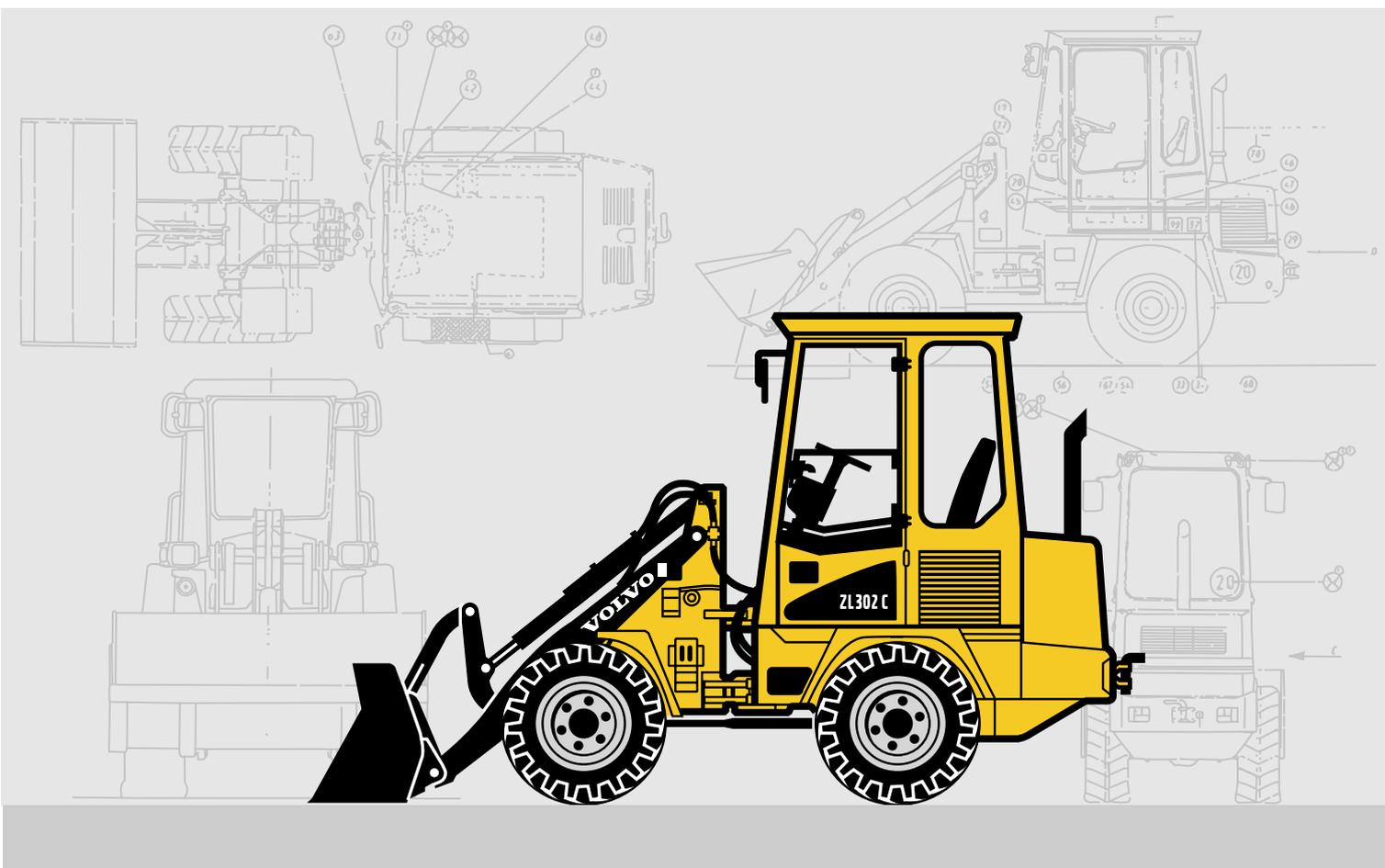


VOLVO COMPACT WHEEL LOADER

ZL302C



- **Gross Power:**
SAE J1995 22,5/31 kW/hp
Net Power:
SAE J1349 22/30 kW/hp
- **Operating Weight:**
2,1 t
- **Bucket Capacities:**
0,3 - 0,5 m³
- **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 parallel loader linkage** for excellent loading-fork lifting ability
- **Operator-selected 100% differential lock** on both axles to give optimum traction.
- **Standard mechanical quick-change coupling:** Various tried-and-tested attachments for a wide range of applications.
- **Purpose designed cab comfort:**
 - Audio-visual warning system for monitoring operating systems
 - Multi-function lever.

VOLVO

A wheel loader of the compact class from Volvo

Compact wheel loader ZL302C



An ergonomic operator environment

Mount your new Volvo loader and start into a successful work day. Your compact machine from Volvo makes it easy for you: well laid out cockpit, individually adjustable, comfortable operator's seat, variable ventilation and heating. Good allround-view for precise control of the machine. Simplified operation using the dual «inch/brake» pedal and the multi-function lever. Using a Volvo makes working a pleasure.



Uncompromising performance

Well-proven technology, high quality components and a well thought-out design: engine and central maintenance points in a service-friendly transverse arrangement. Powerful loader linkage with excellent performance. Durable hydrostatic travel drive for constant power. Strong diesel engines with high power reserves. Exemplary environmental features: excellent fuel economy and operation with low exhaust emissions.



Difficult terrain? - No problem!

With their compact dimensions, the high ground clearance and the selectable 100% differential lock on both axes these machines can easily cope

with difficult terrain. Optimum manoeuvrability is ensured even on twisty, narrow sites due to the articulating-oscillating joint. The compact ZL302C is even so small that it can also be used inside buildings.



Parallel loader-linkage for good pallet work features - parallel lift of the working equipment for smooth loading and unloading in any lifting position.



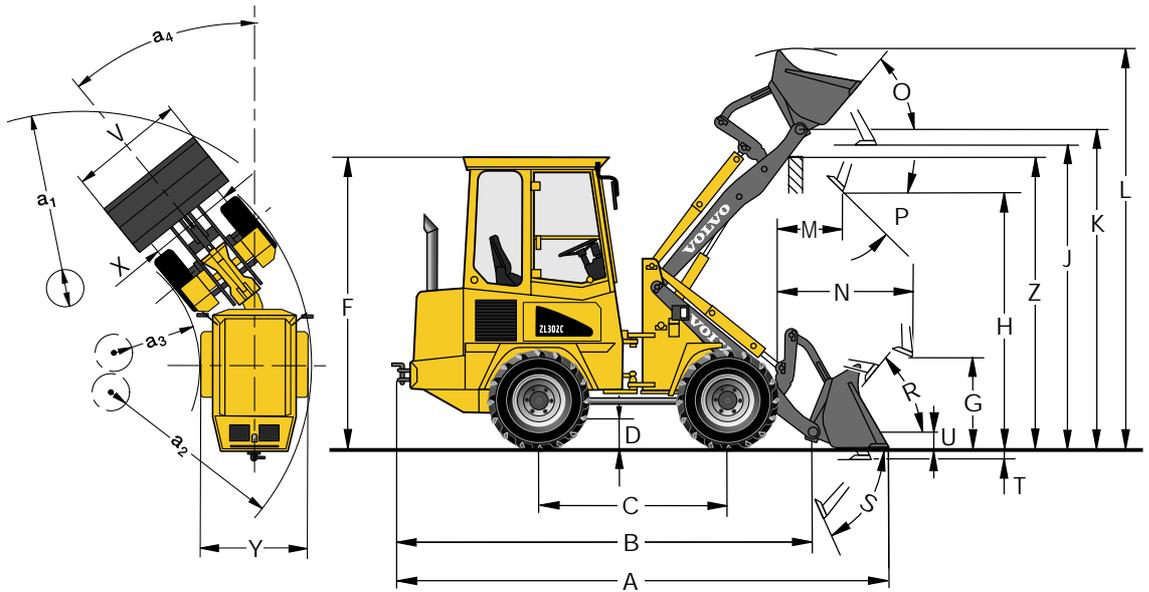
Non stop operation

Don't forget your breaks. Otherwise it may easily happen that you are on the go around the clock. In fact, there is always something to do for a real Volvo allrounder: in the morning with a bucket, at noon with the loading fork, in the afternoon with the road sweeper. Or with another one of the more than 60 attachments, with which you can convert your compact Volvo to your individual needs. With hardly any loss of time, because the quick change coupler is standard on all machines.



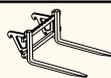
DIMENSIONS • PARALLEL LINKAGE

ZL302C with parallel-link., Z-attachment carrier and 10.0/75-15.3 tires		
B	3225	mm
C	1500	mm
D	230	mm
F	2310	mm
G	950	mm
J	2750	mm
K	2900	mm
O	50	°
P	45	°
R	50	°
S	60	°
U	150	mm
X	1010	mm
Y	1290	mm
Z	2690	mm
a ₂	2780	mm
a ₃	1420	mm
a ₄	±40	°



OPERATING DATA • PARALLEL LINKAGE

Data according to bucket type		General Purpose		Light Material		4-in-1
ZL302C with parallel-linkage, Z-attachment carrier and 10.0/75-15.3 tires						
Capacity heaped	m ³	0,3	0,3	0,4	0,5	0,28
Material density	kg/m ³	1900	1900	1400	1100	1800
Static tipping load, straight (ISO / DIS)	kg	1480	1450	1400	1350	1300
Static tipping load, full turn 40° (ISO / DIS)	kg	1300	1250	1230	1200	1150
Hydraulic lifting capacity, max.	kN	16,0	15,9	15,5	15,0	15,0
Breakout force	kN	18,0	15,0	15,0	13,0	20,0
A Total length	mm	3825	3925	3925	4025	3775
L Lift height, max.	mm	3540	3600	3600	3690	3550
V Bucket width	mm	1350	980	1350	1350	1350
a ₁ Clearance circle	mm	5900	5630	5970	6030	5880
T Digging depth	mm	40	40	40	40	40
H Dump height	mm	2400	2330	2330	2230	2405
M Reach at max. height	mm	360	430	430	455	280
N Reach, max.	mm	1115	1185	1185	1210	1035
Operating weight	kg	2100	2100	2120	2140	2200

Data with Loading Fork		ZL302C - Possible machine variations	
Centre of gravity 400 mm			Linkage/attach. carrier
Tipping load, full turn (ISO / DIS)	kg	1000	Standard
Payload according to EN 474-3, 60/80%	kg	600/800	Parallel-linkage / Z
Payload 80%, transport position, 40° full turn	kg	1000	Z bar / Z



ENGINE

Engine: Deutz in-line 4-cylinder, 4 stroke, indirect injection diesel engine, water cooled.

Air cleaning:

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

Engine	F 4 M 1008F
Gross power @	3000 r/min
SAE J1995	22,5 kW
SAE J1995	31 hp
Net power @	3000 r/min
SAE J1349 - DIN ISO 1585	22 kW
SAE J1349 - DIN ISO 1585	30 hp
Max. torque @	2000 r/min
SAE J1349 netto	78 Nm
DIN ISO 1585	78 Nm
Cubic capacity	1,37 l
Bore	75 mm
Stroke	77,6 mm



ELECTRICAL SYSTEM

Rated voltage	12 V
Battery voltage	12 V
Battery capacity	74 Ah
Alternator rating	910/65 W/A
Starter motor output	1,6 kW



DRIVETRAIN

Transmission: hydrostatic transmission, full power shift under load, when changing direction (forward/reverse).

Inch/brake pedal for variable machine speed control.

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

Axles: all-wheel drive by two rigid 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.	175/125# mm
Track	1010/726# mm
Angle of oscillation	±10°
Tires: Size	10.0/75-15.3
Rim	9 x 15.3

Speed, max:

1st range forward/reverse	20,0 km/h
---------------------------------	-----------

small track, with wheels inverted



SERVICE FILL CAPACITIES

Engine	4,3 l
Fuel tank	38,0 l
Front axle, total	5,0 l
Rear axle, incl. drop-box	6,0 l
Hydraulic tank, incl. hydraulic system	28,0 l



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.

Hydraulic control valve: double acting control valve with three spool system, with primary and secondary pressure valves.

1. Lifting function
2. Tilting function
3. Additional function for hydraulic QC (option):
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. Pressure filter for the drive assembly with a 10 µm filtration.

The filters can be replaced without emptying the tank.

Hydraulic pump: gear type-pump

Hydraulic pump	
Flow	30 l/min
@ engine rpm	3000 r/min
Relief valve pressure	21 MPa



STEERING

Hydrostatic steering. Central articulating-oscillating joint with damping effect.

Steering pump: gear-type pump controlled by priority valve.

Steering cylinder: 1 double-acting steering cylinder.

Steering	
Angle of articulation	±40°
Steering pump	
Flow	30 l/min
@ engine rpm	3000 r/min
Relief valve pressure	17 MPa



LINKAGE

Linkage system:	Parallel
Lift cylinders	1
Tilt cylinders	1

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

STANDARD EQUIPMENT

Engine

Diesel engine, indirect fuel injection
Extra fuel filter
Cold start aid
Two-stage air filter

Electrical System

Alternator 65 A

Lighting:

Main head lights (halogen) full/dipped/asymmetrical
Parking lights
Rear lights
Brake lights
Direction indicators
Hazard warning lights
Reversing lights
Cab lighting

Instrumentation & controls:

Multi-function lever
12 Volt accessories socket
Horn
Hazard warning switch
Safety start

Gauges:

Hour meter
Drive system oil temperature
Fuel level indicator

Indicator lamps for:

Direction indicator
Parking brake

Main beam
Pre-heater
Battery charging
Differential locks
Hazard warning flashers
Direction (forward/reverse)

Central audio-visual alarm for:

Engine temperature
Engine oil pressure
Drive system oil temperature
Air filter restriction
Parking brake

Drivetrain

Hydrostatic drive
Operator-selected 100% differential locks

Tires 10.0/75-15.3

Hydraulic System

Gear-type pump
Control valve three-spool system

Service and Maintenance

Wheel nut wrench

Cab, Exterior

Removable ROPS-cab
Lockable door
Tinted safety glass (windscreen)
Windscreen wiper (front/rear)
Windscreen washer (front/rear)

Lockable windows for ventilation
External rear view mirrors (right/left)

Cab, Interior

4-way adjustable operator's seat
Seat belt
Sunvisor
Heater with air-filter and defroster (front/rear)
Cab ventilation
Cab lighting
Storage box in the cab

Working Equipment

Bucket level indicator
Mechanical quick-change attachment carrier

Carriage Body

Fenders and mudguards, (front/rear)
Lockable engine hood
Vertical exhaust
Towing device

International Standards for Machines and Production

Quality:
DIN/ISO 9001

Safety:

CE - Criterion
Machine guide-lines 98/37/EC
ROPS ISO 3471
FOPS ISO 3449
Tipping load / Payload: ISO/DIS 14397-1
EMV (Electromagnetic Compatibility) 89/336/EEC plus supplement

Environment:

DIN/ISO 14001
Sound insulation: 86/622/EEC, amendment 95/27/EC

OPTIONAL EQUIPMENT

Hydraulics

3rd hydraulic circuit
Additional hydraulics for 3rd hydraulic circuit
4th hydraulic circuit
Initial filling of biodegradable hydraulic oil

Cab, Exterior

ROPS-Canopy
ROPS-Bar (rigid/folding)
Protective roof for ROPS-Bar
Working lights (front/rear)

Cab, Interior

Handthrottle
Hand control inch valve
Radio

Working Equipment

Boom suspension system
Hydraulic quick-change attachment carrier

Safety

FOPS plate for cab
Anti-theft system
Protective guards for:
Main head lights
Working lights
Rear lights
Rotating beacon
Audible reverse alarm
Counterweight

ATTACHMENTS

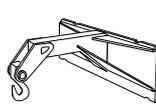
A small selection of the most popular attachments.
Further buckets and attachments available on request.



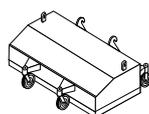
Loading Fork



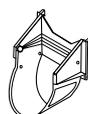
4-in-1 Bucket



Material Handling Arm



Sweeper



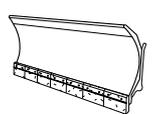
Tree Transplanting Bucket



Silage Fork



Hay/Manure Fork



Snow Plow

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.

VOLVO

Volvo Construction
Equipment

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