

12,8 – 15,0 t, 94 hp

VOLVO EXCAVATOR

EC140C



MORE CARE. BUILT IN.



SPECIFICATIONS

Engine

The Volvo diesel engine delivers lower emissions, along with superior performance and fuel efficiency. The EU Stage IIIA compliant engine uses precise, high-pressure fuel injectors, turbocharged air-to-air intercooling and electronic engine controls to optimize machine performance.

Engine	Volvo D4E EBE3
Max. power, at	33 r/s (2 000 r/min)
Net (ISO 9249, SAE J1349)	69 kW (94 hp)
Gross (SAE J1995)	80 kW (109 hp)
Max. torque at 1 600 r/min	472 Nm
No. of cylinders	4
Displacement	4,0 l
Bore	101 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.

Voltage	24 V
Batteries	2 x 12 V
Battery capacity	100 Ah
Alternator	28 V / 80 A

Service refill capacities

Fuel tank	260 l
Hydraulic system, total	160 l
Hydraulic tank	95 l
Engine oil	15,5 l
Engine coolant	21,3 l
Slew reduction unit	3,8 l
Travel reduction unit	2 x 2,2 l

Slew system

The slew system uses an axial piston motor, driving a planetary gearbox for maximum torque. An automatic holding brake and anti-rebound valve are standard.

Max. slew speed	12 r/min
Max. slew torque	38,8 kNm

Drive

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

Max. drawbar pull	118 kN
Max. travel speed	3,0/5,5 km/h
Gradeability	35°

Undercarriage

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

Track pads	2 x 46
Link pitch	171,5 mm
Shoe width,	500/600/
triple grouser	700/750 mm
Shoe width,	
triple grouser HD	600 mm
Bottom rollers	2 x 7
Top rollers	2 x 1

Hydraulic system

The hydraulic system, also known as the "Integrated work mode control" is designed for high-productivity, high-digging capacity, high-maneuvering precision and excellent fuel economy. The summation system, boom, arm and slew priority along with boom, arm and bucket regeneration provides optimum performance.

The following important functions are included in the system:

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

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

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

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.

Main pump:

Type: 2 x variable displacement axial piston pumps
Maximum flow: 2 x 118 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
Slew: Fixed displacement piston motor with mechanical brake

Relief valve setting:

Implement	32,4/34,3 MPa
Travel circuit	34,3 MPa
Slew circuit	24,5 MPa
Pilot circuit	3,9 MPa

Hydraulic cylinders:

Mono boom	2
Bore x Stroke	ø105 x 980 mm
1st Boom of 2-piece boom	2
Bore x Stroke	ø110 x 980 mm
2nd Boom of 2-piece boom	1
Bore x Stroke	ø160 x 765 mm
Arm	1
Bore x Stroke	ø120 x 1 045 mm
Bucket	1
Bore x Stroke	ø100 x 865 mm
Dozer Blade	2
Bore x Stroke	ø130 x 270 mm

Cab

Standard Care Cab with large and roomy interior, more leg room and foot space. Audio system with remote control. 3 cup holders, 3 high-capacity outlets. Independently adjustable joystick consoles.

Excellent all around-visibility provided through maximum cab glass, transparent roof hatch and 2-piece sliding door window. The lift-up front windshield can easily be secured at the ceiling and the removable lower front glass can be stored in the cab door pocket. Interior lighting consists of one reading light and one cab light with timer.

The pressurized and filtered cab air is supplied by a 14-vent climate-control system, providing fast defrosting and high cooling and heating performance. Viscous/spring-mounted suspension cushions operator from vibrations.

Deluxe seat with adjustable height, tilt, recline, forward-back settings, retractable seat belt and selectable horizontal suspension for reduced whole body vibration.

Adjustable easy-to-read 16,3 cm (6,4") LCD color monitor provides real time information of machine functions, important diagnostic information and a wide variety of work tool settings. LCD monitor is switchable to rear-view camera monitor (option).

Sound Level:

Sound level in cab according to ISO 6396
..... LpA 70 dB(A)

External sound level according to ISO 6395 and EU Directive 2000/14/EC
..... LwA 100 dB(A)

Ground pressure

- **EC140C** with 4,6 m boom, 3,0 m arm, 2 100 kg counterweight

Description	Shoe width	Operating weight	Ground pressure	Overall width
Triple grouser	500 mm	12 760 kg	40,2 kPa	2 490 mm
	600 mm	12 840 kg	33,3 kPa	2 590 mm
	700 mm	13 050 kg	29,4 kPa	2 690 mm

- **EC140C L** with 4,6 m boom, 2,5 m arm, 2 450 kg counterweight

Description	Shoe width	Operating weight	Ground pressure	Overall width
Triple grouser	500 mm	13 270 kg	41,2 kPa	2 490 mm
	600 mm	13 450 kg	35,3 kPa	2 590 mm
	700 mm	13 670 kg	30,4 kPa	2 690 mm
	750 mm	13 850 kg	29,4 kPa	2 740 mm

- **EC140C L** with **dozer blade**, 4,6 m boom, 2,5 m arm, 2 450 kg counterweight

Description	Shoe width	Operating weight	Ground pressure	Overall width
Triple grouser	500 mm	14 250 kg	45,1 kPa	2 490 mm
	600 mm	14 440 kg	38,2 kPa	2 590 mm
	700 mm	14 660 kg	33,3 kPa	2 690 mm
	750 mm	14 840 kg	31,4 kPa	2 740 mm

- **EC140C LM** with 4,6 m boom, 2,5 m arm, 2 450 kg counterweight

Description	Shoe width	Operating weight	Ground pressure	Overall width
Triple grouser	600 mm	14 170 kg	37,3 kPa	2 590 mm
	700 mm	14 380 kg	32,4 kPa	2 690 mm
	800 mm	14 770 kg	29,4 kPa	2 790 mm
	900 mm	15 000 kg	26,5 kPa	2 890 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.
 3. Bucket widths are less than bucket's tip radius.

- **EC140C** and **EC140C L** with **direct fit bucket**, 2 450 kg counterweight

Description	Max. bucket volume / weight	4,6 m boom			4,6 m 2-piece boom		
		2,1 m arm	2,5 m arm	3,0 m arm	2,1 m arm	2,5 m arm	3,0 m arm
GP bucket 1,5 t/m ³	l / kg	925 / 750	775 / 750	675 / 550	900 / 750	775 / 750	675 / 550
GP bucket 1,8 t/m ³	l / kg	825 / 700	675 / 700	600 / 500	800 / 750	675 / 750	600 / 500

- **EC140C** and **EC140C L** with **quick fit bucket**, 2 450 kg counterweight

Description	Max. bucket volume / weight	4,6 m boom			4,6 m 2-piece boom		
		2,1 m arm	2,5 m arm	3,0 m arm	2,1 m arm	2,5 m arm	3,0 m arm
GP bucket 1,5 t/m ³	l / kg	875 / 750	725 / 600	625 / 500	850 / 700	725 / 600	625 / 500
GP bucket 1,8 t/m ³	l / kg	775 / 650	650 / 550	550 / 450	750 / 650	650 / 550	550 / 450

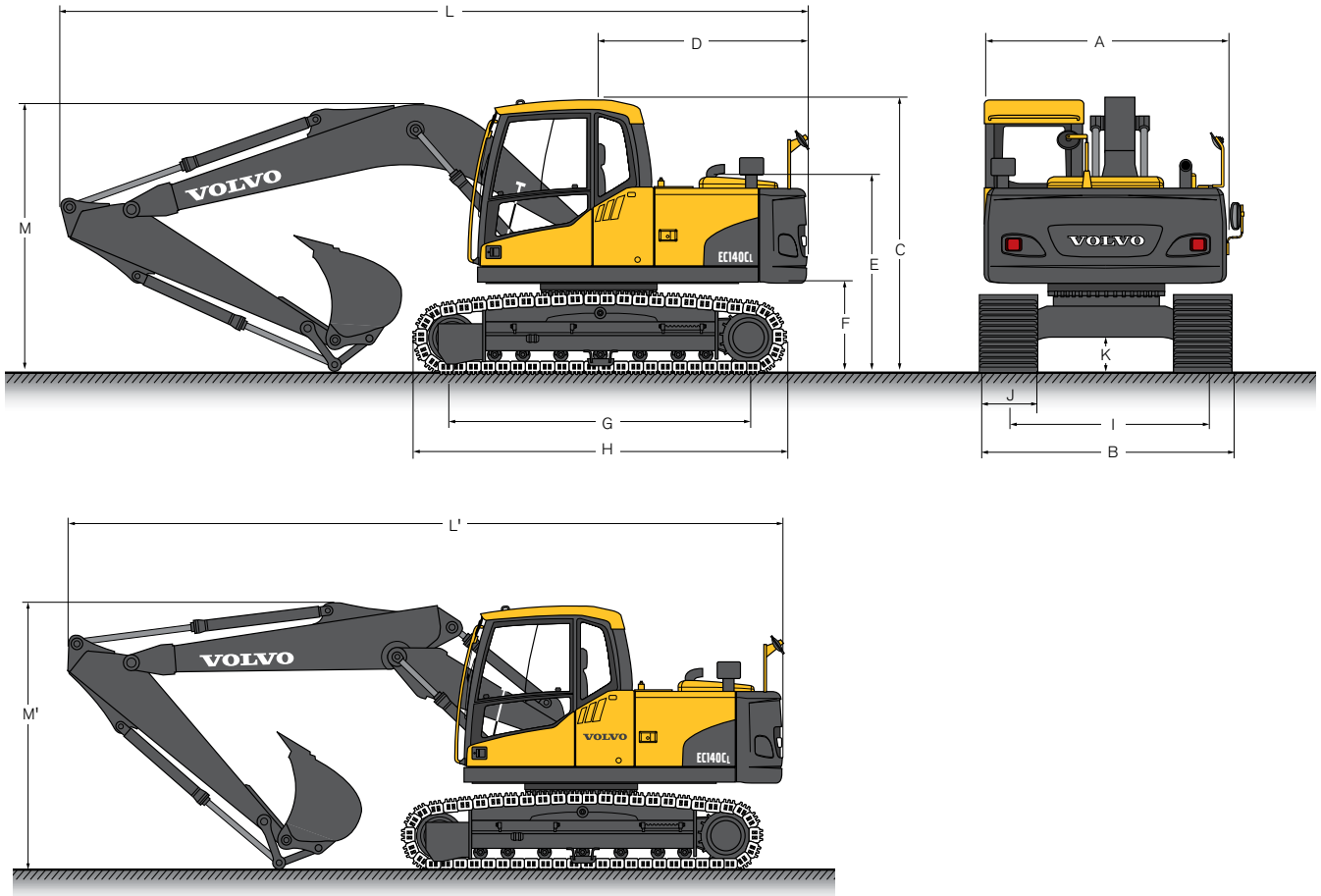
- **EC140C LM** with **direct fit bucket**, 2 450 kg counterweight

Description	Max. bucket volume / weight	4,6 m GP boom			4,6 m VA boom		
		2,1 m arm	2,5 m arm	3,0 m arm	2,1 m arm	2,5 m arm	3,0 m arm
GP bucket 1,5 t/m ³	l / kg	925 / 750	775 / 650	675 / 550	900 / 750	775 / 650	675 / 550
GP bucket 1,8 t/m ³	l / kg	825 / 700	675 / 550	600 / 500	800 / 650	675 / 550	600 / 500

- **EC140C LM** with **quick fit bucket**, 2 450 kg counterweight

Description	Max. bucket volume / weight	4,6 m GP boom			4,6 m VA boom		
		2,1 m arm	2,5 m arm	3,0 m arm	2,1 m arm	2,5 m arm	3,0 m arm
GP bucket 1,5 t/m ³	l / kg	875 / 750	725 / 600	625 / 500	850 / 700	725 / 600	625 / 500
GP bucket 1,8 t/m ³	l / kg	775 / 650	650 / 550	550 / 450	750 / 650	650 / 550	550 / 450

Dimensions



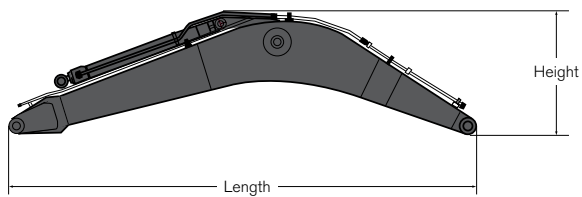
Description		EC140C		
		4,6 m boom		
		2,1 m arm	2,5 m arm	3,0 m arm
A. Overall width of upper structure	mm	2 490	2 490	2 490
B. Overall width	mm	2 690	2 690	2 690
C. Overall height of cab	mm	2 800	2 800	2 800
D. Tail slew radius	mm	2 130	2 130	2 130
E. Overall height of engine hood	mm	2 020	2 020	2 020
F. Counterweight clearance *	mm	920	920	920
G. Tumbler length	mm	2 870	2 870	2 870
H. Track length	mm	3 590	3 590	3 590
I. Track gauge	mm	1 990	1 990	1 990
J. Shoe width	mm	700	700	700
K. Min. ground clearance *	mm	436	436	436
L. Overall length	mm	7 630	7 630	7 510
M. Overall height of boom	mm	2 710	2 830	3 210

* Without shoe grouser

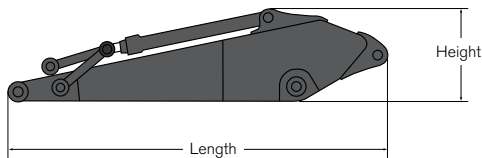
Description		EC140C L			EC140C LM		
		4,6 m boom			4,6 m boom		
		2,1 m arm	2,5 m arm	3,0 m arm	2,1 m arm	2,5 m arm	3,0 m arm
A. Overall width of upper structure	mm	2 490	2 490	2 490	2 490	2 490	2 490
B. Overall width	mm	2 590	2 590	2 590	2 690	2 690	2 690
C. Overall height of cab	mm	2 800	2 800	2 800	2 990	2 990	2 990
D. Tail slew radius	mm	2 130	2 130	2 130	2 130	2 130	2 130
E. Overall height of engine hood	mm	2 020	2 020	2 020	2 214	2 214	2 214
F. Counterweight clearance *	mm	920	920	920	1 113	1 113	1 113
G. Tumbler length	mm	3 040	3 040	3 040	3 000	3 000	3 000
H. Track length	mm	3 760	3 760	3 760	3 790	3 790	3 790
I. Track gauge	mm	1 990	1 990	1 990	1 990	1 990	1 990
J. Shoe width	mm	600	600	600	700	700	700
K. Min. ground clearance *	mm	436	436	436	580	580	580
L. Overall length	mm	7 630	7 630	7 510	7 600	7 620	7 580
L'. Overall length	mm	7 610	7 550	7 320	7 630	7 600	7 420
M. Overall height of boom	mm	2 710	2 830	3 210	2 780	2 900	3 160
M'. Overall height of boom	mm	2 720	2 950	3 350	2 820	2 990	3 370

* Without shoe grouser

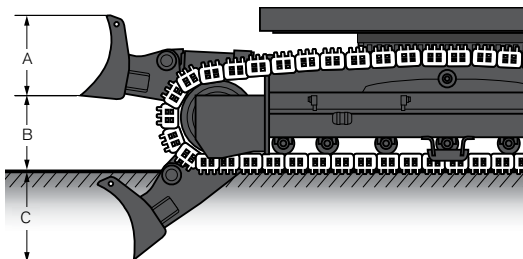
• Boom



• Arm



• Front dozer blade



• EC140C, EC140C L and EC140C LM

Description		4,6 m STD	4,6 m VA
Length	mm	4 770	4 765
Height	mm	1 370	1 225
Width	mm	545	545
Weight	kg	1 100	1 400

* Includes arm cylinder, piping and pin

• EC140C and EC140C L

Description		2,1 m	2,5 m	3,0 m
Length	mm	2 800	3 200	3 700
Height	mm	710	710	780
Width	mm	275	275	275
Weight	kg	555	625	685

* Includes bucket cylinder, linkage and pin

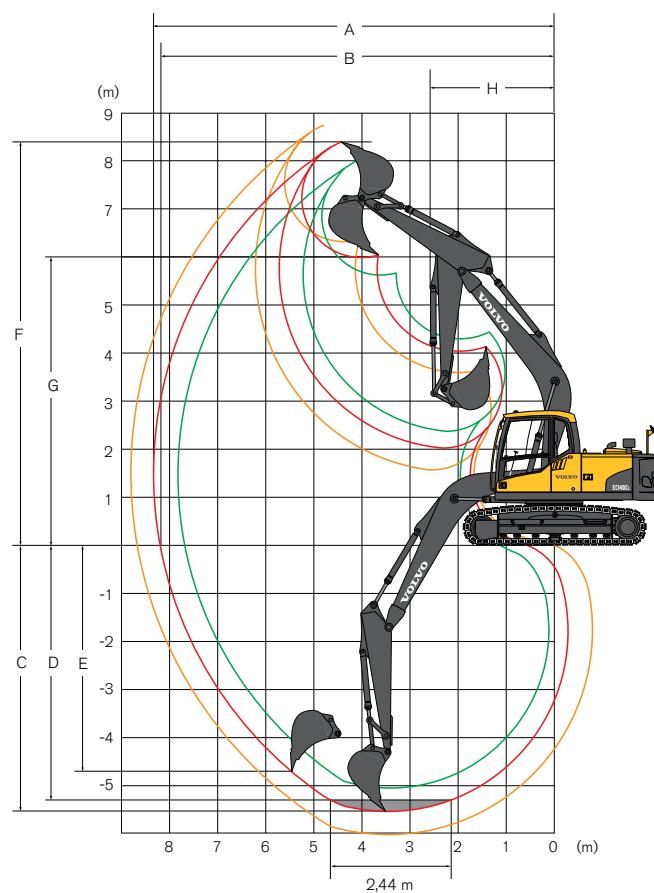
• EC140C LM

Description		2,1 m	2,5 m	3,0 m
Length	mm	2 800	3 195	3 690
Height	mm	710	675	750
Width	mm	275	275	275
Weight	kg	555	625	685

* Includes bucket cylinder, linkage and pin

Description		Measurement
A. Height	mm	580
Width	mm	2 590
Weight	kg	460
B. Lift height	mm	505
C. Digging depth	mm	575

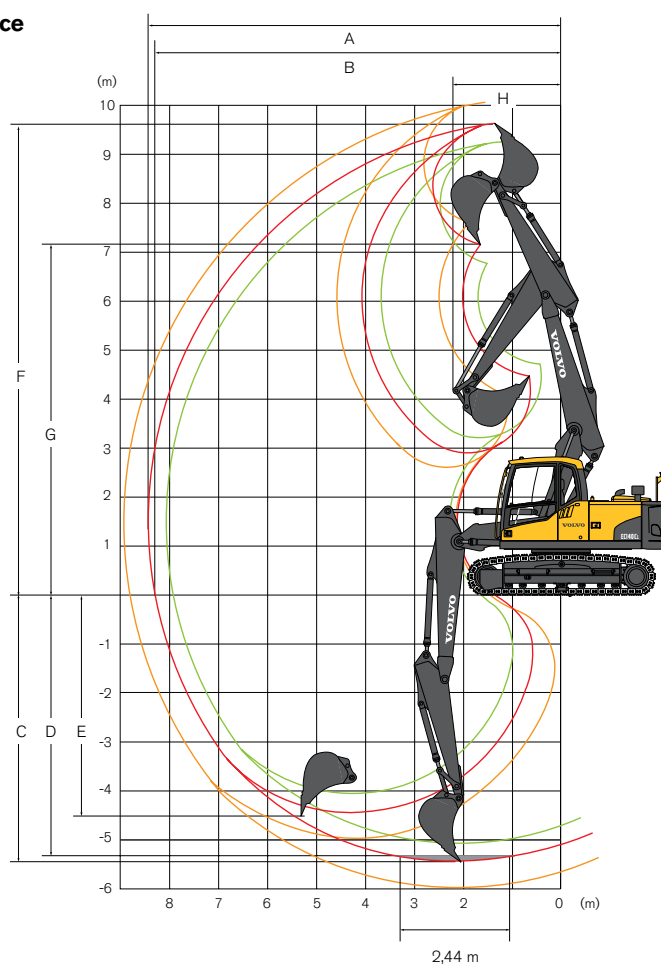
Working ranges & digging force



Machine with direct fit bucket		EC140C and EC140C L			EC140C LM		
		4,6 m boom			4,6 m boom		
		2,1 m arm	2,5 m arm	3,0 m arm	2,1 m arm	2,5 m arm	3,0 m arm
A. Max. digging reach	mm	7 960	8 330	8 820	7 960	8 330	8 820
B. Max. digging reach on ground	mm	7 810	8 190	8 690	7 770	8 150	8 650
C. Max. digging depth	mm	5 130	5 530	6 030	4 940	5 340	5 840
D. Max. digging depth (2,44 m level)	mm	4 870	5 310	5 850	4 680	5 110	5 650
E. Max. vertical wall digging depth	mm	4 580	4 960	5 500	4 380	4 770	5 310
F. Max. cutting height	mm	8 160	8 390	8 740	8 350	8 590	8 930
G. Max. dumping height	mm	5 740	5 980	6 320	5 940	6 170	6 510
H. Min. front slew radius	mm	2 570	2 630	2 840	2 570	2 630	2 840

Digging forces with direct fit bucket		EC140C and EC140C L			EC140C LM		
		4,6 m boom			4,6 m boom		
		2,1 m arm	2,5 m arm	3,0 m arm	2,1 m arm	2,5 m arm	3,0 m arm
Bucket radius	mm	1 250	1 250	1 250	1 250	1 250	1 250
Breakout force - bucket (Normal/Power boost)	SAE J1179	kN	82,4 / 87,3	82,4 / 87,3	82,4 / 87,3	82,4 / 87,3	82,4 / 87,3
	ISO 6015	kN	93,2 / 98,1	93,2 / 98,1	93,2 / 98,1	93,2 / 98,1	93,2 / 98,1
Tearout force - arm (Normal/Power boost)	SAE J1179	kN	69,6 / 73,5	61,8 / 65,7	54,9 / 58,8	69,6 / 73,5	61,8 / 65,7
	ISO 6015	kN	71,6 / 75,5	63,7 / 67,7	56,9 / 59,8	71,6 / 75,5	63,7 / 67,7
Rotation angle, bucket	deg.	174	174	174	174	174	174

Working ranges & digging force



Machine with direct fit bucket		EC140C and EC140C L			EC140C LM		
		4,6 m 2-piece boom			4,6 m 2-piece boom		
		2,1 m arm	2,5 m arm	3,0 m arm	2,1 m arm	2,5 m arm	3,0 m arm
A. Max. digging reach	mm	8 050	8 440	8 930	8 050	8 440	8 930
B. Max. digging reach on ground	mm	7 910	8 300	8 800	7 870	8 260	8 760
C. Max. digging depth	mm	5 050	5 450	5 950	4 860	5 260	5 760
D. Max. digging depth (2,44 m level)	mm	4 930	5 340	5 850	4 740	5 140	5 650
E. Max. vertical wall digging depth	mm	4 290	4 680	5 180	4 100	4 480	4 990
F. Max. cutting height	mm	9 250	9 610	10 080	9 440	9 800	10 280
G. Max. dumping height	mm	6 790	7 150	7 630	6 980	7 340	7 820
H. Min. front slew radius	mm	1 960	2 210	2 640	1 960	2 210	2 640















Digging forces with direct fit bucket		EC140C and EC140C L			EC140C LM		
		4,6 m 2-piece boom			4,6 m 2-piece boom		
		2,1 m arm	2,5 m arm	3,0 m arm	2,1 m arm	2,5 m arm	3,0 m arm
Bucket radius	mm	1 250	1 250	1 250	1 250	1 250	1 250
Breakout force - bucket (Normal/Power boost)	SAE J1179	kN	82,4 / 87,3	82,4 / 87,3	82,4 / 87,3	82,4 / 87,3	82,4 / 87,3
	ISO 6015	kN	93,2 / 98,1	93,2 / 98,1	93,2 / 98,1	93,2 / 98,1	93,2 / 98,1
Tearout force - arm (Normal/Power boost)	SAE J1179	kN	69,6 / 73,5	61,8 / 65,7	54,9 / 58,8	69,6 / 73,5	61,8 / 65,7
	ISO 6015	kN	71,6 / 75,5	63,7 / 67,7	56,9 / 59,8	71,6 / 75,5	63,7 / 67,7
Rotation angle, bucket	deg.	174	174	174	174	174	174

Lifting capacity

At the arm end without bucket.

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

• EC140C

 Across undercarriage  Along undercarriage	Lifting hook related to ground level	1,5 m		3,0 m		4,5 m		6,0 m		7,5 m		Max. reach		
														Max. m
Boom 4,6 m + Arm 2,1 m + Shoe 700 mm + Counterweight 2 100 kg	7,5 m kg													
	6 m kg					*3 280	*3 280					*3 450	3 130	4,9
	4,5 m kg					*3 420	*3 420					3 290	2 230	6,0
	3 m kg			*6 140	*6 140	*4 270	3 360	3 210	2 170			2 800	1 880	6,5
	1,5 m kg					4 820	3 140	3 120	2 080			2 640	1 760	6,7
	0 m kg			*5 160	*5 160	4 660	3 000	3 050	2 010			2 700	1 790	6,5
	-1,5 m kg	*4 780	*4 780	9 310	5 470	4 620	2 960					3 060	2 020	6,0
	-3 m kg			*8 120	5 610	4 700	3 040					4 150	2 710	4,9
-4,5 m kg														
Boom 4,6 m + Arm 2,5 m + Shoe 700 mm + Counterweight 2 100 kg	7,5 m kg													
	6 m kg					*2 840	*2 840					*3 200	2 730	5,4
	4,5 m kg					*3 080	*3 080	*3 190	2 290			3 010	2 050	6,4
	3 m kg			*5 320	*5 320	*3 950	3 450	3 270	2 220			2 610	1 760	6,9
	1,5 m kg			*6 300	5 810	4 900	3 220	3 170	2 120			2 460	1 650	7,1
	0 m kg			*5 780	5 530	4 720	3 050	3 080	2 040			2 510	1 670	6,9
	-1,5 m kg	*4 400	*4 400	*9 280	5 500	4 650	2 990	3 050	2 010			2 800	1 850	6,4
	-3 m kg	*8 610	*8 610	*8 680	5 590	4 690	3 030					3 590	2 370	5,4
-4,5 m kg														
Boom 4,6 m + Arm 3,0 m + Shoe 700 mm + Counterweight 2 100 kg	7,5 m kg											*2 860	*2 860	4,6
	6,0 m kg							*2 800	2 310			*2 730	2 290	6,0
	4,5 m kg							*2 780	2 310			*2 560	1 790	6,9
	3,0 m kg					*3 440	*3 440	*3 140	2 230			2 330	1 560	7,4
	1,5 m kg			*7 320	5 950	*4 620	3 240	3 170	2 120	2 240	1 490	2 210	1 470	7,6
	0 m kg			*6 240	5 520	4 710	3 040	3 060	2 020			2 240	1 480	7,4
	-1,5 m kg	*3 820	*3 820	*8 390	5 410	4 600	2 940	3 000	1 960			2 450	1 610	6,9
	-3,0 m kg	*7 060	*7 060	*9 080	5 460	4 600	2 940	3 030	1 990			3 000	1 970	6,0
-4,5 m kg			*7 210	5 670							*4 510	3 120	4,5	















- 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 end without bucket.

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

• EC140C L

 Across undercarriage  Along undercarriage	Lifting hook related to ground level	1,5 m		3,0 m		4,5 m		6,0 m		7,5 m		Max. reach			
														Max. m	
Boom 4,6 m + Arm 2,1 m + Shoe 600 mm + Counterweight 2 450 kg	7,5 m kg														
	6 m kg					*3 300	*3 300						*3 470	3 390	4,9
	4,5 m kg					*3 440	*3 440						*3 530	2 440	6,0
	3 m kg			*6 170	*6 170	*4 280	3 650	*3 710	2 370				3 250	2 070	6,5
	1,5 m kg					*5 330	3 430	3 630	2 280				3 070	1 930	6,7
	0 m kg			*5 170	*5 170	5 460	3 280	3 550	2 210				3 140	1 970	6,5
	-1,5 m kg	*4 790	*4 790	*9 350	5 970	5 420	3 250						3 570	2 220	6,0
	-3 m kg			*8 140	6 100	*5 420	3 320						*4 790	2 970	4,9
-4,5 m kg															
Boom 4,6 m + Arm 2,5 m + Shoe 600 mm + Counterweight 2 450 kg	7,5 m kg					*2 820	*2 820								
	6 m kg												*3 180	2 930	5,4
	4,5 m kg					*3 060	*3 060	*3 170	2 460				*3 080	2 200	6,4
	3 m kg			*5 290	*5 290	*3 920	3 700	*3 460	2 390				2 990	1 900	6,9
	1,5 m kg			*6 300	6 240	*5 030	3 460	3 640	2 290				2 830	1 780	7,1
	0 m kg			*5 770	*5 770	5 460	3 290	3 540	2 200				2 890	1 810	6,9
	-1,5 m kg	*4 390	*4 390	*9 280	5 920	5 390	3 220	3 510	2 170				3 210	2 000	6,4
	-3 m kg	*8 600	*8 600	*8 620	6 010	5 440	3 260						4 140	2 550	5,4
-4,5 m kg															
Boom 4,6 m + Arm 3,0 m + Shoe 600 mm + Counterweight 2 450 kg	7,5 m kg												*2 850	*2 850	4,5
	6,0 m kg							*2 790	2 480				*2 720	2 460	6,0
	4,5 m kg							*2 760	2 490				*2 550	1 930	6,9
	3,0 m kg					*3 420	*3 420	*3 120	2 400				*2 550	1 690	7,4
	1,5 m kg			*7 270	6 390	*4 590	3 490	3 640	2 280	2 580	1 610		2 540	1 590	7,6
	0 m kg			*6 240	5 940	5 460	3 270	3 520	2 180				2 580	1 600	7,4
	-1,5 m kg	*3 810	*3 810	*8 390	5 830	5 340	3 170	3 460	2 120				2 820	1 750	6,9
	-3,0 m kg	*7 050	*7 050	*9 020	5 880	5 350	3 180	3 490	2 150				3 460	2 130	6,0
-4,5 m kg			*7 150	6 100								*4 470	3 360	4,5	
2-piece boom 4,6 m + Arm 2,1 m + Shoe 600 mm + Counterweight 2 450 kg	7,5 m kg												*5 350	*5 350	2,9
	6 m kg			*5 090	*5 090	*4 770	3 950						*3 810	3 260	5,0
	4,5 m kg			*5 220	*5 220	*4 910	3 900	3 810	2 410				*3 420	2 360	6,1
	3 m kg					*5 680	3 670	3 750	2 360				3 180	2 000	6,6
	1,5 m kg					5 660	3 410	3 640	2 260				3 000	1 870	6,8
	0 m kg					5 460	3 240	3 550	2 180				3 070	1 900	6,6
	-1,5 m kg			*9 110	5 870	5 400	3 190	3 540	2 170				3 470	2 130	6,1
	-3 m kg														
-4,5 m kg															
2-piece boom 4,6 m + Arm 2,5 m + Shoe 600 mm + Counterweight 2 450 kg	7,5 m kg			*5 080	*5 080								*3 990	*3 990	3,8
	6,0 m kg			*4 210	*4 210	*4 310	4 040						*3 080	2 810	5,5
	4,5 m kg			*3 950	*3 950	*4 540	3 960	3 870	2 460				*2 810	2 120	6,5
	3,0 m kg			*7 550	7 050	*5 340	3 730	3 780	2 380				*2 750	1 830	7,0
	1,5 m kg					5 700	3 440	3 650	2 270				2 760	1 710	7,2
	0 m kg			*5 230	*5 230	5 460	3 240	3 540	2 170				2 810	1 730	7,0
	-1,5 m kg			*8 800	5 800	5 370	3 160	3 500	2 130				3 130	1 920	6,5
	-3,0 m kg					*5 290	3 200						*4 230	2 600	5,3
-4,5 m kg															
2-piece boom 4,6 m + Arm 3,0 m + Shoe 600 mm + Counterweight 2 450 kg	7,5 m kg			*4 150	*4 150	*3 450	*3 450						*3 100	*3 100	4,7
	6 m kg					*3 670	*3 670	*3 010	2 490				*2 530	2 360	6,2
	4,5 m kg			*2 850	*2 850	*3 600	*3 600	*3 750	2 500				*2 330	1 860	7,1
	3 m kg					*4 660	3 780	3 800	2 400	*2 430	1 640		*2 280	1 630	7,5
	1,5 m kg					5 750	3 490	3 650	2 270	2 580	1 600		*2 350	1 530	7,7
	0 m kg					5 470	3 250	3 530	2 160	2 540	1 560		2 520	1 550	7,5
	-1,5 m kg	*3 460	*3 460	*7 920	5 760	5 340	3 130	3 460	2 100				2 750	1 690	7,1
	-3 m kg			*8 550	5 820	5 340	3 130	3 490	2 120				3 360	2 050	6,2
-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 end without bucket.

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

• EC140C LM

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

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STANDARD EQUIPMENT

Engine

Turbocharged, 4 stroke diesel engine with water cooling, direct injection and charged air cooler that meets EU Stage IIIA requirements
Air filter with indicator
Air intake heater
Electric engine shut-off
Fuel filter and water separator
Fuel filler pump: 35 l/min, with automatic shut-off
Alternator, 80 A

Electric/Electronic control system

Contronics
- Advanced mode control system
- Self-diagnostic system
Machine status indication
Engine speed sensing power control
Automatic idling system
One-touch power boost
Safety stop/start function
Adjustable LCD color monitor
Master electrical disconnect switch
Engine restart prevention circuit
High-capacity halogen lights:
- Frame-mounted 2
- Boom-mounted 2
Batteries, 2 x 12 V / 100 Ah
Start motor, 24 V / 5,5 kW

Hydraulic system

Hydraulic piping:
- Hammer & shear, 1 pump flow
- Quick fit piping

Hose rupture valve: boom
Overload warning device
Automatic sensing hydraulic system
- Summation system
- Boom priority
- Arm priority
- Slew priority
Boom, arm and bucket regeneration valves
Slew anti-rebound valves
Boom and arm holding valves
Multi-stage filtering system
Cylinder cushioning
Cylinder contamination seals
Auxiliary hydraulic valve
Automatic two-speed travel motors
Hydraulic oil, ISO VG 46

Superstructure

Access way with handrail
Full height counterweight
Tool storage area
Punched metal anti-slip plates
Undercover (heavy-duty 4,5 mm)

Cab and interior

Fabric seat with heater
Control joysticks with 4 switches each
Heater & air-conditioner, automatic
Hydraulic dampening cab mounts
Adjustable operator seat and joystick control console
Flexible antenna
Hydraulic safety lock lever
Cab, all-weather sound suppressed, includes:
- Ashtray

- Cup holder (X3)
- Lighter
- Door locks
- Tinted glass
- Floor mat
- Horn
- Large storage area
- Pull-up type front window
- Removable lower windshield
- Seat belt, retractable
- Safety glass
- Sun shields, front, roof, rear
- Rain shield
- Windshield wiper with intermittent feature
Anti-vandalism kit assembly preparation
Master ignition key
Opening top hatch

Undercarriage

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

Track shoes

Track shoes with triple grouser

Digging equipment

Boom: 4,6 m
Arm: 2,5 m

Service

Tool kit, daily maintenance

OPTIONAL EQUIPMENT

Engine

Block heater: 240 V
Pre-cleaner
Diesel driven coolant heater, 5 kW
Water separator with heater

Electric

Extra lamps:
- Cab-mounted 1
- Counterweight-mounted 1
Travel alarm
Anti-theft system
Rotating warning beacon

Hydraulic system

Hose rupture valve: arm
Boom float function
Hydraulic piping:
- Hammer & shear, 2 pump flow
- Slope & rotator

- Grapple
- Oil leak (drain) line
Volvo hydraulic quick fit, S6, U size
Hydraulic oil, ISO VG 32
Hydraulic oil, ISO VG 68
Hydraulic oil, biodegradable 32
Hydraulic oil, biodegradable 46

Cab and interior

Fabric seat
Fabric seat with heater and air suspension
Control joystick with semi-long levers
Control joystick with proportional control
Falling object guard (FOG)
- Cab-mounted
Cab-mounted falling object protective structure (FOPS)
Screen guard for front window
Sunlight protection, roof (steel)
Lower wiper with intermittent control
Anti-vandalism kit

Specific key
Rear view mirror
Rear view camera

Undercarriage

Dozer blade

Track shoes

EC140C: 500 / 600 / 700 mm,
with triple grouser
EC140C L: 500 / 600 / 700 / 750 mm,
with triple grouser
EC140C LM: 600 / 700 / 800 / 900 mm,
with triple grouser

Digging equipment

Boom: 4,6 m 2-piece
Arm: 2,1 m
3,0 m

Service

Tool kit, full scale



Volvo Construction Equipment is different. Our machines are designed, built and supported in a different way. That difference comes from an engineering heritage of over 175 years. A heritage of thinking first about the people who actually use the machines. About how to help them be safer, more comfortable, more productive. About the environment we all share. The result of that thinking is a growing range of machines and a global support network dedicated to helping you do more. People around the world are proud to use Volvo. And we're proud of what makes Volvo different – **More care. Built in.**



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