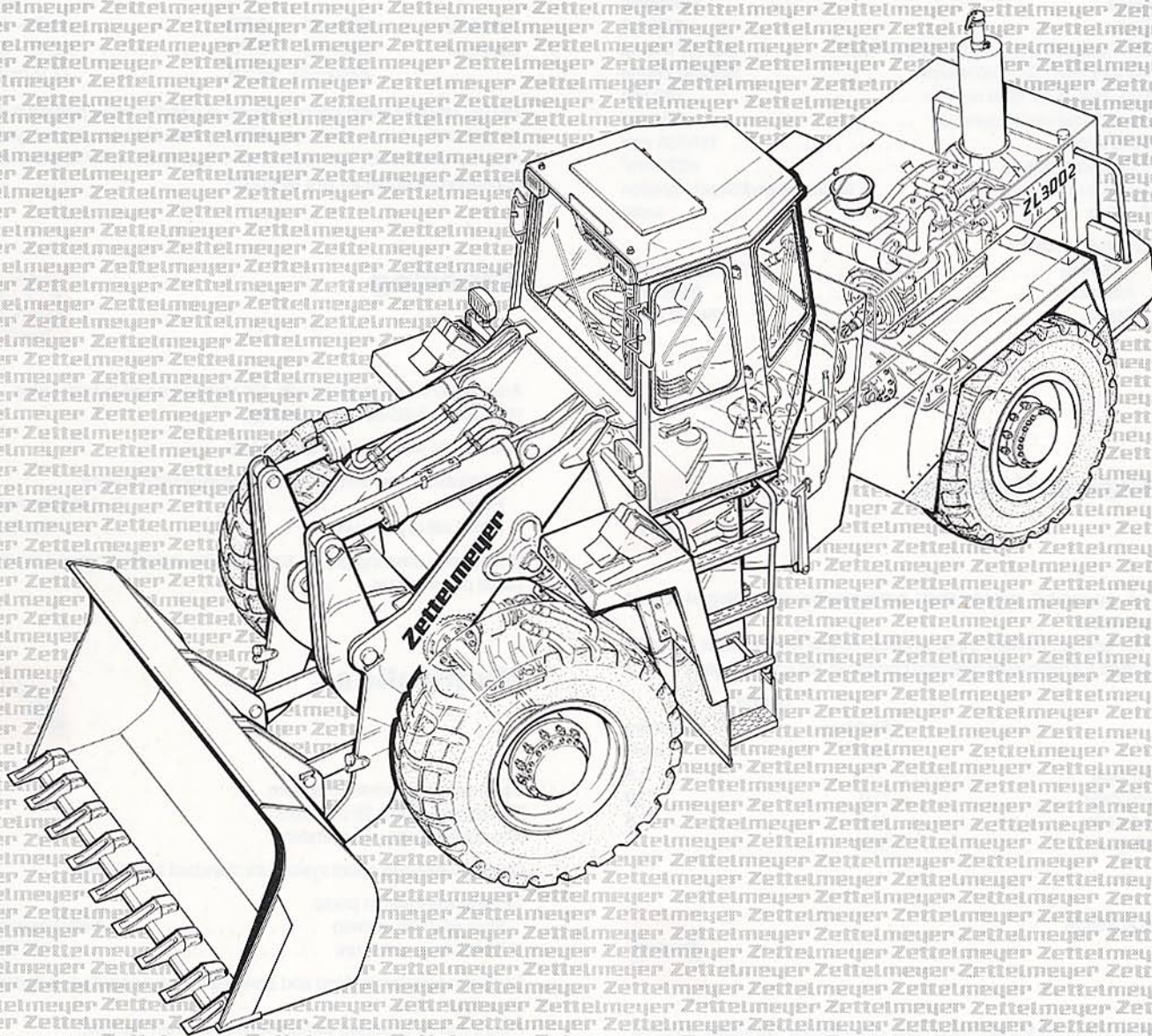


Wheel Loader — Technical Data



Basic Specifications

Operating Weights	19000 - 19700 kg
Gross Power	153 kW / 208 hp
Maximum Speed	35.0 km/h
Tyres	23.5-25 16 PR
Bucket Capacities	2.7 - 5.0 m ³
Bucket Width	3000 mm

Wheel Loader

ZL 3002

Engine



Make	Cummins
Type	6CT 8.3
Net Power @ 2100 rev/min DIN 70020	145/197 kW/hp
Gross Power @ 2100 rev/min	153/208 kW/hp
Max. torque @ 1500 rev/min	760 Nm
No. cylinders/configuration	6/in-line
Bore/stroke	114/135 mm
Total displacement	8270 cm ³
Combustion system	turbocharged/direct injection
Cooling	water
Electrical system:	
Batteries	2 x 12/143 V/Ah
Alternator	28/65 V/A
Starter	24/5.3 V/kW

Transmission



Full powershift countershaft transmission with integral torque converter.
Four speeds forward three reverse. Single lever control. Softshift 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	11.0	11.0
3rd gear	21.5	21.5
4th gear	35.0	-

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 outboard mounted planetary final drives in both axles.

Ground clearance	440 mm
Track	2215 mm
Oscillation at wheel, max.	425 mm
Angle of oscillation	± 12°

Brakes



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

Tyres



		Rim
Standard:	23.5-25 16 PR	19.50-25
Optional:	26.5-25 16 PR	22.00-25
	30/65-25 16 PR	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.
Hydrostatic load-sensing steering.

Two double-acting steering cylinders.

Axial piston pump with pressure-compensation control

Flow	0-149 litres/min
Relief valve pressure	150 bar

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

Hydraulics



Load-sensing-hydraulic system.

Two double-acting tilt cylinders.

Two double-acting lift cylinders.

Control valve-two spool system as standard equipment.

Tandem axial piston pump

Flow @ 2100 rev/min	2 x 149 litres/min
Relief valve pressure	230 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 (loaded)

Lowering time (empty)

Dump time

Crowd time

Gear pump for servo control and brake

Flow @ 2100 rev/min

Service Refill Capacities



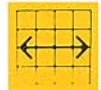
Fuel tank	360.0 litres
Engine	19.0 litres
Hydraulic system incl. tank	230.0 litres
Front axle	31.0 litres
Rear axle	31.0 litres
Transmission	28.0 litres

Operating Data



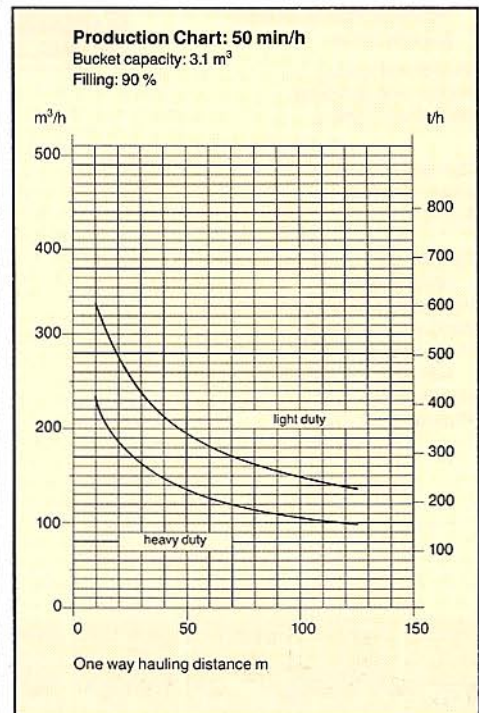
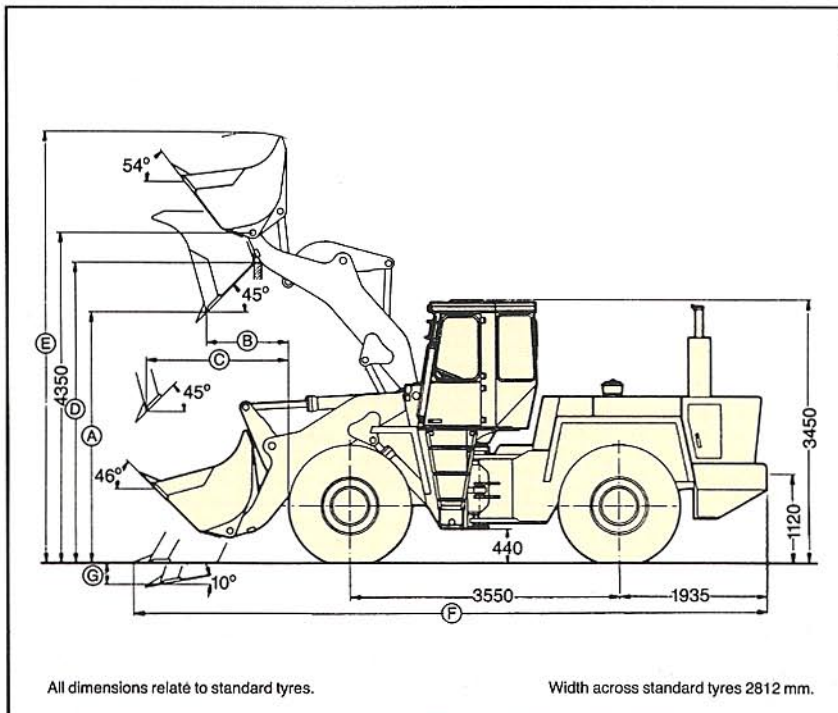
Buckets Dimensions and weights with standard tyres, and 1000 kg standard counterweight.	Bucket	Rock Bucket Straight Edge	Rock Bucket Spade Nose	Bucket	Bucket	Bucket	Bucket	Bucket	
Capacity, heaped	m ³	2.7	3.1	3.1	3.1	3.5	3.9	4.6	5.0
Capacity, struck	m ³	2.3	2.6	2.6	2.6	3.0	3.5	3.9	4.5
Bucket weight with teeth	kg	1600	2250	2300	1700	1850	2000	2100	2200
Bucket teeth		9	8	8	9	9	9	9	9
Static tipping load, straight	kg	15700	14800	14500	15400	15000	14700	14500	14300
Static tipping load at 40°	kg	13800	13000	12700	13500	13200	12900	12700	12500
Breakout force	daN	23700	21300	20500	21500	19500	19000	18200	16200
Hydraulic lifting capacity	daN	20100	19400	18300	20000	19200	18700	18100	17700
Operating weight	kg	19000	19650	19700	19100	19250	19400	19500	19600

Dimensions



Ⓐ Dump height	mm	3400	3310	3160	3330*	3220	3140	3060	2980
Ⓑ Reach at max. height	mm	950	1020	1180	1020*	1120	1120	1280	1350
Ⓒ Reach max.	mm	1830	1900	2060	1900	2000	2000	2160	2240
Ⓓ Load over height	mm	3970	3970	3970	3970	3970	3950	3970	3970
Ⓔ Lift height max.	mm	5690	5890	5890	5690	5690	5810	5930	6050
Ⓕ Total length	mm	8160	8300	8530	8260	8410	8500	8640	8740
Ⓖ Digging depth at 10°	mm	270	300	330	290	320	370	360	370
Turning radius, outside bucket	mm	6850	6900	6930	6870	6910	6930	6980	7050
Bucket width	mm	3000	3000	3000	3000	3000	3000	3000	3000

Operating data in accordance with SAE standards. All technical data relate to the standard version. For selection of buckets see bucket size diagram overleaf. (* At 3100 mm dump height = 1200 mm reach)



Standard Equipment

Comfort ROPS + FOPS Cab

Detachable 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
Transmission temp. gauge
Transmission shift press. gauge
Hydraulic pressure gauge
Engine temperature gauge
Engine oil pressure gauge

Indicator lamps for:

Direction indicator
Main beam
Battery charging
Transmission declutch

Warning lights for:

Air filter restriction
Hydraulic filter restriction
Parking brake
Service brake
Emergency steering pump
Cooling water

Central audible alarm for:

Engine temperature
Engine oil pressure
Air filter restriction
Hydraulic filter restriction
Service brake

24 V power socket
Heater with defroster
Instrument lighting

Tool box (lockable)
Interior lighting
Radio

Tinted safety glass (windscreen)

Windscreen wiper front and rear
Windscreen washer
Hinge out upper door section with sliding windows
Hinge-out skylight
Pressurized cab

General

Diesel engine with direct injection and turbocharging

Alternator 65A
Dry-type air filter
Cold start aid

Transmission declutch
Single lever control
Automatic bucket leveller
Front working floodlights

Fenders and service platforms
Hoodsides
Lockable engine hood
Vertical exhaust
Towing device

External rear view mirrors
Security kit
Reversing lights
Counterweight

Complete system in accordance with German Road Traffic Regulation

Sound insulation in accordance with stringent German Code U.V.V.-VBG 121

Safety equipment in accordance with stringent German Code U.V.V.-VBG 40

Certified for safe working by German Excavation Trade Association



Optional Equipment

Exhaust ejector

Air conditioning
Heating independent of engine

Auxiliary hydraulics, front
Extended lift arms
ZLS (suspension of lift frame)
Lifting eyes

»QC« Quick-change attachment carrier, mechanical

Attachments:
Loading fork

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
Side-tip bucket
Bolt-on cutting edge

Snow plow
Snow blower
Front winch
Hydraulic breaker

