

Zettelmeyer

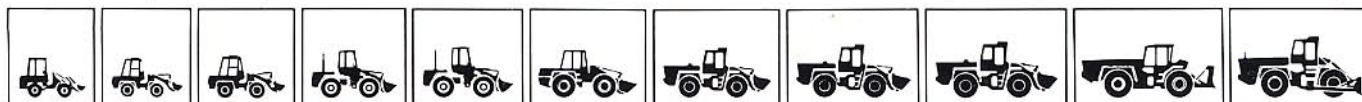
made in W.-Germany

Wheel Loader ZL 18 D

Standard Bucket capacity 0.9 m³



Germany's only wheel loader manufacturer with a complete performance range



Wheel Loader ZL 18 D



Engine

Make/system	Deutz/Diesel 4-stroke
Type	F4L 912
Gross power @ 2500 rev/min.	58 kW/79 hp
Net power @ 2500 rev/min.	46 kW/62.5 hp
Max. torque	215 Nm
at engine speed	1600 rpm
No. cylinders/configuration	4/in-line
Bore/stroke	100/120 mm
Displacement	3770 cm ³
Combustion system	direct injection
Cooling	Air

Electrical system	
battery	12 V/143 Ah
alternator	14 V/33 A
starter	3 kW/12 V



Transmission

Hydrostatic transmission, gear selection for work/travel range.
Inching pedal for continuously variable speed control.

Speeds (standard tyres)	forward	reverse
	km/h	km/h
Work range	7.5	7.5
Travel range	20.0	20.0



Axles

All-wheel drive with 2 Hurth portal axles with hydraulically operated differential lock (100% effective) in both axles.

Ground clearance	520 mm
Track	1556 mm
Max. wheel lift	390 mm

Reduction ratios:	
Gearbox	2.71 : 1
Axles	12.02 : 1
Total	32.6 : 1



Brakes

1. Service brake: Normal retardation is effected by the braking capacity of the hydrostatic motor acting on all four wheels.
2. Secondary brake: hydraulically actuated, multi wet disc brake in rear axle.
3. Parking brake: mechanical actuation of multi wet disc brake.



Tyres

Standard: 14.5 - 20	rim
	11.00 x 20
Optional: 15.5 - 25	12.00 x 25
16/70 - 20	13.00 x 20
16.5/75 R 20	13.00 x 20

NOTE: Under certain job conditions 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

Central articulating oscillating joint

Central articulation	± 40°
Oscillation	± 13°

Hydraulic steering via 2 double-acting steering cylinders
bore/stroke 60/300 mm

Pump: gear-type
capacity at 2500 rpm 40 litre/min.

Relief valve pressure 150 bar



Hydraulics

2 double-acting tilt cylinders
bore/stroke 75/440 mm

2 double-acting lift cylinders
bore/stroke 100/510 mm

Pump: gear-type
capacity at 2500 rpm 80 litre/min.

Safety pressure 200 bar

The common tank for the working hydraulics, drive and steering hydraulics is pressurized (0.3 bar).

Thermostat controlled oil circuit with integrated cooling system.
Filters can be changed without having to drain the tank.

Lifting time (loaded)	6.0 sec.
Drop time (empty)	3.5 sec.
Dump time	1.0 sec.
Roll back time	1.0 sec.



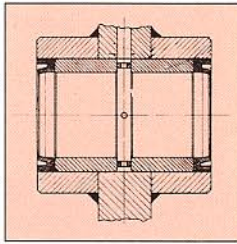
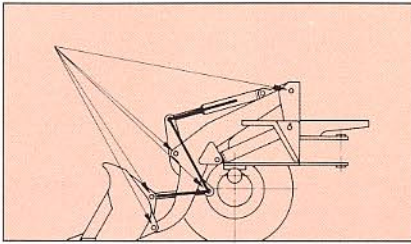
Service Data

Fuel tank	95 litre
Engine	11.5 litre
Hydraulic system incl. tank	75 litre
Front axle	8.7 litre
Rear axle	11.0 litre
Brakes	1.0 litre

Low-maintenance boom arm with Z-Bar linkage

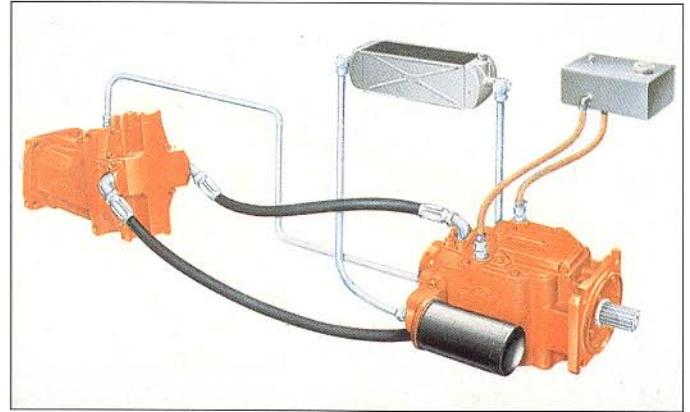
- excellent dump height and reach
- highest breakout force
- fast bucket dump action
- good dump/roll back angles
- optimum bucket design
- very high bucket fill
- low-maintenance requirements due to sealed bearings

High quality seals protect the bearings from dirt.



Hydrostatic transmission

- maximum torque even at low engine speed
- low fuel consumption
- better efficiency on the job
- wear-free hydrostatic brakes
- infinitely variable speed control over full speed range
- forward-reverse direction change under full load

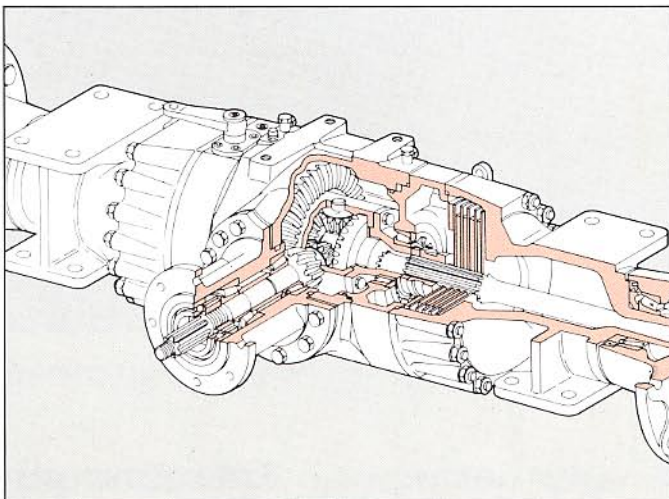


Engineered with a proven record of success for optimum performance and economy

Portal axles with 100% selectable differential lock

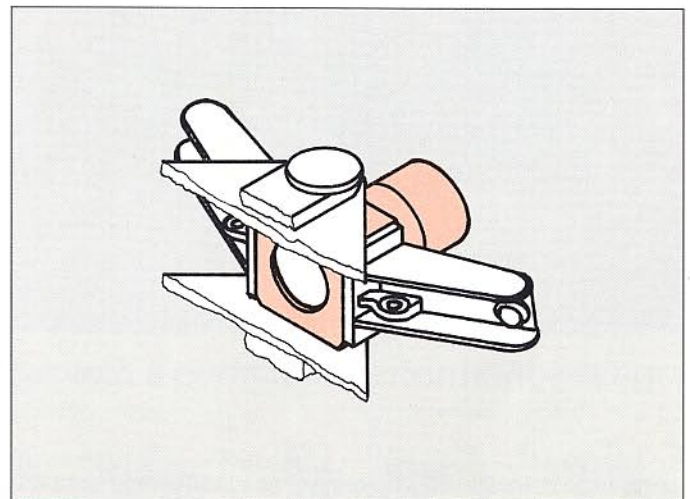
- 520 mm ground clearance
- optimum traction
- superb off-road capability
- integral multi disc brakes (rear axle only) supplement hydrostatic retardation
- Portal reduction for maximum power transmission

Rugged compact axle with multi-disc brakes running in oil bath for maintenance-free, minimum wear operation.



Hydrostatic articulated frame steering with combined oscillating-articulating joint

- Newly designed articulation-oscillation pin for minimum surface pressure including dirt protected bearings. The articulation-oscillation pin – as illustrated below – is drilled to take up the wire harness and all hoses of the hydraulic system.
- smooth and reliable steering, full tracking capacity
- 40° steering angle to both sides
- short turning radius, excellent manoeuvrability
- rigid axle mounting for constantly balanced load distribution add to good stability

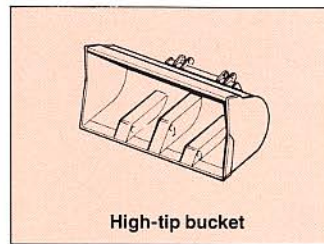
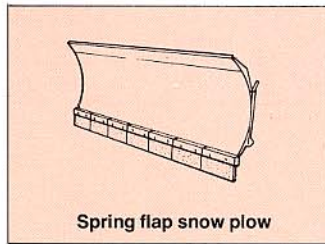
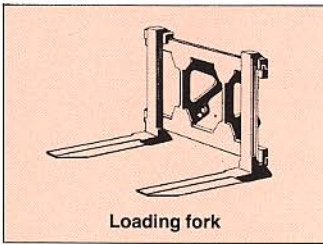


Front end quick-change system – fast and easy

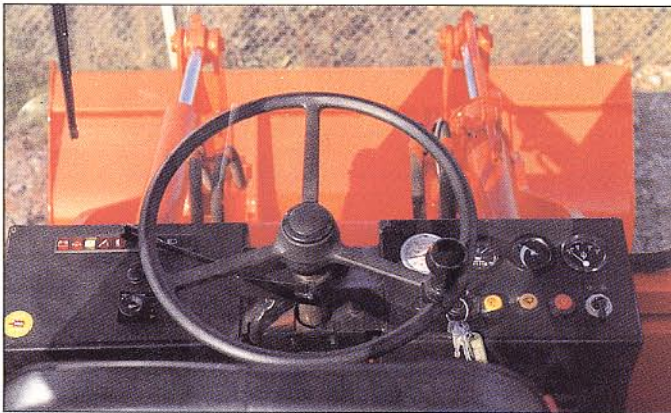


The new quick-change system allows all directly mounted attachments to be also used as quick-change attachments.

More than 40 variants for hydraulic or mechanical operation are available for use in practically every branch of industry all year round.



Operators compartment and routine maintenance



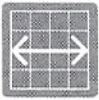
- The operators compartment designed for minimum noise and vibration, reduces operator fatigue and adds to the efficiency of the operation.
- Conveniently located controls and gauges together with good all-round visibility from the spacious ROPS cab add to the safety of the unit.
- Clear design and easy access to all components reduce maintenance and repair downtime.





Operating Data Rated payload with GP Bucket 1.7 tonne.

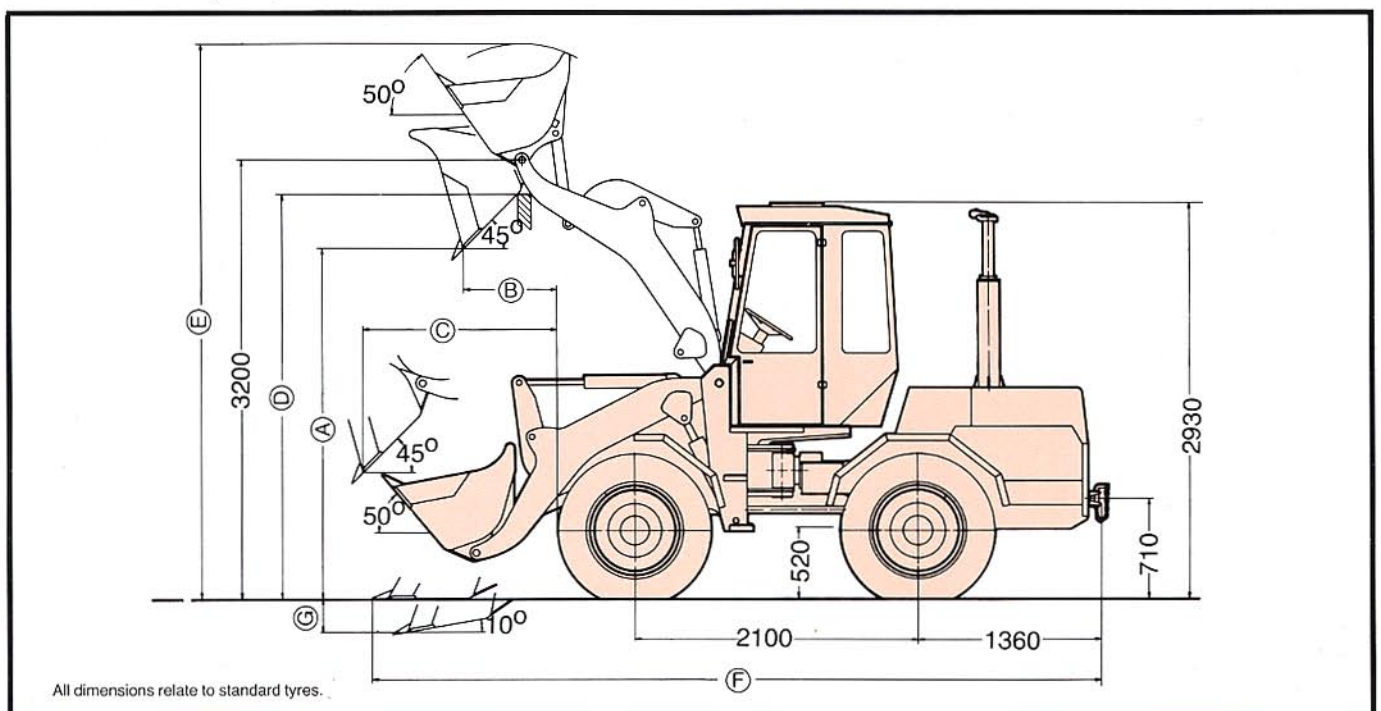
Buckets dimensions and weights with 14.5 – 20 tyres		High- density bucket	High- density bucket	GP bucket	Light Mat. bucket	Light Mat. bucket	Light Mat. bucket	Clam bucket 4 in 1)	High- tip bucket
Material density max.	t/m ³	2.4	2.0	1.8	1.5	1.2	0.7	1.8	0.9
Capacity, heaped	m ³	0.7	0.8	0.9	1.1	1.4	2.0	0.85	1.5
Capacity, struck	m ³	0.6	0.65	0.72	0.9	1.1	1.7	0.7	1.1
Bucket weight	kg	400	400	380	400	430	500	550	600
Bucket teeth		7	7	7	7	7	7	7	–
Tipping load, straight	kg	4 000	4 000	4 000	3 950	3 900	3 750	3 850	3 600
Tipping load full turn	kg	3 400	3 400	3 400	3 350	3 300	3 150	3 250	3 000
Breakout force	daN	6 000	6 000	5 680	4 930	4 100	3 300	4 900	4 000
Hydraulic lifting capacity	daN	4 930	4 930	4 950	4 860	4 750	4 600	4 760	4 500
Operating weight	kg	5 730	5 730	5 710	5 730	5 760	5 830	5 880	5 910



Dimensions

Ⓐ Dump height	mm	2580	2580	2545	2480	2370	2230	2515	3600
Ⓑ Reach at max. height	mm	740	740	780	840	950	1020	810	1030
Ⓒ Reach at 1.6 m height	mm	1440	1440	1480	1540	1650	1720	1510	2050
Ⓓ Load over height	mm	2960	2960	2960	2960	2960	2940	2980	3650
Ⓔ Lift height max.	mm	4000	4040	4070	4160	4300	4420	4180	4850
Ⓕ Total length	mm	5355	5355	5400	5500	5650	5840	5450	5620
Ⓖ Digging depth at 10°	mm	235	235	245	270	290	360	260	290
Turning radius, outside bucket	mm	4260	4260	4285	4320	4360	4500	4300	4400
Bucket width	mm	2050	2050	2050	2050	2050	2250	2050	2050

Machine illustrations may show optional features.



Equipment

Comfort ROPS cab

The cab is mounted on the front frame for better noise and thermal insulation whilst presenting the driver with excellent all-round visibility on the job.

Easily accessible walk through cab

Lockable doors

Driver seat, 4-way adjustable

Seat belts

Indicators:

Warning lamps

Hour meter

Engine temperature

Engine oil pressure

Battery charging

Transmission temperature

Fuel

Air filter

Warning buzzer for:

Engine temperature

Engine oil pressure

Transmission oil temperature

Air filter

12 V power socket

Noise insulation in accordance with German regulations

Heating with defroster nozzle

Tinted safety glass

Windscreen wiper front and rear

Windscreen washer (front)

Tool box

Cab skylight

Hinge-up side windows

Storage compartment in door

General

Dry type air cleaner

Alternator (33 Amp.)

Ether cold start

Automatic bucket positioner

Load holding valve

Tow hook

Lockable fuel tank cap

Lockable engine hood

Upswept exhaust

Safety equipment in accordance

with German Code U.V.V.-

VBG 40

Fully equipped to comply with

German Road Traffic

Regulations

Certified for safe working by

German excavation trade

association



Optional Equipment

Various bucket sizes with/without teeth

Loading fork

Attachment carrier mech. (for permanent mounting system)

Sweeper

Log clamp

Front ripper tooth

Tree planting shovel

Snow plow

Hydraulic hammer

Barrel clamp

Tree transplanting bucket (hydr.)

Front winch

Clamp fork

Optional hydraulics front

Backhoe preparations

Double filter

Single lever control

Air-conditioning system

Security kit

FOPS grille

Stacker protektive grille

Roll over protection bar

FOPS plate

Extended boom arm

Backhoe

Underscrew blade

ROPS sun roof

Silo bucket

High tip bucket

Clamp bucket (4 in 1)

Rock bucket

Side dump bucket

PTO

Auger

