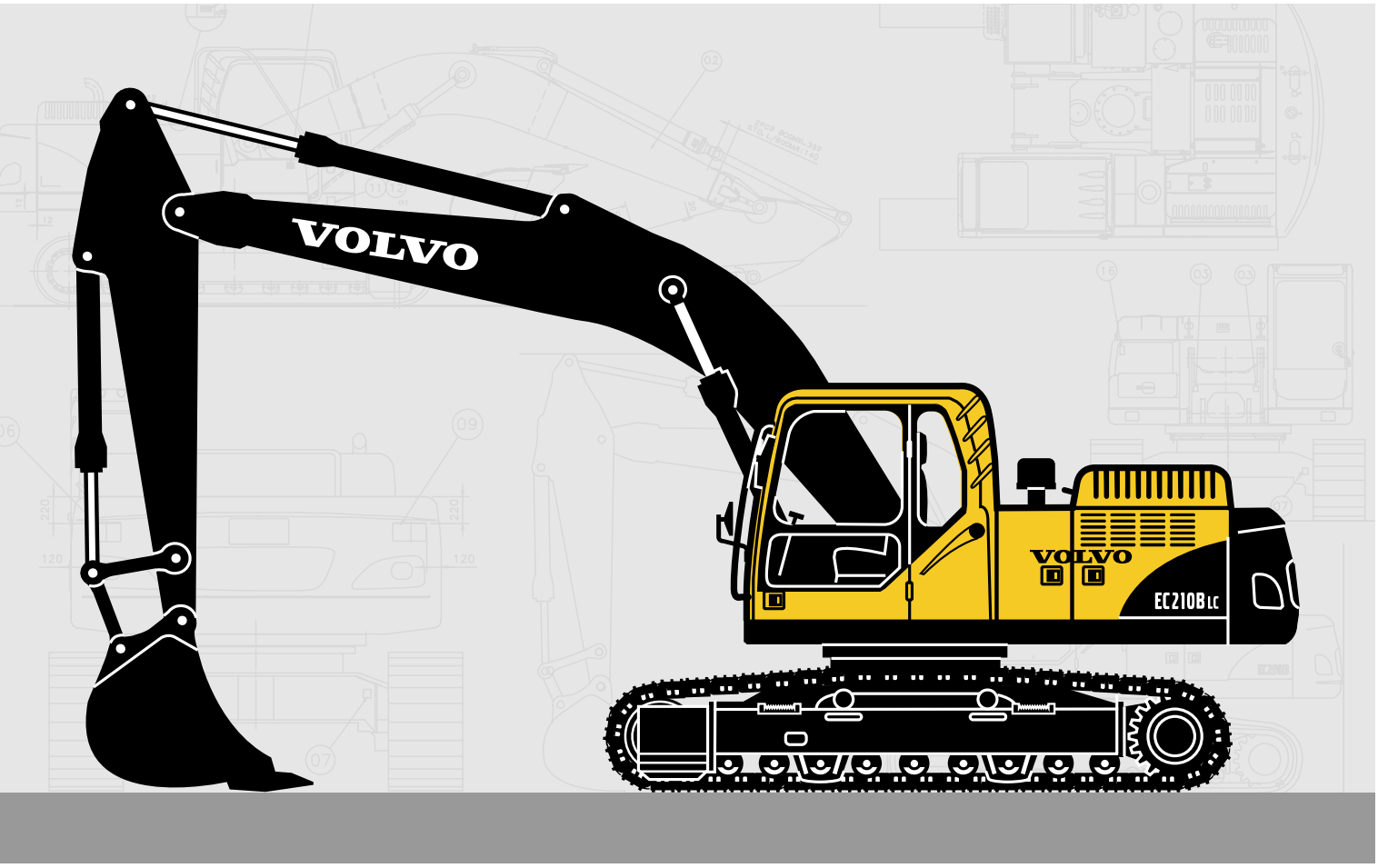
VOLVO EXCAVATOR

EC210B LC
EC210B NLC



- Engine power, gross:
  119 kW 159 hp
- Operating weight:
  LC: 20.8 ~ 22.3 t
  45,950 ~ 49,260 lb
  NLC: 21.5 ~ 22.2 t
  47,460 ~ 48,900 lb
- Buckets (SAE):
  750 ~ 1,550 l
  0.98 ~ 2.03 yd^3

- Turbocharged Volvo diesel engine with direct injection and charged air cooler meets EPA Tier 2 emission standards

- 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
  – Fabric seat with heater and air suspension

- Strong digging equipment produced by robotic welding
- High lifting, breakout and tearout forces for tough digging conditions
- Undercarriage
  – LC: Long undercarriage for excellent stability
  – NLC: Narrow width for easier transportation
- 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 that easily meets EPA Tier 2 emission standards. The engine has been developed especially for excavator use, providing good fuel economy, low noise levels and a long service life.

Air Filter: 3-stage and precleaner

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:

Make	VOLVO	
Model	D6D EAE2	
Power output at	32 r/s	1,900 rpm
Net (ISO 9249/ SAE J1349)	107 kW	143 hp
Gross (SAE J1995)	119 kW	159 hp
Max. torque	647 N·m at	1,425 rpm
	477 lb·ft at	1,425 rpm
No. of cylinders	6	
Displacement	5.7 l	348 cu.in
Bore	98 mm	3.86"
Stroke	126 mm	4.96"

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	150 Ah
Alternator	28 V / 80 A

SERVICE REFILL CAPACITIES

Fuel tank		
LC	350 l	92 gal
NLC	335 l	89 gal
Hydraulic system, total	295 l	78 gal
Hydraulic tank	160 l	42 gal
Engine oil	25 l	7 gal
Engine coolant	27.5 l	7 gal
Swing reduction unit	6 l	1.6 gal
Travel reduction unit	2 x 5.8 l	2 x 1.5 gal

SWING SYSTEM

The superstructure is swung by the means of an axial piston motor and a planetary reduction gear. Automatic swing holding brake and anti-rebound valve are standard.

Max. swing speed	11.6 rpm

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. drawbar pull (tractive effort)	183 kN
	41,230 lb
Max. travel speed	3.2/5.5 km/h
	2.0/3.4 mph
Gradeability	35° 70%

UNDERCARRIAGE

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

LC

No. of track pads	2 x 49	
Link pitch	190 mm	7.5"
Shoe width, triple grouser	600/700/800(Std.)/900 mm	
	24"/28"/32"(Std.)/36"	
Shoe width, double grouser	700 mm	28"
No. of bottom track rollers	2 x 9	
No. of top rollers	2 x 2	

NLC

No. of track pads	2 x 49	
Link pitch	190 mm	7.5"
Shoe width, triple grouser	500(Std.)/600/700 mm	
	20"(Std.)/24"/28"	
No. of bottom track rollers	2 x 9	
No. of top rollers	2 x 2	

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 provides 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.

Main pump:

Type	2 x variable displacement axial piston pumps	
Maximum flow	2 x 200 l/min	2 x 53 gpm

Pilot pump:

Type	Gear pump	
Maximum flow	1 x 19 l/min	5 gpm

Hydraulic motors:

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

Relief valve setting:

Implement	32.4/34.3 Mpa	4,690/4,980 psi
Travel circuit	34.3 Mpa	4,980 psi
Swing circuit	26.5 Mpa	3,840 psi
Pilot circuit	3.9 Mpa	570 psi

Hydraulic cylinders:

Boom	2	
Bore x Stroke	Ø125 x 1,235 mm	Ø4.9" x 48.6"
Arm	1	
Bore x Stroke	Ø135 x 1,540 mm	Ø5.3" x 60.6"
Bucket	1	
Bore x Stroke	Ø120 x 1,065 mm	Ø4.7" x 41.9"

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 for the operator's comfort and safety.

Sound Level:

Sound level in cab according to ISO 6396	LpA 72 dB(A)
External sound level according to ISO 6395 and EU Directive 2000/14/EC	LwA 102 dB(A)

GROUND PRESSURE

- Long crawler machine with Std. 5.7 m, 18' 8" boom, Std. 2.9 m, 9' 6" arm, 740 kg, 1,630 lb bucket and 3,700 kg, 8,160 lb counterweight

Description	Shoe width	Operating weight	Ground pressure	Overall width
Triple grouser	600 mm 24"	20,840 kg 45,950 lb	43.2 kPa 6.3 psi	2,990 mm 9' 10"
	700 mm 28"	21,290 kg 46,940 lb	37.8 kPa 5.5 psi	3,090 mm 10' 2"
	800 mm 32"	21,560 kg 47,540 lb	33.5 kPa 4.9 psi	3,190 mm 10' 6"
	900 mm 36"	21,840 kg 48,160 lb	30.2 kPa 4.4 psi	3,290 mm 10' 10"
Double grouser	700 mm 28"	21,590 kg 47,610 lb	38.4 kPa 5.6 psi	3,090 mm 10' 2"

- Long crawler machine with Std. 5.7 m, 18' 8" boom, Std. 2.9 m, 9' 6" arm, 740 kg, 1,630 lb bucket and 4,200 kg, 9,260 lb counterweight

Description	Shoe width	Operating weight	Ground pressure	Overall width
Triple grouser	600 mm 24"	21,340 kg 47,050 lb	44.3 kPa 6.4 psi	2,990 mm 9' 10"
	700 mm 28"	21,790 kg 48,050 lb	38.7 kPa 5.6 psi	3,090 mm 10' 2"
	800 mm 32"	22,060 kg 48,640 lb	34.3 kPa 5.0 psi	3,190 mm 10' 6"
	900 mm 36"	22,340 kg 49,260 lb	30.9 kPa 4.5 psi	3,290 mm 10' 10"
Double grouser	700 mm 28"	22,090 kg 48,710 lb	39.3 kPa 5.7 psi	3,090 mm 10' 2"

- Narrow long crawler machine with Std. 5.7 m, 18' 8" boom, Std. 2.9 m, 9' 6" arm, 740 kg, 1,630 lb bucket and 4,800 kg, 10,580 lb counterweight

Description	Shoe width	Operating weight	Ground pressure	Overall width
Triple grouser	500 mm 20"	21,525 kg 47,460 lb	53.6 kPa 7.8 psi	2,540 mm 8' 4"
	600 mm 24"	21,725 kg 47,900 lb	45.1 kPa 6.5 psi	2,640 mm 8' 8"
	700 mm 28"	22,175 kg 48,900 lb	39.4 kPa 5.7 psi	2,740 mm 9' 0"

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 pin-on buckets: Long crawler machine with counterweight 3,700 kg, 8,160 lb

Boom / Arm	Unit	Std. 5.7 m, 18' 8"			
		2.5 m, 8' 2"	Std. 2.9 m, 9' 6"	HD 2.9 m, 9' 6"	3.9 m, 12' 10"
GP bucket 1.5 t/m³, 2,530 lb/yd³	l, yd³	1,450, 1.90	1,350, 1.77	1,325, 1.73	1,150, 1.50
GP bucket 1.8 t/m³, 3,030 lb/yd³	l, yd³	1,250, 1.64	1,175, 1.54	1,150, 1.50	1,000, 1.31
RB bucket 1.8 t/m³, 3,030 lb/yd³	l, yd³	1,100, 1.44	1,050, 1.37	1,025, 1.34	900, 1.18
RB bucket 2.0 t/m³, 3,370 lb/yd³	l, yd³	1,025, 1.34	975, 1.28	950, 1.24	825, 1.08

● Max. permitted sizes for hook-on buckets: Long crawler machine with counterweight 3,700 kg, 8,160 lb

Boom / Arm	Unit	Std. 5.7 m, 18' 8"			
		2.5 m, 8' 2"	Std. 2.9 m, 9' 6"	HD 2.9 m, 9' 6"	3.9 m, 12' 10"
GP bucket 1.5 t/m³, 2,530 lb/yd³	l, yd³	1,375, 1.80	1,275, 1.67	1,250, 1.64	1,100, 1.44
GP bucket 1.8 t/m³, 3,030 lb/yd³	l, yd³	1,200, 1.57	1,125, 1.47	1,100, 1.44	950, 1.24
RB bucket 1.8 t/m³, 3,030 lb/yd³	l, yd³	1,200, 1.57	1,125, 1.47	1,100, 1.44	950, 1.24
RB bucket 2.0 t/m³, 3,370 lb/yd³	l, yd³	1,050, 1.37	1,000, 1.31	975, 1.28	850, 1.11

● Max. permitted sizes for pin-on buckets: Long crawler machine with counterweight 4,200 kg, 9,260 lb

Boom / Arm	Unit	Std. 5.7 m, 18' 8"			
		2.5 m, 8' 2"	Std. 2.9 m, 9' 6"	HD 2.9 m, 9' 6"	3.9 m, 12' 10"
GP bucket 1.5 t/m³, 2,530 lb/yd³	l, yd³	1,550, 2.03	1,450, 1.90	1,425, 1.86	1,250, 1.64
GP bucket 1.8 t/m³, 3,030 lb/yd³	l, yd³	1,350, 1.77	1,275, 1.67	1,250, 1.64	1,100, 1.44
RB bucket 1.8 t/m³, 3,030 lb/yd³	l, yd³	1,200, 1.57	1,125, 1.47	1,100, 1.44	950, 1.24
RB bucket 2.0 t/m³, 3,370 lb/yd³	l, yd³	1,100, 1.44	1,025, 1.34	1,000, 1.31	900, 1.18

● Max. permitted sizes for hook-on buckets: Long crawler machine with counterweight 4,200 kg, 9,260 lb

Boom / Arm	Unit	Std. 5.7 m, 18' 8"			
		2.5 m, 8' 2"	Std. 2.9 m, 9' 6"	HD 2.9 m, 9' 6"	3.9 m, 12' 10"
GP bucket 1.5 t/m³, 2,530 lb/yd³	l, yd³	1,475, 1.93	1,375, 1.80	1,350, 1.77	1,175, 1.54
GP bucket 1.8 t/m³, 3,030 lb/yd³	l, yd³	1,300, 1.70	1,200, 1.57	1,175, 1.54	1,025, 1.34
RB bucket 1.8 t/m³, 3,030 lb/yd³	l, yd³	1,300, 1.70	1,200, 1.57	1,175, 1.54	1,025, 1.34
RB bucket 2.0 t/m³, 3,370 lb/yd³	l, yd³	1,150, 1.50	1,075, 1.41	1,050, 1.37	900, 1.18

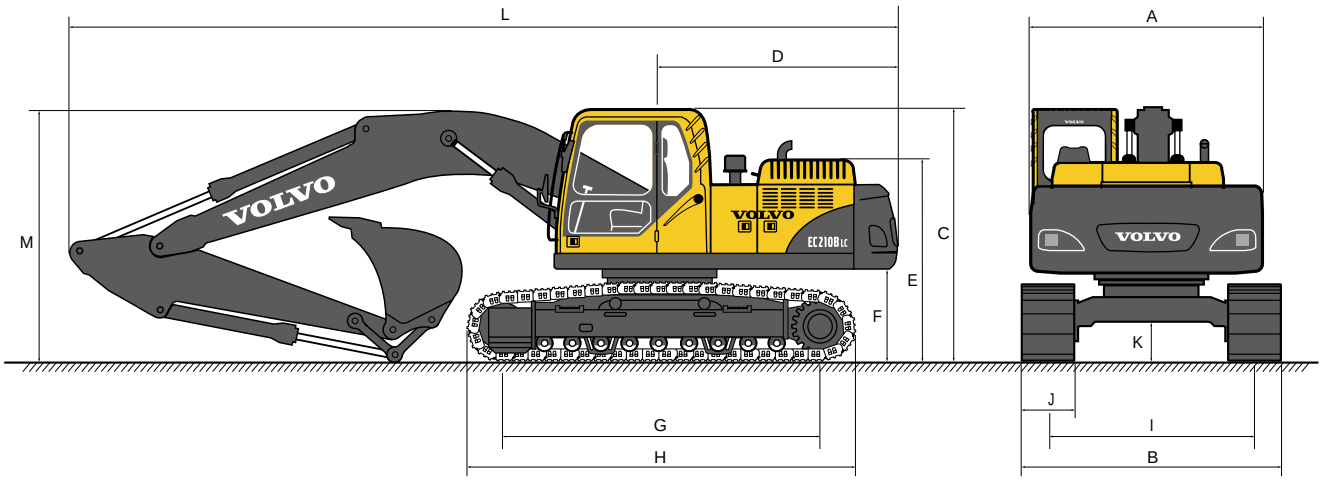
● Max. permitted sizes for pin-on buckets: Narrow long crawler machine with counterweight 4,800 kg, 10,580 lb

Boom / Arm	Unit	Std. 5.7 m, 18' 8"			
		2.5 m, 8' 2"	Std. 2.9 m, 9' 6"	HD 2.9 m, 9' 6"	3.9 m, 12' 10"
GP bucket 1.5 t/m³, 2,530 lb/yd³	l, yd³	1,375, 1.80	1,300, 1.70	1,275, 1.67	1,175, 1.54
GP bucket 1.8 t/m³, 3,030 lb/yd³	l, yd³	1,200, 1.57	1,125, 1.47	1,000, 1.31	975, 1.28
RB bucket 1.8 t/m³, 3,030 lb/yd³	l, yd³	1,075, 1.41	1,000, 1.31	975, 1.28	850, 1.11
RB bucket 2.0 t/m³, 3,370 lb/yd³	l, yd³	1,000, 1.31	925, 1.21	900, 1.18	800, 1.05

● Max. permitted sizes for hook-on buckets: Narrow long crawler machine with counterweight 4,800 kg, 10,580 lb

Boom / Arm	Unit	Std. 5.7 m, 18' 8"			
		2.5 m, 8' 2"	Std. 2.9 m, 9' 6"	HD 2.9 m, 9' 6"	3.9 m, 12' 10"
GP bucket 1.5 t/m³, 2,530 lb/yd³	l, yd³	1,325, 1.73	1,225, 1.60	1,200, 1.57	1,050, 1.37
GP bucket 1.8 t/m³, 3,030 lb/yd³	l, yd³	1,150, 1.50	1,075, 1.41	1,050, 1.37	925, 1.21
RB bucket 1.8 t/m³, 3,030 lb/yd³	l, yd³	1,025, 1.34	950, 1.24	925, 1.21	800, 1.05
RB bucket 2.0 t/m³, 3,370 lb/yd³	l, yd³	950, 1.24	875, 1.14	850, 1.11	750, 0.98

DIMENSIONS



● Long crawler machine

Boom	Unit	Std. 5.7 m, 18' 8"		
Arm		2.5 m, 8' 2"	Std. 2.9 m, 9' 6"	3.9 m, 12' 10"
A. Overall width of superstructure	mm, ft-in	2,700, 8' 10"	2,700, 8' 10"	2,700, 8' 10"
B. Overall width	mm, ft-in	3,190, 10' 6"	3,190, 10' 6"	3,190, 10' 6"
C. Overall height of cab	mm, ft-in	2,930, 9' 7"	2,930, 9' 7"	2,930, 9' 7"
D. Tail swing radius	mm, ft-in	2,850, 9' 4"	2,850, 9' 4"	2,850, 9' 4"
E. Overall height of engine hood	mm, ft-in	2,330, 7' 8"	2,330, 7' 8"	2,330, 7' 8"
F. Counterweight clearance *	mm, ft-in	1,025, 3' 4"	1,025, 3' 4"	1,025, 3' 4"
G. Tumbler length	mm, ft-in	3,660, 12' 0"	3,660, 12' 0"	3,660, 12' 0"
H. Track length	mm, ft-in	4,460, 14' 8"	4,460, 14' 8"	4,460, 14' 8"
I. Track gauge	mm, ft-in	2,390, 7' 10"	2,390, 7' 10"	2,390, 7' 10"
J. Shoe width	mm, in	800, 32"	800, 32"	800, 32"
K. Min. ground clearance *	mm, ft-in	460, 1' 6"	460, 1' 6"	460, 1' 6"
L. Overall length	mm, ft-in	9,750, 32' 0"	9,690, 31' 9"	9,670, 31' 9"
M. Overall height of boom	mm, ft-in	3,120, 10' 3"	3,000, 9' 10"	3,550, 11' 8"

* Without shoe grouser

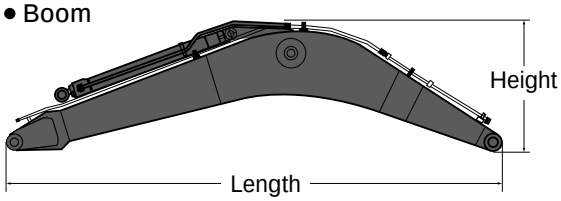
DIMENSIONS

● Narrow long crawler machine

Boom / Arm	Unit	Std. 5.7 m, 18' 8"		
		2.5 m, 8' 2"	Std. 2.9 m, 9' 6"	3.9 m, 12' 10"
A. Overall width of superstructure	mm, ft-in	2,540, 8' 4"	2,540, 8' 4"	2,540, 8' 4"
B. Overall width	mm, ft-in	2,540, 8' 4"	2,540, 8' 4"	2,540, 8' 4"
C. Overall height of cab	mm, ft-in	2,930, 9' 7"	2,930, 9' 7"	2,930, 9' 7"
D. Tail swing radius	mm, ft-in	2,750, 9' 0"	2,750, 9' 0"	2,750, 9' 0"
E. Overall height of engine hood	mm, ft-in	2,330, 7' 8"	2,330, 7' 8"	2,330, 7' 8"
F. Counterweight clearance *	mm, ft-in	1,025, 3' 4"	1,025, 3' 4"	1,025, 3' 4"
G. Tumbler length	mm, ft-in	3,660, 12' 0"	3,660, 12' 0"	3,660, 12' 0"
H. Track length	mm, ft-in	4,460, 14' 8"	4,460, 14' 8"	4,460, 14' 8"
I. Track gauge	mm, ft-in	2,040, 6' 8"	2,040, 6' 8"	2,040, 6' 8"
J. Shoe width	mm, in	500, 20"	500, 20"	500, 20"
K. Min. ground clearance *	mm, ft-in	460, 1' 6"	460, 1' 6"	460, 1' 6"
L. Overall length	mm, ft-in	9,650, 31' 8"	9,590, 31' 6"	9,570, 31' 5"
M. Overall height of boom	mm, ft-in	3,120, 10' 3"	3,000, 9' 10"	3,550, 11' 8"

* Without shoe grouser

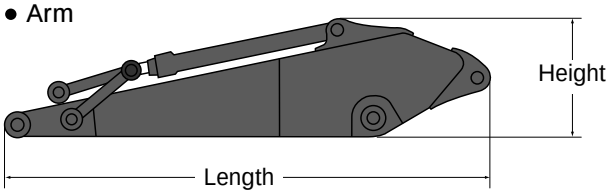
● Boom



Description	5.7 m, 18' 8"	
	Standard	Heavy-duty
Length	5,910 mm, 19' 5"	5,910 mm, 19' 5"
Height	1,585 mm, 5' 2"	1,585 mm, 5' 2"
Width	670 mm, 2' 2"	670 mm, 2' 2"
Weight	1,785 kg, 3,940 lb	1,890 kg, 4,170 lb

* Includes cylinder, pin and piping

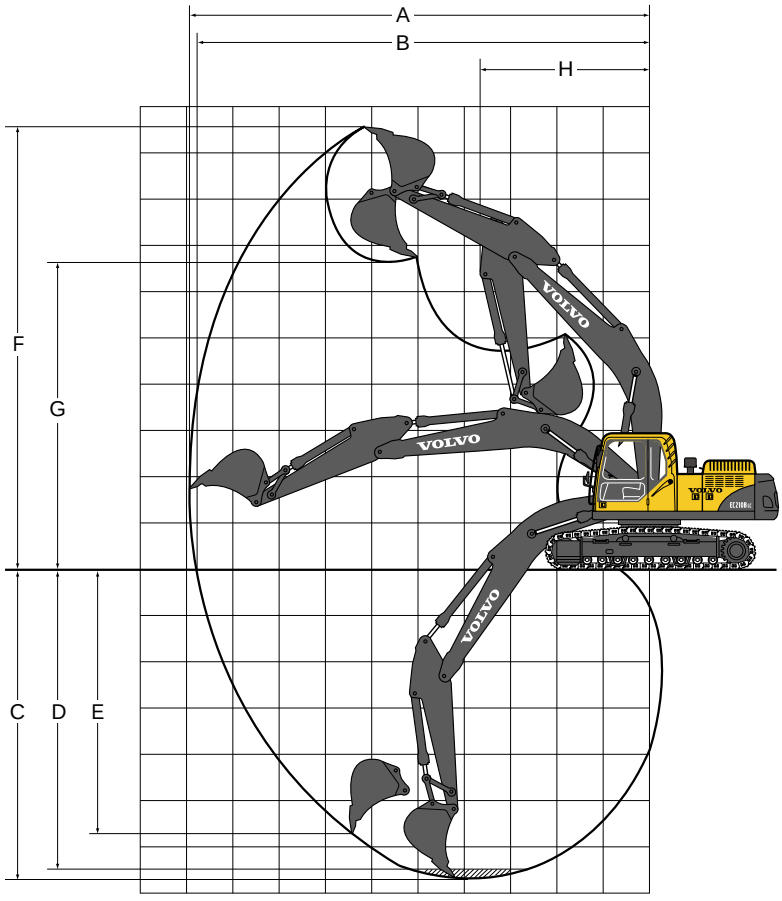
● Arm



Description	2.5 m, 8' 2"	2.9 m, 9' 6"		3.9 m, 12' 10"
		Standard	Heavy-duty	
Length	3,530 mm, 11' 7"	3,900 mm, 12' 10"	3,900 mm, 12' 10"	4,940 mm, 16' 2"
Height	880 mm, 2' 11"	880 mm, 2' 11"	880 mm, 2' 11"	820 mm, 2' 8"
Width	440 mm, 1' 5"	440 mm, 1' 5"	440 mm, 1' 5"	440 mm, 1' 5"
Weight	975 kg, 2,150 lb	1,000 kg, 2,210 lb	1,085 kg, 2,390 lb	1,135 kg, 2,500 lb

* Includes cylinder, piping and linkage

WORKING RANGES & DIGGING FORCES



- Machine with pin-on bucket

Boom	Unit	Std. 5.7 m, 18' 8"		
Arm		2.5 m, 8' 2"	Std. 2.9 m, 9' 6"	3.9 m, 12' 10"
A. Max. digging reach	mm, ft-in	9,540, 31' 4"	9,940, 32' 7"	10,760, 35' 4"
B. Max. digging reach on ground	mm, ft-in	9,350, 30' 8"	9,750, 32' 0"	10,610, 34' 10"
C. Max. digging depth	mm, ft-in	6,330, 20' 9"	6,730, 22' 1"	7,730, 25' 4"
D. Max. digging depth (8' level)	mm, ft-in	6,110, 20' 1"	6,510, 21' 4"	7,550, 24' 9"
E. Max. vertical wall digging depth	mm, ft-in	5,520, 18' 1"	5,830, 19' 2"	6,570, 21' 7"
F. Max. cutting height	mm, ft-in	9,220, 30' 3"	9,450, 31' 0"	9,620, 31' 7"
G. Max. dumping height	mm, ft-in	6,430, 21' 1"	6,650, 21' 10"	6,850, 22' 6"
H. Min. front swing radius	mm, ft-in	3,670, 12' 0"	3,650, 12' 0"	3,640, 11' 11"

- Digging forces with pin-on bucket

Boom		Unit	Std. 5.7 m, 18' 8"		
Arm			2.5 m, 8' 2"	Std. 2.9 m, 9' 6"	3.9 m, 12' 10"
Bucket tip radius		mm, in	1,470, 58"	1,470, 58"	1,470, 58"
Breakout force – bucket (Normal/Power boost)	SAE	kN lb	122.6/130.4 27,560/29,330	122.6/130.4 27,560/29,330	122.6/130.4 27,560/29,330
Teaout force – arm (Normal/Power boost)	SAE	kN lb	110.4/117.2 24,830/26,350	95.6/103.0 21,500/23,150	80.2/86.3 18,040/19,400
Rotation angle, bucket		deg	175°	175°	174°

LIFTING CAPACITY (At the arm end without bucket)

Note: For lifting capacity including bucket, simply subtract actual weight of the pin-on bucket or the bucket with quick coupler from the following values.

EC210B LC (Std. shoe 800 mm, 32", counterweight 3,700 kg, 8,160 lb)

Across under-carriage / Along under-carriage	Lifting hook related to ground level	3.0 m, 10'				4.5 m, 15'				6.0 m, 20'				7.5 m, 25'				Max. reach				
		t	lb	t	lb	t	lb	t	lb	t	lb	t	lb	t	lb	t	lb	t	lb	t	lb	Max. m / ft
Std. boom 5.7 m 18' 8" + Arm 2.5 m 8' 2"	7.5 25'																	*5.4	*11,850	*5.4	*11,850	5.6 / 18.0
	6.0 20'									*5.2	*11,430	5.1	11,040					*5.3	*11,650	4.1	9,170	6.9 / 22.3
	4.5 15'					*6.6	*14,260	*6.6	*14,260	*5.7	*12,380	5.0	10,730					5.3	11,740	3.4	7,560	7.6 / 24.8
	3.0 10'					*8.5	*18,280	7.2	15,560	*6.5	*14,120	4.7	10,220	5.3	11,430	3.4	7,310	4.8	10,630	3.1	6,790	8.0 / 26.2
	1.5 5'					*10.1	*21,890	6.7	14,520	7.3	15,630	4.5	9,730	5.2	11,190	3.3	7,090	4.7	10,260	3.0	6,510	8.1 / 26.5
	0 0'					*10.9	*23,570	6.5	14,020	7.1	15,260	4.4	9,400	5.1	11,020	3.2	6,930	4.8	10,520	3.0	6,630	7.9 / 25.8
	-1.5 -5'	*9.8	*22,490	*9.8	*22,490	*10.8	*23,420	6.5	13,950	7.0	15,140	4.3	9,300					5.2	11,580	3.3	7,270	7.4 / 24.1
	-3.0 -10'	*13.9	*30,080	12.9	27,550	*9.9	*21,480	6.6	14,160	7.1	15,330	4.4	9,460					6.4	14,220	4.0	8,850	6.5 / 21.1
	-4.5 -15'	*10.7	*22,880	*10.7	*22,880	*7.7	*16,140	6.9	14,810									*6.7	*14,800	6.0	13,560	5.0 / 16.0
Std. boom 5.7 m 18' 8" + Std. arm 2.9 m 9' 6"	7.5 25'																	*4.5	*9,950	*4.5	*9,950	6.2 / 19.9
	6.0 20'									*4.8	*10,550	*4.8	*10,550					*4.2	*9,210	3.7	8,350	7.3 / 23.8
	4.5 15'									*5.3	*11,630	5.1	10,890	*5.0	*11,090	3.5	7,600	*4.1	*9,050	3.2	7,020	8.0 / 26.2
	3.0 10'					*8.0	*17,130	7.4	15,860	*6.2	*13,470	4.8	10,360	5.4	11,520	3.4	7,390	*4.2	*9,290	2.9	6,360	8.4 / 27.5
	1.5 5'					*9.8	*21,040	6.8	14,720	*7.1	*15,430	4.6	9,820	5.2	11,240	3.3	7,130	4.4	9,600	2.8	6,100	8.5 / 27.8
	0 0'	*4.9	*11,410	*4.9	*11,410	*10.7	*23,250	6.5	14,090	7.1	15,310	4.4	9,440	5.1	11,030	3.2	6,940	4.5	9,810	2.8	6,190	8.3 / 27.1
	-1.5 -5'	*9.4	*21,340	*9.4	*21,340	*10.9	*23,610	6.5	13,910	7.0	15,120	4.3	9,270	5.1	10,970	3.2	6,880	4.8	10,670	3.0	6,710	7.8 / 25.5
	-3.0 -10'	*14.7	*31,860	12.7	27,270	*10.3	*22,210	6.5	14,050	7.1	15,210	4.3	9,350					5.7	12,730	3.6	7,960	6.9 / 22.7
	-4.5 -15'	*12.0	*25,640	*12.0	*25,640	*8.5	*18,130	6.7	14,540									*6.5	*14,330	5.0	11,260	5.6 / 18.0
Std. boom 5.7 m 18' 8" + Arm 3.9 m 12' 10"	7.5 25'																	*3.4	*7,510	*3.4	*7,510	7.3 / 23.5
	6.0 20'													*4.0	*8,890	3.7	7,960	*3.2	*7,140	3.1	6,950	8.3 / 26.9
	4.5 15'													*4.3	*9,360	3.6	7,800	*3.2	*7,090	2.7	5,990	8.9 / 29.1
	3.0 10'					*6.4	*13,820	*6.4	*13,820	*5.3	*11,520	4.9	10,630	*4.8	*10,370	3.5	7,500	*3.3	*7,310	2.5	5,470	9.2 / 30.2
	1.5 5'	*8.2	*19,420	*8.2	*19,420	*8.5	*18,300	7.0	15,170	*6.4	*13,780	4.6	9,970	5.2	11,290	3.3	7,160	*3.5	*7,790	2.4	5,250	9.3 / 30.5
	0 0'	*6.9	*15,890	*6.9	*15,890	*10.0	*21,620	6.6	14,170	7.1	15,330	4.4	9,430	5.1	10,970	3.2	6,860	3.8	8,420	2.4	5,280	9.1 / 29.9
	-1.5 -5'	*9.1	*20,680	*9.1	*20,680	*10.7	*23,190	6.4	13,690	7.0	14,960	4.2	9,110	5.0	10,770	3.1	6,680	4.1	8,970	2.5	5,600	8.7 / 28.5
	-3.0 -10'	*12.8	*29,020	12.3	26,330	*10.6	*23,040	6.3	13,610	6.9	14,870	4.2	9,020	5.0	10,760	3.1	6,680	4.6	10,240	2.9	6,370	7.9 / 25.9
	-4.5 -15'	*14.2	*30,580	12.6	26,950	*9.7	*20,950	6.4	13,870	7.0	15,080	4.3	9,210					5.9	13,140	3.6	8,130	6.8 / 22.0

Notes:
1. Machine in “Fine Mode-F” (Power Boost) for lifting capacities.
2. The above loads are in compliance with SAE J1097 and ISO 10567 Hydraulic Excavator Lifting Capacity Standards.
3. Rated loads do not exceed 87% of hydraulic lifting capacity or 75% of tipping load.
4. Rated loads marked with an asterisk (*) are limited by hydraulic capacity rather than tipping load.
5. Contains metric and U.S. measurement charts.

LIFTING CAPACITY (At the arm end without bucket)

Note: For lifting capacity including bucket, simply subtract actual weight of the pin-on bucket or the bucket with quick coupler from the following values.

EC210B LC (Std. shoe 800 mm, 32", counterweight 4,200 kg, 9,260 lb)

Across under-carriage / Along under-carriage	Lifting hook related to ground level	3.0 m, 10'				4.5 m, 15'				6.0 m, 20'				7.5 m, 25'				Max. reach				
		t	lb	t	lb	t	lb	t	lb	t	lb	t	lb	t	lb	t	lb	t	lb	t	lb	Max. m / ft
Std. boom 5.7 m 18' 8" + Arm 2.5 m 8' 2"	7.5 25'																	*5.4	*11,850	*5.4	*11,850	5.6 / 18.0
	6.0 20'									*5.2	*11,430	*5.2	*11,430					*5.3	*11,650	4.4	9,740	6.9 / 22.3
	4.5 15'					*6.6	*14,260	*6.6	*14,260	*5.7	*12,380	5.3	11,370					*5.4	*11,810	3.6	8,060	7.6 / 24.8
	3.0 10'					*8.5	*18,280	7.6	16,500	*6.5	*14,120	5.0	10,870	5.6	12,040	3.6	7,800	5.1	11,210	3.3	7,260	8.0 / 26.2
	1.5 5'					*10.1	*21,890	7.2	15,460	*7.4	15,930	4.8	10,370	5.5	11,800	3.5	7,580	4.9	10,830	3.2	6,970	8.1 / 26.5
	0 0'					*10.9	*23,570	6.9	14,970	7.5	16,090	4.7	10,040	5.4	11,630	3.4	7,420	5.0	11,110	3.2	7,100	7.9 / 25.8
	-1.5 -5'	*9.8	*22,490	*9.8	*22,490	*10.8	*23,420	6.9	14,890	7.4	15,980	4.6	9,940					5.5	12,220	3.5	7,780	7.4 / 24.1
	-3.0 -10'	*13.9	*30,080	13.7	29,310	*9.9	*21,480	7.0	15,110	*7.3	*15,730	4.7	10,110					*6.6	*14,550	4.3	9,450	6.5 / 21.1
	-4.5 -15'	*10.7	*22,880	*10.7	*22,880	*7.7	*16,140	7.3	15,750									*6.7	*14,800	6.3	14,430	5.0 / 16.0
Std. boom 5.7 m 18' 8" + Std. Arm 2.9 m 9' 6"	7.5 25'																	*4.5	*9,950	*4.5	*9,950	6.2 / 19.9
	6.0 20'									*4.8	*10,550	*4.8	*10,550					*4.2	*9,210	4.0	8,870	7.3 / 23.8
	4.5 15'									*5.3	*11,630	*5.3	11,530	*5.0	*11,090	3.8	8,090	*4.1	*9,050	3.4	7,480	8.0 / 26.2
	3.0 10'					*8.0	*17,130	7.8	16,800	*6.2	*13,470	5.1	11,000	*5.4	*11,830	3.7	7,880	*4.2	*9,290	3.1	6,790	8.4 / 27.5
	1.5 5'					*9.8	*21,040	7.3	15,660	*7.1	*15,430	4.9	10,470	5.5	11,850	3.5	7,620	*4.5	*9,920	3.0	6,530	8.5 / 27.8
	0 0'	*4.9	*11,410	*4.9	*11,410	*10.7	*23,250	7.0	15,040	7.5	16,140	4.7	10,080	5.4	11,640	3.4	7,430	4.7	10,360	3.0	6,640	8.3 / 27.1
	-1.5 -5'	*9.4	*21,340	*9.4	*21,340	*10.9	*23,610	6.9	14,860	7.4	15,950	4.6	9,920	5.4	11,580	3.4	7,370	5.1	11,270	3.3	7,190	7.8 / 25.5
	-3.0 -10'	*14.7	*31,860	13.5	29,030	*10.3	*22,210	7.0	14,990	7.4	16,040	4.6	10,000					6.0	13,430	3.8	8,510	6.9 / 22.7
	-4.5 -15'	*12.0	*25,640	*12.0	*25,640	*8.5	*18,130	7.2	15,480									*6.5	*14,330	5.3	11,990	5.6 / 18.0
Std. boom 5.7 m 18' 8" + Arm 3.9 m 12' 10"	7.5 25'																	*3.4	*7,510	*3.4	*7,510	7.3 / 23.5
	6.0 20'													*4.0	*8,890	3.9	8,450	*3.2	*7,140	*3.2	*7,140	8.3 / 26.9
	4.5 15'													*4.3	*9,360	3.9	8,290	*3.2	*7,090	2.9	6,400	8.9 / 29.1
	3.0 10'					*6.4	*13,820	*6.4	*13,820	*5.3	*11,520	5.2	11,280	*4.8	*10,370	3.7	7,990	*3.3	*7,310	2.7	5,860	9.2 / 30.2
	1.5 5'	*8.2	*19,420	*8.2	*19,420	*8.5	*18,300	7.5	16,110	*6.4	*13,780	4.9	10,620	*5.3	*11,590	3.6	7,650	*3.5	*7,790	2.6	5,630	9.3 / 30.5
	0 0'	*6.9	*15,890	*6.9	*15,890	*10.0	*21,620	7.0	15,110	*7.2	*15,710	4.7	10,070	5.4	11,580	3.4	7,350	*3.9	*8,630	2.6	5,670	9.1 / 29.9
	-1.5 -5'	*9.1	*20,680	*9.1	*20,680	*10.7	*23,190	6.8	16,430	7.3	15,800	4.5	9,750	5.3	11,380	3.3	7,170	4.3	9,490	2.7	6,020	8.7 / 28.5
	-3.0 -10'	*12.8	*29,020	*12.8	28,080	*10.6	*23,040	6.8	14,550	7.3	15,700	4.5	9,660	5.3	11,370	3.3	7,160	4.9	10,820	3.1	6,840	7.9 / 25.9
	-4.5 -15'	*14.2	*30,580	13.4	28,710	*9.7	*20,950	6.9	14,810	*7.1	*15,260	4.6	9,860					*6.0	*13,320	3.9	8,700	6.8 / 22.0

Notes:
1. Machine in “Fine Mode-F” (Power Boost) for lifting capacities.
2. The above loads are in compliance with SAE J1097 and ISO 10567 Hydraulic Excavator Lifting Capacity Standards.
3. Rated loads do not exceed 87% of hydraulic lifting capacity or 75% of tipping load.
4. Rated loads marked with an asterisk (*) are limited by hydraulic capacity rather than tipping load.
5. Contains metric and U.S. measurement charts.

LIFTING CAPACITY (At the arm end without bucket)

Note: For lifting capacity including bucket, simply subtract actual weight of the pin-on bucket or the bucket with quick coupler from the following values.

EC210B NLC (Std. shoe 500 mm, 20", counterweight 4,800 kg, 10,580 lb)

Across under-carriage / Along under-carriage	Lifting hook related to ground level	3.0 m, 10'				4.5 m, 15'				6.0 m, 20'				7.5 m, 25'				Max. reach				
																						Max.
		t	lb	t	lb	t	lb	t	lb	t	lb	t	lb	t	lb	t	lb	t	lb	t	lb	m / ft
Std. boom 5.7 m 18' 8" + Arm 2.5 m 8' 2"	7.5 25'																	*5.4	*11,850	5.3	*11,850	5.6 / 18.0
	6.0 20'									*5.2	*11,430	4.8	10,300					*5.3	*11,650	3.8	8,580	6.9 / 22.3
	4.5 15'					*6.6	*14,260	*6.6	*14,260	*5.7	*12,380	4.6	10,000					*5.4	*11,810	3.2	7,080	7.6 / 24.8
	3.0 10'					*8.5	*18,280	6.6	14,260	*6.5	*14,120	4.4	9,510	*5.6	12,190	3.2	6,840	5.1	11,350	2.9	6,360	8.0 / 26.2
	1.5 5'					*10.1	*21,890	6.1	13,270	*7.4	*15,930	4.2	9,030	5.5	11,950	3.1	6,620	5.0	10,970	2.8	6,090	8.1 / 26.5
	0 0'					*10.9	*23,570	5.9	12,800	7.6	16,290	4.0	8,710	5.5	11,780	3.0	6,480	5.1	11,250	2.8	6,200	7.9 / 25.8
	-1.5 -5'	*9.8	*22,490	*9.8	*22,490	*10.8	*23,420	5.9	12,730	7.5	16,180	4.0	8,610					5.6	12,380	3.1	6,780	7.4 / 24.1
	-3.0 -10'	*13.9	*30,080	11.2	24,150	*9.9	*21,480	6.0	12,940	*7.3	*15,730	4.1	8,770					*6.6	*14,550	3.7	8,220	6.5 / 21.1
	-4.5 -15'	*10.7	*22,880	*10.7	*22,880	*7.7	*16,140	6.3	13,550									*6.7	*14,800	5.5	12,460	5.0 / 16.0
Std. boom 5.7 m 18' 8" + Std. Arm 2.9 m 9' 6"	7.5 25'																	*4.5	*9,950	*4.5	*9,950	6.2 / 19.9
	6.0 20'									*4.8	*10,550	*4.8	10,480					*4.2	*9,210	3.5	7,830	7.3 / 23.8
	4.5 15'									*5.3	*11,630	4.7	10,150	*5.0	*11,090	3.3	7,130	*4.1	*9,050	3.0	6,580	8.0 / 26.2
	3.0 10'					*8.0	*17,130	6.7	14,550	*6.2	*13,470	4.5	9,640	*5.4	*11,830	3.2	6,920	*4.2	*9,290	2.7	5,960	8.4 / 27.5
	1.5 5'					*9.8	*21,040	6.2	13,470	*7.1	*15,430	4.2	9,120	5.6	12,000	3.1	6,670	*4.5	*9,920	2.6	5,720	8.5 / 27.8
	0 0'	*4.9	*11,410	*4.9	*11,410	*10.7	*23,250	6.0	12,870	7.6	16,340	4.1	8,750	5.5	11,790	3.0	6,480	4.8	10,490	2.6	5,800	8.3 / 27.1
	-1.5 -5'	*9.4	*21,340	*9.4	*21,340	*10.9	*23,610	5.9	12,700	7.5	16,160	4.0	8,590	5.4	11,730	3.0	6,420	5.2	11,410	2.8	6,270	7.8 / 25.5
	-3.0 -10'	*14.7	*31,860	11.1	23,890	*10.3	*22,210	5.9	12,830	7.5	16,250	4.0	8,670					6.1	13,600	3.3	7,410	6.9 / 22.7
	-4.5 -15'	*12.0	*25,640	11.5	24,670	*8.5	*18,130	6.2	13,290									*6.5	*14,330	4.6	10,400	5.6 / 18.0
Std. boom 5.7 m 18' 8" + Arm 3.9 m 12' 10"	7.5 25'																	*3.4	*7,510	*3.4	*7,510	7.3 / 23.5
	6.0 20'													*4.0	*8,890	3.5	7,470	*3.2	*7,140	2.9	6,520	8.3 / 26.9
	4.5 15'													*4.3	*9,360	3.4	7,310	*3.2	*7,090	2.5	5,620	8.9 / 29.1
	3.0 10'					*6.4	*13,820	*6.4	*13,820	*5.3	*11,520	4.6	9,890	*4.8	*10,370	3.3	7,020	*3.3	*7,310	2.3	5,130	9.2 / 30.2
	1.5 5'	*8.2	*19,420	*8.2	*19,420	*8.5	*18,300	6.4	13,880	*6.4	*13,780	4.3	9,260	*5.3	*11,590	3.1	6,690	*3.5	*7,790	2.2	4,910	9.3 / 30.5
	0 0'	*6.9	*15,890	*6.9	*15,890	*10.0	*21,620	6.0	12,920	*7.2	*15,710	4.1	8,730	5.4	11,730	3.0	6,400	*3.9	*8,630	2.2	4,930	9.1 / 29.9
	-1.5 -5'	*9.1	*20,680	*9.1	*20,680	*10.7	*23,190	5.8	12,470	7.4	16,000	3.9	8,420	5.4	11,530	2.9	6,220	4.4	9,610	2.4	5,230	8.7 / 28.5
	-3.0 -10'	*12.8	*29,020	10.7	23,020	*10.6	*23,040	5.8	12,400	7.4	15,900	3.9	8,340	5.3	11,520	2.9	6,220	4.9	10,960	2.7	5,940	7.9 / 25.9
	-4.5 -15'	*14.2	*30,580	11.0	23,580	*9.7	*20,950	5.9	12,650	*7.1	*15,260	3.9	8,520					*6.0	*13,320	3.4	7,550	6.8 / 22.0

Notes:
1. Machine in “Fine Mode-F” (Power Boost) for lifting capacities.
2. The above loads are in compliance with SAE J1097 and ISO 10567 Hydraulic Excavator Lifting Capacity Standards.
3. Rated loads do not exceed 87% of hydraulic lifting capacity or 75% of tipping load.
4. Rated loads marked with an asterisk (*) are limited by hydraulic capacity rather than tipping load.
5. Contains metric and U.S. measurement charts.

STANDARD EQUIPMENT

Engine
Turbocharged, 4-stroke diesel engine with water cooling, direct injection and charged air cooler that meets EPA (Environment Protection Agency) Tier 2 emission standards
3-stage air filter with indicator and precleaner
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
Automatic idling system
One-touch power boost
Safety stop/start function
Travel alarm
Adjustable monitor
Master switch
Engine restart prevention circuit
High-capacity halogen lights:
– Frame-mounted 2
– Boom-mounted 2
Batteries, 2 x 12 V / 150 Ah
Start motor, 24 V / 4.8 kW

Hydraulic system
Automatic hydraulic system:
– Summation system
– Boom priority
– Arm priority
– Swing priority
Hydraulic piping:
– Hammer & shear:
1 pump flow
– Quick coupler piping
Boom and arm regeneration valves
Swing anti-rebound valves
Boom and arm holding valves
Pump flow control for hammer & shear
Multi-stage filtering system
Cylinder cushioning
Cylinder contamination seals
Auxiliary hydraulic valve
Straight travel circuit
Automatic two-speed travel motors
Hydraulic oil, ISO VG 46

Superstructure
Access way with handrail
Full height counterweight:
– LC: 4,200 kg, 9,260 lb
– NLC: 4,800 kg, 10,580 lb
Tool storage area
Punched metal anti-slip plates
Undercover (heavy-duty 4,5 mm, 0.18")

Cab and interior
Fabric seat with heater and air suspension
Pilot-operated wrist control joysticks with 3 switches each
Heater & air-conditioner, automatic
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
– Sun shield, front, roof, rear
– 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, 0.18")

Track shoes
LC: Track shoes 800 mm, 32" with triple grousers
NLC: Track shoes 500 mm, 20" with triple grousers

Digging equipment
Boom: 5.7 m, 18' 8"
Arm: 2.9 m, 9' 6"

OPTIONAL EQUIPMENT *(Standard in certain markets)*

Engine
Block heater: 120 V
Diesel coolant heater
Tropical cooling kit
Oil bath precleaner
Fuel filler pump: 50 l/min, 13.2 gpm with automatic shut-off

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

Hydraulic system
Hose rupture valve: boom, arm
Hydraulic piping:
– Hammer & shear:
2 pump flow
Additional return filter
Extra piping for slope & rotator
– Slope & rotator
– Grapple
– Oil leak (drain) line
Volvo hydraulic quick-coupler, S1 size
Hydraulic oil, ISO VG 32
Hydraulic oil, ISO VG 68
Hydraulic oil, biodegradable 32
Hydraulic oil, biodegradable 46

Superstructure
Full height counterweight:
– LC: 3,700 kg, 8,160 lb

Cab and interior
Fabric seat
Control joystick with semi-long levers
Control joystick with 5 switches each
Air-conditioner, manual
Falling object guard (FOG)
Cab-mounted falling object protective structures (FOPS)
Sunlight protection, roof (steel)
Rain shield, front
Safety screen for front window
Lower wiper
Anti-vandalism kit

Undercarriage
Full track guards (only LC)
Undercover (heavy-duty 10 mm, 0.39")

Track shoes
LC: 600/700/900 mm, 24"/28"/36" track shoes with triple grousers
700 mm, 28" track shoe with double grouser
NLC: 600/700 mm, 24"/28" track shoes with triple grousers

Digging equipment
Boom: 5.7 m, 18' 8" heavy-duty
Arm: 2.5 m, 8' 2"
3.9 m, 12' 10"
2.9 m, 9' 6" heavy-duty

Service
Hand lamp
Spare parts
Tool kit, full scale

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

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