AGROTRON TTV

DEUTZ FAHR

EVOLVING AGRICULTURE.

TECHNICAL DATA.

Type designation		610	620	630
Engine				
Liquid-cooled DEUTZ diesel engine	Type	TCD 2012 L6 4V		
Cylinders/cubic capacity	No./cm³	6/6,057		
Bore/stroke	mm	101/126		
Injection system		DCR (DEUTZ Common-Rail) with 1,600 bar injection pressure and 7-hole-injectors		
Rated power	kW/hp	115/157	121/165	149/203
Homologated power (2000/25 EC)*	kW/hp	121/165	124/169	163/222
Max. power with DPC	kW/hp	121/165	135/184 including 11 kW/15 hp boost function	164/224 including 13 kW/18 hp boost function
Speed rated power	rpm	2,100		
Maximum torque	Nm	606	693	851 at 1,600 rpm
Constant power range	rpm	1,400-1,900		1,300-1,600
Air intake		On top left A strut		Under the cowling
Tank capacity	l	305		305 + 130 on request
Engine oil change interval		500 h or annually		
Cab				
Construction		Integrated, sound-proofed safety cab		
Noise level	dB (A)	73-74		70
Air conditioning		standard		
PowerComV armrest		standard		
Control management		Comfortip as standard feature with up to 16 programmed operating sequences		
Cab suspension		Mechanical or pneumatic on request		Pneumatic or semi-active suspension on request
Electrical system				
Voltage	V	12		
Alternator	W/A	2,500/200		
Starter	V/kW	12/4,0		
Battery	V/Ah	12/180		
External socket		7 pole signal		7 pole ISO and DIN (option)
High-voltage socket		3-pin, 25 A		
AGROTRONic-hD connections		External signal transmitter, 4-pin		
Chassis, brakes, steering				
Front drive		Central drive		
Front axle suspension		hydro-pneumatic suspension on request		
Differential locks front/rear	ASM	Fully-automatic control through speed, steering angle, individual wheel brake and slip (100% locking value); can be deactivated		
Service brake	front/rear	Automatic engagement front drive/oil-immersed disk brake system		
Parking brake		Acts on disk brake in rear axle		
Steering angle		52°		
Turning radius	m	5.13		5.80
Steering		Open Centre with separate pump		
Pump flow rate/pressure	l/min (bar)	44 (185)		

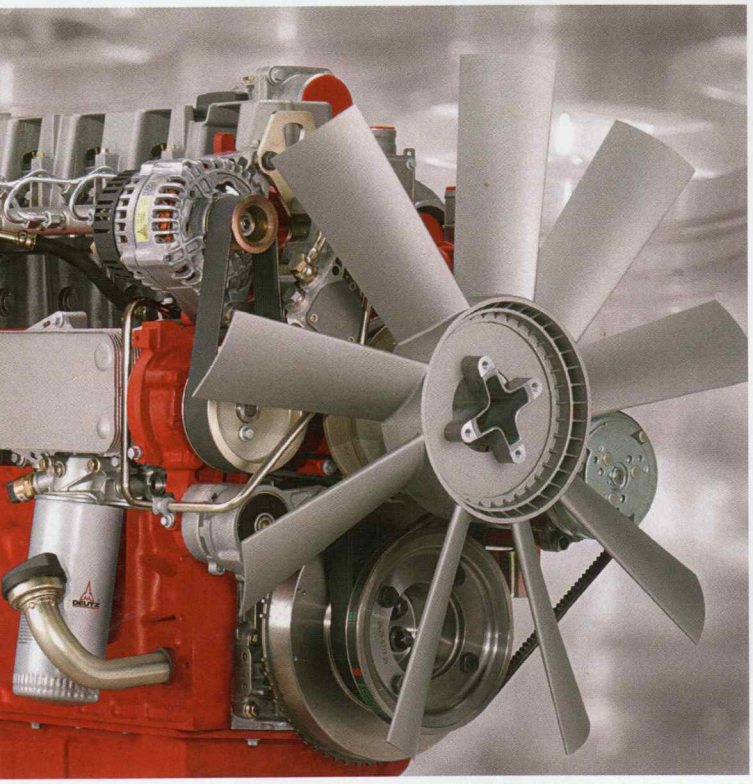
Printed in Germany

Typenbezeichnung		610	620	630
Hydraulic system				
System		Load-Sensing		
Oil reservoir	l	Shared with transmission		Separate
Pump flow rate	l/min (bar)	30		45
Available oil quantity	l	Load-Sensing 120 (200)		Load-Sensing 110 (200)/ 160 (200) on request
Front PTO on request				
Kupplung		Multi-plate clutch, oil-immersed		
Actuation		Electrohydraulic		
PTO speed	1/min	1,000		1,000 oder 1,000 E (o. r.)
PTO profile		6-spline shaft 1 3/8"		
Max. transmittable power	kW/hp	110/150		
Engine speed at PTO speed 1,000	1/min	1,960		1,930/1,600
Rear PTO				
Clutch		Oil-immersed, modulating start-up		
Actuation		Electrohydraulic circuit		
PTO stub		Bolted, can be exchanged		
Profiles		6-spline shaft 1 3/8" **		
Engine speed 540/1,000 and 540 E/1,000 E	1/min	1,946/1,645		1,880/1,600
Remote control		On left rear mudguard (and right on wide mudguards)		On both sides
Transmission				
Transmission type		Infinitely variable TTV transmission up to 50 km/h * (40 km/h on request)		
Reversing transmission		Hydraulic, oil-immersed multi-plate clutches		
Oil cooler		standard		
Transmission/hydraulics oil volume	l	104		67
Maximum speed		Set by means of engine speed regulator, max. speed 40 or 50 km/h – 50 km/h with lowered engine speed of only 1,830 rpm		
Powerlift				
AGROTRONIC-hD		Draft/positional/mixed control/free floating/diagnosis/vibration damping/slip control		
Category of 3-point hitch, rear		II/III; fast action couplings		
Rear powerlift lifting force	kg	9,200		10,000
Rear powerlift remote control mudguards		on left mudguard as standard, left and right optional		
Front powerlift lifting force (on request)	kg	4,000		4,500
Category of 3-point hitch, front		II/III; fast action couplings		
Additional hydraulic remote valves				
Number electronic		4		4, on request max. 7
Parallel operation		standard		
Non-pressurized recirculation		standard		
Functions pressure		In neutral position or raise/lower		
Actuation		Double-acting with float position, can be coupled under pressure		
Flow rate adjustment		4 remote valves electrically adjustable		4 remote valves electrically adjustable, max. 7 on request
Flow time adjustment		2 remote valves electrically adjustable		2 remote valves electrically adjustable, max. 7 on request

* If allowed by law
** More PTO profiles on request

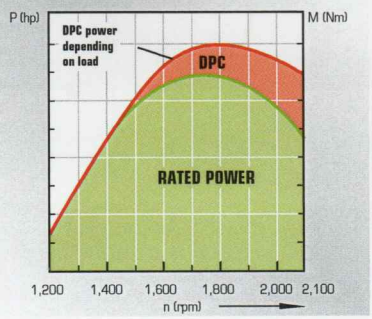
ADVANTAGES

- Modern, high-torque and fuel-efficient DEUTZ 4-valve turbo diesel engines with electronic engine control (EMC) for low consumption and compliance with TIER III exhaust gas emissions regulations
- The innovative DPC system (DEUTZ-FAHR Power Control) provides powerful and economical engine power for every application
- DEUTZ Common-Rail (DCR) high-pressure injection, up to 1,600 bar using two injection pumps
- The exhaust gas recirculation reduces emissions of nitrogen oxide and particulates whilst also considerably reducing fuel consumption
- Air filter with ejector dust separation and long maintenance intervals
- DEUTZ-FAHR is the first manufacturer granting approval for the use of bio-diesel fuel (B100) ex-works including a 24-month warranty. Expensive after sales solutions or additional assurances are not necessary. Savings from the first moment on.



Optimum fuel combustion thanks to four valves and 7-hole injection nozzles.

DEUTZ-FAHR Power Control (DPC)

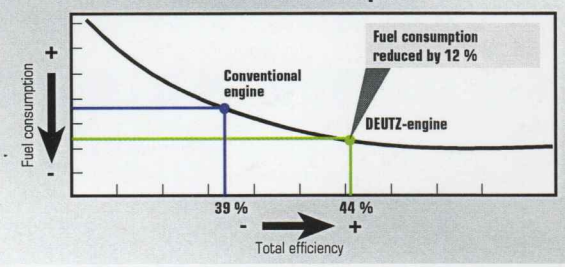


The innovative DPC technology delivers the highest and most economically efficient power at all times depending on the load situation. Strong torque, quick response characteristics and sufficient traction are therefore guaranteed even under the most difficult operating conditions.

Fuel costs

Every litre of bio-diesel saves hard cash. At a fuel consumption rate of 30,000 l/year and an average price saving of 15 ct/l, the overall saving over five years would be 22,000 Euro.

Low fuel consumption



Powerful, economic and environmentally friendly

Many can construct engines. But the real task is to build strong and efficient engines which comply with the effective emission standards and still set their own trend. The DEUTZ engine philosophy comes down to power, economy and environmentally friendliness.

We develop for agriculture

DEUTZ-FAHR focuses on technologies which contribute to increase power and lower fuel consumption and minimise harmful emissions. Our bio diesel initiative is only one of several forward-looking projects.

The ever changing applications in agriculture require extraordinary know-how and longtime experience in engine construction. But there is one thing all those applications have in common: power must be available when it's needed. And the fuel consumption has to be reduced at the same time.

What sounds paradoxical has been achieved by the DEUTZ-FAHR engineers with the innovative DPC (DEUTZ-FAHR Power Control). By combining the electronic engine control (EMC) and the DEUTZ Common-Rail-Technology, a complex but very efficient engine control system has been developed.

Powerful, strong, efficient

The 6 cylinder high-tech DEUTZ turbo diesel engines in the Agrotron TTV come with innovative DEUTZ Common-Rail-Technology (DCR) as standard. And thanks to the DPC the engines deliver constant power, high overpower and maximum torque. The driver can therefore relax while working because the engine offers sufficient reserves of power, excellent flexibility and reduced fuel consumption at all times. A special feature for transport work at 50 km/h: thanks to the reduced engine speed of 1,850 rpm the Agrotron TTV works very economically in this sector.

Quiet for both the driver and the environment

Possible noise sources were already excluded at the engine design stage, as noises that do not occur do not require insulation. Noise generation is already prevented at the source by a rigid, ribbed crankcase, soft combustion, exhaust turbocharger, liquid cooling and double-shell silencing below the engine cowling and a flexible intake and exhaust pipe mounting.