Report on test in accordance with O.E.C.D. STANDARD CODE

O.E.C.D. No. **902**



Agricultural Tractor DEUTZ-FAHR DX 6.10 (4WD)

Type denomination D 1026 A-S, D 1026 A-T

Manufacturer
Klöckner-Humboldt-Deutz AG
D-5000 Köln-Deutz

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This bulletin is based on engineering tests in accordance with the O.E.C.D. STANDARD CODE for the Official Testing of Agricultural Tractor Performance. It does not contain an evaluation of the tractor performance on practical work.

Duration of Tests: December 1983 till March 1984
DLG-Testing-Station for Agricultural Machinery, Max-Eyth-Weg 1,
D-6114 Groß-Umstadt

This report has been approved by the O.E.C.D. Coordinating Centre (C.E.M.A.G.R.E.F., France) as being in accordance with the O.E.C.D. STANDARD CODE.

Date of Approval: 13th September 1984 O.E.C.D. No. 902

The tractor DX 6.10, type denomination D 1026, has been tested in 2 variants:

1 As model D 1026 A-S with 5 speed change gear and maximum design related speed 30 km/h
2 as model D 1026 A-T with 6 speed change gear and maximum design related speed 40 km/h

In the rest both variants are identical

In this report all performance characteristics are given corresponding to the International System of Units.

The reference to the former used Technical System of Units is given by the following relations:

Forces	1 daN = 10 N	=	1,02 kp	or 1 kp	= 0,981 daN
Powers	1 kW	=	1,36 PS	or 1 PS	= 0,736 kW
Pressures	1 bar	=	1,02 kp/cm²	or 1 kp/cm²	= 0,981 bar
	1000 mbar	=	750,10 mm Hg		

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PRÜFUNGS-ABTEILUNG
DEUTZ-FAHR DX 6.10 Test No. 83-189

Tractor manufacturer:	KLÖCKNER-HUMBOLDT-DEUTZ AG D-5000 Köln-Deutz
Submitted for test by:	Manufacturer
Selected by:	Manufacturer with agreement by DLG
Place of running in:	Köln and Groß-Umstadt
Duration of running in:	Engine and tractor appr. 100 hours

SPECIFICATION OF TRACTOR

Tractor

Make:	DEUTZ-FAHR
Trade name:	DX 6.10
Type denomination:	D 1026 A-S and D 1026 A-T
Type:	Four-wheel-drive tractor, unit construction
Serial No.:	7437 0004

Engine

Make:	DEUTZ
Model:	F6L 912.74
Type:	4-stroke Diesel engine, direct injection air cooled
Serial No.:	6912666
Cylinders:	6, in-line, bore 100 mm, stroke 120 mm, displacement 5655 cm^3, compression ratio 17:1; replaceable ribbed cylinder liners
Valves:	Overhead
Fuel system:	PIERBURG fuel feed pump; BOSCH in-line injection pump; PES 6A 85D 410/3 RS 2527; manufacturer's production setting 50,6 mm^3/stroke at rated engine speed and full load; injection timing $30^{\circ} \pm 1^{\circ}$ before TDC; BOSCH multihole injection nozzles DLLA 149 S 774, injection pressure 175 + 8 bar; MANN fuel filter with replaceable cartridge; capacity of fuel tank 125 l, additional tank with 100 l capacity available
Governor:	BOSCH centrifugal variable speed governor EP/RSV 325-1150 A8B 2014 DL; governed range of engine speed 650 to 2410 1/min, rated engine speed 2300 1/min

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Air cleaner:	DEUTZ-SICCOPUR dry paper element filter with precleaner, replaceable cartridge, electrical maintenance indicator, air intake below bonnet
Exhaust silencer:	LANGE single chamber-expansion type silencer, 120 x 230 mm oval, 1090 mm long; on the left beside the bonnet, mouth showing upwards; mouth 2800 mm above ground
Lubrication system:	Forced feed from gear pump; strainer in sump; MANN oil filter in full flow with by-pass valve and replaceable cartridge; cartridge change every 500 operating hours; oil capacity 17 l; recommended oil qualities: API-CC oil change period 250 operating hours,or API-CD oil change period 500 operating hours specified oil viscosities: below - 5°C SAE 10W from -10°C to +10°C SAE 20W/20 from + 5°C to +30°C SAE 30 over +25°C SAE 40 or over -10°C SAE 15W/40; engine oil cooler inside of cooling air baffle
Cooling system:	Air cooling with axial blower, driven by V-belt and fluid coupling, blower speed controlled by exhaust gas temperature
Starting system:	Electrical BOSCH solenoid pre-engaged-drive-starting motor JF 12V 2,7 kW; BERU flame pflug in intake manifold
Electrical equipment:	12 Volt, negative earth; BOSCH 3 phase alternator G1 14V 33A, 462 W; 1 lead acid battery 110 Ah at 20 hours rating

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Transmission

Clutch:	LAMELLEN- UND KUPPLUNGSBAU GMBH dry dual disc clutch DT 310/310 G travel drive disc 310 mm dia, pedal operated; p.t.o. drive disc 310 mm dia, hand lever operated
Gear box:	DEUTZ-FAHR TW 903-T synchromesh speed change gear with 5 speeds at model D 1026 A-S and 6 speeds at model D 1026 A-T; synchronized range gear with 3 forward ranges (L, M and H) and 1 reverse range (R); total 15 forward and 5 reverse speeds at model D 1026 A-S, 18 forward and 6 reverse speeds at model D 1026 A-T; collar shifted creeper group optional, not attached to tested tractor
Rear axle and final drives:	DEUTZ-FAHR bevel gear drive, bevel gear type differential on intermediate shaft, spur gear final drives; differential lock in rear axle, pedal operated, not self disengaging, with electrical indicator
Front axle and final drives:	ZAHNRADFABRIK FRIEDRICHSHAFEN APL 345 driven by universal joint shaft (placed in tractor's median plane); wet multi disc safety clutch; hand lever operated collar shifting; bevel gear drive; No Spin-differential OPTITRAC; planetary final drives

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Total ratios and speeds (tyres 18.4 - 38)

Range	Gear	Total ratio engine : driving wheels	Nominal travelling speed *) at rated engine speed km/h
L	1	298,86	2,38
	2	222,13	3,20
	3	175,68	4,05
	4	121,16	5,87
	5	98,72	7,20
	6 +)	78,17	9,10
M	1	144,54	4,92
	2	107,43	6,62
	3	84,97	8,37
	4	58,60	12,13
	5	47,75	14,89
	6 +)	37,80	18,81
H	1	71,00	10,01
	2	52,77	13,47
	3	41,74	17,03
	4	28,78	24,70
	5	23,45	30,31
	6 +)	18,57	38,29
R	1	154,81	4,59
	2	115,06	6,18
	3	91,00	7,81
	4	62,76	11,33
	5	51,14	13,90
	6 +)	40,49	17,56

*) calculated with the radius index 820 mm

+) not at model D 1026 A-S

Gear lubrication: Oil screen filter in gear housing, cleaning every 2000 operating hours

oil capacity in gearbox including rear axle with final drives 40 l
specified: engine oil SAE 15W/40 recommended quality API-CC or API-CD; oil change period 2000 operating hours

oil capacity in front axle bevel gear drive 7,5 l
in front axle final drives, each 0,75 l
specified: EP-gear oil SAE 90, quality API-GL5; oil change period 1000 operating hours

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Power-take-off	Independent p.t.o. 2 p.t.o. shafts at rear of tractor, driven by 2nd plate of dual clutch, both shafts rotate simultaneously and are shifted in common by p.t.o. hand lever; rotation clockwise, viewed to tractor's rear 540 1/min p.t.o. 650 mm above ground, 50 mm to the right of tractor's median plane; 35 mm dia, 6 splines, ISO 500/DIN 9611 type 1; 567 1/min at rated engine speed, standard p.t.o. speed 540 1/min at engine speed 2192 1/min 1000 1/min p.t.o. 635 mm above ground, 50 mm to the left of tractor's median plane; 35 mm dia, 6 splines, ISO 500/DIN 9611 type 1, optional 35 mm dia, 21 splines, ISO 500/DIN 9611 type 2; 1039 1/min at rated engine speed, standard p.t.o. speed 1000 1/min at engine speed 2214 1/min p.t.o. shafts 525 mm behind rear axle centre line
Power lift	DEUTZ-FAHR K 55.2 DEUTZ TRANSFERMATIC-system, hydraulic power lift in unit construction, draft control, position control and intermixable control, floating position; lower link sensing, no lowering throttle

Hydraulic system:	Open centre system; BOSCH tandem gear pump HY/ZFFS 11/22,5 + 14 L, directly driven by engine; delivery 55,6 l/min at rated engine speed; hydraulic oil filter with electrical maintenance indicator, filter change yearly DEUTZ-FAHR control valve; maximum working pressure 175 + 8 bar, single acting cylinder with 90 mm bore and 145 mm stroke, overpressure relief valve in cylinder set to 240 bar; 2 single acting additional rams with 55 mm bore and 185 mm stroke 1 double acting additional DEUTZ-FAHR control valve SD.80, 2 couplings at rear of tractor; maximum 3 double acting additional control valves available; 1 separate oil return pipe rear of tractor hydraulic oil reservoir with 13 l capacity in power lift unit, additional tank with 25 l capacity optional; by oil tap may be taken off 8 l if tractor is working stationary or travelling, 30 l may be taken off if tractor is fitted out with additional tank, hydraulic oil cooler attached to cooling air baffle
Hydraulic oil:	Recommended: engine oil SAE 20W/20 API-CC, oil change period 1000 operating hours, or engine oil SAE 20 W/20 API-CD, oil change period 2000 operating hours
Implement linkage:	Three point linkage, quick couplers optional, mounted to tested tractor; joint balls category 2 acc. to ISO 730/I; lift rods adjustable from 755 to 895 mm; lifting range with mean lift rods' length of 825 mm: from 280 mm to 890 mm above ground; length of top link adjustable from 580 mm to 880 mm length of lower links 940 mm

Pull attachment

Trailer hitch:	CRAMER, KU 9602 automatical; height above ground adjustable to 885 or 955 mm, coupling pin 32 mm dia; distance of hitch hole centre to rear axle centre line 571 mm to p.t.o. shaft end 46 mm; permissible vertical load 2000 kg
Swinging drawbar:	Optionally available, not attached to tested tractor
Holed drawbar:	Short bar, fitted to hitch points of lower links; length between the joint balls 825 mm; thickness of bar 30 mm, width 80 mm; centre hole and 4 holes on either side with 80 mm distance each; all holes 33 mm dia; distance of holes' centre line with lower links in horizontal position from rear axle centre line 1087 mm from p.t.o. shaft end 562 mm with lift rods adjusted to mean length of 825 mm lifting range from 295 mm to 905 mm above ground, the drawbar can be fixed mechanically-hydraulically in the height of 593 mm above ground, measured on surface of bar
Towing hitch:	At front of tractor, 902 mm above ground

Steering

Hydrostatic, DANFOSS
OSPC 140 OR
oil circuit in common with power lift, supplied by tandem part of the BOSCH gear pump with 14 cm^3/rev delivery;
1 integrated steering cylinder directly acting on front axle; bore 70 mm dia, stroke 238 mm, piston rod 36 mm dia

Brakes

Parking brake:	Mechanical internal-expanding-shoe brake acting on intermediate shaft, operated by pulling handle with ratchet; 1 brake drum with 180 mm dia and 60 mm width each on the left and right, outside of gearbox
Service brake:	Pedal operated muscle power brake with hydraulical transmission, acting on front- and rear axle; at rear: TEVES 1 brake disc with 276 mm dia and 2 brake calipers each on the left and right, outside of gearbox, on intermediate shaft at front: TEVES 1 caliper disc brake between universal joint shaft and bevel gear drive of front axle; brake disc 282 mm dia; front axle brake at 40 km/h version standard, for 30 km/h version optional
Steering brake:	Divided pedal of service brake; for normal use locked together
Trailer brake:	Optionally available; dual line or combined single-dual line compressed air brake

Wheels

Steering wheels:	At front, 2 radial-ply tyres 13.6 R 28 123 A8 MICHELIN, maximum permissible load per tyre 1550 kg at 1,6 bar inflation pressure and 40 km/h road speed; track width adjustable to 1800 mm or by turning the wheels to 2000 mm; rims W 12 x 28

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Driving wheels: At front and at rear;
rear wheels:
2 radial-ply tyres
18.4 R 38 8 ply PIRELLI,
maximum permissible load per tyre 2715 kg
at 1,4 bar inflation pressure and 30-40 km/h
road speed;
track width adjustable from 1600 to 2200 mm
in steps of 100 mm each by adjustable-gauge
bowl wheels;
rims W 15 L x 38

Wheel base: 2703 mm

Cab DEUTZ-FAHR
OECD-tested safety cab SK 1905-37/4
approval no. CSD 0501/6 (model D 1026 A-S)
CSD 0501/10 (model D 1026 A-T)
antivibration mounted by 4 silent blocks on
tractor;
1 door and 2 steps each on the left and right
hand side, steps 600 mm and 900 mm above
ground; driver's platform 1200 mm above ground

windscreen and upper rear window tiltable;
engine-oil heat exchanger heating-system,
3-step blower for fresh and warm air
incorporated in instrument and steering
support;
air intake above engine bonnet, air outlet
jets at cab floor, at instrument panel and at
windscreen;
heating by recirculating air is possible

noise reduction materials:

floor	foam PUR	25 mm
	in PE-foil	0,05 mm
	rubber mat	5 mm
mudguards	imitation leather on moltoprene foam	8 mm
seat support	rubber mat	4 mm
roof	cotton fleece, phenolic resin bonded	2-6 mm
	needle fleece	2 mm
	foam	30 mm
	needle fleece	3 mm

Seat	GRAMMER, DS 85 H/90 AR; upholstered seat with back rest and arm rests, adjustable spring with shock absorber; height of unloaded seat above driver's platform adjustable in 2 steps from 480 to 540 mm, back rest inclination adjustable about 10°, longitudinal adjustment 160 mm, seat revolving about vertical axle to the left and right each about 25°
Number of grease points	20
Dimensions	Total length: 4552 mm without ballast 4872 mm with ballast
	Total width: 2304 mm with and without ballast
	Total height: 2800 mm to mouth of exhaust silencer 2700 mm to top of cab roof
	Ground clearance: 415 mm below side fixation of lower links

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Possible combinations of tyres

tyre size			
at front		at rear	
9.5 - 32	10 ply	11.2 - 48	8 ply
12.4 - 28	6 ply	16.9 - 38	8 ply
13.6 - 24	8 ply	18.4 - 34	8 ply
13.6 - 28	6 ply	18.4 - 38	8 ply
13.6 - 28	123 A8	18.4 - 38	8 ply
14.9 - 24	6 ply	16.9 - 38	8 ply

Lighting equipment — Electrical 12 V, in accordance with German legislation

	Dimensions mm	Height above ground to centre mm	Distance from outside edge of tractor to centre mm
Head lights	130 dia	1136	944
Side lights	50x50	1655	379
Rear lights	45x64	1635	340
Reflectors			
1st pair	103x58	1335	143
2nd pair	103x58	665	663

Running-time meter — Mechanical, combined with tachometer, driven by camshaft of engine; reference engine speed for one really counted hour 1500 rev/min

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TEST CONDITIONS

Track setting: 1800 mm at front and at rear

Weights

		without driver	with driver
Without ballast:	at front	1775 kg	1785 kg
	at rear	2875 kg	2935 kg
	total	4650 kg	4720 kg
Front ballast:	water in the tyres		344 kg
	13 front weights, total		390 kg
Rear ballast:	water in the tyres		836 kg
	4 weights per wheel, total		500 kg
With ballast:	at front	2690 kg	2700 kg
	at rear	4030 kg	4090 kg
	total	6720 kg	6790 kg

Fuels and lubricants used in tests

Fuel:	ARAL Diesel-fuel DIN 51601	
	density at 15°C	
	at engine test	0,820 kg/l
	at p.t.o. test	0,840 kg/l
	at drawbar test	0,837 kg/l
Engine oil:	DEUTZ HDC SAE 15W/40	
Gear oil:	DEUTZ HDC SAE 15W/40 in gearbox including rear axle	
	DEUTZ gear oil API-GL5 hypoid SAE 90 in front axle including final drives	
Hydraulic oil:	DEUTZ SGHD-B SAE 20W/20 in power lift and in steering	

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COMPULSORY TESTS

(1) MAIN POWER TAKE-OFF PERFORMANCE (1000 rev/min)

Date of tests: 13th February 1984
Location of tests: DLG-Testing-Station Groß-Umstadt
Type of dynamometer: SCHENCK hydraulic dynamometer U1-40

Power kW	Speed engine rev/min	Speed p.t.o. rev/min	Fuel consumption hourly l/h	Fuel consumption hourly kg/h	Fuel consumption specific g/kWh	Specific energy kWh/l
Maximum power						
At 2-hour test						
68.2	2300	1039	20.93	17.58	258	3.26
At standard p.t.o. speed						
68.0	2214	1000	20.32	17.07	251	3.34
At rated engine speed						
68.2	2300	1039	20.93	17.58	258	3.26
Part loads, the governor hand lever in the position corresponding to the maximum power at full load (curve a)						
(i) 85% of the torque at maximum power at 2-hour test						
58.9	2339	1056	18.22	15.31	260	3.24
(ii) unloaded						
-	2406	1087	4.99	4.19	-	-
(iii) 50% of the load defined in (i)						
29.9	2375	1072	11.41	9.58	320	2.62
(iv) maximum power						
68.2	2300	1039	20.93	17.58	258	3.26
(v) 25% of the load defined in (i)						
15.0	2386	1078	7.93	6.66	443	1.90
(vi) 75% of the load defined in (i)						
44.5	2353	1063	14.46	12.15	273	3.08

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Power kW	Speed engine rev/min	Speed p.t.o. rev/min	Fuel consumption hourly l/h	Fuel consumption hourly kg/h	Fuel consumption specific g/kWh	Specific energy kWh/l
Part loads, the governor hand lever in the position corresponding to the standard p.t.o. speed at full load (curve b)						
(i) 85% of the torque at maximum power at standard p.t.o. speed						
58.6	2247	1015	17.64	14.81	253	3.32
(ii) unloaded						
-	2299	1038	4.33	3.63	-	-
(iii) 50% of the load defined in (i)						
29.7	2276	1028	10.71	9.00	303	2.77
(iv) maximum power						
68.0	2214	1000	20.32	17.07	251	3.34
(v) 25% of the load defined in (i)						
14.9	2290	1034	7.39	6.20	416	2.02
(vi) 75% of the load defined in (i)						
44.2	2261	1021	14.01	11.76	266	3.15

Standard specific fuel consumption (g/kWh): 260/320/253/303

No load maximum engine speed: 2406 rev/min
Equivalent crankshaft torque at maximum power (2 hours): 283 Nm
Maximum equivalent crankshaft torque: 337 Nm at 1497 rev/min of the engine

Mean atmospheric conditions:	temperature	16 °C
	pressure	974 mbar
	relative humidity	36 %
Maximum temperatures:	cylinder head	65 °C
	engine oil	97 °C
	fuel	18 °C
	engine air intake	19 °C

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Zapfwellenleistung
- 19 -
P.t.o. performance

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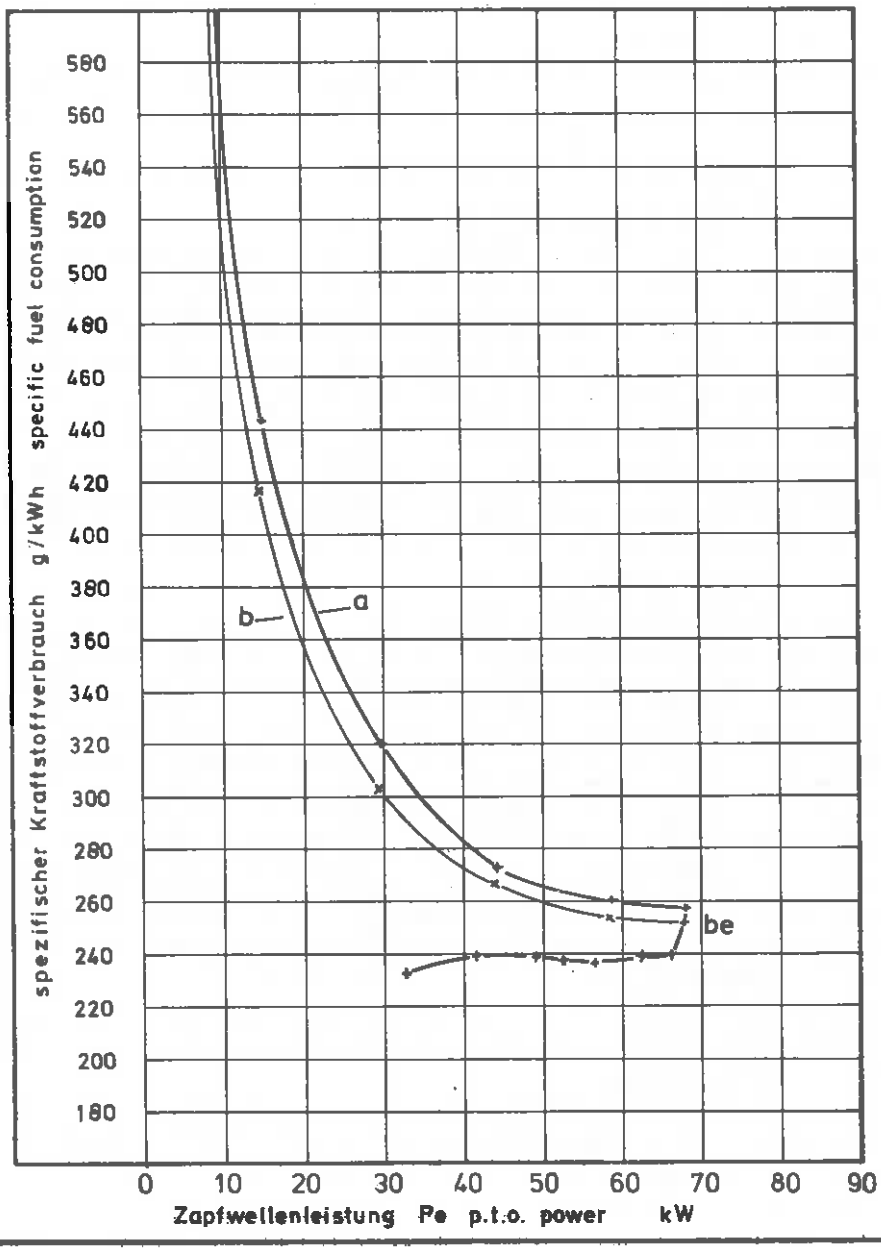
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Zapfwellenleistung

P.t.o. performance

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(2) DRAWBAR PERFORMANCE

Date of tests: 1st till 20th March 1984
Type of track: Concrete

Gear	Driving speed km/h	Power kW	Drawbar pull daN	Engine speed rev/min	Slip of wheels %
(i)	MAXIMUM POWER (unballasted) height of drawbar above ground 535 mm				
2 L	2,90	39,0	4843	2358	15,1
3 L	3,61	48,4	4823	2344	15,1
1 M	4,49	56,1	4497	2298	11,2
4 L	5,56	59,0	3822	2298	7,9
2 M	6,39	59,1	3328	2301	6,1
5 L	7,00	58,2	2995	2301	5,3
3 M	8,20	59,5	2613	2302	4,6
6 L	8,92	58,9	2379	2296	4,1
1 H	9,88	58,8	2143	2298	3,5
4 M	11,98	58,2	1749	2304	2,7
2 H	13,23	56,9	1547	2298	2,3
(ii)	MAXIMUM POWER (ballasted) height of drawbar above ground 530 mm				
1 L	2,11	39,4	6710	2350	15,0
2 L	2,81	52,5	6740	2334	15,0
3 L	3,82	57,9	5461	2299	7,9
1 M	4,73	58,7	4464	2299	5,8
4 L	5,73	59,2	3722	2303	4,5
2 M	6,48	59,4	3299	2300	3,9
5 L	7,09	58,0	2943	2301	3,4
3 M	8,28	58,0	2521	2299	2,9
6 L	9,01	55,9	2232	2297	2,6
1 H	9,96	55,9	2019	2298	2,3
4 M	12,01	56,0	1679	2304	1,8
2 H	13,23	52,5	1428	2301	1,6
(iii)	FIVE-HOUR-TEST at 75 % of pull at maximum power in 3 M gear				
3 M	8,51	44,7	1891	2346	2,2
(iv)	FIVE-HOUR-TEST at pull corresponding to 15 % wheel slip in test (ii)				
2 L	2,80	52,4	6740	2327	-

Total oil consumption during ten hours duration of tests (iii) and (iv) 106 g/h

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Tyre size front: 13.6 R 28 123 A8
rear: 18.4 R 38 8 ply

Tread bar height at the beginning of drawbar tests 96 % at front, 82 % at rear of the value, when new

Specific fuel consumpt. g/kWh	Specific energy kWh/l	Temperatures Fuel °C	Cylinder-head °C	Engine-oil °C	Atmospheric conditions Tempe-rature °C	Relative humidity %	Pressure mbar
tyre inflation pressure 1,1 bar at rear, 0,8 bar at front							
336	2,49	24	62	78	-2	100	995
321	2,61	23	54	79	-2	95	995
316	2,65	26	82	81	-2	100	995
301	2,78	26	82	85	-1	98	995
298	2,81	30	76	86	0	98	995
304	2,75	25	80	84	1	98	995
296	2,83	26	79	86	2	85	995
299	2,80	24	74	84	8	76	995
302	2,77	22	73	84	9	78	995
305	2,75	26	80	86	8	73	995
312	2,69	26	80	86	9	69	995
tyre inflation pressure 1,1 bar at rear, 1,4 bar at front							
341	2,45	30	58	86	6	55	1001
330	2,54	35	63	84	6	57	1001
302	2,77	30	68	83	7	57	1001
301	2,78	28	64	84	7	58	1001
294	2,85	29	71	87	7	56	1001
299	2,80	29	70	83	7	59	1001
306	2,74	28	71	84	7	58	1001
304	2,75	28	73	84	8	58	1000
314	2,67	29	74	85	9	58	1000
315	2,65	29	72	85	9	57	1000
317	2,64	29	75	82	9	56	1000
334	2,51	30	72	84	10	57	1000
317	2,64	30	49	87	14	48	1000
-	-	27	50	88	10	44	996

Test (iv) was carried out with additional ballast, the figures not quoted are therefore irrelevant

(3) TURNING SPACE AND TURNING CIRCLE

Wheel equipment front: 13.6 R 28 123 A8
rear: 18.4 R 38 8 ply

Track of wheels front: 1800 mm
rear: 1800 mm

	With brakes		Without brakes	
	left-hand m	right-hand m	left-hand m	right-hand m
Radius of turning space	4,86	4,90	5,83	5,87
Radius of turning circle	4,45	4,50	5,42	5,47

(4) LOCATION OF CENTRE OF GRAVITY

Height above ground	1022 mm
Distance forward from rear axle centre	1022 mm
Distance from tractor's median plane , to the left	2 mm

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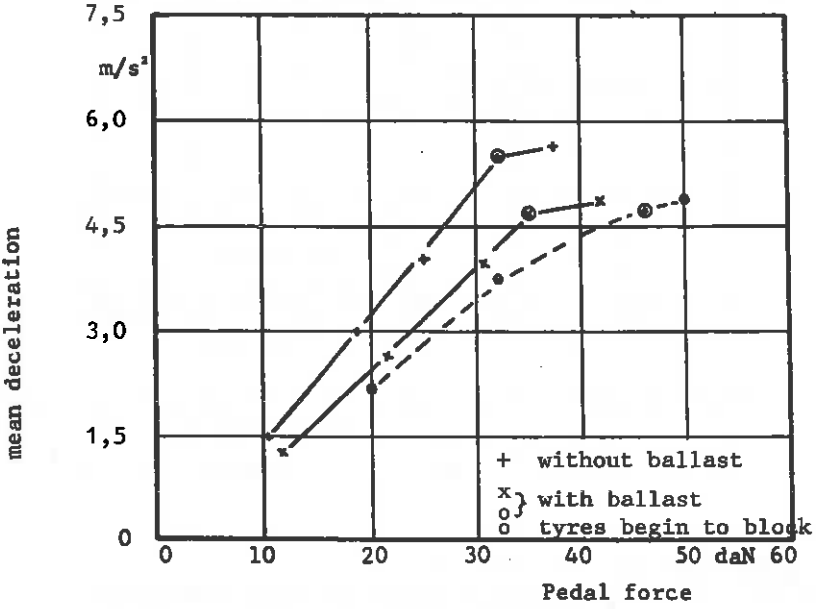
(5) Braking (Front wheel drive disengaged)

Date of tests: 14th and 15th March 1984

Tractor masses during tests with driver:	front kg	rear kg	total kg
without ballast	1785	2935	4720
with ballast	2700	4090	6790

A) Service brake 30 km/h-version D 1026 A-S

Type-0-test (cold brakes) ——, Type-I-(fade)test – – –



Speed before application of brakes, without ballast 32,0 km/h
with ballast 31,8 km/h

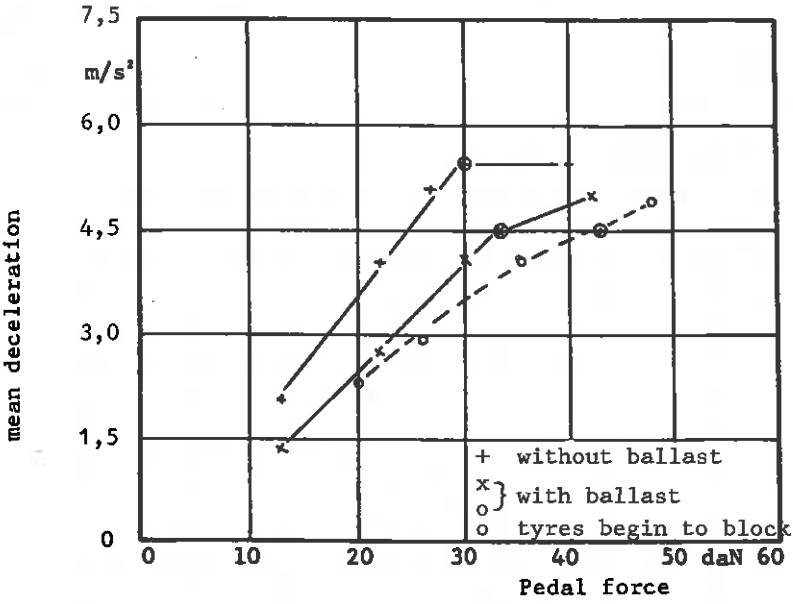
The brakes were heated by towing of the tractor for 1 km

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Service brake 40 km/h-version D 1026 A-T

Type-0-test (cold brakes) ——, Type-I-(fade)test – – –



Speed before application of brakes, without ballast 40,4 km/h
with ballast 40,0 km/h

The brakes were heated by towing of the tractor for 1 km

Parking brake both versions

	Ballasted tractor on 18%-slope		Unballasted tractor on 12%-slope with trailer of 3000 kg	
	up	down	up	down
Braking device control force daN	23	24	18	20

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(6) MEASUREMENT OF EXTERNAL NOISE LEVEL

Date of test: 14th March 1984
Type of track: Concrete
Type of sound level meter: BRÜEL AND KJAER model 2203

Results of test	D 1026 A-S	D 1026 A-T
Gear:	5 H	6 H
Travelling speed before acceleration:	24,5 km/h	30,6 km/h
Sound level:	87,5 dB(A)	87,0 dB(A)

(7) NOISE MEASUREMENT AT THE DRIVER'S EAR

Date of tests: 29th February 1984
Type of track: Concrete
Type of sound level meter: BRÜEL AND KJAER model 2209

with DEUTZ-FAHR safety cab SK 1905-37/4

Results of tests

Gear no. and range	Drawbar pull at which the tractor develops the maximum sound level daN	Travelling speed nominal km/h	Travelling speed effective km/h	Sound level dB(A)
1 L	4742	2,38	2,18	83,0
2 L	4744	3,20	2,93	83,0
3 L	4771	4,05	3,57	83,5
1 M	4685	4,92	4,24	83,5
4 L	3812	5,87	5,51	83,5
2 M	3325	6,62	6,32	84,0
5 L*)	3008	7,20	6,95	84,5
5 L*)	light load	7,20	7,73	81,0
3 M	2602	8,37	8,12	84,5
6 L**)	2400	9,10	8,84	84,5
1 H	2167	10,01	9,80	84,0
4 M	1725	12,13	11,94	84,0
2 H	1544	13,47	13,18	84,5
5 M	1415	14,89	14,72	83,5
3 H	1209	17,03	16,92	84,0
6 M**)	1049	18,81	18,72	84,5
5 H+)	light load	30,31	32,24	83,0
6 H**) +)	light load	38,29	40,75	83,0

*) The 5 L-gear corresponds to the nominal travelling speed nearest to 7,5 km/h
**) not at 30 km/h-version D 1026 A-S
+) front wheel drive disengaged

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(8) POWER LIFT AND HYDRAULIC PUMP PERFORMANCE

Date of tests: 28th February 1984

Power Lift

	Height of lower hitch point above ground in down pos. mm	Vertical movement mm	Max. force exerted through full range daN	Corresp. pressure of hydraul. fluid bar	Moment about rear axle daNm	Max.tilt angle of mast over range of lift degrees
At hitch points	280	610	3765	158	-	-
On the frame	280	669	2975	158	5049	8 *)

Temperature of hydraulic fluid at start of test 65 °C
*) max. tilting angle from vertical to uppermost position 7°

Lifting heights relative to horizontal lower links

mm	-294	-280	-200	-100	±0	+100	+200	+300	+330	+375
Lifting forces at hitch points										
daN		3765	3980	4110	4195	4195	4155	4155	4110	
Lifting forces at test frame										
daN	3845		3800	3760	3670	3540	3370	3195		2975

Hydraulic Pump Performance

Opening pressure of the relief valve in remote circuit	154 bar
Sustained pressure with relief valve open	177 bar
Pump delivery rate at minimum pressure, the governor control lever being set for max. power	58,0 l/min
Hydraulic power at 90% of relief valve setting	12,7 kW
Corresponding delivery rate	47,8 l/min
Pressure	159 bar
Temperature of hydraulic fluid	65 °C

Tapping point used for test: rear of tractor

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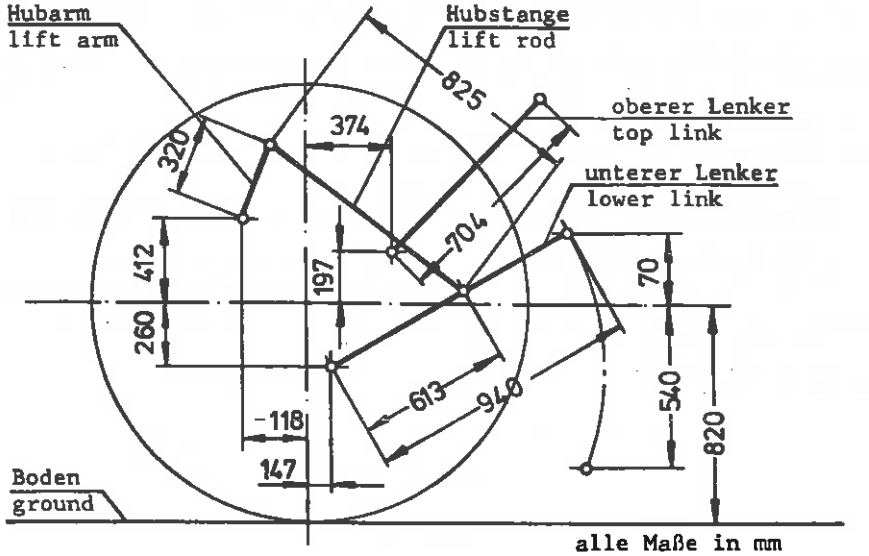
LINKAGE GEOMETRY when connected to the standard frame

Projected length in side view:

Lower links	940 mm
Lift arms	320 mm
Lift rods	825 mm
Top link	704 mm
Distance of lift rod connection point from pivot point of lower link	613 mm

The following dimensions are given relative to the rear wheel centre line, situated 820 mm above ground:

Lower link pivot point	260 mm below,	147 mm behind
Top link pivot point	197 mm above,	374 mm behind
Lift arm pivot point	412 mm above,	118 mm behind
Maximum and minimum height of lower link hitch points	70 mm above,	540 mm below
Height of lower link hitch points when locked in transport position	70 mm above or	242 mm below



alle Maße in mm
all dimensions in mm

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OPTIONAL TESTS

(9) ENGINE PERFORMANCE

Date of tests: 19th January 1984
Location of tests: DLG-Testing-Station Groß-Umstadt
Type of dynamometer: SCHENCK eddy-current dynamometer W 400

Power kW	Engine speed rev/min	Fuel consumption hourly l/h	Fuel consumption hourly kg/h	Fuel consumption specific g/kWh	Specific energy kWh/l
Maximum power					
At 2-hour test					
74.5	2300	21.45	17.58	236	3.48
At standard p.t.o. speed (1000 rev/min)					
73.4	2214	20.79	17.05	232	3.53
At rated engine speed					
74.5	2300	21.45	17.58	236	3.48
Part loads					
(i) 85% of the torque at maximum power at 2-hour test					
64.5	2342	18.76	15.38	239	3.44
(ii) unloaded					
-	2408	4.47	3.66	-	-
(iii) 50% of the torque defined in (i)					
32.9	2388	11.17	9.16	279	2.94
(iv) maximum power					
74.5	2300	21.45	17.58	236	3.48
(v) 25% of the torque defined in (i)					
16.5	2393	7.34	6.02	366	2.24
(vi) 75% of the torque defined in (i)					
48.6	2355	14.83	12.16	250	3.28

Optimum fuel consumption: 210 g/kWh at 36.9 kW and 1265 rev/min
No load maximum engine speed: 2408 rev/min
Torque at maximum power (2 hours): 309 Nm
Maximum torque: 356 Nm at 1503 rev/min of the engine

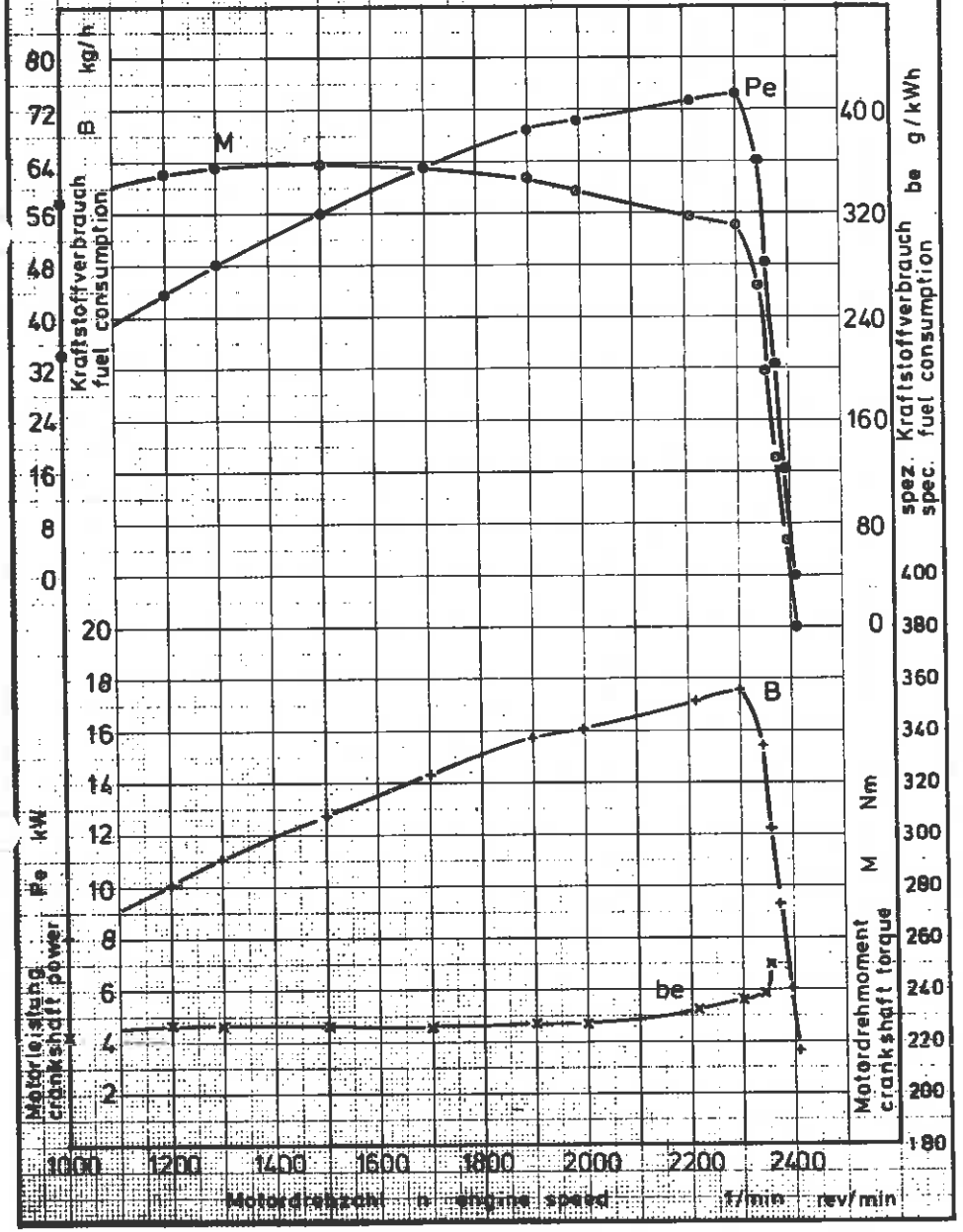
Mean atmospheric conditions:	temperature	18 °C
	pressure	991 mbar
	relative humidity	28 %
Maximum temperatures:	cylinder head	80 °C
	engine oil	85 °C
	fuel	17 °C
	engine air intake	19 °C

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Motorleistung
- 29 -
Engine performance

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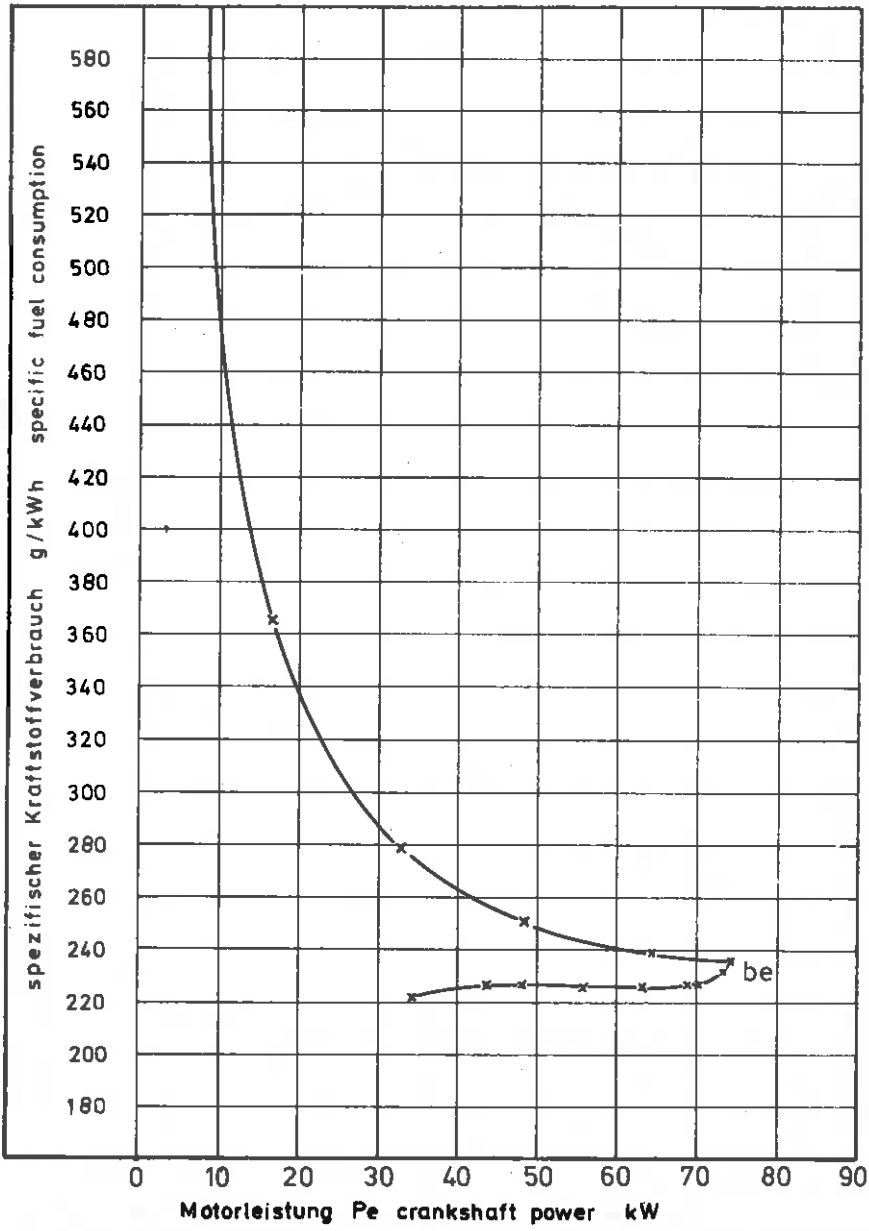
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Motorleistung

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Engine performance

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Motorleistung

Engine performance

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Motorleistung in % der Leistung bei Nenndrehzahl

engine power in % of power at rated engine speed

Belastung in % des Drehmomentes bei Nenndrehzahl

load in % of torque at rated engine speed

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