VOLVO COMPACT WHEEL LOADER

L45B



- Gross Power: SAE J1995 75/102 kW/hp Net Power: SAE J1349 73/99 kW/hp
- Operating Weight: 8,3 8,5 t
- Bucket Capacities: 1,3 - 2,5 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.
- Strong TP-loader linkage, perfect for loading fork applications: high breakout and lift forces combine with optimum parallelity of the attachment.
- Operator-selected 100% differential lock on both axles to give optimum traction.
- Standard hydraulic quickchange coupling:
 Various tried-and-tested attachments for a wide range of applications.
- Purpose designed cab comfort:
 - Electronic Information System.
 - · Multi-function lever.





ENGINE

Engine: Volvo in-line 4-cylinder, 4 stroke, direct injection diesel engine with turbocharging, water cooled.

Air cleaning:

- 1. Pre cleaner with ejector
- 2. Paper filter with indicator in cab
- 3. Safety filter

Engine	D5DCBE2
Gross power @	2100 r/min
SAE J1995	75 kW
SAE J1995	102 hp
Net power @	2100 r/min
SAE J1349 - DIN ISO 1585	73 kW
SAE J1349 - DIN ISO 1585	99 hp
Max. torque @	1400 r/min
SAE J1349 netto	450 Nm
DIN ISO 1585	450 Nm
Cubic capacity	4,76 l
Bore	108 mm
Stroke	130 mm



ELECTRICAL SYSTEM

Rated voltage	24 V
Battery voltage	
Battery capacity	
Alternator rating	
Starter motor output	4,0 kW



DRIVETRAIN

Transmission: hydrostatic transmission, full power shift under load, both when changing direction (forward and reverse) and between ranges. Maximum drawbar force can be achieved in all 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 planetary 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		310 mm
Track		1760 mm
Angle of oscillation		±10°
Tires: Size		15.5-25
Rim		12 x 25
Speed, max.:		High Speed
		17,0 km/h
3rd range forward/reverse		35,0 km/h
Speed, max.: 1st range forward/reverse 2nd range forward/reverse 3rd range forward/reverse	6,0 km/h 20,0 km/h	6,0 km/h 17,0 km/h



SERVICE FILL CAPACITIES

Engine	14,0 I
Fuel tank	
Front axle, total	7,9
Rear axle,	
incl. drop-box	9,91
Hydraulic tank, incl. hydraulic system	120,0 I



BRAKING SYSTEM

Service brake: reliable, dual braking system, disc brake hydraulically actuated via pump accumulator, 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.
- High speed version: Inch/brake pedal and additional pedal both acting on the oil immersed multi-disk brake.

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



HYDRAULIC SYSTEM

Load sensing hydraulic system with self-controlling power distribution. Thermostatically controlled oil circuit with integrated cooling system.

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

- 1. Lifting function
- 2. Tilting function
- Additional function for hydraulic QC
 Unlock, neutral, lock
 Despection for appearing hydraulic at

Preparation for operating hydraulic attachments with this function is available as an option.

Hydraulic oil filter: Combined suction and return-filtration cartridge with a 10 µm filter.

The filter can be replaced without emptying the hydraulic oil tank.

Hydraulic pump: axial piston pump

Hydraulic pump

Flow	106 l/min
@ engine rpm	2100 r/min
Relief valve pressure	25 MPa



STEERING

Load sensing hydrostatic steering. Central articulating-ocillating joint with damping effect.

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

Steering cylinder: 2 double-acting steering cylinders

Steering

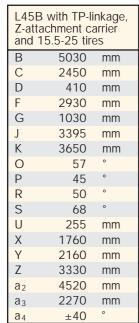
±40°
43,5 l/min
2100 r/min
17 MPa

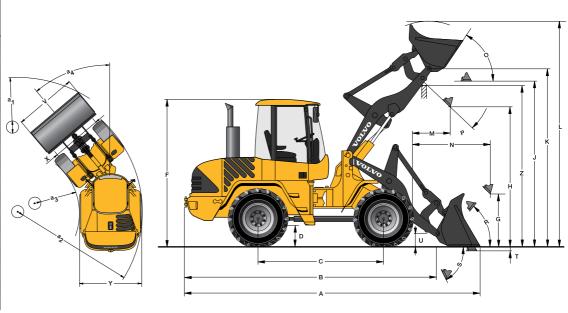


LINKAGE

Linkage system:	
Lift cylinders	2
Tilt cylinders	
,	
Lift time (loaded)	6,0 s
Lowering time (empty)	5,0 s
Dump time	
Crowd time	

DIMENSIONS • TPZ-LINKAGE





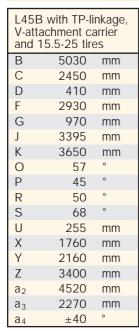
OPERATING DATA • TPZ-LINKAGE

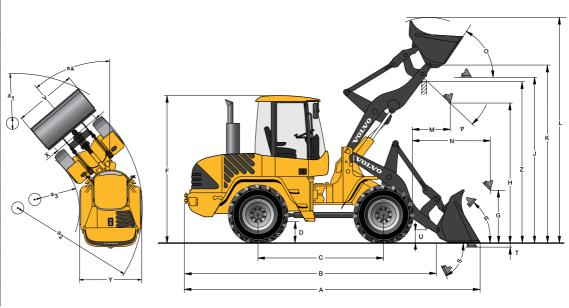
Data according to bucket type		Genera	al Purpose	Light I	Material	4-in-1	High-Tip
L45B with TP-linkage, Z-attachment carrier and 15.5-25 tires		The state of the s	+			The state of the s	
Capacity heaped	m^3	1,4	1,6	2,0	2,5	1,3	2,3
Material density	kg/m³	1900	1600	1300	900	1900	1000
Static tipping load, straight (ISO / DIS)	kg	6250	6100	5900	5750	5800	5250
Static tipping load, full turn 40° (ISO / DIS	s) kg	5500	5400	5250	5100	5100	4650
Hydraulic lifting capacity, max.	kN	77,0	75,5	73,5	71,5	72,5	64,5
Breakout force	kN	69,0	63,0	49,5	43,5	60,5	-
A Total length	mm	5970	6040	6230	6380	6080	6530
L Lift height, max.	mm	4645	4725	4840	5050	4560	5710
V Bucket width	mm	2250	2250	2250	2250	2250	2250
a ₁ Clearance circle	mm	9720	9760	9880	9980	9780	10080
T Digging depth	mm	200	200	195	195	190	195
H Dump height, 45°	mm	2840	2780	2645	2535	2735	4110
M Reach at max. height	mm	820	860	990	1085	860	1330
N Reach, max.	mm	1635	1675	1805	1900	1675	2490
Operating weight	kg	8310	8360	8340	8440	8510	8810

Data with Loading Fork		
Centre of gravity 500 mm		
Tipping load, full turn (ISO / DIS)	kg	4630
Payload according to EN 474-3, 60/80%	kg	2750/3700
Payload 80%, transport position, 40 ° full turn	kg	4000

L45B - Possible machine variations						
Linkage/attach. carrier	Standard	High speed				
TP / Z	•	•				
TP / V	•	•				

DIMENSIONS • TPV-LINKAGE





OPERATING DATA • TPV-LINKAGE

Data according to bucket type		Genera	al Purpose	Light I	Material	4-in-1	High-Tip
L45B with TP-linkage, V-attachment carrier and 15.5-25 tires		The state of the s	+				
Capacity heaped	m ³	1,4	1,6	2,0	2,5	1,2	2,3
Material density	kg/m ³	1800	1600	1200	900	1900	900
Static tipping load, straight (ISO / DIS)	kg	5900	5800	5650	5500	5500	4900
Static tipping load, full turn 40° (ISO / DIS	S) kg	5250	5150	5000	4850	4850	4350
Hydraulic lifting capacity, max.	kN	72,6	71,2	69,5	67,5	67,5	60,0
Breakout force	kN	62,0	57,3	48,1	42,8	53,5	-
A Total length	mm	6060	6130	6320	6470	6210	6660
L Lift height, max.	mm	4700	4770	4900	5110	4620	6170
V Bucket width	mm	2250	2250	2250	2250	2250	2250
a ₁ Clearance circle	mm	9770	9820	9940	10040	9860	10100
T Digging depth	mm	200	200	190	190	195	210
H Dump height, 45°	mm	2780	2720	2580	2470	2640	4190
M Reach at max. height	mm	895	935	1060	1160	940	1430
N Reach, max.	mm	1710	1750	1875	1975	1760	2620
Operating weight	kg	8400	8450	8430	8520	8620	8910

Data with Loading Fork Centre of gravity 500 mm		
Tipping load, full turn (ISO / DIS)	kg	4375
Payload according to EN 474-3, 60/80%	kg	2625/3500
Payload 80%, transport position, 40° full turn	kg	4000

L45B - Possible machine variations		
Linkage/attach. carrier	Standard	High speed
TP / V	•	•
TP / Z	•	•

STANDARD EQUIPMENT

Engine
Diesel engine, direct fuel injection
Extra fuel filter
Cold start aid
Dry-type air filter

Electrical System Alternator 55 A

Lighting:
Main head lights (halogen)
full/dipped/asymmetrical
Working lights (2 front/1 rear
right)
Parking lights
Rear lights
Brake lights
Direction indicators
Hazard warning lights
Reversing lights
Cab lighting

Instrumentation & controls: Multi-function lever 24 Volt accessories socket Horn Hazard warning switch Safety start

Electronic
Information System:
Analog LED-information for:
Fuel level
Engine temperature
Drive system oil temperature
LED-illuminated symbols
(colour-coded) for:
Direction (forward/reverse)
Indicators (left/right)

Pre-heater
Main beam
Differential locks
Boom arm suspension system
(option)

Loading fork operation (option) LED-illuminated symbols (red) with acoustic signal for:

ith acoustic signal for:
Parking brake
Air filter restriction
Drive system oil temperature
Engine temperature
Engine oil pressure
Battery charging

Return filter Touch pad with symbols and integrated LEDs for:

Parking lights
Working lights (front/rear)
Windscreen wiper (rear)
Rotating beacon (option)
Boom arm suspension system
on/off (option)

Locking and activation of Volvo -attachment carrier (option) Activation of multi-function lever for directional change

Digital LED display activated by dual function keys for: Entry and retrieval of operating information Anti-theft function control

Drivetrain Hydrostatic drive Operator-selected 100% differential locks

Tires 15.5-25

Hydraulic System
Load-Sensing Hydraulics
Axial piston pump
Control valve three-spool
system
3rd hydraulic circuit

Service and Maintenance Tool kit Wheel nut wrench

Cab, Exterior
ROPS/FOPS-cab with flexible
mountings
Walk-through cab
Lockable doors
All-round tinted safety glass
Windscreen wiper (front/rear)
Windscreen washer (front/rear)
Sliding window in the left door
Door stops
External rear view mirrors

External rear view mirrors (right/left)

Cab, Interior

4-way adjustable operator's seat

Adjustable steering column Seat belt

Sunvisor

Heater with air-filter and defroster (front/rear)

Cab ventilation
Preparation for an optional airconditioner
Storage box in the cab

Working Equipment 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
Lifting eyes

International Standards for

Machines and Production Quality: **DIN/ISO 9001** Safety: CE - Criteron Machine guide-lines 98/37/EC **ROPS ISO 3471 FOPS ISO 3449** Operating weight ISO 7131 Tipping load / Payload: ISO / DIS 14397-1 EMV (Electromagnetic Compatibility) 89/336/EEC plus supplement **Environment: DIN/ISO 14001**

OPTIONAL EQUIPMENT

Engine Equipment
Pre-heater
Pre cleaner air filter (Turbo II)
Oilbath air filter
Exhaust particle filter

Hydraulics
Hydraulic couplings for
3rd hydraulic circuit

4th hydraulic circuit

Cab
Handthrottle
Hand control inch valve
Airconditioner
Radio
Working light (1 rear, left)

Air suspension operator's seat

Working Equipment Boom arm suspension system Attachment carrier TPV

Environment Biodegradable hydraulic oil Low-noise kit Safety
Anti-theft system
Protective guards for:
Main head lights
Working lights
Rear lights
Rotating beacon
Audible reverse alarm

Sound regulation:

2000/14/EC

ATTACHMENTS

A small selection of the most popular attachments. 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 neccessarily show the standard version of the machine.

