

V O L V O



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

EC300

Volvo Construction Equipment

EC300

A versatile machine regardless of application.
A modern, comfortable cab helps operators perform
at their very best, giving you an edge in productivity.



A straightforward solution

Commonly used in quarries, for trenching, digging or preparing construction sites, the EC300 is a versatile machine. Regardless of applications, the EC300 is a straightforward solution with big payback. With enhanced machine access, superior visibility, increased service intervals, improved fuel efficiency, this excavator delivers all the safety, comfort, reliability and performance you would expect from a Volvo machine.



Operator comfort

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



Smart View with Obstacle Detection

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



Serviceability

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



Fuel Efficiency

- Up to 14% improvement
- Powerful and efficient Volvo engine
- 2.5% lower engine RPM
- 4.5% hydraulic system improvement



Productivity

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

Volvo EC300 in detail

Engine

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

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

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

Electrical system

High-capacity electrical system that is well protected. Waterproof double-lock harness plugs are used to secure corrosion-free connections. The main relays and solenoid valves are shielded to prevent damage. The master switch is standard. Contronics provides advanced monitoring of machine functions and important diagnostic information.

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

Undercarriage and structures

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

EC300F L / LR

Track shoe		2 x 50
Link pitch	mm (in)	203 (8)
Shoe width, triple grouser	mm (in)	600 / 700 / 800 / 900 (24 / 28 / 32 / 36)
Bottom rollers		2 x 9
Top rollers		2 x 2

Swing system

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

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

Travel System

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

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

Cab

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

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

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

Sound Level

Sound level in cab according to ISO 6396

L _{pA}	dB	70
External sound level according to ISO 6395, EU Noise Directive (2000/14/EC)		
L _{WA}	dB	104

Service Refill

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

Hydraulic system

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

The following important functions are included in the system:

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

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

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

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

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

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

Power boost: All digging and lifting forces are increased.

Main pump: 2 x Variable displacement axial piston pumps

Maximum flow	l/min (gal/min)	2 x 276 (2 x 73)
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Pilot pump: Gear pump

Maximum flow	l/min (gal/min)	20.3 (5)
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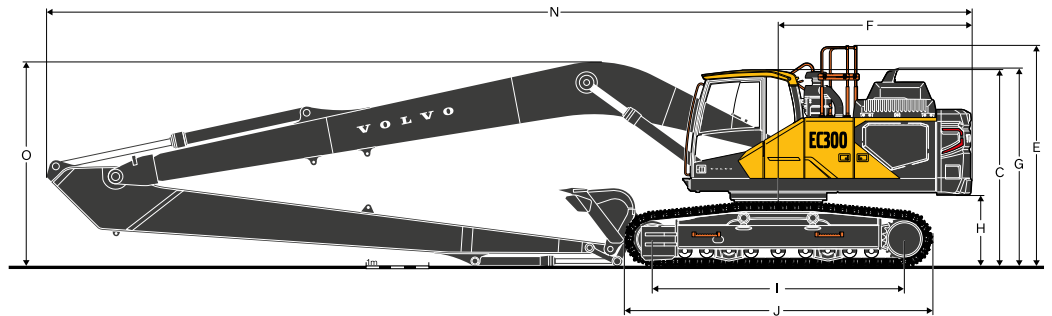
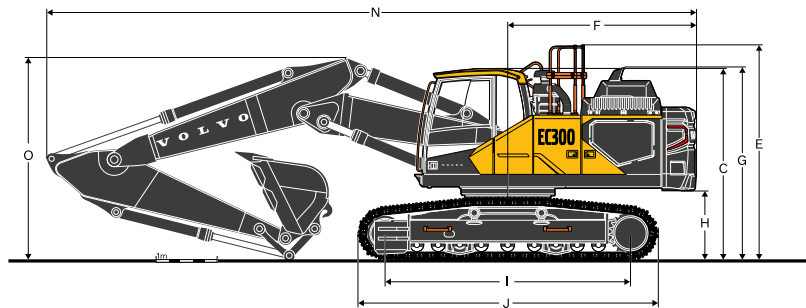
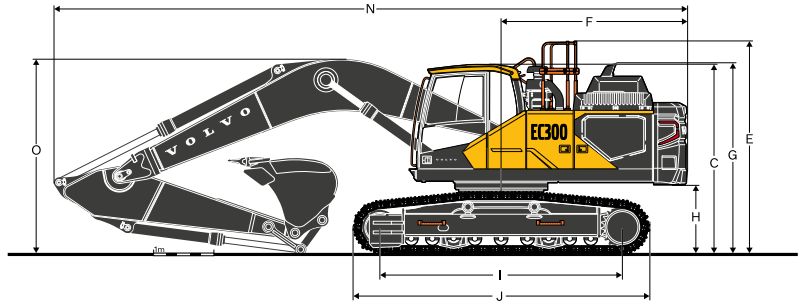
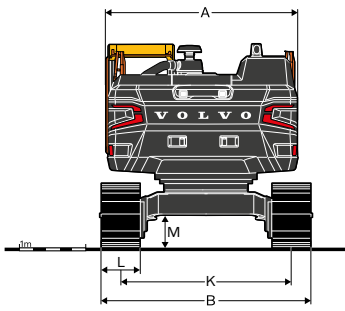
Max. pressure

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

Hydraulic Cylinders

Boom		2
Bore x Stroke	ø x mm (ø x in)	140 x 1 480 (5.5 x 58.3)
2 piece boom		1
Bore x Stroke	ø x mm (ø x in)	170 x 1 300 (6.7 x 51.2)
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)
Bucket for LR boom		1
Bore x Stroke	ø x mm (ø x in)	100 x 865 (3.9 x 34.1)

Specifications

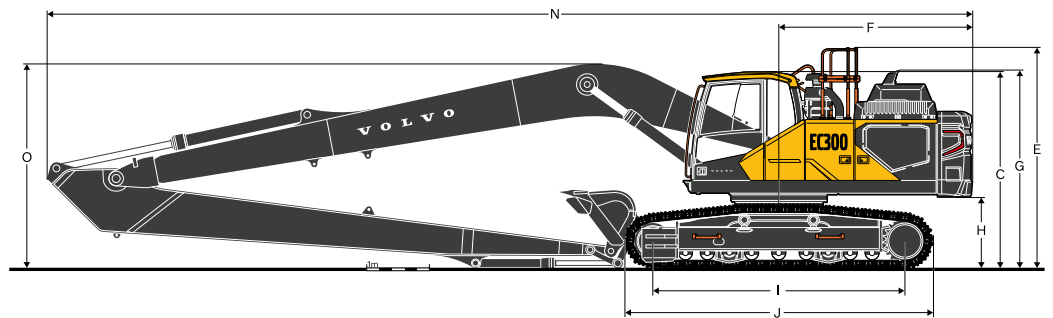
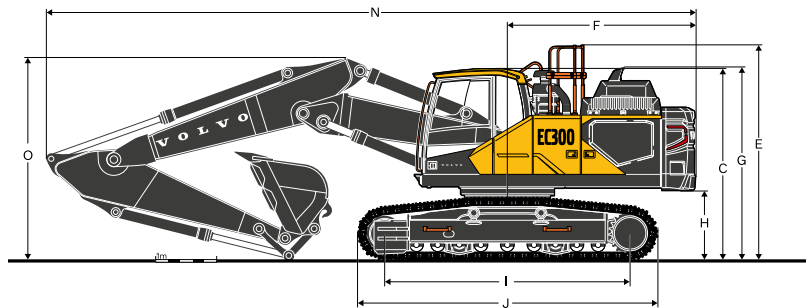
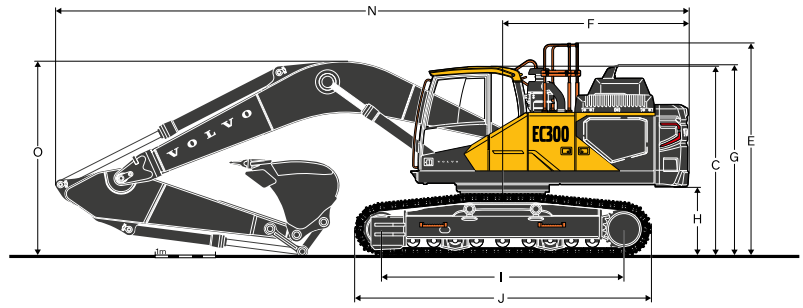
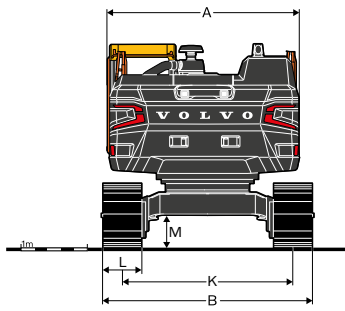


DIMENSIONS

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

* Exclude walkway, handrail

** Without shoe grouser



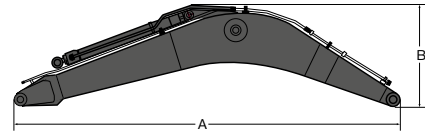
DIMENSIONS

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

* Exclude walkway, handrail

** Without shoe grouser

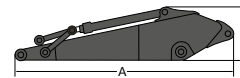
Specifications



DIMENSIONS

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

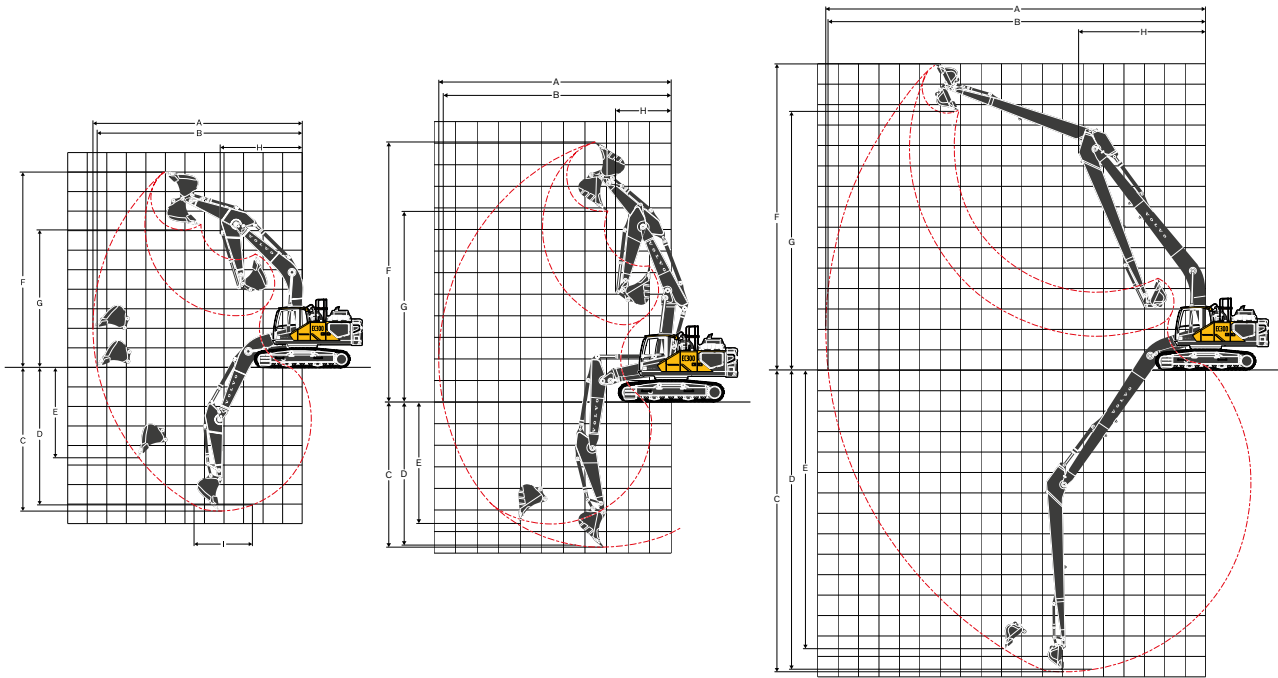
* Includes arm cylinder, piping and pin



DIMENSIONS

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

* Includes cylinder, linkage and pin



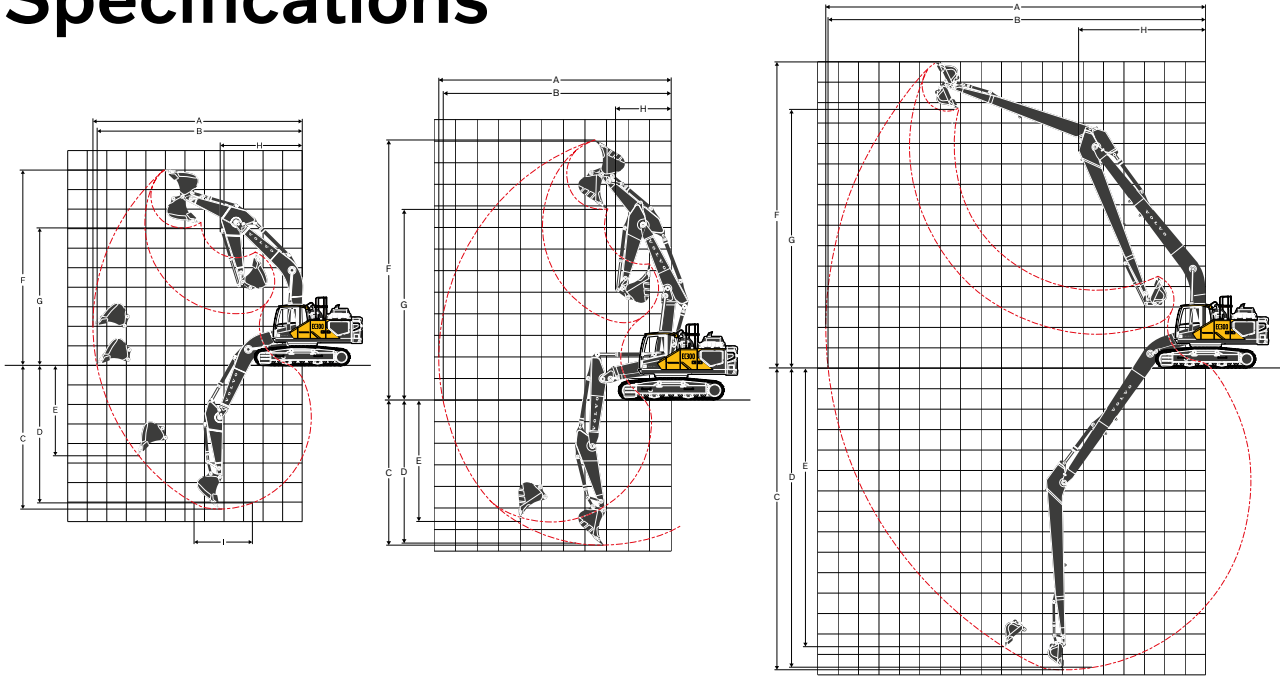
WORKING RANGES WITH DIRECT FIT BUCKET

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

DIGGING FORCES WITH DIRECT FIT BUCKET

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

Specifications



WORKING RANGES WITH DIRECT FIT BUCKET

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

DIGGING FORCES WITH DIRECT FIT BUCKET

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

GROUND PRESSURE

EC300F L

Description	Shoe width		Operating weight		Ground pressure		Overall width		Operating weight		Ground pressure		Overall width	
	mm	in	kg	lb	kPa	psi	mm	ft in	kg	lb	kPa	psi	mm	ft in
Triple grouser	600	24	30,560	67,380	59.0	8.5	3,190	10'6"	30,850	68,020	59.5	8.6	3,190	10'6"
	600 (HD)	24 (HD)	30,770	67,850	59.4	8.6	3,190	10'6"	31,060	68,490	59.9	8.7	3,190	10'6"
	700	28	31,140	68,660	51.5	7.5	3,290	10'10"	31,430	69,300	52.0	7.5	3,290	10'10"
	800	32	31,510	69,480	45.6	6.6	3,390	11'1"	31,800	70,120	46.0	6.7	3,390	11'1"
Double grouser	900	36	31,880	70,300	41.0	5.9	3,490	11'5"	32,160	70,910	41.4	6.0	3,490	11'5"
	600	24	30,930	68,200	59.7	8.6	3,190	10'6"	31,220	68,840	60.2	8.7	3,190	10'6"
Single grouser	700	28	31,340	69,100	51.8	7.5	3,190	10'6"	31,630	69,740	52.3	7.6	3,190	10'6"
	700	28	30,970	68,290	51.2	7.4	3,340	10'11"	31,260	38,930	51.7	7.5	3,340	10'11"

			EC300F L, 6.2 m (20'4") GP boom, 3.05 m (10'0") GP arm, 1,354 kg (2,990 lb) bucket, 6,200 kg (13,670 lb) counterweight						EC300F L, 6.2 m (20'4") HD boom, 3.05 m (10'0") HD arm, 1,354 kg (2,990 lb) bucket, 6,200 kg (13,670 lb) counterweight					
Description	Shoe width		Operating weight		Ground pressure		Overall width		Operating weight		Ground pressure		Overall width	
	mm	in	kg	lb	kPa	psi	mm	ft in	kg	lb	kPa	psi	mm	ft in
Triple grouser	600	24	31,060	68,490	59.9	8.7	3,190	10'6"	31,440	69,330	60.7	8.8	3,190	10'6"
	600 (HD)	24 (HD)	31,270	68,950	60.3	8.7	3,190	10'6"	31,650	69,790	61.1	8.8	3,190	10'6"
	700	28	31,640	69,770	52.3	7.6	3,290	10'10"	32,020	70,600	52.9	7.7	3,290	10'10"
	800	32	32,010	70,580	46.3	6.7	3,390	11'1"	32,390	71,420	46.9	6.8	3,390	11'1"
Double grouser	900	36	32,380	71,400	41.6	6.0	3,490	11'5"	32,760	72,240	42.1	6.1	3,490	11'5"
	600	24	31,440	69,330	60.7	8.8	3,190	10'6"	31,810	70,140	61.4	8.9	3,190	10'6"
Single grouser	700	28	31,840	70,210	52.7	7.6	3,190	10'6"	32,220	71,050	53.3	7.7	3,190	10'6"
	700	28	31,470	69,390	52.0	7.5	3,340	10'11"	31,850	70,230	52.7	7.6	3,340	10'11"

			EC300F L, 6.2 m (20'4") XD boom, 3.05 m (10'0") XD arm, 1,354 kg (2,990 lb) bucket, 6,200 kg (13,670 lb) counterweight						EC300F L, 6.2 m (20'4") 2-pieces boom, 3.05 m (10'0") GP arm, 1,354 kg (2,990 lb) bucket, 6,200 kg (13,670 lb) counterweight					
Description	Shoe width		Operating weight		Ground pressure		Overall width		Operating weight		Ground pressure		Overall width	
	mm	in	kg	lb	kPa	psi	mm	ft in	kg	lb	kPa	psi	mm	ft in
Triple grouser	600	24	31,500	69,460	60.8	8.8	3,190	10'6"						
	600 (HD)	24 (HD)	31,710	69,920	61.2	8.9	3,190	10'6"						
	700	28	32,080	70,740	53.0	7.7	3,290	10'10"						
	800	32	32,450	71,550	47.0	6.8	3,390	11'1"						
Double grouser	900	36	32,820	72,370	42.2	6.1	3,490	11'5"						
	600	24	31,880	70,300	61.5	8.9	3,190	10'6"						
Single grouser	700	28	32,280	71,180	53.4	7.7	3,190	10'6"						
	700	28	31,910	70,360	52.8	7.7	3,340	10'11"						

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

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

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

BUCKET SELECTION GUIDE

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

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

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 material density

D: > 1,900 kg/m³ (> 3,200 lb/yd³): Wet mud, Iron ore

C: 1,700 ~ 1,800 kg/m³ (2,800 ~ 3,100 lb/yd³): Granite, Wet sand, Well blasted rock

B: 1,400 ~ 1,600 kg/m³ (2,300 ~ 2,700 lb/yd³): Wet earth and clay, Limestone, Sandstone

A: 1,200 ~ 1,300 kg/m³ (2,000 ~ 2,200 lb/yd³): Coal, Caliche, Shale

X: Not recommended

LIFTING CAPACITY EC300F L

Lifting capacity at the arm end without bucket.

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

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

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

Specifications

LIFTING CAPACITY EC300F L

Lifting capacity at the arm end without bucket.

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

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

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

LIFTING CAPACITY EC300F L

Lifting capacity at the arm end without bucket.

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

	Lifting hook related to ground level		1.5 m		3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		Max. reach		Max.
			Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	
Boom : 6.2 m VA 20'4" VA Arm : 2.55 m HD 8'4" HD Shoe : 600 mm 24" CWT : 6 200 kg 13,670 lb	9 m	kg					*11,670	*11,670							*10,620	*10,620	4.94 m
	30 ft	lb					*25,300	*25,300							*23,930	*23,930	15.5 ft
	7.5 m	kg					*11,250	*11,250	*10,000	8,780					*9,300	7,430	6.61 m
	25 ft	lb					*24,570	*24,570	*22,000	18,840					*20,640	16,820	21.3 ft
	6 m	kg			*12,150	*12,150	*12,240	*12,240	*10,260	8,640	*9,170	5,970			*8,880	5,790	7.63 m
	20 ft	lb			*26,100	*26,100	*26,510	*26,510	*22,340	18,600					*19,600	12,930	24.8 ft
	4.5 m	kg					*14,250	12,860	*11,070	8,270	9,130	5,850			7,800	5,000	8.25 m
	15 ft	lb					*30,710	27,770	*24,000	17,840	19,640	12,600			17,290	11,090	27.0 ft
	3 m	kg					*16,370	11,800	*11,980	7,820	8,900	5,650			7,240	4,610	8.56 m
	10 ft	lb					*35,310	25,500	*25,950	16,890	19,170	12,180			15,990	10,180	28.1 ft
	1.5 m	kg							12,200	7,450	8,690	5,450			7,090	4,480	8.60 m
	5 ft	lb							*37,030	24,010	26,260	16,080	18,720	11,770	15,620	9,880	28.2 ft
	0 m	kg					*16,200	10,920	11,960	7,240	8,550	5,330			7,310	4,600	8.37 m
	0 ft	lb					*35,260	23,520	25,730	15,610	18,430	11,510			16,120	10,140	27.5 ft
	-1.5 m	kg					*14,310	10,950	*11,230	7,190	*8,520	5,320			*7,790	5,030	7.85 m
	-5 ft	lb					*31,140	23,580	*24,300	15,510	*18,200	11,510			*17,160	11,110	25.7 ft
-3 m	kg					*11,300	11,150	*8,910	7,310					*6,930	6,020	6.96 m	
-10 ft	lb					*24,440	24,010	*19,050	15,790					*15,190	13,370	22.7 ft	
Boom : 6.2 m VA 20'4" VA Arm : 3.05 m HD 10'0" HD Shoe : 600 mm 24" CWT : 6 200 kg 13,670 lb	9 m	kg					*9,650	*9,650							*7,270	*7,270	5.83 m
	30 ft	lb					*21,220	*21,220							*16,310	*16,310	18.5 ft
	7.5 m	kg					*9,080	*9,080	*9,290	8,950					*6,440	6,370	7.29 m
	25 ft	lb					*20,160	*20,160	*20,240	19,220					*14,280	*14,280	23.6 ft
	6 m	kg					*9,640	*9,640	*9,690	8,770	*8,690	6,070			*6,120	5,150	8.22 m
	20 ft	lb					*21,110	*21,110	*21,110	18,890	*18,990	13,040			*13,520	11,490	26.8 ft
	4.5 m	kg					*13,360	13,160	*10,570	8,390	*9,010	5,910			*6,070	4,520	8.8 m
	15 ft	lb			*42,170	*42,170	*28,820	28,410	*22,930	18,100	*19,620	12,730			*13,370	10,020	28.8 ft
	3 m	kg					*15,670	12,080	*11,600	7,920	8,950	5,680	6,710	4,270	*6,220	4,200	9.18 m
	10 ft	lb					*33,810	26,090	*25,130	17,090	19,270	12,250			*13,700	9,270	29.8 ft
	1.5 m	kg					*16,960	11,260	12,270	7,500	8,700	5,460	6,610	4,180	6,470	4,090	9.13 m
	5 ft	lb					*36,710	24,300	26,400	16,180	18,750	11,780			14,260	9,010	30.0 ft
	0 m	kg					*16,660	10,910	11,960	7,230	8,530	5,310			6,640	4,180	8.92 m
	0 ft	lb					*36,190	23,500	25,730	15,590	18,380	11,450			14,640	9,210	29.3 ft
	-1.5 m	kg			*10,890	*10,890	*15,180	10,860	*11,640	7,130	8,470	5,250			7,190	4,510	8.43 m
	-5 ft	lb			*24,780	*24,780	*32,970	23,370	*25,200	15,380	18,250	11,330			15,890	9,970	27.6 ft
-3 m	kg					*12,570	10,990	*9,800	7,190	*6,960	5,340			*6,660	5,250	7.61 m	
-10 ft	lb					*27,170	23,670	*21,060	15,520					*14,620	11,660	24.9 ft	
Boom : 6.2 m VA 20'4" VA Arm : 3.7 m GP 12'2" GP Shoe : 600 mm 24" CWT : 6 200 kg 13,670 lb	10.5 m	kg					*7,500	*7,500							*7,020	*7,020	4.67 m
	35 ft	lb													*16,160	*16,160	14.2 ft
	9 m	kg							*7,290	*7,290					*5,620	*5,620	6.76 m
	30 ft	lb							*15,500	*15,500					*12,570	*12,570	21.7 ft
	7.5 m	kg							*7,540	*7,540	*6,740	6,260			*5,080	*5,080	8.05 m
	25 ft	lb							*16,620	*16,620	*13,970	13,410			*11,270	*11,270	26.1 ft
	6 m	kg					*7,120	*7,120	*7,880	*7,880	*7,770	6,210			*4,860	4,570	8.90 m
	20 ft	lb					*15,720	*15,720	*17,330	*17,330	*16,850	13,350			*10,730	10,180	29.1 ft
	4.5 m	kg			*10,020	*10,020	*9,900	*9,900	*9,630	8,580	*8,540	6,020	*6,780	4,430	*4,820	4,060	9.44 m
	15 ft	lb			*20,570	*20,570	*21,190	*21,190	*20,870	18,500	*18,590	12,960	*13,700	9,520	*10,620	9,000	30.9 ft
	3 m	kg					*14,630	12,470	*11,040	8,070	9,040	5,760	6,770	4,320	*4,920	3,790	9.71 m
	10 ft	lb					*31,560	26,920	*23,910	17,420	19,460	12,410	14,560	9,290	*10,850	8,380	31.9 ft
	1.5 m	kg					*16,480	11,500	*12,000	7,590	8,750	5,500	6,630	4,190	*5,180	3,700	9.75 m
	5 ft	lb					*35,650	24,800	*26,000	16,390	18,850	11,860	14,270	9,020	*11,410	8,150	32.0 ft
	0 m	kg			*6,060	*6,060	*16,900	10,960	12,000	7,250	8,530	5,300	6,520	4,090	*5,630	3,760	9.55 m
	0 ft	lb			*13,900	*13,900	*36,640	23,600	25,800	15,640	18,370	11,430	14,040	8,810	*12,420	8,280	31.3 ft
-1.5 m	kg			*10,300	*10,300	*15,990	10,780	11,800	7,080	8,410	5,190	6,490	4,060	*6,390	4,010	9.09 m	
-5 ft	lb			*23,380	*23,380	*34,700	23,190	25,370	15,270	18,120	11,200			*14,120	8,850	29.8 ft	
-3 m	kg			*15,990	*15,990	*13,930	10,820	*10,680	7,070	*8,090	5,200			*6,470	4,550	8.34 m	
-10 ft	lb			*36,330	*36,330	*30,130	23,300	*23,020	15,260	*17,260	11,250			*14,230	10,080	27.3 ft	
-4.5 m	kg					*10,450	*10,450	*7,960	7,240							7.21 m	
-15 ft	lb					*22,300	*22,300	*16,770	15,650							23.4 ft	

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

Specifications

LIFTING CAPACITY EC300F LR

Lifting capacity at the arm end without bucket.

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

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

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

LIFTING CAPACITY EC300F LR

Lifting capacity at the arm end without bucket.

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

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

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

Equipment

STANDARD AND OPTIONAL EQUIPMENT

• = Standard / o = Optional

Engine

Turbocharged, 6 stroke diesel engine with water cooling, direct injection and charged air cooler that meets NA Tier4f requirements	•
Cooling system by fan clutch	•
New work mode with 10 steps	•
Cyclone pre-cleaner	•
Fuel shut off valve	•
Engine block heater	o
Coolant heater by diesel	o
Reversible fan drive	o
Precleaner, oil bath	o
Air filter, High efficiency	o
Delayed engine Shutdown	•
Automatic engine shutdown	o
Water separator with heater	o
Arctic regeneration	o
Oil sampling port for engine oil	•

Electric / Electronic control system

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

Undercarriage and structures

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

STANDARD AND OPTIONAL EQUIPMENT

• = Standard / o = Optional

Hydraulic system

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

STANDARD AND OPTIONAL EQUIPMENT

• = Standard / o = Optional

Cab and interior

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

Digging equipment

Boom: 6.2 m (20'4") monoblock	•
Boom: VA 6.2 m (20'4") / LR 10.2 m (33'6") / Straight 7.0 m (23'0")	o
Arm: 3.05 m (10'0")	•
Arm: 2.55 m (8'4")	o
Arm: 2.75 m (9'0")	o
Arm: 3.7 m (12'2")	o
Arm: LR 7.9 m (25'11")	o

STANDARD AND OPTIONAL EQUIPMENT

• = Standard / o = Optional

Machine controls

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

Service and maintenance

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

Safety and security

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

V O L V O