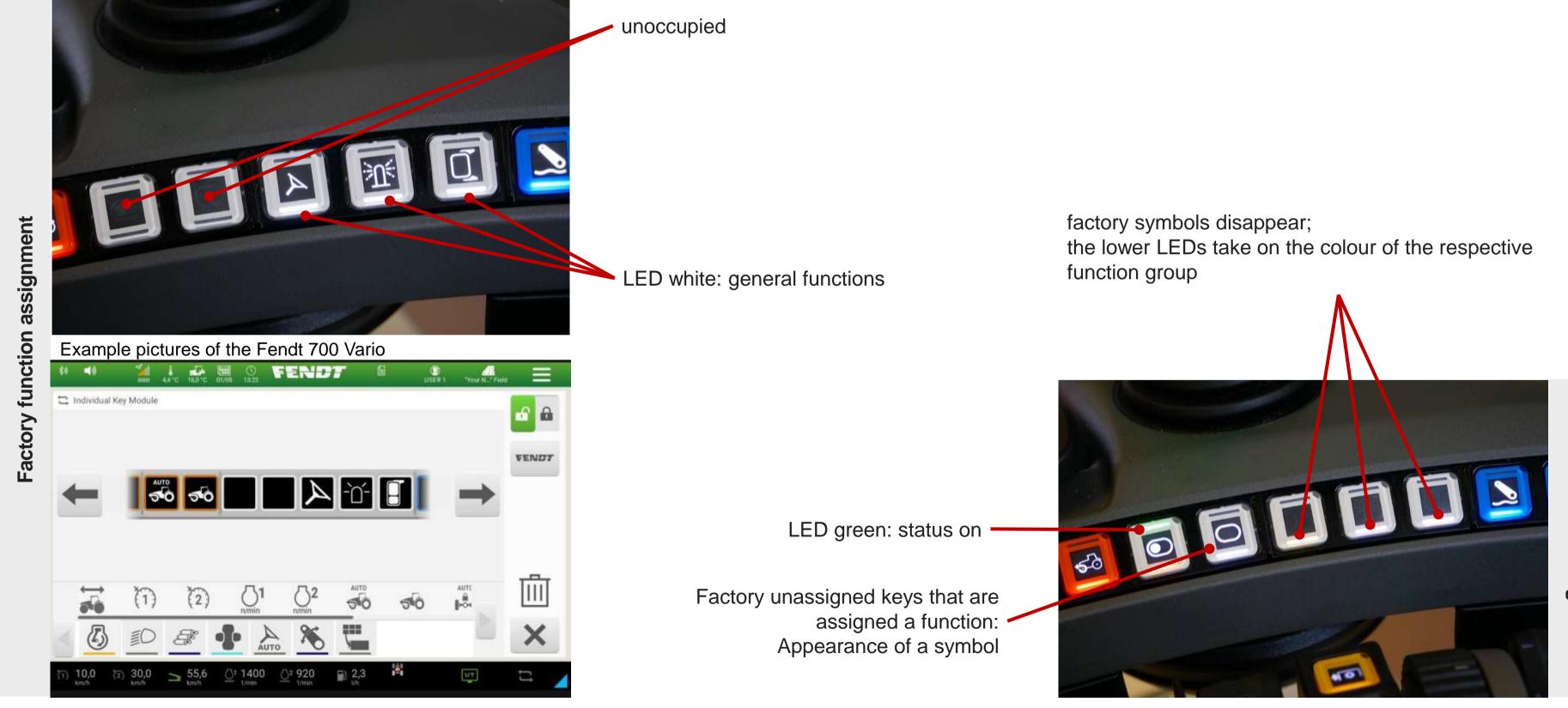
Reversing symbol disappears when reassigned





FendtONE operating philosophy.

Operating keys - IOM



Status 06/2021





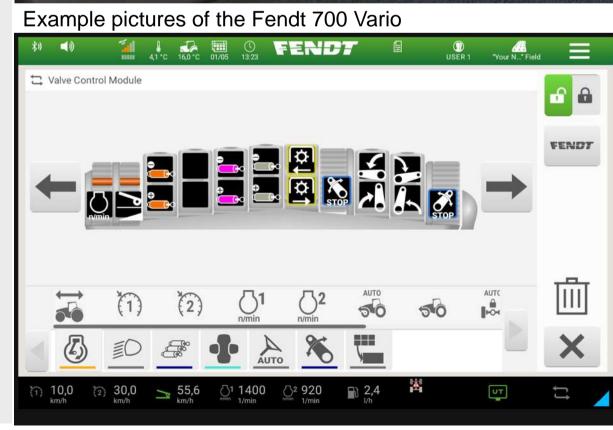
FendtONE operating philosophy.

Rocker (linear modules) - IOM



Finger tip (linear module) locked Hydraulic valve colour

Factory function assignment



Status 06/2021



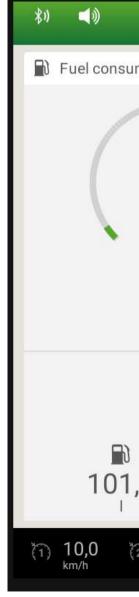
The colour of the LEDs changes according to the reassignment



FendtONE operating philosophy.

Terminal - Fuel consumption

- Consumption display in I/h, I/ha and I/100 km
- Display of 4 consumption types:
 - current
 - average
 - Diesel total counter 1
 - Diesel total counter 2





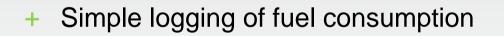


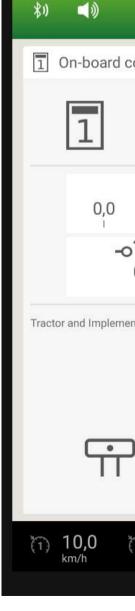
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(2) $30,0_{km/h} \rightarrow 55,6_{km/h} \stackrel{0}{\longrightarrow} 1400_{1/min}$	Operation of the second seco	UT	tt 🖌

FendtONE operating philosophy.

On-board computer

- Up to 10 on-board computers for easy determination of fuel consumption during various operations









computer: Onboard Counter 1 Onboard Counter 1 0, 0 , 0 , 0 , 0 , 0 , 0 , 0 ,			4,8°C 21,0°C	01/05 1	1 4:34	ND	III III	0 USER 1	Your N" Field	
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km/h km/h ^{n/min} 1/min ^{n/min} 1/min I/h	(2)	30,0 ^{km/h}	<u>→</u> 55,6 km/h		400 ^[] 2 min	920] 1/min	2,2 H		UΤ	t1 🖌

FendtONE operating philosophy.

Device manager

- Central storage of attachments in the implement manager:
 - Working width
 - Steering axle or rigid axle
 - Type of attachment:
 - Front attachment
 - Three-point linkage semi-mounted
 - Three-point linkage
 - Drawbar
 - towing hitch
 - Ball head coupling







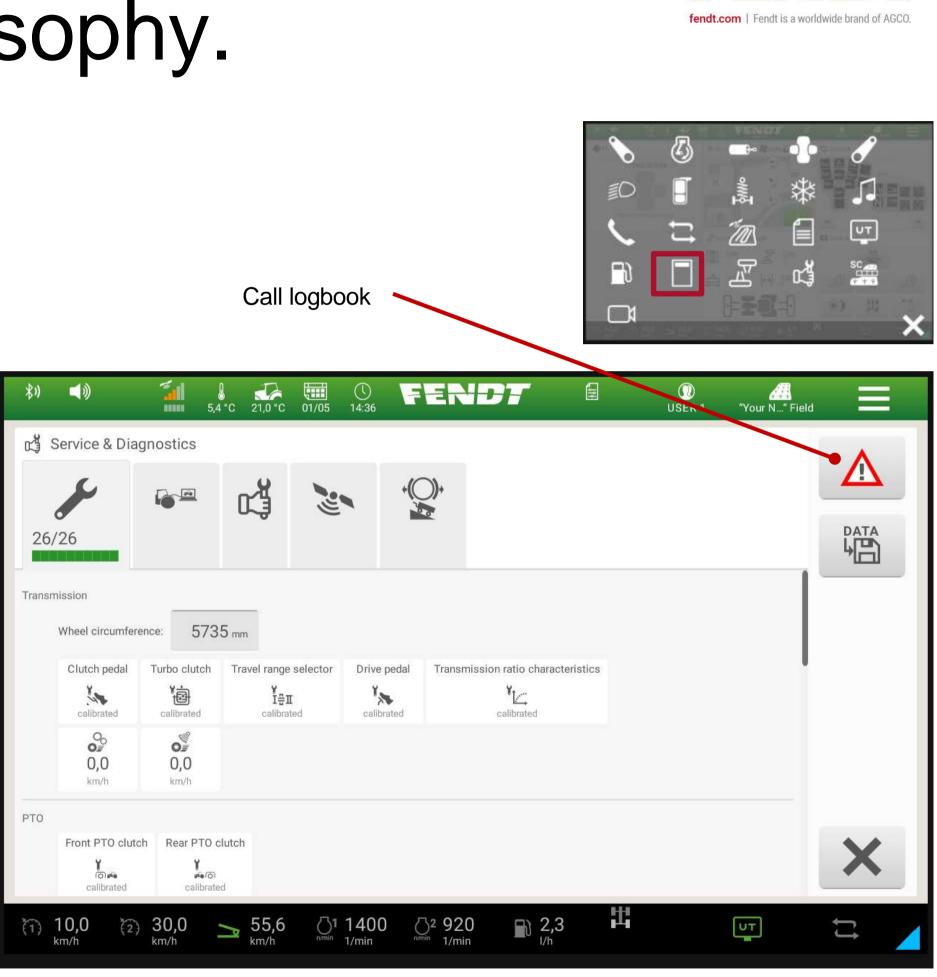
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(2) $30,0_{km/h} \rightarrow 55,6_{km/h} \frac{1400}{1/min}$	² 920 ¹ /min ² 2,2 ¹ /h	

FendtONE operating philosophy.

Service & Diagnosis

- Logbook with all error messages including description, e.g. display of:
 - Air filter contamination
 - hydraulic oil level
 - DPF loading condition
- Customer service info
- Review of the EC control position
- Switching the hydraulic trailer brake to depressurised

+ Display of error messages in plain text





FendtONE operating philosophy.

Camera

- Optional: 4 camera connections (2x digital, 2x analogue) in the roof
- Extremely high-resolution display of the transmission image in the terminal

+ Flexible camera selection through analogue and digital camera connections









Smart Farming.

Basics

FendtONE offboard

Example

Agronomy

Telemetry

Machine control





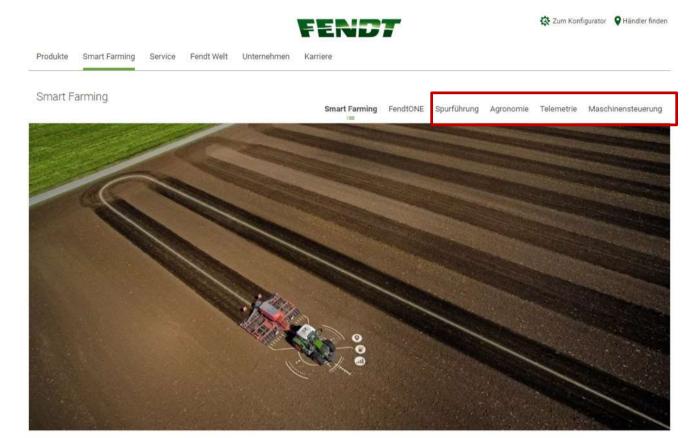
Basics - module logic and naming.

- Increasing number and complexity of smart farming solutions ٠
- Structuring since PL 789: ٠
- 4 modules:
- Track Example
- Agronomy
- Telemetry
- Machine control
- respective basic function included in the basic package (e.g. Fendt Guide in the track Example • module)
- Additional functions are optionally available (e.g. Fendt Contour Assistant in the track Example • module).
- New naming for electronic features at the new driver's workplace ۲

+ Easier orientation through clear and uniform structure across all channels

+ Possibility to distinguish current vs. new driver workstation and still the same module logic and similar logic in naming





Website

Ko	nfiguration	Angebot	Vertrag	Drucken	Administ	ration	
Fend	t 516 Vario Ge	en3 ① Typ änd	ern				
	Hydraulik	Kabine	Spu	rführung	Agronomie	Telemetrie	Maschinensteuerun
Co	nfigurato	or					

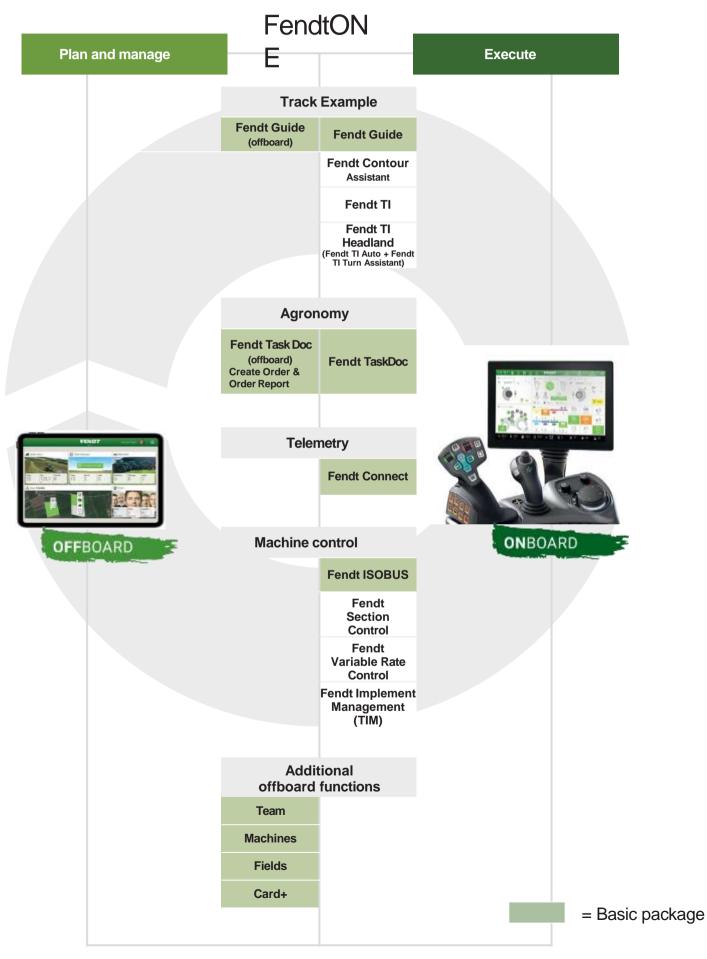
Basics.

How do FendtONE and Fendt Smart Farming fit together?

- FendtONE expands the previously known technology products that run onboard on the tractor to include planning and managing components offboard
- Example order management: offboard: Order planning onboard: Order is executed, actual values are recorded offboard: Order report

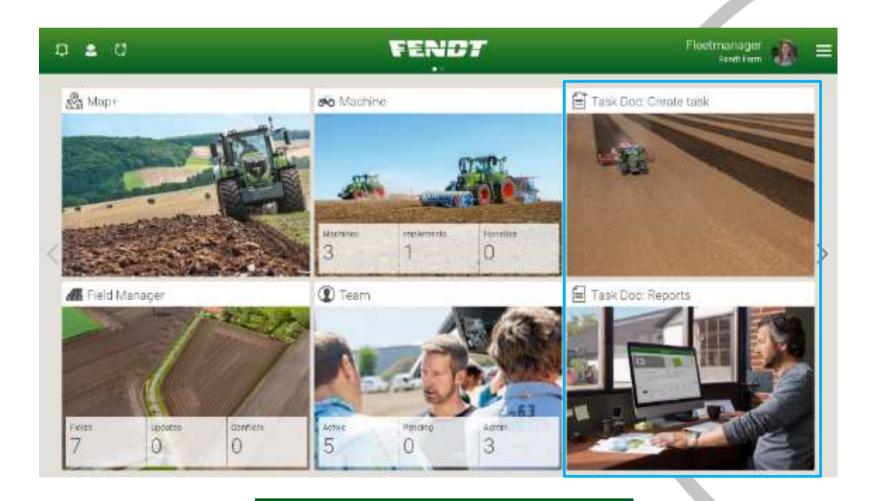
- + Easy entry into system-supported documentation
- + Full complement to Fendt: complementary functions
- + Reduction of complexity





Basics.

Example order management



Offboard





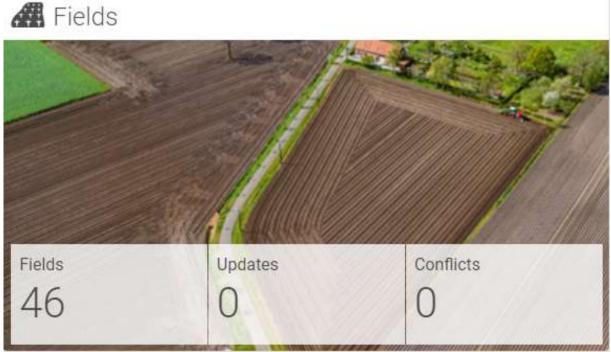
Onboard

FendtONE offboard - range of functions at launch.



Team Management

- Invite people to FendtONE offboard
- Granting roles and permissions



Fields Management

- Manage fields and track lines
- Import fields
- Field master data

Nachines



Machine management

- Add machines
- Machine information
- Interface to Fendt Connect
- Task Doc: Create task



Job planning

 Create and send orders







Card+

- Locate fields and tractors
- Points of interest
- Weather

Task Doc: Reports



- Order management
- Import orders
- Evaluate and visualise orders
- Quick report



FendtONE offboard - Availability.

Model / Type	Comment	Status
+	All Fendt tractors with FendtONE driver's workstation	
+	Combination of FendtONE model and tractor with 10.4" terminal	
+	Fendt tractors with 10.4" terminal	



FendtONE offboard - Availability.

Model / Type	Comment	Status
	Rogator600 MT1100 with VarioGuide MT900 IDEAL Fendt combine harvester In combination with FendtONE tractor	
	as a single machine	

FendtONE onboard is the ticket for FendtONE offboard





- -. . .

FendtONE of	ffboard - Requirem	ents.
Requirements		
Series/Model	All tractors with FendtONE workstation Ticket to FendtONE offboard	Self-propelled and tractors with existing workplace: Only in combination with FendtONE tractor
GNSS receiver	 Novatel Smart6L/Smart7L Trimble AG-382/AG-482 	 Novatel Smart6L/Smart7L Trimble AG382/AG482 Topcon AGI4 with VDO2/VD03
Software equipment	 E082: Agronomy basic package (Task Doc activation incl. 3-year server licence) 	 10.4" terminal with VarioDoc Pro activation Task Doc / VarioDoc Pro server licence Machine created on TaskDoc server
Hardware equipment	 Sim card with data tariff for wireless data transmission and R 	TK reception via Ntrip, if applicable.
Optional hardware equipment	E101: Telemetry Basic Package Required for machine localisation in Map+ and display of machi	ine info such as alarms and status information.
Required settings in the terminal	 The data transmission type must be set to "Mobile radio" in th ISOBUS and Task Controller must be activated. 	e connection settings.



Guidance Example. 1/10



Current driver's workplace

Track Example

VarioGuide

VarioGuide Standard NovAtel VarioGuide RTK NovAtel VarioGuide Standard Trimble VarioGuide RTK Trimble VarioGuide Contour Assistant VariotronicTI Fendt TI Headland VariotronicTI automatic VariotronicTI Turn Assistant



New driver's workplace

Track Example

Fendt Guide
Fendt Standard NovAtel
Fendt RTK NovAtel
Fendt Standard Trimble
Fendt RTK Trimble
Fendt Contour Assistant
Fendt TI
Fendt TI Headland
Fendt TI Car
Fendt TI Turn Assistant

= Basic package





Guidance Example. 2/10

Track Example basic package

Includes the tractor preparation for track Example and the Fendt Guide application.

Option

- Choice of receivers (NovAtel or Trimble)
- Fendt Contour Assistant
- Fendt TI Headland (Fendt TI Auto + Fendt TI Turn Assistant)

+ Relief for the driver: full concentration on the implement, easy control of the area already worked on.

+ Savings potential: higher area output through full utilisation of the working width, at the same time minimisation of undesired overlaps and thus reduction of operating resource expenditure
+ Sustainable land management: minimisation of soil compaction by reducing the number of passes and optimising turning operations.



Guidance Example. 3/10

Receiver selection with Fendt Guide

- 2 different GNSS receivers are possible:
- NovAtel Receiver
- Trimble receiver

Each business can individually select the receiver that best suits its requirements

- + Choice between two powerful receivers
- + Variety of correction data signals of different accuracy levels
- + Upgrades and conversions possible at any time, even with older machines
- + Installation of the receiver under the roof hatch: perfect protection against theft, weather and damage
- + Bridging mechanisms for signal failures

(NovAtel RTK-ASSIST & Trimble xFill (Premium))





NovAtel SMART7



Trimble AG-482

Guidance Example. 4/10





Standard Standard SBAS (EGNOS / WAAS) SBAS (EGNOS / WAAS) TerraStar-L (free of charge in the first year) RangePoint® RTX (free of charge in the first Option Option TerraStar-L (from the second year) RangePoint® RTX (from the second year) TerraStar-C Pro CenterPoint® RTX Image RTK (radio) RTK (NTRIP Mobile Radio) Advantage Image Standard		
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TerraStar-L (from the second year) RangePoint® RTX (from the second year) TerraStar-C Pro CenterPoint® RTX Image: CenterPoint® RTX Fast CenterPoint® RTX Fast RTK (radio) RTK (radio) RTK (NTRIP Mobile Radio) RTK (NTRIP Mobile Radio) Advantage S Inexpensive to purchase Advantage High accuracy in SBAS mode through GLIDE algorithm Optional use of xFill™ Premium: unlimited br Steadyline mechanism (fallback solution for RTK failures) Image: CenterPoint® RTX Failures	TerraStar-L (free of charge in the first year)	RangePoint® RTX (free of charge in the first year)
TerraStar-C Pro CenterPoint® RTX CenterPoint® RTX Fast CenterPoint® RTX Fast RTK (radio) RTK (radio) RTK (NTRIP Mobile Radio) RTK (NTRIP Mobile Radio) Advantage Advantage s Inexpensive to purchase High accuracy in SBAS mode through GLIDE algorithm Optional use of xFill™ Premium: unlimited br Steadyline mechanism (fallback solution for RTK failures) Interpretation of the steadyline mechanism (fallback solution for RTK failures)	Option	Option
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RTK (NTRIP Mobile Radio) RTK (NTRIP Mobile Radio) Advantage Advantage s Inexpensive to purchase High accuracy in SBAS mode through GLIDE algorithm Optional use of xFill™ Premium: unlimited br Steadyline mechanism (fallback solution for RTK failures) Image: Steadyline mechanism (fallback solution for RTK failures)		CenterPoint® RTX Fast
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Inexpensive to purchase Trimble xFill™ technology: bridging RTK outa High accuracy in SBAS mode through GLIDE algorithm Optional use of xFill™ Premium: unlimited br Steadyline mechanism (fallback solution for RTK failures) Image: Comparison of the second s		-
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	High accuracy in SBAS mode through GLIDE algorithm	Optional use of xFill™ Premium: unlimited bridging o
Optional use of RTK ASSIST™: bridging of RTK failures up to 20 minutes	Steadyline mechanism (fallback solution for RTK failures)	
	Optional use of RTK ASSIST™: bridging of RTK failures up to 20 minutes	





up to 20 minutes

of RTK failures

Guidance example. 5/10

Fendt Contour Assistant

- The Fendt Contour Assistant supplements the known contour line types with • the contour lines
 - Contour segments and
 - Single track
- Available as a software option for the Profi+ equipment variant ٠

- + Even more efficient and convenient field cultivation
- + Consistent use of lane Example also at the headland



Fendt Contour Assistant

Contour segments

=Combining track lines of the same type (e.g. all track lines of the main machining direction) into contour segments.

Single track

=Possibility of recording a track with free contour

Guidance Example. 6/10

Fendt Contour Assistant - Contour segments

- Three ways to create contour segment track lines:
 - Recording the contour segments: When circling the field, individual segments / track line types can be recorded
 - Automatic calculation based on existing field boundaries
 - Creation of the contour segments from existing track lines
- During subsequent cultivation, the tractor automatically selects the appropriate track line depending on the current driving direction and position No more manual changing of the track lines in the terminal necessary
- In addition, the field boundary can also be created on the basis of the contour segments if this does not yet exist

+ Time saving and convenience: Quick and easy recording of track lines, automatic creation contour segments based on the field boundary, consistent use of the steering system also a the headland

+ Data preservation and enhancement: possibility to convert track lines already recorded (for many years) into contour segments





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or	

Guidance example. 7/10

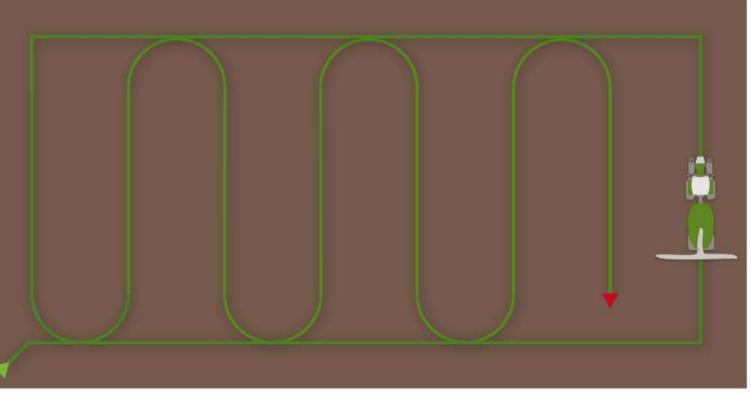
Fendt Contour Assistant - single track

- · Enables the recording of a track with a free contour
- During maintenance work (fertilisation/plant protection), the entire tramlines can be saved as a contour line.
- Tractor can drive complete field according to a single recorded track
- Perfect for use in harvesting and tending special crops planted without track Example

+ Predestined for crop protection, as the complete application can be picked up and the tractor then automatically drives off the track

- + Use of the Example system also for crops that have not been sown with it
- + Work facilitation and optimisation through automatic turning processes
- + full concentration on the plant stand
- + Consideration of obstacles





Guidance example. 8/10

Fendt TI Headland

- · Complete package for professional work on the headland
- Consists of the two functions
- Fendt TI Car -
- Fendt TI Turn Assistant -
- Fendt TI Headland is available for all FendtONE machines from PL795 onwards

Fendt TI Car =Storage and automatic triggering of a sequence of work steps at the headland

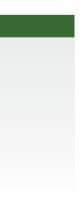
+ Full utilisation of the track Example system also at the headland



Fendt TI Headland

Fendt TI Turn Assistant

=automatic turning at the headland



Guidance example. 9/10

Fendt TI Headland - Fendt TI Auto

• In combination with Fendt Guide, individual sequences (e.g. lowering the rear hydraulics) are

(e.g. lowering the rear hydraulics) are automatically activated via the position on the headland determined by the Example system - manual activation is no longer necessary.

+ Driver relief through automatic triggering of the sequence of working steps, + Precision even at the headland: Distance to the field boundary always remains the same



Guidance Example. 10/10

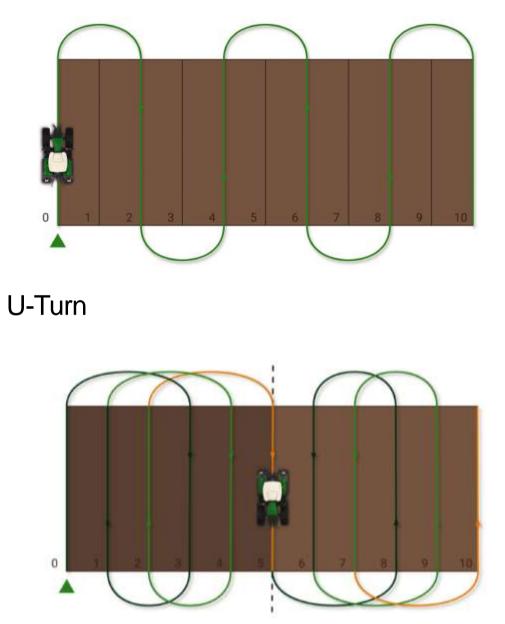
Fendt TI Headland - Fendt TI Turn Assistant

- Adds the automatic turning function to Fendt TI Auto
- Two different release modes:
- Manual mode: Manual initiation of the turning process Field boundary not mandatory
- Automatic mode: Based on a given boundary line with headland settings, all turning operations are calculated
- The automatic mode contains two different turning types:
- U-Turn
- Bed mode

+ Maximum driver relief

- + Maximum precision and efficiency
- + Savings in turning times and operating resources
- + Soil protection due to optimal turning processes





Bed mode

Agronomy. 1/4



Current driver's workplace

Agronomy

VarioDoc Pro

agrirouter

= Basic package



New driver's workplace

Agronomy

Fendt TaskDoc	
Fendt TaskDoc (offboard)	
agrirouter	







Agronomy. 2/4

Agronomy Basic Package

- The Agronomy Basic Package includes the order-related documentation system Fendt Task Doc and • the associated offboard component
- It includes a three-year Task Doc server licence, which is required for mobile data transmission • between FendtONE offboard (or a farm management system) and the tractor

Option

agrirouter •

- + Overview of tasks and assignments
- + Simplified documentation of orders and fieldwork
- + complete documentation of the field work
- + also prepared for future documentation efforts



Agronomy. 3/4

Fendt Task Doc (onboard)

- Fast and easy data transfer to the Farm Management Information System (FMIS) via mobile radio or USB •
- Simple and prompt documentation without intermediate steps •
- Transfer of all data relevant for documentation into the FMIS: •
 - Field data (Fendt Guide track lines, boundaries and obstacles) •
 - Field name + current fruit, address of the enterprise or customer •
 - Application name •
 - Plant protection product used + application rate ۲
 - Attachment used
- Existing field data from third-party providers can also be used via an FMIS •
- Fendt Task Doc is available as standard for Profi+ •

+ Simple intuitive operation through complete integration into the overall concept

+ High data security due to large storage space and data backup until data transfer





Adding a new job

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Adding the individual elements

Agronomy. 4/4

agrirouter

- Web-based data exchange platform that enables cross-manufacturer data transfer between machines and agricultural software
- Via an agrirouter account, agronomy data can be sent wirelessly from a land use planning index to the Fendt terminal and vice versa.
- Data transmission in standardised format
- Can also be used in conjunction with FendtONE:
- Through the agrirouter, other farm management systems can also be connected to FendtONE -> wireless data exchange between Fendt terminal and other FMIS*.

Prerequisite

• Agronomy Basic Package

+ barrier-free data transfer even with mixed machine parks*.

- + Transparency and data control: definition of data transmission routes
- + Data security: no data storage





*) Provided that the respective agricultural machinery or agricultural equipment manufacturer is a member of the agrirouter consortium. More info at <u>www.my-agrirouter.com</u>

Telemetry. 1/5



Current driver's workplace

Telemetry

Fendt Connect

Fendt Smart Connect





New driver's workplace

Telemetry

Fendt Connect

Fendt Smart Connect



Status 06/2021







Telemetry Basic Package

The telemetry basic package includes all components for using the telemetry solution Fendt Connect:

- ACM Box
- Licence for a five-year use of Fendt Connect
- Fendt Connect web application and app

The Fendt Smart Connect product can be ordered as an option (free of charge).

AGCO Connectivity Module ("ACM Box")

Prerequisite for the

- + Data transmission via mobile radio to Fendt Connect
- + Data transmission via WLAN to Fendt Smart Connect
- (optional, free of charge)





Telemetry. 3/5

Fendt Connect

- Fendt Connect is the central telemetry solution for Fendt machines •
- With Fendt Connect, machine data is recorded and evaluated so that farms and contractors • can monitor, analyse and optimise the condition and use of their machines.
- Thanks to mobile data transmission, current machine data can be called up from any location -٠ via farm PC, tablet or smartphone.

- + Increased efficiency through better logistics decisions
- + Reduction of input: Monitoring consumption to improve performance
- Maximising uptime through intelligent service appointment planning
- + Minimising downtime: Use of diagnostic support for decision-making
- + Flexibility: Retrieval of current machine data from anywhere



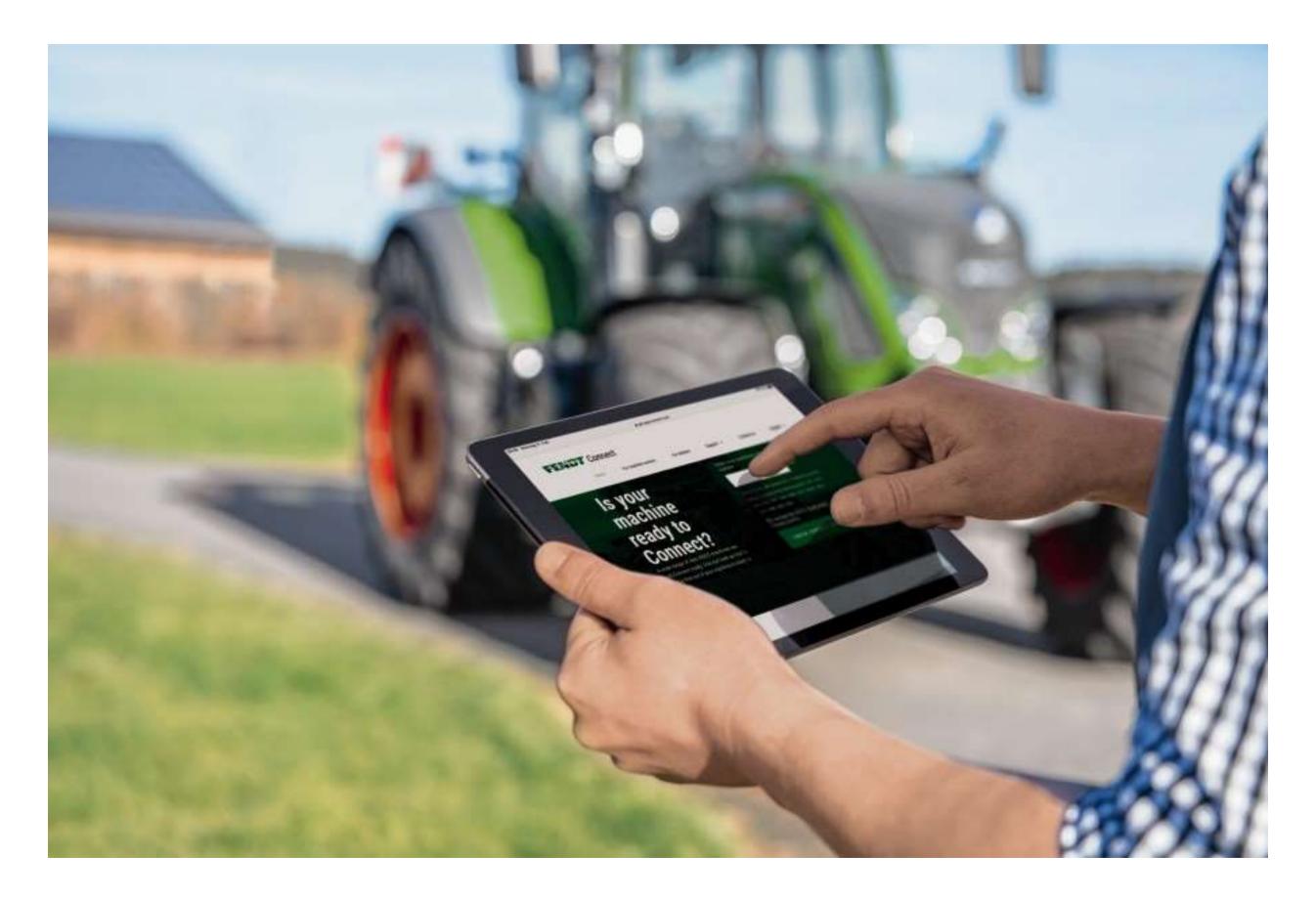


Telemetry. 4/5

Fendt Connect

What information does Fendt Connect provide?

- Position and travel paths of the machine
- Fuel consumption and AdBlue consumption
- Speed and working time
- Machine utilisation
- Error messages
- upcoming service intervals
- etc.





Telemetry. 5/5

Fendt Smart Connect

- Fendt Smart Connect can be booked as an option to the basic telemetry package (free of charge).
- With Fendt Smart Connect, machine parameters can be visualised on the iPad, e.g. engine speed, slip, fuel and AdBlue consumption, engine load, etc.
- In addition to mobile radio, the ACM Box is equipped with its own WLAN, which enables data transmission to the free Fendt Smart Connect App.
- With Fendt Smart Connect, the driver is provided with an additional display surface that can be individually adapted
- There is no permanent data storage

- + Free additional display space in the cabin
- + Intuitive operation through familiar hardware and operating logic
- + Full data control no permanent data storage









Machine control. 1/7



Current driver's workplace

Machine control

Variotronic unit control

SectionControl

VariableRateControl

Variotronic Implement Management (TIM)

= Basic package



New driver's workplace

Machine control

Fendt ISOBUS
Fendt Section Control
Fendt Variable Rate Control
Fendt Implement Management (TIM)





Machine control. 2/7

Machine control basic package

- Prerequisite for further ISOBUS functions ٠
- Simple and intuitive control of ISOBUS implements via standardised, cross-manufacturer interface Standard ISO 11783 ٠
- Tractor terminal and implement are connected by means of a socket at the rear •

Option

- Fendt Section Control (SC) •
- Fendt Variable Rate Control (VRC) ٠
- Fendt Implement Management (TIM) ٠
- Front unit control ٠
 - + Increasing the efficiency of the team
 - + Increasing the quality of work
 - + Maximum range of functions for controlling ISOBUS devices
 - + Simple operation of complex attachments
 - + Basis for site-specific processing





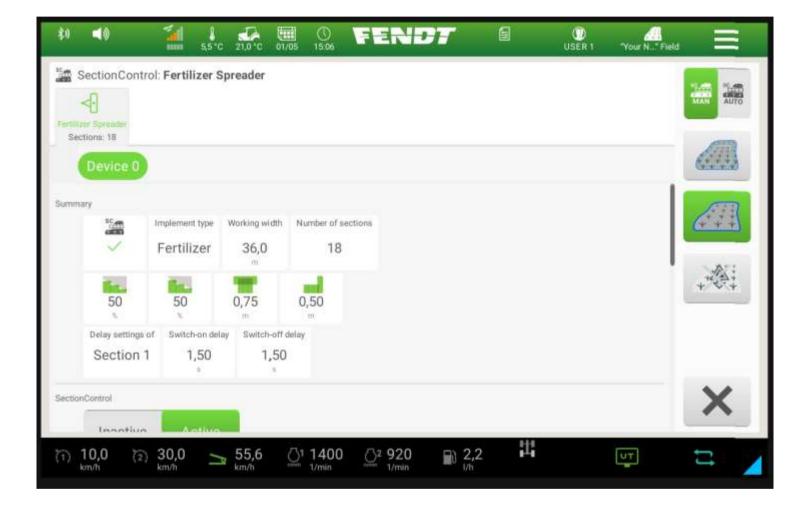
Machine control. 3/7

Fendt Section Control

- Section Control is the automatic section control for ISOBUS implements.
- This function is made possible by the Task Controller Section Control (TC-SC).
- The task controller documents where the area has already been processed and passes on the necessary switching commands to the machine's job computer, which switches the sections accordingly
- Headland mode: possibility to work the inside of the field first and then the headland
- Prerequisites: Fendt Guide, activation of TC-SC on tractor AND implement

- + Savings of up to 15 % on fertilisers, sprays, seeds, etc. by avoiding unwanted overlaps.
- + Reduction of disease, pest and weed pressure by avoiding overly dense stands and missing areas.
- + Relief for the driver, full concentration on monitoring the implement
- + Increased quality of work due to clean connections at the headland





Machine control. 4/7

New: Fendt Section Control with Multi Device Control ("Multi Boom") and 144 boom sections

- Function extension for Fendt Section Control
- Up to now, the automatic boom section control could only be used on one implement / one application unit ("boom").
- With Multi Device Control, part width sections for up to five application units can be switched independently of each other (useful e.g. for maize sowing with fertiliser tank).
- In addition, Section Control now supports up to 144 sections

+ Control of several units simultaneously





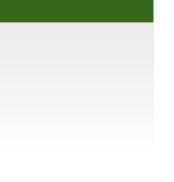
Machine control. 5/7

Fendt Variable Rate Control (VRC)

- Variable Rate Control (VRC) is the site-specific control of the application rate of inputs (seed, crop protection ٠ products or fertiliser).
- Basis: application map created in advance with the help of an FMIS ٠
- Application map is transferred to the machine as part of an order as an ISO-XML file via mobile radio or USB ٠ (Shape format also compatible, transferable only via USB)
- The TC-GEO task controller automatically adjusts the specified target application rates depending on the position. •
- After completion of the order, send back an order report with the actually applied quantities to the FMIS. ٠
- Prerequisites: Fendt Guide, Agronomy basic package, Fendt Section Control and activation for the ISOBUS standard TC-GEO for tractor AND implement.

- + Increasing efficiency: maximising yields per unit area while saving on inputs
- + Time saving: use of the order report as a basis for documentation
- + Flexibility: Support of ISO-XML as well as Shape files





Machine control. 6/7

New: Fendt Variable Rate Control (VRC) with Zone Control

- Function extension for Fendt Variable Rate Control
- Until now, the application rate could only be controlled over the entire working width
- With Zone Control, the application rate can now be regulated per part-width section (zone) (provided the implement is equipped accordingly)
- Support for up to 144 zones

- + Even more needs-based application of operating resources
- + Especially useful for larger working widths





Machine control. 7/7

Fendt Implement Management (TIM)

- With Tractor Implement Management (TIM), an implement can automatically control certain functions of the ٠ tractor, e.g. its forward speed or spool valves.
- This is possible as soon as both the tractor and the implement are equipped with the ISOBUS function TIM. ٠
- With the help of TIM, the implement optimises its own workload, the driver is relieved and the team works ٠ more productively.
- TIM is available from PL 795 for all FendtONE machines •

- + Increasing the efficiency of the team
- + Maximum driver relief





Equipment variants. 1/9

Engine

Reversible fan

Fuel pre-filter (heated)

Preheater unit (engine, transmission, hydraulic oil)

Exhaust brake

Transmission

VarioDrive with variable torque distribution between the front and rear axle

Vario TMS - Tractor Management System

Shuttle function, stop-and-go function

Cruise control

Acoustic signal when reversing

Guidance system

Guidance system basic package

Standard Trimble / NovAtel

RTK Trimble / NovAtel

TI Headland (TI Auto & TI Turn)

Contour Assistant



Power+	Profi	Profi+

Equipment variants. 2/9

Telemetry

Agronomy basic package

Telemetry basic package

Machine control

Machine control basic package (ISOBUS)

Section Control (SC)

Variable Rate Control (VRC)

Vario operation

Multi-function joystick with cruise control, engine speed memory, automatic modes, controls for hydraulics

3L joystick

Individual Operation Manager – flexible key assignment

Digital Dashboard

12" terminal with touchscreen and key control

Second 12" terminal in roof

Ready for automatic steering system

Electronic immobiliser

Without immobiliser



Power+	Profi	Profi+

Equipment variants. 3/9

Cab

Mechanical cab suspension Pneumatic cab suspension, 4-point with integral self-levelling Super Comfort Seat, air sprung Super comfort seat Evolution dynamic / CA Super Comfort Seat Evolution active DuMo leather/CA

Super Comfort Seat Evolution dynamic DuMo/CA

Super Comfort Seat Evolution dynamic DuMo leather / CA

Comfort instructor seat

Height and tilt-adjustable steering column

Heating with stepless fans

Integrated automatic climate control

Climate-controlled storage compartment

Front windscreen laminated safety glass, heated

Rear window heated

Roller shade rear

Roller shade right

300°-front windscreen wipers (with continuous windscreen)

Rear window wash/wipe



Power+	Profi	Profi+

Equipment variants. 4/9

Side window wash/wipe system right	
Electrically adjustable rear view mirror + wide-angle mirror	
Comfort mirror + clearance light	
Retractable comfort mirror + clearance light	
Auxiliary device holder	
Radio mounting kit with two stereo speakers	
Infotainment package	
Infotainment bundle + 4.1 sound system	
4 USB ports	
EC tachograph standard	
Fendt Reaction steering system	
Radar sensor	
Reverse drive control	
Self-cancelling indicators	
Electric battery disconnect switch	
Cool box	
Floor mat	



Power+	Profi	Profi+

Equipment variants. 5/9

Lighting

Halogen headlightsAuxiliary lights frontAuxiliary LED lights at frontWork lights A-pillar, rear mudguardWork lights LED A-pillar, rear mudguardRoof rear work lights / 2 pairsRoof rear LED work lights / 2 pairsLED headlamps with headlamp levellingLED rear lights3rd brake lightLED rotating beaconsAmbient lighting



Power+	Profi	Profi+

Equipment variants. 6/9

Chassis

FSC Fendt Stability Control

Single wheel suspension front axle

Steering brake

Pneumatic high-speed dual-circuit braking system 1 pedal

Pneumatic high-speed dual-circuit braking system 2 pedal

Electro-pneumatic handbrake

Electro-pneumatic handbrake (handbrake assist)

Automatic trailer steering axle lock

VarioGrip tyre pressure regulation system

4WD / differential locks

Smart 4-wheel drive

Rear / front differential with 100% disc locking and steering angle sensors



Power+	Profi	Profi+

Equipment variants. 7/9

Power lift

Tractive power and stepless mixed control

Clearance, position control

Single-action Comfort front power lift with position adjustment and external controls

Comfort front power lift da, with position control and relief control, external controls

No rear power lift

Electrohydraulic power lift da (EHR), with external controls

Electrohydraulic power lift sa (EHR), with external controls

Externally controlled rear power lift

Lower link tail arrester cat. 4

PT0

Rear: Flanged PTO 1000/1000E/1300 rpm

External controls for rear PTO

PTO comfort control, electrohydr. preselection



Power+	Profi	Profi+

Equipment variants. 8/9

Hydraulics

EHS valve actuation crossgate lever, multi-function joystick EHS valve actuation linear module External control for hydraulic control unit at rear Load sensing system with axial piston pump (165 l/min) Load sensing system with axial piston pump (220 l/min) Load sensing system with 2 axial piston pumps (220+210 l/min) 1st and 2nd EHS valve at rear 3rd EHS valve at rear 4th EHS valve at rear 5th EHS valve at rear 6th EHS valve at rear 1st front EHS valve Hydraulic power beyond connection Return rear Unpressurised rear return flow FFC flat-gasket rear hydraulic couplings Double connect-under-pressure lever couplings rear CUP coupling rear Bio hydraulic oil



Power+	Profi	Profi+

Equipment variants. 9/9

Additional equipment

Manual hitch
Automatic trailer hitch with remote control, rear
Ball coupling, height adjustable
Ball coupling, short, in the bottom hitch
Ball coupling, long, in the bottom hitch
Hitch
Drawbar
Piton-fix
Comfort ballast for front-end weight (not available with front power lift)
Front weights, various sizes
Wheel weights, rear wheels
Forced steering (one or two-sided)
Wide vehicle marker
Pivoting front wheel mudguard
ABS trailer sockets
Removable toolbox



Power+	Profi	Profi+

Technical specifications. 1/4

		1038 Vario	1042 Vario	1046 Vario	1050 Vario
Engine					
Rated power ECE R 120	kW/hp	291/396	320/435	350/476	380/517
Maximum power ECE R 120	kW/hp	291/396	320/435	350/476	380/517
Constant power ECE R 120 from 1500 rpm to 1700 rpm	kW/hp	291/396	320/435	350/476	380/517
No. of cylinders	number	6	6	6	б
Cylinder bore/stroke	mm	126/166	126/166	126/166	126/166
Cubic capacity	cm ³	12419	12419	12419	12419
Rated speed	rpm	1700	1700	1700	1700
Max. torque at 1100-1500 rpm	Nm	1910	2108	2305	2420
Torque rise	%	17.0	17.0	17.0	13.0
Fuel level	litres	740.0	740.0	740.0	740.0
AdBlue tank	litres	84.0	84.0	84.0	84.0
Oil change interval	working hours	1000	1000	1000	1000
Constant power range	rpm	1500 - 1700	1500 - 1700	1500 - 1700	1500 - 1700
Exhaust gas after-treatment		SCR Katalysator, DOC/ DPF, Abgasrückführung, VGT-Turbolader			



Technical specifications. 2/4

		1038 Vario	1042 Vario	1046 Vario	1050 Vario
Transmission and PTO					
Transmission type		TA 400	TA 400	TA 400	TA 400
Speed range forward	km/h	0,02-60	0,02-60	0,02-60	0,02-60
Speed range reverse	km/h	0,02-33	0,02-33	0,02-33	0,02-33
Top speed	km/h	60	60	60	60
Rear PTO option		1000/1000E/1300	1000/1000E/1300	1000/1000E/1300	1000/1000E/1300
Engine rpm at rated speed of rear PTO (1000 PTO)	rpm	1054	1054	1054	1054
Engine rpm at rated speed of rear PTO (1000E PTO)	rpm	1355	1355	1355	1355
Engine rpm at rated speed of rear PTO (1300 PTO)	rpm	1355	1355	1355	1355
Power lift and hydraulics					
Variable flow pump	l/min	165	165	165	165
Variable flow pump option 1	l/min	220	220	220	220
Variable flow pump option 2	l/min	220+210	220+210	220+210	220+210
Working pressure / control pressure	bar	200	200	200	200
Max. valves (front/centre/rear) Power+	number	1/0/6	1/0/6	1/0/6	1/0/6
Max. valves (front/centre/rear) Profi / Profi+	Number	1/0/6	1/0/6	1/0/6	1/0/6
Max. hydraulic oil filling	approx. litres	139	139	139	139
Max. available hydraulic oil volume	litres	100	100	100	100
Flow rate of control valves (all valves)	litres	140	140	140	140



Technical specifications. 3/4

		1038 Vario
Flow rate of control valves (valve 3)	l/min	140/170
Flow rate of control valves (valve 4)	l/min	140/170
Max. lift capacity of rear power lift	daN	12920
Max. lift capacity of front power lift	daN	5584
Electrical features		
Batteries	number	2
Battery power	Ah/V	180/12
Alternator	V/A	14/270
Max. transferable current ISOBUS socket	А	60+25
Tyres		
Front tyres (standard)		650/60R38
Standard tyres rear		750/70R44
1st option for front tyres		650/65R38
1st option for rear tyres		750/75R46
2nd option for front tyres		710/60R34
2nd option for rear tyres		900/60R42
3rd option for front tyres		710/60R38
3rd option for rear tyres		900/65R46



1042 Vario	1046 Vario	1050 Vario
140/170	140/170	140/170
140/170	140/170	140/170
12920	12920	12920
5584	5584	5584
2	2	2
180/12	180/12	180/12
14/270	14/270	14/270
60+25	60+25	60+25
650/65R38	650/65R38	650/65R38
750/75R46	750/75R46	750/75R46
710/60R38	710/60R38	710/60R38
900/65R46	900/65R46	900/65R46

Technical specifications. 4/4

1038 Vario

Dimensions

Front track width (standard tyres)	mm	2100
Rear track width (standard tyres)	mm	2000
Overall width with standard tyres	mm	2750
Overall length	mm	6350
Total height of driver's cab with standard tyres without Fendt Guide	mm	3470
Total height of driver's cab with standard tyres with Fendt Guide	mm	3506
Max. ground clearance	mm	600
Wheelbase	mm	3300
Small turning radius with standard tyres	m	6.97

Weights

Unladen weight (base tractor with cab - full tanks, without driver)	kg	14000.0
Max. permissible overall weight up to 40 km/h country-specific exception approval required	kg	23000.0
Max. permissible overall weight up to 50 km/h country-specific exception approval required	kg	21000.0
Max. permissible overall weight up to 60km/h	kg	18000.0
Max. trailer hitch load	kg	2000.0
Max. permissible front axle load	kg	10000.0
Max. permissible front axle load up to 8 km/h	kg	11000.0
Max. permissible rear axle load (country-specific)	kg	13000.0



1042 Vario	1046 Vario	1050 Vario
2100	2100	2100
2000	2000	2000
2750	2750	2750
6350	6350	6350
3570	3570	3570
3606	3606	3606
600	600	600
3300	3300	3300
7.33	7.33	7.33

14000.0	14000.0	14000.0
23000.0	23000.0	23000.0
21000.0	21000.0	21000.0
18000.0	18000.0	18000.0
2000.0	2000.0	2000.0
10000.0	10000.0	10000.0
11000.0	11000.0	11000.0
13000.0	13000.0	13000.0