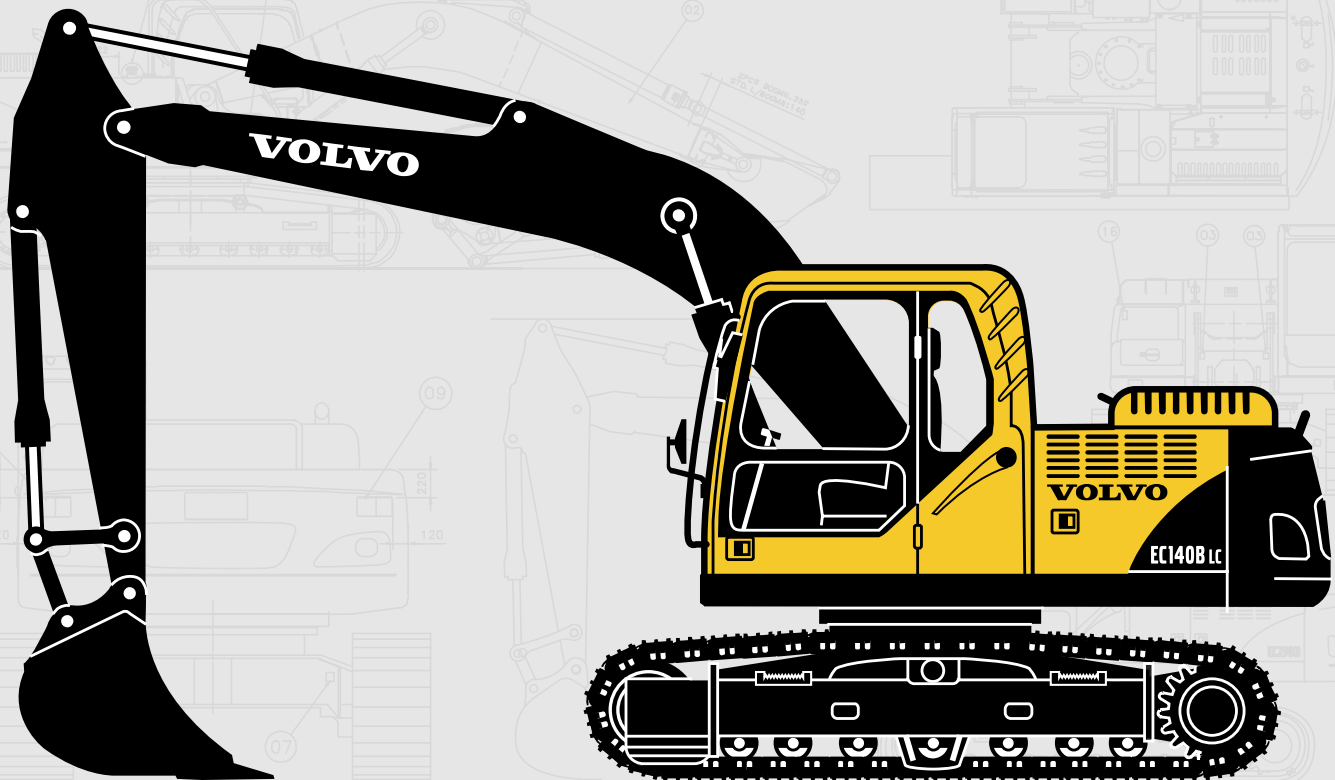


# VOLVO EXCAVATOR

# EC140B LC

# EC140B LCM

## MONOBLOCK/2-PIECE BOOM



- Engine power, gross: 73 kW (98 hp)
- Operating weight:  
LC: 13,7 ~ 15,2 t  
LCM: 14,9 ~ 15,6 t
- Buckets (SAE) 650 ~ 1 075 l
- Turbocharged VOLVO diesel engine with direct injection
- Contronics, advanced mode selection system and electronically controlled system
- 2 variable displacement axial piston pumps. Independent and simultaneous movements of the digging equipment are controlled by "Automatic Sensing Work Mode".
- Cab
  - Ergonomic environment
  - Low sound level
  - Filtered air
  - Hydraulic dampening mounts
- Strong digging equipment, produced by robotic welding
- High lifting, breakout and tearout forces for tough digging conditions
- Undercarriage
  - LC: Long undercarriage for good stability
  - LCM: Uses 20 ton class undercarriage components and offers higher ground clearance transportation
- Auxiliary hydraulic valve as standard
- Prepared for a number of optional items

# VOLVO



## ENGINE

*Turbocharged, 4-stroke diesel engine with water cooling, direct injection. The engine has been developed especially for excavator use, providing good fuel economy, low noise levels and a long service life.*

Air Filter: 2-stage

Automatic Idling System: Reduces engine speed to idle when the levers and pedals are not activated resulting in less fuel consumption and low cab noise level.

### Low-Emission Engine

Make	VOLVO
Model	D4D EAE1
Power output at	35 r/s (2 100 rpm)
Net (ISO 9249/ DIN 6271)	69 kW (94 ps / 93 hp)
Gross (SAE J1349)	73 kW (99 ps / 98 hp)
Max. torque	390 N·m at 1 500 rpm
No. of cylinders	4
Displacement	4 l
Bore	101 mm
Stroke	126 mm



## ELECTRICAL SYSTEM

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

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

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



## UNDERCARRIAGE

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

### LC

No. of track shoes	2 x 46
Link pitch	171,45 mm
Shoe width, triple grouser	500 / 600 / 700 / 750 mm
No. of lower rollers	2 x 7
No. of top rollers	2 x 1

### LCM

No. of track shoes	2 x 42
Link pitch	190 mm
Shoe width, triple grouser	600 / 700 / 800 / 900 mm
No. of lower rollers	2 x 6
No. of top rollers	2 x 2



## DRIVE

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

### LC

Max. tractive effort	109,8 kN
Max. travel speed	3,2 / 5,5 km/h
Gradeability	35° (70%)

### LCM

Max. tractive effort	140,2 kN
Max. travel speed	2,5 / 4,3 km/h
Gradeability	35° (70%)



## SLEW SYSTEM

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

Max. slew speed	11,0 rpm
-----------------	----------



## SERVICE REFILL CAPACITIES

Fuel tank	260 l
Hydraulic system, total	205 l
Hydraulic tank	100 l
Engine oil	15,5 l
Engine coolant	20,3 l
Slew reduction unit	3,8 l
Travel reduction unit	
LC	2 x 3,5 l
LCM	2 x 5,8 l



## HYDRAULIC SYSTEM

The hydraulic system, named "Automatic Sensing Work Mode", is designed for high-productivity, high-digging capacity, high-maneuvering precision and good fuel economy. The summation system, boom, arm and slew priority along with boom and arm regeneration are provides optimum performance.

The following important functions are included in the system:

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

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

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

**Slew priority:** Supplies priority to the slew operation for faster slew simultaneous operations.

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

**Power boost:** All digging and lifting forces are increased.

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

**Power Max:** All function speeds are increased.

### Main pump

Type ..... 2 x variable displacement axial piston pumps  
Maximum flow ... 2 x 118 l/min

### Pilot pump

Type ..... Gear pump  
Maximum flow ... 1 x 21 l/min

### Hydraulic motors

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

### Relief valve setting

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

### Hydraulic cylinders

Monoblock boom ..... 2  
bore x stroke .....  $\varnothing$ 105 x 980 mm  
1st boom of 2-piece boom ..... 2  
bore x stroke .....  $\varnothing$ 110 x 980 mm  
2nd boom of 2-piece boom ..... 1  
bore x stroke .....  $\varnothing$ 160 x 765 mm  
Arm ..... 1  
bore x stroke .....  $\varnothing$ 120 x 1 045 mm  
Bucket ..... 1  
bore x stroke .....  $\varnothing$ 100 x 865 mm



## CAB

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

### Integrated air conditioning and heating system:

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

**Ergonomic operator's seat:** The adjustable seat and joystick consoles move independently to accommodate the operator. The seat has nine different adjustments and a seat belt to meet any operator's comfort and safety.

### Sound Level:

Sound level in cab  
according to ISO 6396 ..... LpA 72 dB(A)  
External sound level  
according to ISO 6395 ..... LwA 100 dB(A)  
(Directive 2000/14/EC)



## GROUND PRESSURE

- LC undercarriage with 4,6 m monoblock boom, 2,5 m arm, 450 l (400 kg) bucket and 2 450 kg counterweight.

Description	Shoe width	Operating weight	Ground pressure	Overall width
Triple grouser	500 mm	13 740 kg	41,1 kPa	2 490 mm
	600 mm	13 950 kg	35,0 kPa	2 590 mm
	700 mm	14 160 kg	30,5 kPa	2 690 mm
	750 mm	14 270 kg	28,7 kPa	2 740 mm

- LC undercarriage dozer blade with 4,6 m monoblock boom, 2,5 m arm, 450 l (400 kg) bucket and 2 450 kg counterweight.

Description	Shoe width	Operating weight	Ground pressure	Overall width
Triple grouser	500 mm	14 640 kg	44,1 kPa	2 490 mm
	600 mm	14 850 kg	37,3 kPa	2 590 mm
	700 mm	15 060 kg	32,4 kPa	2 690 mm
	750 mm	15 170 kg	30,5 kPa	2 740 mm

- LCM undercarriage with 4,6 m monoblock boom, 2,5 m arm, 450 l (400 kg) bucket and 2 450 kg counterweight.

Description	Shoe width	Operating weight	Ground pressure	Overall width
Triple grouser	600 mm	14 940 kg	37,2 kPa	2 590 mm
	700 mm	15 150 kg	32,3 kPa	2 690 mm
	800 mm	15 360 kg	28,7 kPa	2 790 mm
	900 mm	15 570 kg	25,8 kPa	2 890 mm

## MAX. PERMITTED BUCKETS

*Note: 1. Bucket size based on SAE-J296, heaped material with a 1:1 angle of repose.  
2. "Max permitted sizes" are for reference only and are not necessarily available from the factory.*

- Max. permitted sizes for direct fit buckets:  
LC undercarriage with counterweight 2 450 kg

Description	Unit	4,6 m Boom		
		2,1 m Arm	2,5 m Arm	3,0 m Arm
GP bucket 1,5 t/m <sup>3</sup>	l	975	900	800
GP bucket 1,8 t/m <sup>3</sup>	l	850	775	700

- Max. permitted sizes for quick fit buckets:  
LC undercarriage with counterweight 2 450 kg

Description	Unit	4,6 m Boom		
		2,1 m Arm	2,5 m Arm	3,0 m Arm
GP bucket 1,5 t/m <sup>3</sup>	l	950	850	750
GP bucket 1,8 t/m <sup>3</sup>	l	825	750	650

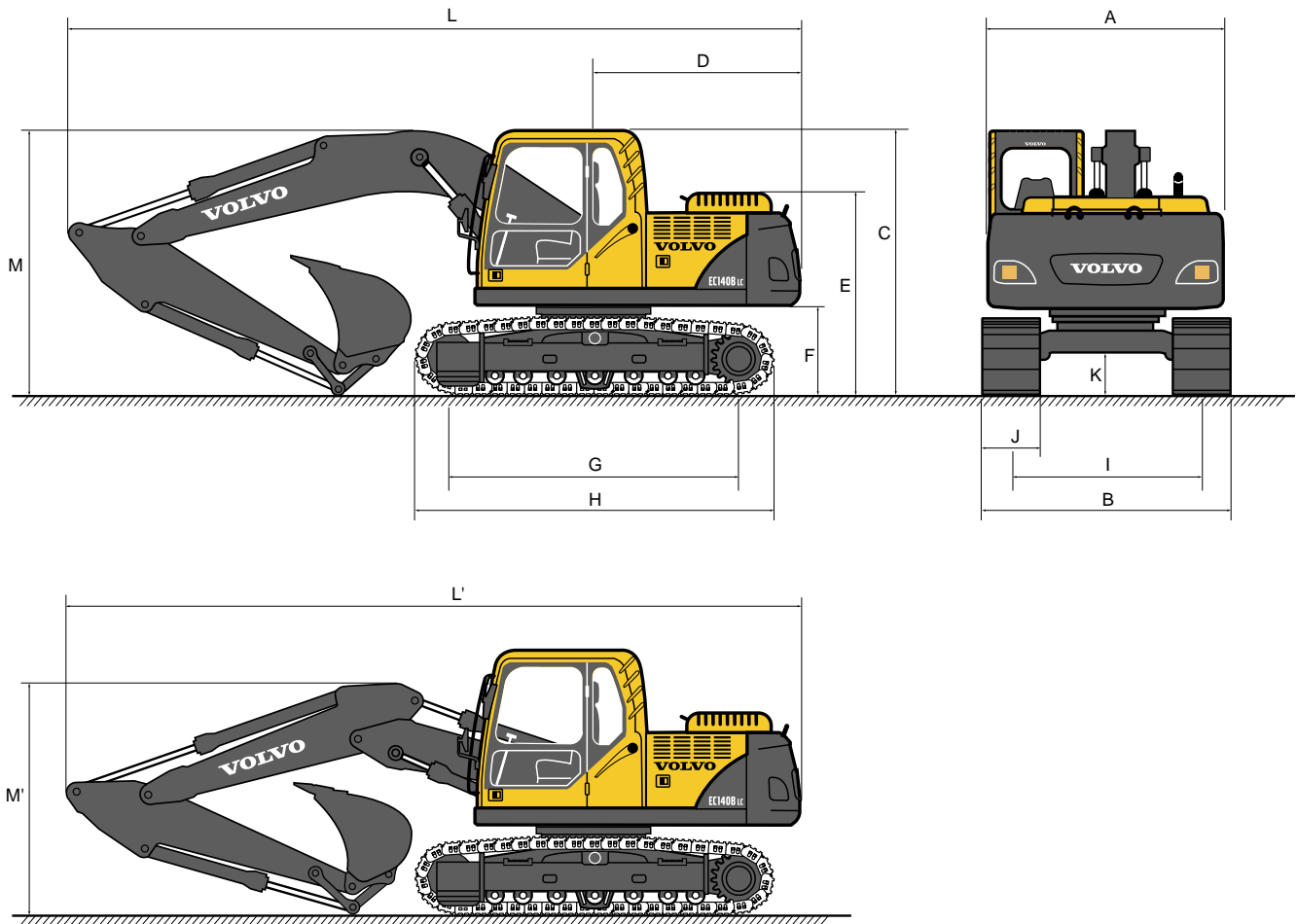
- Max. permitted sizes for direct fit buckets:  
LCM undercarriage with counterweight 2 450 kg

Description	Unit	4,6 m Boom		
		2,1 m Arm	2,5 m Arm	3,0 m Arm
GP bucket 1,5 t/m <sup>3</sup>	l	1 075	1 000	875
GP bucket 1,8 t/m <sup>3</sup>	l	950	875	775

- Max. permitted sizes for quick fit buckets:  
LCM undercarriage with counterweight 2 450 kg

Description	Unit	4,6 m Boom		
		2,1 m Arm	2,5 m Arm	3,0 m Arm
GP bucket 1,5 t/m <sup>3</sup>	l	1 050	950	850
GP bucket 1,8 t/m <sup>3</sup>	l	900	825	725

# DIMENSIONS



• LC

Description	Unit	4,6 m Boom		
		2,1 m Arm	2,5 m Arm	3,0 m Arm
A. Overall width of superstructure	mm	2 450	2 450	2 450
B. Overall width	mm	2 590	2 590	2 590
C. Overall height of cab	mm	2 770	2 770	2 770
D. Tail slew radius	mm	2 130	2 130	2 130
E. Overall height of engine hood	mm	2 080	2 080	2 080
F. Counterweight clearance *	mm	900	900	900
G. Tumbler length	mm	3 000	3 000	3 000
H. Track length	mm	3 740	3 740	3 740
I. Track gauge	mm	1 990	1 990	1 990
J. Shoe width	mm	600	600	600
K. Min. ground clearance *	mm	430	430	430
L. Overall length	mm	7 630	7 630	7 510
L'. Overall length	mm	7 610	7 550	7 320
M. Overall height of boom	mm	2 710	2 830	3 210
M'. Overall height of boom	mm	2 720	2 950	3 350

\* Without shoe grouser

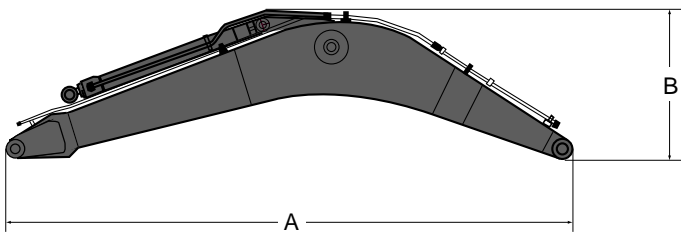
# DIMENSIONS

• LCM

Description	Unit	4,6 m Boom		
		2,1 m Arm	2,5 m Arm	3,0 m Arm
A. Overall width of superstructure	mm	2 450	2 450	2 450
B. Overall width	mm	2 690	2 690	2 690
C. Overall height of cab	mm	2 960	2 960	2 960
D. Tail slew radius	mm	2 130	2 130	2 130
E. Overall height of engine hood	mm	2 270	2 270	2 270
F. Counterweight clearance *	mm	1 080	1 080	1 080
G. Tumbler length	mm	3 000	3 000	3 000
H. Track length	mm	3 790	3 790	3 790
I. Track gauge	mm	1 990	1 990	1 990
J. Shoe width	mm	700	700	700
K. Min. ground clearance *	mm	540	540	540
L. Overall length	mm	7 600	7 620	7 580
L'. Overall length	mm	7 630	7 600	7 420
M. Overall height of boom	mm	2 780	2 900	3 160
M'. Overall height of boom	mm	2 820	2 990	3 370

\* Without shoe grouser

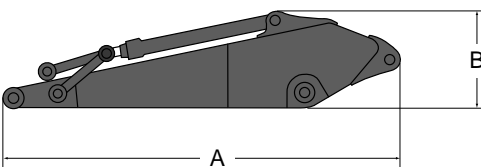
• Boom



Description	4,6 m	4,6 m 2-piece
A. Length	4 770 mm	4 765 mm
B. Height	1 370 mm	1 225 mm
Width	545 mm	545 mm
Weight	1 000 kg	1 280 kg

\* Includes cylinder, pin and piping

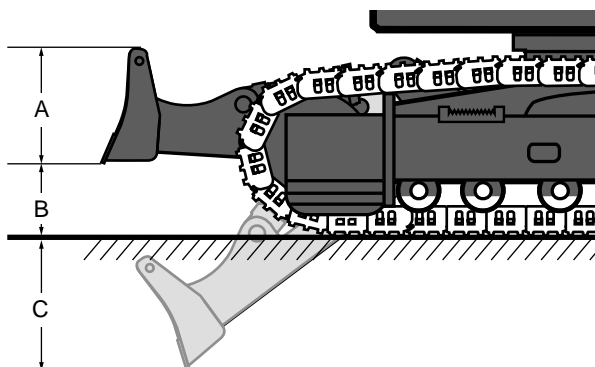
• Arm



Description	2,1 m	2,5 m	3,0 m
A. Length	2 800 mm	3 190 mm	3 690 mm
B. Height	760 mm	760 mm	760 mm
Width	300 mm	300 mm	300 mm
Weight	570 kg	645 kg	720 kg

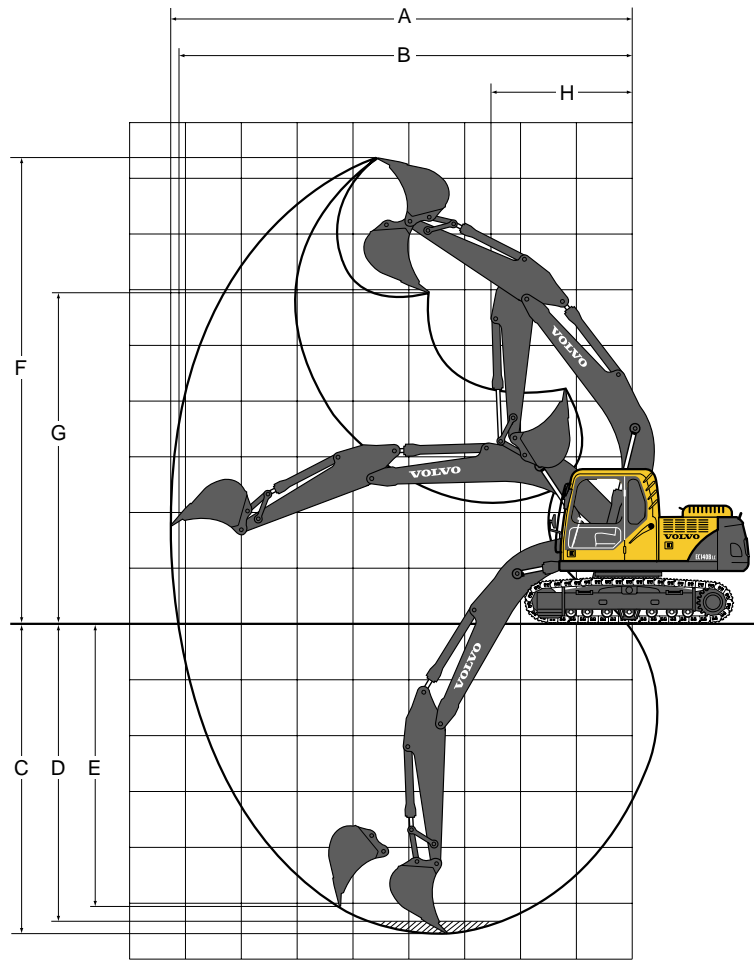
\* Includes cylinder, piping and linkage

• Front dozer blade (for LC only)



Description	Measurement
A. Height	580 mm
Width	2 590 mm
Weight	900 kg
B. Lift height	504 mm
C. Digging depth	562 mm

## WORKING RANGES & DIGGING FORCES



### • 4,6 m monoblock boom with direct fit bucket:

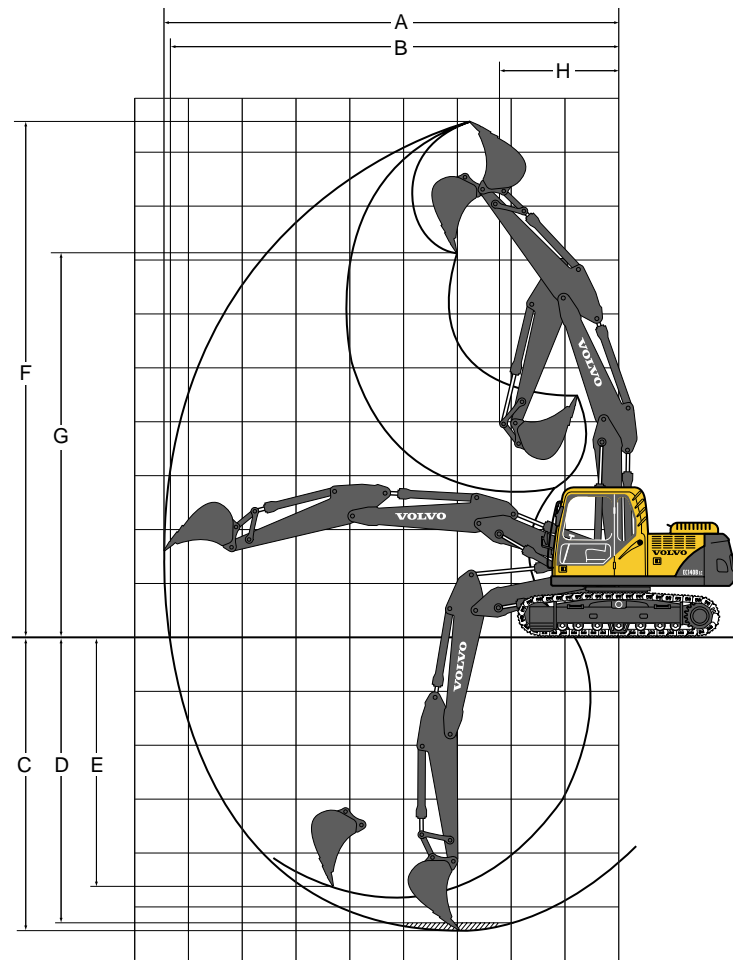
Description	Unit	LC			LCM		
		2,1 m Arm	2,5 m Arm	3,0 m Arm	2,1 m Arm	2,5 m Arm	3,0 m Arm
A. Max. digging reach	mm	7 960	8 330	8 820	7 960	8 330	8 820
B. Max. digging reach on ground	mm	7 810	8 190	8 690	7 780	8 160	8 660
C. Max. digging depth	mm	5 130	5 530	6 030	4 980	5 380	5 880
D. Max. digging depth	mm	4 870	5 310	5 850	4 710	5 160	5 690
E. Max. vertical wall digging depth	mm	4 580	5 060	5 500	4 430	4 900	5 330
F. Max. cutting height	mm	8 180	8 420	8 770	8 340	8 570	8 930
G. Max. dumping height	mm	5 740	5 980	6 320	5 900	6 130	6 470
H. Min. front slew radius	mm	2 570	2 630	2 840	2 570	2 640	2 830

### • Digging forces with direct fit bucket

Description	Unit	LC			LCM		
		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 kN	82,4 / 87,3	82,4 / 87,3	82,4 / 87,3	82,4 / 87,3	82,4 / 87,3	82,4 / 87,3
Breakout force – bucket (Normal / Power boost)	ISO kN	93,2 / 98,1	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 kN	69,6 / 73,5	61,8 / 65,7	54,9 / 58,8	69,6 / 73,5	61,8 / 65,7	54,9 / 58,8
Tearout force – arm (Normal / Power boost)	ISO kN	71,6 / 75,5	63,7 / 67,7	56,9 / 59,8	71,6 / 75,5	63,7 / 67,7	56,9 / 59,8
Rotation angle, bucket	deg	174	174	173	174	174	173



## WORKING RANGES & DIGGING FORCES



• 4,6 m 2-piece boom with direct fit bucket:

Description	Unit	LC			LCM		
		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	7 880	8 270	8 780
C. Max. digging depth	mm	5 060	5 450	5 960	4 900	5 300	5 800
D. Max. digging depth	mm	4 940	5 340	5 850	4 780	5 180	5 690
E. Max. vertical wall digging depth	mm	4 270	4 660	5 190	4 120	5 400	5 040
F. Max. cutting height	mm	9 250	9 610	10 090	9 400	9 770	10 240
G. Max. dumping height	mm	6 780	7 140	7 630	6 930	7 290	7 780
H. Min. front slew radius	mm	1 960	2 220	2 640	1 960	2 220	2 640
















• Digging forces with direct fit bucket

Description		Unit	LC			LCM		
			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	kN	82,4 / 87,3	82,4 / 87,3	82,4 / 87,3	82,4 / 87,3	82,4 / 87,3	82,4 / 87,3
Breakout force – bucket (Normal / Power boost)	ISO	kN	93,2 / 98,1	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	kN	69,6 / 73,5	61,8 / 65,7	54,9 / 58,8	69,6 / 73,5	61,8 / 65,7	54,9 / 58,8
Tearout force – arm (Normal / Power boost)	ISO	kN	71,6 / 75,5	63,7 / 67,7	56,9 / 59,8	71,6 / 75,5	63,7 / 67,7	56,9 / 59,8
Rotation angle, bucket		deg	174	174	173	174	174	173

# 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.

## EC140B LC















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

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

# 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.

## EC140B LCM

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

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

## STANDARD EQUIPMENT

### Engine

Turbocharged, 4 stroke diesel engine with water cooling and direct injection  
2-stage air filter with indicator, including pre-cleaner  
Air intake heater  
Electric engine shut-off  
Fuel filter and water separator  
Fuel filler pump: 50 l/min with automatic shut-off  
Coolant filter  
Alternator, 80 A

### Electric / Electronic control system

Contronics  
– Advanced mode control system  
– Self-diagnostic system  
Machine status indication  
Engine speed sensing power control  
“Power Max” mode system  
Automatic idling system  
One-touch power boost

Safety stop/start function  
Adjustable monitor  
Battery master 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 / 4,8 kW

### Hydraulic system

Automatic hydraulic system  
– Summation system  
– Boom priority  
– Arm priority  
– Slew priority  
Boom and arm regeneration valves  
Slew anti-rebound valves  
Boom and arm holding valves  
Multi-stage filtering system  
Cylinder cushions  
Cylinder contamination seals  
Hose rupture valve: boom  
Auxiliary hydraulic valve  
Straight travel circuit

Automatic two-speed travel motors  
Hydraulic oil, ISO VG 46

### Superstructure

Access way with handrail  
Tool storage area  
Punched metal anti-slip plates  
Counterweight, 2 450 kg  
Undercover (heavy duty 4,5 mm)

### Cab and interior

Heater & air-conditioner, automatic  
Hydraulic dampening cab mounts  
Adjustable operator seat and joystick control console  
Flexible antenna  
Hydraulic safety lock lever  
Control joystick, with 5 switches each  
Cab, all-weather sound suppressed, includes:  
– Ashtray  
– Cup holder  
– Lighter  
– 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  
Anti-vandalism kit assembly preparation  
Sun shield, front, roof, rear  
Master ignition key

### Undercarriage

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

### Service

Tool kit, daily maintenance

## ALTERNATIVE EQUIPMENT

### Cab and interior

Seat:  
– Fabric seat  
– Fabric seat, with heater  
– Fabric seat, with heater and air suspension

### Track shoes

LC: 500 / 600 / 700 / 750 mm track shoes with triple grousers  
LCM: 600 / 700 / 800 / 900 mm track shoes with triple grousers

### Digging equipment

Boom: 4,6 m monoblock  
4,6 m 2-piece  
Arm: 2,1 / 2,5 / 3,0 m

### Undercarriage

LC (Long crawler)  
LCM

## OPTIONAL EQUIPMENT (Standard in certain markets)

### Engine

Block heater, 240 V  
Diesel coolant heater  
Tropical cooling kit

### Electric

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

### Hydraulic system

Hose rupture valve: dipper arm  
Hydraulic piping  
– Hammer & shears:  
1 pump or 2 pump flow  
Pump flow control for hammer & shears  
Additional return filter  
Extra piping for slope & rotator  
– Slope & rotator  
– Grapple  
– Oil leak (drain) line  
– Quick fit piping  
Volvo hydraulic quick-fit, S6 size  
Hydraulic oil, ISO VG 32  
Hydraulic oil, ISO VG 68  
Hydraulic oil, biodegradable 32  
Hydraulic oil, biodegradable 46  
Boom floating function

### Cab and interior

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

### Undercarriage

Front dozer blade (for LC only)

### Service

Tool kit, full scale

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

# VOLVO

Construction Equipment

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KOR

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