

VOLVO EXCAVATOR

EC330 B LC



- Engine power, gross:
198 kW 265 hp
- Operating weight:
32.4 ~ 33.8 t
71,440 ~ 74,530 lb
- Buckets (SAE)
1,250 ~ 2,500 l
1.64 ~ 3.27 yd³
- Turbocharged VOLVO diesel engine with direct injection and charged air cooler meets EPA Tier 2 emission standards

- 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
- Fabric seat, with heater and air suspension
- Strong digging equipment, produced by robotic welding
- High-lifting, breakout and tearout forces for tough digging conditions
- Long undercarriage for good stability
- Auxiliary hydraulic valve as standard
- Prepared for a number of optional items

VOLVO



ENGINE

The engine is a turbocharged, 4-stroke diesel engine with water cooling, direct injection and charged air cooler that meets EPA Tier 2 emission standards.

The engine has been developed especially for excavator use, providing good fuel economy, low noise levels and a long service life.

Air Filter: 3-stage, includes pre-cleaner

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

Low-Emission Engine

| | | |
|-----------------------------|------------------------|------------------------|
| Make | VOLVO | |
| Model | D10B EAE2 | |
| Power output at | 28 r/s | 1,700 rpm |
| Net (ISO 9249/ DIN 6271) | 184 kW | 247 hp |
| Gross (SAE J1349) | 198 kW | 265 hp |
| Max. torque | 1,255 N·m at 1,400 rpm | 926 lb·ft at 1,400 rpm |
| No. of cylinders | 6 | |
| Displacement | 9.6 l | 586 cu.in |
| Bore | 121 mm | 4.75" |
| Stroke | 140 mm | 5.51" |



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 9.7 rpm



DRIVE

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

| | |
|-------------------------------------|----------------|
| Max. drawbar pull (tractive effort) | 256.9 kN |
| | 57,770 lb |
| Max. travel speed | 3.3 / 4.5 km/h |
| | 2.1 / 2.8 mph |
| Gradeability | 35° 70% |



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 | 200 Ah |
| Alternator | 28 V / 55 A |



UNDERCARRIAGE

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

| | |
|----------------------------|---------------------------------------------------|
| No. of track pads | 2 x 48 |
| Link pitch | 215.9 mm 8.5" |
| Shoe width, triple grouser | 600/700/800(Std.)/900 mm 24"/28"/32"(Std.)/36" |
| Shoe width, double grouser | 600 mm 24" |
| No. of bottom track roller | 2 x 8 |
| No. of top roller | 2 x 2 |



SERVICE REFILL CAPACITIES

| | | |
|-------------------------|-----------|-------------|
| Fuel tank | 565 l | 149 gal |
| Hydraulic system, total | 500 l | 132 gal |
| Hydraulic tank | 220 l | 58 gal |
| Engine oil | 39.5 l | 10 gal |
| Engine coolant | 58.7 l | 16 gal |
| Swing reduction unit | 6.0 l | 1.6 gal |
| Travel reduction unit | 2 x 5.5 l | 2 x 1.5 gal |



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 swing priority along with boom and arm regeneration 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 fast 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.

Swing priority: Supplies priority to the swing operation for faster swing during 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 280 l/min **2 x 74 gpm**

Pilot pump

Type Gear pump
Maximum flow 1 x 25.5 l/min **6.7 gpm**

Hydraulic motors

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

Relief valve setting

| | | |
|----------------------|-----------------|-----------------|
| Implement | 31.4 / 34.3 Mpa | 4,550/4,980 psi |
| Travel circuit | 34.3 Mpa | 4,980 psi |
| Swing circuit | 25.5 Mpa | 3,700 psi |
| Pilot circuit | 3.9 Mpa | 570 psi |

Hydraulic cylinders

| | |
|------------------|-----------------------------------|
| Boom | 2 |
| bore x stroke .. | ø150 x 1,530 mm ø 5.9" x 60.2" |
| Arm | 1 |
| bore x stroke .. | ø175 x 1,700 mm ø 6.9" x 66.9" |
| Bucket | 1 |
| bore x stroke .. | ø145 x 1,285 mm ø 5.7" x 50.6" |
| ME bucket | 1 |
| bore x stroke .. | ø160 x 1,250 mm ø 6.3" x 49.2" |



CAB

The operators 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 73 dB(A) |
| External sound level according to ISO 6395 | LwA105 dB(A) |
| (Directive 2000/14/EC) | |



GROUND PRESSURE

- Machine with Std. 6.45 m, 21' 2" boom, 3.2 m, 10' 6" arm, 1,460 kg, 3,220 lb bucket and 5,800 kg, **12,790 lb** counterweight.

| Description | Shoe width | Operating weight | Ground pressure | Overall width |
|----------------|---------------|------------------------|---------------------|--------------------|
| Triple grouser | 600 mm 24" | 32,400 kg 71,440 lb | 61.8 kPa 9.0 psi | 3,190 mm 10' 6" |
| | 700 mm 28" | 33,040 kg 72,850 lb | 53.9 kPa 7.8 psi | 3,190 mm 10' 6" |
| | 800 mm 32" | 33,440 kg 73,740 lb | 48.0 kPa 7.0 psi | 3,390 mm 11' 1" |
| | 900 mm 36" | 33,820 kg 74,570 lb | 43.1 kPa 6.3 psi | 3,490 mm 11' 5" |
| Double grouser | 600 mm 24" | 32,940 kg 72,630 lb | 62.8 kPa 9.1 psi | 3,190 mm 10' 6" |

- Machine with Std. 6.45 m, 21' 2" boom, 3.2 m, 10' 6" arm, 1,460 kg, 3,220 lb bucket and 6,700 kg, **14,770 lb** counterweight.

| Description | Shoe width | Operating weight | Ground pressure | Overall width |
|----------------|---------------|------------------------|---------------------|--------------------|
| Triple grouser | 600 mm 24" | 33,300 kg 73,430 lb | 62.8 kPa 9.1 psi | 3,190 mm 10' 6" |
| | 700 mm 28" | 33,940 kg 74,840 lb | 54.9 kPa 8.0 psi | 3,190 mm 10' 6" |
| | 800 mm 32" | 34,340 kg 75,720 lb | 49.0 kPa 7.1 psi | 3,390 mm 11' 1" |
| | 900 mm 36" | 34,720 kg 76,560 lb | 44.1 kPa 6.4 psi | 3,490 mm 11' 5" |
| Double grouser | 600 mm 24" | 33,840 kg 74,620 lb | 63.7 kPa 9.2 psi | 3,190 mm 10' 6" |

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 pin on buckets:
 Counterweight 5,800 kg, 12,790 lb

| Boom | Unit | ME 6.2 m, 20' 4" | Std. 6.45 m, 21' 2" | | |
|-----------------------------------------------------------|--------------------|------------------|---------------------|--------------------|----------------|
| | | 2.6 m, 8' 6" | 2.6 m, 8' 6" | Std. 3.2 m, 10' 6" | 3.9 m, 12' 10" |
| GP bucket 1.5 t/m ³ , 2,530 lb/yd ³ | l, yd ³ | 2,300, 3.01 | 2,200, 2.88 | 2,075, 2.71 | 1,800, 2.35 |
| GP bucket 1.8 t/m ³ , 3,030 lb/yd ³ | l, yd ³ | 2,000, 2.62 | 1,925, 2.52 | 1,825, 2.39 | 1,575, 2.06 |
| RB bucket 1.8 t/m ³ , 3,030 lb/yd ³ | l, yd ³ | 1,850, 2.42 | 1,775, 2.32 | 1,675, 2.19 | 1,450, 1.90 |
| RB bucket 2.0 t/m ³ , 3,370 lb/yd ³ | l, yd ³ | 1,725, 2.26 | 1,650, 2.16 | 1,550, 2.03 | 1,350, 1.77 |

- Max. permitted sizes for hook on buckets:
 Counterweight 5,800 kg, 12,790 lb

| Boom | Unit | ME 6.2 m, 20' 4" | Std. 6.45 m, 21' 2" | | |
|-----------------------------------------------------------|--------------------|------------------|---------------------|--------------------|----------------|
| | | 2.6 m, 8' 6" | 2.6 m, 8' 6" | Std. 3.2 m, 10' 6" | 3.9 m, 12' 10" |
| GP bucket 1.5 t/m ³ , 2,530 lb/yd ³ | l, yd ³ | 2,175, 2.84 | 2,050, 2.68 | 1,950, 2.55 | 1,675, 2.19 |
| GP bucket 1.8 t/m ³ , 3,030 lb/yd ³ | l, yd ³ | 1,900, 2.49 | 1,800, 2.35 | 1,700, 2.22 | 1,475, 1.93 |
| RB bucket 1.8 t/m ³ , 3,030 lb/yd ³ | l, yd ³ | 1,750, 2.29 | 1,650, 2.16 | 1,575, 2.06 | 1,350, 1.77 |
| RB bucket 2.0 t/m ³ , 3,370 lb/yd ³ | l, yd ³ | 1,625, 2.13 | 1,550, 2.03 | 1,450, 1.90 | 1,250, 1.64 |

- Max. permitted sizes for pin on buckets:
 Counterweight 6,700 kg, 14,770 lb

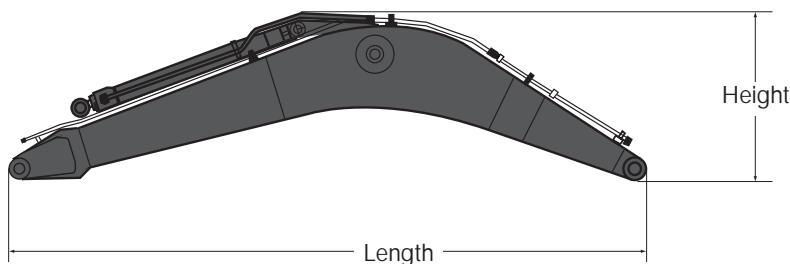
| Boom | Unit | ME 6.2 m, 20' 4" | Std. 6.45 m, 21' 2" | | |
|-----------------------------------------------------------|--------------------|------------------|---------------------|--------------------|----------------|
| | | 2.6 m, 8' 6" | 2.6 m, 8' 6" | Std. 3.2 m, 10' 6" | 3.9 m, 12' 10" |
| GP bucket 1.5 t/m ³ , 2,530 lb/yd ³ | l, yd ³ | 2,500, 3.27 | 2,400, 3.14 | 2,275, 2.98 | 1,975, 2.58 |
| GP bucket 1.8 t/m ³ , 3,030 lb/yd ³ | l, yd ³ | 2,200, 2.88 | 2,100, 2.75 | 1,975, 2.58 | 1,725, 2.26 |
| RB bucket 1.8 t/m ³ , 3,030 lb/yd ³ | l, yd ³ | 2,025, 2.65 | 1,925, 2.52 | 1,825, 2.39 | 1,600, 2.09 |
| RB bucket 2.0 t/m ³ , 3,370 lb/yd ³ | l, yd ³ | 1,875, 2.45 | 1,800, 2.35 | 1,700, 2.22 | 1,475, 1.93 |

- Max. permitted sizes for hook on buckets:
 Counterweight 6,700 kg, 14,770 lb

| Boom | Unit | ME 6.2 m, 20' 4" | Std. 6.45 m, 21' 2" | | |
|-----------------------------------------------------------|--------------------|------------------|---------------------|--------------------|----------------|
| | | 2.6 m, 8' 6" | 2.6 m, 8' 6" | Std. 3.2 m, 10' 6" | 3.9 m, 12' 10" |
| GP bucket 1.5 t/m ³ , 2,530 lb/yd ³ | l, yd ³ | 2,375, 3.11 | 2,275, 2.98 | 2,125, 2.78 | 1,850, 2.42 |
| GP bucket 1.8 t/m ³ , 3,030 lb/yd ³ | l, yd ³ | 2,075, 2.71 | 1,975, 2.58 | 1,875, 2.45 | 1,625, 2.13 |
| RB bucket 1.8 t/m ³ , 3,030 lb/yd ³ | l, yd ³ | 1,925, 2.52 | 1,825, 2.39 | 1,725, 2.26 | 1,500, 1.96 |
| RB bucket 2.0 t/m ³ , 3,370 lb/yd ³ | l, yd ³ | 1,775, 2.32 | 1,700, 2.22 | 1,600, 2.09 | 1,775, 2.32 |

DIMENSIONS

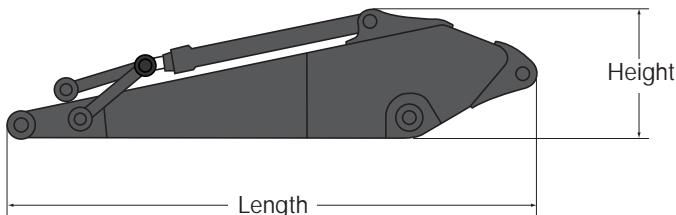
- Boom



| Description | ME 6.2 m, 20' 4" | Std. 6.45 m, 21' 2" |
|-------------|--------------------|---------------------|
| Length | 6,460 mm, 21' 2" | 6,700 mm, 22' 0" |
| Height | 1,740 mm, 5' 9" | 1,800 mm, 5' 11" |
| Width | 820 mm, 2' 8" | 820 mm, 2' 8" |
| Weight | 3,230 kg, 7,120 lb | 3,010 kg, 6,640 lb |

* Includes cylinder, pin and piping

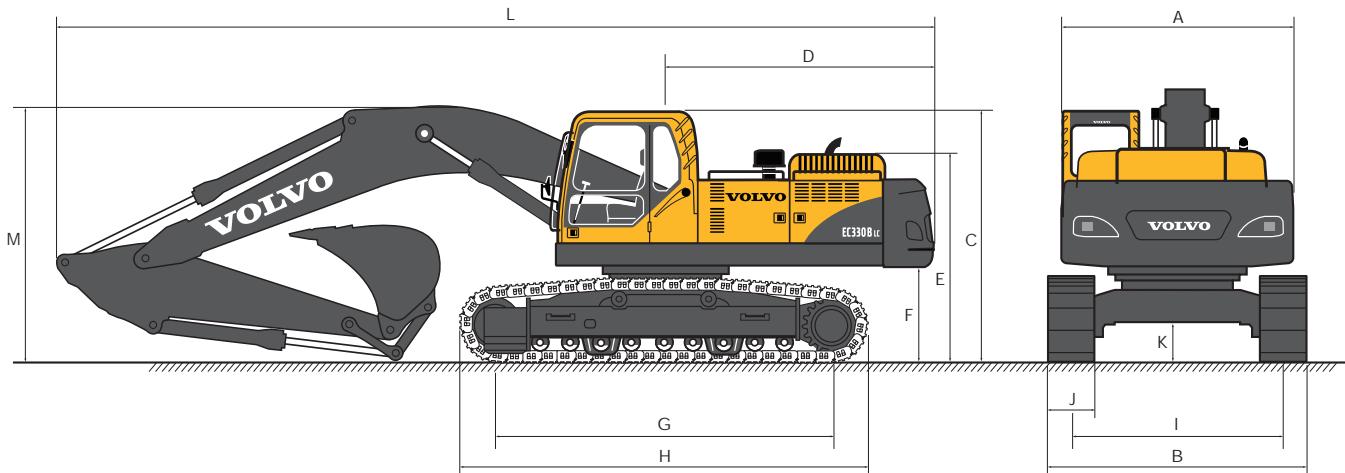
- Arm



| Description | 2.6 m, 8' 6" | Std. 3.2 m, 10' 6" | 3.9 m, 12' 10" |
|-------------|--------------------|--------------------|--------------------|
| Length | 3,780 mm, 12' 5" | 4,360 mm, 14' 4" | 5,080 mm, 16' 8" |
| Height | 1,145 mm, 3' 9" | 1,145 mm, 3' 9" | 1,140 mm, 3' 9" |
| Width | 560 mm, 1' 10" | 560 mm, 1' 10" | 560 mm, 1' 10" |
| Weight | 1,975 kg, 4,350 lb | 1,850 kg, 4,080 lb | 2,165 kg, 4,770 lb |

* Includes cylinder, piping and linkage

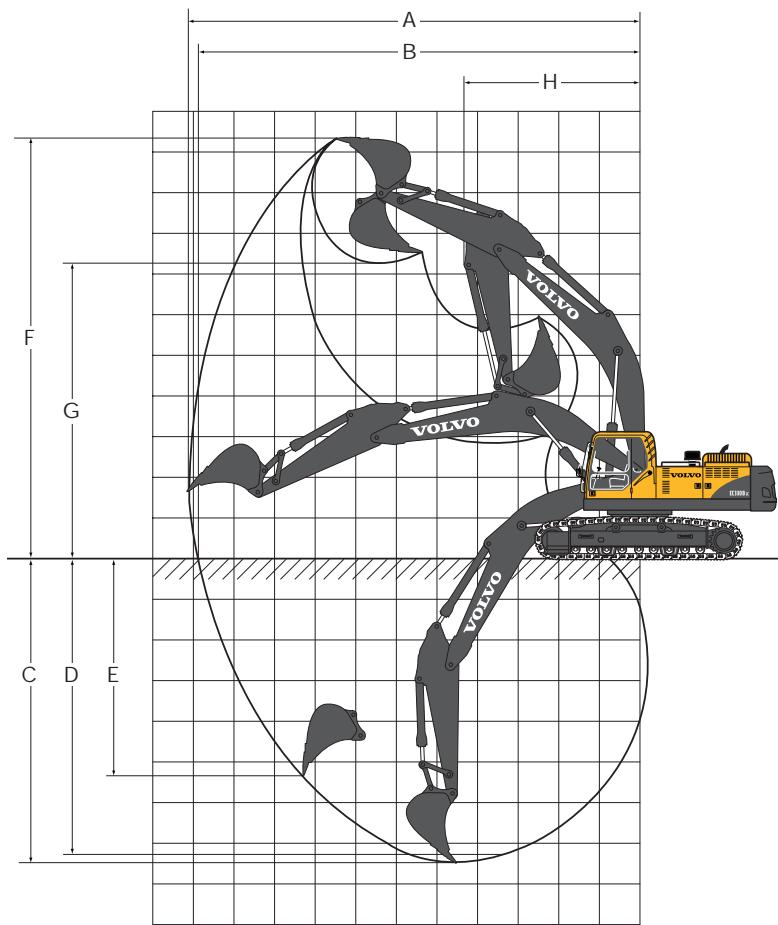
DIMENSIONS



| Boom | Unit | ME 6.2 m, 20' 4" | Std. 6.45 m, 21' 2" | | |
|------------------------------------|-----------|------------------|---------------------|--------------------|----------------|
| Arm | | 2.6 m, 8' 6" | 2.6 m, 8' 6" | Std. 3.2 m, 10' 6" | 3.9 m, 12' 10" |
| A. Overall width of superstructure | mm, ft-in | 2,990, 9' 10" | 2,990, 9' 10" | 2,990, 9' 10" | 2,990, 9' 10" |
| B. Overall width | mm, ft-in | 3,390, 11' 1" | 3,390, 11' 1" | 3,390, 11' 1" | 3,390, 11' 1" |
| C. Overall height of cab | mm, ft-in | 3,190, 10' 6" | 3,190, 10' 6" | 3,190, 10' 6" | 3,190, 10' 6" |
| D. Tail swing radius | mm, ft-in | 3,390, 11' 1" | 3,390, 11' 1" | 3,390, 11' 1" | 3,390, 11' 1" |
| E. Overall height of engine hood | mm, ft-in | 2,700, 8' 10" | 2,700, 8' 10" | 2,700, 8' 10" | 2,700, 8' 10" |
| F. Counterweight clearance * | mm, ft-in | 1,210, 4' 0" | 1,210, 4' 0" | 1,210, 4' 0" | 1,210, 4' 0" |
| G. Tumbler length | mm, ft-in | 4,020, 13' 2" | 4,020, 13' 2" | 4,020, 13' 2" | 4,020, 13' 2" |
| H. Track length | mm, ft-in | 4,962, 16' 3" | 4,962, 16' 3" | 4,962, 16' 3" | 4,962, 16' 3" |
| I. Track gauge | mm, ft-in | 2,590, 8' 6" | 2,590, 8' 6" | 2,590, 8' 6" | 2,590, 8' 6" |
| J. Shoe width | mm, in | 800, 32" | 800, 32" | 800, 32" | 800, 32" |
| K. Min. ground clearance * | mm, ft-in | 500, 1' 8" | 500, 1' 8" | 500, 1' 8" | 500, 1' 8" |
| L. Overall length | mm, ft-in | 10,910, 35' 10" | 11,160, 36' 7" | 11,070, 36' 4" | 11,120, 36' 6" |
| M. Overall height of boom | mm, ft-in | 3,700, 12' 2" | 3,580, 11' 9" | 3,350, 11' 0" | 3,590, 11' 9" |

* Without shoe grouser

WORKING RANGES & DIGGING FORCES



- Machine with pin on bucket:

| Boom | Unit | ME 6.2 m, 20' 4" | Std. 6.45 m, 21' 2" | | |
|-------------------------------------|-----------|------------------|---------------------|--------------------|----------------|
| Arm | | 2.6 m, 8' 6" | 2.6 m, 8' 6" | Std. 3.2 m, 10' 6" | 3.9 m, 12' 10" |
| A. Max. digging reach | mm, ft-in | 10,480, 34' 5" | 10,540, 34' 7" | 11,060, 36' 3" | 11,700, 38' 5" |
| B. Max. digging reach on ground | mm, ft-in | 10,250, 33' 8" | 10,320, 33' 10" | 10,850, 35' 7" | 11,500, 37' 9" |
| C. Max. digging depth | mm, ft-in | 6,720, 22' 1" | 6,770, 22' 3" | 7,370, 24' 2" | 8,080, 26' 6" |
| D. Max. digging depth (8' level) | mm, ft-in | 6,540, 21' 5" | 6,570, 21' 7" | 7,190, 23' 7" | 7,930, 26' 0" |
| E. Max. vertical wall digging depth | mm, ft-in | 4,880, 16' 0" | 4,900, 16' 1" | 5,290, 17' 4" | 5,920, 19' 5" |
| F. Max. cutting height | mm, ft-in | 10,070, 33' 0" | 10,100, 33' 2" | 10,260, 33' 8" | 10,530, 34' 7" |
| G. Max. dumping height | mm, ft-in | 6,830, 22' 5" | 7,170, 23' 6" | 7,360, 24' 2" | 7,630, 25' 0" |
| H. Min. front swing radius | mm, ft-in | 4,180, 13' 9" | 4,390, 14' 5" | 4,340, 14' 3" | 4,320, 14' 2" |

- Digging forces with pin on bucket

| Boom | Unit | ME 6.2 m, 20' 4" | Std. 6.45 m, 21' 2" | | | |
|---------------------------------------------------|--------|------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|
| Arm | | 2.6 m, 8' 6" | 2.6 m, 8' 6" | Std. 3.2 m, 10' 6" | 3.9 m, 12' 10" | |
| Bucket tip radius | mm, in | 1,810, 71" | 1,623, 64" | 1,623, 64" | 1,623, 64" | |
| Breakout force – bucket (Normal / Power boost) | SAE | kN lb | 208.0 / 228.0 46,970 / 51,380 | 192.0 / 209.0 43,220 / 47,190 | 192.0 / 209.0 43,220 / 47,190 | 192.0 / 209.0 43,220 / 47,190 |
| Tearout force – arm (Normal / Power boost) | SAE | kN lb | 182.0 / 200.0 41,020 / 44,980 | 190.0 / 207.0 42,780 / 46,750 | 157.0 / 172.0 35,500 / 38,810 | 137.0 / 150.0 30,870 / 33,740 |
| Rotation angle, bucket | deg | 164° | 177° | 177° | 177° | |

LIFTING CAPACITY (At the arm end without bucket)

Note: For lifting capacity including bucket, simply subtract actual weight of the pin on bucket or the bucket with quick coupler from the following values.

EC330 B LC (Std. shoe 800 mm, 32", counterweight 5,800 kg, 12,790 lb)

|  Across under-carriage  Along under-carriage | Lifting hook related to ground level | 4.5 m, 15' | | 6.0 m, 20' | | 7.5 m, 25' | | 9.0 m, 30' | | Max. reach | | | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|-----------------------------------------------------------------------------------|------|-----------------------------------------------------------------------------------|------|-----------------------------------------------------------------------------------|------|-----------------------------------------------------------------------------------|------|-----------------------------------------------------------------------------------|------|------------------------------------------------------------------------------------|------|
| | |  | t lb |  | t lb |  | t lb |  | t lb |  | t lb |  | t lb |

| | | | | | | | | | | | | | | | | | | |
|----------------------------------------------------------------------------------------------------------|-----------|---------------|---------------|---------------|------------|---------------|------------|--------------|------------|-----|--------|------------|-----------|-------------|---------------|---------------|-------------|-------------|
| Boom Std. 6.45 m 21' 2" + Arm 2.6 m 8' 6" | 7.5 25' | | | | | *22,050 | 20,490 | | | | | | | | *8.9 *19,670 | 7.2 16,310 | 7.0 / 22.79 | |
| | 6.0 20' | | | | | *10.8 *23,460 | 9.3 20,010 | 10.0 | 21,410 | 6.4 | 13,820 | | | | *8.6 *18,980 | 5.8 12,850 | 8.0 / 26.04 | |
| | 4.5 15' | *15.9 *34,150 | 13.7 29,640 | *12.4 *26,800 | 8.8 19,060 | 9.8 | 21,010 | 6.3 | 13,450 | | | | | | 7.9 17,390 | 5.0 11,120 | 8.6 / 28.02 | |
| | 3.0 10' | *20.1 *43,120 | 12.5 27,100 | 13.5 29,010 | 8.3 17,970 | 9.5 | 20,430 | 6.0 | 12,930 | | | | | | 7.3 16,170 | 4.6 10,250 | 8.8 / 29.01 | |
| | 1.5 5' | *15.6 *38,070 | 11.9 25,640 | 13.0 28,000 | 7.9 17,090 | 9.2 | 19,910 | 5.8 | 12,460 | | | | | | 7.2 15,840 | 4.5 9,970 | 8.9 / 29.10 | |
| | 0 0' | *20.1 44,570 | 11.7 25,250 | 12.8 27,450 | 7.7 16,610 | 9.1 | 19,570 | 5.6 | 12,160 | | | | | | 7.4 16,350 | 4.6 10,240 | 8.6 / 28.29 | |
| | -1.5 -5' | 20.9 44,670 | 11.8 25,330 | 12.7 27,320 | 7.7 16,500 | 9.1 | 19,520 | 5.6 | 12,110 | | | | | | 8.1 17,960 | 5.1 11,210 | 8.1 / 26.52 | |
| | -3.0 -10' | *19.9 *43,020 | 12.0 25,750 | 12.8 27,610 | 7.8 16,750 | | | | | | | | | | 9.7 21,620 | 6.0 13,430 | 7.2 / 23.56 | |
| | -4.5 -15' | *16.0 *34,250 | 12.4 26,670 | | | | | | | | | | | | *12.0 *26,490 | 8.5 19,120 | 5.8 / 18.82 | |
| | | | | | | | | | | | | | | | | | | |
| Boom Std. 6.45 m 21' 2" + Arm Std. 3.2 m 10' 6" | 7.5 25' | | | | | | | *7.9 *16,010 | 6.8 14,480 | | | | | | *7.1 *15,760 | 6.4 14,430 | 7.7 / 25.05 | |
| | 6.0 20' | | | | | | | *8.1 *17,650 | 6.7 14,400 | | | | | | *6.9 *15,280 | 5.3 11,780 | 8.6 / 28.04 | |
| | 4.5 15' | *12.3 *26,390 | *12.3 *26,390 | *9.9 *21,430 | 9.2 19,750 | *8.7 *18,990 | 6.5 13,950 | | | | | | | | | *7.0 *15,400 | 4.7 10,370 | 9.1 / 29.89 |
| | 3.0 10' | *15.9 *34,110 | 13.1 28,220 | *11.6 *25,090 | 8.6 18,580 | *9.6 *20,870 | 6.2 13,370 | 7.3 | 15,720 | 4.7 | 10,070 | 6.8 15,060 | 4.4 9,640 | 9.4 / 30.81 | | | | |
| | 1.5 5' | *18.5 *39,890 | 12.2 26,300 | *13.1 *28,380 | 8.1 17,550 | 9.4 20,290 | 5.9 12,810 | 7.2 | 15,430 | 4.6 | 9,800 | 6.7 14,760 | 4.3 9,380 | 9.5 / 30.89 | | | | |
| | 0 0' | *19.4 *42,110 | 11.8 25,490 | 12.9 27,780 | 7.8 16,910 | 9.2 19,850 | 5.8 12,410 | 7.1 | 15,240 | 4.5 | 9,630 | 6.9 15,140 | 4.3 9,560 | 9.2 / 30.14 | | | | |
| | -1.5 -5' | *19.2 *41,640 | 11.8 25,350 | 12.8 27,480 | 7.7 16,650 | 9.1 19,660 | 5.7 12,250 | | | | | | | | | 7.4 16,360 | 4.7 10,300 | 8.7 / 28.49 |
| | -3.0 -10' | *18.0 *38,910 | 11.9 25,630 | 12.8 27,610 | 7.8 16,760 | 9.2 19,820 | 5.7 12,390 | | | | | | | | | 8.6 19,030 | 5.4 11,940 | 7.9 / 25.76 |
| | -4.5 -15' | *15.4 *33,070 | 12.2 26,360 | *11.5 *24,590 | 8.0 17,310 | | | | | | | | | | | *10.0 *22,040 | 7.0 15,710 | 6.6 / 21.52 |
| | | | | | | | | | | | | | | | | | | |

Notes: 1. Machine in "Fine Mode-F" (Power Boost), for lifting capacities.

2. The above loads are in compliance with SAE and ISO 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.

5. Contains metric and U.S. measurement charts.

LIFTING CAPACITY (At the arm end without bucket)

Note: For lifting capacity including bucket, simply subtract actual weight of the pin on bucket or the bucket with quick coupler from the following values.

EC330 B LC (Std. shoe 800 mm, 32", counterweight 6,700 kg, 14,770 lb)

|  Across under-carriage  Along under-carriage | Lifting hook related to ground level | 4.5 m, 15' | | 6.0 m, 20' | | 7.5 m, 25' | | 9.0 m, 30' | | Max. reach | | | | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|---------------|---------------|---------------|------------|---------------|--------------|---------------|------------|--------------|------------|--------------|------------|----------------------------------------|
| | | t | lb | t | lb | t | lb | t | lb | t | lb | t | lb | Max. m / ft |
| ME boom 6.2 m 20' 4" + Arm 2.6 m 8' 6" | 7.5 25' | | | | | *8.9 *19,750 | *8.9 *19,750 | | | | | | | *9.1 *20,060 8.2 18,640 6.8 / 21.84 |
| | 6.0 20' | | | | | *9.4 *20,500 | *9.4 *20,500 | *9.0 *19,750 | 6.9 14,750 | | | | | *9.0 *19,780 6.5 14,510 7.7 / 25.22 |
| | 4.5 15' | *13.5 *28,880 | *13.5 *28,880 | *10.7 *23,090 | 9.5 20,500 | *9.4 *20,440 | 6.7 14,460 | | | | | | | 8.7 19,280 5.6 12,510 8.3 / 27.27 |
| | 3.0 10' | *16.9 *36,230 | 13.6 29,440 | *12.2 *26,410 | 9.0 19,420 | 10.1 21,730 | 6.5 13,970 | | | | | | | 8.1 17,890 5.2 11,530 8.6 / 28.28 |
| | 1.5 5' | *19.0 *41,040 | 12.9 27,800 | *13.5 *29,250 | 8.6 18,510 | 9.9 21,210 | 6.3 13,500 | | | | | | | 8.0 17,540 5.1 11,230 8.6 / 28.37 |
| | 0 0' | *19.4 *42,080 | 12.7 27,260 | 13.6 29,240 | 8.3 17,990 | 9.7 20,880 | 6.1 13,200 | | | | | | | 8.2 18,150 5.2 11,560 8.4 / 27.54 |
| | -1.5 -5' | *18.7 *40,530 | 12.7 27,290 | 13.5 29,100 | 8.3 17,870 | 9.7 20,860 | 6.1 13,180 | | | | | | | 9.1 20,050 5.8 12,720 7.9 / 25.72 |
| | -3.0 -10' | *16.8 *36,360 | 12.9 27,750 | *12.7 *27,340 | 8.4 18,160 | | | | | | | | | *10.4 *22,990 6.9 15,400 6.9 / 22.64 |
| | -4.5 -15' | *12.9 *27,420 | *12.9 *27,420 | | | | | | | | | | | *10.2 *22,350 10.0 *22,350 5.5 / 17.66 |
| Boom Std. 6.45 m 21' 2" | 7.5 25' | | | | | *22,050 | 21,900 | | | | | | | *8.9 *19,670 7.8 17,510 7.0 / 22.79 |
| | 6.0 20' | | | | | *10.8 *23,460 | 9.9 21,420 | *10.1 *22,250 | 6.9 14,880 | | | | | *8.6 *18,980 6.2 13,860 8.0 / 26.04 |
| | 4.5 15' | *15.9 *34,150 | 14.7 31,730 | *12.4 *26,800 | 9.5 20,470 | 10.4 22,350 | 6.7 14,520 | | | | | | | 8.4 18,540 5.4 12,040 8.6 / 28.02 |
| | 3.0 10' | *20.1 *43,120 | 13.5 29,190 | *14.3 30,850 | 9.0 19,380 | 10.1 21,770 | 6.5 14,000 | 16,740 | 10,910 | 7.8 17,270 | 5.0 11,140 | | | 8.8 / 29.01 |
| | 1.5 5' | *15.6 *38,070 | 12.9 27,730 | 13.9 29,840 | 8.6 18,500 | 9.9 21,250 | 6.3 13,520 | 16,460 | 10,640 | 7.7 16,940 | 4.9 10,860 | | | 8.9 / 29.10 |
| | 0 0' | *20.1 *47,260 | 12.7 27,340 | 13.6 29,290 | 8.4 18,020 | 9.7 20,910 | 6.1 13,220 | 16,260 | 10,460 | 7.9 17,490 | 5.1 11,150 | | | 8.6 / 28.29 |
| | -1.5 -5' | *21.8 *47,360 | 12.8 27,420 | 13.6 29,160 | 8.3 17,910 | 9.7 20,860 | 6.1 13,170 | | | | | | | 8.7 19,200 5.5 12,200 8.1 / 26.52 |
| | -3.0 -10' | *19.9 *43,020 | 12.9 27,840 | 13.7 29,450 | 8.4 18,160 | | | | | | | | | 10.4 23,070 6.6 14,570 7.2 / 23.56 |
| | -4.5 -15' | *16.0 *34,250 | 13.3 28,760 | | | | | | | | | | | *12.0 *26,490 9.2 20,650 5.8 / 18.82 |
| Boom Std. 6.45 m 21' 2" | 7.5 25' | | | | | | | *7.9 *16,010 | 7.3 15,550 | | | | | *7.1 *15,760 6.9 15,490 7.7 / 25.05 |
| | 6.0 20' | | | | | | | *8.1 *17,650 | 7.2 15,470 | | | | | *6.9 *15,280 5.7 12,710 8.6 / 28.04 |
| | 4.5 15' | *12.3 *26,390 | *12.3 *26,390 | *9.9 *21,430 | 9.8 21,160 | *8.7 *18,990 | 7.0 15,020 | | | | | | | *7.0 *15,400 5.1 11,230 9.1 / 29.89 |
| | 3.0 10' | *15.9 *34,110 | 14.0 30,310 | *11.6 *25,090 | 9.3 19,990 | *9.6 *20,870 | 6.7 14,430 | 7.8 16,770 | 5.1 10,930 | 7.3 *16,030 | 4.7 10,460 | | | 9.4 / 30.81 |
| | 1.5 5' | *18.5 *39,890 | 13.2 28,400 | *13.1 *28,380 | 8.8 18,970 | 10.0 21,630 | 6.4 13,880 | 7.7 16,480 | 5.0 10,660 | 7.2 15,780 | 4.6 10,200 | | | 9.4 / 30.89 |
| | 0 0' | *19.4 *42,110 | 12.8 27,580 | 13.8 29,620 | 8.5 18,320 | 9.8 21,190 | 6.3 13,480 | 7.6 16,290 | 4.9 10,480 | 7.3 16,180 | 4.7 10,420 | | | 9.2 / 30.14 |
| | -1.5 -5' | *19.2 *41,640 | 12.8 27,440 | 13.6 29,330 | 8.4 18,060 | 9.8 21,000 | 6.2 13,310 | | | | | | | 7.9 17,490 5.1 11,210 8.7 / 28.49 |
| | -3.0 -10' | *18.0 *38,910 | 12.9 27,730 | *13.6 *29,350 | 8.4 18,170 | 9.8 21,160 | 6.2 13,460 | | | | | | | 9.1 20,320 5.9 12,970 7.9 / 25.76 |
| | -4.5 -15' | *15.4 *33,070 | 13.2 28,450 | *11.5 *24,590 | 8.7 18,720 | | | | | | | | | *10.0 *22,040 7.6 17,000 6.6 / 21.52 |
| Boom Std. 6.45 m 21' 2" | 7.5 25' | | | | | | | *8.0 *17,720 | 7.4 15,930 | | | | | *5.7 *12,520 *5.7 *12,520 8.5 / 27.64 |
| | 6.0 20' | | | | | | | *8.4 *18,350 | 7.3 15,680 | *7.0 *13,560 | 5.3 11,380 | *5.5 *12,180 | 5.0 11,120 | 9.3 / 30.36 |
| | 4.5 15' | | | | | *10.2 *22,170 | 10.0 21,510 | *9.2 *20,130 | 7.0 15,120 | 8.0 17,100 | 5.2 11,170 | *5.6 *12,240 | 4.5 9,910 | 9.8 / 32.08 |
| | 3.0 10' | *16.3 *34,950 | 14.3 30,940 | *12.3 *26,600 | 9.3 20,130 | 10.4 22,280 | 6.9 14,400 | 7.8 16,710 | 5.0 10,810 | *5.8 *12,680 | 4.2 9,240 | | | 10.0 / 32.94 |
| | 1.5 5' | *19.9 *42,860 | 13.2 28,370 | 14.1 30,320 | 8.7 18,840 | 10.0 21,490 | 6.3 13,690 | 7.6 16,300 | 4.8 10,430 | *6.1 *13,520 | 4.1 8,990 | | | 10.1 / 33.02 |
| | 0 0' | *21.8 47,190 | 12.5 26,960 | 13.6 29,270 | 8.3 17,920 | 9.7 20,880 | 6.1 13,130 | 7.4 15,970 | 4.7 10,130 | 6.5 14,340 | 4.1 9,110 | | | 9.8 / 32.31 |
| | -1.5 -5' | 21.8 46,580 | 12.3 26,460 | 13.4 28,730 | 8.1 17,450 | 9.5 20,540 | 5.9 12,820 | 7.3 15,840 | 4.6 10,010 | 6.9 15,290 | 4.4 9,680 | | | 9.4 / 30.78 |
| | -3.0 -10' | *21.5 *46,570 | 12.3 26,560 | 13.3 28,660 | 8.1 17,390 | 9.5 20,520 | 5.9 12,800 | | | | | | | 7.8 17,310 4.9 10,930 8.6 / 28.27 |
| | -4.5 -15' | *19.4 *41,790 | 12.6 27,140 | 13.5 29,080 | 8.2 17,760 | | | | | | | | | 9.7 21,590 6.1 13,580 7.5 / 24.50 |

- 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.
 - Contains metric and U.S. measurement charts.

NOTES

STANDARD EQUIPMENT

Engine

Turbocharged, 4-stroke diesel engine with water cooling, direct injection and charged air cooler that meets EPA (Environment Protection Agency) Tier 2 emission standards
3-stage air filter with indicator, includes pre-cleaner
Air pre-cleaner
Air intake heater
Electric engine shut-off
Fuel filter and water separator
Coolant filter
Alternator, 55 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
Travel alarm
Adjustable monitor
Master switch

Engine restart prevention circuit
High capacity halogen lights:
– Frame mounted 2
– Boom mounted 4
Batteries, 2 x 12 V / 200 Ah
Start motor, 24 V / 6.6 kW

Hydraulic system

Automatic hydraulic system
– Summation system
– Boom priority
– Arm priority
– Swing priority
Hydraulic piping
– Hammer & shear:
 1 pump flow
 – Quick coupler piping
Boom and arm regeneration valve
Swing anti-rebound valve
Boom and arm holding valves
Pump flow control for hammer & shear
Multi-stage filtering system
Cylinder cushioning
Cylinder contamination seals
Auxiliary hydraulic valve
Straight travel circuit
Automatic two-speed travel motors
Hydraulic oil, ISO VG 46

Superstructure

Access way with handrail
Full height counterweight 6,700 kg, 14,770 lb
Tool storage area
Punched metal anti-slip plates
Undercover (heavy duty 4,5 mm, 0.18")

Cab and interior

Fabric seat, with heater and air suspension
Pilot-operated wrist control joysticks, with 3 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
– Lighter
– Door locks
– Tinted glass
– Floor mat
– Horn

– Large storage area
– Pull-up type front window
– Removable lower windshield
– Seat belt
– Safety glass
– Sun shield, front, roof, rear
– Rain shield, front
– Windshield wiper with intermittent feature
– Stereo cassette radio
Anti-vandalism kit assembly preparation
Master ignition key

Undercarriage

Hydraulic track adjusters
Greased and sealed track chain
Track guards
Undercover (4,5 mm, 0.18")

Track shoes

Track shoes 800 mm, 32" with triple grousers

Digging equipment

Boom: 6.45 m, 21' 2"
Arm: 3.2 m, 10' 6"

OPTIONAL EQUIPMENT (Standard in certain markets)

Engine

Alternator, 80 A
Block heater: 120 V
Oil bath pre-cleaner
Diesel coolant heater
Tropical cooling kit
Fuel filter pump: 50 l/min, 13.2 gpm with automatic shut-off

Electric

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

Hydraulic system

Hose rupture valve: boom, arm
Hydraulic piping
– Hammer & shear:
 2 pump flow
 Additional return filter
 Extra piping for slope & rotator
– Slope & rotator
– Grapple
– Oil leak (drain) line
Volvo hydraulic quick-coupler, S3 size
Hydraulic oil, ISO VG 32
Hydraulic oil, ISO VG 68
Hydraulic oil, biodegradable 32
Hydraulic oil, biodegradable 46

Superstructure

Full height counterweight 5,800 kg, 12,790 lb

Cab and interior

Fabric seat
Control joystick, with semi-long levers
Control joystick, with 5 switches each
Air-conditioner, manual
Falling object guard (FOG)
Cab mounted falling object protective structures (FOPS)
Sunlight protection, roof (steel)
Safety screen for front window
Lower wiper
Anti-vandalism kit

Undercarriage

Full track guards
Undercover (heavy duty 10 mm, 0.39

Track shoes

600/700/900 mm, 24"/28"/36" track shoes with triple grousers
600 mm, 24" track shoe with double grouser

Digging equipment

Boom: ME 6.2 m, 20' 4"
Arm: 2.6 m, 8' 6"
 3.9 m, 12' 10"

Service

Hand lamp
Spare parts
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

**Volvo Construction Equipment
North America Inc.**

One Volvo Drive, Asheville, N.C. 28803-3447

www.VolvoCE.com

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