



Volvo Construction Equipment

# EW160E, EW180E

VOLVO EXCAVATORS 16.2-20.8 t / 35,715-45,855 lb 154-173 hp



# A passion for performance.

At Volvo Construction Equipment, we're not just coming along for the ride. Developing products and services that raise productivity – we are confident we can lower costs and increase profits for customers around the globe. Part of the Volvo Group, we are passionate about innovative solutions to help you work smarter – not harder.

## Helping you to do more

Doing more with less is a trademark of Volvo Construction Equipment. High productivity has long been married to low energy consumption, ease of use and durability. When it comes to lowering life-cycle costs, Volvo is in a class of its own.

## Designed to fit your needs

There is a lot riding on creating solutions that are suited to the particular needs of different industry applications. Innovation often involves high technology – but it doesn't always have to. Some of our best ideas have been simple, based on a clear and deep understanding of our customers' working lives.



## You learn a lot in 180 years

Over the years, Volvo has advanced solutions that have revolutionized the use of construction equipment. No other name speaks Safety louder than Volvo. Protecting operators, those around them and minimizing our environmental impact are traditional values that continue to shape our product design philosophy.

## We're on your side

We back the Volvo brand with the best people. Volvo is truly a global enterprise, one that is on standby to support customers quickly and efficiently – wherever they are.

## We have a passion for performance.

### A strong, dedicated, capable dealer network.

Our dealers are strategically located throughout North America to provide the equipment you need and the parts and service support you demand for a productive and profitable operation.

The strength of our dealer network is enhanced with extensive individualized product support training at our best-in-class Customer Center in Shippensburg and through hands-on training. Using a great Product Demonstration Center featuring a dedicated area for most common applications, visitors operate equipment from our entire product line under a variety of simulated working conditions. This facility is in year-round use by our dealers and customers.

### Building the best starts right here.

The products designed and manufactured by Volvo Construction Equipment have their beginnings at the most advanced Research & Design centers in the industry. Volvo CE machines are designed in 11 R&D centers and produced in 15 manufacturing facilities across the world.

The major R&D center and manufacturing plant in the Americas is located in Shippensburg, Pennsylvania. This facility has been in operation for over 30 years and – with its recently added 200,000 sq. ft. expansion – now covers 570,000 sq. ft. on an 80 acre campus. Dedicated work teams and highly advanced technologies and techniques using the Volvo Production System ensure continuous quality improvements, labor savings and cost control to reach the high quality that our customers have come to expect from Volvo.





Volvo Trucks



Renault Trucks



Mack Trucks



UD Trucks



Volvo Buses



Volvo Construction Equipment



Volvo Penta



Volvo Financial Services

# A vision of versatility

The Volvo EW160E & EW180E wheeled excavators are efficient and versatile machines that can make your life easier on the job site as well as increase productivity. Take all your tools with you in one trip and avoid any unnecessary travelling.

## Work modes

The E-Series Wheeled Excavators feature four work modes combined with three travel speeds. In total 12 different combinations to be chosen to provide optimum performance and improved fuel efficiency.

## Hydraulically elevated cab (EW160E only)

The hydraulically elevated Volvo Care Cab lifts the operator up to five meters above the ground at eye level, providing a wider field of vision to the entire job site for more productivity and safety.



## Matched attachments

Volvo's durable attachments have been purpose-built to work in perfect harmony with Volvo machines, forming one solid, reliable unit. With functions and properties ideally matched, Volvo attachments are an integrated part of the excavator for which they're intended.



### Flexible configurations

Depending on your market and application, make your wheeled excavator perfect for your jobsite with flexible configurations. Tailor your machine to your precise specifications and get it delivered straight from the factory.



#12  
Instruction Equipment  
R1304  
0.8 145  
WARNING



### Cab

Volvo's industry-leading cab provides excellent visibility that is crucial for operator comfort, control and safety on your jobsite. The spacious cab, with ample storage, leg room, easy to access controls and an optional luxury seat increases operator productivity and reduces fatigue. The cab's view to the right has also been made clearer.

# Operate in style.

To ensure comfort and productivity, operating the EW160E and the EW180E has been designed with easy operation in mind. The cab, HMI and luxuries like climate control all contribute to a happier and more comfortable operator for increased uptime.

## HMI

All machine interfaces – including the joysticks, keypad and LCD monitor – are ergonomically positioned and designed for optimum control and efficiency. For operator convenience and ease of use, the number of switches has been significantly reduced.



## ROPS

The Volvo cab features Roll Over Protective Structure (ROPS) safety certification, which provides more operator safety and peace-of-mind when operating in tough environments. It also provides greater ergonomic comfort leading to reduced fatigue and increased productivity.



## Volvo Smart View

Three cameras attached to different corners of the machine – the front, side and back – create a bird's eye view of the machine operating from above. The cameras also provide individual views of the front, side and back of the machine so you can see all angles and ensure safe rotation. This intelligent and industry leading technology offers a 360° view of real footage happening in real time.



## Fuel filler pump

The fuel filler electric pump can deliver 50 liters / 13 gallons of fuel per minute for easy and clean filling of the fuel tank from ground level. It is conveniently located next to the fuel tank.

# Configure your perfect excavator.



## Stretched two-piece boom

The newly developed stretched two-piece boom enhances working ability and increases the total reach by approximately half a meter.

## New hydraulics/technology system

The improved hydraulics system allows maximum utilization of available engine power regardless of the application, increasing controllability and responsiveness of operation.

## Auto greasing

This optional feature supplies the correct amount of lubrication to all greasing points on a timed basis for reduced costs.



## Flexible configurations

Depending on your market and application, make your wheeled excavator perfect for your jobsite with a range of flexible configurations.





## Volvo Smart View

Three cameras attached to different corners of the machine – the front, side and back – create a bird's eye view of the machine operating from above.

### Rear and side view camera

The rear and side view camera are fitted to the machine so that the operator can see different angles around the machine on a display monitor.



### Cab

Volvo's industry-leading cab provides excellent visibility that is crucial for operator comfort, control and safety on your jobsite.



### Service Access

A number of maintenance features are easily accessible for fast serviceability and reduced downtime.



### Engine

Volvo's wheeled excavators with Tier 4 Final engines are powerful and fuel efficient.

### ECO mode

For increased fuel efficiency ECO mode turns on automatically, which reduces your fuel consumption while maintaining productivity.

### Diesel Exhaust Fluid (DEF)

Volvo offers a total DEF solution that is quality assured, cost efficient and easily accessible. Contact your Volvo dealer for more information.



### Boom suspension system

The Boom Suspension System improves operator comfort and allows for faster travel over bumpy roads or rough terrain.

# Fuelling reliable and efficient operations.

For maximum efficiency and reliability, the EW160E & EW180E features Volvo's most powerful Tier 4 Final engine. The machine has also been designed and rigorously tested to reduce fuel consumption and increase your productivity.

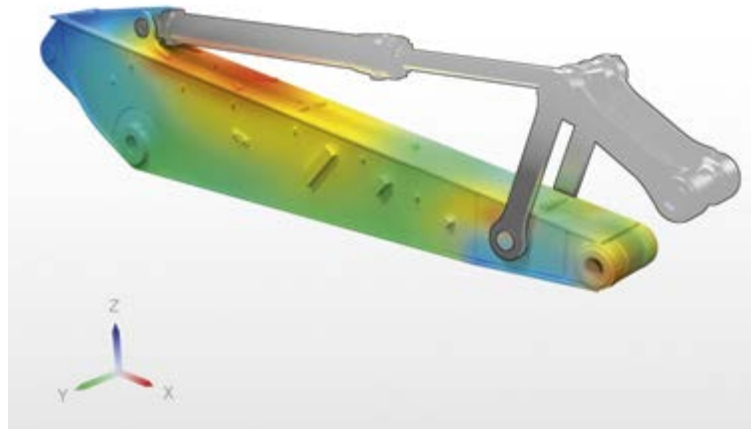
## ECO mode

For increased fuel efficiency ECO mode turns on automatically, which reduces your fuel consumption while maintaining productivity.



## Design and testing

The Volvo wheeled excavators have been designed and tested to ensure the highest standard of reliability and efficiency. Components, systems and technology work together to increase machine life and productivity.



## Robust axles

The robust excavator axles with automatic or operator controlled front axle oscillation are highly durable and made to last for increased wear and component life.

## Ground clearance

The undercarriage protects itself with high ground clearance and is strong enough to endure hard ground and tough surface conditions.



## Service Network

In order to respond to your needs faster, a Volvo expert is on their 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.



### Engine

Volvo's wheeled excavators with Tier 4 Final engines are powerful and efficient, designed to reduce fuel consumption and increase your productivity. With advanced technology, save your business time and cost.

# Volvo EW160E in detail.

## Engine

Volvo Construction Equipment is ready to comply with the tough new Tier 4 Final legislation for off-road vehicles with the introduction of a cascade of innovations in its new generation engines with Volvo Advanced combustion technology (V-ACT).  
Volvo machines are equipped with in-line turbo charged diesel engine with high pressure unit injector system. The engine features a externally cooled exhaust gas re-circulation (E-EGR), a Diesel Particulate Filter (DPF) and a Selective Catalytic Reduction( SCR) with Diesel Exhaust Fluid (DEF).

Engine		VOLVO D6J	
Max power at	r/s / r/min	32 / 1,900	
Net (ISO9249/SAEJ1349)	kW / hp	112 / 150	
Gross (ISO 14396/SAE J1995)	kW / hp	115 / 154	
Max. torque at	Nm lbf ft	716	528
at engine speed	r/min	1,400	
No. of cylinders		6	
Displacement	l in <sup>3</sup>	5,7	348
Bore	mm in	98	3.86
Stroke	mm in	126	4.96

## 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.

Voltage	V	24
Batteries	V	2 x 12
Battery capacity	Ah	2 x 140
Alternator	V / A	28 / 120
Alternator rating	V / kW	28 / 3.36

## Undercarriage

Drive train: A variable axle piston motor in combination with a power shift gearbox supplies 3 speeds. The gearbox distributes the energy via propeller shafts to the axles.  
Framework: All-welded robust torsion box frame.  
Wheels: Alternative single and twin wheels available.  
Front axle: Robust excavator axle with automatic or operator controlled front axle oscillation lock.  
Undercarriage available with all possible combinations of bolted outriggers and /or parallel blade.

Oscillating	°	± 9
Oscillating with mudguards	°	± 6
Twin wheels	type	10,00-20
Max. tractive force (net)	kN lbf	111 24,954
		20.0 / 12.4 / 30.0 / 18.6 / 35.0 / 21.7
Travel speed, on road	km/h mph	5.0 / 3.1 / 7.4 / 4.6 / 8.7 / 5.4
Travel speed, off road	km/h mph	4 2.5
Travel speed, creep	km/h mph	4 2.5
Min. turning radius	m ft	7.3 24

## Cab

New design Volvo Care Cab with operator protective structure, large and roomy interior. One way travel pedal with rocker switch control (F-N-R) on the right joystick. One-touch release for digging brake pedal.  
Audio system with remote control and Bluetooth® system for hands free phoning. Independently adjustable joystick consoles.  
Excellent all-round visibility provided by maximized cab class, transparent roof hatch, 2-piece sliding door window and long stroke, easy to adjust and narrow steering column. The liftable front windshield can easily be stored in the inside roof space and clipped in position. The removable lower front glass can be stored in the side door pocket. Interior lighting consists of one reading light and one light with timer.  
The pressurized and filtered cab air is supplied by a 14-vent climate-control providing fast defrosting and high cooling and heating performance. Viscous/spring mounted suspension cushions protect the operator from vibrations.  
Deluxe air-suspension seat with adjustable seat suspension, height, tilt, recline and forward-backward settings. (option)  
Adjustable, easy to read 8.3" LCD color monitor provides real time information of machine functions and important diagnostic information and is switchable to rear view camera monitor (standard) / side view camera (option). A new multi function button on left hand joystick with programmable function to improve the operator comfort.

## 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)	100

## Hydraulic system

Closed-centre load sensing hydraulic system with pressure compensated valves. Load independence of movements. Flow sharing feature, combined with a high flow pump (power regulation). The system gives superior manoeuvrability and fast movements, for optimal working result and economy.

The following working modes are included in the system:

Parking mode (P): Parking position for optimal safety.

Travel mode (T): Engine speed is controlled by travel pedal stroke for low fuel consumption and noise.

Working mode (W): Full working flow with adjustable engine rpm for normal working and best speed utilisation.

Customer mode (C): Operator can set proper oil flow in accordance with job conditions.

Power Boost: All digging and lifting forces are increased.

## Hydraulic pumps

### Main pump

Type Low noise axial piston pump

Max. flow	l/min	gpm	275	72.5
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### Brake + steering pump

Type Low noise gear pump

Max. flow	l/min	gpm	36	9.5
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### Servo pump

Type Low noise gear pump

Max. flow	l/min	gpm	15	4
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## Relief valve setting

Implement	MPa	34 / 37.5
Travel system	MPa	37.5
Pilot System	MPa	3.5

## Brakes

Service brakes: servo-hydraulically manoeuvred self-adjusting wet multi-discs with two separate brake circuits.

Parking brake: negative wet disc in gear housing, spring applied and pressure released.

Digging brake: service brake with mechanical lock system.

Security system: The 2-circuit travel brakes are supplied with two accumulators in the event of failure in the service brake system.

## Total machine weights

Machine with 5.0 m / 16' 5" mono boom, 2.45 m / 8' 0" dipper arm, quick-fit S6, 530 kg / 1,168 lb - 780 l / 206 gal bucket. Standard counterweight.

Dozer blade front and outriggers rear	kg	lb	17 250	38,030
Dozer blade rear only	kg	lb	16 200	35,715
Front and rear outriggers	kg	lb	17 500	38,581

Machine with 5.1 m / 16' 9" 2-piece boom, 2.45 m / 8' 0" dipper arm, quick-fit S6, 530 kg / 1,168 lb - 780 l / 206 gal bucket. Standard counterweight

Dozer blade front and outriggers rear	kg	lb	17 600	38,801
Dozer blade rear only	kg	lb	16 550	36,487
Front and rear outriggers	kg	lb	17 850	39,353

## Service refill capacities

Fuel tank	l	gal	250	66
DEF tank	l	gal	25	6.6
Hydraulic system, total	l	gal	250	66
Hydraulic tank	l	gal	123	32.5
Engine oil	l	gal	25	6.6
Engine coolant	l	gal	33	8.7
Transmission	l	gal	2.5	0.7

## Axle differential: (Axle housing)

Front axle	l	gal	9.5	2.5
Rear axle	l	gal	12.5	3.3
Final drive, wet disc type	l	gal	4 x 2.5	4 x 0.7

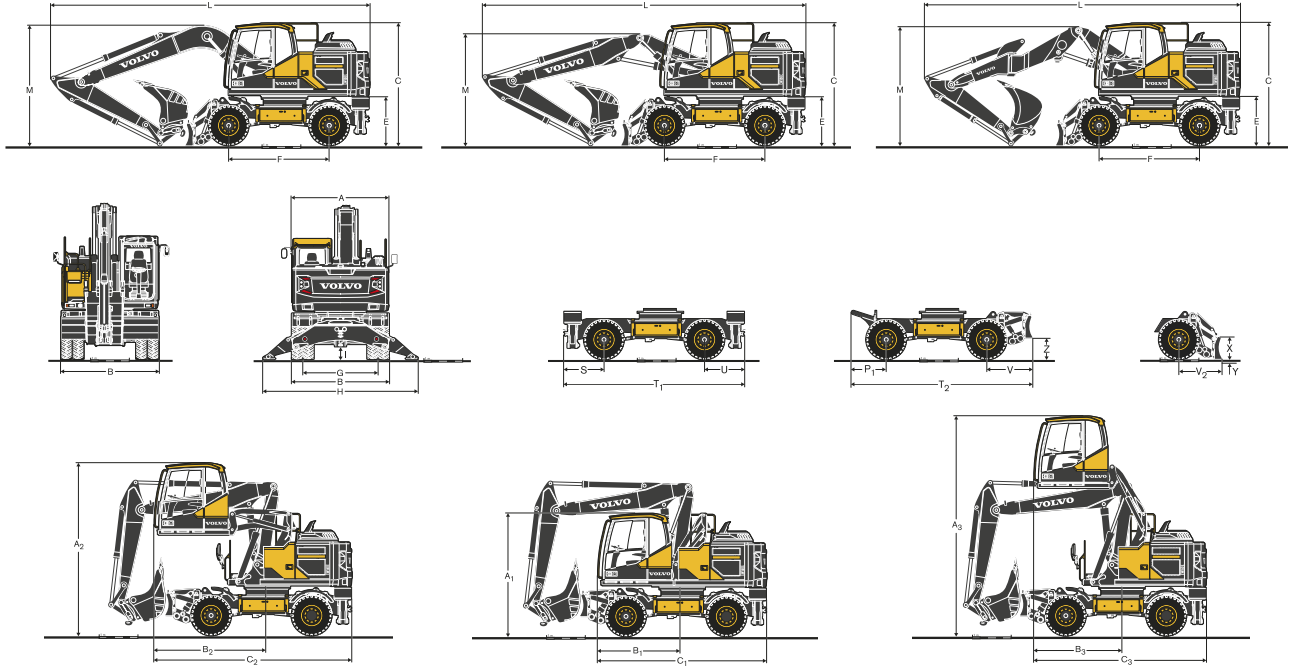
## Slew system

The superstructure is slewed by the means of a radial piston motor without reduction gear.

Automatic slew holding brake and anti-rebound valve are standard.

Max slew speed	rpm	9
Max. slew torque	kNm lbf ft	50.4 37,173

# Dimensions.



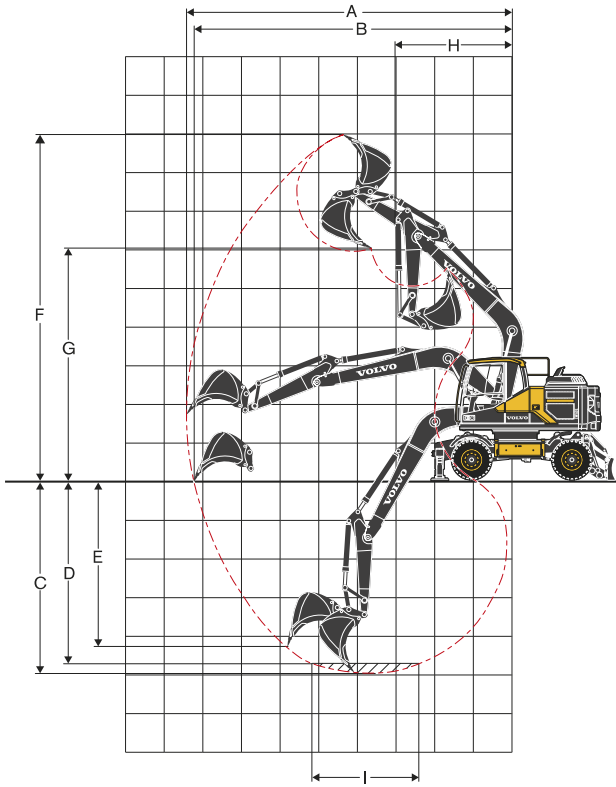
Description	Unit		5.0 m, 16' 5" Mono boom		5.1 m, 16' 9" 2-piece boom		5.2 m, 17' 1" 2-piece offset boom									
A Overall width of superstructure	mm	ft in	2 520	8' 3"	2 520	8' 3"	2 520	8' 3"								
B Overall width	mm	ft in	2 540 / 2 750	8' 4" / 9' 0"	2 540 / 2 750	8' 4" / 9' 0"	2 540 / 2 750	8' 4" / 9' 0"								
C Overall height of cab	mm	ft in	3 140	10' 4"	3 140	10' 4"	3 140	10' 4"								
D Tail slew radius	mm	ft in	2 150	7' 1"	2 150	7' 1"	2 150	7' 1"								
E Counterweight clearance	mm	ft in	1 260	4' 2"	1 260	4' 2"	1 260	4' 2"								
F Wheel base	mm	ft in	2 600	8' 6"	2 600	8' 6"	2 600	8' 6"								
G Tread	mm	ft in	1 940	6' 4"	1 940	6' 4"	1 940	6' 4"								
H Outrigger width (front or rear)	mm	ft in	3 980	13' 1"	3 980	13' 1"	3 980	13' 1"								
I Min. ground clearance	mm	ft in	360	1' 2"	360	1' 2"	360	1' 2"								
Description	Unit		5.0 m, 16' 5" Mono boom													
			Arm				Grab Arm									
L Overall length	m	ft in	2.0	6' 7"	2.45	8' 0"	2.6	8' 6"	3.1	10' 2"	2.95*	9' 8"				
M Overall height of boom	mm	ft in	8 240	27' 0"	8 250	27' 1"	8 240	27' 0"	7 940	26' 1"	8 255*	27' 1"				
Description	Unit		5.1, 16' 9" 2-piece boom								5.2 m, 17' 1" 2-piece offset boom					
			Arm				Grab Arm				Arm					
L Overall length	mm	ft in	8 330	27' 4"	8 360	27' 5"	8 360	27' 5"	8 150	26' 9"	8 350*	27' 5"	8 460	27' 9"	8 450	27' 9"
M Overall height of boom	mm	ft in	2 865	9' 5"	2 860	9' 5"	2 900	9' 6"	3 390	11' 1"	2 950*	9' 8"	2 750	9' 0"	2 800	9' 2"
L <sub>1</sub> Overall length	mm	ft in	6 440	21' 2"	6 440	21' 2"	5 960**	19' 7"	5 950**	19' 6"	6 900*	22' 8"	6 220	20' 5"	6 260	20' 6"
M <sub>1</sub> Overall height of boom	mm	ft in	3 920	12' 10"	3 920	12' 10"	3 920**	12' 10"	3 940**	12' 11"	3 990*	13' 1"	3 980	13' 1"	3 980	13' 1"
N Front overhang	mm	ft in	3 200	10' 6"	3 215	10' 7"	2 715**	8' 11"	2 710**	8' 11"	3 660*	12' 0"	2 980	9' 9"	3 020	9' 11"

\*grab arm, without clamshell bucket | \*\* without bucket

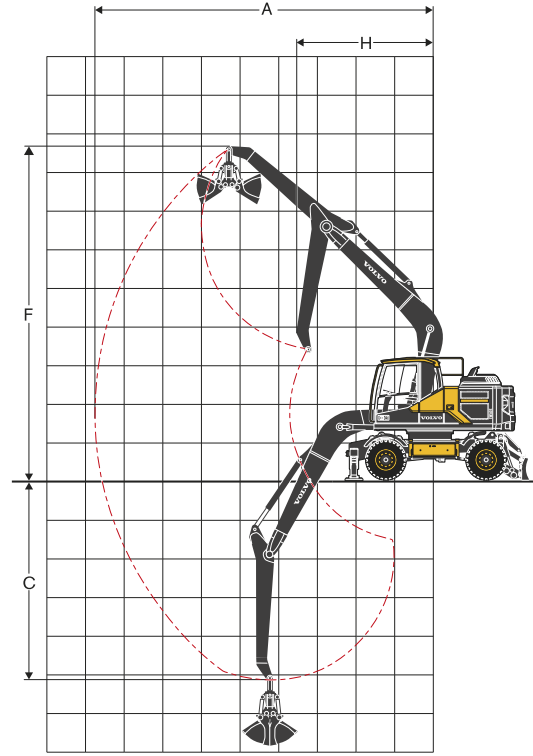
Description	Unit		Undercarriage dimensions	
P	mm	ft in	1 180	3' 10"
P <sub>1</sub>	mm	ft in	750	2' 6"
Q	mm	ft in	1 150	3' 9"
R/U	mm	ft in	1 030	3' 5"
S	mm	ft in	1 080	3' 7"
T	mm	ft in	4 800	15' 9"
T <sub>1</sub>	mm	ft in	4 700	15' 5"
T <sub>2</sub>	mm	ft in	4 470	14' 8"
V	mm	ft in	1 120	3' 8"
V <sub>2</sub>	mm	ft in	920	3' 0"
X	mm	ft in	630	2' 1"
Y	mm	ft in	153	0' 6"
Z	mm	ft in	520	1' 8"

Description	Unit		Hydraulic Elevated Cab	
A <sub>1</sub>	mm	ft in	3 150	10' 4"
B <sub>1</sub>	mm	ft in	4 350	14' 3"
C <sub>1</sub>	mm	ft in	2 160	7' 1"
A <sub>2</sub>	mm	ft in	4 430	14' 6"
B <sub>2</sub>	mm	ft in	5 090	16' 8"
C <sub>2</sub>	mm	ft in	2 900	9' 6"
A <sub>3</sub>	mm	ft in	5 550	18' 3"
B <sub>3</sub>	mm	ft in	4 440	14' 7"
C <sub>3</sub>	mm	ft in	2 250	7' 5"

# Specifications.



**Mono boom 5.0 m / 16' 5" and  
dipper arm 2.0 m / 6' 7", 2.45 m / 8' 0",  
2.6 m / 8' 6", 3.1 m / 10' 2"**



**Mono boom 5.0 m / 16' 5" and  
grab arm 2.95 m / 9' 8"**

## WORKING RANGES WITH DIRECT FIT BUCKET

	Unit		5.0 m, 16' 5" Mono boom								Grab arm	
			Arm								2.95*	9' 8"*
	m	ft in	2.0	6' 7"	2.45	8' 0"	2.6	8' 6"	3.1	10' 2"		
A Max. digging reach	mm	ft in	8 600	28' 3"	9 000	29' 6"	9 150	30' 0"	9 620	31' 7"	8 050	26' 5"
B Max. digging reach on ground	mm	ft in	8 400	27' 7"	8 810	28' 11"	8 960	29' 5"	9 450	31' 0"	-	-
C Max. digging depth	mm	ft in	5 130	16' 10"	5 580	18' 4"	5 730	18' 10"	6 230	20' 5"	4 590	15' 1"
D Max. digging depth (l=2.44 m / 8' 0" level)	mm	ft in	4 910	16' 1"	5 400	17' 9"	5 550	18' 3"	6 070	19' 11"	-	-
E Max. vertical wall digging depth	mm	ft in	4 320	14' 2"	4 770	15' 8"	4 920	16' 2"	5 400	17' 9"	-	-
F Max. cutting height	mm	ft in	8 840	29' 0"	9 100	29' 10"	9 190	30' 2"	9 470	31' 1"	8 090	26' 7"
G Max. dumping height	mm	ft in	5 900	19' 4"	6 150	20' 2"	6 230	20' 5"	6 520	21' 5"	-	-
H Min. front slew radius	mm	ft in	3 140	10' 4"	3 150	10' 4"	3 160	10' 4"	3 190	10' 6"	3 270	10' 9"

\* without clamshell bucket

## DIGGING FORCES WITH DIRECT FIT BUCKET

	ISO	kN	lbf	126*	28,326*	126*	28,326*	126*	28,326*	126*	28,326*
Breakout force (bucket)											
Tearout force				98*	22,031*	86*	19,334*	82*	18,434*	72*	16,186*

\* with powerboost

## Max. recommended sizes for direct fit buckets

	l	gal	1 100	291	957	253	957	253	858	227
GP-Bucket (1.8 t/m <sup>3</sup> / 3,035 lb/yd <sup>3</sup> )										
HD-Bucket (2.1 t/m <sup>3</sup> / 3,540 lb/yd <sup>3</sup> )			770	203	770	203	770	203	682	180

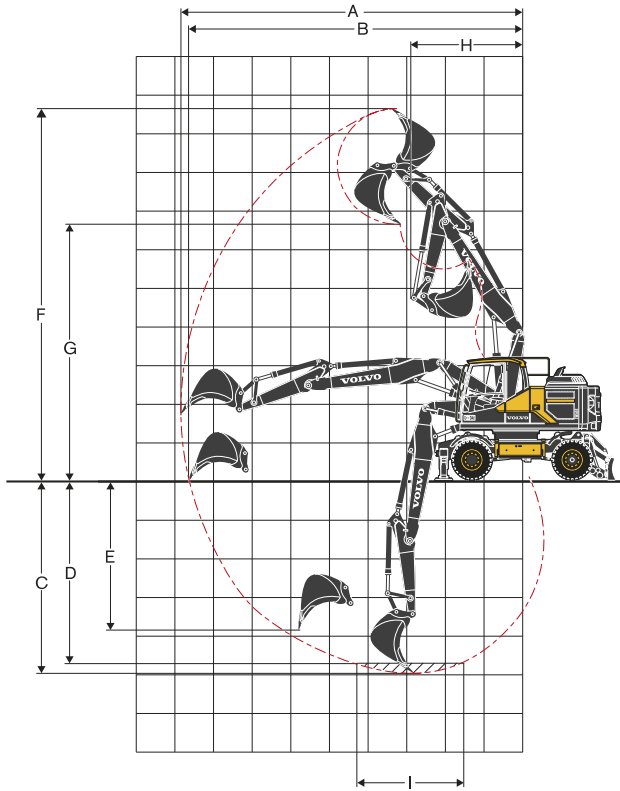
## Max. recommended sizes for quick fit buckets

	l	gal	870	230	780	206	780	206	700	185
S6/S60 QF GP-Bucket (1.8 t/m <sup>3</sup> / 3,035 lb/yd <sup>3</sup> )										
S6 QF HD-Bucket (2.1 t/m <sup>3</sup> / 3,540 lb/yd <sup>3</sup> )			700	185	700	185	620	164	500	132
S1 QF GP-Bucket (1.8 t/m <sup>3</sup> / 3,035 lb/yd <sup>3</sup> )			870	230	780	206	700	185	620	164
S1 QF HD-Bucket (2.1 t/m <sup>3</sup> / 3,540 lb/yd <sup>3</sup> )			700	185	620	164	620	164	360	95

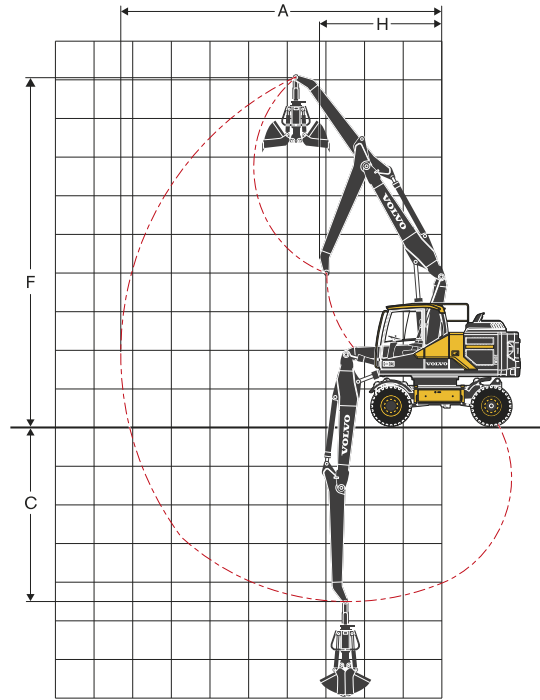
Note: 1. Bucket size based on SAE-J296, heaped material with a 1:1 angle of repose.

2. "Max permitted sizes" are for reference only and are not necessarily available from the factory.

3. "Max permitted sizes" are for heavy counterweight.



2-piece boom 5.1 m / 16' 5" and  
dipper arm 2.0 m / 6' 7", 2.45 m / 8' 0",  
2.6 m / 8' 6", 3.1 m / 10' 2"



2-piece boom 5.1 m / 16' 5" and  
grab arm 2.95 m / 9' 8"

#### WORKING RANGES WITH DIRECT FIT BUCKET

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			Arm									
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A Max. digging reach	mm	ft in	8 720	28' 7"	9 150	30' 0"	9 300	30' 6"	9 770	32' 1"	8 200	26' 11"
B Max. digging reach on ground	mm	ft in	8 520	27' 11"	8 960	29' 5"	9 110	29' 11"	9 600	31' 6"	-	-
C Max. digging depth	mm	ft in	5 120	16' 10"	5 570	18' 3"	5 720	18' 9"	6 220	20' 5"	4 600	15' 1"
D Max. digging depth (l=2.44 m / 8' 0" level)	mm	ft in	5 020	16' 6"	5 470	17' 11"	5 620	18' 5"	6 120	20' 1"	-	-
E Max. vertical wall digging depth	mm	ft in	4 080	13' 5"	4 550	14' 11"	4 700	15' 5"	5 180	17' 0"	-	-
F Max. cutting height	mm	ft in	9 640	31' 8"	10 000	32' 10"	10 100	33' 2"	10 450	34' 3"	9 000	29' 6"
G Max. dumping height	mm	ft in	6 670	21' 11"	7 000	23' 0"	7 110	23' 4"	7 480	24' 6"	-	-
H Min. front slew radius	mm	ft in	2 690	8' 10"	2 820	9' 3"	2 860	9' 5"	3 000	9' 10"	3 010	9' 11"

\* without clamshell bucket

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#### Max. recommended sizes for quick fit buckets

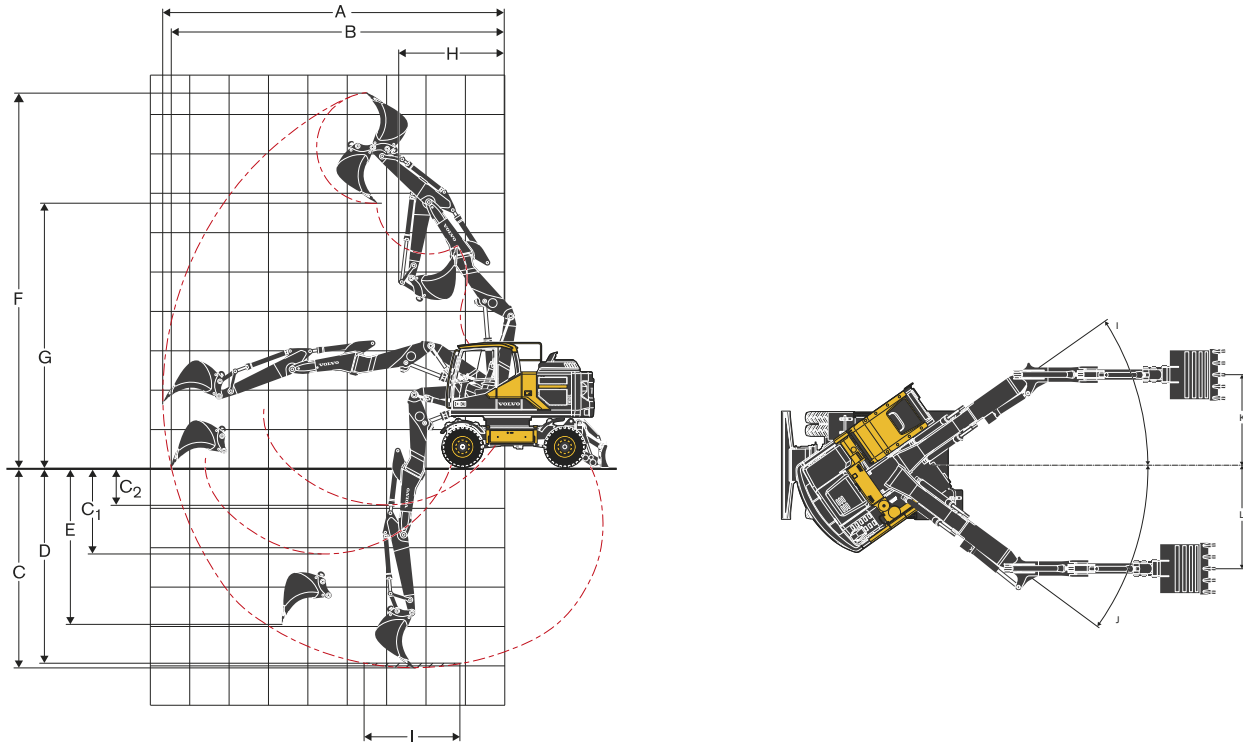
	l	gal	870	230	780	206	780	206	700	185
S6/S60 QF GP-Bucket (1.8 t/m <sup>3</sup> / 3,035 lb/yd <sup>3</sup> )										
S6 QF HD-Bucket (2.1 t/m <sup>3</sup> / 3,540 lb/yd <sup>3</sup> )			700	185	620	164	620	164	500	132
S1 QF GP-Bucket (1.8 t/m <sup>3</sup> / 3,035 lb/yd <sup>3</sup> )			870	230	700	185	700	185	620	164
S1 QF HD-Bucket (2.1 t/m <sup>3</sup> / 3,540 lb/yd <sup>3</sup> )			700	185	620	164	620	164	360	95

Note: 1. Bucket size based on SAE-J296, heaped material with a 1:1 angle of repose.

2. "Max permitted sizes" are for reference only and are not necessarily available from the factory.

3. "Max permitted sizes" are for heavy counterweight.

# Specifications.



2-piece offset boom 5.2 m / 17' 1" and  
dipper arm 2.0 m / 6' 7", 2.45 m / 8' 0", 2.6 m / 8' 6"

## WORKING RANGES WITH DIRECT FIT BUCKET

	Unit		5.2 m, 17' 1" 2-piece offset boom					
	m	ft in	Arm					
			2.0	6' 7"	2.45	8' 0"	2.6	8' 6"
A Max. digging reach	mm	ft in	8 760	28' 9"	9 200	30' 2"	9 330	30' 7"
B Max. digging reach on ground	mm	ft in	8 560	28' 1"	9 000	29' 6"	9 140	30' 0"
C Max. digging depth	mm	ft in	5 210	17' 1"	5 660	18' 7"	5 810	19' 1"
C <sub>1</sub> Max. digging depth at max. attachment offset with vertical trench walls	mm	ft in	2 280	7' 6"	2 730	8' 11"	2 880	9' 5"
C <sub>2</sub> Min. digging depth at max. attachment offset with vertical trench walls	mm	ft in	1 030	3' 5"	1 480	4' 10"	1 630	5' 4"
D Max. digging depth (l=2.44 m / 8' 0" level)	mm	ft in	5 100	16' 9"	5 560	18' 3"	5 710	18' 9"
E Max. vertical wall digging depth	mm	ft in	4 000	13' 1"	4 410	14' 6"	4 560	15' 0"
F Max. cutting height	mm	ft in	9 570	31' 5"	9 880	32' 5"	9 000	29' 6"
G Max. dumping height	mm	ft in	6 700	22' 0"	7 000	23' 0"	7 100	23' 4"
H Min. front swing radius	mm	ft in	2 710	8' 11"	2 820	9' 3"	2 850	9' 4"
J <sub>1</sub>		°	35		35		35	
J <sub>2</sub>		°	36		36		36	
K	mm	ft in	2 120	6' 11"	2 120	6' 11"	2 120	6' 11"
L	mm	ft in	2 430	8' 0"	2 430	8' 0"	2 430	8' 0"

## DIGGING FORCES WITH DIRECT FIT BUCKET

Breakout force (bucket)	ISO	kN	lbf	108*	24,279*	108*	24,279*	108*	24,279*	126*	28,326*
Tearout force	ISO	kN	lbf	73*	16,411*	63.5*	14,275*	61*	13,713*	72*	16,186*

\* with powerboost

## Max. recommended sizes for direct fit buckets

GP-Bucket (1.8 t/m <sup>3</sup> / 3,035 lb/yd <sup>3</sup> )	l	gal	780	206	700	185	700	185	858	227
HD-Bucket (2.1 t/m <sup>3</sup> / 3,540 lb/yd <sup>3</sup> )	l	gal	620	164	500	132	500	132	682	180

## Max. recommended sizes for quick fit buckets

S6/S60 QF GP-Bucket (1.8 t/m <sup>3</sup> / 3,035 lb/yd <sup>3</sup> )	l	gal	780	206	700	185	700	185	700	185
S6 QF HD-Bucket (2.1 t/m <sup>3</sup> / 3,540 lb/yd <sup>3</sup> )	l	gal	620	164	500	132	500	132	500	132
S1 QF GP-Bucket (1.8 t/m <sup>3</sup> / 3,035 lb/yd <sup>3</sup> )	l	gal	620	164	620	164	620	164	620	164
S1 QF HD-Bucket (2.1 t/m <sup>3</sup> / 3,540 lb/yd <sup>3</sup> )	l	gal	620	164	500	132	500	132	360	95

Note: 1. Bucket size based on SAE-J296, heaped material with a 1:1 angle of repose.

2. "Max permitted sizes" are for reference only and are not necessarily available from the factory.

3. "Max permitted sizes" are for heavy counterweight.



# Volvo EW180E in detail.

## Engine

Volvo Construction Equipment is ready to comply with the tough new Tier 4 Final legislation for off-road vehicles with the introduction of a cascade of innovations in its new generation engines with Volvo Advanced combustion technology (V-ACT).  
Volvo machines are equipped with in-line turbo charged diesel engine with high pressure unit injector system. The engine features a externally cooled exhaust gas re-circulation (E-EGR), a Diesel Particulate Filter (DPF) and a Selective Catalytic Reduction(SCR) with Diesel Exhaust Fluid (DEF).

Engine	VOLVO D6J			
Max power at	r/s / r/min	30 / 1,800		
Net (ISO9249/SAEJ1349)	kW / hp	126 / 169		
Gross (ISO 14396/SAE J1995)	kW / hp	129 / 173		
Max. torque	Nm	lbf ft	850 627	
at engine speed	r/min		1,350	
No. of cylinders	6			
Displacement	l	in <sup>3</sup>	5.7 348	
Bore	mm	in	98 3.86	
Stroke	mm	in	126 4.96	

## 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.

Voltage	V	24
Batteries	V	2 x 12
Battery capacity	Ah	2 x 140
Alternator	V / A	28 / 120
Alternator rating	V / kW	28 / 3.36

## Undercarriage

Drive train: A variable axle piston motor in combination with a power shift gearbox supplies 3 speeds. The gearbox distributes than the energy via propeller shafts to the axles.  
Framework: All-welded robust torsion box frame.  
Wheels: Alternative single and twin wheels available.  
Front axle: Robust excavator axle with automatic or operator controlled front axle oscillation lock.  
Undercarriage available with all possible combinations of bolted outriggers and / or parallel blade.

Oscillating	°	± 10	
Oscillating with mudguards	°	± 7	
Twin wheels	type	10.00-20	
Max. tractive force (net)	kN	lbf	104 23,380
Travel speed, on road	km/h	mph	20.0 / 12.4 / 30.0 / 18.6 / 35.0 21.7
Travel speed, off road	km/h	mph	5.0 / 3.1 / 7.4 / 4.6 / 8.9 5.5
Travel speed, creep	km/h	mph	3.7 2.3
Min. turning radius	m	ft	7.6 24.9

## Cab

New design Volvo Care Cab with operator protective structure, large and roomy interior. One way travel pedal with rocker switch control (F-N-R) on the right joystick. One-touch release for digging brake pedal.  
Audio system with remote control and Bluetooth® system for hands free phoning. Independently adjustable joystick consoles.  
Excellent all-round visibility provided by maximized cab class, transparent roof hatch, 2-piece sliding door window and long stroke, easy to adjust and narrow steering column. The liftable front windshield can easily be stored in the inside roof space and clipped in position. The removable lower front glass can be stored in the side door pocket. Interior lighting consists of one reading light and one light with timer.  
The pressurized and filtered cab air is supplied by a 14-vent climate-control providing fast defrosting and high cooling and heating performance. Viscous / spring mounted suspension cushions protect the operator from vibrations. Deluxe air-suspension seat with adjustable seat suspension, height, tilt, recline and forward-backward settings. (option)  
Adjustable, easy to read 8.3" LCD color monitor provides real time information of machine functions and important diagnostic information and is switchable to rear view camera monitor (standard) / side view camera (option). A new multi function button on left hand joystick with programmable function to improve the operator comfort.

## 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

## Hydraulic system

Closed-centre load sensing hydraulic system with pressure compensated valves. Load independence of movements. Flow sharing feature, combined with a high flow pump (power regulation). The system gives superior manoeuvrability and fast movements, for optimal working result and economy  
The following working modes are included in the system:  
Parking mode (P): Parking position for optimal safety.  
Travel mode (T): Engine speed is controlled by travel pedal stroke for low fuel consumption and noise.  
Working mode (W): Full working flow with adjustable engine rpm for normal working and best speed utilisation.  
Customer mode (C): Operator can set proper oil flow in accordance with job conditions.  
Power Boost: All digging and lifting forces are increased.

## Hydraulic pumps

### Main pump

Type Low noise axial piston pump

Max. flow	l/min	gpm	400	105.7
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### Brake + steering pump

Type Low noise gear pump

Max. flow	l/min	gpm	15.2	4
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### Servo pump

Type Low noise gear pump

Max. flow	l/min	gpm	36.1	9.5
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## Relief valve setting

Implement	MPa	Psi	34 / 37.5	4,931 / 5,439
Travel system	MPa	Psi	37.5	5,439
Pilot System	MPa	Psi	3.5	5,439

## Brakes

Service brakes: servo-hydraulically manoeuvred self-adjusting wet multi-discs with two separate brake circuits.  
Parking brake: negative wet disc in gear housing, spring applied and pressure released.  
Digging brake: service brake with mechanical lock system.  
Security system: The 2-circuit travel brakes are supplied with two accumulators in the event of failure in the service brake system.

## Total machine weights

Machine with 5.2 m / 17' 1" mono boom, 2.45 m / 8' 0" dipper arm, quickfit S1, 590 kg / 1,301 lb - 890 l / 235 gal bucket.	Dozer blade front and outriggers rear	kg	lb	19 900	43,872
	Dozer blade rear only	kg	lb	18 700	41,226
	Front and rear outriggers	kg	lb	20 220	44,577
Machine with 5.47 m / 17' 11" 2-piece boom, 2.45 m / 8' 0" dipper arm, quickfit S1, 590 kg / 1,301 lb - 890 l / 235 gal bucket.	Dozer blade front and outriggers rear	kg	lb	20 500	45,195
	Dozer blade rear only	kg	lb	19 300	42,549
	Front and rear outriggers	kg	lb	20 820	45,900

## Service refill capacities

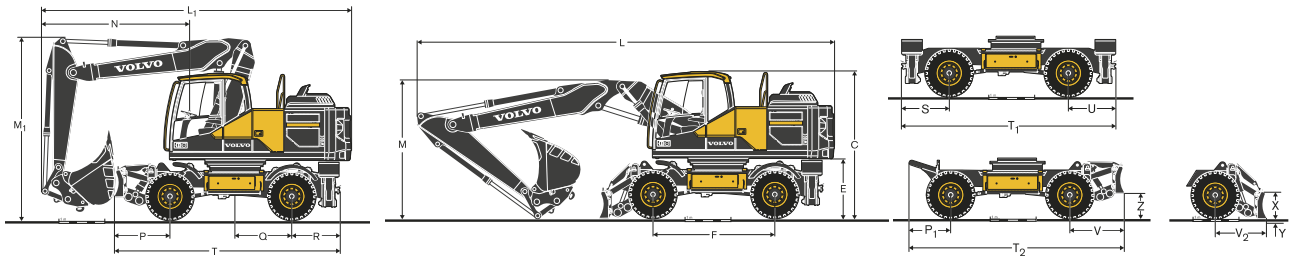
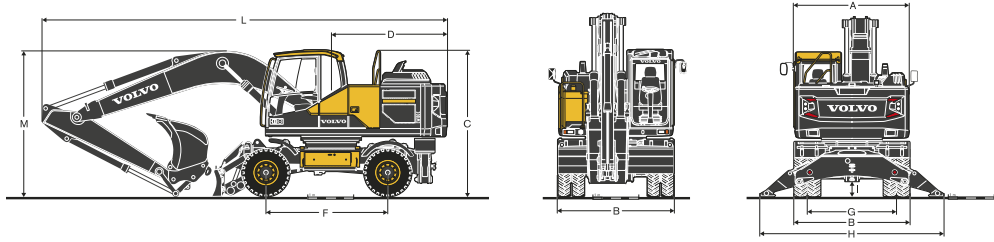
Fuel tank	l	gal	295	77.9
DEF tank	l	gal	25	6.6
Hydraulic system, total	l	gal	300	79.3
Hydraulic tank	l	gal	165	43.6
Engine oil	l	gal	25	6.6
Engine coolant	l	gal	33	8.7
Transmission	l	gal	2.5	0.7
Axle differential: (Axle housing)				
Front axle	l	gal	9.5	2.5
Rear axle	l	gal	12.5	3.3
Final drive, wet disc type	l	gal	4 x 2.5	4 x 0.7

## Slew system

The superstructure is slewed by the means of a radial piston motor without reduction gear.  
Automatic slew holding brake and anti-rebound valve are standard.

Max slew speed	rpm	9	
Max. slew torque	kNm	lbf ft	65.6 48,384

# Dimensions.



Description	Unit	5.2 m, 17' 1" Mono boom		5.47 m, 17' 11" 2-piece boom	
A Overall width of superstructure	mm ft in	2 520	8' 3"	2 520	8' 3"
B Overall width	mm ft in	2 540 / 2 750	8'4" / 9'0"	2 540 / 2 750	8' 4" / 9' 0"
C Overall height of cab	mm ft in	3 190	10' 6"	3 190	10' 6"
D Tail slew radius	mm ft in	2 550	8' 4"	2 550	8' 4"
E Counterweight clearance	mm ft in	1 280	4' 2"	1 280	4' 2"
F Wheel base	mm ft in	2 650	8' 8"	2 650	8' 8"
G Tread	mm ft in	1 940	6' 4"	1 940	6' 4"
H Outrigger width (front or rear)	mm ft in	4 000	13' 1"	4 000	13' 1"
I Min. ground clearance	mm ft in	333	1' 1"	333	1' 1"

Description	Unit		5.2 m, 17' 1" Mono boom							
	m	ft in	Arm			Grab Arm				
L Overall length	mm	ft in	2.45	8' 0"	2.6	8' 6"	3.0	9' 10"	3.2*	10' 6"
M Overall height of boom	mm	ft in	3 220	10' 7"	3 180	10' 5"	3 480	11' 5"	3 580	11' 9"

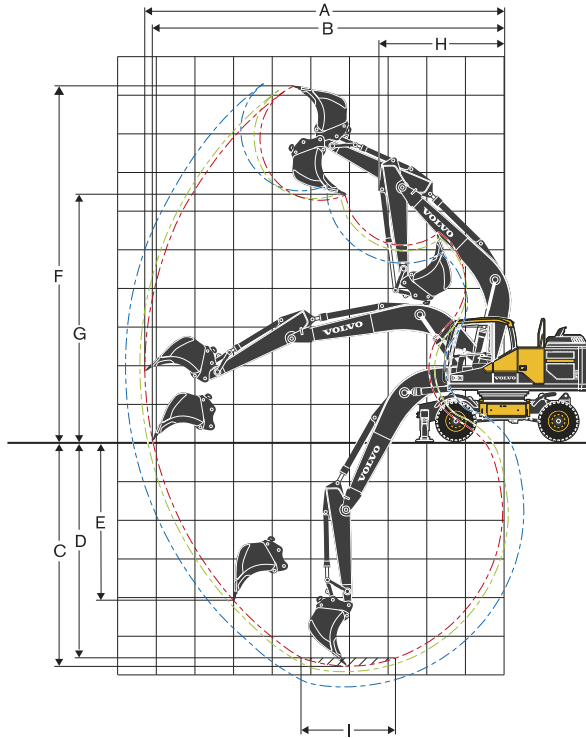
\*grab arm, without clamshell bucket | \*\* without bucket

Description	Unit		5.47 m, 17' 11" 2-piece boom							
	m	ft in	Arm			Grab Arm				
L Overall length	mm	ft in	2.45	8' 0"	2.6	8' 6"	3.0	9' 10"	3.2*	10' 6"
M Overall height of boom	mm	ft in	3 220	10' 7"	3 200	10' 6"	3 340	10' 11"	3 530*	11' 7"
L <sub>1</sub> Overall length	mm	ft in	6 870	22' 6"	6 630**	21' 9"***	6 670**	21' 1"***	6 720*	22' 1"
M <sub>1</sub> Overall height of boom	mm	ft in	3 970	13' 0"	3 940**	12' 11"***	3 940**	12' 11"***	3 950*	13' 0"
N Front overhang	mm	ft in	3 280	10' 9"	3 040**	10' 0"***	3 080**	10' 1"***	3 130*	10' 3"

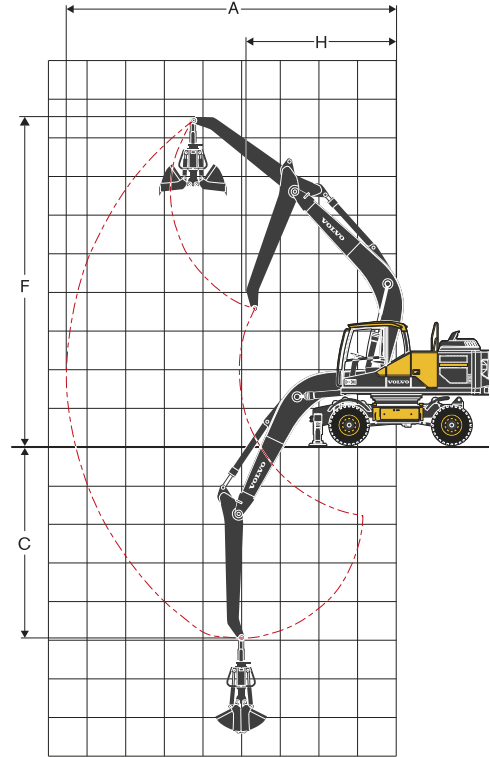
\*grab arm, without clamshell bucket | \*\* without bucket

Description	Unit	Undercarriage dimensions	
P	mm ft in	1 210	4' 0"
P <sub>1</sub>	mm ft in	780	2' 7"
Q	mm ft in	1 220	4' 0"
R/U	mm ft in	1 040	3' 5"
S	mm ft in	1 130	3' 8"
T	mm ft in	4 900	16' 1"
T <sub>1</sub>	mm ft in	4 820	15' 10"
T <sub>2</sub>	mm ft in	4 560	15' 0"
V	mm ft in	1 130	3' 8"
V <sub>2</sub>	mm ft in	960	3' 2"
X	mm ft in	630	2' 1"
Y	mm ft in	155	0' 6"
Z	mm ft in	470	1' 7"

# Specifications.



**Mono boom 5.2 m / 17' 1" and dipper arm 2.45 m / 8' 0", 2.6 m / 8' 6", 3.0 m / 9' 10"**



**Mono boom 5.2 m / 17' 1" and grab arm 3.2 m / 10' 6"**

## WORKING RANGES WITH DIRECT FIT BUCKET

	Unit		5.2 m, 17' 1" Mono boom						Grab arm	
			Arm							
	m	ft in	2.45	8' 0"	2.6	8' 6"	3.0	9' 10"	3.2	10' 6"
A Max. digging reach	mm	ft in	9 400	30' 10"	9 530	31' 3"	10 000	32' 10"	8 420	27' 7"
B Max. digging reach on ground	mm	ft in	9 200	30' 2"	9 350	30' 8"	9 735	31' 11"	-	-
C Max. digging depth	mm	ft in	5 540	18' 2"	5 690	18' 8"	6 100	20' 0"	4 680	15' 4"
D Max. digging depth (l=2.44 m / 8' 0" level)	mm	ft in	5 355	17' 7"	5 510	18' 1"	5 930	19' 5"	-	-
E Max. vertical wall digging depth	mm	ft in	4 700	15' 5"	4 855	15' 11"	5 235	17' 2"	-	-
F Max. cutting height	mm	ft in	9 720	31' 11"	9 820	32' 3"	10 070	33' 0"	8 500	27' 11"
G Max. dumping height	mm	ft in	6 530	21' 5"	6 630	21' 9"	6 880	22' 7"	-	-
H Min. front slew radius	mm	ft in	2 990	9' 10"	3 010	9' 11"	3 050	10' 0"	3 710	12' 2"

\* without clamshell bucket

## DIGGING FORCES WITH DIRECT FIT BUCKET

	ISO	kN	lbf	136*	30,574*	136*	30,574*	136*	30,574*	-	-
Breakout force (bucket)											
Tearout force				106*	23,830*	102*	22,931*	92*	20,682*	-	-

\* with powerboost

## Max. recommended sizes for direct fit buckets

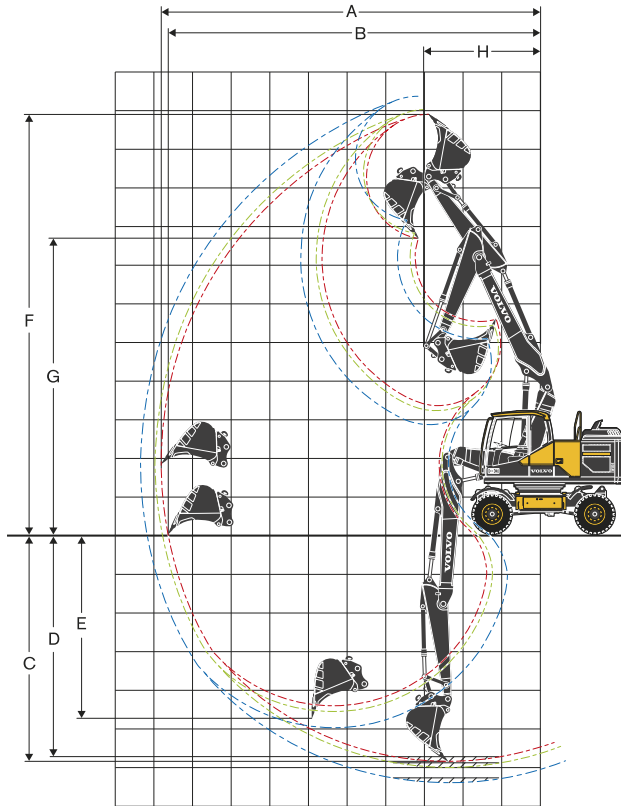
	l	gal	1 000	264.2	1 000	264.2	870	229.8	-	-
GP-Bucket (1.8 t/m <sup>3</sup> / 3,035 lb/yd <sup>3</sup> )										
HD-Bucket (2.1 t/m <sup>3</sup> / 3,540 lb/yd <sup>3</sup> )			700	184.9	700	184.9	700	184.9	-	-

## Max. recommended sizes for quick fit buckets

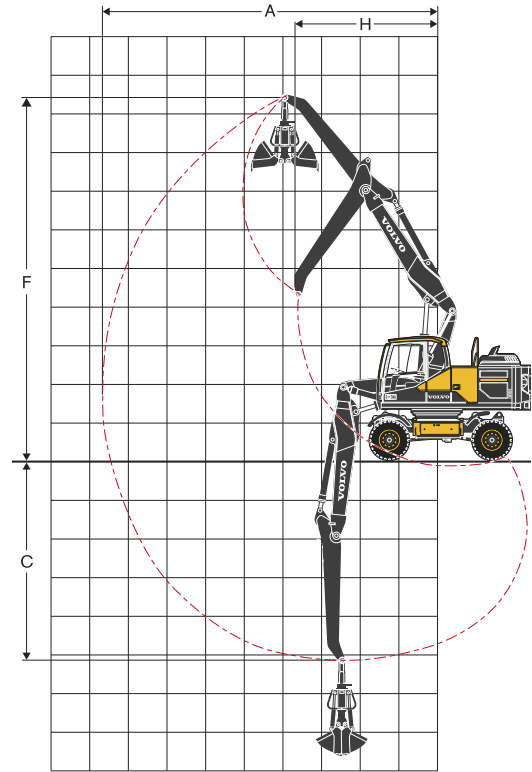
	l	gal	870	229.8	870	229.8	780	206.1	-	-
S1/S70 QF GP-Bucket (1.8 t/m <sup>3</sup> / 3,035 lb/yd <sup>3</sup> )										
S1/S70 QF HD-Bucket (2.1 t/m <sup>3</sup> / 3,540 lb/yd <sup>3</sup> )			700	184.9	700	184.9	700	184.9	-	-
UQF GP-Bucket (1.8 t/m <sup>3</sup> / 3,035 lb/yd <sup>3</sup> )			870	229.8	870	229.8	780	206.1	-	-
UQF HD-Bucket (2.1 t/m <sup>3</sup> / 3,540 lb/yd <sup>3</sup> )			700	184.9	700	184.9	620	163.8	-	-

Note: 1. Bucket size based on SAE-J296, heaped material with a 1:1 angle of repose. 2. "Max permitted sizes" are for reference only and are not necessarily available from the factory. 3. "Max permitted sizes" are for heavy counterweight.

# Specifications.



2-piece boom 5.47 m / 17' 11" and  
dipper arm 2.45 m / 8' 0", 2.6 m / 8' 6", 3.0 m / 9' 10"



2-piece boom 5.47 m / 17' 11" and  
grab arm 3.2 m / 10' 6"

## WORKING RANGES WITH DIRECT FIT BUCKET

	Unit		5.47 m, 17' 11" 2-piece boom							Grab arm	
			Arm								
	m	ft in	2.45	8' 0"	2.6	8' 6"	3.0	9' 10"	3.2	10' 6"	
A Max. digging reach	mm	ft in	9 770	32' 1"	9 920	32' 7"	10 310	33' 10"	8 840	29' 0"	
B Max. digging reach on ground	mm	ft in	9 600	31' 6"	9 740	31' 11"	10 140	33' 3"	-	-	
C Max. digging depth	mm	ft in	5 860	19' 3"	6 010	19' 9"	6 410	21' 0"	5 000	16' 5"	
D Max. digging depth (l=2.44 m / 8' 0" level)	mm	ft in	5 760	18' 11"	5 920	19' 5"	6 320	20' 9"	-	-	
E Max. vertical wall digging depth	mm	ft in	4 740	15' 7"	4 900	16' 1"	5 280	17' 4"	-	-	
F Max. cutting height	mm	ft in	10 850	35' 7"	10 980	36' 0"	11 320	37' 2"	9 750	32' 0"	
G Max. dumping height	mm	ft in	7 650	25' 1"	7 780	25' 6"	8 120	26' 8"	-	-	
H Min. front slew radius	mm	ft in	3 010	9' 11"	3 080	10' 1"	3 240	10' 8"	3 700	12' 2"	

\* without clamshell bucket

## DIGGING FORCES WITH DIRECT FIT BUCKET

	ISO	kN	lbf	136*	30,574*	136*	30,574*	136*	30,574*	-	-
Breakout force (bucket)											
Tearout force				106*	23,830*	102*	22,931*	92*	20,682*	-	-

\* with powerboost

## Max. recommended sizes for direct fit buckets

	l	gal	1 000	264.2	870	229.8	870	229.8	-	-
GP-Bucket (1.8 t/m <sup>3</sup> / 3,035 lb/yd <sup>3</sup> )										
HD-Bucket (2.1 t/m <sup>3</sup> / 3,540 lb/yd <sup>3</sup> )			700	184.9	700	184.9	700	184.9	-	-

## Max. recommended sizes for quick fit buckets

	l	gal	870	229.8	780	206.1	700	184.9	-	-
S1/S70 QF GP-Bucket (1.8 t/m <sup>3</sup> / 3,035 lb/yd <sup>3</sup> )										
S1/S70 QF HD-Bucket (2.1 t/m <sup>3</sup> / 3,540 lb/yd <sup>3</sup> )			700	184.9	700	184.9	620	163.8	-	-
UQF GP-Bucket (1.8 t/m <sup>3</sup> / 3,035 lb/yd <sup>3</sup> )			870	229.8	780	206.1	700	184.9	-	-
UQF HD-Bucket (2.1 t/m <sup>3</sup> / 3,540 lb/yd <sup>3</sup> )			700	184.9	700	184.9	620	163.8	-	-

Note: 1. Bucket size based on SAE-J296, heaped material with a 1:1 angle of repose. 2. "Max permitted sizes" are for reference only and are not necessarily available from the factory. 3. "Max permitted sizes" are for heavy counterweight.

# Equipment.

## STANDARD EQUIPMENT

	EW160E	EW180E
<b>Engine</b>		
Turbocharged, 4 stroke Volvo diesel engine with water cooling, direct injection and charged air cooler that meets Tier 4 Final emission requirements	•	•
Intake air pre-heater	•	•
ECO- Modus	•	•
Fuel filter and water separator	•	•
Fuel filler pump: 50 l/min (13.2 gpm) with automatic shut-off	•	•
Aluminium core radiator	•	•
<b>Electric/Electronic control system</b>		
Contronics-computerized monitoring and diagnostic system	•	•
Master electrical disconnect switch	•	•
Adjustable automatic idling system	•	•
One-touch power boost	•	•
Adjustable monitor	•	•
Safety stop/start function	•	•
2 Frame mounted halogen lamps	•	•
Alternator, 120 A	•	•
Batteries, 2 x 12 V/140 Ah	•	•
Start motor, 24 V/5.5 kW	•	•
CareTrack via GSM or satellite	•	•
Rear view camera	•	•
<b>Undercarriage</b>		
3 speeds (creep / off road / road speed up to 35 km/h / 21.7 mph)	•	•
2-speed power transmission plus creep speed		•
Oscillating front axle ± 9° without mudguards/ 6° with mudguards	•	•
2-circuit travel brakes	•	•
Maintenance-free propeller shafts	•	•
<b>Superstructure</b>		
LED Rear lights	•	•
Service walkway with anti-slip grating	•	•
Centralised lubricating point for slew bearing and boom	•	•
<b>Digging equipment</b>		
Attachment points for extra hydraulics	•	•
Centralised lubrication point for arm and bucket	•	•

	EW160E	EW180E
<b>Cab and interior</b>		
Volvo Care Cab with fixed roof hatch / ROPS		•
Heater & air-conditioner, automatic		•
Hydraulic dampening cab mounts		•
Adjustable operator seat and joystick control console		•
Adjustable steering column		•
Hydraulic safety lock lever		•
Control joystick, with 5 switches each		•
Cab, all-weather sound suppressed, includes:	•	•
Cup holder	•	•
Door locks	•	•
Safety glass, light tinted	•	•
Floor mat	•	•
Horn	•	•
Large storage area	•	•
Pull-up type front window	•	•
Removable lower windshield	•	•
Retractable seat belt	•	•
Windshield wiper with washer and intermittent feature	•	•
Sun shield, front, roof & rear	•	•
Bluetooth radio with USB port	•	•
Master ignition key	•	•
Multi function switch on LH Joystick	•	•
Operator programmable switch on joystick		•
<b>Hydraulic system</b>		
Load sensing hydraulic system	•	•
Cylinder cushioning	•	•
Cylinder contamination seals	•	•
Return filter of full flow type 2,000 h exchange interval	•	•
Pressure relief system (servo accumulator)	•	•
Proportional controlled visco-clutch cooling fan	•	•
Hose rupture valve for boom and arm	•	•
Hydraulic long life oil ISO VG 46	•	•

# Equipment.

## OPTIONAL EQUIPMENT

	EW160E	EW180E
<b>Engine</b>		
Diesel coolant heater with digital timer	•	•
Block heater, 240 V	•	•
Water separator with heater	•	•
Dust net	•	•
Reversible fan	•	•
Air inlet turbo pre-cleaning system	•	•
Micro- mesh and sealing for engine compartment	•	•
Tropical cooling	•	•
Waste package	•	•
<b>Electric / Electronic control system</b>		
Travel alarm	•	•
Rotating beacon	•	•
Extra work lights: ( LED or halogen)	•	•
Service walkway 1 and counterweight 1	•	•
Boom-mounted 2	•	•
Cab front 2	•	•
Extra LED lights on arm and Cab (4)	•	•
Multi-channel electric centre passage	•	•
Anti-theft system	•	•
Tilting and rotating attachment preparation	•	•
<b>Hydraulic system</b>		
Boom float function	•	•
Boom suspension system	•	•
Hydraulic oil, biodegradable ISO VG32 and ISO 46	•	•
Hydraulic long life oil ISO VG32 and ISO VG68	•	•
Hydraulic equipment for:	•	•
Hammer & shears	•	•
Slope bucket/rotator	•	•
Grab/clam shell	•	•
Quick fit	•	•
Flow control	•	•
Flow & pressure control	•	•

	EW160E	EW180E
<b>Cab and interior</b>		
Volvo Care Cab with openable PC roof hatch / ROPS	•	•
Proportional control joystick	•	•
On/off joystick	•	X
Falling object guard (FOG)	•	•
Cab mounted falling object protective structures (FOPS)	•	•
Rain shield, front	•	•
Side camera	•	•
Volvo Smart View system	•	•
Sunlight protection, roof hatch (steel)	•	•
Safety net for front window	•	•
Lower wiper	•	•
Anti-vandalism kit	•	•
Ashtray	•	•
Lighter	•	•
Seat:	•	•
Mechanical Fabric seat, with/or without heater	•	•
Air suspension seat with heater and X isolator	•	•
Luxury operator seat with aico and wide armrest	•	•
Fixed cab risers	•	•
Hydraulic elevated cab	•	•
<b>Undercarriage</b>		
Trailer Towing system	•	•
Twin tires 10.00 - 20 / 11.00 - 20	•	•
Single tires 18R - 19.5 / 620/40-22.5	•	•
Stone protection rings	•	•
Solid rubber tires 10.00-20/11.00-20	•	•
Front dozer blade and rear outriggers	•	•
Rear dozer blade	•	•
Front outriggers and rear dozer blade	•	•
4 outriggers	•	•
Grab holder	•	•
Mudguards, front/rear	•	•
Tool box, left hand side/right hand side	•	•
Drawer type Toolbox	•	•
Cruise control	•	•
Travel speed 20 km/h / 12.4 mph, 30 km/h / 18.6 mph, 35 km/h / 21.7 mph	•	•
Wide axle 2.75 m / 9' 0"	•	•
Automatic digging brake	•	•

## OPTIONAL EQUIPMENT

	EW160E	EW180E
<b>Digging equipment</b>		
Booms		
5.0 m/16' 5" mono boom	•	
5.1 m/16' 9" 2-piece boom	•	
4.75 m/15' 7" mono offset boom	•	
5.2 m/17' 1" 2-piece offset boom	•	
5.2 m / 17' 1" mono boom		•
5.47 m / 17' 11" 2-piece boom		•
Dipper arms		
2.0 m/6' 7", 2.45 m/8' 0", 2.6 m/8' 6", 3.1 m/10'2"	•	
2.95 m/9' 8" grab arm	•	
2.45 m / 8' 0", 2.6 m / 8' 6", 3.0 m / 9' 10"		•
3.2 m / 10' 6" grab arm		•
<b>Hydraulic quick fit</b>		
S-type system ( S1 / S60 )	•	
S-type system ( S1 / S70 )		•
Universal system	•	•

	EW160E	EW180E
<b>Attachments</b>		
Buckets, direct fit and quick fit:		
General Purpose bucket (GP)	•	•
Heavy Duty bucket	•	•
Slope bucket	•	•
Lifting eye	•	•
<b>Service</b>		
Tool kit, daily maintenance	•	•
Automatic Greasing System	•	•
Wheel chocks	•	•
<b>Superstructure</b>		
Heavy counter weight	•	
License plate preparation	•	•

## Selection of Volvo optional equipment

### Luxury seat



### Boom float



### LED lights



### Heavy counterweight



### Trailer Towing System





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