John Deere 7810 AutoPowr

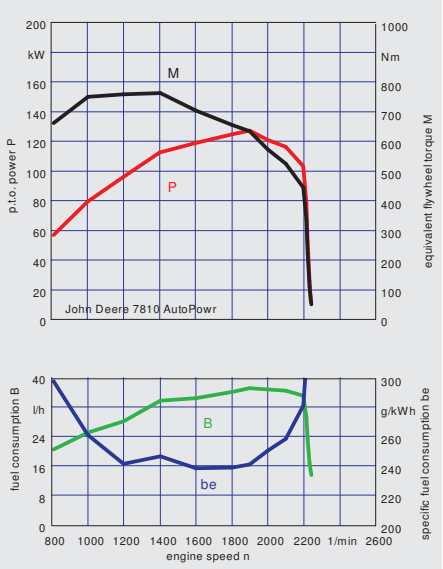
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Engine

John Deere 6081HRW43, rated engine power 129 kW at 2100 min^{-1}, turbocharger, intercooler, 6 cylinder, capacity 8100 cm^3, bore 116 mm, stroke 129 mm, water cooled, viscous fan, average pressure 9,1 daN/cm^2, fuel tank capacity 344 l

Measurement at main power take off

	Rated engine speed 2100 min^{-1}	Engine speed at max power 1900 min^{-1}
Power	116,4 kW	127,0 kW
Fuel consumption	36,4 l/h	37,3 l/h
Specific fuel cons.	259 g/kWh	242 g/kWh



Average fuel consumption of

the 6 measurement points from the governor curve 25,7 l/h, 329 g/kWh

Equivalent flywheel torque

Max. torque 767 Nm at 1400 min^{-1}, torque increase 45 % at a speed drop of 19 %

Torque at engine speed 1000 min^{-1}

143 % rated to the torque at rated engine speed

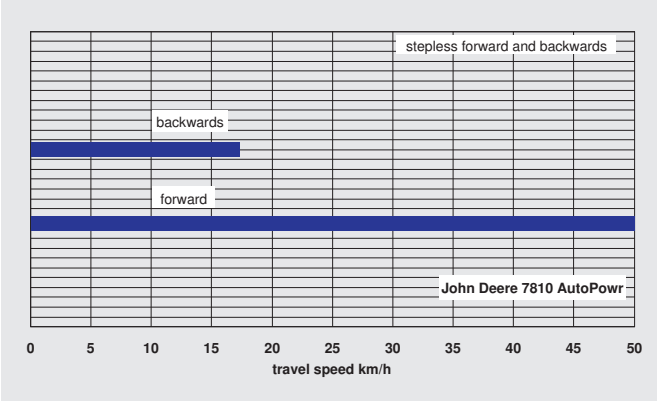
Power take off

Wet multi-disc clutch, electro-hydraulically operated by switch, 1 rear p.t.o., form 2, double shifting, changeable

Standard speed	540	540 E	1000	1000E
Engine speed	-	1730 min^{-1}	1973 min^{-1}	-

Gearbox

Stepless, variable power branching gearbox with 4 gears; shuttle gearbox, power shifted; 2 shift levers



Speed scheme arranged by groups, for every gear in the speed range from the engine speed at max. torque to the rated engine speed.

Drawbar power

Max. power 110,8 kW at 8,2 km/h and engine speed 1900 min^{-1}, at 279 g/kWh; at rated engine speed 101,8 kW at 9,2 km/h, at 300 g/kWh



Chassis

All wheel drive, central driving shaft with universal joints, wet multi-disc clutch, electro hydraulically operated, front self-engaging multi-plate differential lock, rear multi-plate differential lock, electro-hydraulically operated; hydro-pneumatically suspended front axle

Front	Tyre 600/65 R 28
Rear	Tyre 710/70 R 38

Brakes

Oil-immersed disc brake at the rear axle; hydraulically operated; automatic engagement of 4WD; maximum mean deceleration 4,5 m/s^2 at 45 daN applied pedal pressure

Cab

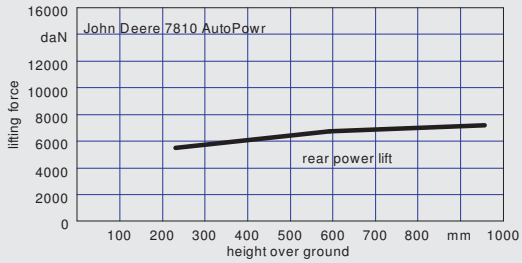
John Deere SG 060, OECD-No. CSS 0349, 2 doors, rear and side windows tiltable, cooling water heat exchanger, air conditioner

Sound levels at drivers ear

	Unloaded	Under load
At 7.5km/h, nominal gear selected, all openings closed	72,0 dB(A)	75,0 dB(A)
Open	81,0 dB(A)	82,0 dB(A)
In loudest gear, all openings closed	72,5 dB(A)	75,5 dB(A)

Hydraulic system

Closed centre type; pressure and flow compensated system; power lift category 3, 2 external cylinders with 80 mm diameter, electronic lower link sensing, front power lift



Oil tapping port

Max flow rate 110,8 l/min; max. hydraulic power 30,8 kW at 188 bar and 98,1 l/min; max. pressure 207 bar; oil together with gear box with 102 l capacity, available to external cylinders 30 l

Masses/Axle load

Mass	Test tractor	Permissable total mass
Front	2975 kg	4800 kg
Rear	5095 kg	10000 kg
Total	8040 kg	12500 kg

Tractor mass to engine power ratio 62 kg/kW

Dimensions

Width 2520 mm, length 4820 mm, height at top of exhaust silencer pipe 3000 mm, at cab 3100 mm, wheel base 2800 mm, distance from p.t.o. shaft end to trailer hitch 185 mm, distance from p.t.o. shaft end to lower link couplers 595 mm

Test centre
DLG-Prüfstelle für Landmaschinen

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