

VOLVO EXCAVATOR

EC290B PRIME

29.6 – 32.1 t, 208 metric hp



MORE CARE. BUILT IN.



TAKE A TOUR. EXPERIENCE THE EC290B PRIME.

MORE COMFORT

- **large and comfortable cab** puts you in command with ergonomic controls.
- **Roomy, adjustable seat** supports your whole body.
- **Top-mounted windshield wiper** cleans a wider area – including both upper corners.
- **Vibration dampening** protects against whole body fatigue for all-day productivity.
- **Electronic climate control system** delivers the highest-capacity heating and cooling available.

MORE QUALITY

- **Strengthened undercarriage frame** endures daily use.
- **Reinforced boom/arm and proven components** deliver every time.
- **Reinforced superstructure** with double welded corners.
- **Greased and sealed track link** guarantees long life.



MORE SAFETY

- **Safety is a core value at Volvo and it shows in our machine.**
- **Anti-slip steps and platforms** with punched steel plates for superior grip even when wet or icy.
- **Low engine emission levels and low noise.**
- **Tumbler length ensures stability.**
- **Recessed bolts on superstructure** walk areas for less risk of trip hazard.
- **Lead-free exterior paint** is in harmony with the environment.

MORE PROFIT

- **Powerful, innovative and efficient Volvo engine:** well-matched to hydraulic system, components and design.
- Volvo continues to deliver **industry-leading fuel efficiency.**
- **Advanced hydraulic system** with priority functions and optional float position.
- **Optional hydraulic quick fit** increases versatility.

MORE UPTIME

- **Simplified, ground level serviceability** means more uptime.
- **Easy access, centralized lubrication points.**
- **Easy to learn. Easy to operate. Easy to get more done.**



VOLVO - A PARTNER TO TRUST.

Volvo wants you to trust your Volvo excavator. Volvo wants you to be comfortable while you work, so you can get more done. Volvo wants you to maximize profit through industry-leading fuel economy. Volvo delivered. It's all here in the Volvo EC290B prime Excavator and it meets all your wants, needs and jobsite requirements. Perfect for contractors, civil engineers and quarry companies, the Volvo EC290B prime excels in earth moving, road building, demolition and quarry work. It's everything you want and a whole lot more. You want a trusted partner, and this is it.

Your local partner around the globe

Since 1927, Volvo has earned a global reputation for providing complete solutions. Volvo is built on core values of quality, safety and environmental care. The extensive line of construction equipment is augmented by Volvo's commercial transport solutions, including buses and trucks. This global experience and expertise have led to the ongoing development of engines with the lowest fuel consumption in their class. Today, the tradition continues with Volvo B prime-Series Excavators — designed and built to the exacting standards that make each machine a trusted Volvo partner.

Strong on quality, long on endurance

Quality lasts. That is why Volvo is built to last with high quality throughout. The Volvo difference is clear, from the well-built cab details to the reinforced service doors to the rigid, long-life undercarriage.

If you have ever operated a Volvo Wheel Loader, Articulated Hauler or any of our machines, you know that Volvo is your edge for production, comfort and safety. Trust the Volvo EC290B prime Excavator to be ready to work — every day.

The innovations of comfort

Volvo is known for legendary comfort, for less fatigue and higher productivity. The EC290B prime takes it to a whole new level of innovation with a larger, more ergonomic work environment. Visibility is better. So are the seat, floor space and access to controls/switches.

Leading fuel efficiency stretches profit

Construction professionals around the world know Volvo for fuel efficiency — and the EC290B prime is set to remain the industry leader that gets the most out of each tank. Volvo: your most fuel-efficient option.

Experience for your work

Get the job done in the excavator made for your work. From earth moving, 25-ton hauler loading and demolition to civil engineering, landfill work and utility/piping, the Volvo EC290B prime Excavator puts you in command.

The protection you need

The Volvo EC290B prime's proven, long life booms and arms are ready for the toughest conditions. We've designed it and tested it to deliver strength and day after day endurance. Count on Volvo to help your business grow by getting the job done, making money and moving on to the next job. And it's built to keep working day after day.





VOLVO'S ENGINE LEADERSHIP SPANS LAND, SEA, SKY AND SPACE

As the world's second largest manufacturer of 9-to-18-liter diesel engines, Volvo has unmatched expertise designing power systems that move the world. Volvo engines for Volvo Construction Equipment, Volvo

Aero, Volvo Buses, Volvo Penta and Volvo Trucks define productivity and fuel economy. Our performance has been honed on land, over the sea, across the sky and into space. Leading research and development

keeps all Volvo Group products at the forefront of productivity. So when we say Volvo engines are tested — and proven — you can believe it. Trust in it. It's the real advantage of Volvo Power.



BUILT TO RUN – SUPPORTED FOR LIFE.

Even the best machines need service and maintenance to be as productive tomorrow as they are today. With superior attention to detail, we've created a productivity chain of machines, parts and service. Our global Customer Support organization delivers the values you've come to expect from Volvo Construction Equipment.

We care about your operation – anywhere, anytime

Volvo Construction Equipment comes with a professional Customer Support organization providing genuine parts, aftersale service and training — providing you with controlled owning and operation costs. With all the products and resources at our disposal, we can offer you the best support there is. Anywhere, anytime.

Four levels of support, one level of care

The best way to get the most out of your Volvo is to invest in a Volvo Customer Support Agreement. Since business' needs vary, we've made it easy for you to select the agreement that's right for your business by creating four levels of Customer Support Agreements. We offer programs that provide everything from regular machine inspections to a comprehensive repair and maintenance program that takes the hassle and worry out of running a workshop and gives you total peace of mind.

CareTrack – fast and correct information

CareTrack is an optional GPS monitoring program that works with the machine's diagnostic system. Installation is simple. You and your dealer can remotely track usage, productivity, fuel consumption and more. Maximize uptime through important service reminders. CareTrack also monitors geographic machine location and can even prevent unauthorized use. With CareTrack, you can focus on the care of your business while your Volvo dealer focuses on the care of your machine.

MATRIS reports on your efficiency

MATRIS delivers detailed operating history analysis about the utilization and efficiency factors that influence your operating costs. MATRIS turns the data captured inside the machine's computer into easy-to-use graphs and reports. Maximize machine and operator performance, while reducing maintenance costs and increasing service life.

PROSIS makes parts ordering faster

PROSIS is a CD-ROM application that makes it quick and easy for your Volvo dealer to order all your Volvo CE product parts. Your dealer will help you find the right part, place your order and get you back up and running fast.

Standard and optional equipment may vary by market. Please consult your local Volvo dealer for details.





SPECIFICATIONS

Engine

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

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

Engine	Volvo D7E EAE2
Power output at	30 r/s (1,800 rpm)
Net (ISO 9249/SAE J1349)	143 kW (194 metric hp)
Gross (SAE J1995)	153 kW (208 metric hp)
Max. torque at 1,350 rpm	965 Nm
No. of cylinders	6
Displacement	7.1 l
Bore	108 mm
Stroke	130 mm

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.

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

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

Service refill capacities

Fuel tank	470 l
Hydraulic system, total	400 l
Hydraulic tank	195 l
Engine oil	30 l
Engine coolant	36 l
Swing reduction unit	6.1 l
Travel reduction unit	2 x 6.8 l

Swing system

The superstructure is swung by the means of an axial piston motor and a planetary reduction gear. Automatic swing holding brake and anti-rebound valve are standard.

Max. swing speed	10.1 rpm
Max. swing torque	89.1 rpm

Drive

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

Max. tractive effort	234 kN (23,900 kg)
Max. travel speed	3.2 / 5.1 km/h
Gradeability	35° (70%)

Undercarriage

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

No. of track pads	2 x 50
Link pitch	203.2 mm
Shoe width, triple grouser	600 / 700 / 800 / 900 mm
Shoe width, double grouser	700 mm
Shoe width, triple grouser HD	600 mm
No. of bottom rollers	2 x 9
No. of top rollers	2 x 2

Hydraulic system

The hydraulic system, also known as the Integrated work mode control is designed for high-productivity, high-digging capacity, high-maneuvering precision and good fuel economy. The summation system, boom, arm and swing priority along with boom and arm regeneration provide optimum performance.

The following important functions are included in the system:

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

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

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

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

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

Power boost: All digging and lifting forces are increased.

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

Main pump

Type	2 x variable displacement axial piston pumps
Maximum flow	2 x 250 l/min

Pilot pump

Type	Gear pump
Maximum flow	1 x 18 l/min

Hydraulic motors

Travel	Variable displacement axial piston motors with mechanical brake
Swing	Fixed displacement axial piston motor with mechanical brake

Relief valve setting

Implement	32.4 / 34.3 Mpa (330 / 350 kg/cm ²)
Travel circuit	34.3 Mpa (350 kg/cm ²)
Swing circuit	26.5 Mpa (270 kg/cm ²)
Pilot circuit	3.9 Mpa (40 kg/cm ²)

Hydraulic cylinders

Boom	2
Bore x Stroke	ø140 x 1,480 mm
Arm	1
Bore x Stroke	ø150 x 1,745 mm
Bucket	1
Bore x Stroke	ø140 x 1,140 mm

Cab

The operator's cab has easy access via a wide door opening. The cab is supported on hydraulic dampening mounts to reduce shock and vibration levels. These along with sound absorbing lining provide low noise levels. The cab has excellent all-round visibility. The front windshield can easily slide up into the ceiling and the lower front glass can be removed and stored in the side door.

Integrated air conditioning and heating system:

The pressurized and filtered cab air is supplied by an automatically controlled fan. The air is distributed throughout the cab from 13 vents.

Ergonomic operator's seat: The adjustable seat and joystick console move independently to accommodate the operator. The seat has nine different adjustments plus a seat belt to for the operator's comfort and safety.

Sound level in cab according to ISO 6396:

LpA 72 dB(A)

External sound level according to ISO 6395 and EU

Directive 2000/14/EC:

LwA 105 dB(A)

Ground pressure

- **EC290B LC prime with** 6.2 m boom, 3.05 m arm, 1,240 l (975 kg) bucket and 5,400 kg counterweight.

Description	Shoe width	Operating weight up to	Ground pressure	Overall width
Triple grouser	600 mm	29,597 kg	57.1 kPa (0.57 kg/cm ²)	3,190 mm
	700 mm	30,157 kg	49.9 kPa (0.50 kg/cm ²)	3,290 mm
	800 mm	30,617 kg	44.3 kPa (0.44 kg/cm ²)	3,390 mm
	900 mm	30,987 kg	39.9 kPa (0.40 kg/cm ²)	3,490 mm
Triple grouser HD	600 mm	29,701 kg	57.3 kPa (0.57 kg/cm ²)	3,190 mm
Double grouser	700 mm	30,402 kg	50.1 kPa (0.50 kg/cm ²)	3,290 mm

- **EC290B LC prime with** 6.2 m boom, 3.05 m arm, 1,240 l (975 kg) bucket and 5,800 kg counterweight.

Description	Shoe width	Operating weight up to	Ground pressure	Overall width
Triple grouser	600 mm	29,997 kg	57.9 kPa (0.58 kg/cm ²)	3,190 mm
	700 mm	30,557 kg	50.5 kPa (0.51 kg/cm ²)	3,290 mm
	800 mm	31,017 kg	44.9 kPa (0.45 kg/cm ²)	3,390 mm
	900 mm	31,387 kg	40.4 kPa (0.40 kg/cm ²)	3,490 mm
Triple grouser HD	600 mm	30,101 kg	58.1 kPa (0.58 kg/cm ²)	3,190 mm
Double grouser	700 mm	30,801 kg	50.8 kPa (0.51 kg/cm ²)	3,290 mm

- **EC290B LR prime with** 10.2 m boom, 7.9 m arm, 520 l (452 kg) bucket and 7,150 kg counterweight.

Description	Shoe width	Operating weight up to	Ground pressure	Overall width
Triple grouser	800 mm	32,100 kg	45.5 kPa (0.46 kg/cm ²)	3,390 mm

Max. permitted buckets

- Notes: 1. Bucket size based on ISO 7451, 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. Bucket widths are less than bucket's tip radius.

- **EC290B LC prime with direct fit bucket**, 5,800 kg counterweight.

Description	Max. bucket volume / weight	6.2 m boom		
		2.55 m arm	3.05 m arm	3.7 m arm
GP bucket 1.5 t/m ³	l / kg	1,950/1,650	1,775/1,500	1,575/1,350
GP bucket 1.8 t/m ³	l / kg	1,725/1,475	1,575/1,325	1,400/1,200
HD bucket 1.8 t/m ³	l / kg	1,625/1,625	1,500/1,500	1,325/1,325
HD bucket 2.0 t/m ³	l / kg	1,525/1,525	1,400/1,400	1,250/1,250

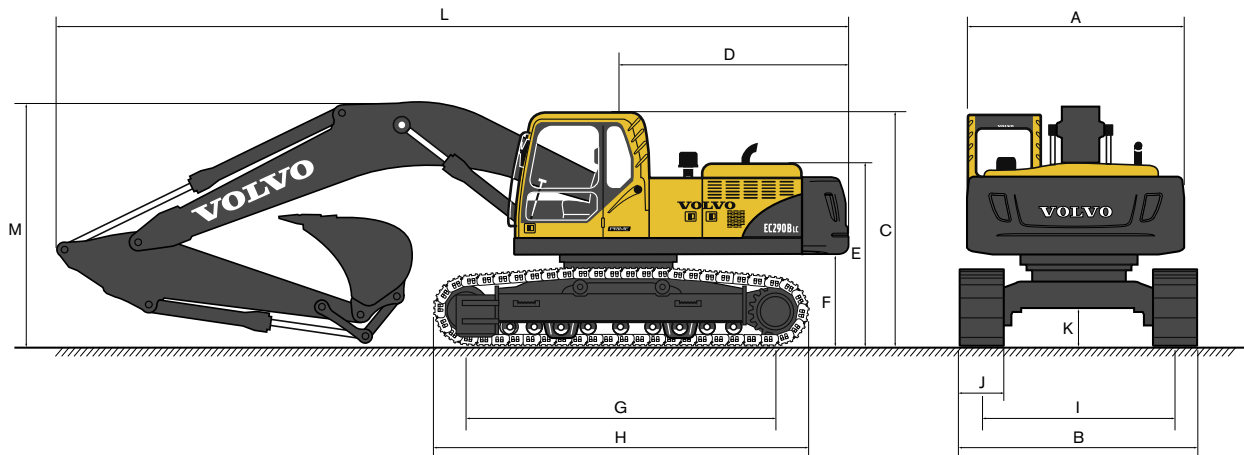
- **EC290B LC prime with S quick fit bucket**, 5,800 kg counterweight.

Description	Max. bucket volume / weight	6.2 m boom		
		2.55 m arm	3.05 m arm	3.7 m arm
GP bucket 1.5 t/m ³	l / kg	1,825/1,550	1,650/1,400	1,475/1,250
GP bucket 1.8 t/m ³	l / kg	1,625/1,375	1,475/1,250	1,300/1,100
HD bucket 1.8 t/m ³	l / kg	1,525/1,525	1,400/1,400	1,225/1,225
HD bucket 2.0 t/m ³	l / kg	1,425/1,425	1,300/1,300	1,150/1,150

- **EC290B LC prime with U quick fit bucket**, 5,800 kg counterweight.

Description	Max. bucket volume / weight	6.2 m boom		
		2.55 m arm	3.05 m arm	3.7 m arm
GP bucket 1.5 t/m ³	l / kg	1,725/1,475	1,575/1,325	1,375/1,175
GP bucket 1.8 t/m ³	l / kg	1,550/1,300	1,400/1,175	1,225/1,025
HD bucket 1.8 t/m ³	l / kg	1,450/1,450	1,325/1,325	1,150/1,150
HD bucket 2.0 t/m ³	l / kg	1,350/1,350	1,225/1,225	1,075/1,075

Dimensions

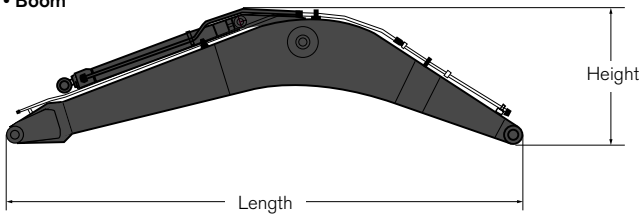


Description	Unit	EC290B LC prime			EC290B LR prime
		6.2 m boom			10.2 m boom
		2.55 m arm	3.05 m arm	3.7 m arm	7.9 m arm
A. Overall width of superstructure	mm	2,890	2,890	2,890	2,890
B. Overall width	mm	3,190	3,190	3,190	3,390
C. Overall height of cab	mm	3,030	3,030	3,030	3,030
D. Tail swing radius	mm	3,050	3,050	3,050	3,080
E. Overall height of engine hood	mm	2,500	2,500	2,500	2,500
F. Counterweight clearance *	mm	1,145	1,145	1,145	1,145
G. Tumbler length	mm	4,015	4,015	4,015	4,015
H. Track length	mm	4,870	4,870	4,870	4,870
I. Track gauge	mm	2,590	2,590	2,590	2,590
J. Shoe width	mm	600	600	600	800
K. Min. ground clearance *	mm	480	480	480	480
L. Overall length	mm	10,500	10,420	10,450	14,700
M. Overall height of boom	mm	3,430	3,290	3,540	3,340

* Without shoe grouser

Dimensions

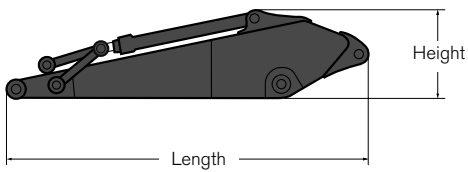
• Boom



Description	Unit	EC290B LC prime			EC290B LR prime
		6.2 m	6.2 m HD	6.2 m XD	10.2 m
Length	mm	6,430	6,430	6,430	10,430
Height	mm	1,680	1,680	1,680	1,620
Width	mm	770	770	770	770
Weight	kg	2,840	3,020	3,190	3,440

* Includes cylinder, pin and piping

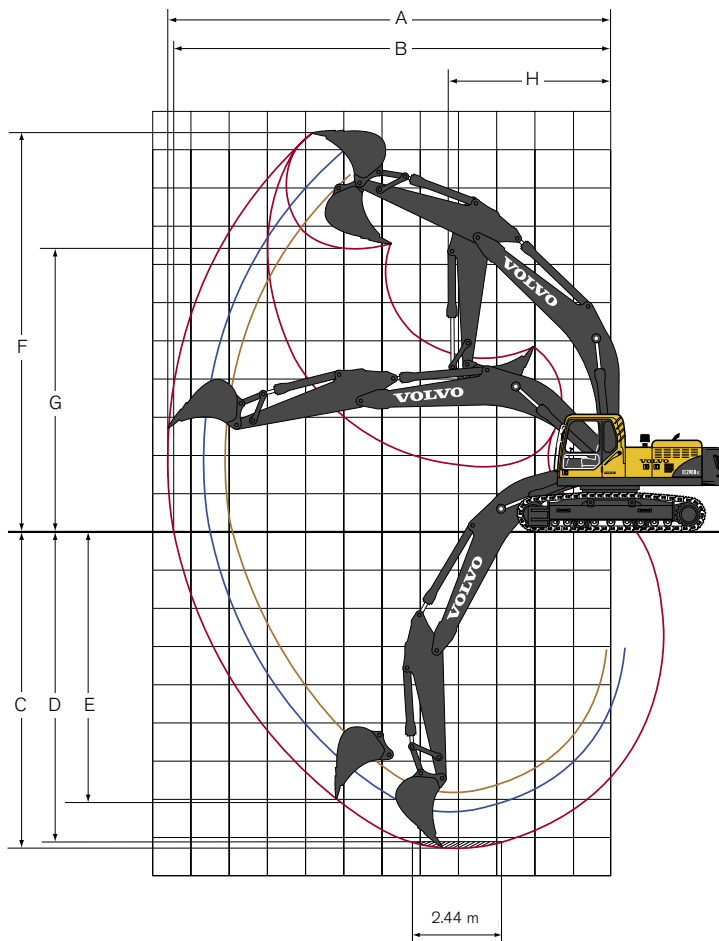
• Arm



Description	Unit	EC290B LC prime					EC290B LR prime
		2.55 m	3.05 m	3.05 m HD	3.05 m XD	3.7 m	7.9 m
Length	mm	3,710	4,150	4,150	4,150	4,900	9,060
Height	mm	1,010	1,010	1,010	1,010	1,050	1,065
Width	mm	545	545	545	545	545	545
Weight	kg	1,530	1,630	1,700	1,780	1,750	1,790

* Includes cylinder, piping and linkage

Working ranges & digging forces



Machine with direct fit bucket	Unit	EC290B LC prime			EC290B LR prime
		6.2 m boom			10.2 m boom
		2.55 m arm	3.05 m arm	3.7 m arm	7.9 m arm
A. Max. digging reach	mm	10,160	10,690	11,290	18,600
B. Max. digging reach on ground	mm	9,950	10,490	11,110	18,490
C. Max. digging depth	mm	6,830	7,320	7,980	14,770
D. Max. digging depth (2.44 m level)	mm	6,590	7,140	7,820	14,670
E. Max. vertical wall digging depth	mm	5,440	6,200	6,590	13,520
F. Max. cutting height	mm	9,620	10,040	10,320	14,920
G. Max. dumping height	mm	6,690	7,050	7,340	12,580
H. Min. front swing radius	mm	4,220	4,180	4,240	5,210

















Digging forces with direct fit bucket		Unit	EC290B LC prime			EC290B LR prime
			6.2 m boom			10.2 m boom
			2.55 m arm	3.05 m arm	3.7 m arm	7.9 m arm
Bucket radius		mm	1,600	1,600	1,600	1,250
Breakout force – bucket (Normal/Power boost)	SAE J1179	kN	162.6/172.5	162.6/172.5	162.6/172.5	69.1
	ISO 6015	kN	182.4/193.5	182.4/193.5	182.4/193.5	80.3
Tearout force – arm (Normal/Power boost)	SAE J1179	kN	152.1/161.3	127.6/135.4	111.8/118.6	60.6
	ISO 6015	kN	156.5/166.0	130.8/138.7	114.2/121.1	61.2
Rotation angle, bucket		deg	179	179	179	179

Lifting capacity

At the arm end without bucket.

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

• EC290B LC prime

 Across undercarriage  Along undercarriage	Lifting hook related to ground level	1.5 m		3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		Max. reach			
																Max. mm	
Boom 6.2 m + Arm 2.55 m + Shoe 600 mm + Counterweight 5,400 kg	7.5 m kg								*6,340	*6,340					*6,480	5,770	6,511
	6.0 m kg								*6,720	*6,720	*6,490	4,360			*6,500	4,300	7,547
	4.5 m kg					*9,980	*9,980	*7,820	6,480	*6,840	4,310				6,150	3,600	8,178
	3.0 m kg					*13,020	9,730	*9,210	6,140	7,090	4,160				5,610	3,260	8,498
	1.5 m kg					*15,070	9,130	10,110	5,830	6,920	4,020				5,520	3,150	8,541
	0 m kg					*15,630	8,930	9,900	5,650	6,810	3,910				5,720	3,260	8,313
	-1.5 m kg			*11,000	*11,000	*15,240	8,950	9,840	5,600	6,790	3,890				6,380	3,660	7,788
	-3.0 m kg			*19,240	19,220	*13,950	9,110	9,940	5,680						7,890	4,560	6,898
	-4.5 m kg			*15,270	*15,270	*11,120	9,410								*8,720	6,910	5,462
Boom 6.2 m + Arm 3.05 m + Shoe 600 mm + Counterweight 5,400 kg	7.5 m kg														*5,110	4,870	7,195
	6.0 m kg									*5,930	4,520				*4,900	3,770	8,142
	4.5 m kg							*7,230	6,620	*6,410	4,410				*4,940	3,210	8,730
	3.0 m kg					*11,930	9,920	*8,660	6,230	*7,140	4,230	5,140	2,940		5,110	2,920	9,030
	1.5 m kg					*14,320	9,170	*10,000	5,860	6,960	4,040	5,070	2,870		4,990	2,830	9,070
	0 m kg					*15,380	8,830	9,870	5,620	6,810	3,910				5,150	2,910	8,856
	-1.5 m kg	*6,330	*6,330	*10,090	*10,090	*15,370	8,770	9,760	5,520	6,750	3,850				5,650	3,210	8,366
	-3.0 m kg	*12,170	*12,170	*17,290	*17,290	*14,450	8,890	9,820	5,560	6,820	3,920				6,760	3,880	7,546
	-4.5 m kg			*17,190	*17,190	*12,260	9,190	*8,730	5,790						*8,090	5,430	6,264
Boom 6.2 m + Arm 3.7 m + Shoe 600 mm + Counterweight 5,400 kg	7.5 m kg									*5,140	4,700				*3,980	*3,980	7,950
	6.0 m kg									*5,250	4,690				*3,840	3,290	8,815
	4.5 m kg							*6,410	*6,410	*5,810	4,530	5,330	3,110		*3,860	2,830	9,360
	3.0 m kg					*10,490	10,230	*7,880	6,360	*6,610	4,310	5,230	3,020		*4,030	2,590	9,639
	1.5 m kg					*13,210	9,300	*9,340	5,910	7,010	4,080	5,110	2,910		*4,340	2,500	9,678
	0 m kg			*5,600	*5,600	*14,810	8,760	9,860	5,590	6,800	3,890	5,010	2,810		4,580	2,550	9,477
	-1.5 m kg	*5,870	*5,870	*9,560	*9,560	*15,290	8,580	9,660	5,420	6,690	3,870	4,980	2,780		4,960	2,770	9,021
	-3.0 m kg	*10,210	*10,210	*14,830	*14,830	*14,840	8,620	9,650	5,410	6,690	3,790				5,750	3,260	8,268
	-4.5 m kg	*15,580	*15,580	*19,190	18,590	*13,310	8,860	*9,720	5,560						7,460	4,290	7,121
-6.0 m kg			*14,060	*14,060	*9,770	9,370								*7,720	7,190	5,323	
Boom 6.2 m + Arm 3.05 m XD + Shoe 600 mm + Counterweight 5,800 kg	7.5 m kg														*5,970	5,930	7,195
	6.0 m kg									*6,640	5,510				*5,720	4,740	8,142
	4.5 m kg							*7,850	7,650	*7,070	5,360				*5,710	4,130	8,730
	3.0 m kg					*12,420	11,020	*9,240	7,190	*7,770	5,140	6,160	3,830		*5,900	3,810	9,030
	1.5 m kg					*14,790	10,230	*9,240	7,190	*7,770	5,140	6,160	3,830		*5,900	3,810	9,070
	0 m kg					*15,830	9,880	11,030	6,520	7,840	4,760				6,140	3,760	8,856
	-1.5 m kg	*7,040	*7,040	*10,970	*10,970	*15,810	9,810	10,900	6,420	7,770	4,700				6,650	4,060	8,366
	-3.0 m kg	*13,000	*13,000	*18,260	*18,260	*14,880	9,920	10,950	6,460	7,850	4,780				7,790	4,740	7,546
	-4.5 m kg			*17,480	*17,480	*12,690	10,220	*9,260	6,700						*8,630	6,340	6,264

Notes: 1. Machine in "Fine Mode-F" (Power Boost), for lifting capacities.

2. The above loads are in compliance with SAE J1097 and ISO 10567 Hydraulic Excavator Lifting Capacity Standards.

3. Rated loads do not exceed 87% of hydraulic lifting capacity or 75% of tipping load.

















4. Rated loads marked with an asterisk (*) are limited by hydraulic capacity rather than tipping load.

Lifting capacity

At the arm end without bucket.

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

• EC290B LR prime

 Across undercarriage  Along undercarriage	Lifting hook related to ground level	6.0 m		7.5 m		9.0 m		10.5 m		12.0 m		13.5 m		Max. reach			
																Max. mm	
Boom 10.2 m + Arm 7.9 m + Shoe 800 mm + Counterweight 7,150 kg	13.5 m	kg													*850	*850	12,916
	12.0 m	kg										*1,360	*1,360	*780	*780	14,122	
	10.5 m	kg										*1,920	*1,920	*740	*740	15,082	
	9.0 m	kg										*2,270	*2,270	*720	*720	15,842	
	7.5 m	kg										*2,360	2,340	*720	*720	16,428	
	6.0 m	kg									*2,630	*2,630	*2,490	2,240	*730	*730	16,859
	4.5 m	kg							*3,140	*3,140	*2,870	2,720	*2,660	2,110	*750	*750	17,148
	3.0 m	kg			*4,830	*4,830	*4,040	*4,040	*3,500	3,250	*3,120	2,520	*2,840	1,970	*790	*790	17,301
	1.5 m	kg	*7,380	6,900	*5,610	5,040	*4,560	3,820	*3,860	2,960	*3,380	2,320	*3,020	1,820	*850	*850	17,322
	0 m	kg	*8,340	6,060	*6,270	4,480	*5,020	3,440	*4,200	2,690	*3,620	2,130	3,090	1,680	*920	890	17,212
	-1.5 m	kg	*8,950	5,490	*6,760	4,060	*5,390	3,130	4,420	2,460	3,590	1,960	2,960	1,560	*1,020	890	16,967
	-3.0 m	kg	*8,940	5,160	6,950	3,770	5,320	2,900	4,230	2,280	3,450	1,820	2,850	1,450	*1,150	910	16,583
	-4.5 m	kg	*9,310	4,980	6,760	3,600	5,150	2,750	4,100	2,160	3,340	1,720	2,770	1,380	*1,330	960	16,048
	-6.0 m	kg	*9,140	4,930	6,660	3,510	5,060	2,660	4,020	2,080	3,280	1,660	2,730	1,340	*1,570	1,050	15,347
	-7.5 m	kg	*8,760	4,960	6,650	3,510	5,030	2,640	3,990	2,060	3,260	1,650	2,730	1,340	*1,930	1,200	14,455
	-9.0 m	kg	*8,140	5,070	*6,500	3,570	5,080	2,680	4,030	2,090	3,310	1,690			*2,480	1,430	13,334
	-10.5 m	kg	*7,220	5,270	*5,800	3,710	*4,740	2,790	*3,860	2,190					*3,070	1,820	11,919
-12.0 m	kg	*5,850	5,580	*4,700	3,940	*3,740	2,990							*3,060	2,540	10,084	
-13.5 m	kg			*2,810	*2,810									*2,790	*2,790	7,521	

Notes: 1. Machine in "Fine Mode-F" (Power Boost), for lifting capacities.

2. The above loads are in compliance with SAE J1097 and ISO 10567 Hydraulic Excavator Lifting Capacity Standards.

3. Rated loads do not exceed 87% of hydraulic lifting capacity or 75% of tipping load.

4. Rated loads marked with an asterisk (*) are limited by hydraulic capacity rather than tipping load.

STANDARD EQUIPMENT

Engine

Turbocharged, 4 stroke 6 cylinder diesel engine water cooling, common rail direct injection and charged air cooler
Air filter with indicator
Air intake heater
Electric engine shut-off
Fuel filler and water separator with indicator
Alternator, 24V/80 A

Electric / Electronic control system

Contronics:
– Advanced mode control system
– Self-diagnostic system
Machine status indication
Engine speed sensing power control
"Power Max" mode system
Automatic idling system
One-touch power boost
Safety stop/start function
Adjustable monitor
Engine restart prevention circuit
High capacity halogen lights:
– Frame mounted 2
– Boom mounted 1
Batteries, 2 x 12 V/200 Ah
Start motor, 24 V/6.6 kW

Hydraulic system

Automatic hydraulic system:
– Summation system
– Boom priority
– Arm priority
– Swing priority
Boom and arm regeneration valves
Swing anti-rebound valves
Boom and arm holding valves
Multi-stage filtering system
Cylinder cushioning
Cylinder contamination seals
Auxiliary hydraulic valve
Automatic two-speed travel motors

Superstructure

Access way with handrail
Tool storage area
Punched metal anti-slip plates

Cab and interior

Hydraulic dampening cab mounts
Adjustable operator seat and joystick control console
Flexible antenna
Hydraulic control lockout lever

Cab, all-weather sound suppressed, includes:
– Ashtray
– Cup holder
– Lighter
– Tinted glass
– Door locks
– Floor mat
– Horn
– Large storage area
– Pull-up type front window
– Removable lower windshield
– Seat belt
– Tinted safety glass
Front (upper & lower): laminated glass
Side & rear: tempered glass
– Windshield wiper with intermittent function
Master key

Undercarriage

Greased and sealed track link
Track guards

OPTIONAL EQUIPMENT

Engine

Diesel coolant heater, 5 kW
Oil bath pre-cleaner
Dry pre-cleaner
Fuel filler pump: 35 l/min
Water separator with heater

Electric

Extra lights:
– Cab-mounted 3, (front 2, rear 1)
– Boom-mounted 1
– Counterweight-mounted 1
Rotating warning beacon
Travel alarm
Anti-theft system

Hydraulic system

Hammer & shear piping
– 1 and 2 pump flow
– Pump flow control for hammer & shears
– Additional return filter
– 1 switch control
– 2 switch control
– Pedal control
Slope & rotator piping
Oil leak (drain) line piping
Quick fit piping (UQF, SQF)
Volvo hydraulic quick fit (UQF29, UQF29 wide, S2)
Hydraulic oil, ISO VG 32

Hydraulic oil, ISO VG 46
Hydraulic oil, ISO VG 68
Boom floating function

Superstructure

Counterweight,
LC: 5,400/5,800 kg
LR: 7,150 kg
Undercover: 1.6 mm/4.5 mm HD

Cab and interior

Fabric seat
Fabric seat with heater and air suspension
Air-conditioner without heater, manual
Heater & air-conditioner, automatic
Semi-long joysticks
Control joystick with 3 switches each
Control joystick with 5 switches each
Cab-mounted falling object guard (FOG)
Cab-mounted falling object protective structures (FOPS)
AM/FM stereo radio
AM/FM stereo with CD player and MP3 input
Rain shield, front
Sun screens, front, roof, rear
Sunlight protection, roof (steel)
Safety screen for front window
Lower wiper
Anti-vandalism kit assembly preparation
Anti-vandalism kit
Specific key

Undercarriage

Full track guards
Undercover: 4.5 mm/10 mm HD

Track shoes

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

Digging equipment

Boom: 6.2 m GP
6.2 m HD
6.2 m XD
10.2 m LR
Arm: 2.55/3.05/3.7 m GP
3.05 m HD
3.05 m XD
7.9 m LR

Service

Hand lamp
Spare parts
Tool kit, full scale
Tool kit, daily maintenance
CareTrack



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