

Fendt 211Vario

Tractor Test No. 1989/13

APPLICANT

Agco GmbH
Johann-Georg-Fendt-Strasse 4
D-87616 Marktoberdorf

TRACTOR

Manufacturer: Agco GmbH
Model: Fendt 211Vario
Approval certificate no.: 4FA2 95

SUSPENSION AND BRAKES

Central four-wheel drive with powershift transmission
Wet disc brake on rear axle
Automatic all-wheel activation
Mechanical parking brake

DRIVER PROTECTION

Integrated safety cab with mechanical suspension

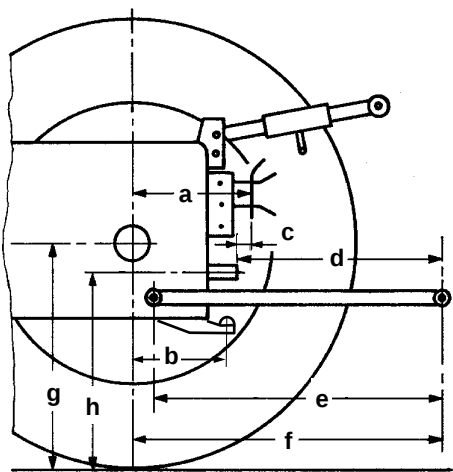


TYRES

	Track width:
front: 440/65 R24	1710 mm
rear: 540/65 R34	1660 mm

DIMENSIONS

Length:	— mm
With front mounting:	4450 mm
Front overhang from steering wheel:	2450 mm
Width:	2240 mm
Height:	2460 mm
Wheelbase:	2295 mm
Ground clearance:	410 mm
Turning diameter:	8,3 m (without four-wheel drive) 9,4 m (with four-wheel drive)



Rear

a: 640 mm
b: — mm
c: 220 mm
d: 615 mm
e: 875 mm
f: 1035 mm
g: 740 mm
h: 710 mm

Front

d: 600 mm
e: 800 mm
f: 990 mm
g: 560 mm
h: 730 mm

TEST EQUIPMENT

- front 3-point hitch and PTO

WEIGHT

in test equipment

Front:	1790 kg	42 %
Rear:	2510 kg	
Total:	4300 kg	

Permissible front axle load:	3000 kg
Permissible rear axle load:	5000 kg
Permissible total weight:	7000 kg

Payload:	2700 kg
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Towed weight, braked:	35 000 kg
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CAPACITIES

Fuel tank	125 l	
AdBlue tank	— l	
Engine oil	10 l	(change interval 500 h)
Gearbox oil	30 l	(change interval 2000 h)
Hydraulic oil	39 l	(change interval 1000 h)

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ENGINE (Manufacturer's data)

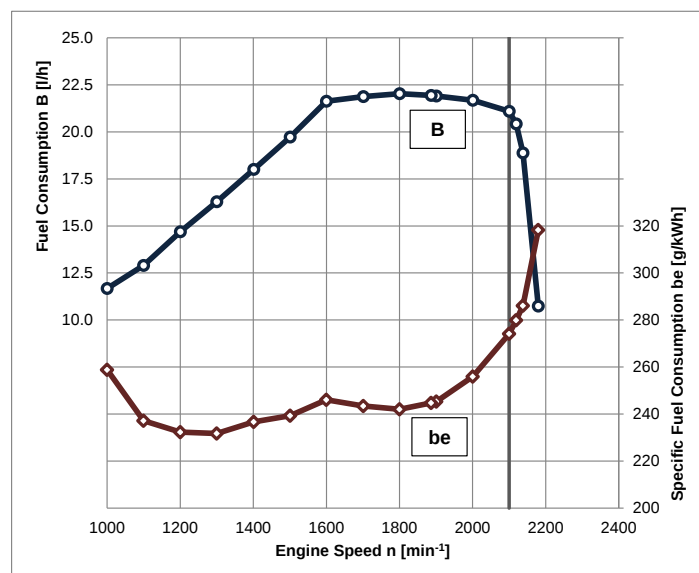
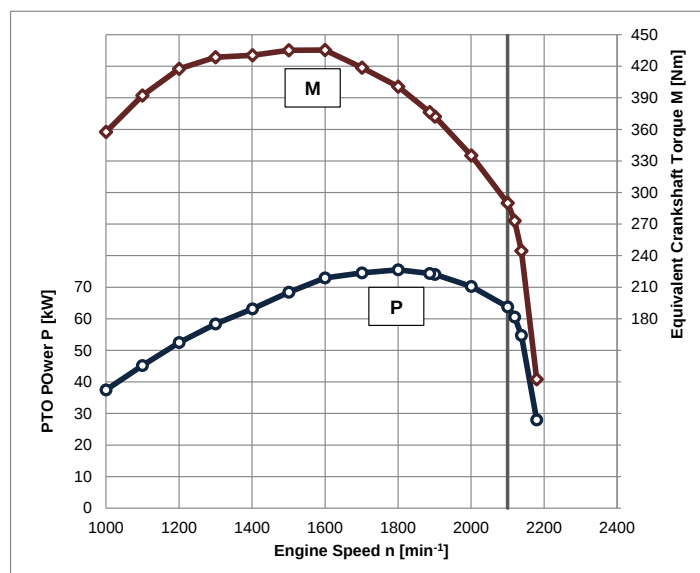
Manufacturer: Agco Sisu Power
Model: 33.521CTA
Injection: Diesel direct injection
CommonRail
Supercharging: Exhaust gas turbocharger and air-to-air intercooling
External cooled exhaust gas recirculation
Exhaust emission treatment: –

Bore/stroke: 108 / 120 mm
Cylinders / capacity: 3 / 3298 cm³
Cooling: Water, viscous fan

Rated power: 74 kW (101 PS) EG 97/68

Rated engine speed: 2100 min⁻¹
Exhaust stage: IIIA

POWER TAKE-OFF MEASUREMENT



Measurement conditions:

- air temperature 20 °C
- relative atmospheric humidity 37 %
- atmospheric pressure 950 mbar



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Full load test values

	Speed [min ⁻¹]		Power		Fuel consumption		AdBlue consumption	
	Engine	PTO	kW	HP	Specific [g/kWh]	Absolute [l/h]	Specific [g/kWh]	Absolute [l/h]
Rated power	2100	1112	63,8	86,7	274	21,1		
Maximum power	1800	953	75,3	102,3	242	22,0		
Normal speed PTO	1889	1000	74,4	101,1	245	21,9		

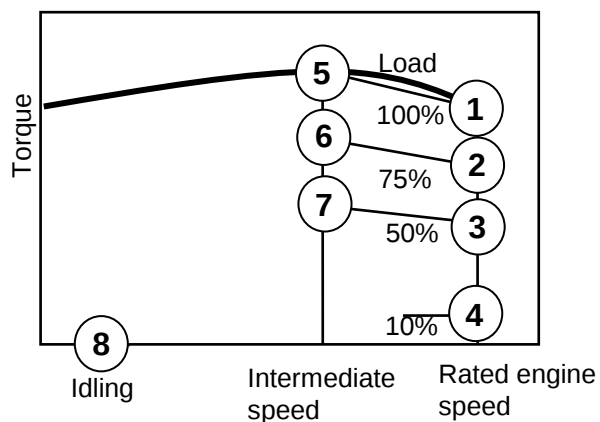
Max. torque: 435 Nm at 1600 min⁻¹
 Torque increase: 50 % at 24 % speed drop
 Starting torque: 123 %
 Idling speed: 799 min⁻¹
 Cutoff speed: 2222 min⁻¹

Partial load values

Fuel consumption with 42,5 % partial load at normal PTO speed

PTO shaft Fuel
 1000 min⁻¹: 271 g/kWh, 10,3 l/h

In characteristic diagram



Measuring point	Fuel consumption		AdBlue consumption	
	Specific [g/kWh]	Absolute [l/h]	Specific [g/kWh]	Absolute [l/h]
1	274	21,1		
2	267	15,3		
3	295	11,3		
4	674	5,2		
5	243	21,3		
6	243	15,7		
7	254	11,0		
8	-	1,1		

EMISSIONS

Exhaust gas emissions

▪ Black smoke 0,75 SZ (BOSCH)

Emissions according to ISO 8178-4, C1

▪ Hydrocarbons HC 0,22 g/kWh*
 ▪ Nitrogen oxides NOx 5,22 g/kWh*
 ▪ Carbon monoxide CO 0,70 g/kWh*
 ▪ Particulate number Pn 1,9E14 #/kWh*
 ▪ Cycle consumption Fuel 273 g/kWh* (12,6l/h)

Noise level

▪ Noise level at driver's ear: 74,5 dB(A)
 ▪ Passing noise: 85,0 dB(A)

* With reference to PTO power



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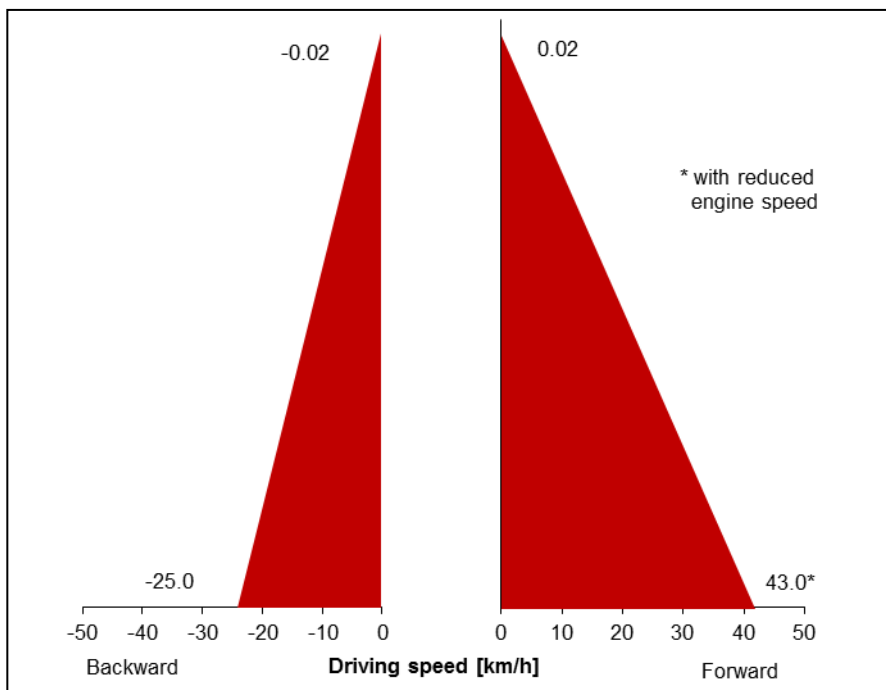
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TRANSMISSION

Travel gear

- Continuously variable transmission
- hydrostatic / mechanical power split

Driving speed at rated engine speed
(tyre radius $r = 750$ mm)



PTO transmission

Rear

- Wet multi-plate clutch, electro-hydraulic engagement

Front

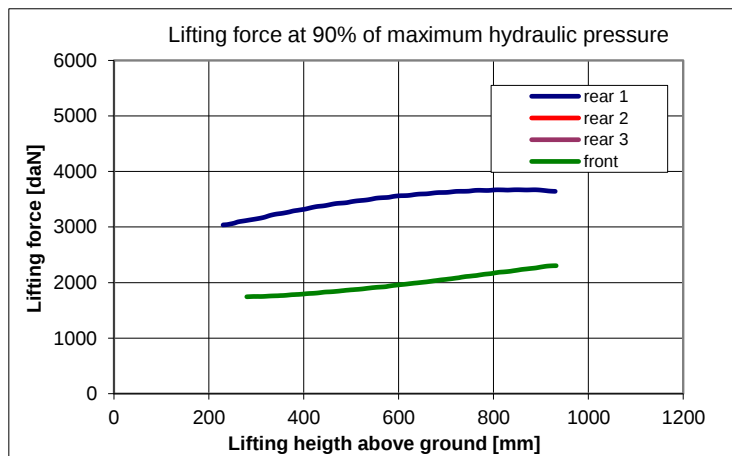
- Dry multi-disc clutch, electro-hydraulic engagement

	Rear						Front
PTO shaft	430	540	540E	1000	1000 E	Ground speed	1000
Engine speed	-	1906	1566	1889	-	-	2033

HYDRAULICS

Remote hydraulics

- max. oil pressure: 205,2 bar
- max. flow rate : 48,3 l/min
- flow rate: 40,5 l/min at 174,4 bar
- max. hydraulic power: 12,1 kW (37,6 l/min and 193,5 bar)
- max. flow rate through a single coupler: 48,3 l/min
- max. quantity of oil taken: 34 l



3-Point Hitch

Rear

3-Point Hitch, category: II
Control hydraulics via lower link, (EHR)

Front

3-Point Hitch, category: II

			Lifting force at 90% pressure	
Measurement		Lifting movement	Continuous	Maximum
Rear	Lower link, short	700 mm	3035 daN	3675 daN
	Lower link, medium			
	Lower link, long			
Front		652 mm (280 mm to 932 mm)	1745 daN	2305 daN

Explanatory notes on tractor test at:
www.traktorentest.ch



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