VOLVO

Volvo Wheel Loaders 24,1-33,1 t / 53.131-72.973 lb 295-368 hp

L150H, L180H, L220H

Volvo Construction Equipment

Smarter, stronger, faster

The new H-series L150, L180 and L220 may boast the same striking design as each of its forunners, but these machines have been updated with the latest innovative technology, promoting greater productivity and fuel efficiency. Ready to tackle a range of applications, enjoy the same reliability and quality you'd expect from your Volvo wheel loader and more.

1954

The world's first wheel loader to feature a parallel lift arm system and attachment bracket with quick coupler – the H-10

1973

The first wheel loader with direct injected turbo engine – Volvo BM 1641

Volvo introduced the world's first truly low-emission diesel engines in construction equipment (1974)

1981

Volvo introduced the world's first automatic gear shifting system (Automatic Power Shift) and load sensing hydraulic technology

1988

Comfort Drive Control

Progress is in our DNA

Since introducing our first wheel loader, Volvo has continued to refine its concept for more than half a century. Over the years, we have revolutionized our machines, bringing customers unparalleled productivity and efficiency.

With you for the long run

As your trusted partner in production, Volvo is here to support you with the best equipment for the job. Boasting a comprehensive portfolio of attachments designed to complement your machines performance, as well as a range of services to boost your profitability, we'll help you tailor the perfect package to suit your business needs.

1990

Boom suspension system

Volvo patented Torque Parallel linkage (1991)

2009

Volvo sets the standard for the attachment bracket (ISO 23727)

2010

OptiShift

CareTrack

2016

Load Assist, powered by the award-winning Volvo Co-Pilot

2017

New generation OptiShift

Second generation load sensing hydraulics – Patent pending

Smarter operation

Primed for productivity, the innovative L150H, L180H and L220H loaders combine the latest Volvo technology, including second generation OptiShift, with power and upgraded features, resulting in up to 15% better fuel efficiency than the G-series.

Up to 15% greater fuel efficiency

Do more with less fuel, the H-series machine updates offer up to 15% greater fuel efficiency than the G-series. Contributing to the increase is the powerful engine, second generation OptiShift, attachment optimization and the new dry P-Brake, which eliminates drag losses.

Reverse By Braking

Extend the life of your machine's components and increase operator comfort with Reverse By Braking (RBB) – patented by Volvo. The braking function slows the machine when the operator wants to change direction, by reducing engine rpm and automatically applying the service brakes, reducing stress on the drivetrain.

Power up, fuel down

For short cycle times and high fuel efficiency, the H-series wheel loaders are fitted with a powerful Volvo engine – compliant with the latest emission regulations – delivering greater output and torque than the G-series.

Eco pedal

Save on machine wear and increase fuel efficiency with the eco pedal. Uniquely designed by Volvo, the eco pedal encourages economical operation, by applying a mechanical push-back force in response to excess use of the accelerator.

NEW GENERATION OPTISHIFT

For improved cycle times and reduced fuel consumption, customize the lock-up engagement of your machine, with new generation OptiShift. The improved technology integrates the Reverse By Braking function and the new torque converter with lock-up, creating a direct drive between the engine and transmission.

Made to move

Engineered for efficient work, the L150H, L180H and L220H are fitted with a new transmission and improved technology, resulting in up to 10% better productivity than the G-series.

Boost your productivity by up to 10%

For ultimate stability and high efficiency, the H-series wheel loaders have been upgraded with a new transmission, which works in harmony with the engine and axels. The new converter delivers increased torque output, resulting in better performance at low speeds. For faster acceleration and smooth operation, the steps between gears have been reduced.

Fast cycle times

Achieve shorter cycle times with next generation load sensing hydraulics, designed to enhance the responsiveness of attachments and improve the lifting and lowering speed of the boom.

Comfortably productive

Customize your machine and ensure precise control of hydraulic functions, with the choice of single or multi levers. To get the most out of each operation, select from three hydraulic modes, according to your preferred responsiveness.

Bucket leveling function

Take your productivity to the next level with the new bucket leveling function. Automatically return the bucket to level from both dump and curl positions, enhancing operator performance.

Load Assist

Optimize your load cycles with Load Assist, powered by Volvo Co-Pilot – the 10" in-cab display. Gain access to a set of smart apps and boost the efficiency of your operation. When installed, the rear-view camera and radar detect system are now integrated into the Volvo Co-Pilot.

On-Board Weighing

Make overloading, underloading, reweighing and waiting times a thing of the past with On-Board Weighing, providing real-time insight into the bucket's load. What's more, with the new Simple Mode, it has never been easier to start reaping the benefits of On-Board Weighing.

Operator Coaching

Operator Coaching helps to ensure operators are using their Volvo machine to its full potential. The intuitive app provides real-time guidance to operators, helping them understand how their actions influence machine productivity and efficiency, as well as identify areas for improvement or changes in their technique.

Tire Pressure Monitoring System

With the tire pressure monitoring app, you can check the condition of your tires from the comfort of the cab. Providing real-time information on tire pressure and temperature, the system saves time during machine inspections and can prolong tire lifetime.

Map

Get accurate machine positioning with Map, a clever app that allows operators to monitor on-site traffic in real-time. Not only does this give operators an improved orientation of the site they are working on, but it allows them to proactively adjust their driving behavior according to traffic conditions.

Fully loaded

Get the most out of your Volvo wheel loader with a range of purpose built attachments. Form one solid and reliable unit, with attachments that are ideally matched by size and design to your machine's parameters – including link-arm geometry, breakout and lifting forces. If we don't have the right attachment, Volvo can custom build one to your specific requirements.

Rehandling

Experience up to 5% greater productivity with a new range of Volvo Rehandling buckets. The redesigned buckets are easier to fill and minimize spillage, thanks to new convex sides and the improved spill guard. To prevent spillage and absorb shocks, opt for the Boom Suspension System, which automatically engages, depending on gear or speed selection.

Log handling

Designed for high lifting force and tilt out force, and offering maximum stability in log handling applications, select from a choice of general purpose grapples, sorting grapples and unloading grapples.

Slag handling

To protect you and your machine, and ensure durable performance in hot slag handling applications, Volvo offers a selection of specially-designed machine options and attachments.

Block handling

For high lifting force and maximum stability in block handling applications, choose from a range of robust Volvo attachments, including block forks, breaker tine and clearing rakes.

"Taking 27 tonnes (59.525 lbs) blocks from the quarry floor to the loading area is not a problem with the L220H."

Giuseppe Sanna, Director of Production,
MARMI DAINO REAL, Italy

TORQUE PARALLEL LINKAGE

For strength in demanding applications, Volvo's unique Torque Parallel (TP) linkage provides high breakout torque and ultimate parallel movement throughout the entire lifting range. The linkage offers stability during loading and carrying and allows easy filling of the buckets. For long lasting performance, the lifting arm has double sealing on each of the pins.

Strong and smart machines

Built with the operator in mind

- Adjustable seat
- Choice of three hydraulic modes
- Comfort Drive Control (option)
- Radar detect system (option)
- Remote-control door opener (option)
- Collision Mitigation System (option)

Up to 15% greater fuel efficiency

- Rimpull control
- New generation OptiShift
- Reverse By Braking
- Eco pedal
- Dry P-brake

Boost your productivity by up to 10%

- New load sensing hydraulics
- New transmission and gear ratio
- Bucket leveling function
- Load Assist, powered by Volvo Co-Pilot
- Choice of single or multi levers

Maximize your uptime

- Quicker hydraulic oil fill thanks to new mounted nipple
- Tilting cab - 30° or 70°
- Electronically-operated engine hood
- Brake wear indicators
- Outboard mounted brakes
- Replaceable breather filters

Fully loaded

- Unique Torque Parallel linkage
- Block handling
- Slag handling
- Log handling
- Rehandling – up to 5% greater productivity

Here to support you

- Genuine Volvo Parts
- Operator training
- ActiveCare

Built with the operator in mind

Built with the customer, for the customer, the L150H, L180H and L220H boast a range of features to enhance your operating experience. For increased productivity, the Volvo cab can be customized to your preference.

Visibility

To enhance visibility, the H-series wheel loaders can be equipped with a rear-view camera. Optimized by the radar detect system, which works with the camera to give a visual and audible alert to the operator of unseen on-coming objects. Orange handrails and steps have been placed on the machine, intended to stand out to the operators and maintenance staff.

Comfort Drive Control

To reduce operator fatigue and improve productivity, Comfort Drive Control can be optionally integrated into your machine. The smart function gives you the opportunity to steer the machine from a small lever – particularly effective for fast-paced truck loading operations.

Operator training

Increase productivity and reduce fuel consumption by learning how to operate your wheel loader in the most efficient way. Volvo offers operator training, which encompasses the best practices in the industry.

Collision Mitigation System

The Collision Mitigation System has been developed to support the safe operation of Volvo Wheel Loaders. The optional system assists operators while working in reverse by automatically applying the brakes when the machine approaches an obstacle, helping to reduce the risk or consequences of collisions and enhance jobsite safety.

"I'm very pleased that we decided to go for these machines."

Wayne Flew, Operator,
Albion Stone (United Kingdom)

THE OPERATOR'S CHOICE

Operate in comfort from the best cab on the market, the Volvo cab can be equipped with a new adjustable seat. Access the cab safely and effortlessly using the steps and open the door with ease, thanks to the optional remote-control opener.

Keep moving

Offering strength in demanding applications, the L150H, L180H and L220H are built to last. Maintain the life of your machine with simple serviceability and proactive dealer support.

Durable by design

Designed with durability in mind, the H-series wheel loaders are built with a strong frame structure, ideally-matched to Volvo powertrain. The hydraulically-driven cooling fan regulates component temperature and can be automatically reversed to permit self-cleaning of the cooling units. For long service life, the brakes are outboard mounted and the front and rear axles are cooled by the oil circulation.

Here to support you

Maintain productivity and machine uptime with our range of readily available Genuine Volvo Parts, all backed by Volvo warranty. We're here to help you stay on track, offering flexible maintenance and repair plans.

ActiveCare

Keep your machine moving with ActiveCare. Volvo monitors machine health remotely, from our very own Uptime Center, helping to predict potential failures before they occur. This gives you more time to focus on your operation, helping to reduce unplanned downtime and minimize repair costs.

"We have chosen Volvo machines based on quality, trust and service."

Gerard den Hartog, CEO,
Gebroeders Den Hartog (Netherlands)

INDUSTRY LEADING SERVICEABILITY

For simple servicability, the Volvo cab can be tilted to either a 30º or 70º angle, and the engine hood is operated electronically. Stay one step ahead and check the condition of your brakes using the brake wear indicators, placed on the wheels. To prevent dirt and moisture from entering components, each has replaceable breather filters, located remotely.

Volvo L150H, L180H, L220H in detail

Engine

V-ACT Stage IIIA, 13 liters (3,4 gal), 6-cylinder straight turbocharged diesel engine with 4 valves per cylinder, overhead camshaft and electonically controlled unit injectors. The engine has wet replacable cylinder liners and replacable valve guides and valve seats. The throttle applications is transmitted electrically from the throttle pedal or the optional hand throttle .
Air Cleaning: 2 stages.
Cooling system: Hydrostatic, electronically controlled fan and intercooler of the air-to-air type.

L150H

Engine	Volvo	D13E
Max. power at	r/min (r/s)	1.300 (21,7)
ECE R120 net	kW (hp)	224 (300)
ISO 9249, SAE J1349 net	kW (hp)	223 (299)
Max. torque at	r/min (r/s)	1.000 (167)
ECE R120 net	Nm (ft lbf)	1.999 (1.474)
ISO 9249, SAE J1349 net	Nm (ft lbf)	1.996 (1.472)
Economic working range	r/min (r/s)	800 - 1.600 (13,3 - 26,7)
Displacement	l (in³)	128 (781)

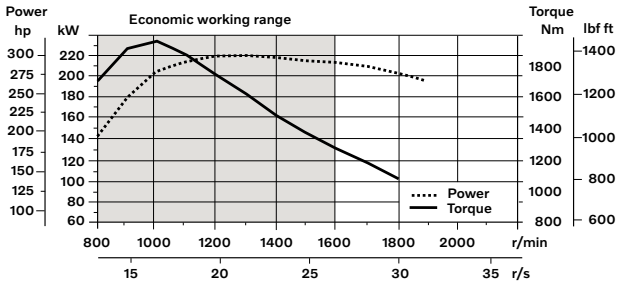
L180H

Engine	Volvo	D13E
Max. power at	r/min (r/s)	1.300 - 1.400 (21,7 - 23,3)
ECE R120 net	kW (hp)	251 (337)
ISO 9249, SAE J1349 net	kW (hp)	250 (335)
Max. torque at	r/min (r/s)	1.000 (167)
ECE R120 net	Nm (ft lbf)	2.071 (1.527)
ISO 9249, SAE J1349 net	Nm (ft lbf)	2.065 (1.523)
Economic working range	r/min (r/s)	800 - 1.600 (13,3 - 26,7)
Displacement	l (in³)	128 (781)

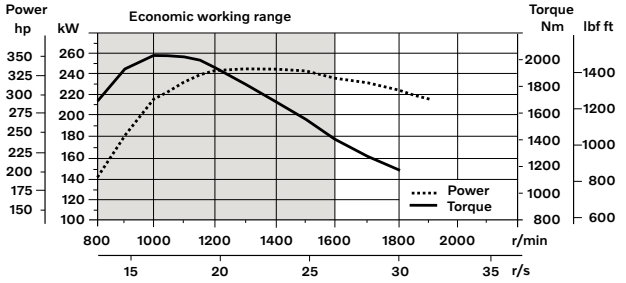
L220H

Engine	Volvo	D13E
Max. power at	r/min (r/s)	1.300 - 1.400 (21,7 - 23,3)
ECE R120 net	kW (hp)	280 (375)
ISO 9249, SAE J1349 net	kW (hp)	279 (374)
Max. torque at	r/min (r/s)	1.100 (183)
ECE R120 net	Nm (ft lbf)	2.276 (1.679)
ISO 9249, SAE J1349 net	Nm (ft lbf)	2.265 (1.671)
Economic working range	r/min (r/s)	800 - 1.600 (13,3 - 26,7)
Displacement	l (in³)	128 (781)

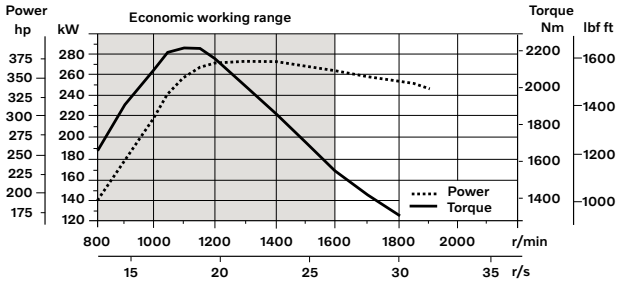
L150H



L180H



L220H



Drivetrain

Torque converter: Single-stage.
Transmission: Volvo countershaft transmission with single lever control. Fast and smooth shifting of gears with Pulse Width Modulation (PWM) valve. Torque converter with lockup.
Transmission: Volvo Automatic Power Shift (APS) with fully automatic shifting 1-4 and mode selector with 4 different gear shifting programs, including AUTO. Also equipped with Rimpull control to avoid wheel spin and optimize bucket filling.
Axles: Volvo fully floating drive shafts with planetary hub reductions and nodular iron axle housing. Fixed front axle and oscillating rear axle. 100% differential lock on the front axle. Optional: Limslip rear.

		L150H	L180H	L220H
Transmission	Volvo	HTL 223	HTL 223	HTL 310
Torque multiplication, stall ratio		2,09:1	2,09:1	2,02:1
Maximum speed, forward/reverse				
1st gear	km/h	6,1	6,1	6,7 / 6,6
2nd gear	km/h	12,6	12,6	11,6 / 11,4
3rd gear	km/h	23,5	23,5	21,7 / 21,4
4th gear	km/h	38	38	36,5 / 36,1
Measured with tires		26,5 R25 L3	26,5 R25 L3	29,5 R25 L4
Front axle/rear axle		Volvo/ AWB 40B/40C	Volvo/ AWB 40B/40B	Volvo/ AWB 50/41
Rear axle oscillation	± °	15	15	15
Ground clearance	mm	610	610	600
at oscillation	°	15	15	15

Electrical System

Central warning system: Contronic electrical system with central warning light and buzzer for following functions: - Serious engine fault - Low steering system pressure - Over speed warning engine - Interruption in communication (computer fault) Central warning light and buzzer with the gear engaged for the following functions. - Low engine oil pressure - High engine oil temperature - High charge air temperature - Low coolant level - High coolant temperature - High crank case pressure - Low transmission oil pressure - High transmission oil temperature - Low brake pressure - Engaged parking brake - Fault on brake charging - Low hydraulic oil level - High hydraulic oil temperature - Overspeeding in engaged gear - High brake cooling oil temperature front and rear axles.

		L150H	L180H	L220H
Voltage	V	24	24	24
Batteries	V	2 x 12	2 x 12	2 x 12
Battery capacity	Ah	2 x 170	2 x 170	2 x 170
Cold cranking capacity, approx	A	1.000	1.000	1.000
Alternator rating	W/A	2.280/80	2.280/80	2.280/80
Starter motor output	kW	7	7	7

Brake System

Service brake: Volvo dual-circuit system with nitrogen charged accumulators. Outboard mounted hydraulically operated, fully sealed oil circulation-cooled wet disc brakes. The operator can select automatic disengagement of the transmission when braking using Contronic.
Parking brake: Dry disc brake. Applied by spring force, electro-hydraulic release with a switch on the instrument panel.
Secondary brake: Dual brake circuits with rechargeable accumulators. One circuit or the parking brake fulfills all safety requirements.
Standard: The brake system complies with the requirements of ISO 3450.

		L150H	L180H	L220H
Number of brake discs per wheel front/rear		1/1	1/1	2/1
Accumulators	l	2 x 1,0 + 3 x 0,5	2 x 1,0 + 1 x 0,5	2 x 1,0 + 1 x 0,5

Cab

Instrumentation: All important information is centrally located in the operator's field of vision. Display for Contronic monitoring system.
Heater and defroster: Heater coil with filtered fresh air and fan with auto and 11 speeds. Defroster vents for all window areas.
Operator's seat: Operator's seat with adjustable suspension and retractable seatbelt. The seat is mounted on a bracket on the rear cab wall and floor. The forces from the retractable seatbelt are absorbed by the seat rails.
Standard: The cab is tested and approved according to ROPS (ISO 3471), FOPS (ISO 3449). The cab meets with requirements according to ISO 6055 (Operator overhead protection - Industrial trucks) and SAE J386 ("Operator Restraint System").
Refrigerant of the type R134a is used when this machine is equipped with air conditioning. Contains fluorinated greenhouse gas R134a, Global Warming Potential 1.430 t (3.152.610 lbs)CO2-eq

		L150H	L180H	L220H
Emergency exit: Use emergency hammer to break window				
Ventilation	m^3/ min	9	9	9
Heating capacity	kW	16	16	16
Air conditioning (optional)	kW	7,5	7,5	7,5

Lift Arm System

Torque Parallel linkage (TP-linkage) with high breakout torque and parallel action throughout the entire lifting range.

		L150H	L180H	L220H
Lift cylinders		2	2	2
Cylinder bore	mm	160	180	190
Piston rod diameter	mm	90	90	90
Stroke	mm	784	788	768
Tilt cylinder		1	1	1
Cylinder bore	mm	220	240	250
Piston rod diameter	mm	110	120	120
Stroke	mm	452	480	455

Volvo L150H, L180H, L220H in detail

Hydraulic system

System supply: Two load-sensing axial piston pumps with variable displacement. The steering function always has priority.
Valves: Double-acting 2-spool valve. The main valve is electro operated.
Lift function: The valve has four positions; raise, hold, lower and floating position. Inductive/magnetic automatic boom kickout can be switched on and off and is adjustable to any position between maximum reach and full lifting height.
Tilt function: The valve has three functions including rollback, hold and dump. Inductive/magnetic automatic tilt can be adjusted to the desired bucket angle.
Cylinders: Double-acting cylinders for all functions.
Filter: Full flow filtration through 10 micron (absolute) filter cartridge.

		L150H	L180H	L220H
Working pressure maximum, pump 1 for working hydraulic system	MPa (bar)	29 (290)	29 (290)	29 (290)
Flow	l/min (gal/min)	180 (476)	217 (573)	253 (668)
at	MPa (bar)	10 (100)	10 (100)	10 w(100)
engine speed	r/min (r/s)	1.900 (317)	1.900 (317)	1.900 (317)
Working pressure maximum, pump 2 for steering-, brake-, pilot- and working hydraulic system	MPa (bar)	31 (310)	31 (310)	31 (310)
Flow	l/min (gal/min)	202 (534)	202 (534)	202 (534)
at	MPa (bar)	10 (100)	10 (100)	10 (100)
engine speed	r/min (r/s)	1.900 (317)	1.900 (317)	1.900 (317)
Working pressure maximum, pump 3 for brake- and cooling fan system	MPa (bar)	25 (250)	25 (250)	25 (250)
Flow	l/min (gal/min)	77 (203)	77 (203)	77 (203)
at	MPa (bar)	10 (100)	10 (100)	10 (100)
engine speed	r/min (r/s)	1.900 (317)	1.900 (317)	1.900 (317)
Pilot system, working pressure	MPa (bar)	3,5 (35)	3,5 (35)	3,5 (35)
Cycle times				
Lift	s	59	64	68
Tilt	s	2	18	16
Lower, empty	s	37	33	32
Total cycle time	s	116	115	116

Steering System

Steering system: Load-sensing hydrostatic articulated steering.
System supply: The steering system has priority feed from a loadsensing axial piston pump with variable displacement.
Steering cylinders: Two double-acting cylinders.

		L150H	L180H	L220H
Steering cylinders		2	2	2
Cylinder bore	mm (in)	100 (39)	100 (39)	100 (39)
Rod diameter	mm (in)	60 (24)	60 (24)	60 (24)
Stroke	mm (in)	390 (154)	525 (207)	525 (207)
Working pressure	MPa (bar)	21 (210)	21 (210)	21 (210)
Maximum flow	l/min (gal/min)	188 (497)	188 (497)	191 (505)
Maximum articulation	± °	37	37	37

Service Refill

Service accessibility: Large, easy-to-open hood covering whole engine department, electrically operated. Fluid filters and component breather air filters promote long service intervals. A quick-fit adapter on the hydraulic tank provides faster hydraulic oil fill. Possibility to monitor, log and analyze data to facilitate troubleshooting.

		L150H	L180H	L220H
Fuel tank	l (gal)	366 (967)	366 (967)	366 (967)
Engine coolant	l (gal)	55 (145)	55 (145)	55 (145)
Hydraulic oil tank	l (gal)	156 (412)	156 (412)	226 (597)
Transmission oil	l (gal)	48 (127)	48 (127)	48 (127)
Engine oil	l (gal)	50 (132)	50 (132)	50 (132)
Axle oil front	l (gal)	46 (122)	46 (122)	77 (203)
Axle oil rear	l (gal)	55 (145)	55 (145)	71 (188)

Sound Level

		L150H	L180H	L220H
Sound level in cab according to ISO 6396/SAE J2105				
L_{pA}	dB	69	70	70
External sound level according to ISO 6395/SAE J2104				
L_{WA}	dB	108	108	109

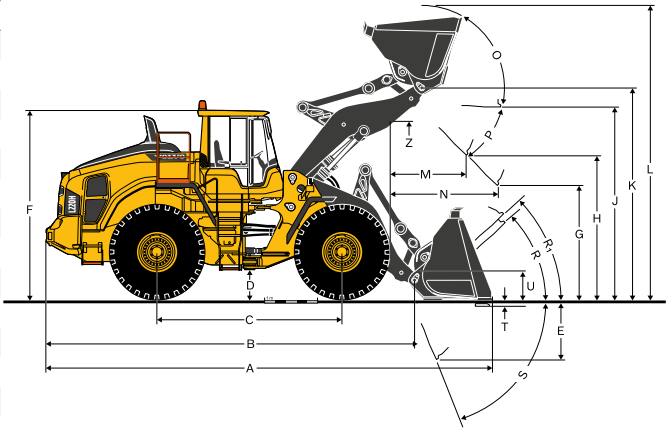
Specifications

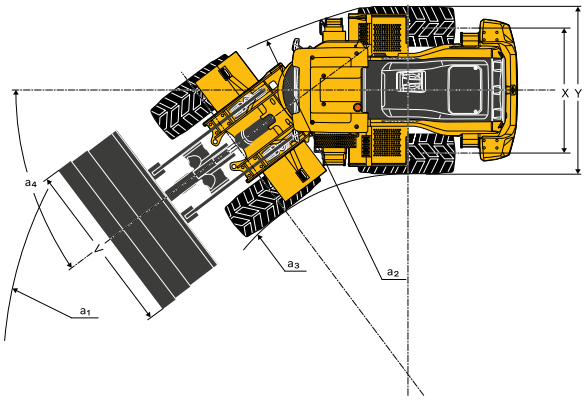
Tires L150H, L180H: 26.5 R25 L3. Tires L220H: 29.5 R25 L3

			Standard boom				Long boom			
			L150H		L180H	L220H	L150H		L180H	L220H
B	mm	ft in	7.070	23'2"	7.190	23'7"	7.480	24'6"	7.570	24'10"	7.620	25'0"	7.8	25'7"
C	mm	ft in	3.550	11'8"	3.550	11'8"	3.7	12'2"	3.550	11'8"	3.550	11'8"	3.7	12'2"
D	mm	ft in	480	1'7"	480	1'7"	530	1'9"	470	1'7"	490	1'7"	530	1'9"
F	mm	ft in	3.580	11'9"	3.580	11'9"	3.730	12'3"	3.570	11'9"	3.590	11'9"	3.730	12'3"
G	mm	ft in	2.134	7'0"	2.134	7'0"	2.134	7'0"	2.157	7'1"	2.133	7'0"	2.133	7'0"
J	mm	ft in	3.920	12'10"	4.060	13'4"	4.230	13'11"	4.490	14'9"	4.560	15'0"	4.6	15'1"
K	mm	ft in	4.340	14'3"	4.470	14'8"	4.660	15'3"	4.9	16'1"	4.970	16'4"	5.020	16'6"
O		°	58		57		56		59		55		56	
Pmax		°	50		49		48		49		49		48	
R		°	45		45		43		48		48		44	
R1*		°	48		48		47		53		53		49	
S		°	66		71		65		61		63		63	
T	mm	ft in	93	0'4"	131	0'5"	119	0'5"	149	0'6"	207	0'8"	121	0'5"
U	mm	ft in	520	1'8"	570	1'10"	600	2'0"	640	2'1"	660	2'2"	680	2'3"
X	mm	ft in	2.280	7'6"	2.280	7'6"	2.4	7'10"	2.280	7'6"	2.280	7'6"	2.4	7'10"
Y	mm	ft in	2.960	9'9"	2.960	9'9"	3.150	10'4"	2.960	9'9"	2.960	9'9"	3.150	10'4"
Z	mm	ft in	3.510	11'6"	3.810	12'6"	4.050	13'3"	3.960	13'0"	4.180	13'9"	4.380	14'4"
a2	mm	ft in	6.790	22'3"	6.790	22'3"	7.1	23'4"	6.790	22'3"	6.790	22'3"	7.1	23'4"
a3	mm	ft in	3.820	12'6"	3.820	12'6"	3.960	13'0"	3.820	12'6"	3.820	12'6"	3.960	13'0"
a4		±°	37		37		37		37		37		37	

* Carry position SAE

Bucket: L150H: 4.0 m³/5,2 yd³ GP STE PT SEG L180H: 4,6 m³/6yd³ GP STE PT SEG
L220H: 5.2 m³/6,8 yd³ GP STE PT SEG





L150H **Sales code:** WLA80713
Operating weight (incl. logging cw 1.140 kg / 2.513 lb): 25.660 kg / 56.571 lb
Operating load: 7.7 kg / 16.976 lb

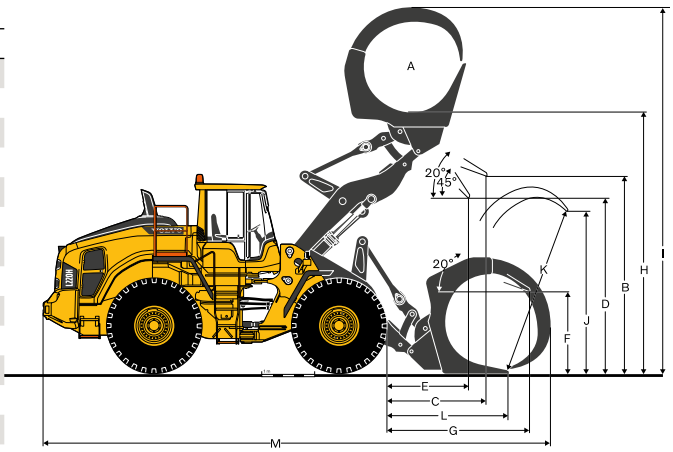
L180H **Sales code:** WLA80027
Operating weight (incl. logging cw 1.140 kg / 2.513 lb): 28.470 kg / 62.766 lb
Operating load: 8.710 kg / 19.22 lb

L220H **Sales code:** WLA80852
Operating weight (incl. logging cw 870 kg / 1.918 lb): 32.810 kg / 72.334 lb
Operating load: 10.080 kg / 22.223 lb

Where applicable, specifications and dimensions are according to ISO 7131, SAE J732, ISO 7546, SAE J742, ISO 14397, SAE J818.

Tires L150H, L180H: 775/65 R29 L3 | Tires L220H: 875/65 R29 L4

			L150H		L180H		L220H	
A	m²	yd²	3,1	3,7	3,5	4,2	4	4,8
B	mm	ft in	3.660	12'0"	3.870	12'8"	3.920	12'10"
C	mm	ft in	2.110	6'11"	2.150	7'1"	2.270	7'5"
D	mm	ft in	2.960	9'9"	3.150	10'4"	3.160	10'4"
E	mm	ft in	1.650	5'5"	1.720	5'8"	1.780	5'10"
F	mm	ft in	1.630	5'4"	1.700	5'7"	1.640	5'5"
G	mm	ft in	2.930	9'7"	3.040	10'0"	3.230	10'7"
H	mm	ft in	4.990	16'4"	5.170	17'0"	5.350	17'7"
I	mm	ft in	7.270	23'10"	7.610	25'0"	7.730	25'4"
J	mm	ft in	3.080	10'1"	3.370	11'1"	3.620	11'11"
K	mm	ft in	3.340	10'11"	3.710	12'2"	3.940	12'11"
L	mm	ft in	2.290	7'6"	2.410	7'11"	2.630	8'8"
M	mm	ft in	9.680	31'9"	9.980	32'9"	10.380	34'1"



Volvo L150H Specifications

L150H

Tires 26.5 R25 L3	REHANDLING				GENERAL PURPOSE			ROCK***	LIGHT MATERIAL	LONG BOOM*
										
	4,0 m³ STE P BOE	**4,4 m³ STE P BOE**	**4,8 m³ STE P BOE**	**5,2 m³ STE P BOE**	**4,0 m³ STE P T SEG**	**4,4 m³ STE P T SEG**	**4,5 m³ STE P T SEG**	**3,5 m³ SPN P T SEG**	**6,8 m³ LM P**	**4,0 m³ STE P T SEG**

Volume, heaped ISO/SAE	m³	yd³	4,0	5,2	4,4	5,8	4,8	6,3	5,2	6,8	4,0	5,2	4,4	5,8	4,5	5,9	3,5	5,6	6,8	8,9	4,0	5,2
Volume at 110% fill factor	m³	yd³	4,4	5,8	4,8	6,3	5,3	6,9	5,7	7,5	4,4	5,8	4,8	6,3	5,0	6,5	3,9	5,1	7,5	9,8	4,4	5,8
Static tipping load, straight	kg	lb	20.50	45.195	20.230	44.599	19.950	43.982	19.80	43.651	1810	39.94	17.690	390	17.670	38.956	18.730	41.293	16.360	36.068	-3.550	-7.826
at 35° turn	kg	lb	18.320	40.389	18.050	39.793	17.780	39.198	17.630	38.867	16.190	35.693	15.780	34.789	15.760	34.745	16.730	36.883	14.520	32.012	-3.270	-7.29
at full turn	kg	lb	18.070	39.837	17.810	39.264	17.530	38.647	17.380	38.316	15.970	35.28	15.560	34.34	15.550	34.282	16.50	36.376	14.310	31.548	-3.230	-7.121
Breakout force	kN	lbf	201,3	45.254	191,7	43.096	183,2	41.185	182,7	41.073	202	45.411	192	43.163	184	41.365	188	42.264	140	31.473	+9	+2.023
A	mm	ft in	8.60	28'3"	8.680	28'6"	8.750	28'8"	8.750	28'8"	8.790	28'10"	8.860	29'1"	8.930	29'4"	8.850	29'0"	9.230	30'3"	+520	+18"
E	mm	ft in	1.230	4'0"	1.30	4'3"	1.360	4'6"	1.370	4'6"	1.40	4'7"	1.460	4'9"	1.520	4'12"	1.450	4'9"	1.790	5'10"	+10	0'0"
H**)	mm	ft in	3.020	9'11"	2.970	9'9"	2.920	9'7"	2.920	9'7"	2.890	9'6"	2.850	9'4"	2.80	9'2"	2.870	9'5"	2.620	8'7"	+570	+1'10"
L	mm	ft in	5.720	18'9"	5.770	18'11"	5.880	19'3"	5.870	19'3"	5.880	19'3"	5.990	19'8"	6.040	19'10"	5.970	19'7"	6.140	20'2"	+570	+1'10"
M**)	mm	ft in	1.220	4'0"	1.270	4'2"	1.320	4'4"	1.320	4'4"	1.360	4'6"	1.410	4'8"	1.450	4'9"	1.420	4'8"	1.70	5'7"	-20	-0'1"
N**)	mm	ft in	1.80	5'11"	1.830	6'0"	1.860	6'1"	1.860	6'1"	1.880	6'2"	1.910	6'3"	1.930	6'4"	1.930	6'4"	1.960	6'5"	+450	+1'6"
V	mm	ft in	3.20	10'6"	3.20	10'6"	3.20	10'6"	3.40	11'2"	3.230	10'7"	3.20	10'6"	30	9'10"	3.230	10'7"	3.20	10'6"	0	0'0"
a, clearance circle	mm	ft in	14.640	48'0"	14.670	48'2"	14.70	48'3"	14.890	48'10"	14.750	48'5"	14.760	48'5"	14.6	47'11"	14.80	48'7"	14.940	49'0"	+340	+11"
Operating weight	kg	lb	25.090	55.314	25.30	55.777	25.50	56.218	25.620	56.482	24.090	53.19	24.450	53.93	24.420	53.837	25.320	55.821	24.920	54.939	+410	+904

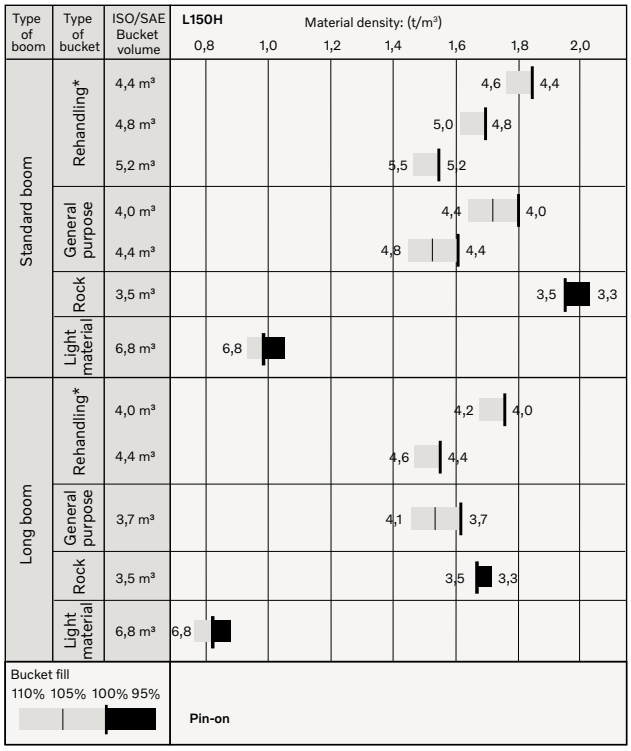
*) Measured with 4,0 m³ (5,2 yd³)GP STE P T SEG bucket Note: This only applies to genuine Volvo attachments.
**) Measured to the tip of the bucket teeth or bolt-on edge. Dump height to bucket edge measured at 45° dump angle. (Spade nose buckets at 42°.)
***) Measured with 26.5 R25 L5 tires

Bucket Selection Chart

The chosen bucket is determined by the density of the material and the expected bucket fill factor. The actual bucket volume is often larger than the rated capacity, due to the features of the TP linkage, including an open bucket design, good rollback angles in all positions and good bucket filling performance. The example represents a standard boom configuration.
Example: Sand and gravel. Fill factor ~ 105%. Density 1,6 t/m³ (2.204lbs/yd³).
Result: The 4,0 m³ (5,2 yd³) bucket carries 4,2 m³ (5,5yd³). For optimum stability always consult the bucket selection chart.

Material	Bucket fill, %		Material density		ISO/SAE bucket volume		Actual volume	
			t/m³	lb/yd³	m3	yd³	m³	yd³
Earth/Clay	~ 110		~ 1,6 ~ 1,5	~ 2.698 ~ 2.530	4,0 4,4	5,2 5,8	~ 4,4 ~ 4,8	~ 5,8 ~ 6,3
Sand/ Gravel	~ 105		~ 1,6 ~ 1,5	~ 2.698 ~ 2.530	4,0 4,4	5,2 5,8	~ 4,2 ~ 4,6	~ 5,5 ~ 6,0
Aggregate	~ 100		~ 1,8 ~ 1,7 ~ 1,5	~ 3.035 ~ 2.867 ~ 2.530	4,4 4,8 5,2	5,8 6,3 6,8	~ 4,4 ~ 4,8 ~ 5,2	~ 5,8 ~ 6,3 ~ 6,8
Rock	≤100		~ 1,7	~ 2.867	3,5	4,6	~ 3,5	~ 4,6

The size of rock buckets is optimized for optimal penetration and filling capability rather than the density of the material.



How to read bucket fill factor

* Including counterweight

Supplemental Operating Data

			Standard boom						Long boom					
Tires 26.5 R25 L3			26.5 R25 L4		26.5 R25 L5		775/65 R29 L3		26.5 R25 L4		26.5 R25 L5		775/65 R29 L3	
Width over tires	mm	in	+5	+0,2	+30	+1,2	+180	+7,1	+5	+0,2	+30	+1,2	+180	+7,1
Ground clearance	mm	in	+18	+0,7	+30	+1,2	+10	+0,4	+18	+0,7	+30	+1,2	+10	+0,4
Tipping load, full turn	kg	lb	+250	+551	+760	+1.676	+590	+1.300	+220	+485	+640	+1.411	+500	+1.102
Operating weight	kg	lb	+400	+882	+1.060	+2.337	+760	+1.676	+400	+882	+1.050	+2.315	+750	+1.653

Volvo L180H Specifications

L180H

Tires 26.5 R25 L3			REHANDLING								GENERAL PURPOSE						ROCK***		LIGHT MATERIAL		LONG BOOM*	
																				
			4,8 m³ STE P BOE		5,2 m³ STE P BOE		5,5 m³ STE P BOE		5,8 m³ STE P BOE		4,4 m³ STE P T SEG		4,6 m³ STE P T SEG		4,8 m³ STE P T SEG		4,2 m³ SPN P T SEG		7,8 m³ LM P		4,6 m³ STE P T SEG	
Volume, heaped ISO/SAE	m³	yd³	4,8	6,3	5,2	6,8	5,5	7,2	5,8	7,6	4,4	5,8	4,6	6	4,8	6,3	4,2	5,5	7,8	10,2	4,6	6
Volume at 110% fill factor	m³	yd³	5,3	6,9	5,7	7,5	6,1	7,9	6,4	8,3	4,8	6,3	5,1	6,6	5,3	6,9	4,6	6	8,6	11,2	5,1	6,6
Static tipping load, straight	kg	lb	23.670	52.190	23.520	51.860	23.350	51.480	23.210	51.180	21.540	47.50	21.560	47.540	21.360	47.090	22.250	49.060	20.430	45.040	-3.820	-8.420
at 35° turn	kg	lb	21.010	46.330	20.860	460	20.70	45.630	20.570	45.350	19.140	42.20	19.150	42.230	18.960	41.810	19.750	43.560	18.070	39.850	-3.480	-7.680
at full turn	kg	lb	20.710	45.660	20.560	45.330	20.390	44.970	20.260	44.680	18.860	41.60	18.880	41.620	18.690	41.20	19.470	42.930	17.80	39.260	-3.450	-7.590
Breakout force	kN	lbf	224,9	50.570	224,2	50.420	216,2	48.60	210,0	47.230	236,0	53.060	236,0	53.060	226,4	50.910	212,6	47.790	173,5	390	+3,9	+870
A	mm	ft in	8.890	29'2"	8.890	29'2"	8.960	29'5"	9.010	29'7"	90	29'6"	90	29'6"	9.070	29'9"	9.140	30'0"	9.360	30'8"	+470	+17"
E	mm	ft in	1.430	4'8"	1.430	4'8"	1.490	4'11"	1.540	5'1"	1.530	5'0"	1.530	5'0"	1.590	5'3"	1.650	5'5"	1.860	6'1"	+20	+0.1"
H**)	mm	ft in	3.060	10'0"	3.050	10'0"	3.010	9'11"	2.970	9'9"	2.990	9'10"	2.990	9'10"	2.940	9'8"	2.910	9'7"	2.690	8'10"	+500	+1'8"
L	mm	ft in	6.010	19'9"	6.010	19'9"	6.040	19'10"	6.110	20'0"	6.130	20'1"	6.170	20'3"	6.180	20'3"	6.320	20'9"	6.30	20'8"	+500	+1'8"
M**)	mm	ft in	1.330	4'4"	1.330	4'4"	1.370	4'6"	1.410	4'8"	1.420	4'8"	1.420	4'8"	1.460	4'10"	1.520	5'0"	1.610	5'3"	+20	+0.1"
N**)	mm	ft in	1.960	6'5"	1.960	6'5"	1.990	6'6"	20	6'7"	2.020	6'7"	2.020	6'7"	2.040	6'8"	2.080	6'10"	2.050	6'9"	+410	+1'4"
V	mm	in	3.20	125"	3.40	133"	3.40	133"	3.40	133"	3.20	125"	3.20	125"	3.20	125"	3.230	127"	3.40	133"	-	-
a_1 clearance circle	mm	ft in	14.80	48'7"	14.990	49'2"	15.010	49'3"	15.040	49'4"	14.850	48'9"	14.850	48'9"	14.880	48'10"	14.960	49'1"	15.220	49'11"	+350	+1'2"
Operating weight	kg	lb	28.070	61.890	28.190	62.160	28.290	62.380	28.360	62.540	27.020	59.590	27.060	59.670	27.120	59.80	28.440	62.70	27.470	60.570	+270	+590

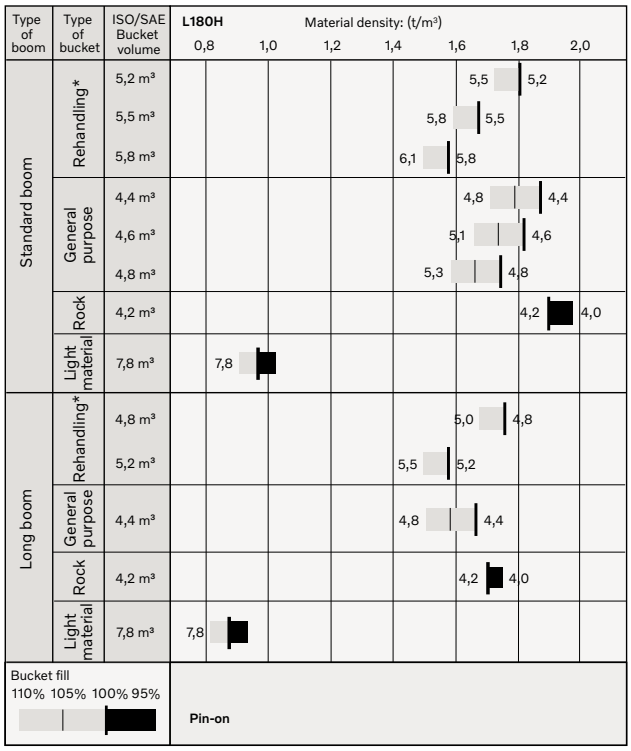
*) Measured with 4,6 m³ (6,0 yd³) GP STE P T SEG bucket Note: This only applies to genuine Volvo attachments.
**) Measured to the tip of the bucket teeth or bolt-on edge. Dump height to bucket edge measured at 45° dump angle. (Spade nose buckets at 42°.)
***) Measured with 26.5 R25 L5 tires

Bucket Selection Chart

The chosen bucket is determined by the density of the material and the expected bucket fill factor. The actual bucket volume is often larger than the rated capacity, due to the features of the TP linkage, including an open bucket design, good rollback angles in all positions and good bucket filling performance. The example represents a standard boom configuration.
Example: Sand and gravel. Fill factor ~ 105%. Density 1,6 t/m³ (2.204lbs/yd³).
Result: The 4,6 m³ (6yd³) bucket carries 4,8 m³(6,3yd³) For optimum stability always consult the bucket selection chart.

Material	Bucket fill, %		Material density		ISO/SAE bucket volume		Actual volume	
			t/m³	lb/yd³	m³	yd³	m³	yd³
Earth/Clay	~ 110		~ 1,7 ~ 1,6 ~ 1,5	~ 2.867 ~ 2.698 ~ 2.530	4,9 5,2 5,4	6,4 6,8 7,1	~ 4,8 ~ 5,1 ~ 5,3	~ 6,3 ~ 6,7 ~ 6,9
Sand/ Gravel	~ 105		~ 1,7 ~ 1,6 ~ 1,5	~ 2.867 ~ 2.698 ~ 2.530	4,4 4,6 4,8	5,8 6,0 6,3	~ 4,6 ~ 4,8 ~ 5,1	~ 6,0 ~ 6,3 ~ 6,7
Aggregate	~ 100		~ 1,8 ~ 1,7 ~ 1,6	~ 3.035 ~ 2.867 ~ 2.698	5,2 5,5 5,8	6,8 7,2 7,6	~ 5,2 ~ 5,5 ~ 5,8	~ 6,8 ~ 7,2 ~ 7,6
Rock	≤100		~ 1,7	~ 2.867	4,3	5,6	~ 4,3	~ 5,6

The size of rock buckets is optimized for optimal penetration and filling capability rather than the density of the material.



How to read bucket fill factor

* Including counterweight

Supplemental Operating Data

Tires 26.5 R25 L3			Standard boom						Long boom					
			26.5 R25 L4		26.5 R25 L5		775/65 R29 L3		26.5 R25 L4		26.5 R25 L5		775/65 R29 L3	
Width over tires	mm	in	+5	+0,2	+30	+1,2	+130	+5,1	+5	+0,2	+30	+1,2	+130	+5,1
Ground clearance	mm	in	+18	+0,7	+40	+1,6	+10	+0,4	+18	+0,7	+40	+1,6	+10	+0,4
Tipping load, full turn	kg	lb	+280	+617	+770	+30,3	+600	+23,6	+250	+551	+760	+29,9	+530	+20,9
Operating weight	kg	lb	+400	+882	+1.050	+2.315	+920	+36,2	+400	+882	+1.050	+2.315	+1.120	+44,1

Volvo L220H Specifications

L220H

Tires 29.5 R25 L3			REHANDLING								GENERAL PURPOSE						ROCK***		LIGHT MATERIAL		LONG BOOM*	
			5,6 m³ (7,3 yd³) STE P BOE		5,9 m³ (7,7 yd³) STE P BOE		6,3 m³ (8,2 yd³) STE P BOE		4,9 m³ (6,4 yd³) STE P T SEG		5,2 m³ (6,8 yd³) STE P T SEG		5,6 m³ (7,3 yd³) STE P T SEG		4,5 m³ (5,9 yd³) SPN P T SEG		5,0 m³ (6,5 yd³) SPN P T SEG		8,2 m³ (10,7 yd³) LM P		5,2 m³ (6,8 yd³) STE P T SEG	
Volume, heaped ISO/SAE	m³	yd³	5,6	7,3	5,9	7,7	6,3	8,2	4,9	6,4	5,2	6,8	5,6	7,3	4,5	5,9	5,0	6,5	8,2	10,7	5,2	6,8
Volume at 110% fill factor	m³	yd³	6,2	8,1	6,5	8,5	6,9	9,1	5,4	7	5,7	7,5	6,2	8,1	5,0	6,5	5,5	7,2	9,0	11,8	5,7	7,5
Static tipping load, straight	kg	lb	25.270	55.710	25.140	55.430	24.960	55.030	23.960	52.840	23.90	52.70	23.6	52.030	24.90	54.90	23.770	52.410	22.820	50.310	-2.890	-6.370
at 35° turn	kg	lb	22.420	49.430	22.290	49.160	22.120	48.770	21.280	46.930	21.220	46.790	20.940	46.160	22.150	48.840	21.090	46.50	20.190	44.510	-2.650	-5.840
at full turn	kg	lb	22.090	48.720	21.970	48.440	21.8	48.060	20.980	46.250	20.910	46.110	20.630	45.50	21.840	48.150	20.780	45.830	19.890	43.850	-2.620	-5.780
Breakout force	kN	lbf	228.9	51.460	223.1	50.150	215.0	48.330	255.9	57.530	244.5	54.990	229.0	51.490	211.5	47.560	196.5	44.190	190.8	42.90	+3.4	+670
A	mm	ft in	9.270	30'5"	9.310	30'7"	9.380	30'9"	9.310	30'7"	9.350	30'8"	9.460	31'0"	9.580	31'5"	9.730	31'11"	9.580	31'5"	+310	+1'0"
E	mm	ft in	1.470	4'10"	1.510	4'11"	1.570	5'2"	1.510	4'11"	1.540	5'1"	1.640	5'5"	1.730	5'8"	1.860	6'1"	1.750	5'9"	-30	-0.1"
H**)	mm	ft in	3.160	10'4"	3.130	10'3"	3.080	10'1"	3.130	10'3"	3.110	10'3"	3.040	9'11"	3.030	9'11"	2.930	9'7"	2.910	9'7"	+370	+1'3"
L	mm	ft in	6.260	20'6"	6.290	20'7"	6.370	20'11"	6.370	20'11"	6.440	21'2"	6.440	21'1"	6.450	21'2"	6.510	21'4"	6.450	21'2"	+360	+1'2"
M**)	mm	ft in	1.40	4'7"	1.440	4'9"	1.480	4'10"	1.430	4'8"	1.470	4'10"	1.560	5'1"	1.70	5'7"	1.80	5'11"	1.610	5'3"	-30	-0.1"
N**)	mm	ft in	2.10	6'11"	2.120	7'0"	2.150	7'1"	2.120	6'11"	2.160	7'1"	2.20	7'3"	2.250	7'5"	2.30	7'6"	2.180	7'2"	+270	+0'11"
V	mm	in	3.40	133"	3.40	133"	3.40	133"	3.430	135"	3.40	133"	3.40	133"	3.430	135"	3.430	135"	3.70	145"	-	-
a_1 clearance circle	mm	ft in	15.570	51'1"	15.590	51'2"	15.620	51'3"	15.610	51'3"	15.610	51'3"	15.670	51'5"	15.770	51'9"	15.850	52'0"	16.020	52'7"	+260	+0'10"
Operating weight	kg	lb	31.950	70.440	32.020	70.610	32.130	70.850	31.160	68.710	31.190	68.770	31.260	68.920	32.710	72.130	33.130	73.050	31.660	69.80	+380	+860

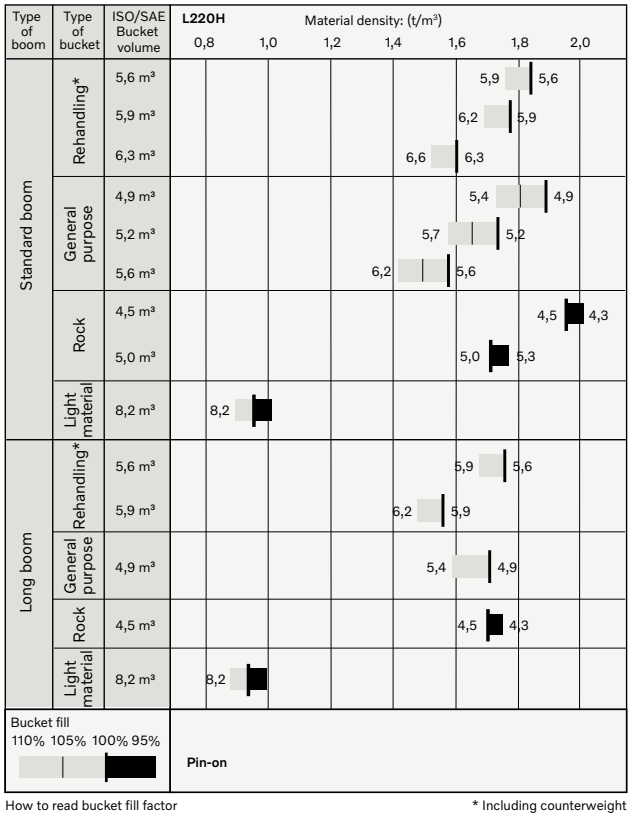
*) Measured with 5.2 m³ (6.8 yd³) GP STE P T SEG bucket Note: This only applies to genuine Volvo attachments.
**) Measured to the tip of the bucket teeth or bolt-on edge. Dump height to bucket edge measured at 45° dump angle. (Spade nose buckets at 42°.)
***) Measured with 29.5 R25 L5 tires

Bucket Selection Chart

The chosen bucket is determined by the density of the material and the expected bucket fill factor. The actual bucket volume is often larger than the rated capacity. due to the features of the TP linkage. including an open bucket design. good rollback angles in all positions and good bucket filling performance. The example represents a standard boom configuration.
Example: Sand and gravel. Fill factor ~ 105%. Density 1,6 t/m³ (2.204lbs/yd³).
Result: The 5,2 m³ (6,8yd³) bucket carries 5.5 m³ (7,2yd³). For optimum stability always consult the bucket selection chart.

Material	Bucket fill. %	Material density		ISO/SAE bucket volume		Actual volume	
		t/m³	lb/yd³	m³	yd³	m³	yd³
Earth/Clay	~ 110	~ 1,6	~2.698	4,9	6,4	~ 5,4	~ 7,1
		~ 1,5	~2.530	5,2	6,8	~ 5,7	~ 7,5
		~ 1,4	~2.361	5,4	7,1	~ 5,9	~ 7,7
Sand/ Gravel	~ 105	~ 1,7	~2.867	4,9	6,4	~ 5,1	~ 6,7
		~ 1,6	~2.698	5,2	6,8	~ 5,5	~ 7,2
		~ 1,5	~2.530	5,4	7,1	~ 5,7	~ 7,5
Aggregate	~ 100	~ 1,8	~3.035	5,6	7,3	~ 5,6	~ 7,3
		~ 1,7	~2.867	5,9	7,7	~ 5,9	~ 7,7
		~ 1,6	~2.698	6,3	8,2	~ 6,3	~ 8,2
Rock	≤100	~ 1,7	~2.867	4,5	5,9	~ 4,5	~ 5,9

The size of rock buckets is optimized for optimal penetration and filling capability rather than the density of the material.



How to read bucket fill factor

* Including counterweight

Supplemental Operating Data

			Standard boom						Long boom					
Tires 29.5 R25 L4			29.5 R25 L3		29.5 R25 L5		875/65 R29 L4		29.5 R25 L3		29.5 R25 L5		875/65 R29 L4	
Width over tires	mm	in	-20	-0,8	+35	+1,4	+95	+3,7	-20	-0,8	+35	+1,4	+95	+3,7
Ground clearance	mm	in	±0	±0	+40	+1,6	-10	-0,4	±0	±0	+40	+1,6	-20	-0,8
Tipping load, full turn	kg	lb	-100	-3,9	+1.010	+39,8	+180	+7,1	-90	-3,5	+930	+36,6	+180	+7,1
Operating weight	kg	lb	-80	-3,2	+1.490	+58,7	+650	+25,6	-80	3,2	+1.500	+59,1	+650	+25,6

Equipment

STANDARD EQUIPMENT

	L150H	L180H	L220H
Engine			
Two stage air cleaner, pre-cleaner, primary and secondary filter	•	•	•
Preheating of induction air	•	•	•
Fuel pre-filter with water trap	•	•	•
Fuel filter	•	•	•
Crankcase breather oil trap	•	•	•
Exterior radiator air intake protection	•	•	•
Drivetrain			
Automatic Power Shift	•	•	•
Fully automatic gearshifting, 1-4	•	•	•
PWM-controlled gearshifting	•	•	•
Forward and reverse switch by hydraulic lever console	•	•	•
Rimpull control	•	•	•
Indicator glass for transmission oil level	•	•	•
Differentials: Front, 100% hydraulic diff lock. Rear, conventional.	•	•	•
Optishift with Lock-up, RBB	•	•	•
Lock-up first gear	•	•	•
Electrical system			
24 V, pre-wired for optional accessories	•	•	•
Alternator 24V/80A/2280W	•	•	•
Battery disconnect switch	•	•	•
Fuel gauge	•	•	•
Hour meter	•	•	•
Electric horn	•	•	•
Instrument cluster: Fuel level Diesel Exhaust Fluid/AdBlue level Transmission temperature Coolant temperature Instrument lighting	•	•	•
Lighting: Twin halogen front headlights with high and low beams Parking lights Double brake and tail lights Turn signals with flashing hazard light function Halogen work lights (2 front and 2 rear)	•	•	•

STANDARD EQUIPMENT

	L150H	L180H	L220H
Contronic monitoring system			
Monitoring and logging of machine data	•	•	•
Contronic display	•	•	•
Fuel consumption	•	•	•
Diesel Exhaust Fluid/AdBlue consumption	•	•	•
Ambient temperature	•	•	•
Clock	•	•	•
Test function for warning and indicator lights	•	•	•
Brake test	•	•	•
Test function, sound level at max fan speed	•	•	•
Warning and indicator lights: Battery charging Parking brake	•	•	•
Warning and display message: Regeneration Engine coolant temperature Charge-air temperature Engine oil temperature Engine oil pressure Transmission oil temperature Transmission oil pressure Hydraulic oil temperature Brake pressure Parking brake applied Brake charging Overspeed at direction change Axle oil temperature Steering pressure Crankcase pressure Attachment lock open Safety Belt Warning	•	•	•
Level warnings: Fuel level Diesel Exhaust Fluid/AdBlue level Engine oil level Engine coolant level Transmission oil level Hydraulic oil level Washer fluid level	•	•	•
Engine torque reduction in case of malfunction indication: High engine coolant temperature High engine oil temperature Low engine oil pressure High crankcase pressure High charge-air temperature	•	•	•
Engine shutdown to idle in case of malfunction indication: High transmission oil temperature Slip in transmission clutches	•	•	•
Keypad, background lit	•	•	•
Start interlock when gear is engaged	•	•	•

Equipment

STANDARD EQUIPMENT	L150H	L180H	L220H
Hydraulic system			
Main valve, double acting 2-spool with hydraulic pilots	•	•	•
Variable displacement axial piston pumps (3) for: 1 Working hydraulics, Pilot hydraulics and Brake system 2 Working hydraulics, Pilot hydraulics, Steering and Brake system 3 Cooling fan and Brake system	•	•	•
Electro-hydraulic servo controls	•	•	•
Electronic hydraulic lever lock	•	•	•
Automatic boom kick-out	•	•	•
Automatic bucket positioner	•	•	•
Double-acting hydraulic cylinders	•	•	•
Indicator glass for hydraulic oil level	•	•	•
Hydraulic oil cooler	•	•	•
Brake system			
Dual brake circuits	•	•	•
Dual brake pedals	•	•	•
Secondary brake system	•	•	•
Parking brake, electro-hydraulic	•	•	•
Brake wear indicators	•	•	•
Cab			
ROPS (ISO 3471), FOPS (ISO 3449)	•	•	•
Single key kit door/start	•	•	•
Acoustic inner lining	•	•	•
Cigarette lighter, 24 V power outlet	•	•	•
Lockable door	•	•	•
Cab heating with fresh air inlet and defroster	•	•	•
Fresh air inlet with two filters	•	•	•
Automatic heat control	•	•	•
Floor mat	•	•	•
Dual interior lights	•	•	•
Interior rear-view mirrors	•	•	•
Dual exterior rear-view mirrors	•	•	•
Sliding window, right side	•	•	•
Tinted windshield glass	•	•	•
Retractable seatbelt (SAE J386)	•	•	•
Adjustable steering wheel	•	•	•
Storage compartment	•	•	•
Document pocket	•	•	•
Sun visor	•	•	•
Beverage holder	•	•	•
Windshield washer front and rear	•	•	•
Windshield wipers front and rear	•	•	•
Interval function for front and rear wipers	•	•	•

STANDARD EQUIPMENT	L150H	L180H	L220H
Service and Maintenance			
Engine oil remote drain and fill	•	•	•
Transmission oil remote drain and fill	•	•	•
Lubrication manifolds, ground accessible	•	•	•
Pressure check connections: transmission and hydraulic, quick-connects	•	•	•
Quick-fit hydraulic oil fill	•	•	•
Tool box, lockable	•	•	•
External equipment			
Orange hand rails	•	•	•
Fenders, front and rear	•	•	•
Viscous cab mounts	•	•	•
Rubber engine and transmission mounts	•	•	•
Frame, joint lock	•	•	•
Vandalism lock prepared for Engine compartment Radiator grille	•	•	•
Lifting eyes	•	•	•
Tie-down eyes	•	•	•
Fabricated counterweight	•	•	•
Counterweight, pre-drilled for optional guards	•	•	•

OPTIONAL EQUIPMENT

	L150H	L180H	L220H
Engine			
Air pre-cleaner, cyclone type	•	•	•
Air pre-cleaner, oil-bath type	•	•	•
Air pre-cleaner, turbo type	•	•	•
Engine auto shutdown	•	•	•
Engine delayed shutdown	•	•	•
Engine block heater 230V/110V	•	•	•
Fuel fill strainer	•	•	•
Fuel heater	•	•	•
Hand throttle control	•	•	•
Max. fan speed, hot climate	•	•	•
Radiator, corrosion-protected	•	•	•
Reversible cooling fan	•	•	•
Reversible cooling fan and axle oil cooler	•	•	•
Tires			
26.5 R25	•	•	–
775/65 R29	•	•	–
29.5 R25	–	–	•
875/65 R29	–	–	•
Drivetrain			
Diff lock front 100%, Limited Slip rear	•	•	•
Speed limiter	•	•	•
Wheel/axle seal guards	•	•	•
Electrical system			
Anti-theft device	•	•	•
Emergency stop	•	•	•
Locking device, Tag out Lock out	•	•	•
Headlights, assym. left	•	•	•
License plate holder, lighting	•	•	•
Rear vision system, colour LCD monitor in the cab	•	•	•
Rear view mirrors, Long arm	•	•	•
Rear view mirrors, adjustable, el.heated, Long arm	•	•	•
Reduced function working lights, reverse gear activated	•	•	•
Reverse alarm, audible	•	•	•
Reverse alarm, white noise	•	•	•
Reverse warning light, strobe lighting	•	•	•
Seatbelt indicator, external	•	•	•
Shortened headlight support brackets	•	•	•
Side marker lamps	•	•	–
Warning beacon LED	•	•	•
Warning beacon LED automatic	•	•	•
LED Head Light	•	•	•
LED tail light	•	•	•
LED working lights, attachments	•	•	•
LED working lights on cab, front and rear	•	•	•
LED working lights on cab, front, 2 alt. 4 LED lamps	•	•	•
LED working lights on cab, rear, 2 alt. 4 LED lamps	•	•	•
LED working lights, rear in grille, 2 LED lamps	•	•	•
LED working lights, front above head lamps, 2 LED lamps	•	•	•
LED work lights, side on cab, 4 LED lamps	•	•	•
LED light packages	•	•	•
Working lights halogen, attachments	•	•	•
Working lights on cab halogen, front and rear	•	•	•
Working lights on cab halogen, rear	•	•	•
Electrical distribution unit 24 volt	•	•	•
Alternator 120 amp, heavy-duty	•	•	•
Radar detect system	•	•	•
Forward camera, colour	•	•	•
Parking brake alarm, audible for air susp seats	•	•	•
Jump start connector, NATO-Type	•	•	•
Max Boom height	•	•	•
Can Bus Interface	•	•	•
Delayed Engine Shutdown	•	•	•
Co Pilot available	•	•	•
Rearview camera in Co pilot	•	•	•
OnBoard Weighing	•	•	•
Tire pressure monitoring	•	•	•
MAP	•	•	•

OPTIONAL EQUIPMENT

	L150H	L180H	L220H
Hydraulic system			
Boom suspension system	•	•	•
Separate attachment locking	•	•	•
Arctic kit, for 3rd function	•	•	•
Boom cylinder hose and tube guards	•	•	•
Hydraulic fluid, biodegradable, Volvo	•	•	•
Hydraulic fluid, fire-resistant	•	•	•
Hydraulic fluid, for hot climate	•	•	•
Hydraulic 3rd function	•	•	•
hydraulic 3rd-4th function	•	•	•
Single lever control, hydraulics 2 functions	•	•	•
Single lever control, hydraulics 3 functions	•	•	•
Single lever control, hydraulics 4 functions	•	•	•
Brake system			
Oil cooler and filter front & rear axle	•	•	•
Stainless steel, brake lines	•	•	–
Cab			
Anchorage for Operator's manual	•	•	•
Automatic Climate Control, ACC	•	•	•
ACC control panel, with Fahrenheit scale	•	•	•
Asbestos dust protection filter	•	•	•
Ashtray	•	•	•
Cab air pre-cleaner, cyclone type	•	•	•
Carbon filter	•	•	•
Cover plate, under cab	•	•	•
Lunch box holder	•	•	•
Volvo Armrest, operator's seat, left	•	•	•
Operator's seat, Volvo air susp, heavy-duty, high back, heated	•	•	•
Operator's seat, (air seat std) 2-point seat belt	•	•	•
Operator's seat, (air seat std) 3-point seat belt	•	•	•
Operator's seat, Premium Comfort ISRI	•	•	•
Operator's seat, Premium Comfort ISRI 3-point seat belt	•	•	•
Radio installation kit incl. 12 volt outlet, left side	•	•	•
Radio installation kit incl. 12 volt outlet, right side	•	•	•
Radio (with AUX, Bluetooth and USB connection)	•	•	•
DAB Radio	•	•	•
Subwoofer	•	•	•
Steering wheel knob	•	•	•
Sun blinds, rear windows	•	•	•
Sun blinds, side windows	•	•	•
Timer cab heating	•	•	•
Window, sliding, door	•	•	•
Universal door/ignition key	•	•	•
Remote door opener	•	•	•
Forward view mirror	•	•	•
Cab heater power outlet 240V	•	•	•
Cab, Hot applications. Roof, steel	•	•	•
Fire extinguisher cab	•	•	•
Outside steel protection cab	•	•	•
Rear view mirrors long arm, cab	•	•	•
Reinforced windshield, flat	•	•	•

Equipment

OPTIONAL EQUIPMENT	L150H	L180H	L220H
Service and Maintenance			
Automatic lubrication system	•	•	•
Automatic lubrication system for long boom	•	•	•
Grease nipple guards	•	•	•
Oil sampling valve	•	•	•
Quick engine oil change	•	•	•
Refill pump for grease to lube system	•	•	•
Tool kit	•	•	•
Wheel nut wrench kit	•	•	•
CareTrack, GSM, GSM/Satellite	•	•	•
Telematics, Subscription	•	•	•
Belly guard front	•	•	•
Belly guard rear	•	•	•
Cover plate, heavy-duty, front frame	•	•	•
Cover plate, rear frame	•	•	•
Cab roof, heavy-duty	•	•	•
Guards for front headlights	•	•	•
Guards for radiator grill	•	•	•
Guards for tail lights	•	•	•
Windows, side and rear guards	•	•	•
Windshield guard	•	•	•
Corrosion protection, painting of machine	•	•	•
Corrosion protection, painting of attachment bracket	•	•	–
Option for machines without dinitrol	•	•	•
Bucket Teeth protection	•	•	–
External equipment			
Cab ladder, rubber-suspended	•	•	•
Escape Ladder, left fender	•	•	•
Handles on counterweight	•	•	•
Deleted front mudguards	•	•	•
Fire suppression system	•	•	•
Mudguards, full cover, front and rear for 80-series tires	•	•	•
Mudguards, full cover, front and rear for 65-series tires	•	•	•
Long boom	•	•	•
Tow hitch	•	•	•

OPTIONAL EQUIPMENT	L150H	L180H	L220H
Other equipment			
CE-marking	•	•	•
Comfort Drive Control (CDC)	•	•	•
Counterweight, logging	•	•	•
Counterweight, signal painted, chevrons	•	•	•
Secondary steering with automatic test function	•	•	•
Sound decal, EU	•	•	•
Sound decal, USA	•	•	•
Reflecting stickers (decals), machine contour	•	•	•
Reflecting stickers (stripes), machine contour Cab	•	•	•
Noise reduction kit, exterior	•	•	•
Sign, 50 km/h (31 mph)	•	–	–
Attachments			
Buckets:	•	•	•
Rock straight or spade nose	•	•	•
General purpose	•	•	•
Re-handling	•	•	•
Side-dump	•	•	•
Light material	•	•	•
Wear parts:	•	•	•
Bolt-on and weld-on bucket teeth	•	•	•
Segments	•	•	•
Cutting edge in three sections, bolt-on	•	•	•
Fork equipment	•	•	•
Material handling arm	•	•	•
Log grapples	•	•	•

SELECTION OF VOLVO OPTIONAL EQUIPMENT

Additional auxiliary hydraulics

Central lubrication system

Fire suppression system

External axle oil cooling

LED light packages

Long boom

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

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