

V O L V O



Volvo Excavators 41.8-52.8 t / 92,089-116,400 lb 339-418 hp

EC300, EC400, EC500 STRAIGHT BOOM

Volvo Construction Equipment

EC300, EC400, EC500 STRAIGHT BOOM

The EC400 Straight Boom and EC500 Straight Boom crawler excavators are configured to deliver the highest levels of performance and safety in demolition applications, all while retaining the quality and comfort from their standard counterparts.



From E to F-generation: top news

EC400 Straight boom vs EC380E Straight Boom, EC300 Straight Boom vs EC300E Straight Boom

- Up to 14% higher fuel efficiency
- 10% more engine power
- +1,000 hr service intervals on hydraulic oil and return filter
- New state-of-the-art cab environment
- Dig Assist suite of tools enabled: Boundary Limits, On-Board Weighing, In-Field Design
- New features, including Auto Power Boost, boom and arm shock reduction, ability to adjust boom down speed plus set boom/swing and boom/travel priority
- Optimized positioning of water spraying nozzles to capture dust at earliest
- Bigger X1 return line for faster attachment movements



Made for demolition

The Volvo straight boom excavator offers approximately 30% better reach over digging-biased models, ultimate protection against falling debris and a clear view of the jobsite. These, combined with outstanding stability and a durable design including lifetime frame/boom/arm warranty, make it the perfect choice for efficient demolition projects.



High visibility, protected cab

Industry renowned Volvo cab comfort combines additional features to protect the operator and secure efficient demolition

- Frame-mounted Falling Object Guards – opening of front guard eases window cleaning
- Roll Over Protection Structure
- 12 mm (0.47 in) thick single-piece front window and top window, scratch resistant and demolition specific
- Washer and wiper on front and top windows
- Standard LED lights on the cab, platform, counterweight and boom



Reversible cooling fan

Protects vital machine components from damage through overheating in dusty demolition environments

- Reversible functionality enables self-cleaning, reducing maintenance requirements and machine downtime
- Customizable settings: manual or auto modes



Heavy counterweight

Outstanding stability, yet easy to transport

- 1,200 kg / 3,000 kg (2,645 lb / 6,610 lb) heavier counterweights than on standard excavators
- Hydraulically removable to facilitate transportation (not applicable to EC300 Straight Boom)



Dust suppression system

The unique factory-fit system from Volvo captures dust, removing the need for a separate truck for pumping water

- 8 gallons per minute water pump
- Four nozzles fitted on the arm create a fine mist which encapsulates the dust
- Selectable Auto/Manual mode
- Can also be used for cleaning the machine, with a high-pressure water gun mounted behind the cab



Specialist work equipment

Fully equipped boom and arm, designed for productivity

- 7.0/7.8 meter (23'0"/25'7") straight boom: 30% increase in reach compared to standard boom design
- Dedicated arms
- X1 and X3 auxiliary piping, including case drain line to protect the attachment
- Quick fit and oil drain line: fast attachment change
- Water lines for dust suppression system



Heavy duty protection

Protecting your investment

- Boom and bucket cylinders protection
- Heavy-duty side doors with screens and louvers
- Slew ring cover
- Side Impact Protection Structure
- Heavy-Duty or eXtreme-Duty undercover
- Heavy-Duty belly cover
- Full track guard
- Demolition Specific, High Visibility Cab

Volvo EC300, EC400, EC500 Straight Boom in detail

Engine

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

Air Filter: 3-stage and precleaner

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

		EC300 SB	EC400 SB	EC500 SB
Engine	Volvo	D8M	D13J	Volvo D13J
Max power at	r/min (r/s)	1,600 (26.7)	1,600 (26.7)	1,600 (27)
Net, ISO 9249/ SAE J1349	kW (hp)	188 (252)	252 (338)	311 (417)
Gross, ISO 14396/SAE J1995	kW (hp)	189 (253)	253 (339)	312 (418)
Max torque	Nm (ft lbf)	1,290 (951)	1,975 (1,457)	2,070 (1,527)
at engine speed	r/min (r/s)	1,400 (23.3)	1,200 (20)	1,300 (22)
No. of cylinders		6	6	6
Displacement	l (in ³)	7.7 (470)	12.8 (781)	12.8 (781)
Bore	mm (in)	110 (4.33)	131 (5.16)	131 (5.16)
Stroke	mm (in)	135 (5.32)	158 (6.2)	158 (6.22)

Electrical system

High-capacity electrical system that is well protected. Waterproof double-lock harness plugs are used to secure corrosion-free connections. The main relays and solenoid valves are shielded to prevent damage. The master switch is standard.

EC500 SB: Contronics provides advanced monitoring of machine functions and important diagnostic information.

		EC300 SB	EC400 SB	EC500 SB
Voltage	V	24	24	24
Batteries	V	2 x 12	2 x 12	2 x 12
Battery capacity	Ah	170	200	200
Alternator	V/A	28	28	28 / 180
Alternator rating	V - kW	28	-	-
Start motor	V - kW	24	-	-

Undercarriage and structures

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

		EC300 SB	EC400 SB	EC500 SB
Track shoes		2 x 50	2 x 50	2 x 52
Link pitch	mm (in)	203 (7.8)	216 (8.5)	216 (8.5)
Shoe width	mm (in)	600 (24)	600 / 700 / 800 / 900 (24 / 28 / 32 / 36)	600 / 700 / 800 / 900 (24 / 28 / 32 / 36)
Shoe width, triple grouser	mm (in)	600 / 700 / 800 / 900 (24 / 28 / 32 / 36)	600 (24)	600 (24)
Shoe width, triple grouser (HD)	mm (in)	600 (24)	600 (24)	600 (24)
Shoe width, double grouser	mm (in)	600 / 700 (24 / 28)	600 (24)	- (-)
Bottom rollers		2 x 9	2 x 9	2 x 9
Top rollers		2 x 2	2 x 2	2 x 2

Swing system

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

		EC300 SB	EC400 SB	EC500 SB
Max. slew speed	r/min	11	9.8	9.3
Max. slew torque	kNm (ft lbf)	115 (84,672)	131 (96,252)	166 (122,656)

Travel System

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

		EC300 SB	EC400 SB	EC500 SB
Max. drawbar pull	kN (lbf)	248 (55,753)	277 (62,160)	333 (74,970)
Max. travel speed (low)	km/h (mi/h)	2.2 (1.37)	2.1 (1.3)	3.1 (1.9)
Max. travel speed (high)	km/h (mi/h)	3.6 (2.24)	3.3 (2.1)	5.1 (3.2)
Gradeability	°	35	35	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 10 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.

Sound Level

		EC300 SB	EC400 SB	EC500 SB
Sound level in cab according to ISO 6396				
L _{pA}	dB	70	71	71
External sound level according to ISO 6395				
L _{WA}	dB	104	106	107

Service Refill

		EC300 SB	EC400 SB	EC500 SB
Fuel tank	l (gal)	440 (116)	600 (159)	640 (169)
DEF/AdBlue® tank	l (gal)	50 (13.2)	45 (11.9)	45 (12)
Hydraulic system, total	l (gal)	385 (102)	440 (116)	480 (127)
Hydraulic tank	l (gal)	215 (56.8)	200 (52.8)	235 (62)
Engine oil	l (gal)	30 (7.93)	55 (14.5)	55 (15)
Engine coolant	l (gal)	44 (11.6)	60 (15.9)	60 (16)
Slew reduction unit	l (gal)	6 (1.59)	6.5 (1.7)	2 x 8.8 (2 x 2.3)
Travel reduction unit	l (gal)	2 x 6.0 (2 x 1.6)	2 x 6.8 (2 x 1.8)	2 x 8.0 (2 x 2.1)



Hydraulic System

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

The following important functions are included in the system:

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

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

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

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

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

Power boost: All digging and lifting forces are increased.

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

		EC300 SB	EC400 SB	EC500 SB
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2 x Variable displacement axial piston pumps

Maximum flow	l/min (gal/min)	2 x 276 (2 x 72.9)	2 x 288 (2 x 76.1)	2 x 376 (2 x 99)
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Pilot pump: Gear pump

Maximum flow	l/min (gal/min)	1 x 20.3 (1 x 5.4)	1 x 26.7 (1 x 7.1)	34 (9)
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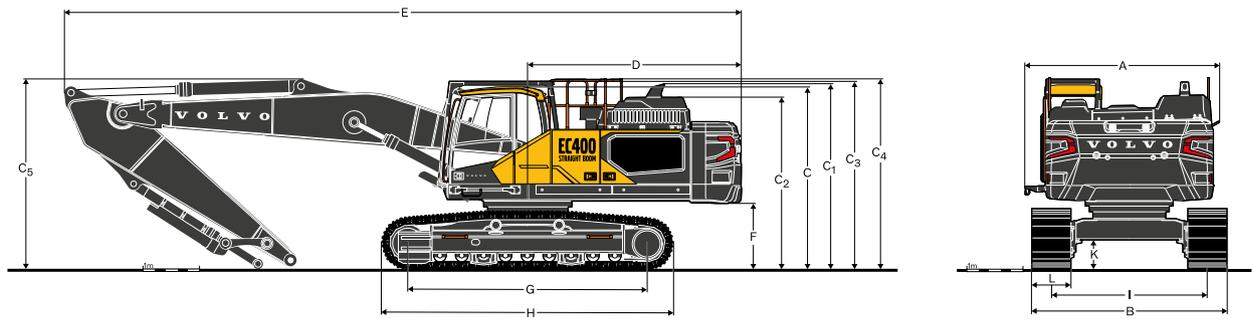
Max. pressure

Implement	MPa (psi)	33.3/36.3 (4,830/5,265)	32.4/35.3 (4,699/5,120)	32.4/35.3 (4,690/5,120)
Travel circuit	MPa (psi)	36.3 (5,265)	35.3 (5,120)	32.4 (4,690)
Slew circuit	MPa (psi)	28.9 (4,192)	27.5 (3,989)	25.8 (3,740)
Pilot circuit	MPa (psi)	3.9 (566)	3.9 (566)	3.9 (570)

Hydraulic Cylinders

		EC300 SB	EC400 SB	EC500 SB
Mono boom		2	2	2
Bore x Stroke	ø x mm (ø x in)	140 x 1 480 (5.5 x 58.3)	160 x 1 530 (6.3 x 60.2)	165 x 1 590 (6.5 x 62.6)
Arm		1	1	1
Bore x Stroke	ø x mm (ø x in)	150 x 1 745 (5.9 x 68.7)	175 x 1 700 (6.9 x 66.9)	190 x 1 850 (7.5 x 72.8)
Bucket		1	1	1
Bore x Stroke	ø x mm (ø x in)	140 x 1 140 (5.5 x 44.9)	145 x 1 285 (5.7 x 50.6)	165 x 1 335 (6.5 x 52.6)
ME Bucket		-	1	1
Bore x Stroke	ø x mm (ø x in)	-	160 x 1 250 (6.3 x 49.2)	175 x 1 335 (6.9 x 52.6)

Specifications



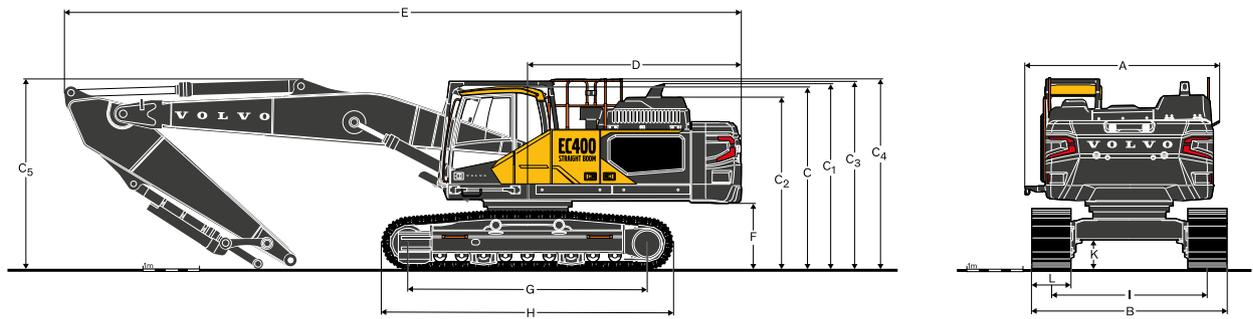
DIMENSIONS

	Unit		EC300F Straight Boom	
	m	(ft)	7.0 (23'0")	
Boom				
Arm	m	ft in	3.05	10'0"
A. Overall width of upper structure*	mm	ft in	2,890	9'6"
B. Overall width**	mm	ft in	3,190	10'6"
C. Overall height of cab***	mm	ft in	3,110	10'2"
D. Overall height of handrail	mm	ft in	3,205	10'6"
E. Overall height of guardrail	mm	ft in	3,470	11'5"
F. Tail swing radius	mm	ft in	3,125	10'3"
G. Overall height of engine hood	mm	ft in	2,920	9'7"
H. Counterweight clearance *	mm	ft in	1,135	3'9"
I. Tumbler length	mm	ft in	4,015	13'2"
J. Track length	mm	ft in	4,865	15'12"
K. Track gauge	mm	ft in	2,590	8'6"
L. Shoe width	mm	in	600	24
M. Min. ground clearance *	mm	in	475	18.7
N. Overall length	mm	ft in	11,175	36'8"
O. Overall height of boom	mm	ft in	3,135	10'3"

*With walkway, handrail

** Shoe end to end

*** Without shoe grouser

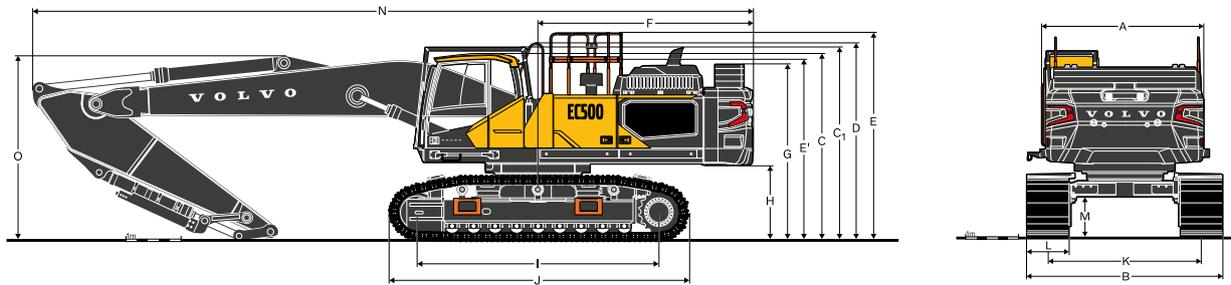


DIMENSIONS

	Unit		EC400F Straight Boom	
Boom	m (ft)		7.0 (23'0")	
Arm	m	ft in	3.9	12'10"
A. Overall width of upper structure*	mm	ft in	3,400	11'2"
B. Overall width**	mm	ft in	3,340	10'11"
C. Overall height of cab***	mm	ft in	3,240	10'8"
C1. Overall height of FOG	mm	ft in	3,350	11'0"
D. Overall height of handrail	mm	ft in	3,360	11'0"
E. Overall height of guardrail	mm	ft in	3,360	11'0"
F. Tail swing radius	mm	ft in	3,600	11'10"
G. Overall height of engine hood	mm	ft in	3,000	9'10"
H. Counterweight clearance *	mm	ft in	1,190	3'11"
I. Tumbler length	mm	ft in	4,240	13'11"
J. Track length	mm	ft in	5,180	17'0"
K. Track gauge	mm	ft in	2,740	9'0"
L. Shoe width	mm	in	600	23.6
M. Min. ground clearance *	mm	in	480	18.9
N. Overall length	mm	ft in	11,800	38'9"
O. Overall height of boom	mm	ft in	3,870	12'8"

* With walkway, handrail
 ** Shoe end to end
 *** Without shoe grouser

Specifications



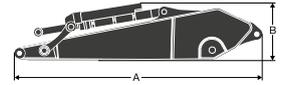
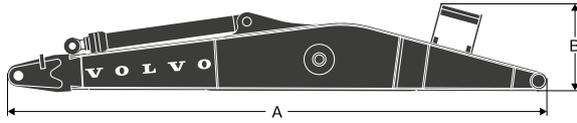
DIMENSIONS

	Unit		EC500F Straight Boom with RETRACTABLE undercarriage	
Boom	m (ft)		7.8 (25'8")	
Arm	m	ft in	3.9	12'10"
A. Overall width of upper structure*	mm	ft in	2,990	9'10"
B. Overall width**	mm	ft in	3,190	10'6"
C. Overall height of cab***	mm	ft in	3,410	11'2"
C. Overall height of FOG	mm	ft in	3,520	11'7"
D. Overall height of handrail	mm	ft in	3,530	11'7"
E. Overall height of guardrail	mm	ft in	3,750	12'4"
F. Tail swing radius	mm	ft in	3,880	12'9"
G. Overall height of engine hood	mm	ft in	3,170	10'5"
H. Counterweight clearance *	mm	ft in	1,320	4'4"
I. Tumbler length	mm	ft in	4,380	14'4"
J. Track length	mm	ft in	5,380	17'8"
K. Track gauge	mm	ft in	2,390	7'10"
L. Shoe width	mm	in	800	32"
M. Min. ground clearance *	mm	in	710	28"
N. Overall length	mm	ft in	13,130	43'1"
O. Overall height of boom	mm	ft in	3,950	13'0"

* With walkway, handrail

** Shoe end to end

*** Without shoe grouser



DIMENSIONS EC300F SB

Description	Unit		Boom		Description	Unit		Arm	
	m	ft in	7.0 (23'0") SB			m	ft in	3.05 (10'0") HD	
A. Length	mm	ft in	7,225	23'8"	A. Length	mm	ft in	4,145	13'7"
B. Height	mm	ft in	1,060	3'6"	B. Height	mm	ft in	1,010	3'4"
Width	mm	ft in	765	2'6"	Width	mm	ft in	560	1'10"
Weight	kg	lb	3,020	6,660	Weight	kg	lb	1,930	4,250
* Includes cylinder, piping and pin, excludes boom cyl. Pin					* Includes cylinder, piping and pin, excludes boom cyl. Pin				

DIMENSIONS EC400F SB

Description	Unit		Boom		Description	Unit		Arm	
	m	ft in	7.0	23'0"		m	ft in	3.9	12'10"
A. Length	mm	ft in	7,260	23'10"	A. Length	mm	ft in	5,050	16'7"
B. Height	mm	ft in	1,195	3'11"	B. Height	mm	ft in	1,110	3'8"
Width	mm	ft in	832	2'9"	Width	mm	ft in	440	1'5"
Weight	kg	lb	3,992	8,800	Weight	kg	lb	2,285	5,038
* Includes cylinder, piping and pin, excludes boom cyl. Pin					* Includes cylinder, piping and pin, excludes boom cyl. Pin				

DIMENSIONS EC500F SB

Description	Unit		Boom		Description	Unit		Arm	
	m	ft in	7.8	25'8"		m	ft in	3.9	12'10"
A. Length	mm	ft in	8,080	26'6"	A. Length	mm	ft in	5,140	16'10"
B. Height	mm	ft in	1,240	4'1"	B. Height	mm	ft in	1,300	4'3"
Width	mm	ft in	1,000	3'3"	Width	mm	ft in	740	2'5"
Weight	kg	lb	5,130	11,310	Weight	kg	lb	3,120	6,880
* Includes cylinder, piping and pin, excludes boom cyl. Pin					* Includes cylinder, piping and pin, excludes boom cyl. Pin				

Specifications

Superstructure with boom cylinders, weight EC300F SB

Description	Unit		Superstructure	
	kg	lb		
Weight			9,750	21,500

Lower structure, weight EC300F SB

Description	Unit		Long crawler undercarriage	
	kg	lb		
600 mm			10,391	22,910
600 mm (HD)			10,601	23,370
700 mm			10,971	24,190
800 mm			11,331	24,980
900 mm			11,701	25,800
600 mm double			10,761	23,720
600 mm single			11,171	24,630

Superstructure with boom cylinders, weight EC400F SB

Description	Unit		Superstructure	
	kg	lb		
Weight			11,830	26,081

Lower structure, weight EC400F SB

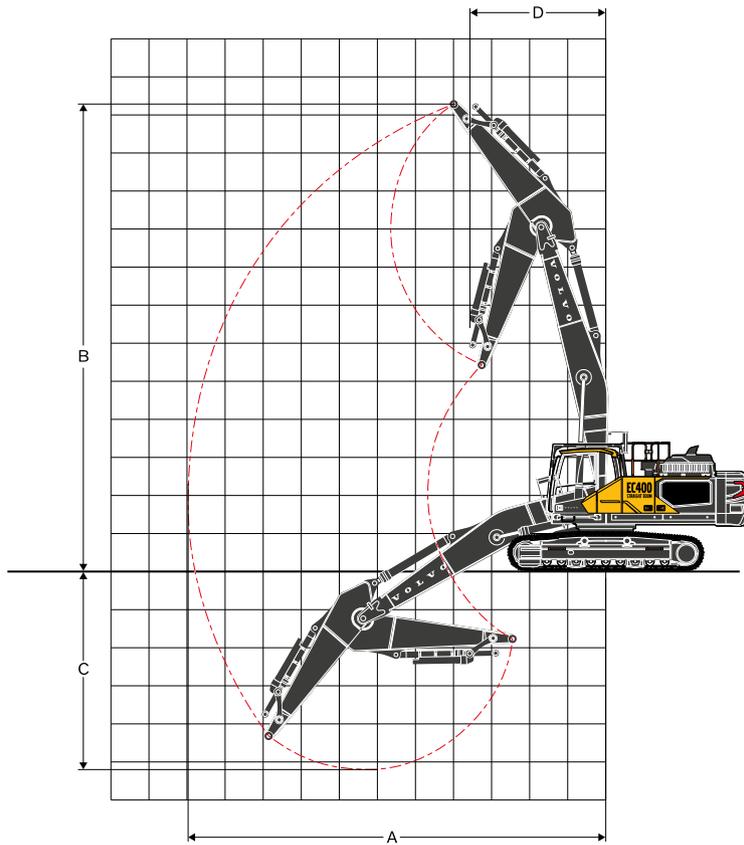
Description	Unit		Long crawler undercarriage	
	kg	lb		
600 mm / 24"			13,060	28,792
600 mm / 24" (HD)			13,500	29,762
700 mm / 28"			13,510	29,784
800 mm / 32"			13,950	30,754
900 mm / 36"			14,400	31,747
600 mm / 24" double			13,330	29,388
600 mm / 24" single			13,130	28,947

Superstructure with boom cylinders, weight EC500F SB

Description	Unit		Superstructure	
	kg	lb		
Weight			15,840	34,930

Lower structure, weight EC500F SB

Description	Unit		Lower structure with RETRACTABLE undercarriage, weight	
	kg	lb		
600 mm / 24"			17,830	39,320
600 mm / 24" (HD)			17,940	39,560
700 mm / 28"			18,330	40,420
800 mm / 32"			18,830	41,520
900 mm / 36"			19,340	42,640
600 mm / 24" double			17,880	39,430



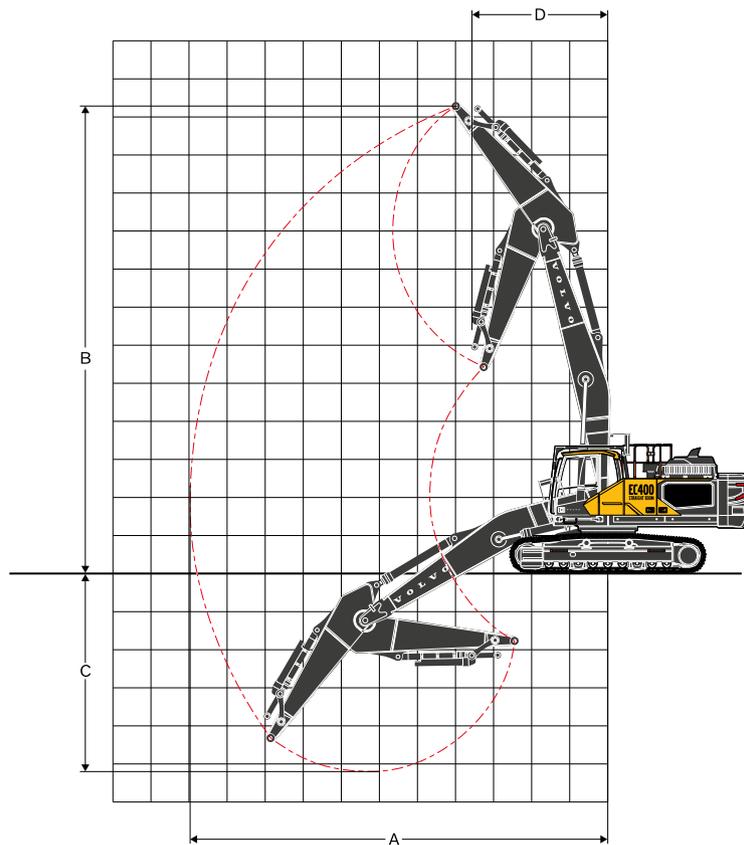
WORKING RANGES WITH DIRECT FIT BUCKET

Description	Unit		EC300F Straight Boom	
	m (ft)		7.0 (23'0")	
Boom				
Arm	m	ft in	3.05	10'0"
A. Max. digging reach	mm	ft in	11,760	38'7"
B. Max. digging reach on ground	mm	ft in	11,580	37'12"
C. Max. digging depth	mm	ft in	6,150	20'2"
D. Max. digging depth (l=2.44 m / 8'0" level)	mm	ft in	5,990	19'8"
E. Max. vertical wall digging depth	mm	ft in	4,920	16'2"
F. Max. cutting height	mm	ft in	13,155	43'2"
G. Max. dumping height	mm	ft in	9,835	32'3"
H. Min. front swing radius	mm	ft in	3,470	11'5"

DIGGING FORCES WITH DIRECT FIT BUCKET

Breakout force (bucket)	Normal	SAE J1179	kN	lbf	165	37,090
	Power boost	SAE J1179	kN	lbf	179	40,240
	Normal	ISO 6015	kN	lbf	190	42,710
	Power boost	ISO 6015	kN	lbf	207	46,540
Tearout force (arm)	Normal	SAE J1179	kN	lbf	133	29,900
	Power boost	SAE J1179	kN	lbf	144	32,370
	Normal	ISO 6015	kN	lbf	136	30,570
	Power boost	ISO 6015	kN	lbf	148	33,270
Rotation angle, bucket				°	179	

Specifications



WORKING RANGES WITH DIRECT FIT BUCKET

Description	Unit		EC400F Straight Boom	
	m (ft)		7.0 (23'0")	
Boom				
Arm	m	ft in	3.9	12'10"
A. Max. digging reach	mm	ft in	12,652	41'6"
B. Max. digging reach on ground	mm	ft in	12,468	40'11"
C. Max. digging depth	mm	ft in	6,942	22'9"
D. Max. digging depth (l=2.44 m / 8'0" level)	mm	ft in	6,811	22'4"
E. Max. vertical wall digging depth	mm	ft in	5,534	18'2"
F. Max. cutting height	mm	ft in	13,956	45'9"
G. Max. dumping height	mm	ft in	10,283	33'9"
H. Min. front swing radius	mm	ft in	3,660	12'0"

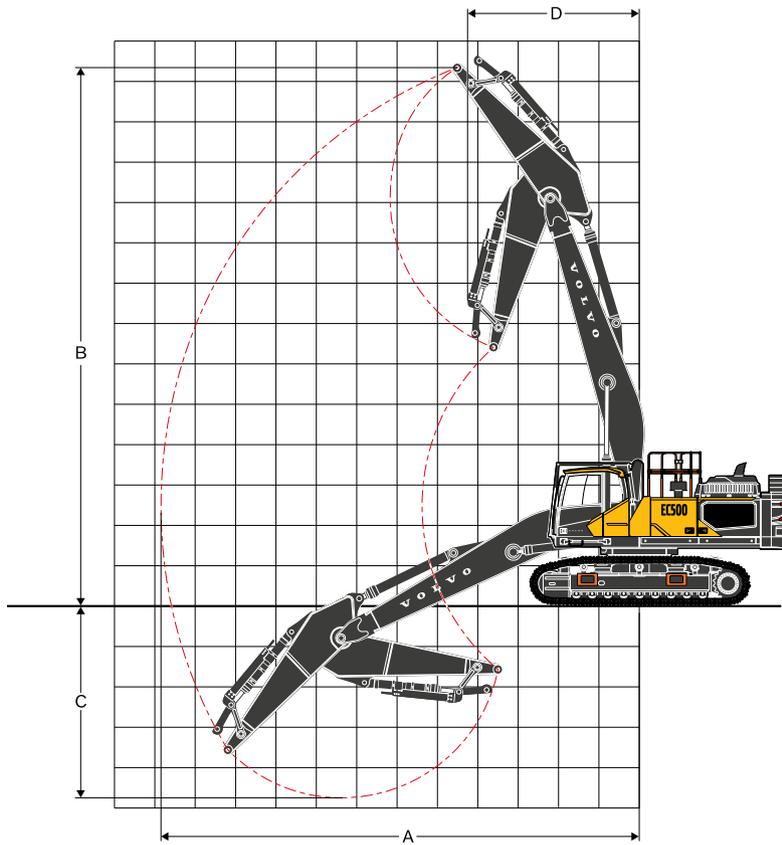
DIGGING FORCES WITH DIRECT FIT BUCKET

Breakout force (bucket)	Normal	SAE J1179	kN	lbf	198	44,512
	Power boost	SAE J1179	kN	lbf	215	48,334
	Normal	ISO 6015	kN	lbf	222	49,908
	Power boost	ISO 6015	kN	lbf	243	54,629
Tearout force (arm)	Normal	SAE J1179	kN	lbf	142	31,923
	Power boost	SAE J1179	kN	lbf	154	34,621
	Normal	ISO 6015	kN	lbf	144	32,372
	Power boost	ISO 6015	kN	lbf	157	35,295

Rotation angle, bucket

°

178



WORKING RANGES WITH DIRECT FIT BUCKET

Description	Unit	EC500F Straight Boom	
Boom	m (ft)	7.8 (25'8")	
Arm	m ft in	3.9	12'10"
A. Max. pin reach	mm ft in	11,700	38'5"
B. Max. pin height	mm ft in	13,090	43'0"
C. Max. pin depth	mm ft in	4,730	15'7"
D. Min. front slew radius	mm ft in	4,200	13'10"

Specifications

MACHINE WEIGHTS AND GROUND PRESSURE

EC300F Straight Boom L

Description	Shoe width		Operating weight		Ground pressure		Overall width	
	mm	in	kg	lb	kPa	psi	mm	ft in
Triple grouser	600	24	33,540	73,943	64.7	9.38	3,190	10'6"
	600 (HD)	24 (HD)	33,750	74,406	65.1	9.44	3,190	10'6"
	700	28	34,120	75,222	56.4	8.18	3,290	10'10"
	800	32	34,480	76,015	49.9	7.24	3,390	11'1"
	900	36	34,850	76,831	44.8	6.5	3,490	11'5"
Double grouser	600	24	33,910	74,759	65.4	9.49	3,190	10'6"
Single grouser	600	28	34,320	75,663	56.8	8.24	3,290	10'10"
EC300F Straight Boom L, 7.0 m (23'0") boom, 3.05 m (10'0") arm, 1,546 kg (3,408 lb) bucket, 6,900 kg (15,210 lb) counterweight								

MACHINE WEIGHTS AND GROUND PRESSURE

EC400F Straight Boom L

Description	Shoe width		Operating weight		Ground pressure		Overall width	
	mm	in	kg	lb	kPa	psi	mm	ft in
Triple grouser	600	24	42,433	93,549	75.9	11.0	3,340	10'11"
	600 (HD)	24 (HD)	43,095	95,008	77.1	11.2	3,340	10'11"
	700	28	43,081	94,977	66.0	9.6	3,440	11'3"
	800	32	43,523	95,952	58.4	8.5	3,540	11'7"
	900	36	43,965	96,926	52.4	7.6	3,640	11'11"
Double grouser	600	24	42,925	94,633	76.8	11.1	3,340	10'11"
Single grouser	600	28	42,725	94,192	76.4	11.1	3,340	10'11"
EC400F Straight Boom L, 7.0 m (23'0") GP boom, 3.9 m (12'10") HD arm, 1,546 kg (3,408 lb) bucket, 10,250 kg (22,597 lb) counterweight								

MACHINE WEIGHTS AND GROUND PRESSURE

EC500F Straight Boom LR

Description	Shoe width		Operating weight		Ground pressure		Overall width	
	mm	in	kg	lb	kPa	psi	mm	ft in
Triple grouser	600	24	55,170	121,630	95.5	13.9	2,990	9'10"
	600 (HD)	24 (HD)	55,670	122,730	82.6	12.0	2,990	9'10"
	700	28	56,170	123,830	72.9	10.6	3,090	10'2"
	800	32	56,680	124,960	65.4	9.5	3,190	10'6"
	900	36	55,280	121,870	95.7	13.9	3,290	10'10"
Double grouser	600	24	55,220	121,740	95.6	13.9	2,990	9'10"
EC500F Straight Boom LR with RETRACTABLE undercarriage, 7.8 m (25'8") boom, 3.9 m (12'10") HD arm, 6,400 kg (14,110 lb) tool, 13,250 kg (29,210 lb) counterweight (incl. Additional CWT)								

LIFTING CAPACITY EC300F Straight Boom 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	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										
Boom : 7.0 m 23'0" Arm : 3.05 m 10'0" Shoe : 600 mm 24" CWT : 6,900 kg 15,210 lb	10.5 m kg												*8,580	*8,580	5.4 m
	35 ft lb												*19,650	*19,650	16.7 ft
	9.0 m kg					*9,360	*9,360						*6,890	6,660	7.2 m
	30 ft lb					*20,590	20,140						*15,430	15,200	23.3 ft
	7.5 m kg					*9,100	*9,100	*8,320	6,400				*6,180	5,100	8.5 m
	25 ft lb					*20,170	20,070	*18,210	13,740				*13,710	11,440	27.5 ft
	6.0 m kg			*9,490	*9,490	*9,970	8,980	*8,490	6,270	7,180	4,570		*5,830	4,300	9.3 m
	20 ft lb			*20,470	*20,470	*21,620	19,360	*18,480	13,490	*14,900	9,780		*12,890	9,580	30.3 ft
	4.5 m kg					*10,840	8,450	*8,860	6,010	7,090	4,490		*5,700	3,860	9.8 m
	15 ft lb			*31,160	28,210	*23,450	18,260	*19,230	12,970	15,240	9,650		*12,570	8,550	32.1 ft
	3.0 m kg					*11,630	7,890	9,170	5,730	6,940	4,350		*5,740	3,630	10.1 m
	10 ft lb					*25,170	17,050	19,760	12,360	14,940	9,370		*12,620	8,030	33.0 ft
	1.5 m kg					*11,920	7,460	8,900	5,480	6,800	4,220		5,740	3,570	10.1 m
	5 ft lb					*25,840	16,110	19,170	11,830	14,640	9,100		12,670	7,870	33.1 ft
	0 m kg					*11,490	7,240	8,720	5,320	6,710	4,140		5,890	3,650	9.9 m
	0 ft lb					*24,950	15,620	18,800	11,490	14,470	8,940		12,980	8,050	32.5 ft
	-1.5 m kg			*12,110	11,100	*10,360	7,200	*8,250	5,280	*6,270	4,140		*5,360	3,910	9.5 m
	-5 ft lb			*27,340	23,870	*22,480	15,530	*17,820	11,400	*13,260	8,970		*11,790	8,650	31.0 ft
	-3 m kg	*9,210	*9,210	*9,930	*9,930	*8,500	7,300	*6,680	5,350				*4,480	4,450	8.7 m
	-10 ft lb	*20,320	*20,320	*21,590	*21,590	*18,330	15,750	*14,250	11,580				*9,810	*9,810	28.6 ft
-4.5 m kg	*5,060	*5,060	*6,390	*6,390	*5,600	*5,600	*3,490	*3,490				*2,970	*2,970	7.7 m	
-15 ft lb	*10,840	*10,840	*13,630	*13,630	*11,760	*11,760						*6,340	*6,340	24.9 ft	
Boom : 7.0 m 23'0" Arm : 3.05 m 10'0" Shoe : 700 mm 28" CWT : 6,900 kg 15,210 lb	10.5 m kg												*8,570	*8,570	5.4 m
	35 ft lb												*19,630	*19,630	16.7 ft
	9.0 m kg					*9,370	*9,370						*6,890	6,740	7.2 m
	30 ft lb					*20,600	20,350						*15,420	15,380	23.3 ft
	7.5 m kg					*9,100	*9,100	*8,330	6,480				*6,180	5,170	8.5 m
	25 ft lb					*20,160	*20,160	*18,230	13,900				*13,700	11,590	27.5 ft
	6.0 m kg			*9,490	*9,490	*9,980	9,080	*8,500	6,340	7,270	4,640		*5,830	4,370	9.3 m
	20 ft lb			*20,470	*20,470	*21,650	19,580	*18,500	13,660	*14,890	9,920		*12,880	9,710	30.3 ft
	4.5 m kg					*10,850	8,560	*8,870	6,090	7,180	4,550		*5,700	3,920	9.8 m
	15 ft lb			*31,200	28,540	*23,480	18,480	*19,260	13,140	15,450	9,790		*12,560	8,690	32.1 ft
	3.0 m kg					*11,650	8,000	*9,230	5,810	7,030	4,420		*5,730	3,690	10.1 m
	10 ft lb					*25,220	17,280	*20,010	12,540	15,150	9,520		*12,610	8,160	33.0 ft
	1.5 m kg					*11,950	7,580	9,020	5,570	6,900	4,290		5,830	3,630	10.1 m
	5 ft lb					*25,890	16,360	19,450	12,010	14,860	9,250		12,860	8,000	33.1 ft
	0 m kg					*11,520	7,360	8,850	5,410	6,810	4,210		*5,940	3,710	9.9 m
	0 ft lb					*25,000	15,870	19,080	11,680	14,680	9,090		*13,090	8,190	32.5 ft
	-1.5 m kg			*12,110	11,270	*10,390	7,320	*8,270	5,370	*6,280	4,210		*5,370	3,980	9.5 m
	-5 ft lb			*27,420	24,240	*22,540	15,780	*17,860	11,580	*13,290	9,120		*11,820	8,790	31. ft
	-3 m kg	*9,260	*9,260	*9,970	*9,970	*8,520	7,420	*6,700	5,440				*4,500	*4,500	8.7 m
	-10 ft lb	*20,430	*20,430	*21,660	*21,660	*18,390	16,000	*14,290	11,760				*9,840	*9,840	28.6 ft
-4.5 m kg	*5,100	*5,100	*6,420	*6,420	*5,620	*5,620	*3,510	*3,510				*2,990	*2,990	7.7 m	
-15 ft lb	*10,940	*10,940	*13,700	*13,700	*11,810	*11,810						*6,370	*6,370	24.9 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 Straight Boom 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	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											
Boom : 7.0 m 23'0" Arm : 3.05 m 10'0" Shoe : 800 mm 32" CWT : 6,900 kg 15,210 lb	10.5 m	kg												*8,570	*8,570	5.4 m
	35 ft	lb												*19,630	*19,630	16.7 ft
	9.0 m	kg					*9,370	*9,370						*6,890	6,840	7.2 m
	30 ft	lb					*20,600	*20,600						*15,420	*15,420	23.3 ft
	7.5 m	kg					*9,100	*9,100	*8,330	6,570				*6,180	5,250	8.5 m
	25 ft	lb					*20,160	*20,160	*18,230	14,100				*13,700	11,770	27.5 ft
	6.0 m	kg			*9,490	*9,490	*9,980	9,200	*8,500	6,440	7,390	4,710		*5,830	4,440	9.3 m
	20 ft	lb			*20,470	*20,470	*21,650	19,840	*18,500	13,860	*14,890	10,080		*12,880	9,870	30.3 ft
	4.5 m	kg					*10,850	8,680	*8,870	6,190	7,300	4,630		*5,700	3,990	9.8 m
	15 ft	lb			*31,200	28,920	*23,480	18,740	*19,260	13,340	15,700	9,950		*12,560	8,830	32.1 ft
	3.0 m	kg					*11,650	8,120	*9,230	5,900	7,150	4,490		*5,730	3,760	10.1 m
	10 ft	lb					*25,220	17,550	*20,010	12,740	15,400	9,680		*12,610	8,300	33.0 ft
	1.5 m	kg					*11,950	7,700	9,170	5,660	7,010	4,360		*5,920	3,690	10.1 m
	5 ft	lb					*25,890	16,620	19,760	12,210	15,110	9,410		*13,020	8,140	33.1 ft
	0 m	kg					*11,520	7,480	9,000	5,500	6,920	4,280		*5,940	3,780	9.9 m
	0 ft	lb					*25,000	16,140	19,390	11,880	14,930	9,250		*13,090	8,330	32.5 ft
	-1.5 m	kg			*12,110	11,450	*10,390	7,440	*8,270	5,460	*6,280	4,290		*5,370	4,050	9.5 m
	-5 ft	lb			*27,420	24,630	*22,540	16,040	*17,860	11,780	*13,290	9,280		*11,820	8,940	31.0 ft
	-3 m	kg	*9,260	*9,260	*9,970	*9,970	*8,520	7,540	*6,700	5,530				*4,500	*4,500	8.7 m
	-10 ft	lb	*20,430	*20,430	*21,660	*21,660	*18,390	16,260	*14,290	11,960				*9,840	*9,840	28.6 ft
-4.5 m	kg	*5,100	*5,100	*6,420	*6,420	*5,620	*5,620	*3,510	*3,510				*2,990	*2,990	7.7 m	
-15 ft	lb	*10,940	*10,940	*13,700	*13,700	*11,810	*11,810						*6,370	*6,370	24.9 ft	
Boom : 7.0 m 23'0" Arm : 3.05 m 10'0" Shoe : 900 mm 36" CWT : 6,900 kg 15,210 lb	10.5 m	kg												*8,570	*8,570	5.4 m
	35 ft	lb												*19,630	*19,630	16.7 ft
	9.0 m	kg					*9,370	*9,370						*6,890	*6,890	7.2 m
	30 ft	lb					*20,600	*20,600						*15,420	*15,420	23.3 ft
	7.5 m	kg					*9,100	*9,100	*8,330	6,630				*6,180	5,300	8.5 m
	25 ft	lb					*20,160	*20,160	*18,230	14,230				*13,700	11,890	27.5 ft
	6.0 m	kg			*9,490	*9,490	*9,980	9,280	*8,500	6,500	7,470	4,760		*5,830	4,490	9.3 m
	20 ft	lb			*20,470	*20,470	*21,650	20,020	*18,500	14,000	*14,890	10,190		*12,880	9,980	30.3 ft
	4.5 m	kg					*10,850	8,760	*8,870	6,250	7,380	4,680		*5,700	4,030	9.8 m
	15 ft	lb			*31,200	29,190	*23,480	18,920	*19,260	13,480	15,870	10,060		*12,560	8,940	32.1 ft
	3.0 m	kg					*11,650	8,200	*9,230	5,960	7,230	4,540		*5,730	3,800	10.1 m
	10 ft	lb					*25,220	17,730	*20,010	12,870	15,570	9,790		*12,610	8,400	33.0 ft
	1.5 m	kg					*11,950	7,780	9,270	5,720	7,090	4,410		*5,920	3,730	10.1 m
	5 ft	lb					*25,890	16,800	19,980	12,350	15,280	9,520		*13,020	8,240	33.1 ft
	0 m	kg					*11,520	7,560	*9,090	5,570	7,000	4,330		*5,940	3,820	9.9 m
	0 ft	lb					*25,000	16,320	19,610	12,010	15,110	9,360		*13,090	8,430	32.5 ft
	-1.5 m	kg			*12,110	11,580	*10,390	7,520	*8,270	5,520	*6,280	4,340		*5,370	4,100	9.5 m
	-5 ft	lb			*27,420	24,900	*22,540	16,220	*17,860	11,920	*13,290	9,390		*11,820	9,050	31.0 ft
	-3 m	kg	*9,260	*9,260	*9,970	*9,970	*8,520	7,620	*6,700	5,600				*4,500	*4,500	8.7 m
	-10 ft	lb	*20,430	*20,430	*21,660	*21,660	*18,390	16,440	*14,290	12,100				*9,840	*9,840	28.6 ft
-4.5 m	kg	*5,100	*5,100	*6,420	*6,420	*5,620	*5,620	*3,510	*3,510				*2,990	*2,990	7.7 m	
-15 ft	lb	*10,940	*10,940	*13,700	*13,700	*11,810	*11,810						*6,370	*6,370	24.9 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 EC400F Straight Boom 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	3.0 m / 10 ft		4.5 m / 15 ft		6.0 m / 20 ft		7.5 m / 25 ft		9.0 m / 30 ft		10.5 m / 35 ft		Max. reach		Max.	
		Along UC	Across UC	Along UC	Across UC	Along UC	Across UC										
Boom : 7.0 m 23'0" Arm : 3.9 m 12'10" Shoe : 600 mm 24" CWT : 10 250 kg 22,597 lb	12 m	kg													*11,030	*11,030	4.3 m
	40 ft	lb													*24,317	*24,317	14.1 ft
	10.5 m	kg					*10,480	*10,480							*8,090	*8,090	6.8 m
	35 ft	lb					*23,104	*23,104							*17,835	*17,835	22.3 ft
	9.0 m	kg					*10,220	*10,220	*9,800	*9,800					*7,030	*7,030	8.3 m
	30 ft	lb					*22,531	*22,531	*21,605	*21,605					*15,498	*15,498	27.2 ft
	7.5 m	kg					*9,910	*9,910	*10,380	*10,380	*8,640	7,980			*6,500	*6,500	9.4 m
	25 ft	lb					*21,848	*21,848	*22,884	*22,884	*19,048	17,593			*14,330	*14,330	30.8 ft
	6.0 m	kg			*9,570	*9,570	*10,790	*10,790	*10,780	10,680	*9,590	7,910			*6,260	*6,260	10.1 m
	20 ft	lb			*21,098	*21,098	*23,788	*23,788	*23,766	23,545	*21,142	17,439			*13,801	*13,801	33.1 ft
	4.5 m	kg			*17,870	*17,870	*13,750	*13,750	*11,380	10,280	*9,810	7,720	*6,780	5,930	*6,190	5,870	10.6 m
	15 ft	lb			*39,397	*39,397	*30,314	*30,314	*25,089	22,663	*21,627	17,020	*14,947	13,073	*13,647	12,941	34.8 ft
	3.0 m	kg					*15,000	13,590	*12,000	9,810	*10,060	7,460	*8,550	5,830	*6,280	5,570	10.8 m
	10 ft	lb					*33,069	29,961	*26,455	21,627	*22,178	16,446	*18,850	12,853	*13,845	12,280	35.4 ft
	1.5 m	kg					*15,760	12,820	*12,380	9,370	*10,160	7,210	*8,350	5,710	*6,510	5,460	10.8 m
	5 ft	lb					*34,745	28,263	*27,293	20,657	*22,399	15,895	*18,409	12,588	*14,352	12,037	35.4 ft
	0 m	kg			*13,360	*13,360	*15,680	12,310	*12,300	9,040	*9,930	7,010	*7,730	5,630	*6,940	5,550	10.6 m
	0 m	lb			*29,454	*29,454	*34,568	27,139	*27,117	19,930	*21,892	15,454	*17,042	12,412	*15,300	12,236	34.8 ft
	-1.5 m	kg	*8,000	*8,000	*17,520	*17,520	*14,680	12,060	*11,600	8,850	*9,160	6,890			*6,970	5,850	10.2 m
	-5 ft	lb	*17,637	*17,637	*38,625	*38,625	*32,364	26,588	*25,574	19,511	*20,194	15,190			*15,366	12,897	33.5 ft
-3.0 m	kg	*13,890	*13,890	*15,750	*15,750	*12,720	12,020	*10,050	8,810	*7,440	6,910			*6,140	*6,140	9.5 m	
-10 ft	lb	*30,622	*30,622	*34,723	*34,723	*28,043	26,500	*22,156	19,423	*16,402	15,234			*13,536	*13,536	31.2 ft	
-4.5 m	kg			*11,470	*11,470	*9,550	*9,550	*7,200	*7,200							8.5 m	
-15 ft	lb			*25,287	*25,287	*21,054	*21,054	*15,873	*15,873							27.9 ft	
Boom : 7.0 m 23'0" Arm : 3.9 m 12'10" Shoe : 700 mm 28" CWT : 10 250 kg 22,597 lb	12 m	kg													*11,030	*11,030	4.3 m
	40 ft	lb													*24,317	*24,317	14.1 ft
	10.5 m	kg					*10,480	*10,480							*8,090	*8,090	6.8 m
	35 ft	lb					*23,104	*23,104							*17,835	*17,835	22.3 ft
	9.0 m	kg					*10,220	*10,220	*9,800	*9,800					*7,030	*7,030	8.3 m
	30 ft	lb					*22,531	*22,531	*21,605	*21,605					*15,498	*15,498	27.2 ft
	7.5 m	kg					*9,910	*9,910	*10,380	*10,380	*8,640	8,040			*6,500	*6,500	9.4 m
	25 ft	lb					*21,848	*21,848	*22,884	*22,884	*19,048	17,725			*14,330	*14,330	30.8 ft
	6.0 m	kg			*9,570	*9,570	*10,790	*10,790	*10,780	10,760	*9,590	7,980			*6,260	*6,260	10.1 m
	20 ft	lb			*21,098	*21,098	*23,788	*23,788	*23,766	23,722	*21,142	17,593			*13,801	*13,801	33.1 ft
	4.5 m	kg			*17,870	*17,870	*13,750	*13,750	*11,380	10,360	*9,810	7,780	*6,780	5,980	*6,190	5,920	10.6 m
	15 ft	lb			*39,397	*39,397	*30,314	*30,314	*25,089	22,840	*21,627	17,152	*14,947	13,184	*13,647	13,051	34.8 ft
	3.0 m	kg					*15,000	13,690	*12,000	9,890	*10,060	7,520	*8,550	5,890	*6,280	5,620	10.8 m
	10 ft	lb					*33,069	30,181	*26,455	21,804	*22,178	16,579	*18,850	12,985	*13,845	12,390	35.4 ft
	1.5 m	kg					*15,760	12,930	*12,380	9,450	*10,160	7,270	*8,350	5,770	*6,510	5,510	10.8 m
	5 ft	lb					*34,745	28,506	*27,293	20,834	*22,399	16,028	*18,409	12,721	*14,352	12,147	35.4 ft
	0 m	kg			*13,360	*13,360	*15,680	12,420	*12,300	9,120	*9,930	7,070	*7,730	5,680	*6,940	5,600	10.6 m
	0 m	lb			*29,454	*29,454	*34,568	27,381	*27,117	20,106	*21,892	15,587	*17,042	12,522	*15,300	12,346	34.8 ft
	-1.5 m	kg	*8,000	*8,000	*17,520	*17,520	*14,680	12,160	*11,600	8,930	*9,160	6,960			*6,970	5,910	10.2 m
	-5 ft	lb	*17,637	*17,637	*38,625	*38,625	*32,364	26,808	*25,574	19,687	*20,194	15,344			*15,366	13,029	33.5 ft
-3.0 m	kg	*13,890	*13,890	*15,750	*15,750	*12,720	12,130	*10,050	8,890	*7,440	6,980			*6,140	*6,140	9.5 m	
-10 ft	lb	*30,622	*30,622	*34,723	*34,723	*28,043	26,742	*22,156	19,599	*16,402	15,388			*13,536	*13,536	31.2 ft	
-4.5 m	kg			*11,470	*11,470	*9,550	*9,550	*7,200	*7,200							8.5 m	
-15 ft	lb			*25,287	*25,287	*21,054	*21,054	*15,873	*15,873							27.9 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 EC400F Straight Boom 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	3.0 m / 10 ft		4.5 m / 15 ft		6.0 m / 20 ft		7.5 m / 25 ft		9.0 m / 30 ft		10.5 m / 35 ft		Max. reach		Max.	
		Along UC	Across UC	Along UC	Across UC	Along UC	Across UC										
Boom : 7.0 m 23'0" Arm : 3.9 m 12'10" Shoe : 800 mm 32" CWT : 10 250 kg 22,597 lb	12 m	kg													*11,030	*11,030	4.3 m
	40 ft	lb													*24,317	*24,317	14.1 ft
	10.5 m	kg					*10,480	*10,480							*8,090	*8,090	6.8 m
	35 ft	lb					*23,104	*23,104							*17,835	*17,835	22.3 ft
	9.0 m	kg					*10,220	*10,220	*9,800	*9,800					*7,030	*7,030	8.3 m
	30 ft	lb					*22,531	*22,531	*21,605	*21,605					*15,498	*15,498	27.2 ft
	7.5 m	kg					*9,910	*9,910	*10,380	*10,380	*8,640	8,110			*6,500	*6,500	9.4 m
	25 ft	lb					*21,848	*21,848	*22,884	*22,884	*19,048	17,879			*14,330	*14,330	30.8 ft
	6.0 m	kg			*9,570	*9,570	*10,790	*10,790	*10,780	*10,780	*9,590	8,040			*6,260	*6,260	10.1 m
	20 ft	lb			*21,098	*21,098	*23,788	*23,788	*23,766	*23,766	*21,142	17,725			*13,801	*13,801	33.1 ft
	4.5 m	kg			*17,870	*17,870	*13,750	*13,750	*11,380	10,440	*9,810	7,840	*6,780	6,040	*6,190	5,980	10.6 m
	15 ft	lb			*39,397	*39,397	*30,314	*30,314	*25,089	23,016	*21,627	17,284	*14,947	13,316	*13,647	13,184	34.8 ft
	3.0 m	kg					*15,000	13,800	*12,000	9,970	*10,060	7,590	*8,550	5,940	*6,280	5,670	10.8 m
	10 ft	lb					*33,069	30,424	*26,455	21,980	*22,178	16,733	*18,850	13,095	*13,845	12,500	35.4 ft
	1.5 m	kg					*15,760	13,040	*12,380	9,530	*10,160	7,340	*8,350	5,820	*6,510	5,570	10.8 m
	5 ft	lb					*34,745	28,748	*27,293	21,010	*22,399	16,182	*18,409	12,831	*14,352	12,280	35.4 ft
	0 m	kg			*13,360	*13,360	*15,680	12,520	*12,300	9,200	*9,930	7,140	*7,730	5,730	*6,940	5,650	10.6 m
	0 m	lb			*29,454	*29,454	*34,568	27,602	*27,117	20,283	*21,892	15,741	*17,042	12,632	*15,300	12,456	34.8 ft
	-1.5 m	kg	*8,000	*8,000	*17,520	*17,520	*14,680	12,270	*11,600	9,010	*9,160	7,020			*6,970	5,960	10.2 m
	-5 ft	lb	*17,637	*17,637	*38,625	*38,625	*32,364	27,051	*25,574	19,864	*20,194	15,476			*15,366	13,140	33.5 ft
	-3.0 m	kg	*13,890	*13,890	*15,750	*15,750	*12,720	12,240	*10,050	8,970	*7,440	7,040			*6,140	*6,140	9.5 m
	-10 ft	lb	*30,622	*30,622	*34,723	*34,723	*28,043	26,985	*22,156	19,775	*16,402	15,521			*13,536	*13,536	31.2 ft
	-4.5 m	kg			*11,470	*11,470	*9,550	*9,550	*7,200	*7,200							8.5 m
	-15 ft	lb			*25,287	*25,287	*21,054	*21,054	*15,873	*15,873							27.9 ft
Boom : 7.0 m 23'0" Arm : 3.9 m 12'10" Shoe : 900 mm 36" CWT : 10 250 kg 22,597 lb	12 m	kg													*11,030	*11,030	4.3 m
	40 ft	lb													*24,317	*24,317	14.1 ft
	10.5 m	kg					*10,480	*10,480							*8,090	*8,090	6.8 m
	35 ft	lb					*23,104	*23,104							*17,835	*17,835	22.3 ft
	9.0 m	kg					*10,220	*10,220	*9,800	*9,800					*7,030	*7,030	8.3 m
	30 ft	lb					*22,531	*22,531	*21,605	*21,605					*15,498	*15,498	27.2 ft
	7.5 m	kg					*9,910	*9,910	*10,380	*10,380	*8,640	8,170			*6,500	*6,500	9.4 m
	25 ft	lb					*21,848	*21,848	*22,884	*22,884	*19,048	18,012			*14,330	*14,330	30.8 ft
	6.0 m	kg			*9,570	*9,570	*10,790	*10,790	*10,780	*10,780	*9,590	8,110			*6,260	*6,260	10.1 m
	20 ft	lb			*21,098	*21,098	*23,788	*23,788	*23,766	*23,766	*21,142	17,879			*13,801	*13,801	33.1 ft
	4.5 m	kg			*17,870	*17,870	*13,750	*13,750	*11,380	10,520	*9,810	7,910	*6,780	6,090	*6,190	6,030	10.6 m
	15 ft	lb			*39,397	*39,397	*30,314	*30,314	*25,089	23,193	*21,627	17,439	*14,947	13,426	*13,647	13,294	34.8 ft
	3.0 m	kg					*15,000	13,910	*12,000	10,050	*10,060	7,650	*8,550	6,000	*6,280	5,720	10.8 m
	10 ft	lb					*33,069	30,666	*26,455	22,156	*22,178	16,865	*18,850	13,228	*13,845	12,610	35.4 ft
	1.5 m	kg					*15,760	13,140	*12,380	9,610	*10,160	7,400	*8,350	5,880	*6,510	5,620	10.8 m
	5 ft	lb					*34,745	28,969	*27,293	21,186	*22,399	16,314	*18,409	12,963	*14,352	12,390	35.4 ft
	0 m	kg			*13,360	*13,360	*15,680	12,630	*12,300	9,280	*9,930	7,200	*7,730	5,790	*6,940	5,710	10.6 m
	0 m	lb			*29,454	*29,454	*34,568	27,844	*27,117	20,459	*21,892	15,873	*17,042	12,765	*15,300	12,588	34.8 ft
	-1.5 m	kg	*8,000	*8,000	*17,520	*17,520	*14,680	12,380	*11,600	9,090	*9,160	7,090			*6,970	6,020	10.2 m
	-5 ft	lb	*17,637	*17,637	*38,625	*38,625	*32,364	27,293	*25,574	20,040	*20,194	15,631			*15,366	13,272	33.5 ft
	-3.0 m	kg	*13,890	*13,890	*15,750	*15,750	*12,720	12,340	*10,050	9,050	*7,440	7,110			*6,140	*6,140	9.5 m
	-10 ft	lb	*30,622	*30,622	*34,723	*34,723	*28,043	27,205	*22,156	19,952	*16,402	15,675			*13,536	*13,536	31.2 ft
	-4.5 m	kg			*11,470	*11,470	*9,550	*9,550	*7,200	*7,200							8.5 m
	-15 ft	lb			*25,287	*25,287	*21,054	*21,054	*15,873	*15,873							27.9 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 EC500F Straight Boom LR RETRACTABLE undercarriage

Lifting capacity at the arm end without bucket.

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

	Lifting hook related to ground level		1.5 m / 5 ft		3.0 m / 10 ft		4.5 m / 15 ft		6.0 m / 20 ft		7.5 m / 25 ft		9.0 m / 30 ft		
			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 : 9.0 m 29'6" Arm : 6.0 m 19'8" Shoe : 900 mm 36" CWT : 10,600 kg 23,370 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												*6,980	*6,980
	15 ft	lb												*15,150	*15,150
	3.0 m	kg							*11,890	*11,890	*9,370	*9,370	*7,930	*7,930	
	10 ft	lb							*25,580	*25,580	*20,240	*20,240	*17,190	*17,190	
	1.5 m	kg							*14,060	*14,060	*10,760	*10,760	*8,870	8,380	
	5 ft	lb							*30,320	*30,320	*23,260	*23,260	*19,220	18,090	
	0 m	kg							*15,640	13,760	*11,910	10,210	*9,690	7,990	
	0 m	lb							*33,810	29,690	*25,780	22,040	*21,010	17,240	
	-1.5 m	kg						*8,530	*8,530	*16,590	13,320	*12,730	9,840	*10,340	7,710
	-5 ft	lb						*19,510	*19,510	*35,920	28,720	*27,590	21,230	*22,410	16,630
	-3 m	kg	*5,830	*5,830	*7,450	*7,450	*11,330	*11,330	*17,000	13,140	*13,210	9,640	*10,750	7,540	
	-10 ft	lb	*13,080	*13,080	*16,820	*16,820	*25,800	*25,800	*36,840	28,320	*28,630	20,790	*23,310	16,260	
	-4.5 m	kg	*8,740	*8,740	*10,670	*10,670	*14,930	*14,930	*16,950	13,140	*13,330	9,590	*10,900	7,480	
	-15 ft	lb	*19,630	*19,630	*24,110	*24,110	*34,010	*34,010	*36,720	28,330	*28,880	20,680	*23,610	16,140	
	-6.0 m	kg	*11,980	*11,980	*14,480	*14,480	*19,650	*19,650	*16,420	13,300	*13,050	9,660	*10,700	7,530	
	-20 ft	lb	*26,980	*26,980	*32,790	*32,790	*44,910	44,680	*35,510	28,670	*28,220	20,860	*23,120	16,270	
	-7.5 m	kg	*15,880	*15,880	*19,320	*19,320	*19,870	*19,870	*15,290	13,600	*12,240	9,880	*9,990	7,710	
	-25 ft	lb	*35,870	*35,870	*43,960	*43,960	*42,820	*42,820	*32,940	29,360	*26,330	21,350	*21,410	16,710	
	-9.0 m	kg			*23,450	*23,450	*17,030	*17,030	*13,260	*13,260	*10,560	10,270	*8,190	8,120	
-30 ft	lb			*49,890	*49,890	*36,310	*36,310	*28,240	*28,240	*22,330	22,290	*16,780	*16,780		

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

Specifications

LIFTING CAPACITY EC500F Straight Boom LR RETRACTABLE undercarriage

Lifting capacity at the arm end without bucket.

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

	Lifting hook related to ground level		10.5 m / 35 ft		12 m / 40 ft		13 m / 45 ft		Max. reach		Max.
			Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	
Boom : 9.0 m 29'6" Arm : 6.0 m 19'8" Shoe : 900 mm 36" CWT : 10,600 kg 23,370 lb	12.0 m	kg							*4,830	*4,830	11.3 m
	40 ft	lb							*10,770	*10,770	36.5 ft
	10.5 m	kg			*5,350	*5,350			*4,510	*4,510	12.4 m
	35 ft	lb			*10,990	*10,990			*10,000	*10,000	40.4 ft
	9.0 m	kg			*5,220	*5,220			*4,310	*4,310	13.3 m
	30 ft	lb			*11,580	*11,580			*9,540	*9,540	43.4 ft
	7.5 m	kg			*5,340	*5,340	*5,470	5,000	*4,200	*4,200	13.9 m
	25 ft	lb			*11,770	*11,770	*11,000	10,660	*9,280	*9,280	45.6 ft
	6.0 m	kg			*5,620	*5,620	*5,570	4,940	*4,160	*4,160	14.4 m
	20 ft	lb	*12,680	*12,680	*12,320	*12,320	*12,280	10,580	*9,170	*9,170	47.2 ft
	4.5 m	kg	*6,390	*6,390	*6,000	5,930	*5,780	4,830	*4,170	4,090	14.7 m
	15 ft	lb	*13,910	*13,910	*13,110	12,760	*12,690	10,360	*9,200	9,040	48.2 ft
	3.0 m	kg	*7,030	*7,030	*6,440	5,720	*6,060	4,700	*4,240	3,950	14.8 m
	10 ft	lb	*15,290	15,180	*14,040	12,300	*13,270	10,090	*9,360	8,730	48.7 ft
	1.5 m	kg	*7,680	6,720	*6,890	5,500	*6,360	4,570	*4,380	3,900	14.8 m
	5 ft	lb	*16,680	14,500	*15,010	11,850	*13,890	9,820	*9,650	8,590	48.7 ft
	0 m	kg	*8,270	6,450	*7,310	5,320	*6,640	4,450	*4,580	3,920	14.7 m
	0 m	lb	*17,960	13,920	*15,900	11,460	*14,460	9,580	*10,100	8,640	48.1 ft
	-1.5 m	kg	*8,750	6,250	*7,650	5,180	*6,840	4,370	*4,870	4,020	14.3 m
	-5 ft	lb	*19,000	13,480	*16,620	11,170	14,850	9,430	*10,740	8,880	47.0 ft
	-3 m	kg	*9,070	6,120	*7,860	5,100	6,870	4,350	*5,270	4,230	13.8 m
	-10 ft	lb	*19,680	13,210	*17,040	11,010	*13,400	9,420	*11,660	9,350	45.3 ft
	-4.5 m	kg	*9,170	6,080	*7,850	5,100			*5,860	4,570	13.1 m
	-15 ft	lb	*19,850	13,130	*16,940	11,030			*13,000	10,130	43.0 ft
	-6.0 m	kg	*8,940	6,140	*7,380	5,220			*6,740	5,120	12.2 m
	-20 ft	lb	*19,250	13,290					*15,020	11,400	39.9 ft
	-7.5 m	kg	*8,070	6,360					*7,290	6,030	11.0 m
	-25 ft	lb	*17,000	13,840					*16,110	13,520	35.8 ft
	-9.0 m	kg							*7,370	*7,370	9.4 m
	-30 ft	lb							*16,230	*16,230	30.4 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.



V O

EC400
STRAIGHT BOOM

VOLVO



Equipment

STANDARD AND OPTIONAL EQUIPMENT

• = Standard / o = Optional

	EC300 SB	EC400 SB	EC500 SB
Engine			
Turbocharged, 4 stroke diesel engine with water cooling, direct injection and charged air cooler that meets EU StageV/NA T4f requirements	•	•	•
Dual cooling fan system including electric driven for CAC	•	•	•
New work mode with 10 steps	–	–	•
Cyclone pre-cleaner	•	•	•
Fuel shut off valve	•	•	•
Engine block heater	o	o	•
Coolant heater by diesel	o	o	•
Reversible fan drive	•	•	•
High Capacity cooling	o	o	•
Precleaner, oil bath	o	o	o
Air filter, High efficiency (EON)	o	o	•
Delayed engine Shutdown	o	o	•
Automatic engine shutdown	o	o	•
Water separator with heater	o	o	•
Arctic regeneration	o	o	o
Regeneration control	o	o	o
Oil sampling for engine oil	o	o	•
Electric / Electronic control system			
Anti-theft with code lock system	•	•	•
Alternator, 180 A	•	•	•
Automatic idling system	•	•	•
Lock Out / Tag Out function on main battery switch	•	•	•
Standard light	•	•	–
Deluxe light package	•	•	•
Arm light	o	o	o
LH light	o	o	o

STANDARD AND OPTIONAL EQUIPMENT

• = Standard / o = Optional

	EC300 SB	EC400 SB	EC500 SB
Undercarriage and structures			
3-point side access	•	•	•
Direct filling DEF(AdBlue) / Sight gauge and splash guard	•	•	•
Openable combined muffler hood	•	•	•
Platform handrail fixed & Guardrail, foldable	–	–	•
Handrail & Guardrail, Foldable	•	•	–
Inner rail	o	o	•
Cabin entrance, foldable	o	o	•
Cabin entrance, fixed	o	o	o
Walk way, fixed/foldable	o	o	–
SIPS (Side Impact Protection System)	•	•	•
HD Side door & hood with screen	•	•	•
Without lower structure	o	o	–
Link 600 / 700 / 800 / 900 mm triple grouser shoe (24 / 28 / 32 / 36“)	o	o	–
Link 900 mm triple grouser shoe (36“)	–	–	•
Link 600 mm triple grouser shoe, HD (24“)	o	o	o
Link 600 mm double grouser shoe (24“)	o	o	o
Full track guard	•	•	•
Track cleaner	–	–	o
Track tensioner,sand protect	o	o	–
Removable counterweight	•	•	•
Additional counterweight	–	–	•
Hydraulic System			
EH(Electro-Hydraulic) control system	•	•	•
New work mode with 10 steps	•	•	•
Boom up & swing priority	–	–	•
Auto warm up	–	–	•
Auto power boost	•	•	•
One touch power boost	•	•	•
Priority Adjustment	•	•	–
Boom down speed control	•	•	•
Shock reduction function	•	•	•
Joystick, 4 switch & 1 proportional / Simple L8 / L8	o	o	o
Hydraulic oil mineral 32 / 46 / 68	o	o	o
Longlife hyd oil mineral 32 / 46 / 68	o	o	o
Hydraulic oil bio 46	o	o	o
Pattern change	o	o	•
Boom float function	o	o	•
Straight travel pedal	o	o	•
Comfort driving control	o	o	•
Creep mode	o	o	•
Dust suppression system	•	•	•
Dedicated drain line	•	•	•
Variable X3 P-Q control	o	o	•
Hose rupture valve for boom	•	•	•
Hose rupture valve for arm	•	•	o
Increase X1 return line (1 1/4“ => 1 1/2“) (3rd party offering)	–	–	•

STANDARD AND OPTIONAL EQUIPMENT

• = Standard / o = Optional

	EC300 SB	EC400 SB	EC500 SB
Cab and interior			
Keyless engine start and stop	•	•	•
8" HD display	•	•	•
High visibility cab	•	•	•
Tiltable left console	•	•	•
Digital hour meter	•	•	•
Wireless mobile charger with Kinematic sensor package option	•	•	•
Various storage space with cool/heated	•	•	•
Air pressure supply in cabin	o	o	o
Cabin large mirror with heater	o	o	o
Cabin large mirror	o	o	o
Basic / Premium / Deluxe seat	o	o	o
Seat belt, 2 inch 2 point / 3 inch 2 point / 3 inch 3 point	o	o	–
Seat belt, 3 inch 2 point / 3 inch 3 point	–	–	o
Climate control-HEPA filter	o	o	o
Radio with MP3/USB/Bluetooth	o	o	o
Lower wiper	•	•	o
Sun shield, roof hatch	o	o	o
Foot rest, High mount	o	o	•
FOG, frame mounted, hinge type for easy cleaning	•	•	•
Digging equipment			
7.0 m (23') Straight boom	•	•	–
7.8 m (25'8") Straight boom	–	–	•
3.9 m (12'10") HD	•	•	•
Machine controls			
Kinematic sensor package	–	–	•
Volvo Co-Pilot 2nd display, 12.8" touchable Full HD	–	–	•
Safety			
Travel alarm, beep	o	o	•
Travel alarm, white noise	o	o	o
Flashing beacon, LED	o	o	•
Green light beacon	o	o	o
Rear view camera	•	•	•
Side view camera	•	•	•
HD VSV(Volvo Smart View)	o	o	o
HD VSV with obstacle detection	o	o	–
Provision, HD VSV with obstacle detection	o	o	–

STANDARD AND OPTIONAL EQUIPMENT

• = Standard / o = Optional

	EC300 SB	EC400 SB	EC500 SB
Service and Maintenance			
Fuel level gauge	•	•	•
Swing out A/C condenser	•	•	•
Fuel filler pump	o	o	o
Fast Fuel Fill preparation	o	o	o
Quick Hydraulic Oil Fill connection	o	o	•
Quick Engine Oil Change	o	o	•
Jump start connector	o	o	•
Auto lubrication system	o	o	o
Tool kit	o	o	o

V O L V O