

Zettelmeyer

ZL 802



Top Producer in the Small-Loader Class

- **Powerful Z-bar loader linkage**, designed for rapid loading cycles, achieving high output in loading operations
- **High-performance low environmental impact diesel engine**: quiet, low emissions, economical fuel consumption.
- **Hydrostatic drive** with significant advantages:
 - Easy to operate due to automatic drive facility
 - Maintains high drawbar pull even when working hydraulics are engaged
 - Advantageous hydrostatic brakes, wear-free and safe
- **Operator-selected 100% differential lock** on both axles to give optimum traction.
- **Standard hydraulic quick-change coupling**: Various tried-and-tested attachments for a wide range of applications
- **Purpose designed cab comfort** for extra performance
Audio-visual warning system for monitoring operating systems

- **Gross Power:**
SAE J1995 58/78 kW/hp
Net Power:
SAE J 1349 56/75 kW/hp
- **Operating Weight:**
6,7 t (14800 lb)
- **Bucket Capacities:**
1,0 - 2,0 m³ (1,3 - 2,6 yd³)

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ENGINE

Engine: in-line 4-cylinder, 4-stroke, direct injection diesel engine, with turbocharging, water cooled.

Three-stage air cleaning:

1. Pre-cleaner with ejector
2. Dry type air filter with indicator
3. Safety filter

Make	KHD			
Type	BF 4M 1012 E			
Gross power @	2100	r/min	(35	r/s)
SAE J1995	58	kW	(78	hp)
Net power @	2100	r/min	(35	r/s)
SAE J1349	56	kW	(75	hp)
DIN 70020 / 6271	56	kW	(75	hp)
Max. torque @	1500	r/min	(25	r/s)
SAE J1349 netto	300	Nm	(221	lbf ft)
DIN 70020 / 6271	300	Nm	(221	lbf ft)
No. cylinders	4			
Cubic capacity	3,2	l	(195	in ³)
Bore	94	mm	(3,7	in)
Stroke	115	mm	(4,5	in)

Electrical System

Rated voltage	24	V		
Battery voltage	2 x 12	V		
Battery capacity	2 x 74	Ah		
Alternator rating	1540/55	W/A		
Starter motor output	4,0	kW	(5,4	hp)



DRIVETRAIN

Transmission: hydrostatic transmission, full power shift under load, both when changing direction (forward and reverse) and between first and second range. Maximum drawbar force can be achieved in each range. Inch/brake pedal for variable machine speed control and power transfer to bucket hydraulics at constant engine rpm.

Axles: all-wheel drive by two portal axles.

Differential lock: hydraulically actuated 100% differential locks in both axles.

Frame: solid front and rear frame, robot-welded. Articulating

Oscillation at wheel, max.	290	mm	(11,4"	in)
Track	1584	mm	(62,4"	in)
Angle of oscillation	± 10	°		

Standard tires	Size	15.5-25		
	Rim	12 x 25		

Speed, max.				
1st range				
forward/reverse	6,5	km/h	(4,0	mile/h)
2nd range				
forward/reverse	20,0	km/h	(12,4	mile/h)



SERVICE FILL CAPACITIES

Engine	9,0	l	(2,4	US gal)
Fuel tank	100,0	l	(26,5	US gal)
Front axle, total	8,7	l	(2,3	US gal)
Rear axle, incl. drop-box	11,5	l	(3,0	US gal)
Hydraulic tank, incl. hydraulic system	110,0	l	(29,1	US gal)



BRAKING SYSTEM

Service brake: reliable dual braking system, acting upon all four wheels.

1. Wear-free, hydrostatic brake
2. Central disc brake, actuated via "inch/brake pedal".
First stage of pedal application actuates the inching facility, the last third of pedal application applies the central disc brake.

Parking brake: wet inboard mounted multi-disc brakes.



HYDRAULIC SYSTEM

Thermostatically controlled oil circuit with integrated cooling system.

Hydraulic control valve: servo-assisted three spool system, with primary and secondary pressure valves.

1. Lifting function
2. Tilting function
3. Additional function for hydraulic QC
Unlock, neutral, lock
Preparation for operating hydraulic attachments with this function is available as an option.

Hydraulic oil filter: main stream filter cartridge with a 10 µm filtration in the return-line. Suction filter for the drive assembly with a 10 µm filtration.

The filters can be replaced without emptying the tank.

Lifting frame: Z-bar
2 Lift cylinders
1 Tilt cylinder

Hydraulic pump				
Flow	82	l/min	(21,7	US gal/min)
@ engine rpm	2100	r/min	(35	r/s)
Relief valve pressure	21	MPa	(3045	psi)

Lift time (loaded)	6,5	sec
Lowering time (empty)	4,0	sec
Dump time	1,5	sec
Crowd time	2,0	sec



STEERING

Hydrostatic steering. Central articulating joint with damping effect.

Steering pump: gear-type pump

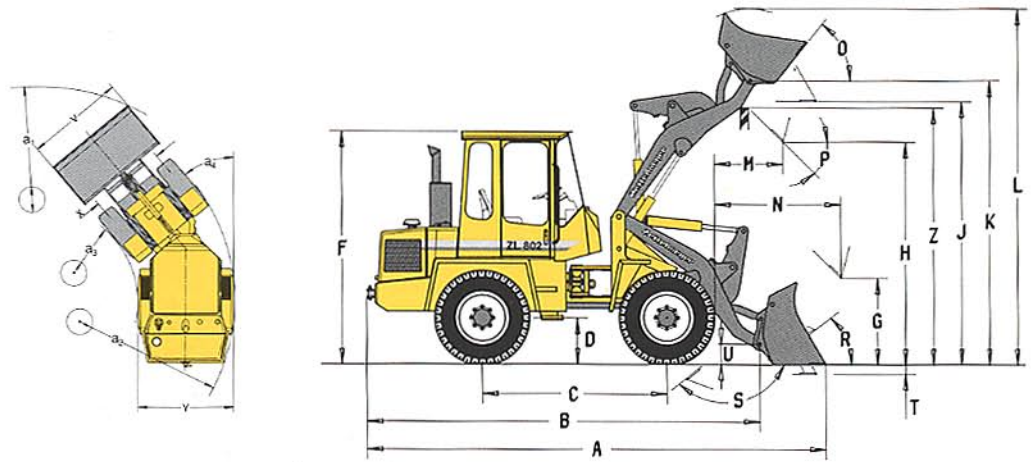
Steering cylinder: 2 double acting steering cylinders

Steering				
Angle of articulation	± 40	°		
Steering pump				
Flow	40	l/min	(10,6	US gal/min)
@ engine rpm	2100	r/min	(35	r/s)
Relief valve pressure	15	MPa	(2176	psi)



DIMENSIONS*

- B 4730 mm (15' 6" ft in)
- C 2250 mm (7' 5" ft in)
- D 600 mm (2' 0" ft in)
- F 2860 mm (9' 5" ft in)
- G 1070 mm (3' 6" ft in)
- J 3250 mm (10' 8" ft in)
- K 3500 mm (11' 6" ft in)
- O 52 °
- P 45 °
- R 48 °
- S 140 °
- U 250 mm (0' 10" ft in)
- X 1584 mm (5' 2" ft in)
- Y 1990 mm (6' 6" ft in)
- Z 3180 mm (10' 5" ft in)
- a₂ 4125 mm (13' 6" ft in)
- a₃ 2100 mm (6' 11" ft in)
- a₄ ± 40 °



* measured with bucket 1,0 m³ (1,3 yd³), standard quick-change mounting and 15.5-25 tires



OPERATING DATA

Bucket Type (quick-change mounting standard equipment) Edge: straight (G) with / without (+ / -) teeth	General Purpose Bucket		Light Material Bucket		4-in-1 Bucket	High-Tip Bucket	
	G +/-		G -		G +	G -	
Capacity heaped	m ³ (yd ³)	1,0 (1,3)	1,2 (1,6)	1,5 (2,0)	2,0 (2,6)	0,95 (1,2)	1,5 (2,0)
Material density	kg/m ³ (lb/yd ³)	1800 (3030)	1500 (2530)	1100 (1850)	800 (1350)	1800 (3030)	1000 (1690)
Static tipping load, straight (ISO)	kg (lb)	4600 (10140)	4500 (9920)	4400 (9700)	4200 (9260)	4250 (9370)	4000 (8820)
Static tipping load, full turn (40° ISO)	kg (lb)	3700 (8160)	3600 (7940)	3450 (7610)	3400 (7500)	3450 (7610)	3200 (7050)
Hydraulic lifting capacity, max.	kN (lbf)	58,0 (13000)	56,8 (12760)	55,4 (12450)	53,6 (12040)	53,8 (12090)	49,5 (11130)
Breakout force	kN (lbf)	60,0 (13480)	51,8 (11640)	45,6 (10250)	40,7 (9150)	55,6 (12500)	- (-)
A Total length	mm (ft in)	5530 (18' 2")	5640 (18' 6")	5760 (18' 11")	5900 (19' 4")	5600 (18' 4")	5920 (19' 5")
L Lift height, max.	mm (ft in)	4370 (14' 4")	4470 (14' 8")	4570 (15' 0")	4670 (15' 4")	4430 (14' 6")	5230 (17' 2")
V Bucket width	mm (ft in)	2050 (6' 9")	2050 (6' 9")	2050 (6' 9")	2250 (7' 5")	2050 (6' 9")	2050 (6' 9")
a ₁ Clearance circle	mm (ft in)	9000 (29' 6")	9070 (29' 9")	9150 (30' 0")	9430 (30' 11")	9040 (29' 8")	9250 (30' 4")
T Digging depth	mm (ft in)	65 (0' 3")	65 (0' 3")	65 (0' 3")	65 (0' 3")	65 (0' 3")	65 (0' 3")
H Dump height	mm (ft in)	2790 (9' 2")	2710 (8' 11")	2640 (8' 8")	2500 (8' 2")	2720 (8' 11")	3955 (13' 0")
M Reach at max. height	mm (ft in)	810 (2' 8")	890 (2' 11")	970 (3' 2")	1050 (3' 5")	800 (2' 7")	1230 (4' 0")
N Reach, max.	mm (ft in)	1520 (5' 0")	1600 (5' 3")	1680 (5' 6")	1760 (5' 9")	1510 (4' 11")	2190 (7' 2")
Operating weight	kg (lb)	6700 (14800)	6740 (14900)	6770 (14 920)	6840 (15000)	6870 (15150)	6990 (15400)
Loading Fork, centre of gravity 500 mm (1 ft 6 in)				with additional counter-weight 250 kg (550 lb)			
Tipping load, full turn acc. to ISO 8313	kg (lb)	3130 (6900)		3340 (7360)			
Payload acc. to EN 474-3, 80%	kg (lb)	2500 (5510)		2650 (5840)			
Payload acc. to EN 474-3, 60%	kg (lb)	1870 (4120)		2000 (4410)			

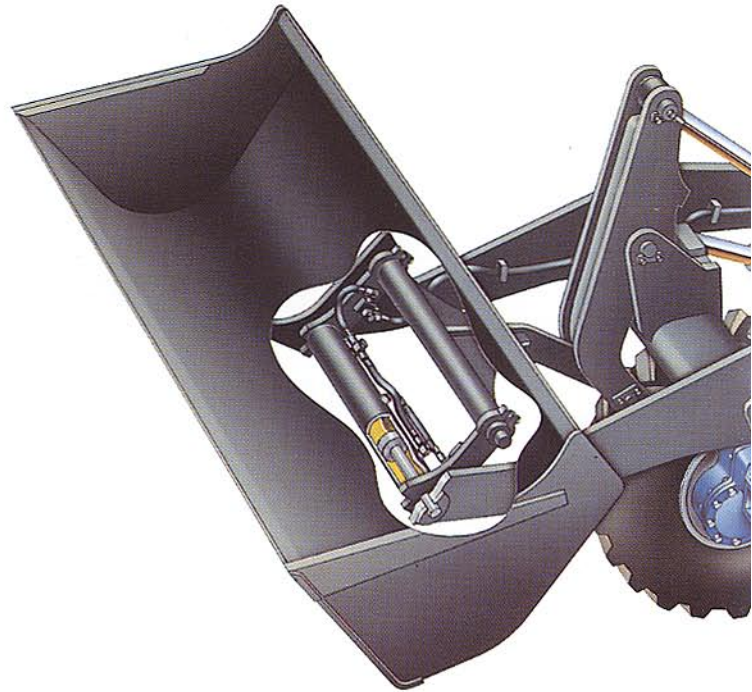


A Giant in its Class!

When your requirements call for high performance with production qualities, ZL 802 with Z-bar linkage powers its way through the job. It is an extremely efficient worker for the earth-moving industry - add the allrounder capabilities and you have a highly economical machine for use in industry.

Select from a wide range of attachments! With quick-coupler the machine is equipped for your job within seconds - all controlled from the operator's seat. Expensive idle times are eliminated on construction sites, farms, in gardening, landscaping or municipal jobs, maximising use of your investment, and, irrespective of summer or winter -

It's always Zettelmeyer Season!



ZL 802 - Traction in Abundance

Strong portal axles make the machine highly manoeuvrable and mobile in extremely difficult terrain. For its size, the ZL 802 offers a ground clearance unmatched by others.

With 100% differential locks and its portal axles front and rear, the ZL 802 makes easy work of heavy ground conditions.

The design of the ZL 802 has additional advantages: its slanted engine cover gives superb visibility, and this, together with the low maintenance, articulating-oscillating joint and overall compact dimensions, makes manoeuvring in tight quarters easy.

The Specialist for fast Working Cycles

The ZL 802 with Z-bar linkage adds tempo to working cycles. Extremely good breakout forces ensure easy filling at the face. Transport duties are minimized by a higher-than-average bucket fill. The advantage is high productivity - the ideal machine when output is a major factor.



Problematic operation is over! The new multi-functional lever for servo-assisted control makes this possible. Simply by the touch of a button, you can select travel direction (forward/ reverse), neutral position or differential lock without taking your hand from the lever. The conventional control lever - should you prefer it - remains part of the standard equipment.

Additional Comfort for Increased Operator Performance

A suitable ergonomic environment is of paramount importance for good operator performance. The ZL 802 has a clearly designed cab interior, with allround soundproofing and additional comfort. The low front windscreen, without disturbing side frames, guarantees a panoramic view over the working area.



Operator Comfort...

- Spacious, detachable cab
- Reliable heating and ventilation system
- 4-way adjustable operator's seat

... for smooth Working Cycles

- Clearly designed dashboard
- Audio-visual warning system
- Simple operation thanks to multi-functional lever
- Single pedal for inching and braking

The Power Source: Economic, Low Emission

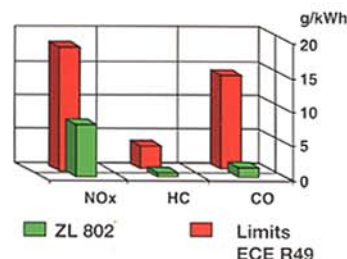
The ZL 802 is equipped with the latest series Deutz 1012 engine. The result leaves nothing to be desired: high performance, economical fuel consumption along with low acoustic and low exhaust emissions.

Transverse engine allows easy access to major components. Daily maintenance and servicing are made simple by eye level check points. Reduced maintenance time leaves you with cash-in-hand.

Hydrostatic Drive - Power you can rely on!

Hydrostatic drive maintains a constant drawbar pull even when the working hydraulics are at maximum pressure. The automatic drive allows the operator to concentrate fully on the job. Gears can be shifted under full load in work, cycles remain smooth and productivity stays constantly high. The hydrostatic drive serves as the main braking system - a further advantage, as this brake is virtually wear-free.

Exhaust Emissions ZL802



Exhaust emissions of the ZL802 are considerably lower than those required by ECE R49.

STANDARD EQUIPMENT

Cab, Exterior

Removable ROPS/FOPS-cab with flexible mountings

Walk-through cab
Lockable doors

Tinted safety glass (windscreen)
Windscreen wiper, front and rear
Windscreen washer, front and rear
Sliding window in the left door
Door stops
External rear view mirrors (right and left)

Cab, Interior

4-way adjustable driver's seat
Seat belt

Sunblind
Heater with air-filter and defroster
Cab ventilation
Cab lighting
Heated rear windscreen
Storage box in the cab
Tool box

Instrument Panel

with symbols:
Instrument lighting
24 V power socket
Horn
Safety start

Gauges:
Engine temperature
Fuel gauge
Hour meter
Drive system oil temperature

Indicator lamps for:
Direction indicator
Parking brake
Main beam
Pre-heater
Battery charging
Differential locks
Hazard warning flashers

Central audio-visual alarm for:
Engine temperature
Engine oil pressure
Drive system oil temperature
Air filter restriction
Parking brake

Exterior Lighting

Main head lights (Halogen):
full/dipped/asymmetrical
Parking lights
Rear lights
Brake lights
Direction indicators
Hazard warning lights

Powertrain

Diesel engine with direct fuel injection
Cold start aid
Dry-type, three-stage air filter
Pre-cleaner with ejector

Alternator 55 A

Hydrostatic drive
Operator-selected 100% differential lock

Tires 15.5-25

Hydraulic System

Gear-type pumps
Control valve three-spool system
Third hydraulic circuit

Service and Maintenance

Tool kit

Working Equipment

Working lights, front
Multi-functional lever
Automatic bucket leveller
Hydraulic quick-change attachment carrier

Carriage Body

Fenders and mudguards, front/rear
Lockable engine hood
Lockable fuel-tank cap
Vertical exhaust
Towing device

Complete system in accordance with German road traffic regulations
Sound insulation acc. to EU-guidelines
Safety standards according to EU-directive 89/392/EEC

 Certification

OPTIONAL EQUIPMENT

Cab

ROPS-Canopy
ROPS-Bar

Handthrottle
Hand control inch valve
Heating independent of engine
Radio

Sliding window in the right door

Safety

Protective guards for
Main head lights
Working lights
Rear lights
Rotating beacon
Audible reverse alarm
Counterweight

Powertrain

Pre-heater
Catalytic converter
Extra fuel filter
Two-stage air filter (with oil bath)

Service and Maintenance

Wheel nut wrench

Working Equipment

Working lights (rear)
ZLS load stabilizer
Extended lift arms

Extra hydraulics, rear
Additional hydraulics for attachment carrier
4th hydraulic circuit

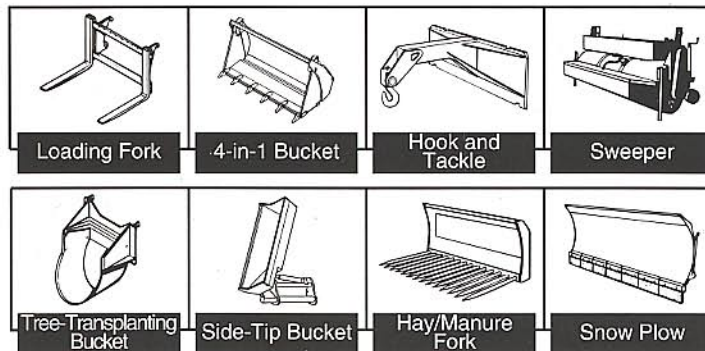
ATTACHMENT

Buckets

of various sizes
1,0 - 2,0 m³ (1,3 - 2,6 yd³)
with or without teeth

Wide range of bucket types, eg
Light material bucket (with or without teeth)

High-tip bucket (without teeth)
Side-tip Bucket (without teeth)
4-in-1 bucket (with teeth)
Brick bucket (with teeth)
Horticultural bucket
Bolt-on cutting edge



Further buckets and attachments available on request

Selection of Attachments, eg for

- Timber industry:
 - Log grapple
 - Loading fork with log grapple
- Road building/industry:
 - Loading fork
 - Hook and tackle
- Municipal application:
 - Sweeper
 - Angle dozer blade
 - Snow plow
- Horticulture and agriculture:
 - Hay/Manure fork
 - Front scarifier

*Under our policy of continuous product improvement, we reserve the right to change specifications and design without prior notice.
The illustrations do not necessarily show the standard version of the machine.*

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