

VOLVO COMPACT WHEEL LOADERS
L40B, L45B



MORE CARE. BUILT IN.



BUILT TO WORK.

Meet your most valuable performer: the Volvo L40B and L45B. Built to work all day, every day, each offers ideal size and a wide range of attachments for unmatched versatility. Loaded with power, yet efficient to operate, you're going to enjoy a new standard of productivity and profitability.

Take control of your productivity

For optimum traction in difficult terrain, the Volvo Model L40B and L45B feature 100% operator selectable differential locks in the front and rear axles – helping all wheels turn with the same speed. The servo-controlled hydraulic control valve features a proven, double-acting design for smooth control of all movements. Independent hydraulic pumps with load-sensing control improve precision hydraulic control while extending the life of components and reducing fuel consumption. For effortless handling, the ergonomic joystick controls multiple functions: lift, lower, float, dig and dump, forward, neutral, reverse and differential locks.

Giving you a needed lift

Experience the performance of Volvo's TP Linkage system for high breakout force, superior parallel fork loading action and safe visibility throughout the entire lift range. Loading operations are quick and efficient with optimum lifting height and fast cycle times. The counterweight is bevelled on the lower side for ease of operation on extremely steep slopes or rough terrain.

Productivity starts with efficiency

The low emission Volvo engine is not only high on power and output, it's low on fuel consumption for economical operation that increases profitability. A fuel filter and water separator protects the fuel-injection system. For maximum power and speed, enjoy automatic drive facility from a hydrostatic transmission that features an axial piston drive motor. The system's high pressure allows maximum speed – without the need to shift and regardless of traction. Advantages include less wear and optimum performance in all drive modes.

Loaded with versatility

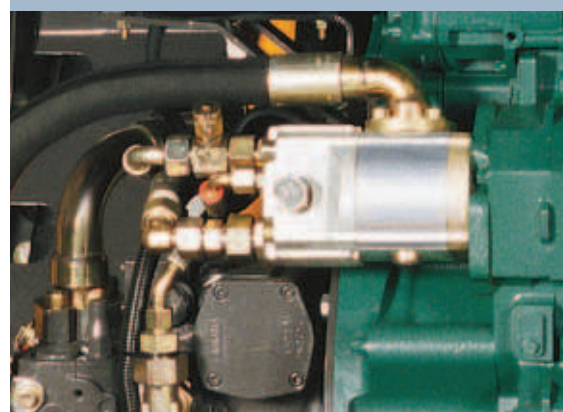
With a wide range of available Volvo attachments and a choice of two attachment carriers, the Volvo L40B and L45B deliver the versatility of an entire fleet of machines. Built of the finest quality and perfectly matched for your machine, genuine Volvo attachments help you take on any job. Both the TPV and TPZ attachment carriers make attachment hook-up quick and easy, right from the operator's seat. Standard hydraulic couplings on the carriers allow use of numerous hydraulic tools and attachments for even more productivity.



- Wide range of accessories available



- Operator selectable differential locks provide optimal traction.



- Separate hydraulic pumps provide fast cycle times.



- Superb ground clearance, drive torque and traction.
- Patented Volvo loader linkage.



TOUGH WHERE IT COUNTS

You make money working, not down for repair. That's why the L40B and L45B are built strong and sturdy from the ground up – to match high Volvo standards. When it's time for service, Volvo makes it fast and easy to get you back out there. We give you maximum uptime so you get maximum profits.

Volvo keeps you protected

Demand Volvo quality for the toughest of jobs. The L40B and L45B feature superior frame stability from a durable articulating/oscillating joint. Navigate over difficult, uneven terrain with confidence, comfort and ease – with smooth steering, excellent power distribution and high ground contact. Special tyres do not influence the steering angle or oscillation angle. For high quality performance and long life, the oscillating joint features large, sealed hinge bushings and surface-hardened pins. A special shock absorber stabilizes oscillating movements for greater operator comfort. For maximum protection from damage, expensive downtime and repair, hydraulic hoses and electrical cables are routed through the central articulating/oscillating joint to the main control valve. The standard water separator prevents damage in injection pumps and injection nozzles for long life.

Your access to greater uptime

Easy access makes service quick and simple. All important service points, such as the radiator, battery and all filters, are grouped within easy reach and fully protected under the engine hood. Perform quick service checks with an engine oil dipstick and a hydraulic oil sight glass. Standard, easy-access test ports on all hydraulic components make maintenance fast and easy. There's excellent side engine access to the double filter element located in the hydraulic tank. The air filter is not only easy to access and maintain, there's also an indicator light for the filter in the cab. To help increase availability and reduce operating costs, oil and filter service intervals are long.

More quality. Built in.

Look to the Volvo L40B and L45B for a compact wheel loader that stands up to today's jobsite conditions. The rugged, high-strength steel frame design offers secure mounting of components for durability and performance. Each order is assembled using the latest, well-matched components - designed and built together from the ground up to guarantee the highest quality and reliability. From fabrication to finished product, every Volvo L40B and L45B must meet Volvo's demanding standards.



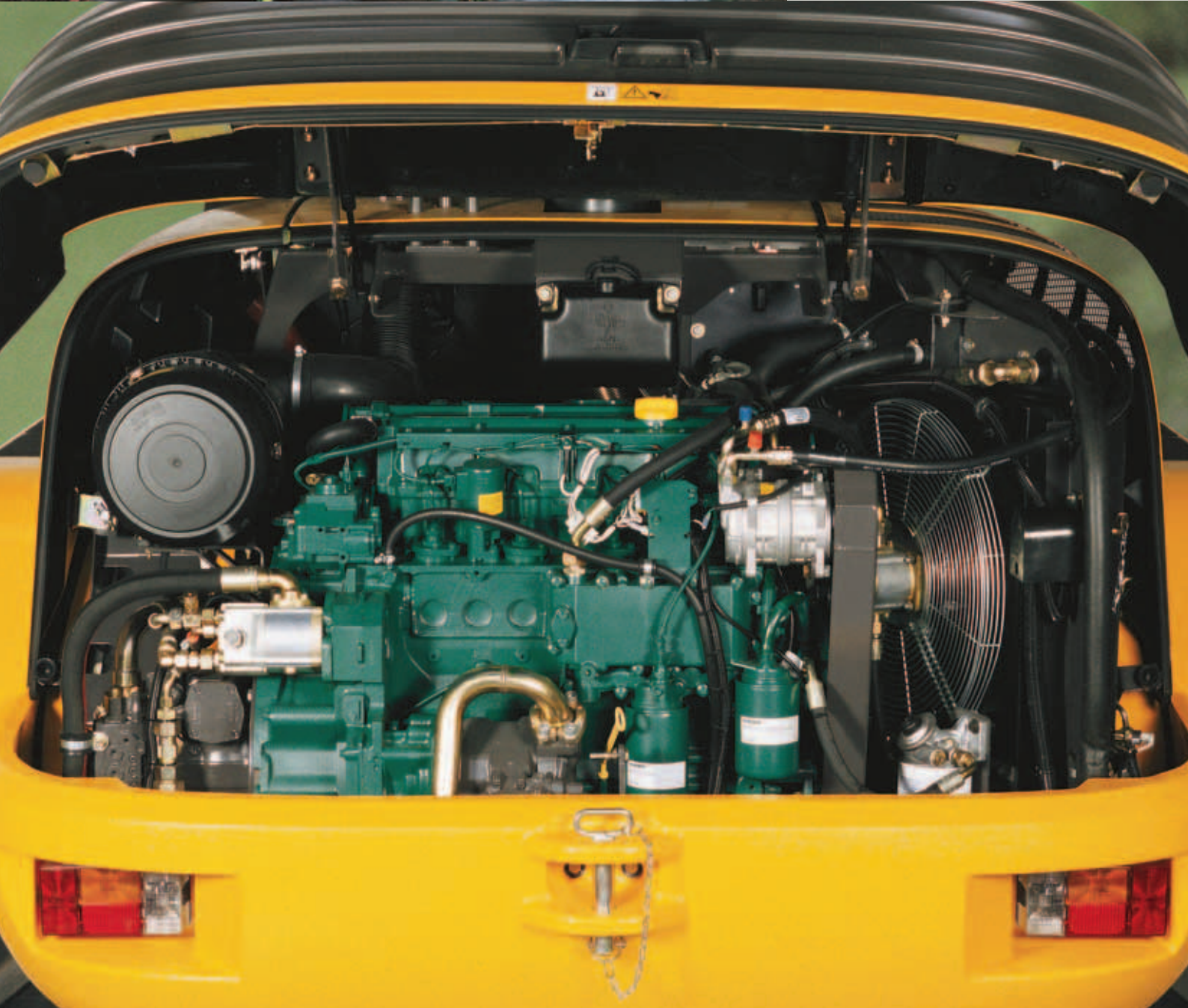
- Articulated frame for work in tight areas.



- Non stop operation.



- Volvo durability.
- Easy service access to the engine department.



- Volvo quality and sturdiness.

GET COMFORTABLE WITH VOLVO SAFETY.

For an operator, your cab is your office. In the Volvo L40B and L45B, you've got the best seat on the jobsite. You're surrounded in comfort: with plenty of room and everything right where you want it. You can also relax, knowing you've got Volvo safety. Now that's the smart way to work.

Safe operation - for everyone

A safe jobsite starts with the operator. The L40B and L45B provide excellent visibility around the entire machine. Cab windows are large, offering a very large glazed surface area on all four sides. Excellent visibility improves safety for the operator, nearby objects and those working in the vicinity of the machine. The boom design with TP Linkage system and a quick coupler provide improved visibility down to the attachment for a reduced risk of damage. The central electrical board, components, relays and fuses are located in a protected, safe location that's easy to check and access. The wiring harness is fixed to the chassis, housed in a protected, flexible conduit. This protects wiring against wear caused by vibrations, dust and heat. That means safer electronics, improved reliability and higher residual value.

Work in comfort

The Volvo comfort cab offers the finest work environment. The operator station has plenty of comfortable features including one of the most spacious cabs in its category. Operators of all heights and sizes will feel at ease for fatigue-free operation and greater productivity. Enjoy efficient climate control with comfortable heating, demisting and defrosting. Air conditioning and the high-capacity, three-phase heating fan allow year-round productivity. Seven well-placed adjustable fresh air blowers keep you comfortable with fresh, filtered outside air. There's plenty of floor space and storage space. A large, lockable storage compartment offers a safe location for personal items such as a cell phone or other valuables.

You're safe with Volvo

Entering and exiting the cab is quick, safe and easy from both sides of the machine. You always have three points of contact, climbing the large anti-slip steps and gripping the wide, ergonomic handrails. All cabs are ROPS/FOPS certified for optimum safety against falling objects or in case of accidental roll-over. Quiet cab sound proofing meets cab sound regulations for a comfortable environment and fatigue-free operation. To protect against vandalism, all critical components, such as oil fills, batteries and maintenance points, are located under the lockable engine hood.



- ROPS/TOPS certified cab for safe operation.



- Ergonomic control for multiple functions.



- Optional protection package.



- Easy view instrument panel.
- Spacious cab offers comfort and visibility



SPECIFICATIONS

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

	L40B	L45B
Engine	D5DCFE3	D5DCGE3
Gross power @	2200 r/min	2200 r/min
SAE1995	71 kW - 97 hp	75 kW - 102 hp
Net power @	2200 r/min	2200 r/min
SAE1349 - DIN ISO 1585	69 kW - 94 hp	73 kW - 99 hp
Max. torque @	1700 r/min	1700 r/min
SAE1349 net - DIN ISO 1585	400 Nm	420 Nm
Cubic capacity	4.76 l	4.76 l
Bore	108 mm	108 mm
Stroke	130 mm	130 mm

Electrical system

	L40B	L45B
Rated voltage	24 V	24 V
Battery voltage	2 x 12 V	2 x 12 V
Battery capacity	2 x 74 Ah	2 x 74 Ah
Alternator rating	1540/55 W/A	1540/55 W/A
Starter motor output	4,0 kW	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.

	L40B	L45B
Oscillation at wheel, max.	310 mm	310 mm
Track	1760 mm	1760 mm
Angle of oscillation	±10°	±10°

Tyres:

	L40B	L45B
Size	15.5-25	15.5-25
Rim	12 x 25	12 x 25

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.

Speed, max:	Standard	High Speed
1st range forward/reverse	6,0 km/h	6,0 km/h
2nd range forward/reverse	20,0 km/h	13,0 km/h
3rd range forward/reverse		35,0 km/h

Service fill capacities

	L40B	L45B
Engine	14,0 l	14,0 l
Fuel tank	130,0 l	130,0 l
Front axle, total	7,9 l	7,9 l
Rear axle, incl. drop-box	9,9 l	9,9 l
Hydraulic tank, incl. hydraulic system	120,0 l	120,0 l

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. / 3. 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 / 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: Combined suction and return-filtration cartridge with a 10 µm filter. The filter can be replaced without emptying the hydraulic oil tank.

Axial piston pump

	L40B	L45B
Flow	106 l/min	106 l/min
@ engine rpm	2100 r/min	2100 r/min
Relief valve pressure	23 MPa	25 MPa

Steering

Load sensing hydrostatic steering. Central articulating-oscillating joint with damping effect. Steering pump: gear-type pump controlled by priority valve. Steering cylinder: 2 double-acting steering cylinders.

Steering:

	L40B	L45B
Angle of articulation	±40°	±40°

Steering pump:

	L40B	L45B
Flow	43,5 l/min	43,5 l/min
@ engine rpm	2100 r/min	2100 r/min
Relief valve pressure	17 MPa	17 MPa

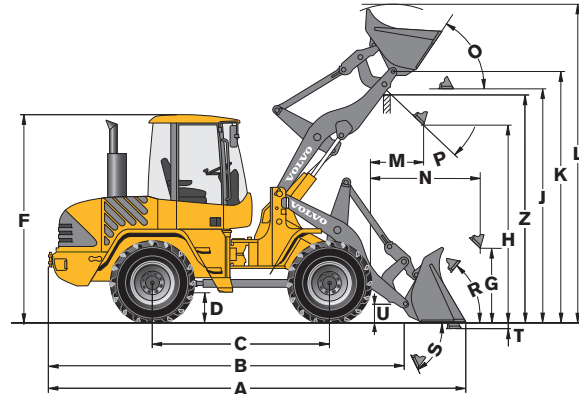
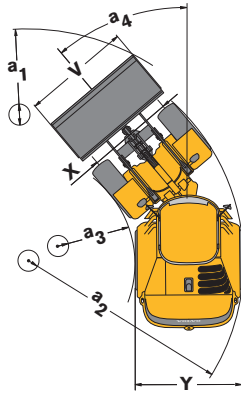
Linkage

	L40B	L45B
Linkage system	TP	TP
Lift cylinders	2	2
Tilt cylinders	1	1
Lift time (loaded)	6,0 s	6,0 s
Lowering time (empty)	5,0 s	5,0 s
Dump time	1,5 s	1,5 s
Crowd time	1,8 s	1,8 s

Noise levels

The L40B conforms to the 2006 European Machine Directive Noise Level (2000/14/CE) of 102 dB(A) for this class of machine. The L45B conforms to the 2006 European Machine Directive Noise Level (2000/14/CE) of 102 dB(A) for this class of machine.

SPECIFICATIONS L40B



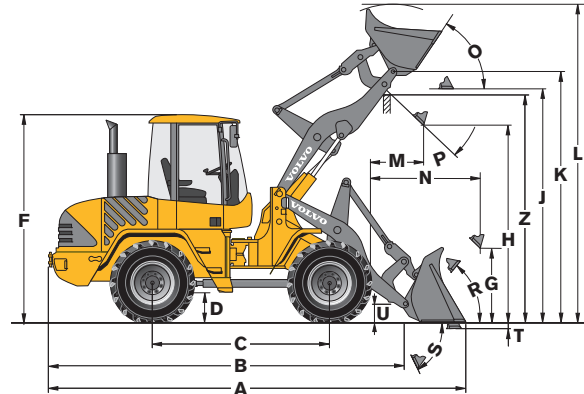
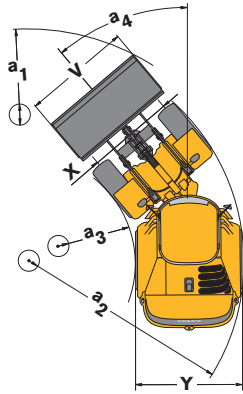
Data according to bucket type		General Purpose		Light Material		4-in-1	High-Tip
L40B with TP-linkage, TPZ attachment carrier and 15.5-25 tyres							
Capacity heaped	m ³	1,3	1,4	1,6	2,0	1,1	2,0
Material density	kg/m ³	1800	1600	1400	1100	1900	900
Static tipping load, straight (ISO / DIS)	kg	5450	5400	5300	5150	5150	4500
Static tipping load, full turn 40° (ISO / DIS)	kg	4800	4750	4700	4550	4550	3950
Hydraulic lifting capacity, max.	kN	70,0	69,0	68,0	65,5	67,0	57,0
Breakout force	kN	66,0	62,5	57,5	47,5	70,5	-
A Total length	mm	5795	5835	5910	6050	5740	6400
L Lift height, max.	mm	4490	4550	4620	4740	4510	5490
V Bucket width	mm	2250	2250	2250	2250	2250	2250
a1 Clearance circle	mm	9520	9550	9590	9700	9500	9890
T Digging depth	mm	165	165	165	160	150	155
H Dump height, 45°	mm	2770	2745	2685	2550	2790	4010
M Reach at max. height	mm	800	825	870	995	720	1340
N Reach, max.	mm	1560	1585	1630	1755	1480	2440
Operating weight	kg	7820	7830	7820	7860	8010	8290

L40B with TP-linkage and 15.5-25 tyres	
B	4900 mm
C	2400 mm
D	415 mm
F	2930 mm
G	1080 mm TPZ QC
G	1020 mm TPV QC
J	3300 mm
K	3555 mm
O	57 °
P	45 °
R	50 °
S	68 °
U	255 mm
X	1760 mm
Y	2160 mm
Z	3240 mm TPZ QC
Z	3310 mm TPV QC
a2	4440 mm
a3	2220 mm
a4	±40 °

Data according to bucket type		General Purpose		Light Material		4-in-1	High-Tip
L40B with TP-linkage, TPV attachment carrier and 15.5-25 tyres							
Capacity heaped	m ³	1,2	1,4	1,6	2,0	1,1	2,0
Material density	kg/m ³	1900	1600	1400	1100	1900	900
Static tipping load, straight (ISO / DIS)	kg	5250	5200	5150	5000	4950	4200
Static tipping load, full turn 40° (ISO / DIS)	kg	4650	4600	4550	4400	4350	3700
Hydraulic lifting capacity, max.	kN	65,5	64,5	63,5	61,0	61,5	52,0
Breakout force	kN	61,0	56,0	51,5	43,5	60,0	-
A Total length	mm	5850	5930	6000	6190	5860	6530
L Lift height, max.	mm	4520	4610	4680	4810	4540	5580
V Bucket width	mm	2250	2250	2250	2250	2250	2250
a1 Clearance circle	mm	9550	9590	9630	9750	9550	9990
T Digging depth	mm	160	160	160	155	155	170
H Dump height, 45°	mm	2740	2680	2620	2490	2690	4110
M Reach at max. height	mm	845	890	940	1060	805	1435
N Reach, max.	mm	1605	1650	1700	1820	1565	2570
Operating weight	kg	7900	7930	7920	7960	8080	8390

Data with Loading Fork		TPZ	TPV
Centre of gravity 500 mm			
Tipping load, full turn (ISO / DIS)	kg	4050	3750
Payload according to EN 474-3, 60/80%	kg	2400/3200	2250/3000
Payload 80%, transport position, 40° full turn	kg	4000	3700

SPECIFICATIONS L45B



Data according to bucket type	General Purpose		Light Material		4-in-1	High-Tip
L45B with TP-linkage, TPZ attachment carrier and 15.5-25 tyres						
Capacity heaped	m ³	1,5 1,6	2,0 2,5	1,3	2,3	
Material density	kg/m ³	1800 1600	1300 900	1900	1000	
Static tipping load, straight (ISO / DIS)	kg	6200 6100	5900 5750	5800	5250	
Static tipping load, full turn 40° (ISO / DIS)	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	66,0 63,0	49,5 43,5	60,5	-	
A Total length	mm	6000 6040	6230 6380	6080	6530	
L Lift height, max.	mm	4690 4725	4840 5050	4560	5710	
V Bucket width	mm	2250 2250	2250 2250	2250	2250	
a1 Clearance circle	mm	9735 9760	9880 9980	9780	10080	
T Digging depth	mm	200 200	195 195	190	195	
H Dump height, 45°	mm	2810 2780	2645 2535	2735	4110	
M Reach at max. height	mm	830 860	990 1085	860	1330	
N Reach, max.	mm	1650 1675	1805 1900	1675	2490	
Operating weight	kg	8330 8360	8340 8440	8510	8810	

L45B with TP-linkage and 15.5-25 tyres	
B	5030 mm
C	2450 mm
D	410 mm
F	2930 mm
G	1030 mm TPZ QC
G	970 mm TPV QC
J	3395 mm
K	3650 mm
O	57 °
P	45 °
R	50 °
S	68 °
U	255 mm
X	1760 mm
Y	2160 mm
Z	3330 mm TPZ QC
Z	3400 mm TPV QC
a2	4520 mm
a3	2270 mm
a4	±40°

Data according to bucket type	General Purpose		Light Material		4-in-1	High-Tip
L45B with TP-linkage, TPV attachment carrier and 15.5-25 tyres						
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)	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	
a1 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		TPZ	TPV
Centre of gravity 500 mm			
Tipping load, full turn (ISO / DIS)	kg	4630	4375
Payload according to EN 474-3, 60/80%	kg	2750/3700	2625/3500
Payload 80%, transport position, 40° full turn	kg	4000	4000

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:

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
Tyres 15.5-25

Hydraulic system

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

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 (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
Sound regulation: 2000/14/EC

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



Volvo Construction Equipment is different. It's designed, built and supported in a different way. That difference comes from an engineering heritage of over 170 years. A heritage of thinking first about the people who actually use the machines. About how to help them be safer, more comfortable, more productive. About the environment we all share. The result of that thinking is a growing range of machines and a global support network dedicated to helping you do more. People around the world are proud to use Volvo. And we're proud of what makes Volvo different – **More care. Built in.**



All products are not available in all markets. Under our policy of continuous 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

Construction Equipment

www.volvoce.com

Ref No. 21 3 430 5593
Printed in Sweden
Volvo, Belley

English
2008.03
CWL