VOLVO



Volvo Excavators 30.1-36.9 t 253 hp

EC300E

Volvo Construction Equipment



Welcome to our world

Welcome to a world of industry leading machinery. A world where imagination, hard work and technological innovation will lead the way towards developing a future which is cleaner, smarter, and more connected. A world supported by the enduring values of the Volvo Group. A world of stability, sustainability and innovation. A world which we put our customers at the heart of.

Welcome to the world of Volvo Construction Equipment – we think you're going to like it here.

Working harder, working smarter

For over 180 years Volvo has been a pioneer in the design and manufacture of machines which set the standard for efficiency, performance and uptime. Across our range of excavators, wheel loaders and haulers, our reputation for engineering excellence is unrivalled, which means whatever your operation or application, we can provide a total fleet solution to help you succeed.

Building on our proud history, the Volvo Concept Lab continues to create cutting-edge ideas and innovative concepts, to ensure we offer customers machines which work harder and smarter long into the future.



Solutions for you

Our industry leading machines are just the start of your relationship with Volvo. As your partner, we have developed an extensive range of additional solutions to help you improve uptime, boost productivity and reduce costs.

Designed for your business

Structured across nine blocks, our portfolio of products and services are designed to complement your machine's performance and boost your profitability. Simply put, we offer some of the best guarantees, warranties and technological solutions in the industry today.

There when you need us

Whether you're buying new or used, our global network of dealers and technicians offer around-the-clock support, including machine monitoring and world-class parts availability. It's the basis of everything offered by Volvo Services, so you can be confident we've got you covered right from the start.



BUILDING TOMORROW

Giving you more

The new and enhanced EC300E is packed with the latest technology to help you move more, for less. Features including the new Volvo engine, improved hydraulics, flow priority functions and optional Dig Assist apps deliver optimum productivity, efficiency and performance for a lower cost per ton.

More productivity

Get more done in the EC300E. An increase in engine power and improved hydraulic performance contributes to faster cycle times, while a 700 kg heavier counterweight provides superb stability and a 5% increase in across lifting capacity. Machine productivity is further enhanced by new motion priority functions, boom down speed control and improved jack up speed.



More precision

Unlock the full potential of your machine's productivity with Dig Assist, powered by the 10" Volvo Co-Pilot display. Gain access to a set of smart apps, including 2D, In-Field Design, 3D software packages, On-Board Weighing and Volvo Active Control, designed to optimize the digging process.



More control

Double your productivity with Volvo Active Control functions. The working day just got easier with automated boom and bucket movements, making the digging process more accurate and twice as fast. Simply set the grade from the Volvo Co-Pilot display, push the button and get to work – all controlled using a single lever.



More responsiveness

With electric control joystick and full electric travel pedals, operators benefit from an improved response time. Machine controllability is enhanced further by Boom/Swing and Boom/Travel priority functions which enable operators to prioritize one function over another. Operators can also easily adjust the boom down speed, ideal for precision tasks which require optimum control.





MORE FUEL EFFICIENCY

A range of features combine in the EC300E to deliver up to 10% improvement in fuel efficiency. The new D8M Volvo engine reduces rated rpm from 1800 down to 1600, while also delivering a 5% increase in power, and the intelligent new generation electro-hydraulic system provides on-demand flow and reduces internal losses in the hydraulic circuit. Classic Volvo features such as ECO mode and selectable work modes further contribute to outstanding fuel efficiency.

For your comfort and safety

With a host of new and proven features including enhanced machine access, superior visibility, bouncing reduction technology and customizable settings, the upgraded EC300E delivers all the safety and comfort you would expect from your Volvo machine.

Know your limits

With Volvo Active Control, operators can easily set swing fence, height limit and depth limit from the Volvo Co-Pilot. This helps to avoid contact with side obstacles, overhead obstacles such as power lines and underground hazards such as pipes and cables.



See it all

Operators benefit from outstanding visibility thanks to rear and side-view cameras. Furthermore, the optional Volvo Smart View uses front, rear and side cameras to provide a real-time, overhead view of the machine, resulting in safer machine rotation while working, especially in confined spaces.



A smoother shift

New boom and arm bouncing reduction technology reduces machine shock, resulting in a more comfortable and productive operator performance. Comfort Drive Control further helps to reduce fatigue by enabling operators to steer the machine using the joystick rollers instead of the pedals.



How you like it

Get ready for the working day in no time with customizable settings, including preferred control patterns easily selected from the monitor. New ‘long push’ functionality on the joystick allows operators to set an additional shortcut function, and with the L8 joystick operators can create a shortcut to hydraulic priority functions.





SAFETY, INSIDE AND OUT

Operators can access the upper structure with safety and confidence thanks to the new 3-point right-hand side access. Industry renowned features such as bolted anti-slip steps, high visibility handrails and spacious, ergonomic and low-noise Volvo Care Cab ensure the highest levels of operator comfort and safety.

Boost versatility

Get the most out of your excavator with our range of purpose-built attachments, designed to work in perfect harmony with your machine. Customize your EC300E with quality Volvo attachments, matched to your needs, to form one solid and reliable unit that delivers improved cycle times and increased fuel efficiency.

Buckets of productivity

Volvo buckets are the perfect tool to achieve maximum productivity when digging and re-handling in all conditions. Whether you are working with soft, medium or hard materials, our buckets deliver long life and feature original Volvo wear parts. Heavy-Duty variants provide optimum performance when digging in compact materials.



Take a break

Available with a full range of tools, the HB-Series of hydraulic breakers are designed to be a perfect match for your Volvo. Powered by the machine's constant auxiliary hydraulic flow, the breakers are configured to the specific weights of Volvo machines and are fully compatible with Volvo quick couplers for swift, safe and simple attachment changes.



Dig at any angle

Boost productivity and dig at any angle. Compatibility with SMP®, OilQuick®, Steelwrist®, Engcon® and Rototilt® tiltrotators provides the flexibility needed for precise construction jobs. The factory-fitted preparation system gives you the power to control both the excavator and tiltrotator using the original joysticks, with the information presented on the main display.

Stay cool

A new cooling layout increases hydraulic attachment cooling capacity by 10%, resulting in an improved attachment performance.





SMP® is a registered trademark from SMP Parts AB, OilQuick® is a registered trademark from OilQuick AB, Steelwrist® : Steelwrist is a registered trademark of Steelwrist AB
Engcon® : Engcon is a registered trademark of Engcon Holding AB, Rototilt® : Rototilt is a registered trademark of Rototilt Group AB



EASILY ATTACH

Discover our range of Volvo quick couplers, including the new Steelwrist® Auto Connect Quick Coupler – enabling the quick and easy connection of hydraulic attachments from the comfort and safety of the cab. The quick coupler delivers 300 liters per minute of hydraulic flow directly to the attachment.

Lower maintenance costs

Durable by design, the new EC300E is ready to take on the toughest applications. The machine delivers outstanding levels of reliability and with features including engine auto-regeneration, reinforced components and reduced maintenance requirements, you can count on the EC300E to maximize uptime while keeping maintenance costs to a minimum.

Less service requirements

The new electro-hydraulic system requires less hoses, therefore reducing the need for couplings, minimizing maintenance requirements and increasing reliability. Engine oil and engine oil filter change intervals have been doubled to 1000 hours, further ensuring the time and cost spent on maintenance is kept to a minimum.

Easier UREA filling

The new splash guard on the UREA tank makes filling quicker and easier, while also reducing the risk of spillage and subsequent corrosion.





Up to the challenge

Built to deliver outstanding strength and durability, this heavy-duty production machine features a robust undercarriage with reinforced idle frame, track links and bottom rollers. Reinforced bucket linkage with steel strip, optional heavy-duty superstructure undercover and easily replaced bolt-on wear plates at the arm end ensure the excavator succeeds even on the toughest of jobsites.





POWERED BY EXCELLENCE

With impressively high torque at low rpm, the new D8M Volvo engine builds on generations of proven Volvo engine technology to deliver superior reliability and performance. The engine features auto-regeneration technology, while auto-engine idle and auto-engine shutdown reduce unnecessary fuel consumption and wear.

Boost your profits

A world-class machine is just the start of how Volvo strives to add value you to your operation. Our portfolio of services is designed to complement your machine's performance and boost your profitability.

Every part counts

Maintain productivity and machine uptime with our range of readily available, tested and approved parts – all backed by Volvo warranty. Only by using Genuine Volvo Parts, can you protect your investment, extend machine life and guarantee long-lasting performance.



Maintain performance

Stay on track with planned servicing and keep your asset covered with our range of flexible maintenance and repair options.



Powerful reporting

Keep track of your fleet with a comprehensive portfolio of reports, designed to help you take action and boost the profitability of your business. Powered by the CareTrack telematics system, Productivity Report, Fuel Efficiency Report & Summary Report each provide an easy-to-digest overview of your machine's condition and performance.



Machine monitoring made easy

Maximize machine uptime and reduce repair costs with the CareTrack telematic system. Choose to keep track of your machine yourself or let us take care of it with Volvo Active Care. Our Volvo Uptime Center will provide 24/7 machine monitoring, supplying weekly reports and notifying you should preventive maintenance action be required.





GET THE MOST FROM YOUR MACHINE

While reliable and efficient machines of course play a vital role in reducing costs, enhancing safety and maximizing productivity, it is ultimately the performance of the operator that really makes the difference. We offer a wide range of training initiatives to help operators unlock the full capability of their Volvo excavator.

Move more for less

Boost your productivity

- 700kg heavier counterweight: 5% increase in across lifting capacity **NEW**
- Improved response time **NEW**
- Boom/Swing and Boom/Travel priority **NEW**
- Adjustable boom down speed **NEW**
- Dig Assist apps, powered by Volvo Co-Pilot
- Volvo Active Control: double your productivity

Lower maintenance costs

- Less hydraulic hoses: reduced need for couplings/oil **NEW**
- Splash guard on the UREA tank **NEW**
- 1000hr engine oil and engine oil filter change intervals **NEW**
- Engine auto-regeneration **NEW**
- Grouped filters, accessed from ground-level
- Reinforced idle frame, track links, bottom rollers

Comfortable operation

- Boom and arm bouncing reduction **NEW**
- Comfort Drive Control: joysticks steering **NEW**
- Additional 'long push' shortcut button **NEW**
- Selectable control pattern
- Volvo Care Cab: highest levels of comfort

Volvo Services: boost your profits

- Operator training program
- Productivity Report, Fuel Efficiency Report, Summary Report
- ActiveCare: 24/7 machine monitoring
- Genuine Volvo Parts
- Maintenance and repair agreements

Safety, inside and out

- 3-point right-hand side access to the upper structure **NEW**
- Bolted anti-slip steps, high visibility handrails
- ROPS cab, low-noise/vibration
- Rear and side cameras, Volvo Smart View
- Swing fence, height/depth limits functions (Volvo Active Control)



Boost versatility

- Steelwrist® Auto Connect Quick Coupler **NEW**
- Factory-fitted preparation for SMP®, OilQuick®, Steelwrist®, Engcon®, Rototilt® tiltrotator control systems **NEW**
- 10% more hydraulic attachment cooling capacity **NEW**
- Range of matched Volvo buckets and breakers
- Attachment Management System: 32 attachments stored

For a dramatic improvement in fuel efficiency, look no further than the EC300E Hybrid.

Up to 10% better fuel efficiency

- Volvo D8M engine **NEW**
- New generation electro-hydraulic system **NEW**
- ECO mode
- Selectable work modes
- Boom float function
- Auto-engine idle and shutdown



Volvo EC300E 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, highpressure fuel injectors, turbo charger and intercooler, and electronic engine controls to optimize machine performance.		
Engine	Volvo	D8M
Max power at	r/min	1 600
Net, ISO 9249/SAE J1349	kW	188
	hp	256
Gross, ISO 14396/SAE J1995	kW	189
	hp	257
Max torque	Nm	1 290
at engine speed	r/min	1 400
No. of cylinders		6
Displacement	l	7.7
Bore	mm	110
Stroke	mm	135

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

Undercarriage		
The undercarriage has a robust X-shaped frame. Greased and sealed track chains are standard.		
Track shoes		2 x 50
Link pitch	mm	203.2
Shoe width	mm	600 / 700 / 800 / 900
Shoe width, triple grouser	mm	600 / 700 / 800 / 900
Shoe width, triple grouser (HD)	mm	600
Shoe width, double grouser	mm	700
Bottom rollers		2 x 9
Top rollers		2 x 2

Swing system		
The swing system uses an axial piston motors, driving a planetary gearbox for maximum torque. An automatic holding brake and anti-rebound valve are standard.		
Max. slew speed	r/min	11
Max. slew torque	kNm	114.8

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	248
Max. travel speed (low)	km/h	3.6
Max. travel speed (high)	km/h	5.4
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.
Refrigerant of the type R134a is used when this machine is equipped with air conditioning. Contains fluorinated greenhouse gas R134a, Global Warming Potential 1.430 t CO2-eq.

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, arm and bucket regeneration provides optimum performance.		
Main pump, Type 2 x Variable displacement axial piston pumps		
Maximum flow	l/min	2 x 276
Pilot pump, Type Gear Pump		
Maximum flow	l/min	20.3
Relief value setting pressure		
Implement	MPa	33.3 / 36.3
Travel circuit	MPa	36.3
Slew circuit	MPa	28.9
Pilot circuit	MPa	3.9

Hydraulic Motors

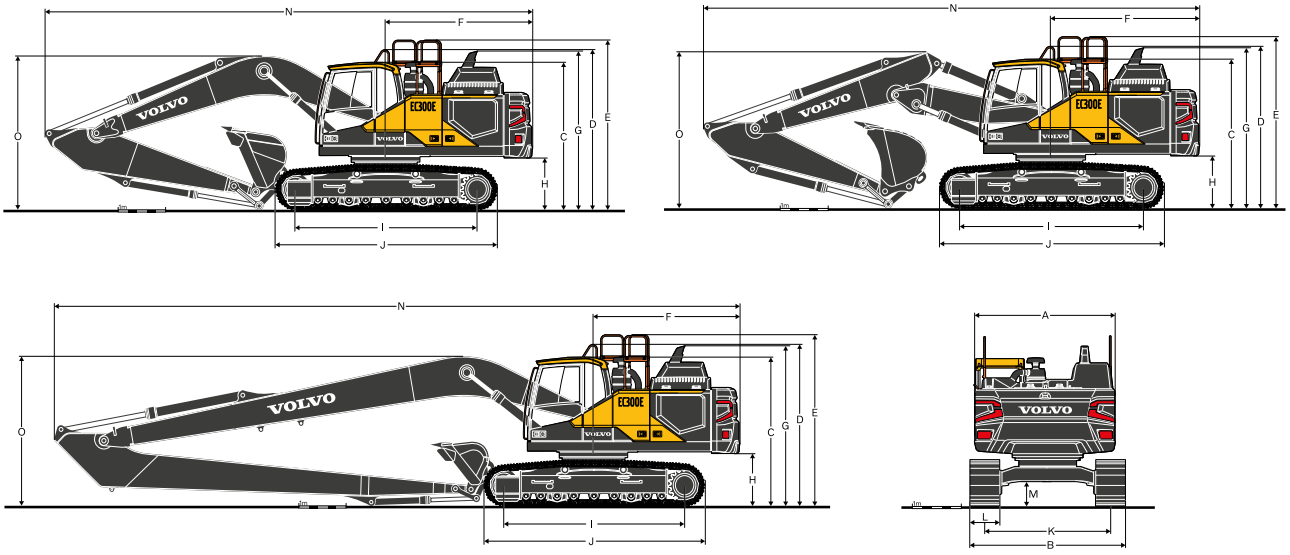
Travel: Variable displacement axial piston motor with mechanical brake
Swing: Fixed displacement piston motor with mechanical brake

Hydraulic Cylinders		
Mono boom		2
Bore x Stroke	ø x mm	140 x 1 480
2 piece boom		2
Bore x Stroke	ø x mm	170 x 1 300
Arm		1
Bore x Stroke	ø x mm	150 x 1 745
Bucket		1
Bore x Stroke	ø x mm	140 x 1 140
Bucket for LR boom		1
Bore x Stroke	ø x mm	100 x 865

Service Refill		
Fuel tank	l	472
DEF/AdBlue® tank	l	50
Hydraulic system, total	l	385
Hydraulic tank	l	215
Engine oil	l	30
Engine coolant	l	44
Slew reduction unit	l	6.1
Travel reduction unit	l	2 x 6

Sound Level		
Sound pressure level in cab according to ISO 6396		
L_{pA}	dB	70
External sound level according to ISO 6395 and EU Noise Directive 2000/14/EC		
L_{WA}	dB	104

Specifications



Description	Unit	EC300EL			EC300ENL			EC300EL/EC300ENL			EC300ELR
Boom	m	6.2			6.2			6.2 2-piece			10.2
Arm	m	2.55	3.05	3.7	2.55	3.05	3.7	2.55	3.05	3.7	7.9
A. Overall width of upper structure	mm	2 890	2 890	2 890	2 890	2 890	2 890	2 890	2 890	2 890	2 890
B. Overall width	mm	3 190	3 190	3 190	2 990	2 990	2 990	3 190 / 2 990	3 190 / 2 990	3 190 / 2 990	3 190
C. Overall height of cab	mm	3 110	3 110	3 110	3 110	3 110	3 110	3 110	3 110	3 110	3 110
D. Overall height of handrail	mm	3 360	3 360	3 360	3 360	3 360	3 360	3 360	3 360	3 360	3 360
E. Overall height of guardrail (Unfolded)	mm	3 570	3 570	3 570	3 570	3 570	3 570	3 570	3 570	3 570	3 570
E'. Overall height of handrail/guardrail (Folded)	mm	3 090	3 090	3 090	3 090	3 090	3 090	3 090	3 090	3 090	3 090
F. Tail swing radius	mm	3 120	3 120	3 120	3 120	3 120	3 120	3 120	3 120	3 120	3 155
G. Overall height of diffuser	mm	3 200	3 200	3 200	3 200	3 200	3 200	3 200	3 200	3 200	3 200
H. Counterweight clearance *	mm	1 105	1 105	1 105	1 105	1 105	1 105	1 105	1 105	1 105	1 105
I. Tumbler length	mm	4 015	4 015	4 015	4 015	4 015	4 015	4 015	4 015	4 015	4 015
J. Track length	mm	4 865	4 865	4 865	4 865	4 865	4 865	4 865	4 865	4 865	4 865
K. Track gauge	mm	2 590	2 590	2 590	2 390	2 390	2 390	2 590 / 2 390	2 590 / 2 390	2 590 / 2 390	2 590
L. Shoe width	mm	600	600	600	600	600	600	600	600	600	600
M. Min. ground clearance *	mm	475	475	475	475	475	475	475	475	475	475
N. Overall length	mm	10 605	10 500	10 540	10 605	10 500	10 540	10 605	10 535	10 535	14 565
O. Overall height of boom	mm	3 470	3 345	3 580	3 470	3 345	3 580	3 385	3 325	3 605	-

* Without shoe grouser

' 2-piece boom

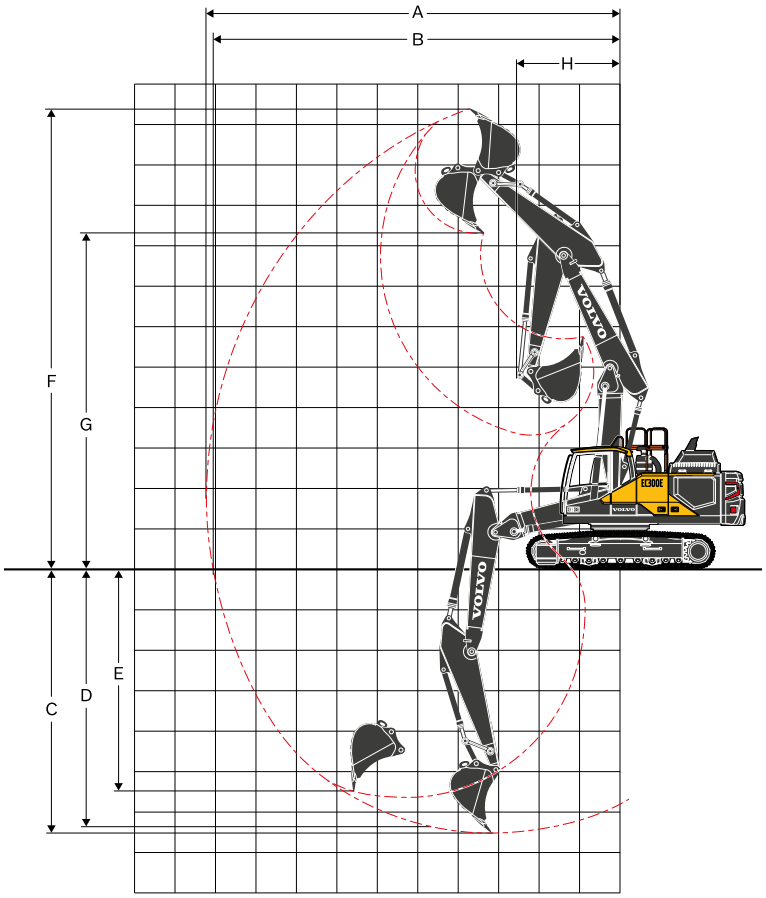
DIMENSIONS					
Boom					
Description	Unit	mono	mono	2-piece	Long-Reach
Boom	m	6.2 GP	6.2 HD	6.2	10.2
Length	mm	6 425	6 425	6 425	10 425
Height - Hose	mm	1 780	1 780	1 595	-
Height - Pipe	mm	1 665	1 665	1 550	1 580
Width	mm	765	765	770	765
Weight	kg	2 505	2 735	3 375	3 380

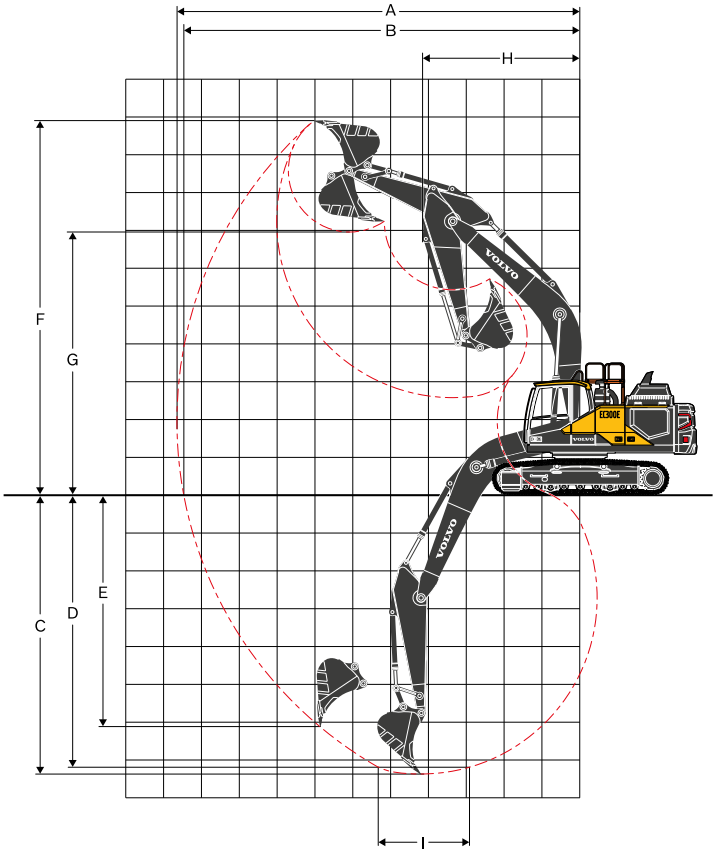
* Includes cylinder, piping and pin, excludes boom cylinder pin

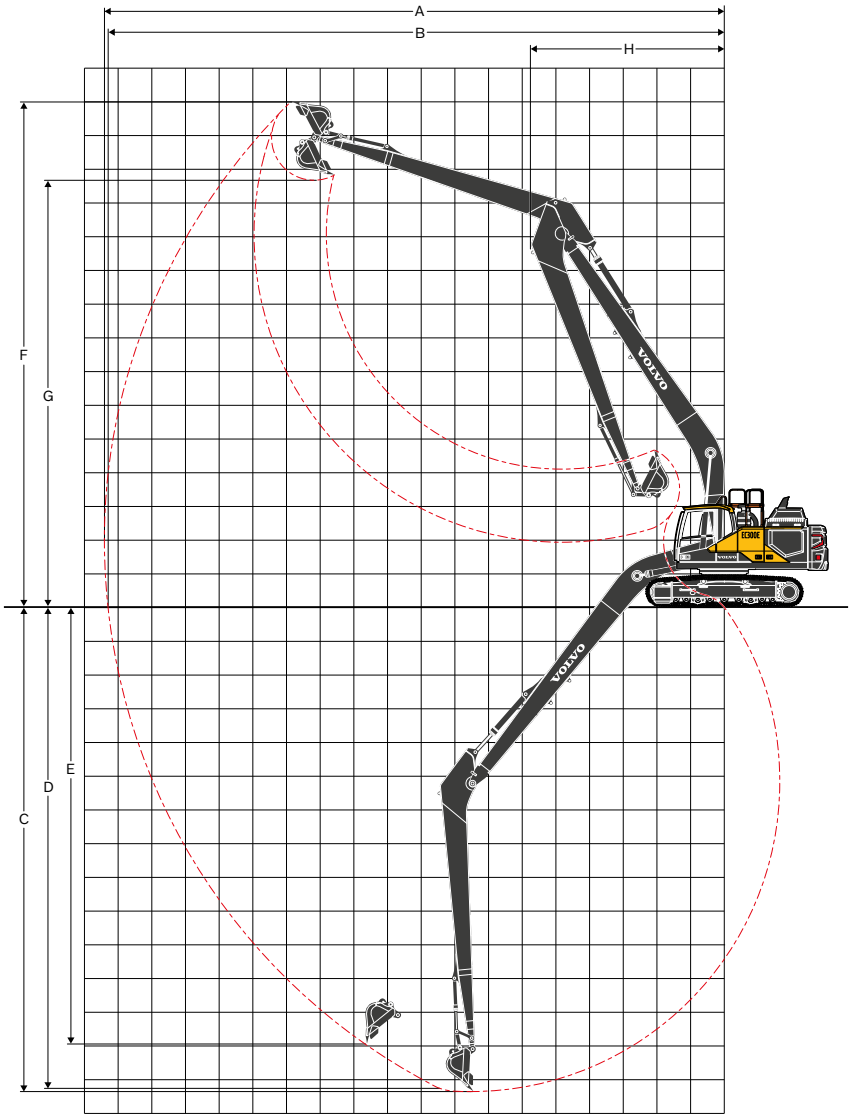
Arm						
Description	Unit					
Arm	m	2.55 HD	3.05 GP	3.05 HD	3.7 GP	7.9 LR
Length	mm	3 720	4 145	4 145	4 800	9 055
Height	mm	1 005	1 010	1 010	1 005	1 095
Width	mm	560	560	560	560	435
Weight	kg	1 450	1 510	1 570	1 630	1 770

* Includes cylinder, linkage and pin

Specifications







WORKING RANGES									
Description			**Unit**	**EC300EL / EC300ENL**						**EC300ELR**
Boom			**m**	**6.2**			**6.2 2-piece**			**10.2**
Arm			**m**	**2.55**	**3.05**	**3.7**	**2.55**	**3.05**	**3.7**	**7.9**
A. Max. digging reach			mm	10 180	10 710	11 310	10 250	10 780	11 390	18 590
B. Max. digging reach on ground			mm	9 970	10 520	11 130	10 040	10 580	11 210	18 480
C. Max. digging depth			mm	6 840	7 340	7 990	6 210	6 730	7 370	14 750
D. Max.digging depth (2.44 m level)			mm	6 600	7 150	7 830	6 100	6 630	7 280	14 650
E. Max. vertical wall digging depth			mm	5 320	6 080	6 680	5 040	5 630	6 240	13 630
F. Max. cutting height			mm	9 560	9 980	10 260	11 550	12 070	12 570	14 940
G. Max. dumping height			mm	6 680	7 040	7 330	8 360	8 850	9 360	12 600
H. Min. front swing radius			mm	4 220	4 180	4 240	2 750	2 580	2 770	6 190
DIGGING FORCES WITH DIRECT FIT BUCKET										
Bucket radius			mm	1 624	1 624	1 624	1 624	1 624	1 624	1 248
Breakout force	Normal	SAE J1179	kN	165	165	165	165	165	165	69
	Power boost		kN	179	179	179	179	179	179	69
	Normal	ISO 6015	kN	190	190	190	190	190	190	78
	Power boost		kN	207	207	207	207	207	207	78
Tearout force	Normal	SAE J1179	kN	158	133	116	158	133	116	51
	Power boost		kN	172	144	126	172	144	126	51
	Normal	ISO 6015	kN	163	136	118	163	136	118	52
	Power boost		kN	177	148	129	177	148	129	52
Rotation angle, bucket			°	179	179	179	179	179	179	178

Specifications

MACHINE WEIGHTS AND GROUND PRESSURE

Description	Shoe width	Operating weight	Ground pressure	Overall width	Operating weight	Ground pressure	Overall width
	mm	kg	kPa	mm	kg	kPa	mm
EC300EL							
		6.2 m boom (GP), 3.05 m arm (GP), 1 209 kg / 1.32 m³ bucket, 6 200 kg counterweight			**6.2 m boom (HD), 3.05 m arm (HD), 1 209 kg / 1.32 m³ bucket, 6 200 kg counterweight**		
Triple grouser	600	30 640	59.1	3 190	30 940	59.7	3 190
	600 (HD)	30 860	59.5	3 190	31 150	60.1	3 190
	700	31 230	51.6	3 290	31 520	52.1	3 290
	800	31 590	45.7	3 390	31 880	46.1	3 390
	900	31 950	41.1	3 490	32 240	41.5	3 490
Double grouser	700	31 420	52.0	3 290	31 710	52.4	3 290
		6.2 m boom (2-piece), 3.05 m arm (GP), 1 209 kg / 1.32 m³ bucket, 6 200 kg counterweight			**6.2 m boom (2-piece), 3.05 m arm (HD), 1 209 kg / 1.32 m³ bucket, 6 200 kg counterweight**		
Triple grouser	600	31 230	60.3	3 190	31 610	61.0	3 190
	600 (HD)	31 450	60.7	3 190	31 820	61.4	3 190
	700	31 820	52.6	3 290	32 190	53.2	3 290
	800	32 180	46.6	3 390	32 550	47.1	3 390
	900	32 540	41.9	3 490	32 910	42.3	3 490
Double grouser	700	32 010	52.9	3 290	32 380	53.5	3 290
EC300ENL							
		6.2 m boom (GP), 3.05 m arm (GP), 1 209 kg / 1.32 m³ bucket, 6 200 kg counterweight			**6.2 m boom (HD), 3.05 m arm (HD), 1 209 kg / 1.32 m³ bucket, 6 200 kg counterweight**		
Triple grouser	600	30 510	58.9	2 990	30 800	59.4	2 990
	600 (HD)	30 720	59.3	2 990	31 020	59.8	2 990
	700	31 090	51.4	3 090	31 390	51.9	3 090
	800	31 460	45.5	3 190	31 750	45.9	3 190
	900	31 820	40.9	3 290	32 110	41.3	3 290
Double grouser	700	31 290	51.7	3 090	31 580	52.2	3 090
		6.2 m boom (2-piece), 3.05 m arm (GP), 1 209 kg / 1.32 m³ bucket, 6 200 kg counterweight			**6.2 m boom (2-piece), 3.05 m arm (HD), 1 209 kg / 1.32 m³ bucket, 6 200 kg counterweight**		
Triple grouser	600	31 100	60.0	2 990	31 470	60.7	2 990
	600 (HD)	31 310	60.4	2 990	31 690	61.1	2 990
	700	31 680	52.4	3 090	32 060	53.0	3 090
	800	32 040	46.4	3 190	32 420	46.9	3 190
	900	32 410	41.7	3 290	32 780	42.2	3 290
Double grouser	700	31 880	52.7	3 090	32 250	53.3	3 090
EC300ELR							
		10.2 m boom (LR), 7.9 m arm (LR), 478 kg / 0.57 m³ bucket, 6 900 kg counterweight					
Triple grouser	600	31 770	61.3	3 190			
	600 (HD)	31 980	61.7	3 290			
	800	32 710	47.3	3 390			
	900	33 080	42.5	3 490			

BUCKET SELECTION GUIDE

Bucket type		Capacity	Cutting width	Weight	Teeth	EC300EL						EC300ENL					
						600 mm shoe, 6 200 kg counterweight						600 mm shoe, 6 200 kg counterweight					
						6.2 m GP Boom			6.2 m 2-piece Boom			6.2 m Boom			6.2 m 2-piece Boom		
		L	mm	kg	EA	2.55 m	3.05 m	3.7 m	2.55 m	3.05 m	3.7 m	2.55 m	3.05 m	3.7 m	2.55 m	3.05 m	3.7 m
Direct fit bucket	General purpose	550	600	883	3	C	C	C	C	C	C	C	C	C	C	C	C
		660	750	867	3	C	C	C	C	C	C	C	C	C	C	C	C
		770	900	996	4	C	C	C	C	C	C	C	C	C	C	C	C
		950	1 090	1 025	4	C	C	C	C	C	C	C	C	C	C	C	C
		1 140	1 240	1 192	5	C	C	C	C	C	C	C	C	C	C	C	C
		1 320	1 390	1 209	5	C	C	C	C	C	C	C	C	C	C	C	C
		1 450	1 490	1 270	5	C	C	C	C	C	C	C	C	C	C	C	C
		1 510	1 540	1 314	5	C	C	C	C	C	C	C	C	C	C	C	B
		1 760	1 740	1 448	6	C	C	B	C	C	B	C	B	B	C	B	A
		1 930	1 840	1 529	6	C	C	B	C	B	A	C	B	A	B	B	X
		2 060	1 950	1 590	6	C	B	A	C	B	A	B	A	X	B	A	X
	Heavy duty	550	600	881	3	D	D	D	D	D	D	D	D	D	D	D	D
		660	750	920	3	D	D	D	D	D	D	D	D	D	D	D	D
		1 140	1 240	1 214	5	D	D	D	D	D	D	D	D	D	D	D	D
		1 270	1 405	1 336	5	D	D	D	D	D	D	D	D	D	D	D	D
		1 320	1 390	1 301	5	D	D	D	D	D	D	D	D	D	D	D	D
		1 510	1 540	1 387	5	D	D	D	D	D	C	D	D	B	D	D	B
		1 690	1 690	1 485	5	D	D	B	D	D	B	D	C	B	D	B	A
		1 930	1 840	1 623	6	C	B	A	C	B	A	B	B	A	B	A	x
Direct fit bucket (UQC interface)	General purpose	550	600	883	3	C	C	C	C	C	C	C	C	C	C	C	C
		660	750	867	3	C	C	C	C	C	C	C	C	C	C	C	C
		770	900	996	4	C	C	C	C	C	C	C	C	C	C	C	C
		950	1 090	1 025	4	C	C	C	C	C	C	C	C	C	C	C	C
		1 140	1 240	1 192	5	C	C	C	C	C	C	C	C	C	C	C	C
		1 320	1 390	1 209	5	C	C	C	C	C	C	C	C	B	C	C	B
		1 450	1 490	1 270	5	C	C	C	C	C	B	C	C	B	C	B	A
		1 510	1 540	1 314	5	C	C	B	C	C	B	C	B	A	C	B	A
		1 760	1 740	1 448	6	C	B	A	C	B	A	B	A	x	B	A	x
		1 930	1 840	1 529	6	B	B	A	B	A	x	B	A	x	A	x	x
		2 060	1 950	1 590	6	B	A	x	B	A	x	A	X	x	A	x	x
	Heavy duty	550	600	881	3	D	D	D	D	D	D	D	D	D	D	D	D
		660	750	920	3	D	D	D	D	D	D	D	D	D	D	D	D
		1 140	1 240	1 214	5	D	D	D	D	D	D	D	D	C	D	D	C
		1 320	1 390	1 301	5	D	D	C	D	D	C	D	D	B	D	C	B
		1 510	1 540	1 387	5	D	D	B	D	C	B	C	B	A	C	B	A
		1 690	1 690	1 485	5	D	B	A	C	B	A	B	A	x	B	A	x
		1 930	1 840	1 623	6	B	A	x	B	A	x	A	x	x	A	x	x

For long reach boom and arm configuration, Volvo recommends to use 0.57 m³ (0.75 yd³) bucket
Please consult with your Volvo dealer for the proper match of buckets and attachments to suit the application.
The recommendations are given as a guide only, based on typical operation conditions.
Bucket capacity based on ISO 7451, heaped material with a 1:1 angle of repose.

Maximum materal density		
A	1 200~1 300 kg/m³	Coal, Caliche, Shale
B	1 400~1 600 kg/m³	Wet earth and clay, Limestone, Sandstone
C	1 700~1 800 kg/m³	Granite, Wet sand, Well blasted rock
D	> 1 900 kg/m³	Wet mud, Iron ore
X	Not recommended	

Specifications

LIFTING CAPACITY EC300EL

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 point		1.5 m		3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		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	m
Boom : 6.2 m Arm : 2.55 m Shoe : 600 mm CWT : 6 200 kg	7.5 m	kg							*7 740	*7 740					*7 900	7 640	6.5
	6.0 m	kg							*8 080	*8 080	*7 890	6 040			*7 900	5 970	7.6
	4.5 m	kg					*11 410	*11 410	*9 190	8 330	*8 220	5 930			7 940	5 160	8.2
	3.0 m	kg					*14 580	11 950	*10 630	7 930	*8 890	5 740			7 370	4 760	8.5
	1.5 m	kg					*16 750	11 340	*11 900	7 590	8 740	5 570			7 220	4 630	8.5
	0 m	kg					*17 340	11 140	12 030	7 390	8 610	5 450			7 440	4 750	8.3
	-1.5 m	kg			*12 880	*12 880	*16 910	11 150	11 970	7 340	8 590	5 430			8 170	5 190	7.8
	-3.0 m	kg			*21 080	*21 080	*15 540	11 310	*11 740	7 430					9 850	6 200	6.9
	-4.5 m	kg			*16 820	*16 820	*12 520	11 670							*10 110	8 870	5.4
Boom : 6.2 m Arm : 3.05 m Shoe : 600 mm CWT : 6 200 kg	7.5 m	kg													*6 380	*6 380	7.2
	6.0 m	kg									*7 240	6 130			*6 120	5 320	8.1
	4.5 m	kg					*10 280	*10 280	*8 540	8 440	*7 710	5 990			*6 120	4 680	8.7
	3.0 m	kg					*13 480	12 210	*10 050	8 020	*8 470	5 780	*6 600	4 370	*6 330	4 350	9.0
	1.5 m	kg					*16 040	11 470	*11 460	7 640	8 760	5 580	6 670	4 290	6 600	4 240	9.1
	0 m	kg					*17 170	11 140	12 040	7 390	8 600	5 430			6 770	4 330	8.9
	-1.5 m	kg	*7 610	*7 610	*11 750	*11 750	*17 140	11 070	11 920	7 290	8 530	5 370			7 330	4 660	8.4
	-3.0 m	kg	*13 880	*13 880	*19 440	*19 440	*16 140	11 170	11 970	7 330	8 610	5 440			8 560	5 420	7.5
	-4.5 m	kg			*18 990	*18 990	*13 800	11 450	*10 080	7 560					*9 460	7 180	6.2
Boom : 6.2 m Arm : 3.7 m Shoe : 600 mm CWT : 6 200 kg	7.5 m	kg									*6 290	6 220			*4 930	*4 930	8.0
	6.0 m	kg									*6 390	6 170			*4 750	4 660	8.8
	4.5 m	kg							*7 580	*7 580	*6 980	6 010	*6 390	4 450	*4 750	4 150	9.4
	3.0 m	kg					*11 960	*11 960	*9 180	8 110	*7 840	5 790	6 740	4 350	*4 900	3 880	9.6
	1.5 m	kg					*14 940	11 680	*10 770	7 690	*8 730	5 560	6 620	4 230	*5 200	3 780	9.7
	0 m	kg			*6 730	*6 730	*16 680	11 190	*11 960	7 380	8 550	5 380	6 520	4 140	*5 730	3 840	9.5
	-1.5 m	kg	*6 940	*6 940	*10 930	*10 930	*17 190	11 010	11 870	7 220	8 440	5 280	6 480	4 100	6 470	4 100	9.0
	-3.0 m	kg	*11 570	*11 570	*16 550	*16 550	*16 670	11 030	11 840	7 200	8 440	5 280			7 370	4 650	8.3
	-4.5 m	kg	*17 310	*17 310	*21 340	*21 340	*15 000	11 220	*11 150	7 330					*8 820	5 830	7.1
	-6.0 m	kg			*15 770	*15 770	*11 150	*11 150							*9 030	*9 030	5.3
Boom : 6.2 m Arm : 2.55 m Shoe : 800 mm CWT : 6 200 kg	7.5 m	kg							*7 700	*7 700					*7 860	*7 860	6.5
	6.0 m	kg							*8 040	*8 040	*7 840	6 240			*7 850	6 170	7.6
	4.5 m	kg					*11 350	*11 350	*9 140	8 620	*8 160	6 130			*7 990	5 340	8.2
	3.0 m	kg					*14 480	12 350	*10 560	8 190	*8 820	5 940			7 660	4 920	8.5
	1.5 m	kg					*16 620	11 700	*11 810	7 840	9 080	5 750			7 490	4 790	8.5
	0 m	kg					*17 200	11 490	12 490	7 630	8 940	5 630			7 730	4 910	8.3
	-1.5 m	kg			*12 880	*12 880	*16 770	11 490	12 420	7 570	8 920	5 610			8 480	5 360	7.8
	-3.0 m	kg			*20 880	*20 880	*15 400	11 660	*11 630	7 660					*9 770	6 400	6.9
	-4.5 m	kg			*16 640	*16 640	*12 400	12 030							*10 010	9 150	5.4
Boom : 6.2 m Arm : 3.05 m Shoe : 800 mm CWT : 6 200 kg	7.5 m	kg													*6 470	*6 470	7.2
	6.0 m	kg									*7 190	6 360			*6 200	5 510	8.1
	4.5 m	kg					*10 200	*10 200	*8 480	*8 480	*7 660	6 200			*6 200	4 840	8.7
	3.0 m	kg					*13 320	12 550	*9 950	8 270	*8 390	5 970	*6 680	4 520	*6 400	4 500	9.0
	1.5 m	kg					*15 820	11 730	*11 320	7 840	9 080	5 750	6 930	4 420	*6 830	4 380	9.1
	0 m	kg					*16 910	11 370	*12 230	7 570	8 900	5 590			7 030	4 460	8.9
	-1.5 m	kg	*7 690	*7 690	*11 840	*11 840	*16 890	11 300	12 310	7 460	8 830	5 520			7 600	4 810	8.4
	-3.0 m	kg	*13 970	*13 970	*19 530	*19 530	*15 900	11 420	*11 950	7 510	8 920	5 600			8 870	5 580	7.5
	-4.5 m	kg			*18 650	*18 650	*13 580	11 730	*9 940	7 770					*9 330	7 380	6.2
Boom : 6.2 m Arm : 3.7 m Shoe : 800 mm CWT : 6 200 kg	7.5 m	kg									*6 260	*6 260			*4 930	*4 930	8.0
	6.0 m	kg									*6 350	*6 350			*4 750	*4 750	8.8
	4.5 m	kg							*7 540	*7 540	*6 940	6 230	*6 390	4 610	*4 750	4 300	9.4
	3.0 m	kg					*11 890	*11 890	*9 120	8 390	*7 780	5 990	7 020	4 500	*4 900	4 010	9.6
	1.5 m	kg					*14 830	12 070	*10 690	7 950	*8 670	5 760	6 880	4 380	*5 200	3 910	9.7
	0 m	kg			*6 730	*6 730	*16 550	11 550	*11 860	7 630	8 890	5 570	6 780	4 280	*5 730	3 980	9.5
	-1.5 m	kg	*6 940	*6 940	*10 930	*10 930	*17 040	11 360	12 320	7 460	8 770	5 460	*6 710	4 240	*6 590	4 240	9.0
	-3.0 m	kg	*11 570	*11 570	*16 550	*16 550	*16 530	11 380	*12 260	7 430	8 760	5 450			7 660	4 810	8.3
	-4.5 m	kg	*17 310	*17 310	*21 140	*21 140	*14 860	11 580	*11 040	7 560					*8 730	6 030	7.1
	-6.0 m	kg			*15 590	*15 590	*11 030	*11 030							*8 930	*8 930	5.3

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 EC300EL

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 point	1.5 m		3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		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	m
Boom : 6.2 m 2pcs Arm : 2.55 m Shoe : 600 mm CWT : 6 200 kg	9.0 m kg					*11 710	*11 710							*10 640	*10 640	4.9
	7.5 m kg					*11 290	*11 290	*10 050	8 810					*9 320	7 450	6.6
	6.0 m kg			*12 170	*12 170	*12 290	*12 290	*10 310	8 660	*9 210	6 000			*8 900	5 820	7.6
	4.5 m kg					*14 310	12 900	*11 120	8 300	9 170	5 880			7 840	5 030	8.2
	3.0 m kg					*16 440	11 850	*12 040	7 860	8 940	5 680			7 280	4 640	8.6
	1.5 m kg							12 260	7 490	8 730	5 490			7 120	4 510	8.6
	0 m kg					*16 280	10 980	12 010	7 280	8 600	5 370			7 350	4 630	8.4
	-1.5 m kg					*14 390	11 010	*11 290	7 230	*8 570	5 360			*7 840	5 060	7.8
	-3.0 m kg					*11 380	11 200	*8 970	7 350					*6 980	6 050	7.0
Boom : 6.2 m 2pcs Arm : 3.05 m Shoe : 600 mm CWT : 6 200 kg	9.0 m kg					*9 760	*9 760							*7 380	*7 380	5.8
	7.5 m kg					*9 190	*9 190	*9 400	9 010					*6 550	6 420	7.3
	6.0 m kg					*9 740	*9 740	*9 760	8 830	*8 750	6 120			*6 230	5 200	8.2
	4.5 m kg					*13 400	13 190	*10 620	8 430	*9 060	5 950			*6 180	4 560	8.8
	3.0 m kg					*15 680	12 070	*11 640	7 940	8 990	5 720	6 760	4 310	*6 340	4 240	9.1
	1.5 m kg					*16 940	11 220	12 280	7 500	8 740	5 490	6 660	4 210	6 510	4 120	9.1
	0 m kg					*16 640	10 860	11 960	7 220	8 560	5 330			6 680	4 210	8.9
	-1.5 m kg			*11 010	*11 010	*15 150	10 800	*11 650	7 120	8 490	5 270			7 230	4 540	8.4
	-3.0 m kg					*12 550	10 950	*9 820	7 190	*6 990	5 370			*6 700	5 280	7.6
Boom : 6.2 m 2pcs Arm : 3.7 m Shoe : 600 mm CWT : 6 200 kg	10.5 m kg					*7 390	*7 390							*6 910	*6 910	4.7
	9.0 m kg							*7 200	*7 200					*5 520	*5 520	6.8
	7.5 m kg							*7 460	*7 460	*6 650	6 220			*4 990	*4 990	8.0
	6.0 m kg					*7 060	*7 060	*7 820	*7 820	*7 700	6 170			*4 770	4 540	8.9
	4.5 m kg			*10 040	*10 040	*9 870	*9 870	*9 580	8 550	*8 520	5 990	*6 700	4 400	*4 730	4 030	9.4
	3.0 m kg					*14 670	12 500	*11 050	8 070	9 030	5 740	6 750	4 290	*4 850	3 770	9.7
	1.5 m kg					*16 560	11 560	*12 030	7 610	8 760	5 500	6 610	4 170	*5 110	3 670	9.7
	0 m kg			*5 950	*5 950	*16 980	11 040	12 040	7 280	8 540	5 300	6 510	4 070	*5 570	3 740	9.5
	-1.5 m kg			*10 200	*10 200	*16 080	10 860	11 840	7 110	8 420	5 200	6 470	4 040	*6 330	3 990	9.1
	-3.0 m kg			*15 880	*15 880	*14 010	10 900	*10 720	7 100	*8 110	5 210			*6 470	4 530	8.3
	-4.5 m kg					*10 510	*10 510	*7 980	7 260							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.

Specifications

LIFTING CAPACITY EC300ENL

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 point		1.5 m		3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		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	m
Boom: 6.2 m Arm: 2.55 m Shoe: 600 mm CWT: 6 200 kg	7.5 m	kg							*7 740	*7 740					*7 900	7 050	6.5
	6.0 m	kg							*8 080	7 980	*7 890	5 560			*7 900	5 500	7.6
	4.5 m	kg					*11 410	*11 410	*9 190	7 660	*8 220	5 460			7 900	4 750	8.2
	3.0 m	kg					*14 580	10 850	*10 630	7 260	*8 890	5 280			7 330	4 370	8.5
	1.5 m	kg					*16 750	10 260	*11 900	6 930	8 700	5 100			7 180	4 250	8.5
	0 m	kg					*17 340	10 060	11 970	6 740	8 570	4 990			7 400	4 350	8.3
	-1.5 m	kg			*12 880	*12 880	*16 910	10 070	11 910	6 690	8 550	4 970			8 130	4 750	7.8
	-3.0 m	kg			*21 080	20 130	*15 540	10 230	*11 740	6 780					9 800	5 670	6.9
	-4.5 m	kg			*16 820	*16 820	*12 520	**10 570**							*10 110	8 090	5.4
Boom: 6.2 m Arm: 3.05 m Shoe: 600 mm CWT: 6 200 kg	7.5 m	kg													*6 380	6 060	7.2
	6.0 m	kg									*7 240	**5 660**			*6 120	**4 900**	8.1
	4.5 m	kg					*10 280	*10 280	*8 540	7 760	*7 710	5 510			*6 120	4 300	8.7
	3.0 m	kg					*13 480	11 100	*10 050	7 350	*8 470	5 310	*6 600	4 010	*6 330	3 990	9.0
	1.5 m	kg					*16 040	10 380	*11 460	6 980	8 710	5 110	6 630	3 930	6 560	3 880	9.1
	0 m	kg					*17 170	10 060	11 980	6 730	8 550	4 970			6 730	3 960	8.9
	-1.5 m	kg	*7 610	*7 610	*11 750	*11 750	*17 140	10 000	11 860	6 640	8 490	4 910			7 290	4 270	8.4
	-3.0 m	kg	*13 880	*13 880	*19 440	*19 440	*16 140	10 100	11 910	6 680	8 570	4 980			8 520	4 960	7.5
	-4.5 m	kg			*18 990	*18 990	*13 800	10 370	*10 080	**6 900**					*9 460	6 560	6.2
Boom: 6.2 m Arm: 3.7 m Shoe: 600 mm CWT: 6 200 kg	7.5 m	kg									*6 290	5 740			*4 930	*4 930	8.0
	6.0 m	kg									*6 390	**5 690**			*4 750	**4 280**	8.8
	4.5 m	kg							*7 580	*7 580	*6 980	5 530	*6 390	4 080	*4 750	3 800	9.4
	3.0 m	kg					*11 960	11 400	*9 180	7 430	*7 840	5 320	6 710	3 980	*4 900	3 550	9.6
	1.5 m	kg					*14 940	10 580	*10 770	7 030	8 710	5 090	6 580	3 870	*5 200	3 450	9.7
	0 m	kg			*6 730	*6 730	*16 680	10 110	*11 960	6 730	8 510	4 920	6 480	3 780	*5 730	3 510	9.5
	-1.5 m	kg	*6 940	*6 940	*10 930	*10 930	*17 190	9 940	11 800	6 570	8 390	4 820	6 450	3 750	6 440	3 740	9.0
	-3.0 m	kg	*11 570	*11 570	*16 550	*16 550	*16 670	9 960	11 780	6 550	8 390	4 810			7 330	4 250	8.3
	-4.5 m	kg	*17 310	*17 310	*21 340	19 960	*15 000	10 140	*11 150	6 670					*8 820	5 330	7.1
	-6.0 m	kg			*15 770	*15 770	*11 150	**10 570**							*9 030	8 370	5.3
Boom: 6.2 m 2pcs Arm: 2.55 m Shoe: 600 mm CWT: 6 200 kg	9.0 m	kg					*11 710	*11 710							*10 640	*10 640	4.9
	7.5 m	kg					*11 290	*11 290	*10 050	**8 110**					*9 320	6 860	6.6
	6.0 m	kg			*12 170	*12 170	*12 290	*12 290	*10 310	7 970	*9 210	5 510			*8 900	5 350	7.6
	4.5 m	kg					*14 310	11 750	*11 120	7 610	9 120	5 400			7 800	4 610	8.2
	3.0 m	kg					*16 440	10 730	*12 040	7 180	8 900	5 200			7 240	4 250	8.6
	1.5 m	kg							12 190	6 820	8 690	5 020			7 090	4 120	8.6
	0 m	kg					*16 280	9 890	11 950	6 620	8 550	4 900			7 310	4 230	8.4
	-1.5 m	kg					*14 390	9 920	*11 290	6 570	8 540	4 890			*7 840	4 620	7.8
	-3.0 m	kg					*11 380	10 100	*8 970	**6 680**					*6 980	5 520	7.0
Boom: 6.2 m 2pcs Arm: 3.05 m Shoe: 600 mm CWT: 6 200 kg	9.0 m	kg					*9 760	*9 760							*7 380	*7 380	5.8
	7.5 m	kg					*9 190	*9 190	*9 400	**8 310**					*6 550	5 910	7.3
	6.0 m	kg					*9 740	*9 740	*9 760	8 130	*8 750	5 630			*6 230	4 780	8.2
	4.5 m	kg					*13 400	12 030	*10 620	7 740	*9 060	5 470			*6 180	4 180	8.8
	3.0 m	kg					*15 680	10 940	*11 640	7 260	8 950	5 240	6 730	3 940	*6 340	3 870	9.1
	1.5 m	kg					*16 940	10 120	12 220	6 830	8 690	5 010	6 620	3 850	6 480	3 760	9.1
	0 m	kg					*16 640	9 770	11 900	6 560	8 510	4 850			6 650	3 840	8.9
	-1.5 m	kg			*11 010	*11 010	*15 150	9 710	*11 650	6 460	8 450	4 790			7 190	4 140	8.4
	-3.0 m	kg					*12 550	9 850	*9 820	6 520	*6 990	4 890			*6 700	4 810	7.6
Boom: 6.2 m 2pcs Arm: 3.7 m Shoe: 600 mm CWT: 6 200 kg	10.5 m	kg					*7 390	*7 390							*6 910	*6 910	4.7
	9.0 m	kg							*7 200	***7 200**					*5 520	***5 520**	6.8
	7.5 m	kg							*7 460	*7 460	*6 650	5 730			*4 990	*4 990	8.0
	6.0 m	kg					*7 060	*7 060	*7 820	*7 820	*7 700	5 680			*4 770	4 160	8.9
	4.5 m	kg			*10 040	*10 040	*9 870	*9 870	*9 580	7 860	*8 520	5 500	*6 700	4 030	*4 730	3 690	9.4
	3.0 m	kg					*14 670	11 360	*11 050	7 390	8 990	5 260	6 710	3 930	*4 850	3 440	9.7
	1.5 m	kg					*16 560	10 450	*12 030	6 940	8 710	5 020	6 580	3 800	*5 110	3 340	9.7
	0 m	kg			*5 950	*5 950	*16 980	9 940	11 980	6 610	8 500	4 830	6 470	3 710	*5 570	3 400	9.5
	-1.5 m	kg			*10 200	*10 200	*16 080	9 760	11 780	6 450	8 380	4 730	6 440	3 680	*6 330	3 630	9.1
	-3.0 m	kg			*15 880	*15 880	*14 010	9 800	*10 720	6 440	*8 110	4 730			*6 470	4 130	8.3
	-4.5 m	kg					*10 510	10 030	*7 980	**6 590**							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.

LIFTING CAPACITY EC300ELR

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 point		0 m		1.5 m		3.0 m		4.5 m		6.0 m		7.5 m		9.0 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
Boom: 10.2 m LR Arm: 7.85 m LR Shoe: 800 mm CWT: 6 900 kg	3.0 m	kg					*4 200	*4 200					*5 290	*5 290	*4 500	*4 500
	1.5 m	kg							*5 640	*5 640	*7 990	7 430	*6 160	5 510	*5 090	4 260
	0 m	kg					*1 810	*1 810	*3 990	*3 990	*9 090	6 640	*6 920	4 990	*5 620	3 910
	-1.5 m	kg			*1 780	*1 780	*2 370	*2 370	*3 940	*3 940	*7 280	6 140	*7 500	4 610	*6 060	3 630
	-3.0 m	kg	*2 440	*2 440	*2 460	*2 460	*3 030	*3 030	*4 360	*4 360	*7 040	5 870	7 680	4 360	5 950	3 430
	-4.5 m	kg	*2 990	*2 990	*3 150	*3 150	*3 760	*3 760	*5 010	*5 010	*7 440	5 750	7 530	4 230	5 820	3 310
	-6.0 m	kg	*3 600	*3 600	*3 880	*3 880	*4 550	*4 550	*5 840	*5 840	*8 240	5 750	7 480	4 190	5 760	3 250
	-7.5 m	kg	*4 270	*4 270	*4 660	*4 660	*5 440	*5 440	*6 840	*6 840	*9 410	5 840	7 520	4 220	5 770	3 270
	-9.0 m	kg	*4 990	*4 990	*5 510	*5 510	*6 440	*6 440	*8 050	*8 050	*9 240	6 000	*7 450	4 330	5 850	3 340
	-10.5 m	kg			*6 450	*6 450	*7 600	*7 600	*9 580	*9 580	*8 310	6 250	*6 750	4 510	*5 580	3 490
	-12.0 m	kg					*8 980	*8 980	*8 680	*8 680	*6 900	6 620	*5 620	4 790	*4 560	3 740
	-13.5 m	kg									*4 690	*4 690				

	Lifting point		10.5 m		12.0 m		13.5 m		15.0 m		16.5 m		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	m
Boom: 10.2 m LR Arm: 7.85 m LR Shoe: 800 mm CWT: 6 900 kg	13.5 m	kg											*1 330	*1 330	12.9
	12.0 m	kg					*1 870	*1 870					*1 260	*1 260	14.1
	10.5 m	kg					*2 460	*2 460	*1 330	*1 330			*1 210	*1 210	15.1
	9.0 m	kg					*2 700	*2 700	*2 060	*2 060			*1 190	*1 190	15.9
	7.5 m	kg					*2 800	2 740	*2 530	2 170			*1 180	*1 180	16.4
	6.0 m	kg			*3 060	*3 060	*2 950	2 630	*2 870	2 110	*1 690	1 680	*1 190	*1 190	16.9
	4.5 m	kg	*3 570	*3 570	*3 320	3 120	*3 130	2 510	*2 990	2 020	*2 080	1 630	*1 220	*1 220	17.2
	3.0 m	kg	*3 980	3 660	*3 610	2 930	*3 340	2 370	*3 140	1 930	*2 360	1 570	*1 260	*1 260	17.3
	1.5 m	kg	*4 390	3 390	*3 900	2 740	*3 550	2 240	3 120	1 830	*2 530	1 510	*1 320	*1 320	17.3
	0 m	kg	*4 770	3 140	*4 180	2 560	3 570	2 110	3 020	1 750	*2 560	1 450	*1 390	1 330	17.2
	-1.5 m	kg	4 970	2 930	4 110	2 410	3 450	2 000	2 940	1 670	*2 370	1 400	*1 500	1 330	17.0
	-3.0 m	kg	4 800	2 780	3 980	2 290	3 370	1 910	2 880	1 610	*1 810	1 380	*1 630	1 370	16.6
	-4.5 m	kg	4 700	2 680	3 900	2 210	3 310	1 860	2 850	1 580			*1 820	1 430	16.0
	-6.0 m	kg	4 650	2 630	3 870	2 180	3 290	1 840	2 860	1 590			*2 070	1 540	15.3
	-7.5 m	kg	4 650	2 640	3 880	2 190	3 320	1 870					*2 440	1 720	14.5
	-9.0 m	kg	4 720	2 700	3 950	2 260							*3 020	1 990	13.3
	-10.5 m	kg	*4 640	2 840									*3 800	2 430	11.9
	-12.0 m	kg											*3 840	3 250	10.1
	-13.5 m	kg											*3 650	*3 650	7.5

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 EQUIPMENT
Engine
Turbocharged, 4 stroke diesel engine with water cooling, direct injection and charged air cooler that meets EU Stage V requirements
Air filter with indicator
Air intake heater
Cyclone precleaner
Electric engine shutoff
Fuel filter and water separator
Fuel filler pump: 50 l/min, with automatic shutoff
Alternator, 80 A
Electric / Electronic control system
Advanced mode control system
Selfdiagnostic system
Machine status indication
Engine speed sensing power control
Automatic idling system
Onetouch power boost
Safety stop/start function
Adjustable LCD color monitor
Master electrical disconnect switch
Engine restart prevention circuit
Highcapacity LED lights:
- Frame-mounted 2
- Boom-mounted 1
Batteries, 2 x 12 V / 170 A
Start motor, 24 V / 5.5 kW
Frame
Access way with handrail
Tool storage area
Punched metal antislip plates
Counterweight:
6 200 kg
6 900 kg Long Reach
Undercarriage
Undercover (heavyduty)
Hydraulic track adjusters
Greased and sealed track link
Track Guard
Hydraulic system
Boom up swing priority function
Boom travel priority function (Creep)
Boom down speed control
Hose rupture valve: boom & arm
Overload warning device
Automatic sensing hydraulic system
Summation system
Boom priority
Arm priority
Swing priority
ECO mode fuel saving technology
Boom, arm and bucket regeneration valves
Swing antirebound valves
Boom and arm holding valves
Multistage filtering system
Cylinder cushioning
Cylinder contamination seals
Auxiliary hydraulic valve
Automatic twospeed travel motors
Hydraulic oil, longlife oil 46

STANDARD EQUIPMENT
Cab and interior
ROPS (ISO121172) certified cab
Silicon oil and rubber mounts with spring
Travel pedals and hand levers
Adjustable operator seat and joystick control console
Proportional joysticks with 3 switches
Heater & airconditioner, automatic
Flexible antenna
Radio with MP3 & USB Jack with bluetooth
Hydraulic safety lock lever
Cab, allweather sound suppressed, includes:
Cup holders
Door locks
Tinted glass
Floor mat
Horn
Large storage area
Pullup 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
Side view camera
Master key
Track shoes
600 mm with triple grousers
800 mm with triple grousers Long Reach
Digging equipment
Boom: 6.2 m monoblock
Arm: 3.05 m
Boom: 10.2 m monoblock, Long Reach
Arm: 7.9 m, Long Reach
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
Reversible fan
Delayed engine shutdown
Electric
Extra work lights(Halogen or LED):
Cab-mounted 3
Boom-mounted 1
Counterweight-mounted 1
Green light beacon
Travel alarm
Anti-theft system
Rotating warning beacon
Smart connect for tilt rotator
Tilt rotator 3rd gen
Dig assist, smart connect
Undercarriage
Full track guard
Track shoes
700/800/900 mm with triple grousers
600 mm HD with triple grousers
600/700 mm with double grousers
High walker undercarriage

OPTIONAL EQUIPMENT
Hydraulic system
CDC, Comfort Driving Control
Boom float function with HRV
Boom float function without HRV
Attachment management system (up to 32 programmable memories)
- Variable flow and pressure pre-setting
Hammer & shear, 1 and 2 pump flow
Additional return filter
Hydraulic piping:
- Slope & rotator
- Grapple
- Oil leak (drain) line
Quick coupler piping
Volvo hydraulic quick coupler S2
Volvo hydraulic quick coupler U30
Volvo hydraulic quick coupler S70
Volvo hydraulic quick coupler SQ70 55
Volvo hydraulic quick coupler SQ70
Hydraulic oil, biodegradable 46
Hydraulic oil, longlife oil 32
Hydraulic oil, longlife oil 68
Fuel tank-fast fuel fill prep
Straight travel pedal

OPTIONAL EQUIPMENT
Cab and interior
High visibility cabin
Fabric seat with heater
Fabric seat with heater and air suspension
Deluxe seat
High-strength one piece front windshield (P5A)
Opening top hatch
Falling object guard, FOG (fixed type or hinge type)
Frame-mounted
Cab-mounted
Cab-mounted falling object protective structure (FOPS)
Volvo smart view
Smoker kit (ashtray and lighter)
Safety net for front window
Lower wiper with intermittent control
Anti-vandalism kit
Specific key
Cleaning air gun
Digging equipment
Boom: 6,2 m 2 piece boom
Boom: 10.2 m monoblock, long reach
Arm: 2.55 m HD, 3.05 m HD, 3.7 m
Arm: 7.9 m, long reach
Linkage with lifting eye
Machine controls
Dig Assist
Volvo Active Control (Semi-autonomous)
Please refer to separate Brochure for more details
Service
Tool kit, daily maintenance
Tool kit, full scale

SELECTION OF VOLVO OPTIONAL EQUIPMENT

Two-piece boom



Swing out FOG



Demolition package



TiltRotator



Volvo Smart View



Long Reach boom & arm with Dig Assist



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.

VOLVO

Ref. No 20059439_E / English-21 / 2022.03 / EXC / Volvo, Global Marketing