5090 // 5095 // 5100 // 5105 // 5115 DF PLATFORM **STAGE V** 



PLATFOR

# // SERIES 5 DF PLATF

#### CLEAN POWER FOR TOMORROW'S AGRICULTURE

The FARMotion 35 and 45 engines optimize performance in DEUTZ-FAHR 5 DF Platform tractors, maintaining compactness while meeting Stage V emissions standards. Also the latest models maintain the same overall external dimensions that made the previous generation such a hit among wine and fruit farmers around the world. With increased power and torque across all models (91 to 116 HP), farmers can choose between 3 or 4-cylinder configurations. These engines can also run on alternative fuels like HVO, enhancing environmental sustainability by reducing CO2 emissions.

#### SAFETY AND AGILITY AT TOP LEVELS

The 5 DF Platform ensures top-level safety and agility with a strong standard front axle featuring front brakes for true 4-wheel braking. An optional independent front axle suspension reduces terrain harshness, ensuring impeccable dynamic behavior and the exact precision necessary when working under the canopy. Electrohydraulically engaged 4WD and differential locks, along with an automatic 4WD function, enhance maneuverability and reduce tyre wear. Additional agility is provided by the SDD function, which halves the steering wheel turns.

### 5 DF PLATFORM.

### TAILORED INNOVATION FOR YOUR AGRICULTURAL NEEDS.



# ORM





#### FULLY CUSTOMISABLE HYDRAULICS

DEUTZ-FAHR 5 DF Platform addresses the increasing demand for hydraulic flow and couplers in vineyards and orchards. The highly configurable hydraulic system caters to diverse needs, ranging from 2 mechanical rear spool valves (4 ways) to 10 rear and 4 mid-mounted ways. Additionally, an electronic rear lift with a vibration damping system enhances comfort during high-speed transfers with mounted implements.

#### **COMFORT WITHOUT COMPROMISE**

Thanks to their low profile, 5 DF Platform tractors nimbly enter in all orchards, citrus growing or vineyards. Two platform height options accommodate various tyre sizes while maintaining a minimal mudguard height of 1.18 m. The driving area prioritises comfort, featuring a suspended platform on 4 Hydro Silent-Blocks. Optionally, a pneumatic suspension for the driver seat is available. The ergonomic side console groups main controls, color-coded for easy identification.

#### STATE-OF-ART TRANSMISSIONS

The 5 DF Platform provides a diverse range of transmission layouts, including a fully mechanical 12+12 gearbox and the advanced 45+45 transmission with HML 3-step Powershift. It features PowerShuttle with SenseClutch, Stop&Go, and ComfortClutch functions. Despite all versions being capable of reaching a top speed of 40 km/h, five speed variants allow for optimal fuel economy during road transport or inter-site travel at lower engine speeds.



The 5 DF Platform range offers five models (91 to 116 HP) with 3 or 4-cylinder engines, two wheelbases, and a variety of transmission, hydraulics, and accessory options. Integration of powerful engines like FARMotion 35 and 45, coupled with high-performance transmissions, ensures top-class performance and fuel efficiency. These tractors, suitable for kiwi and table grape vineyards, feature low mudguard heights, a tapered bonnet, and exceptional agility. Despite lacking a cab, comfort remains a priority with features like a 4 Hydro Silent-Block suspended platform, pneumatic suspension for the driver seat, independent front axle suspension, and an electronic rear lift with a vibration damping system.

### // ENGINE

### Higher torque and higher power to maximise your output.

The beating heart of the new 5 DF Platform models are the multiple award-winning FARMotion 35 and 45 engines, that are now not only Stage V compliant but also more powerful and fuel efficient than before. On top of this, scheduled service intervals have been extended to 600 hours. FARMotion 35 and 45 can be fuelled up with alternative fuels, being officially certified for run with HVO (Hydrotreated Vegetable Oil). 5 DF Platform tractors are therefore ready to tackle the challenges of the agriculture of tomorrow, such as increasing environmental sustainability through CO2 reduction.

The new Series 5 DF Platform models are powered by the latest evolution of the FARMotion 35 and FARMotion 45 engines, powerplants developed with the best technological solutions currently existing for diesel engines and conceived specifically to cater for the needs of agricultural applications. Offered as 3 and 4 cylinder versions, the engines of the new family are extremely compact in size, even offering the highest displacement in the market, contributing to the excellent forward visibility and generous maximum steering angle of these tractors. Together, features such as the innovative geometry of the combustion chamber, fully electronically managed Common Rail injection (with injection pressures up to 2000 bar), the viscostatic fan and a PowerCore air filter form an impressive package of high-tech solutions allowing the new 5 DF Platform models to minimise fuel consumption and maximise productivity. The innovative technology introduced to attain compliance with Stage V emissions standards has been wisely integrated in the vehicle by DEUTZ-FAHR. The new 5 DF Platform Stage V models keep the same overall best in class dimensions of the predecessors, therefore the Stage V upgrade did not impact on visibility and manoeuvrability, that are crucial requisites of a specialised tractor.

#### HIGHLIGHTS

- > Improved efficiency and more torque and power for all models
- > Viscostatic fan for reduced power loss
- > Scheduled oil change intervals extended to 600 hours
- > Automatic hydraulic valve adjustment for minimised maintenance
- > Extended operating range due to lower fuel consumption and large fuel tanks
- > Easy starting even in very cold conditions
- > HVO certified



### // TRANSMISSION AND PTO

### Transmissions and PTOs tailored for the needs of your job.

The transmissions equipping the new DEUTZ-FAHR Series 5 DF Platform combine supreme efficiency with extraordinary reliability. With a 4-speed main gearbox, 3 ranges and a synchronised reverse shuttle (for a total of 12+12 speeds), even the base configuration allows for a top speed of 40 km/h. Alongside this is a variant with a 5-speed main gearbox and 3 ranges, for 15+15 speeds in total, which allows for a top speed of 40 km/h attained at an economical engine speed of around 1800 rpm (with 28" rear tyres). Both configurations can also be equipped with an underdrive gear, engaged from a control integrated in the ergonomically placed reverse shuttle lever under the steering wheel, which doubles the number of forward ratios available, for a total of 24+12 or 30+15 speeds. For even greater versatility, 5 DF Platform models can be equipped even with a 2-stage Powershift transmission (Hi-Lo) or with a 3-stage (HML) Powershift, to offer 45 speeds in total in both drive directions. In this configuration, the tractor can work at ground speeds as low as 203 m/h at maximum engine speed in the lowest ratio available, at the same time reaching 40 kph ECO – with reduced engine rpm.



> Fully integrated front lift and front PTO



Stop&Go function easily engaged via a pushbutton.



> Mechanical shuttle with ergonomic lever on steering column.

> PowerShuttle with SenseClutch 5-levels adjustment.

- > 7 choices of transmission from 12+12 up to 45+45
- > Mechanical shuttle or PowerShuttle availability
- > Stop&Go, ComfortClutch and SenseClutch functions always available with PowerShuttle
  - Up to 3 PTO speeds, Auto PTO function as standard on cab models
- > Ground Speed PTO available

5 DF Platform are also available with a hydraulic reverse shuttle with the SenseClutch function, which offers 5 user-selectable responsiveness settings. This latter variant also includes the Stop&Go function, which lets the operator stop and hold the tractor and set off using the brake pedals only, and the ComfortClutch function, for shifting gear by simply pressing a button on the gear lever without using the clutch pedal. The PTO also offers extensive possibilities for configuration. All tractors come as standard with 540 rpm and 540ECO speed modes, selectable either with an external control or a practical control on left-hand console. To extend the capabilities of the tractor, 1000 rpm or groundspeed modes and front 1000 PTO are also available in addition to the standard configuration. Different PTO output shafts are also available, with a choice of conventional fixed shafts or versatile splined removable output stub shafts, while practical controls replicated on the rear mudguards are available to allow control from outside the tractor.



### // HYDRAULICS AND LIFTS

Incredibly configurable systems with all the power and precision you need.

The 5 DF Platform models are equipped with a robust hydraulic system that offers exceptional configurability. All configurations include a dedicated hydraulic circuit with an independent pump for the steering system. This ensures smooth steering action even at idle speed or while simultaneously operating the lift and/ or distributors. The pumps feeding the lifts and distributors come in different flow rates, from 48, 56, and up to 68 l/min. These tractors can feature up to 10 rear hydraulic ways, complete with a hydraulic flow regulator and free return. Optionally, 5 DF models can be equipped with up to 4 couplers in the mid mounted position, duplicating the rear couplers, plus an additional free return. Standard features include a precise rear lift with mechanical control, while an electronic control is available as an option. The electronic rear lift allows duplicating up/down buttons on the rear fender(s) and integrates a vibration damping function, reducing oscillations caused by mounted implements. This significantly enhances safety and comfort during road travel. Regardless of the configuration, the rear lift has a maximum capacity of 3940 kg. An optional front lift with a 1500 kg capacity is also available. Integrated into the front part of the tractor, the front lift minimises bulkiness, further enhancing the agility of these tractors.



> Up to 10 rear hydraulic couplers.

> Precise mechanical rear lift and spool valve controls.

- Powerful rear lift with up to 3940 kg capacity
  Electronic rear lift with vibration damping system available as option
  Up to 68 l/min hydraulic pump for spool valves and rear lift
  Independent hydraulic system for steering circuit
  Rear spool valves with flow regulator
  Up to 10 rear ways and 1 free return
  Up to 4 mid-mounted ways and 1 free return



> Comfortable electronic rear lift and spool valve controls.

<sup>&</sup>gt; Flow divider ergonomically placed for maximum adjustability.

### // AXLES AND BRAKES

### Class-beating technology for increased productivity and safety.

As an alternative to the conventional swing front axle, the new 5 DF Platform tractors are also available with an exclusive adaptive hydro-pneumatic independent front suspension system, which ensures optimised damping action in relation to vehicle speed, steering angle and roll angle for unbeatable comfort and stability. The innovative active front suspension control software also includes Anti-Dive and Anti-Roll functions as standard, which significantly improve both the safety and productivity. Anti-Dive counters sudden front suspension compression under braking to shorten stopping distances, while Anti-Roll automatically adjusts damper stiffness when cornering, stiffening the suspension of the outer wheel to keep the vehicle correctly balanced, improving stability and grip and drastically reducing roll to maximise comfort and safety. The electronic control unit also manages the DTC, an innovative electronically controlled



- > Independent front axle suspension available as option
- > 4-wet disc brake
- > 100% front differential lock
- > SDD available
- > Auto 4WD available

differential which maximises traction by automatically transferring torque to the wheel with the most grip. Also standard are true all-wheel braking, with wet disc brakes on all four wheels, and electro-hydraulically engaged differential locks and 4WD are standard, while automated management of the 4WD system is offered as an option. For even greater operator comfort and maneuverability, 5 DF Platform tractors are available with the optional SDD (Steering Double Displacement) system, which significantly cuts the time and effort necessary for headland turn manoeuvres. Simply pressing the relative button halves the number of steering wheel turns needed to turn the tractor around.



- Maximum agility ensured by generous steering angle in combination with the Auto 4WD function.
- > Auto 4WD function automatically engage and disengage 4WD according to steering angle.



- > Electronically controlled independent front axle suspension for better comfort and traction.
- > SDD function halves the number of steering wheel turns required for lock-to-lock steering.

### // DRIVING POSITION

### More innovation, less vibration.

Thanks to their low profile, 5 DF Platform tractors features extraordinary agility when working under tree branches or in low-height spaces. Even without cab, 5 DF Platform models offer to the operators outstanding levels of comfort: the revised driver zone layout is in line with latest ergonomics standards while the platform is isolated from the transmission and suspended by 4 innovative Hydro SilentBlocks. As an option, a pneumatic driver seat is even available in order to further decrease the vibrations to the driver. As standard equipment, a practical smartphone holder with 2 USB charging ports is available as well as the telescopic steering column which allows the driver configuring the height of steering wheel according to its preferences. To fulfil every need, the new 5 DF models are offered with two



> Height-adjustable steering column.

> 2-post foldable safety frame.



> Driver seat with pneumatic suspension for better comfort.

> External pushbuttons for the rear lift, rear PTO, and side stabilizers simplify coupling maneuvers.

- > Platform suspended on 4 Hydro Silent-Blocks
- > Foldable 2-post safety frame
- > Platform available in two different mudguard heights
- > Pneumatic seat available as option> Smartphone holder and 2 USB plugs
- > LED driving and working lights

different platform heights. The high platform is designed in order to accommodate big rear tyres up to 28", while the low platform is designed keeping in mind the need to have a low tractor as possible for working in olive trees cultivations or citrus orchards. The low platform, in combination with the smallest tyre size, allow the tractors of Series 5 DF to have a mudguard height of just 1.18 m. As per DEUTZ-FAHR tradition, even on the 5 DF Platform models, controls are arranged following the colour coding scheme, for an easy and fast identification. When working by night, 5 DF Platform lights up the orchards thanks to a pack of LED lights which is available as option.



# // **@SDF** Smart

The new tractors of the Series 5 DF Platform can be equipped with various products and services to simplify work and increase productivity.

# Farming Solutions



### // AGRICULTURE 4.0: FULLY CONNECTED

### State of the art technology for total connectivity.

Optimise operations. Increase efficiency. Linking machines, to the office and to any other external sources simplifies various work processes. SDF Smart Farming Solutions offer practical solutions for managing key data and staying connected at all times. The user is completely free to make his own choices and decisions at any time, while all data remain the sole property of the user.

#### **SDF** Fleet Management

With the new SDF Fleet Management application, SDF offers customisable solutions for the real-time management of key data concerning the operation of the machine. Our clients benefit significantly from being in total control of their machines and from the ability to manage a host of vital data, such as tracking data relative to activities. The SDF Fleet Management suite of applications is the centralised control interface for analysing telemetry data from DEUTZ-FAHR machines. Tractor data is transmitted in real time over a mobile internet connection to the application, which allows users to analyse, monitor and even optimise the use of their machinery.

The "map" view shows the location and status of machines or an entire fleet, and can also display historical data. On request, you can set up virtual fences to receive warnings if a machine leaves the area. Error messages may be forwarded to the technical support team of the dealership, and used to predict failure and reduce unnecessary machine down time.

> Connect the 5 DF Platform models with your dealer for fast and comfortable support.

 SDF Fleet Management gives access to machine relevant data at all time.



			SER	IES 5 DF PLATFO	ORM				
TECHNICAL DATA		90 95 100 105 115							
ENGINE									
Model		FARMotion 35	FARMotion 45	FARMotion 35	FARMotion 45	FARMotion 4			
Emission level				Stage V					
Aspiration				Turbo Intercooler					
Injection @ pressure	Туре		(	Common Rail @ 2000 b	ar				
Cylinder/Displacement	nº/cc	3/2887	4/3849	3/2887	4/3	849			
Max. power (ECE R120)	kW/HP	67/91	70/95	75/102	78/106	85/116			
Power at rated engine speed (ECE R120)	kW/HP	63.5/86	66.4/90	71.1/97	74/101	80.6/110			
Max torque @ 1400 rpm	Nm	372	389	417	433	472			
Fuel tank capacity	l	82							
AdBlue tank capacity	l			13					
TRANSMISSION - MECHANICAL SHUTTLE									
Number of speeds - 4 gears transmission			12+12 or	r 24+12 (with mechanica	al splitter)				
Max. speed - 4 gears transmission	km/h			40					
Number of speeds - 5 gears transmission		15+15 (	or 30+15 (with mechar	nical splitter) or 30+30 (	with Hi-Lo 2-Powershif	t steps)			
Max. speed - 5 gears transmission	km/h			40 ECO*					
TRANSMISSION - POWERSHUTTLE									
Number of speeds - 5 gears transmission		15+15 or 3	30+30 (with Hi-Lo 2-P	owershift steps) or 45+4	45 (with HML 3-Powers	hift steps)			
Max. speed - 5 gears transmission	km/h			40 ECO*					
ОТО									
PTO speeds		540/540ECO or 540/540ECO/1000							
Groundspeed PTO				0					
Front PTO				0					
LIFT									
Mechanical rear lift		•							
Electronic rear lift		0							
Rear lift capacity (STD/OPT)	kg	3130/3940							
Hydraulic right tie rod and stabilisers		0							
Front lift (1500 kg)				0					
HYDRAULICS	14 .			40/56					
Open centre hydraulic system (STD/OPT)	l/min	48/56							
Open centre hydraulic system with double pump (OPT)	l/min	68							
Flow divider for simultaneous use of rear lift and spool valves	9	0							
Rear hydraulic ways (STD/OPT)	n°	4/6/10							
Flow regulator		0							
Rear free return	-0.4			-					
Mid-mounted hydraulic ways - duplicated from rear (OPT)	n° of ways			4					
Mid-mounted free return BRAKES				•					
				•					
4 wheel braking Hydraulic trailer brake				0					
FRONT AXLE				0					
Electrohydraulic engagement for 4WD and Diff.Lock				•					
Independent steering pump				•					
INDEPENDENT FRONT AXLE SUSPENSION (OPT)									
Adaptive-Damping, Active Self-Levelling functions				•					
Adaptive-Damping, Active Self-Leveling functions Anti-Dive, Anti-Roll functions		•							
Differential Traction Control (DTC)				•					
DRIVING POSITION				· ·					
Welded platform with tunnel				•					
2-post foldable safety frame				0					
Suspended on Hydro Silent-Block		•							
Driver seat with mechanical suspension		•							
Driver seat with pneumatic suspension				0					
				•					
Height adjustment of steering column				-					
Height adjustment of steering column Smartohone holder with 2 USB chargers									
Height adjustment of steering column Smartphone holder with 2 USB chargers LED driving and working lights				•					

• = standard  $\bigcirc$  = option - = not available



TECHNICAL DATA		SERIES 5 DF PLATFORM									
		90	95	100	105	115					
DIMENSIONS AND WEIGHTS											
With front tyre	Size	240/70 R16									
With rear tyre	Size	380/70 R20									
Wheelbase (A)	mm	2044	2174	2044	2174						
Max. length (B)	mm	3825	3955	3825	3955						
Total height - ROPS (C)	mm	2225	2355	2225	2355						
Height at bonnet (D)	mm	1351									
Height at mudguards (E)		1180									
Width (F)	mm	1540									
Weight	kg	2590	2650	2590	26	50					
Total admissible load	kg			5000							

\*according to rear tyres size.

Technical data and figures are only provided for guidance. DEUTZ-FAHR is committed to continuously adapting its products to your requirements and therefore reserves the right to make updates without prior notice.





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<sup>To</sup> discover more please contact your dealer or visit deutz-fahr. com