

V O L V O



Volvo Excavators 49.0-52.3 t 418 hp

**EC500**

Volvo Construction Equipment

# EC500

A popular machine across the globe now comes  
in a bigger size with more power.



# Get a new edge with more power

Used on mining sites, in quarries and on heavy construction sites across the globe, EC500 is one of Volvo's most popular machines made bigger. The powerful and efficient EC500 boasts up to 15% in improved fuel efficiency and a lower Total Cost of Ownership. Now even easier to service and with a comfortable modern cab, it is a machine that meets the requirements of everyone from owner to operator.



## Operator comfort

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



## Fuel Efficiency

- Up to 15% improvement
- Engine pump optimization with engine speeds as low as 1600rpm
- Smart MCV



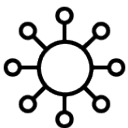
## Smart View with Obstacle Detection

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



## Productivity

- Volvo Active Control
- Dig Assist with On-Board Weighing
- Electro-hydraulic system
- Boom/Swing priority function
- Auto power boost



## Serviceability

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





### Co-Pilot

The new Volvo Co-Pilot features a new 12.8" display with full HD resolution. Associated with the new HD side and rear camera, it gives better visibility on your operations. Both hardware and software improvements provide increased control on the Dig Assist applications.

### Smooth Control

You will find the new joystick controls offer smoother, easier operation. Because the controls are more precise, it is easier for you to achieve what you are trying to do, leading to better machine performance.



## Volvo Smart View

Volvo Smart View with Obstacle Detection provides operators with a 360° view of the machines surroundings thanks to the camera and the new radar detection system. This high technology can identify obstacles as either an object or a human being, allowing the operator to take appropriate action.

## Stay connected

In the comfort of the new cab, you can charge your mobile phone wirelessly or plugged in. You also have the option to use USB connections to access your music playlists or podcasts. The Bluetooth speaker enables you to have clear communication when making a phone call.

## Comfort

The new style cab's ambition is to being more comfortable and make your work easier. A handy storage space allows you to store your coolbox or shoes while you work. You will enjoy reduced noise levels, built-in sunscreen and improved HVAC. Moreover, the new comfortable seat offer will allow to reduce the operator fatigue when working all day.



## Fuel efficiency

In the new Volvo excavators our improved electro-hydraulic system reduces your fuel consumption dramatically. It is done by regulating engine speed and hydraulic flow rate based on the task at hand. This ensures that only the necessary amount of energy is used, leading to improved fuel efficiency and lower operating costs.

## Outstanding cooling performance

The EC500 is equipped with a smart cooling system that consists of electric and hydraulic fans. It automatically adjusts fan speed according to engine coolant temperature and hydraulic workload. This minimizes unnecessary energy consumption and improves overall fuel efficiency. By reducing engine load and preventing overheating, the system ensures optimum excavator performance, extends component life and lowers operating costs.

## New electro-hydraulic system

At the heart of the fuel efficiency improvements is the new electro-hydraulic system with enhanced main control valve (MCV). This intelligent technology uses electronic sensors to monitor the operator's movements and send signals to the machine's on-board computer (ECU) which processes the information and sends commands to the main control valve. The result is smooth and precise movement of the excavator's boom, bucket, and other hydraulic functions allowing for more accurate digging and loading.

## Dig Assist

A must-have on the modern construction site, Dig Assist provides unrivalled machine guidance and control technology, enabling operators to work with the highest levels of precision and accuracy. The addition of On-Board Weighing provides real-time insights into the bucket's load, helping to eliminate overloading, underloading, reweighing and waiting times.

## Productivity

Advanced electric control joystick and full electric travel pedals provide lightning-fast response times. Boom/Swing priority functions help operators work with speed and ease by prioritizing one function over another, improving cycle times.



## Serviceability

Minimizing downtime is key to protect your total cost of ownership. Easy access, clean and quick oil changes, as well as 1 000-hour intervals for engine oil, oil and fuel filter further increase your machine availability. Swing out condenser also makes cleaning of the radiator and oil cooler more convenient.



# Volvo EC500 in Detail

## Engine

The next-generation Volvo diesel engine uses Volvo Advanced Combustion Technology (V-ACT) to deliver lower emissions, superior performance and fuel efficiency. The engine uses precise, high pressure fuel injectors, turbo charger and intercooler, and electronic engine controls to optimize machine performance.

**Air Filter:** 3-stage and 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 D13J |
|----------------------------|-------|------------|
| Max power at               | r/min | 1 600      |
| Net, ISO 9249/SAE J1349    | kW    | 311        |
|                            | hp    | 423        |
| Gross, ISO 14396/SAE J1995 | kW    | 312        |
|                            | hp    | 424        |
| Max torque                 | Nm    | 2 070      |
| at engine speed            | r/min | 1 300      |
| No. of cylinders           |       | 6          |
| Displacement               | l     | 12.80      |
| Bore                       | mm    | 131        |
| Stroke                     | mm    | 158        |

## 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  | 200          |
| Alternator       | V/A | 28 V / 180 A |

## Undercarriage

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

### Fixed undercarriage

|                                 |    |                       |
|---------------------------------|----|-----------------------|
| Track shoe                      |    | 2 x 52                |
| Link pitch                      | mm | 216                   |
| Shoe width, triple grouser      | mm | 600 / 700 / 800 / 900 |
| Shoe width, triple grouser (HD) | mm | 600 (HD)              |
| Shoe width, double grouser      | mm | 600                   |
| Bottom rollers                  |    | 2 x 9                 |
| Top rollers                     |    | 2 x 2                 |

### Retractable undercarriage

|                                 |    |                       |
|---------------------------------|----|-----------------------|
| Track shoe                      |    | 2 x 52                |
| Link pitch                      | mm | 216                   |
| Shoe width, triple grouser      | mm | 600 / 700 / 800 / 900 |
| Shoe width, triple grouser (HD) | mm | 600 (HD)              |
| Shoe width, double grouser      | mm | 600                   |
| Bottom rollers                  |    | 2 x 9                 |
| Top rollers                     |    | 2 x 3                 |

## Swing system

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

|                  |       |      |
|------------------|-------|------|
| Max. slew speed  | r/min | 9.30 |
| Max. slew torque | kNm   | 166  |

## 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   | 333  |
| Max. travel speed (low)  | km/h | 3.10 |
| Max. travel speed (high) | km/h | 5.10 |
| 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 9 vents.

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



|                                                                        |    |         |
|------------------------------------------------------------------------|----|---------|
| <b>Service Refill</b>                                                  |    |         |
| Fuel tank                                                              | l  | 640     |
| DEF/AdBlue® tank                                                       | l  | 45      |
| Hydraulic system, total                                                | l  | 480     |
| Hydraulic tank                                                         | l  | 235     |
| Engine oil                                                             | l  | 55      |
| Engine coolant                                                         | l  | 60      |
| Slew reduction unit                                                    | l  | 2 x 8.8 |
| Travel reduction unit                                                  | l  | 2 x 8.0 |
| <b>Sound Level</b>                                                     |    |         |
| Sound level in cab according to ISO 6396                               |    |         |
| L <sub>pA</sub>                                                        | dB | 71      |
| External sound level according to ISO 6395 and EU Directive 2000/14/EC |    |         |
| L <sub>WA</sub>                                                        | dB | 107     |

## Hydraulic system

The hydraulic system, also known as the "Automatic Sensing Work Mode," is designed for high-productivity, high-digging capacity, high-maneuvering precision and excellent fuel economy. The summation system, boom, arm and swing priority along with boom and arm regeneration provides optimum performance.

The following important functions are included in the system:

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

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

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

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

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

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

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

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

|              |       |         |
|--------------|-------|---------|
| Maximum flow | l/min | 2 x 376 |
|--------------|-------|---------|

Pilot pump: Gear pump

|              |       |        |
|--------------|-------|--------|
| Maximum flow | l/min | 1 x 34 |
|--------------|-------|--------|

## Max. pressure

|                |     |             |
|----------------|-----|-------------|
| Implement      | MPa | 32.4 / 35.3 |
| Travel circuit | MPa | 32.40       |
| Slew circuit   | MPa | 25.80       |
| Pilot circuit  | MPa | 3.90        |

## Hydraulic Motors

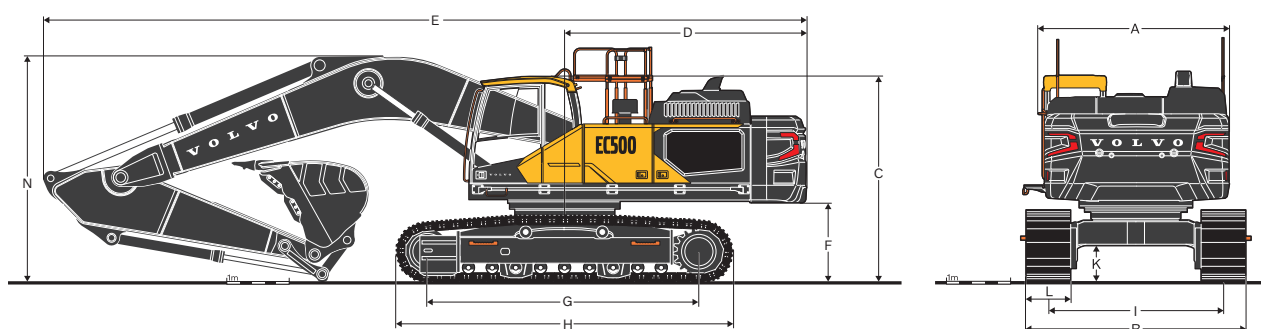
**Travel:** Variable displacement axial piston motor with mechanical brake

**Swing:** Fixed displacement piston motor with mechanical brake

## Hydraulic Cylinders

|                    |        |             |
|--------------------|--------|-------------|
| Boom               |        | 2           |
| Bore x Stroke      | ø x mm | 165 x 1 590 |
| Arm                |        | 1           |
| Bore x Stroke      | ø x mm | 190 x 1 850 |
| Bucket             |        | 1           |
| Bore x Stroke      | ø x mm | 165 x 1 335 |
| ME Bucket          |        | 1           |
| Bore x Stroke      | ø x mm | 175 x 1 335 |
| Bucket for LR boom |        | 1           |
| Bore x Stroke      | ø x mm | 140 x 1 140 |

# Specifications



## DIMENSIONS

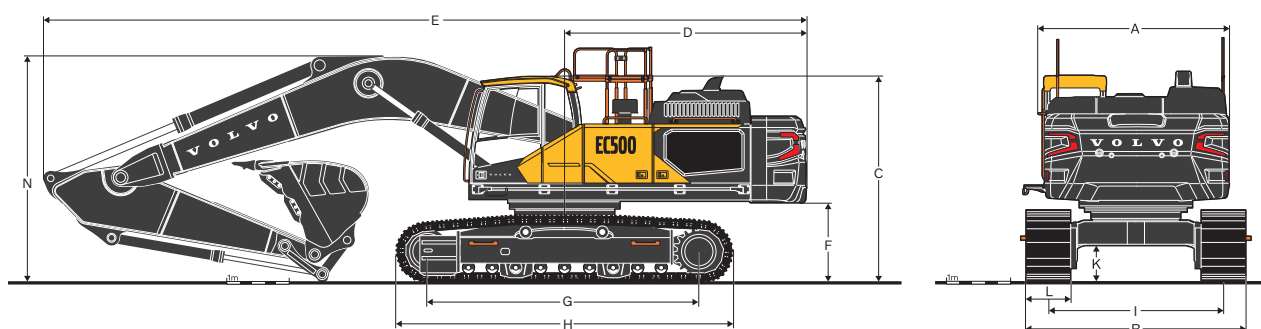
| Description                                 |        | Unit   | EC500F Fixed undercarriage |        |        |        |        |        |
|---------------------------------------------|--------|--------|----------------------------|--------|--------|--------|--------|--------|
| Boom                                        | 6.5 m  |        | 7.0 m                      |        |        |        | 7.4 m  |        |
| Arm                                         | 2.55 m |        | 3.0 m                      | 2.55 m | 3.0 m  | 3.35 m | 3.9 m  | 4.3 m  |
| A. Overall width of superstructure          |        |        |                            |        |        |        |        |        |
| with walkway, handrail                      | mm     | 3 450  | 3 450                      | 3 450  | 3 450  | 3 450  | 3 450  | 3 450  |
| without walkway,handrail                    | mm     | 2 990  | 2 990                      | 2 990  | 2 990  | 2 990  | 2 990  | 2 990  |
| B. Overall width ***                        |        |        |                            |        |        |        |        |        |
| 600 mm shoes                                | mm     | 3 340  | 3 340                      | 3 340  | 3 340  | 3 340  | 3 340  | 3 340  |
| 700 mm shoes                                | mm     | 3 440  | 3 440                      | 3 440  | 3 440  | 3 440  | 3 440  | 3 440  |
| 800 mm shoes                                | mm     | 3 540  | 3 540                      | 3 540  | 3 540  | 3 540  | 3 540  | 3 540  |
| 900 mm shoes                                | mm     | 3 640  | 3 640                      | 3 640  | 3 640  | 3 640  | 3 640  | 3 640  |
| C. Overall height of                        |        |        |                            |        |        |        |        |        |
| Cab                                         | mm     | 3 300  | 3 300                      | 3 300  | 3 300  | 3 300  | 3 300  | 3 300  |
| FOG                                         | mm     | 3 390  | 3 390                      | 3 390  | 3 390  | 3 390  | 3 390  | 3 390  |
| Engine hood                                 | mm     | 3 060  | 3 060                      | 3 060  | 3 060  | 3 060  | 3 060  | 3 060  |
| Guardrail, unfolded                         | mm     | 3 640  | 3 640                      | 3 640  | 3 640  | 3 640  | 3 640  | 3 640  |
| Guardrail, folded                           | mm     | 3 160  | 3 160                      | 3 160  | 3 160  | 3 160  | 3 160  | 3 160  |
| Handrail, unfolded                          | mm     | 3 400  | 3 400                      | 3 400  | 3 400  | 3 400  | 3 400  | 3 400  |
| Handrail, folded                            | mm     | 3 160  | 3 160                      | 3 160  | 3 160  | 3 160  | 3 160  | 3 160  |
| With Boom/Arm/Bucket (with hydraulic hoses) | mm     | 4 270  | 4 100                      | 4 270  | 4 020  | 3 830  | 3 910  | 3 650  |
| With Boom/Arm (with hydraulic hoses)        | mm     | 3 710  | 3 780                      | 3 690  | 3 770  | 3 830  | 3 910  | 3 650  |
| With Boom (with hydraulic hoses)            | mm     | 3 170  | 3 170                      | 3 150  | 3 150  | 3 150  | 3 150  | 2 940  |
| D. Tail swing radius                        | mm     | 3 880  | 3 880                      | 3 880  | 3 880  | 3 880  | 3 880  | 3 880  |
| E. Overall length                           |        |        |                            |        |        |        |        |        |
| With Boom/Arm/Bucket                        | mm     | 11 780 | 11 720                     | 12 280 | 12 220 | 12 220 | 12 220 | 12 660 |
| With Boom/Arm                               | mm     | 11 570 | 11 670                     | 12 170 | 12 200 | 12 220 | 12 220 | 12 660 |
| With Boom                                   | mm     | 10 330 | 10 330                     | 10 850 | 10 850 | 10 850 | 10 850 | 11 270 |
| F. Counterweight clearance*                 | mm     | 1 210  | 1 210                      | 1 210  | 1 210  | 1 210  | 1 210  | 1 210  |
| G. Tumbler length                           | mm     | 4 380  | 4 380                      | 4 380  | 4 380  | 4 380  | 4 380  | 4 380  |
| H. Track length                             | mm     | 5 380  | 5 380                      | 5 380  | 5 380  | 5 380  | 5 380  | 5 380  |
| I. Track gauge                              | mm     | 2 740  | 2 740                      | 2 740  | 2 740  | 2 740  | 2 740  | 2 740  |
| K. Min. ground clearance *                  | mm     | 475    | 475                        | 475    | 475    | 475    | 475    | 475    |

\* Without shoe grouser

\*\* Exclude walkway, handrail

\*\*\* Shoe end to end





## DIMENSIONS

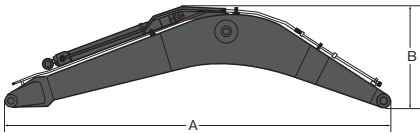
| Description                                 |        | Unit   | EC500F Retractable undercarriage |        |        |        |        |        |
|---------------------------------------------|--------|--------|----------------------------------|--------|--------|--------|--------|--------|
| Boom                                        | 6.5 m  |        | 7.0 m                            |        |        |        | 7.4 m  |        |
| Arm                                         | 2.55 m |        | 3.0 m                            | 2.55 m | 3.0 m  | 3.35 m | 3.9 m  | 4.3 m  |
| A. Overall width of superstructure          |        |        |                                  |        |        |        |        |        |
| with walkway, handrail                      | mm     | 3 450  | 3 450                            | 3 450  | 3 450  | 3 450  | 3 450  | 3 450  |
| without walkway,handrail                    | mm     | 2 990  | 2 990                            | 2 990  | 2 990  | 2 990  | 2 990  | 2 990  |
| B. Overall width ***                        |        |        |                                  |        |        |        |        |        |
| Retracted                                   |        |        |                                  |        |        |        |        |        |
| 600 mm shoes                                | mm     | 2 990  | 2 990                            | 2 990  | 2 990  | 2 990  | 2 990  | 2 990  |
| 700 mm shoes                                | mm     | 3 090  | 3 090                            | 3 090  | 3 090  | 3 090  | 3 090  | 3 090  |
| 800 mm shoes                                | mm     | 3 190  | 3 190                            | 3 190  | 3 190  | 3 190  | 3 190  | 3 190  |
| 900 mm shoes                                | mm     | 3 290  | 3 290                            | 3 290  | 3 290  | 3 290  | 3 290  | 3 290  |
| Extended                                    |        |        |                                  |        |        |        |        |        |
| 600 mm shoes                                | mm     | 3 490  | 3 490                            | 3 490  | 3 490  | 3 490  | 3 490  | 3 490  |
| 700 mm shoes                                | mm     | 3 590  | 3 590                            | 3 590  | 3 590  | 3 590  | 3 590  | 3 590  |
| 800 mm shoes                                | mm     | 3 690  | 3 690                            | 3 690  | 3 690  | 3 690  | 3 690  | 3 690  |
| 900 mm shoes                                | mm     | 3 790  | 3 790                            | 3 790  | 3 790  | 3 790  | 3 790  | 3 790  |
| C. Overall height of                        |        |        |                                  |        |        |        |        |        |
| Cab                                         | mm     | 3 410  | 3 410                            | 3 410  | 3 410  | 3 410  | 3 410  | 3 410  |
| FOG                                         | mm     | 3 500  | 3 500                            | 3 500  | 3 500  | 3 500  | 3 500  | 3 500  |
| Engine hood                                 | mm     | 3 170  | 3 170                            | 3 170  | 3 170  | 3 170  | 3 170  | 3 170  |
| Guardrail, unfolded                         | mm     | 3 750  | 3 750                            | 3 750  | 3 750  | 3 750  | 3 750  | 3 750  |
| Guardrail, folded                           | mm     | 3 270  | 3 270                            | 3 270  | 3 270  | 3 270  | 3 270  | 3 270  |
| Handrail, unfolded                          | mm     | 3 510  | 3 510                            | 3 510  | 3 510  | 3 510  | 3 510  | 3 510  |
| Handrail, folded                            | mm     | 3 270  | 3 270                            | 3 270  | 3 270  | 3 270  | 3 270  | 3 270  |
| With Boom/Arm/Bucket (with hydraulic hoses) | mm     | 4 310  | 4 120                            | 4 220  | 4 050  | 3 890  | 3 910  | 3 630  |
| With Boom/Arm (with hydraulic hoses)        | mm     | 3 730  | 3 790                            | 3 720  | 3 790  | 3 890  | 3 910  | 3 630  |
| With Boom (with hydraulic hoses)            | mm     | 3 220  | 3 220                            | 3 220  | 3 220  | 3 220  | 3 220  | 3 000  |
| D. Tail swing radius                        | mm     | 3 880  | 3 880                            | 3 880  | 3 880  | 3 880  | 3 880  | 3 880  |
| E. Overall length                           |        |        |                                  |        |        |        |        |        |
| With Boom/Arm/Bucket                        | mm     | 11 780 | 11 720                           | 12 280 | 12 220 | 12 200 | 12 200 | 12 630 |
| With Boom/Arm                               | mm     | 11 550 | 11 630                           | 12 150 | 12 180 | 12 200 | 12 200 | 12 630 |
| With Boom                                   | mm     | 10 280 | 10 280                           | 10 820 | 10 820 | 10 820 | 10 820 | 11 230 |
| F. Counterweight clearance*                 | mm     | 1 320  | 1 320                            | 1 320  | 1 320  | 1 320  | 1 320  | 1 320  |
| G. Tumbler length                           | mm     | 4 380  | 4 380                            | 4 380  | 4 380  | 4 380  | 4 380  | 4 380  |
| H. Track length                             | mm     | 5 380  | 5 380                            | 5 380  | 5 380  | 5 380  | 5 380  | 5 380  |
| I. Track gauge                              |        |        |                                  |        |        |        |        |        |
| Retracted                                   | mm     | 2 390  | 2 390                            | 2 390  | 2 390  | 2 390  | 2 390  | 2 390  |
| Extended                                    | mm     | 2 890  | 2 890                            | 2 890  | 2 890  | 2 890  | 2 890  | 2 890  |
| K. Min. ground clearance *                  | mm     | 710    | 710                              | 710    | 710    | 710    | 710    | 710    |

\* Without shoe grouser

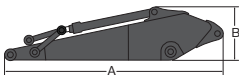
\*\* Exclude walkway, handrail

\*\*\* Shoe end to end

# Specifications

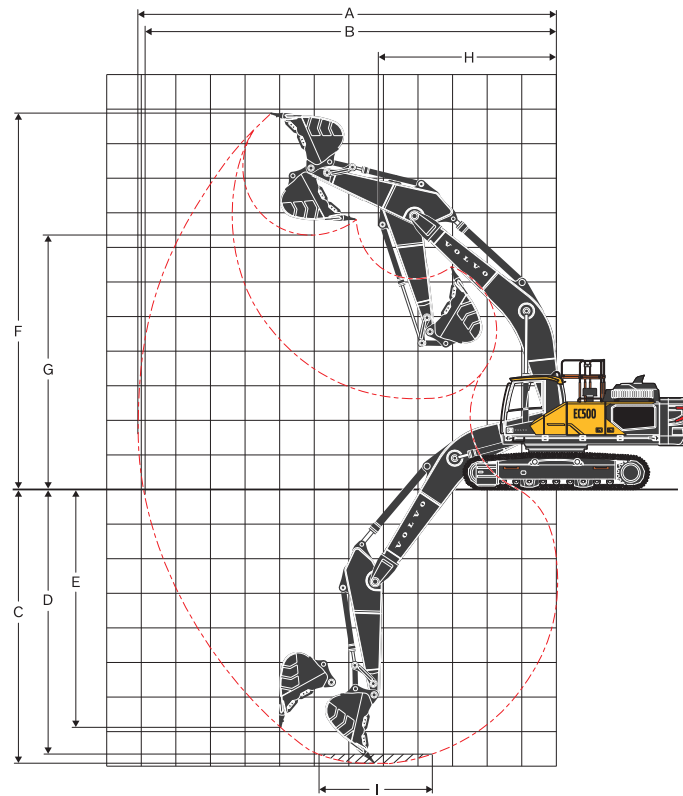


| BOOM                                 |      |          |          |          |
|--------------------------------------|------|----------|----------|----------|
| Description                          | Unit | 6.5 m ME | 7.0 m HD | 7.4 m GP |
| Length                               | mm   | 6 780    | 7 280    | 7 680    |
| Height                               | mm   | 1 850    | 1 760    | 1 615    |
| Width                                | mm   | 906      | 906      | 906      |
| Weight*                              | kg   | 4 730    | 4 630    | 4 740    |
| * Includes cylinder, piping and pins |      |          |          |          |



| ARM                                     |      |           |          |           |          |          |
|-----------------------------------------|------|-----------|----------|-----------|----------|----------|
| Description                             | Unit | 2.55 m ME | 3.0 m HD | 3.35 m HD | 3.9 m GP | 4.3 m GP |
| Length                                  | mm   | 3 750     | 4 220    | 4 570     | 5 120    | 5 610    |
| Height                                  | mm   | 1 280     | 1 280    | 1 280     | 1 280    | 1 260    |
| Width                                   | mm   | 470       | 470      | 470       | 470      | 470      |
| Weight*                                 | kg   | 2 520     | 2 740    | 2 730     | 2 880    | 3 040    |
| * Includes arm cylinder, piping and pin |      |           |          |           |          |          |





#### WORKING RANGES

| Description                         | Unit | EC500F Fixed undercarriage* |        |        |        |        |        |        |
|-------------------------------------|------|-----------------------------|--------|--------|--------|--------|--------|--------|
| Boom                                | m    | 6.5 ME                      |        | 7.0 HD |        |        |        | 7.4 GP |
| Arm                                 | m    | 2.55                        | 3.0    | 2.55   | 3.0    | 3.35   | 3.9    | 4.3    |
| A. Max Digging Reach                | mm   | 10 935                      | 11 295 | 11 455 | 11 820 | 12 145 | 12 645 | 13 090 |
| B. Max Digging Reach on the Ground  | mm   | 10 690                      | 11 060 | 11 220 | 11 590 | 11 925 | 12 435 | 12 890 |
| C. Max Digging Depth                | mm   | 6 585                       | 7 035  | 7 030  | 7 480  | 7 830  | 8 380  | 8 860  |
| D. Max Digging Depth (2.44 m level) | mm   | 6 420                       | 6 885  | 6 860  | 7 325  | 7 685  | 8 250  | 8 725  |
| E. Max Vertical Wall Digging Depth  | mm   | 5 825                       | 6 000  | 6 270  | 6 465  | 6 795  | 7 235  | 6 725  |
| F. Max Cutting Height               | mm   | 10 560                      | 10 550 | 10 915 | 10 915 | 11 065 | 11 235 | 11 060 |
| G. Max Dumping Height               | mm   | 6 960                       | 7 015  | 7 310  | 7 370  | 7 525  | 7 710  | 7 735  |
| H. Min front slew radius            | mm   | 4 815                       | 4 800  | 5 210  | 5 170  | 5 135  | 5 050  | 5 130  |

| Description                         | Unit | EC500F Retractable undercarriage* |        |        |        |        |        |        |
|-------------------------------------|------|-----------------------------------|--------|--------|--------|--------|--------|--------|
| Boom                                | m    | 6.5 ME                            |        | 7.0 HD |        |        |        | 7.4 GP |
| Arm                                 | m    | 2.55                              | 3.0    | 2.55   | 3.0    | 3.35   | 3.9    | 4.3    |
| A. Max Digging Reach                | mm   | 10 935                            | 11 295 | 11 455 | 11 820 | 12 145 | 12 645 | 13 090 |
| B. Max Digging Reach on the Ground  | mm   | 10 690                            | 11 060 | 11 220 | 11 590 | 11 925 | 12 435 | 12 890 |
| C. Max Digging Depth                | mm   | 6 585                             | 7 035  | 7 030  | 7 480  | 7 830  | 8 380  | 8 860  |
| D. Max Digging Depth (2.44 m level) | mm   | 6 420                             | 6 885  | 6 860  | 7 325  | 7 685  | 8 250  | 8 725  |
| E. Max Vertical Wall Digging Depth  | mm   | 5 825                             | 6 000  | 6 270  | 6 465  | 6 795  | 7 235  | 6 725  |
| F. Max Cutting Height               | mm   | 10 560                            | 10 550 | 10 915 | 10 915 | 11 065 | 11 235 | 11 060 |
| G. Max Dumping Height               | mm   | 6 960                             | 7 015  | 7 310  | 7 370  | 7 525  | 7 710  | 7 735  |
| H. Min front slew radius            | mm   | 4 815                             | 4 800  | 5 210  | 5 170  | 5 135  | 5 050  | 5 130  |

#### DIGGING FORCES WITH DIRECT FIT BUCKET

|                            |                        |    |     |     |     |     |     |     |     |
|----------------------------|------------------------|----|-----|-----|-----|-----|-----|-----|-----|
| Breakout force - bucket    | SAE J1179, Normal      | kN | 249 | 249 | 230 | 230 | 230 | 230 | 230 |
|                            | SAE J1179, Power Boost | kN | 272 | 272 | 251 | 251 | 251 | 251 | 251 |
|                            | ISO 6015, Normal       | kN | 281 | 281 | 261 | 261 | 261 | 261 | 261 |
|                            | ISO 6015, Power Boost  | kN | 307 | 307 | 285 | 285 | 285 | 285 | 285 |
| Tearout force - digger arm | SAE J1179, Normal      | kN | 224 | 206 | 231 | 211 | 197 | 176 | 173 |
|                            | SAE J1179, Power Boost | kN | 245 | 224 | 252 | 230 | 214 | 192 | 189 |
|                            | ISO 6015, Normal       | kN | 232 | 211 | 237 | 216 | 201 | 179 | 176 |
|                            | ISO 6015, Power Boost  | kN | 253 | 230 | 259 | 235 | 219 | 195 | 192 |
| Rotation angle, bucket     | °                      |    | 179 | 179 | 179 | 179 | 179 | 179 | 179 |

\*Machine with pin-on bucket

# Specifications

| GROUND PRESSURE     |            |                                                                                                   |                 |               |                                                                                                         |                 |               |
|---------------------|------------|---------------------------------------------------------------------------------------------------|-----------------|---------------|---------------------------------------------------------------------------------------------------------|-----------------|---------------|
| Description         | Shoe width | Operating weight                                                                                  | Ground pressure | Overall width | Operating weight                                                                                        | Ground pressure | Overall width |
|                     | mm         | kg                                                                                                | kPa             | mm            | kg                                                                                                      | kPa             | mm            |
| Triple grouser      | 600        | 49 800                                                                                            | 86.2            | 3 340         | 51 070                                                                                                  | 88.4            | 3 490         |
|                     | 700        | 49 910                                                                                            | 74.6            | 3 440         | 51 180                                                                                                  | 76.5            | 3 590         |
|                     | 800        | 50 300                                                                                            | 65.9            | 3 540         | 51 570                                                                                                  | 67.6            | 3 690         |
|                     | 900        | 50 810                                                                                            | 59.2            | 3 640         | 52 070                                                                                                  | 60.6            | 3 790         |
| Triple grouser (HD) | 600 (HD)   | 51 310                                                                                            | 86.4            | 3 340         | 52 580                                                                                                  | 88.5            | 3 490         |
| Double grouser      | 600        | 49 850                                                                                            | 86.2            | 3 340         | 51 120                                                                                                  | 88.4            | 3 490         |
|                     |            | EC500F with FIXED undercarriage, 6.5 m boom, 2.55 m arm, 2 740 kg bucket, 10 250 kg counterweight |                 |               | EC500F with RETRACTABLE undercarriage, 6.5 m boom, 2.55 m arm, 2 740 kg bucket, 10 250 kg counterweight |                 |               |
| Description         | Shoe width | Operating weight                                                                                  | Ground pressure | Overall width | Operating weight                                                                                        | Ground pressure | Overall width |
|                     | mm         | kg                                                                                                | kPa             | mm            | kg                                                                                                      | kPa             | mm            |
| Triple grouser      | 600        | 50 020                                                                                            | 86.5            | 3 340         | 51 290                                                                                                  | 88.7            | 3 490         |
|                     | 700        | 50 130                                                                                            | 74.9            | 3 440         | 51 400                                                                                                  | 76.8            | 3 590         |
|                     | 800        | 50 520                                                                                            | 66.2            | 3 540         | 51 790                                                                                                  | 67.9            | 3 690         |
|                     | 900        | 51 030                                                                                            | 59.4            | 3 640         | 52 290                                                                                                  | 60.9            | 3 790         |
| Triple grouser (HD) | 600 (HD)   | 51 530                                                                                            | 86.7            | 3 340         | 52 800                                                                                                  | 88.9            | 3 490         |
| Double grouser      | 600        | 50 070                                                                                            | 86.6            | 3 340         | 51 340                                                                                                  | 88.8            | 3 490         |
|                     |            | EC500F with FIXED undercarriage, 6.5 m boom, 3.0 m arm, 2 740 kg bucket, 10 250 kg counterweight  |                 |               | EC500F with RETRACTABLE undercarriage, 6.5 m boom, 3.0 m arm, 2 740 kg bucket, 10 250 kg counterweight  |                 |               |
| Description         | Shoe width | Operating weight                                                                                  | Ground pressure | Overall width | Operating weight                                                                                        | Ground pressure | Overall width |
|                     | mm         | kg                                                                                                | kPa             | mm            | kg                                                                                                      | kPa             | mm            |
| Triple grouser      | 600        | 49 670                                                                                            | 85.9            | 3 340         | 50 940                                                                                                  | 88.1            | 3 490         |
|                     | 700        | 49 780                                                                                            | 74.4            | 3 440         | 51 050                                                                                                  | 76.3            | 3 590         |
|                     | 800        | 50 170                                                                                            | 65.8            | 3 540         | 51 440                                                                                                  | 67.4            | 3 690         |
|                     | 900        | 50 680                                                                                            | 59.0            | 3 640         | 51 940                                                                                                  | 60.5            | 3 790         |
| Triple grouser (HD) | 600 (HD)   | 51 180                                                                                            | 86.1            | 3 340         | 52 450                                                                                                  | 88.3            | 3 490         |
| Double grouser      | 600        | 49 720                                                                                            | 86.0            | 3 340         | 50 990                                                                                                  | 88.2            | 3 490         |
|                     |            | EC500F with FIXED undercarriage, 7.0 m boom, 3.35 m arm, 2 500 kg bucket, 10 250 kg counterweight |                 |               | EC500F with RETRACTABLE undercarriage, 7.0 m boom, 3.35 m arm, 2 500 kg bucket, 10 250 kg counterweight |                 |               |



# BUCKET SELECTION GUIDE

| Bucket type        |                      | Capacity | Cutting width | Weight | Teeth | EC500F Fixed undercarriage           |           |            |           |            |            |           |
|--------------------|----------------------|----------|---------------|--------|-------|--------------------------------------|-----------|------------|-----------|------------|------------|-----------|
|                    |                      |          |               |        |       | 600 mm shoe, 10 250 kg counterweight |           |            |           |            |            |           |
|                    |                      |          |               |        |       | 6.5 m boom                           |           | 7.0 m boom |           |            | 7.4 m boom |           |
|                    |                      |          |               |        |       | 2.55 m arm                           | 3.0 m arm | 2.55 m arm | 3.0 m arm | 3.35 m arm | 3.9 m arm  | 4.3 m arm |
| Direct fit Buckets | Fixed Ditching       | 1 540    | 1 800         | 1 210  | 0     | C                                    | C         | C          | C         | C          | C          | C         |
|                    | High Capacity        | 3 500    | 1 960         | 2 490  | 5     | C                                    | C         | C          | B         | B          | A          | x         |
|                    |                      | 3 820    | 2 100         | 2 490  | 5     | C                                    | B         | B          | B         | A          | x          | x         |
|                    | General Purpose      | 1 550    | 1 240         | 1 870  | 4     | C                                    | C         | C          | C         | C          | C          | C         |
|                    |                      | 2 100    | 1 540         | 2 190  | 5     | C                                    | C         | C          | C         | C          | C          | C         |
|                    |                      | 2 380    | 1 690         | 2 220  | 5     | C                                    | C         | C          | C         | C          | C          | C         |
|                    |                      | 2 660    | 1 840         | 2 500  | 5     | C                                    | C         | C          | C         | C          | C          | B         |
|                    |                      | 2 840    | 1 940         | 2 470  | 5     | C                                    | C         | C          | C         | C          | B          | B         |
|                    |                      | 3 310    | 2 190         | 2 750  | 6     | C                                    | C         | C          | B         | B          | A          | x         |
|                    |                      | 2 100    | 1 540         | 2 370  | 5     | D                                    | D         | D          | D         | D          | D          | C         |
|                    | Heavy Duty           | 2 380    | 1 690         | 2 500  | 5     | D                                    | D         | D          | D         | D          | C          | B         |
|                    |                      | 2 660    | 1 840         | 2 670  | 5     | D                                    | D         | D          | C         | C          | B          | B         |
|                    |                      | 2 840    | 1 940         | 2 740  | 5     | D                                    | D         | D          | C         | C          | B          | A         |
|                    |                      | 3 030    | 2 020         | 2 890  | 5     | D                                    | C         | C          | B         | B          | A          | x         |
|                    | Extreme Duty         | 2 660    | 1 870         | 2 810  | 4     | D                                    | D         | D          | C         | C          | B          | A         |
|                    |                      | 2 840    | 1 970         | 3 010  | 4     | D                                    | C         | C          | C         | B          | B          | x         |
|                    |                      | 3 030    | 2 050         | 3 120  | 4     | D                                    | C         | C          | B         | B          | A          | x         |
|                    | Heavy Duty eXtreme   | 3 000    | 2 050         | 3 560  | 4     | C                                    | C         | B          | B         | A          | x          | x         |
|                    |                      | 3 200    | 2 140         | 3 670  | 4     | C                                    | B         | B          | A         | x          | x          | x         |
|                    | Extreme Duty eXtreme | 3 000    | 2 050         | 3 880  | 4     | C                                    | B         | B          | A         | x          | x          | x         |
| Bucket type        |                      | Capacity | Cutting width | Weight | Teeth | EC500F Retractable undercarriage     |           |            |           |            |            |           |
|                    |                      |          |               |        |       | 600 mm shoe, 10 250 kg counterweight |           |            |           |            |            |           |
|                    |                      |          |               |        |       | 6.5 m boom                           |           | 7.0 m boom |           |            | 7.4 m boom |           |
|                    |                      |          |               |        |       | 2.55 m arm                           | 3.0 m arm | 2.55 m arm | 3.0 m arm | 3.35 m arm | 3.9 m arm  | 4.3 m arm |
| Direct fit Buckets | Fixed Ditching       | 1 540    | 1 800         | 1 210  | 0     | C                                    | C         | C          | C         | C          | C          | C         |
|                    | High Capacity        | 3 500    | 1 960         | 2 490  | 5     | C                                    | C         | C          | C         | B          | B          | A         |
|                    |                      | 3 820    | 2 100         | 2 490  | 5     | C                                    | C         | C          | B         | B          | A          | x         |
|                    | General Purpose      | 1 550    | 1 240         | 1 870  | 4     | C                                    | C         | C          | C         | C          | C          | C         |
|                    |                      | 2 100    | 1 540         | 2 190  | 5     | C                                    | C         | C          | C         | C          | C          | C         |
|                    |                      | 2 380    | 1 690         | 2 220  | 5     | C                                    | C         | C          | C         | C          | C          | C         |
|                    |                      | 2 660    | 1 840         | 2 500  | 5     | C                                    | C         | C          | C         | C          | C          | B         |
|                    |                      | 2 840    | 1 940         | 2 470  | 5     | C                                    | C         | C          | C         | C          | C          | B         |
|                    |                      | 3 310    | 2 190         | 2 750  | 6     | C                                    | C         | C          | C         | B          | B          | A         |
|                    |                      | 2 100    | 1 540         | 2 370  | 5     | D                                    | D         | D          | D         | D          | D          | D         |
|                    | Heavy Duty           | 2 380    | 1 690         | 2 500  | 5     | D                                    | D         | D          | D         | D          | D          | C         |
|                    |                      | 2 660    | 1 840         | 2 670  | 5     | D                                    | D         | D          | D         | D          | C          | B         |
|                    |                      | 2 840    | 1 940         | 2 740  | 5     | D                                    | D         | D          | D         | C          | C          | B         |
|                    |                      | 3 030    | 2 020         | 2 890  | 5     | D                                    | D         | D          | C         | C          | B          | A         |
|                    | Extreme Duty         | 2 660    | 1 870         | 2 810  | 4     | D                                    | D         | D          | D         | D          | C          | B         |
|                    |                      | 2 840    | 1 970         | 3 010  | 4     | D                                    | D         | D          | C         | C          | B          | B         |
|                    |                      | 3 030    | 2 050         | 3 120  | 4     | D                                    | D         | C          | C         | B          | B          | x         |
|                    | Heavy Duty eXtreme   | 3 000    | 2 050         | 3 560  | 4     | D                                    | C         | C          | B         | B          | A          | x         |
|                    |                      | 3 200    | 2 140         | 3 670  | 4     | C                                    | C         | C          | B         | B          | x          | x         |
|                    | Extreme Duty eXtreme | 3 000    | 2 050         | 3 880  | 4     | D                                    | C         | C          | B         | B          | x          | x         |

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.

Maximum material density  
D: 2 100 kg/m<sup>3</sup>  
C: 1 800 kg/m<sup>3</sup>  
B: 1 500 kg/m<sup>3</sup>  
A: 1 200 kg/m<sup>3</sup>  
X: Not recommended

# Specifications

## LIFTING CAPACITY EC500F FIXED undercarriage

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    |           | 10.5 m   |           | Max.     |           | m   |
|--------------------------------------------------------------------------------|--------------------------------------|----------|-----------|----------|-----------|----------|-----------|----------|-----------|----------|-----------|----------|-----------|----------|-----------|----------|-----------|-----|
|                                                                                |                                      | Along UC | Across UC | Along UC | Across UC | Along UC | Across UC | Along UC | Across UC | Along UC | Across UC | Along UC | Across UC | Along UC | Across UC | Along UC | Across UC |     |
| Boom<br>6.5 m<br>Arm<br>2.55 m<br>Shoe<br>600 mm<br>Counterweight<br>10 250 kg | 7.5 kg                               |          |           |          |           |          |           |          |           |          |           |          |           |          |           | *11950   | 11 720    | 7.3 |
|                                                                                | 6.0 kg                               |          |           |          |           |          |           | *13 070  | *13 070   | *11980   | 11 060    |          |           |          |           | *11480   | 9 610     | 8.2 |
|                                                                                | 4.5 kg                               |          |           |          |           | *19 490  | *19 490   | *14 850  | *14 850   | *12 710  | 10 750    |          |           |          |           | *11480   | 8 530     | 8.7 |
|                                                                                | 3.0 kg                               |          |           |          |           | *22 510  | 21 320    | *16 860  | 14 230    | *13 700  | 10 380    |          |           |          |           | *11870   | 8 000     | 8.9 |
|                                                                                | 1.5 kg                               |          |           |          |           | *16 340  | *16 340   | *18 380  | 13 660    | *14 550  | 10 050    |          |           |          |           | *12 370  | 7 870     | 8.9 |
|                                                                                | 0 kg                                 |          |           |          |           | *24 100  | 20 330    | *18 980  | 13 360    | *14 940  | 9 860     |          |           |          |           | *12 680  | 8 130     | 8.7 |
|                                                                                | -1.5 kg                              |          |           | *17 720  | *17 720   | *24 350  | 20 430    | *18 550  | 13 320    | *14 510  | 9 840     |          |           |          |           | *12 970  | 8 900     | 8.1 |
|                                                                                | -3.0 kg                              |          |           | *27 940  | *27 940   | *21 730  | 20 750    | *16 750  | 13 520    |          |           |          |           |          |           | *13 050  | 10 590    | 7.2 |
|                                                                                | -4.5 kg                              |          |           |          |           | *16 670  | *16 670   |          |           |          |           |          |           |          |           |          |           | 5.8 |
| Boom<br>6.5 m<br>Arm<br>3.0 m<br>Shoe<br>600 mm<br>Counterweight<br>10 250 kg  | 7.5 kg                               |          |           |          |           |          |           |          |           | *11 030  | *11 030   |          |           |          |           | *10 100  | *10 100   | 7.7 |
|                                                                                | 6.0 kg                               |          |           |          |           |          |           |          |           | *11 210  | 11 120    |          |           |          |           | *9 800   | 8 920     | 8.5 |
|                                                                                | 4.5 kg                               |          |           |          |           | *17 910  | *17 910   | *13 970  | *13 970   | *12 050  | 10 770    | *10 790  | 8 060     |          |           | *9 880   | 7 970     | 9.1 |
|                                                                                | 3.0 kg                               |          |           |          |           | *22 350  | 21 630    | *16 080  | 14 290    | *13 140  | 10 360    | *11 560  | 7 890     |          |           | *10 260  | 7 480     | 9.3 |
|                                                                                | 1.5 kg                               |          |           |          |           | *23 460  | 20 500    | *17 810  | 13 620    | *14 120  | 9 980     | *11 980  | 7 710     |          |           | *11 020  | 7 350     | 9.3 |
|                                                                                | 0 kg                                 |          |           |          |           | *25 640  | 20 120    | *18 700  | 13 240    | *14 700  | 9 740     | *12 080  | 7 600     |          |           | *12 000  | 7 550     | 9.0 |
|                                                                                | -1.5 kg                              |          |           | *18 310  | *18 310   | *24 800  | 20 120    | *18 600  | 13 130    | *14 580  | 9 660     |          |           |          |           | *12 370  | 8 180     | 8.5 |
|                                                                                | -3.0 kg                              |          |           | *30 440  | *30 440   | *22 650  | 20 390    | *17 280  | 13 250    | *13 140  | 9 810     |          |           |          |           | *12 660  | 9 560     | 7.7 |
|                                                                                | -4.5 kg                              |          |           |          |           | *18 460  | *18 460   | *13 700  | *13 700   |          |           |          |           |          |           | *12 500  | *12 500   | 6.3 |
| Boom<br>7.0 m<br>Arm<br>2.55 m<br>Shoe<br>600 mm<br>Counterweight<br>10 250 kg | 9.0 kg                               |          |           |          |           |          |           |          |           |          |           |          |           |          |           | *11 570  | *11 570   | 6.6 |
|                                                                                | 7.5 kg                               |          |           |          |           |          |           |          |           | *11 020  | *11 020   |          |           |          |           | *11 110  | 10 230    | 7.9 |
|                                                                                | 6.0 kg                               |          |           |          |           |          |           | *12 750  | *12 750   | *11 380  | 11 010    |          |           |          |           | *11 010  | 8 610     | 8.7 |
|                                                                                | 4.5 kg                               |          |           |          |           |          |           | *14 750  | 14 710    | *12 310  | 10 640    | *11 140  | 8 060     |          |           | *11 080  | 7 730     | 9.2 |
|                                                                                | 3.0 kg                               |          |           |          |           |          |           | *16 820  | 13 910    | *13 400  | 10 220    | *11 600  | 7 870     |          |           | *11 260  | 7 290     | 9.5 |
|                                                                                | 1.5 kg                               |          |           |          |           |          |           | *18 280  | 13 370    | *14 300  | 9 890     | *12 030  | 7 700     |          |           | *11 510  | 7 180     | 9.5 |
|                                                                                | 0 kg                                 |          |           |          |           |          |           | *18 810  | 13 130    | *14 770  | 9 690     | *12 140  | 7 610     |          |           | *11 800  | 7 390     | 9.2 |
|                                                                                | -1.5 kg                              |          |           |          |           | *23 870  | 20 210    | *18 440  | 13 110    | *14 570  | 9 660     |          |           |          |           | *12 090  | 8 000     | 8.7 |
|                                                                                | -3.0 kg                              |          |           | *25 920  | *25 920   | *21 740  | 20 500    | *17 060  | 13 280    | *13 260  | 9 830     |          |           |          |           | *12 260  | 9 300     | 7.9 |
|                                                                                | -4.5 kg                              |          |           |          |           | *17 920  | *17 920   | *13 820  | 13 740    |          |           |          |           |          |           | *11 950  | *11 950   | 6.6 |
| Boom<br>7.0 m<br>Arm<br>3.0 m<br>Shoe<br>600 mm<br>Counterweight<br>10 250 kg  | 9.0 kg                               |          |           |          |           |          |           |          |           |          |           |          |           |          |           | *10 550  | *10 550   | 7.2 |
|                                                                                | 7.5 kg                               |          |           |          |           |          |           |          |           | *10 170  | *10 170   |          |           |          |           | *10 260  | 9 420     | 8.3 |
|                                                                                | 6.0 kg                               |          |           |          |           |          |           |          |           | *10 690  | *10 690   | *10 230  | 8 200     |          |           | *10 030  | 8 010     | 9.1 |
|                                                                                | 4.5 kg                               |          |           |          |           | *18 580  | *18 580   | *13 870  | *13 870   | *11 680  | 10 650    | *10 560  | 8 040     |          |           | *10 110  | 7 230     | 9.6 |
|                                                                                | 3.0 kg                               |          |           |          |           |          |           | *16 040  | 13 960    | *12 850  | 10 200    | *11 130  | 7 820     |          |           | *10 480  | 6 830     | 9.8 |
|                                                                                | 1.5 kg                               |          |           |          |           |          |           | *17 710  | 13 320    | *13 870  | 9 820     | *11 670  | 7 610     |          |           | 10 800   | 6 710     | 9.8 |
|                                                                                | 0 kg                                 |          |           |          |           | *16 980  | *16 980   | *18 520  | 12 990    | *14 490  | 9 570     | *11 970  | 7 480     |          |           | 11 110   | 6 870     | 9.6 |
|                                                                                | -1.5 kg                              |          |           | *13 020  | *13 020   | *24 400  | 19 850    | *18 450  | 12 900    | *14 530  | 9 490     | *11 700  | 7 470     |          |           | *11 520  | 7 380     | 9.1 |
|                                                                                | -3.0 kg                              |          |           | *24 200  | *24 200   | *22 560  | 20 120    | *17 420  | 13 020    | *13 670  | 9 580     |          |           |          |           | *11 820  | 8 440     | 8.3 |
|                                                                                | -4.5 kg                              |          |           |          |           | *19 280  | *19 280   | *14 920  | 13 380    |          |           |          |           |          |           | *11 860  | 10 710    | 7.1 |

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 EC500F FIXED undercarriage

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    |           | 10.5 m   |           | Max.     |           | m    |
|--------------------------------------------------------------------------------|--------------------------------------|----------|-----------|----------|-----------|----------|-----------|----------|-----------|----------|-----------|----------|-----------|----------|-----------|----------|-----------|------|
|                                                                                |                                      | Along UC | Across UC | Along UC | Across UC | Along UC | Across UC | Along UC | Across UC | Along UC | Across UC | Along UC | Across UC | Along UC | Across UC | Along UC | Across UC |      |
| Boom<br>7.0 m<br>Arm<br>3.35 m<br>Shoe<br>600 mm<br>Counterweight<br>10 250 kg | 9.0 kg                               |          |           |          |           |          |           |          |           | *9 920   | *9 920    |          |           |          |           | *9 590   | *9 590    | 7.6  |
|                                                                                | 7.5 kg                               |          |           |          |           |          |           |          |           | *9 660   | *9 660    |          |           |          |           | *9 010   | 8 830     | 8.7  |
|                                                                                | 6.0 kg                               |          |           |          |           |          |           |          |           | *10 250  | *10 250   | *9 780   | 8 320     |          |           | *8 810   | 7 600     | 9.5  |
|                                                                                | 4.5 kg                               |          |           |          |           | *17 440  | *17 440   | *13 310  | *13 310   | *11 310  | 10 770    | *10 230  | 8 130     |          |           | *8 870   | 6 900     | 9.9  |
|                                                                                | 3.0 kg                               |          |           |          |           | *22 110  | 21 280    | *15 560  | 14 160    | *12 540  | 10 300    | *10 880  | 7 880     |          |           | *9 180   | 6 530     | 10.2 |
|                                                                                | 1.5 kg                               |          |           |          |           | *14 660  | *14 660   | *17 400  | 13 460    | *13 650  | 9 890     | *11 510  | 7 650     |          |           | *9 770   | 6 420     | 10.2 |
|                                                                                | 0 kg                                 |          |           |          |           | *18 080  | *18 080   | *18 420  | 13 060    | *14 400  | 9 620     | *11 910  | 7 490     |          |           | 10 580   | 6 550     | 9.9  |
|                                                                                | -1.5 kg                              |          |           | *13 060  | *13 060   | *24 870  | 19 840    | *18 570  | 12 920    | *14 590  | 9 490     | *11 860  | 7 440     |          |           | *11 100  | 7 000     | 9.4  |
|                                                                                | -3.0 kg                              |          |           | *22 320  | *22 320   | *23 300  | 20 050    | *17 790  | 12 990    | *13 990  | 9 540     |          |           |          |           | *11 440  | 7 910     | 8.7  |
|                                                                                | -4.5 kg                              |          |           | *27 100  | *27 100   | *20 380  | *20 380   | *15 720  | 13 280    | *11 750  | 9 840     |          |           |          |           | *11 610  | 9 770     | 7.5  |
| Boom<br>7.0 m<br>Arm<br>3.9 m<br>Shoe<br>600 mm<br>Counterweight<br>10 250 kg  | 9.0 kg                               |          |           |          |           |          |           |          |           |          |           |          |           |          |           | *7 670   | *7 670    | 8.3  |
|                                                                                | 7.5 kg                               |          |           |          |           |          |           |          |           |          |           | *8 950   | 8 540     |          |           | *7 250   | *7 250    | 9.3  |
|                                                                                | 6.0 kg                               |          |           |          |           |          |           |          |           | *9 500   | *9 500    | *9 100   | 8 440     |          |           | *7 110   | 7 010     | 10.0 |
|                                                                                | 4.5 kg                               |          |           |          |           |          |           | *12 290  | *12 290   | *10 610  | *10 610   | *9 660   | 8 210     |          |           | *7 170   | 6 400     | 10.4 |
|                                                                                | 3.0 kg                               |          |           |          |           | *20 310  | *20 310   | *14 630  | 14 380    | *11 920  | 10 410    | *10 400  | 7 930     | *8 970   | 6 230     | *7 410   | 6 070     | 10.7 |
|                                                                                | 1.5 kg                               |          |           |          |           | *19 980  | *19 980   | *16 690  | 13 590    | *13 150  | 9 950     | *11 130  | 7 670     | *9 590   | 6 100     | *7 840   | 5 960     | 10.7 |
|                                                                                | 0 kg                                 |          |           |          |           | *19 930  | 19 820    | *18 020  | 13 080    | *14 070  | 9 610     | *11 680  | 7 460     |          |           | *8 540   | 6 060     | 10.4 |
|                                                                                | -1.5 kg                              | *9 160   | *9 160    | *13 080  | *13 080   | *25 070  | 19 670    | *18 500  | 12 850    | *14 490  | 9 430     | *11 860  | 7 360     |          |           | *9 660   | 6 420     | 10.0 |
|                                                                                | -3.0 kg                              | *15 370  | *15 370   | *20 220  | *20 220   | *24 050  | 19 790    | *18 090  | 12 840    | *14 220  | 9 410     | *11 340  | 7 400     |          |           | *10 820  | 7 140     | 9.3  |
|                                                                                | -4.5 kg                              |          |           | *29 520  | *29 520   | *21 700  | 20 140    | *16 580  | 13 040    | *12 840  | 9 590     |          |           |          |           | *11 130  | 8 560     | 8.2  |
| Boom<br>7.4 m<br>Arm<br>4.3 m<br>Shoe<br>600 mm<br>Counterweight<br>10 250 kg  | -6.0 kg                              |          |           |          |           | *17 340  | *17 340   | *13 010  | *13 010   |          |           |          |           |          |           | *11 070  | *11 070   | 6.7  |
|                                                                                | 9.0 kg                               |          |           |          |           |          |           |          |           |          |           | *8 200   | *8 200    |          |           | *8 260   | *8 260    | 8.8  |
|                                                                                | 7.5 kg                               |          |           |          |           |          |           |          |           |          |           |          |           |          |           | *8 230   | 7 330     | 9.8  |
|                                                                                | 6.0 kg                               |          |           |          |           |          |           |          |           |          |           | *8 570   | 8 380     |          |           | *8 310   | 6 420     | 10.5 |
|                                                                                | 4.5 kg                               |          |           |          |           |          |           | *12 090  | *12 090   | *10 280  | *10 280   | *9 200   | 8 090     | *8 570   | 6 260     | *8 460   | 5 860     | 10.9 |
|                                                                                | 3.0 kg                               |          |           |          |           | *20 090  | *20 090   | *14 360  | 14 070    | *11 570  | 10 180    | *9 960   | 7 750     | *8 970   | 6 080     | *8 690   | 5 540     | 11.1 |
|                                                                                | 1.5 kg                               |          |           |          |           | *18 350  | *18 350   | *16 310  | 13 180    | *12 760  | 9 660     | *10 690  | 7 440     | *9 370   | 5 900     | 8 840    | 5 410     | 11.1 |
|                                                                                | 0 kg                                 |          |           |          |           | *18 050  | *18 050   | *17 550  | 12 610    | *13 640  | 9 270     | *11 250  | 7 190     | 9 480    | 5 770     | 8 990    | 5 470     | 10.9 |
|                                                                                | -1.5 kg                              |          |           | *12 220  | *12 220   | *22 070  | 18 920    | *17 980  | 12 340    | *14 050  | 9 050     | *11 490  | 7 040     |          |           | 9 460    | 5 730     | 10.5 |
|                                                                                | -3.0 kg                              | *14 210  | *14 210   | *18 130  | *18 130   | *23 370  | 19 030    | *17 620  | 12 310    | *13 880  | 8 990     | *11 250  | 7 020     |          |           | *10 070  | 6 300     | 9.8  |
|                                                                                | -4.5 kg                              |          |           | *25 410  | *25 410   | *21 280  | 19 350    | *16 360  | 12 470    | *12 910  | 9 110     |          |           |          |           | *10 470  | 7 400     | 8.8  |
|                                                                                | -6.0 kg                              |          |           |          |           | *17 750  | *17 750   | *13 770  | 12 870    |          |           |          |           |          |           | *10 730  | 9 710     | 7.4  |

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 EC500F RETRACTABLE undercarriage

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    |           | 10.5 m   |           | Max.     |           | m   |
|--------------------------------------------------------------------------------|--------------------------------------|----------|-----------|----------|-----------|----------|-----------|----------|-----------|----------|-----------|----------|-----------|----------|-----------|----------|-----------|-----|
|                                                                                |                                      | Along UC | Across UC | Along UC | Across UC | Along UC | Across UC | Along UC | Across UC | Along UC | Across UC | Along UC | Across UC | Along UC | Across UC | Along UC | Across UC |     |
| Boom<br>6.5 m<br>Arm<br>2.55 m<br>Shoe<br>600 mm<br>Counterweight<br>10 250 kg | 7.5 kg                               |          |           |          |           |          |           |          |           |          |           |          |           |          |           | *11 880  | *11 880   | 7.3 |
|                                                                                | 6.0 kg                               |          |           |          |           |          |           | *13 180  | *13 180   | *12 020  | 11 870    |          |           |          |           | *11 450  | 10 230    | 8.2 |
|                                                                                | 4.5 kg                               |          |           |          |           | *19 840  | *19 840   | *15 000  | *15 000   | *12 780  | 11 550    |          |           |          |           | *11 490  | 9 140     | 8.7 |
|                                                                                | 3.0 kg                               |          |           |          |           |          |           | *17 000  | 15 350    | *13 770  | 11 170    |          |           |          |           | *11 930  | 8 620     | 9.0 |
|                                                                                | 1.5 kg                               |          |           |          |           | *16 620  | *16 620   | *18 460  | 14 780    | *14 600  | 10 850    |          |           |          |           | *12 400  | 8 520     | 8.9 |
|                                                                                | 0 kg                                 |          |           |          |           | *24 930  | 22 240    | *18 990  | 14 500    | *14 940  | 10 670    |          |           |          |           | *12 700  | 8 830     | 8.6 |
|                                                                                | -1.5 kg                              |          |           | *18 820  | *18 820   | *24 210  | 22 360    | *18 470  | 14 480    | *14 420  | 10 660    |          |           |          |           | *12 980  | 9 720     | 8.1 |
|                                                                                | -3.0 kg                              |          |           | *27 570  | *27 570   | *21 460  | *21 460   | *16 530  | 14 700    |          |           |          |           |          |           | *13 040  | 11 670    | 7.1 |
| Boom<br>6.5 m<br>Arm<br>3.0 m<br>Shoe<br>600 mm<br>Counterweight<br>10 250 kg  | 7.5 kg                               |          |           |          |           |          |           |          |           | *11 010  | *11 010   |          |           |          |           | *10 060  | *10 060   | 7.8 |
|                                                                                | 6.0 kg                               |          |           |          |           |          |           |          |           | *11 260  | *11 260   |          |           |          |           | *9 800   | 9 510     | 8.6 |
|                                                                                | 4.5 kg                               |          |           |          |           | *18 240  | *18 240   | *14 120  | *14 120   | *12 130  | 11 580    | *11 170  | 8 690     |          |           | *9 900   | 8 550     | 9.1 |
|                                                                                | 3.0 kg                               |          |           |          |           | *22 630  | *22 630   | *16 220  | 15 400    | *13 220  | 11 150    | *11 590  | 8 510     |          |           | *10 310  | 8 070     | 9.3 |
|                                                                                | 1.5 kg                               |          |           |          |           | *23 360  | 22 370    | *17 900  | 14 750    | *14 180  | 10 780    | *12 000  | 8 330     |          |           | *11 090  | 7 960     | 9.3 |
|                                                                                | 0 kg                                 |          |           |          |           | *25 620  | 22 020    | *18 730  | 14 380    | *14 710  | 10 540    | *12 060  | 8 230     |          |           | *12 030  | 8 210     | 9.0 |
|                                                                                | -1.5 kg                              |          |           | *19 120  | *19 120   | *24 690  | 22 050    | *18 550  | 14 280    | *14 530  | 10 480    |          |           |          |           | *12 400  | 8 940     | 8.5 |
|                                                                                | -3.0 kg                              |          |           | *30 100  | *30 100   | *22 430  | 22 340    | *17 120  | 14 430    | *12 930  | 10 660    |          |           |          |           | *12 670  | 10 510    | 7.6 |
| Boom<br>7.0 m<br>Arm<br>2.55 m<br>Shoe<br>600 mm<br>Counterweight<br>10 250 kg | -4.5 kg                              |          |           |          |           | *18 030  | *18 030   | *13 240  | *13 240   |          |           |          |           |          |           | *12 450  | *12 450   | 6.2 |
|                                                                                | 9.0 kg                               |          |           |          |           |          |           |          |           |          |           |          |           |          |           | *11 510  | *11 510   | 6.8 |
|                                                                                | 7.5 kg                               |          |           |          |           |          |           |          |           | *11 010  | *11 010   |          |           |          |           | *11 100  | 10 830    | 8.0 |
|                                                                                | 6.0 kg                               |          |           |          |           |          |           | *12 880  | *12 880   | *11 430  | *11 430   |          |           |          |           | *11 010  | 9 180     | 8.8 |
|                                                                                | 4.5 kg                               |          |           |          |           |          |           | *14 900  | *14 900   | *12 390  | 11 430    | *11 170  | 8 680     |          |           | *11 090  | 8 300     | 9.3 |
|                                                                                | 3.0 kg                               |          |           |          |           |          |           | *16 960  | 15 020    | *13 470  | 11 020    | *11 630  | 8 490     |          |           | *11 280  | 7 860     | 9.5 |
|                                                                                | 1.5 kg                               |          |           |          |           |          |           | *18 350  | 14 490    | *14 350  | 10 690    | *12 050  | 8 320     |          |           | *11 530  | 7 780     | 9.5 |
|                                                                                | 0 kg                                 |          |           |          |           | *13 970  | *13 970   | *18 810  | 14 260    | *14 780  | 10 500    | *12 130  | 8 240     |          |           | *11 830  | 8 030     | 9.2 |
| Boom<br>7.0 m<br>Arm<br>3.0 m<br>Shoe<br>600 mm<br>Counterweight<br>10 250 kg  | -1.5 kg                              |          |           |          |           | *23 750  | 22 130    | *18 380  | 14 260    | *14 530  | 10 480    |          |           |          |           | *12 110  | 8 740     | 8.6 |
|                                                                                | -3.0 kg                              |          |           | *26 810  | *26 810   | *21 530  | *21 530   | *16 910  | 14 450    | *13 070  | 10 670    |          |           |          |           | *12 260  | 10 210    | 7.8 |
|                                                                                | -4.5 kg                              |          |           |          |           | *17 530  | *17 530   | *13 420  | *13 420   |          |           |          |           |          |           | *11 880  | *11 880   | 6.5 |
|                                                                                | 9.0 kg                               |          |           |          |           |          |           |          |           |          |           |          |           |          |           | *10 510  | *10 510   | 7.3 |
|                                                                                | 7.5 kg                               |          |           |          |           |          |           |          |           | *10 180  | *10 180   |          |           |          |           | *10 220  | 9 990     | 8.4 |
|                                                                                | 6.0 kg                               |          |           |          |           |          |           |          |           | *10 750  | *10 750   | *10 230  | 8 830     |          |           | *10 020  | 8 560     | 9.2 |
|                                                                                | 4.5 kg                               |          |           |          |           | *18 940  | *18 940   | *14 030  | *14 030   | *11 770  | 11 440    | *10 590  | 8 670     |          |           | *10 130  | 7 770     | 9.6 |
|                                                                                | 3.0 kg                               |          |           |          |           |          |           | *16 190  | 15 070    | *12 930  | 10 990    | *11 170  | 8 440     |          |           | *10 530  | 7 370     | 9.8 |
| Boom<br>7.0 m<br>Arm<br>3.0 m<br>Shoe<br>600 mm<br>Counterweight<br>10 250 kg  | 1.5 kg                               |          |           |          |           |          |           | *17 800  | 14 440    | *13 930  | 10 610    | *11 710  | 8 230     |          |           | *10 860  | 7 270     | 9.8 |
|                                                                                | 0 kg                                 |          |           |          |           | *17 570  | *17 570   | *18 550  | 14 120    | *14 520  | 10 370    | *11 980  | 8 100     |          |           | *11 190  | 7 480     | 9.6 |
|                                                                                | -1.5 kg                              |          |           | *13 840  | *13 840   | *24 300  | 21 770    | *18 410  | 14 050    | *14 500  | 10 300    | *11 630  | 8 110     |          |           | *11 540  | 8 060     | 9.0 |
|                                                                                | -3.0 kg                              |          |           | *25 090  | *25 090   | *22 380  | 22 050    | *17 300  | 14 190    | *13 550  | 10 410    |          |           |          |           | *11 830  | 9 270     | 8.2 |
|                                                                                | -4.5 kg                              |          |           |          |           | *18 950  | *18 950   | *14 640  | 14 580    |          |           |          |           |          |           | *11 840  | *11 840   | 7.0 |

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 EC500F RETRACTABLE undercarriage

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    |           | 10.5 m   |           | Max.     |           | m    |
|--------------------------------------------------------------------------------|--------------------------------------|----------|-----------|----------|-----------|----------|-----------|----------|-----------|----------|-----------|----------|-----------|----------|-----------|----------|-----------|------|
|                                                                                |                                      | Along UC | Across UC | Along UC | Across UC | Along UC | Across UC | Along UC | Across UC | Along UC | Across UC | Along UC | Across UC | Along UC | Across UC | Along UC | Across UC |      |
| Boom<br>7.0 m<br>Arm<br>3.35 m<br>Shoe<br>600 mm<br>Counterweight<br>10 250 kg | 9.0 kg                               |          |           |          |           |          |           |          |           | *9 850   | *9 850    |          |           |          |           | *9 530   | *9 530    | 7.7  |
|                                                                                | 7.5 kg                               |          |           |          |           |          |           |          |           | *9 680   | *9 680    |          |           |          |           | *8 980   | *8 980    | 8.8  |
|                                                                                | 6.0 kg                               |          |           |          |           |          |           |          |           | *10 320  | *10 320   | *9 800   | 8 940     |          |           | *8 810   | 8 120     | 9.5  |
|                                                                                | 4.5 kg                               |          |           |          |           | *17 800  | *17 800   | *13 470  | *13 470   | *11 390  | *11 390   | *10 280  | 8 750     |          |           | *8 890   | 7 410     | 10.0 |
|                                                                                | 3.0 kg                               |          |           |          |           | *21 270  | *21 270   | *15 720  | 15 260    | *12 630  | 11 090    | *10 930  | 8 500     |          |           | *9 220   | 7 050     | 10.2 |
|                                                                                | 1.5 kg                               |          |           |          |           | *14 690  | *14 690   | *17 500  | 14 580    | *13 720  | 10 690    | *11 550  | 8 270     |          |           | *9 820   | 6 960     | 10.1 |
|                                                                                | 0 kg                                 |          |           |          |           | *18 520  | *18 520   | *18 460  | 14 190    | *14 430  | 10 420    | *11 930  | 8 110     |          |           | *10 770  | 7 130     | 9.9  |
|                                                                                | -1.5 kg                              |          |           | *13 710  | *13 710   | *24 790  | 21 750    | *18 550  | 14 070    | *14 570  | 10 300    | *11 820  | 8 070     |          |           | *11 130  | 7 640     | 9.4  |
|                                                                                | -3.0 kg                              |          |           | *23 070  | *23 070   | *23 140  | 21 980    | *17 690  | 14 150    | *13 900  | 10 370    |          |           |          |           | *11 460  | 8 670     | 8.6  |
|                                                                                | -4.5 kg                              |          |           | *26 660  | *26 660   | *20 090  | *20 090   | *15 490  | 14 460    |          |           |          |           |          |           | *11 600  | 10 810    | 7.4  |
| Boom<br>7.0 m<br>Arm<br>3.9 m<br>Shoe<br>600 mm<br>Counterweight<br>10 250 kg  | 9.0 kg                               |          |           |          |           |          |           |          |           |          |           |          |           |          |           | *7 620   | *7 620    | 8.4  |
|                                                                                | 7.5 kg                               |          |           |          |           |          |           |          |           |          |           | *8 940   | *8 940    |          |           | *7 230   | *7 230    | 9.4  |
|                                                                                | 6.0 kg                               |          |           |          |           |          |           |          |           | *9 570   | *9 570    | *9 130   | 9 070     |          |           | *7 110   | *7 110    | 10.0 |
|                                                                                | 4.5 kg                               |          |           |          |           |          |           | *12 460  | *12 460   | *10 700  | *10 700   | *9 710   | 8 830     |          |           | *7 180   | 6 890     | 10.5 |
|                                                                                | 3.0 kg                               |          |           |          |           | *20 630  | *20 630   | *14 800  | *14 800   | *12 010  | 11 200    | *10 450  | 8 550     | *9 070   | 6 730     | *7 430   | 6 560     | 10.7 |
|                                                                                | 1.5 kg                               |          |           |          |           | *19 660  | *19 660   | *16 820  | 14 700    | *13 240  | 10 740    | *11 170  | 8 280     | *9 560   | 6 600     | *7 880   | 6 470     | 10.6 |
|                                                                                | 0 kg                                 |          |           |          |           | *20 170  | *20 170   | *18 090  | 14 200    | *14 120  | 10 410    | *11 710  | 8 080     |          |           | *8 610   | 6 600     | 10.4 |
|                                                                                | -1.5 kg                              | *9 620   | *9 620    | *13 560  | *13 560   | *25 110  | 21 570    | *18 500  | 13 990    | *14 490  | 10 240    | *11 850  | 7 990     |          |           | *9 780   | 7 010     | 9.9  |
|                                                                                | -3.0 kg                              | *15 850  | *15 850   | *20 800  | *20 800   | *23 920  | 21 710    | *18 030  | 13 990    | *14 170  | 10 230    | *11 260  | 8 040     |          |           | *10 850  | 7 830     | 9.2  |
|                                                                                | -4.5 kg                              |          |           | *29 530  | *29 530   | *21 460  | *21 460   | *16 410  | 14 220    | *12 670  | 10 430    |          |           |          |           | *11 140  | 9 440     | 8.1  |
|                                                                                | -6.0 kg                              |          |           |          |           | *16 890  | *16 890   | *12 580  | *12 580   |          |           |          |           |          |           | *11 030  | *11 030   | 6.5  |
| Boom<br>7.4 m<br>Arm<br>4.3 m<br>Shoe<br>600 mm<br>Counterweight<br>10 250 kg  | 9.0 kg                               |          |           |          |           |          |           |          |           |          |           |          |           |          |           | *8 260   | *8 260    | 8.9  |
|                                                                                | 7.5 kg                               |          |           |          |           |          |           |          |           |          |           |          |           |          |           | *8 230   | 7 810     | 9.9  |
|                                                                                | 6.0 kg                               |          |           |          |           |          |           |          |           | *9 220   | *9 220    | *8 610   | *8 610    | *8 320   | 6 910     | *8 320   | 6 880     | 10.5 |
|                                                                                | 4.5 kg                               |          |           |          |           |          |           | *12 260  | *12 260   | *10 370  | *10 370   | *9 260   | 8 700     | *8 590   | 6 770     | *8 480   | 6 320     | 10.9 |
|                                                                                | 3.0 kg                               |          |           |          |           | *20 390  | *20 390   | *14 520  | *14 520   | *11 660  | 10 960    | *10 020  | 8 360     | *9 000   | 6 590     | *8 700   | 6 000     | 11.1 |
|                                                                                | 1.5 kg                               |          |           |          |           | *18 060  | *18 060   | *16 430  | 14 280    | *12 840  | 10 440    | *10 740  | 8 050     | *9 390   | 6 410     | *8 980   | 5 890     | 11.1 |
|                                                                                | 0 kg                                 |          |           |          |           | *18 240  | *18 240   | *17 610  | 13 730    | *13 680  | 10 060    | *11 280  | 7 810     | *9 650   | 6 270     | 9 250    | 5 970     | 10.9 |
|                                                                                | -1.5 kg                              |          |           | *12 620  | *12 620   | *22 470  | 20 810    | *17 980  | 13 470    | *14 060  | 9 850     | *11 500  | 7 670     |          |           | *9 690   | 6 280     | 10.4 |
|                                                                                | -3.0 kg                              | *14 610  | *14 610   | *18 610  | *18 610   | *23 250  | 20 930    | *17 560  | 13 460    | *13 840  | 9 810     | *11 200  | 7 660     |          |           | *10 100  | 6 930     | 9.7  |
|                                                                                | -4.5 kg                              |          |           | *26 030  | *26 030   | *21 080  | *21 080   | *16 220  | 13 640    | *12 790  | 9 940     |          |           |          |           | *10 500  | 8 170     | 8.7  |
|                                                                                | -6.0 kg                              |          |           |          |           | *17 410  | *17 410   | *13 500  | *13 500   |          |           |          |           |          |           | *10 730  | *10 730   | 7.2  |

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, 4 stroke diesel engine with water cooling, direct injection and charged air cooler that meets EU StageV requirements | • |
| Dual cooling fan system including electric driven for CAC                                                                          | • |
| Cyclone pre-cleaner                                                                                                                | • |
| Fuel shut off valve                                                                                                                | • |
| Engine block heater                                                                                                                | o |
| Coolant heater by diesel                                                                                                           | o |
| Reversible fan drive                                                                                                               | o |
| Tropical cooling                                                                                                                   | 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 |
| Regeneration control                                                                                                               | o |
| Oil sampling for engine oil                                                                                                        | o |

### Electric / Electronic control system

|                                                    |   |
|----------------------------------------------------|---|
| Anti-theft with code lock system                   | • |
| Alternator, 180 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 combined muffler hood                            | • |
| Handrail & Guardrail, fixed/foldable                      | • |
| Inner rail                                                | o |
| Cabin entrance, fixed/foldable                            | o |
| Walk way, fixed/foldable                                  | o |
| SIPS (Side Impact Protection Structure)                   | o |
| HD Side door & hood with screen                           | o |
| Without lower structure                                   | o |
| Lower frame, Retractable                                  | o |
| Link 600/700/800/900 mm triple grouser shoe               | o |
| Link 600 mm triple grouser shoe HD                        | o |
| Link 600 mm doublegrouser shoe                            | o |
| Full track guard                                          | o |
| Track tensioner, sand protect                             | o |
| Removable counterweight                                   | o |
| Counterweight for Long reach                              | o |

## STANDARD AND OPTIONAL EQUIPMENT

• = Standard / o = Optional

### Hydraulic system

|                                                                             |   |
|-----------------------------------------------------------------------------|---|
| EH (Electro-Hydraulic) control system                                       | • |
| New work mode with 10 steps                                                 | • |
| 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 |
| Provision, Magnet application                                               | o |
| Dust suppression system                                                     | 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                                           | • |
| Tilttable 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, Heated                                   | o |
| Cabin large mirror                                           | 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 |



## STANDARD AND OPTIONAL EQUIPMENT

• = Standard / o = Optional

### Digging equipment

|                                                                      |   |
|----------------------------------------------------------------------|---|
| HD 7.0 m boom                                                        | • |
| ME 6.5 m boom / GP 7.4 m boom / Non-Boom                             | o |
| HD 3.35 m arm                                                        | • |
| ME 2.55 m arm / HD 3.0 m arm / GP 3.9 m arm / GP 4.3 m arm / Non-Arm | o |

### Machine control technology

|                                                     |   |
|-----------------------------------------------------|---|
| 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, Trimble Earthworks                      | 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 |

### Safety and security

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

### Service and maintenance

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

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













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CJD Equipment are in the industry for the long term and have the skills and knowledge to support you and your equipment. CJD Equipment takes great pride in being Volvo CE's first and only authorised partner in Australia for three decades. Together, we provide a full range of machinery ideally suited to Australia's unique landscapes and industry requirements. These products are fully supported through a nationwide network of branches, and carefully selected dealers and service agents, strategically positioned to ensure total support.

With fully equipped parts warehouses in every capital city, and dealers throughout major regional towns, we have the support network in place to ensure you're well supported, no matter where you or your machines are. Ongoing in-house training programs ensures our technicians' skills keep pace with the latest technology and product advances.

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