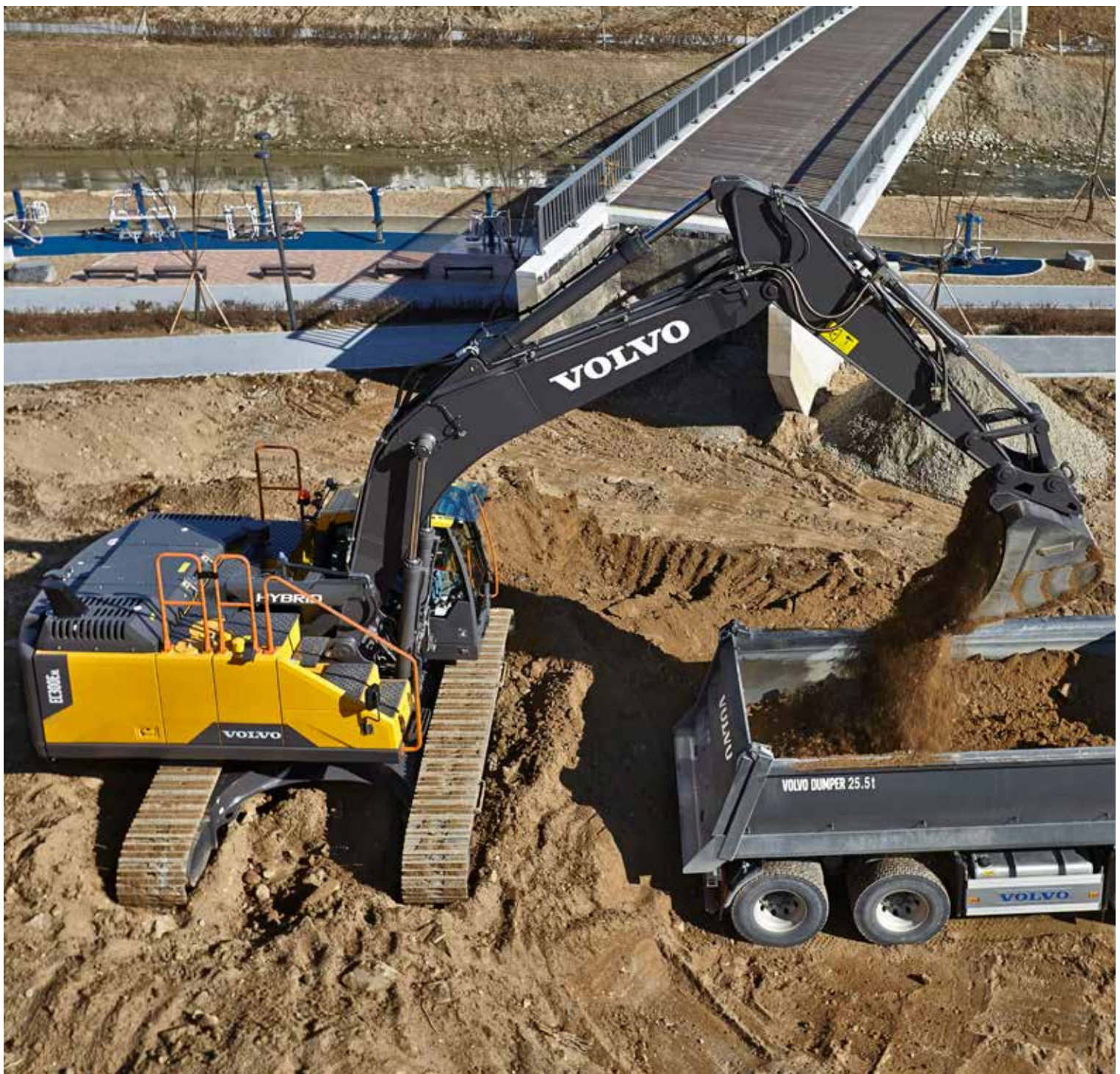


Volvo Construction Equipment
Building Tomorrow



EC300E HYBRID

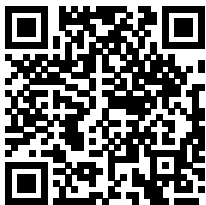
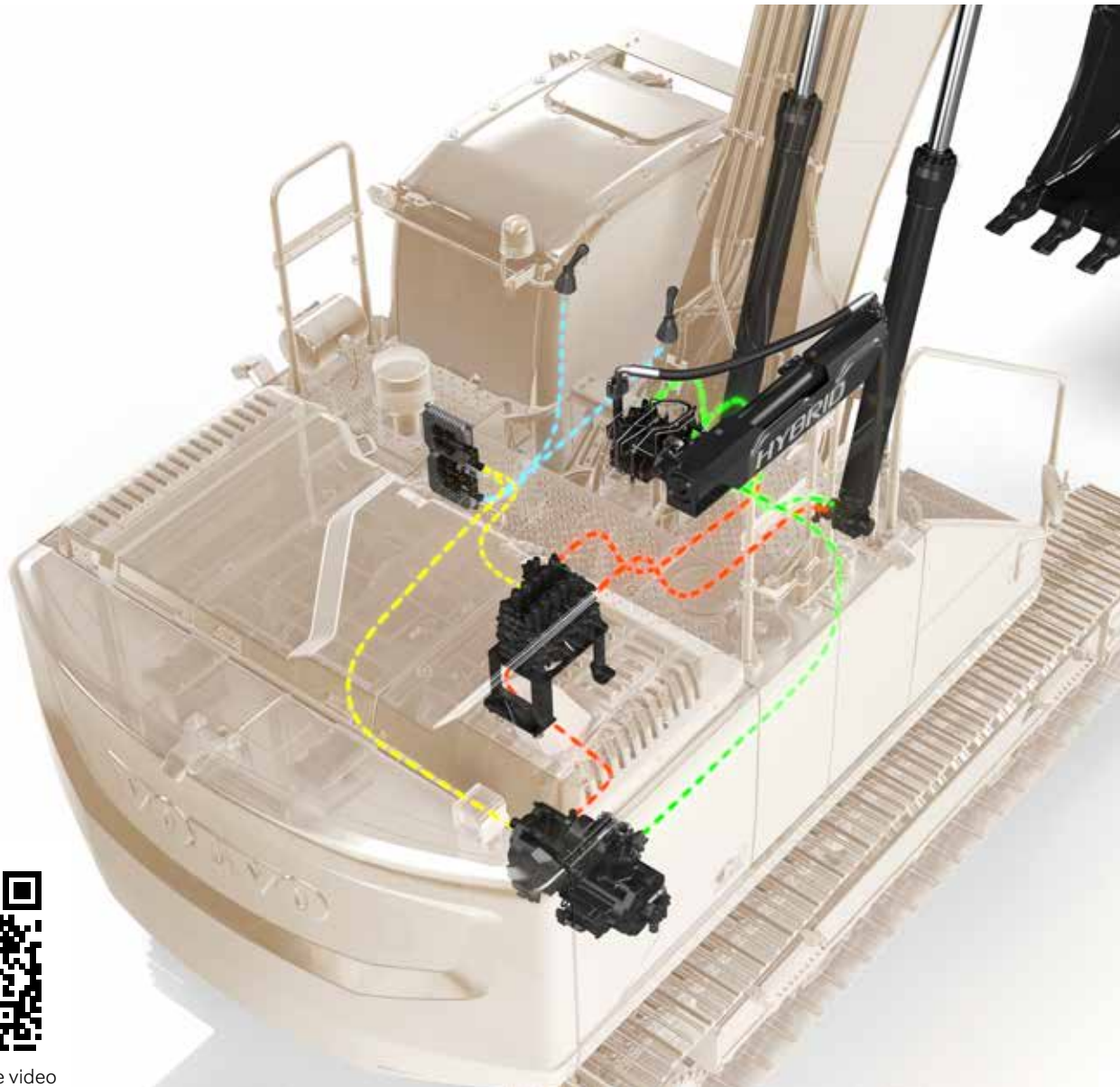
Volvo Excavators



Simple solution, big savings

Introducing the new EC300E Hybrid. Featuring unique hydraulic hybrid Volvo technology, the excavator utilizes the boom down motion to charge accumulators, with the stored energy used to drive assist motors which power the engine system.

The result is up to 20% increase in fuel efficiency while delivering all the power and performance you would expect from a conventional EC300E.



Scan to watch the video

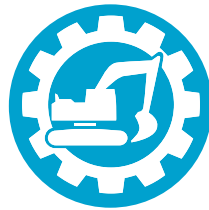
Simply reliable

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



20%

More Fuel Efficiency



100%

Volvo Engineered



17%

Lower Fuel Consumption



Cleaner and greener

The EC300E reduces CO₂ emissions by up to 17% making it a more environmentally respectful choice, especially when working in built-up areas.

The value of efficiency

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

EC300E Hybrid in detail

Engine

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

Engine	Volvo	D8J
Max power at	r/min	1800
Net, ISO 9249/SAE J1349	kW	179
	hp	243
Gross, ISO 14396/SAE J1995	kW	180
	hp	245
Max torque	Nm	1238
at engine speed	r/min	1350
No. of cylinders		6
Displacement	l	7.8
Bore	mm	110
Stroke	mm	136

Hybrid

The uncomplicated and reliable hybrid solution, Volvo's novel hydraulic hybrid harvests 'free' energy generated by the down motion of the excavator's boom and uses it to supercharge the engine system. The powerful and regular boom-down motions charge 20 litre hydraulic accumulators (5.3 gallon), which then deliver energy to drive hydraulic assist motors that help power the engine system. There are the same levels of controllability and performance as the standard EC300E, including the ability to work in ECO mode and Hybrid mode simultaneously.

Accumulator

No. of accumulator		1
Displacement	l	20

Electrical system

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

Voltage	V	24
Batteries	V	2 x 12
Battery capacity	Ah	200
Alternator	V/A	28/80

Undercarriage

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

Track shoes		2 x 50
Link pitch	mm	203
Shoe width, triple grouser	mm	600 / 700 / 800 / 900
Shoe width, triple grouser (HD)	mm	600
Shoe width, double grouser	mm	700
Bottom rollers		2 x 9
Top rollers		2 x 2

Cab

The operator's cab has easy access via a wide door opening. The cab is supported on hydraulic dampening mounts to reduce shock and vibration levels. These along with sound absorbing lining provide low noise levels. The cab has excellent all-round visibility. The front windshield can easily slide up into the ceiling, and the lower front glass can be removed and stored in the side door. Integrated air-conditioning and heating system: The pressurized and filtered cab air is supplied by an automatically-controlled fan. The air is distributed throughout the cab from 14 vents. Ergonomic operator's seat: The adjustable seat and joystick console move independently to accommodate the operator. The seat has nine different adjustments plus a seat belt for the operator's comfort and safety.

Swing system

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

Max. slew speed	r/min	10.7
Max. slew torque	kNm	110.9

Travel System

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

Max. drawbar pull	kN	248
Max. travel speed (low)	km/h	3.4
Max. travel speed (high)	km/h	5.4
Gradeability	°	35

Sound Level

Sound pressure level in cab according to ISO 6396

L _{pA} (standard)	dB	70
L _{pA} (tropical)	dB	71

External sound level according to ISO 6395 and EU Noise Directive 2000/14/EC

L _{WA} (standard)	dB	104
L _{WA} (tropical)	dB	105

Hydraulic system

The new electro-hydraulic system and new MCV (main control valve) use intelligent technology to control on-demand flow for high-productivity, high-digging capacity and excellent fuel consumption. The following important functions are included in the system for optimum performance:

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

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

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

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

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

Power boost: All digging and lifting forces are increased.

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

Main pump, Type 2 x variable displacement axial piston pumps

Maximum flow	l/min	2 x 263
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Pilot pump, Type Gear pump

Maximum flow	l/min	18
--------------	-------	----

Relief value setting pressure

Implement	MPa	33.3/36.3
-----------	-----	-----------

Travel circuit	MPa	33.3
----------------	-----	------

Slew circuit	MPa	27.9
--------------	-----	------

Pilot circuit	MPa	3.9
---------------	-----	-----

Travel: Variable displacement axial piston motor with mechanical brake

Slew: Fixed displacement axial piston motor with mechanical brake

Hydraulic Cylinders

Mono boom		2
-----------	--	---

Bore x Stroke	ø x mm	140 x 1 480
---------------	--------	-------------

Arm		1
-----	--	---

Bore x Stroke	ø x mm	150 x 1 745
---------------	--------	-------------

Bucket		1
--------	--	---

Bore x Stroke	ø x mm	140 x 1 140
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Service Refill

Fuel tank	l	470
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DEF/AdBlue® tank	l	53
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Hydraulic system, total	l	400
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Hydraulic tank	l	207
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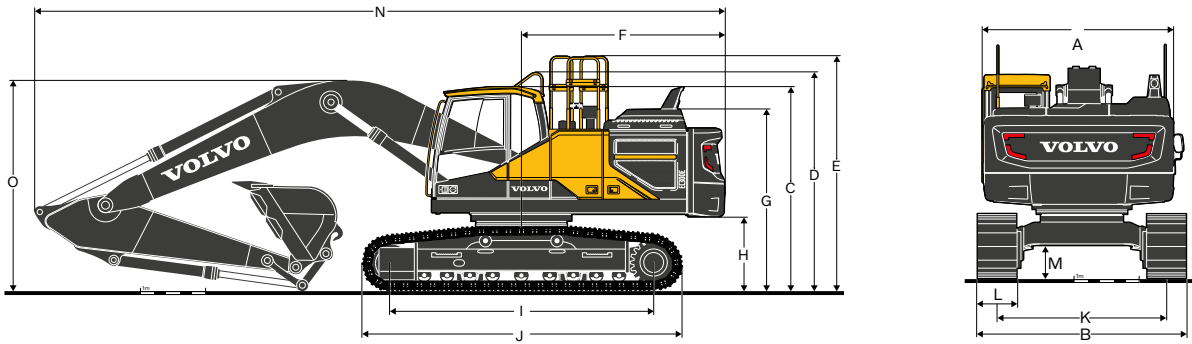
Engine oil	l	32
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Engine coolant	l	41
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Slew reduction unit	l	6.1
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Travel reduction unit	l	2 x 6
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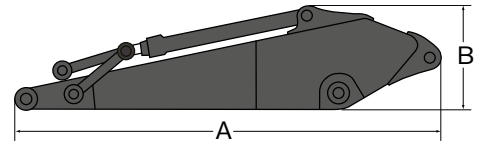
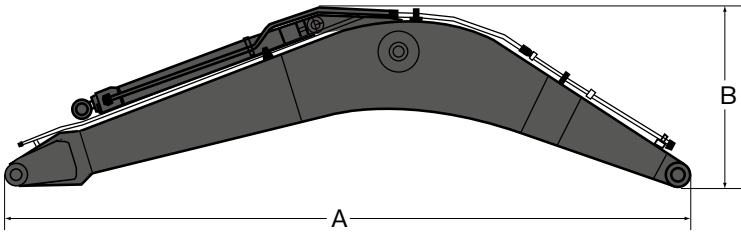
Specifications



DIMENSIONS

Description	Unit	EC300EL Hybrid			EC300ENL Hybrid		
Boom	m	6.2 mono			6.2 mono		
Arm	m	2.55	3.05	3.7	2.55	3.05	3.7
A. Overall width of upper structure	mm	2 890	2 890	2 890	2 890	2 890	2 890
B. Overall width	mm	3 190	3 190	3 190	2 990	2 990	2 990
C. Overall height of cab	mm	3 110	3 110	3 110	3 110	3 110	3 110
D. Overall height of handrail	mm	3 325	3 325	3 325	3 325	3 325	3 325
E. Overall height of guardrail (Unfolded)	mm	3 570	3 570	3 570	3 570	3 570	3 570
E. Overall height of guardrail (Folded)	mm	3 175	3 175	3 175	3 175	3 175	3 175
F. Tail swing radius	mm	3 120	3 120	3 120	3 120	3 120	3 120
G. Overall height of engine hood	mm	2 770	2 770	2 770	2 770	2 770	2 770
H. Counterweight clearance *	mm	1 100	1 100	1 100	1 100	1 100	1 100
I. Tumbler length	mm	4 015	4 015	4 015	4 015	4 015	4 015
J. Track length	mm	4 870	4 870	4 870	4 870	4 870	4 870
K. Track gauge	mm	2 590	2 590	2 590	2 390	2 390	2 390
L. Shoe width	mm	600	600	600	600	600	600
M. Min. ground clearance *	mm	480	480	480	480	480	480
N. Overall length	mm	10 610	10 510	10 550	10 610	10 510	10 550
O. Overall height of boom	mm	3 480	3 350	3 580	3 480	3 350	3 580

* Without shoe grouser



DIMENSIONS BOOM

		EC300E Hybrid	
Description	Unit	mono	mono
Boom	m	6.2 GP	6.2 HD
Length	mm	6430	6430
Height	mm	1680	1680
Width	mm	770	770
Weight	kg	2610	2810

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

DIMENSIONS ARM

		EC300E Hybrid			
Description	Unit	2.55 HD	3.05 GP	3.05 HD	3.7 GP
Arm	m				
Length	mm	3710	4150	4150	4800
Height	mm	1010	1010	1010	1050
Width	mm	545	545	545	545
Weight	kg	1530	1530	1590	1660

* Includes cylinder, linkage and pin

Specifications

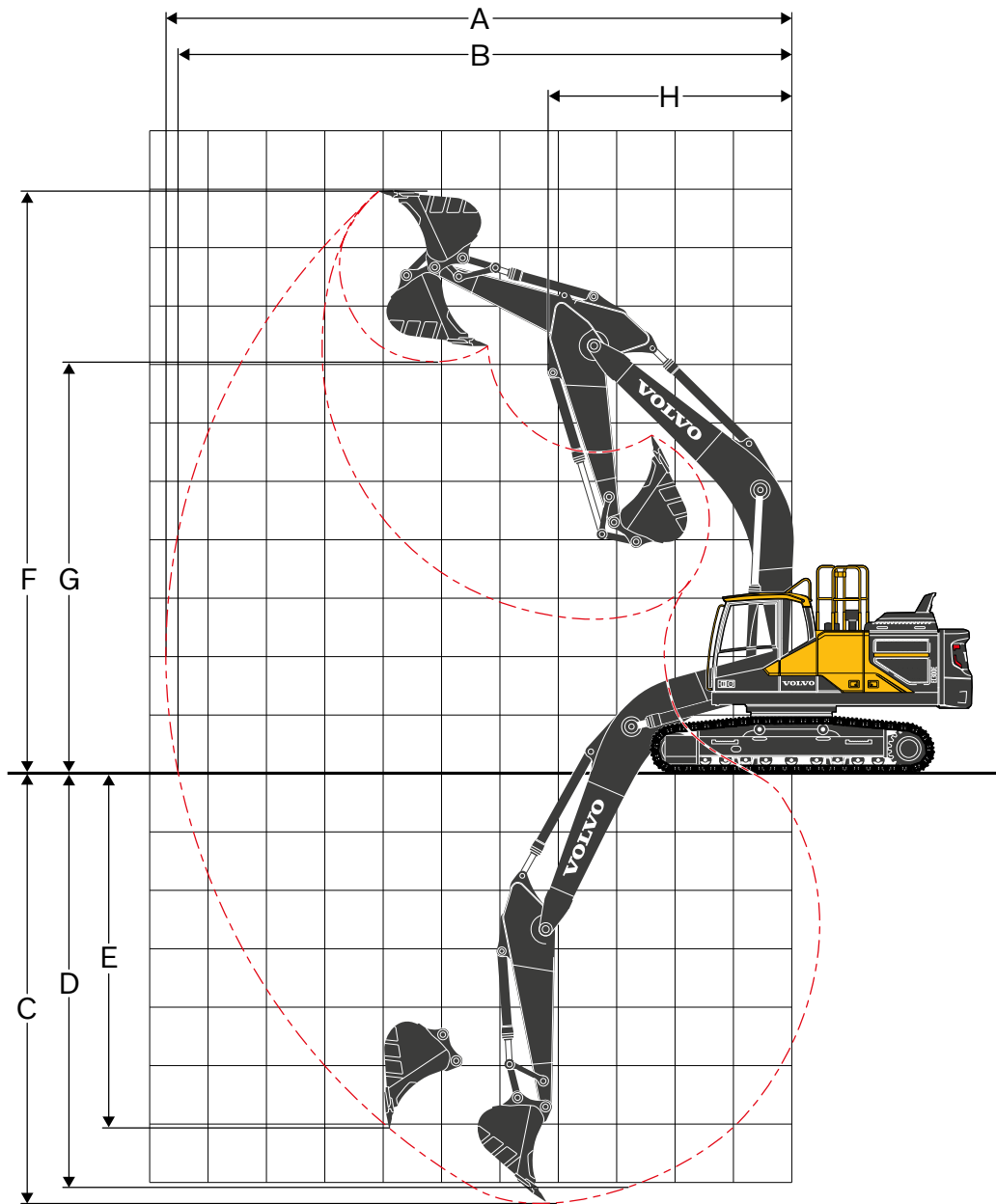
WORKING RANGES

Description	Unit	EC300EL Hybrid and EC300ENL Hybrid		
Boom	m	6.2		
Arm	m	2.55	3.05	3.7
A. Max. digging reach	mm	10 180	10 710	11 310
B. Max. digging reach on ground	mm	9 970	10 520	11 130
C. Max. digging depth	mm	6 840	7 340	7 990
D. Max. digging depth (2.44 m level)	mm	6 600	7 150	7 830
E. Max. vertical wall digging depth	mm	5 320	6 080	6 680
F. Max. cutting height	mm	9 560	9 980	10 260
G. Max. dumping height	mm	6 680	7 040	7 330
H. Min. front swing radius	mm	4 220	4 180	4 240

DIGGING FORCES WITH DIRECT FIT BUCKET

Bucket radius			mm	1 600	1 600	1 600
Breakout force - bucket	Normal	SAE J1179	kN	168	168	168
	Power boost	SAE J1179	kN	182	182	182
	Normal	ISO 6015	kN	188	188	188
	Power boost	ISO 6015	kN	205	205	205
Tearout force - dipper arm	Normal	SAE J1179	kN	157	132	115
	Power boost	SAE J1179	kN	170	143	125
	Normal	ISO 6015	kN	161	135	118
	Power boost	ISO 6015	kN	176	147	128
Rotation angle, bucket			°	179	179	179

MACHINE WITH MONO BOOM



Specifications

GROUND PRESSURE

Description	Shoe width	Operating weight	Ground pressure	Overall width	Operating weight	Ground pressure	Overall width
	mm	kg	kPa	mm	kg	kPa	mm
EC300E							
		EC300E Hybrid with L undercarriage, 6.2m boom, 3.05m arm, 1 209kg bucket, 5 100kg counterweight			EC300E Hybrid with L undercarriage, 6.2m HD boom, 3.05m HD arm, 1 209kg bucket, 5 100kg counterweight		
Triple grouser	600	29 780	57.5	3 190	30 080	58	3 190
	700	30 340	50.2	3 290	30 640	50.7	3 290
	800	30 720	44.5	3 390	31 020	44.9	3 390
	900	31 090	40	3 490	31 390	40.4	3 490
Triple grouser(HD)	600	29 980	57.8	3 190	30 280	58.4	3 190
Double grouser	700	30 490	50.4	3 290	30 790	50.9	3 290
EC300E Hybrid with L undercarriage, 6.2m boom, 3.05m arm, 1 209kg bucket, 5 500kg counterweight							
EC300E Hybrid with L undercarriage, 6.2m HD boom, 3.05m HD arm, 1 209kg bucket, 5 500kg counterweight							
Triple grouser	600	30 180	58.2	3 190	30 480	58.8	3 190
	700	30 740	50.8	3 290	31 040	51.3	3 290
	800	31 120	45	3 390	31 420	45.5	3 390
	900	31 490	40.5	3 490	31 790	40.9	3 490
Triple grouser(HD)	600	30 380	58.6	3 190	30 680	59.2	3 190
Double grouser	700	30 890	51.1	3 290	31 190	51.6	3 290
EC300E Hybrid with NL undercarriage, 6.2m boom, 3.05m arm, 1 209kg bucket, 5 100kg counterweight							
EC300E Hybrid with NL undercarriage, 6.2m HD boom, 3.05m HD arm, 1 209kg bucket, 5 100kg counterweight							
Triple grouser	600	29 650	57.2	2 990	29 950	57.8	2 990
	700	30 210	50	3 090	30 510	50.5	3 090
	800	30 590	44.3	3 190	30 890	44.7	3 190
	900	30 960	39.8	3 290	31 260	40.2	3 290
Triple grouser(HD)	600	29 850	57.6	2 990	30 150	58.2	2 990
EC300E Hybrid with NL undercarriage, 6.2m boom, 3.05m arm, 1 209kg bucket, 5 500kg counterweight							
EC300E Hybrid with NL undercarriage, 6.2m HD boom, 3.05m HD arm, 1 209kg bucket, 5 500kg counterweight							
Triple grouser	600	30 050	58	2 990	30 350	58.6	2 990
	700	30 610	50.6	3 090	30 910	51.1	3 090
	800	30 990	44.8	3 190	31 290	45.3	3 190
	900	31 360	40.3	3 290	31 660	40.7	3 290
Triple grouser(HD)	600	30 250	58.4	2 990	30 550	58.9	2 990

BUCKET SELECTION GUIDE

Bucket type		Capacity	Cutting width	Weight	Teeth	EC300ELC Hybrid		
						6.2m Boom		
		600mm shoe, 5 500kg counterweight						
		m ³	mm	kg	EA	2.55m	3.05m	3.7m
Direct fit Buckets	General purpose	0.55	600	823	3	D	D	D
		0.66	750	869	3	D	D	D
		0.95	1050	1018	4	D	D	D
		1.32	1350	1209	5	D	D	D
		1.45	1450	1263	5	D	D	C
		1.51	1500	1307	5	D	D	C
		1.76	1700	1448	6	C	B	A
	Heavy duty	2.06	1950	1590	6	B	A	X
		0.66	750	1000	3	D	D	D
		0.66	750	992	3	D	D	D
		1.14	1200	1294	5	D	D	D
		1.32	1350	1381	5	D	D	D
		1.51	1500	1476	5	D	D	B
		1.51	1500	1409	5	D	D	B
Bucket type		Capacity	Cutting width	Weight	Teeth	EC300ENL Hybrid		
						6.2m Boom		
		600mm shoe, 5 500kg counterweight						
		m ³	mm	kg	EA	2.55m	3.05m	3.7m
Direct fit Buckets	General purpose	0.55	600	823	3	D	D	D
		0.66	750	869	3	D	D	D
		0.95	1050	1018	4	D	D	D
		1.32	1350	1209	5	D	D	C
		1.45	1450	1263	5	D	C	B
		1.51	1500	1307	5	D	C	B
		1.76	1700	1448	6	B	B	X
	Heavy duty	2.06	1950	1590	6	A	X	X
		0.66	750	1000	3	D	D	D
		0.66	750	992	3	D	D	D
		1.14	1200	1294	5	D	D	D
		1.32	1350	1381	5	D	D	B
		1.51	1500	1476	5	C	B	A
		1.51	1500	1409	5	D	C	B

The recommendations are given as a guide only, based on typical operation conditions.
 Bucket capacity based on ISO 7451, heaped material with a 1:1 angle of repose.
 Please consult with your Volvo dealer for the proper match of buckets and attachments to suit the application.

- X : Not recommended
Maximum material density
 A 1200~1300 kg/m³ Coal, Caliche, Shale
 B 1400~1600 kg/m³ Wet earth and clay, Limestone, Sandstone
 C 1700~1800 kg/m³ Granite, Wet sand, Well blasted rock
 D 1900 kg/m³ ~ Wet mud, Iron ore

Specifications

LIFTING CAPACITY EC300EL Hybrid

Lifting capacity at the arm end without bucket.

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

	Lifting hook related to ground level	1.5 m		3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		Max. reach		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 : 6.2m Arm : 2.55m Shoe : 600mm CWT : 5 100kg	7.5 m	kg							*7660	*7660					*7820	6830	6.5							
	6.0 m	kg							*8000	7780	*7800	5350			*7810	5270	7.6							
	4.5 m	kg									*8120	5230			7200	4520	8.2							
	3.0 m	kg						*11310	*11310	*9090	7430													
	1.5 m	kg						*14460	10620	*10520	7010	8110	5040			6660	4140	8.5						
	0 m	kg						*16600	9980	11140	6650	7910	4850			6500	4010	8.5						
	-1.5 m	kg						*17180	9780	10900	6450	7770	4730			6700	4110	8.3						
	-3.0 m	kg						*12810	*12810	*16750	9790	10840	6400	7750	4710		7360	4490	7.8					
	-4.5 m	kg						*20860	20290	*15370	9950	10950	6500				8910	5400	6.9					
Boom : 6.2m Arm : 3.05m Shoe : 600mm CWT : 5 100kg	7.5 m	kg													*6350	5880	7.2							
	6.0 m	kg													*6080	4720	8.2							
	4.5 m	kg													*6080	4120	8.7							
	3.0 m	kg													*8500	7590	*7660	5330						
	1.5 m	kg													*7660	5330								
	0 m	kg													8200	5120	6140	3830						
	-1.5 m	kg													6100	3800	9.0							
	-3.0 m	kg													5970	3690	9.1							
	-4.5 m	kg													*17090	9850	10960	6510	7800	4760				
Boom : 6.2m Arm : 3.7m Shoe : 600mm CWT : 5 100kg	7.5 m	kg													*6300	5630								
	6.0 m	kg													*6390	5580								
	4.5 m	kg													*6300	5630								
	3.0 m	kg													*5010	*5010								
	1.5 m	kg													*4820	4150								
	0 m	kg													*4820	3670								
	-1.5 m	kg													*7570	*7570	*6970	5390	6280	3950				
	-3.0 m	kg													*1900	11250	*9140	7260	*7810	5150	6160	3840		
	-4.5 m	kg													*14830	10340	*10700	6800	7980	4910	6020	3710		
Boom : 6.2m Arm : 2.55m Shoe : 600mm CWT : 5 500kg	7.5 m	kg													*6300	5630								
	6.0 m	kg													*6390	5580								
	4.5 m	kg													*6300	5630								
	3.0 m	kg													*5010	*5010								
	1.5 m	kg													*4820	4150								
	0 m	kg													*4820	3670								
	-1.5 m	kg													*7570	*7570	*6970	5390	6280	3950				
	-3.0 m	kg													*1900	11250	*9140	7260	*7810	5150	6160	3840		
	-4.5 m	kg													*14830	10340	*10700	6800	7980	4910	6020	3710		
Boom : 6.2m Arm : 3.05m Shoe : 600mm CWT : 5 500kg	7.5 m	kg													*6350	6100								
	6.0 m	kg													*6080	4900								
	4.5 m	kg													*6080	4290								
	3.0 m	kg													*8500	7860	*7660	5530						
	1.5 m	kg													*7660	5530								
	0 m	kg													8200	5120	6340	3990						
	-1.5 m	kg													6170	3860	9.1							
	-3.0 m	kg													6330	3930	8.9							
	-4.5 m	kg													*6990	*6990	*11710	*11710	*17060	10180	11200	6670	8010	4920
Boom : 6.2m Arm : 3.7m Shoe : 600mm CWT : 5 500kg	7.5 m	kg													*6300	5840								
	6.0 m	kg													*6390	5780								
	4.5 m	kg													*6300	5840								
	3.0 m	kg													*5010	*5010								
	1.5 m	kg													*4820	4320								
	0 m	kg													*4820	3820								
	-1.5 m	kg													*7570	*7570	*6970	5600	*6480	4110				
	-3.0 m	kg													*1900	11650	*9140	7530	*7810	5350	6360	4000		
	-4.5 m	kg													*14830	10740	*10700	7080	8240	5110	6220	3870		

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 EC300ENL Hybrid

Lifting capacity at the arm end without bucket.

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

	Lifting hook related to ground level	1.5 m		3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		Max. reach			
		Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	m	
Boom : 6.2m Arm : 2.55m Shoe : 600mm CWT : 5 100kg	7.5 m	kg							*7660	7270					*7820	6270	6.5
	6.0 m	kg							*8000	7130	*7800	4890			*7810	4830	7.6
	4.5 m	kg					*11310	10530	*9090	6790	*8120	4780			7170	4120	8.2
	3.0 m	kg					*14460	9570	*10520	6380	8070	4590			6620	3760	8.5
	1.5 m	kg					*16600	8960	11080	6030	7870	4400			6470	3640	8.5
	0 m	kg					*17180	8760	10850	5830	7730	4290			6670	3730	8.3
	-1.5 m	kg			*12810	*12810	*16750	8770	10780	5780	7710	4270			7330	4070	7.8
	-3.0 m	kg			*20860	17770	*15370	8930	10900	5870					8870	4900	6.9
	-4.5 m	kg			*16600	*16600	*12360	9300							*9950	7080	5.4
Boom : 6.2m Arm : 3.05m Shoe : 600mm CWT : 5 100kg	7.5 m	kg												*6350	5400	7.2	
	6.0 m	kg									*7190	5020			*6080	4320	8.2
	4.5 m	kg							*8500	6940	*7660	4880			*6080	3750	8.7
	3.0 m	kg					*13430	9890	*10000	6520	8160	4670	6110	3480	6070	3460	9.0
	1.5 m	kg					*15980	9160	11200	6130	7930	4460	6010	3390	5940	3350	9.1
	0 m	kg					*17090	8830	10910	5880	7760	4310			6090	3410	8.9
	-1.5 m	kg	*7560	*7560	*11710	*11710	*17060	8770	10790	5790	7700	4250			6600	3690	8.4
	-3.0 m	kg	*13850	*13850	*19420	17560	*16060	8870	10840	5830	7780	4330			7730	4300	7.5
	-4.5 m	kg			*18860	18070	*13700	9150	*10000	6060					*9370	5760	6.2
Boom : 6.2m Arm : 3.7m Shoe : 600mm CWT : 5 100kg	7.5 m	kg									*6300	5170			*5010	4610	8.0
	6.0 m	kg									*6390	5120			*4820	3790	8.8
	4.5 m	kg							*7570	7080	*6970	4940	6250	3600	*4820	3340	9.4
	3.0 m	kg					*11900	10190	*9140	6620	*7810	4700	6130	3490	*4960	3090	9.6
	1.5 m	kg					*14830	9300	*10700	6170	7940	4460	5990	3360	*5250	2990	9.7
	0 m	kg			*6800	*6800	*16530	8800	10890	5850	7720	4270	5880	3270	5450	3030	9.5
	-1.5 m	kg	*6990	*6990	*11020	*11020	*17030	8620	10700	5690	7600	4160	5840	3230	5830	3230	9.0
	-3.0 m	kg	*11650	*11650	*16650	*16650	*16520	8650	10680	5670	7610	4160			6650	3680	8.3
	-4.5 m	kg	*17420	*17420	*21100	17530	*14850	8860	10840	5810					8420	4640	7.1
-6.0 m	kg			*15550	*15550	*11020	9320							*8920	7380	5.3	
Boom : 6.2m Arm : 2.55m Shoe : 600mm CWT : 5 500kg	7.5 m	kg							*7660	7530					*7820	6500	6.5
	6.0 m	kg							*8000	7390	*7800	5090			*7810	5020	7.6
	4.5 m	kg					*11310	10910	*9090	7050	*8120	4970			7400	4300	8.2
	3.0 m	kg					*14460	9950	*10520	6630	8330	4780			6840	3930	8.5
	1.5 m	kg					*16600	9340	11440	6290	8130	4600			6690	3810	8.5
	0 m	kg					*17180	9140	11200	6090	7990	4480			6890	3900	8.3
	-1.5 m	kg			*12810	*12810	*16750	9150	11140	6030	7970	4460			7570	4260	7.8
	-3.0 m	kg			*20860	18480	*15370	9310	11260	6130					9160	5120	6.9
	-4.5 m	kg			*16600	*16600	*12360	9680							*9950	7380	5.4
Boom : 6.2m Arm : 3.05m Shoe : 600mm CWT : 5 500kg	7.5 m	kg												*6350	5600	7.2	
	6.0 m	kg									*7190	5220			*6080	4500	8.2
	4.5 m	kg							*8500	7200	*7660	5070			*6080	3920	8.7
	3.0 m	kg					*13430	10270	*10000	6770	*8420	4860	6310	3640	6270	3620	9.0
	1.5 m	kg					*15980	9540	*11400	6390	8190	4660	6210	3550	6140	3510	9.1
	0 m	kg					*17090	9210	11270	6140	8020	4510			6300	3580	8.9
	-1.5 m	kg	*7560	*7560	*11710	*11710	*17060	9150	11150	6040	7960	4450			6820	3860	8.4
	-3.0 m	kg	*13850	*13850	*19420	18270	*16060	9250	11200	6080	8040	4520			7990	4500	7.5
	-4.5 m	kg			*18860	18780	*13700	9530	*10000	6320					*9370	6000	6.2
Boom : 6.2m Arm : 3.7m Shoe : 600mm CWT : 5 500kg	7.5 m	kg									*6300	5370			*5010	4790	8.0
	6.0 m	kg									*6390	5310			*4820	3950	8.8
	4.5 m	kg							*7570	7340	*6970	5130	6450	3760	*4820	3490	9.4
	3.0 m	kg					*11900	10570	*9140	6880	*7810	4890	6330	3650	*4960	3240	9.6
	1.5 m	kg					*14830	9680	*10700	6430	8200	4650	6190	3520	*5250	3130	9.7
	0 m	kg			*6800	*6800	*16530	9180	11250	6110	7980	4460	6080	3420	5640	3180	9.5
	-1.5 m	kg	*6990	*6990	*11020	*11020	*17030	9000	11060	5950	7870	4360	6050	3390	6040	3380	9.0
	-3.0 m	kg	*11650	*11650	*16650	*16650	*16520	9030	11040	5930	7870	4360			6880	3850	8.3
	-4.5 m	kg	*17420	*17420	*21100	18240	*14850	9230	*11050	6070					8700	4850	7.1
-6.0 m	kg			*15550	*15550	*11020	9700							*8920	7680	5.3	

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

Equipment

STANDARD EQUIPMENT

Engine

Turbocharged, 4 stroke diesel engine with water cooling, direct injection and charged air cooler that meets EU Stage V requirements

Air filter with indicator

Air intake heater

Cyclone precleaner

Electric engine shutoff

Fuel filter and water separator

Fuel filler pump: 50 l/min, with automatic shutoff

Alternator, 110 A

Hybrid

Accumulator, 20 L

Boom regeneration valves

Assist motor

Main pump with PTO

Electric / Electronic control system

Contronics

Advanced mode control system

Selfdiagnostic system

Machine status indication

Engine speed sensing power control

Automatic idling system

Onetouch power boost

Safety stop/start function

Adjustable LCD color monitor

Master electrical disconnect switch

Engine restart prevention circuit

Highcapacity halogen lights:

Frame-mounted 2

Boom-mounted 1

Batteries, 2 x 12 V / 200 Ah

Start motor, 24 V / 5.5 kW

Frame

Access way with handrail

Tool storage area

Punched metal antislip plates

Full height counterweight:

5 500 kg

Undercarriage

Undercover (heavyduty)

Hydraulic track adjusters

Greased and sealed track link

Track Guard

Hydraulic system

Boom float function

Hose rupture valve: boom

Overload warning device

Automatic sensing hydraulic system

Summation system

Boom priority

Arm priority

Swing priority

ECO mode fuel saving technology

Boom, arm and bucket regeneration valves

Swing antirebound valves

Boom and arm holding valves

Multistage filtering system

Cylinder cushioning

Cylinder contamination seals

Auxiliary hydraulic valve

Automatic twospeed travel motors

Hydraulic oil, ISO VG 46

STANDARD EQUIPMENT

Cab and interior

ROPS (ISO121172) certified cab

Silicon oil and rubber mounts with spring

Travel pedals and hand levers

Adjustable operator seat and joystick control console

Control joysticks with 4 switches each

Heater & airconditioner, automatic

Flexible antenna

Radio with MP3 & USB Jack with bluetooth

Hydraulic safety lock lever

Cab, allweather sound suppressed, includes:

Cup holders

Door locks

Tinted glass

Floor mat

Horn

Large storage area

Pullup type front window

Removable lower windshield

Seat belt

Safety glass

Sun screens, front, roof, rear

Rain shield

Windshield wiper with intermittent feature

Rear view camera

Master key

Track shoes

600 mm with triple grousers

Digging equipment

Boom: 6.2 m monoblock

Arm: 3.05 m

Manual centralized lubrication

OPTIONAL EQUIPMENT

Engine

Block heater: 120 V, 240 V

Oil bath pre-cleaner

Diesel coolant heater, 10 kW

Water separator with heater

Auto engine shutdown

Electric

Extra work lights(Halogen or LED):

Cab-mounted 3

Boom-mounted 1

Counterweight-mounted 1

Travel alarm

Anti-theft system

Rotating warning beacon

Frame

Counterweight 5 100 kg

OPTIONAL EQUIPMENT

Undercarriage

Full track guard
Track shoes
600/700/800/900 mm with triple grousers
600 mm HD with triple grousers
Track shoes 700 mm with double grousers

Hydraulic system

Hose rupture valve: arm
Without Hose rupture valve: boom
Hydraulic piping:
Attachment management system
(up to 18 programmable memories)
Hammer & shear, 1 and 2 pump flow
Hammer & shear:
variable flow and pressure pre-setting
Additional return filter
Slope & rotator
Grapple
Oil leak (drain) line
Quick coupler piping
Volvo hydraulic quick coupler S2
Volvo hydraulic quick coupler U29
Hydraulic oil, longlife oil 32
Hydraulic oil, longlife oil 46
Hydraulic oil, longlife oil 68

OPTIONAL EQUIPMENT

Machine control system

Dig assist 2D/In-field/Steelwrist

Cab and interior

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

Digging equipment

Arm: 2.55 m HD, 3.05 m HD, 3.7 m
Linkage with lifting eye

Service

Tool kit, daily maintenance
Tool kit, full scale

SELECTION OF VOLVO OPTIONAL EQUIPMENT

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

Not all products are available in all markets. Under our policy of continuous improvement, we reserve the right to change specifications and design without prior notice. The illustrations do not necessarily show the standard version of the machine.

VOLVO

Volvo Construction Equipment

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