

V O L V O



Volvo Excavators 12.9-15.9 t 105 hp

EC140D

Volvo Construction Equipment

Do more and increase profit

Make more profit with the EC140D. This machine's reliability and durability increases your uptime allowing you to keep working and earning. With outstanding fuel efficiency and power for excellent productivity, it allows you to work faster and get more done.

ECO mode

Work efficiently and profitably with Volvo's intelligent ECO mode. This feature contributes to the machine's total improved fuel efficiency –without any loss of performance. The design optimizes flow and pressure while maintaining digging power and swing torque. Choose the right work setting for the job at hand.



Durability

Deliver a strong performance shift after shift, day after day. Built with durable components, the robust superstructure, undercarriage and boom and arm, will help you to achieve the best results in all applications.



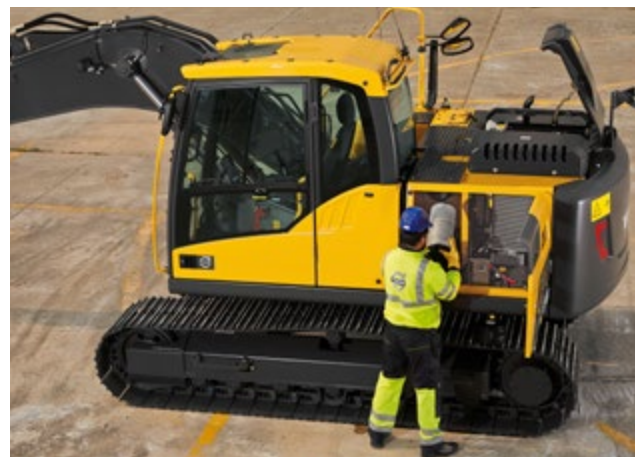
Reliability

Quality, long lasting components and the machine's design increases uptime as well as profits. The EC140D has a robust structure and parts ensure it's reliable on your job site so you can depend on your machine to perform and work hard.



Serviceability

The EC140D is built to ensure servicing is safe, quick and easy, featuring anti-slip plates, ground-level service access and centralized filters and greasing points. Long service intervals enhance machine availability and increase uptime for maximum productivity.





OUTSTANDING FUEL EFFICIENCY

Reduce fuel consumption, increase profitability and deliver higher productivity with the EC140D, featuring best-in-class fuel efficiency. The powerful engine works in harmony with the optimized hydraulics and machine auto-idle function for lower fuel consumption.

Outperform your competition

The EC140D has outstanding power and controllability for a star performance. Superior digging power and machine stability results in faster cycle times and increased productivity.

Efficient new work mode

For fast cycle times and optimum fuel consumption, the EC140D is equipped with intelligent work modes, including the new G4 work mode. Operators can choose the best mode to suit the task at hand, selecting from I (Idle), F (Fine), G (General), H (Heavy) and P (Power max) mode. Choose the correct mode according to your working conditions for added versatility and increased performance.



Operator performance

Operate in a comfortable cab for a more productive working day. The EC140D has a premium cab equipped with an easy-to-view monitor, spacious and safe operator environment, offering enhanced all-around visibility, an adjustable seat and ergonomic controls.



Powerful Volvo engine

The engine boasts the best power and performance in its class, and its effective cooling capacity increases its longevity and performance.



Machine stability

Improve your stability and work in more challenging environments with the machine's long, wide undercarriage and heavy counterweight for a well-balanced and solid machine when operating in all terrains.





SUPERIOR MACHINE PERFORMANCE

The EC140D is designed to help you do more. This excavator delivers a strong, versatile performance in a wide range of applications. A robust frame combines with excellent engine power and hydraulic system to provide superior digging forces and fast cycle times for first-rate productivity in all operations.

One machine for many jobs

Volvo offers a wide range of attachment combinations that are suitable for any job site. Volvo attachments are an integrated part of the excavator for which they are intended – delivering maximum productivity and versatility.

Quality Volvo buckets

Volvo's General Purpose bucket is ideal for digging in low impact materials such as soft ground and comes with a standard GP tooth and lifting hook. The Volvo Heavy-Duty bucket is heavier and more robust with a rigid top structure and double wear shrouds on each side of the bucket. It is thicker for aggressive digging and bucket loading, and the RC tooth comes as standard.



Breakers

Volvo's durable hydraulic breaker has been designed for ultimate compatibility with Volvo excavators and is built to break even the most demanding materials. With consistent power and high breaking force you'll benefit from maximum impact and durability. Set your Volvo breaker at the right frequency to suit your application needs.



Attachment Management System

The password protected attachment management system allows storage for up to 20 different attachments. The system allows the operator to pre-set hydraulic flow inside the cab through the monitor, which ensures the use of various attachments for increased versatility.



Quick Couplers

Volvo offers a full range of quick couplers, from its dedicated Volvo S-type coupler to the Universal type, with front pin lock technology. These innovative couplers are not only designed to fit perfectly with Volvo excavators but they also comply with the latest safety regulations.





A VERSATILE MACHINE

Access more applications and efficiently perform a variety of tasks with Volvo's extensive attachment range. The EC140D is compatible with a selection of robust buckets, breakers and piping options that allow you to adapt to any job with ease.

A valued performance

A versatile machine

Access more applications and efficiently perform a variety of tasks with Volvo's extensive attachment range.

Operator performance

The EC140D's premium cab is equipped with an easy-to-view monitor and features a spacious and safe operator environment.

Durability

Robust superstructure, undercarriage and boom and arm, helps to achieve the best results.

Reliability

The machine's durable components and parts ensure it's reliable on your job site.

Superior machine performance

This excavator delivers a strong, versatile performance in a wide range of applications.

Serviceability

Built to ensure servicing is safe, quick and easy, featuring anti-slip plates, ground-level service access, centralized filters and greasing points.



ECO mode

This feature contributes to the machine's total improved fuel efficiency – without any loss of performance.

Outstanding fuel efficiency

Reduce fuel consumption, increase profitability and deliver higher productivity.

Efficient new work mode

For fast cycle times and optimum fuel consumption, the EC140D is equipped with intelligent work modes.

Powerful Volvo engine

The engine boasts the best power and performance in its class.



Machine stability

A well-balanced and solid machine when operating in all terrains with the machine's long, wide undercarriage and heavy counterweight.

Customer Support Agreements

Customer Support Agreements offer preventive maintenance, total repairs and a number of uptime services.

Adding value to your business

Being a Volvo customer means having a complete set of services at your fingertips. Volvo can offer you a long-term partnership, protect your revenue and provide a full range of customer solutions using high quality parts, delivered by passionate people. Volvo is committed to a positive return on your investment.

Complete Solutions

Volvo has the right solution for you. So why not let us provide all your needs throughout the whole life cycle of your machine? By listening to your requirements, we can reduce your total cost of ownership and increase your revenue.



Service Network

In order to respond to your needs faster, a Volvo expert is on the way to your job site from one of our Volvo facilities. With our extensive infrastructure of technicians, workshops and dealers, Volvo has a comprehensive network to fully support you using local knowledge and global experience.



Genuine Volvo Parts

Our attention to detail is what makes us stand out. This proven concept acts as a solid investment in your machine's future. Parts are extensively tested and approved because every part is vital for uptime and performance. Only by using Genuine Volvo Parts, can you be sure that your machine retains the renowned Volvo quality.



CareTrack

CareTrack is the state-of-the-art Volvo telematics system that provides access to a wide range of machine monitoring information designed to save time and money. Proactively manage service and maintenance schedules, optimize machine and operator performance and reduce fuel costs with CareTrack.





CUSTOMER SUPPORT AGREEMENTS

The range of Customer Support Agreements offer preventive maintenance, total repairs and a number of uptime services. Volvo uses the latest technology to monitor machine operation and status, giving you advice to increase your profitability. By having a Customer Support Agreement you are in control of your service costs.

Volvo EC140D in detail

Engine

The engine, which provide excellent performance, is equipped with four cylinder, vertical, electronic-controlled high pressure fuel injectors, cooled EGR, 3.8 liter in-line waste gate turbo charger, air-to-air intercooler and water cooled diesel engine type.

Engine	Volvo	D3.8E
Max power at	r/min	2 200
Net, ISO 9249/SAE J1349	kW	73.3
	hp	100
Gross, ISO 14396/SAE J1995	kW	77.4
	hp	105
Max torque	Nm	369.5
at engine speed	r/min	1 500
No. of cylinders		4
Displacement	l	3.77
Bore	mm	100
Stroke	mm	120

Electrical System

Well protected high-capacity electrical system. Waterproof double-lock connectors are used to ensure corrosion-free connection. Main relays and fuses are located in a shielded electrical distribution box. The master switch is standard. Advanced monitoring of machine functions and important diagnostic information is displayed on the I-ECU.

Voltage	V	24
Batteries	V	2 x 12
Battery capacity	Ah	100
Alternator	V/Ah	28/80
Start motor	V - kW	24 - 3.2

Swing System

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

Max. slew speed	r/min	11.2
Max. slew torque	kNm	30.2

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.

EC140DL

Max. drawbar pull	kN	119
Max. travel speed (low)	km/h	2.9
Max. travel speed (high)	km/h	5.2
Gradeability	°	35

EC140DLM

Max. drawbar pull	kN	137
Max. travel speed (low)	km/h	2.5
Max. travel speed (high)	km/h	4.4
Gradeability	°	35

Undercarriage

Robust X-shaped frame with greased and sealed track chains as standard.

EC140DL

Track shoe		2 x 46
Link pitch	mm	171.5
Shoe width, triple grouser	mm	500 / 600 / 750
Shoe width, triple grouser (HD)	mm	600 / 700
Bottom rollers		2 x 7
Top rollers		2 x 1

EC140DLM

Track shoe		2 x 42
Link pitch	mm	190
Shoe width, triple grouser	mm	600 / 700 / 800 / 900
Shoe width, single grouser	mm	900
Bottom rollers		2 x 6
Top rollers		2 x 2

Hydraulic System

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

Main pump, 2 x variable displacement axial piston pumps

Maximum flow	l/min	2 x 118
Pilot pump, Gear pump		
Maximum flow	l/min	1 x 22
Relief valve setting pressure		
Implement	MPa	32.4 / 34.3
Travel circuit	MPa	34.3
Slew circuit	MPa	24.5
Pilot circuit	MPa	3.9

Hydraulic Cylinders

Mono boom		2
Bore x Stroke	ø x mm	105 x 980
Arm		1
Bore x Stroke	ø x mm	120 x 1 045
Bucket		1
Bore x Stroke	ø x mm	100 x 865
Dozer blade		1
Bore x Stroke	ø x mm	130 x 270

Service Refill

Fuel tank	l	250
Hydraulic system, total	l	230
Hydraulic tank	l	85
Engine oil	l	13.2
Engine coolant	l	22.3
Slew reduction unit	l	3.9
Travel reduction unit (LC)	l	2 x 2.2
Travel reduction unit (LM)	l	2 x 5.8

Cab

The Volvo cab features a brand new Volvo styling including a strong cab structure, slim pillars and a large glass area for good visibility, a spacious cab, an ergonomic switch layout, efficient air ventilation and a pressurized cab.

Sound Level

Sound level in cab according to ISO 6396		
LpA	dB(A)	70
External sound level according to ISO 6395 and EU Noise Directive (2000/14/EC)		
LwA	dB(A)	101

Specifications

MACHINE WEIGHTS AND GROUND PRESSURE

Description	Shoe width	Operating weight			Ground pressure			Overall width	
Units	mm	kg			kPa			mm	
		EC140DL, 4.6m boom, 2.5m arm, 0.54m ³ / 436kg bucket, 2 100kg counterweight			EC140DL, 4.6m boom, 2.5m arm, 0.54m ³ / 436kg bucket, 2 450kg counterweight				
Triple grouser	500	13 500	40.2	2 490	13 850	41.2	2 490		
	600	13 700	34.3	2 590	14 050	35.3	2 590		
	750	14 080	27.5	2 740	14 430	28.4	2 740		
Triple grouser, HD	600	13 770	34.3	2 590	14 120	35.3	2 590		
	700	13 980	29.4	2 690	14 330	30.4	2 690		
		EC140DL with dozer blade, 4.6m boom, 2.5m arm, 0.54m ³ / 436kg bucket, 2100kg counterweight			EC140DL with dozer blade, 4.6m boom, 2.5m arm, 0.54m ³ / 436kg bucket, 2450kg counterweight				
Triple grouser	500	14 460	43.1	2 490	14 810	44.1	2 490		
	600	14 660	36.3	2 590	15 010	37.3	2 590		
	750	15 040	29.4	2 740	15 390	30.4	2 740		
Triple grouser, HD	600	14 730	36.3	2 590	15 080	37.3	2 590		
	700	14 940	31.4	2 690	15 290	32.4	2 690		
		EC140DLM, 4.6m boom, 2.5m arm, 0.52m ³ / 460kg bucket, 2 100kg counterweight			EC140DLM, 4.6m boom, 2.5m arm, 0.52m ³ / 460kg bucket, 2 450kg counterweight				
Triple grouser	600	14 770	36.3	2 590	15 120	37.3	2 590		
	700	14 980	31.4	2 690	15 330	32.4	2 690		
	800	15 400	28.4	2 790	15 750	29.4	2 790		
	900	15 650	25.5	2 890	16 000	26.5	2 890		
Triple grouser, HD	900	15 720	26.5	2 890	16 070	26.5	2 890		

BUCKET SELECTION GUIDE

Bucket type		Capacity	Cutting width	Weight	Teeth	EC140DL					
						4.6m boom					
						500mm shoe, 2 100kg counterweight			500mm shoe, 2 450kg counterweight		
						m ³	mm	kg	EA	2.1m	2.5m
Direct fit buckets	General purpose	0.25	450	326	3	C	C	C	C	C	C
		0.33	600	357	3	C	C	C	C	C	C
		0.54	900	436	4	C	C	B	C	C	C
		0.66	1 050	476	4	C	B	A	C	C	B
		0.73	1 150	486	5	B	A	X	C	B	A

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.

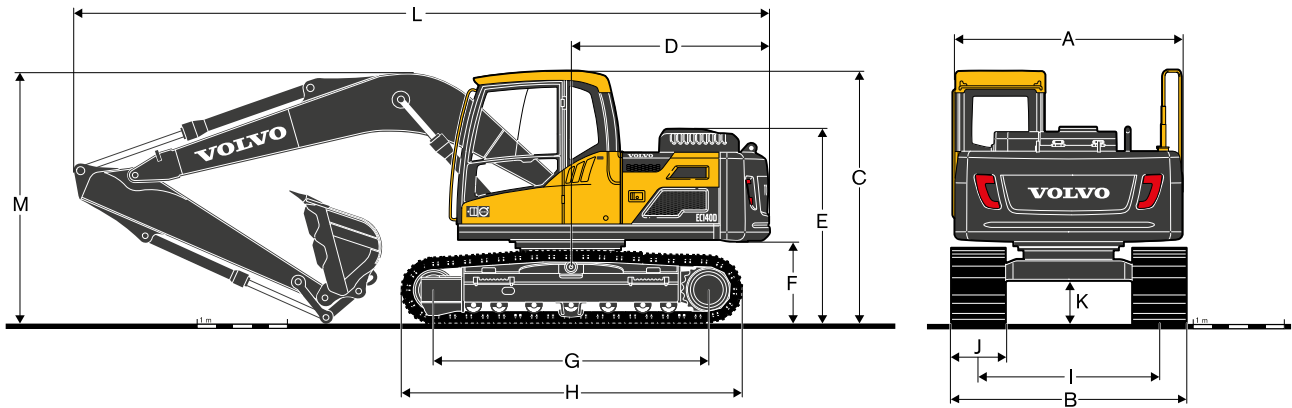
Maximum material density

A	1 200~1 300 kg/m ³	Coal, Caliche, Shale
B	1 400~1 600 kg/m ³	Wet earth and clay, Limestone, Sandstone
C	1 700~1 800 kg/m ³	Granite, Wet sand, Well blasted rock
D	1 900 kg/m ³ ~	Wet mud, Iron ore

X : Not recommended

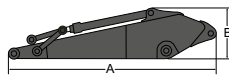
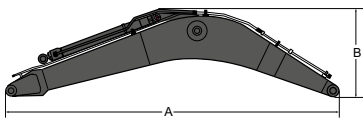
Specifications

DIMENSIONS



Description	Unit	EC140DL			EC140DLM		
Boom	m	4.6	4.6	4.6	4.6	4.6	4.6
Arm	m	2.1	2.5	3.0	2.1	2.5	3.0
A Overall width of upper structure	mm	2 490	2 490	2 490	2 490	2 490	2 490
B Overall width	mm	2 590	2 590	2 590	2 690	2 690	2 690
C Overall height of cab	mm	2 800	2 800	2 800	2 980	2 980	2 980
D Tail swing radius	mm	2 200	2 200	2 200	2 200	2 200	2 200
E Overall height of engine hood	mm	2 170	2 170	2 170	2 350	2 350	2 350
F Counterweight clearance *	mm	920	920	920	1 113	1 113	1 113
G Tumbler length	mm	3 040	3 040	3 040	3 000	3 000	3 000
H Track length	mm	3 760	3 760	3 760	3 790	3 790	3 790
I Track gauge	mm	1 990	1 990	1 990	1 990	1 990	1 990
J Shoe width	mm	600	600	600	700	700	700
K Min. ground clearance *	mm	436	436	436	580	580	580
L Overall length	mm	7 720	7 720	7 650	7 690	7 720	7 690
M Overall height of boom	mm	2 670	2 800	3 180	2 730	2 850	3 160

* Without shoe grouser

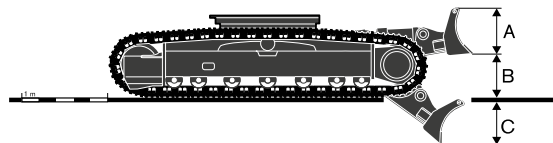


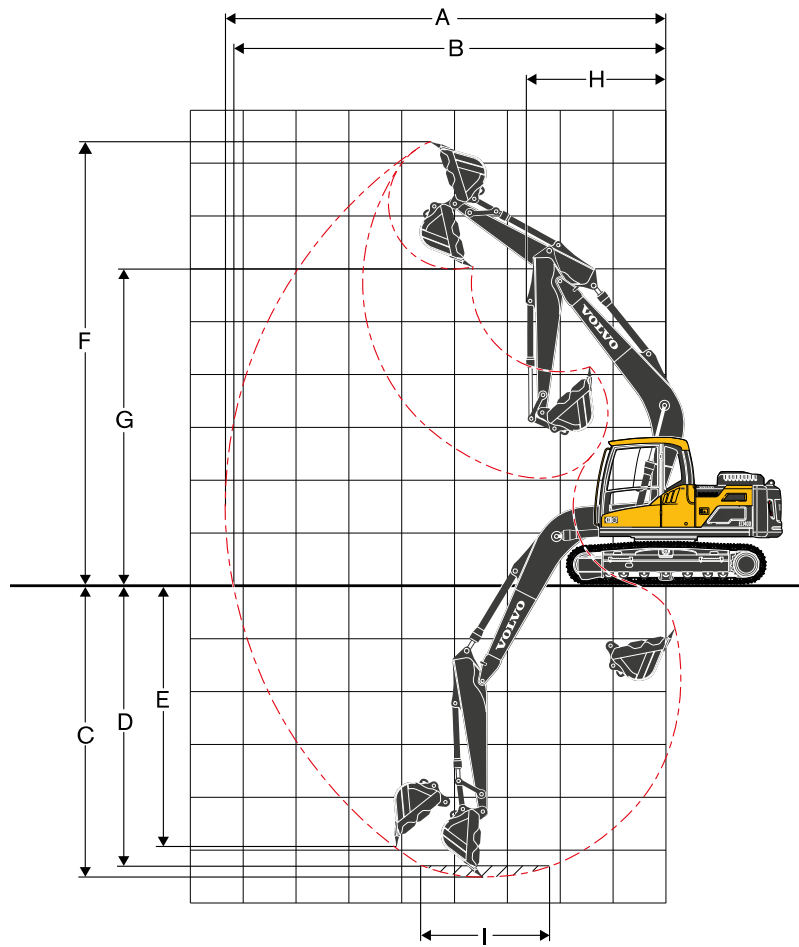
Description	Unit	4.6	Description	Unit	2.1	2.5	3.0
Boom	m	4.6	Arm	m	2.1	2.5	3.0
A Length	mm	4 770	A Length	mm	2 800	3 200	3 700
B Height	mm	1 370	B Height	mm	710	710	780
Width	mm	545	Width	mm	300	300	300
Weight	kg	1 060	Weight	kg	585	625	695

Includes cylinder, piping and pin, excludes boom cylinder pin

* Includes bucket cylinder, linkage and pin

Description	Unit	
Front dozer blade		
A Height	mm	580
Width	mm	2 590
Weight	kg	458
B Lift height	mm	480
C Digging depth	mm	600





WORKING RANGES

Description	Unit	EC140DL			EC140DLM		
Boom	m	4.6	4.6	4.6	4.6	4.6	4.6
Arm	m	2.1	2.5	3.0	2.1	2.5	3.0
A Max. digging reach	mm	7 960	8 330	8 820	7 960	8 330	8 820
B Max. digging reach on ground	mm	7 820	8 190	8 680	7 780	8 160	8 660
C Max. digging depth	mm	5 130	5 530	6 030	4 960	5 360	5 860
D Max. digging depth (2.44 m level)	mm	4 870	5 310	5 850	4 710	5 140	5 680
E Max. vertical wall digging depth	mm	4 580	4 960	5 460	4 400	4 780	5 320
F Max. cutting height	mm	8 160	8 390	8 720	8 330	8 560	8 900
G Max. dumping height	mm	5 790	6 020	6 300	5 910	6 150	6 490
H Min. front swing radius	mm	2 570	2 630	2 740	2 570	2 630	2 740

DIGGING FORCES WITH DIRECT FIT BUCKET

Bucket radius		mm	1 247.5	1 247.5	1 247.5	1 247.5	1 247.5	1 247.5
Breakout force - bucket	Normal	SAE J1179	kN	82.2	82.2	82.2	82.2	82.2
	Power boost	SAE J1179	kN	87.2	87.2	87.2	87.2	87.2
	Normal	ISO 6015	kN	92.9	92.9	92.9	92.9	92.9
	Power boost	ISO 6015	kN	98.5	98.5	98.5	98.5	98.5
Tearout force - dipper arm	Normal	SAE J1179	kN	69.2	61.8	55.0	69.2	61.8
	Power boost	SAE J1179	kN	73.4	65.5	58.3	73.4	65.5
	Normal	ISO 6015	kN	71.4	63.4	56.2	71.4	63.4
	Power boost	ISO 6015	kN	75.7	67.3	59.6	75.7	67.3
Rotation angle, bucket		°	175	175	175	175	175	175

Specifications

LIFTING CAPACITY EC140DL

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		Max. reach		
		Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	m
Boom : 4.6m	6.0 m kg					*3 330	*3 330					*3 510	3 080	4.9
Arm : 2.1m	4.5 m kg					*3 480	*3 480					3 450	2 210	6.0
Shoe : 600mm	3.0 m kg			*6 240	6 190	*4 340	3 330	3 390	2 150			2 950	1 870	6.5
CWT : 2 100kg	1.5 m kg					5 130	3 120	3 300	2 070			2 780	1 750	6.7
	0 m kg			*5 400	*5 400	4 970	2 990	3 230	2 010			2 850	1 780	6.5
	-1.5 m kg	*5 010	*5 010	*9 460	5 430	4 930	2 950					3 230	2 010	6.0
	-3.0 m kg			*8 230	5 540	5 000	3 010					4 390	2 690	4.9
Boom : 4.6m	6.0 m kg					*2 840	*2 840					*3 220	2 640	5.4
Arm : 2.5m	4.5 m kg					*3 080	*3 080	*3 200	2 230			3 100	1 990	6.4
Shoe : 600mm	3.0 m kg			*5 340	*5 340	*3 960	3 370	3 400	2 160			2 700	1 710	6.9
CWT : 2 100kg	1.5 m kg					*5 090	3 140	3 300	2 070			2 550	1 600	7.1
	0 m kg			*5 960	5 390	4 970	2 980	3 210	1 990			2 600	1 620	6.9
	-1.5 m kg	*4 550	*4 550	*9 620	5 360	4 890	2 920	3 180	1 960			2 900	1 800	6.4
	-3.0 m kg	*8 930	*8 930	*8 700	5 450	4 930	2 950					3 730	2 300	5.4
Boom : 4.6m	7.5 m kg											*2 880	*2 880	4.5
Arm : 3.0m	6.0 m kg							*2 880	2 250			*2 820	2 220	6.0
Shoe : 600mm	4.5 m kg							*2 790	2 250			*2 650	1 740	6.9
CWT : 2 100kg	3.0 m kg					*3 450	3 420	*3 150	2 170			2 410	1 520	7.4
	1.5 m kg			*7 350	5 800	*4 640	3 160	3 300	2 060	2 330	1 450	2 290	1 430	7.6
	0 m kg			*6 510	5 380	4 960	2 960	3 190	1 970			2 330	1 440	7.4
	-1.5 m kg	*3 990	*3 990	*8 760	5 280	4 850	2 870	3 130	1 920			2 550	1 570	6.9
	-3.0 m kg	*7 370	*7 370	*9 110	5 320	4 850	2 870	3 160	1 940			3 130	1 920	6.0
	-4.5 m kg			*7 230	5 520							*4 500	3 020	4.5
Boom : 4.6m	6.0 m kg					*3 330	*3 330					*3 510	3 280	4.9
Arm : 2.1m	4.5 m kg					*3 480	*3 480					*3 570	2 370	6.0
Shoe : 600mm	3.0 m kg			*6 240	*6 240	*4 340	3 560	3 590	2 310			3 130	2 020	6.5
CWT : 2 450kg	1.5 m kg					*5 400	3 350	3 500	2 230			2 950	1 890	6.7
	0 m kg			*5 400	*5 400	5 280	3 220	3 430	2 170			3 030	1 930	6.5
	-1.5 m kg	*5 010	*5 010	*9 460	5 840	5 230	3 180					3 440	2 170	6.0
	-3.0 m kg			*8 230	5 950	5 310	3 240					4 660	2 890	4.9
Boom : 4.6m	6.0 m kg					*2 840	*2 840					*3 220	2 820	5.4
Arm : 2.5m	4.5 m kg					*3 080	*3 080	*3 200	2 390			*3 160	2 130	6.4
Shoe : 600mm	3.0 m kg			*5 340	*5 340	*3 960	3 600	*3 500	2 330			2 860	1 840	6.9
CWT : 2 450kg	1.5 m kg					*5 090	3 370	3 500	2 230			2 710	1 730	7.1
	0 m kg			*5 960	5 800	5 270	3 210	3 420	2 150			2 770	1 760	6.9
	-1.5 m kg	*4 550	*4 550	*9 620	5 770	5 200	3 150	3 380	2 120			3 090	1 950	6.4
	-3.0 m kg	*8 930	*8 930	*8 700	5 860	5 240	3 180					3 970	2 480	5.4
Boom : 4.6m	7.5 m kg											*2 880	*2 880	4.5
Arm : 3.0m	6.0 m kg							*2 880	2 410			*2 820	2 380	6.0
Shoe : 600mm	4.5 m kg							*2 790	2 420			*2 650	1 870	6.9
CWT : 2 450kg	3.0 m kg					*3 450	*3 450	*3 150	2 330			2 570	1 640	7.4
	1.5 m kg			*7 350	6 210	*4 640	3 390	3 500	2 230	2 480	1 580	2 440	1 550	7.6
	0 m kg			*6 510	5 790	5 260	3 190	3 400	2 130			2 480	1 560	7.4
	-1.5 m kg	*3 990	*3 990	*8 760	5 680	5 150	3 100	3 340	2 080			2 720	1 700	6.9
	-3.0 m kg	*7 370	*7 370	*9 110	5 730	5 160	3 100	3 360	2 100			3 330	2 080	6.0
	-4.5 m kg			*7 230	5 930							*4 500	3 250	4.5

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

LIFTING CAPACITY EC140DLM

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		Max. reach		
		Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	m
Boom : 4.6m	6.0 m kg					*3 330	*3 330					*3 510	3 400	4.9
Arm : 2.1m	4.5 m kg					*3 480	*3 480					*3 570	2 460	6.0
Shoe : 700mm	3.0 m kg			*6 240	*6 240	*4 340	3 690	3 750	2 410			3 270	2 100	6.5
CWT : 2 100kg	1.5 m kg					*5 400	3 480	3 660	2 320			3 090	1 970	6.7
	0 m kg			*5 400	*5 400	5 500	3 350	3 590	2 260			3 170	2 010	6.5
	-1.5 m kg	*5 010	*5 010	*9 460	6 070	5 460	3 310					3 590	2 260	6.0
	-3.0 m kg			*8 230	6 190	*5 480	3 380					*4 830	3 010	4.9
Boom : 4.6m	6.0 m kg					*2 840	*2 840					*3 220	2 930	5.4
Arm : 2.5m	4.5 m kg					*3 080	*3 080	*3 200	2 480			*3 160	2 220	6.4
Shoe : 700mm	3.0 m kg			*5 340	*5 340	*3 960	3 730	*3 500	2 420			2 990	1 920	6.9
CWT : 2 100kg	1.5 m kg					*5 090	3 510	3 660	2 320			2 840	1 810	7.1
	0 m kg			*5 960	*5 960	5 490	3 340	3 570	2 250			2 900	1 840	6.9
	-1.5 m kg	*4 550	*4 550	*9 620	6 010	5 420	3 280	3 540	2 220			3 230	2 030	6.4
	-3.0 m kg	*8 930	*8 930	*8 700	6 100	5 460	3 310					4 140	2 580	5.4
Boom : 4.6m	7.5 m kg											*2 880	*2 880	4.5
Arm : 3.0m	6.0 m kg							*2 880	2 510			*2 820	2 470	6.0
Shoe : 700mm	4.5 m kg							*2 790	2 510			*2 650	1 950	6.9
CWT : 2 100kg	3.0 m kg					*3 450	*3 450	*3 150	2 430			*2 640	1 710	7.4
	1.5 m kg			*7 350	6 450	*4 640	3 530	3 660	2 320	2 600	1 650	2 560	1 620	7.6
	0 m kg			*6 510	6 030	5 490	3 330	3 550	2 220			2 600	1 640	7.4
	-1.5 m kg	*3 990	*3 990	*8 760	5 920	5 370	3 230	3 490	2 170			2 850	1 780	6.9
	-3.0 m kg	*7 370	*7 370	*9 110	5 970	5 380	3 230	3 520	2 190			3 480	2 170	6.0
	-4.5 m kg			*7 230	6 170							*4 500	3 390	4.5
Boom : 4.6m	6.0 m kg					*3 330	*3 330					*3 510	*3 510	4.9
Arm : 2.1m	4.5 m kg					*3 480	*3 480					*3 570	2 620	6.0
Shoe : 700mm	3.0 m kg			*6 240	*6 240	*4 340	3 920	*3 750	2 570			3 450	2 240	6.5
CWT : 2 450kg	1.5 m kg					*5 400	3 710	3 860	2 480			3 260	2 110	6.7
	0 m kg			*5 400	*5 400	5 800	3 580	3 790	2 420			3 350	2 150	6.5
	-1.5 m kg	*5 010	*5 010	*9 460	6 480	5 760	3 540					3 790	2 420	6.0
	-3.0 m kg			*8 230	6 600	*5 480	3 610					*4 830	3 220	4.9
Boom : 4.6m	6.0 m kg					*2 840	*2 840					*3 220	3 110	5.4
Arm : 2.5m	4.5 m kg					*3 080	*3 080	*3 200	2 640			*3 160	2 370	6.4
Shoe : 700mm	3.0 m kg			*5 340	*5 340	*3 960	*3 960	*3 500	2 580			*3 150	2 060	6.9
CWT : 2 450kg	1.5 m kg					*5 090	3 740	3 860	2 480			3 000	1 940	7.1
	0 m kg			*5 960	*5 960	5 800	3 570	3 780	2 410			3 070	1 970	6.9
	-1.5 m kg	*4 550	*4 550	*9 620	6 420	5 730	3 510	3 740	2 380			3 420	2 180	6.4
	-3.0 m kg	*8 930	*8 930	*8 700	6 510	5 760	3 540					4 370	2 770	5.4
Boom : 4.6m	7.5 m kg											*2 880	*2 880	4.5
Arm : 3.0m	6.0 m kg							*2 880	2 670			*2 820	2 630	6.0
Shoe : 700mm	4.5 m kg							*2 790	2 670			*2 650	2 090	6.9
CWT : 2 450kg	3.0 m kg					*3 450	*3 450	*3 150	2 590			*2 640	1 840	7.4
	1.5 m kg			*7 350	6 860	*4 640	3 760	*3 700	2 480	2 750	1 770	2 710	1 740	7.6
	0 m kg			*6 510	6 440	*5 640	3 560	3 750	2 380			2 750	1 760	7.4
	-1.5 m kg	*3 990	*3 990	*8 760	6 330	5 680	3 460	3 700	2 330			3 010	1 920	6.9
	-3.0 m kg	*7 370	*7 370	*9 110	6 380	5 680	3 460	3 720	2 350			3 680	2 330	6.0
	-4.5 m kg			*7 230	6 580							*4 500	3 620	4.5

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

Equipment

STANDARD EQUIPMENT

Engine

Turbocharged, 4 stroke diesel engine with water cooling, direct injection and charged air cooler

Air filter with indicator

Air intake heater

Fuel filter and water separator

Extra water separator

Alternator, 80 A

Fuel filler pump: 35 l/min

Electric/Electronic control system

Contronics

Advanced mode control system

Self-diagnostic system

Machine status indication

Caretrack and subscription

Engine speed sensing power control

Automatic idling system

One-touch power boost

Power max mode (P)

Safety stop/start function

Adjustable LCD color monitor

Master electrical disconnect switch

Engine restart prevention circuit

Travel alarm

Highcapacity halogen lights:

Frame-mounted 2

Boom-mounted 1

Batteries, 2 x 12 V / 100 Ah

Start motor, 24 V / 3.2 kW

Hydraulic system

Automatic sensing hydraulic system

Summation system

Boom priority

Arm priority

Swing priority

Boom and arm regeneration valves

ECO mode fuel saving technology

Swing anti-rebound valves

Boom and arm holding valves

Multi-stage filtering system

Cylinder cushioning

Cylinder contamination seals

Automatic two-speed travel motors

Superstructure

Access way with handrail

Tool storage area

Punched metal anti-slip plates

Undercovers

STANDARD EQUIPMENT

Cab and interior

ROPS (ISO12117-2) certified cab

Control lock out lever

Travel pedals and hand levers

Adjustable operator seat and joystick control console

Control joysticks

Heater & airconditioner

Flexible antenna

Cab, all-weather sound suppressed, includes:

Cup holders

Door locks

Tinted glass

Floor mat

Horn

Large storage area

Pull-up type front window

Removable lower windshield

Seat belt

Safety glass

Windshield wiper with intermittent feature

Master key

Sun screens, front, roof, rear

Undercarriage

Undercover

Hydraulic track adjusters

Greased and sealed track link

Track guard

Digging equipment

Boom: 4.6 m mono

Arm: 2.5 m

Linkage

OPTIONAL EQUIPMENT

Engine

Cyclone pre-cleaner

Rain cap

Auto engine shutdown

Electric

Extra work lights:

Boom-mounted 1

Cab-mounted 3

Counterweight-mounted 1

Rotating warning beacon

Anti-theft with code lock system

Hydraulic system

Boom hose rupture valve (HRV) with overload warning device

Aoom hose rupture valve (HRV)

Boom float with HRV

Boom float without HRV

Hydraulic piping:

Breaker & shear, 1 or 2 pump flow

Extra piping

Rotator & slope

Quick coupler

Grapple

Oil leak (drain) line

Hydraulic oil, ISO VG 32, 46, 68

Hydraulic oil, longlife oil 32, 46, 68

OPTIONAL EQUIPMENT

Cab and interior

Electric pedal for breaker and shear

Cab-mounted falling object guard (FOG)

Cab-mounted falling object protective structure (FOPS)

Radio or Radio with MP3/AUX

Rain shield

Rear view camera

Ashtray and lighter

Safety net (lower net)

Specific key

Superstructure

Rear view mirror on counterweight

Counterweight: 2 100kg, 2 450kg

Undercarriage

500 / 600 / 700 / 750 / 800 / 900 mm with triple grousers

600 / 700 mm HD with triple grousers

900 mm with single grousers

Digging equipment

Arm: 2.1m, 3.0m

Service

Tool kit, daily maintenance

Tool kit, full scale

Spare parts kit

SELECTION OF VOLVO OPTIONAL EQUIPMENT

Auto engine shutdown



Rear view camera



Auxiliary piping



Fuel filler pump



Boom float



FOG



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.

V O L V O