

Zettelmeyer ZL 602 Si Series C



Agile Allrounder - for swift Transport

- **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
- **Strong TP loader-linkage**
ideal for loading fork applications
 - High breakout and lifting forces combine with optimum parallelity of the attachment
- **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**
 - Multi-function lever
 - Audio-visual warning system for monitoring operating systems

- **Gross Power:**
SAE J1995 44,5/60 kW/hp
Net Power:
SAE J1349 42,5/57 kW/hp

- **Operating Weight:**
5,0 t (11020lb)

- **Bucket Capacities:**
0,8 - 1,5 m³ (1,0-1,9 yd³)

Zettelmeyer

ZL 602 Si Series C



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 1011FT			
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)



BRAKING SYSTEM

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

1. Wear-free, hydrostatic inching 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: 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: 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: TP 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	(3190	psi)

Lift time (loaded)	6,0	s		
Lowering time (empty)	3,5	s		
Dump time	1,5	s		
Crowd time	2,0	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)



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.

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

Axes: 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

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				
forward/reverse, up to	8,0	km/h	(5,0	mile/h)
2nd range				
forward/reverse, up to	30,0	km/h	(18,6	mile/h)



SERVICE FILL CAPACITIES

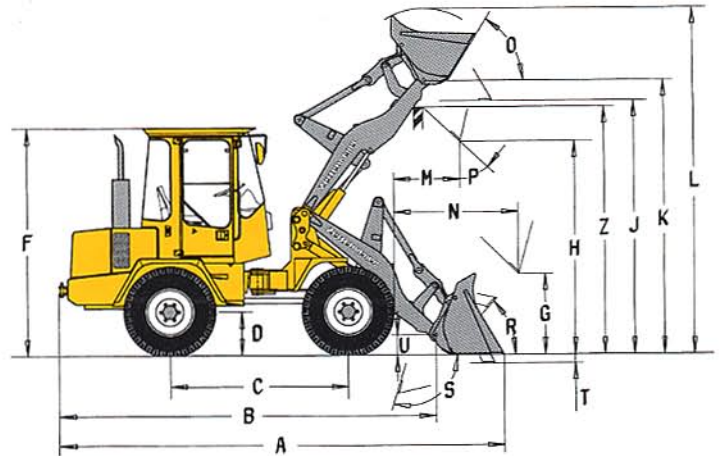
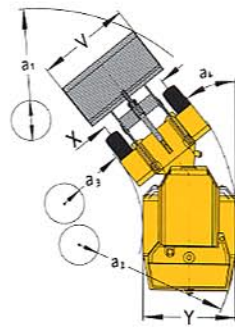
Engine	10,5	l	(2,8	US gal)
Fuel tank	60,0	l	(15,9	US gal)
Front axle, total	10,0	l	(2,6	US gal)
Rear axle, incl. drop-box	11,0	l	(2,9	US gal)
Hydraulic tank, incl. hydrostatic system	60,0	l	(15,9	US gal)

ZL 602 Si Series C



DIMENSIONS*

- B 4260 mm (14' 0" ft in)
- C 2030 mm (6' 8" ft in)
- D 430 mm (1' 5" ft in)
- F 2630 mm (8' 8" ft in)
- G 950 mm (3' 1" ft in)
- J 2955 mm (9' 8" ft in)
- K 3190 mm (10' 6" ft in)
- O 57 °
- P 45 °
- R 48 °
- S 68 °
- U 235 mm (0' 9" ft in)
- X 1382 mm (4' 6" ft in)
- Y 1730 mm (5' 8" ft in)
- Z 2890 mm (9' 6" ft in)
- a₂ 3750 mm (12' 1" ft in)
- a₃ 1980 mm (6' 6" ft in)
- a₄ ± 39 °



* measured with bucket 0,8 m³ (1,0 yd³), standard quick-change mounting and 12.5-20 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)	0,8 (1,0)	0,9 (1,2)	1,3 (1,7)	1,5 (1,9)	0,75 (0,9)	1,5 (1,9)
Material density	kg/m ³ (lb/yd ³)	1800 (3050)	1500 (2500)	1000 (1700)	800 (1350)	1700 (2850)	800 (1350)
Static tipping load, straight (ISO)	kg (lb)	3400 (7496)	3350 (7385)	3250 (7165)	3150 (6944)	3200 (7055)	2900 (6393)
Static tipping load, full turn (39° ISO)	kg (lb)	2900 (6393)	2800 (6173)	2700 (5952)	2600 (5732)	2650 (5842)	2400 (5291)
Hydraulic lifting capacity, max.	kN (lbf)	35,0 (7868)	34,3 (7711)	33,0 (7418)	32,0 (7194)	32,7 (7352)	28,2 (6337)
Breakout force	kN (lbf)	39,5 (8880)	38,0 (8543)	29,5 (6632)	26,5 (5957)	37,4 (8408)	- (-)
A Total length	mm (ft in)	5070 (16' 8")	5090 (16' 8")	5300 (17' 5")	5400 (17' 9")	5120 (16' 10")	5510 (18' 1")
L Lift height, max.	mm (ft in)	4050 (13' 3")	4070 (13' 4")	4250 (13' 11")	4330 (14' 2")	4030 (13' 3")	5040 (16' 6")
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)	8260 (27' 1")	8410 (27' 7")	8550 (28' 1")	8620 (28' 3")	8300 (27' 3")	8700 (28' 7")
T Digging depth	mm (ft in)	120 (0' 5")	120 (0' 5")	120 (0' 5")	120 (0' 5")	120 (0' 5")	120 (0' 5")
H Dump height	mm (ft in)	2480 (8' 2")	2460 (8' 1")	2300 (7' 7")	2230 (7' 4")	2420 (7' 11")	3690 (12' 1")
M Reach at max. height	mm (ft in)	780 (2' 7")	790 (2' 7,5")	930 (3' 1")	1000 (3' 3")	780 (2' 7")	1160 (3' 10")
N Reach, max.	mm (ft in)	1470 (4' 9,8")	1480 (4' 10")	1620 (5' 4")	1690 (5' 10")	1470 (4' 9,8")	2160 (7' 1")
Operating weight	kg (lb)	5000 (11020)	5035 (11100)	5070 (11180)	5100 (11240)	5170 (11400)	5350 (11800)
Loading Fork, centre of gravity 500 mm (1 ft 6 in)							
Tipping load, full turn acc. to ISO 8313	kg (lb)	2300 (5070)					
Payload acc. to EN 474-3, 80%	kg (lb)	1840 (4060)					
Payload acc. to EN 474-3, 60%	kg (lb)	1380 (3040)					

Swift Allround Loader - the New Generation

Extra speed for long distances, good multi-purpose wheel loader



...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.



NEW



Not only extremely manoeuvrable, but also extremely quick. The ZL602Si Serie C with a top speed of 30 kmh (18,6 mph).

...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 machine's special design: no single element protrudes beyond the width defined by the wheel rim - even the doors stop open within this contour.



TP loader-linkage

combined loader-linkage with tried-and-tested advantages: parallelity throughout the lifting range and controlled dumping even from the highest lifting positions.



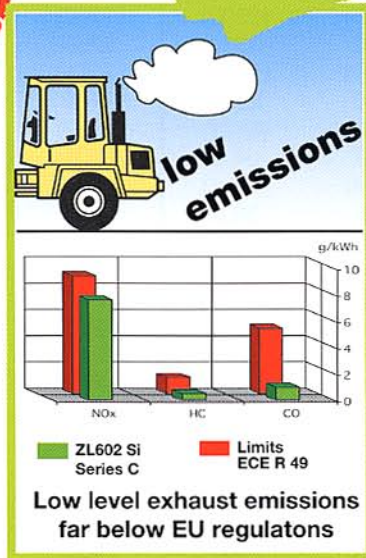
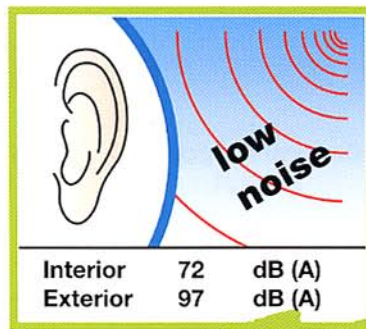
...so versatile

You need more than just a wheel loader for a Zettelmeyer Allrounder. With various attachments, it replaces a whole range of special machines. Loading, unloading, spreading, etc. with a choice of buckets...with a choice of attachments...right one for your application. Re-equipping is child's play. Strengthened, standard hydraulic

Generation ZL602 Si Series C

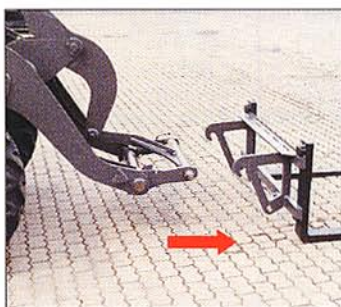
...so reliable

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.

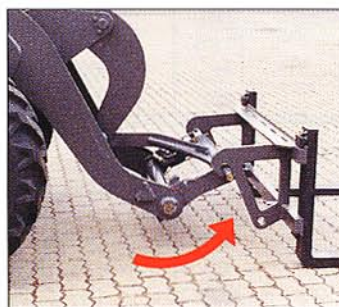


In an instant, your wheel loader becomes a multi-functional Allrounder

...wheel loader? A clear case for...er! With the correct...whole series of expensive...forks, sweepers,...over 60 attachments, the...on is bound to be available...y with the newly...draulic quick-coupler.



Approach



Attach



Ready!

STANDARD EQUIPMENT

Cab, Exterior

Removable ROPS/FOPS-cab with flexible mountings

Walk-through cab
Lockable doors

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)

Cab, Interior

4-way adjustable driver's seat
Seat belt
Sunblind
Heater with air-filter and defroster
Cab lighting
Cab ventilation
Storage box in the cab
Tool box

Instrument Panel

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

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

Indicator lamps for:
Indicator (left/right)
Parking brake
Main beam
Pre-heater
Battery charging
Differential locks
Hazard warning flashers
Direction (forwards/reverse)

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
Reversing lights

Powertrain
Diesel engine with direct fuel injection
Cold start aid
Dry-type air filter

Alternator 60 A

Hydrostatic drive
Operator-selected 100% differential locks

Tires 12.5-20

Hydraulic System
Gear-type pump
Control valve three-spool system
Third hydraulic circuit

Service and Maintenance
Tool kit

Working Equipment

Multi-function 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 according to EU-guidelines
Safety standards according to EC-directive 89/392/EEC

CE Certification

OPTIONAL EQUIPMENT

Cab

Handthrottle
Hand control inch valve
Heating independent of engine
Radio

Sliding window in the right door

ROPS-Bar (folding)
Canopy for ROPS-Bar

Safety

FOPS plate
Protective guards for
Main head lights
Working lights
Rear lights

Rotating beacon
Audible reverse alarm

Powertrain

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

Service and Maintenance
Wheel nut wrench

Working Equipment

Working lights (front and rear)
ZLS load stabilizer
Extended lift arms

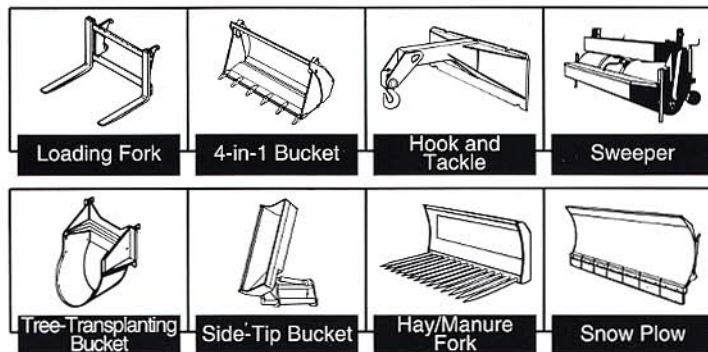
Extra hydraulics, rear
Additional hydraulics for attachment carrier
4th hydraulic circuit
Hydraulic circuit with additional pump

ATTACHMENTS

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.*

Ref. No. Zettelmeyer G. 29054494
Volvo Parts 21 2 430 5083
Printed in Germany 11.96 ENGLISCH

Zettelmeyer GmbH

Max-Planck-Straße 1 • D-54329 Konz-Könen
Postfach 13 40 • D-54323 Konz
Germany