

Volvo Construction Equipment  
Building Tomorrow



# EC300E HYBRID

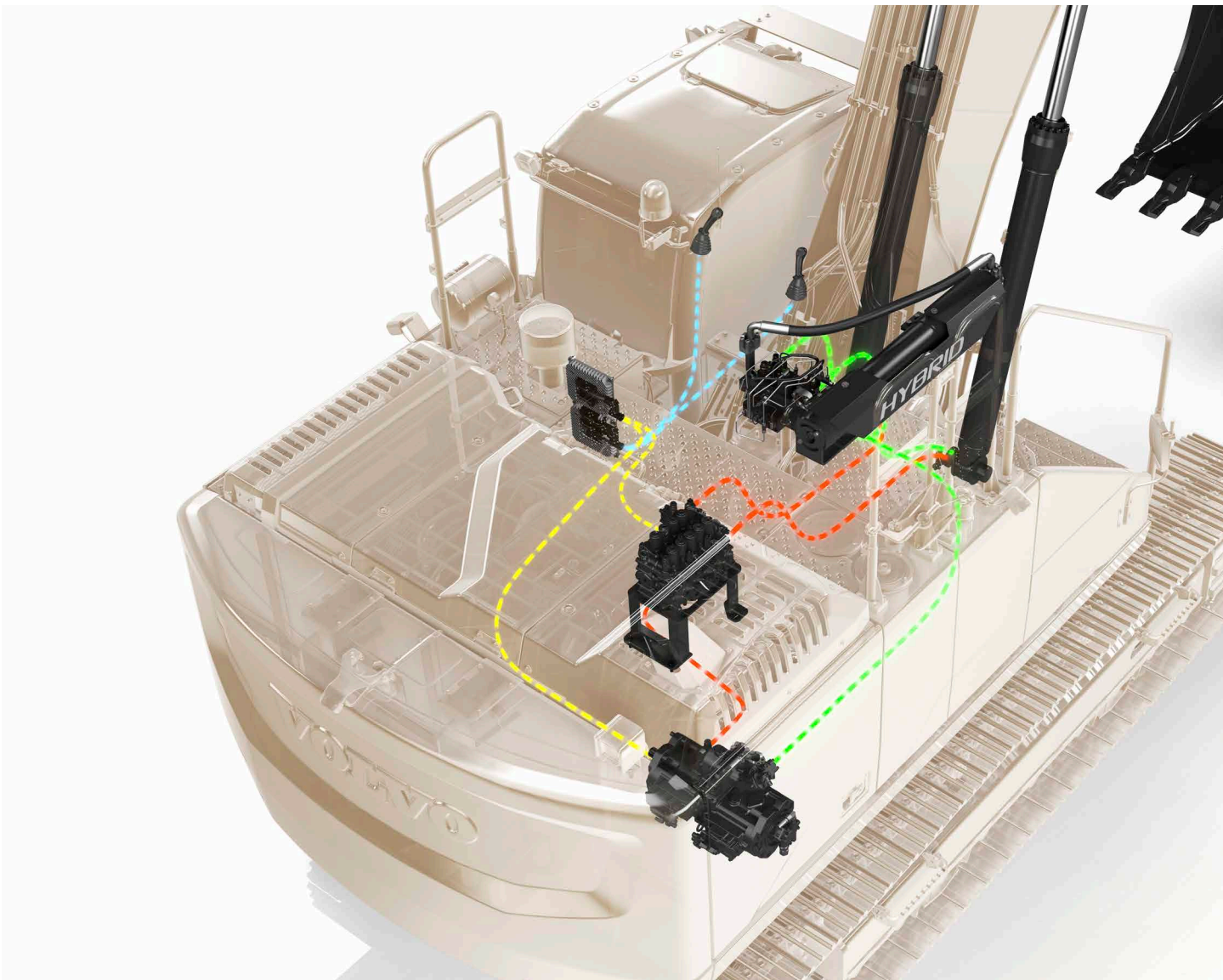
Volvo Excavators



# Simple solution, big savings

Introducing the new EC300E Hybrid. Featuring unique hydraulic hybrid Volvo technology, the excavator uses the boom down motion to charge an accumulator, with the stored energy driving an assist motor, lowering the torque requirement on the engine.

This results in up to 15% lower fuel consumption while delivering all the power and performance you would expect from a conventional EC300E.



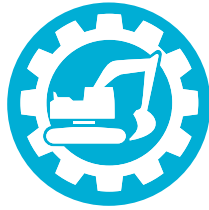
## Simply reliable

The uncomplicated and reliable hybrid solution is easy to maintain and consists of just a handful of add-on components, meaning no disruption or complication to how the high performing EC300E is engineered.



**UP TO 17%**

More Fuel Efficiency



**100%**

Volvo Engineered



**15%**

Lower Fuel Consumption



**Cleaner and greener**

The EC300E reduces CO<sub>2</sub> emissions by up to 12% making it a more environmentally respectful choice, especially when working in built-up areas.

**The value of efficiency**

When working in dig and dump applications, the EC300E Hybrid is a straightforward solution with big payback. Save fuel, lower emissions and boost the profitability of your operation.

# EC300E Hybrid in detail

## Engine

The latest generation, Volvo engine Tier 4 Final emissions compliant diesel engine fully meets the demands of the latest, emissions regulations. Featuring Volvo Advanced Combustion Technology (V-ACT), it is designed to deliver superior performance and fuel efficiency. The engine uses precise, high pressure fuel injectors, turbo charger and air-to-air intercooler, and electronic engine controls to optimize machine performance. Air Filter: 3-stage with precleaner. Automatic Idling System: Reduces engine speed to idle when the levers and pedals are not activated resulting in less fuel consumption and low cab noise levels.

Engine	Volvo	D8J
Max power at	r/min (r/s)	1,800 (30)
Net, ISO 9249/SAE J1349	kW (hp)	179 (240)
Gross, ISO 14396/SAE J1995	kW (hp)	180 (241)
Max torque	Nm (ft lbf)	1,238 (913)
at engine speed	r/min (r/s)	1,350 (22.5)
No. of cylinders		6
Displacement	l (in <sup>3</sup> )	7.8 (476)
Bore	mm (in)	110 (4.33)
Stroke	mm (in)	136 (5.35)

## Hybrid

The simple and reliable hybrid solution, Volvo's novel hydraulic hybrid takes 'free' energy generated by the boom down motion and uses it to reduce fuel consumption. The powerful and regular boom-down motions charge the 5.3 gallon (20 litre) hydraulic accumulator, which then delivers energy to drive a hydraulic assist motor. There is the same level of controllability and performance as the standard EC300E.

Accumulator		
No. of accumulator		1
Displacement	l (gal)	20 (5.3)

## 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	28/110

## Undercarriage

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

Track shoes		2 x 50
Link pitch	mm (in)	203 (8)
Shoe width, triple grouser	mm (in)	600 / 700 / 800 / 900 (24/28/32/36)
Shoe width, triple grouser (HD)	mm (in)	600 (24)
Shoe width, double grouser	mm (in)	700 (28)
Bottom rollers		2 x 9
Top rollers		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 air-conditioning and heating system: The pressurized and filtered cab air is supplied by an automatically-controlled fan. The air is distributed throughout the cab from 14 vents. Ergonomic operator's seat: The adjustable seat and joystick console move independently to accommodate the operator. The seat has nine different adjustments plus a seat belt for the operator's comfort and safety.

## 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	10.7
Max. slew torque	kNm (ft lbf)	110.9 (81,795)

## Travel System

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

Max. drawbar pull	kN (lbf)	248 (55,753)
Max. travel speed (low)	km/h (mi/h)	3.4 (2.1)
Max. travel speed (high)	km/h (mi/h)	5.4 (3.4)
Gradeability	°	35

## Sound Level

Sound pressure level in cab according to ISO 6396		
L <sub>pA</sub> (standard)	dB	70
L <sub>pA</sub> (tropical)	dB	71
External sound level according to ISO 6395 and EU Noise Directive 2000/14/EC		
L <sub>WA</sub> (standard)	dB	104
L <sub>WA</sub> (tropical)	dB	105

## Hydraulic system

The new electro-hydraulic system and new MCV (main control valve) use intelligent technology to control on-demand flow for high-productivity, high-digging capacity and excellent fuel consumption. The following important functions are included in the system 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 263 (2 x 69.5)
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### Pilot pump, Type Gear pump

Maximum flow	l/min (gal/min)	18 (4.76)
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### Relief value setting pressure

Implement	MPa (psi)	33.3/36.3 (4830/5265)
Travel circuit	MPa (psi)	33.3 (4,830)
Slew circuit	MPa (psi)	27.9 (4,047)
Pilot circuit	MPa (psi)	3.9 (566)

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

**Slew:** Fixed displacement axial piston motor with mechanical brake

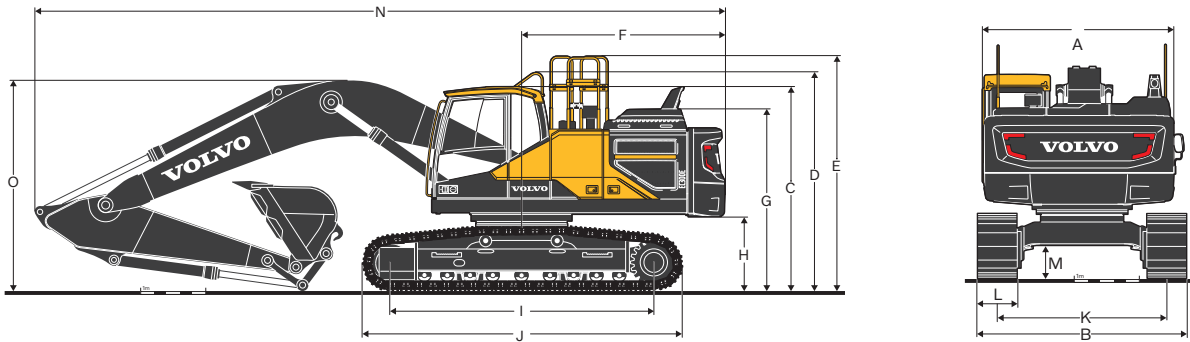
## Hydraulic Cylinders

Mono boom		2
Bore x Stroke	ø x mm (ø x in)	140 x 1 480 (5.5 x 58.3)
Arm		1
Bore x Stroke	ø x mm (ø x in)	150 x 1 745 (5.9 x 68.7)
Bucket		1
Bore x Stroke	ø x mm (ø x in)	140 x 1 140 (5.5 x 44.9)

## Service Refill

Fuel tank	l (gal)	470 (124)
DEF/AdBlue® tank	l (gal)	53 (14)
Hydraulic system, total	l (gal)	400 (105)
Hydraulic tank	l (gal)	207 (54.7)
Engine oil	l (gal)	32 (8.5)
Engine coolant	l (gal)	41 (10.8)
Slew reduction unit	l (gal)	6.1 (1.61)
Travel reduction unit	l (gal)	2 x 6 (2 x 1.6)

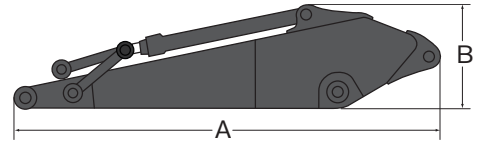
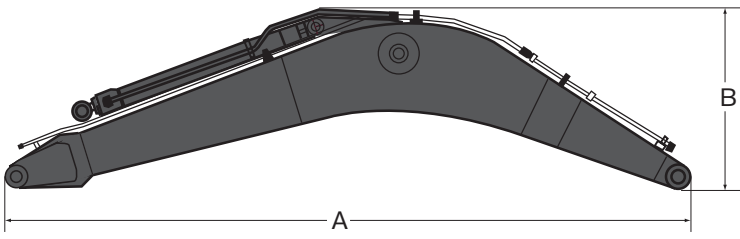
# Specifications



## DIMENSIONS

Description	Unit		EC300EL Hybrid					
	m	ft in	6.2 (20'4") mono					
Boom								
Arm	m	ft in	2.55	8'4"	3.05	10'0"	3.7	12'2"
A. Overall width of upper structure	mm	ft in	2,890	9'6"	2,890	9'6"	2,890	9'6"
B. Overall width	mm	ft in	3,190	10'6"	3,190	10'6"	3,190	10'6"
C. Overall height of cab	mm	ft in	3,110	10'2"	3,110	10'2"	3,110	10'2"
D. Overall height of handrail	mm	ft in	3,325	10'11"	3,325	10'11"	3,325	10'11"
E. Overall height of guardrail (Unfolded)	mm	ft in	3,570	11'9"	3,570	11'9"	3,570	11'9"
E. Overall height of guardrail (Folded)	mm	ft in	3,175	10'5"	3,175	10'5"	3,175	10'5"
F. Tail swing radius	mm	ft in	3,120	10'3"	3,120	10'3"	3,120	10'3"
G. Overall height of engine hood	mm	ft in	2,770	9'1"	2,770	9'1"	2,770	9'1"
H. Counterweight clearance *	mm	ft in	1,100	3'7"	1,100	3'7"	1,100	3'7"
I. Tumbler length	mm	ft in	4,015	13'2"	4,015	13'2"	4,015	13'2"
J. Track length	mm	ft in	4,870	16'0"	4,870	15'12"	4,870	16'0"
K. Track gauge	mm	ft in	2,590	8'6"	2,590	8'6"	2,590	8'6"
L. Shoe width	mm	ft in	600	1'12"	600	1'12"	600	2'0"
M. Min. ground clearance *	mm	ft in	480	1'7"	480	1'7"	480	1'7"
N. Overall length	mm	ft in	10,610	34'10"	10,510	34'6"	10,550	34'7"
O. Overall height of boom	mm	ft in	3,480	11'5"	3,350	11'0"	3,580	11'9"

\* Without shoe grouser



**DIMENSIONS BOOM**

Description	Unit		EC300E Hybrid	
			mono	
			6.2 HD	20'4" HD
<b>Boom</b>	<b>m</b>	<b>ft in</b>		
Length	mm	ft in	6,430	21'1"
Height	mm	ft in	1,680	5'6"
Width	mm	ft in	770	2'6"
Weight	kg	lb	2,810	6,195

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

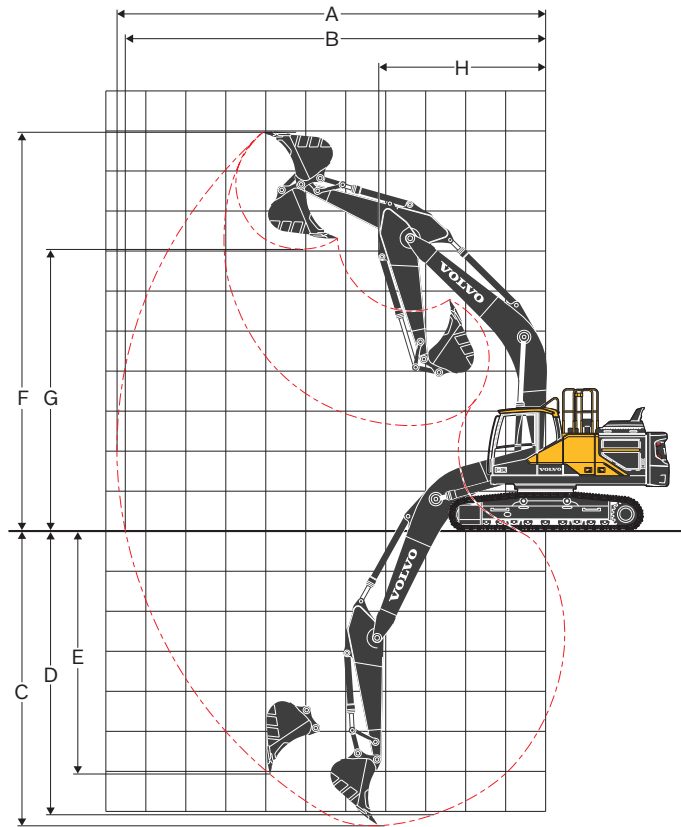
**DIMENSIONS ARM**

Description	Unit		EC300E Hybrid							
			2.55 HD	8'4" HD	3.05 GP	10'0" GP	3.05 HD	10'0" HD	3.7 GP	12'2" GP
			m	ft in	m	ft in	m	ft in	m	ft in
<b>Arm</b>	<b>m</b>	<b>ft in</b>								
Length	mm	ft in	3,710	12'2"	4,150	13'7"	4,150	13'7"	4,800	15'9"
Height	mm	ft in	1,010	3'4"	1,010	3'4"	1,010	3'4"	1,050	3'5"
Width	mm	ft in	545	1'9"	545	1'9"	545	1'9"	545	1'9"
Weight	kg	lb	1,530	3,373	1,530	3,373	1,590	3,505	1,660	3,660

\* Includes cylinder, linkage and pin

# Specifications

## MACHINE WITH MONO BOOM



### WORKING RANGES

Description	Unit		EC300EL Hybrid					
Boom	m (ft in)		6.2 (20'4")					
Arm	m	ft in	2.55	8'4"	3.05	10'0"	3.7	12'2"
A. Max. digging reach	mm	ft in	10,180	33'5"	10,710	35'2"	11,310	37'1"
B. Max. digging reach on ground	mm	ft in	9,970	32'9"	10,520	34'6"	11,130	36'6"
C. Max. digging depth	mm	ft in	6,840	22'5"	7,340	24'1"	7,990	26'3"
D. Max. digging depth (2.44 m level)	mm	ft in	6,600	21'8"	7,150	23'5"	7,830	25'8"
E. Max. vertical wall digging depth	mm	ft in	5,320	17'5"	6,080	19'11"	6,680	21'11"
F. Max. cutting height	mm	ft in	9,560	31'4"	9,980	32'9"	10,260	33'8"
G. Max. dumping height	mm	ft in	6,680	21'11"	7,040	23'1"	7,330	24'1"
H. Min. front swing radius	mm	ft in	4,220	13'10"	4,180	13'9"	4,240	13'11"

### DIGGING FORCES WITH DIRECT FIT BUCKET

Bucket radius			mm	ft in	1,600	5'3"	1,600	5'3"	1,600	5'3"
Breakout force - bucket	Normal	SAE J1179	kN	lbf	168	37,768	168	37,768	168	37,768
	Power boost	SAE J1179	kN	lbf	182	40,915	182	40,915	182	40,915
	Normal	ISO 6015	kN	lbf	188	42,264	188	42,264	188	42,264
	Power boost	ISO 6015	kN	lbf	205	46,086	205	46,086	205	46,086
Tearout force - dipper arm	Normal	SAE J1179	kN	lbf	157	35,295	132	29,675	115	25,853
	Power boost	SAE J1179	kN	lbf	170	38,218	143	32,148	125	28,101
	Normal	ISO 6015	kN	lbf	161	36,194	135	30,349	118	26,527
	Power boost	ISO 6015	kN	lbf	176	39,566	147	33,047	128	28,776

Rotation angle, bucket

°

179

179

179



**GROUND PRESSURE**

Description	Shoe width		Operating weight		Ground pressure		Overall width		Operating weight		Ground pressure		Overall width	
	mm	in	kg	lb	kPa	psi	mm	ft in	kg	lb	kPa	psi	mm	ft in
			<b>EC300E Hybrid with L undercarriage, 6.0m (20'4") boom, 3.05m (10'0") arm, 1,320kg (2,910lb) bucket, 5,100kg (11,250 lb) counterweight</b>					<b>EC300E Hybrid with L undercarriage, 6.0m (20'4") boom, 3.05m (10'0") HD arm, 1,320kg (2,910lb) bucket, 5100kg (11,250 lb) counterweight</b>						
<b>Triple grouser</b>	600	24	29,780	65,654	57.5	8.3	3,190	10'6"	30,080	66,315	58	8.4	3,190	10'6"
	700	28	30,340	66,888	50.2	7.3	3,290	10'10"	30,640	67,550	50.7	7.4	3,290	10'10"
	800	32	30,720	67,726	44.5	6.5	3,390	11'1"	31,020	68,387	44.9	6.5	3,390	11'1"
	900	36	31,090	68,542	40	5.8	3,490	11'5"	31,390	69,203	40.4	5.9	3,490	11'5"
<b>Triple grouser(HD)</b>	600	24	29,980	66,095	57.8	8.4	3,190	10'6"	30,280	66,756	58.4	8.5	3,190	10'6"
<b>Double grouser</b>	700	28	30,490	67,219	50.4	7.3	3,290	10'10"	30,790	67,880	50.9	7.4	3,290	10'10"
			<b>EC300E Hybrid with L undercarriage, 6.0m (20'4") boom, 3.05m (10'0") arm, 1,320kg (2,910lb) bucket, 5,500kg (12,130 lb) counterweight</b>					<b>EC300E Hybrid with L undercarriage, 6.0m (20'4") boom, 3.05m (10'0") HD arm, 1,320kg (2,910lb) bucket, 5,500kg (12,130 lb) counterweight</b>						
<b>Triple grouser</b>	600	24	30,180	66,535	58.2	8.4	3,190	10'6"	30,480	67,197	58.8	8.5	3,190	10'6"
	700	28	30,740	67,770	50.8	7.4	3,290	10'10"	31,040	68,431	51.3	7.4	3,290	10'10"
	800	32	31,120	68,608	45	6.5	3,390	11'1"	31,420	69,269	45.5	6.6	3,390	11'1"
	900	36	31,490	69,423	40.5	5.9	3,490	11'5"	31,790	70,085	40.9	5.9	3,490	11'5"
<b>Triple grouser(HD)</b>	600	24	30,380	66,976	58.6	8.5	3,190	10'6"	30,680	67,638	59.2	8.6	3,190	10'6"
<b>Double grouser</b>	700	28	30,890	68,101	51.1	7.4	3,290	10'10"	31,190	68,762	51.6	7.5	3,290	10'10"

**BUCKET SELECTION GUIDE**

Bucket type	Capacity		Cutting width		Weight		Teeth	EC300ELC Hybrid			
								6.2m Boom			
	m <sup>3</sup>	yd <sup>3</sup>	mm	in	kg	lb	EA	600mm (24") shoe, 5,500kg (12,130lb) counterweight	2.55m (8'4")	3.05m (10'0")	3.7m (12'2")
<b>Direct fit Buckets</b>	<b>General purpose</b>	0.55	0.72	600	24	823	1,814	3	D	D	D
		0.66	0.86	750	30	869	1,916	3	D	D	D
		0.95	1.24	1,050	41	1,018	2,244	4	D	D	D
		1.32	1.73	1,350	53	1,209	2,665	5	D	D	D
		1.45	1.90	1,450	57	1,263	2,784	5	D	D	C
		1.51	1.98	1,500	59	1,307	2,881	5	D	D	C
	<b>Heavy duty</b>	1.76	2.30	1,700	67	1,448	3,192	6	C	B	A
		2.06	2.69	1,950	77	1,590	3,505	6	B	A	X
		0.66	0.86	750	30	1,000	2,205	3	D	D	D
		0.66	0.86	750	30	992	2,187	3	D	D	D
	1.14	1.49	1,200	47	1,294	2,853	5	D	D	D	
	1.32	1.73	1,350	53	1,381	3,045	5	D	D	D	
	1.51	1.98	1,500	59	1,476	3,254	5	D	D	B	
	1.51	1.98	1,500	59	1,409	3,106	5	D	D	B	

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.

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

**Maximum material density**

	kg/m <sup>3</sup>	lb/yd <sup>3</sup>	
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

# Specifications

## LIFTING CAPACITY EC300EL Hybrid

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		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	Max.			
<b>Boom :</b> 6.2 m HD, 20'34" <b>Arm :</b> 2.55 m HD, 8'4" <b>Shoe :</b> 600 mm, 24" <b>CWT :</b> 5,500kg, 12,130lb	7.5 m	kg							*7,630	*7,630							*7,780	7,070	6.5 m	
	25 ft	lb							*16,930	*16,930								*17,180	16,040	21.1 ft
	6.0 m	kg							*7,960	*7,960	*7,750	5,530						*7,760	5,460	7.6 m
	20 ft	lb							*17,380	17,340								*17,100	12,190	24.6 ft
	4.5 m	kg						*11,250	*11,250	*9,040	7,690	*8,060	5,410					7,420	4,670	8.2 m
	15 ft	lb						*24,160	*24,160	*19,610	16,590	*17,630	11,650					16,450	10,370	26.8 ft
	3.0 m	kg						*14,360	10,970	*10,440	7,250	8,360	5,210					6,850	4,280	8.5 m
	10 ft	lb						*30,820	23,700	*22,600	15,650	17,990	11,230					15,140	9,460	27.9 ft
	1.5 m	kg						*16,470	10,300	11,460	6,870	8,140	5,010					6,690	4,140	8.5 m
	5 ft	lb						*35,540	22,210	24,660	14,840	17,530	10,810					14,760	9,140	28.0 ft
	0 m	kg						*17,040	10,080	11,210	6,660	8,000	4,890					6,890	4,240	8.3 m
	0 ft	lb						*36,930	21,700	24,120	14,360	17,230	10,540					15,200	9,360	27.3 ft
	-1.5 m	kg			*12,810	*12,810	*16,610	10,090	11,140	6,600	7,970	4,860						7,580	4,640	7.8 m
	-5 ft	lb			*29,220	*29,220	*36,040	21,710	23,970	14,230	17,200	10,510						16,740	10,260	25.5 ft
	-3.0 m	kg			*20,660	*20,660	*15,230	10,260	11,260	6,700								9,170	5,580	6.9 m
-10 ft	lb			*44,890	44,690	*32,990	22,090	24,240	14,470								20,390	12,400	22.5 ft	
-4.5 m	kg			*16,420	*16,420	*12,230	10,650										*9,850	8,070	5.4 m	
-15 ft	lb			*35,250	*35,250	*26,090	22,980										*21,700	18,280	17.6 ft	
<b>Boom :</b> 6.2 m HD, 20'34" <b>Arm :</b> 3.05 m HD, 10'0" <b>Shoe :</b> 600 mm, 24" <b>CWT :</b> 5,500kg, 12,130lb	7.5 m	kg															*6,360	6,060	7.2 m	
	25 ft	lb																*14,110	13,690	23.3 ft
	6.0 m	kg									*7,110	5,650						*6,090	4,860	8.2 m
	20 ft	lb									*15,670	12,130						*13,450	10,830	26.6 ft
	4.5 m	kg							*8,400	7,820	*7,570	5,490						*6,080	4,230	8.7 m
	15 ft	lb							*18,240	16,870	*16,540	11,810						*13,400	9,380	28.6 ft
	3.0 m	kg					*13,270	11,240	*9,870	7,350	*8,310	5,260	6,290	3,930				6,250	3,900	9.0 m
	10 ft	lb					*28,510	24,280	*21,370	15,860	*18,080	11,330						13,810	8,620	29.6 ft
	1.5 m	kg					*15,760	10,420	*11,250	6,930	8,160	5,030	6,180	3,830				6,110	3,780	9.1 m
	5 ft	lb					*34,000	22,490	*24,360	14,950	17,580	10,850						13,480	8,350	29.8 ft
	0 m	kg					*16,860	10,060	11,210	6,650	7,980	4,870						6,260	3,860	8.9 m
	0 ft	lb					*36,500	21,660	24,120	14,350	17,200	10,500						13,820	8,510	29.0 ft
	-1.5 m	kg	*7,560	*7,560	*11,720	*11,720	*16,820	9,990	11,090	6,540	7,910	4,800						6,790	4,160	8.4 m
	-5 ft	lb	*16,960	*16,960	*26,620	*26,620	*36,480	21,490	23,850	14,110	17,050	10,370						15,000	9,200	27.4 ft
	-3.0 m	kg	*13,860	*13,860	*19,430	*19,430	*15,820	10,100	11,140	6,590	8,000	4,880						7,950	4,860	7.5 m
-10 ft	lb	*31,120	*31,120	*44,190	43,870	*34,270	21,750	23,980	14,220								17,660	10,790	24.6 ft	
-4.5 m	kg			*18,550	*18,550	*13,490	10,420	*9,840	6,850								*9,220	6,500	6.2 m	
-15 ft	lb			*39,930	*39,930	*28,960	22,460	*20,770	14,840								*20,340	14,620	20.2 ft	
<b>Boom :</b> 6.2 m HD, 20'34" <b>Arm :</b> 3.7 m GP, 12'2" <b>Shoe :</b> 600 mm, 24" <b>CWT :</b> 5,500kg, 12,130lb	7.5 m	kg									*6,270	5,840					*5,010	*5,010	8.0 m	
	25 ft	lb									*13,160	12,490						*11,110	*11,110	25.8 ft
	6.0 m	kg									*6,360	5,780						*4,820	4,300	8.8 m
	20 ft	lb									*13,990	12,420						*10,650	9,590	28.8 ft
	4.5 m	kg							*7,530	*7,530	*6,930	5,590	*6,480	4,090				*4,820	3,800	9.4 m
	15 ft	lb							*16,350	*16,350	*15,130	12,030	*12,880	8,780				*10,610	8,420	30.7 ft
	3.0 m	kg					*11,830	11,640	*9,080	7,510	*7,750	5,330	6,350	3,970				*4,960	3,530	9.6 m
	10 ft	lb					*25,440	25,120	*19,660	16,210	*16,870	11,490	13,650	8,540				*10,910	7,790	31.6 ft
	1.5 m	kg					*14,720	10,680	*10,620	7,040	8,220	5,080	6,200	3,840				*5,250	3,420	9.7 m
	5 ft	lb					*31,750	23,040	*23,000	15,180	17,700	10,940	13,350	8,270				*11,570	7,540	31.8 ft
	0 m	kg			*6,800	*6,800	*16,410	10,140	11,270	6,690	8,000	4,870	6,090	3,740				5,650	3,470	9.5 m
	0 ft	lb			*15,560	*15,560	*35,500	21,840	24,240	14,440	17,220	10,510	13,120	8,050				12,450	7,650	31.1 ft
	-1.5 m	kg	*6,990	*6,990	*11,020	*11,020	*16,900	9,940	11,060	6,520	7,870	4,760	6,050	3,700				6,040	3,690	9.0 m
	-5 ft	lb	*15,650	*15,650	*24,970	*24,970	*36,620	21,390	23,790	14,050	16,950	10,270						13,330	8,160	29.5 ft
	-3.0 m	kg	*11,650	*11,650	*16,650	*16,650	*16,380	9,970	11,040	6,490	7,870	4,760						6,880	4,200	8.3 m
-10 ft	lb	*26,150	*26,150	*37,790	*37,790	*35,490	21,450	23,740	14,010	16,970	10,280						15,250	9,320	27.0 ft	
-4.5 m	kg	*17,420	*17,420	*20,900	20,650	*14,720	10,180	*10,950	6,640								*8,660	5,290	7.1 m	
-15 ft	lb	*39,290	*39,290	*45,080	44,200	*31,720	21,940	*23,490	14,350								*19,130	11,850	23.1 ft	
-6.0 m	kg			*15,370	*15,370	*10,910	10,690											*8,820	8,410	5.3 m
-20 ft	lb			*32,410	*32,410	*22,760	*22,760											*19,410	*19,410	16.9 ft

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

**LIFTING CAPACITY EC300EL Hybrid**

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		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	Max.				
<b>Boom :</b> 6.2 m HD, 20'34" <b>Arm :</b> 2.55 m HD, 8'4" <b>Shoe :</b> 700 mm, 28" <b>CWT :</b> 5,500kg, 12,130lb	7.5 m	kg							*7,630	*7,630							*7,780	7,190	6.5 m		
	25 ft	lb							*16,930	*16,930								*17,180	16,310	21.1 ft	
	6.0 m	kg							*7,960	*7,960	*7,750	5,630						*7,760	5,560	7.6 m	
	20 ft	lb							*17,380	*17,380								*17,100	12,410	24.6 ft	
	4.5 m	kg						*11,250	*11,250	*9,040	7,820	*8,060	5,510						7,570	4,760	8.2 m
	15 ft	lb						*24,160	*24,160	*19,610	16,870	*17,630	11,860						16,770	10,560	26.8 ft
	3.0 m	kg						*14,360	11,160	*10,440	7,380	8,520	5,310						6,990	4,370	8.5 m
	10 ft	lb						*30,820	24,120	*22,600	15,930	18,350	11,440						15,450	9,650	27.9 ft
	1.5 m	kg						*16,470	10,490	*11,680	7,010	8,300	5,110						6,830	4,230	8.5 m
	5 ft	lb						*35,540	22,630	25,160	15,120	17,890	11,030						15,060	9,330	28.0 ft
	0 m	kg						*17,040	10,270	11,440	6,790	8,160	4,990						7,040	4,330	8.3 m
	0 ft	lb						*36,930	22,120	24,610	14,650	17,590	10,760						15,520	9,560	27.3 ft
	-1.5 m	kg			*12,810	*12,810		*16,610	10,280	11,370	6,730	8,140	4,960						7,730	4,740	7.8 m
	-5 ft	lb			*29,220	*29,220		*36,040	22,130	24,460	14,520	17,560	10,730						17,090	10,470	25.5 ft
	-3.0 m	kg			*20,660	*20,660	*15,230	10,460	11,490	6,830									9,360	5,690	6.9 m
-10 ft	lb			*44,890	*44,890	*32,990	22,510	24,730	14,760									20,800	12,650	22.5 ft	
-4.5 m	kg			*16,420	*16,420	*12,230	10,850											*9,850	8,220	5.4 m	
-15 ft	lb			*35,250	*35,250	*26,090	23,410											*21,700	18,610	17.6 ft	
<b>Boom :</b> 6.2 m HD, 20'34" <b>Arm :</b> 3.05 m HD, 10'0" <b>Shoe :</b> 700 mm, 28" <b>CWT :</b> 5,500kg, 12,130lb	7.5 m	kg																*6,360	6,170	7.2 m	
	25 ft	lb																	*14,110	13,920	23.3 ft
	6.0 m	kg									*7,110	5,750							*6,090	4,950	8.2 m
	20 ft	lb									*15,670	12,340							*13,450	11,030	26.6 ft
	4.5 m	kg							*8,400	7,950	*7,570	5,590							*6,080	4,310	8.7 m
	15 ft	lb							*18,240	17,150	*16,540	12,030							*13,400	9,560	28.6 ft
	3.0 m	kg					*13,270	11,430	*9,870	7,480	*8,310	5,360	6,420	4,010					*6,280	3,980	9.0 m
	10 ft	lb					*28,510	24,700	*21,370	16,150	*18,080	11,540							*13,840	8,800	29.6 ft
	1.5 m	kg					*15,760	10,620	*11,250	7,060	8,330	5,130	6,310	3,910					6,240	3,860	9.1 m
	5 ft	lb					*34,000	22,910	*24,360	15,240	17,940	11,070							13,760	8,520	29.8 ft
	0 m	kg					*16,860	10,260	11,440	6,790	8,150	4,970							6,400	3,940	8.9 m
	0 ft	lb					*36,500	22,090	24,610	14,640	17,560	10,720							14,110	8,690	29.0 ft
	-1.5 m	kg	*7,560	*7,560	*11,720	*11,720		*16,820	10,180	11,320	6,680	8,080	4,900						6,930	4,250	8.4 m
	-5 ft	lb	*16,960	*16,960	*26,620	*26,620	*36,480	21,920	24,340	14,400	17,410	10,590							15,310	9,390	27.4 ft
	-3.0 m	kg	*13,860	*13,860	*19,430	*19,430	*15,820	10,300	11,370	6,720	8,170	4,980							8,120	4,960	7.5 m
-10 ft	lb	*31,120	*31,120	*44,190	*44,190	*34,270	22,170	24,470	14,510									18,020	11,010	24.6 ft	
-4.5 m	kg			*18,550	*18,550	*13,490	10,610	*9,840	6,980									*9,220	6,620	6.2 m	
-15 ft	lb			*39,930	*39,930	*28,960	22,880	*20,770	15,130									*20,340	14,900	20.2 ft	
<b>Boom :</b> 6.2 m HD, 20'34" <b>Arm :</b> 3.7 m GP, 12'2" <b>Shoe :</b> 700 mm, 28" <b>CWT :</b> 5,500kg, 12,130lb	7.5 m	kg									*6,270	5,940						*5,010	*5,010	8.0 m	
	25 ft	lb									*13,160	12,700							*11,110	*11,110	25.8 ft
	6.0 m	kg									*6,360	5,880							*4,820	4,380	8.8 m
	20 ft	lb									*13,990	12,630							*10,650	9,770	28.8 ft
	4.5 m	kg							*7,530	*7,530	*6,930	5,690	*6,480	4,170					*4,820	3,880	9.4 m
	15 ft	lb							*16,350	*16,350	*15,130	12,250	*12,880	8,950					*10,610	8,590	30.7 ft
	3.0 m	kg					*11,830	*11,830	*9,080	7,640	*7,750	5,430	6,480	4,050					*4,960	3,600	9.6 m
	10 ft	lb					*25,440	*25,440	*19,660	16,490	*16,870	11,710	13,930	8,720					*10,910	7,950	31.6 ft
	1.5 m	kg					*14,720	10,880	*10,620	7,170	8,390	5,180	6,330	3,920					*5,250	3,490	9.7 m
	5 ft	lb					*31,750	23,460	*23,000	15,470	18,060	11,160	13,630	8,440					*11,570	7,710	31.8 ft
	0 m	kg			*6,800	*6,800	*16,410	10,330	11,500	6,830	8,160	4,970	6,220	3,820					5,770	3,540	9.5 m
	0 ft	lb			*15,560	*15,560	*35,500	22,260	24,730	14,720	17,570	10,720	13,400	8,230					12,720	7,810	31.1 ft
	-1.5 m	kg	*6,990	*6,990	*11,020	*11,020	*16,900	10,140	11,290	6,650	8,030	4,860	6,180	3,780					6,170	3,770	9.0 m
	-5 ft	lb	*15,650	*15,650	*24,970	*24,970	*36,620	21,820	24,280	14,330	17,310	10,480							13,620	8,340	29.5 ft
	-3.0 m	kg	*11,650	*11,650	*16,650	*16,650	*16,380	10,160	11,270	6,630	8,030	4,860							7,020	4,290	8.3 m
-10 ft	lb	*26,150	*26,150	*37,790	*37,790	*35,490	21,870	24,230	14,290	17,330	10,500							15,570	9,510	27.0 ft	
-4.5 m	kg	*17,420	*17,420	*20,900	*20,900	*14,720	10,380	*10,950	6,770									*8,660	5,400	7.1 m	
-15 ft	lb	*39,290	*39,290	*45,080	45,010	*31,720	22,360	*23,490	14,630									*19,130	12,090	23.1 ft	
-6.0 m	kg			*15,370	*15,370	*10,910	10,880												*8,820	8,570	5.3 m
-20 ft	lb			*32,410	*32,410	*22,760	22,760												*19,410	*19,410	16.9 ft

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

# Specifications

## LIFTING CAPACITY EC300EL Hybrid

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		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	Max.
<b>Boom :</b> 6.2 m HD, 20'34" <b>Arm :</b> 2.55 m HD, 8'4" <b>Shoe :</b> 800 mm, 32" <b>CWT :</b> 5,500kg, 12,130lb	7.5 m	kg							*7,630	*7,630					*7,780	7,260	6.5 m
	25 ft	lb							*16,930	*16,930					*17,180	16,470	21.1 ft
	6.0 m	kg							*7,960	*7,960	*7,750	5,690			*7,760	5,620	7.6 m
	20 ft	lb							*17,380	*17,380					*17,100	12,540	24.6 ft
	4.5 m	kg					*11,250	*11,250	*9,040	7,900	*8,060	5,570			7,650	4,820	8.2 m
	15 ft	lb					*24,160	*24,160	*19,610	17,040	*17,630	11,990			16,970	10,680	26.8 ft
	3.0 m	kg					*14,360	11,280	*10,440	7,460	8,620	5,370			7,080	4,420	8.5 m
	10 ft	lb					*30,820	24,380	*22,600	16,100	18,560	11,570			15,640	9,760	27.9 ft
	1.5 m	kg					*16,470	10,610	*11,680	7,080	8,400	5,170			6,910	4,280	8.5 m
	5 ft	lb					*35,540	22,890	*25,290	15,290	18,100	11,160			15,250	9,440	28.0 ft
	0 m	kg					*17,040	10,390	11,570	6,870	8,260	5,040			7,130	4,380	8.3 m
	0 ft	lb					*36,930	22,370	24,900	14,820	17,800	10,890			15,710	9,670	27.3 ft
	-1.5 m	kg			*12,810	*12,810	*16,610	10,400	11,510	6,810	8,240	5,020			7,830	4,790	7.8 m
	-5 ft	lb			*29,220	*29,220	*36,040	22,380	24,750	14,690	17,770	10,860			17,300	10,590	25.5 ft
	-3.0 m	kg			*20,660	*20,660	*15,230	10,570	*11,500	6,910					9,470	5,750	6.9 m
-10 ft	lb			*44,890	*44,890	*32,990	22,760	*24,790	14,930					21,050	12,790	22.5 ft	
-4.5 m	kg			*16,420	*16,420	*12,230	10,960							*9,850	8,310	5.4 m	
-15 ft	lb			*35,250	*35,250	*26,090	23,660							*21,700	18,820	17.6 ft	
<b>Boom :</b> 6.2 m HD, 20'34" <b>Arm :</b> 3.05 m HD, 10'0" <b>Shoe :</b> 800 mm, 32" <b>CWT :</b> 5,500kg, 12,130lb	7.5 m	kg												*6,360	6,230	7.2 m	
	25 ft	lb													*14,110	14,060	23.3 ft
	6.0 m	kg									*7,110	5,810			*6,090	5,000	8.2 m
	20 ft	lb									*15,670	12,470			*13,450	11,150	26.6 ft
	4.5 m	kg							*8,400	8,030	*7,570	5,640			*6,080	4,360	8.7 m
	15 ft	lb							*18,240	17,320	*16,540	12,150			*13,400	9,670	28.6 ft
	3.0 m	kg					*13,270	11,550	*9,870	7,560	*8,310	5,410	6,500	4,050	*6,280	4,030	9.0 m
	10 ft	lb					*28,510	24,950	*21,370	16,320	*18,080	11,670			*13,840	8,900	29.6 ft
	1.5 m	kg					*15,760	10,740	*11,250	7,140	8,430	5,190	6,390	3,960	6,320	3,910	9.1 m
	5 ft	lb					*34,000	23,160	*24,360	15,410	18,150	11,190			13,930	8,630	29.8 ft
	0 m	kg					*16,860	10,370	11,580	6,860	8,250	5,030			6,480	3,990	8.9 m
	0 ft	lb					*36,500	22,340	24,910	14,810	17,770	10,850			14,280	8,790	29.0 ft
	-1.5 m	kg	*7,560	*7,560	*11,720	*11,720	*16,820	10,300	11,450	6,750	8,180	4,960			7,020	4,300	8.4 m
	-5 ft	lb	*16,960	*16,960	*26,620	*26,620	*36,480	22,170	24,630	14,570	17,620	10,710			15,500	9,500	27.4 ft
	-3.0 m	kg	*13,860	*13,860	*19,430	*19,430	*15,820	10,410	11,510	6,800	8,270	5,040			8,220	5,020	7.5 m
-10 ft	lb	*31,120	*31,120	*44,190	*44,190	*34,270	22,420	24,760	14,680					18,240	11,140	24.6 ft	
-4.5 m	kg			*18,550	*18,550	*13,490	10,730	*9,840	7,060					*9,220	6,700	6.2 m	
-15 ft	lb			*39,930	*39,930	*28,960	23,130	*20,770	15,300					*20,340	15,070	20.2 ft	
<b>Boom :</b> 6.2 m HD, 20'34" <b>Arm :</b> 3.7 m GP, 12'2" <b>Shoe :</b> 800 mm, 32" <b>CWT :</b> 5,500kg, 12,130lb	7.5 m	kg									*6,270	6,000			*5,010	5,010	8.0 m
	25 ft	lb									*13,160	12,830			*11,110	11,110	25.8 ft
	6.0 m	kg									*6,360	5,940			*4,820	4,430	8.8 m
	20 ft	lb									*13,990	12,760			*10,650	9,880	28.8 ft
	4.5 m	kg							*7,530	*7,530	*6,930	5,750	*6,480	4,220	*4,820	3,920	9.4 m
	15 ft	lb							*16,350	*16,350	*15,130	12,380	*12,880	9,050	*10,610	8,690	30.7 ft
	3.0 m	kg					*11,830	*11,830	*9,080	7,720	*7,750	5,490	6,550	4,100	*4,960	3,640	9.6 m
	10 ft	lb					*25,440	*25,440	*19,660	16,660	*16,870	11,840	14,100	8,820	*10,910	8,050	31.6 ft
	1.5 m	kg					*14,720	10,990	*10,620	7,250	8,490	5,240	6,410	3,970	*5,250	3,540	9.7 m
	5 ft	lb					*31,750	23,710	*23,000	15,640	18,270	11,290	13,800	8,540	*11,570	7,800	31.8 ft
	0 m	kg			*6,800	*6,800	*16,410	10,450	11,630	6,910	8,260	5,030	6,300	3,860	*5,770	3,590	9.5 m
	0 ft	lb			*15,560	*15,560	*35,500	22,510	25,020	14,890	17,790	10,850	13,570	8,330	*12,730	7,910	31.1 ft
	-1.5 m	kg	*6,990	*6,990	*11,020	*11,020	*16,900	10,250	11,430	6,730	8,130	4,920	6,260	3,830	6,240	3,820	9.0 m
	-5 ft	lb	*15,650	*15,650	*24,970	*24,970	*36,620	22,070	24,570	14,500	17,520	10,610			13,790	8,440	29.5 ft
	-3.0 m	kg	*11,650	*11,650	*16,650	*16,650	*16,380	10,280	11,400	6,700	8,130	4,920			7,110	4,340	8.3 m
-10 ft	lb	*26,150	*26,150	*37,790	*37,790	*35,490	22,120	24,520	14,460	17,540	10,630			15,770	9,630	27.0 ft	
-4.5 m	kg	*17,420	*17,420	*20,900	*20,900	*14,720	10,500	*10,950	6,850					*8,660	5,460	7.1 m	
-15 ft	lb	*39,290	*39,290	*45,080	*45,080	*31,720	22,620	*23,490	14,800					*19,130	12,230	23.1 ft	
-6.0 m	kg			*15,370	*15,370	*10,910								*8,820	8,660	5.3 m	
-20 ft	lb			*32,410	*32,410	*22,760	22,760							*19,410	*19,410	16.9 ft	

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

**LIFTING CAPACITY EC300EL Hybrid**

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		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	Max.		
<b>Boom :</b> 6.2 m HD, 20'34" <b>Arm :</b> 2.55 m HD, 8'4" <b>Shoe :</b> 900 mm, 35" <b>CWT :</b> 5,500kg, 12,130lb	7.5 m	kg							*7,630	*7,630						*7,780	7,340	6.5 m	
	25 ft	lb							*16,930	*16,930						*17,180	16,630	21.1 ft	
	6.0 m	kg							*7,960	*7,960	*7,750	5,750				*7,760	5,680	7.6 m	
	20 ft	lb							*17,380	*17,380						*17,100	12,680	24.6 ft	
	4.5 m	kg						*11,250	*11,250	*9,040	7,980	*8,060	5,630			7,750	4,870	8.2 m	
	15 ft	lb						*24,160	*24,160	*19,610	17,230	*17,630	12,130			17,180	10,810	26.8 ft	
	3.0 m	kg						*14,360	11,400	*10,440	7,540	*8,710	5,430			7,170	4,470	8.5 m	
	10 ft	lb						*30,820	24,640	*22,600	16,280	18,790	11,710			15,830	9,880	27.9 ft	
	1.5 m	kg						*16,470	10,730	*11,680	7,170	8,510	5,240			7,000	4,330	8.5 m	
	5 ft	lb						*35,540	23,150	*25,290	15,470	18,330	11,290			15,440	9,560	28.0 ft	
	0 m	kg						*17,040	10,520	11,720	6,950	8,370	5,110			7,220	4,440	8.3 m	
	0 ft	lb						*36,930	22,640	25,210	15,000	18,030	11,020			15,910	9,790	27.3 ft	
	-1.5 m	kg			*12,810	*12,810		*16,610	10,530	11,650	6,890	8,340	5,090			7,930	4,850	7.8 m	
	-5 ft	lb			*29,220	*29,220		*36,040	22,650	25,070	14,870	18,000	10,990			17,520	10,730	25.5 ft	
	-3.0 m	kg			*20,660	*20,660	*15,230	10,700	*11,500	7,000						9,580	5,820	6.9 m	
-10 ft	lb			*44,890	*44,890	*32,990	23,030	*24,790	15,110						*21,280	12,950	22.5 ft		
-4.5 m	kg			*16,420	*16,420	*12,230	11,090								*9,850	8,400	5.4 m		
-15 ft	lb			*35,250	*35,250	*26,090	23,930								*21,700	19,030	17.6 ft		
<b>Boom :</b> 6.2 m HD, 20'34" <b>Arm :</b> 3.05 m HD, 10'0" <b>Shoe :</b> 900 mm, 35" <b>CWT :</b> 5,500kg, 12,130lb	7.5 m	kg														*6,360	6,300	7.2 m	
	25 ft	lb															*14,110	*14,110	23.3 ft
	6.0 m	kg									*7,110	5,870				*6,090	5,060	8.2 m	
	20 ft	lb									*15,670	12,610				*13,450	11,280	26.6 ft	
	4.5 m	kg							*8,400	8,120	*7,570	5,710				*6,080	4,410	8.7 m	
	15 ft	lb							*18,240	17,510	*16,540	12,290				*13,400	9,780	28.6 ft	
	3.0 m	kg					*13,270	11,680	*9,870	7,640	*8,310	5,480	6,580	4,100		*6,280	4,080	9.0 m	
	10 ft	lb					*28,510	25,220	*21,370	16,500	*18,080	11,810				*13,840	9,010	29.6 ft	
	1.5 m	kg					*15,760	10,860	*11,250	7,220	8,530	5,250	6,470	4,010		6,400	3,960	9.1 m	
	5 ft	lb					*34,000	23,430	*24,360	15,590	18,380	11,330				14,110	8,740	29.8 ft	
	0 m	kg					*16,860	10,500	11,720	6,950	8,350	5,090				6,560	4,040	8.9 m	
	0 ft	lb					*36,500	22,610	25,220	14,990	18,000	10,980				14,470	8,910	29.0 ft	
	-1.5 m	kg	*7,560	*7,560	*11,720	*11,720		*16,820	10,420	11,600	6,840	8,280	5,030			7,110	4,360	8.4 m	
	-5 ft	lb	*16,960	*16,960	*26,620	*26,620	*36,480	22,430	24,940	14,750	17,850	10,850				15,700	9,630	27.4 ft	
	-3.0 m	kg	*13,860	*13,860	*19,430	*19,430	*15,820	10,540	11,650	6,890	8,370	5,110				8,320	5,080	7.5 m	
-10 ft	lb	*31,120	*31,120	*44,190	*44,190	*34,270	22,690	25,070	14,860						18,470	11,280	24.6 ft		
-4.5 m	kg			*18,550	*18,550	*13,490	10,850	*9,840	7,140						*9,220	6,780	6.2 m		
-15 ft	lb			*39,930	*39,930	*28,960	23,400	*20,770	15,480						*20,340	15,250	20.2 ft		
<b>Boom :</b> 6.2 m HD, 20'34" <b>Arm :</b> 3.7 m GP, 12'2" <b>Shoe :</b> 900 mm, 35" <b>CWT :</b> 5,500kg, 12,130lb	7.5 m	kg									*6,270	6,060				*5,010	*5,010	8.0 m	
	25 ft	lb									*13,160	12,970				*11,110	*11,110	25.8 ft	
	6.0 m	kg									*6,360	6,000				*4,820	4,480	8.8 m	
	20 ft	lb									*13,990	12,900				*10,650	9,990	28.8 ft	
	4.5 m	kg							*7,530	*7,530	*6,930	5,810	*6,480	4,270		*4,820	3,970	9.4 m	
	15 ft	lb							*16,350	*16,350	*15,130	12,510	*12,880	9,160		*10,610	8,800	30.7 ft	
	3.0 m	kg					*11,830	*11,830	*9,080	7,810	*7,750	5,560	6,640	4,150		*4,960	3,690	9.6 m	
	10 ft	lb					*25,440	*25,440	*19,660	16,840	*16,870	11,970	14,280	8,930		*10,910	8,160	31.6 ft	
	1.5 m	kg					*14,720	11,120	*10,620	7,330	8,590	5,300	6,490	4,020		*5,250	3,580	9.7 m	
	5 ft	lb					*31,750	23,980	*23,000	15,820	18,500	11,420	13,980	8,650		*11,570	7,910	31.8 ft	
	0 m	kg			*6,800	*6,800	*16,410	10,580	*11,770	6,990	8,370	5,100	6,380	3,920		*5,770	3,630	9.5 m	
	0 ft	lb			*15,560	*15,560	*35,500	22,780	25,330	15,070	18,010	10,990	13,750	8,440		*12,730	8,020	31.1 ft	
	-1.5 m	kg	*6,990	*6,990	*11,020	*11,020	*16,900	10,380	11,570	6,810	8,240	4,980	6,340	3,880		6,330	3,870	9.0 m	
	-5 ft	lb	*15,650	*15,650	*24,970	*24,970	*36,620	22,340	24,880	14,680	17,750	10,750				13,970	8,550	29.5 ft	
	-3.0 m	kg	*11,650	*11,650	*16,650	*16,650	*16,380	10,400	11,550	6,790	8,240	4,980				7,200	4,400	8.3 m	
-10 ft	lb	*26,150	*26,150	*37,790	*37,790	*35,490	22,390	24,840	14,640	17,770	10,760				15,970	9,750	27.0 ft		
-4.5 m	kg	*17,420	*17,420	*20,900	*20,900	*14,720	10,620	*10,950	6,930						*8,660	5,530	7.1 m		
-15 ft	lb	*39,290	*39,290	*45,080	*45,080	*31,720	22,880	*23,490	14,980						*19,130	12,390	23.1 ft		
-6.0 m	kg			*15,370	*15,370	*10,910									*8,820	8,760	5.3 m		
-20 ft	lb			*32,410	*32,410	*22,760	22,760								*19,410	*19,410	16.9 ft		

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

# 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

Alternator, 110 A

### Hybrid

Accumulator, 20 L

Boom regeneration valves

Assist motor

Main pump with PTO

### Electric / Electronic control system

Contronics

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 halogen lights:

Frame-mounted 2

Boom-mounted 1

Batteries, 2 x 12 V / 200 Ah

Start motor, 24 V / 5.5 kW

### Frame

Access way with handrail

Tool storage area

Punched metal antislip plates

Full height counterweight:

5,500 kg / 12,125 lb

### Undercarriage

Undercover (heavyduty)

Hydraulic track adjusters

Greased and sealed track link

Track Guard

### Hydraulic system

Boom float function

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, ISO VG 46

## STANDARD EQUIPMENT

### Machine control system

Dig Assist Start

### 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

L8 multi-functional joystick each

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

Volvo Smart View on Instrument Cluster only

Battery switch protector

Master key

### Track shoes

800 mm / 32 in with triple grousers

### Digging equipment

Boom: 6.2 m / 20'4" monoblock

Arm: 3.05 m / 10' HD

Manual centralized lubrication

Linkage with lifting eye

## OPTIONAL EQUIPMENT

### Engine

Block heater: 120 V

Oil bath pre-cleaner

Diesel coolant heater, 10 kW

Water separator with heater

Reversible fan drive

Auto engine shutdown

Fuel filler pump

### Electric

Extra work lights(Halogen or LED):

Cab-mounted 3

Boom-mounted 1

Counterweight-mounted 1

Travel alarm

Anti-theft system

Flashing beacon LED

### Frame

Counterweight 5,100 kg / 11,245 lb

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**OPTIONAL EQUIPMENT**

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**Undercarriage**

Full track guard

Track shoes

600/700/800/900 mm / 24/28/32/36 in with triple grousers

600 mm / 24 in HD with triple grousers

Track shoes 700 mm / 28 in with double grousers

**Hydraulic system**

Hose rupture valve: arm

Without Hose rupture valve: boom

Hydraulic piping:

Hammer &amp; shear

Slope &amp; rotator

Oil leak (drain) line

Volvo hydraulic quick coupler S2

Volvo hydraulic quick coupler U29

Hydraulic oil, longlife oil 32

Hydraulic oil, longlife oil 46

Hose rupture valve: boom

Overload warning

**Machine control system**

Dig Assist In-field/Steelwrist

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**OPTIONAL EQUIPMENT**

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**Cab and interior**

Fabric seat with heater

Fabric seat with heater and air suspension

Falling object guard, FOG (fixed type or hinge type)

Frame-mounted

Cab-mounted

Cab-mounted falling object protective structure (FOPS)

Rear view camera

Side view camera

Safety net for front window

Lower wiper with intermittent control

Anti-vandalism kit

Specific key

Control joystick with 4 switched each

**Digging equipment**

Arm: 2.55 m / 8.4 ft HD, 3.05 m / 10 ft HD, 3.7 m / 12.1 ft

Linkage with lifting eye

**Service**

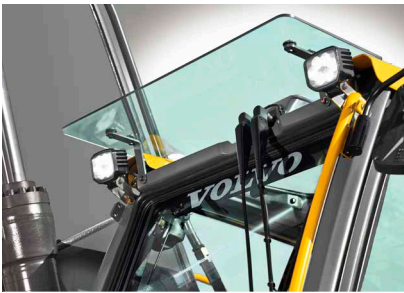
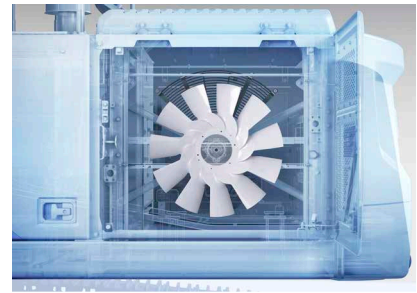
Tool kit, daily maintenance

Tool kit, full scale

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**SELECTION OF VOLVO OPTIONAL EQUIPMENT**

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**LED Lights****Side-view camera****Reversible cooling fan****Swing-out FOG (\*for demolition package only)****Demolition package**

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**

**Volvo Construction Equipment**

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