

# AGROTRON K 90 • 100 • 110 • 120



EVOLVING AGRICULTURE.



# AGROTRON K: A GIANT IN





# N DWARF'S CLOTHING.



**Arable and grass farms make high demands on a modern tractor – essential attributes are: versatility, flexibility, manoeuvrability, compactness and last but not least specification with optional equipment to meet special requirements. At the same time comfort and maximum ergonomics should not be ignored. The Agrotron K meets these demands with its unique design that provides an excellent view of all mounted implements and features a complete range of standard equipment.**

#### **Unique cab concept**

The cab of the Agrotron K ensures that the driver has an excellent all-round view and a great deal of freedom of movement for such a compact tractor. Ergonomic controls and an excellent cab atmosphere guarantee relaxed and productive working conditions.

#### **Economical and powerful engines**

The latest generation of economical, powerful and electronically controlled DEUTZ engines with wide torque and constant power ranges ensure flexible performance with minimum fuel consumption under all load conditions.

#### **Perfectly coordinated transmission**

Reliable, easy-shift 3-stage powershift transmission with electro-hydraulic "comfort clutch" and PowerShuttle provide practical close ratios for all jobs. With the optional "Profiline" package the Agrotron K is also equipped with an automatic powershift (APS) as well as the "PowerComS" operating lever and the "Comfortip" function management feature.

#### **Standard feature 4-stage PTO**

Four standard speeds – 540, 540 E, 1000, 1000 E – enhance utility and productivity while lowering fuel consumption.

All in all the Agrotron K is the culmination of the rich experience of more than 75 years of major technological leadership in the agricultural machinery industry. The concept, the styling and the cab of the Agrotron K are unmistakable. The Agrotron K is the ideal all-round tractor for all agricultural businesses. It ensures that, as its owner, you enjoy productivity, value stability and economic success.



# WE WANT YOU TO BE RELAXED – AND PRODUCTIVE



The large and spacious cab of the Agrotion K is easy to enter via its anti-slip steps.



The front and rear windscreens can be opened wide. The cab also features a tilting transparent glass roof hatch that is ideal for working with front loaders.

## ADVANTAGES

- ▶ Large-area cab glazing with 6.1 m<sup>2</sup> for a panoramic view of 330°
- ▶ Up to 10 working lamps
- ▶ Transparent glass roof hatch for best view of front loader
- ▶ Perfect, ergonomically designed workplace
- ▶ Cable lead-in when rear windscreen is closed
- ▶ Pressurised cab with two filters for dust and other contaminants
- ▶ Low noise levels due to all-round silencing measures

**Compact tractor. Spacious cab. Relaxed and productive work requires room for movement and a clear arrangement of all working elements. The cab of the Agrottron K is one of the largest in its class and, apart from an excellent view of working areas, also gives the driver the necessary comfort he needs for long and productive working days.**

### Optimum lighting

The cab and entrance area are illuminated automatically when the doors are opened, allowing you to mount and dismount safely in the dark. The effective Agrottron K lighting also enhances safety and confidence and increases productivity with improved external lighting for night work. The maximum option of 14 headlights and working lamps can effectively illuminate an area of 500 m<sup>2</sup>.

### Efficient noise reduction

The Agrottron K is one of the quietest tractors in its class. This is achieved with basic design features such as engines with reduced noise emission and thorough exclusion of all noise-emitting and noise-transferring components from the cab. An additional insulating wall between the engine compartment and the single-cell, full-body cab considerably improves noise insulation.

### Comfortable and safe co-driver seat

The folding, upholstered co-driver seat is perfectly integrated into the cab entrance. The seat has an automatic lap belt and handle, ensuring maximum safety for the co-driver.

### Bags of storage space

Three large storage compartments in the left-hand fender panelling offer adequate space for all necessary documents plus food and drink for long working days.



The standard co-driver seat is upholstered, comfortable and equipped with an automatic lap belt.



Efficiently organised multi-storage options.



A total of 17 air nozzles ensure excellent cab ventilation and quick demisting.



The controls for the heating and air conditioning system are installed in the roof. The air conditioning system is a standard feature of the "Profiline" package. An optional electronically controlled automatic air conditioner is available for the "Profiline" version.

### Impressive air conditioning

The powerful 4-stage heating and ventilation fan with up to 17 air nozzles in the cab has a capacity of up to 740 m<sup>3</sup>/h and ensures a constant and pleasant working atmosphere in no time at all. Tinted windows and a front windscreen sunblind protect the driver against excessive

sunlight. An air conditioning unit is available upon request; this also cools the large beverage compartment for cool drinks at all times.



# EXCELLENT OPERATION.

**There are many operating concepts on the market. However, in practice few are simple, self-explanatory and easy to learn. For this reason the DEUTZ-FAHR development engineers focused all their attention on functionality and operating simplicity.**

Every driver should, in practice, be able to use the tractor reliably and productively without extra training and after only a short period of familiarisation.

All levers and switches in the Agrottron K vary in shape and colour and are logically and clearly arranged. They are combined according to frequency of use in functional groups on an operating panel at the driver's right hand. Drivers find their way around immediately. This workplace is optimally designed for reliable and confusion-free operation that enhances the driver's productivity.

## **The "PowerComS" armrest ("Profiline" version)**

All functions of the Agrottron K are conveniently integrated in the "PowerComS" armrest for easy access. Both engine and transmission control and also flow and time settings for the electrical remote valves are integrated into the folding armrest.

## **The Infocenter**

With the Infocenter the driver has all the tractor operating data of the tractor in view at all times; function indicators, for example for PTO rpm and travelling speeds, are digital. The engine speed and temperature as well as fuel levels are shown on analogue displays. Maintenance and warning signals are displayed both digitally and in plain text.



**Colour-coded and ergonomically arranged according to frequency of use. All drivers find their way around immediately in the Agrottron K.**



**Unique in this tractor class – the new "PowerComS" armrest combines all the functions of the Agrottron K in one control unit for productive work.**



**The Infocenter 3 displays maintenance and fault messages in digital text.**

## ADVANTAGES

- All operating groups are colour-coded
- The self-explanatory symbols ensure fast, intuitive operation
- Practical operating management
- Workplace with perfect ergonomic design for safe work due to confusion-free operating elements
- Fast, individual driver customisation due to adjustable steering wheel, driver's seat and multifunction armrest
- Fast recognition of all operating conditions with easily read displays from an unobstructed view of the instrument panel.
- Low noise levels due to all-round silencing measures
- Low-vibration, pneumatic suspension seat with more than 11 different functions and individual adjustment options



## PowerComS operating lever with Comfortip

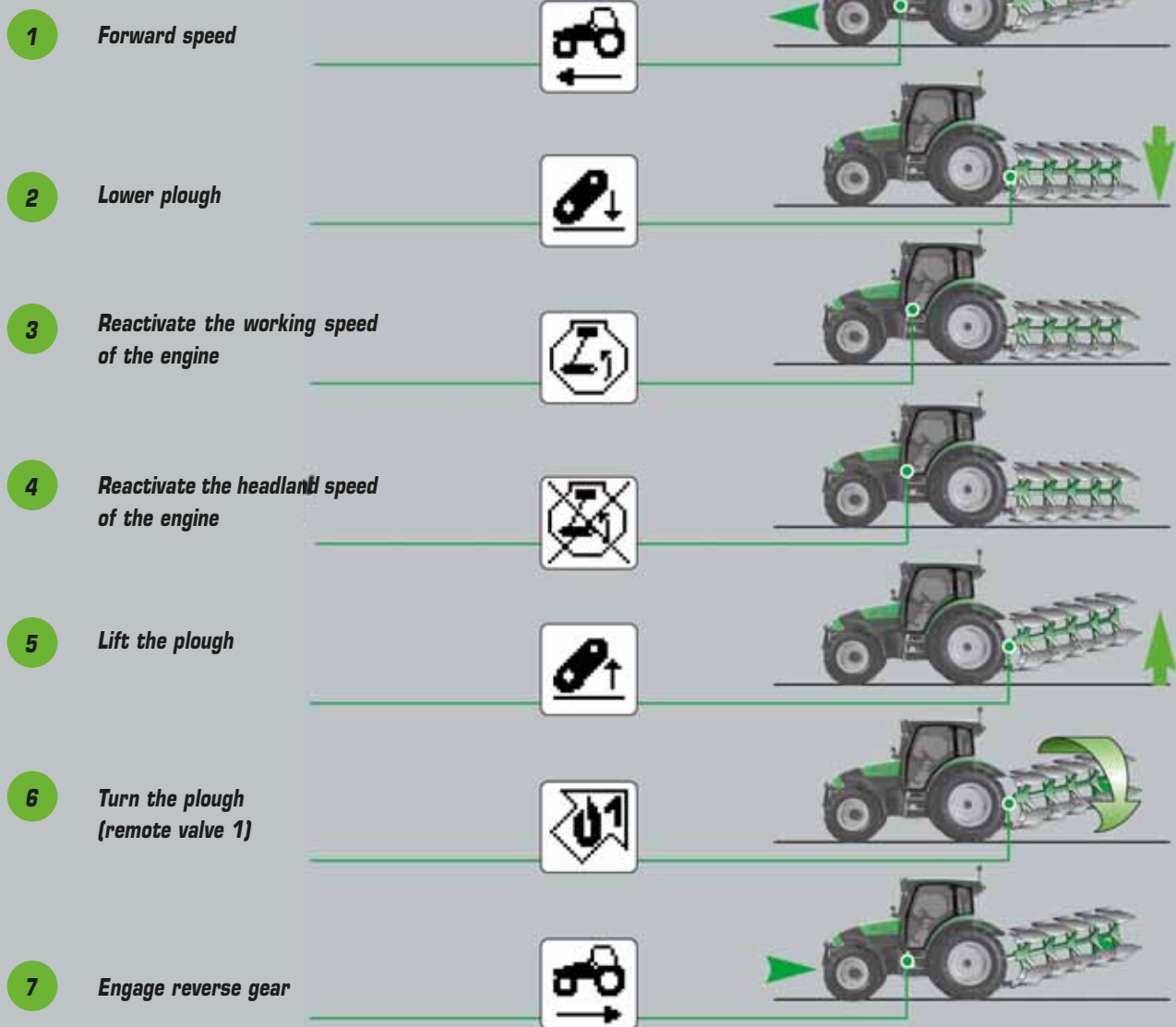
- 1 Actuation of the electro hydraulic remote valve 1
- 2 Actuation of the electro hydraulic remote valve 2
- 3 Lifting/lowering the rear lift, activating the EHR , stop and fast penetration
- 4 POWERSHUTTLE forwards/reverse
- 5 Actuation of the powershift stages (rocking forwards/backwards)
- 6 "Comfortip" operating management
- 7 EMC (Electronic Motor Control)
- 8 Electronic throttle touch pad
- 9 Transmission neutral
- 10 Differential lock
- 11 Front axle drive
- 12 Joystick electronic remote valves 3+4
- 13 Activation APS



The central display in the A-post shows the activated PowerShift stage.

# ALL FUNCTIONS UNDER CONTROL.

## Programming



**Can standardised tractor management programmes really do justice to varying applications in practical agricultural hands-on situations? Or would it not be better if the driver could automate the functions that he requires for the job in hand? Ideally these could be reactivated by a simple operating lever gesture.**

### Simple programming

This is exactly the concept of DEUTZ-FAHR with the "PowerComS" operating lever and the "Comfortip" function (standard feature in the "Profiline" version). Individual operating sequences can be programmed by the driver and reactivated by simply moving or pushing the operating lever. The operating sequences are centrally and consecutively displayed in the Infocenter. The next programmed function is highlighted on the display so that the

driver can see at all times which function he will activate next.

To prepare the system for programming operating sequences – this is possible when the tractor is stationary or moving – the "PowerComS" operating lever only has to be moved to the left, whilst simultaneously pressing the locking button. An acoustic signal is then sounded and the digital display on the instrument panel is activated to accept the command function.



## AVANTAGES

- Simple and logical programming of the individual functions and parameters by the driver and customisation for specific jobs
- Individual operation by the driver
- Maximum operative safety – no irritating grasping at controls
- Enhanced productivity
- Prevention of operating errors
- Manual intervention possible at all times



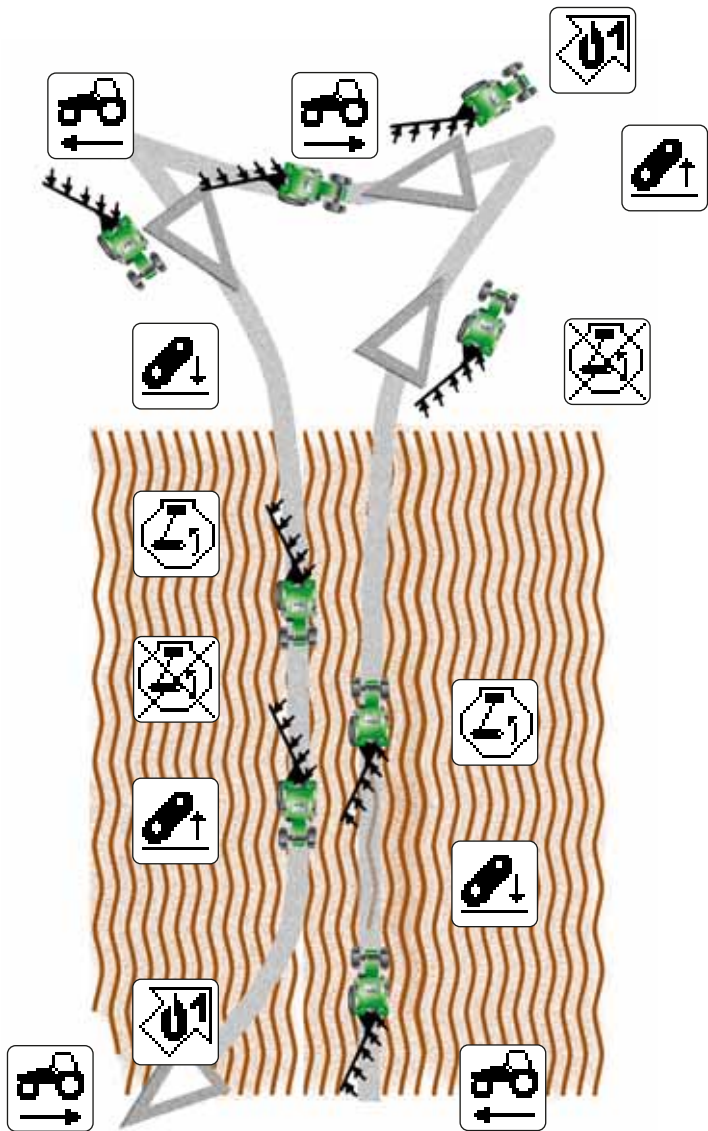
ASM is simply activated with a pushbutton.



Turning in the field. The ASM principle: Steering angle greater than 15° - differential lock off; Steering angle less than 15° - differential lock on; Actuation of individual wheel brake - differential lock off.



Road transport. The advantages of ASM: Speed above 15 km/h – 4wheel drive disengaged; Speed below 14 km/h – 4wheel drive engaged.



All functions the driver requires for ploughing can be simply reactivated by pushing the PowerComS operating lever to one side.

For programming all you have to do is press the respective buttons on the PowerComS operating lever or on the multi-function armrest. The programmed functions are of course stored in the memory when the tractor is switched off. This is the ultimate in simplicity and practicality.

### Increase in productivity ensured

In this manner different operating sequences with up to 16 functions can be saved and reactivated. The driver customises

his Agrottron for each job and considerably increases productivity with one-hand operation of the tractor functions. Operating sequences also enhance operating safety.

### Axle control management

Practical situations that are both typical and frequent: Ploughing in soil of varying density, road travel with heavily loaded trailers or working on slippery terrain. The axle control management (ASM) automatically controls the front drive axle and both

differential locks. The front and rear differential locks (100 percent locking value) and the 4wheel drive can be activated and deactivated under load as required, depending on the steering angle and the speed. If the radar sensor is fitted wheel slip is also taken into account. ASM ensures maximum traction, driving comfort and a high degree of operational safety even under the toughest conditions.

**DOESN'T DRINK. DOESN'T SMOKE.  
AND GIVES YOU ALL THE POWER  
YOU NEED.**



The compact cooling system can be easily and quickly opened for cleaning without tools.



With the EMC the driver is able to programme a working speed at the touch of a button - the speed can be reactivated whenever it is required.



## AVANTAGES

- ▶ Powerful, high-propulsion, economical and reliable DEUTZ engines with electronic engine control
- ▶ Quick working speed programming at the touch of a button
- ▶ PLD high-pressure injection with up to 1,400 bar
- ▶ Low fuel consumption with favourable emission values
- ▶ High flexibility, therefore less gear shifting
- ▶ High torque in the lower speed range carries you through those load peaks
- ▶ Low fuel consumption due to the constant precise rpm control
- ▶ Long maintenance intervals



**DEUTZ engines are renowned for their economy, reliability and their excellent torque. It is therefore not surprising that the Agrottron K was given top marks in these categories by agriculturalists from all over the world. The high propulsion is frequently praised. One particular feature, which is much appreciated, is that maximum power output is already reached at 1800 rpm.**

The modern liquid-cooled 4 and 6-cylinder DEUTZ turbo diesel engines have a capacity of 4 and 6 litres are notable for their constant output with high overpower. With a minimum torque rise of 30% and the standard feature EMC electronic motor control, the engines are among the most advanced on the market. The engine sensors supply the EMC with continuous information that is constantly compared with the programmed optimum engine ratings for power, torque and fuel consumption. The result: More power, lower consumption and lower effective engine speed.

### **Constant engine performance**

The rated power of the Agrottron K is already reached at 1,700 rpm, so that a constant engine performance is available over a wide speed range of 600 rpm. This means relaxed work, less gear shifting, large power reserves, high torque values and lower fuel consumption at lower speeds while maintaining the same engine performance.

### **Wide and high torque plateaux**

Constantly high torque plateaux are another important and unique feature of DEUTZ engines. The torque plateau of the Agrottron K 120 (1,400-1,600 rpm) provides the engine with maximum flexibility through to the lower speed ranges. The optimum values are automatically set in every driving or load situation by the EMC.

### **High starting torque**

The engines have a very high starting torque of at least 26 percent above the tor-

que at the rated speed. The high starting torque ensures that the tractor pulls off reliably and quickly on slopes, even with very heavy loads.

### **Powerful compact cooling system**

All coolers for the engine coolant, oil, charging air, fuel and transmission are integrated into the compact cooling system with minimum space requirements. An efficient and constant cooling performance is also guaranteed at high ambient temperatures. The cooling system can be opened quickly and easily for cleaning. The compact cooler arrangement also minimises thermal losses. The optimised cooling also ensures a constantly low fuel temperature. The result: Cooled fuel has improved combustion qualities for a higher performance.

# TAKING THE BURDEN OUT OF SHIFTING.



**High-torque engines and a robust transmission with 3-stage powershift and standard PowerShuttle create a drive train for outstanding performance and power with minimal shifting. The practical close ratio transmission comprises a 4-speed transmission with 2 electro-hydraulically shifted groups (road and field). A 4-speed creeper gear group is available.**

Due to the position of the large-dimensioned wet multi-plate clutch between the main and PowerShift transmission, wear on the clutch and the shifting forces are reduced considerably. This results in smooth

and fluent shifting with maximum clutch reliability. The mechanical torsion dampers enhance smooth start-off and reduce the load peaks when the PowerShift stages are actuated.

#### **Practical graduation**

Depending on the version and tyres the overall speeds range from 320 metres per hour to 50 km/h, and there are ten speeds in the main working range of 4 – 12 km/h. When a maximum speed of 40 km/h is mandatory this is achieved by simple electronic reduction of the rated engine speed in the 4th gear (road group), saving fuel

and lowering noise emission. The right speed is always available for all jobs, each with three powershift stages. The powershift stage is automatically adjusted when changing gears (3-4 or 4-3) and when changing ranges. Powershift speeds are increased by approximately 20 percent or lowered by approximately 17 percent. The driver can, for example, use the tractor economically and flexibly solely by utilisation of the constant power range and the three powershift stages with a full engine performance from 5.0 to 10 km/h without having to change gear.



## AVANTAGES

- ZF 7100 series transmission: Simple and reliable transmission design for speeds up to 50 km/h
- Easy shifting with compact arrangement due to Bowden cables
- Electrohydraulic shifting of field and road group
- "Comfort clutch" in all Agrottron K as standard feature
- Transmission ratios optimally coordinated with the engine performance therefore no unnecessary additional powershift stages
- APS standard feature on the "Profiline"
- Fast, clear information for the driver with integrated diagnosis
- One speed with three powershift stages for all typical jobs
- No power train interruption in the powershift range



Change the direction of travel with the PowerShuttle lever quickly and conveniently without using the clutch pedal. Nothing could be more simple.



Easy shifting due to Bowden cables and the electronic "comfort clutch".

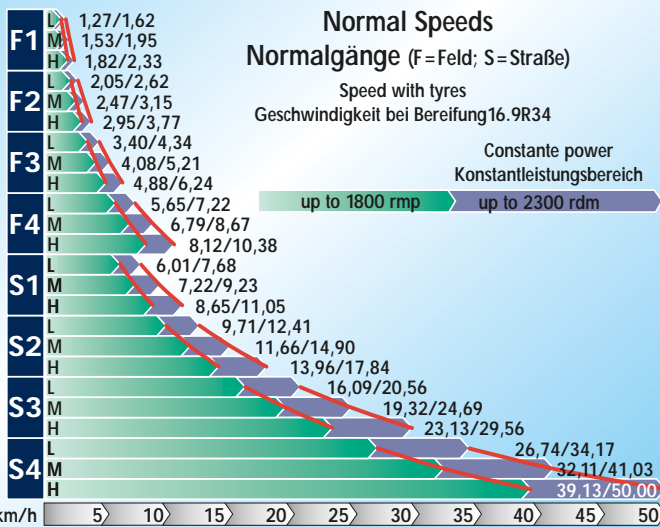


Simple changing of the powershift stages with the "PowerComS" operating lever.

### Creep speeds Kriechgänge



C1	L	0,25/0,32
	M	0,31/0,39
C2	L	0,41/0,52
	M	0,49/0,63
C3	L	0,67/0,86
	M	0,81/1,04
C4	L	1,12/1,43
	M	1,35/1,72
	H	1,61/2,06



### Comfort clutch

Shifting is made easier by the standard feature, electrohydraulically actuated "comfort clutch". The shifting lever features a push-button that permits gear shifting without actuating the clutch pedal.

### More than just a powershift:

#### Automatic PowerShift (APS)

As an exclusive feature of the "Profiline" version the four powershift stages are automatically shifted, depending on the load conditions of the tractor, with the newly-developed APS feature. The load of

the engine and the engine speed are used as a control impulse. The driver can infinitely vary the sensitivity of the system with a rotary switch. The clutch is actuated with either the foot pedal or with a button on the gearshift lever. The driver shifts 24 speeds without using the clutch.

As an additional feature the APS automatically adapts the powershift stages to the travelling and engine speed during shifting.

### Convenient reversing transmission

With the PowerShuttle reversing transmission it is possible to pull off from a stationary position or change the direction of travel (reverse/forwards) up to a speed of 12.5 km/h without actuating the clutch. The PowerShuttle is of particular benefit when working on the headland or with the front loader. The driver's right hand is free to operate other function controls.

# NOW YOU CAN REALLY GET THINGS MOVING.



**A powerful hydraulic system is also a must in the compact tractor range due to the varied hydraulic consumers. The Agrotron K is fitted with an open-centre hydraulic system with a capacity of 55 l/min as a standard feature. A separate gear pump with a capacity of 26 l/min supplies the steering circuit. A total hydraulic conveying capacity of around 80 l/min is available.**

## **Load Sensing**

1. For implements with higher oil requirements a pressure and volume-controlled hydraulic system (standard feature on "Profiline") with a conveying capacity of up to 83 l/min is available upon request. The system runs with an axial piston variable displacement pump that is controlled by the respective implement. When the consumer draws off oil, the system pressure drops; the variable displacement pump instantly provides more oil so that the pressure

required by the consumers is maintained. The consumer with the highest pressure requirement determines the current system pressure.

## **No vibration for driver and implement**

During fast road travel vibrations and shock waves can occur in the hydraulic system that are caused by "pitching" of the implement. These can have a considerable detrimental effect on driving safety and comfort. When vibration damping is activated (automatically from 8 km/h onwards), vibration is detected by the electronic components on the load sensing pins and compensated with selective and fast counteraction by the powerlift. Geared to the future for reliable and safe driving in all situations.

## **Tremendous lifting power**

Large-dimensioned lifting cylinders provide a tremendous lifting force of up to 6.2 t. This means sound strength to handle all implement combinations. Externally we have additional actuation of the powerlift on both rear mudguards giving us an alternative fast, reliable and safe implement coupling and uncoupling.

## **Best electronic control**

All Agrotron K tractors are equipped with an electronic powerlift control (EHR). The following functions are automatically monitored: Draft control, position control, mix control, free floating, fast penetration, slip control (with fitted radar sensor), transport locking, external control switches, lifting height limitation and lowering speed control.

## **Remote valves**

The Agrotron K is equipped as standard with 3 double-acting remote valves, each with 4 functions operating in the lift and float positions and which can also be used for single or double action. All remote connections at the rear can be coupled under pressure and are equip-



## AVANTAGES

- Powerful hydraulics with a high degree of efficiency, high flow capacity and tremendous lifting force
- Standard rear PTO with four speeds.
- Standard economy PTOs lower engine speed and fuel consumption
- Simple adaptation to different cardan shaft profiles
- Automatic activation and deactivation when lifting and lowering the rear powerlift
- Axle control management for optimal traction control (optional)



The standard four PTO speeds can be conveniently pre-selected.



Powerlift and rear PTO can be safely operated from both rear mudguards.



The standard EHR operating panel permits fast programming and setting adjustments.



The settings of the remote valves with flow rate and time-dependent operation are conveniently adjusted with the knobs on the operating panel.

ped with a rapid emergency breakaway function and an oil collector. With an easy-reach cross-gate lever the driver is able to simply and accurately operate two remote valves. The third remote valve is actuated with an individual lever.

Four electrical remote valves are standard on the "Profiline" version. Two are activated with the "PowerCom S" operating lever (flow rates and times are adjustable); two others are operated with the joystick (flow rate is adjustable).

### Four speeds

Ahead of most tractors in its class the Agrottron K features, as standard, a rear PTO with 4 speeds (540, 540 E, 1.000

und 1.000 E). A number of economical uses are therefore possible. Due to perfect coordination with the engine characteristics the economy PTOs optimise fuel consumption while maintaining a high performance and torque potential. A standard automatic PTO feature switches the rear PTO on and off depending on the lifting height of the rear powerlift. Operating errors are prevented and mounted implements protected from damage.

### Powerful front PTO

The 1000 rpm front PTO is driven directly by the engine and electrohydraulically activated by pressing a button. Due to the modulation provided by the wet plate

clutch, implement start-up is always smooth and independent of the load, even with heavy implements.



# WHAT MORE COULD YOU NEED?



Although the standard features on the Agrottron K are already very comprehensive, individual needs may require individual solutions. DEUTZ-FAHR supplies a coordinated range of perfectly adapted additional and special equipment for all ranges and assemblies. Contact your DEUTZ-FAHR dealer. They will be pleased to be of assistance.

#### 1 DEUTZ-FAHR front loader

The Agrottron K can be fitted with front loaders with mechanical and hydraulic parallel control as well as a wide range of practical implements.

#### 2 Working lamps:

Up to 10 working lamps illuminate the implement areas, permitting safe use at dusk and during the night.

#### 3 Front hydraulic system and front PTO

The Agrottron reveals its true versatility when equipped with mounted front implements. The integrated front powerlift has a lifting force of up to 2,500 kg. The front PTO turns clockwise at a speed of 1000 rpm.

#### 4 Front axle with suspension

More driving safety and comfort for all Agrottron K models. Front axle suspension is a standard feature on the 50 km/h models.

#### 4 Articulated mudguards

Available upon request. These mudguards enable a reduced turning circle of 4.65 m.

#### 5 Widened mudguards

Available for the corresponding tyres in three different widths.





5



6



7



8



9



9



10



11

### 6 Widened mudguards

Available for the corresponding tyres in three different widths.

### 7 Pneumatic braking systems

Indispensable for road transport with trailers. Available as a 2-line braking system and as a 1 and 2-line braking system as an option. Hydraulic trailer braking systems are also available.

### 8 "ProfiLine" package

This turns the Agrottron K into a high-tech tractor. Comprising: Air conditioning system (automatic upon request) "Power-

ComS" operating lever with "Comfortip", four electrical remote valves, "comfort clutch" and APS.

### 9 Ballast carrier and front weights

Optimum weight distribution with ballast carriers and front weights ranging from 100 to 1,000 kg.

### 10 Swinging, adjustable drawbar

The drawbar can be mounted either in a central fixed position or allowed to swing. Its length can be simply adjusted as required.

### 11 Pick-up hitch

The pick-up hitch is lowered and raised with the powerlift using the EHR.

### Piton-Fix

With a pin diameter of 45 mm and a maximum drawbar load of 3,000 kg.

### Aeromat comfort seat

Pneumatic suspension, seat angle adjustment, automatic adaptation to driver's weight, rotation adapter to left and right (20°), double lumbar support, horizontal suspension and adjustable shock absorber.

**NO NEED FOR LENGTHY SERVICING.**





## AVANTAGES

- ▶ Long maintenance intervals for oil and filters considerably lower operating costs
- ▶ Tool-free access to all important maintenance points
- ▶ Tappet clearance check every 1,500 hours
- ▶ Engine oil change every 500 hours; transmission oil change every 1,000 hours
- ▶ Simple cleaning of the compact cooling system
- ▶ Standard diagnosis feature

### Fast daily maintenance

Daily maintenance is simple and completed in next to no time with the rearward opening angle of the engine cowling. Pneumatic springs keep the cowling in the open position. All important components and assemblies are easily accessible for simple maintenance work without tools. The engine oil level can be checked without opening the cowling. On the transmission a large, easily visible sight glass indicates the transmission and hydraulic oil levels.

### Long maintenance intervals

The regular engine maintenance intervals are long – in fact uniquely long. The engine oil only requires changing every 500 hours of operation and the tappet adjustment only needs checking every 1,500 hours. The transmission oil and its filters only require changing every 1,000 hours of operation. The operating costs for an Agrottron K are therefore satisfyingly low.

**1 The engine air filter** is easily accessible. Due to the ejector dust separation the filter maintenance intervals are very long.

**2 Best diagnosis.** DEUTZ-FAHR service centres can perform fast electronic system diagnostic checks on the tractor via a single plug connection.

**3 All fuses and switching relays** are easily accessible and well-protected in the cab on the right-hand rear mud-guard.

**4 Both cab filters** are easily accessible in the roof. The filters can be cleaned and replaced without tools. Active carbon, Aerosol filters are available upon request.

**5 The oil filler** inlet and dipstick are

easily accessible. Long maintenance intervals lower operating costs for maintenance and service.

**6 The transmission** and hydraulic oil levels are easily visible in a large sight glass.



# WITHOUT DOUBT ORIGINAL DEUTZ-FAHR.



## Authorised service - a wise move.

Without doubt – many can repair much. But only your DEUTZ-FAHR specialist dealer knows your tractor inside and out. Only your dealer has regularly trained mechanics and experts on call. Only dealers have the special tools and diagnostic equipment required for competent diagnosis and inspection. All this gives you peace of mind - without doubt.

## Original parts make good sense.

As you placed your trust in the original tractor, you should also only use original parts when required. Only these comply with the high quality and safety standards of DEUTZ-FAHR and ensure correct function, trouble-free operation and value stability of your tractor – guaranteed.



## Your DEUTZ-FAHR dealer will be pleased to answer questions:

This printed material is designed for international use. The illustrations it contains show both special equipment and incomplete standard equipment. The availability of some illustrated models, standard and special equipment can vary from country to country. Only the dealer's price list stipulates whether such illustrated equipment is included as a standard feature or whether it is a special accessory. In addition the illustrated mounted implements and special accessories may not always comply with the respective statutory regulations. It is the responsibility of the customer – after consultation with the dealer – to verify this, taking the operating instructions into account. All information and illustrations in this brochure are subject to correction; errors excepted. Furthermore all information contained in this brochure is not binding and is subject to modifications of a technical and commercial nature or those resulting from statutory regulations. No claims whatsoever can be derived from these. SAME DEUTZ-FAHR DEUTSCHLAND GmbH reserves the right to make any changes to the design and technical construction and also the scope of standard equipment at a time and without prior notice. order no.: 546-10-01

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## EVOLVING AGRICULTURE.



# AGROTRON K 90 • 100 • 110 • 120

Tyres, wheels, track widths	K 90	K 100	K 110	K 120
14.9 R24	1,590/1,690 v			
16.9 R34	1,600/1,700 h			
480/65 R24	1,890 v			
540/65 R34	1,850 h			
380/70 R28	1,590/1,690 v			
480/70 R38	1,700 h			
420/70 R24	1,590/1,690 v			
480/70 R34	1,700 h			
540/65 R24	1,790 v			
540/65 R38	1,800 h			
16.9 R24	1,590/1,690 v			
16.9 R38	1,600/1,700 h			
360/70 R28			1,590/1,690 v	
16.9 R38			1,600/1,700 h	
420/70 R24			1,790 v	
520/70 R34			1,800 h	
480/65 R24			1,890 v	
600/65 R34			1,840 h	
540/65 R24			1,790 v	
600/65 R38*			1,840 h	
16.9 R24			1,590/1,690 v	
18.4 R38*			1,700 h	
480/70 R24			1,790 v	
520/70 R38*			1,800 h	
230/95 R32	1,540/1,740 v			
270/95 R44	1,500/1,800 h			
270/95 R32	1,440/1,840 v			
270/95 R46	1,500/1,800 h			
230/95 R32	1,490/1,790 v			
230/95 R44	1,500/1,800 h			
230/95 R32			1,540/1,740 v	
230/95 R48			1,500/1,800 h	
270/95 R32**			1,440/1,840 v	
300/95 R46**			1,500/1,800 h	
270/95 R32			1,440/1,840 v	
270/95 R48*			1,500/1,800 h	

Available standard tyre combinations are given on the current valid price lists. Operation with twin tyres is possible at the front and rear is permissible; observe the Motor Vehicle Construction and Use Regulations. \*for AT K 120: combination permissible only with cabin suspension. \*\*only Kleber Super 3.

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**EVOLVING AGRICULTURE.**

# AGROTRON K 90 • 100 • 110 • 120

Engine		K 90	K 100	K 110	K 120
Water-cooled DEUTZ diesel engine	Type	BF4M 2012 C	BF4M 2012 C	BF6M 2012 C	BF4M 2012 C
Rated power (ECE R24)	kW/hp	62/84	70/95	76/104	85/115
Max. power (ECE R24)	kW/hp	66/90	74/101	81/110	88/120
Max. power (2000/25/EC)*	kW/hp	73/99	82/112	87/118	93/126
Rated power / Maximum power	rpm	2,300 / 1,990			
Cylinders/cubic capacity	No./cm <sup>3</sup>	4 / 4,038		6 / 6,057	4 / 4,038
Bore / Stroke	mm	101/126			
Starting torque	%	134	126	129	124
Maximum torque	Nm	372	396	418	447
Constant torque range	tr/min	1,600–1,200	1,600–1,250	1,800–1,200	1,600–1,400
Power at maximum torque	kW/PS	61/83	66/90	70/95	75/102
Torque rise	%	35	30	30	40
Constant power range	rpm	1,800–2,300			1,700–2,300
Air intake		below the cowling			
Motor oil changing intervals		500 h or annually			
Oil quantity / tank capacity	l	10 / 180		14 / 180	10/180
<b>Cab</b>					
Air conditioning		upon request (Profiline: standard)			
Automatic air condition Profiline		upon request			
<b>Electrical system</b>					
Voltage	V	12			
Three-phase generator	kW/A	12/95			
Battery	V/Ah	12/170			
High current socket		3-pin, 25 A			
<b>Chassis, brakes, steering</b>					
Front differential lock		45% standard, 100% upon request			
ASM Locking value 100%		upon request			
Rear differential lock		electro-hydraulic activation			
Service brake	front	Automatic activation of front-wheel drive			
Service brake	rear	Wet disc brake system			
Parking brake		Actuates the disc brake on the rear axle			
Steering system		Hydrostatic with synchronous steering cylinder			
Steering angle /turning radius		52° / 4,65 m		52° / 4,95 m	52° / 4,65 m
Steering		Separate gear pump			
Pump flow rate/pressure	l/min (bar)	till 26 (180)			

\*without fan

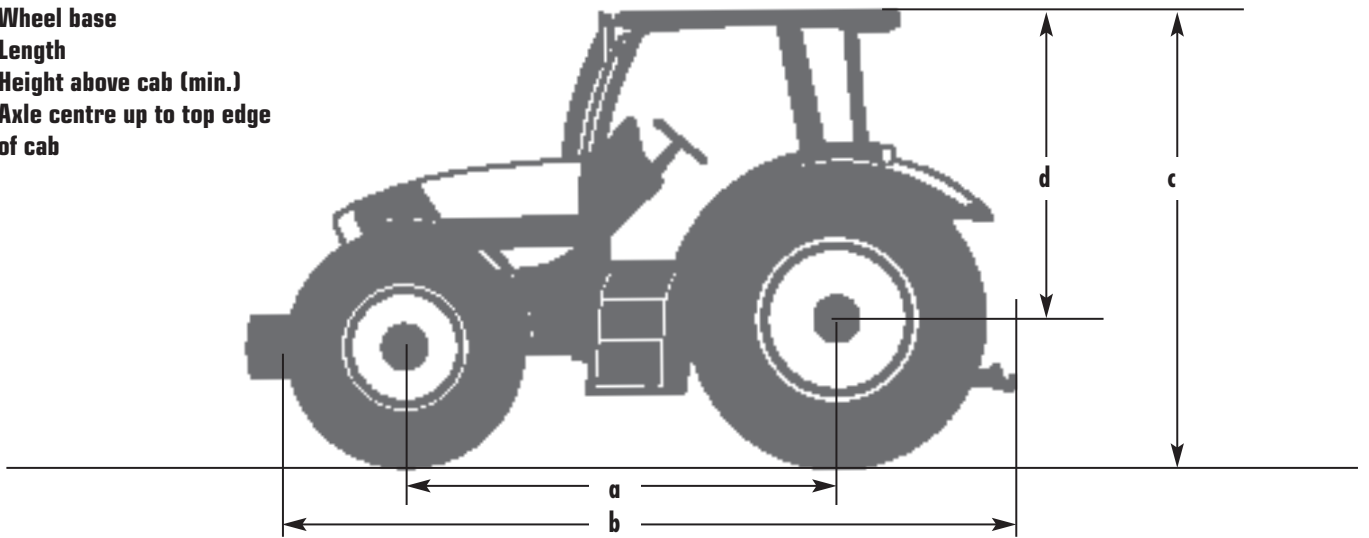


# AGROTRON K 90 • 100 • 110 • 120

Working hydraulics		K 90	K 100	K 110	K 120								
System/oil reservoir		Open center/together with transmission (Profiline: Load sensing/seperate)											
Pump flow rate	l/min (bar)	55 (200) (Profiline: 83 (200))											
Available oil quantity	l	max. 26 (Profiline: max. 35)											
<b>Powerlift</b>													
AGROTRONic-hD		Standard											
Category of 3-point hitch, rear		II / III; Quick-action coupling											
Lifting capacity, rear	kg	6,220											
Front powerlift, cat. II		upon request											
Front powerlift lifting force	kg	2,500											
<b>Hydraulic remote valves</b>													
No. of remote valves, connections		3, mechanical (Profiline: 4, electrical)											
Non-pressurised recirculation		Standard											
Functions		Double-acting with floating position, can be coupled under pressure											
Blocking		In neutral position, lifting and float position											
Actuation		1+2 with cross-lever, 3 with individual lever (Profiline: 1+2 on PowerComS, 3+4 with Joystick)											
<b>Transmission</b>													
Type		ZF 7100, 8-speed range transmission, electro-hydraulic group shifting											
PowerShift		3-range powershift (Profiline avec APS)											
PowerShuttle		Standard											
No. of speeds (with creeper speed)	F/R	24/8 (36/12)											
Clutch		Multi-plate clutch, oil-immersed / comfort clutch											
<b>Front PTO</b>													
Clutch/actuation		Multi-plate clutch, oil-immersed/electrohydraulic											
Speed	rpm	1,000											
PTO profile		1 3/8" 6 spline shaft											
Max. transferable power		Max. engine power											
Direction of rotation		Clockwise in direction of travel											
<b>Rear PTO</b>													
Clutch/actuation		Oil immersed, modulated start-up/electro-hydraulic shifting											
PTO stub		replaceable / bolted											
Profiles		1 3/8" 6 spline or 1 3/8" 21-section											
Engine speed 540/1000	rpm	1,990/1,990											
Engine speed 540E/1000E	rpm	1,550/1,550											
<b>Speeds *</b>													
		Creeper speed				Field				Road			
		L	M	H	R	L	M	H	R	L	M	H	R
1		0,32	0,39	0,46	0,32	1,62	1,95	2,33	1,62	7,68	9,32	11,05	7,68
2		0,52	0,63	0,75	0,52	2,62	3,15	3,77	2,62	12,41	14,90	17,84	12,41
3		0,86	1,04	1,24	0,86	4,34	5,21	6,24	4,34	20,56	24,69	29,56	20,56
4		1,43	1,72	2,06	1,43	7,22	8,67	10,38	7,22	34,17	41,03	50,00	34,17

\*All data apply for 16.9.R34 tyres and rated speed of 2,300 rpm

- a Wheel base**
- b Length**
- c Height above cab (min.)**
- d Axle centre up to top edge of cab**



Dimensions* in mm	K 90	K 100	K 110	K 120
a	2,419		2,647	2,419
b	4,139		4,370	4,139
c	2,630		2,660	2,630
d	1,913		1,943	1,913
<b>Weights in kg (40 kph)</b>				
<b>Unladen weight</b>				
front	1,650		1,750	1,650
rear	2,790		3,100	2,790
Poids total	4,440		4,850	4,440
<b>Permissible laden weight</b>				
front	3,500		3,800	
rear	6,000		6,300	
Poids total	7,500		8,000	
<b>Payload</b>				
front	1,850		2,050	2,150
rear	3,210		3,200	3,510
Total	3,060		3,150	3,560
<b>Flange dimensions</b>				
Flange dimension at front (mm)		1.660		
Wheel connection, front (mm)		275 x 8 x 20		
Flange dimension at rear (mm)		1.640		
Wheel connection, rear (mm)		205 x 8 x 20		

Negative castor calculation in % :  $[(\text{Front rolling circumference} \div \text{rear rolling circumference} \times i) - 1] \times 100\% = \text{negative castor \%}$ . The minimum negative castor should be +0.5% and maximum +4.5%. Ratio (i): AT K 90 / 100:  $i=1.316$ ; 110 / 120:  $i=1.3572$

\*with 16.9 R 34 tyres