

Zettelmeyer ZL 602 Series B



An Agile Allrounder - Tested under Hard Conditions

- **High-performance, environmentally-friendly 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

- **Powerful Z-bar loader-linkage**

with two lifting cylinders:

- High breakout force and lifting capacity in bucket applications
- Excellent fork-lift capacity

- **100% differential lock can be engaged** 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 44,5/60 kW/hp

- **Operating Weight:**

4,6 t (10140 lb)

- **Bucket Capacities:**

0,8 - 1,5 m³ (1,0-1,9 yd³)

Zettelmeyer

ZL 602 Series B



ENGINE

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

Two-stage air cleaning:

1. Paper filter with indicator in cab
2. Safety filter

Make	KHD			
Type	BF4 L 1011 FT			
Gross power @	2300	r/min	(38,3	r/s)
SAE J1995	44,5	kW	(60	hp)
Net power @	2300	r/min	(38,3	r/s)
SAE J1349	42,5	kW	(57	hp)
DIN 70020 / 6271	42,5	kW	(57	hp)
Max. torque @	1800	r/min	(30	r/s)
SAE J1349 netto	200	Nm	(148	lbf/ft)
DIN 70020 / 6271	200	Nm	(148	lbf/ft)
No. cylinders	4			
Cubic capacity	2,73	l	(167	in ³)
Bore	91	mm	(3,6	in)
Stroke	105	mm	(4,1	in)

Electrical System

Rated voltage	12	V		
Battery voltage	12	V		
Battery capacity	88	Ah		
Alternator rating	840/60	W/A		
Starter motor output	2,2	kW	(3,0	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 both ranges. Inch/brake pedal for variable machine speed control and power transfer to bucket hydraulics at constant engine rpm.

Axles: all-wheel drive by two rigid portal axles.

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

Frame: solid front and rear frame, robot-welded. Articulating oscillating joint for optimum manoeuvrability and traction.

Oscillation at wheel, max.	250	mm	(9"	in)
Track	1382	mm	(52,4"	in)
Angle of oscillation	± 10	°		

Standard tires	Size	12.5-20		
	Rim	11 x 20		

Speed, max:				
1st range	10,0	km/h	(6,2	mile/h)
forward/reverse				
2 nd range	20,0	km/h	(12,4	mile/h)
forward/reverse				



SERVICE FILL CAPACITIES

Engine	10,5	l	(2,8	US gal)
Fuel tank	60,0	l	(15,9	US gal)
Front axle, total	10,0	l	(2,6	US gal)
Rear axle, incl. drop-box	11,0	l	(2,9	US gal)
Hydraulic tank, incl. hydrostatic system	60,0	l	(15,9	US gal)



BRAKING SYSTEM

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

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

Parking brake: central drum brake, acting upon all four wheels.



HYDRAULIC SYSTEM

Thermostatically controlled oil circuit with integrated cooling system and electrically switched fan.

Hydraulic control valve: double acting control valve 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 linkage
	2 Lift cylinders
	1 Tilt cylinder

Hydraulic pump				
Flow	52	l/min	(13,7	US gal/min)
@ engine rpm	2300	r/min	(38,3	r/s)
Relief valve pressure	22	MPa	(3191	psi)

Lift time (loaded)	6,0	sec.
Lowering time (empty)	3,0	sec.
Dump time	1,0	sec.
Crowd time	1,0	sec.



STEERING

Hydrostatic steering. Central articulating joint with damping effect.

Steering pump: gear-type pump

Steering cylinder: 1 double-acting steering cylinder

Steering				
Angle of articulation	± 39	°		
Steering pump				
Flow	25	l/min	(6,6	US gal/min)
@ engine rpm	2300	r/min	(38,3	r/s)
Relief valve pressure	15	MPa	(2176	psi)



An Allrounder from Zettelmeyer: as Versatile as your Requirements!

The ZL 602 Series B is not only a top performer of classic earth-moving tasks - it has much more to offer!

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, gardening, landscaping or municipal jobs maximising use of your investment, and, irrespective of summer or winter -



It's always Zettelmeyer Season!



ZL 602 Series B Traction in Abundance

The strong portal axles make the machine highly manoeuvrable and mobile in extremely difficult terrain. With 100% differential locks and portal axles front and rear, the ZL 602 Series B makes easy work of heavy ground conditions.

Slanted engine cover gives superb visibility, and the low maintenance articulating-oscillating joint ensures excellent manoeuvrability in tight quarters and uneven terrain.

The Lift-arm System adds Power to Digging Cycles!

In every application, you can take advantage of the proven Z-bar loader linkage. It shows extraordinary breakout force at the face, and excellent lifting force with the loading fork. The curvature of the lift arm is designed to cater for larger trucks both in dump height and reach for symmetric loading.



Additional Comfort for Increased Operator Performance

A suitable ergonomic environment is of paramount importance for good operator performance. The ZL 602 Series B 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
- Single lever control for working hydraulics and differential locks
- Single pedal for inching and braking

The Power Source: Environmentally-friendly Performance

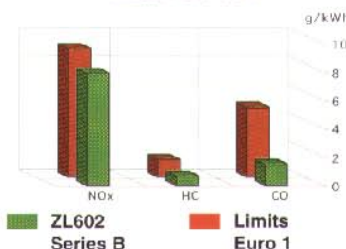
The ZL 602 Series B is equipped with the latest Deutz 1011 series engine. The result leaves nothing to be desired. High performance, economical fuel consumption along with low acoustic and low exhaust emissions. Therefore the ZL 602 Series B has been honoured with the blue environment seal "environmentally-friendly - low noise".

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

Hydrostatic Drive - Constant 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
ZL602 Series B

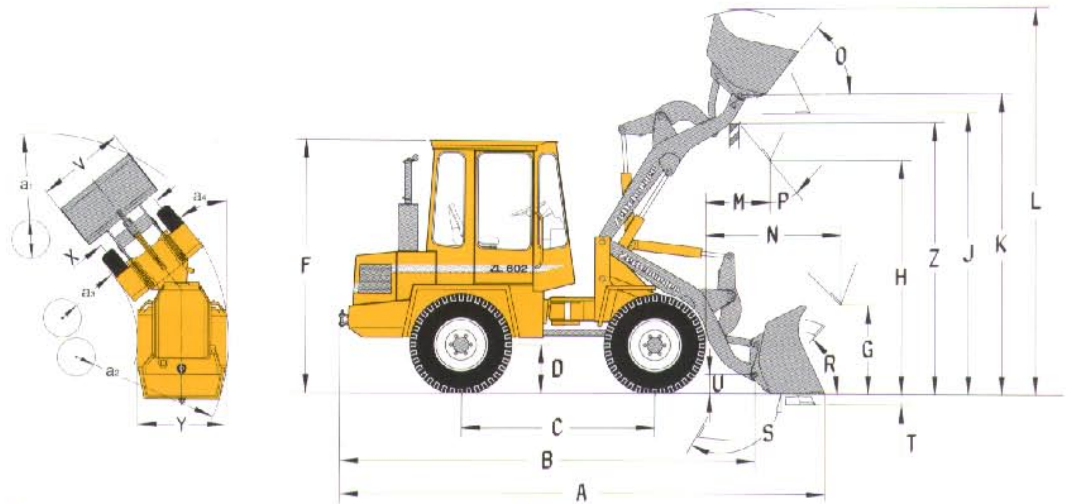


Exhaust emissions of the ZL602 Series B are considerably lower than those required by Euro 1.

ZL 602 Series B



B	4275 mm	(14' 0" ft in)
C	2000 mm	(6' 6" ft in)
D	480 mm	(1' 7" ft in)
F	2630 mm	(8' 8" ft in)
G	950 mm	(3' 1" ft in)
J	2920 mm	(9' 7" ft in)
K	3120 mm	(10' 3" ft in)
O	53	°
P	45	°
R	50	°
S	143	°
U	200 mm	(0' 8" ft in)
X	1382 mm	(4' 6" ft in)
Y	1730 mm	(5' 8" ft in)
Z	2840 mm	(9' 4" ft in)
a ₂	3750 mm	(12' 1" ft in)
a ₃	1980 mm	(6' 6" ft in)
a ₄	± 39	°



* measured with bucket 0,8 m³ (1,0 yd³), standard quick-change mounting and 12.5-20 tires



Bucket Type

Mounting R
(quick-change mounting standard equipment)

Edge: straight (G)
with / without (+ / -) teeth

		General Purpose Bucket		Light Material Bucket		4-in-1 Bucket	High-Tip Bucket
		R	R	R	R	R	R
		G	G	G	G	G	G
		+/-	-	-	+	+	+
Capacity heaped	m ³ (yd ³)	0,8 (1,0)	0,9 (1,2)	1,3 (1,7)	1,5 (1,9)	0,75 (0,9)	1,2 (1,5)
Material density	kg/m ³ (lb/yd ³)	1800 (3050)	1500 (2550)	1000 (1700)	800 (1350)	1700 (2850)	1000 (1650)
Static tipping load, straight (ISO)	kg (lb)	3500 (7716)	3440 (7584)	3300 (7275)	3240 (7143)	3170 (6989)	3060 (6746)
Static tipping load, full turn (39° ISO)	kg (lb)	2890 (6371)	2830 (6239)	2700 (5952)	2660 (5864)	2600 (5732)	2470 (5445)
Hydraulic lifting capacity, max.	kN (lbf)	35,0 (7868)	34,6 (7778)	33,0 (7419)	32,2 (7239)	32,2 (7239)	30,0 (6477)
Breakout force	kN (lbf)	40,5 (9105)	36,0 (8093)	28,5 (6407)	25,5 (5733)	34,4 (7733)	- (-)
A Total length	mm (ft in)	5150 (16' 10")	5225 (17' 2")	5405 (17' 9")	5505 (18' 1")	5260 (17' 3")	5400 (17' 9")
L Lift height, max.	mm (ft in)	4000 (13' 1")	4040 (13' 3")	4140 (13' 7")	4270 (14' 0")	3990 (13' 1")	4660 (15' 3")
V Bucket width	mm (ft in)	1750 (5' 9")	1900 (6' 3")	1900 (6' 3")	1900 (6' 3")	1750 (5' 9")	1900 (6' 3")
a ₁ Clearance circle	mm (ft in)	8180 (26' 10")	8300 (27' 3")	8480 (27' 10")	8550 (28' 1")	8260 (27' 1")	8980 (29' 6")
T Digging depth	mm (ft in)	100 (0' 4")	100 (0' 4")	100 (0' 4")	100 (0' 4")	100 (0' 4")	100 (0' 4")
H Dump height	mm (ft in)	2470 (8' 1")	2420 (7' 11")	2290 (7' 6")	2220 (7' 3")	2390 (7' 10")	3560 (11' 8")
M Reach at max. height	mm (ft in)	710 (2' 4")	760 (2' 6")	890 (2' 11")	960 (3' 2")	790 (2' 7")	1120 (3' 8")
N Reach, max.	mm (ft in)	1390 (4' 7")	1440 (4' 9")	1570 (5' 2")	1640 (5' 6")	1470 (4' 10")	2075 (6' 10")
Operating weight	kg (lb)	4600 (10140)	4630 (10207)	4670 (10295)	4700 (10360)	4770 (10516)	4930 (10870)

STANDARD EQUIPMENT

<p>Cab, Exterior Removable ROPS-cab with flexible mountings</p> <p>Walk-through cab Lockable doors</p> <p>Tinted safety glass (front and rear) 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)</p> <p>Cab, Interior 4-way adjustable driver's seat Seat belt</p> <p>Sunblind Heater with air-filter and defroster Cab lighting Cab ventilation Storage box in the cab Tool box</p>	<p>Instrument Panel with symbols: Instrument lighting 12 V power socket Horn Safety start</p> <p>Gauges: Engine temperature Fuel gauge Hour meter Drive system oil temperature</p> <p>Indicator lamps for: Direction indicator Parking brake Main beam Pre-heater Battery charging Differential locks Hazard warning flashers</p> <p>Central audio-visual alarm for: Engine temperature Engine oil pressure Drive system oil temperature Air filter restriction Parking brake</p>	<p>Exterior Lighting Main head lights (Halogen): full/dipped/asymmetrical Parking lights Rear lights Brake lights Direction indicators Hazard warning lights Reversing lights</p> <p>Powertrain Diesel engine with direct fuel injection Cold start aid Dry-type air filter</p> <p>Alternator 60 A</p> <p>Hydrostatic drive Additional 100% differential locks</p> <p>Tires 12.5-20</p> <p>Hydraulic System Gear-type pump Control valve three-spool system Third hydraulic circuit</p> <p>Service and Maintenance Tool kit</p>	<p>Working Equipment Single lever control Bucket level indicator Hydraulic quick-change attachment carrier</p> <p>Carriage Body Fenders and mudguards, front/rear Lockable engine hood Lockable fuel-tank cap Vertical exhaust Towing device</p> <p>Complete system in accordance with German road traffic regulations Sound insulation acc. to EC-guidelines Safety standards according to EC-directive 89/392/EEC CE Certification</p>
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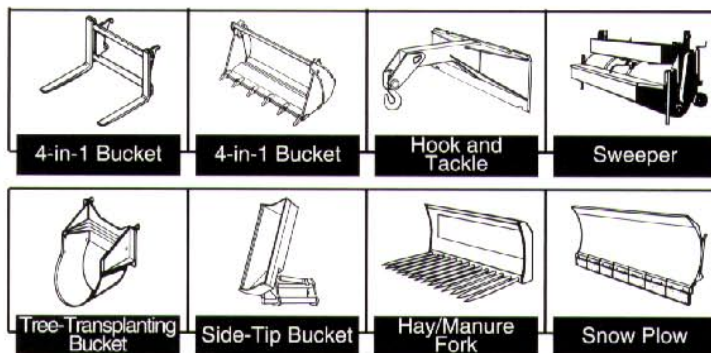
OPTIONAL EQUIPMENT

<p>Cab Handthrottle Hand control inch valve Heating independent of engine Radio</p> <p>Sliding window in the right door</p>	<p>Safety FOPS plate Protective guards for Main head lights Working lights Rear lights Rotating beacon Audible reverse alarm Counterweight</p>	<p>Powertrain Pre-heater Catalytic converter Extra fuel filter Pre-cleaner with ejector Two-stage air filter (oil bath)</p> <p>Service and Maintenance Wheel nut wrench</p>	<p>Working Equipment Working lights (front and rear) ZLS load stabilizer Extended lift arms Extra hydraulics, rear Additional hydraulics for attachment carrier 4th hydraulic circuit Hydraulic circuit with additional pump</p>
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ATTACHMENT

Buckets
of various sizes
0,8 - 1,5 m³ (1,0 - 1,9 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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