

Volvo Construction Equipment
Building Tomorrow



EC480E

Volvo Excavators 47.9-50.4 t / 105,540-111,180 lb 381 hp



E is for efficiency

Introducing the EC480E crawler excavator from Volvo – a powerful and efficient production machine designed to reduce fuel consumption and increase productivity. With advanced technology including Volvo's unique ECO mode and a new electro-hydraulic control system, the EC480E delivers fuel efficiency improvement.

Advanced hydraulics

The new electro-hydraulic system uses intelligent technology to control on-demand flow and reduce internal losses in the hydraulic circuit. This increases controllability, shortens cycle times and improves fuel efficiency – resulting in higher productivity and performance.



Automatic idling system

Engine speed is reduced to idle when the controls are inactive for a pre-set amount of time (between 3 and 20 seconds). This reduces fuel consumption and noise.

Auto engine shut down

To reduce fuel consumption, the engine will automatically switch off when the machine is inactive for a pre-set amount of time (five minutes is the default setting).

Work modes

Volvo's unique, integrated work mode system now includes the G4 mode for optimum fuel efficiency and machine performance. Operators can choose the best work mode for the task at hand – select from I (Idle), F (Fine), G (General), H (Heavy) and P (Power max).



Fuel consumption display

A gauge bar on the monitor measures both instantaneous fuel consumption and average fuel consumption. This allows machine owners and operators to monitor fuel usage on different job sites.





ECO MODE

Volvo's unique ECO mode optimizes the hydraulic system to reduce flow and pressure losses – resulting in improved fuel efficiency without any loss of performance in most operating conditions. ECO mode is automatically selected but can be switched off via the keypad.



HUMAN MACHINE INTERFACE (HMI)

All machine interfaces – including the joysticks, keypad and LCD monitor – are ergonomically positioned and designed for optimum control and efficiency. For operator convenience and ease of use, the number of switches has been significantly reduced.

Productivity at your fingertips

The EC480E has been expertly designed with both the machine owner and operator in mind. With ideally placed controls and switches and a user-friendly LCD monitor and keypad, the task at hand becomes easier and operators will work with increased efficiency – resulting in more productivity.

Keypad

The optimally positioned keypad allows the operator to easily navigate through the LCD monitor and activate machine functions in a safe and comfortable way. The functionality of the camera, air conditioning and lights can be customized via the hot key – enabling the operator to select and save desired configurations.



LCD monitor

The new, color, eight inch LCD monitor displays machine status information including fuel consumption data and service interval alerts – enabling increased uptime and high productivity. The user-friendly design is easy to read in any light conditions.



Shortcut switch

The windshield wipers, camera, audio mute or power max function can be assigned to a shortcut switch located on the joystick. This allows the operator to easily control the selected function by simply pressing a switch.



Seatbelt warning alarm

If the seatbelt is not fastened when the ignition key is turned, a sensor triggers an alarm which sounds for three seconds.

Bluetooth®

For added convenience, operators can now connect a Bluetooth device to the machine.

The source of productivity

Volvo puts customer needs at the heart of its design process. That's why the EC480E not only increases productivity with 5% faster cycle times, but also improves fuel efficiency and meets the latest Tier 4 Final engine emission legislation. Capitalize on high torque at low rpm and experience superior performance and reduced fuel consumption.

Volvo After Treatment System

During the fully automatic regeneration process, particulate matter in the Diesel Particulate Filter is oxidized at low exhaust temperatures via passive regeneration. Volvo uses Selective Catalytic Reduction technology where AdBlue®/Diesel Exhaust Fluid is heated to produce ammonia. This causes a chemical reaction which converts NOx to nitrogen and CO2 – both of which are naturally found in the air. Neither process interrupts machine operation, performance or productivity. ® = registered trademark of the Verband der Automobilindustrie e.V. (VDA)



Diesel-driven heater

The optional diesel-driven coolant heater helps to start the engine in low temperatures while simultaneously heating the cab. The heater can be set in advance to engage at a specific date and time.



Cooling fan

The hydraulically-driven, electronically controlled cooling fan regulates the temperature of the vital components. It automatically activates only when needed – reducing fuel consumption and noise. The optional reversible functionality – which blows air in the opposite direction – enables self-cleaning of the cooling units.





VOLVO ENGINE

Featuring proven, advanced technology and built on decades of experience, Volvo's robust D13 Tier 4 Final engine boasts more power while reducing both fuel consumption and emissions and delivering superior quality, reliability and durability.



REINFORCED UNDERCARRIAGE

With a strong three-piece undercarriage and a high strength tensile steel X-shaped frame, Volvo excavators are built to withstand tough conditions. For superior durability, the undercarriage components are reinforced – ensuring long life and high uptime.

Reinforced quality

If you're looking for a strong and reliable excavator to handle tough conditions then look no further than the EC480E. Whether you're working on a quarry, in mass excavation or any other application, this robust, heavy-duty production machine has the quality and durability you need to work on demanding job sites.

Superstructure undercover

The heavy-duty superstructure undercover plates increase durability by providing additional protection to the underside of the machine in tough applications – preventing damage from rock and debris.



Doors and hinges

Volvo's durable design features a rigid side door with a robust handle and hinges for superior durability.



Robust design

The reinforced idler frame, track links and bottom rollers are built to withstand tough conditions for improved durability and reliability in demanding applications.



Upping your uptime

Maintaining and servicing construction equipment is essential in order to sustain maximum performance and productivity – but this shouldn't be a complicated or time consuming task. With large, wide opening compartment doors and grouped service points, Volvo makes maintenance easy. Increase your uptime with Volvo.

Service access

Grouped filters are quick and easy to access from ground level. To facilitate fast servicing, grouped greasing points are easily accessed with the machine in one position.



Anti-slip plates

Punched anti-slip plates provide superior grip and increased safety. The design facilitates easy cleaning.



Storage space

A large storage compartment provides a safe and convenient location for items including a toolbox and grease can.



Handrails

Handrails and full size guardrails fold-able provide safe and easy access to the cab and superstructure. The fold-able guardrail is to minimize transportation height when it is folded.



SINGLE MODULE COOLER

The radiator, charged air cooler and hydraulic oil cooler are situated side-by-side on a single layer to maximize efficiency, reduce blockages and aid cleaning. The system is easily accessed from ground level by simply opening the side door.



ATTACHMENTS

Volvo's durable attachments have been purposebuilt to work in perfect harmony with Volvo machines, forming one solid, reliable unit. With functions and properties ideally matched, Volvo attachments are an integrated part of the excavator for which they're intended – delivering maximum productivity.

The perfect match

Maximize your productivity and profitability with the EC480E and Volvo's durable range of attachments. Increase your versatility, access more applications and effectively perform a variety of tasks – all while experiencing faster cycle times and excellent control. Get the most out of your excavator with Volvo.

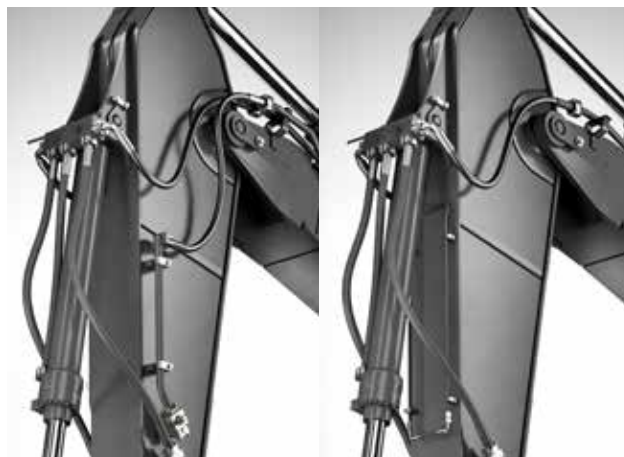
Bucket range

Volvo's general purpose buckets are the perfect tool for digging and re-handling in soft to medium conditions. Heavy-duty buckets are intended for productive digging in compact materials. Both provide maximum productivity and long life.



Optional auxiliary hydraulics

Factory fitted breaker and shear piping (X1) as well as tilt and rotator piping (X3) increase versatility by enabling a wide range of additional attachments to be used.



S-type quick coupler

The Volvo S-type quick coupler is designed to work with Volvo attachments – delivering ultimate compatibility and unrivalled performance.



Universal quick coupler

The Volvo universal quick coupler offers maximum versatility. It picks up a variety of attachments from various manufacturers and meets new safety regulations.



Genuine Volvo wear parts

Volvo offers a selection of economic, replaceable wear parts including high quality teeth, segments, side cutters, adapters and shrouds to protect the bucket and ensure long life.

Do more

Safe access

Punched anti-slip plates, handrails and full size fold-able guardrails provide safe and easy access to the machine.

HUMAN MACHINE INTERFACE (HMI)

All machine interfaces are ergonomically positioned and designed for optimum control and efficiency.

Advanced hydraulics

New electro-hydraulic system and main control valve use intelligent technology to control on-demand flow for high performance and efficiency.

Universal quick coupler

The Volvo quick coupler offers maximum versatility, picking up a wide variety of attachments.

ATTACHMENTS

Volvo's durable attachments have been purpose-built to deliver maximum productivity and long service life in combination with Volvo machines.

REINFORCED UNDERCARRIAGE

The undercarriage components are reinforced to ensure long life, high uptime and ultimate durability in tough conditions.

Volvo After Treatment System

The automatic regeneration process takes place without interrupting machine operation, performance or productivity.



Diesel Exhaust Fluid (DEF)

Volvo offers a total DEF solution that is quality assured, cost efficient and easily accessible. Contact your Volvo dealer for more information.

LCD monitor

The new, eight inch LCD monitor clearly displays machine status information for easy operation and increased productivity.

ECO MODE

Volvo's unique ECO mode improves fuel efficiency without any loss of performance in most operating conditions.

Service access

Grouped filters are quick and easy to access from ground level via large, wide compartment doors.

SINGLE MODULE COOLER

The radiator, charged air cooler and hydraulic oil cooler are situated side-by-side on a single layer to maximize efficiency, reduce blockages and aid cleaning.

VOLVO ENGINE

Volvo's D13 Tier 4 Final engine boasts more power while reducing both fuel consumption and emissions and delivering superior quality, reliability and durability.

Adding value to your business

Being a Volvo customer means having a complete set of services at your fingertips. Volvo can offer you a long-term partnership, protect your revenue and provide a full range of customer solutions using high quality parts, delivered by passionate people. Volvo is committed to increasing the positive return on your investment and maximising uptime.

Complete Solutions

Volvo has the right solution for you. So why not let us provide all your needs throughout the whole life cycle of your machine? By

listening to your requirements, we can reduce your total cost of ownership and increase your revenue.



Genuine Volvo Parts

Our attention to detail is what makes us stand out. This proven concept acts as a solid investment in your machine's future. Parts are extensively tested and approved because every part is vital for uptime and performance. Only by using Genuine Volvo Parts, can you be sure that your machine retains the renowned Volvo quality.

Service Network

In order to respond to your needs faster, a Volvo expert is on their way to your job site from one of our Volvo facilities. With our extensive infrastructure of technicians, workshops and dealers, Volvo has a comprehensive network to fully support you using local knowledge and global experience.





CUSTOMER SUPPORT AGREEMENTS

The range of Customer Support Agreements offer preventive maintenance, total repairs and a number of uptime services. Volvo uses the latest technology to monitor machine operation and status, giving you advice to increase your profitability. By having a Customer Support Agreement you are in control of your service costs.

Volvo EC480E in detail

Engine

The latest generation, Volvo engine Tier 4f emissions certified diesel engine fully meets the demands of the latest, emissions regulations. Featuring Volvo Advanced Combustion Technology (V-ACT), it is designed to deliver superior performance and fuel efficiency. The engine uses precise, highpressure fuel injectors, turbo charger and air-to-air intercooler, and electronic engine controls to optimize machine performance.

Air Filter: 3-stage with precleaner.

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

Engine	Volvo	D13J
Max power at	r/min (r/s)	1,800 (30)
Net, ISO 9249/SAE J1349	kW (hp)	283 (380)
Gross, ISO 14396/SAE J1995	kW (hp)	284 (381)
Max torque	Nm (ft lbf)	1,928 (1,422)
at engine speed	r/min (r/s)	1,350 (22.5)
No. of cylinders		6
Displacement	l (in³)	12.8 (781)
Bore	mm (in)	131 (5.16)
Stroke	mm (in)	158 (6.22)

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	28/80

Swing system

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

Max. slew speed	r/min	9.3
Max. slew torque	kNm (ft lbf)	166.3 (122,656)

Travel System

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

Max. drawbar pull	kN (lbf)	333.4 (74,951)
Max. travel speed (low)	km/h (mi/h)	3.2 (2)
Max. travel speed (high)	km/h (mi/h)	5.2 (3.2)
Gradeability	°	35

Undercarriage

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

Track shoes		2 x 52
Link pitch	mm (in)	215.9 (8.5)
Shoe width, triple grouser	mm (in)	600 / 600HD* / 700 / 800 / 900 (24 / 24HD* / 28 / 32 / 36)
Shoe width, double grouser	mm (in)	600 (24)
Bottom rollers		2 x 9
Top rollers		2 x 2
Top rollers (retractable)		2 x 3

* Not HD shoe but HD track link

Sound Level

Sound pressure level in cab according to ISO 6396		
L _{pA}	dB	71
External sound level according to ISO 6395 and EU Noise Directive 2000/14/EC		
L _{WA}	dB	106

Hydraulic system

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

The following important functions are included in the system for optimum performance:

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

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

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

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

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

Power boost: All digging and lifting forces are increased.

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

Main pump, Type 2 x variable displacement axial piston pumps

Maximum flow	l/min (gal/min)	2 x 376 (2 x 99.3)
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Pilot pump, Type Gear pump

Maximum flow	l/min (gal/min)	32 (8.45)
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Relief value setting pressure

Implement	MPa (psi)	32.4/35.3 (4,699/5,120)
Travel circuit	MPa (psi)	32.4 (4,700)
Slew circuit	MPa (psi)	25.8 (3,742)
Pilot circuit	MPa (psi)	3.9 (566)

Hydraulic Motors

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

Hydraulic Cylinders

Mono boom		2.00
Bore x Stroke	ø x mm (ø x in)	165 x 1 590 (6.5 x 62.6)
Arm		1.00
Bore x Stroke	ø x mm (ø x in)	190 x 1 850 (7.5 x 72.8)
Bucket		1.00
Bore x Stroke	ø x mm (ø x in)	165 x 1 335 (6.5 x 52.6)
ME Bucket		1.00
Bore x Stroke	ø x mm (ø x in)	175 x 1 335 (6.9 x 52.6)

Service Refill

Fuel tank	l (gal)	680 (179.6)
DEF/AdBlue® tank	l (gal)	62.5 (16.5)
Hydraulic system, total	l (gal)	525 (138.7)
Hydraulic tank	l (gal)	270 (71.3)
Engine oil	l (gal)	42 (11.1)
Engine coolant	l (gal)	60 (15.8)
Slew reduction unit	l (gal)	2 x 6 (2 x 1.6)
Travel reduction unit	l (gal)	2 x 7.5 (2 x 2)

Cab

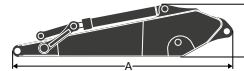
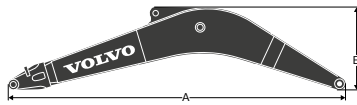
The operator's cab has easy access via a wide door opening. The cab is supported on hydraulic dampening mounts to reduce shock and vibration levels. These along with sound absorbing lining provide low noise levels. The cab has excellent all-round visibility. The front windshield can easily slide up into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

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

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

Refrigerant of the type R134a is used when this machine is equipped with air conditioning. Contains fluorinated greenhouse gas R134a, Global Warming Potential 1430 CO₂-eq.

Specifications

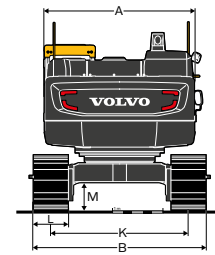
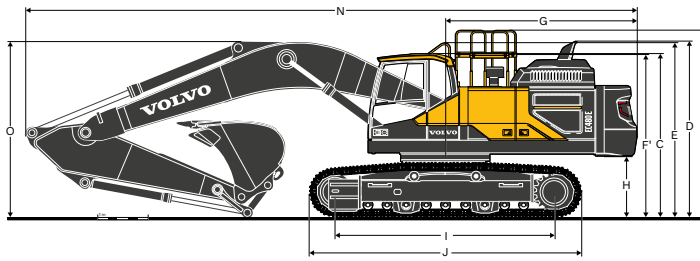


DIMENSIONS

Boom								Arm							
Description	Unit							Description	Unit						
Boom	m in	6.5 ME	21'4"	7.0	23'	9.0	30'	Arm	m in	2.55 ME	8'4"	3.0	9'10"	3.35	11'
A	mm in	6 750	22'2"	7 250	23'9"	9 270	30'5"	A	mm in	3 770	12'4"	4 260	13'12"	4 590	15'1"
B	mm in	2 000	6'7"	1 840	6'0"	1 950	6'5"	B	mm in	1 235	4'1"	1 270	4'2"	1 235	4'1"
Width	mm in	960	3'2"	960	3'2"	960	3'2"	Width	mm in	600	2'	600	1'12"	600	2'
Weight	kg lb	4 370	9,630	4 400	9,710	4 725	10,420	Weight	kg lb	2 415	5,330	2 640	5,820	2 665	5,870

* Includes arm cylinder, piping and pin

* Includes bucket cylinder, linkage and pin



DIMENSIONS

Description	Unit	EC480EL fixed undercarriage														EC480ELR **	
Boom	m, ft in	6.5 ME, 21'4"				7.0, 23'								9.0, 30'			
Arm	m ft in	2.55	8'4"	3.0	9'10"	2.55	8'4"	3.0	9'10"	3.35	11'	3.9	12'10"	4.8	15'9"	6.0	19'8"
A. Overall width of upper structure	mm ft in	2 990	9'10"	2 990	9'10"	2 990	9'10"	2 990	9'10"	2 990	9'10"	2 990	9'10"	2 990	9'10"	2 990	9'10"
B. Overall width (retracted)	mm ft in	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Overall width (extended)	mm ft in	3 640	11'11"	3 640	11'11"	3 640	11'11"	3 640	11'11"	3 640	11'11"	3 640	11'11"	3 640	11'11"	3 640	11'11"
C. Overall height of cab	mm ft in	3 280	10'9"	3 280	10'9"	3 280	10'9"	3 280	10'9"	3 280	10'9"	3 280	10'9"	3 280	10'9"	3 280	10'9"
D. Overall height of diffuser	mm ft in	3 525	11'7"	3 525	11'7"	3 525	11'7"	3 525	11'7"	3 525	11'7"	3 525	11'7"	3 525	11'7"	3 525	11'7"
E. Overall height of handrail	mm ft in	3 500	11'6"	3 500	11'6"	3 500	11'6"	3 500	11'6"	3 500	11'6"	3 500	11'6"	3 500	11'6"	3 500	11'6"
F. Overall height of guardrail (unfolded)	mm ft in	3 745	12'3"	3 745	12'3"	3 745	12'3"	3 745	12'3"	3 745	12'3"	3 745	12'3"	3 745	12'3"	3 745	12'3"
F'. Overall height of guard rail (folded)	mm ft in	3 270	10'9"	3 270	10'9"	3 270	10'9"	3 270	10'9"	3 270	10'9"	3 270	10'9"	3 270	10'9"	3 270	10'9"
G. Tail swing radius	mm ft in	3 880	12'9"	3 880	12'9"	3 880	12'9"	3 880	12'9"	3 880	12'9"	3 880	12'9"	3 880	12'9"	3 880	12'9"
H. Counterweight clearance *	mm ft in	1 210	4'	1 210	4'	1 210	4'	1 210	4'	1 210	4'	1 210	4'	1 210	4'	1 210	4'
Removal Counterweight clearance *	mm ft in	1 205	4'	1 205	4'	1 205	4'	1 205	4'	1 205	4'	1 205	4'	1 205	4'	1 205	4'
I. Tumbler length	mm ft in	4 370	14'4"	4 370	14'4"	4 370	14'4"	4 370	14'4"	4 370	14'4"	4 370	14'4"	4 370	14'4"	4 370	14'4"
J. Track length	mm ft in	5 370	17'7"	5 370	17'7"	5 370	17'7"	5 370	17'7"	5 370	17'7"	5 370	17'7"	5 370	17'7"	5 370	17'7"
K. Track gauge (retracted)	mm ft in	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Track gauge (extended)	mm ft in	2 740	9'	2 740	9'	2 740	9'	2 740	9'	2 740	9'	2 740	9'	2 740	9'	2 740	9'
L. Shoe width	mm ft in	900	36"	900	36"	900	36"	900	36"	900	36"	900	36"	900	36"	900	36"
M. Min. ground clearance *	mm ft in	515	1'8"	515	1'8"	515	1'8"	515	1'8"	515	1'8"	515	1'8"	515	1'8"	515	1'8"
N. Overall length	mm ft in	11 695	38'4"	11 715	38'5"	12 195	40'0"	12 220	40'1"	12 215	40'1"	12 210	40'1"	12 095	39'8"	13 710	45'
O. Overall height of boom	mm ft in	4 055	13'4"	4 000	13'2"	4 000	13'1"	3 780	12'5"	3 750	12'4"	3 715	12'2"	4 675	15'4"	5 600	18'4"

*Without shoe grouser

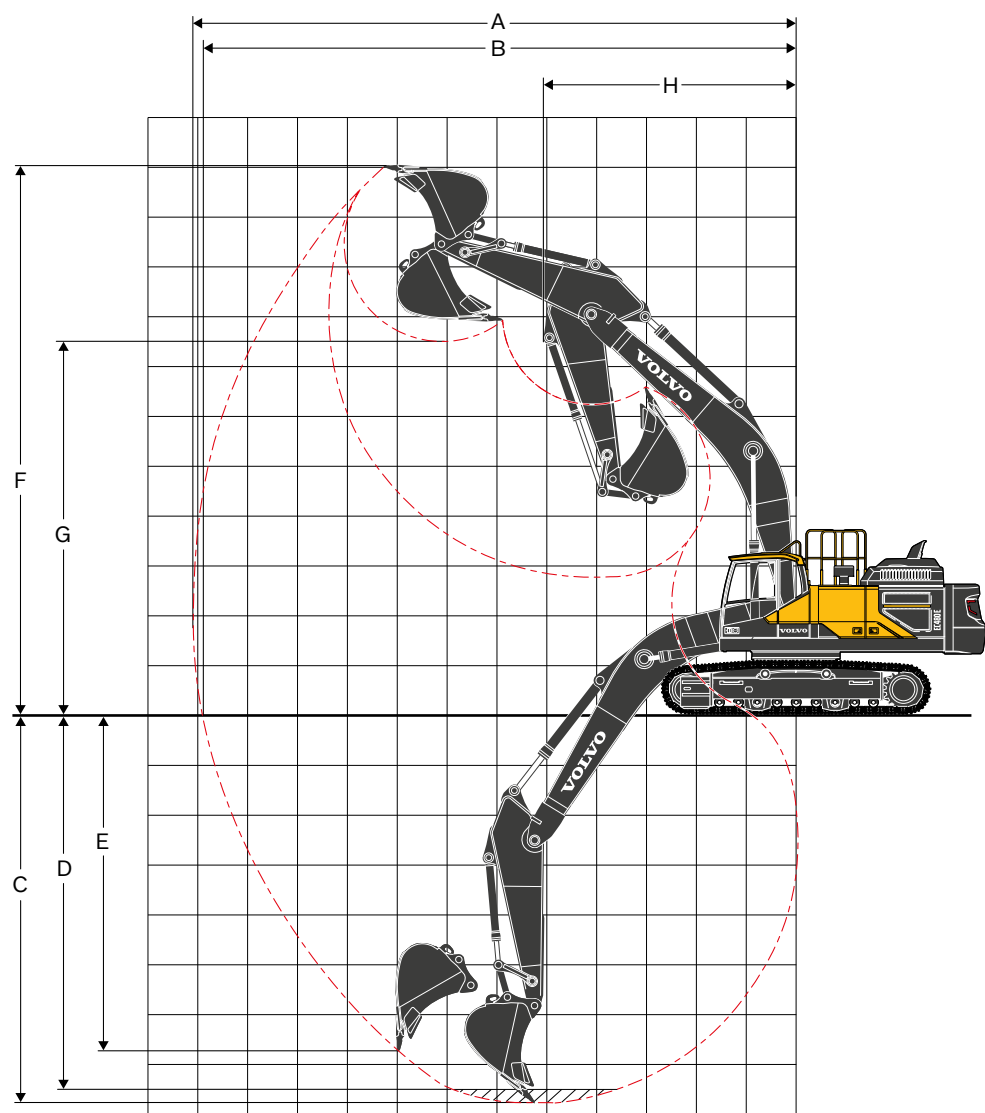
Description	Unit	EC480EL retractable undercarriage														EC480ELR ***	
Boom	m, ft in	6.5 ME, 21'4"				7.0, 23'								9.0, 30'			
Arm	m ft in	2.55	8'4"	3.0	9'10"	2.55	8'4"	3.0	9'10"	3.35	11'	3.9	12'10"	4.8	15'9"	6.0	19'8"
A. Overall width of upper structure	mm ft in	2 990	9'10"	2 990	9'10"	2 990	9'10"	2 990	9'10"	2 990	9'10"	2 990	9'10"	2 990	9'10"	2 990	9'10"
B. Overall width (retracted)	mm ft in	3 290	10'10"	3 290	10'10"	3 290	10'10"	3 290	10'10"	3 290	10'10"	3 290	10'10"	3 290	10'10"	3 290	10'10"
Overall width (extended)	mm ft in	3 790	12'5"	3 790	12'5"	3 790	12'5"	3 790	12'5"	3 790	12'5"	3 790	12'5"	3 790	12'5"	3 790	12'5"
C. Overall height of cab	mm ft in	3 390	11'2"	3 390	11'2"	3 390	11'2"	3 390	11'2"	3 390	11'2"	3 390	11'2"	3 390	11'2"	3 390	11'2"
D. Overall height of diffuser	mm ft in	3 650	12'	3 650	12'	3 650	12'	3 650	12'	3 650	12'	3 650	12'	3 650	12'	3 650	12'
E. Overall height of handrail	mm ft in	3 610	11'10"	3 610	11'10"	3 610	11'10"	3 610	11'10"	3 610	11'10"	3 610	11'10"	3 610	11'10"	3 610	11'10"
F. Overall height of guardrail (unfolded)	mm ft in	3 855	12'8"	3 855	12'8"	3 855	12'8"	3 855	12'8"	3 855	12'8"	3 855	12'8"	3 855	12'8"	3 855	12'8"
F'. Overall height of guard rail (folded)	mm ft in	3 380	11'1"	3 380	11'1"	3 380	11'1"	3 380	11'1"	3 380	11'1"	3 380	11'1"	3 380	11'1"	3 380	11'1"
G. Tail swing radius	mm ft in	3 880	12'9"	3 880	12'9"	3 880	12'9"	3 880	12'9"	3 880	12'9"	3 880	12'9"	3 880	12'9"	3 880	12'9"
H. Counterweight clearance *	mm ft in	1 320	4'4"	1 320	4'4"	1 320	4'4"	1 320	4'4"	1 320	4'4"	1 320	4'4"	1 320	4'4"	1 320	4'4"
Removal Counterweight clearance *	mm ft in	1 315	4'4"	1 315	4'4"	1 315	4'4"	1 315	4'4"	1 315	4'4"	1 315	4'4"	1 315	4'4"	1 315	4'4"
I. Tumbler length	mm ft in	4 370	14'4"	4 370	14'4"	4 370	14'4"	4 370	14'4"	4 370	14'4"	4 370	14'4"	4 370	14'4"	4 370	14'4"
J. Track length	mm ft in	5 370	17'7"	5 370	17'7"	5 370	17'7"	5 370	17'7"	5 370	17'7"	5 370	17'7"	5 370	17'7"	5 370	17'7"
K. Track gauge (retracted)	mm ft in	2 390	7'10"	2 390	7'10"	2 390	7'10"	2 390	7'10"	2 390	7'10"	2 390	7'10"	2 390	7'10"	2 390	7'10"
Track gauge (extended)	mm ft in	2 890	9'6"	2 890	9'6"	2 890	9'6"	2 890	9'6"	2 890	9'6"	2 890	9'6"	2 890	9'6"	2 890	9'6"
L. Shoe width	mm ft in	900	36"	900	36"	900	36"	900	36"	900	36"	900	36"	900	36"	900	36"
M. Min. ground clearance *	mm ft in	710	2'4"	710	2'4"	710	2'4"	710	2'4"	710	2'4"	710	2'4"	710	2'4"	710	2'4"
N. Overall length	mm ft in	11 695	38'4"	11 715	38'5"	12 195	40'0"	12 205	40'1"	12 195	40'0"	12 185	40'	12 145	39'10"	13 775	45'2"
O. Overall height of boom	mm ft in	4 130	13'7"	4 025	13'2"	4 030	13'3"	3 795	12'5"	3 720	12'2"	3 735	12'3"	4 675	15'4"	5 490	18'0"

*Without shoe grouser

** FIXED UNDERCARRIAGE

*** RETRACTABLE UNDERCARRIAGE

Specifications



WORKING RANGE

Description	Unit		EC480EL fixed undercarriage														EC480ELR*	
Boom	m, ft in		6.5 ME, 21'4"				7.0, 23'										9.0, 30'	
Arm	m	ft in	2.55	8'4"	3.0	9'10"	2.55	8'4"	3.0	9'10"	3.35	11'	3.9	11'	4.8	15'9"	6.0	19'8"
A. Max. digging reach	mm	ft in	10 934	35'10"	11 294	37'1"	11 453	37'7"	11 817	38'9"	12 146	39'10"	12 645	41'6"	13 366	43'10"	16 456	54'
B. Max. digging reach on ground	mm	ft in	10 690	35'1"	11 058	36'3"	11 221	36'10"	11 592	38'0"	11 927	39'2"	12 434	40'10"	13 168	43'2"	16 296	53'6"
C. Max. digging depth	mm	ft in	6 586	21'7"	7 036	23'1"	7 028	23'1"	7 478	24'6"	7 828	25'8"	8 378	27'6"	9 278	30'5"	11 865	38'11"
D. Max. digging depth (2.44 m/8' level)	mm	ft in	6 418	21'1"	6 884	22'7"	6 860	22'6"	7 325	24'0"	7 686	25'3"	8 250	27'1"	9 167	30'1"	11 767	38'7"
E. Max. vertical wall digging depth	mm	ft in	5 769	18'11"	6 160	20'3"	6 242	20'6"	6 436	21'1"	6 774	22'3"	7 214	23'8"	7 625	25'0"	11 204	36'9"
F. Max. cutting height	mm	ft in	10 584	34'9"	10 580	34'9"	10 910	35'10"	10 909	35'9"	11 064	36'4"	11 234	36'10"	11 168	36'8"	13 753	45'1"
G. Max. dumping height	mm	ft in	6 957	22'10"	7 015	23'0"	7 310	24'	7 372	24'2"	7 526	24'8"	7 713	25'4"	7 744	25'5"	10 702	35'1"
H. Min. front slew radius	mm	ft in	4 758	15'7"	4 743	15'7"	5 040	16'6"	5 135	16'10"	5 088	16'8"	5 050	16'7"	5 100	16'9"	6 492	21'4"

Digging forces with direct fit bucket

Bucket radius		mm	ft in	1923	6'4"	1923	6'4"	1810	5'11"	1810	5'11"	1810	5'11"	1810	5'11"	1810	5'11"	1598	5'3"
Breakout force - bucket (Normal/Power boost)	SAE J1179	kN	lb	253	56,854	253	56,854	230	51,616	230	51,616	230	51,616	230	51,616	230	51,616	163	36,666
	SAE J1179	kN	lb	275	61,889	275	61,889	251	56,472	251	56,472	251	56,472	251	56,472	251	56,472	178	40,000
	ISO 6015	kN	lb	285	64,093	285	64,093	261	58,652	261	58,652	261	58,652	261	58,652	261	58,652	183	41,145
	ISO 6015	kN	lb	311	69,825	311	69,825	284	63,935	284	63,935	284	63,935	284	63,935	284	63,935	200	44,886
Tearout force - dipper arm (Normal/Power boost)	SAE J1179	kN	lb	225	50,469	205	46 086	232	52,065	211	47 435	196	44,085	176	39,543	160	35,901	130	29,230
	SAE J1179	kN	lb	244	54,875	224	50 357	252	56,696	230	51 706	215	48,311	192	43,073	174	39,206	142	31,888
	ISO 6015	kN	lb	232	52,065	212	47 659	239	53,639	216	48 559	201	45,231	179	40,240	163	36,598	132	29,644
	ISO 6015	kN	lb	253	56,899	231	51 931	260	58,495	235	52 830	220	49,435	196	43,972	178	39,903	144	32,339
Rotation angle, bucket			°		169	169	169	169	183	183	183	183	183	183	183	183	183	177	177

Description	Unit		EC480EL retractable undercarriage														EC480ELR**	
Boom	m, ft in		6.5 ME, 21'4"				7.0, 23'										9.0, 30'	
Arm	m	ft in	2.55	8'4"	3.0	9'10"	2.55	8'4"	3.0	9'10"	3.35	11'	3.9	11'	4.8	15'9"	6.0	19'8"
A. Max. digging reach	mm	ft in	10 934	35'10"	11 294	37'1"	11 453	37'7"	11 817	38'9"	12 146	39'10"	12 644	41'6"	13 366	43'10"	16 456	54'
B. Max. digging reach on ground	mm	ft in	10 665	35'	11 034	36'2"	11 197	36'9"	11 570	37'12"	11 905	39'1"	12 413	40'9"	13 148	43'2"	16 280	53'5"
C. Max. digging depth	mm	ft in	6 476	21'3"	6 926	22'9"	6 918	22'8"	7 368	24'2"	7 718	25'4"	8 268	27'2"	9 168	30'1"	11 755	38'7"
D. Max. digging depth (2.44 m/8' level)	mm	ft in	3 608	11'10"	6 774	22'3"	6 750	22'2"	7 215	23'8"	7 576	24'10"	8 139	26'8"	9 057	29'9"	11 657	38'3"
E. Max. vertical wall digging depth	mm	ft in	5 659	18'7"	6 050	19'10"	6 132	20'1"	6 326	20'9"	6 664	21'10"	7 104	23'4"	7 515	24'8"	11 094	36'5"
F. Max. cutting height	mm	ft in	10 694	35'1"	10 690	35'1"	11 021	36'2"	11 019	36'2"	11 174	36'8"	11 344	37'3"	11 278	37'0"	13 863	45'6"
G. Max. dumping height	mm	ft in	7 067	23'2"	7 125	23'5"	7 420	24'4"	7 482	24'7"	7 636	25'1"	7 823	25'8"	7 854	25'9"	10 812	35'6"
H. Min. front slew radius	mm	ft in	4 757	15'7"	4 743	15'7"	5 043	16'7"	5 135	16'10"	5 088	16'8"	5 050	16'7"	5 100	16'9"	6 610	21'8"

Digging forces with direct fit bucket

Breakout force - bucket (Normal/Power boost)	SAE J1179	kN	lb	253	56,854	253	56,854	230	51,616	230	51,616	230	51,616	230	51,616	230	51,616	163	36,666
	SAE J1179	kN	lb	275	61,889	275	61,889	251	56,472	251	56,472	251	56,472	251	56,472	251	56,472	178	40,000
	ISO 6015	kN	lb	285	64,093	285	64,093	261	58,652	261	58,652	261	58,652	261	58,652	261	58,652	183	41,145
	ISO 6015	kN	lb	311	69,825	311	69,825	284	63,935	284	63,935	284	63,935	284	63,935	284	63,935	200	44,886
Tearout force - dipper arm (Normal/Power boost)	SAE J1179	kN	lb	225	50,469	205	46 086	232	52,065	211	47 435	196	44,085	176	39,543	160	35,901	130	29,230
	SAE J1179	kN	lb	244	54,875	224	50 357	252	56,696	230	51 706	215	48,311	192	43,073	174	39,206	142	31,888
	ISO 6015	kN	lb	232	52,065	212	47 659	239	53,639	216	48 559	201	45,231	179	40,240	163	36,598	132	29,644
	ISO 6015	kN	lb	253	56,899	231	51 931	260	58,495	235	52 830	220	49,435	196	43,972	178	39,903	144	32,339

* FIXED UNDERCARRIAGE, Machine with pin-on bucket

** RETRACTABLE UNDERCARRIAGE, Machine with pin-on bucket

Specifications

GROUND PRESSURE										
EC480EL			with FIXED undercarriage							
Description	Shoe width		Operating weight				Ground pressure			
	mm	in	kg		lb		kPa		psi	
Triple grouser	600	24	47 866		105,540		87.3		12.7	
	700	28	48 368		106,650		75.6		11.0	
	800	32	48 877		107,770		66.9		9.7	
	900	36	49 381		108,890		60.0		8.7	
Triple grouser(HD)	600	24	47 980		105,800		87.5		12.7	
Double grouser	600	24	47 918		105,660		87.4		12.7	
			EC480E with FIXED undercarriage, 7.0m (23') boom, 3.35 m (11') arm, 2 200 kg (4,850 lb) bucket, 9 750 kg (21,500 lb) counterweight							
EC480EL			with RETRACTABLE undercarriage							
Description	Shoe width		Operating weight				Ground pressure			
	mm	in	kg		lb		kPa		psi	
Triple grouser	600	24	48 915		107,860		89.2		12.9	
	700	28	49 417		108,960		77.3		11.2	
	800	32	49 919		110,070		68.3		9.9	
	900	36	50 421		111,180		61.3		8.9	
Triple grouser(HD)	600	24	49 029		108,110		89.4		13.0	
Double grouser	600	24	48 967		107,970		89.3		12.9	
			EC480E with RETRACTABLE undercarriage, 7.0m (23') boom, 3.35 m (11') arm, 2 200 kg (4,850 lb) bucket, 9 750 kg (21,500 lb) counterweight							
EC480ELR			with FIXED undercarriage				with RETRACTABLE undercarriage			
Description	Shoe width		Operating weight		Ground pressure		Operating weight		Ground pressure	
	mm	in	kg	lb	kPa	psi	kg	lb	kPa	psi
Triple grouser	600	24	48 299	106,500	88.1	12.8	49 348	108,810	90.0	13.0
	700	28	48 801	107,610	76.3	11.1	49 850	109,920	77.9	11.3
	800	32	49 310	108,730	67.5	9.8	50 352	111,030	68.9	10.0
	900	36	49 814	109,840	60.6	8.8	50 854	112,130	61.8	9.0
Triple grouser(HD)	600	24	48 351	106,610	88.2	12.8	49 400	108,930	90.1	13.1
			EC480E LR with FIXED undercarriage, 9 m (29'6") boom, 6 m (19'8") arm, 1 162 kg (2,560 lb) bucket, 10 300 kg (22,710 lb) counterweight				EC480E LR with RETRACTABLE undercarriage, 1 162 kg (2,560 lb) bucket, 9 m (29'6") boom, 6 m (19'8") arm, 10 300 kg (22,710 lb) counterweight			

BUCKET SELECTION GUIDE

Bucket type		Capacity		Cutting width		Weight		Teeth	EC480EL fixed undercarriage						
									900mm(36'') shoe, 9750kg(21,500lb) counterweight						
									6.5m(21'4'') ME Boom		7.0m(23') Boom				
		m3	yd3	mm	ft/in	kg	lb	EA	ME2.55m (8'4'')	3.0m (9'10'')	2.55m (8'4'')	3.0m (9'10'')	3.35m (11')	3.9m (12'10'')	4.8m (15'9'')
Direct fit Buckets	General purpose	1.15	1.50	850	2'9"	1 627	3,589	3	C	C	C	C	C	C	C
		1.27	1.66	1 050	3'5"	1 681	3,706	3	C	C	C	C	C	C	C
		1.55	2.03	1 200	3'11"	1 869	4,122	4	C	C	C	C	C	C	C
		1.82	2.38	1 350	4'5"	2 051	4,522	5	C	C	C	C	C	C	C
		2.10	2.75	1 500	4'11"	2 192	4,833	5	C	C	C	C	C	C	C
		2.66	3.48	1 800	5'11"	2 456	5,416	5	C	C	C	C	C	B	A
	Heavy duty	3.31	4.33	2 150	7'1"	2 712	5,980	6	C	C	B	B	B	A	X
		1.15	1.50	850	2'9"	1 730	3,814	3	D	D	D	D	D	D	D
		2.10	2.75	1 500	4'11"	2 333	5,144	5	D	D	D	D	D	D	C
		2.38	3.11	1 650	5'5"	2 470	5,446	5	D	D	D	D	D	C	B
		2.66	3.48	1 800	5'11"	2 623	5,783	5	D	D	D	C	C	B	A
		3.03	3.96	2 000	6'7"	2 823	6,223	6	D	C	C	B	B	A	X
Bucket type		Capacity		Cutting width		Weight		Teeth	EC480EL retractable undercarriage						
									900mm(36'') shoe, 9750kg(21,500lb) counterweight						
									6.5m(21'4'') ME Boom		7.0m(23') Boom				
		m3	yd3	mm	ft/in	kg	lb	EA	ME2.55m (8'4'')	3.0m (9'10'')	2.55m (8'4'')	3.0m (9'10'')	3.35m (11')	3.9m (12'10'')	4.8m (15'9'')
Direct fit Buckets	General purpose	1.15	1.50	850	2'9"	1 627	3,589	3	C	C	C	C	C	C	C
		1.27	1.66	1 050	3'5"	1 681	3,706	3	C	C	C	C	C	C	C
		1.55	2.03	1 200	3'11"	1 869	4,122	4	C	C	C	C	C	C	C
		1.82	2.38	1 350	4'5"	2 051	4,522	5	C	C	C	C	C	C	C
		2.10	2.75	1 500	4'11"	2 192	4,833	5	C	C	C	C	C	C	C
		2.66	3.48	1 800	5'11"	2 456	5,416	5	C	C	C	C	C	C	B
	Heavy duty	3.31	4.33	2 150	7'1"	2 712	5,980	6	C	C	C	B	B	B	X
		1.15	1.50	850	2'9"	1 730	3,814	3	D	D	D	D	D	D	D
		2.10	2.75	1 500	4'11"	2 333	5,144	5	D	D	D	D	D	D	D
		2.38	3.11	1 650	5'5"	2 470	5,446	5	D	D	D	D	D	D	C
		2.66	3.48	1 800	5'11"	2 623	5,783	5	D	D	D	D	D	C	B
		3.03	3.96	2 000	6'7"	2 823	6,223	6	D	D	D	C	B	B	A
Bucket type		Capacity		Cutting width		Weight		Teeth	EC480ELR fixed undercarriage		EC480ELR retractable undercarriage				
									900mm(36'') shoe, 10 300 kg (22,710 lb) counterweight		900mm(36'') shoe, 10 300 kg (22,710 lb) counterweight				
									9 m (29'6'') boom		9 m (29'6'') boom				
		m3	yd3	mm	ft/in	kg	lb	EA	6 m (19'8'') arm		6 m (19'8'') arm				
Direct fit Buckets	General purpose	1.60	2.09	1 640	5'5"	1 162	2,562	6	B		B				
	Fixed ditching	0.95	1.24	1 500	4'11"	796	1,756	-	B		B				

X : Not recommended

Maximum material density

	kg/m3	lb/yd3	
A	1 200 - 1 300	2,000 - 2,200	Coal, Caliche, Shale
B	1 400 - 1 600	2,300 - 2,700	Wet earth and clay, Limestone, Sandstone
C	1 700 - 1 800	2,800 - 3,100	Granite, Wet sand, Well blasted rock
D	> 1 900	> 3,200	Wet mud, Iron ore

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.

Specifications

LIFTING CAPACITY EC480EL 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 (5 ft)		3.0 m (10 ft)		4.5 m (15 ft)		6.0 m (20 ft)		7.5 m (25 ft)		9.0 m (30 ft)		10.5 m (35 ft)		Max. reach		
		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	Front	Side	Max.
Boom : 6.5m(21'4") Arm : 2.55m(8'4") Shoe : 900mm(36") CWT : 9 750kg(21,500lb)	7.5 m kg															*12 280	11 740	7.3 m
	25 ft lb															*27,150	26,410	23.5 ft
	6 m kg															*12 030	9 670	8.2 m
	20 ft lb							*13 270	*13 270	*12 200	11 090					*26,520	21,520	26.6 ft
	4.5 m kg					*19 800	*19 800	*15 110	15 020	*12 950	10 810					*12 030	8 610	8.7 m
	15 ft lb					*42,430	*42,430	*32,690	32,440	*28,210	23,300					*26,510	19,060	28.5 ft
	3 m kg					*23 500	21 460	*17 170	14 320	*13 970	10 460					*12 360	8 090	8.9 m
	10 ft lb					*52,110	46,350	*37,120	30,920	*30,340	22,570					*27,230	17,870	29.3 ft
	1.5 m kg					*17 080	*17 080	*18 730	13 790	*14 840	10 160					*12 580	7 980	8.9 m
	5 ft lb					*42,190	*42,190	*40,540	29,760	*32,210	21,930					*27,720	17,580	29.3 ft
	0 m kg					*25 160	20 540	*19 360	13 510	*15 240	9 980					*12 950	8 240	8.7 m
	0 ft lb					*56,770	44,200	*41,960	29,150	*33,050	21,550					*28,560	18,170	28.5 ft
	-1.5 m kg			*18 530	*18 530	*24 830	20 630	*18 920	13 480	*14 810	9 960					*13 250	9 010	8.1 m
	-5 ft lb			*42,290	*42,290	*53,960	44,380	*41,010	29,060	*31,980	21,530					*29,220	19,910	26.6 ft
	-3 m kg			*28 560	*28 560	*22 190	20 930	*17 110	13 660							*13 350	10 700	7.2 m
	-10 ft lb			*62,150	*62,150	*48,070	45,030	*36,880	29,480							*29,430	23,780	23.6 ft
	-4.5 m kg					*17 080	*17 080											5.8 m
	-15 ft lb					*36,390	*36,390											18.7 ft
Boom : 6.5m(21'4") Arm : 3.0m(8'4") Shoe : 900mm(36") CWT : 9 750kg(21,500lb)	7.5 m kg									*11 170	*11 170					*10 570	*10 570	7.7 m
	25 ft lb									*23,460	*23,460					*23,410	*23,410	25. ft
	6 m kg									*11 350	11 080					*10 270	8 930	8.5 m
	20 ft lb									*24,850	23,860					*22,650	19,860	27.9 ft
	4.5 m kg					*18 090	*18 090	*14 130	*14 130	*12 210	10 760	*11 300	8 080			*10 360	7 990	9.1 m
	15 ft lb					*38,810	*38,810	*30,580	*30,580	*26,580	23,190					*22,780	17,690	29.7 ft
	3 m kg					*22 630	21 610	*16 280	14 280	*13 320	10 370	*11 730	7 920			*10 750	7 520	9.3 m
	10 ft lb					*48,610	46,670	*35,200	30,830	*28,920	22,360	*25,600	17,050			*23,660	16,600	30.5 ft
	1.5 m kg					*24 490	20 560	*18 050	13 660	*14 320	10 020	*12 160	7 750			*11 540	7 390	9.3 m
	5 ft lb					*54,880	44,310	*39,060	29,470	*31,080	21,620	*26,450	16,710			*25,400	16,300	30.5 ft
	0 m kg					*26 010	20 210	*18 970	13 300	*14 910	9 790	12 200	7 650			*12 110	7 600	9. m
	0 ft lb					*56,380	43,490	*41,100	28,690	*32,340	21,120					*26,700	16,750	29.7 ft
	-1.5 m kg			*19 130	*19 130	*25 170	20 220	*18 870	13 190	*14 800	9 710					*12 570	8 230	8.5 m
	-5 ft lb			*43,350	*43,350	*54,620	43,480	*40,900	28,450	*32,020	20,970					*27,730	18,190	27.9 ft
	-3 m kg			*30 950	*30 950	*23 000	20 460	*17 550	13 310	*13 360	9 860					*12 870	9 600	7.7 m
	-10 ft lb			*67,230	*67,230	*49,820	44,030	*37,910	28,730	*28,460	21,350					*28,380	21,310	25. ft
	-4.5 m kg					*18 790	*18 790	*13 950	13 750							*12 730	*12 730	6.3 m
	-15 ft lb					*40,270	*40,270	*29,370	*29,370							*28,000	*28,000	20.5 ft
Boom : 7.0m(23') Arm : 2.55m(8'4") Shoe : 900mm(36") CWT : 9 750kg(21,500lb)	9 m kg															*11 710	*11 710	6.6 m
	30 ft lb															*25,990	*25,990	21.3 ft
	7.5 m kg									*11 170	*11 170					*11 270	10 240	7.9 m
	25 ft lb									*24,710	24,020					*24,890	22,970	25.6 ft
	6 m kg							*12 920	*12 920	*11 540	11 010					*11 180	8 640	8.7 m
	20 ft lb							*27,980	*27,980	*25,200	23,740					*24,660	19,220	28.5 ft
	4.5 m kg					*19 960	*19 960	*14 950	14 720	*12 500	10 660	*11 320	8 110			*11 260	7 780	9.2 m
	15 ft lb					*44,000	*44,000	*32,270	31,800	*27,150	23,010	*24,840	17,440			*24,820	17,230	30.2 ft
	3 m kg							*17 080	13 970	*13 610	10 280	*11 790	7 930			*11 450	7 360	9.5 m
	10 ft lb							*36,860	30,190	*29,520	22,190	*25,710	17,110			*25,240	16,240	31.1 ft
	1.5 m kg							*18 570	13 460	*14 540	9 970	*12 230	7 780			*11 460	7 260	9.5 m
	5 ft lb							*40,150	29,060	*31,520	21,520	*26,550	16,780			*25,260	16,000	31.1 ft
	0 m kg					*14 970	*14 970	*19 110	13 230	*15 020	9 780	12 230	7 690			*11 840	7 470	9.2 m
	0 ft lb					*33,010	*33,010	*41,420	28,550	*32,550	21,120	26,380	16,630			*26,110	16,470	30.2 ft
	-1.5 m kg					*24 260	20 340	*18 750	13 220	*14 830	9 750					*12 310	8 080	8.7 m
	-5 ft lb					*52,790	43,740	*40,660	28,510	*32,100	21,070					*27,160	17,860	28.5 ft
	-3 m kg			*27 060	*27 060	*22 120	20 620	*17 360	13 390	*13 500	9 920					*12 490	9 380	7.9 m
	-10 ft lb			*60,130	*60,130	*48,010	44,360	*37,550	28,890	*28,890	21,470					*27,540	20,810	25.7 ft
	-4.5 m kg					*18 270	*18 270	*14 090	13 820							*12 200	*12 200	6.6 m
	-15 ft lb					*39,280	*39,280	*29,870	*29,870							*26,810	*26,810	21.3 ft

Notes: 1. Machine in "Fine Mode-F" (Power Boost) for lifting capacities. 2. The above loads are in compliance with SAE J1097 and ISO 10567 Hydraulic Excavator Lifting Capacity Standards. 3. Rated loads do not exceed 87% of hydraulic lifting capacity or 75% of tipping load. 4. Rated loads marked with an asterisk (*) are limited by hydraulic capacity rather than tipping load.

LIFTING CAPACITY EC480EL 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 (5 ft)		3.0 m (10 ft)		4.5 m (15 ft)		6.0 m (20 ft)		7.5 m (25 ft)		9.0 m (30 ft)		10.5 m (35 ft)		Max. reach		
		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	Front	Side	Max.
Boom : 7.0m(23') Arm : 3.0m(8'4") Shoe : 900mm(36") CWT : 9 750kg(21,500lb)	9 m kg															*10 650	*10 650	7.2 m
	30 ft lb															*23,590	*23,590	23. ft
	7.5 m kg									*10 270	*10 270					*10 380	9 390	8.3 m
	25 ft lb									*22,630	*22,630					*22,900	21,050	27.1 ft
	6 m kg									*10 800	*10 800	*10 350	8 200			*10 360	8 010	9.1 m
	20 ft lb									*23,560	*23,560					*22,840	17,810	29.8 ft
	4.5 m kg					*18 750	*18 750	*14 010	*14 010	*11 810	10 630	*10 690	8 050			*10 490	7 240	9.6 m
	15 ft lb					*40,070	*40,070	*30,250	*30,250	*25,670	22,930	*23,370	17,330			*23,110	16,040	31.4 ft
	3 m kg							*16 220	13 950	*13 000	10 200	*11 270	7 840			*10 700	6 850	9.8 m
	10 ft lb							*35,000	30,130	*28,200	22,020	*24,550	16,890			*23,590	15,130	32.2 ft
	1.5 m kg							*17 920	13 340	*14 040	9 840	*11 830	7 640			10 710	6 740	9.8 m
	5 ft lb							*38,740	28,800	*30,440	21,240	*25,710	16,480			23,620	14,870	32.3 ft
	0 m kg					*17 740	*17 740	*18 750	13 030	*14 680	9 610	12 050	7 510			11 030	6 910	9.6 m
	0 ft lb					*41,580	*41,580	*40,610	28,100	*31,830	20,730	25,980	16,220			24,310	15,240	31.5 ft
	-1.5 m kg			*13 630	*13 630	*24 700	19 910	*18 680	12 950	*14 720	9 530	*11 860	7 510			*11 680	7 420	9.1 m
	-5 ft lb					*31,090	*31,090	*53,660	42,810	*40,500	27,930	*31,880	20,570			*25,770	16,390	29.8 ft
	-3 m kg			*25 270	*25 270	*22 860	20 160	*17 650	13 070	*13 860	9 630					*11 990	8 480	8.3 m
	-10 ft lb			*57,320	*57,320	*49,590	43,370	*38,200	28,190	*29,850	20,810					*26,460	18,810	27.1 ft
	-4.5 m kg					*19 560	*19 560	*15 150	13 420							*12 050	10 740	7.1 m
	-15 ft lb					*42,150	*42,150	*32,430	29,000							*26,540	24,050	23. ft
Boom : 7.0m(23') Arm : 3.35m(11') Shoe : 900mm(36") CWT : 9 750kg(21,500lb)	9 m kg									*10 020	*10 020					*10 080	*10 080	7.6 m
	30 ft lb									*22,090	*22,090					*22,320	*22,320	24.5 ft
	7.5 m kg									*9 760	*9 760					*9 470	8 820	8.7 m
	25 ft lb									*21,460	*21,460					*20,950	19,730	28.4 ft
	6 m kg									*10 360	*10 360	*9 900	8 310			*9 270	7 600	9.5 m
	20 ft lb									*22,610	*22,610	*21,800	17,850			*20,450	16,900	30.9 ft
	4.5 m kg					*17 590	*17 590	*13 440	*13 440	*11 430	10 740	*10 360	8 130			*9 340	6 920	9.9 m
	15 ft lb					*37,640	*37,640	*29,030	*29,030	*24,840	23,180	*22,640	17,510			*20,590	15,310	32.6 ft
	3 m kg					*22 320	21 230	*15 730	14 130	*12 680	10 300	*11 020	7 900			*9 670	6 560	10.2 m
	10 ft lb					*47,870	45,880	*33,950	30,520	*27,510	22,230	*24,000	17,030			*21,290	14,480	33.3 ft
	1.5 m kg					*15 350	*15 350	*17 590	13 470	*13 820	9 910	*11 660	7 680			10 240	6 450	10.2 m
	5 ft lb					*36,980	*36,980	*38,040	29,080	*29,960	21,390	*25,340	16,570			22,570	14,230	33.3 ft
	0 m kg					*18 910	*18 910	*18 640	13 090	*14 580	9 650	12 060	7 530			10 550	6 590	9.9 m
	0 ft lb					*44,070	42,750	*40,370	28,240	*31,600	20,820	26,010	16,250			23,160	14,540	32.6 ft
	-1.5 m kg			*13 700	*13 700	*25 160	19 880	*18 790	12 960	*14 780	9 530	12 010	7 480			11 250	7 040	9.4 m
	-5 ft lb			*31,100	*31,100	*54,600	42,750	*40,740	27,950	*32,020	20,580	25,920	16,170			24,840	15,550	31. ft
	-3 m kg			*23 340	*23 340	*23 580	20 080	*18 020	13 030	*14 180	9 580					*11 610	7 950	8.7 m
	-10 ft lb			*52,860	*52,860	*51,130	43,200	*39,000	28,110	*30,600	20,700					*25,620	17,620	28.4 ft
	-4.5 m kg			*27 470	*27 470	*20 660	20 510	*15 940	13 320	*11 940	9 880					*11 790	9 810	7.5 m
	-15 ft lb			*59,350	*59,350	*44,560	44,150	*34,250	28,750	*26,320	21,780					*26,000	21,920	24.5 ft
Boom : 7.0m(23') Arm : 3.9m(12'10") Shoe : 900mm(36") CWT : 9 750kg(21,500lb)	9 m kg															*8 060	*8 060	8.3 m
	30 ft lb															*17,900	*17,900	26.7 ft
	7.5 m kg											*9 070	8 530			*7 630	*7 630	9.3 m
	25 ft lb											*18,290	18,270			*16,870	*16,870	30.3 ft
	6 m kg									*9 620	*9 620	*9 230	8 440			*7 490	7 030	10. m
	20 ft lb									*20,990	*20,990	*20,270	18,140			*16,510	15,600	32.7 ft
	4.5 m kg							*12 430	*12 430	*10 750	*10 750	*9 800	8 220			*7 550	6 430	10.4 m
	15 ft lb							*26,870	*26,870	*23,360	*23,360	*21,410	17,710			*16,630	14,240	34.2 ft
	3 m kg					*20 560	*20 560	*14 830	14 370	*12 090	10 420	*10 550	7 960	*9 440	6 270	*7 800	6 120	10.7 m
	10 ft lb					*44,120	*44,120	*32,010	31,030	*26,220	22,480	*22,980	17,160	*20,810	13,820	*17,170	13,500	35. ft
	1.5 m kg					*20 860	20 490	*16 920	13 620	*13 350	9 990	*11 300	7 710	9 750	6 150	*8 260	6 010	10.7 m
	5 ft lb					*49,770	44,170	*36,590	29,410	*28,940	21,550	*24,570	16,630	21,490	13,560	*18,190	13,260	35. ft
	0 m kg					*20 810	19 910	*18 280	13 150	*14 280	9 670	*11 860	7 520			*9 000	6 120	10.4 m
	0 ft lb					*48,290	42,870	*39,590	28,360	*30,970	20,860	*25,760	16,220			*19,840	13,500	34.2 ft
	-1.5 m kg	*9 630	*9 630	*13 700	*13 700	*25 520	19 780	*18 780	12 930	*14 710	9 500	11 950	7 420			*10 190	6 480	10. m
	-5 ft lb	*21,520	*21,520	*30,970	*30,970	*55,330	42,550	*40,690	27,880	*31,890	20,500	25,770	16,020			*22,480	14,300	32.7 ft
	-3 m kg	*16 090	*16 090	*21 130	*21 130	*24 410	19 900	*18 370	12 930	*14 450	9 480	*11 540	7 460			*11 010	7 200	9.3 m
	-10 ft lb	*36,050	*36,050	*47,760	*47,760	*52,900	42,810	*39,790	27,880	*31,250	20,480	*24,740	16,150			*24,310	15,960	30.3 ft
	-4.5 m kg			*30 400	*30 400	*22 040	20 240	*16 850	13 120	*13 070	9 660					*11 330	8 620	8.2 m
	-15 ft lb			*65,700	*65,700	*47,610	43,560	*36,310	28,330	*27,930	20,900					*25,010	19,220	26.7 ft
	-6 m kg					*17 660	*17 660	*13 260	*13 260							*11 290	*11 290	6.7 m
	-20 ft lb					*37,580	*37,580	*27,810	*27,810							*24,830	*24,830	21.4 ft

Notes: 1. Machine in "Fine Mode-F" (Power Boost) for lifting capacities. 2. The above loads are in compliance with SAE J1097 and ISO 10567 Hydraulic Excavator Lifting Capacity Standards. 3. Rated loads do not exceed 87% of hydraulic lifting capacity or 75% of tipping load. 4. Rated loads marked with an asterisk (*) are limited by hydraulic capacity rather than tipping load.

Specifications

LIFTING CAPACITY EC480EL 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 (5 ft)		3.0 m (10 ft)		4.5 m (15 ft)		6.0 m (20 ft)		7.5 m (25 ft)		9.0 m (30 ft)		10.5 m (35 ft)		Max. reach				
		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	Front	Side	Max.		
Boom : 7.0m(23') Arm : 4.8m(15'0") Shoe : 900mm(36") CWT : 9 750kg(21,500lb)	9 m	kg										*7 880	*7 880			*7 290	*7 290	9.2 m		
	30 ft	lb										*17,370	*17,370			*16,170	*16,170	29.8 ft		
	7.5 m	kg										*7 720	*7 720			*7 020	*7 020	10.1 m		
	25 ft	lb										*17,060	*17,060			*15,510	*15,510	33. ft		
	6 m	kg										*8 080	*8 080	*8 090	6 550	*6 950	6 240	10.8 m		
	20 ft	lb										*17,730	*17,730	*16,190	14,040	*15,320	13,860	35.2 ft		
	4.5 m	kg								*9 440	*9 440	*8 760	8 310	*8 380	6 430	*7 040	5 750	11.2 m		
	15 ft	lb								*20,530	*20,530	*19,130	17,890	*18,410	13,820	*15,520	12,720	36.7 ft		
	3 m	kg					*17 390	*17 390	*13 050	*13 050	*10 870	10 550	*9 610	8 000	*8 850	6 260	*7 300	5 460	11.4 m	
	10 ft	lb					*37,350	*37,350	*28,210	*28,210	*23,600	22,750	*20,940	17,230	*19,360	13,470	*16,080	12,070	37.3 ft	
	1.5 m	kg					*21 700	20 930	*15 450	13 790	*12 310	10 030	*10 500	7 690	*9 360	6 080	*7 740	5 360	11.4 m	
	5 ft	lb					*46,790	45,120	*33,400	29,760	*26,690	21,630	*22,820	16,570	*20,410	13,100	*17,040	11,820	37.3 ft	
	0 m	kg					*24 290	19 900	*17 250	13 130	*13 490	9 610	*11 250	7 430	9 540	5 940	*8 420	5 420	11.2 m	
	0 ft	lb					*52,530	42,850	*37,360	28,320	*29,270	20,730	*24,440	16,010	20,560	12,790	*18,550	11,950	36.7 ft	
	-1.5 m	kg	*9 300	*9 300	*13 830	*13 830	*25 250	19 480	*18 260	12 760	*14 250	9 340	*11 720	7 260	9 460	5 860	9 150	5 670	10.8 m	
	-5 ft	lb	*20,760	*20,760	*31,210	*31,210	*54,700	41,900	*39,570	27,500	*30,900	20,150	25,410	15,650	20,400	12,640	20,190	12,520	35.3 ft	
	-3 m	kg	*14 260	*14 260	*19 340	*19 340	*24 960	19 420	*18 420	12 630	*14 430	9 230	11 730	7 200			10 010	6 190	10.1 m	
	-10 ft	lb	*31,910	*31,910	*43,650	*43,650	*54,080	41,770	*39,910	27,210	*31,250	19,920	25,290	15,540			22,150	13,710	33. ft	
	-4.5 m	kg	*19 970	*19 970	*26 530	*26 530	*23 480	19 630	*17 630	12 710	*13 820	9 290	*10 870	7 300			*10 600	7 170	9.1 m	
	-15 ft	lb	*44,860	*44,860	*60,120	*60,120	*50,760	42,230	*38,100	27,400	*29,780	20,070	*23,960	16,090			*23,430	15,960	29.8 ft	
	-6 m	kg			*28 670	*28 670	*20 450	20 100	*15 490	13 010	*11 730	9 580					*11 050	9 150	7.8 m	
	-20 ft	lb			*61,480	*61,480	*43,870	43,290	*33,120	28,110	*24,670	20,770					*24,410	20,610	25.1 ft	
		Lifting hook related to ground level	1.5 m (5 ft)	3.0 m (10 ft)	4.5 m (15 ft)	6.0 m (20 ft)	7.5 m (25 ft)	9.0 m (30 ft)	10.5 m (35 ft)											
		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 : LR 9.0m(29'6") Arm : LR 6.0m(19'8") Shoe : 900mm(36") CWT : LR 10 300kg(22,710lb)	6 m	kg												*5 710	*5 710					
	20 ft	lb												*12,580	*12,580					
	4.5 m	kg												*6 330	*6 330					
	15 ft	lb												*13,790	*13,790					
	3 m	kg														6 120				
	10 ft	lb														*15,170	13,200			
	1.5 m	kg														*7 630	5 810			
	5 ft	lb														*16,570	12,520			
	0 m	kg														*8 220	5 540			
	0 ft	lb														*17,860	11,940			
	-1.5 m	kg					*8 730	*8 730	*16 540	11 380	*12 680	8 430	*10 290	6 600	*8 720	5 330				
	-5 ft	lb					*19,980	*19,980	*35,810	24,550	*27,480	18,190	*22,320	14,230	*18,920	11,490				
	-3 m	kg	*5 880	*5 880	*7 550	*7 550	*11 580	*11 580	*16 990	11 190	*13 190	8 220	*10 730	6 420	8 780	5 200				
	-10 ft	lb	*13,210	*13,210	*17,070	*17,070	*26,400	*26,400	*36,820	24,130	*28,580	17,730	*23,260	13,850	18,920	11,220				
	-4.5 m	kg	*8 900	*8 900	*10 880	*10 880	*15 270	*15 270	*16 970	11 190	*13 330	8 160	10 840	6 360	8 730	5 150				
	-15 ft	lb	*19,990	*19,990	*24,580	*24,580	*34,790	*34,790	*36,770	24,110	*28,890	17,600	23,370	13,720	18,830	11,130				
	-6 m	kg	*12 240	*12 240	*14 790	*14 790	*20 080	17 640	*16 480	11 320	*13 080	8 230	*10 730	6 400	8 780	5 210				
	-20 ft	lb	*27,570	*27,570	*33,500	*33,500	*45,890	37,970	*35,650	24,430	*28,300	17,760	*23,180	13,830	18,980	11,270				
	-7.5 m	kg	*16 230	*16 230	*19 730	*19 730	*20 040	18 120	*15 400	11 610	*12 320	8 430	*10 070	6 570	*8 170	5 400				
	-25 ft	lb	*36,680	*36,680	*44,880	*44,880	*43,200	39,030	*33,190	25,080	*26,520	18,220	*21,590	14,230	*17,270	11,770				
	-9 m	kg			*23 880	*23 880	*17 300	*17 300	*13 460	12 080	*10 730	8 800	*8 400	6 950						
	-30 ft	lb			*50,840	*50,840	*36,910	*36,910	*28,680	26,150	*22,740	19,100	*17,350	15,170						
		Lifting hook related to ground level	12.0 m (40 ft)	13.5 m (45 ft)	Max. reach															
			Along UC	Across UC	Along UC	Across UC	Front	Side	Max.											
	Boom : LR 9.0m(29'6") Arm : LR 6.0m(19'8") Shoe : 900mm(36") CWT : LR 10 300kg(22,710lb)	12 m	kg				*5 090	*5 090	11.2 m											
		40 ft	lb				*11,360	*11,360	36.1 ft											
		10.5 m	kg	*5 370	*5 370			*4 750	*4 750	12.3 m										
		35 ft	lb	*10,880	*10,880			*10,530	*10,530	40.1 ft										
		9 m	kg	*5 210	*5 210			*4 530	4 480	13.2 m										
		30 ft	lb	*11,570	*11,570			*10,030	10,000	43.2 ft										
		7.5 m	kg	*5 320	*5 320	*5 460	4 310	*4 420	4 020	13.9 m										
		25 ft	lb	*11,720	*11,720	*11,160	9,160	*9,750	8,930	45.4 ft										
		6 m	kg	*5 590	5 340	*5 550	4 260	*4 370	3 700	14.4 m										
20 ft		lb	*12,250	11,460	*12,240	9,090	*9,630	8,190	47.1 ft											
4.5 m		kg	*5 960	5 150	*5 760	4 150	*4 380	3 480	14.7 m											
15 ft		lb	*13,030	11,060	*12,640	8,880	*9,650	7,690	48.2 ft											
3 m		kg	*6 400	4 930	*6 030	4 020	*4 450	3 340	14.8 m											
10 ft		lb	*13,960	10,610	*13,210	8,620	*9,800	7,380	48.7 ft											
1.5 m		kg	*6 850	4 720	*6 330	3 890	*4 580	3 280	14.8 m											
5 ft		lb	*14,920	10,170	*13,830	8,340	*10,090	7,240	48.7 ft											
0 m		kg	*7 280	4 540	6 310	3 770	*4 780	3 290	14.7 m											
0 ft		lb	*15,830	9,770	13,580	8,110	*10,550	7,250	48.2 ft											
-1.5 m		kg	7 370	4 400	6 220	3 690	*5 080	3 370	14.4 m											
-5 ft		lb	15,880	9,480	13,420	7,950	*11,200	7,440	47.1 ft											
-3 m		kg	7 280	4 320	6 200	3 670	*5 500	3 540	13.9 m											
-10 ft		lb	15,700	9,310	13,400	7,930	*12,140	7,830	45.5 ft											
-4.5 m		kg	7 270	4 310			*6 090	3 840	13.2 m											
-15 ft	lb	15,710	9,310			*13,490	8,500	43.2 ft												
-6 m	kg	7 390	4 420			*6 970	4 310	12.3 m												
-20 ft	lb	*15,780	9,620			*15,540	9,590	40.1 ft												
-7.5 m	kg					*7 280	5 080	11.1 m												
-25 ft	lb					*16,080	11,390	36.2 ft												
-9 m	kg					*7 360	6 490	9.6 m												
-30 ft	lb					*16,230	14,730	30.9 ft												

Notes:

1. Machine in "Fine Mode-F" (Power Boost) for lifting capacities. 2. The above loads are in compliance with SAE J1097 and ISO 10567 Hydraulic Excavator Lifting Capacity Standards. 3. Rated loads do not exceed 87% of hydraulic lifting capacity or 75% of tipping load. 4. Rated loads marked with an asterisk (*) are limited by hydraulic capacity rather than tipping load.

LIFTING CAPACITY EC480EL 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 (5 ft)		3.0 m (10 ft)		4.5 m (15 ft)		6.0 m (20 ft)		7.5 m (25 ft)		9.0 m (30 ft)		10.5 m (35 ft)		Max. reach		
			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	Front	Side	Max.
Boom : 6.5m(21'4") Arm : 2.55m(8'4") Shoe : 900mm(36") CWT : 9 750kg(21,500lb)	7.5 m	kg															*12 280	11 970	7.3 m
	25 ft	lb															*27,150	26,930	23.5 ft
	6 m	kg															*12 030	9 870	8.2 m
	20 ft	lb															*26,520	21,970	26.6 ft
	4.5 m	kg					*19 800	*19 800	*15 110	*15 110	*12 950	11 030					*12 030	8 790	8.7 m
	15 ft	lb					*42,430	*42,430	*32,690	*32,690	*28,210	23,780					*26,510	19,470	28.5 ft
	3 m	kg					*23 500	21 900	*17 170	14 620	*13 970	10 680					*12 360	8 270	8.9 m
	10 ft	lb					*52,110	47,310	*37,120	31,560	*30,340	23,050					*27,230	18,270	29.3 ft
	1.5 m	kg					*17 080	*17 080	*18 730	14 080	*14 840	10 380					*12 630	8 160	8.9 m
	5 ft	lb					*42,190	*42,190	*40,540	30,400	*32,210	22,420					*27,840	17,980	29.3 ft
	0 m	kg					*25 160	20 990	*19 360	13 810	*15 240	10 200					*12 950	8 430	8.7 m
	0 ft	lb					*56,770	45,150	*41,960	29,800	*33,050	22,030					*28,560	18,580	28.5 ft
	-1.5 m	kg			*18 530	*18 530	*24 830	21 080	*18 920	13 770	*14 810	10 190					*13 250	9 210	8.1 m
	-5 ft	lb			*42,290	*42,290	*53,960	45,330	*41,010	29,710	*31,980	22,010					*29,220	20,360	26.6 ft
	-3 m	kg			*28 560	*28 560	*22 190	21 370	*17 110	13 950							*13 350	10 940	7.2 m
	-10 ft	lb			*62,150	*62,150	*48,070	45,990	*36,880	30,120							*29,430	24,300	23.6 ft
	-4.5 m	kg					*17 080	*17 080											5.8 m
	-15 ft	lb					*36,390	*36,390											18.7 ft
Boom : 6.5m(21'4") Arm : 3.0m(8'4") Shoe : 900mm(36") CWT : 9 750kg(21,500lb)	7.5 m	kg									*11 170	*11 170					*10 570	*10 570	7.7 m
	25 ft	lb									*23,460	*23,460					*23,410	*23,410	25. ft
	6 m	kg									*11 350	11 310					*10 270	9 120	8.5 m
	20 ft	lb									*24,850	24,340					*22,650	20,280	27.9 ft
	4.5 m	kg					*18 090	*18 090	*14 130	*14 130	*12 210	10 980	*11 300	8 260			*10 360	8 170	9.1 m
	15 ft	lb					*38,810	*38,810	*30,580	*30,580	*26,580	23,680					*22,780	18,080	29.7 ft
	3 m	kg					*22 630	22 060	*16 280	14 580	*13 320	10 590	*11 730	8 100			*10 750	7 690	9.3 m
	10 ft	lb					*48,610	47,630	*35,200	31,470	*28,920	22,850	*25,600	17,440			*23,660	16,970	30.5 ft
	1.5 m	kg					*24 490	21 010	*18 050	13 950	*14 320	10 240	*12 160	7 930			*11 540	7 560	9.3 m
	5 ft	lb					*54,880	45,270	*39,060	30,120	*31,080	22,100	*26,450	17,100			*25,400	16,670	30.5 ft
	0 m	kg					*26 010	20 660	*18 970	13 600	*14 910	10 010	*12 270	7 830			*12 190	7 780	9. m
	0 ft	lb					*56,380	44,450	*41,100	29,330	*32,340	21,600					*26,880	17,150	29.7 ft
	-1.5 m	kg			*19 130	*19 130	*25 170	20 660	*18 870	13 490	*14 800	9 940					*12 570	8 420	8.5 m
	-5 ft	lb			*43,350	*43,350	*54,620	44,440	*40,900	29,090	*32,020	21,460					*27,730	18,610	27.9 ft
	-3 m	kg			*30 950	*30 950	*23 000	20 910	*17 550	13 610	*13 360	10 080					*12 870	9 820	7.7 m
	-10 ft	lb			*67,230	*67,230	*49,820	44,980	*37,910	29,370	*28,460	21,830					*28,380	21,800	25. ft
	-4.5 m	kg					*18 790	*18 790	*13 950	*13 950							*12 730	*12 730	6.3 m
	-15 ft	lb					*40,270	*40,270	*29,370	*29,370							*28,000	*28,000	20.5 ft
Boom : 7.0m(23') Arm : 2.55m(8'4") Shoe : 900mm(36") CWT : 9 750kg(21,500lb)	9 m	kg															*11 710	*11 710	6.6 m
	30 ft	lb															*25,990	*25,990	21.3 ft
	7.5 m	kg									*11 170	*11 170					*11 270	10 990	7.9 m
	25 ft	lb									*24,710	*24,710					*24,890	24,660	25.6 ft
	6 m	kg									*12 920	*12 920	*11 540	*11 540			*11 180	9 290	8.7 m
	20 ft	lb									*27,980	*27,980	*25,200	*25,200			*24,660	20,660	28.5 ft
	4.5 m	kg					*19 960	*19 960	*14 950	*14 950	*12 500	11 470	*11 320	8 730			*11 260	8 380	9.2 m
	15 ft	lb					*44,000	*44,000	*32,270	*32,270	*27,150	24,760	*24,840	18,780			*24,820	18,560	30.2 ft
	3 m	kg					*17 080	15 110	*13 610	11 080	*11 790	8 550					*11 450	7 940	9.5 m
	10 ft	lb							*36,860	32,640	*29,520	23,930	*25,710	18,440			*25,240	17,520	31.1 ft
	1.5 m	kg							*18 570	14 590	*14 540	10 770	*12 230	8 390			*11 710	7 830	9.5 m
	5 ft	lb							*40,150	31,490	*31,520	23,250	*26,590	18,110			*25,810	17,270	31.1 ft
	0 m	kg					*14 970	*14 970	*19 110	14 360	*15 020	10 580	*12 360	8 310			*12 010	8 070	9.2 m
	0 ft	lb					*33,010	*33,010	*41,420	30,970	*32,550	22,850	*26,740	17,960			*26,490	17,790	30.2 ft
	-1.5 m	kg					*24 260	22 220	*18 750	14 350	*14 830	10 550					*12 310	8 730	8.7 m
	-5 ft	lb					*52,790	47,750	*40,660	30,930	*32,100	22,790					*27,160	19,290	28.5 ft
	-3 m	kg			*27 060	*27 060	*22 120	*22 120	*17 360	14 520	*13 500	10 720					*12 490	10 120	7.9 m
	-10 ft	lb			*60,130	*60,130	*48,010	*48,010	*37,550	31,320	*28,890	23,190					*27,540	22,470	25.7 ft
	-4.5 m	kg					*18 270	*18 270	*14 090	*14 090							*12 200	*12 200	6.6 m
	-15 ft	lb					*39,280	*39,280	*29,870	*29,870							*26,810	*26,810	21.3 ft

Notes: 1. Machine in "Fine Mode-F" (Power Boost) for lifting capacities. 2. The above loads are in compliance with SAE J1097 and ISO 10567 Hydraulic Excavator Lifting Capacity Standards. 3. Rated loads do not exceed 87% of hydraulic lifting capacity or 75% of tipping load. 4. Rated loads marked with an asterisk (*) are limited by hydraulic capacity rather than tipping load.

Specifications

LIFTING CAPACITY EC480EL 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 (5 ft)		3.0 m (10 ft)		4.5 m (15 ft)		6.0 m (20 ft)		7.5 m (25 ft)		9.0 m (30 ft)		10.5 m (35 ft)		Max. reach		
		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	Front	Side	Max.
Boom : 7.0m(23') Arm : 3.0m(8'4") Shoe : 900mm(36") CWT : 9 750kg(21,500lb)	9 m kg															*10 650	*10 650	7.2 m
	30 ft lb															*23,590	*23,590	23. ft
	7.5 m kg									*10 270	*10 270					*10 380	10 090	8.3 m
	25 ft lb									*22,630	*22,630					*22,900	22,610	27.1 ft
	6 m kg									*10 800	*10 800	*10 350	8 820			*10 360	8 620	9.1 m
	20 ft lb									*23,560	*23,560					*22,840	19,170	29.8 ft
	4.5 m kg					*18 750	*18 750	*14 010	*14 010	*11 810	11 440	*10 690	8 670			*10 490	7 810	9.6 m
	15 ft lb					*40,070	*40,070	*30,250	*30,250	*25,670	24,680	*23,370	18,670			*23,110	17,290	31.4 ft
	3 m kg							*16 220	15 090	*13 000	11 010	*11 270	8 460			*10 700	7 400	9.8 m
	10 ft lb							*35,000	32,590	*28,200	23,750	*24,550	18,230			*23,590	16,340	32.2 ft
	1.5 m kg							*17 920	14 470	*14 040	10 640	*11 830	8 260			10 980	7 290	9.8 m
	5 ft lb							*38,740	31,240	*30,440	22,960	*25,710	17,810			24,210	16,080	32.3 ft
	0 m kg					*17 740	*17 740	*18 750	14 150	*14 680	10 410	*12 130	8 130			11 300	7 480	9.6 m
	0 ft lb					*41,580	*41,580	*40,610	30,520	*31,830	22,460	*26,310	17,550			24,920	16,490	31.5 ft
	-1.5 m kg			*13 630	*13 630	*24 700	21 780	*18 680	14 080	*14 720	10 330	*11 860	8 130			*11 680	8 030	9.1 m
	-5 ft lb			*31,090	*31,090	*53,660	46,820	*40,500	30,340	*31,880	22,290					*25,770	17,730	29.8 ft
	-3 m kg			*25 270	*25 270	*22 860	22 040	*17 650	14 200	*13 860	10 430					*11 990	9 170	8.3 m
	-10 ft lb			*57,320	*57,320	*49,590	47,390	*38,200	30,620	*29,850	22,530					*26,460	20,350	27.1 ft
	-4.5 m kg					*19 560	*19 560	*15 150	14 550							*12 050	11 610	7.1 m
	-15 ft lb					*42,150	*42,150	*32,430	31,430							*26,540	26,000	23. ft
Boom : 7.0m(23') Arm : 3.35m(11') Shoe : 900mm(36") CWT : 9 750kg(21,500lb)	9 m kg									*10 020	*10 020					*10 080	*10 080	7.6 m
	30 ft lb									*22,090	*22,090					*22,320	*22,320	24.5 ft
	7.5 m kg									*9 760	*9 760					*9 470	9 470	8.7 m
	25 ft lb									*21,460	*21,460					*20,950	*20,950	28.4 ft
	6 m kg									*10 360	*10 360	*9 900	8 940			*9 270	8 190	9.5 m
	20 ft lb									*22,610	*22,610	*21,800	19,200			*20,450	18,190	30.9 ft
	4.5 m kg					*17 590	*17 590	*13 440	*13 440	*11 430	*11 430	*10 360	8 750			*9 340	7 460	9.9 m
	15 ft lb					*37,640	*37,640	*29,030	*29,030	*24,840	*24,840	*22,640	18,850			*20,590	16,510	32.6 ft
	3 m kg					*22 320	*22 320	*15 730	15 270	*12 680	11 110	*11 020	8 520			*9 670	7 080	10.2 m
	10 ft lb					*47,870	*47,870	*33,950	32,980	*27,510	23,970	*24,000	18,370			*21,290	15,640	33.3 ft
	1.5 m kg					*15 350	*15 350	*17 590	14 600	*13 820	10 710	*11 660	8 300			*10 280	6 980	10.2 m
	5 ft lb					*36,980	*36,980	*38,040	31,510	*29,960	23,120	*25,340	17,900			*22,630	15,390	33.3 ft
	0 m kg					*18 910	*18 910	*18 640	14 220	*14 580	10 450	*12 070	8 150			10 770	7 140	9.9 m
	0 ft lb					*44,070	*44,070	*40,370	30,660	*31,600	22,540	*26,200	17,580			23,750	15,740	32.6 ft
	-1.5 m kg			*13 700	*13 700	*25 160	21 750	*18 790	14 090	*14 780	10 330	*12 030	8 100			*11 270	7 620	9.4 m
	-5 ft lb			*31,100	*31,100	*54,600	46,750	*40,740	30,370	*32,020	22,300	*25,980	17,500			*24,860	16,820	31.0 ft
	-3 m kg			*23 340	*23 340	*23 580	21 960	*18 020	14 160	*14 180	10 380					*11 610	8 600	8.7 m
	-10 ft lb			*52,860	*52,860	*51,130	47,220	*39,000	30,530	*30,600	22,420					*25,620	19,060	28.4 ft
	-4.5 m kg			*27 470	*27 470	*20 660	*20 660	*15 940	14 450	*11 940	10 680					*11 790	10 600	7.5 m
	-15 ft lb			*59,350	*59,350	*44,560	*44,560	*34,250	31,190	*26,320	23,540					*26,000	23,700	24.5 ft
Boom : 7.0m(23') Arm : 3.9m(12'10") Shoe : 900mm(36") CWT : 9 750kg(21,500lb)	9 m kg															*8 060	*8 060	8.3 m
	30 ft lb															*17,900	*17,900	26.7 ft
	7.5 m kg											*9 070	*9 070			*7 630	*7 630	9.3 m
	25 ft lb											*18,290	*18,290			*16,870	*16,870	30.3 ft
	6 m kg									*9 620	*9 620	*9 230	9 060			*7 490	*7 490	10.0 m
	20 ft lb									*20,990	*20,990	*20,270	19,500			*16,510	*16,510	32.7 ft
	4.5 m kg							*12 430	*12 430	*10 750	*10 750	*9 800	8 850			*7 550	6 940	10.4 m
	15 ft lb							*26,870	*26,870	*23,360	*23,360	*21,410	19,060			*16,630	15,360	34.2 ft
	3 m kg					*20 560	*20 560	*14 830	*14 830	*12 090	11 230	*10 550	8 580	*9 440	6 770	*7 800	6 610	10.7 m
	10 ft lb					*44,120	*44,120	*32,010	*32,010	*26,220	24,220	*22,980	18,500	*20,810	14,920	*17,170	14,590	35.0 ft
	1.5 m kg					*20 860	*20 860	*16 920	14 760	*13 350	10 790	*11 300	8 330	10 000	6 650	*8 260	6 510	10.7 m
	5 ft lb					*49,770	48,210	*36,590	31,850	*28,940	23,280	*24,570	17,970	22,050	14,660	*18,190	14,350	35.0 ft
	0 m kg					*20 810	*20 810	*18 280	14 280	*14 280	10 470	*11 860	8 140			*9 000	6 630	10.4 m
	0 ft lb					*48,290	46,870	*39,590	30,780	*30,970	22,590	*25,760	17,550			*19,840	14,610	34.2 ft
	-1.5 m kg	*9 630	*9 630	*13 700	*13 700	*25 520	21 650	*18 780	14 060	*14 710	10 300	*12 060	8 040			*10 190	7 010	10.0 m
	-5 ft lb	*21,520	*21,520	*30,970	*30,970	*55,330	46,550	*40,690	30,300	*31,890	22,220	*26,110	17,360			*22,480	15,490	32.7 ft
	-3 m kg	*16 090	*16 090	*21 130	*21 130	*24 410	21 770	*18 370	14 050	*14 450	10 280	*11 540	8 080			*11 010	7 800	9.3 m
	-10 ft lb	*36,050	*36,050	*47,760	*47,760	*52,900	46,810	*39,790	30,300	*31,250	22,200	*24,740	17,480			*24,310	17,270	30.3 ft
	-4.5 m kg			*30 400	*30 400	*22 040	*22 040	*16 850	14 250	*13 070	10 460					*11 330	9 320	8.2 m
	-15 ft lb			*65,700	*65,700	*47,610	47,590	*36,310	30,750	*27,930	22,620					*25,010	20,790	26.7 ft
	-6 m kg					*17 660	*17 660	*13 260	*13 260							*11 290	*11 290	6.7 m
	-20 ft lb					*37,580	*37,580	*27,810	*27,810							*24,830	*24,830	21.4 ft

Notes:

1. Machine in "Fine Mode-F" (Power Boost) for lifting capacities. 2. The above loads are in compliance with SAE J1097 and ISO 10567 Hydraulic Excavator Lifting Capacity Standards. 3. Rated loads do not exceed 87% of hydraulic lifting capacity or 75% of tipping load. 4. Rated loads marked with an asterisk (*) are limited by hydraulic capacity rather than tipping load.

For lifting capacity including bucket, simply subtract actual weight of the direct fit bucket or the bucket with quick coupler from the following values.

Notes: 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 EQUIPMENT
Engine
Turbocharged, 4 stroke diesel engine with water cooling, direct injection and charged air cooler that meets Tier 4f requirements
Air filter with indicator
Air intake heater
Cyclone pre-cleaner
Electric engine shut-off
Fuel filter and water separator
Fuel filler pump: 50 l/min(13.2 gal/min), with automatic shut-off
Alternator, 80 A
Electric / Electronic control system
Contronics
Advanced mode control system
Self-diagnostic system
Machine status indication
Engine speed sensing power control
Automatic idling system
One-touch power boost
Safety stop/start function
Adjustable 8inch LCD color monitor
Master electrical disconnect switch
Engine restart prevention circuit
High-capacity halogen lights:
Frame-mounted 2
Boom-mounted 2
Batteries, 2 x 12 V / 200 Ah
Start motor, 24 V / 7 kW
Frame
Access way with handrail
Tool storage area
Punched metal anti-slip plates
Undercover (heavy-duty)
Undercarriage
Undercover (heavy-duty)
Hydraulic track adjusters
Greased and sealed track link
Track Guard
Hydraulic System
Hose rupture valve: boom
Overload warning device
Automatic sensing hydraulic system
2-pump flow bucket circuit
Summation system
Boom priority
Arm priority
Swing priority
Boom, arm and bucket regeneration valves
Swing anti-rebound valves
Boom and arm holding valves
Multi-stage filtering system
Cylinder cushioning
Cylinder contamination seals
Auxiliary hydraulic valve
Automatic two-speed travel motors
Hydraulic oil, ISO VG 46

STANDARD EQUIPMENT
Cab and interior
ROPS (ISO12117-2) certified cab
Silicon oil and rubber mounts with spring
Travel pedals and hand levers
Adjustable operator seat and joystick control console
Control joysticks with 4 switches each
Heater & air-conditioner, automatic
Flexible antenna
AM/FM stereo with MP3, USB and bluetooth input
Hydraulic safety lock lever
Cab, all-weather sound suppressed, includes:
Cup holders
Door locks
Tinted glass
Floor mat
Horn
Large storage area
Pull-up type front window
Removable lower windshield
Seat belt
Safety glass
Sun screens, front, roof, rear
Rain shield
Windshield wiper with intermittent feature
Rear view camera
Master key
Track shoes
800 mm(32") with triple grousers
Digging Equipment
Boom: 6.45 m (21'2") HD
Arm: 3.2 m (10'6") HD
Manual centralized lubrication

OPTIONAL EQUIPMENT
Engine
Block heater: 120 V, 240 V
Oil bath pre-cleaner
Diesel coolant heater, 10 kW
Water separator with heater
Auto engine shutdown
Electric
Extra work lights:Halogen or LED
Cab-mounted 3
Boom-mounted 2
Counterweight-mounted 1
Travel alarm
Anti-theft system
Rotating warning beacon
Frame
Hydraulic removable counterweight

OPTIONAL EQUIPMENT

Undercarriage

- Full track guard
- Mechanically retractable width track gauge

Hydraulic System

- Hose rupture valve: arm
- Boom float function
- Hydraulic piping:
- Work tool management system
- (up to 20 programmable memories)
- Hammer & shear, 1 and 2 pump flow
- Hammer & shear:
- variable flow and pressure pre-setting
- Additional return filter
- Slope & rotator
- Grapple
- Oil leak (drain) line
- Quick coupler piping
- Volvo hydraulic quick coupler S3
- Volvo hydraulic quick coupler VQC-HU
- Volvo hydraulic quick coupler DR48
- Hydraulic oil, ISO VG 32
- Hydraulic oil, ISO VG 46
- Hydraulic oil, ISO VG 68
- Hydraulic oil, biodegradable 46
- Hydraulic oil, longlife oil 32
- Hydraulic oil, longlife oil 46
- Hydraulic oil, longlife oil 68

OPTIONAL EQUIPMENT

Cab and interior

- Fabric seat with heater
- Fabric seat with heater and air suspension
- Pilot control pattern change
- Opening top hatch
- Falling object guard (FOG)
- Frame-mounted
- Cab-mounted
- Cab-mounted falling object protective structure (FOPS)
- Smoker kit (ashtray and lighter)
- Safety net for front window
- Lower wiper with intermittent control
- Side view camera
- Anti-vandalism kit
- Specific key

Track shoes

- Track shoes 600/700/800/900 mm(24"/28"/32"/36") with triple grousers
- Track shoes 600 mm(24") with triple grousers and HD links
- Track shoes 600 mm(24") with double grousers

Digging Equipment

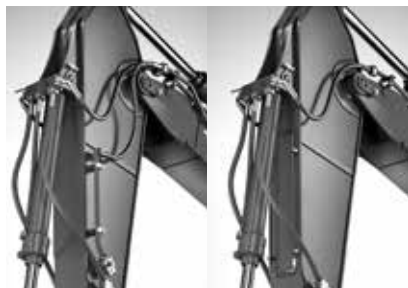
- Boom: 6,5 m(21'4") ME
- Arm: 2,55 m, 3,0 m, 3,9 m, 4,8 m(8'4", 9'10", 12'10", 15'9")
- Linkage with lifting eye

Service

- Tool kit, daily maintenance
- Tool kit, full scale
- Automatic lubrication system
- Air compressor

SELECTION OF VOLVO OPTIONAL EQUIPMENT

Auxiliary hydraulics, Breaker / Shear, Tilt / Rotator



Side-view camera



LED Lights



Air compressor



Retractable undercarriage



Removable counterweight



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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