

AGROFARM PROFILINE / TTV



GERMAN ENGINEERING

THE AGROFARM: THE SIMPLEST WAY OF WORKING PROFITABLY.

Comfortable 4 post cabin with tinted glass, sun blind and a perfect panoramic view. Provides a fatigue free work environment. Ergonomic, easy-to-follow operation and clearly arranged switches and operating levers. Air conditioning available on request.

Angled, shaped bonnet ensures outstanding visibility, especially with front mounted implements. Safe working and maneuvering even in the smallest spaces.

The very latest economical DEUTZ engines boast electronic engine control, programmable speed, high reliability and uniform power delivery. Responsive and high torque engines with low fuel consumption.

The optional integrated front powerlift with a lifting force of up to 1,800 kg and the front PTO running at 1,000 rpm considerably widen the range of applications of the Agrofarm and are absolutely essential for a universal tractor.



Approval for 100% biodiesel: Saves costs and protects the environment.

Farm managers and service providers want to earn money. After all, work is only fun if it earns money. In pursuit of this aim, today's managers have to make far-reaching decisions which always directly affect the operating results of their agricultural businesses.

The process of deciding on a new machine is often a long one of collecting data and information and consulting friends, advisors and associations. Ultimately decisions are, however, always made for rational reasons, as all aspects which safeguard the success of the business must be taken into account. It is therefore advantageous if a decision can be made for a strong brand with a rational tractor

concept which concentrates on one thing – the success of its customers – by providing cost-effective technology which does justice to practical requirements. With a wealth of experience gained from more than 80 years of major technological leadership in the agricultural machinery industry, the Agrofarm is an example of such rational technology.

The universal tractor class

The new Agrofarm series has been specially designed for grassland, field maintenance and farmyard use and offers particular advantages in the compact medium class: Great flexibility, a low center of gravity and high maneuverability, clear sight lines, easy handling as well as maximum

economic efficiency and productivity, offering great value for money.

The Agrofarm is a universal tractor which comes with practical equipment. With economic, reliable DEUTZ engines fitted in the two available equipment variants, it is a match for the requirements of any farm, whether full-time or part-

time operations. The various cab roof options and the resulting low height make this series suitable for small building entrances. With a practical range of transmission, a professional hydraulic system and unbeatably low operating and maintenance costs, the Agrofarm is a genuine all-round talent.

COMFORTABLE WORKING CONDITIONS.



The modern 4-post cab offers not just a better overview but comfortable entry as well.



Clearly arranged and easy to read – the Agrofarm's instrument panel.



ADVANTAGES

- Ergonomic and spacious 4 post cab with excellent panoramic view
- Operating levers within easy reach
- Efficient heating and ventilation
- High flow air conditioning system
- Low height to suit low building entrances
- Excellent view of front-mounted implements with shaped, sloping bonnet

- Open-view roof simplifies front loader work
- Armrest control



Today's farmers can rely on DEUTZ-FAHR to give them a comfortable workplace in every tractor class. The Agrofarm also boasts a generously configured compact cab and ergonomic operation – suitably designed in friendly colors and high-quality materials.

An exemplary workplace: Safe cab access with a large door opening angle, anti-slip, solid steps. Excellent freedom of movement and clear view of all important operating and control elements. Additional comfort with optional air-sprung driver's seat for relaxed and concentrated work. This

ergonomic driver's workplace also naturally includes the softly padded driving wheel, located within easy reach. Adjustable in tilt and reach (not in all versions), it can be optimally adjusted to the height of any driver.

Well informed

The clear, non-glare information display provides constant information on all relevant values and operating statuses of the tractor in both analog and digital form. Speed, PTO speed, operating hours and mileage are shown on an easy-to-read digital display.

Everything in sight

The tractors are characterized by their compact, low design and excellent maneuverability. Good lines of sight in all directions due to the shaped, sloping bonnet and narrow cab uprights as well as large glazed areas.

Everything at hand

All operator elements are conveniently located on the right next to the driver's seat. They are arranged in functional groups and can be operated almost intuitively after even just a short time. All the levers of a functional group are the same color, eliminating the

possibility of confusion and enhancing operational reliability. It doesn't take long to get a grip on the Agrofarm.

First-class air conditioning

The best air conditioning in all weather conditions. The outside air is effectively filtered over a large surface. In addition to the three-stage fresh air blower and the efficient heating system, the Agrofarm tractor is fitted with a high output air conditioning system.

POWER UNDER THE HOOD.

ADVANTAGES

- ▶ Constant power and constant torque
- ▶ High torque rise and a high starting torque for constant power and reliable starts even when under load
- ▶ Powerful and yet flexible water-cooled DEUTZ turbo diesel engines with electronic engine control and programmable speed
- ▶ High efficiency with Bosch single high-pressure injection pumps
- ▶ Approval for 100% biodiesel: Saves costs and protects the environment



Work hard and save fuel. DEUTZ engines live up to their economic reputation. After all, modern farmers expect fuel-efficient, high-power engines even in the compact Agrofarm.

The water-cooled 4-cylinder turbo diesel engines of the TCD 2012 series boast a compact design, uniform power development and low fuel consumption. Fitted with electronic engine control with pro-

grammable speeds and a modern high-pressure injection system with injection pressures of up to 1,400 bar, they deliver efficient fuel utilization, enormous efficiency and excellent emissions values. And,

thanks to the 160 litre fuel tank, they are more than a match for long working days.

High torque and constant power

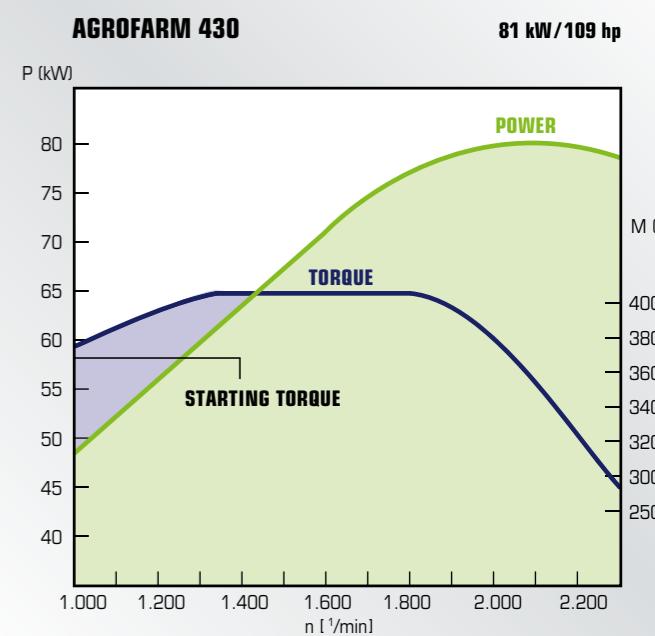
The engines are characterized by high

torque at low engine speeds. That means the Agrofarm 430 reaches its maximum torque of 400 Nm at just 1,800 rpm and keeps it constant up to a speed of 1,400 rpm. Maximum power is reached

at just 2,100 rpm. High starting torques ensure that the tractor pulls off reliably with heavy loads, even on hills.



Modern engine technology from DEUTZ with high-pressure injection and electronic engine control.



THE RIGHT GEAR (OR SPEED) FOR EVERY ACTIVITY. PROFILINE.



One rarely has a choice with compact tractors. DEUTZ-FAHR is one of the few manufacturers which also offers two gear drive types in the compact class: A robust load switch gear drive with 60/60 gears or the new stepless TTV gear drive. No matter which you choose, the maximum speed of 40 km/h is achieved for a reduced engine speed.

Powershift transmission

The newly developed Powershift transmission comes with 5 speeds and 4 groups (including creeper speed group) as well as mechanical or hydraulic F/R shifting. It is available with 60/60 speeds, ensuring correspondingly narrow and practical speed graduation.

This means ECO-Speed:

Save fuel at 40 km/h

The ECO-Speed gear drive is equipped with three load switching steps. With 60 forward and 60 reverse speeds, it offers the right speed for every application. The powershift stage currently activated is displayed on the dashboard. The speed ranges from 540 m/h to 40 km/h and in the main working range from 4 to 15 km/h, 15 speeds can be selected.

Safe braking as you please

All Agrofarm models have independent oil-immersed disc brakes on the front and rear axles. The durable, maintenance-free long-life brakes also ensure the necessary safety at high speeds. The Agrofarm ProfiLine/TTV comes with a hydraulically actuated parking brake.

Power shuttle can be adjusted individually

The gear drive is equipped with a hydraulic power shuttle which can be adjusted in five steps. With it, the driver changes

the driving direction without activating the clutch. This makes front loader work and maneuvering child's play. The Powershuttle versions also come with a comfort clutch on the shifting lever. They engage at the press of a button and shift up to 15 speeds without the clutch pedal being pressed.

ADVANTAGES

- Reliable 60/60 gear EcoSpeed transmission with three under-load powershift steps
- Maximum speed of 40 km/h with reduced engine speed
- Hydraulic power shuttle with sensitivity control
- 15 speeds in the main work range
- Maintenance-free lifetime clutches for the Powershuttle
- Comfort clutch actuation on the shift lever
- True four-wheel brakes for maximum performance and reliable braking



Hydraulic Powershuttle.



Modulation of powershuttle is shown on the display.



Operation of the comfort clutch using a button in the switching knob.



Hydraulic stop brake.



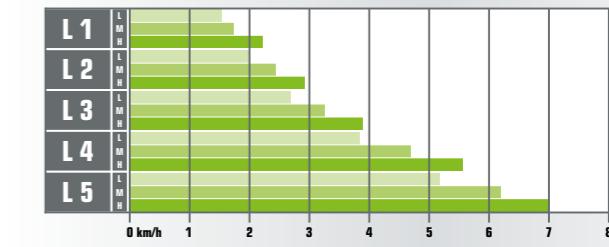
Stop & Go is activated per toggle switch.

60/60 Speed-EcoSpeed-Powershift transmission (Agrofarm 420, tyres 480/70 R34)

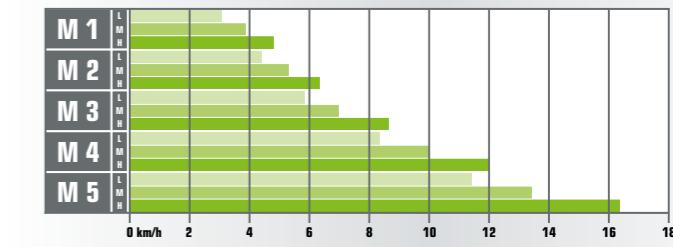
Super crawling speed



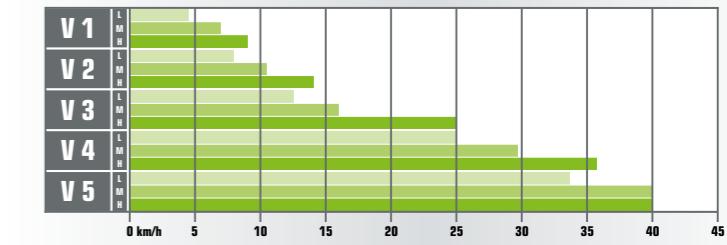
Crawling speed



Medium speed range



Fast speed range



STEPLESS WORKING: THE NEW TTV TRANSMISSION.

ADVANTAGES

- Highly efficient drive system
- Long service life thanks to oil bath clutches with low transmission losses
- High efficiency using the latest CVT concepts and high proportion of mechanical parts
- Simple operation and easy to use
- 40 km/h at reduced engine speed
- Infinite speed choice and stepless acceleration
- Three driving strategies



Clearly laid out and driver friendly: The right hand operator panel.



Stepless adjustment of engine and transmission management.



The new DEUTZ-FAHR TTV gearbox.



Working automatically

It doesn't get any easier: Start, drive off and work. In automatic mode, the Agrofarm TTV offers great comfort for all types of work without tedious programming. All tasks are competently and easily mastered. The selection of the desired speed is achieved using the accelerator pedal. The control of the engine speed is taken over by the engine electronics, which maintain the correct speed ready to suit the respective load conditions.

Advantage of the automatic mode: In automatic, it's always easy and efficient, just like driving a car

Auto, ECO or Power: The driver decides. Depending on the type of work, the driver can adjust the basic setting of the automatic mode and specify how far the engine speed is controlled up or down.

Power take-off mode

This mode is automatically activated when the power take-off is switched on and enables efficient work at a constant PTO speed. The desired forward speed can be adjusted and controlled using the foot ped-

al. Advantage: The Agrofarm TTV directly and comfortably adapts the working speed to suit the operation but keeps a constant PTO speed.

Manual mode

The accelerator serves exclusively as a gas pedal and in this way controls the engine speed. The maximum speed of 40 km/h and the lowest speed is 47 m/h.

Active brake control

With this function the tractor transmission keeps the tractor stationary independent of the slope or the respective loading condi-

tion without activating the operating the brake. No activation of the trailer brake occurs. In this way, the driver can safely and comfortably start and stop at any time.

Automatically determined

The standard time-controlled or manually operated parking lock guarantees additional operating safety. It is automatically activated when the driver leaves his seat or the tractor is idle for more than 30 seconds.

- 1 Manual acceleration/control lever
- 2 Engine speed memory
- 3 Cruise control
- 4 Speed ranges
- 5 EHR operation
- 6 Front power take-off
- 7 Rear power take-off
- 8 Power take-off automatic system
- 9 Power train management ASM (only Agrofarm TTV)
- 10 Four-wheel drive
- 11 Differential lock

POWERFUL HYDRAULICS FOR TOUGH JOBS.

ADVANTAGES

- Electronic lower linkage control hydraulics (EHR)
- Hydraulic connections with covers and leakage tanks
- Three electrically operated auxiliary control units (std)
- With flow rate and time adjustment
- Proportional control of the valves



Hydraulic power you can rely on. That's because these days even a compact tractor has to handle a wide variety of jobs.

With a pump capacity of 93 l/min and a separate hydraulic circuit for the steering, the Agrofarm's hydraulic system is a match for any requirement.

The Agrofarm is supplied with a electrical lower link control as standard. The electrical control is particularly efficient and offers application-specific advantages for all farms.

Remote valves for all demands
The hydraulic system ensures practical implement use. Up to four precision-controlled, double-acting additional remote valves can be supplied for the



Up to four additional remote valves upon request.



The powerful rear linkage with 6,200 kg lift capacity for operating the heaviest implements.

Agrofarm. They are controlled using a joystick or single levers and, depending on the version, also feature a flow rate control system. The oil then flows to easily accessible hydraulic connections,

which can be coupled under pressure and are provided with leakage oil tanks.

MULTIFUNCTION OPERATION.



ADVANTAGES

- ▶ Actuation of the PTO on both rear mudguards
- ▶ Integrated front powerlift with single or double action upon request
- ▶ Independent electro-hydraulically operated PTO
- ▶ 4 PTO speeds: 540/540E and 1000/1000E (Profiline)
- ▶ 3 PTO speeds: 540/540E/1000 (TTV)



Fully integrated, powerful front hydraulics with 1.8 t lifting force.



Four power take-off shaft speeds easily preselectable from the cabin.



Electro-hydraulically operated PTO (push-button control).

Electro-hydraulically operated PTOs

All Agrofarm tractors come with comprehensive PTO equipment as standard. Up to four power take-off shaft speeds are available:

540 / 540E / 1000 / 1000E. The required speeds are preselected in the cab and switched electro-hydraulically. Control is proportional and, thus, ensures modulated, smooth starting of

the power take-off shaft. The PTO can also be operated externally at the rear fender.

MAY WE OFFER YOU ANYTHING ELSE?



Although the standard equipment of the Agrofarm is already extremely comprehensive, it can still be enhanced. DEUTZ-FAHR supplies a coordinated range of additional and special equipment for all ranges and assemblies. Contact your DEUTZ-FAHR dealer. They will be pleased to be of assistance.

1 Front powerlift & front PTO: (opt)

The Agrofarm unfolds its true versatile potential when equipped with mount-

ed front implements. The integrated front powerlift boasts a lifting force of 1,800 kg, while the front PTO delivers a speed of 1,000 rpm.

2 Compressed air braking system: (opt)

Indispensable for road transport with trailers. In addition to compressed air braking systems, hydraulic trailer braking systems complying with a variety of standards are also available.

3 The air conditioning (std) ensures if desired a comfortable cabin climate in all weather.

4 High visibility roof: (std) The comfort cab becomes a true open-view cab giving the best view of the front loader. The elevated front loader is easily visible through the tilting transparent roof.

5 Beacon lamp: (std) The beacon lamp, available as a factory fitting and at-

tached to a hinged arm on the cab roof, makes an active contribution to road safety.

6 Ground-speed PTO: (opt) A ground-speed PTO is available in addition to the standard PTO equipment.

7 Powershuttle: (std) Hydraulically actuated and included as standard depending on equipment. With five adjustable settings to cover every application.

8 Hydraulic trailer braking available upon request.

9 Working headlamps: (opt) Additional working headlamps provide optimal illumination of the working area at the front.

10 Ballast carrier and front weights: (opt) Front weight carriers and ballast weights guarantee optimal weight distribution for every application. A wide

range of front weights is also available for use with front powerlifts.

11 Driver's seat with air suspension: (std) For your comfort and health on long working days.

12 (opt) DEUTZ-FAHR offers a large selection of **trailer couplings** for different requirements in different countries.

NO NEED FOR LONG MAINTENANCE.

ADVANTAGES

- Tool-free access to all important maintenance points
- Long maintenance intervals for oil and filters lower operating costs
- Low costs for wearing and maintenance parts
- Engine oil change every 500 hours
- Valve adjustment every 1,500 hours
- Transmission and hydraulic oil change every 1,000 hours
- Easy cleaning of the cooling system



Fast, daily maintenance

Daily maintenance is quick and easy and can be completed in next to no time simply by opening the rear hinged bonnet. Pressure-actuated springs keep the bonnet in the open position. All important components and assemblies can be reached straightforwardly for maintenance without the need for tools. The engine oil level can be checked without opening the bonnet.

Long maintenance intervals

The regular maintenance intervals for the engine are so long they are almost unique. The engine oil only has to be changed every 500 hours of operation, while the val-

ve setting only has to be checked every 1,500 hours. The transmission oil and its filters do not need to be replaced until after 1,200 hours. That – and the low cost of wearing and maintenance parts – means that the operating costs for an Agrofarm are satisfactorily low.

1 The engine and transmission oil coolers are fitted with a mesh guard and are therefore easy to clean.

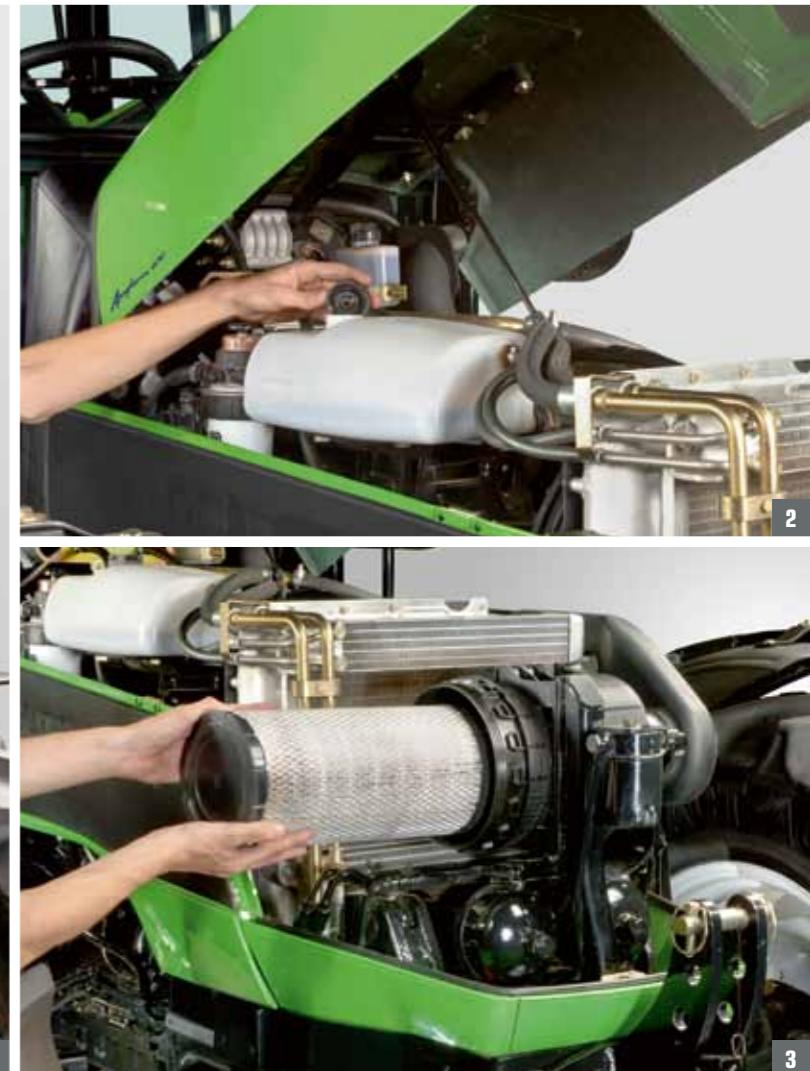
2 The expansion reservoir for the coolant is also easily accessible. The liquid level can be conveniently checked through the transparent tank.

3 The cartridge of the intake air filter is easily pulled out to the side after the clips have been detached. The ejector dust seal keeps the maintenance intervals for the filter very long.

4 The fuel filters with water separator can be accessed from the side after opening the engine bonnet.

5 The battery can also be accessed easily without the use of tools.

6 The oil filler neck and dipstick are very easy to reach. Long maintenance intervals cut the operating costs for servicing and maintenance.



TECHNICAL DATA.

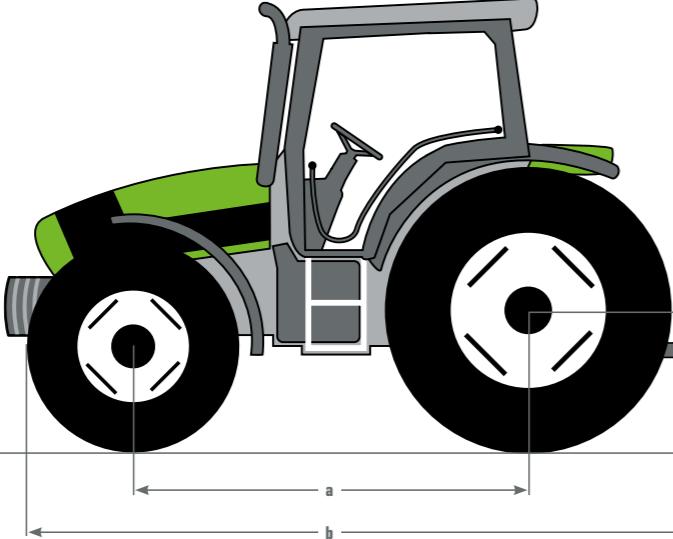
Type designation	430	
Engine		
DEUTZ diesel engine	Type	TCD 2012 L 04
Design		Turbo/liquid-cooled/high-pressure injection and intercooler
Homologated Power (200/25/CE)	hp	109
Speed rated	rpm	2,300 Profiline/ 2,100 TTV
Cylinders/cubic capacity	No./cm ³	4/4,038
Bore/stroke	mm	101/126
Torque rise	%	35
Maximum torque	Nm	400
Constant torque range	rpm	1,400-1,700
Constant power range	rpm	1,800-2,100
Engine oil change interval		500 h or every year*
Oil quantity/tank capacity	l	9/160
Use of bio-diesel*		Suitable for use of fuel in accordance with DIN EN 14214
Cab		
Design		With noise insulation, exhaust on the side of the strut
Equipment		Front and rear windows can be tilted, glass roof, Grammer comfort seat with air suspension and seat belt
Heating		Hot-water heating with fan with 3 settings
Air conditioning		Standard
Display		Non-glare information display with digital display showing vehicle speed, speed of front/rear PTO, powershift stages, operating hours, time, etc.
Electrical system		
Voltage	V	12
Battery	V/Ah/A	12/180/800
Chassis, brakes, steering		
Front differential lock		100%, electrohydraulic activation
Rear differential lock		Electrohydraulic activation
4-wheel drive operation		Electrohydraulic activation
Service brake		Wet disk brake system on all 4 wheels
Parking brake		hydraulic spring storage
Steering system		Hydrostatic with separate pump
Steering angle/smallest turning circle		55°/3.50 m
Trailer brake		Combined one/two line compressed air braking system on request
Hydraulic trailer brake		on request
Working hydraulics		
System		Energy saving system with electronic control and flow regulators
Pump flow rate	l/min (bar)	93 (190)

* Engine oil change interval halved if run on bio-diesel.

Type designation	430														
Powerlift															
Category of 3-point hitch, rear		II/Quick coupling													
EHR		Standard													
Lifting force at rear	kg	5,300													
External operation		Left and right on the rear fender													
Front powerlift, cat. II		Integrated with folding lower links on request													
Front powerlift lifting force	kg	1,800													
Hydraulic remote valves															
No. of remote valves		6 remotes (3 sets)													
Non-pressurized recirculation		Standard													
Version		Double-acting, float setting													
Operation		one separate levers and joystick													
Transmission															
Powershift transmission (profiline)		60/60, 5 gears, 4 groups including creep speed, 3 load switching steps, 40km/h for reduced engine speed of 1,900 rpm													
Stepless TTV transmission (TTV)		up to 40km/h of 1,800 rpm, cruise control													
Clutch actuation (Profiline)		Electrohydraulic actuation via foot pedal and switch in gear lever													
Reverse transmission		5-step, adjustable, electrohydraulic Powershuttle on the steering wheel													
Stop & Go braking and routing system (Profiline)		Standard													
Speeds Powershift transmission 60/60 with 480/70 R38 tyres, example for Agrofarm 420															
SR	1L	1M	1H	2L	2M	2H	3L	3M	3H	4L	4M	4H	5L	5M	5H
SR	0,44	0,53	0,64	0,59	0,71	0,86	0,79	0,95	1,14	1,13	1,35	1,63	1,52	1,82	2,2
L	1,51	1,8	2,18	2,03	2,43	2,93	2,7	3,23	3,9	3,85	4,6	5,56	5,19	6,21	7,05
N	3,26	3,9	4,71	4,39	5,25	6,34	5,84	6,98	8,44	8,32	9,94	12,02	11,22	13,41	16,2
V	9,72	11,62	14,04	13,07	15,63	18,88	17,39	20,79	25,13	24,77	29,61	35,78	33,4	39,9	40*
Speeds stepless TTV transmission															
Driving strategies		3 driving strategies (Auto, PTO, manual), speed preselection stepless, up to 40km/h (at reduced engine speed of 1,800 rpm)													
0 to 20 km/h		for permanently slow and very heavy pulling works													
0 to 40 km/h		for normal operation on field and road													
Front PTO															
Actuation		Electrohydraulic shifting													
Speed	rpm	1,000													
Direction of rotation		Right in direction of travel													
Rear PTO ProfiLine															
Actuation		Electrohydraulic; in the cab and on the two rear mudguards													
Ground-speed PTO		With separate PTO stub on request													
PTO speeds		540/540E/1,000/1,000E													
Rear PTO TTV															
Actuation		Electrohydraulic with proportional control													
PTO speeds		540/540E/1,000													

* Max. Speed regulated by law.

DIMENSIONS, WEIGHTS, TYRES.

a Wheel base				
b Length				
c Height above cab				
				
Type designation	420			
	Profiline	TTV		
Dimensions in mm				
a Wheel base	2,340			
b Length with lower link	3,990	4,150		
c Overall height without/with A/C*	2,730			
Track widths	Adjustable rims, tracks according to tyres from 1,600 to 2,100 mm possible			
Minimum width	min. - max.	2,050-2,458 mm for tyre combinations 480/70 R 24 (f) and 480/70 R 34 (n)		
Ground clearance max.	500			
Weights in kg (40 km/h, cab)				
Unladen weight				
Total	4,050	4,100		
Permissible laden weight				
Maximum front axle load	3,000			
Maximum rear axle load	5,000			
Permissible total weight	7,500			

* For standard roof; depending on rear wheel tires.

Type designation	420	
	Front	Rear
Option	280/85 R 28	340/85 R 38
Standard (Profiline/ TTV)	480/65 R 24	540/65 R 34
Option	420/70 R 24	480/70 R 34
Option	380/85 R 24	420/85 R 34
Option	480/70 R 24	520/70 R 34
Option	420/85 R 24	460/85 R 34
Option	340/85 R 28	420/85 R 38
Option	440/65 R 28	540/65 R 38
Option	380/70 R 28	480/70 R 38

Available standard tyre combinations are given on the current valid price lists.

SURE AND SAFE WITH ORIGINAL DEUTZ-FAHR SERVICE AND PARTS.



Original service is wise.

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, we recommend you use original parts when required. Only these comply with the high quality and safety standards of DEUTZ-FAHR and ensure correct function and operation without problems – guaranteed.

DEUTZ-FAHR lubricants

We recommend genuine DEUTZ-FAHR lubricants. The outstanding quality of this product range, which is made exclusively for DEUTZ-FAHR, ensures that your tractor always receives exactly what it needs.



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



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