

# Zettelmeyer ZL 702 Serie B



## **Pallet-specialist for High Payloads**

- **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 loading fork lifting capability.

- **100% differential locks** 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 51 / 68 kW / hp

- **Operating Weight:**

5,0 t (11020 lb)

- **Bucket Capacities:**

0,9 - 1,5 m<sup>3</sup> (1,2 - 1,9 yd<sup>3</sup>)

## **Zettelmeyer**

## ZL 702 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
2. Safety filter

Make		KHD		
Type		BF 4L 1011 F		
Gross power @	2300	r/min	(38,3	r/s)
SAE J1995	51	kW	(68	hp)
Net power @	2300	r/min	(38,3	r/s)
SAE J1349	48,5	kW	(65	hp)
DIN 70020 / 6271	48,5	kW	(65	hp)
Max. torque @	1800	r/min	(30	r/s)
SAE J1349 netto	220	Nm	(162	lbf ft)
DIN 70020 / 6271	220	Nm	(162	lbf ft)
No. cylinders	4			
Cubic capacity	2,73	l	(167	in <sup>3</sup> )
Bore	91	mm	(0' 3,6"	in)
Stroke	105	mm	(0' 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 ranges. Maximum pushing 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 lock:** 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	(0' 9"	in)
Track	1472	mm	(4' 11"	in)
Angle of oscillation	± 10	°		

Standard tires	Size	405/70 R20
	Rim	13 x 20

Speed, max.				
1st range				
forward/reverse	8,0	km/h	(5,0	mile/h)
2nd range				
forward/reverse	20,0	km/h	(12,4	mile/h)



### 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	(2,6	US gal)
Hydraulic tank, incl. hydraulic 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 on 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 loader-linkage
	2 Lift cylinders
	1 Tilt cylinder

Hydraulic pump				
Flow	52	l/min	(1,2	US gal/min)
@ engine rpm	2300	r/min	(38,3	r/s)
Relief valve pressure	23	MPa	(3336	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)

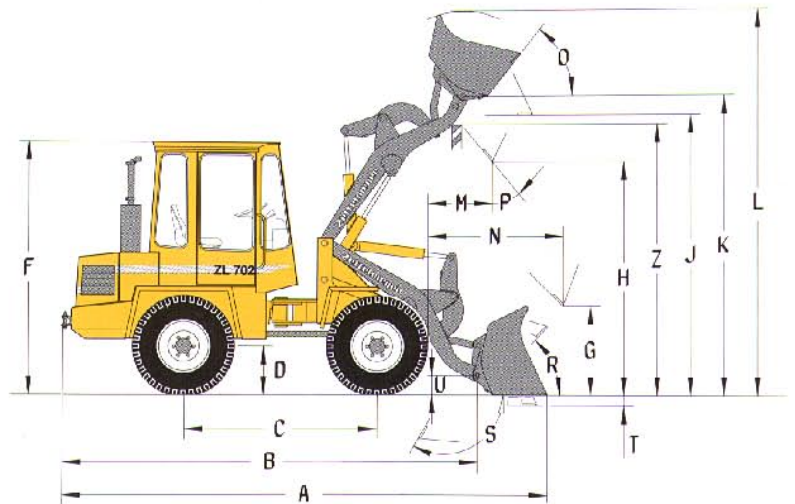
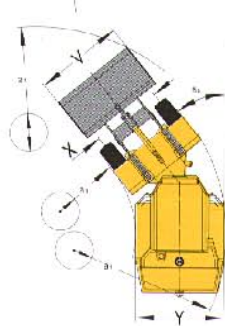


# ZL 702 Series B



## DIMENSIONS\*

B	4275 mm	(14' 0" ft in)
C	2000 mm	(6' 7" ft in)
D	420 mm	(1' 5" ft in)
F	2640 mm	(8' 8" ft in)
G	960 mm	(3' 2" ft in)
J	2930 mm	(9' 7" ft in)
K	3130 mm	(10' 3" ft in)
O	53	°
P	45	°
R	50	°
S	143	°
U	200 mm	(0' 8" ft in)
X	1472 mm	(4' 10" ft in)
Y	1895 mm	(6' 3" ft in)
Z	2850 mm	(9' 4" ft in)
a <sub>2</sub>	3800 mm	(12' 6" ft in)
a <sub>3</sub>	1875 mm	(6' 2" ft in)
a <sub>4</sub>	± 39	°



\* measured with bucket 0,9 m<sup>3</sup> (1,2 yd<sup>3</sup>) standard quick-change mounting and 405/70 R20 tires



## OPERATING DATA

Bucket Type	General Purpose Bucket		Light Material Bucket		4-in-1 Bucket	High-Tip Bucket	
	R	R	R	R	R	R	
Mounting R (quick-change mounting standard equipment)							
Edge: straight (G) with / without (+ / -) teeth	G +/-	G	G	G	G +	G -	
Capacity heaped	m <sup>3</sup> (yd <sup>3</sup> )	0,9	1,1	1,3	1,5	0,85	1,5
Material density	kg/m <sup>3</sup> (lb/yd <sup>3</sup> )	1800	1400	1100	900	1700	900
Static tipping load, straight (ISO)	kg	3950	3850	3780	3700	3650	3400
Static tipping load, full turn (39° ISO)	kg	3240	3150	3050	2980	2900	2700
Hydraulic lifting capacity, max.	kN	37,0	35,5	35,0	34,0	33,5	32,5
Breakout force	kN	41,0	32,0	30,0	27,0	36,5	-
A Total length	mm	5020	5200	5250	5350	5250	5350
L Lift height, max.	mm	4010	4160	4200	4290	4000	4880
V Bucket width	mm	1900	1900	1900	1900	1900	1900
a <sub>1</sub> Clearance circle	mm	8300	8460	8480	8550	8260	8980
T Digging depth	mm	90	90	90	90	90	90
H Dump height	mm	2490	2340	2300	2230	2400	3570
M Reach at max. height	mm	760	830	870	940	760	1230
N Reach, max.	mm	1450	1520	1550	1620	1450	2420
Operating weight	kg (lb)	5000 (11020)	5040 (11110)	5040 (11110)	5070 (11180)	5180 (11420)	5320 (11730)





### Multi-Talent with Maximum Performance!

The ZL 702 Series B is much more than merely a good performer of classic earth moving tasks. You can 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 702 - Traction in Abundance

Radial tires are standard on the ZL 702 Series B. This provides good stability and low ground bearing pressure. The strong portal axles make the machine highly manoeuvrable and mobile in extremely difficult terrain.

The functionally designed shape of the ZL 702 Series B offers additional advantages: its slanted engine cover gives superb visibility, and its low maintenance, articulating-oscillating joint, ensures excellent manoeuvrability.



## A steady Workhorse!

The ZL 702 Series B with standard Z-bar loader linkage provides for excellent productivity when handling bulk materials. When working with a loading fork, high performance is also maintained.

The ZL 702 Series B lets you handle in full confidence, always safe and stable, even when handling large capacity (2,1 tonne) Europallets. Stability is ensured by the heavy operating weight and good axle load distribution.



## Additional Comfort for Increased Operator Performance

A suitable ergonomic environment is of paramount importance for good operator performance. The ZL 702 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 pedal for inching and braking
- Single lever control for working hydraulics and differential locks

## The Power Source: Environmentally-friendly Performance

The ZL 702 Series B is equipped with the latest series Deutz 1011 F engine. The result leaves nothing to be desired: high performance, economical fuel consumption along with low acoustic and low exhaust emissions. Therefore the ZL 702 Series B has been honoured with the blue environmental seal "environmentally-friendly - low noise".

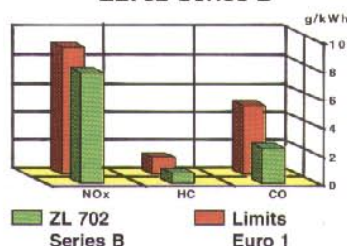
Transverse engine allows easy access to major components. Daily maintenance and servicing are made simple by eye level check points. Resultant time-saving leave you with cash-in-hand.

## 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 extremely high.

The hydrostatic drive serves as the main braking system - a further advantage, as this brake is virtually wear-free.

Exhaust Emissions  
ZL702 Series B



Exhaust emissions of the ZL 702 Series B are considerably lower than those required by Euro 1.



**STANDARD EQUIPMENT**

<p><b>Cab, Exterior</b> Removable ROPS/FOPS-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><b>Cab, Interior</b> 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><b>Instrument Panel</b> 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><b>Exterior Lighting</b> Main head lights (Halogen): full/dipped/asymmetrical Parking lights Rear lights Brake lights Direction indicators Hazard warning lights Reversing lights</p> <p><b>Powertrain</b> 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 405/70R20</p> <p><b>Hydraulic System</b> Gear-type pump Control valve three-spool system Third hydraulic circuit</p> <p><b>Service and Maintenance</b> Tool kit</p>	<p><b>Working Equipment</b> Single lever control Bucket level indicator Hydraulic quick-change attachment carrier</p> <p><b>Carriage Body</b> 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**

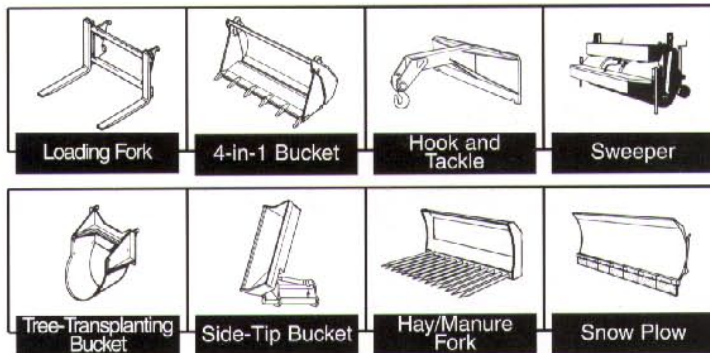
<p><b>Cab</b> Handthrottle Hand control inch valve Heating independent of engine Radio</p> <p>Sliding window in the right door</p>	<p><b>Safety</b> FOPS plate Protective guards for Main head lights Working lights Rear lights Rotating beacon Audible reverse alarm</p>	<p><b>Powertrain</b> Pre-heater Catalytic converter Extra fuel filter Pre-cleaner with ejector Two-stage air filter (oil bath)</p> <p><b>Service and Maintenance</b> Wheel nut wrench</p>	<p><b>Working Equipment</b> 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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**ATTACHMENTS**



**Buckets**  
of various sizes  
0,9 - 1,5 m<sup>3</sup> (1,2 - 1,9 yd<sup>3</sup>)  
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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