

V O L V O



Volvo Excavators 29.8 - 38.8 t / 65,808-85,539 lb 253 hp

# EC300 HYBRID

Volvo Construction Equipment

# EC300 HYBRID

A solid and reliable hybrid machine that delivers all the performance you would expect from a Volvo machine.



# A solid and reliable solution

Commonly used in quarries, for trenching, digging or preparing construction sites, the EC300F Hybrid is a versatile machine. Customize it with purpose-built quality Volvo attachments, matched to your needs. Form one solid and reliable unit that delivers improved cycle times and increased fuel efficiency. This hybrid delivers all the performance you would expect from a Volvo machine.



## Operator comfort

- More precise controls
- Quieter cab
- Personalized settings for greater comfort
- ROPS cab as standard



## Smart View with Obstacle Detection

- Increased safety onsite and for the operator
- Radar warns for items outside the screen
- HD screen
- Human identifying alarm separate from other obstacles



## Serviceability

- Ground level access for service
- Long service intervals
- Grouped filters and lubrication points
- Quick and easy oil changes



## Fuel Efficiency

- Up to 15% improvement
- Powerful and efficiency Volvo engine



## Productivity

- 7% productivity improvement
- Volvo Active Control
- Dig Assist with On-Board Weighing
- Electro-hydraulic system
- Boom/Swing & Boom/Travel priority functions

# Volvo EC300 Hybrid in detail

## Engine

The latest generation, Volvo engine Tier4f emissions compliant diesel engine fully meets the demands of the latest, emissions regulations. Featuring Volvo Advanced Combustion Technology (V-ACT), it is designed to deliver superior performance and fuel efficiency. The engine uses precise, high pressure fuel injectors, turbo charger and air-to-air intercooler, and electronic engine controls to optimize machine performance.

- **Air Filter:** 3-stage with precleaner
- **Automatic Idling System:** Reduces engine speed to idle when the levers and pedals are not activated resulting in less fuel consumption and low cab noise levels.

| Engine                     | Volvo                | Volvo D8M    |
|----------------------------|----------------------|--------------|
| Max power at               | r/min (r/s)          | 1,600 (26.7) |
| Net, ISO 9249/SAE J1349    | kW (hp)              | 188 (252)    |
| Gross, ISO 14396/SAE J1995 | kW (hp)              | 189 (253)    |
| Max torque                 | Nm (ft lbf)          | 1,290 (951)  |
| at engine speed            | r/min (r/s)          | 1,400 (23.3) |
| No. of cylinders           |                      | 6            |
| Displacement               | l (in <sup>3</sup> ) | 7.7 (470)    |
| Bore                       | mm (in)              | 110 (4.33)   |
| Stroke                     | mm (in)              | 135 (5.31)   |

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

|                  |        |          |
|------------------|--------|----------|
| Voltage          | V      | 24       |
| Batteries        | V      | 2 x 12   |
| Battery capacity | Ah     | 170      |
| Alternator       | V/A    | 28 / 120 |
| Start motor      | V - kW | 24 / 5.5 |

## Hybrid

The uncomplicated and reliable hybrid solution, Volvo's novel hydraulic hybrid harvests 'free' energy generated by the down motion of the excavator's boom and uses it to supercharge the engine system.

The powerful and regular boom-down motions charge 32 litre hydraulic accumulators, which then deliver energy to drive hydraulic assist motors that help power the engine system. There are the same levels of controllability and performance as the standard EC400F, including the ability to work in ECO mode and Hybrid mode simultaneously.

### Accumulator

|                    |         |          |
|--------------------|---------|----------|
| No. of accumulator |         | 1        |
| Displacement       | l (gal) | 32 (8.5) |

## Undercarriage and structures

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

| EC300F L / LR              |         |   |
|----------------------------|---------|---|
| Track shoe                 |         | 2 x 50  |
| Link pitch                 | mm (in) | 203 (8)   |
| Shoe width, triple grouser | mm (in) | 600 / 700 /<br>800 / 900<br>(24 / 28 / 32 / 36) |
| Bottom rollers             |         | 2 x 9   |
| Top rollers                |         | 2 x 2   |

## Swing system

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

|                  |              |              |
|------------------|--------------|--------------|
| Max. slew speed  | r/min        | 11           |
| Max. slew torque | kNm (ft lbf) | 115 (84,660) |

## Travel System

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

|                          |             |              |
|--------------------------|-------------|--------------|
| Max. drawbar pull        | kN (lbf)    | 248 (55,680) |
| Max. travel speed (low)  | km/h (mi/h) | 3.6 (2.2)    |
| Max. travel speed (high) | km/h (mi/h) | 5.6 (3.5)    |
| Gradeability             | °           | 35           |

## Cab

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

**Integrated air-conditioning and heating system:** The pressurized and filtered cab air is supplied by an automatically controlled fan. The air is distributed throughout the cab from 14 vents.

**Ergonomic operator's seat:** The adjustable seat and joystick console move independently to accommodate the operator. The seat has 12 different adjustments plus a seat belt for the operator's comfort and safety.

## Sound Level

|   |    |     |
|---|----|-----|
| Sound level in cab according to ISO 6396                                    |    |     |
| L <sub>pA</sub>   | dB | 70  |
| External sound level according to ISO 6395, EU Noise Directive (2000/14/EC) |    |     |
| L <sub>WA</sub>   | dB | 104 |

## Service Refill

|                         |         |                   |
|-------------------------|---------|-------------------|
| Fuel tank               | l (gal) | 440 (116)         |
| DEF/AdBlue® tank        | l (gal) | 50 (13)           |
| Hydraulic system, total | l (gal) | 385 (102)         |
| Hydraulic tank          | l (gal) | 215 (57)          |
| Engine oil              | l (gal) | 30 (8)            |
| Engine coolant          | l (gal) | 44 (12)           |
| Slew reduction unit     | l (gal) | 6 (2)             |
| Travel reduction unit   | l (gal) | 2 x 6.0 (2 x 2.0) |

## Hydraulic System

The new electro-hydraulic system and new MCV (main control valve) use intelligent technology to control on-demand flow for high productivity, high-digging capacity and excellent fuel consumption.

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.

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

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

### Main pump: 2 x Variable displacement axial piston pumps

|              |                 |                  |
|--------------|-----------------|------------------|
| Maximum flow | l/min (gal/min) | 2 x 276 (2 x 73) |
|--------------|-----------------|------------------|

### Pilot pump: Gear pump

|              |                 |          |
|--------------|-----------------|----------|
| Maximum flow | l/min (gal/min) | 20.3 (5) |
|--------------|-----------------|----------|

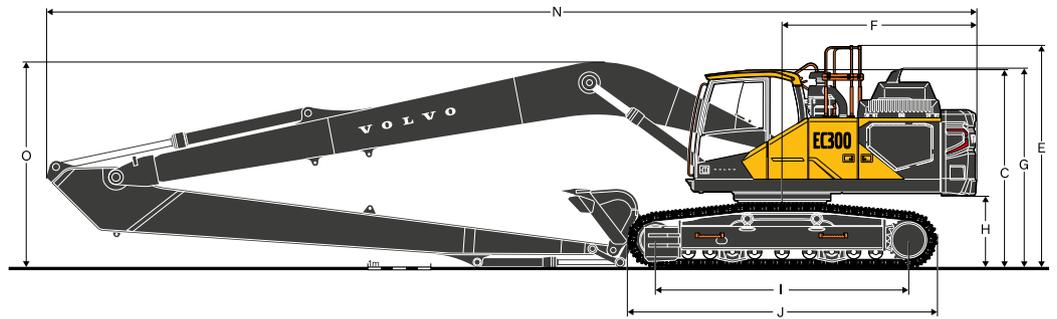
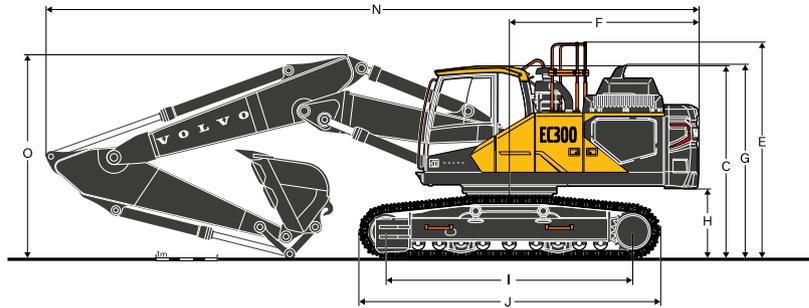
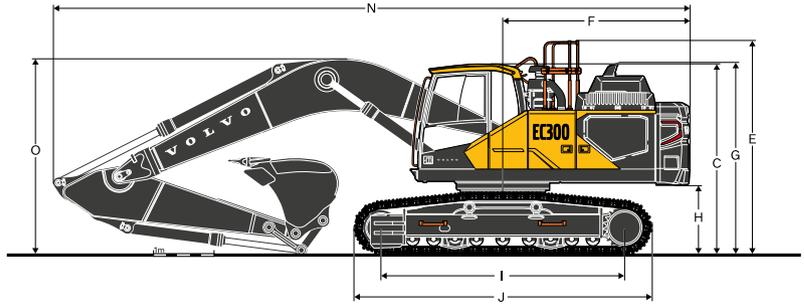
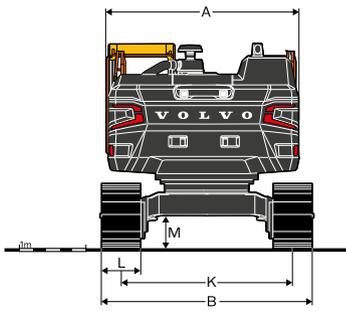
### Max. pressure

|                |           |                                |
|----------------|-----------|--------------------------------|
| Implement      | MPa (psi) | 33.3 / 36.3<br>(4,840 / 5,260) |
| Travel circuit | MPa (psi) | 36.3 (5,260)                   |
| Slew circuit   | MPa (psi) | 28.9 (4,200)                   |
| Pilot circuit  | MPa (psi) | 3.9 (570)                      |

## Hydraulic Cylinders

|                    |                 |                             |
|--------------------|-----------------|-----------------------------|
| Boom               |                 | 2                           |
| Bore x Stroke      | ø x mm (ø x in) | 140 x 1 480<br>(5.5 x 58.3) |
| 2 piece boom       |                 | 1                           |
| Bore x Stroke      | ø x mm (ø x in) | 170 x 1 300<br>(6.7 x 51.2) |
| Arm                |                 | 1                           |
| Bore x Stroke      | ø x mm (ø x in) | 150 x 1 745<br>(5.9 x 68.7) |
| Bucket             |                 | 1                           |
| Bore x Stroke      | ø x mm (ø x in) | 140 x 1 140<br>(5.5 x 44.9) |
| Bucket for LR boom |                 | 1                           |
| Bore x Stroke      | ø x mm (ø x in) | 100 x 865<br>(3.9 x 34.1)   |

# Specifications

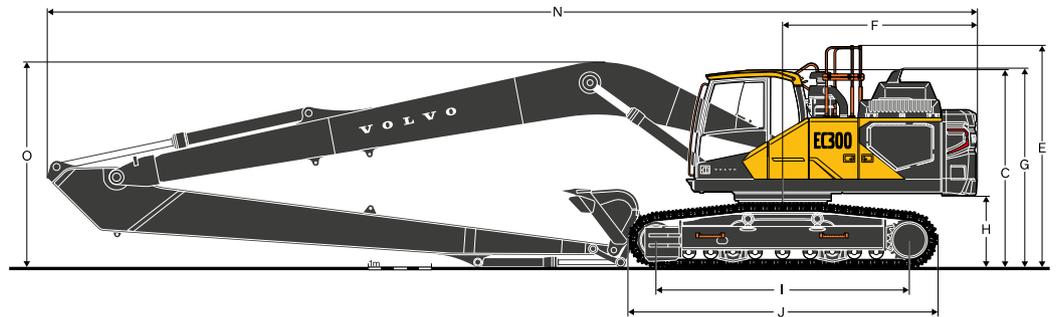
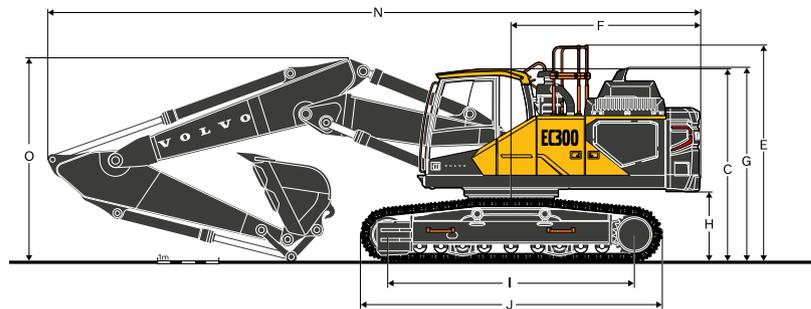
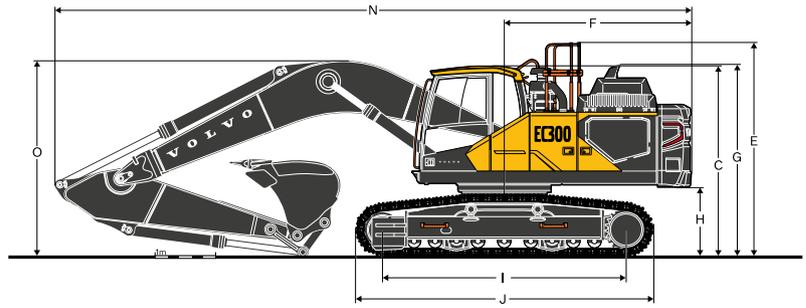
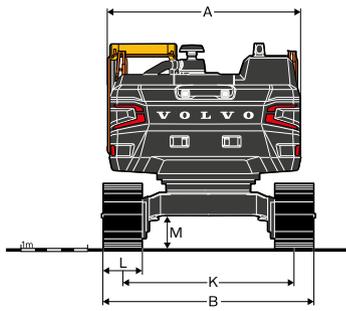


## DIMENSIONS

|                                      | Unit |       | EC300F L    |       |        |       |        |        |        |       |
|--------------------------------------|------|-------|-------------|-------|--------|-------|--------|--------|--------|-------|
|                                      | m    | ft in | 6.2 (20'4") |       |        |       |        |        |        |       |
| <b>Boom</b>                          |      |       |             |       |        |       |        |        |        |       |
| <b>Arm</b>                           | m    | ft in | 2.55        | 8'4"  | 2.75   | 9'0"  | 3.05   | 10'0"  | 3.7    | 12'2" |
| A. Overall width of upper structure* | mm   | ft in | 2,890       | 9'6"  | 2,890  | 9'6"  | 2,890  | 9'6"   | 2,890  | 9'6"  |
| B. Overall width                     | mm   | ft in | 3,190       | 10'6" | 3,190  | 10'6" | 3,190  | 10'6"  | 3,190  | 10'6" |
| C. Overall height of cab             | mm   | ft in | 3,110       | 10'2" | 3,110  | 10'2" | 3,110  | 10'2"  | 3,110  | 10'2" |
| D. Overall height of handrail        | mm   | ft in | 3,205       | 10'6" | 3,205  | 10'6" | 3,205  | 10'6"  | 3,205  | 10'6" |
| E. Overall height of guardrail       | mm   | ft in | 3,470       | 11'5" | 3,470  | 11'5" | 3,470  | 11'5"  | 3,470  | 11'5" |
| F. Tail swing radius                 | mm   | ft in | 3,125       | 10'3" | 3,125  | 10'3" | 3,125  | 10'3"  | 3,125  | 10'3" |
| G. Overall height of engine hood     | mm   | ft in | 2,920       | 9'7"  | 2,920  | 9'7"  | 2,920  | 9'7"   | 2,920  | 9'7"  |
| H. Counterweight clearance **        | mm   | ft in | 1,105       | 3'8"  | 1,105  | 3'8"  | 1,105  | 3'8"   | 1,105  | 3'8"  |
| I. Tumbler length                    | mm   | ft in | 4,015       | 13'2" | 4,015  | 13'2" | 4,015  | 13'2"  | 4,015  | 13'2" |
| J. Track length                      | mm   | ft in | 4,865       | 16'0" | 4,865  | 16'0" | 4,865  | 16'0"  | 4,865  | 16'0" |
| K. Track gauge                       | mm   | ft in | 2,590       | 8'6"  | 2,590  | 8'6"  | 2,590  | 8'6"   | 2,590  | 8'6"  |
| L. Shoe width                        | mm   | in    | 600         | 24    | 600    | 24    | 600    | 24     | 600    | 24    |
| M. Min. ground clearance **          | mm   | ft in | 475         | 1'7"  | 475    | 1'7"  | 475    | 1'7"   | 475    | 1'7"  |
| N. Overall length                    | mm   | ft in | 10,595      | 34'9" | 10,540 | 34'7" | 10,495 | 34'5"  | 10,535 | 34'7" |
| O. Overall height of boom            | mm   | ft in | 3,460       | 11'4" | 3,420  | 11'3" | 3,335  | 10'11" | 3,575  | 11'9" |

\* Exclude walkway, handrail

\*\* Without shoe grouser



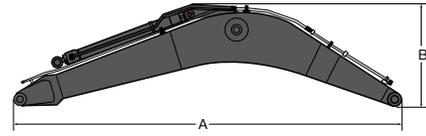
## DIMENSIONS

|                                      | Unit |       | EC300F L                 |       |        |        |        |       | EC300F LR    |        |
|--------------------------------------|------|-------|--------------------------|-------|--------|--------|--------|-------|--------------|--------|
|                                      | m    | ft in | 2 piece boom 6.2 (20'4") |       |        |        |        |       | 10.2 (33'6") |        |
| <b>Boom</b>                          | m    | ft in | 2.55                     | 8'4"  | 3.05   | 10'0"  | 3.7    | 12'2" | 7.9          | 25'11" |
| <b>Arm</b>                           | m    | ft in | 2.55                     | 8'4"  | 3.05   | 10'0"  | 3.7    | 12'2" | 7.9          | 25'11" |
| A. Overall width of upper structure* | mm   | ft in | 2,890                    | 9'6"  | 2,890  | 9'6"   | 2,890  | 9'6"  | 2,890        | 9'6"   |
| B. Overall width                     | mm   | ft in | 3,190                    | 10'6" | 3,190  | 10'6"  | 3,190  | 10'6" | 3,190        | 10'6"  |
| C. Overall height of cab             | mm   | ft in | 3,110                    | 10'2" | 3,110  | 10'2"  | 3,110  | 10'2" | 3,110        | 10'2"  |
| D. Overall height of handrail        | mm   | ft in | 3,205                    | 10'6" | 3,205  | 10'6"  | 3,205  | 10'6" | 3,205        | 10'6"  |
| E. Overall height of guardrail       | mm   | ft in | 3,470                    | 11'5" | 3,470  | 11'5"  | 3,470  | 11'5" | 3,470        | 11'5"  |
| F. Tail swing radius                 | mm   | ft in | 3,125                    | 10'3" | 3,125  | 10'3"  | 3,125  | 10'3" | 3,155        | 10'4"  |
| G. Overall height of engine hood     | mm   | ft in | 2,920                    | 9'7"  | 2,920  | 9'7"   | 2,920  | 9'7"  | 2,920        | 9'7"   |
| H. Counterweight clearance **        | mm   | ft in | 1,105                    | 3'8"  | 1,105  | 3'8"   | 1,105  | 3'8"  | 1,105        | 3'8"   |
| I. Tumbler length                    | mm   | ft in | 4,015                    | 13'2" | 4,015  | 13'2"  | 4,015  | 13'2" | 4,015        | 13'2"  |
| J. Track length                      | mm   | ft in | 4,865                    | 16'0" | 4,865  | 16'0"  | 4,865  | 16'0" | 4,865        | 16'0"  |
| K. Track gauge                       | mm   | ft in | 2,590                    | 8'6"  | 2,590  | 8'6"   | 2,590  | 8'6"  | 2,590        | 8'6"   |
| L. Shoe width                        | mm   | in    | 600                      | 24    | 600    | 24     | 600    | 24    | 600          | 24     |
| M. Min. ground clearance **          | mm   | ft in | 475                      | 1'7"  | 475    | 1'7"   | 475    | 1'7"  | 475          | 1'7"   |
| N. Overall length                    | mm   | ft in | 10,595                   | 34'9" | 10,525 | 34'6"  | 10,530 | 34'7" | 14,555       | 47'9"  |
| O. Overall height of boom            | mm   | ft in | 3,360                    | 11'0" | 3,300  | 10'10" | 3,485  | 11'5" | 3,320        | 10'11" |

\* Exclude walkway, handrail

\*\* Without shoe grouser

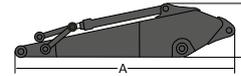
# Specifications



## DIMENSIONS

| Description | Unit      |       | Boom           |       |                |       |                |       |                     |       |                 |       |
|-------------|-----------|-------|----------------|-------|----------------|-------|----------------|-------|---------------------|-------|-----------------|-------|
|             | m (ft in) |       | 6.2 (20'4") GP |       | 6.2 (20'4") HD |       | 6.2 (20'4") XD |       | 6.2 (20'4") 2-piece |       | 10.2 (33'6") LR |       |
| A. Length   | mm        | ft in | 6,425          | 21'1" | 6,425          | 21'1" | 6,425          | 21'1" | 6,425               | 21'1" | 10,425          | 34'2" |
| B. Height   | mm        | ft in | 1,780          | 5'10" | 1,780          | 5'10" | 1,780          | 5'10" | 1,595               | 5'3"  | 1,580           | 5'2"  |
| Width       | mm        | ft in | 765            | 2'6"  | 765            | 2'6"  | 765            | 2'6"  | 770                 | 2'6"  | 765             | 2'6"  |
| Weight      | kg        | lb    | 2,505          | 5,520 | 2,735          | 6,030 | 2,865          | 6,315 | 3,390               | 7,475 | 3,410           | 7,520 |

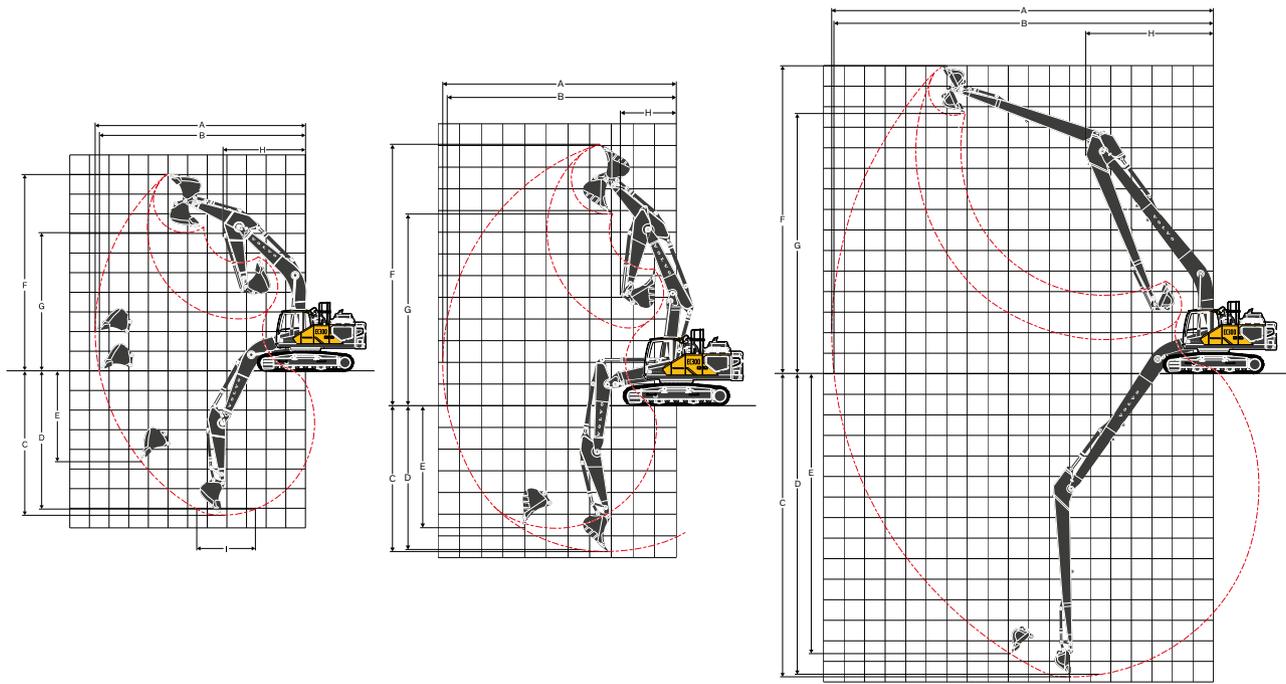
\* Includes arm cylinder, piping and pin



## DIMENSIONS

| Description | Unit      |       | Arm            |       |                 |       |                 |       |                |       |                 |       |                |       |                 |       |
|-------------|-----------|-------|----------------|-------|-----------------|-------|-----------------|-------|----------------|-------|-----------------|-------|----------------|-------|-----------------|-------|
|             | m (ft in) |       | 2.55 (8'4") HD |       | 3.05 (10'0") GP |       | 3.05 (10'0") HD |       | 2.75 (9'0") XD |       | 3.05 (10'0") XD |       | 3.7 (12'2") GP |       | 7.9 (25'11") LR |       |
| A. Length   | mm        | ft in | 3,720          | 12'2" | 4,145           | 13'7" | 4,145           | 13'7" | 3,860          | 12'8" | 4,145           | 13'7" | 4,800          | 15'9" | 9,055           | 29'8" |
| B. Height   | mm        | ft in | 1,005          | 3'4"  | 1,010           | 3'4"  | 1,010           | 3'4"  | 1,010          | 3'4"  | 1,010           | 3'4"  | 1,005          | 3'4"  | 1,095           | 3'4"  |
| Width       | mm        | ft in | 560            | 1'10" | 560             | 1'10" | 560             | 1'10" | 560            | 1'10" | 560             | 1'10" | 560            | 1'10" | 435             | 1'5"  |
| Weight      | kg        | lb    | 1,525          | 3,360 | 1,535           | 3,380 | 1,595           | 3,520 | 1,585          | 3,490 | 1,680           | 3,700 | 1,660          | 3,660 | 1,760           | 3,880 |

\* Includes cylinder, linkage and pin



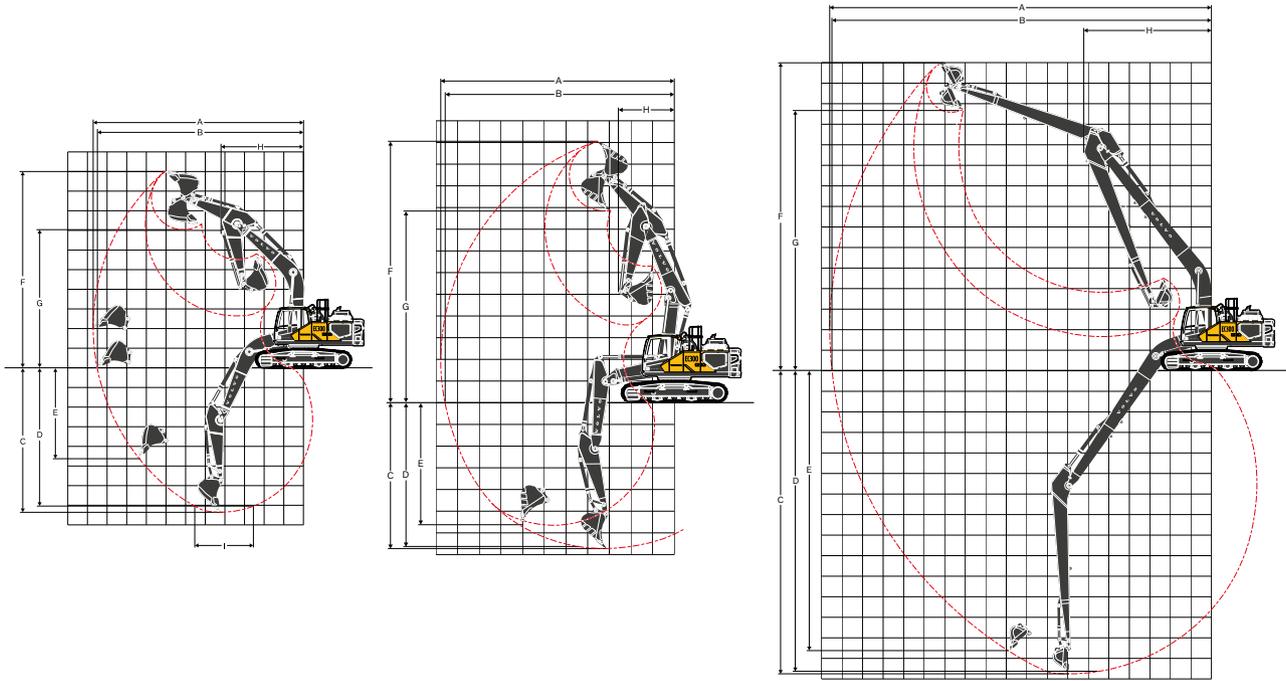
**WORKING RANGES WITH DIRECT FIT BUCKET**

| Description                                      | Unit      |       | EC300F L    |        |        |        |        |       |        |        |
|--|-----------|-------|-------------|--------|--------|--------|--------|-------|--------|--------|
|  | m (ft in) |       | 6.2 (20'4") |        |        |        |        |       |        |        |
| Boom   |           |       |             |        |        |        |        |       |        |        |
| Arm  | m         | ft in | 2.55        | 8'4"   | 2.75   | 9'0"   | 3.05   | 10'0" | 3.7    | 12'2"  |
| A. Max. digging reach                            | mm        | ft in | 10,185      | 33'5"  | 10,425 | 34'2"  | 10,715 | 35'2" | 11,320 | 37'2"  |
| B. Max. digging reach on ground                  | mm        | ft in | 9,980       | 32'9"  | 10,225 | 33'7"  | 10,520 | 34'6" | 11,135 | 36'6"  |
| C. Max. digging depth                            | mm        | ft in | 6,845       | 22'5"  | 7,045  | 23'1"  | 7,345  | 24'1" | 7,995  | 26'3"  |
| D. Max. digging depth<br>(l=2.44 m (8'0") level) | mm        | ft in | 6,605       | 21'8"  | 6,840  | 22'5"  | 7,160  | 23'6" | 7,835  | 25'8"  |
| E. Max. vertical wall digging depth              | mm        | ft in | 5,105       | 16'9"  | 5,540  | 18'2"  | 5,870  | 19'3" | 6,460  | 21'2"  |
| F. Max. cutting height                           | mm        | ft in | 9,565       | 31'5"  | 9,820  | 32'3"  | 9,990  | 32'9" | 10,275 | 33'9"  |
| G. Max. dumping height                           | mm        | ft in | 6,675       | 21'11" | 6,885  | 22'7"  | 7,045  | 23'1" | 7,330  | 24'1"  |
| H. Min. front swing radius                       | mm        | ft in | 4,220       | 13'10" | 4,220  | 13'10" | 4,185  | 13'9" | 4,240  | 13'11" |

**DIGGING FORCES WITH DIRECT FIT BUCKET**

|                         |             |           |    |     |     |        |     |        |     |        |     |        |
|-------------------------|-------------|-----------|----|-----|-----|--------|-----|--------|-----|--------|-----|--------|
| Breakout force (bucket) | Normal      | SAE J1179 | kN | lbf | 164 | 36,940 | 164 | 36,960 | 164 | 36,980 | 164 | 36,950 |
|                         | Power boost | SAE J1179 | kN | lbf | 179 | 40,200 | 179 | 40,220 | 179 | 40,240 | 179 | 40,210 |
|                         | Normal      | ISO 6015  | kN | lbf | 196 | 44,150 | 196 | 44,170 | 197 | 44,200 | 196 | 44,170 |
|                         | Power boost | ISO 6015  | kN | lbf | 214 | 48,050 | 214 | 48,070 | 214 | 48,100 | 214 | 48,060 |
| Tearout force (arm)     | Normal      | SAE J1179 | kN | lbf | 158 | 35,460 | 145 | 32,630 | 132 | 29,770 | 116 | 26,070 |
|                         | Power boost | SAE J1179 | kN | lbf | 172 | 38,590 | 158 | 35,510 | 144 | 32,400 | 126 | 28,370 |
|                         | Normal      | ISO 6015  | kN | lbf | 165 | 37,050 | 151 | 34,000 | 137 | 30,900 | 120 | 26,890 |
|                         | Power boost | ISO 6015  | kN | lbf | 179 | 40,320 | 165 | 37,000 | 150 | 33,630 | 130 | 29,270 |
| Rotation angle, bucket  |             |           | °  |     | 179 |        | 179 |        | 179 |        | 179 |        |

# Specifications



## WORKING RANGES WITH DIRECT FIT BUCKET

| Description                                      | Unit      |       | EC300F L                 |        |        |       |        |        | EC300F LR    |        |
|--|-----------|-------|--------------------------|--------|--------|-------|--------|--------|--------------|--------|
|  |           |       | 2 piece boom 6.2 (20'4") |        |        |       |        |        | 10.2 (33'6") |        |
| Boom   | m (ft in) |       |                          |        |        |       |        |        |              |        |
| Arm  | m         | ft in | 2.55                     | 8'4"   | 3.05   | 10'0" | 3.7    | 12'2"  | 7.9          | 25'11" |
| A. Max. digging reach                            | mm        | ft in | 10,250                   | 33'8"  | 10,780 | 35'4" | 11,395 | 37'5"  | 18,590       | 60'12" |
| B. Max. digging reach on ground                  | mm        | ft in | 10,045                   | 32'11" | 10,585 | 34'9" | 11,210 | 36'9"  | 18,480       | 60'8"  |
| C. Max. digging depth                            | mm        | ft in | 6,210                    | 20'4"  | 6,735  | 22'1" | 7,375  | 24'2"  | 14,755       | 48'5"  |
| D. Max. digging depth<br>(l=2.44 m (8'0") level) | mm        | ft in | 6,105                    | 20'0"  | 6,640  | 21'9" | 7,290  | 23'11" | 14,650       | 48'1"  |
| E. Max. vertical wall digging depth              | mm        | ft in | 4,910                    | 16'1"  | 5,500  | 18'1" | 6,100  | 20'0"  | 13,515       | 44'4"  |
| F. Max. cutting height                           | mm        | ft in | 11,555                   | 37'11" | 12,070 | 39'7" | 12,570 | 41'3"  | 14,935       | 48'12" |
| G. Max. dumping height                           | mm        | ft in | 8,355                    | 27'5"  | 8,850  | 29'0" | 9,350  | 30'8"  | 12,600       | 41'4"  |
| H. Min. front swing radius                       | mm        | ft in | 2,755                    | 9'0"   | 2,575  | 8'5"  | 2,775  | 9'1"   | 6,190        | 20'4"  |

## DIGGING FORCES WITH DIRECT FIT BUCKET

|                         |             |           |    |     |     |        |     |        |     |        |     |        |
|-------------------------|-------------|-----------|----|-----|-----|--------|-----|--------|-----|--------|-----|--------|
| Breakout force (bucket) | Normal      | SAE J1179 | kN | lbf | 164 | 36,940 | 164 | 36,980 | 164 | 36,950 | 69  | 15,580 |
|                         | Power boost | SAE J1179 | kN | lbf | 179 | 40,200 | 179 | 40,240 | 179 | 40,210 | 69  | 15,580 |
|                         | Normal      | ISO 6015  | kN | lbf | 196 | 44,150 | 197 | 44,200 | 196 | 44,170 | 80  | 18,060 |
|                         | Power boost | ISO 6015  | kN | lbf | 214 | 48,050 | 214 | 48,100 | 214 | 48,060 | 80  | 18,060 |
| Tearout force (arm)     | Normal      | SAE J1179 | kN | lbf | 158 | 35,460 | 132 | 29,770 | 116 | 26,070 | 51  | 11,550 |
|                         | Power boost | SAE J1179 | kN | lbf | 172 | 38,590 | 144 | 32,400 | 126 | 28,370 | 51  | 11,550 |
|                         | Normal      | ISO 6015  | kN | lbf | 165 | 37,050 | 137 | 30,900 | 120 | 26,890 | 52  | 11,700 |
|                         | Power boost | ISO 6015  | kN | lbf | 179 | 40,320 | 150 | 33,630 | 130 | 29,270 | 52  | 11,700 |
| Rotation angle, bucket  |             |           | °  |     | 179 |        | 179 |        | 179 |        | 178 |        |

**GROUND PRESSURE**

**EC300F L**

| Description    | Shoe width |         | Operating weight |        | Ground pressure |     | Overall width |        | Operating weight |        | Ground pressure |     | Overall width |        |
|----------------|------------|---------|------------------|--------|-----------------|-----|---------------|--------|------------------|--------|-----------------|-----|---------------|--------|
|                | mm         | in      | kg               | lb     | kPa             | psi | mm            | ft in  | kg               | lb     | kPa             | psi | mm            | ft in  |
| Triple grouser | 600        | 24      | 30,560           | 67,380 | 59.0            | 8.5 | 3,190         | 10'6"  | 30,850           | 68,020 | 59.5            | 8.6 | 3,190         | 10'6"  |
|                | 600 (HD)   | 24 (HD) | 30,770           | 67,850 | 59.4            | 8.6 | 3,190         | 10'6"  | 31,060           | 68,490 | 59.9            | 8.7 | 3,190         | 10'6"  |
|                | 700        | 28      | 31,140           | 68,660 | 51.5            | 7.5 | 3,290         | 10'10" | 31,430           | 69,300 | 52.0            | 7.5 | 3,290         | 10'10" |
|                | 800        | 32      | 31,510           | 69,480 | 45.6            | 6.6 | 3,390         | 11'1"  | 31,800           | 70,120 | 46.0            | 6.7 | 3,390         | 11'1"  |
| Double grouser | 600        | 24      | 30,930           | 68,200 | 59.7            | 8.6 | 3,190         | 10'6"  | 31,220           | 68,840 | 60.2            | 8.7 | 3,190         | 10'6"  |
|                | 700        | 28      | 31,340           | 69,100 | 51.8            | 7.5 | 3,190         | 10'6"  | 31,630           | 69,740 | 52.3            | 7.6 | 3,190         | 10'6"  |
| Single grouser | 700        | 28      | 30,970           | 68,290 | 51.2            | 7.4 | 3,340         | 10'11" | 31,260           | 38,930 | 51.7            | 7.5 | 3,340         | 10'11" |

**EC300F L, 6.2 m (20'4") GP boom, 3.05 m (10'0") GP arm, 1,354 kg (2,990 lb) bucket, 6,200 kg (13,670 lb) counterweight**

**EC300F L, 6.2 m (20'4") HD boom, 3.05 m (10'0") HD arm, 1,354 kg (2,990 lb) bucket, 6,200 kg (13,670 lb) counterweight**

| Description    | Shoe width |         | Operating weight |        | Ground pressure |     | Overall width |        | Operating weight |        | Ground pressure |     | Overall width |        |
|----------------|------------|---------|------------------|--------|-----------------|-----|---------------|--------|------------------|--------|-----------------|-----|---------------|--------|
|                | mm         | in      | kg               | lb     | kPa             | psi | mm            | ft in  | kg               | lb     | kPa             | psi | mm            | ft in  |
| Triple grouser | 600        | 24      | 31,060           | 68,490 | 59.9            | 8.7 | 3,190         | 10'6"  | 31,440           | 69,330 | 60.7            | 8.8 | 3,190         | 10'6"  |
|                | 600 (HD)   | 24 (HD) | 31,270           | 68,950 | 60.3            | 8.7 | 3,190         | 10'6"  | 31,650           | 69,790 | 61.1            | 8.8 | 3,190         | 10'6"  |
|                | 700        | 28      | 31,640           | 69,770 | 52.3            | 7.6 | 3,290         | 10'10" | 32,020           | 70,600 | 52.9            | 7.7 | 3,290         | 10'10" |
|                | 800        | 32      | 32,010           | 70,580 | 46.3            | 6.7 | 3,390         | 11'1"  | 32,390           | 71,420 | 46.9            | 6.8 | 3,390         | 11'1"  |
| Double grouser | 600        | 24      | 31,440           | 69,330 | 60.7            | 8.8 | 3,190         | 10'6"  | 31,810           | 70,140 | 61.4            | 8.9 | 3,190         | 10'6"  |
|                | 700        | 28      | 31,840           | 70,210 | 52.7            | 7.6 | 3,190         | 10'6"  | 32,220           | 71,050 | 53.3            | 7.7 | 3,190         | 10'6"  |
| Single grouser | 700        | 28      | 31,470           | 69,390 | 52.0            | 7.5 | 3,340         | 10'11" | 31,850           | 70,230 | 52.7            | 7.6 | 3,340         | 10'11" |

**EC300F L, 6.2 m (20'4") XD boom, 3.05 m (10'0") XD arm, 1,354 kg (2,990 lb) bucket, 6,200 kg (13,670 lb) counterweight**

**EC300F L, 6.2 m (20'4") 2-pieces boom, 3.05 m (10'0") GP arm, 1,354 kg (2,990 lb) bucket, 6,200 kg (13,670 lb) counterweight**

| Description    | Shoe width |         | Operating weight |        | Ground pressure |     | Overall width |        |
|----------------|------------|---------|------------------|--------|-----------------|-----|---------------|--------|
|                | mm         | in      | kg               | lb     | kPa             | psi | mm            | ft in  |
| Triple grouser | 600        | 24      | 31,500           | 69,460 | 60.8            | 8.8 | 3,190         | 10'6"  |
|                | 600 (HD)   | 24 (HD) | 31,710           | 69,920 | 61.2            | 8.9 | 3,190         | 10'6"  |
|                | 700        | 28      | 32,080           | 70,740 | 53.0            | 7.7 | 3,290         | 10'10" |
|                | 800        | 32      | 32,450           | 71,550 | 47.0            | 6.8 | 3,390         | 11'1"  |
| Double grouser | 600        | 24      | 31,880           | 70,300 | 61.5            | 8.9 | 3,190         | 10'6"  |
|                | 700        | 28      | 32,280           | 71,180 | 53.4            | 7.7 | 3,190         | 10'6"  |
| Single grouser | 700        | 28      | 31,910           | 70,360 | 52.8            | 7.7 | 3,340         | 10'11" |

**EC300F L, 6.2 m (20'4") 2-pieces boom, 3.05 m (10'0") HD arm, 1,354 kg (2,990 lb) bucket, 6,200 kg (13,670 lb) counterweight**

**EC300F LR**

| Description    | Shoe width |         | Operating weight |        | Ground pressure |     | Overall width |        |
|----------------|------------|---------|------------------|--------|-----------------|-----|---------------|--------|
|                | mm         | in      | kg               | lb     | kPa             | psi | mm            | ft in  |
| Triple grouser | 600        | 24      | 31,510           | 69,480 | 60.8            | 8.8 | 3,190         | 10'6"  |
|                | 600 (HD)   | 24 (HD) | 31,720           | 69,940 | 61.2            | 8.9 | 3,190         | 10'6"  |
|                | 700        | 28      | 32,090           | 70,760 | 53.1            | 7.7 | 3,290         | 10'10" |
|                | 800        | 32      | 32,460           | 71,570 | 47.0            | 6.8 | 3,390         | 11'1"  |
|                | 900        | 36      | 32,830           | 72,390 | 42.2            | 6.1 | 3,490         | 11'5"  |

**EC300F LR, 10.2 m (33'6") LR boom, 7.9 m (25'11") LR arm, 472 kg (1,040 lb) bucket, 6,900 kg (15,210 lb) counterweight**

# Specifications

## BUCKET SELECTION GUIDE

EC300F L with 600 mm (24") shoe, 6,200 kg (13,670 lb) counterweight

| Bucket Type                       |                 | Capacity        |                 | Cutting width |       | Weight |       | Teeth | Recommended maximum material density (kg/m <sup>3</sup> ) |                |               |                             |                |               |
|-----------------------------------|-----------------|-----------------|-----------------|---------------|-------|--------|-------|-------|---|----------------|---------------|-----------------------------|----------------|---------------|
|                                   |                 |                 |                 |               |       |        |       |       | 6.2 m (20'4") GP Boom                                     |                |               | 5.95 m (19'6") 2-piece Boom |                |               |
|                                   |                 | L               | yd <sup>3</sup> | mm            | in    | kg     | lb    | EA    | 2.55 m (8'4")   | 3.05 m (10'0") | 3.7 m (12'2") | 2.55 m (8'4")               | 3.05 m (10'0") | 3.7 m (12'2") |
| Direct fit bucket                 | General purpose | 550             | 0.72            | 600           | 23.6  | 883    | 1,946 | 3     | C   | C              | C             | C                           | C              | C             |
|                                   |                 | 660             | 0.86            | 750           | 29.5  | 867    | 1,912 | 3     | C   | C              | C             | C                           | C              | C             |
|                                   |                 | 770             | 1.01            | 900           | 35.4  | 996    | 2,197 | 4     | C   | C              | C             | C                           | C              | C             |
|                                   |                 | 950             | 1.24            | 1,090         | 42.9  | 1,025  | 2,260 | 4     | C   | C              | C             | C                           | C              | C             |
|                                   |                 | 1,140           | 1.49            | 1,240         | 48.8  | 1,192  | 2,629 | 5     | C   | C              | C             | C                           | C              | C             |
|                                   |                 | 1,320           | 1.73            | 1,390         | 54.7  | 1,209  | 2,666 | 5     | C   | C              | C             | C                           | C              | C             |
|                                   |                 | 1,450           | 1.90            | 1,490         | 58.7  | 1,270  | 2,799 | 5     | C   | C              | C             | C                           | C              | C             |
|                                   |                 | 1,510           | 1.98            | 1,540         | 60.6  | 1,314  | 2,897 | 5     | C   | C              | C             | C                           | C              | C             |
|                                   |                 | 1,760           | 2.30            | 1,740         | 68.5  | 1,448  | 3,193 | 6     | C   | C              | B             | C                           | C              | B             |
|                                   | 1,930           | 2.52            | 1,840           | 72.4          | 1,529 | 3,370  | 6     | C     | C   | B              | C             | B                           | A              |               |
|                                   | 2,060           | 2.69            | 1,950           | 76.8          | 1,590 | 3,506  | 6     | C     | B   | A              | C             | B                           | A              |               |
|                                   | Heavy duty      | 550             | 0.72            | 600           | 23.6  | 881    | 1,942 | 3     | D   | D              | D             | D                           | D              | D             |
|                                   |                 | 660             | 0.86            | 750           | 29.5  | 920    | 2,029 | 3     | D   | D              | D             | D                           | D              | D             |
|                                   |                 | 1,140           | 1.49            | 1,240         | 48.8  | 1,214  | 2,677 | 5     | D   | D              | D             | D                           | D              | D             |
|                                   |                 | 1,270           | 1.66            | 1,405         | 55.3  | 1,336  | 2,945 | 5     | D   | D              | D             | D                           | D              | D             |
|                                   |                 | 1,320           | 1.73            | 1,390         | 54.7  | 1,301  | 2,868 | 5     | D   | D              | D             | D                           | D              | D             |
|                                   |                 | 1,510           | 1.98            | 1,540         | 60.6  | 1,387  | 3,058 | 5     | D   | D              | D             | D                           | D              | C             |
|                                   |                 | 1,690           | 2.21            | 1,690         | 66.5  | 1,485  | 3,274 | 5     | D   | D              | B             | D                           | D              | B             |
| 1,930                             |                 | 2.52            | 1,840           | 72.4          | 1,623 | 3,578  | 6     | C     | B   | A              | C             | B                           | A              |               |
| Direct fit bucket (UQC interface) |                 | General purpose | 550             | 0.72          | 600   | 23.6   | 883   | 1,946 | 3   | C              | C             | C                           | C              | C             |
|                                   | 660             |                 | 0.86            | 750           | 29.5  | 867    | 1,912 | 3     | C   | C              | C             | C                           | C              | C             |
|                                   | 770             |                 | 1.01            | 900           | 35.4  | 996    | 2,197 | 4     | C   | C              | C             | C                           | C              | C             |
|                                   | 950             |                 | 1.24            | 1,090         | 42.9  | 1,025  | 2,260 | 4     | C   | C              | C             | C                           | C              | C             |
|                                   | 1,140           |                 | 1.49            | 1,240         | 48.8  | 1,192  | 2,629 | 5     | C   | C              | C             | C                           | C              | C             |
|                                   | 1,320           |                 | 1.73            | 1,390         | 54.7  | 1,209  | 2,666 | 5     | C   | C              | C             | C                           | C              | C             |
|                                   | 1,450           |                 | 1.90            | 1,490         | 58.7  | 1,270  | 2,799 | 5     | C   | C              | C             | C                           | C              | B             |
|                                   | 1,510           |                 | 1.98            | 1,540         | 60.6  | 1,314  | 2,897 | 5     | C   | C              | B             | C                           | C              | B             |
|                                   | 1,760           |                 | 2.30            | 1,740         | 68.5  | 1,448  | 3,193 | 6     | C   | B              | A             | C                           | B              | A             |
|                                   | 1,930           | 2.52            | 1,840           | 72.4          | 1,529 | 3,370  | 6     | B     | B   | A              | B             | A                           | x              |               |
|                                   | 2,060           | 2.69            | 1,950           | 76.8          | 1,590 | 3,506  | 6     | B     | A   | x              | B             | A                           | x              |               |
|                                   | Heavy duty      | 550             | 0.72            | 600           | 23.6  | 881    | 1,942 | 3     | D   | D              | D             | D                           | D              | D             |
|                                   |                 | 660             | 0.86            | 750           | 29.5  | 920    | 2,029 | 3     | D   | D              | D             | D                           | D              | D             |
|                                   |                 | 1,140           | 1.49            | 1,240         | 48.8  | 1,214  | 2,677 | 5     | D   | D              | D             | D                           | D              | D             |
|                                   |                 | 1,320           | 1.73            | 1,390         | 54.7  | 1,301  | 2,868 | 5     | D   | D              | C             | D                           | D              | C             |
|                                   |                 | 1,510           | 1.98            | 1,540         | 60.6  | 1,387  | 3,058 | 5     | D   | D              | B             | D                           | C              | B             |
|                                   |                 | 1,690           | 2.21            | 1,690         | 66.5  | 1,485  | 3,274 | 5     | D   | B              | A             | C                           | B              | A             |
|                                   |                 | 1,930           | 2.52            | 1,840         | 72.4  | 1,623  | 3,578 | 6     | B   | A              | x             | B                           | A              | x             |

### Maximum material density

D: > 1,900 kg/m<sup>3</sup> (> 3,200 lb/yd<sup>3</sup>): Wet mud, Iron ore

C: 1,700 ~ 1,800 kg/m<sup>3</sup> (2,800 ~ 3,100 lb/yd<sup>3</sup>): Granite, Wet sand, Well blasted rock

B: 1,400 ~ 1,600 kg/m<sup>3</sup> (2,300 ~ 2,700 lb/yd<sup>3</sup>): Wet earth and clay, Limestone, Sandstone

A: 1,200 ~ 1,300 kg/m<sup>3</sup> (2,000 ~ 2,200 lb/yd<sup>3</sup>): Coal, Caliche, Shale

X: Not recommended

For long reach boom and arm configuration, Volvo recommends to use 0.57 m<sup>3</sup> (0.75 yd<sup>3</sup>) bucket

Please consult with your Volvo dealer for the proper match of buckets and attachments to suit the application.

The recommendations are given as a guide only, based on typical operation conditions.

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

**LIFTING CAPACITY EC300F L**

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 coupler from the following values.

|   | Lifting hook related to ground level |         | 1.5 m    |           | 3.0 m    |           | 4.5 m    |           | 6.0 m    |           | 7.5 m    |           | 9.0 m    |           | Max. reach |           | Max.    |         |
|---|--------------------------------------|---------|----------|-----------|----------|-----------|----------|-----------|----------|-----------|----------|-----------|----------|-----------|------------|-----------|---------|---------|
|   |                                      |         | Along UC | Across UC | Along UC   | Across UC |         |         |
| Boom :<br>6.2 m GP<br>20'4" GP<br>Arm :<br>2.55 m HD<br>8'4" HD<br>Shoe :<br>600 mm<br>24"<br>CWT :<br>6 200 kg<br>13,670 lb  | 7.5 m                                | kg      |          |           |          |           |          |           | *7,700   | *7,700    |          |           |          |           | *7,860     | 7,620     | 6.52 m  |         |
|   | 25 ft                                | lb      |          |           |          |           |          |           | *17,090  | *17,090   |          |           |          |           | *17,350    | 17,260    | 21.0 ft |         |
|   | 6.0 m                                | kg      |          |           |          |           |          |           | *8,040   | *8,040    | *7,850   | 6,010     |          |           | *7,860     | 5,940     | 7.55 m  |         |
|   | 20 ft                                | lb      |          |           |          |           |          |           | *17,550  | *17,550   |          |           |          |           | *17,310    | 13,260    | 24.6 ft |         |
|   | 4.5 m                                | kg      |          |           |          |           | *11,350  | *11,350   | *9,140   | 8,300     | *8,170   | 5,900     |          |           | 7,910      | 5,130     | 8.18 m  |         |
|   | 15 ft                                | lb      |          |           |          |           | *24,370  | *24,370   | *19,820  | 17,910    | *17,860  | 12,710    |          |           | 17,530     | 11,370    | 26.8 ft |         |
|   | 3.0 m                                | kg      |          |           |          |           | *14,510  | 11,910    | *10,570  | 7,890     | *8,830   | 5,710     |          |           | 7,340      | 4,730     | 8.50 m  |         |
|   | 10 ft                                | lb      |          |           |          |           | *31,140  | 25,720    | *22,870  | 17,040    | 19,170   | 12,320    |          |           | 16,210     | 10,450    | 27.9 ft |         |
|   | 1.5 m                                | kg      |          |           |          |           | *16,660  | 11,290    | *11,830  | 7,550     | 8,700    | 5,530     |          |           | 7,180      | 4,600     | 8.54 m  |         |
|   | 5 ft                                 | lb      |          |           |          |           | *35,950  | 24,340    | *25,610  | 16,290    | 18,750   | 11,940    |          |           | 15,840     | 10,150    | 28.0 ft |         |
|   | 0 m                                  | kg      |          |           |          |           | *17,250  | 11,080    | 11,980   | 7,340     | 8,570    | 5,410     |          |           | 7,410      | 4,720     | 8.31 m  |         |
|   | 0 ft                                 | lb      |          |           |          |           | *37,390  | 23,870    | 25,780   | 15,850    | 18,470   | 11,690    |          |           | 16,330     | 10,410    | 27.2 ft |         |
|   | -1.5 m                               | kg      |          |           | *12,860  | *12,860   | *16,830  | 11,100    | 11,920   | 7,290     | 8,550    | 5,400     |          |           | 8,130      | 5,150     | 7.78 m  |         |
|   | -5 ft                                | lb      |          |           | *29,330  | *29,330   | *36,520  | 23,880    | 25,650   | 15,730    | 18,450   | 11,660    |          |           | 17,970     | 11,390    | 25.5 ft |         |
|   | -3.0 m                               | kg      |          |           | *20,980  | *20,980   | *15,460  | 11,260    | *11,670  | 7,390     |          |           |          |           | *9,800     | 6,160     | 6.88 m  |         |
|   | -10 ft                               | lb      |          |           | *45,570  | *45,570   | *33,470  | 24,240    | *25,170  | 15,960    |          |           |          |           | *21,650    | 13,700    | 22.5 ft |         |
| -4.5 m  | kg                                   |         |          | *16,730   | *16,730  | *12,450   | 11,630   |           |          |           |          |           |          | *10,050   | 8,830      | 5.44 m    |         |         |
| -15 ft  | lb                                   |         |          | *35,920   | *35,920  | *26,570   | 25,080   |           |          |           |          |           |          | *22,150   | 20,000     | 17.5 ft   |         |         |
| Boom :<br>6.2 m GP<br>20'4" GP<br>Arm :<br>3.05 m GP<br>10'0" GP<br>Shoe :<br>600 mm<br>24"<br>CWT :<br>6 200 kg<br>13,670 lb | 7.5 m                                | kg      |          |           |          |           |          |           |          |           |          |           |          |           | *6,370     | *6,370    | 7.20 m  |         |
|   | 25 ft                                | lb      |          |           |          |           |          |           |          |           |          |           |          |           |            | *14,130   | *14,130 | 23.3 ft |
|   | 6.0 m                                | kg      |          |           |          |           |          |           |          |           | *7,220   | 6,130     |          |           | *6,100     | 5,320     | 8.15 m  |         |
|   | 20 ft                                | lb      |          |           |          |           |          |           |          |           | *15,910  | 13,170    |          |           | *13,480    | 11,850    | 26.6 ft |         |
|   | 4.5 m                                | kg      |          |           |          |           | *10,260  | *10,260   | *8,520   | 8,440     | *7,700   | 5,980     |          |           | *6,110     | 4,670     | 8.73 m  |         |
|   | 15 ft                                | lb      |          |           |          |           |          |           | *18,490  | 18,200    | *16,820  | 12,890    |          |           | *13,440    | 10,350    | 28.6 ft |         |
|   | 3.0 m                                | kg      |          |           |          |           | *13,460  | 12,210    | *10,030  | 8,010     | *8,450   | 5,780     | *6,580   | 4,370     | *6,300     | 4,340     | 9.03 m  |         |
|   | 10 ft                                | lb      |          |           |          |           | *28,920  | 26,360    | *21,710  | 17,300    | *18,400  | 12,460    |          |           | *13,880    | 9,590     | 29.6 ft |         |
|   | 1.5 m                                | kg      |          |           |          |           | *16,020  | 11,470    | *11,440  | 7,630     | 8,750    | 5,570     | 6,660    | 4,280     | 6,590      | 4,230     | 9.07 m  |         |
|   | 5 ft                                 | lb      |          |           |          |           | *34,560  | 24,740    | *24,770  | 16,480    | 18,850   | 12,030    |          |           | 14,530     | 9,330     | 29.8 ft |         |
|   | 0 m                                  | kg      |          |           |          |           | *17,140  | 11,140    | 12,030   | 7,390     | 8,590    | 5,430     |          |           | 6,760      | 4,320     | 8.85 m  |         |
|   | 0 ft                                 | lb      |          |           |          |           | *37,120  | 24,000    | 25,880   | 15,930    | 18,500   | 11,710    |          |           | 14,910     | 9,530     | 29.0 ft |         |
|   | -1.5 m                               | kg      | *7,600   | *7,600    | *11,740  | *11,740   | *17,120  | 11,080    | 11,920   | 7,290     | 8,520    | 5,370     |          |           | 7,320      | 4,660     | 8.36 m  |         |
|   | -5 ft                                | lb      | *17,040  | *17,040   | *26,650  | *26,650   | *37,120  | 23,840    | 25,640   | 15,720    | 18,370   | 11,590    |          |           | 16,170     | 10,300    | 27.4 ft |         |
|   | -3.0 m                               | kg      | *13,870  | *13,870   | *19,430  | *19,430   | *16,120  | 11,180    | 11,970   | 7,330     | 8,600    | 5,440     |          |           | 8,550      | 5,410     | 7.53 m  |         |
|   | -10 ft                               | lb      | *31,150  | *31,150   | *44,180  | *44,180   | *34,910  | 24,070    | 25,750   | 15,810    |          |           |          |           | 18,990     | 12,020    | 24.6 ft |         |
| -4.5 m  | kg                                   |         |          | *18,960   | *18,960  | *13,770   | 11,460   | *10,060   | 7,560    |           |          |           |          | *9,440    | 7,180      | 6.24 m    |         |         |
| -15 ft  | lb                                   |         |          | *40,820   | *40,820  | *29,580   | 24,700   | *21,230   | 16,370   |           |          |           |          | *20,830   | 16,140     | 20.2 ft   |         |         |
| Boom :<br>6.2 m GP<br>20'4" GP<br>Arm :<br>3.7 m GP<br>12'2" GP<br>Shoe :<br>600 mm<br>24"<br>CWT :<br>6 200 kg<br>13,670 lb  | 7.5 m                                | kg      |          |           |          |           |          |           |          |           | *6,320   | 6,270     |          |           | *5,030     | *5,030    | 7.96 m  |         |
|   | 25 ft                                | lb      |          |           |          |           |          |           |          |           | *13,150  | *13,150   |          |           | *11,140    | *11,140   | 25.8 ft |         |
|   | 6.0 m                                | kg      |          |           |          |           |          |           |          |           | *6,410   | 6,220     |          |           | *4,840     | 4,690     | 8.82 m  |         |
|   | 20 ft                                | lb      |          |           |          |           |          |           |          |           | *14,110  | 13,370    |          |           | *10,680    | 10,450    | 28.8 ft |         |
|   | 4.5 m                                | kg      |          |           |          |           |          |           | *7,580   | *7,580    | *7,000   | 6,040     | *6,470   | 4,480     | *4,830     | 4,180     | 9.36 m  |         |
|   | 15 ft                                | lb      |          |           |          |           |          |           | *16,470  | *16,470   | *15,290  | 13,010    | *12,870  | 9,620     | *10,640    | 9,260     | 30.6 ft |         |
|   | 3.0 m                                | kg      |          |           |          |           | *11,920  | *11,920   | *9,160   | 8,110     | *7,840   | 5,800     | 6,770    | 4,370     | *4,970     | 3,900     | 9.64 m  |         |
|   | 10 ft                                | lb      |          |           |          |           | *25,630  | *25,630   | *19,840  | 17,500    | *17,060  | 12,510    | 14,560   | 9,400     | *10,950    | 8,620     | 31.6 ft |         |
|   | 1.5 m                                | kg      |          |           |          |           | *14,860  | 11,620    | *10,730  | 7,670     | *8,720   | 5,570     | 6,640    | 4,250     | *5,280     | 3,800     | 9.67 m  |         |
|   | 5 ft                                 | lb      |          |           |          |           | *32,060  | 25,050    | *23,240  | 16,550    | 18,850   | 12,000    | 14,290   | 9,150     | *11,610    | 8,390     | 31.7 ft |         |
|   | 0 m                                  | kg      |          |           | *6,830   | *6,830    | *16,590  | 11,120    | *11,910  | 7,350     | 8,550    | 5,380     | 6,530    | 4,150     | *5,790     | 3,860     | 9.47 m  |         |
|   | 0 ft                                 | lb      |          |           | *15,620  | *15,620   | *35,890  | 23,940    | *25,810  | 15,860    | 18,400   | 11,600    | 14,080   | 8,950     | *12,770    | 8,520     | 31.1 ft |         |
|   | -1.5 m                               | kg      | *7,020   | *7,020    | *11,040  | *11,040   | *17,090  | 10,930    | 11,820   | 7,190     | 8,430    | 5,270     | 6,500    | 4,120     | 6,480      | 4,110     | 9.01 m  |         |
|   | -5 ft                                | lb      | *15,700  | *15,700   | *25,010  | *25,010   | *37,050  | 23,540    | 25,430   | 15,510    | 18,160   | 11,380    |          |           | 14,320     | 9,080     | 29.5 ft |         |
|   | -3.0 m                               | kg      | *11,670  | *11,670   | *16,660  | *16,660   | *16,590  | 10,960    | 11,800   | 7,170     | 8,430    | 5,280     |          |           | 7,380      | 4,660     | 8.25 m  |         |
|   | -10 ft                               | lb      | *26,180  | *26,180   | *37,800  | *37,800   | *35,930  | 23,590    | 25,390   | 15,470    | 18,180   | 11,400    |          |           | 16,350     | 10,340    | 27.0 ft |         |
| -4.5 m  | kg                                   | *17,420 | *17,420  | *21,200   | *21,200  | *14,920   | 11,160   | *11,110   | 7,310    |           |          |           |          | *8,800    | 5,840      | 7.10 m    |         |         |
| -15 ft  | lb                                   | *39,280 | *39,280  | *45,730   | *45,730  | *32,160   | 24,050   | *23,830   | 15,790   |           |          |           |          | *19,450   | 13,070     | 23.1 ft   |         |         |
| -6.0 m  | kg                                   |         |          | *15,660   | *15,660  | *11,100   | *11,100  |           |          |           |          |           |          | *9,010    | *9,010     | 5.29 m    |         |         |
| -20 ft  | lb                                   |         |          | *33,050   | *33,050  | *23,200   | *23,200  |           |          |           |          |           |          | *19,830   | *19,830    | 16.9 ft   |         |         |

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.

# Specifications

## LIFTING CAPACITY EC300F L

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 coupler from the following values.

|   | Lifting hook related to ground level |         | 1.5 m    |           | 3.0 m    |           | 4.5 m    |           | 6.0 m    |           | 7.5 m    |           | 9.0 m    |           | Max. reach |           | Max.    |         |
|---|--------------------------------------|---------|----------|-----------|----------|-----------|----------|-----------|----------|-----------|----------|-----------|----------|-----------|------------|-----------|---------|---------|
|   |                                      |         | Along UC | Across UC | Along UC   | Across UC |         |         |
| <b>Boom :</b><br>6.2 m HD<br>20'4" HD<br><b>Arm :</b><br>2.55 m HD<br>8'4" HD<br><b>Shoe :</b><br>800 mm<br>32"<br><b>CWT :</b><br>6 200 kg<br>13,670 lb  | 7.5 m                                | kg      |          |           |          |           |          |           | *7,660   | *7,660    |          |           |          |           | *7,810     | 7,800     | 6.52 m  |         |
|   | 25 ft                                | lb      |          |           |          |           |          |           | *17,000  | *17,000   |          |           |          |           | *17,260    | *17,260   | 21.1 ft |         |
|   | 6.0 m                                | kg      |          |           |          |           |          |           | *8,000   | *8,000    | *7,790   | 6,150     |          |           | *7,810     | 6,070     | 7.55 m  |         |
|   | 20 ft                                | lb      |          |           |          |           |          |           | *17,470  | *17,470   |          |           |          |           | *17,200    | 13,560    | 24.6 ft |         |
|   | 4.5 m                                | kg      |          |           |          |           | *11,300  | *11,300   | *9,090   | 8,500     | *8,110   | 6,040     |          |           | *7,950     | 5,240     | 8.18 m  |         |
|   | 15 ft                                | lb      |          |           |          |           | *24,260  | *24,260   | *19,720  | 18,340    | *17,740  | 13,000    |          |           | *17,500    | 11,630    | 26.8 ft |         |
|   | 3.0 m                                | kg      |          |           |          |           | *14,420  | 12,170    | *10,500  | 8,070     | *8,770   | 5,840     |          |           | 7,530      | 4,830     | 8.50 m  |         |
|   | 10 ft                                | lb      |          |           |          |           | *30,950  | 26,290    | *22,720  | 17,420    | *19,090  | 12,590    |          |           | 16,640     | 10,680    | 27.9 ft |         |
|   | 1.5 m                                | kg      |          |           |          |           | *16,540  | 11,510    | *11,750  | 7,700     | *8,930   | 5,650     |          |           | 7,370      | 4,700     | 8.54 m  |         |
|   | 5 ft                                 | lb      |          |           |          |           | *35,690  | 24,840    | *25,430  | 16,630    | 19,240   | 12,190    |          |           | 16,250     | 10,360    | 28.0 ft |         |
|   | 0 m                                  | kg      |          |           |          |           | *17,110  | 11,300    | 12,290   | 7,490     | 8,790    | 5,530     |          |           | 7,600      | 4,820     | 8.30 m  |         |
|   | 0 ft                                 | lb      |          |           |          |           | *37,090  | 24,330    | 26,440   | 16,170    | 18,950   | 11,930    |          |           | 16,760     | 10,630    | 27.2 ft |         |
|   | -1.5 m                               | kg      |          |           | *12,890  | *12,890   | *16,690  | 11,310    | 12,230   | 7,440     | *8,770   | 5,510     |          |           | 8,340      | 5,260     | 7.77 m  |         |
|   | -5 ft                                | lb      |          |           | *29,410  | *29,410   | *36,210  | 24,340    | 26,300   | 16,050    | 18,920   | 11,900    |          |           | 18,440     | 11,620    | 25.5 ft |         |
|   | -3.0 m                               | kg      |          |           | *20,770  | *20,770   | *15,310  | 11,480    | *11,560  | 7,540     |          |           |          |           | *9,720     | 6,290     | 6.88 m  |         |
| -10 ft  | lb                                   |         |          | *45,120   | *45,120  | *33,160   | 24,710   | *24,940   | 16,280   |           |          |           |          | *21,450   | 13,980     | 22.4 ft   |         |         |
| -4.5 m  | kg                                   |         |          | *16,540   | *16,540  | *12,320   | 11,860   |           |          |           |          |           |          | *9,950    | 9,030      | 5.43 m    |         |         |
| -15 ft  | lb                                   |         |          | *35,500   | *35,500  | *26,270   | 25,590   |           |          |           |          |           |          | *21,920   | 20,440     | 17.5 ft   |         |         |
| <b>Boom :</b><br>6.2 m HD<br>20'4" HD<br><b>Arm :</b><br>3.05 m HD<br>10'0" HD<br><b>Shoe :</b><br>800 mm<br>32"<br><b>CWT :</b><br>6 200 kg<br>13,670 lb | 7.5 m                                | kg      |          |           |          |           |          |           |          |           |          |           |          |           | *6,360     | *6,360    | 7.21 m  |         |
|   | 25 ft                                | lb      |          |           |          |           |          |           |          |           |          |           |          |           |            | *14,090   | *14,090 | 23.3 ft |
|   | 6.0 m                                | kg      |          |           |          |           |          |           |          |           | *7,140   | 6,250     |          |           | *6,090     | 5,410     | 8.15 m  |         |
|   | 20 ft                                | lb      |          |           |          |           |          |           |          |           | *15,730  | 13,420    |          |           | *13,440    | 12,060    | 26.6 ft |         |
|   | 4.5 m                                | kg      |          |           |          |           | *10,180  | *10,180   | *8,440   | *8,440    | *7,610   | 6,090     |          |           | *6,090     | 4,740     | 8.73 m  |         |
|   | 15 ft                                | lb      |          |           |          |           |          |           | *18,310  | *18,310   | *16,620  | 13,120    |          |           | *13,410    | 10,520    | 28.6 ft |         |
|   | 3.0 m                                | kg      |          |           |          |           | *13,330  | 12,430    | *9,920   | 8,160     | *8,350   | 5,870     | *6,570   | 4,430     | *6,290     | 4,400     | 9.03 m  |         |
|   | 10 ft                                | lb      |          |           |          |           | *28,630  | 26,850    | *21,480  | 17,610    | *18,180  | 12,660    |          |           | *13,850    | 9,730     | 29.6 ft |         |
|   | 1.5 m                                | kg      |          |           |          |           | *15,840  | 11,650    | *11,310  | 7,750     | 8,950    | 5,660     | 6,800    | 4,340     | 6,730      | 4,290     | 9.07 m  |         |
|   | 5 ft                                 | lb      |          |           |          |           | *34,170  | 25,120    | *24,480  | 16,730    | 19,270   | 12,200    |          |           | *14,800    | 9,460     | 29.8 ft |         |
|   | 0 m                                  | kg      |          |           |          |           | *16,940  | 11,290    | *12,220  | 7,490     | 8,770    | 5,500     |          |           | 6,900      | 4,380     | 8.85 m  |         |
|   | 0 ft                                 | lb      |          |           |          |           | *36,680  | 24,330    | 26,440   | 16,150    | 18,900   | 11,870    |          |           | 15,220     | 9,650     | 29.0 ft |         |
|   | -1.5 m                               | kg      | *7,600   | *7,600    | *11,740  | *11,740   | *16,910  | 11,220    | 12,170   | 7,380     | 8,700    | 5,440     |          |           | 7,480      | 4,720     | 8.35 m  |         |
|   | -5 ft                                | lb      | *17,050  | *17,050   | *26,670  | *26,670   | *36,660  | 24,160    | 26,180   | 15,920    | 18,760   | 11,740    |          |           | 16,520     | 10,430    | 27.4 ft |         |
|   | -3.0 m                               | kg      | *13,880  | *13,880   | *19,440  | *19,440   | *15,910  | 11,330    | *11,940  | 7,420     | 8,790    | 5,510     |          |           | 8,740      | 5,490     | 7.53 m  |         |
| -10 ft  | lb                                   | *31,160 | *31,160  | *44,220   | *44,220  | *34,460   | 24,400   | *25,790   | 16,030   |           |          |           |          | 19,410    | 12,190     | 24.6 ft   |         |         |
| -4.5 m  | kg                                   |         |          | *18,680   | *18,680  | *13,570   | 11,630   | *9,900    | 7,670    |           |          |           |          | *9,300    | 7,290      | 6.24 m    |         |         |
| -15 ft  | lb                                   |         |          | *40,210   | *40,210  | *29,140   | 25,080   | *20,890   | 16,620   |           |          |           |          | *20,520   | 16,400     | 20.2 ft   |         |         |
| <b>Boom :</b><br>6.2 m HD<br>20'4" HD<br><b>Arm :</b><br>3.7 m GP<br>12'2" GP<br><b>Shoe :</b><br>800 mm<br>32"<br><b>CWT :</b><br>6 200 kg<br>13,670 lb  | 7.5 m                                | kg      |          |           |          |           |          |           |          |           | *6,290   | *6,290    |          |           | *5,020     | *5,020    | 7.96 m  |         |
|   | 25 ft                                | lb      |          |           |          |           |          |           |          |           | *13,170  | *13,170   |          |           | *11,130    | *11,130   | 25.8 ft |         |
|   | 6.0 m                                | kg      |          |           |          |           |          |           |          |           | *6,380   | 6,370     |          |           | *4,830     | 4,810     | 8.82 m  |         |
|   | 20 ft                                | lb      |          |           |          |           |          |           |          |           | *14,040  | 13,710    |          |           | *10,680    | *10,680   | 28.8 ft |         |
|   | 4.5 m                                | kg      |          |           |          |           |          |           | *7,550   | *7,550    | *6,960   | 6,190     | *6,480   | 4,590     | *4,830     | 4,270     | 9.36 m  |         |
|   | 15 ft                                | lb      |          |           |          |           |          |           | *16,400  | *16,400   | *15,200  | 13,330    | *12,890  | 9,850     | *10,640    | 9,470     | 30.7 ft |         |
|   | 3.0 m                                | kg      |          |           |          |           | *11,860  | *11,860   | *9,110   | 8,310     | *7,790   | 5,940     | 6,960    | 4,470     | *4,980     | 3,990     | 9.64 m  |         |
|   | 10 ft                                | lb      |          |           |          |           | *25,510  | *25,510   | *19,730  | 17,920    | *16,950  | 12,810    | 14,970   | 9,620     | *10,950    | 8,820     | 31.6 ft |         |
|   | 1.5 m                                | kg      |          |           |          |           | *14,770  | 11,870    | *10,660  | 7,850     | *8,660   | 5,690     | 6,820    | 4,340     | *5,280     | 3,890     | 9.67 m  |         |
|   | 5 ft                                 | lb      |          |           |          |           | *31,850  | 25,600    | *23,090  | 16,930    | *18,820  | 12,280    | 14,680   | 9,360     | *11,620    | 8,570     | 31.7 ft |         |
|   | 0 m                                  | kg      |          |           | *6,840   | *6,840    | *16,460  | 11,340    | *11,820  | 7,510     | 8,770    | 5,500     | 6,710    | 4,240     | *5,790     | 3,940     | 9.47 m  |         |
|   | 0 ft                                 | lb      |          |           | *15,640  | *15,640   | *35,620  | 24,430    | *25,620  | 16,200    | 18,900   | 11,850    | 14,450   | 9,150     | *12,770    | 8,700     | 31.1 ft |         |
|   | -1.5 m                               | kg      | *7,040   | *7,040    | *11,050  | *11,050   | *16,960  | 11,150    | 12,130   | 7,340     | 8,650    | 5,380     | 6,670    | 4,210     | *6,650     | 4,200     | 9.01 m  |         |
|   | -5 ft                                | lb      | *15,740  | *15,740   | *25,050  | *25,050   | *36,750  | 24,000    | 26,080   | 15,820    | 18,630   | 11,620    |          |           | 14,710     | 9,280     | 29.5 ft |         |
|   | -3.0 m                               | kg      | *11,680  | *11,680   | *16,680  | *16,680   | *16,440  | 11,180    | 12,100   | 7,320     | 8,650    | 5,380     |          |           | 7,570      | 4,760     | 8.25 m  |         |
| -10 ft  | lb                                   | *26,210 | *26,210  | *37,850   | *37,850  | *35,620   | 24,060   | 26,030    | 15,780   | 18,650    | 11,640   |           |          | 16,790    | 10,560     | 27.0 ft   |         |         |
| -4.5 m  | kg                                   | *17,440 | *17,440  | *20,990   | *20,990  | *14,780   | 11,390   | *11,000   | 7,460    |           |          |           |          | *8,720    | 5,970      | 7.10 m    |         |         |
| -15 ft  | lb                                   | *39,330 | *39,330  | *45,270   | *45,270  | *31,850   | 24,530   | *23,600   | 16,110   |           |          |           |          | *19,270   | 13,350     | 23.1 ft   |         |         |
| -6.0 m  | kg                                   |         |          | *15,460   | *15,460  | *10,970   | *10,970  |           |          |           |          |           |          | *8,910    | *8,910     | 5.28 m    |         |         |
| -20 ft  | lb                                   |         |          | *32,620   | *32,620  | *22,890   | *22,890  |           |          |           |          |           |          | *19,600   | *19,600    | 16.8 ft   |         |         |

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 EC300F L**

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 coupler from the following values.

|   | Lifting hook related to ground level |    | 1.5 m    |           | 3.0 m    |           | 4.5 m    |           | 6.0 m    |           | 7.5 m    |           | 9.0 m    |           | Max. reach |           | Max.    |         |         |         |
|---|--------------------------------------|----|----------|-----------|----------|-----------|----------|-----------|----------|-----------|----------|-----------|----------|-----------|------------|-----------|---------|---------|---------|---------|
|   |                                      |    | Along UC | Across UC | Along UC   | Across UC |         |         |         |         |
| Boom :<br>6.2 m VA<br>20'4" VA<br>Arm :<br>2.55 m HD<br>8'4" HD<br>Shoe :<br>600 mm<br>24"<br>CWT :<br>6 200 kg<br>13,670 lb  | 9 m                                  | kg |          |           |          |           | *11,670  | *11,670   |          |           |          |           |          |           |            |           | *10,620 | *10,620 | 4.94 m  |         |
|   | 30 ft                                | lb |          |           |          |           | *25,300  | *25,300   |          |           |          |           |          |           |            |           |         | *23,930 | *23,930 | 15.5 ft |
|   | 7.5 m                                | kg |          |           |          |           | *11,250  | *11,250   | *10,000  | 8,780     |          |           |          |           |            |           |         | *9,300  | 7,430   | 6.61 m  |
|   | 25 ft                                | lb |          |           |          |           | *24,570  | *24,570   | *22,000  | 18,840    |          |           |          |           |            |           |         | *20,640 | 16,820  | 21.3 ft |
|   | 6 m                                  | kg |          |           | *12,150  | *12,150   | *12,240  | *12,240   | *10,260  | 8,640     | *9,170   | 5,970     |          |           |            |           |         | *8,880  | 4,610   | 7.63 m  |
|   | 20 ft                                | lb |          |           | *26,100  | *26,100   | *26,510  | *26,510   | *22,340  | 18,600    |          |           |          |           |            |           |         | *19,600 | 12,930  | 24.8 ft |
|   | 4.5 m                                | kg |          |           |          |           | *14,250  | 12,860    | *11,070  | 8,270     | 9,130    | 5,850     |          |           |            |           |         | 7,800   | 5,000   | 8.25 m  |
|   | 15 ft                                | lb |          |           |          |           | *30,710  | 27,770    | *24,000  | 17,840    | 19,640   | 12,600    |          |           |            |           |         | 17,290  | 11,090  | 27.0 ft |
|   | 3 m                                  | kg |          |           |          |           | *16,370  | 11,800    | *11,980  | 7,820     | 8,900    | 5,650     |          |           |            |           |         | 7,240   | 4,610   | 8.56 m  |
|   | 10 ft                                | lb |          |           |          |           | *35,310  | 25,500    | *25,950  | 16,890    | 19,170   | 12,180    |          |           |            |           |         | 15,990  | 10,180  | 28.1 ft |
|   | 1.5 m                                | kg |          |           |          |           |          |           | 12,200   | 7,450     | 8,690    | 5,450     |          |           |            |           |         | 7,090   | 4,480   | 8.60 m  |
|   | 5 ft                                 | lb |          |           |          |           |          |           | *37,030  | 24,010    | 26,260   | 16,080    | 18,720   | 11,770    |            |           |         | 15,620  | 9,880   | 28.2 ft |
|   | 0 m                                  | kg |          |           |          |           | *16,200  | 10,920    | *11,960  | 7,240     | 8,550    | 5,330     |          |           |            |           |         | 7,310   | 4,600   | 8.37 m  |
|   | 0 ft                                 | lb |          |           |          |           | *35,260  | 23,520    | 25,730   | 15,610    | 18,430   | 11,510    |          |           |            |           |         | 16,120  | 10,140  | 27.5 ft |
| -1.5 m  | kg                                   |    |          |           |          | *14,310   | 10,950   | *11,230   | 7,190    | *8,520    | 5,320    |           |          |           |            |           | *7,790  | 5,030   | 7.85 m  |         |
| -5 ft   | lb                                   |    |          |           |          | *31,140   | 23,580   | *24,300   | 15,510   | *18,200   | 11,510   |           |          |           |            |           | *17,160 | 11,110  | 25.7 ft |         |
| -3 m  | kg                                   |    |          |           |          | *11,300   | 11,150   | *8,910    | 7,310    |           |          |           |          |           |            |           | *6,930  | 6,020   | 6.96 m  |         |
| -10 ft  | lb                                   |    |          |           |          | *24,440   | 24,010   | *19,050   | 15,790   |           |          |           |          |           |            |           | *15,190 | 13,370  | 22.7 ft |         |
| Boom :<br>6.2 m VA<br>20'4" VA<br>Arm :<br>3.05 m HD<br>10'0" HD<br>Shoe :<br>600 mm<br>24"<br>CWT :<br>6 200 kg<br>13,670 lb | 9 m                                  | kg |          |           |          |           | *9,650   | *9,650    |          |           |          |           |          |           |            |           | *7,270  | *7,270  | 5.83 m  |         |
|   | 30 ft                                | lb |          |           |          |           | *21,220  | *21,220   |          |           |          |           |          |           |            |           |         | *16,310 | *16,310 | 18.5 ft |
|   | 7.5 m                                | kg |          |           |          |           | *9,080   | *9,080    | *9,290   | 8,950     |          |           |          |           |            |           |         | *6,440  | 6,370   | 7.29 m  |
|   | 25 ft                                | lb |          |           |          |           | *20,160  | *20,160   | *20,240  | 19,220    |          |           |          |           |            |           |         | *14,280 | *14,280 | 23.6 ft |
|   | 6 m                                  | kg |          |           |          |           | *9,640   | *9,640    | *9,690   | 8,770     | *8,690   | 6,070     |          |           |            |           |         | *6,120  | 5,150   | 8.22 m  |
|   | 20 ft                                | lb |          |           |          |           | *21,110  | *21,110   | *21,110  | 18,890    | *18,990  | 13,040    |          |           |            |           |         | *13,520 | 11,490  | 26.8 ft |
|   | 4.5 m                                | kg |          |           |          |           | *13,360  | 13,160    | *10,570  | 8,390     | *9,010   | 5,910     |          |           |            |           |         | *6,070  | 4,520   | 8.8 m   |
|   | 15 ft                                | lb |          |           | *42,170  | *42,170   | *28,820  | 28,410    | *22,930  | 18,100    | *19,620  | 12,730    |          |           |            |           |         | *13,370 | 10,020  | 28.8 ft |
|   | 3 m                                  | kg |          |           |          |           | *15,670  | 12,080    | *11,600  | 7,920     | 8,950    | 5,680     | 6,710    | 4,270     |            |           |         | *6,220  | 4,200   | 9.10 m  |
|   | 10 ft                                | lb |          |           |          |           | *33,810  | 26,090    | *25,130  | 17,090    | 19,270   | 12,250    |          |           |            |           |         | *13,700 | 9,270   | 29.8 ft |
|   | 1.5 m                                | kg |          |           |          |           | *16,960  | 11,260    | 12,270   | 7,500     | 8,700    | 5,460     | 6,610    | 4,180     |            |           |         | 6,470   | 4,090   | 9.13 m  |
|   | 5 ft                                 | lb |          |           |          |           | *36,710  | 24,300    | 26,400   | 16,180    | 18,750   | 11,780    |          |           |            |           |         | 14,260  | 9,010   | 30.0 ft |
|   | 0 m                                  | kg |          |           |          |           | *16,660  | 10,910    | *11,960  | 7,230     | 8,530    | 5,310     |          |           |            |           |         | 6,640   | 4,180   | 8.92 m  |
|   | 0 ft                                 | lb |          |           |          |           | *36,190  | 23,500    | 25,730   | 15,590    | 18,380   | 11,450    |          |           |            |           |         | 14,640  | 9,210   | 29.3 ft |
| -1.5 m  | kg                                   |    |          | *10,890   | *10,890  | *15,180   | 10,860   | *11,640   | 7,130    | 8,470     | 5,250    |           |          |           |            |           | 7,190   | 4,510   | 8.43 m  |         |
| -5 ft   | lb                                   |    |          | *24,780   | *24,780  | *32,970   | 23,370   | *25,200   | 15,380   | 18,250    | 11,330   |           |          |           |            |           | 15,890  | 9,970   | 27.6 ft |         |
| -3 m  | kg                                   |    |          |           |          | *12,570   | 10,990   | *9,800    | 7,190    | *6,960    | 5,340    |           |          |           |            |           | *6,660  | 5,250   | 7.61 m  |         |
| -10 ft  | lb                                   |    |          |           |          | *27,170   | 23,670   | *21,060   | 15,520   |           |          |           |          |           |            |           | *14,620 | 11,660  | 24.9 ft |         |
| Boom :<br>6.2 m VA<br>20'4" VA<br>Arm :<br>3.7 m GP<br>12'2" GP<br>Shoe :<br>600 mm<br>24"<br>CWT :<br>6 200 kg<br>13,670 lb  | 10.5 m                               | kg |          |           |          |           | *7,500   | *7,500    |          |           |          |           |          |           |            |           | *7,020  | *7,020  | 4.67 m  |         |
|   | 35 ft                                | lb |          |           |          |           |          |           |          |           |          |           |          |           |            |           |         | *16,160 | *16,160 | 14.2 ft |
|   | 9 m                                  | kg |          |           |          |           |          |           | *7,290   | *7,290    |          |           |          |           |            |           |         | *5,620  | *5,620  | 6.76 m  |
|   | 30 ft                                | lb |          |           |          |           |          |           | *15,500  | *15,500   |          |           |          |           |            |           |         | *12,570 | *12,570 | 21.7 ft |
|   | 7.5 m                                | kg |          |           |          |           |          |           | *7,540   | *7,540    | *6,740   | 6,260     |          |           |            |           |         | *5,080  | *5,080  | 8.05 m  |
|   | 25 ft                                | lb |          |           |          |           |          |           | *16,620  | *16,620   | *13,970  | 13,410    |          |           |            |           |         | *11,270 | *11,270 | 26.1 ft |
|   | 6 m                                  | kg |          |           |          |           | *7,120   | *7,120    | *7,880   | *7,880    | *7,770   | 6,210     |          |           |            |           |         | *4,860  | 4,570   | 8.90 m  |
|   | 20 ft                                | lb |          |           |          |           | *15,720  | *15,720   | *17,330  | *17,330   | *16,850  | 13,350    |          |           |            |           |         | *10,730 | 10,180  | 29.1 ft |
|   | 4.5 m                                | kg |          |           | *10,020  | *10,020   | *9,900   | *9,900    | *9,630   | 8,580     | *8,540   | 6,020     | *6,780   | 4,430     |            |           |         | *4,820  | 4,060   | 9.44 m  |
|   | 15 ft                                | lb |          |           | *20,570  | *20,570   | *21,190  | *21,190   | *20,870  | 18,500    | *18,590  | 12,960    | *13,700  | 9,520     |            |           |         | *10,620 | 9,000   | 30.9 ft |
|   | 3 m                                  | kg |          |           |          |           | *14,630  | 12,470    | *11,040  | 8,070     | 9,040    | 5,760     | 6,770    | 4,320     |            |           |         | *4,920  | 3,790   | 9.71 m  |
|   | 10 ft                                | lb |          |           |          |           | *31,560  | 26,920    | *23,910  | 17,420    | 19,460   | 12,410    | 14,560   | 9,290     |            |           |         | *10,850 | 8,380   | 31.9 ft |
|   | 1.5 m                                | kg |          |           |          |           | *16,480  | 11,500    | *12,000  | 7,590     | 8,750    | 5,500     | 6,630    | 4,190     |            |           |         | *5,180  | 3,700   | 9.75 m  |
|   | 5 ft                                 | lb |          |           |          |           | *35,650  | 24,800    | *26,000  | 16,390    | 18,850   | 11,860    | 14,270   | 9,020     |            |           |         | *11,410 | 8,150   | 32.0 ft |
| 0 m   | kg                                   |    |          | *6,060    | *6,060   | *16,900   | 10,960   | 12,000    | 7,250    | 8,530     | 5,300    | 6,520     | 4,090    |           |            |           | *5,630  | 3,760   | 9.55 m  |         |
| 0 ft  | lb                                   |    |          | *13,900   | *13,900  | *36,640   | 23,600   | 25,800    | 15,640   | 18,370    | 11,430   | 14,040    | 8,810    |           |            |           | *12,420 | 8,280   | 31.3 ft |         |
| -1.5 m  | kg                                   |    |          | *10,300   | *10,300  | *15,990   | 10,780   | 11,800    | 7,080    | 8,410     | 5,190    | 6,490     | 4,060    |           |            |           | *6,390  | 4,010   | 9.09 m  |         |
| -5 ft   | lb                                   |    |          | *23,380   | *23,380  | *34,700   | 23,190   | 25,370    | 15,270   | 18,120    | 11,200   |           |          |           |            |           | *14,120 | 8,850   | 29.8 ft |         |
| -3 m  | kg                                   |    |          | *15,990   | *15,990  | *13,930   | 10,820   | *10,680   | 7,070    | *8,090    | 5,200    |           |          |           |            |           | *6,470  | 4,550   | 8.34 m  |         |
| -10 ft  | lb                                   |    |          | *36,330   | *36,330  | *30,130   | 23,300   | *23,020   | 15,260   | *17,260   | 11,250   |           |          |           |            |           | *14,230 | 10,080  | 27.3 ft |         |
| -4.5 m  | kg                                   |    |          |           |          | *10,450   | *10,450  | *7,960    | 7,240    |           |          |           |          |           |            |           |         |         | 7.21 m  |         |
| -15 ft  | lb                                   |    |          |           |          | *22,300   | *22,300  | *16,770   | 15,650   |           |          |           |          |           |            |           |         |         | 23.4 ft |         |

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.

# Specifications

## LIFTING CAPACITY EC300F LR

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 coupler from the following values.

|  | Lifting hook related to ground level | 0 m      |           | 1.5 m    |           | 3.0 m    |           | 4.5 m    |           | 6.0 m    |           | 7.5 m    |           | 9.0 m    |           |        |
|--|--------------------------------------|----------|-----------|----------|-----------|----------|-----------|----------|-----------|----------|-----------|----------|-----------|----------|-----------|--------|
|  |                                      | Along UC | Across UC |        |
| Boom :<br>10.2 m LR<br>33'6" LR<br>Arm :<br>7.9 m LR<br>25'11" LR<br>Shoe :<br>800 mm<br>32"<br>CWT :<br>6 900 kg<br>15,210 lb | 13.5 m                               | kg       |           |          |           |          |           |          |           |          |           |          |           |          |           |        |
|  | 45 ft                                | lb       |           |          |           |          |           |          |           |          |           |          |           |          |           |        |
|  | 12.0 m                               | kg       |           |          |           |          |           |          |           |          |           |          |           |          |           |        |
|  | 40 ft                                | lb       |           |          |           |          |           |          |           |          |           |          |           |          |           |        |
|  | 10.5 m                               | kg       |           |          |           |          |           |          |           |          |           |          |           |          |           |        |
|  | 35 ft                                | lb       |           |          |           |          |           |          |           |          |           |          |           |          |           |        |
|  | 9.0 m                                | kg       |           |          |           |          |           |          |           |          |           |          |           |          |           |        |
|  | 30 ft                                | lb       |           |          |           |          |           |          |           |          |           |          |           |          |           |        |
|  | 7.5 m                                | kg       |           |          |           |          |           |          |           |          |           |          |           |          |           |        |
|  | 25 ft                                | lb       |           |          |           |          |           |          |           |          |           |          |           |          |           |        |
|  | 6.0 m                                | kg       |           |          |           |          |           |          |           |          |           |          |           |          |           |        |
|  | 20 ft                                | lb       |           |          |           |          |           |          |           |          |           |          |           |          |           |        |
|  | 4.5 m                                | kg       |           |          |           |          |           |          |           |          |           |          |           |          |           |        |
|  | 15 ft                                | lb       |           |          |           |          |           |          |           |          |           |          |           |          |           |        |
|  | 3.0 m                                | kg       |           |          |           |          | *4,180    | *4,180   |           |          |           |          | *5,290    | *5,290   | *4,500    | *4,500 |
|  | 10 ft                                | lb       |           |          |           |          | *10,460   | *10,460  |           |          |           |          | *11,450   | *11,450  | *9,760    | *9,760 |
|  | 1.5 m                                | kg       |           |          |           |          |           |          | *5,640    | *5,640   | *7,990    | 7,360    | *6,170    | 5,460    | *5,090    | 4,230  |
|  | 5 ft                                 | lb       |           |          |           |          |           |          | *13,250   | *13,250  | *17,240   | 15,930   | *13,340   | 11,810   | *11,030   | 9,120  |
|  | 0 m                                  | kg       |           |          |           |          | *1,820    | *1,820   | *4,000    | *4,000   | *9,090    | 6,570    | *6,920    | 4,940    | *5,620    | 3,870  |
|  | 0 ft                                 | lb       |           |          |           |          | *4,120    | *4,120   | *9,150    | *9,150   | *19,650   | 14,210   | *14,980   | 10,680   | *12,180   | 8,350  |
|  | -1.5 m                               | kg       |           |          | *1,790    | *1,790   | *2,380    | *2,380   | *3,940    | *3,940   | *7,290    | 6,070    | *7,500    | 4,560    | *6,060    | 3,590  |
|  | -5 ft                                | lb       |           |          | *3,970    | *3,970   | *5,340    | *5,340   | *8,940    | *8,940   | *16,760   | 13,110   | *16,240   | 9,840    | *13,130   | 7,740  |
|  | -3.0 m                               | kg       | *2,450    | *2,450   | *2,470    | *2,470   | *3,040    | *3,040   | *4,370    | *4,370   | *7,040    | 5,800    | 7,580     | 4,310    | 5,880     | 3,390  |
|  | -10 ft                               | lb       | *5,440    | *5,440   | *5,500    | *5,500   | *6,810    | *6,810   | *9,870    | *9,870   | *16,090   | 12,510   | 16,330    | 9,310    | 12,670    | 7,310  |
|  | -4.5 m                               | kg       | *3,000    | *3,000   | *3,160    | *3,160   | *3,770    | *3,770   | *5,020    | *5,020   | *7,450    | 5,680    | 7,430     | 4,180    | 5,740     | 3,270  |
|  | -15 ft                               | lb       | *6,680    | *6,680   | *7,060    | *7,060   | *8,450    | *8,450   | *11,340   | *11,340  | *16,970   | 12,260   | 16,010    | 9,020    | 12,380    | 7,050  |
|  | -6.0 m                               | kg       | *3,610    | *3,610   | *3,890    | *3,890   | *4,560    | *4,560   | *5,850    | *5,850   | *8,250    | 5,680    | 7,390     | 4,140    | 5,690     | 3,220  |
|  | -20 ft                               | lb       | *8,060    | *8,060   | *8,700    | *8,700   | *10,250   | *10,250  | *13,210   | *13,210  | *18,820   | 12,250   | 15,920    | 8,930    | 12,260    | 6,940  |
|  | -7.5 m                               | kg       | *4,280    | *4,280   | *4,670    | *4,670   | *5,450    | *5,450   | *6,850    | *6,850   | *9,420    | 5,770    | 7,430     | 4,170    | 5,700     | 3,230  |
|  | -25 ft                               | lb       | *9,560    | *9,560   | *10,470   | *10,470  | *12,260   | *12,260  | *15,490   | *15,490  | *21,300   | 12,450   | 16,010    | 9,010    | 12,300    | 6,970  |
| -9.0 m   | kg                                   | *5,000   | *5,000    | *5,520   | *5,520    | *6,450   | *6,450    | *8,060   | *8,060    | *9,240   | 5,940     | *7,440   | 4,280     | 5,780    | 3,300     |        |
| -30 ft   | lb                                   | *11,180  | *11,180   | *12,390  | *12,390   | *14,540  | *14,540   | *18,300  | *18,300   | *19,910  | 12,830    | *16,040  | 9,260     | 12,490   | 7,150     |        |
| -10.5 m  | kg                                   |          |           | *6,460   | *6,460    | *7,610   | *7,610    | *9,590   | *9,590    | *8,300   | 6,190     | *6,740   | 4,460     | *5,580   | 3,450     |        |
| -35 ft   | lb                                   |          |           | *14,520  | *14,520   | *17,200  | *17,200   | *21,890  | 20,920    | *17,760  | 13,400    | *14,420  | 9,680     | *11,900  | 7,500     |        |
| -12.0 m  | kg                                   |          |           |          |           | *8,990   | *8,990    | *8,660   | *8,660    | *6,890   | 6,550     | *5,610   | 4,740     | *4,560   | 3,700     |        |
| -40 ft   | lb                                   |          |           |          |           | *20,410  | *20,410   | *18,210  | *18,210   | *14,500  | 14,230    | *11,760  | 10,330    | *9,430   | 8,090     |        |
| -13.5 m  | kg                                   |          |           |          |           |          |           |          |           | *4,670   | *4,670    |          |           |          |           |        |
| -45 ft   | lb                                   |          |           |          |           |          |           |          |           |          |           |          |           |          |           |        |

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 EC300F LR**

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 coupler from the following values.

|  | Lifting hook related to ground level | 10.5 m   |           | 12.0 m   |           | 13.5 m   |           | 15 m     |           | 16.5 m   |           | Max. reach |           | Max.   |         |         |
|--|--------------------------------------|----------|-----------|----------|-----------|----------|-----------|----------|-----------|----------|-----------|------------|-----------|--------|---------|---------|
|  |                                      | Along UC | Across UC | Along UC   | Across UC | m      |         |         |
| Boom :<br>10.2 m LR<br>33'6" LR<br>Arm :<br>7.9 m LR<br>25'11" LR<br>Shoe :<br>800 mm<br>32"<br>CWT :<br>6 900 kg<br>15,210 lb | 13.5 m                               | kg       |           |          |           |          |           |          |           |          |           |            |           | *1,340 | *1,340  | 12.9    |
|  | 45 ft                                | lb       |           |          |           |          |           |          |           |          |           |            |           | *2,980 | *2,980  | 41.8 ft |
|  | 12.0 m                               | kg       |           |          |           |          | *1,880    | *1,880   |           |          |           |            |           | *1,260 | *1,260  | 14.1    |
|  | 40 ft                                | lb       |           |          |           |          | *3,490    | *3,490   |           |          |           |            |           | *2,800 | *2,800  | 45.9 ft |
|  | 10.5 m                               | kg       |           |          |           |          | *2,470    | *2,470   | *1,340    | *1,340   |           |            |           | *1,220 | *1,220  | 15.1    |
|  | 35 ft                                | lb       |           |          |           |          | *5,090    | *5,090   |           |          |           |            |           | *2,690 | *2,690  | 49.2 ft |
|  | 9.0 m                                | kg       |           |          |           |          | *2,700    | *2,700   | *2,070    | *2,070   |           |            |           | *1,190 | *1,190  | 15.9    |
|  | 30 ft                                | lb       |           |          |           |          | *5,950    | *5,950   | *4,000    | *4,000   |           |            |           | *2,640 | *2,640  | 51.8 ft |
|  | 7.5 m                                | kg       |           |          |           |          | *2,800    | 2,720    | *2,530    | 2,160    |           |            |           | *1,190 | *1,190  | 16.4    |
|  | 25 ft                                | lb       |           |          |           |          | *6,150    | 5,810    | *5,180    | 4,590    |           |            |           | *2,620 | *2,620  | 53.8 ft |
|  | 6.0 m                                | kg       |           |          | *3,060    | *3,060   | *2,950    | 2,610    | *2,870    | 2,090    | *1,690    | 1,660      |           | *1,200 | *1,200  | 16.9    |
|  | 20 ft                                | lb       |           |          | *6,690    | *6,690   | *6,460    | 5,600    | *6,060    | 4,460    | *2,910    | *2,910     |           | *2,640 | *2,640  | 55.3 ft |
|  | 4.5 m                                | kg       | *3,580    | *3,580   | *3,320    | 3,100    | *3,130    | 2,490    | *3,000    | 2,010    | *2,090    | 1,610      |           | *1,220 | *1,220  | 17.2    |
|  | 15 ft                                | lb       | *7,780    | *7,780   | *7,240    | 6,670    | *6,850    | 5,330    | *6,560    | 4,290    | *3,890    | 3,420      |           | *2,690 | *2,690  | 56.3 ft |
|  | 3.0 m                                | kg       | *3,980    | 3,630    | *3,610    | 2,910    | *3,340    | 2,350    | *3,140    | 1,910    | *2,360    | 1,550      |           | *1,260 | *1,260  | 17.3    |
|  | 10 ft                                | lb       | *8,650    | 7,830    | *7,860    | 6,250    | *7,280    | 5,040    | 6,830     | 4,090    | *4,520    | 3,310      |           | *2,780 | *2,780  | 56.8 ft |
|  | 1.5 m                                | kg       | *4,390    | 3,360    | *3,900    | 2,710    | *3,550    | 2,210    | 3,080     | 1,820    | *2,530    | 1,490      |           | *1,320 | *1,320  | 17.3    |
|  | 5 ft                                 | lb       | *9,530    | 7,240    | *8,490    | 5,840    | *7,740    | 4,750    | 6,620     | 3,890    | *4,840    | 3,180      |           | *2,910 | *2,910  | 56.8 ft |
|  | 0 m                                  | kg       | *4,770    | 3,110    | *4,180    | 2,530    | 3,530     | 2,090    | 2,990     | 1,730    | 2,550     | 1,430      |           | *1,400 | 1,310   | 17.2    |
|  | 0 ft                                 | lb       | *10,360   | 6,700    | 9,090     | 5,450    | 7,590     | 4,480    | 6,420     | 3,700    | *4,800    | 3,060      |           | *3,090 | 2,900   | 56.5 ft |
|  | -1.5 m                               | kg       | 4,910     | 2,900    | 4,060     | 2,380    | 3,410     | 1,970    | 2,910     | 1,650    | *2,370    | 1,390      |           | *1,500 | 1,320   | 17.0    |
|  | -5 ft                                | lb       | 10,590    | 6,250    | 8,750     | 5,120    | 7,350     | 4,240    | 6,250     | 3,540    | *4,180    | 2,970      |           | *3,320 | 2,910   | 55.7 ft |
|  | -3.0 m                               | kg       | 4,750     | 2,740    | 3,930     | 2,260    | 3,320     | 1,890    | 2,850     | 1,590    | *1,810    | 1,360      |           | *1,640 | 1,350   | 16.6    |
|  | -10 ft                               | lb       | 10,230    | 5,910    | 8,480     | 4,870    | 7,160     | 4,060    | 6,130     | 3,420    |           |            |           | *3,630 | 2,980   | 54.4 ft |
|  | -4.5 m                               | kg       | 4,640     | 2,640    | 3,850     | 2,190    | 3,270     | 1,840    | 2,820     | 1,560    |           |            |           | *1,820 | 1,420   | 16.0    |
|  | -15 ft                               | lb       | 10,000    | 5,700    | 8,310     | 4,710    | 7,040     | 3,950    | 6,080     | 3,370    |           |            |           | *4,040 | 3,130   | 52.5 ft |
|  | -6.0 m                               | kg       | 4,590     | 2,600    | 3,820     | 2,150    | 3,250     | 1,820    | 2,820     | 1,570    |           |            |           | *2,070 | 1,530   | 15.3    |
|  | -20 ft                               | lb       | 9,900     | 5,600    | 8,240     | 4,640    | 7,010     | 3,930    | *4,920    | 3,400    |           |            |           | *4,620 | 3,390   | 50.2 ft |
|  | -7.5 m                               | kg       | 4,590     | 2,600    | 3,830     | 2,160    | 3,280     | 1,850    |           |          |           |            |           | *2,450 | 1,700   | 14.4    |
|  | -25 ft                               | lb       | 9,920     | 5,630    | 8,280     | 4,680    | 7,100     | 4,000    |           |          |           |            |           | *5,470 | 3,790   | 47.1 ft |
|  | -9.0 m                               | kg       | 4,660     | 2,670    | 3,900     | 2,230    |           |          |           |          |           |            |           | *3,030 | 1,970   | 13.3    |
|  | -30 ft                               | lb       | 10,090    | 5,780    | 8,460     | 4,850    |           |          |           |          |           |            |           | *6,830 | 4,420   | 43.3 ft |
| -10.5 m  | kg                                   | *4,630   | 2,800     |          |           |          |           |          |           |          |           |            | *3,800    | 2,410  | 11.9    |         |
| -35 ft   | lb                                   | *9,810   | 6,110     |          |           |          |           |          |           |          |           |            | *8,400    | 5,460  | 38.5 ft |         |
| -12.0 m  | kg                                   |          |           |          |           |          |           |          |           |          |           |            | *3,840    | 3,220  | 10.1    |         |
| -40 ft   | lb                                   |          |           |          |           |          |           |          |           |          |           |            | *8,460    | 7,440  | 32.1 ft |         |
| -13.5 m  | kg                                   |          |           |          |           |          |           |          |           |          |           |            | *3,640    | *3,640 | 7.50    |         |
| -45 ft   | lb                                   |          |           |          |           |          |           |          |           |          |           |            |           |        |         |         |

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.

# Equipment

## STANDARD AND OPTIONAL EQUIPMENT

• = Standard / o = Optional

### Engine

|  |   |
|--|---|
| Turbocharged, 6 stroke diesel engine with water cooling, direct injection and charged air cooler that meets EU StageV requirements | • |
| Cooling system by fan clutch   | • |
| New work mode with 10 steps  | • |
| Cyclone pre-cleaner  | • |
| Fuel shut off valve  | • |
| Engine block heater  | o |
| Coolant heater by diesel   | o |
| Reversible fan drive   | o |
| Precleaner, oil bath   | o |
| Air filter, High efficiency  | o |
| Delayed engine Shutdown  | o |
| Automatic engine shutdown  | o |
| Water separator with heater  | o |
| Arctic regeneration  | o |
| Oil sampling port for engine oil   | o |

### Hybrid

|                             |   |
|-----------------------------|---|
| Accumulator, 32 L (8.5 gal) | • |
| Boom regeneration valves    | • |
| Assist motor                | • |
| Main pump with PTO          | • |

### Electric / Electronic control system

|  |   |
|--|---|
| Anti-theft with code lock system                   | • |
| Alternator, 120 A                                  | • |
| Automatic idling system                            | • |
| Lock Out / Tag Out function on main battery switch | • |
| Standard light                                     | • |
| Basic light package                                | o |
| Advanced light package                             | o |
| Deluxe light package                               | o |
| Arm light  | o |
| LH light   | o |

### Undercarriage and structures

|  |   |
|--|---|
| 3-point side access  | • |
| Direct filling DEF(AdBlue) / Sight gauge and splash guard  | • |
| Openable 3 piece hood                                      | • |
| Guardrail, fixed/foldable                                  | o |
| Inner rail   | o |
| SIPS (Side Impact Protection Steel)                        | o |
| HD Side door & hood with screen                            | o |
| Without lower structure                                    | o |
| Lower frame, NLC/High walker                               | o |
| Link 600/700/800/900 mm (24/28/32/36") triple grouser shoe | o |
| Link 600 mm (24") triple grouser shoe, HD                  | o |
| Link 600 / 700 mm (24/28") double grouser shoe             | o |
| Link 700 mm (24") single grouser shoe                      | o |

## STANDARD AND OPTIONAL EQUIPMENT

• = Standard / o = Optional

### Hydraulic System

|   |   |
|---|---|
| EH (Electro-Hydraulic) control system                                       | • |
| Auto warm up  | • |
| Auto power boost  | • |
| One touch power boost   | • |
| Priority Adjustment   | • |
| Boom down speed control   | • |
| Shock reduction function  | • |
| Joystick, Semi-long / 4 switch / 4 switch & 1 proportional / Simple L8 / L8 | o |
| Hydraulic oil mineral 32 / 46 / 68  | o |
| Longlife hyd oil mineral 32 / 46 / 68                                       | o |
| Hydraulic oil bio 46  | o |
| Pattern change  | o |
| Boom float function   | o |
| Straight travel pedal   | o |
| Comfort driving control   | o |
| Creep mode  | o |
| Dedicated drain line  | o |
| Variable X3 P-Q control   | o |
| Hose rupture valve for boom   | • |
| Hose rupture valve for arm  | • |

### Cab and interior

|  |   |
|--|---|
| Keyless engine start and stop                                | • |
| 8" HD display  | • |
| ROPS certified cab   | • |
| Tiltable left console  | • |
| Digital hour meter   | • |
| Wireless mobile charger with Kinematic sensor package option | • |
| Various storage space with cool/heated                       | • |
| Cleaning air gun   | o |
| 1 piece wind shield cab                                      | o |
| High visibility cab  | o |
| Cabin large mirror   | o |
| Cabin large mirror, Heated                                   | o |
| Basic / Premium / Deluxe seat                                | o |
| Seat belt, 2 inch 2 point / 3 inch 2 point / 3 inch 3 point  | o |
| Climate control-HEPA filter                                  | o |
| Radio with MP3/USB/Bluetooth                                 | o |
| Front rain shield  | o |
| Sun screen   | o |
| Lower wiper  | o |
| Sun shield, roof hatch                                       | o |
| Foot rest, High mount  | o |
| FOG (Falling Object Guard)                                   | o |
| FOPS (Falling Object Protection Structure)                   | o |
| Safety net   | o |

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**STANDARD AND OPTIONAL EQUIPMENT**

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• = Standard / o = Optional

**Digging equipment**

|   |   |
|---|---|
| Boom: 6.2 m monoblock                       | • |
| Boom: VA 6.2 m / LR 10.2 m / Straight 7.0 m | o |
| Arm: 3.05 m (10'0")                         | • |
| Arm: 2.55 m (8'4")                          | o |
| Arm: 2.75 m (9'0")                          | o |
| Arm: 3.7 m (12'2")                          | o |
| Arm: LR 7.9 m (25'11")                      | o |

**Machine controls**

|   |   |
|---|---|
| Kinematic sensor package                            | • |
| Volvo Co-Pilot 2nd display, 12.8" touchable Full HD | • |
| Dig Assist, Start                                   | o |
| Dig Assist, 2D                                      | o |
| Dig Assist, In-Field Design                         | o |
| Dig Assist, Topcon 3D-MC                            | o |
| Dig Assist, Infield-Design Advanced                 | o |
| Dig Assist, On-Board Weighing                       | o |
| Dig Assist, Laser Receiver                          | o |
| Volvo Active Control                                | o |
| Dig Assist, Boundary Limit                          | o |

**Service and Maintenance**

|                                     |   |
|-------------------------------------|---|
| Swing out A/C condenser             | • |
| Fuel filler pump                    | o |
| Quick Hydraulic Oil Fill connection | o |
| Jump start connector                | o |
| Auto lubrication system             | o |
| Tool kit                            | o |

**Safety and security**

|   |   |
|---|---|
| Travel alarm, beep / white noise          | o |
| Flashing beacon, LED                      | o |
| Green light beacon                        | o |
| Rear view camera                          | • |
| Side view camera                          | • |
| HD VSV (Volvo Smart View)                 | o |
| HD VSV with obstacle detection            | o |
| Provision, HD VSV with obstacle detection | o |

**V O L V O**