

VOLVO EXCAVATOR
EC140C

28,110 – 32,370 lb, 92 hp



MORE CARE. BUILT IN.



SPECIFICATIONS

Engine

The Volvo diesel engine delivers lower emissions, along with superior performance and fuel efficiency. The EPA Tier 3 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 rpm
Net (ISO 9249, SAE J1349)	69 kW 92 hp
Gross (SAE J1995)	80 kW 107 hp
Max. torque at 1,600 rpm	472 Nm 354 lb.ft
No. of cylinders	4
Displacement	4.0 l 246 cu.in
Bore	101 mm 3.98"
Stroke	126 mm 4.96"

Electrical system

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

Voltage	24 V
Batteries	2 x 12 V
Battery capacity	100 Ah
Alternator	28 V / 80 A
Service refill capacities	
Fuel tank	260 l 69 gal
Hydraulic system, total	160 l 42 gal
Hydraulic tank	95 l 25 gal
Engine oil	16.5 l 4 gal
Engine coolant	21.3 l 6 gal
Swing reduction unit	3.8 l 1.0 gal
Travel reduction unit	2 x 2.2 l 2 x 0.6 gal

Swing system

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

Max. swing speed	12 rpm
Max. swing torque	38.8 kNm 28,620 lb.ft

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 26,460 lb
Max. travel speed	3.0/5.5 km/h 1.9/3.4 mph
Gradeability	35° 70%

Undercarriage

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

Track pads	2 x 46
Link pitch	171.5 mm 6.8"
Shoe width, triple grouser	500/600/700/750 mm 20"/24"/28"/30"
Shoe width, triple grouser HD	600 mm 24"
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 swing 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.

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

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

Power boost: All digging and lifting forces are increased.

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

Main pump:

Type: 2 x variable displacement axial piston pumps
Maximum flow: 2 x 118 l/min **2 x 31 gpm**

Pilot pump:

Type: Gear pump
Maximum flow: 1 x 20 l/min **1 x 5.3 gpm**

Hydraulic motors:

Travel: Variable displacement axial piston motor with mechanical brake

Swing: Fixed displacement piston motor with mechanical brake

Relief valve setting:

Implement	32.4/34.3 MPa
.....	4,690/4,980 psi
Travel circuit	34.3 MPa 4,980 psi
Swing circuit	24.5 MPa 3,560 psi
Pilot circuit	3.9 MPa 570 psi

Hydraulic cylinders:

Mono boom	2
Bore x Stroke	ø 105 x 980 mm
.....	ø 4.1 x 38.6"
Arm	1
Bore x Stroke	ø 120 x 1,045 mm
.....	ø 4.7 x 41.1"
Bucket	1
Bore x Stroke	ø 100 x 865 mm
.....	ø 3.9 x 34.1"
Dozer Blade	2
Bore x Stroke	ø 130 x 270 mm
.....	ø 5.1 x 10.6"

Cab

Standard Care Cab with large and roomy interior, more leg room and foot space. Audio system with remote control. Cup holders, 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 **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 rearview 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 L** with 4.6 m, **15' 1"** std. boom, 2.5 m, **8' 2"** arm, 2,100 kg, **4,630 lb** counterweight

Description	Shoe width	Operating weight (up to)	Ground pressure	Overall width
Triple grouser	500 mm, 20"	12,750 kg, 28,110 lb	40.2 kPa, 5.8 psi	2,490 mm, 8' 2"
	600 mm, 24"	12,940 kg, 28,530 lb	34.3 kPa, 5.0 psi	2,590 mm, 8' 6"
	700 mm, 28"	13,160 kg, 29,020 lb	29.4 kPa, 4.3 psi	2,690 mm, 8' 10"
	750 mm, 30"	13,340 kg, 29,410 lb	27.5 kPa, 4.0 psi	2,740 mm, 9' 0"

- **EC140C L** with **dozer blade**, 4.6 m, **15' 1"** std. boom, 2.5 m, **8' 2"** arm, 2,100 kg, **4,630 lb** counterweight

Description	Shoe width	Operating weight (up to)	Ground pressure	Overall width
Triple grouser	500 mm, 20"	13,740 kg, 30,300 lb	43.1 kPa, 6.3 psi	2,490 mm, 8' 2"
	600 mm, 24"	13,930 kg, 30,720 lb	36.3 kPa, 5.3 psi	2,590 mm, 8' 6"
	700 mm, 28"	14,150 kg, 31,200 lb	31.4 kPa, 4.6 psi	2,690 mm, 8' 10"
	750 mm, 30"	14,330 kg, 31,600 lb	30.4 kPa, 4.4 psi	2,740 mm, 9' 0"

- **EC140C L** with 4.6 m, **15' 1"** std. boom, 2.5 m, **8' 2"** arm, 2,450 kg, **5,400 lb** counterweight

Description	Shoe width	Operating weight (up to)	Ground pressure	Overall width
Triple grouser	500 mm, 20"	13,100 kg, 28,890 lb	41.2 kPa, 6.0 psi	2,490 mm, 8' 2"
	600 mm, 24"	13,290 kg, 29,300 lb	34.3 kPa, 5.0 psi	2,590 mm, 8' 6"
	700 mm, 28"	13,510 kg, 29,790 lb	30.4 kPa, 4.4 psi	2,690 mm, 8' 10"
	750 mm, 30"	13,690 kg, 30,190 lb	28.4 kPa, 4.1 psi	2,740 mm, 9' 0"

- **EC140C L** with **dozer blade**, 4.6 m, **15' 1"** std. boom, 2.5 m, **8' 2"** arm, 2,450 kg, **5,400 lb** counterweight

Description	Shoe width	Operating weight (up to)	Ground pressure	Overall width
Triple grouser	500 mm, 20"	14,090 kg, 31,070 lb	44.1 kPa, 6.4 psi	2,490 mm, 8' 2"
	600 mm, 24"	14,280 kg, 31,490 lb	37.3 kPa, 5.4 psi	2,590 mm, 8' 6"
	700 mm, 28"	14,500 kg, 31,970 lb	32.4 kPa, 4.7 psi	2,690 mm, 8' 10"
	750 mm, 30"	14,680 kg, 32,370 lb	30.4 kPa, 4.4 psi	2,740 mm, 9' 0"

Max. permitted buckets

Note: 1. Bucket size based on ISO 7451, heaped material with a 1:1 angle of repose.

2. "Max. permitted sizes" are for reference only and are not necessarily available from the factory.

3. Bucket widths are less than bucket's tip radius.

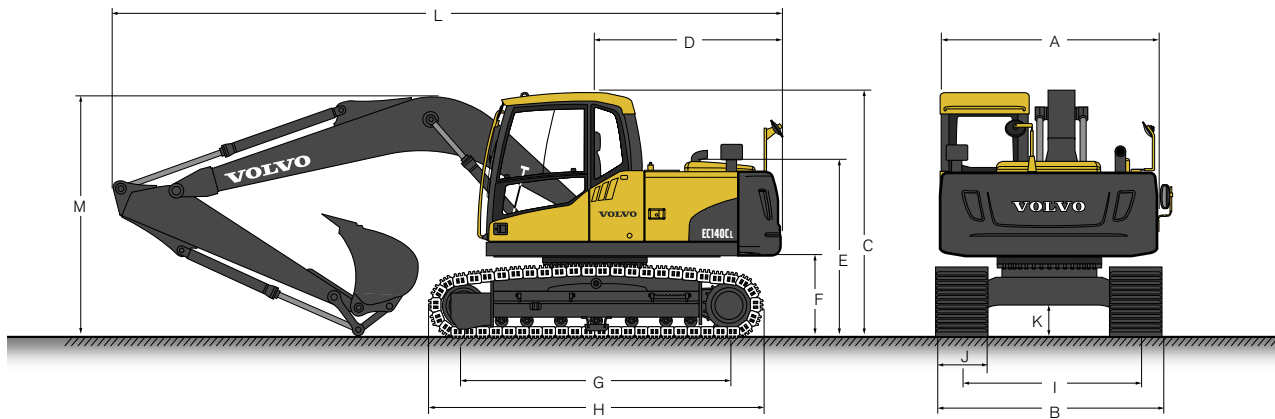
• EC140C L with direct fit bucket

Description	Max. bucket volume / weight	4.6 m, 15' 1" boom		
		2.1 m, 6' 11" arm	2.5 m, 8' 2" arm	3.0 m, 9' 10" arm
GP bucket 1.5 t/m ³ , 2,530 lb/yd³	l / kg	925 / 750	775 / 650	675 / 550
	yd ³ / lb	1.21 / 1,650	1.01 / 1,430	0.88 / 1,210
GP bucket 1.8 t/m ³ , 3,030 lb/yd³	l / kg	825 / 700	675 / 550	600 / 500
	yd ³ / lb	1.08 / 1,540	0.88 / 1,210	0.78 / 1,100
HD bucket 1.8 t/m ³ , 3,030 lb/yd³	l / kg	775 / 750	650 / 650	550 / 550
	yd ³ / lb	1.01 / 1,650	0.85 / 1,430	0.72 / 1,210
HD bucket 2.0 t/m ³ , 3,368 lb/yd³	l / kg	725 / 700	600 / 600	525 / 500
	yd ³ / lb	0.95 / 1,540	0.78 / 1,320	0.69 / 1,100

• EC140C L with quick fit bucket

Description	Max. bucket volume / weight	4.6 m, 15' 1" boom		
		2.1 m, 6' 11" arm	2.5 m, 8' 2" arm	3.0 m, 9' 10" arm
GP bucket 1.5 t/m ³ , 2,530 lb/yd³	l / kg	875 / 750	725 / 600	625 / 500
	yd ³ / lb	1.14 / 1,650	0.95 / 1,320	0.82 / 1,100
GP bucket 1.8 t/m ³ , 3,030 lb/yd³	l / kg	775 / 650	650 / 550	550 / 450
	yd ³ / lb	1.01 / 1,430	0.85 / 1,210	0.72 / 990
HD bucket 1.8 t/m ³ , 3,030 lb/yd³	l / kg	725 / 700	600 / 600	525 / 500
	yd ³ / lb	0.95 / 1,540	0.78 / 1,320	0.69 / 1,100
HD bucket 2.0 t/m ³ , 3,368 lb/yd³	l / kg	675 / 650	575 / 550	475 / 450
	yd ³ / lb	0.88 / 1,430	0.75 / 1,210	0.62 / 990

Dimensions

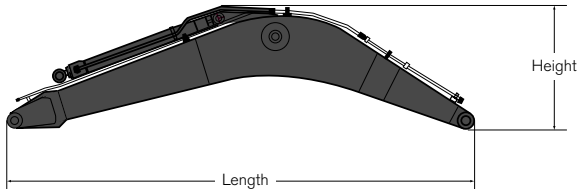


Description		EC140C L		
		4.6 m, 15' 1" boom		
		2.1 m, 6' 11" arm	2.5 m, 8' 2" arm	3.0 m, 9' 10" arm
A. Overall width of upper structure	mm, ft-in	2,490, 8' 2"	2,490, 8' 2"	2,490, 8' 2"
B. Overall width	mm, ft-in	2,590, 8' 6"	2,590, 8' 6"	2,590, 8' 6"
C. Overall height of cab	mm, ft-in	2,800, 9' 2"	2,800, 9' 2"	2,800, 9' 2"
D. Tail swing radius	mm, ft-in	2,200, 7' 3"	2,200, 7' 3"	2,200, 7' 3"
E. Overall height of engine hood	mm, ft-in	2,020, 6' 8"	2,020, 6' 8"	2,020, 6' 8"
F. Counterweight clearance *	mm, ft-in	920, 3' 0"	920, 3' 0"	920, 3' 0"
G. Tumbler length	mm, ft-in	3,040, 10' 0"	3,040, 10' 0"	3,040, 10' 0"
H. Track length	mm, ft-in	3,760, 12' 4"	3,760, 12' 4"	3,760, 12' 4"
I. Track gauge	mm, ft-in	1,990, 6' 6"	1,990, 6' 6"	1,990, 6' 6"
J. Shoe width	mm, ft-in	600, 24"	600, 24"	600, 24"
K. Min. ground clearance *	mm, ft-in	436, 1' 5"	436, 1' 5"	436, 1' 5"
L. Overall length	mm, ft-in	7,700, 25' 3"	7,700, 25' 3"	7,580, 24' 10"
M. Overall height of boom	mm, ft-in	2,710, 8' 11"	2,830, 9' 3"	3,210, 10' 6"

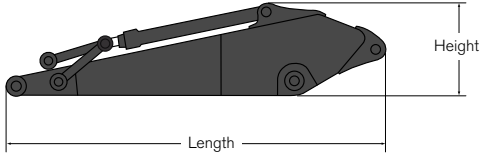
* Without shoe grouser

Dimensions

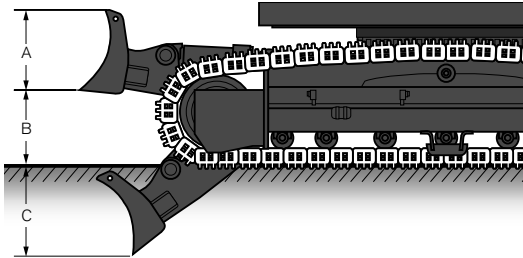
• Boom



• Arm



• Front dozer blade



• EC140C L

Description		4.6 m, 15' 1"
Length	mm, ft-in	4,770, 15' 8"
Height	mm, ft-in	1,370, 4' 6"
Width	mm, ft-in	545, 1' 9"
Weight	kg, lb	1,100, 2,430

* Includes arm cylinder, piping and pin

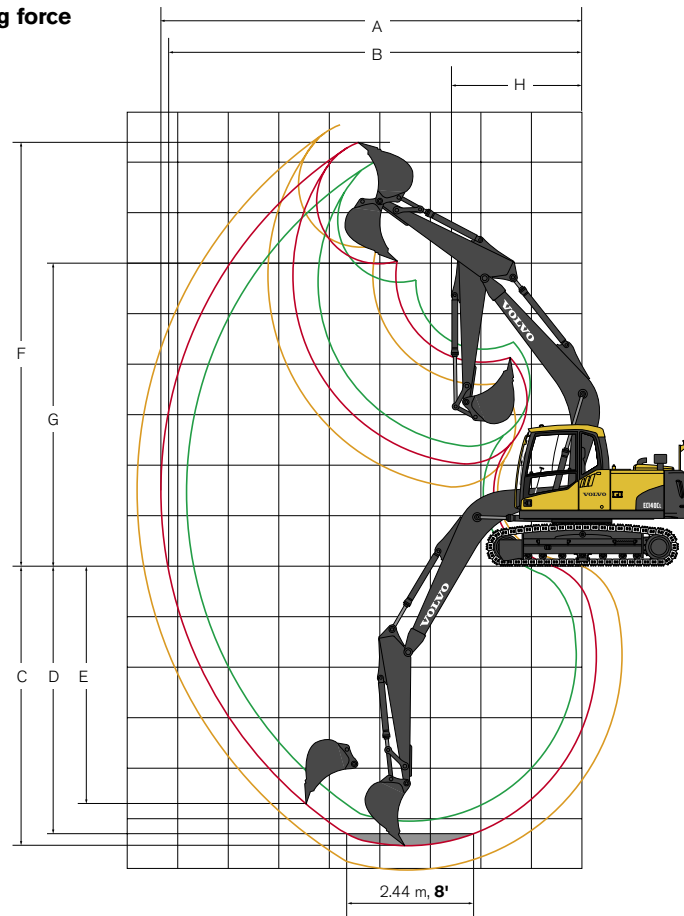
• EC140C L

Description		2.1 m, 6' 11"	2.5 m, 8' 2"	3.0 m, 9' 10"
Length	mm, ft-in	2,800, 9' 2"	3195, 10' 6"	3,690, 12' 1"
Height	mm, ft-in	710, 2' 4"	675, 2' 3"	750, 2' 6"
Width	mm, ft-in	275, 11"	275, 11"	275, 11"
Weight	kg, lb	555, 1,220	625, 1,380	685, 1,510

* Includes bucket cylinder, linkage and pin

Description		Measurement
A. Height	mm, ft-in	580, 1' 11"
Width	mm, ft-in	2,590, 8' 6"
Weight	kg, lb	460, 1,010
B. Lift height	mm, ft-in	505, 1' 8"
C. Digging depth	mm, ft-in	575, 1' 11"

Working ranges & digging force



Machine with direct fit bucket		EC140C L		
		4.6 m, 15' 1" boom		
		2.1 m, 6' 11" arm	2.5 m, 8' 2" arm	3.0 m, 9' 10" arm
A. Max. digging reach	mm, ft-in	7,960, 26' 1"	8,330, 27' 4"	8,820, 28' 11"
B. Max. digging reach on ground	mm, ft-in	7,810, 25' 7"	8,190, 26' 10"	8,690, 28' 6"
C. Max. digging depth	mm, ft-in	5,130, 16' 10"	5,530, 18' 2"	6,030, 19' 9"
D. Max. digging depth (8' level)	mm, ft-in	4,870, 16' 0"	5,310, 17' 5"	5,850, 19' 2"
E. Max. vertical wall digging depth	mm, ft-in	4,580, 15' 0"	4,960, 16' 3"	5,500, 18' 1"
F. Max. cutting height	mm, ft-in	8,160, 26' 9"	8,390, 27' 6"	8,740, 28' 8"
G. Max. dumping height	mm, ft-in	5,740, 18' 10"	5,980, 19' 7"	6,320, 20' 9"
H. Min. front swing radius	mm, ft-in	2,570, 8' 5"	2,630, 8' 8"	2,840, 9' 4"

Digging forces with direct fit bucket			EC140C L		
			4.6 m, 15' 1" boom		
			2.1 m, 6' 11" arm	2.5 m, 8' 2" arm	3.0 m, 9' 10" arm
Bucket radius		mm, ft-in	1,250, 49"	1,250, 49"	1,250, 49"
Breakout force - bucket (Normal/Power boost)	SAE J1179	kN lb	82.4 / 87.3 18,560 / 19,620	82.4 / 87.3 18,560 / 19,620	82.4 / 87.3 18,560 / 19,620
	ISO 6015	kN lb	93.2 / 98.1 20,950 / 22,050	93.2 / 98.1 20,950 / 22,050	93.2 / 98.1 20,950 / 22,050
Tearout force - arm (Normal/Power boost)	SAE J1179	kN lb	69.6 / 73.5 15,660 / 16,540	61.8 / 65.7 13,890 / 14,770	54.9 / 58.8 12,350 / 13,230
	ISO 6015	kN lb	71.6 / 75.5 16,100 / 16,980	63.7 / 67.7 14,330 / 15,210	56.9 / 59.8 12,790 / 13,450
Rotation angle, bucket		deg.	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 L

 	Lifting hook related to ground level	1.5 m, 5'				3.0 m, 10'				4.5 m, 15'				6.0 m, 20'				7.5 m, 25'				Max. reach				
																								Max. m/ft		
		t	lb	t	lb	t	lb	t	lb	t	lb	t	lb	t	lb	t	lb	t	lb	t	lb					
Boom 4.6 m, 15' 1" + Arm 2.1 m, 6' 11" + Shoe 600 mm, 24" + Counterweight 2,100 kg, 4,630 lb	6.0 m 20'									*33	*7,470	*33	*7,470									*35	*7,720	33	7,260	5.4/17.7
	4.5 m 15'									*34	*7,590	*34	*7,590									*35	*7,840	23	5,100	5.9/19.5
	3.0 m 10'					*60	*13,230	60	*13,230	*42	*9,360	33	7,410	34	7,590	210	4,790					31	6,810	19	4,290	6.5/21.4
	1.5 m 5'									52	11,470	31	6,950	33	7,400	200	4,610					29	6,400	18	4,000	6.7/22.0
	0 m 0'					*55	*12,140	54	12,000	50	11,120	30	6,640	32	7,250	200	4,480					29	6,560	18	4,070	6.5/21.4
	-1.5 m -5'	*49	*10,830	*49	*10,830	*92	*20,440	54	12,030	50	11,030	29	6,560									33	7,460	20	4,600	6.0/19.6
	-3.0 m -10'					*80	*17,700	55	12,310	50	11,210	30	6,730									46	10,260	28	6,220	4.9/15.9
-4.5 m -15'																										
Boom 4.6 m, 15' 1" + Arm 2.5 m, 8' 2" + Shoe 600 mm, 24" + Counterweight 2,100 kg, 4,630 lb	6.0 m 20'									*28	*6,360	*28	*6,360									*32	*7,050	28	6,220	5.3/17.4
	4.5 m 15'									*30	*6,740	*30	*6,740	*32	*7,080	22	4,950					*31	*6,830	20	4,600	6.4/20.9
	3.0 m 10'					*51	*11,360	*51	*11,360	*38	*8,560	34	7,500	34	7,630	21	4,820					28	6,240	17	3,930	6.9/22.7
	1.5 m 5'					*70	*15,600	57	12,600	*49	*10,960	31	6,990	33	7,410	20	4,620					26	5,890	16	3,680	7.1/23.2
	0 m 0'					*61	*13,460	54	11,960	50	11,110	30	6,630	32	7,220	20	4,440					27	6,010	16	3,720	6.9/22.7
	-1.5 m -5'	*45	*9,910	*45	*9,910	*94	*20,790	54	11,890	49	10,950	29	6,490	32	7,150	19	4,380					30	6,710	18	4,130	6.4/20.9
	-3.0 m -10'	*88	*19,470	*88	*19,470	*86	*18,730	55	12,100	50	11,050	29	6,580									39	8,730	24	5,320	5.4/17.4
-4.5 m -15'																										
Boom 4.6 m, 15' 1" + Arm 3.0 m, 9' 10" + Shoe 600 mm, 24" + Counterweight 2,100 kg, 4,630 lb	6.0 m 20'																					*27	*6,060	23	5,200	6.0/19.5
	4.5 m 15'																					*25	*5,660	18	4,020	6.9/22.6
	3.0 m 10'									*33	*7,470	*33	*7,470	27	6,150	25	5,010					25	5,580	15	3,490	7.4/24.3
	1.5 m 5'					*71	*15,700	58	12,910	*45	*10,020	32	7,050	33	7,400	20	4,600					24	5,290	14	3,270	7.6/24.8
	0 m 0'					*66	*14,530	54	11,960	50	11,100	29	6,600	32	7,170	19	4,390					24	5,370	15	3,300	7.4/24.3
	-1.5 m -5'	*39	*8,590	*39	*8,590	*87	*19,290	53	11,710	49	10,850	29	6,390	32	7,040	19	4,280					26	5,890	16	3,600	6.9/22.7
	-3.0 m -10'	*72	*15,940	*72	*15,940	*89	*19,630	53	11,830	49	10,860	29	6,400									33	7,280	20	4,440	6.0/19.7
-4.5 m -15'																					*45	*9,990	32	7,180	4.4/14.3	
Boom 4.6 m, 15' 1" + Arm 2.1 m, 6' 11" + Shoe 600 mm, 24" + Counterweight 2,450 kg, 5,401 lb	6.0 m 20'									*29	*6,580	*29	*6,580									*31	*6,920	*31	*6,920	5.0/16.3
	4.5 m 15'									*31	*6,920	*31	*6,920									*31	*7,040	24	5,400	6.1/20.0
	3.0 m 10'									*38	*8,550	36	8,080	*35	*7,770	23	5,230					32	7,100	20	4,570	6.7/21.8
	1.5 m 5'							*36		*48	*10,770	34	7,600	35	7,910	22	5,020					*30	6,660	19	4,250	6.8/22.4
	0 m 0'					*35	*7,830	*35	*7,830	53	11,860	32	7,210	35	7,720	22	4,860					*30	6,790	19	4,290	6.7/21.9
	-1.5 m -5'	*45	*10,000	*45	*10,000	*83	*18,350	58	12,810	52	11,660	32	7,040	34	7,650	21	4,790					34	7,620	21	4,780	6.1/20.1
	-3.0 m -10'					*86	*19,040	59	12,990	53	11,730	32	7,100									46	10,160	28	6,240	5.0/16.5
-4.5 m -15'																										
Boom 4.6 m, 15' 1" + Arm 2.5 m, 8' 2" + Shoe 600 mm, 24" + Counterweight 2,450 kg, 5,401 lb	6.0 m 20'																					*28	*6,240	*28	*6,240	5.5/18.0
	4.5 m 15'									*27	*6,060	*27	*6,060	*29	*6,530	24	5,440					*27	*5,950	22	4,880	6.5/21.4
	3.0 m 10'									*35	*7,740	*35	*7,740	*32	*7,200	23	5,260					*27	*6,080	19	4,190	7.1/23.1
	1.5 m 5'					*70	*15,540	63	13,960	*45	*10,040	34	7,670	36	7,930	22	5,040					27	6,140	17	3,910	7.2/23.7
	0 m 0'					*56	*12,380	*56	*12,380	53	11,880	32	7,220	35	7,710	22	4,840					28	6,230	17	3,930	7.1/23.2
	-1.5 m -5'	*41	*9,190	*41	*9,190	*80	*17,640	57	12,700	52	11,620	31	6,990	34	7,590	21	4,730					31	6,880	19	4,310	6.5/21.5
	-3.0 m -10'	*70	*15,430	*70	*15,430	*89	*19,770	58	12,810	52	11,610	31	6,990									39	8,710	24	5,390	5.6/18.2
-4.5 m -15'					*71	*15,780	60	13,240													*58	*12,970	44	9,750	3.7/12.2	
Boom 4.6 m, 15' 1" + Arm 3.0 m, 9' 10" + Shoe 600 mm, 24" + Counterweight 2,450 kg, 5,401 lb	6.0 m 20'													*25	*5,580	25	5,540					*24	*5,270	*24	*5,270	6.2/20.3
	4.5 m 15'													*25	*5,640	25	5,500					*22	*5,030	19	4,250	7.1/23.3
	3.0 m 10'									*30	*6,630	*30	*6,630	*29	*6,430	24	5,290					*23	*5,090	16	3,710	7.6/24.9
	1.5 m 5'					*59	*13,160	*59	*13,160	*40	*9,020	35	7,750	*34	*7,570	22	5,040	25	5,640	16	3,570	*25	*5,400	15	3,480	7.8/25.4
	0 m 0'					*69	*15,220	59	13,040	*51	*11,440	32	7,230	34	7,680	21	4,800					25	5,550	15	3,480	7.6/24.9
	-1.5 m -5'	*28	*6,290	*28	*6,290	*76	*16,760	57	12,580	52	11,550	31	6,920	34	7,500	21	4,640					27	6,020	17	3,750	7.1/23.4
	-3.0 m -10'	*58	*12,860	*58	*12,860	*92	*20,330	57	12,570	52	11,460	31	6,840	34	7,490	21	4,630					33	7,270	20	4,500	6.2/20.4
-4.5 m -15'					79	*17,510	58	12,890	*51	*11,410	31	7,030									*50	*11,070	30	6,810	4.7/15.4	

- Notes:
- Machine in "Fine Mode-F" (Power Boost) for lifting capacities.
 - The above loads are in compliance with SAE J1097 and ISO 10567 Hydraulic Excavator Lifting Capacity Standards.
 - Rated loads do not exceed 87% of hydraulic lifting capacity or 75% of tipping load.
 - Rated loads marked with an asterisk (*) are limited by hydraulic capacity rather than tipping load.

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 under-carriage  Along under-carriage	Lifting hook related to ground level	1.5 m, 5'				3.0 m, 10'				4.5 m, 15'				6.0 m, 20'				7.5 m, 25'				Max. reach				Max. m/ft
																										
		t	lb	t	lb	t	lb	t	lb	t	lb	t	lb	t	lb	t	lb	t	lb	t	lb	t	lb			
Boom 4.6 m, 15' 1" + Arm 2.1 m, 6' 11" + Shoe 600 mm, 24" + Counterweight 2,100 kg, 4,630 lb + Dozer blade	6.0 m 20'									'3.3	'7,319	'3.3	'7,319							'3.5	'7,716	'3.5	'7,716	4.9/16.0		
	4.5 m 15'									'3.5	'7,649	'3.5	'7,649							'3.6	'7,848	2.8	6,085	6.0/19.6		
	3.0 m 10'					'6.2	'13,690	'6.2	'13,690	'4.3	'9,523	4.2	9,149	'3.7	'8,245	2.7	5,930			'3.7	'8,157	2.4	5,203	6.5/21.4		
	1.5 m 5'									'5.4	'11,838	3.9	8,642	'4.2	'9,193	2.6	5,754			'3.9	'8,597	2.2	4,872	6.7/22.0		
	0 m 0'					'5.2	'11,419	'5.2	'11,419	'6.1	'13,426	3.8	8,333	'4.5	'9,942	2.5	5,600			'4.2	'9,171	2.3	4,982	6.5/21.4		
	-1.5 m -5'	'4.8	'10,582	'4.8	'10,582	'9.4	'20,767	7.0	15,410	'6.2	'13,690	3.7	8,245							'4.5	'9,854	2.6	5,622	6.0/19.6		
	-3.0 m -10'					'8.2	'18,077	7.1	15,697	'5.5	'12,037	3.8	8,400							'4.8	'10,648	3.4	7,496	4.9/16.1		
	-4.5 m -15'																									
Boom 4.6 m, 15' 1" + Arm 2.5 m, 8' 2" + Shoe 600 mm, 24" + Counterweight 2,100 kg, 4,630 lb + Dozer blade	6.0 m 20'									'2.8	'6,261	'2.8	'6,261							'3.2	'7,054	'3.2	'7,054	5.4/17.7		
	4.5 m 15'									'3.1	'6,790	'3.1	'6,790	'3.2	'7,032	2.8	6,129			'3.1	'6,812	2.5	5,512	6.4/20.9		
	3.0 m 10'					'5.3	'11,728	'5.3	'11,728	'4.0	'8,708	'4.0	'8,708	'3.5	'7,694	2.7	5,974			'3.1	'6,812	2.2	4,762	6.9/22.7		
	1.5 m 5'					'6.3	'13,888	'6.3	'13,888	'5.1	'11,177	4.0	8,708	'4.0	'8,752	2.6	5,754			'3.3	'7,231	2.0	4,497	7.1/23.1		
	0 m 0'					'5.8	'12,742	'5.8	'12,742	'5.9	'13,029	3.8	8,311	'4.4	'9,678	2.5	5,578			'3.7	'8,112	2.1	4,564	6.9/22.7		
	-1.5 m -5'	'4.4	'9,700	'4.4	'9,700	'9.3	'20,480	7.0	15,256	'6.2	'13,668	3.7	8,179	'4.5	'9,942	2.5	5,489			'4.2	'9,193	2.3	5,071	6.4/20.9		
	-3.0 m -10'	'8.6	'18,981	'8.6	'18,981	'8.7	'19,113	7.0	15,476	'5.8	'12,698	3.8	8,267							'4.5	'9,986	2.9	6,437	5.4/17.7		
	-4.5 m -15'																									
Boom 4.6 m, 15' 1" + Arm 3.0 m, 9' 10" + Shoe 600 mm, 24" + Counterweight 2,100 kg, 4,630 lb + Dozer blade	6.0 m 20'													'2.8	'6,172	2.8	6,172			'2.7	'6,018	'2.7	'6,018	6.0/19.6		
	4.5 m 15'													'2.8	'6,128	'2.8	'6,128			'2.6	'5,643	2.2	4,828	6.9/22.7		
	3.0 m 10'									'3.4	'7,583	'3.4	'7,583	'3.2	'6,944	2.7	5,997			'2.6	'5,643	1.9	4,255	7.4/24.3		
	1.5 m 5'					'7.3	'16,137	'7.3	'16,137	'4.6	'10,207	4.0	8,774	'3.7	'8,134	2.6	5,732	'3.0	'6,569	1.9	4,079	'2.7	'5,908	1.8	4,034	7.6/24.8
	0 m 0'					'6.2	'13,756	'6.2	'13,756	'5.6	'12,389	3.8	8,289	'4.2	'9,237	2.5	5,512			'3.0	'6,525	1.9	4,079	7.4/24.3		
	-1.5 m -5'	'3.8	'8,421	'3.8	'8,421	'8.4	'18,496	6.8	15,079	'6.1	'13,470	3.7	8,069	'4.5	'9,832	2.5	5,401			'3.5	'7,738	2.0	4,431	6.9/22.7		
	-3.0 m -10'	'7.1	'15,564	'7.1	'15,564	'9.1	'20,017	6.9	15,190	'6.0	'13,139	3.7	8,091	'4.2	'9,171	2.5	5,445			'4.1	'9,082	2.5	5,401	6.0/19.7		
	-4.5 m -15'					'7.2	'15,895	7.1	15,675											'4.5	'9,942	3.9	8,488	4.5/14.8		
Boom 4.6 m, 15' 1" + Arm 2.1 m, 6' 11" + Shoe 600 mm, 24" + Counterweight 2,450 kg, 5,401 lb + Dozer blade	6.0 m 20'									'3.3	'7,319	'3.3	'7,319							'3.5	'7,716	'3.5	'7,716	4.9/16.0		
	4.5 m 15'									'3.5	'7,649	'3.5	'7,649							'3.6	'7,848	2.9	6,349	6.0/19.7		
	3.0 m 10'					'6.2	'13,690	'6.2	'13,690	'4.3	'9,523	4.3	9,523	'3.7	'8,245	2.8	6,195			'3.7	'8,157	2.5	5,423	6.5/21.4		
	1.5 m 5'									'5.4	'11,838	4.1	9,017	'4.2	'9,193	2.7	5,997			'3.9	'8,597	2.3	5,115	6.7/22.0		
	0 m 0'					'5.2	'11,419	'5.2	'11,419	'6.1	'13,426	4.0	8,708	'4.5	'9,942	2.7	5,864			'4.2	'9,171	2.4	5,225	6.5/21.4		
	-1.5 m -5'	'4.8	'10,582	'4.8	'10,582	'9.4	'20,767	7.3	16,094	'6.2	'13,690	3.9	8,620							'4.5	'9,854	2.7	5,864	6.0/19.6		
	-3.0 m -10'					'8.2	'18,077	7.4	16,380	'5.5	'12,037	4.0	8,774							'4.8	'10,648	3.6	7,826	4.9/15.9		
	-4.5 m -15'																									
Boom 4.6 m, 15' 1" + Arm 2.5 m, 8' 2" + Shoe 600 mm, 24" + Counterweight 2,450 kg, 5,401 lb + Dozer blade	6.0 m 20'									'2.8	'6,261	'2.8	'6,261							'3.2	'7,054	'3.2	'7,054	5.4/17.4		
	4.5 m 15'									'3.1	'6,790	'3.1	'6,790	'3.2	'7,032	2.9	6,371			'3.1	'6,812	2.6	5,754	6.4/20.9		
	3.0 m 10'					'5.3	'11,728	'5.3	'11,728	'4.0	'8,708	'4.0	'8,708	'3.5	'7,694	2.8	6,217			'3.1	'6,812	2.3	4,982	6.9/22.7		
	1.5 m 5'					'6.3	'13,888	'6.3	'13,888	'5.1	'11,177	4.1	9,083	'4.0	'8,752	2.7	6,019			'3.3	'7,231	2.1	4,718	7.1/23.1		
	0 m 0'					'5.8	'12,742	'5.8	'12,742	'5.9	'13,029	3.9	8,686	'4.4	'9,678	2.6	5,820			'3.7	'8,112	2.2	4,784	6.9/22.7		
	-1.5 m -5'	'4.4	'9,700	'4.4	'9,700	'9.3	'20,480	7.2	15,939	'6.2	'13,668	3.9	8,554	'4.5	'9,942	2.6	5,754			'4.2	'9,193	2.4	5,291	6.4/20.9		
	-3.0 m -10'	'8.6	'18,981	'8.6	'18,981	'8.7	'19,113	7.3	16,160	'5.8	'12,698	3.9	8,642							'4.5	'9,986	3.1	6,746	5.4/17.4		
	-4.5 m -15'																									
Boom 4.6 m, 15' 1" + Arm 3.0 m, 9' 10" + Shoe 600 mm, 24" + Counterweight 2,450 kg, 5,401 lb + Dozer blade	6.0 m 20'													'2.8	'6,172	'2.8	'6,172			'2.7	'6,018	'2.7	'6,018	6.0/19.6		
	4.5 m 15'													'2.8	'6,128	'2.8	'6,128			'2.6	'5,643	2.3	5,049	6.9/22.7		
	3.0 m 10'									'3.4	'7,583	'3.4	'7,583	'3.2	'6,944	2.8	6,261			'2.6	'5,643	2.0	4,453	7.4/24.3		
	1.5 m 5'					'7.3	'16,137	'7.3	'16,137	'4.6	'10,207	4.2	9,149	'3.7	'8,134	2.7	5,997	'3.0	6,570	1.9	4,277	'2.7	'5,908	1.9	4,233	7.6/24.8
	0 m 0'					'6.2	'13,756	'6.2	'13,756	'5.6	'12,389	3.9	8,664	'4.2	'9,237	2.6	5,776			'3.0	'6,525	1.9	4,277	7.4/24.3		
	-1.5 m -5'	'3.8	'8,421	'3.8	'8,421	'8.4	'18,496	7.2	15,763	'6.1	'13,470	3.8	8,444	'4.5	'9,832	2.6	5,644			'3.5	'7,738	2.1	4,652	6.9/22.7		
	-3.0 m -10'	'7.1	'15,564	'7.1	'15,564	'9.1	'20,017	7.2	15,873	'6.0	'13,139	3.8	8,466	'4.2	'9,171	2.6	5,710			'4.1	'9,082	2.6	5,666	6.0/19.6		
	-4.5 m -15'					'7.2	'15,895	'7.2	'15,895											'4.5	'9,942	4.0	8,862	4.5/14.8		

- Notes:
- Machine in "Fine Mode-F" (Power Boost) for lifting capacities.
 - The above loads are in compliance with SAE J1097 and ISO 10567 Hydraulic Excavator Lifting Capacity Standards.
 - Rated loads do not exceed 87% of hydraulic lifting capacity or 75% of tipping load.
 - Rated loads marked with an asterisk (*) are limited by hydraulic capacity rather than tipping load.

STANDARD EQUIPMENT

Engine

Turbocharged, 4-stroke diesel engine with water cooling, direct injection and charged air cooler that meets EPA Tier 3 emission standards

Air filter with indicator

Intake air pre-heater

Electric engine shut-off

Cyclone pre cleaner

Fuel filter and water separator

Alternator, 80 A

Water separator

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 1

Travel alarm

Batteries, 2 x 12 V / 100 Ah

Start motor, 24 V / 5.5 kW

Hydraulic system

Automatic sensing hydraulic system

– Summation system

– Boom priority

– Arm priority

– Swing priority

– Travel priority

Boom, arm and bucket regeneration valves

Swing anti-rebound valves

Boom and arm holding valves

Multi-stage filtering system

Boom cylinders (x2)

Cylinder cushioning

Cylinder contamination seals

Auxiliary hydraulic valve

Automatic two-speed travel motors

Hydraulic oil, ISO VG 46

Superstructure

Access way with handrail

Tool storage area

Service walkway with anti-slip grating

Undercover (HD 4.5 mm, **0.18"**)

Cab and interior

Fabric seat with heater

Travel pedals with hand levers

Hydraulic dampening cab mounts

Adjustable operator seat and joystick control console

Hydraulic safety lock lever

Flexible antenna

AM/FM stereo with CD player and MP3 input

Cab, all-weather sound suppressed, includes:

– Cup holders

– Door locks

– Tinted glass

– Floor mat

– Horn

– Large storage area

– Pull-up type front window

– Removable lower windshield

– 3" retractable seat belt

– Safety glass, light tinted

– Sun screen, front, roof, rear

– Windshield wiper with washer and intermittent feature

Anti-vandalism kit assembly preparation

Master key

Undercarriage

Hydraulic track adjusters

Greased and sealed track link

Track guard

Digging equipment

Manual centralized lubrication

OPTIONAL EQUIPMENT

Engine

Block heater: 120 V

Oil-bath pre-cleaner

Rain cap

Diesel coolant heater, programmable

Water separator with heater

Fuel filler pump: 35 l/min, **9.2 gpm** with automatic shut-off

Electric

Extra lights:

– Cab-mounted 2

– Boom-mounted 1

Travel alarm

Anti-theft system

Rotating warning beacon

Hydraulic system

Hose rupture valve: boom, arm

Overload warning device

Hydraulic piping:

– Work tool management system (up to 20 programmable memories)

– 2-button control for hammer/shear auxiliary hydraulics

– Hammer & shear, 1 and 2 pump flow

– Hammer & shear: variable flow and pressure pre-setting

– Additional return filter

– Slope & rotator

– Grapple

– Oil leak (drain) line

Volvo hydraulic quick fit (S6, U14)

Hydraulic oil, ISO VG 32

Hydraulic oil, ISO VG 68

Hydraulic oil, biodegradable 32

Hydraulic oil, biodegradable 46

Long life hydraulic oil, mineral 32, 46, 68

Superstructure

Full height counterweight: 2,100/2,450 kg, **4,630/5,400 lb**

Cab and interior

Fabric seat

Fabric seat with heater and air suspension

Control joysticks with 4 switches each

Control joystick with semi-long levers

Control joystick with proportional control

Pilot control pattern change

Heater & air-conditioner, automatic

Falling object guard (FOG)

– Frame-mounted

– Cab-mounted

Cab-mounted falling object protective structure (FOPS)

Protective screen for front window

Rain shield

Lower wiper with intermittent control

Straight travel pedal

Anti-vandalism kit

Rearview camera

Rearview mirror, counterweight

Smoker kit

Opening top hatch

Undercarriage

Undercover (HD 4.5 mm, **0.18"**)

Dozer blade

Track equipment

500/600/700/750 mm

20"/24"/28"/30" with triple grouser

600 mm, **24"** with triple grouser HD

Digging equipment

Boom: 4.6 m, **15' 1"** GP

Arm: 2.1 m, **6' 11"** with wear strip

2.5 m, **8' 2"** with wear strip

2.5 m, **8' 2"** GP without wear strip

3.0 m, **9' 10"** with wear strip

3.0 m, **9' 10"** GP without wear strip

Bucket: **36"** XP - GP

36" S6 - GP

Linkage with lifting eye

Extended greasing bushing

Auto lubrication system

Service

Tool kit, daily maintenance

Tool kit, full scale

CareTrack

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

NOTES:



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.**



Not all products are available in all markets. Under our policy of continuous improvement, we reserve the right to change specifications and design without prior notice. The illustrations do not necessarily show the standard version of the machine.

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