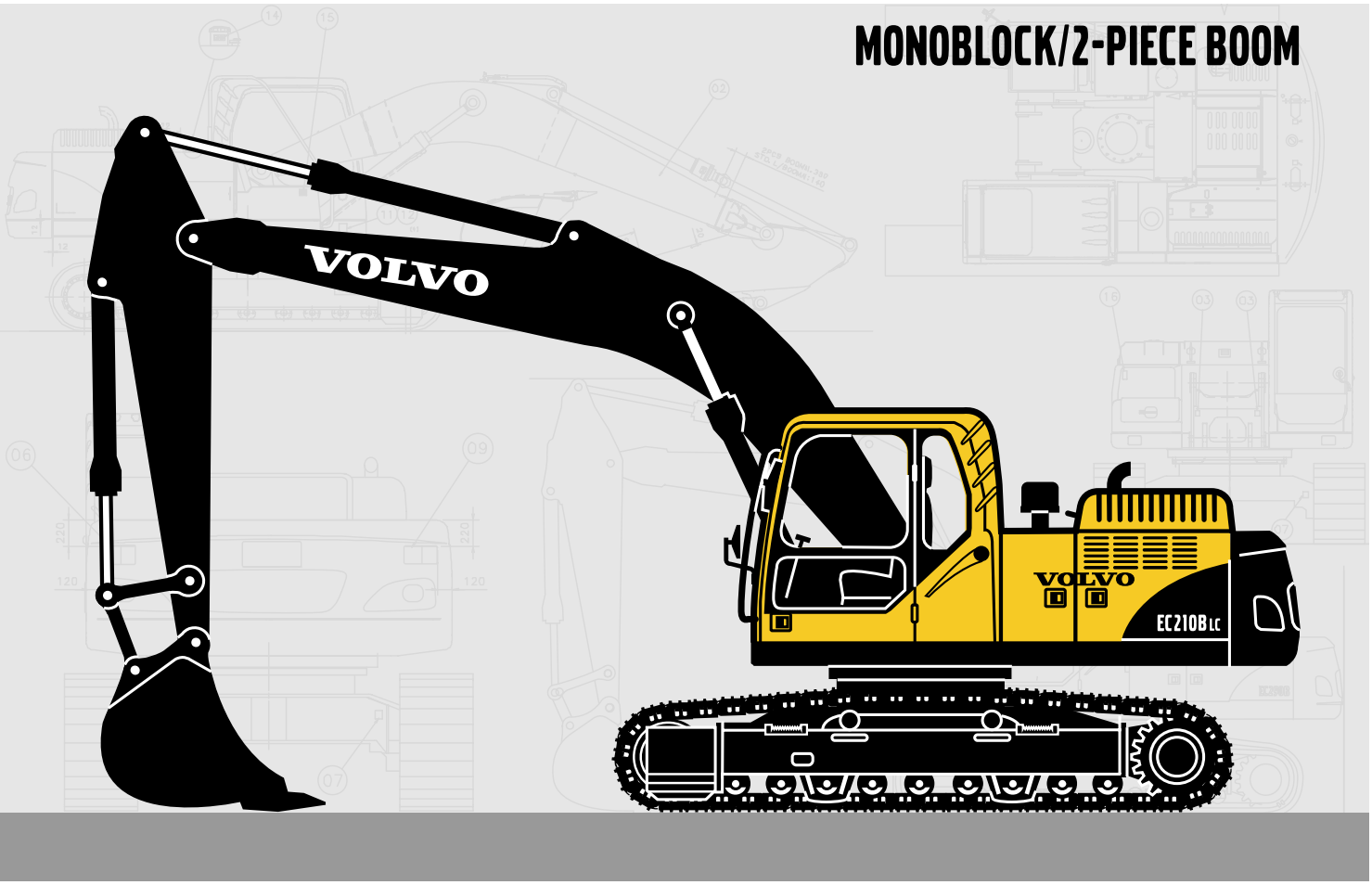
VOLVO EXCAVATOR

EC210B LC
EC210B NC/EC210B NLC

MONOBLOCK/2-PIECE BOOM



- Engine power, gross: 119 kW (159 hp)
- Operating weight:
  LC: 21,3 ~ 22,3 t
  NC: 20,9 ~ 21,8 t
  NLC: 21,5 ~ 22,2 t
- Buckets (SAE):
  750 ~ 1 550 l

- Turbocharged VOLVO diesel engine with direct injection and charged air cooler meets EU Step 2 requirements
- 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
- Undercarriage
  – LC: Long undercarriage for excellent stability
  – NC: Medium width for good stability and maneuvering
  – 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 a charged air cooler that easily meets EU Step 2 requirements.
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 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:

Make	VOLVO
Model	D6D EFE2
Power output at	32 r/s (1 900 rpm)
Net (ISO 9249/ DIN 6271)	107 kW (145 ps / 143 hp)
Gross (SAE J1995)	119 kW (162 ps / 159 hp)
Max. torque	647 N·m at 1 425 rpm
No. of cylinders	6
Displacement	5,7 l
Bore	98 mm
Stroke	126 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	150 Ah
Alternator	28 V / 80 A

SERVICE REFILL CAPACITIES

Fuel tank	
LC	350 l
NC	350 l
NLC	335 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

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	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

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, double grouser	700 mm
Shoe width, triple grouser	600 / 700 / 800 / 900 mm
No. of bottom rollers	2 x 9
No. of top rollers	2 x 2

NC

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

NLC

No. of track shoes	2 x 49
Link pitch	190 mm
Shoe width, triple grouser	500 / 600 / 700 mm
No. of bottom 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 slew 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 excavation.

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

Slew priority: Gives priority to slew 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 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	ø125 x 1 235 mm
1st boom of 2-piece boom	2
Bore x Stroke	ø125 x 1 235 mm
2nd boom of 2-piece boom	1
Bore x Stroke	ø160 x 1 070 mm
Arm	1
Bore x Stroke	ø135 x 1 540 mm
Bucket	1
Bore x Stroke	ø120 x 1 065 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 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 consoles 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 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 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
Double grouser	700 mm	22 090 kg	39,3 kPa	3 090 mm

● Narrow 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

● Narrow long crawler machine with 5,7 m monoblock boom, 2,5 m arm, 920 l (740 kg) bucket and 4 800 kg counterweight.

Description	Shoe width	Operating weight	Ground pressure	Overall width
Triple grouser	500 mm	21 500 kg	53,5 kPa	2 540 mm
	600 mm	21 700 kg	45,0 kPa	2 640 mm
	700 mm	22 150 kg	39,4 kPa	2 740 mm

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: 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/m³	l	1 550	1 450	1 250
GP bucket 1,8 t/m³	l	1 350	1 275	1 100
RB bucket 1,8 t/m³	l	1 200	1 125	950
RB bucket 2,0 t/m³	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/m³	l	1 475	1 375	1 175
GP bucket 1,8 t/m³	l	1 300	1 200	1 025
RB bucket 1,8 t/m³	l	1 300	1 200	1 025
RB bucket 2,0 t/m³	l	1 150	1 075	900

● Max. permitted sizes for direct fit buckets: Narrow 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/m³	l	1 375	1 300	1 125
GP bucket 1,8 t/m³	l	1 200	1 125	975
RB bucket 1,8 t/m³	l	1 075	1 000	850
RB bucket 2,0 t/m³	l	1 000	925	800

● Max. permitted sizes for quick fit buckets: Narrow 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/m³	l	1 325	1 225	1 050
GP bucket 1,8 t/m³	l	1 150	1 075	925
RB bucket 1,8 t/m³	l	1 025	950	800
RB bucket 2,0 t/m³	l	950	875	750

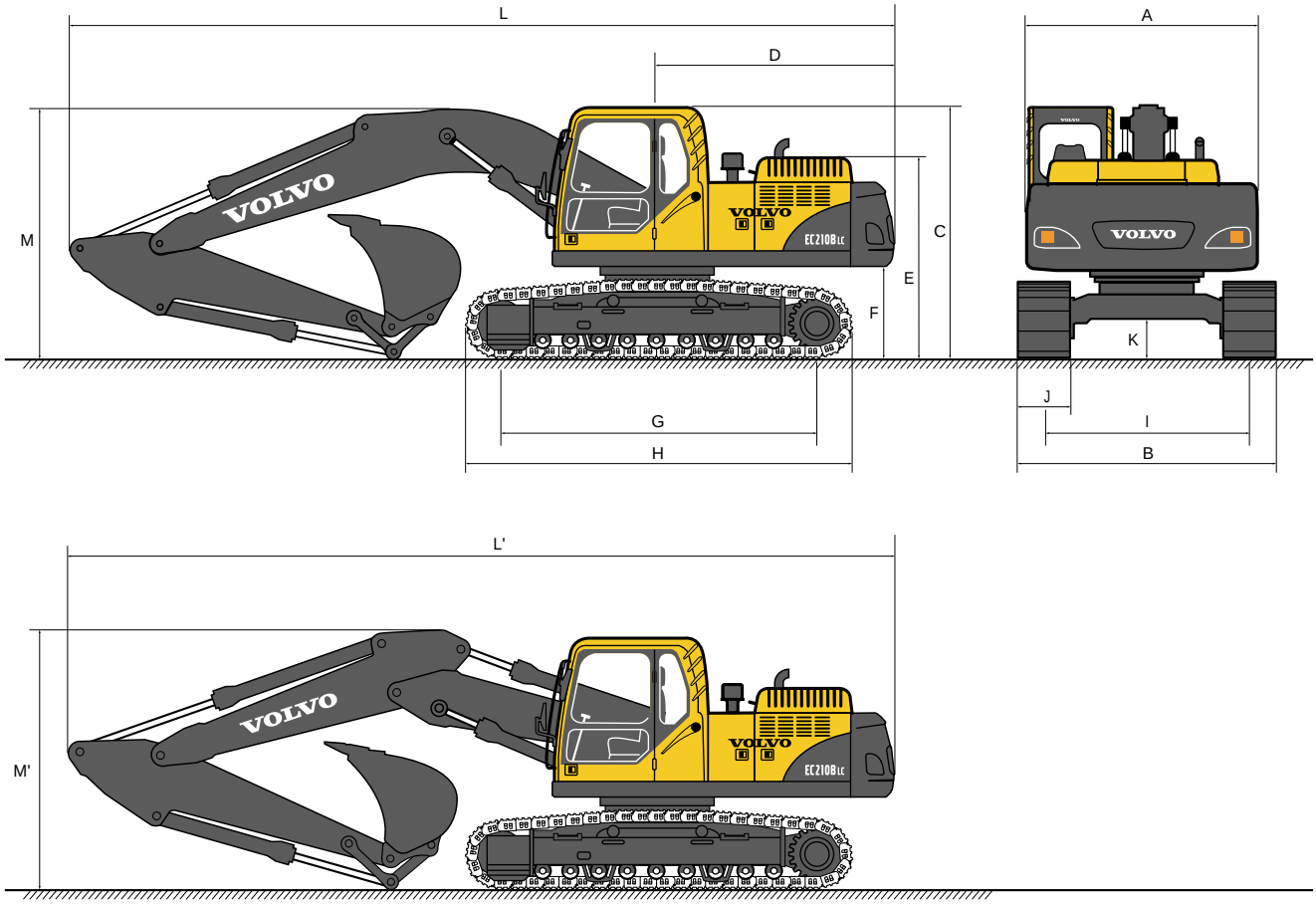
● Max. permitted sizes for direct fit buckets: Narrow long crawler machine with counterweight 4 800 kg

Description	Unit	5,7 m Boom		
		2,5 m Arm	2,9 m Arm	3,9 m Arm
GP bucket 1,5 t/m³	l	1 375	1 300	1 125
GP bucket 1,8 t/m³	l	1 200	1 125	975
RB bucket 1,8 t/m³	l	1 075	1 000	850
RB bucket 2,0 t/m³	l	1 000	925	800

● Max. permitted sizes for quick fit buckets: Narrow long crawler machine with counterweight 4 800 kg

Description	Unit	5,7 m Boom		
		2,5 m Arm	2,9 m Arm	3,9 m Arm
GP bucket 1,5 t/m³	l	1 325	1 225	1 050
GP bucket 1,8 t/m³	l	1 150	1 075	925
RB bucket 1,8 t/m³	l	1 025	950	800
RB bucket 2,0 t/m³	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	9 650	9 590	9 570
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

DIMENSIONS

● Narrow crawler machine

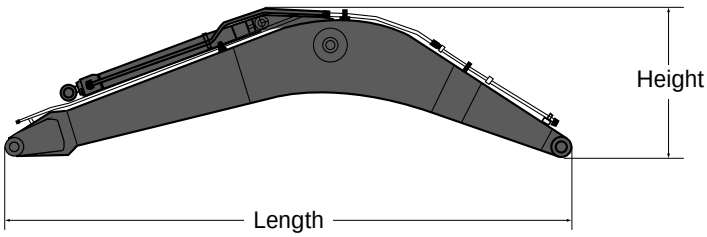
Description	Unit	5,7 m Boom		
		2,5 m Arm	2,9 m Arm	3,9 m Arm
A. Overall width of superstructure	mm	2 700	2 700	2 700
B. Overall width	mm	2 800	2 800	2 800
C. Overall height of cab	mm	2 930	2 930	2 930
D. Tail slew radius	mm	2 750	2 750	2 750
E. Overall height of engine hood	mm	2 330	2 330	2 330
F. Counterweight 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	9 650	9 590	9 570
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

● 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	2 540	2 540	2 540
B. Overall width	mm	2 540	2 540	2 540
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	2 040	2 040	2 040
J. Shoe width	mm	500	500	500
K. Min. ground clearance *	mm	460	460	460
L. Overall length	mm	9 650	9 590	9 570
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

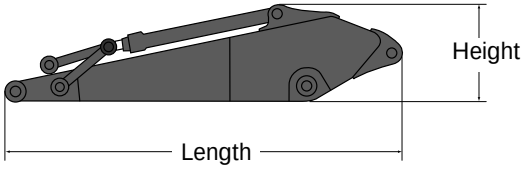
● Boom



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

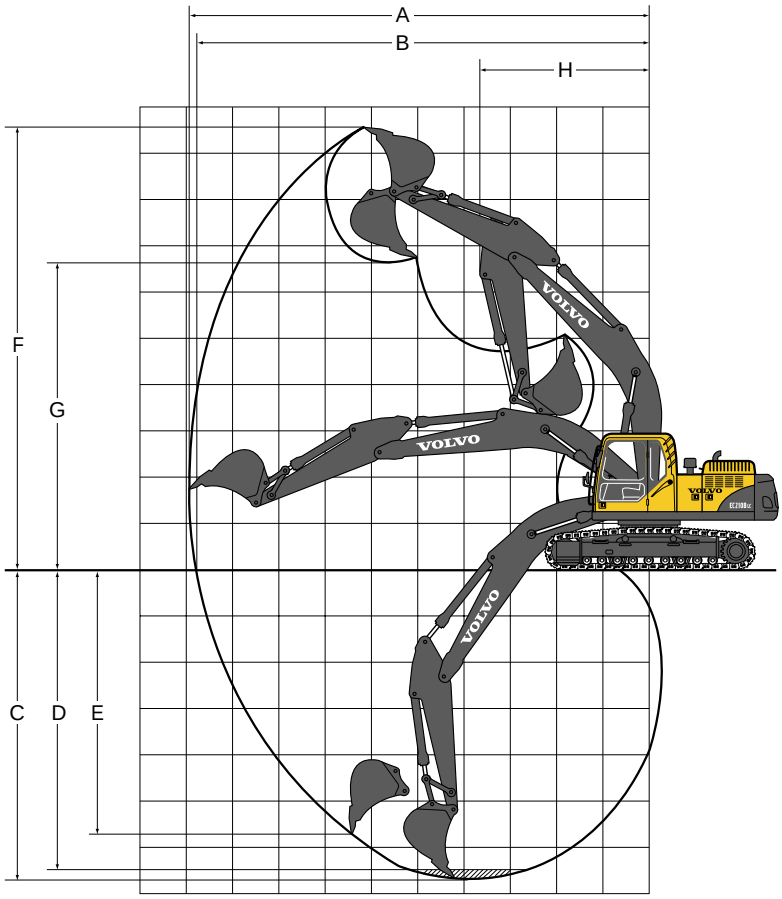
● Arm



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



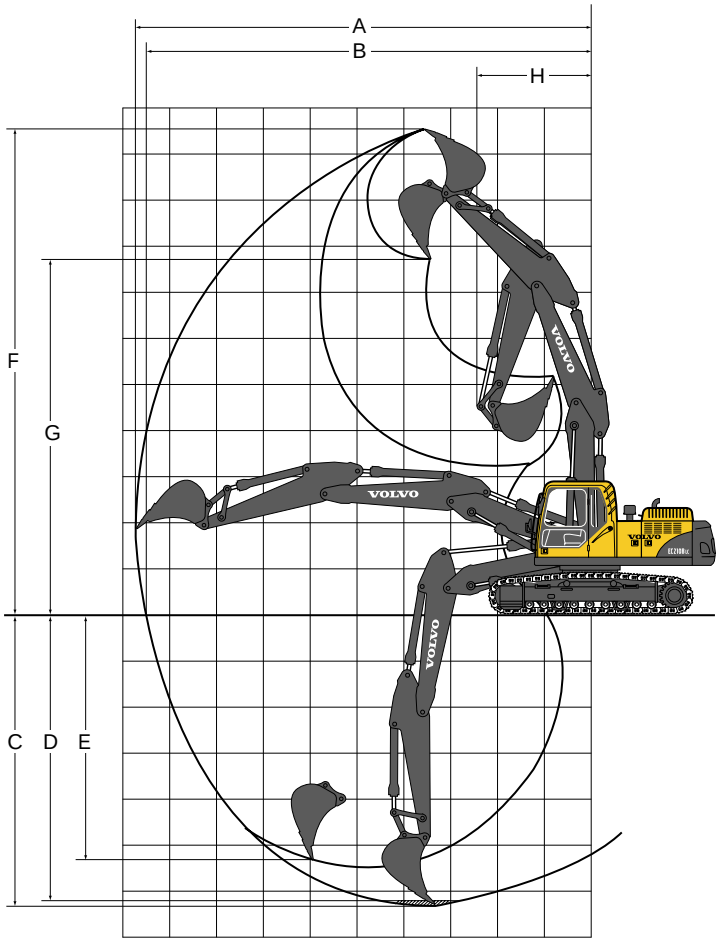
- 5,7 m monoblock boom with direct fit bucket

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.

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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

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.

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 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 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.

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 NC

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

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.

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 NC

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 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:
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.

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

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.
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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 500 mm shoe 4 800 kg CWT 2-piece boom 5,57 m + arm 2,5 m	6,0 m kg			*7 590	7 540	*6 670	4 750					*5 660	3 890	6 740
	4,5 m kg	*12 070	*12 070	*8 580	7 140	*6 990	4 600					*5 550	3 210	7 490
	3,0 m kg			*9 960	6 570	*7 530	4 360	5 640	3 130			5 210	2 880	7 880
	1,5 m kg			*10 850	6 090	7 730	4 130	5 530	3 020			5 040	2 760	7 970
	0 m kg			*10 690	5 860	7 550	3 980	5 450	2 950			5 180	2 820	7 770
	-1,5 m kg	*10 430	*10 430	*9 580	5 830	*7 220	3 940					*5 420	3 090	7 250
	-3,0 m kg			*7 450	5 940	*5 400	4 030					*4 770	3 770	6 340
	-4,5 m kg													
with 500 mm shoe 4 800 kg CWT 2-piece boom 5,57 m + arm 2,9 m	6,0 m kg			*6 440	*6 440	*6 340	4 840					*4 140	3 540	7 200
	4,5 m kg	*8 270	*8 270	*8 130	7 290	*6 730	4 680	*5 700	3 270			*4 050	2 980	7 900
	3,0 m kg			*9 570	6 720	*7 330	4 430	5 690	3 170			*4 140	2 700	8 280
	1,5 m kg			*10 690	6 180	7 790	4 180	5 560	3 050			*4 400	2 590	8 360
	0 m kg	*5 400	*5 400	*10 830	5 890	7 580	4 000	5 460	2 960			4 830	2 630	8 170
	-1,5 m kg	*9 860	*9 860	*9 990	5 810	*7 470	3 930	5 430	2 940			*5 210	2 850	7 680
	-3,0 m kg	*10 440	*10 440	*8 170	5 890	*6 060	3 970					*4 730	3 380	6 820
	-4,5 m kg													
with 500 mm shoe 4 800 kg CWT 2-piece boom 5,57 m + arm 3,9 m	6,0 m kg					*4 850	*4 850	*4 350	3 450			*3 210	2 940	8 160
	4,5 m kg			*5 070	*5 070	*5 430	4 850	*5 090	3 370			*3 180	2 530	8 790
	3,0 m kg	*12 130	*12 130	*8 360	7 060	*6 650	4 570	*5 660	3 230	*3 710	2 370	*3 260	2 310	9 120
	1,5 m kg	*9 430	*9 430	*9 890	6 400	*7 370	4 260	5 590	3 060	4 220	2 300	*3 460	2 220	9 200
	0 m kg	*7 400	*7 400	*10 700	5 930	7 600	4 000	5 430	2 920	*3 990	2 240	*3 810	2 230	9 030
	-1,5 m kg	*9 530	*9 530	*10 530	5 710	7 420	3 850	5 340	2 840			4 410	2 360	8 590
	-3,0 m kg	*13 220	10 600	*9 420	5 680	*7 000	3 810	*5 130	2 840			*4 660	2 690	7 840
	-4,5 m kg			*7 170	5 810	*5 160	3 910					*4 170	3 430	6 660

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.
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4. 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, and pre-cleaner
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
Hose rupture valve: boom
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:
– LC: 4 200 kg
– NC: 4 200 kg
– NLC: 4 800 kg
Undercover (heavy duty 4,5 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
Control joystick, with 5 switches each
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
LC: 700 mm track shoes with double grousers
600 / 700 / 800 / 900 mm track shoes with triple grousers
NC: 600 / 700 / 800 / 900 mm track shoes with triple grousers
NLC: 500 / 600 / 700 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

OPTIONAL EQUIPMENT (Standard in certain markets)

Engine
Block heater:
– LC: 240 V
– NC: 240 V
– NLC: 120 V / 240 V
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: dipper arm
Hydraulic piping
– Hammer & shears:
1 pump or 2 pump flow
Pump flow control for hammer & shears
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

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

Undercarriage
Full track guards (except NC)

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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