

Zettelmeyer

ZL 702

Series C



Specialist for High Payloads

- **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
- **Powerful Z-bar loader linkage** with two lifting cylinders:
 - High breakout force and lifting capacity in bucket applications.
 - Excellent loading fork lifting capability.
- **Operator-selected 100% differential locks** 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**
 - Multi-function lever
 - Audio-visual warning system for monitoring operating systems
- **Gross power:**
 - SAE J1995 51/68 kW/hp
 - Net Power:**
 - SAE J 1349 48,5/65 kW/hp
- **Operating Weight:**
 - 5,0 t (11020 lb)
- **Bucket Capacities:**
 - 0,9 - 1,5 m³ (1,2 - 1,9 yd³)

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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 ³)
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.

Multi-function lever for change of direction, differential lock and use of the servo-control.

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	8,0	km/h	(5,0	mile/h)
forward/reverse				
2nd 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	(2,6	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: Servo-controlled, 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	(3340	psi)

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



STEERING

Hydrostatic steering. Central articulating joint with damping effect.

Steering pump: gear-type pump

Steering cylinder: 1 double acting steering cylinder

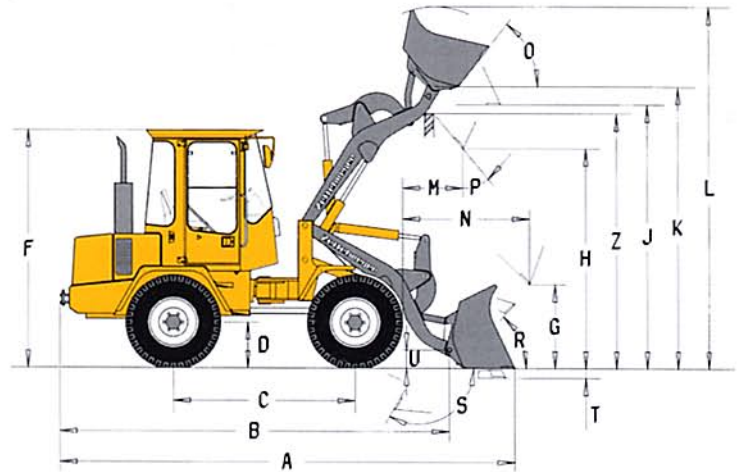
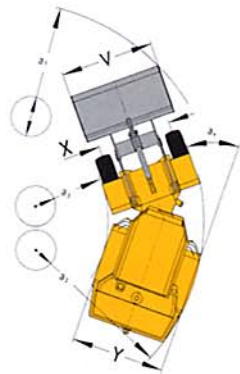
Steering				
Angle of articulation	± 39	°		
Steering pump				
Flow	25	l/min	(6,6	US gal/min)
@ engine rpm	2300	r/min	(38,3	r/s)
Relief valve pressure	17	MPa	(2470	psi)

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DIMENSIONS*

B	4270	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 ₂	3800	mm	(12' 6" ft in)
a ₃	1875	mm	(6' 2" ft in)
a ₄	± 39	°	



* measured with bucket 0,9 m³ (1,2 yd³) standard quick-change mounting and 405/70 R20 tires



OPERATING DATA

Bucket Type (quick-change mounting standard equipment)		General Purpose Bucket		Light Material Bucket		4-in-1 Bucket	High-Tip Bucket
		G +/-		G -		G +	G -
Capacity heaped	m ³ (yd ³)	0,9 (1,2)	1,1 (1,4)	1,3 (1,7)	1,5 (1,9)	0,85 (1,1)	1,5 (1,9)
Material density	kg/m ³ (lb/yd ³)	1800 (3050)	1400 (2560)	1100 (1850)	900 (1520)	1700 (2860)	900 (1520)
Static tipping load, straight (ISO)	kg (lb)	3950 (8710)	3850 (8490)	3780 (8330)	3700 (8157)	3650 (8050)	3400 (7500)
Static tipping load, full turn (39° ISO)	kg (lb)	3240 (7140)	3150 (6940)	3050 (6720)	2980 (6570)	2900 (6390)	2700 (5950)
Hydraulic lifting capacity, max.	kN (lbf)	37,0 (8320)	35,5 (7980)	35,0 (7670)	34,0 (7650)	33,5 (7530)	32,5 (7300)
Breakout force	kN (lbf)	41,0 (9220)	32,0 (7190)	30,0 (6740)	27,0 (6070)	36,5 (8200)	- (-)
A Total length	mm (ft in)	5020 (16' 6")	5200 (17' 1")	5250 (17' 3")	5350 (17' 7")	5250 (17' 3")	5500 (18' 1")
L Lift height, max.	mm (ft in)	4010 (13' 2")	4160 (13' 8")	4200 (13' 9")	4300 (14' 1")	4000 (13' 1")	4980 (16' 4")
V Bucket width	mm (ft in)	1900 (6' 3")	1900 (6' 3")	1900 (6' 3")	1900 (6' 3")	1900 (6' 3")	1900 (6' 3")
a ₁ Clearance circle	mm (ft in)	8300 (27' 3")	8400 (27' 7")	8440 (27' 8")	8500 (27' 11")	8400 (27' 7")	8600 (28' 3")
T Digging depth	mm (ft in)	90 (0' 4")	90 (0' 4")	90 (0' 4")	90 (0' 4")	90 (0' 4")	90 (0' 4")
H Dump height	mm (ft in)	2490 (8' 2")	2340 (7' 8")	2300 (7' 7")	2230 (7' 10")	2400 (7' 10")	3580 (11' 9")
M Reach at max. height	mm (ft in)	760 (2' 6")	830 (2' 9")	870 (2' 10")	940 (3' 1")	760 (2' 6")	1160 (3' 10")
N Reach, max.	mm (ft in)	1450 (4' 9")	1520 (5' 0")	1550 (5' 1")	1620 (5' 4")	1450 (4' 9")	2120 (6' 11")
Operating weight	kg (lb)	5000 (11020)	5040 (11110)	5040 (11110)	5070 (11180)	5180 (11420)	5320 (11730)
Loading Fork, centre of gravity 500 mm (1 ft 6 in)							
Tipping load, full turn acc. to ISO 8313	kg (lb)	2500 (5510)					
Payload acc. to EN 474-3, 80%	kg (lb)	2000 (4410)					
Payload acc. to EN 474-3, 60%	kg (lb)	1500 (3310)					

Strong and extremely Steady - the N

Stable design, expert for heavy loads



...so comfortable

The roomy cab offers a high level of operator comfort making operation fun: well laid out cockpit, individually adjustable, comfortable operator seat, variable ventilation and heating. Phantastic panoramic view for precise control of machine. Simplified operation using the dual inch/brake pedal and the multi-function lever.



Operation as you choose!

New: control direction of travel, neutral and differential lock by simply pressing a button on the multi-function lever or conventionally using the direction lever on the steering column.



...so mobile

Difficult terrain? No problem as every Allrounder has operator-selected 100% differential lock standard in both axles. And, in addition, portal axles with high ground clearance. Optimum manoeuvrability is ensured even on twisty, narrow sites due to the articulating-oscillating joint and the machines' special design: no single element protrudes beyond the width defined by the wheel rim - even the doors stop open within this contour.



Z-bar loader-linkage - robust multi-purpose loader-linkage with high breakout and lift forces. Powerful in loading and production.



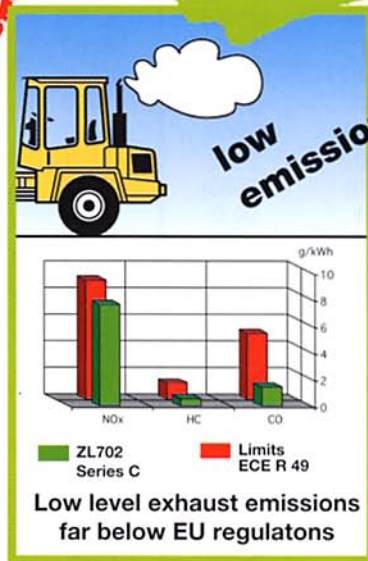
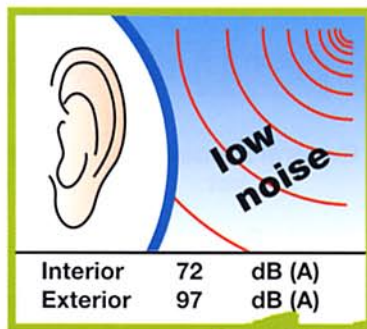
...so versatile

You need more than just a loader for a Zettelmeyer Allrounder. With its many attachments, it replaces a whole range of special machines. Loading, digging, grading, etc. With a choice of attachments, you can find the right one for your application.

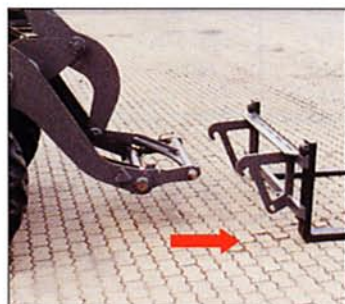
ew Generation ZL702 Series C

...so reliable

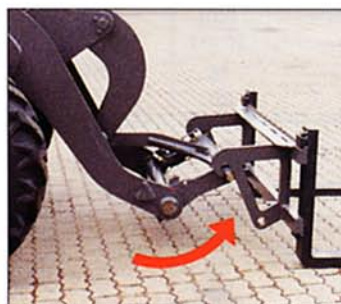
Zettelmeyer wheel loaders - uncompromising performance. Tried-and-tested, high-quality components and carefully planned design: single engine cover and transversely-mounted engine for simple service. Durable hydrostatic transmission for constant power. Strong diesel engines with high power potential. Exemplary environmental features: economic use of fuel, low emissions during operation and reduced noise emission.



In an instant, your wheel loader becomes a multi-functional Allrounder



Approach



Attach



Ready!

a wheel loader? A clear case for! With the correct whole series of expensive g forks, sweepers, f over 60 attachments, the tion is bound to be available.

STANDARD EQUIPMENT

<p>Cab, Exterior 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>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: Indicators (left/right) Parking brake Main beam Pre-heater Battery charging Differential locks Hazard warning flashers Direction (forward/reverse)</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 Operator-selected 100% differential locks Tires 405/70R20</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 Multi-function lever 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 EU-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>ROPS-Bar (folding) Canopy for ROPS-Bar</p>	<p>Safety Protective guards for Main head lights Working lights Rear lights</p> <p>Rotating beacon Audible reverse alarm</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</p> <p>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 m³ (1,2 - 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

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

Further buckets and attachments available on request

*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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