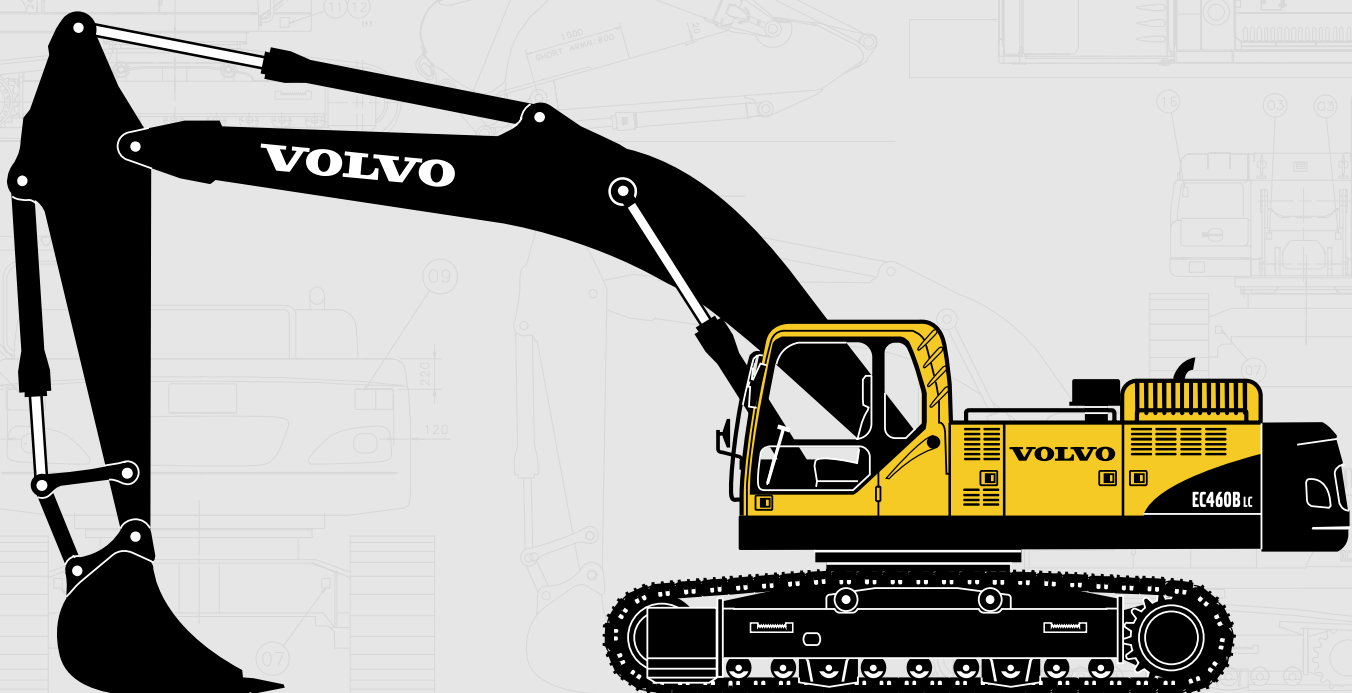


**VOLVO EXCAVATOR**

# EC460B LC



- Engine power, gross: 239 kW (321 hp)
- Operating weight: 44.5 ~ 47.9 t
- Buckets (SAE): 1,720 ~ 3,775 l
- Turbocharged VOLVO diesel engine with water cooling, direct injection and charged air cooler
- Contronics, Volvo's advanced mode selection system and electronically controlled system
- 2 variable displacement axial piston pumps. Independent and simultaneous movements of the digging equipment are controlled by "Automatic Sensing Work Mode".
- Cab
  - Ergonomic environment for easier operator use
  - Low sound level
  - Filtered air
  - Hydraulic dampening mounts
- Strong digging equipment, produced by robotic welding
- High lifting, breakout and tearout forces for tough digging conditions
- Long undercarriage for excellent stability
- Auxiliary hydraulic valve is standard
- Prepared for a number of optional items

**VOLVO**



## ENGINE

The engine is a turbocharged, 4-stroke diesel engine with water cooling, direct injection and charged air cooler. This engine has been specifically designed for excavators giving you good fuel economy, low noise emission levels, and a long service life.

**Air Filter:** 3-stage, and pre-cleaner

**Automatic Idling System:** Reduces engine speed to idle when the levers and pedals are not activated resulting in less fuel consumption and low cab noise levels.

### Low-Emission Engine:

Maker	VOLVO
Model	D12C
Power output at	32 r/s (1,900 rpm)
Net (ISO 9249/ SAE J1349)	228 kW (310 ps / 306 hp)
Gross (SAE J1995)	239 kW (325 ps / 321 hp)
Max. torque	1,549 N·m at 1,400 rpm
No. of cylinders	6
Displacement	12.1 l
Bore	131 mm
Stroke	150 mm



## ELECTRICAL SYSTEM

High capacity electrical system that is well-protected. Waterproof double-lock harness plugs are used to secure corrosion free connections. The main relays and solenoid valves are shielded to prevent damage. The master switch is standard.

**Contronics**, provides advanced monitoring of machine functions and important diagnostic information.

Voltage	24 V
Batteries	2 x 12 V
Battery capacity	200 Ah
Alternator	28 V / 80 A



## UNDERCARRIAGE

The undercarriage has a robust X-shaped frame, greased and sealed track chains are standard.

### Fixed undercarriage

No. of track pads	2 x 52
Link pitch	216 mm
Shoe width, triple grouser	600 / 700 / 800 / 900 mm
Shoe width, double grouser	600 mm
No. of bottom rollers	2 x 9
No. of top rollers	2 x 2

### Mechanically retractable undercarriage

No. of track pads	2 x 52
Link pitch	216 mm
Shoe width, triple grouser	600 / 700 / 800 / 900 mm
Shoe width, double grouser	600 mm
No. of bottom rollers	2 x 9
No. of top rollers	2 x 3



## HYDRAULIC SYSTEM

The hydraulic system, also known as the "Automatic Sensing Work Mode", is designed for high-productivity, high-digging capacity, high-maneuvering precision and good fuel economy. The summation system, boom, arm and swing priority along with boom and arm regeneration provide optimum performance.

The following important functions are included in the system:

**Summation system:** Combines the flow of both hydraulic pumps to ensure quick cycle times and high productivity.

**Boom priority:** Gives priority to the boom operation for faster raising when loading or performing deep excavations.

**Arm priority:** Gives priority to the arm operation for faster cycle times in leveling and for increased bucket filling when digging.

**Swing priority:** Gives priority to swing functions for faster simultaneous operations.

**Regeneration system:** Prevents cavitation and provides flow to other movements during simultaneous operations for maximum productivity.

**Power boost:** All digging and lifting forces are increased.

**Holding valves:** Boom and arm holding valves prevent the digging equipment from creeping.

**Power Max:** All function speeds are increased.

### Main pump:

Type	2 x variable displacement axial piston pumps
Maximum flow	2 x 345 l/min

### Pilot pump:

Type	Gear pump
Maximum flow	1 x 28 l/min

### Hydraulic motors:

Travel	Variable displacement axial piston motors
Swing	Fixed displacement axial piston motor with mechanical brake

### Relief valve setting:

Implement	31.4 / 34.3 Mpa (320 / 350 kg/cm <sup>2</sup> )
Travel circuit	31.4 Mpa (320 kg/cm <sup>2</sup> )
Swing circuit	24.5 Mpa (250 kg/cm <sup>2</sup> )
Pilot circuit	3.9 Mpa (40 kg/cm <sup>2</sup> )

### Hydraulic cylinders:

Boom	2
Bore x Stroke	∅165 x 1,590 mm
Arm	1
Bore x Stroke	∅190 x 1,850 mm
Bucket	1
Bore x Stroke	∅165 x 1,335 mm
ME bucket	1
Bore x Stroke	∅175 x 1,335 mm



## SERVICE REFILL CAPACITIES

Fuel tank	685 l
Hydraulic system, total	525 l
Hydraulic tank	270 l
Engine oil	39 l
Engine coolant	65.4 l
Swing reduction unit	2 x 6.0 l
Travel reduction unit	2 x 5.5 l



## DRIVE

Each track is powered by an automatic two-speed shift travel motor. The track brakes are multi-disc, spring-applied and hydraulic released. The travel motor, brake and planetary gears are well protected within the track frame.

Max. tractive effort ..... 324.6 kN (33,100 kg)  
Max. travel speed ..... 2.9 / 4.8 km/h  
Gradeability ..... 35° (70%)



## SWING SYSTEM

The swing system uses 2 axial piston motors, driving 2 planetary gearboxes for maximum torque. An automatic holding brake and anti-rebound valves are standard.

Max. swing speed ..... 8.5 rpm



## CAB

The operator's cab has easy access via a wide door opening. The cab is supported on hydraulic dampening mounts to reduce shock and vibration levels. These along with sound absorbing lining provide low noise levels. The cab has excellent all-round visibility. The front windshield can easily slide up into the ceiling and the lower front glass can be removed and stored in the side door.

### Integrated air conditioning and heating system:

The pressurized and filtered cab air is supplied by an automatically controlled fan. The air is distributed throughout the cab from 13 vents.

**Ergonomic operator's seat:** The adjustable seat and joystick console move independently to accommodate the operator. The seat has nine different adjustments plus a seat belt to for the operator's comfort and safety.

### Sound Level:

Sound level in cab  
according to ISO 6396 ..... LpA 73 dB(A)  
External sound level  
according to ISO 6395  
and EU Directive 2000/14/EC ..... LwA 109 dB(A)



## GROUND PRESSURE

- Machine with fixed undercarriage 7.0 m boom, 3.35 m arm, 2,060 l (1,730 kg) bucket and 8,700 kg counterweight.

Description	Shoe width	Operating weight	Ground pressure	Overall width
Triple grouser	600 mm	44,500 kg	77.5 kPa (0.79 kg/cm <sup>2</sup> )	3,340 mm
	700 mm	45,000 kg	66.7 kPa (0.68 kg/cm <sup>2</sup> )	3,440 mm
	800 mm	45,500 kg	59.8 kPa (0.61 kg/cm <sup>2</sup> )	3,540 mm
	900 mm	46,020 kg	53.9 kPa (0.55 kg/cm <sup>2</sup> )	3,640 mm
Double grouser	600 mm	44,250 kg	77.5 kPa (0.79 kg/cm <sup>2</sup> )	3,340 mm

- Machine with retractable undercarriage 7.0 m boom, 3.35 m arm, 2,060 l (1,730 kg) bucket and 8,700 kg counterweight.

Description	Shoe width	Operating weight	Ground pressure	Overall width
Triple grouser	600 mm	45,700 kg	79.4 kPa (0.81 kg/cm <sup>2</sup> )	3,490 mm
	700 mm	46,220 kg	68.6 kPa (0.70 kg/cm <sup>2</sup> )	3,590 mm
	800 mm	46,740 kg	60.8 kPa (0.62 kg/cm <sup>2</sup> )	3,690 mm
	900 mm	47,280 kg	54.9 kPa (0.56 kg/cm <sup>2</sup> )	3,790 mm
Double grouser	600 mm	45,450 kg	79.4 kPa (0.81 kg/cm <sup>2</sup> )	3,490 mm

- Machine with fixed undercarriage 7.0 m boom, 3.35 m arm, 2,060 l (1,730 kg) bucket and 9,300 kg counterweight.

Description	Shoe width	Operating weight	Ground pressure	Overall width
Triple grouser	600 mm	45,100 kg	78.4 kPa (0.80 kg/cm <sup>2</sup> )	3,340 mm
	700 mm	45,600 kg	67.7 kPa (0.69 kg/cm <sup>2</sup> )	3,440 mm
	800 mm	46,100 kg	59.8 kPa (0.61 kg/cm <sup>2</sup> )	3,540 mm
	900 mm	46,620 kg	53.9 kPa (0.55 kg/cm <sup>2</sup> )	3,640 mm
Double grouser	600 mm	44,850 kg	78.4 kPa (0.80 kg/cm <sup>2</sup> )	3,340 mm

- Machine with retractable undercarriage 7.0 m boom, 3.35 m arm, 2,060 l (1,730 kg) bucket and 9,300 kg counterweight.

Description	Shoe width	Operating weight	Ground pressure	Overall width
Triple grouser	600 mm	46,300 kg	80.4 kPa (0.80 kg/cm <sup>2</sup> )	3,490 mm
	700 mm	46,820 kg	69.6 kPa (0.71 kg/cm <sup>2</sup> )	3,590 mm
	800 mm	47,340 kg	61.8 kPa (0.63 kg/cm <sup>2</sup> )	3,690 mm
	900 mm	47,880 kg	55.9 kPa (0.57 kg/cm <sup>2</sup> )	3,790 mm
Double grouser	600 mm	46,050 kg	80.4 kPa (0.82 kg/cm <sup>2</sup> )	3,490 mm

## BUCKET & ARM COMBINATION

● Volvo K-GP bucket (straight side) with fixed undercarriage

Description			Narrow bucket	Standard bucket	Wide bucket
Bucket capacity	SAE		1,720 l	2,060 l	2,450 l
	CECE		1,500 l	1,800 l	2,100 l
Bucket width			1,295 mm	1,515 mm	1,580 mm
Weight			1,605 kg	1,730 kg	1,920 kg
No. of teeth			5	5	5
Application			Trenching	General purpose	Loading service
8,700 kg counterweight	ME boom 6.5 m + arm 2.55 m		A	A	A
	Boom 7.0m + arm options	2.55 m	A	A	A
		3.35 m	A	A	B
		3.9 m	A	B	C
		4.8 m	A	C	D
9,300 kg counterweight	ME boom 6.5 m + arm 2.55 m		A	A	A
	Boom 7.0m + arm options	2.55 m	A	A	A
		3.35 m	A	A	B
		3.9 m	A	A	C
		4.8 m	A	C	C

● Volvo HARDOX 400® bucket (curved side) with fixed undercarriage

Description			Direct fit - GP bucket			Quick fit - GP bucket		ME - GP bucket
Bucket capacity	SAE		1,900 l	2,100 l	2,300 l	1,900 l	2,100 l	2,600 l
	CECE		1,690 l	1,860 l	2,030 l	1,690 l	1,860 l	2,280 l
Bucket width			1,550 mm	1,700 mm	1,800 mm	1,550 mm	1,700 mm	1,930 mm
Weight			1,720 kg	1,810 kg	1,900 kg	1,700 kg	1,790 kg	1,845 kg
No. of teeth			5	5	5	5	5	5
Application			Tough condition	Tough condition	Tough condition	Tough condition	Tough condition	Loading service
8,700 kg counterweight	ME boom 6.5 m + arm 2.55 m		A	A	A	A	A	A
	Boom 7.0m + arm options	2.55 m	A	A	A	A	A	-
		3.35 m	A	A	B	A	B	-
		3.9 m	A	B	C	B	C	-
		4.8 m	C	C	D	C	C	-
9,300 kg counterweight	ME boom 6.5 m + arm 2.55 m		A	A	A	A	A	A
	Boom 7.0m + arm options	2.55 m	A	A	A	A	A	-
		3.35 m	A	A	B	A	A	-
		3.9 m	A	B	C	A	B	-
		4.8 m	B	C	C	C	C	-

A: Applicable for general purpose up to 2,000 kg/m<sup>3</sup>

B: Applicable for general purpose up to 1,800 kg/m<sup>3</sup>

C: Applicable for general purpose up to 1,500 kg/m<sup>3</sup>

D: Applicable for general purpose up to 1,200 kg/m<sup>3</sup>

## BUCKET & ARM COMBINATION

● **Volvo K-GP bucket (straight side) with mechanically retractable undercarriage**

Description			Narrow bucket	Standard bucket	Wide bucket
Bucket capacity	SAE		1,720 l	2,060 l	2,450 l
	CECE		1,500 l	1,800 l	2,100 l
Bucket width			1,295 mm	1,515 mm	1,580 mm
Weight			1,605 kg	1,730 kg	1,920 kg
No. of teeth			5	5	5
Application			Trenching	General purpose	Loading service
8,700 kg counterweight	ME boom 6.5 m + arm 2.55 m		A	A	A
	Boom 7.0m + arm options	2.55 m	A	A	A
		3.35 m	A	A	B
		3.9 m	A	A	C
		4.8 m	A	C	C
9,300 kg counterweight	ME boom 6.5 m + arm 2.55 m		A	A	A
	Boom 7.0m + arm options	2.55 m	A	A	A
		3.35 m	A	A	B
		3.9 m	A	A	C
		4.8 m	A	B	C

● **Volvo HARDOX 400® bucket (curved side) with mechanically retractable undercarriage**

Description			Direct fit - GP bucket			Quick fit - GP bucket		ME - GP bucket
Bucket capacity	SAE		1,900 l	2,100 l	2,300 l	1,900 l	2,100 l	2,600 l
	CECE		1,690 l	1,860 l	2,030 l	1,690 l	1,860 l	2,280 l
Bucket width			1,550 mm	1,700 mm	1,800 mm	1,550 mm	1,700 mm	1,930 mm
Weight			1,720 kg	1,810 kg	1,900 kg	1,700 kg	1,790 kg	1,845 kg
No. of teeth			5	5	5	5	5	5
Application			Tough condition	Tough condition	Tough condition	Tough condition	Tough condition	Tough condition
8,700 kg counterweight	ME boom 6.5 m + arm 2.55 m		A	A	A	A	A	A
	Boom 7.0m + arm options	2.55 m	A	A	A	A	A	-
		3.35 m	A	A	B	A	A	-
		3.9 m	A	B	C	A	B	-
		4.8 m	B	C	C	C	C	-
9,300 kg counterweight	ME boom 6.5 m + arm 2.55 m		A	A	A	A	A	A
	Boom 7.0m + arm options	2.55 m	A	A	A	A	A	-
		3.35 m	A	A	A	A	A	-
		3.9 m	A	B	B	A	B	-
		4.8 m	B	C	C	B	C	-

A: Applicable for general purpose up to 2,000 kg/m<sup>3</sup>

B: Applicable for general purpose up to 1,800 kg/m<sup>3</sup>

C: Applicable for general purpose up to 1,500 kg/m<sup>3</sup>

D: Applicable for general purpose up to 1,200 kg/m<sup>3</sup>

## MAX. PERMITTED BUCKETS

Note: 1. Bucket size based on ISO 7451, heaped material with a 1:1 angle of repose.  
2. "Max permitted sizes" are for reference only and are not necessarily available from the factory.

- Max. permitted sizes for direct fit buckets:  
Fixed undercarriage, counterweight 8,700 kg / 9,300 kg\*

Description	Unit	6.5 m ME boom	7.0 m Boom			
		2.55 m Arm	2.55 m Arm	3.35 m Arm	3.9 m Arm	4.8 m Arm
GP bucket 1.5 t/m <sup>3</sup>	l	3,575 / 3,725*	3,300 / 3,425*	3,000 / 3,125*	2,750 / 2,850*	2,425 / 2,525*
GP bucket 1.8 t/m <sup>3</sup>	l	3,125 / 3,275*	2,875 / 3,000*	2,625 / 2,725*	2,400 / 2,500*	2,125 / 2,225*
RB bucket 1.8 t/m <sup>3</sup>	l	2,900 / 3,000*	2,650 / 2,775*	2,425 / 2,525*	2,200 / 2,300*	1,950 / 2,050*
RB bucket 2.0 t/m <sup>3</sup>	l	2,675 / 2,800*	2,475 / 2,575*	2,250 / 2,325*	2,050 / 2,150*	1,825 / 1,900*

- Max. permitted sizes for quick fit buckets:  
Fixed undercarriage, counterweight 8,700 kg / 9,300 kg\*

Description	Unit	6.5 m ME boom	7.0 m Boom			
		2.55 m Arm	2.55 m Arm	3.35 m Arm	3.9 m Arm	4.8 m Arm
GP bucket 1.5 t/m <sup>3</sup>	l	3,450 / 3,600*	3,150 / 3,300*	2,850 / 2,975*	2,600 / 2,725*	2,300 / 2,400*
GP bucket 1.8 t/m <sup>3</sup>	l	3,025 / 3,150*	2,775 / 2,875*	2,500 / 2,600*	2,275 / 2,375*	2,000 / 2,100*
RB bucket 1.8 t/m <sup>3</sup>	l	2,775 / 2,900*	2,550 / 2,650*	2,300 / 2,400*	2,100 / 2,200*	1,850 / 1,950*
RB bucket 2.0 t/m <sup>3</sup>	l	2,575 / 2,700*	2,350 / 2,475*	2,150 / 2,225*	1,950 / 2,050*	1,725 / 1,800*

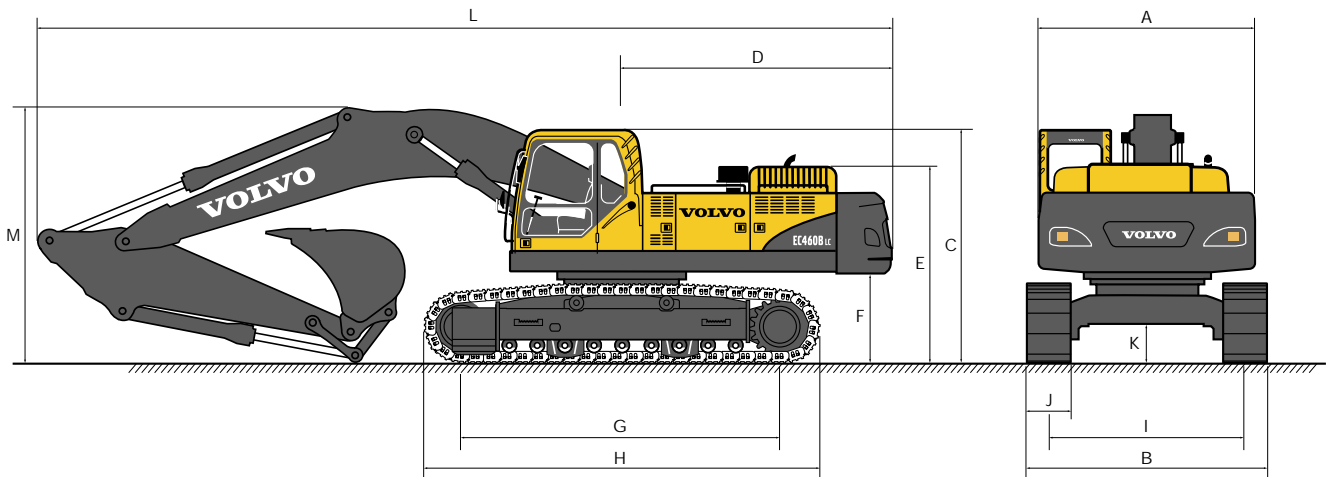
- Max. permitted sizes for direct fit buckets:  
Mechanically retractable undercarriage, counterweight 8,700 kg / 9,300 kg\*

Description	Unit	6.5 m ME boom	7.0 m Boom			
		2.55 m Arm	2.55 m Arm	3.35 m Arm	3.9 m Arm	4.8 m Arm
GP bucket 1.5 t/m <sup>3</sup>	l	3,625 / 3,775*	3,350 / 3,475*	3,050 / 3,175*	2,775 / 2,900*	2,475 / 2,575*
GP bucket 1.8 t/m <sup>3</sup>	l	3,175 / 3,300*	2,925 / 3,050*	2,650 / 2,775*	2,425 / 2,550*	2,150 / 2,250*
RB bucket 1.8 t/m <sup>3</sup>	l	2,925 / 3,050*	2,700 / 2,800*	2,450 / 2,550*	2,250 / 2,350*	2,000 / 2,075*
RB bucket 2.0 t/m <sup>3</sup>	l	2,725 / 2,825*	2,500 / 2,600*	2,275 / 2,375*	2,075 / 2,175*	1,850 / 1,925*

- Max. permitted sizes for quick fit buckets:  
Mechanically retractable undercarriage, counterweight 8,700 kg / 9,300 kg\*

Description	Unit	6.5 m ME boom	7.0 m Boom			
		2.55 m Arm	2.55 m Arm	3.35 m Arm	3.9 m Arm	4.8 m Arm
GP bucket 1.5 t/m <sup>3</sup>	l	3,500 / 3,650*	3,200 / 3,350*	2,900 / 3,025*	2,650 / 2,775*	2,325 / 2,450*
GP bucket 1.8 t/m <sup>3</sup>	l	3,050 / 3,200*	2,800 / 2,925*	2,550 / 2,650*	2,325 / 2,425*	2,050 / 2,150*
RB bucket 1.8 t/m <sup>3</sup>	l	2,825 / 2,950*	2,600 / 2,700*	2,350 / 2,450*	2,150 / 2,250*	1,875 / 1,975*
RB bucket 2.0 t/m <sup>3</sup>	l	2,625 / 2,725*	2,400 / 2,500*	2,175 / 2,275*	1,975 / 2,075*	1,750 / 1,825*

## DIMENSIONS



### • Machine with fixed undercarriage

Description	Unit	6.5 m ME boom	7.0 m Boom			
		2.55 m Arm	2.55 m Arm	3.35 m Arm	3.9 m Arm	4.8 m Arm
A. Overall width of superstructure	mm	2,990	2,990	2,990	2,990	2,990
B. Overall width	mm	3,340	3,340	3,340	3,340	3,340
C. Overall height of cab	mm	3,250	3,250	3,250	3,250	3,250
D. Tail swing radius	mm	3,730	3,730	3,730	3,730	3,730
E. Overall height of engine hood	mm	2,750	2,750	2,750	2,750	2,750
F. Counterweight clearance *	mm	1,275	1,275	1,275	1,275	1,275
G. Tumbler length	mm	4,370	4,370	4,370	4,370	4,370
H. Track length	mm	5,370	5,370	5,370	5,370	5,370
I. Track gauge	mm	2,740	2,740	2,740	2,740	2,740
J. Shoe width	mm	600	600	600	600	600
K. Min. ground clearance *	mm	550	550	550	550	550
L. Overall length	mm	11,560	12,060	12,070	12,070	11,940
M. Overall height of boom	mm	3,770	3,630	3,650	3,690	4,650

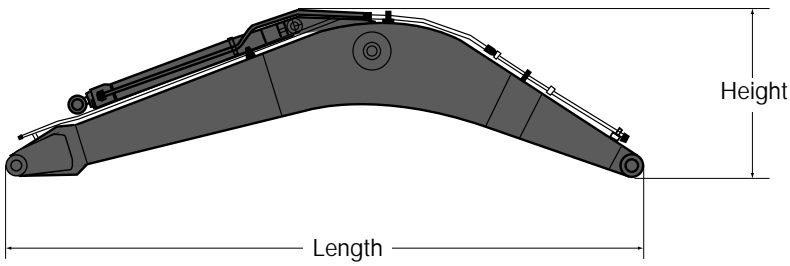
### • Machine with mechanically retractable undercarriage

Description	Unit	6.5 m ME boom	7.0 m Boom			
		2.55 m Arm	2.55 m Arm	3.35 m Arm	3.9 m Arm	4.8 m Arm
A. Overall width of superstructure	mm	2,990	2,990	2,990	2,990	2,990
B. Overall width (extended)	mm	3,490	3,490	3,490	3,490	3,490
Overall width (retracted)	mm	2,990	2,990	2,990	2,990	2,990
C. Overall height of cab	mm	3,360	3,360	3,360	3,360	3,360
D. Tail swing radius	mm	3,730	3,730	3,730	3,730	3,730
E. Overall height of engine hood	mm	2,860	2,860	2,860	2,860	2,860
F. Counterweight clearance *	mm	1,385	1,385	1,385	1,385	1,385
G. Tumbler length	mm	4,370	4,370	4,370	4,370	4,370
H. Track length	mm	5,370	5,370	5,370	5,370	5,370
I. Track gauge (extended)	mm	2,890	2,890	2,890	2,890	2,890
Track gauge (retracted)	mm	2,390	2,390	2,390	2,390	2,390
J. Shoe width	mm	600	600	600	600	600
K. Min. ground clearance *	mm	746	746	746	746	746
L. Overall length	mm	11,540	12,060	12,070	12,070	11,940
M. Overall height of boom	mm	3,800	3,770	3,790	3,830	4,790

\* Without shoe grouser

## DIMENSIONS

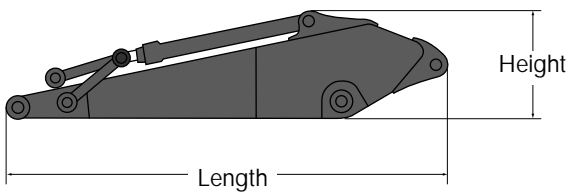
### • Boom



Description	6.5 m ME	7.0 m
Length	6,750 mm	7,250 mm
Height	2,000 mm	1,840 mm
Width	960 mm	960 mm
Weight	3,900 kg	3,880 kg

\* Includes cylinder, piping and linkage

### • Arm



Description	2.55 m	3.35 m	3.9 m	4.8 m
Length	3,770 mm	4,590 mm	5,140 mm	6,100 mm
Height	1,235 mm	1,230 mm	1,240 mm	1,250 mm
Width	600 mm	600 mm	600 mm	600 mm
Weight	2,200 kg	2,245 kg	2,455 kg	2,615 kg

\* Includes cylinder, piping and linkage

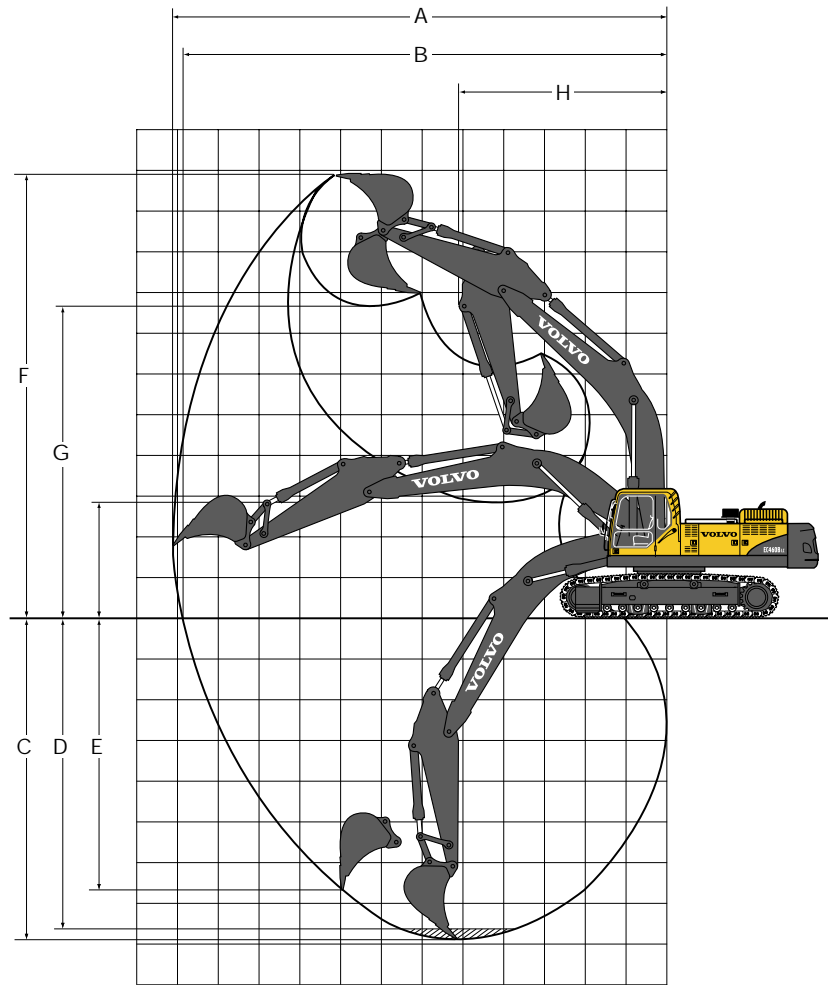
## DIGGING FORCES

### • Digging forces with direct fit bucket

Description			Unit	6.5 m ME boom	7.0 m Boom			
				2.55 m Arm	2.55 m Arm	3.35 m Arm	3.9 m Arm	4.8 m Arm
Bucket radius			mm	1,923	1,810	1,810	1,810	1,810
Breakout force – bucket	SAE	Normal	kN kg	245.2 25,000	222.6 22,700	222.6 22,700	222.6 22,700	222.6 22,700
		Power boost	kN kg	267.7 27,300	244.2 24,900	244.2 24,900	244.2 24,900	244.2 24,900
	ISO	Normal	kN kg	276.5 28,200	253.0 25,800	253.0 25,800	253.0 25,800	253.0 25,800
		Power boost	kN kg	302.0 30,800	276.5 28,200	276.5 28,200	276.5 28,200	276.5 28,200
Tearout force – arm	SAE	Normal	kN kg	217.7 22,200	224.6 22,900	190.2 19,400	170.6 17,400	154.9 15,800
		Power boost	kN kg	237.3 24,200	245.2 25,000	208.9 21,300	186.3 19,000	169.6 17,300
	ISO	Normal	kN kg	224.6 22,900	231.4 23,600	195.1 19,900	173.6 17,700	157.9 16,100
		Power boost	kN kg	246.1 25,100	253.0 25,800	213.8 21,800	190.2 19,400	172.6 17,600
Rotation angle, bucket			deg	169	183	183	183	183



## WORKING RANGES



• Machine with direct fit GP bucket: fixed undercarriage

Description	Unit	6.5 m ME boom	7.0 m Boom			
		2.55 m Arm	2.55 m Arm	3.35 m Arm	3.9 m Arm	4.8 m Arm
A. Max. digging reach	mm	10,900	11,310	12,000	12,500	13,220
B. Max. digging reach on ground	mm	10,660	11,070	11,780	12,290	13,020
C. Max. digging depth	mm	6,570	6,900	7,700	8,250	9,150
D. Max. digging depth (8' level)	mm	6,400	6,720	7,550	8,120	9,030
E. Max. vertical wall digging depth	mm	5,800	6,150	6,840	7,300	7,730
F. Max. cutting height	mm	10,580	10,820	10,970	11,150	11,090
G. Max. dumping height	mm	6,980	7,440	7,650	7,840	7,870
H. Min. front swing radius	mm	4,770	5,170	5,090	4,990	5,040

• Machine with direct fit GP bucket: mechanically retractable undercarriage

Description	Unit	6.5 m ME boom	7.0 m Boom			
		2.55 m Arm	2.55 m Arm	3.35 m Arm	3.9 m Arm	4.8 m Arm
A. Max. digging reach	mm	10,900	11,310	12,000	12,500	13,220
B. Max. digging reach on ground	mm	10,630	11,050	11,750	12,260	12,990
C. Max. digging depth	mm	6,440	6,770	7,570	8,120	9,020
D. Max. digging depth (8' level)	mm	6,270	6,590	7,420	7,980	8,900
E. Max. vertical wall digging depth	mm	5,670	6,020	6,710	7,170	7,600
F. Max. cutting height	mm	10,710	10,950	11,110	11,280	11,220
G. Max. dumping height	mm	7,110	7,570	7,780	7,970	8,000
H. Min. front swing radius	mm	4,770	5,170	5,090	4,990	5,040





## STANDARD EQUIPMENT

### Engine

Turbocharged, 4 stroke diesel engine with water cooling, direct injection and charged air cooler  
3-stage air filter with indicator, and pre-cleaner  
Air intake heater  
Electric engine shut-off  
Fuel filter and water separator  
Coolant filter  
Alternator, 80 A

### Electric / Electronic control system

Contronics:  
– Advanced mode control system  
– Self-diagnostic system  
Machine status indication  
Engine speed sensing power control  
"Power Max" mode system  
Automatic idling system  
One-touch power boost  
Safety stop/start function

Adjustable monitor  
Master switch  
Engine restart prevention circuit  
High capacity halogen lights:  
– Frame mounted 2  
– Boom mounted 4  
Batteries, 2 x 12 V / 200 Ah  
Start motor, 24 V / 6.6 kW

### Hydraulic system

Automatic hydraulic system:  
– Summation system  
– Boom priority  
– Arm priority  
– Swing priority  
Boom and arm regeneration valves  
Swing anti-rebound valves  
Boom and arm holding valves  
Multi-stage filtering system  
Cylinder cushions  
Cylinder contamination seals  
Auxiliary hydraulic valve  
Straight travel circuit

Automatic two-speed travel motors  
Hydraulic oil, ISO VG 46

### Superstructure

Access way with handrail  
Tool storage area  
Punched metal anti-slip plates  
Undercover (2.3 mm)

### Cab and interior

Hydraulic dampening cab mounts  
Adjustable operator seat and joystick control console  
Flexible antenna  
Hydraulic safety lock lever  
Cab, all-weather sound suppressed, includes:  
– Ashtray  
– Cup holder  
– Lighter  
– Tinted glass  
– Door locks  
– Floor mat

– Horn  
– Large storage area  
– Pull-up type front window  
– Removable lower windshield  
– Seat belt  
– Safety glass  
– Windshield wiper with intermittent feature  
– Stereo cassette radio  
Anti-vandalism kit assembly preparation  
Master ignition key

### Undercarriage

Hydraulic track adjusters  
Greased and sealed track chain  
Track guards  
Undercover (4.5 mm)

### Service

Spare parts

## ALTERNATIVE EQUIPMENT

### Engine

Block heater, 120 V / 240 V  
Fuel filler pump: 35 l/min,  
50 l/min with automatic shut-off

### Hydraulic system

Pilot-operated wrist control joysticks:  
– Semi-long joysticks  
– Control joystick, with 3 switches each  
– Control joystick, with 5 switches each

### Superstructure

Counterweight, 8,700 kg / 9,300 kg

### Cab and interior

Seat:  
– Fabric seat  
– Fabric seat, with heater  
– Fabric seat, with heater and air suspension

### Track shoes

– 600 / 700 / 800 / 900 mm track shoes with triple grousers  
– 600 mm track shoe with double grouser

### Digging equipment:

Boom: 6.5 m monoblock, ME  
7.0 m monoblock  
Arm: 2.55 / 3.35 / 3.9 / 4.8 m

## OPTIONAL EQUIPMENT (Standard in certain markets)

### Engine

Oil bath pre-cleaner  
Diesel coolant heater  
Tropical cooling kit

### Electric

Extra lamps:  
– Cab-mounted 3, (front 2, rear 1)  
– Counterweight-mounted 1  
Overload warning device  
Rotating warning beacon  
Travel alarm

### Hydraulic system

Hose rupture valve: boom, arm  
Hydraulic piping  
– Hammer & shears:  
1 pump flow  
2 pump flow

Pump flow control for hammer & shears  
Additional return filter  
Extra piping for slope & rotator  
1 switch control  
2 switch control  
Pedal control  
– Slope & rotator  
– Grapple  
– Oil leak (drain) line  
– Quick fit piping  
Volvo hydraulic quick-fit, S3 size  
Hydraulic oil, ISO VG 32  
Hydraulic oil, ISO VG 68  
Hydraulic oil, biodegradable 32  
Hydraulic oil, biodegradable 46  
Joystick control pattern changer  
Boom floating function

### Superstructure

Undercover (heavy duty 4.5 mm)  
Service walk  
Cab entrance step  
Hydraulic removable counterweight

### Cab and interior

Air-conditioner, manual  
Heater & air-conditioner, automatic  
Falling object guard (FOG)  
Cab mounted falling object protective structures (FOPS)  
Rain shield, front  
Sun shield, front, roof, rear  
Sunlight protection, roof (steel)  
Safety screen for front window  
Lower wiper  
Anti-vandalism kit  
Specific key

### Digging equipment

Long last bushing

### Undercarriage

Full track guards  
Undercover (heavy duty 10 mm)  
Mechanically retractable track gauge

### Service

Hand lamp  
Tool kit:  
– Full scale  
– Daily maintenance

*All products are not available in all markets. Under our policy of continuous improvement, we reserve the right to change specifications and designs without prior notice. The illustrations do not necessarily show the standard version of the machine.*

# VOLVO

Construction Equipment

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