

### Wheel Loader



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# Wheel Loader ZL 4001



## Engine

Make	Deutz/diesel, 4 cycle
Type	F 10L 413F
Gross Power @ 2200 rev/min	222/302 kW/hp
Net Power @ 2200 rev/min Din	198/269 kW/hp
Max. torque @ 1400 rev/min	1015 Nm
No. cylinders/configuration	10/V
Bore/stroke	125/130 mm
Total displacement	15953 cm <sup>3</sup>
Combustion system	direct injection
Cooling	air
Electrical system:	
Batteries	2x12/143 V/Ah
Alternator	28/55 V/A
Starter	24/5.4 V/kW



## Transmission

Full powershift planetary-type transmission with integral torque converter.

Four speeds forward/reverse. Soft-shift feature for full-power direction change in 1st and 2nd gear.

	Speed	
	Forward km/h	Reverse km/h
1st gear	5.5	5.5
2nd gear	11.5	11.5
3rd gear	25.0	25.0
4th gear	40.0	40.0



## Axles

Spiral bevel pinion and ring gear differentials. All wheel drive by two rigid axles. Oscillating rear axle with central greasing point. Limited slip differentials with hub mounted planetary final drives in both axles.

Ground clearance	530 mm
Track	2215 mm
Oscillation at wheel, max.	450 mm
Angle of oscillation	±12°



## Brakes

1. Service brake: air over hydraulic actuated oil immersed multi-disc brakes hub mounted on all four wheels. Dual circuit for front and rear axles.
2. Parking brake: spring applied air released disc brake mounted at the transmission output shaft acting upon all four wheels.



## Tyres

		Rim
Standard:	26.5-25 20 PR (L-2)	22.00-25
Optional:	23.5-25 20 PR (L-2) (L-3) (L-4) (L-5)	19.50-25
	26.5-25 20 PR (L-3) (L-4) (L-5)	22.00-25

NOTE: Under certain job conditions, a specific tread pattern may be required or, the t-km/h capability of standard or optional tyres may be exceeded. We recommend that tyre manufacturers be consulted for optimum tyre selection.



## Steering

Articulated frame steering with 40° steering angle to both sides. Semi integral power steering.

Two double-acting steering cylinders.

Axial- piston pump with constant flow rate and pressure-compensation control.

Variable flow control	100 litres/min
Relief valve pressure	170 bar

Emergency steering pump: transmission mounted ground driven radial piston pump.



## Hydraulics

Two double-acting tilt cylinders.

Two double-acting lift cylinders.

Control valve – two spool system as standard equipment.

Gear-type tandem pump provides two hydraulic speeds.

Flow @ 2200 rev/min	2 x 189 litres/min
Relief valve pressure	180 bar

Common tank for working and steering hydraulics safeguarded by a breather valve.

Filters can be changed without having to drain the tank.

Automatic bucket leveller

Lift time	6.8 sec
Lowering time	4.6 sec
Dump time	1.7 sec
Crowd time	1.3 sec



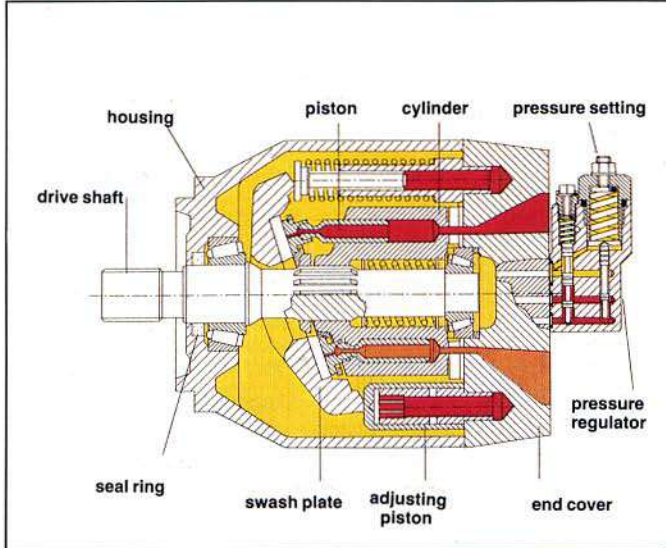
## Service Refill Capacities

Fuel tank	420.0 litres
Engine	28.0 litres
Hydraulic system incl. tank	460.0 litres
Front axle	42.0 litres
Rear axle	42.0 litres
Transmission	40.0 + 7.0 litres

# Series B

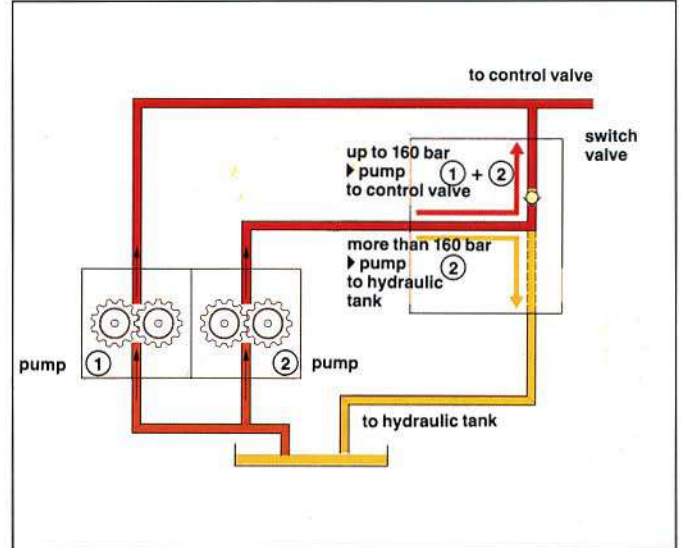
## Maximum Economy with Optimum Power Utilization

**Axial Piston Pump**



- high economy due to reduced operating costs (fuel savings, less oil circulating)
- simplified installation due to elimination of pressure limiting and flow control valve
- variable flow provides power on demand
- reduction in oil temperature
- increase in overall efficiency of machine

**Two Speed Hydraulic System**



- two pumps/combined flow for fast loading
- automatic single pump for hard digging
- maximum power with good fuel economy
- manual switching to single pump for precise levelling

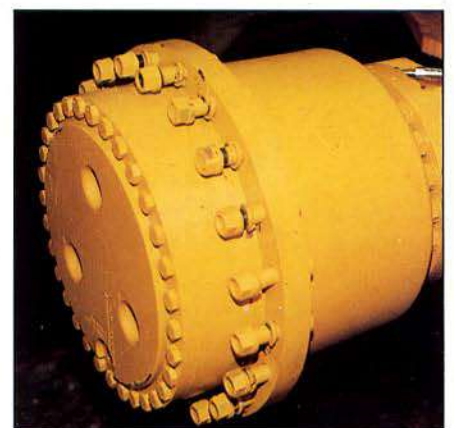
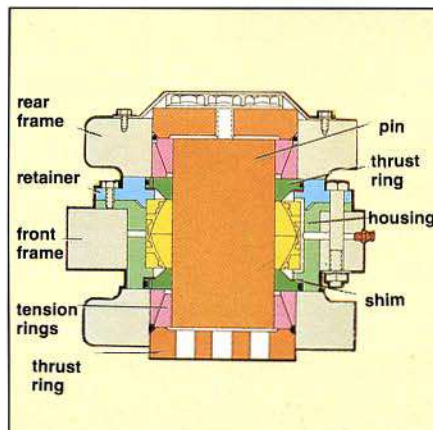
## Well Proven Design

### Provides Reliability, High Performance and Economical Operation

Zettelmeyer-Z-bar linkage enables high breakout force to be achieved in hard digging conditions, and fast bucket dumping action.

Articulated frame steering; widely spaced pivot points incorporate large castings enclosing the heavy duty pivot bearings, which are adjustable and need minimum maintenance during their long service life even in tough operating conditions.

Heavy-duty axles designed for construction equipment applications, planetary reduction gears and standard limited slip differentials. Fully enclosed oil immersed multi-disc brakes mounted at the hub on all four wheels give long life and are maintenance free.



## Easy Access for Maintenance Reduces Service-Time and Costs



Well matched high quality components ensure long life and minimum downtime.

A comprehensive distributor network provides worldwide parts and service support.

## Ergonomically Designed Safety Cab for Optimum Driver Comfort



Large walk-through two man ROPS cab is front mounted and provides excellent visibility.

Low effort servo loader controls allow fatiguefree operation and clearly arranged instrumentation enables vital functions to be easily monitored.

Safe and convenient access from both sides.



Optimally adjustable driver's seat.



Flexibly mounted cab.



# Series B



## Operating Data

Buckets Dimensions and weights with standard tyres and 1300 kg standard counterweight.	Bucket	Rock Bucket Spade Nose	Bucket	Rock Bucket Straight Edge	Bucket	Bucket	
Material density max.	t/m <sup>3</sup>	2.1	2.0	1.8	1.7	1.5	1.0
Capacity, heaped	m <sup>3</sup>	3.5	3.5	4.0	4.0	4.5	6.0
Capacity, struck	m <sup>3</sup>	3.0	3.0	3.5	3.5	3.9	5.2
Bucket weight with teeth	kg	1750	2450	2000	2600	2100	2300
Bucket teeth		9	8	9	8	9	9
Static tipping load, straight	kg	19600	18900	19400	18700	19000	18300
Static tipping load at 40°	kg	17300	16700	17100	16500	16800	16100
Breakout force	daN	20300	16800	19000	18600	17000	13500
Hydraulic lifting capacity	daN	19600	19000	19500	18900	19000	18000
Operating weight	kg	23550	24250	23800	24400	23900	24100

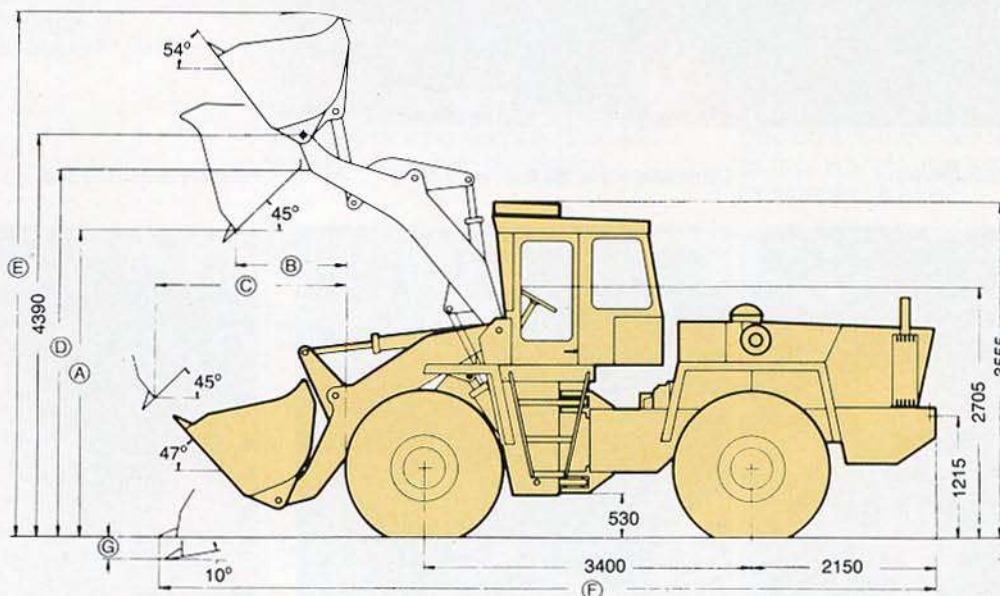


## Dimensions

Adjustments for Tyres	Tipping Load at 40° kg	Operating Weight kg	Vertical Dimensions mm
26.5-25 (L3)	+ 50	+ 100	± 0
26.5-25 (L4)	+ 350	+ 700	+ 25
26.5-25 (L5)	+ 650	+ 1200	+ 25

(A) Dump height	mm	3260	3070	3180	3160	3090	2860
(B) Reach at max. height	mm	1065	1180	1070	1100	1230	1460
(C) Reach max.	mm	1955	2070	1960	1990	2120	2350
(D) Load over height	mm	4000	3980	3980	3980	4000	4000
(E) Lift height max.	mm	5700	6020	5850	6020	5960	6190
(F) Total length	mm	8520	8800	8600	8650	8750	9070
(G) Digging depth at 10°	mm	255	340	315	320	290	350
Turning radius, outside bucket	mm	6880	6870	6900	6900	6970	7070
Bucket width	mm	3000	3100	3000	3100	3000	3000

Operating data in accordance with SAE standards. All technical data relate to the standard version. Machine illustrations may show optional features.



All dimensions relate to standard tyres.

Width across standard tyres 2890 mm.

## Standard Equipment

### Comfort-ROPS cab

- Detachable walk-through cab with flexible mountings located on the front frame for better sound and thermal insulation whilst providing excellent all-round visibility on the job.
- Insulation and acoustic lining
- Lockable doors
- 4-way adjustable driver's seat
- Passenger's seat
- Seat belts

- Steering wheel spinner knob
- Neutral start switch

### Gauges:

- Fuel gauge
- Hour meter
- Speedometer (km/h)
- Transmission temp. gauge
- Transmission shift press. gauge
- Hydraulic-pressure gauge
- Dual air pressure gauge
- Engine temperature gauge
- Engine oil pressure gauge

### Indicator lamps for:

- Direction indicator
- Main beam
- Battery charging
- Hydraulic pump (2<sup>nd</sup> speed)

### Warning lights for:

- Air filter restriction
- Hydraulic filter restriction
- Parking brake
- Brake fluid
- Emergency steering pump

- 24 V power socket
- Heater with defroster
- Instrument lighting
- Storage compartment in the cab
- Tool box
- Interior lighting
- Radio
- Tinted safety glass (windscreen)
- Windscreen wiper front and rear
- Windscreen washer
- Sliding windows in the doors
- Hinge-out cab roof hatch

### General

- Automatic drainage of air system
- Alcohol evaporator
- Tyre inflation kit
- Alternator 55 A
- Dry-type air filter with safety cartridge
- Cold start aid
- Transmission declutch
- Automatic bucket leveller
- Front working floodlights
- Fenders and service platforms
- Hoodsides
- Lockable fuel-tank cab
- Vertical exhaust
- Towing device
- External rear view mirrors
- Safety kit
- Counterweight
- Reversing lights



## Optional Equipment

- Dual air filtration
- Dashboard cover
- Air conditioning
- Single lever control
- Auxiliary hydraulics, front
- Extended lift arms

- Lifting eyes
- FOPS guard
- FOPS plate

»QC« Quick change attachment carrier, mechanical or hydraulic

- Attachments:
  - Loading fork
  - Hook and tackle
  - Tree transplanting bucket
  - Log grapple

- Wide range of bucket sizes and types with or without teeth
- Silo bucket
- Extra-wide bucket
- Brick bucket
- 4 in 1 bucket
- High-tip bucket
- Bolt-on cutting edge

- Snow plow
- Snow blower
- Front winch
- Hydraulic breaker

