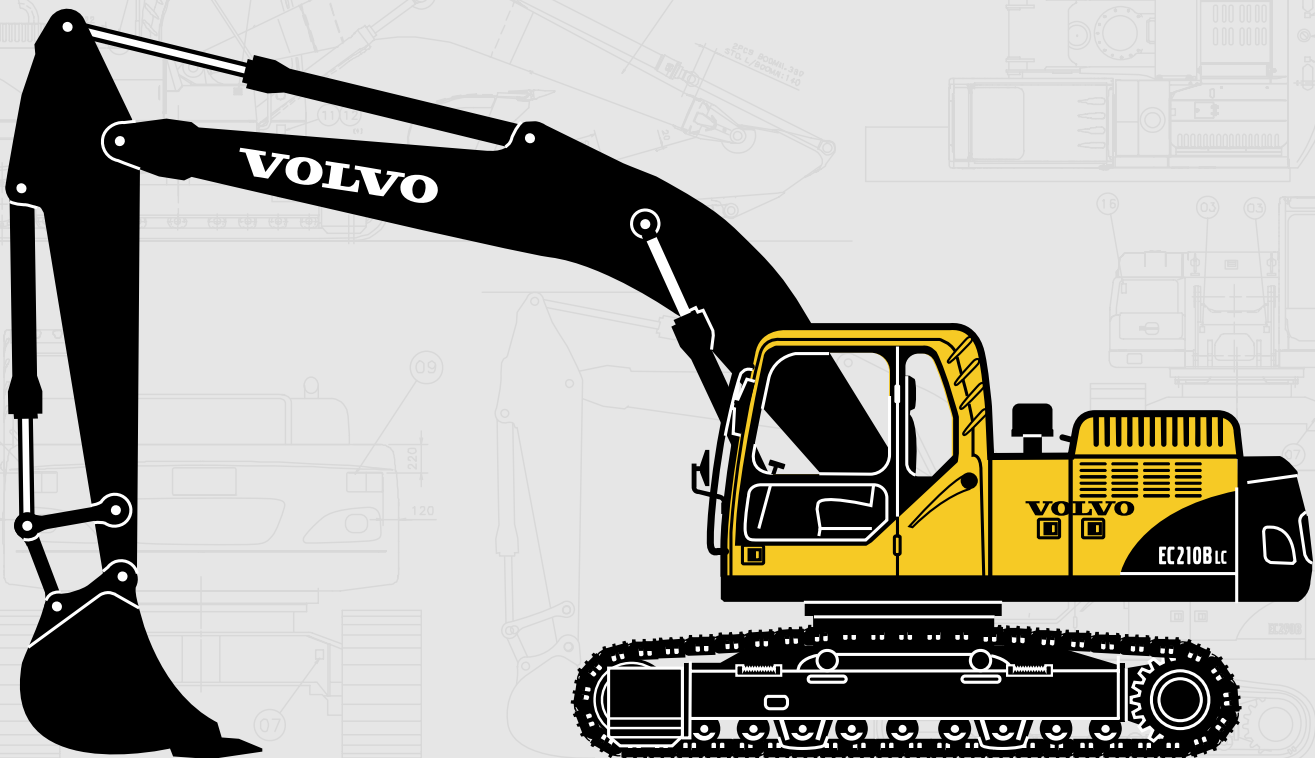


# VOLVO EXCAVATOR

## EC210B LC EC210B NLC

### MONOBLOCK/2-PIECE BOOM



- Engine power, gross:  
119 kW (159 hp)
- Operating weight:  
LC: 21,3 ~ 22,3 t  
NLC: 20,9 ~ 21,8 t
- Buckets (SAE)  
750 ~ 1 550 l
- Turbocharged VOLVO diesel engine with direct injection and charged air cooler meets EU Step 2 and EPA Tier 2 emission standards
- Contronics, 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
  - 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
- Undercarriage
  - LC: Long undercarriage for good stability
  - NLC: Narrow width for easy transportation
- Auxiliary hydraulic valve as 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 meets EU Step 2 and 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, includes 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 level.

### Low-Emission Engine

Make	VOLVO
Model	D6D EAE2
Power output at	32 r/s (1 900 rpm)
Net (ISO 9249/ DIN 6271)	107 kW (145 ps / 143 hp)
Gross (SAE J1349)	119 kW (162 ps / 159 hp)
Max. torque	647 N·m (66 kg·m) at 1 425 rpm
No. of cylinders	6
Displacement	5,7 l
Bore	98 mm
Stroke	126 mm



## ELECTRICAL SYSTEM

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

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

Voltage	24 V
Batteries	2 x 12 V
Battery capacity	150 Ah
Alternator	28 V / 80 A



## UNDERCARRIAGE

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

### LC

No. of track shoes	2 x 49
Link pitch	190 mm
Shoe width, triple grouser	600 / 700 / 800 / 900 mm
No. of lower rollers	2 x 9
No. of top rollers	2 x 2

### NLC

No. of track shoes	2 x 46
Link pitch	190 mm
Shoe width, triple grouser	600 / 700 / 800 / 900 mm
No. of lower rollers	2 x 7
No. of top rollers	2 x 2



## 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 in the track frame.

Max. tractive effort	183 kN
Max. travel speed	3,2 / 5,5 km/h
Gradeability	35° (70%)



## SLEW SYSTEM

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

Max. slew speed	11,6 rpm
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## SERVICE REFILL CAPACITIES

Fuel tank	350 l
Hydraulic system, total	295 l
Hydraulic tank	160 l
Engine oil	25 l
Engine coolant	27,5 l
Slew reduction unit	6 l
Travel reduction unit	2 x 5,8 l



## HYDRAULIC SYSTEM

The hydraulic system, named "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 slew priority along with boom and arm regeneration are provides optimum performance.

The following important functions are included in the system:

**Summation system:** Combining 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 deep excavation.

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

**Slew priority:** Supplies priority to the slew operation for faster slew 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 200 l/min

### Pilot pump

Type ..... Gear pump  
Maximum flow ... 1 x 19 l/min

### Hydraulic motors

Travel ..... Variable displacement axial piston motors  
Slew ..... Fixed displacement axial piston motor with mechanical brake

### Relief valve setting

Implement ..... 32,4 / 34,3 Mpa  
Travel circuit ..... 34,3 Mpa  
Slew circuit ..... 26,5 Mpa  
Pilot circuit ..... 3,9 Mpa

### Hydraulic cylinders

Monoblock boom ..... 2  
bore x stroke .....  $\varnothing$ 125 x 1 235 mm  
1st boom of 2-piece boom ..... 2  
bore x stroke .....  $\varnothing$ 125 x 1 235 mm  
2nd boom of 2-piece boom ..... 1  
bore x stroke .....  $\varnothing$ 160 x 1 070 mm  
Arm ..... 1  
bore x stroke .....  $\varnothing$ 135 x 1 540 mm  
Bucket ..... 1  
bore x stroke .....  $\varnothing$ 120 x 1 060 mm



## 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 a 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. The glass is stored in the door.

### Integrated air conditioning and heating system:

The pressurized and filtered cab air is supplied by automatic controlled fan. The air is distributed via 13 vents.

**Ergonomic operator's seat:** The adjustable seat and joystick consoles move independently to accommodate the operator. The seat has nine different adjustments and a seat belt to meet any 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 ..... LwA 102 dB(A)  
(Directive 2000/14/EC)



## GROUND PRESSURE

- Long crawler machine with 5,7 m monoblock boom, 2,9 m arm, 920 l (740 kg) bucket and 4 200 kg counterweight

Description	Shoe width	Operating weight	Ground pressure	Overall width
Triple grouser	600 mm	21 340 kg	44,3 kPa	2 990 mm
	700 mm	21 790 kg	38,7 kPa	3 090 mm
	800 mm	22 060 kg	34,3 kPa	3 190 mm
	900 mm	22 340 kg	30,9 kPa	3 290 mm

- Narrow long crawler machine with 5,7 m monoblock boom, 2,9 m arm, 920 l (740 kg) bucket and 4 200 kg counterweight

Description	Shoe width	Operating weight	Ground pressure	Overall width
Triple grouser	600 mm	20 870 kg	46,7 kPa	2 800 mm
	700 mm	21 290 kg	40,9 kPa	2 900 mm
	800 mm	21 550 kg	36,2 kPa	3 000 mm
	900 mm	21 820 kg	32,6 kPa	3 100 mm

## MAX. PERMITTED BUCKETS

*Note: 1. Bucket size based on SAE-J296, 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:  
Long crawler machine with counterweight 4 200 kg \*

Description	Unit	5,7 m Boom		
		2,5 m Arm	2,9 m Arm	3,9 m Arm
GP bucket 1,5 t/m <sup>3</sup>	l	1 550	1 450	1 250
GP bucket 1,8 t/m <sup>3</sup>	l	1 350	1 275	1 100
RB bucket 1,8 t/m <sup>3</sup>	l	1 200	1 125	950
RB bucket 2,0 t/m <sup>3</sup>	l	1 100	1 025	900

- Max. permitted sizes for quick fit buckets:  
Long crawler machine with counterweight 4 200 kg \*

Description	Unit	5,7 m Boom		
		2,5 m Arm	2,9 m Arm	3,9 m Arm
GP bucket 1,5 t/m <sup>3</sup>	l	1 475	1 375	1 175
GP bucket 1,8 t/m <sup>3</sup>	l	1 300	1 200	1 025
RB bucket 1,8 t/m <sup>3</sup>	l	1 300	1 200	1 025
RB bucket 2,0 t/m <sup>3</sup>	l	1 150	1 075	900

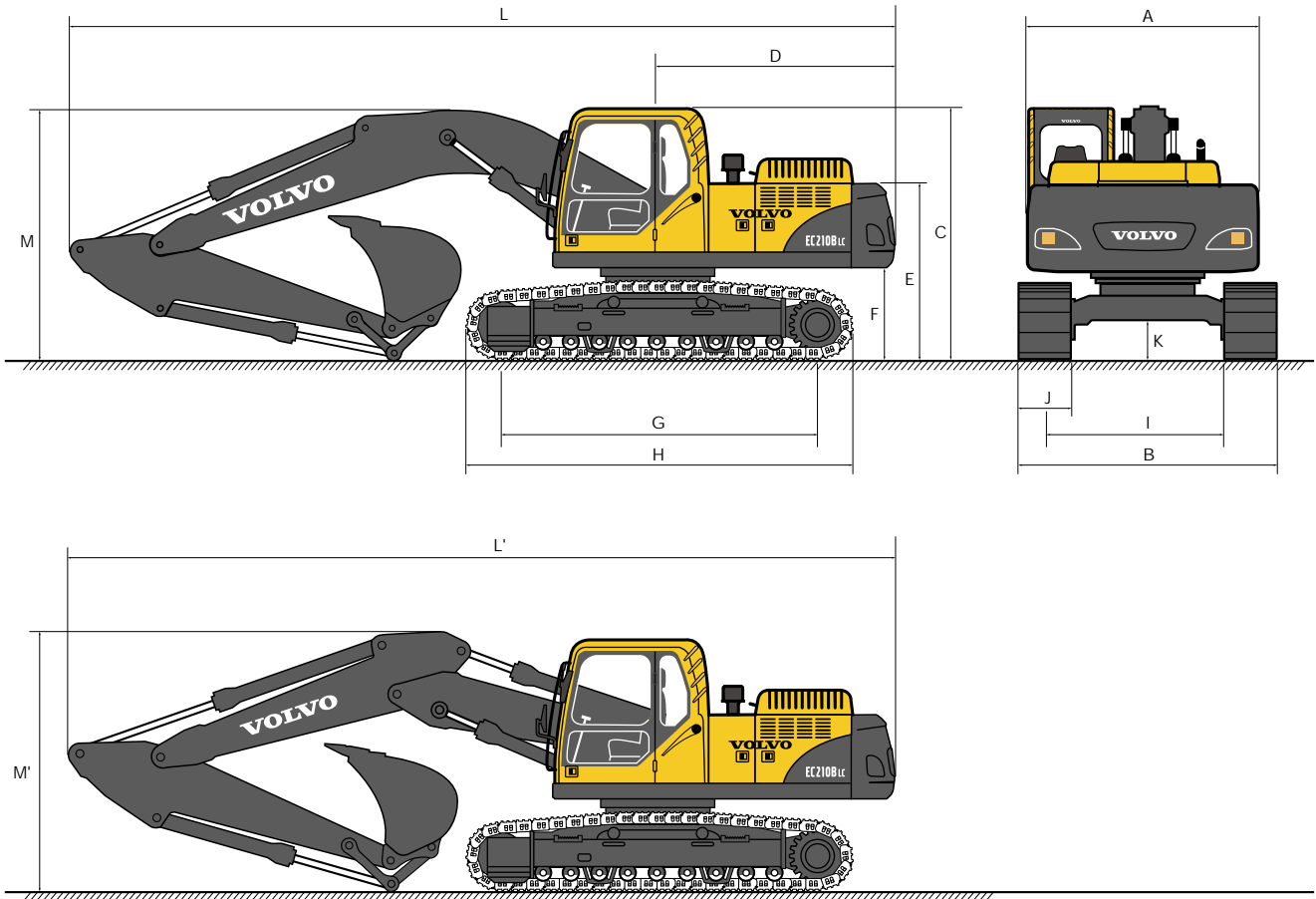
- Max. permitted sizes for direct fit buckets:  
Narrow long crawler machine with counterweight 4 200 kg

Description	Unit	5,7 m Boom		
		2,5 m Arm	2,9 m Arm	3,9 m Arm
GP bucket 1,5 t/m <sup>3</sup>	l	1 375	1 300	1 125
GP bucket 1,8 t/m <sup>3</sup>	l	1 200	1 125	975
RB bucket 1,8 t/m <sup>3</sup>	l	1 075	1 000	850
RB bucket 2,0 t/m <sup>3</sup>	l	1 000	925	800

- Max. permitted sizes for quick fit buckets:  
Narrow long crawler machine with counterweight 4 200 kg

Description	Unit	5,7 m Boom		
		2,5 m Arm	2,9 m Arm	3,9 m Arm
GP bucket 1,5 t/m <sup>3</sup>	l	1 325	1 225	1 050
GP bucket 1,8 t/m <sup>3</sup>	l	1 150	1 075	925
RB bucket 1,8 t/m <sup>3</sup>	l	1 025	950	800
RB bucket 2,0 t/m <sup>3</sup>	l	950	875	750

## DIMENSIONS



### • Long crawler machine

Description	Unit	5,7 m Boom		
		2,5 m Arm	2,9 m Arm	3,9 m Arm
A. Overall width of superstructure	mm	2 700	2 700	2 700
B. Overall width	mm	2 990	2 990	2 990
C. Overall height of cab	mm	2 930	2 930	2 930
D. Tail slew radius	mm	2 750	2 750	2 750
E. Overall height of engine hood	mm	2 330	2 330	2 330
F. Counterweight clearance *	mm	1 025	1 025	1 025
G. Tumbler length	mm	3 660	3 660	3 660
H. Track length	mm	4 460	4 460	4 460
I. Track gauge	mm	2 390	2 390	2 390
J. Shoe width	mm	600	600	600
K. Min. ground clearance *	mm	460	460	460
L. Overall length	mm	9 750	9 690	9 670
L'. Overall length	mm	9 510	9 470	9 370
M. Overall height of boom	mm	3 120	3 000	3 550
M'. Overall height of boom	mm	3 040	2 960	3 630

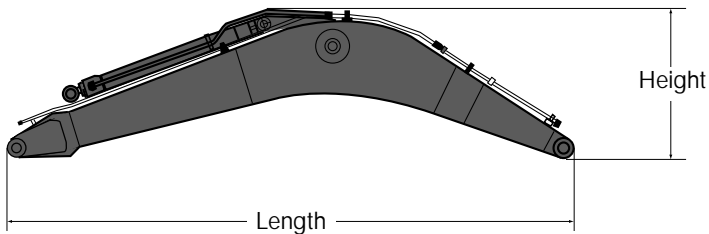
\* Without shoe grouser

# DIMENSIONS

## • Narrow long crawler machine

Description	Unit	5,7 m Boom		
		2,5 m Arm	2,9 m Arm	3,9 m Arm
A. Overall width of superstructure	mm	2 700	2 700	2 700
B. Overall width	mm	2 800	2 800	2 800
C. Overall height of cab	mm	2 930	2 930	2 930
D. Tail slew radius	mm	2 750	2 750	2 750
E. Overall height of engine hood	mm	2 330	2 330	2 330
F. Counterweight clearance *	mm	1 025	1 025	1 025
G. Tumbler length	mm	3 370	3 370	3 370
H. Track length	mm	4 170	4 170	4 170
I. Track gauge	mm	2 200	2 200	2 200
J. Shoe width	mm	600	600	600
K. Min. ground clearance *	mm	460	460	460
L. Overall length	mm	9 750	9 690	9 670
L'. Overall length	mm	9 610	9 570	9 470
M. Overall height of boom	mm	3 120	3 000	3 550
M'. Overall height of boom	mm	3 040	2 960	3 630

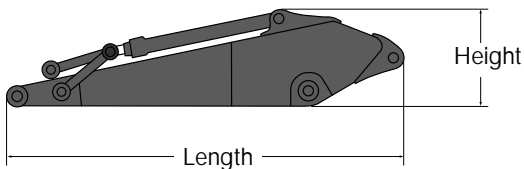
\* Without shoe grouser



## • Boom

Description	5,7 m	5,57 m 2-piece
Length	5 910 mm	5 780 mm
Height	1 585 mm	1 570 mm
Width	670 mm	670 mm
Weight	1 785 kg	2 090 kg

\* Includes cylinder, pin and piping

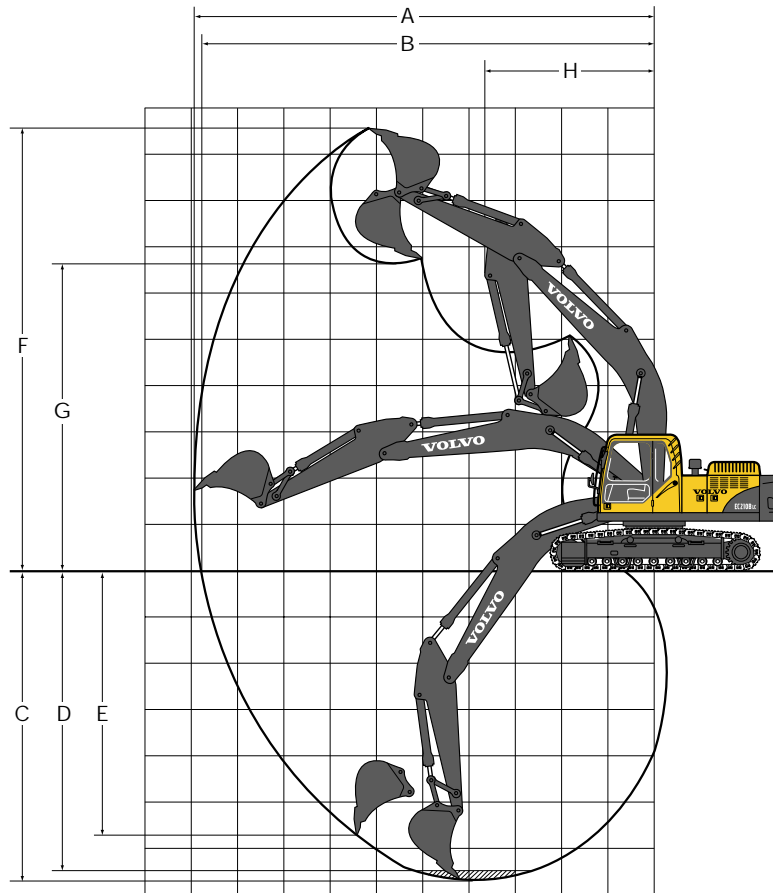


## • Arm

Description	2,5 m	2,9 m	3,9 m
Length	3 530 mm	3 900 mm	4 940 mm
Height	880 mm	880 mm	820 mm
Width	440 mm	440 mm	440 mm
Weight	975 kg	1 000 kg	1 135 kg

\* Includes cylinder, piping and linkage

## WORKING RANGES & DIGGING FORCES



• 5,7 m monoblock boom with direct fit bucket:

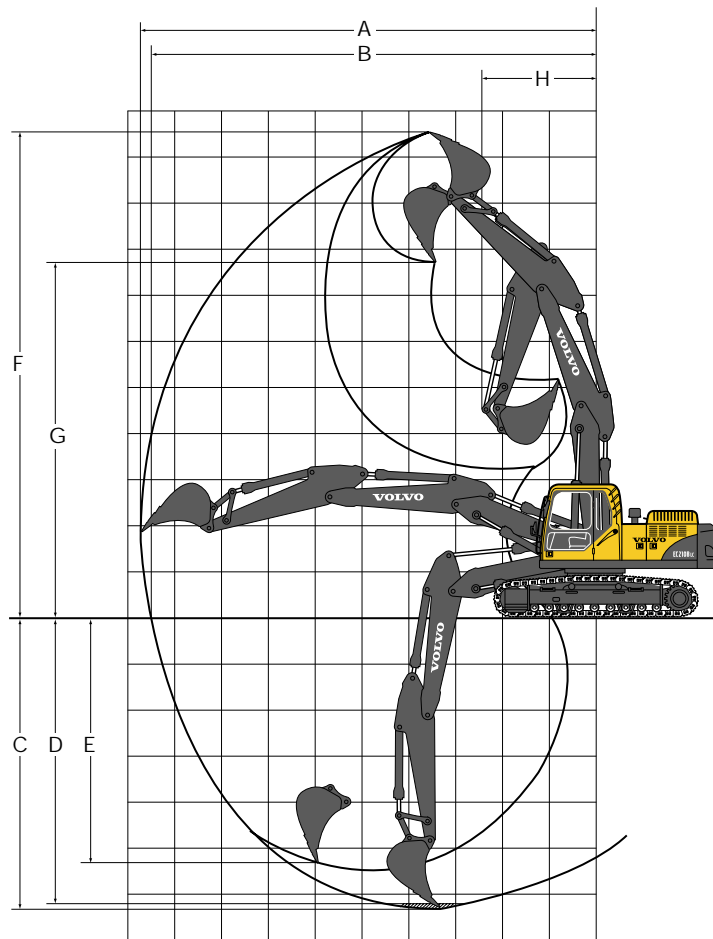
Description	Unit	5,7 m Boom		
		2,5 m Arm	2,9 m Arm	3,9 m Arm
A. Max. digging reach	mm	9 540	9 940	10 760
B. Max. digging reach on ground	mm	9 350	9 750	10 610
C. Max. digging depth	mm	6 330	6 730	7 730
D. Max. digging depth	mm	6 110	6 510	7 550
E. Max. vertical wall digging depth	mm	5 520	5 830	6 570
F. Max. cutting height	mm	9 220	9 450	9 620
G. Max. dumping height	mm	6 430	6 650	6 850
H. Min. front slew radius	mm	3 670	3 650	3 640

• Digging forces with direct fit bucket

Description	Unit	5,7 m Boom		
		2,5 m Arm	2,9 m Arm	3,9 m Arm
Bucket radius	mm	1 470	1 470	1 470
Breakout force – bucket (Normal / Power boost)	SAE kN	122,6 / 130,4	122,6 / 130,4	122,6 / 130,4
Breakout force – bucket (Normal / Power boost)	ISO kN	136,3 / 147,1	136,3 / 147,1	136,3 / 147,1
Tearout force – arm (Normal / Power boost)	SAE kN	110,4 / 117,2	95,6 / 103,0	80,2 / 86,3
Tearout force – arm (Normal / Power boost)	ISO kN	113,7 / 120,7	98,2 / 104,9	81,9 / 88,3
Rotation angle, bucket	deg	175	175	174



## WORKING RANGES & DIGGING FORCES



• 5,57 m 2-piece boom with direct fit bucket:

Description	Unit	5,57 m 2-piece boom		
		2,5 m Arm	2,9 m Arm	3,9 m Arm
A. Max. digging reach	mm	9 450	9 840	10 680
B. Max. digging reach on ground	mm	9 280	9 680	10 530
C. Max. digging depth	mm	5 930	6 300	7 240
D. Max. digging depth	mm	5 820	6 200	7 150
E. Max. vertical wall digging depth	mm	4 910	5 320	6 180
F. Max. cutting height	mm	10 390	10 710	11 180
G. Max. dumping height	mm	7 470	7 780	8 270
H. Min. front slew radius	mm	2 740	2 440	2 840















• Digging forces with direct fit bucket

Description	Unit	5,57 m 2-piece boom		
		2,5 m Arm	2,9 m Arm	3,9 m Arm
Bucket radius	mm	1 470	1 470	1 470
Breakout force – bucket (Normal / Power boost)	SAE kN	122,6 / 130,4	122,6 / 130,4	122,6 / 130,4
Breakout force – bucket (Normal / Power boost)	ISO kN	136,3 / 147,1	136,3 / 147,1	136,3 / 147,1
Tearout force – arm (Normal / Power boost)	SAE kN	110,4 / 117,2	95,6 / 103,0	80,2 / 86,3
Tearout force – arm (Normal / Power boost)	ISO kN	113,7 / 120,7	98,2 / 104,9	81,9 / 88,3
Rotation angle, bucket	deg	175	175	174

# LIFTING CAPACITY (At the arm and without bucket)

Note: For lifting capacity including bucket, simply subtract actual weight of the direct fit bucket or the bucket with quick fit from the following values.

## EC210B LC



 Across undercarriage  Along undercarriage	Lifting hook related to ground level	3,0 m		4,5 m		6,0 m		7,5 m		9,0 m		Max. reach			
														Max. mm	
with 600 mm shoe 4 200 kg CWT monoblock boom 5,7 m + Arm 2,5 m	6,0 m	kg				*5 190	*5 190					*5 280	4 220	6 850	
	4,5 m	kg			*6 610	*6 610	*5 680	5 130	*5 360	3 590		*5 360	3 520	7 590	
	3,0 m	kg			*8 500	7 420	*6 510	4 890	5 420	3 500		4 910	3 180	7 980	
	1,5 m	kg			*10 140	6 940	7 350	4 660	5 300	3 400		4 750	3 050	8 070	
	0 m	kg			*10 880	6 730	7 230	4 500	5 220	3 320		4 870	3 110	7 870	
	-1,5 m	kg	*9 840	*9 840	*10 800	6 690	7 180	4 460				5 350	3 400	7 360	
	-3,0 m	kg	*13 870	13 270	*9 930	6 790	7 260	4 520				*6 520	4 110	6 460	
	-4,5 m	kg	*10 700	*10 700	*7 650	7 070						*6 720	6 150	4 960	
with 600 mm shoe 4 200 kg CWT monoblock boom 5,7 m + Arm 2,9 m	6,0 m	kg				*4 800	*4 800					*4 160	3 850	7 300	
	4,5 m	kg				*5 340	5 200	*5 040	3 650			*4 110	3 270	8 000	
	3,0 m	kg			*7 950	7 570	*6 210	4 950	*5 420	3 540		*4 220	2 970	8 370	
	1,5 m	kg			*9 750	7 040	*7 120	4 700	5 320	3 420		4 440	2 860	8 460	
	0 m	kg	*4 920	*4 920	*10 740	6 760	7 260	4 520	5 220	3 330		4 540	2 910	8 270	
	-1,5 m	kg	*9 380	*9 380	*10 890	6 680	7 170	4 450	5 190	3 300		4 930	3 140	7 780	
	-3,0 m	kg	*14 700	13 140	*10 260	6 740	7 210	4 480				5 850	3 710	6 940	
	-4,5 m	kg	*11 950	*11 950	*8 490	6 950						*6 490	5 150	5 570	
with 600 mm shoe 4 200 kg CWT monoblock boom 5,7 m + Arm 3,9 m	6,0 m	kg						*4 010	3 820			*3 230	3 210	8 250	
	4,5 m	kg						*4 270	3 740			*3 220	2 790	8 870	
	3,0 m	kg			*6 410	*6 410	*5 300	5 080	*4 750	3 600	*3 980	2 670	*3 320	2 560	9 210
	1,5 m	kg	*8 150	*8 150	*8 470	7 250	*6 350	4 770	*5 320	3 440	4 040	2 590	*3 530	2 460	9 280
	0 m	kg	*6 940	*6 940	*9 990	6 790	*7 240	4 520	5 200	3 300	3 970	2 530	3 900	2 480	9 110
	-1,5 m	kg	*9 110	*9 110	*10 700	6 570	7 100	4 370	5 100	3 210			4 150	2 630	8 680
	-3,0 m	kg	*12 770	12 700	*10 640	6 540	7 050	4 330	5 090	3 200			4 710	2 980	7 930
	-4,5 m	kg	*14 180	12 980	*9 720	6 650	*7 120	4 410					5 990	3 760	6 770
with 600 mm shoe 4 200 kg CWT 2-piece boom 5,57 m + Arm 2,5 m	6,0 m	kg			*7 590	*7 590	*6 670	5 260				*5 660	4 300	6 740	
	4,5 m	kg	*12 070	*12 070	*8 580	8 020	*6 990	5 100				5 500	3 550	7 490	
	3,0 m	kg			*9 960	7 410	*7 530	4 860	5 400	3 470		4 980	3 200	7 880	
	1,5 m	kg			*10 850	6 900	7 400	4 620	5 280	3 360		4 820	3 070	7 970	
	0 m	kg			*10 690	6 670	7 220	4 460	5 210	3 290		4 950	3 140	7 770	
	-1,5 m	kg	*10 430	*10 430	*9 580	6 630	7 170	4 420				*5 420	3 440	7 250	
	-3,0 m	kg			*7 450	6 750	*5 400	4 510				*4 770	4 210	6 340	
	-4,5 m	kg													
with 600 mm shoe 4 200 kg CWT 2-piece boom 5,57 m + Arm 2,9 m	6,0 m	kg			*6 440	*6 440	*6 350	5 350				*4 140	3 910	7 200	
	4,5 m	kg	*8 270	*8 270	*8 130	*8 130	*6 730	5 190	5 560	3 610		*4 050	3 290	7 900	
	3,0 m	kg			*9 570	7 570	*7 330	4 930	5 450	3 510		*4 140	2 990	8 280	
	1,5 m	kg			*10 690	7 010	7 450	4 660	5 310	3 380		*4 400	2 870	8 360	
	0 m	kg	*5 400	*5 400	*10 830	6 700	7 240	4 480	5 210	3 290		4 610	2 920	8 170	
	-1,5 m	kg	*9 860	*9 860	*9 990	6 620	7 160	4 400	5 190	3 270		5 020	3 170	7 680	
	-3,0 m	kg	*10 440	*10 440	*8 170	6 690	*6 060	4 450				*4 740	3 770	6 820	
	-4,5 m	kg													
with 600 mm shoe 4 200 kg CWT 2-piece boom 5,57 m + Arm 3,9 m	6,0 m	kg					*4 850	*4 850	*4 350	3 800		*3 210	*3 210	8 160	
	4,5 m	kg			*5 070	*5 070	*5 430	5 370	*5 090	3 720		*3 180	2 800	8 790	
	3,0 m	kg	*12 130	*12 130	*8 360	7 940	*6 650	5 070	5 530	3 570	*3 710	2 630	*3 260	2 570	9 120
	1,5 m	kg	*9 430	*9 430	*9 890	7 240	*7 370	4 750	5 350	3 410	4 030	2 560	*3 460	2 470	9 200
	0 m	kg	*7 400	*7 400	*10 700	6 750	7 270	4 480	5 190	3 260	3 960	2 500	*3 810	2 480	9 030
	-1,5 m	kg	*9 530	*9 530	*10 530	6 510	7 090	4 330	5 100	3 180			4 200	2 640	8 590
	-3,0 m	kg	*13 220	12 600	*9 420	6 480	*7 000	4 290	5 100	3 180			*4 660	3 010	7 840
	-4,5 m	kg			*7 170	6 620	*5 160	4 390					*4 170	3 830	6 660

- Notes:
1. Machine in "Fine Mode-F" (Power Boost), for lifting capacities.
  2. The above loads are in compliance with SAE and ISO 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.

# LIFTING CAPACITY (At the arm and without bucket)

Note: For lifting capacity including bucket, simply subtract actual weight of the direct fit bucket or the bucket with quick fit from the following values.

## EC210B NLC

 Across undercarriage  Along undercarriage	Lifting hook related to ground level	3,0 m		4,5 m		6,0 m		7,5 m		9,0 m		Max. reach			
															Max. mm
with 600 mm shoe 4 200 kg CWT monoblock boom 5,7 m + Arm 2,5 m	6,0 m kg					*5 190	4 790						*5 280	3 820	6 850
	4,5 m kg			*6 610	*6 610	*5 680	4 630	4 900	3 240				4 800	3 170	7 590
	3,0 m kg			*8 500	6 640	*6 510	4 400	4 810	3 150				4 360	2 860	7 980
	1,5 m kg			10 130	6 180	6 520	4 170	4 690	3 050				4 210	2 740	8 070
	0 m kg			9 880	5 970	6 350	4 020	4 610	2 980				4 310	2 790	7 870
	-1,5 m kg	*9 840	*9 840	9 840	5 930	6 300	3 980						4 730	3 050	7 360
	-3,0 m kg	*13 870	11 540	*9 930	6 030	6 370	4 040						5 750	3 680	6 460
	-4,5 m kg	*10 700	*10 700	*7 650	6 300								*6 720	5 500	4 960
with 600 mm shoe 4 200 kg CWT monoblock boom 5,7 m + Arm 2,9 m	6,0 m kg					*4 800	*4 800						*4 160	3 480	7 300
	4,5 m kg					*5 340	4 710	4 960	3 300				*4 110	2 950	8 000
	3,0 m kg			*7 950	6 780	*6 210	4 460	4 850	3 190				4 070	2 670	8 370
	1,5 m kg			*9 750	6 270	6 570	4 220	4 720	3 070				3 940	2 570	8 460
	0 m kg	*4 920	*4 920	9 910	6 000	6 370	4 040	4 620	2 980				4 020	2 600	8 270
	-1,5 m kg	*9 380	*9 380	9 820	5 920	6 290	3 970	4 590	2 950				4 360	2 810	7 780
	-3,0 m kg	*14 700	11 410	9 890	5 980	6 330	4 000						5 160	3 320	6 940
	-4,5 m kg	*11 950	11 770	*8 490	6 190								*6 490	4 610	5 570
with 600 mm shoe 4 200 kg CWT monoblock boom 5,7 m + Arm 3,9 m	6,0 m kg							*4 010	3 470				*3 230	2 900	8 250
	4,5 m kg							*4 270	3 380				*3 220	2 510	8 870
	3,0 m kg			*6 410	*6 410	*5 300	4 590	*4 750	3 240	3 660	2 390		*3 320	2 300	9 210
	1,5 m kg	*8 150	*8 150	*8 470	6 470	*6 350	4 280	4 740	3 080	3 580	2 320		3 410	2 200	9 280
	0 m kg	*6 940	*6 940	9 970	6 030	6 380	4 040	4 590	2 950	3 520	2 260		3 450	2 210	9 110
	-1,5 m kg	*9 110	*9 110	9 720	5 820	6 220	3 890	4 500	2 860				3 670	2 340	8 680
	-3,0 m kg	*12 770	10 990	9 680	5 780	6 170	3 850	4 490	2 850				4 160	2 650	7 930
	-4,5 m kg	*14 180	11 250	*9 720	5 890	6 260	3 930						5 270	3 350	6 770
with 600 mm shoe 4 200 kg CWT 2-piece boom 5,57 m + Arm 2,5 m	6,0 m kg			*7 590	*7 590	*6 670	4 760						*5 660	3 880	6 740
	4,5 m kg	*12 070	*12 070	*8 580	7 210	*6 990	4 610						4 880	3 200	7 490
	3,0 m kg			*9 960	6 630	6 770	4 370	4 790	3 110				4 420	2 870	7 880
	1,5 m kg			10 120	6 130	6 500	4 130	4 670	3 010				4 260	2 750	7 970
	0 m kg			9 850	5 900	6 330	3 980	4 600	2 940				4 370	2 800	7 770
	-1,5 m kg	*10 430	*10 430	*9 580	5 870	6 280	3 930						4 820	3 080	7 250
	-3,0 m kg			*7 450	5 990	*5 400	4 020						*4 770	3 760	6 340
	-4,5 m kg														
with 600 mm shoe 4 200 kg CWT 2-piece boom 5,57 m + Arm 2,9 m	6,0 m kg			*6 440	*6 440	*6 350	4 850						*4 140	3 530	7 200
	4,5 m kg	*8 270	*8 270	*8 130	7 370	*6 730	4 690	4 940	3 260				*4 050	2 960	7 900
	3,0 m kg			*9 570	6 780	6 840	4 430	4 830	3 150				4 120	2 680	8 280
	1,5 m kg			10 240	6 230	6 560	4 180	4 700	3 030				3 990	2 570	8 360
	0 m kg	*5 400	*5 400	9 890	5 390	6 350	3 990	4 600	2 940				4 070	2 610	8 170
	-1,5 m kg	*9 860	*9 860	9 800	5 850	6 270	3 920	4 580	2 920				4 430	2 830	7 680
	-3,0 m kg	*10 440	*10 440	*8 170	5 930	*6 060	3 970						*4 740	3 370	6 820
	-4,5 m kg														
with 600 mm shoe 4 200 kg CWT 2-piece boom 5,57 m + Arm 3,9 m	6,0 m kg					*4 850	*4 850	*4 350	3 440				*3 210	2 920	8 160
	4,5 m kg			*5 070	*5 070	*5 430	4 870	5 060	3 360				*3 180	2 520	8 790
	3,0 m kg	*12 130	*12 130	*8 360	7 130	*6 650	4 580	4 910	3 210	3 640	2 360		*3 260	2 290	9 120
	1,5 m kg	*9 490	*9 490	*9 890	6 460	6 660	4 260	4 730	3 050	3 570	2 280		3 440	2 200	9 200
	0 m kg	*7 400	*7 400	9 960	5 980	6 370	4 000	4 580	2 910	3 500	2 220		3 480	2 210	9 030
	-1,5 m kg	*9 530	*9 530	9 690	5 750	6 200	3 840	4 490	2 830				3 710	2 350	8 590
	-3,0 m kg	*13 220	10 880	*9 420	5 720	6 160	3 810	4 490	2 830				4 230	2 670	7 840
	-4,5 m kg			*7 170	5 850	*5 160	3 910						*4 170	3 420	6 660

- Notes:
- Machine in "Fine Mode-F" (Power Boost), for lifting capacities.
  - The above loads are in compliance with SAE and ISO Hydraulic Excavator Lifting Capacity Standards.
  - Rated loads do not exceed 87% of hydraulic lifting capacity or 75% of tipping load.
  - Rated loads marked with an asterisk (\*) are limited by hydraulic capacity rather than tipping load.

## STANDARD EQUIPMENT

### Engine

Turbocharged, 4 stroke diesel engine with water cooling, direct injection and charged air cooler that meets EU Step 2 requirements  
3-stage air filter with indicator, including pre-cleaner  
Block heater, 240 V  
Air intake heater  
Electric engine shut-off  
Fuel filter and water separator  
Fuel filler pump: 50 l/min with automatic shut-off  
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 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  
– Slew priority  
Boom and arm regeneration valves  
Slew anti-rebound valves  
Boom and arm holding valves  
Multi-stage filtering system  
Cylinder cushioning  
Cylinder contamination seals

Control joystick, with 5 switches each  
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  
Counterweight, 4 200 kg  
Undercover (2,3 mm)

### Cab and interior

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

– Door locks  
– Tinted glass  
– 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  
Sun shield, front, roof, rear  
Master ignition key

### Undercarriage

Hydraulic track adjusters  
Greased and sealed track chain  
Track guards  
Undercover (heavy duty 10 mm)

### Service

Tool kit, daily maintenance

## ALTERNATIVE EQUIPMENT

### 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

### Digging equipment

Boom: 5,7 m monoblock  
5,57 m 2-piece  
Arm: 2,5 / 2,9 / 3,9 m

### Undercarriage

LC (Long crawler)  
NLC (Narrow long crawler)

## OPTIONAL EQUIPMENT (Standard in certain markets)

### Engine

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  
Control joystick, with 3 switches each  
Pump flow control for hammer & shears  
Hydraulic piping  
– Hammer & shears:  
1 pump flow  
2 pump flow  
Additional return filter  
Extra piping for slope & rotator  
– Slope & rotator  
– Grapple  
– Oil leak (drain) line  
– Quick fit piping  
Volvo hydraulic quick-fit, S1 size  
Hydraulic oil, ISO VG 32  
Hydraulic oil, ISO VG 68  
Hydraulic oil, biodegradable 32  
Hydraulic oil, biodegradable 46  
Boom floating function

### Superstructure

Undercover (heavy duty 4,5 mm)

### Cab and interior

Falling object guard (FOG)  
Cab mounted falling object protective structures (FOPS)  
Rain shield, front  
Sunlight protection, roof (steel)  
Safety net for front window  
Lower wiper  
Anti-vandalism kit  
Specific key

### Digging equipment

Long last bushing

### Undercarriage

Full track guards

### Service

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

Construction Equipment

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KOR