

TTV SERIES



5D F/S/V TTV SERIES





**MAXIMUM TECHNOLOGY
AND ERGONOMICS IN A
SMALL SPACE.**



Whether in vineyards or orchards, in horticulture, landscaping, or in municipal use – maximum productivity and flexibility are the building blocks for economic success.

Never before have performance, productivity and comfort been united in a specialist tractor as perfectly as in the new 5D F/S/V TTV Series. DEUTZ-FAHR presents a new, innovative specialist tractor for the highest requirements: continuous TTV transmission, maximum driving and operating comfort, and a powerful hydraulic system ensure an unprecedented level of productivity.

The 5D F/S/V TTV Series can be used and configured individually and flexibly so suit the variety of tasks in orchards and vineyards. Individual equipment and hydraulic packages can be configured depending on the application and tasks. All have one thing in common – relieving the driver so they can focus fully on their work.

The new 5D – the new standard for specialist tractors.

Powerful design.

The rounded shape of the cabin prevents damage to crops and gives the new 5D a modern, functional design. It provides an attractive contrast to the powerful front section with the characteristic bonnet.

FARMotion engines.

The state-of-the-art 3-cylinder or 4-cylinder common rail engines were designed especially for agricultural use and feature a narrow shape, optimum torque and maximum power with low consumption.

Continuous TTV transmission.

The engine power is transformed continuously into productive work performance efficiently and reliably – without losses, fuel saving and with low noise generation. The top speed of 40 km/h is already reached at an economical 1,650 rpm.

Front axle suspension.

The exclusive front axle suspension with independent wheel suspension is unique in this tractor class. It ensures a high level of driving comfort and safety on any surface.



HIGH PERFORMANCE PLAYER.

Comfort cab.

The newly developed 4-post cab with level platform offers a spacious interior with compact external dimensions, ensuring optimum view of all attachment areas.

MaxCom operating armrest.

The newly developed multifunction MaxCom armrest brings the operating convenience of large tractors into this specialist tractor.

Integrated into the driver's seat and with a width of only 20 cm, it offers maximum operating convenience and ergonomics while facilitating intuitive operation.

Powerful hydraulics.

In addition to the load sensing pump with 100 l/min for the linkages and control valves, a separate hydraulic pump with 41 l/min supplies the steering system. Up to nine additional control units supply and control the hydraulic consuming units.

New dimensions.

The immensely compact 5DS has an exterior width of only 1,369 mm.





ENSURES OPTIMUM
TRANSMISSION OF FORCES
IN ANY POSITION.



Highlights:

- TTV Transmission allows for infinitely selectable speeds from 0-40 km/h for the most precise working speeds.
- Ground speed is selected completely independently of engine speed
- Manipulation of transmission to suit operator and conditions - Power/ECO2
- Two ground cruise speeds available

The advanced transmission technology ensures efficient distribution of forces on level ground and on inclines. This makes life much easier for the driver, while also lowering consumption – the transmission of the 5DS TTV combines the performance of a mechanical transmission with the comfort of a hydrostatic transmission. The engine power is transformed into productive performance – continuously, without losses and fuel-saving. The top speed of 40 km/h is already reached at an economical 1,650 rpm.

The operating convenience of the new TTV transmission is unrivalled. The driver only has to set the desired speed and the tractor accelerates continuously until the set speed has been reached. Engine and transmission

synchronise automatically and always operate at the most efficient engine speed based on the current load. The cruise control makes things even easier. The working speed can be saved and recalled at the press of a button.

The transmission is operated intuitively with the ergonomic joystick. All important functions are right at the driver's fingertips. The freely programmable buttons on the MaxCom joystick can be used for reversing the direction of driving. Drivers can select different transmission settings from "ECO2" (for minimum fuel consumption) to "Power" (for maximum performance).



A NEW LEVEL OF
INTUITIVE OPERATING
CONVENIENCE.



Highlights:

- Ergonomic armrest controls to maximize productivity and operator comfort
- All new joystick puts transmission and tractor controls in perfect reach
- Programmable headland sequence
- Assignable buttons on joystick

The workspace has also been redesigned, with the aim of achieving an optimal seating and working position for the driver. The newly developed MaxCom multifunction armrest is integrated into the driver's seat, featuring an ergonomic joystick and clearly structured function buttons. This means the driver can control all work with front, side or rear attachments with their arm resting comfortably.

During work with front attachments, the left hand remains on the steering wheel while the right hand operates the joystick. The joystick



Clearly colour-coded fingertip and rotary buttons for intuitive handling and operation.



The activation of the front axle suspension is easy to access in the MaxCom control panel.



The direction of driving can be reversed with the individually adjustable powershuttle lever to the left of the steering wheel.

combines the control for the front hydraulics and the front linkage, the control for the driving speed and various programmable functions, such as reversing the direction of driving, with three freely programmable buttons. For monitoring the rear attachments, the driver uses a second joystick which operates the rear hydraulic control devices and the programmed functions. Controls for engine, transmission and PTO are combined in the central area of the MaxCom armrest.



THE MOST SPACIOUS CAB
IN ITS CLASS: MORE
COMFORT, LESS STRESS.



Highlights:

- Flat operators platform
- New Infocentre Pro dash display
- Hydraulic Park brake located on dash
- Excellent 360° views

Spacious on the inside – compact on the outside. This was the development target for the new 4-post cab of the new 5D. The rounded frame profiles give the cab a modern look, provide a good view on all sides and are gentle on the vegetation when driving through narrow plant rows. Thanks to the compact and low-lying TTV transmission, the cab platform is completely level. This makes entering and exiting the cab much easier, offers more legroom and allows an optimum pedal and seating position.

A pedal on the steering column allows easy, comfortable height and angle adjustment of the steering wheel. The dashboard is integrated into the steering column and therefore follows the angle of the steering wheel. This allows drivers of any height optimum view of the operating information and operating elements. The InfoCenterPro with a high-resolution 5" monitor provides the driver with clearly structured information on all operating states of the tractor. Driving speed and



The dashboard provides the driver with digital and analogue information about the operating status of the tractor in real time.



The air conditioning controls are easy to access on a display in the roof of the cab.



The level cab floor provides more space, more legroom and an optimum pedal and seating position.

engine speed are shown on analogue dials. The driver receives all information in real time and can program operating sequences. The operating elements for activating the automatic functions, such as front axle suspension, Auto4WD and SDD fast steering as well as the lever for the hydraulic parking brake (HPB) and a mobile phone holder are located to the left and right of the InfoCenterPro. A driver's seat with air springs and a multimedia radio are available as additional options. This provides the driver with everything they need for completing their tasks comfortably and efficiently.

The generous glass area of the one-piece windscreen extends into the roof of the cab, offering an excellent view of all attachment areas. An opening front screen is available as an option. A special filter and pressure balancing system, which is integrated into the newly developed roof, means that the cab meets all standards (class IV) for protecting the driver, making personal protective equipment unnecessary.

INDUSTRY-LEADING IN HYDRAULIC PERFORMANCE.

The attachments used in vineyards and orchards require ever greater hydraulic power while their operation is becoming increasingly complex through combined work processes. This has prompted DEUTZ-FAHR to develop a completely new hydraulic system for the 5D.

Up to five additional electro-hydraulic control valves with double-action can be installed in the rear to meet the requirements in orchard and vineyard work as well as in other areas of application. Four additional double-action control valves are available at the front attachment point. Oil quantity and flow rate can be programmed individually for each control device so they can be recalled for routine tasks at any time. The electronically controlled rear linkage lifts an impressive 2,600 kg, while the optionally available front linkage can manage up to 1,500 kg.







DRIVING COMFORT
AND SAFETY ON
ANY SURFACE.



Highlights:

- Independent front wheel suspension for optimum comfort
- Anti-dive and Anti-roll stabilising system for enhanced safety during braking and cornering
- ASM - Auto management of FWD and Diff-Lock
- Oil immersed wet disc brakes for independent four-wheel braking

The 5D is available with the exclusive front axle suspension with independent 'wheel' suspension and active steering. The innovative suspension system always operates based on driving speed and steering angle. Sensors continuously supply the control unit with the relevant data – an ideal solution when working with foliage cutters or similar devices which work along the vine rows. Depending on the operating conditions, the electronic system controls the shock absorbers in real time, adapting stiffness and damping to the driving situation. This reduces vibrations much more efficiently than before, increasing comfort and safety for the driver.

As a standard, the 5D is equipped with an anti-dive roll stabilising system and an anti-roll side stabilising system. The roll stabilising system increases

safety during braking by counteracting the sudden lowering of the front axle and the resulting strong weight shift to the axle. This reduces the braking distance particularly during heavy braking. The side stabilising system adapts the spring stiffness to the steering angle and the driving speed. During cornering, the suspension is stiffened more on the outside than on the inside. This keeps the vehicle in balance and limits dangerous weaving motions. Automatic activation of the all-wheel drive and the 100% differential locks ensures best possible traction for all terrain situations. The automatically activated rear axle differential is available for added traction and stability. All-wheel braking is fitted as a standard.



LEADING MODERN
TECHNOLOGIES FOR
ALL REQUIREMENTS.



Highlights:

- New state of the art FARMotion engines
- Both 3 and 4-cylinder variants available
- "Right-Size" concept for compact engine with excessive space kept to a minimum

The powerful state-of-the-art FARMotion engines, which were specially designed for agricultural use, feature optimum torque and maximum power with exceptionally low consumption. Customers can choose between 3-cylinder or 4-cylinder common-rail turbo diesel engines with electronic control from 88 to 113 HP (65 to 83 kW) with turbocharger, charge air cooling, DOC exhaust gas treatment and visco fan.

Torque and power are adapted to the toughest tasks. In addition, the new engines are extremely efficient when it comes to diesel consumption. The optimised design allows a narrow bonnet and therefore an excellent view to the front as well as maximum agility. Thanks to state-of-the-art technology of the engines, they comply with all international emissions



The large redesigned cooling package, the improved air guiding and the PowerCore air filter support engine efficiency.



Exclusive DOC system meets all emissions standards in one compact system without AdBlue.



The fuel tank integrated into the front axle support can be filled even with the bonnet closed, while the auxiliary tank is located underneath the chassis.

standards (emissions level III B). Top performance for specialist tractors – the FARMotion already delivers its top power (115 or 113 HP) at 2,200 rpm. All engine components, such as radiator, fan, hoses

and filters, were designed to be as compact as possible and feature maximum ease of maintenance. The two-stage PowerCore air filter is a new feature. It can be equipped with a dust separator. The compact, lightweight aluminium radiator (engine, hydraulic oil, charge air) can be cleaned very quickly and easily. The fuel tank holds 85 litres, allowing even the powerful 5D to complete lengthy work tasks without stopping to refuel.

| Technical data | | 5D TTV | | | | |
|--|-------------|------------------|------------------|------------------|------------------|------------------|
| | | 5090D TTV | 5100D TTV | 5090.4D TTV | 5105D TTV | 5115D TTV |
| ENGINE | | | | | | |
| Manufacturer / model | | SDF/FARMotion | SDF/FARMotion | SDF/FARMotion | SDF/FARMotion | SDF/FARMotion |
| Emissions level | | Stage3B (Tier 4) | Stage3B (Tier 4) | Stage3B (Tier 4) | Stage3B (Tier 4) | Stage3B (Tier 4) |
| Cylinders / capacity | no./ccm | 3/2.887 | 3/2.887 | 4/3.849 | 4/3.849 | 4/3.849 |
| Turbo charge air cooling | | ● | ● | ● | ● | ● |
| Max. power (ECE R120) | kW / HP | 65 / 88 | 71 / 97 | 65 / 88 | 75 / 102 | 83 / 113 |
| Power at rated engine speed (ECE R 120) | kW / HP | 61.5 / 83 | 67 / 91 | 61.8 / 84 | 71.5 / 97 | 79 / 107 |
| Max. torque | Nm | 354 | 369 | 354 | 408 | 435 |
| Engine speed at max. torque | rpm | 1600 | 1600 | 1600 | 1600 | 1600 |
| Electronic engine control | | ● | ● | ● | ● | ● |
| Fuel tank | Litres | 85 | 85 | 85 | 85 | 85 |
| Fuel tank with front hydraulics and front PTO | Litres | 65 | 65 | 65 | 65 | 65 |
| CONTINUOUS TTV TRANSMISSION | | | | | | |
| Manufacturer / model | | SDF / T3500 CVT | SDF / T3500 CVT | SDF / T3500 CVT | SDF / T3500 CVT | SDF / T3500 CVT |
| Number of ranges | | 2 | 2 | 2 | 2 | 2 |
| Top speed | km/h at rpm | 40 at 1650 | 40 at 1650 | 40 at 1650 | 40 at 1650 | 40 at 1650 |
| PowerZero | | ● | ● | ● | ● | ● |
| Cruise control | no. | 2+2 | 2+2 | 2+2 | 2+2 | 2+2 |
| Driving concepts (auto / manual / PTO) | | ● | ● | ● | ● | ● |
| Eco / Power Control | | ● | ● | ● | ● | ● |
| Electro-hydraulic powershuttle | | ● | ● | ● | ● | ● |
| SenseClutch with 5 adjustable stages | | ● | ● | ● | ● | ● |
| REAR HYDRAULICS | | | | | | |
| Electro-hydraulic actuation | | ● | ● | ● | ● | ● |
| Speeds 540 / 540ECO / 1,000 | | ● | ● | ● | ● | ● |
| Speeds 540 / 540ECO and ground speed PTO | | ○ | ○ | ○ | ○ | ○ |
| FRONT HYDRAULICS | | | | | | |
| Electro-hydraulic actuation | | ● | ● | ● | ● | ● |
| Speed 1,000 | | ○ | ○ | ○ | ○ | ○ |
| AXELS AND BRAKING SYSTEM | | | | | | |
| Electro-hydraulic all-wheel activation | | ● | ● | ● | ● | ● |
| Electro-hydraulic differential lock activation | | ● | ● | ● | ● | ● |
| Automatic all-wheel activation | | ○ | ○ | ○ | ○ | ○ |
| All-wheel braking system | | ● | ● | ● | ● | ● |
| HPB (hydraulic parking brake) | | ● | ● | ● | ● | ● |
| Hydraulic trailer brake | | ○ | ○ | ○ | ○ | ○ |
| Servo steering with separate pump | Litres/min | 42 | 42 | 42 | 42 | 42 |
| SDD (fast steering) | | ○ | ○ | ○ | ○ | ○ |
| Steering angle | | 60° | 60° | 60° | 60° | 60° |
| FRONT AXLE SUSPENSION | | | | | | |
| Adaptive damping / active self levelling | | ● | ● | ● | ● | ● |
| Anti-dive / anti-roll | | ● | ● | ● | ● | ● |
| DTC (differential traction control) | | ● | ● | ● | ● | ● |
| LIFTING GEAR | | | | | | |
| EHR (rear) | | ● | ● | ● | ● | ● |
| Lifting capacity (rear) | kg | 2.600 | 2.600 | 2.600 | 2.600 | 2.600 |
| Front hydraulics | | ○ | ○ | ○ | ○ | ○ |
| Lifting capacity (front) | kg | 1500 | 1500 | 1500 | 1500 | 1500 |
| HYDRAULIC SYSTEM | | | | | | |
| Load sensing pump (standard) | Litres/min | 100 | 100 | 100 | 100 | 100 |
| Hydraulic connections front/side, incl. free return (optional) | min-max | 13 | 13 | 13 | 13 | 13 |
| Electrical connections | no. | 2 | 2 | 2 | 2 | 2 |
| Electronic proportional joystick for rear hydraulics | | ● | ● | ● | ● | ● |
| Auxiliary control devices rear (standard) | no. | 4 (8) | 4 (8) | 4 (8) | 4 (8) | 4 (8) |
| Auxiliary control devices rear (optional extra) | no. | 5 (10) | 5 (10) | 5 (10) | 5 (10) | 5 (10) |

●: Standard ○: Optional

Dimensions may vary by +/- 10 mm. The technical data and figures provided are guide values only. DEUTZ-FAHR always strives to offer products that meet customer requirements and therefore reserves the right to make updates at any time and without prior notice.

Technical data

5D TTV

| | 5090D TTV | 5100D TTV | 5090.4D TTV | 5105D TTV | 5115D TTV |
|--|-----------|-----------|-------------|-----------|-----------|
| CAB | | | | | |
| 4-post cab with level platform | ● | ● | ● | ● | ● |
| Cab bearing on Hydro-Silent blocks | ● | ● | ● | ● | ● |
| infoCentre ^{Pro} (5" display) | ● | ● | ● | ● | ● |
| Comfortip (headland management) | ● | ● | ● | ● | ● |
| Steering column height and angle adjustable with pedal | ● | ● | ● | ● | ● |
| Driver's seat with air springs | ● | ● | ● | ● | ● |
| MaxCom multifunction control armrest | ● | ● | ● | ● | ● |
| Air conditioning | ● | ● | ● | ● | ● |
| Slim LED daytime running lights and indicators | ● | ● | ● | ● | ● |
| Halogen work lights | ● | ● | ● | ● | ● |
| Gen. 4 LED work lights | ○ | ○ | ○ | ○ | ○ |
| Cat. 4 filter system | ○ | ○ | ○ | ○ | ○ |




●: Standard ○: Optional

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Dealer

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