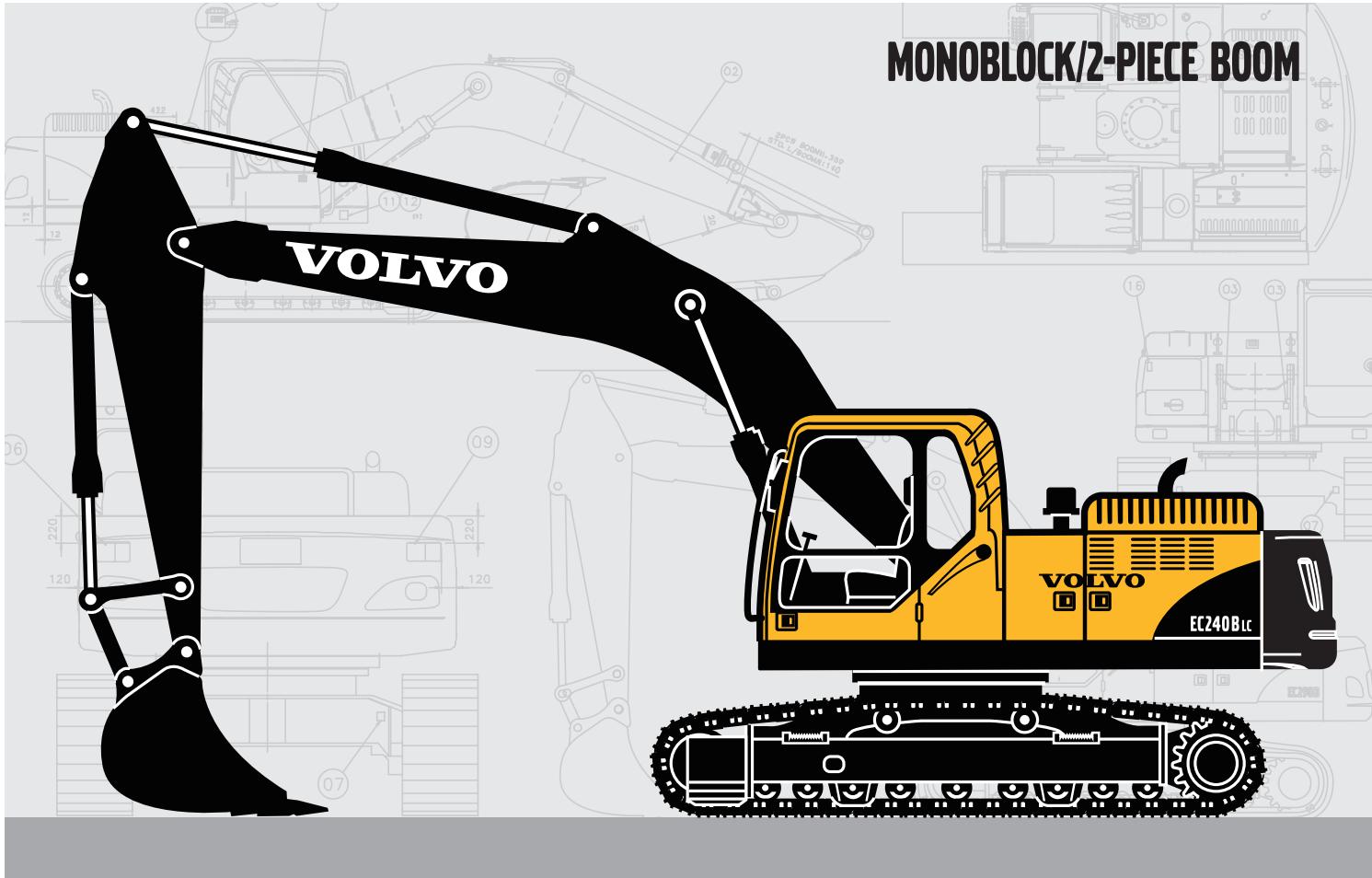


VOLVO EXCAVATOR

EC240B LC

EC240B NLC



- **Engine power, gross:**
134 kW (180 hp)

- **Operating weight:**
LC: 24.2 ~ 25.8 t
NLC: 24.8 ~ 25.7 t

- Turbocharged VOLVO diesel engine with water cooling, direct injection and charged air cooler
- Contronics, Volvo's advanced mode selection system and electronically controlled system

- 2 variable displacement axial piston pumps. Independent and simultaneous movements of the digging equipment are controlled by "Integrated Work Mode System".
- 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: Longer undercarriage for excellent stability
 - NLC: Narrow width for easy transportation
- Auxiliary hydraulic valve is standard
- Prepared for a number of optional items

MORE CARE. BUILT IN.





ENGINE

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

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.....	D7D
Power output at.....	33 r/s (2,000 rpm)
Net (ISO 9249/ SAE J1349)	125 kW (170 ps / 168 hp)
Gross (SAE J1995).....	134 kW (182 ps / 180 hp)
Max. torque	750 N·m at 1,400 rpm
No. of cylinders.....	6
Displacement	7.1 l
Bore.....	108 mm
Stroke.....	130 mm



HYDRAULIC SYSTEM

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

The following important functions are included in the system:

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

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

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

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

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

Power boost: All digging and lifting forces are increased.

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

Power Max: All function speeds are increased.

Main pump:

Type	2 x variable displacement axial piston pumps
Maximum flow	2 x 230 l/min

Pilot pump:

Type	Gear pump
Maximum flow	1 x 20 l/min

Hydraulic motors:

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

Relief valve setting:

Implement	31.4 / 34.3 Mpa (320 / 350 kg/cm ²)
Travel circuit.....	34.3 Mpa (350 kg/cm ²)
Swing circuit	26.5 Mpa (270 kg/cm ²)
Pilot circuit.....	3.9 Mpa (40 kg/cm ²)

Hydraulic cylinders:

Monoblock boom	2
Bore x Stroke	ø135 x 1,345 mm
1st boom of 2-piece boom	2
Bore x Stroke	ø135 x 1,345 mm
2nd boom of 2-piece boom.....	1
Bore x Stroke	ø160 x 1,230 mm
Arm.....	1
Bore x Stroke	ø140 x 1,665 mm
Bucket	1
Bore x Stroke	ø130 x 1,150 mm



ELECTRICAL SYSTEM

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

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

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



UNDERCARRIAGE

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

LC

No. of track pads	2 x 51
Link pitch	190 mm
Shoe width, triple grouser	600 / 700 / 800 / 900 mm
Shoe width, double grouser	700 mm
No. of bottom rollers.....	2 x 9
No. of top rollers.....	2 x 2

NLC

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



SERVICE REFILL CAPACITIES

Fuel tank	380 l
Hydraulic system, total.....	320 l
Hydraulic tank	190 l
Engine oil.....	32 l
Engine coolant	44 l
Swing reduction unit	12 l
Travel reduction unit	2 x 5.2 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	209 kN (21,300 kg)
Max. travel speed	3.2 / 5.5 km/h
Gradeability	35° (70%)



CAB

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

Integrated air conditioning and heating system:

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

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

Sound Level:

Sound level in cab

according to ISO 6396 LpA 73 dB(A)

External sound level

according to ISO 6395

and EU Directive 2000/14/EC LwA 106 dB(A)



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	11.4 rpm
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GROUND PRESSURE

- Long crawler machine with 6.0 m monoblock boom, 2.97 m arm, 1,100 l (820 kg) bucket and 4,600 kg counterweight.

Description	Shoe width	Operating weight	Ground pressure	Overall width
Triple grouser	600 mm	24,200 kg	47.9 kPa (0.49 kg/cm ²)	3,190 mm
	700 mm	24,490 kg	41.5 kPa (0.42 kg/cm ²)	3,290 mm
	800 mm	24,780 kg	36.8 kPa (0.37 kg/cm ²)	3,390 mm
	900 mm	25,070 kg	33.1 kPa (0.34 kg/cm ²)	3,490 mm
Double grouser	700 mm	24,850 kg	42.1 kPa (0.43 kg/cm ²)	3,290 mm

- Long crawler machine with 6.0 m monoblock boom, 2.97 m arm, 1,100 l (820 kg) bucket and 5,300 kg counterweight.

Description	Shoe width	Operating weight	Ground pressure	Overall width
Triple grouser	600 mm	24,900 kg	49.3 kPa (0.50 kg/cm ²)	3,190 mm
	700 mm	25,190 kg	42.7 kPa (0.44 kg/cm ²)	3,290 mm
	800 mm	25,480 kg	37.8 kPa (0.39 kg/cm ²)	3,390 mm
	900 mm	25,770 kg	34.0 kPa (0.35 kg/cm ²)	3,490 mm
Double grouser	700 mm	25,550 kg	43.2 kPa (0.44 kg/cm ²)	3,290 mm

- Narrow long crawler machine with 6.0 m monoblock boom, 2.97 m arm, 1,100 l (820 kg) bucket and 5,300 kg counterweight.

Description	Shoe width	Operating weight	Ground pressure	Overall width
Triple grouser	600 mm	24,800 kg	51.4 kPa (0.52 kg/cm ²)	2,990 mm
	700 mm	25,090 kg	44.6 kPa (0.45 kg/cm ²)	3,090 mm
	800 mm	25,380 kg	39.5 kPa (0.40 kg/cm ²)	3,190 mm
	900 mm	25,670 kg	35.5 kPa (0.36 kg/cm ²)	3,290 mm

BUCKET & ARM COMBINATION

• Volvo K-GP bucket (straight side)

Description			Standard bucket	Reinforced bucket	Wide bucket		
Bucket capacity	SAE		1,100 l	1,100 l	1,350 l		
	CECE		960 l	960 l	1,150 l		
Bucket width	with side cutter		1,340 mm	1,340 mm	1,560 mm		
	without side cutter		1,240 mm	1,240 mm	1,450 mm		
Weight (with side cutter)			820 kg	920 kg	920 kg		
No. of teeth			5	5	6		
Application			Trenching	General purpose	Extreme service		
4,600 kg counterweight	Monoblock boom 6.0 m + arm options	2.5 m	A	A	B		
		2.97 m	A	A	B		
		3.6 m	B	B	C		
5,300 kg counterweight	Monoblock boom 6.0 m + arm options	2.5 m	A	A	A		
		2.97 m	A	A	B		
		3.6 m	A	A	B		

• Volvo HARDOX 400® bucket (curved side)

Description			Direct fit - GP bucket			Quick fit -GP bucket			
Bucket capacity	SAE		1,100 l	1,250 l	1,450 l	1,100 l	1,250 l		
	CECE		990 l	1,120 l	1,300 l	990 l	1,120 l		
Bucket width			1,180 mm	1,310 mm	1,490 mm	1,180 mm	1,310 mm		
Weight			830 kg	900 kg	970 kg	800 kg	870 kg		
No. of teeth			4	5	5	4	5		
Application			Tough condition	Tough condition	Tough condition	Tough condition	Tough condition		
4,600 kg counterweight	Monoblock boom 6.0 m + arm options	2.5 m	A	A	C	A	B		
		2.97 m	A	B	C	B	C		
		3.6 m	B	C	D	B	C		
5,300 kg counterweight	Monoblock boom 6.0 m + arm options	2.5 m	A	A	B	A	A		
		2.97 m	A	A	C	A	B		
		3.6 m	A	B	C	B	C		

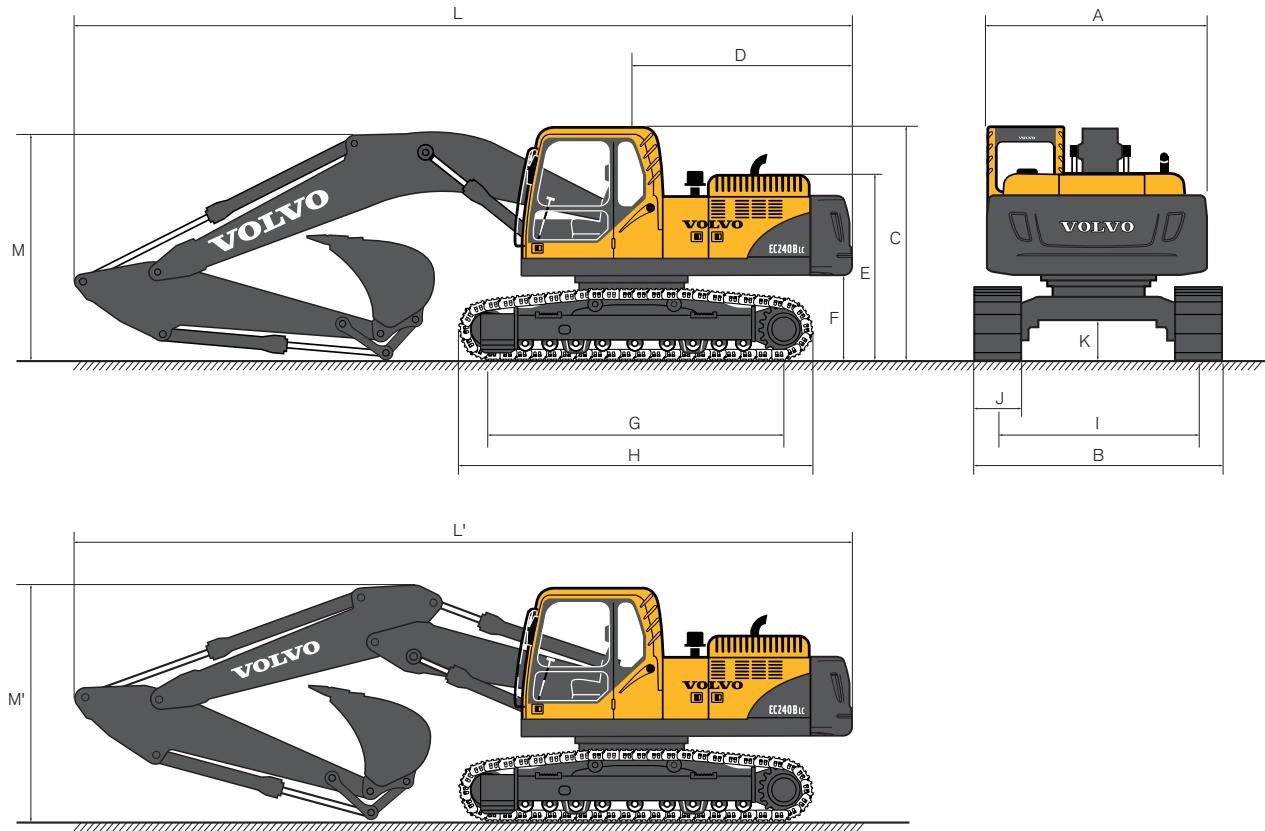
A: Applicable for general purpose up to 2,000 kg/m³

B: Applicable for general purpose up to 1,800 kg/m³

C: Applicable for general purpose up to 1,500 kg/m³

D: Applicable for general purpose up to 1,200 kg/m³

DIMENSIONS



- Long crawler machine

Description	Unit	6.0 m Boom		
		2.5 m Arm	2.97 m Arm	3.6 m Arm
A. Overall width of superstructure	mm	2,840	2,840	2,840
B. Overall width	mm	3,190	3,190	3,190
C. Overall height of cab	mm	2,990	2,990	2,990
D. Tail swing radius	mm	2,940	2,940	2,940
E. Overall height of engine hood	mm	2,390	2,390	2,390
F. Counterweight clearance *	mm	1,080	1,080	1,080
G. Tumbler length	mm	3,850	3,850	3,850
H. Track length	mm	4,650	4,650	4,650
I. Track gauge	mm	2,590	2,590	2,590
J. Shoe width	mm	600	600	600
K. Min. ground clearance *	mm	470	470	470
L. Overall length	mm	10,110	10,020	10,100
L'. Overall length	mm	10,050	10,020	10,030
M. Overall height of boom	mm	3,220	3,040	3,220
M'. Overall height of boom	mm	3,240	3,160	3,380

* Without shoe grouser

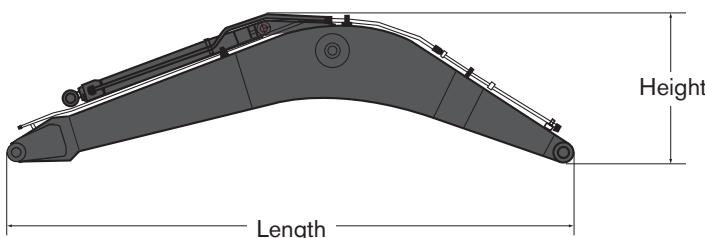
DIMENSIONS

• Narrow long crawler machine

Description	Unit	6.0 m Boom		
		2.5 m Arm	2.97 m Arm	3.6 m Arm
A. Overall width of superstructure	mm	2,840	2,840	2,840
B. Overall width	mm	2,990	2,990	2,990
C. Overall height of cab	mm	2,990	2,990	2,990
D. Tail swing radius	mm	2,940	2,940	2,940
E. Overall height of engine hood	mm	2,390	2,390	2,390
F. Counterweight clearance *	mm	1,080	1,080	1,080
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	470	470	470
L. Overall length	mm	10,110	10,020	10,100
L'. Overall length	mm	10,050	10,020	10,030
M. Overall height of boom	mm	3,220	3,040	3,220
M'. Overall height of boom	mm	3,240	3,160	3,380

* Without shoe grouser

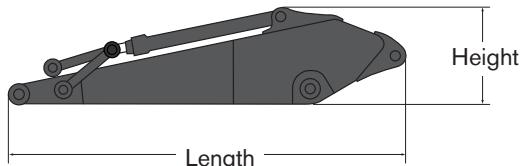
• Boom



Description	Unit	6.0 m	6.0 m HD	5.95 m 2-piece
Length	mm	6,210	6,210	6,160
Height	mm	1,630	1,630	1,510
Width	mm	730	730	730
Weight	kg	2,040	2,130	2,420

* Includes cylinder, pin and piping

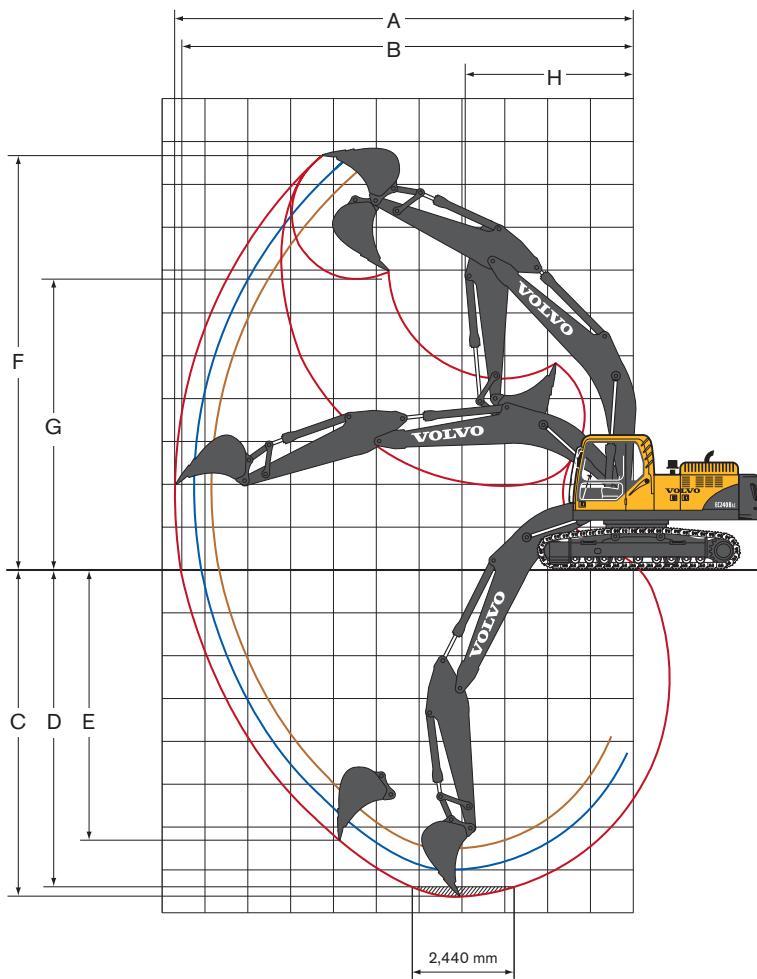
• Arm



Description	Unit	2.5 m	2.97 m	2.97 m HD	3.6 m
Length	mm	3,590	4,060	4,060	4,730
Height	mm	930	920	920	920
Width	mm	480	480	480	480
Weight	kg	1,185	1,210	1,290	1,290

* Includes cylinder, piping and linkage

WORKING RANGES & DIGGING FORCES



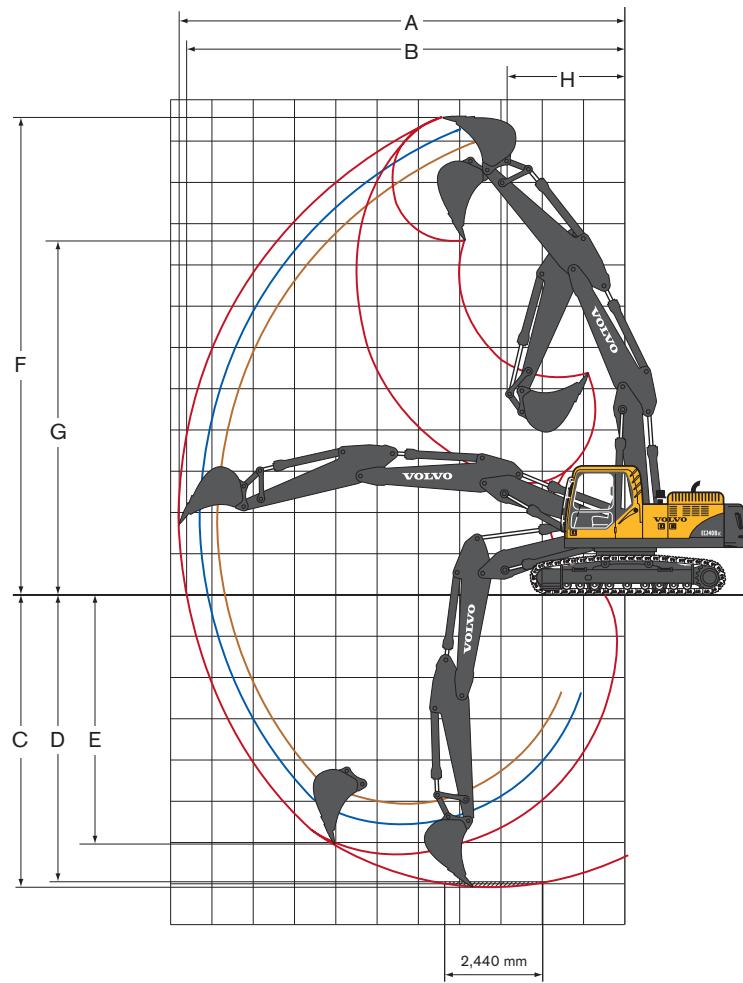
- 6.0 m monoblock boom with direct fit bucket

Description	Unit	6.0 m Boom		
		2.5 m Arm	2.97 m Arm	3.6 m Arm
A. Max. digging reach	mm	9,880	10,260	10,730
B. Max. digging reach on ground	mm	9,690	10,080	10,560
C. Max. digging depth	mm	6,500	6,980	7,600
D. Max. digging depth (2.44 m level)	mm	6,280	6,740	7,380
E. Max. vertical wall digging depth	mm	5,730	5,970	6,270
F. Max. cutting height	mm	9,620	9,690	9,660
G. Max. dumping height	mm	6,700	6,800	6,820
H. Min. front swing radius	mm	3,910	3,890	3,890

- Digging forces with direct fit bucket

Description	Unit	6.0 m Boom		
		2.5 m Arm	2.97 m Arm	3.6 m Arm
Bucket radius	mm	1,540	1,540	1,540
Breakout force – bucket (Normal / Power boost)	SAE	kN	143.2 / 156.9	143.2 / 156.9
		kg	14,600 / 16,000	14,600 / 16,000
Breakout force – bucket (Normal / Power boost)	ISO	kN	160.8 / 175.5	160.8 / 175.5
		kg	16,400 / 17,900	16,400 / 17,900
Tearout force – arm (Normal / Power boost)	SAE	kN	125.2 / 137.0	108.8 / 118.7
		kg	12,770 / 13,970	11,100 / 12,100
Tearout force – arm (Normal / Power boost)	ISO	kN	129.0 / 141.1	111.1 / 121.6
		kg	13,160 / 14,390	11,330 / 12,400
Rotation angle, bucket	deg	177	177	177

WORKING RANGES & DIGGING FORCES



- 5.95 m 2-piece boom with direct fit bucket

Description	Unit	5.95 m 2-piece boom		
		2.5 m Arm	2.97 m Arm	3.6 m Arm
A. Max. digging reach	mm	9,890	10,290	10,780
B. Max. digging reach on ground	mm	9,710	10,110	10,610
C. Max. digging depth	mm	6,040	6,480	7,050
D. Max. digging depth (2.44 m level)	mm	5,930	6,380	6,950
E. Max. vertical wall digging depth	mm	5,110	5,590	6,020
F. Max. cutting height	mm	11,080	11,340	11,580
G. Max. dumping height	mm	8,010	8,270	8,530
H. Min. front swing radius	mm	2,790	2,550	2,720

- Digging forces with direct fit bucket

Description	Unit	5.95 m 2-piece boom		
		2.5 m Arm	2.97 m Arm	3.6 m Arm
Bucket radius	mm	1,540	1,540	1,540
Breakout force – bucket (Normal / Power boost)	SAE	kN	143.2 / 156.9	143.2 / 156.9
		kg	14,600 / 16,000	14,600 / 16,000
Breakout force – bucket (Normal / Power boost)	ISO	kN	160.8 / 175.5	160.8 / 175.5
		kg	16,400 / 17,900	16,400 / 17,900
Tearout force – arm (Normal / Power boost)	SAE	kN	125.2 / 137.0	108.8 / 118.7
		kg	12,770 / 13,970	11,100 / 12,100
Tearout force – arm (Normal / Power boost)	ISO	kN	129.0 / 141.1	111.1 / 121.6
		kg	13,160 / 14,390	11,330 / 12,400
Rotation angle, bucket	deg	177	177	177

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.

EC240B LC

	Across under-carriage Along under-carriage	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		
Boom 5.7 m	6.0 m kg				*8,740	*8,740	*6,470	*6,470	*6,660	4,460			*6,500	4,800	7,230		
+ 4.5 m kg					*11,300	9,130	*8,410	6,010	6,540	4,330			6,120	4,080	7,910		
Arm 2.5 m	3.0 m kg				*13,280	8,600	8,950	5,740	6,390	4,190			5,620	3,730	8,260		
+ 1.5 m kg													5,460	3,600	8,330		
Shoe 600 mm	0.0 m kg		*13,710	8,390	8,760	5,570	6,290	4,100			5,620	3,680	8,110				
+ -1.5 m kg			*9,480	*9,480	*13,830	8,370	8,690	5,510	6,270	4,080			6,160	4,010	7,590		
Counterweight	-3.0 m kg		*17,680	17,070	*12,810	8,480	8,770	5,580					7,450	4,820	6,700		
3,700 kg	-4.5 m kg		*14,150	*14,150	*10,320	8,770							*8,590	7,010	5,250		
Boom 5.7 m	6.0 m kg						*5,890	*5,890	*5,910	4,590			*5,280	4,410	7,670		
+ 4.5 m kg					*7,870	*7,870	*6,740	6,400	*8,230	4,500			*5,300	3,790	8,310		
Arm 2.9 m	3.0 m kg				*10,430	9,300	*7,940	6,070	6,570	4,350			5,250	3,480	8,640		
+ 1.5 m kg					*12,660	8,680	8,990	5,760	6,400	4,190			5,110	3,360	8,710		
Shoe 600 mm	0.0 m kg		*13,790	8,370	8,750	5,550	6,270	4,070					5,220	3,420	8,500		
+ -1.5 m kg			*9,700	*9,700	13,930	8,300	8,650	5,460	6,210	4,020			5,660	3,690	8,010		
Counterweight	-3.0 m kg		*16,150	*16,150	*13,210	8,370	8,680	5,490					6,670	4,320	7,170		
3,700 kg	-4.5 m kg		*15,770	*15,770	*11,310	8,590							*8,410	5,900	5,840		
Boom 5.7 m	6.0 m kg							*5,290	4,700				*4,590	*4,590	8,200		
+ 4.5 m kg							*6,020	*6,020	*5,680	4,580			*4,500	3,500	8,800		
Arm 3.9 m	3.0 m kg		*14,800	*14,800	*9,230	*9,230	*7,270	6,180	*6,330	4,400	4,970	3,300	*4,710	3,220	9,120		
+ 1.5 m kg					*11,720	8,830	*8,560	5,830	6,430	4,220	4,870	3,210	4,730	3,110	9,180		
Shoe 600 mm	0.0 m kg		*6,440	*6,440	*13,300	8,390	8,770	5,560	6,260	4,060			4,800	3,140	8,980		
+ -1.5 m kg			*9,830	*9,830	*13,840	8,210	8,600	5,420	6,170	3,980			5,140	3,340	8,520		
Counterweight	-3.0 m kg		*14,560	*14,560	*13,560	8,220	8,580	5,400	6,170	3,980			5,900	3,820	7,740		
3,700 kg	-4.5 m kg		*17,530	16,820	*12,250	8,380	8,710	5,510					*8,870	8,710	6,520		
Boom 5.7 m	6.0 m kg						*6,450	*6,450					*6,500	6,500	7,230		
+ 4.5 m kg					*8,740	*8,740	*7,260	6,770	*6,660	4,800			6,510	4,400	7,910		
Arm 2.5 m	3.0 m kg				*11,300	9,790	*8,410	6,460	6,960	4,670			5,990	4,030	8,260		
+ 1.5 m kg					*13,280	9,260	*9,490	6,190	6,810	4,530			5,830	3,900	8,330		
Shoe 600 mm	0.0 m kg		*14,020	9,050	9,340	6,020	6,710	4,440					6,000	3,990	8,110		
+ -1.5 m kg			*9,480	*9,480	13,830	9,030	9,270	5,960	6,690	4,420			6,570	4,350	7,590		
Counterweight	-3.0 m kg		*17,680	*17,680	*12,810	9,150	9,350	6,030					7,940	5,210	6,700		
4,200 kg	-4.5 m kg		*14,150	*14,150	*10,320	9,430							*8,590	7,550	5,250		
Boom 5.7 m	6.0 m kg						*5,890	*5,890	*5,910	4,930			*5,280	4,740	7,670		
+ 4.5 m kg					*7,870	*7,870	*6,740	*6,740	*6,320	4,840			*5,300	4,090	8,310		
Arm 2.9 m	3.0 m kg				*10,430	9,970	*7,940	6,520	*6,810	4,690			*5,520	3,770	8,640		
+ 1.5 m kg					*12,660	9,350	*9,120	6,210	6,820	4,530			5,450	3,650	8,710		
Shoe 600 mm	0.0 m kg		*13,790	9,040	9,330	6,000	6,690	4,410					5,580	3,710	8,500		
+ -1.5 m kg			*9,700	*9,700	*13,930	8,960	9,230	5,910	6,640	4,360			6,050	4,000	8,010		
Counterweight	-3.0 m kg		*16,150	*16,150	*13,210	9,030	9,260	5,940					7,120	4,680	7,170		
4,200 kg	-4.5 m kg		*15,770	*15,770	*11,310	9,260							*8,410	6,360	5,840		
Boom 5.7 m	6.0 m kg							*5,290	5,040				*4,460	4,320	8,200		
+ 4.5 m kg							*6,020	*6,020	*5,680	4,920			*4,500	3,780	8,800		
Arm 2.9 m	3.0 m kg		*14,800	*14,800	*9,230	*9,230	*7,270	6,630	*6,330	4,740	5,180	3,570	*4,710	3,490	9,120		
+ 1.5 m kg					*11,720	9,500	*8,560	6,280	*6,850	4,560	5,210	3,480	5,050	3,370	9,180		
Shoe 600 mm	0.0 m kg		*6,440	*6,440	*13,300	9,050	9,350	6,010	6,690	4,400			5,140	3,410	8,980		
+ -1.5 m kg			*9,830	*9,830	*13,860	8,880	9,180	5,870	6,590	4,320			5,500	3,630	8,520		
Counterweight	-3.0 m kg		*14,560	*14,560	*13,560	8,890	9,160	5,850	6,600	4,320			6,310	4,150	7,740		
4,200 kg	-4.5 m kg		*17,530	17,530	*12,250	9,050	9,060	5,960					*8,110	5,320	6,520		
Boom 5.7 m	6.0 m kg						*9,150	*9,150	*8,530	6,990			*6,840	5,090	7,250		
+ 4.5 m kg							*11,490	10,520	*9,090	6,740	7,100	4,760		6,470	4,330	7,920	
Arm 2.9 m	3.0 m kg						*13,220	9,740	*9,800	6,410	6,950	4,620		5,960	3,960	8,270	
+ 1.5 m kg							*13,990	9,170	9,510	6,120	6,790	4,480		5,800	3,840	8,340	
Shoe 600 mm	0.0 m kg						*13,390	8,950	9,310	5,940	6,690	4,380		5,970	3,930	8,120	
+ -1.5 m kg			*9,300	*9,300	*11,810	8,940	*9,150	5,900	6,690	4,380			*6,500	4,300	7,610		
Counterweight	-3.0 m kg						*9,180	9,080	*7,060	5,990			*5,660	5,170	6,720		
4,200 kg	-4.5 m kg						*7,270	*7,270	*7,560	7,090	*5,950	4,890		*5,150	4,660	7,700	
Boom 5.7 m	6.0 m kg						*15,390	*15,390	*10,570	*8,700	6,830	7,160	*4,810	*5,120	4,020	8,340	
+ 4.5 m kg								*12,660	9,930	*9,500	6,480	6,980	4,650		*5,290	3,700	8,670
Arm 2.9 m	3.0 m kg							*13,820	9,260	9,560	6,150	6,800	4,480		5,410	3,580	8,730
+ 1.5 m kg								*13,690	8,940	9,310	5,930	6,670	4,360		5,540	3,650	8,530
Shoe 600 mm	0.0 m kg							*9,540	*9,540	*12,450	8,870	9,210	5,850		6,010	3,940	8,040
+ -1.5 m kg										*10,180	8,960	*7,830	5,890		*5,780	4,620	7,210
Counterweight	-3.0 m kg																
4,200 kg	-4.5 m kg																
Boom 5.7 m	6.0 m kg																
+ 4.5 m kg																	
Arm 2.9 m	3.0 m kg																
+ 1.5 m kg																	
Shoe 600 mm	0.0 m kg																
+ -1.5 m kg																	
Counterweight	-3.0 m kg																
4,200 kg	-4.5 m kg																

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.

EC240B NLC

Lifting hook related to ground level	3.0 m	4.5 m		6.0 m		7.5 m		9.0 m		Max. reach		
Across under-carriage	6.0 m kg				*6,470	6,430				*6,500	4,740	7,230
Along under-carriage	4,5 m kg			*8,740	*8,740	*7,260	6,200	6,660	4,400	6,100	4,030	7,910
Boom 6.0 m +	3.0 m kg			*11,300	8,870	*8,410	5,900	6,520	4,270	5,610	3,680	8,260
Arm 2.5 m +	1.5 m kg			*13,280	8,350	8,860	5,630	6,370	4,140	5,460	3,560	8,330
Shoe 600 mm +	0.0 m kg			13,710	8,150	8,670	5,460	6,270	4,040	5,610	3,640	8,110
Counterweight 4,600 kg -	-1,5 m kg	*9,480	*9,480	13,690	8,130	8,610	5,410	6,250	4,030	6,140	3,960	7,590
Boom 6.0 m +	-3,0 m kg	*17,680	16,120	*12,810	8,240	8,690	5,480			7,400	4,740	6,700
Arm 2.97 m +	-4,5 m kg	*14,150	*14,150	*10,320	8,520					*8,590	6,850	5,250
Boom 6.0 m +	6.0 m kg					*5,890	*5,890	*5,910	4,530	*5,280	4,350	7,670
Arm 2.97 m +	4,5 m kg			*7,870	*7,870	*6,740	6,280	*6,230	4,440	*5,300	3,750	8,310
Shoe 600 mm +	3.0 m kg			*10,430	9,030	*7,940	5,960	6,540	4,290	5,250	3,440	8,640
Counterweight 4,600 kg -	1.5 m kg			*12,660	8,430	8,900	5,660	6,370	4,140	5,100	3,330	8,710
Boom 6.0 m +	0.0 m kg			13,710	8,140	8,670	5,450	6,240	4,020	5,220	3,380	8,500
Arm 3.6 m +	-1,5 m kg	*9,700	*9,700	13,610	8,060	8,570	5,360	6,190	3,970	5,650	3,640	8,010
Shoe 600 mm +	-3,0 m kg	*16,150	15,870	*13,210	8,130	8,600	5,390			6,640	4,260	7,170
Counterweight 4,600 kg -	-4.5 m kg	*15,770	*15,770	*11,310	8,350					*8,410	5,790	5,840
Boom 6.0 m +	6.0 m kg							*5,290	4,640	*4,460	3,970	8,200
Arm 3.6 m +	4,5 m kg					*6,020	*6,020	*5,680	4,520	*4,500	3,460	8,800
Shoe 600 mm +	3.0 m kg	*14,800	*14,800	*9,230	*9,230	*7,270	6,060	*6,330	4,340	4,970	3,260	9,120
Counterweight 4,600 kg -	1.5 m kg			*11,720	8,580	*8,560	5,720	6,400	4,160	4,870	3,170	4,730
Boom 6.0 m +	0.0 m kg	*6,440	*6,440	*13,300	8,150	8,680	5,460	6,240	4,010	4,810	3,110	8,980
Arm 3.6 m +	-1,5 m kg	*9,830	*9,830	13,530	7,980	8,520	5,320	6,150	3,930	5,140	3,310	8,520
Shoe 600 mm +	-3,0 m kg	*14,560	*14,560	13,540	7,990	8,500	5,300	6,150	3,930	5,890	3,770	7,740
Counterweight 4,600 kg -	-4.5 m kg	*17,530	15,880	*12,250	8,140	8,620	5,410			7,630	4,840	6,520
Boom 6.0 m +	6.0 m kg					*6,470	6,430			*6,500	4,740	7,230
Arm 2.5 m +	4,5 m kg			*8,740	*8,740	*7,260	6,200	6,660	4,400	6,100	4,030	7,910
Shoe 600 mm +	3.0 m kg	*11,300	8,870	*8,410	5,900	6,520	4,270			5,610	3,680	8,260
Counterweight 5,300 kg -	1.5 m kg			*13,280	8,350	8,860	5,630	6,370	4,140	5,460	3,560	8,330
Boom 6.0 m +	0.0 m kg	13,710	8,150	8,670	5,460	6,270	4,040			5,610	3,640	8,110
Arm 3.6 m +	-1,5 m kg	*9,480	*9,480	13,690	8,130	8,610	5,410	6,250	4,030	6,140	3,960	7,590
Shoe 600 mm +	-3,0 m kg	*17,680	16,120	*12,810	8,240	8,690	5,480			7,400	4,740	6,700
Counterweight 5,300 kg -	-4.5 m kg	*14,150	*14,150	*10,320	8,520					*8,590	6,850	5,250
Boom 6.0 m +	6.0 m kg					*5,890	*5,890	*5,910	4,530	*5,280	4,350	7,670
Arm 2.97 m +	4,5 m kg			*7,870	*7,870	*6,740	6,280	*6,230	4,440	*5,300	3,750	8,310
Shoe 600 mm +	3.0 m kg	*10,430	9,030	*7,940	5,960	6,540	4,290			5,250	3,440	8,640
Counterweight 5,300 kg -	1.5 m kg			*12,660	8,430	8,900	5,660	6,370	4,140	5,100	3,330	8,710
Boom 6.0 m +	0.0 m kg	13,710	8,140	8,670	5,450	6,240	4,020			5,220	3,380	8,500
Arm 3.6 m +	-1,5 m kg	*9,700	*9,700	13,610	8,060	8,570	5,360	6,190	3,970	5,650	3,640	8,010
Shoe 600 mm +	-3,0 m kg	*16,150	15,870	*13,210	8,130	8,600	5,390			6,640	4,260	7,170
Counterweight 5,300 kg -	-4.5 m kg	*15,770	*15,770	*11,310	8,350					*8,410	5,790	5,840
Boom 6.0 m +	6.0 m kg					*6,020	*6,020	*5,680	4,520	*4,460	3,970	8,200
Arm 3.6 m +	4,5 m kg									*4,500	3,460	8,800
Shoe 600 mm +	3.0 m kg	*14,800	*14,800	*9,230	*9,230	*7,270	6,060	*6,330	4,340	4,970	3,260	9,120
Counterweight 5,300 kg -	1.5 m kg			*11,720	8,580	*8,560	5,720	6,400	4,160	4,870	3,170	4,730
Boom 6.0 m +	0.0 m kg	*6,440	*6,440	*13,300	8,150	8,680	5,460	6,240	4,010	4,810	3,110	8,980
Arm 3.6 m +	-1,5 m kg	*9,830	*9,830	13,530	7,980	8,520	5,320	6,150	3,930	5,140	3,310	8,520
Shoe 600 mm +	-3,0 m kg	*14,560	*14,560	13,540	7,990	8,500	5,300	6,150	3,930	5,890	3,770	7,740
Counterweight 5,300 kg -	-4.5 m kg	*17,530	15,880	*12,250	8,140	8,620	5,410			7,630	4,840	6,520
Boom 5.7 m +	6.0 m kg			*9,150	*9,150	*8,530	6,400			*6,840	4,670	7,250
Arm 2.9 m +	4,5 m kg					*6,020	*6,020	*5,680	4,520	*4,460	3,970	8,200
Shoe 600 mm +	3.0 m kg	*14,800	*14,800	*9,230	*9,230	*7,270	6,060	*6,330	4,340	4,970	3,260	9,120
Counterweight 5,300 kg -	1.5 m kg			*11,720	8,580	*8,560	5,720	6,400	4,160	4,870	3,170	4,730
Boom 5.7 m +	0.0 m kg	*6,440	*6,440	*13,300	8,150	8,680	5,460	6,240	4,010	4,810	3,110	8,980
Arm 3.6 m +	-1,5 m kg	*9,830	*9,830	13,530	7,980	8,520	5,320	6,150	3,930	5,140	3,310	8,520
Shoe 600 mm +	-3,0 m kg	*14,560	*14,560	13,540	7,990	8,500	5,300	6,150	3,930	5,890	3,770	7,740
Counterweight 5,300 kg -	-4.5 m kg	*17,530	15,880	*12,250	8,140	8,620	5,410			7,630	4,840	6,520
Boom 5.7 m +	6.0 m kg			*7,270	*7,270	*7,560	6,500	*5,950	4,480	*5,150	4,270	7,700
Arm 2.9 m +	4,5 m kg	*15,390	*15,390	*10,570	9,760	*8,700	6,250	6,700	4,400	*5,120	3,680	8,340
Shoe 600 mm +	3.0 m kg			*12,660	8,980	9,240	5,910	6,530	4,240	5,200	3,370	8,670
Counterweight 4,200 kg -	1.5 m kg			*13,820	8,340	8,880	5,590	6,350	4,080	5,060	3,260	8,730
Boom 5.7 m +	0.0 m kg			*13,660	8,030	8,630	5,370	6,220	3,960	5,170	3,320	8,530
Arm 2.9 m +	-1,5 m kg	*9,540	*9,540	*12,450	7,950	8,540	5,290	6,170	3,920	5,610	3,580	8,040
Shoe 600 mm +	-3,0 m kg			*10,180	8,050	*7,830	5,330			*5,780	4,200	7,210
Counterweight 4,200 kg -	-4.5 m kg											
Boom 5.7 m +	6.0 m kg					*6,230	*6,230	*5,740	4,610	*4,350	3,880	8,250
Arm 2.9 m +	4,5 m kg	*6,950	*6,950	*7,460	*7,460	*7,380	6,400	*6,730	4,490	*4,360	3,380	8,850
Shoe 600 mm +	3.0 m kg			*11,810	9,260	*9,040	6,030	6,600	4,300	4,950	3,210	4,520
Counterweight 4,200 kg -	1.5 m kg					*13,380	8,500	8,960	5,660	6,390	4,110	4,850
Boom 5.7 m +	0.0 m kg	*6,260	*6,260	13,690	8,040	8,650	5,380	6,220	3,950	4,770	3,050	4,750
Arm 2.9 m +	-1,5 m kg	*9,680	*9,680	*13,070	7,870	8,490	5,240	6,120	3,870	5,080	3,240	8,570
Shoe 600 mm +	-3,0 m kg	*14,540	*14,540	*11,280	7,890	8,480	5,230	6,140	3,880	5,830	3,700	7,790
Counterweight 4,200 kg -	-4.5 m kg					*8,200	8,080	*6,080	5,370			

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.

STANDARD EQUIPMENT

Engine

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

Electric / Electronic control system

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

High capacity halogen lights:

- Frame-mounted 2
- Boom-mounted 1

Batteries, 2 x 12 V/200 Ah
Start motor, 24 V/4.8 kW

Hydraulic system

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

Superstructure

Access way with handrail
Tool storage area
Punched metal anti-slip plates

Cab and interior

Hydraulic dampening cab mounts
Adjustable operator seat and joystick control console
Flexible antenna
Hydraulic safety lock lever
Cab, all-weather sound suppressed, includes:
- Ashtray
- Cup holder
- Lighter
- Tinted glass
- Door locks
- Floor mat
- Horn
- Large storage area
- Pull-up type front window
- Removable lower windshield
- Seat belt
- Safety glass
- Windshield wiper with intermittent feature
- Stereo cassette radio
- Sun screens, front, roof, rear
- Sunlight protection, roof (steel)
Master key

Undercarriage

Hydraulic track adjusters
Greased and sealed track chain
Track guards

OPTIONAL EQUIPMENT

Engine

Block heater, 120 V / 240 V
Fuel filler pump: 35 l/min, 50 l/min with automatic shut-off
Oil bath pre-cleaner
Diesel coolant heater, 5kW
Tropical cooling kit

Electric

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

Hydraulic system

Hose rupture valve: boom, arm
Overload warning device
Hydraulic piping
- Hammer & shears:
 1 pump flow
 2 pump flow
 Pump flow control for hammer & shears
 Additional return filter
 Extra piping for slope & rotator
 1 switch control
 2 switch control
 Pedal control
- Slope & rotator
- Grapple
- Oil leak (drain) line
- Quick fit piping
Volvo hydraulic quick-fit (S2)
Hydraulic oil, ISO VG 32
Hydraulic oil, ISO VG 46
Hydraulic oil, ISO VG 68
Hydraulic oil, biodegradable 32
Hydraulic oil, biodegradable 46
Pilot control pattern change
Boom floating function
Pilot-operated wrist control joysticks:
- Semi-long joysticks
- Control joystick, with 3 switches each
- Control joystick, with 5 switches each

Cab and interior

Fabric seat
Fabric seat, with heater
Fabric seat, with heater and air suspension
Air-conditioner without heater, manual
Heater & air-conditioner, automatic
AM/FM stereo with CD player and MP3 input
Cab mounted falling object guard (FOG)
Cab mounted falling object protective structures (FOPS)
Rain shield, front
Safety screen for front window
Lower wiper
Anti-vandalism kit assembly preparation
Anti-vandalism kit
Specific key

Track shoes

Track shoes 600/700/800/900 mm with triple grousers
Track shoes 700 mm with double grouser

Superstructure

Counterweight, 4,600 / 5,300 kg
Undercover (2.3 / HD 4.5 mm)

Digging equipment

Boom: 6.0 m monoblock
6.0 m HD
5.95 m 2-piece
Arm: 2.5 / 2.97 / 3.6 m
2.97 m HD
Extended greasing bushing

Undercarriage

LC (Long crawler)
NLC (Narrow long crawler)
Full track guards
Undercover (4.5 / HD 10 mm)

Service

Hand lamp
Tool kit, full scale
Tool kit, daily maintenance
Spare parts

Standard and optional equipment may vary by market. Please consult your local Volvo dealer for details.

VOLVO

Volvo Construction Equipment
www.volvo.com

Ref. No. A8 B 435 1642 English (for Asia region)
Printed in Sweden 2009.02-1.0 EXC
Volvo, Seoul