

308E2 CR SB

Mini Hydraulic Excavator with Swing Boom



Engine

Engine Model*	Cat® C3.3B
Net Power (ISO 9249)	48.5 kW 65 hp

*Engine meets U.S. EPA Tier 4 Final/EU Stage IIIB emission standards.

Weights

Operating Weight with Cab	8400 kg	18,519 lb
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Operating Specifications

Maximum Dig Depth	4150 mm	13'7"
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High performance in a compact radius and swing boom design for greater versatility and controllability.



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The Cat 308E2 CR SB Mini Hydraulic Excavator delivers high performance with the versatility of a swing boom front linkage in a durable Compact Radius design to help you work in the tightest applications. With the COMPASS display panel, Tier 4 Final engine and new hydraulic system, the 308E2 CR SB is more productive, versatile and cost effective.

Compact Radius

Work in the tightest spaces.



Compact Radius

The compact radius design gives greater machine versatility and the capability to work within confined areas. The radius of the upper body stays within 280 mm (11 in) of the undercarriage providing flexibility for different work site applications with a reduced risk of damage and less stress for the operator.

This allows the operator to concentrate on the work being done without having to worry about damaging the back of the machine or other job site obstacles.

Operator Station

Superior comfort to keep you productive throughout the work day.

Comfortable Working Environment

Spacious and comfortable operator station with excellent visibility and legroom keeps the operator comfortable and helps reduce fatigue. All hydraulic functions are fully pilot operated, lowering owning and operating costs and resulting in less downtime. The operator station also features:

- Heated, air suspension seat
- COMPASS display panel
- Ergonomic joysticks
- Dynamic operator sound pressure 70 dB(A) ISO 6396
- Average exterior sound pressure 99 dB(A) ISO 6395 – dynamic test



COMPASS Control Panel

Complete, Operational, Maintenance, Performance and Security System.



The COMPASS control panel on the Cat E Series mini hydraulic excavators was specifically designed by Caterpillar for compact excavators. It adds several new features to the machines increasing the amount of customer value. All of the following features are now standard on all E Series models.

Complete – All of the control panel features are standard on all E Series models

Operation – Simple operation of the pattern changer, hydraulic quick coupler and fuel gauge visibility all at the push of a button

Maintenance – Maintenance intervals, diagnostics and work hours

Performance – Maintain optimum performance levels with Eco mode and adjustable work tool flow features

And

Security – Anti theft device with individual user and master passwords

System – Ergonomically designed control panel

Passcode Protected Security System

A standard anti-theft device now comes on every E Series compact excavator. A five digit alphanumeric password is required to start the machine when the anti-theft feature is enabled. There is a master password and up to five user passwords can be created by the owner if desired.

Keep your machine safe on a busy job site by locking it when you are not around.

Adjustable Auxiliary Work Tool Flow Control

The E Series machines now have simple adjustability of the flow going down the boom and stick to the work tool. Both the standard main line and optional secondary auxiliary hydraulics can be adjusted on a scale of 1–15 through a few buttons on the control panel.

Adjust the flow to your different tools with a simple push of a button.



UNLOCK the new features and experience the value of the exclusive COMPASS control panel on the Cat E Series compact excavators

Eco Mode

This feature allows your machine to be set in a more economical power setting with a simple push of a button. While operating in this mode, the machine will maintain excellent performance levels while saving fuel through a slightly lower engine setting.

Save money with the E Series compact excavators.

Continuous Flow

Once this feature is enabled through a button on the monitor, the E Series machines can run in continuous flow mode. With the auxiliary hydraulics on the right hand joystick, just hold the roller switch at the desired flow rate and direction for 2.5 seconds and the machine will maintain that flow rate until it is turned off.

Maintain hydraulic flow to your tools at any flow and in any direction with the simple push of a button.

Pattern Changer

Change the operating pattern between excavator and backhoe with a simple press of a button from the comfort of the cab.

Exclusive push button pattern changer is safe and easy.

Maintenance and Performance Information

Easily keep track of various maintenance and performance parameters of your machine.

Reset the maintenance intervals and ensure the machine is receiving proper care maximizing the life of the machine.



Performance and Controllability

Powerful digging combined with smooth responsive control.



High digging forces that provide power through even the most compacted ground, coupled with direct, smooth control through responsive hydraulics, ensure that the Cat 308E2 CR SB delivers the high productivity that customers demand.

Controllability

The Cat 308E2 CR SB front linkage has been perfectly balanced with the hydraulics to deliver the high level of control required for fine grading and landscaping applications.

- Automatic two speed function improves job site maneuverability by balancing high speed travel requirements and control.
- Joystick mounted auxiliary control enhances machine controllability. The intuitive controls give fine modulation.
- Auxiliary lines including quick connectors are fitted as standard, meaning the Cat 308E2 CR SB comes ready to work.
- Optional boom and stick lowering check valve includes integral overload warning device.

High Definition Hydraulic System

- Delivers fuel savings, efficiency, controllability and precision.
- Industry leading variable displacement, load sensing, flow sharing system.

Lift Capacity

To meet the diverse needs of today's customer, the 308E2 CR SB has high level lift capacity and outstanding stability – all in a compact radius design to provide on site versatility to get the job done.



Undercarriage

Excellent stability.

Depending on the customer's application, the Cat 308E2 CR SB has three different track options to choose from, allowing the correct machine configuration to suit the job.

Rubber Belt

Provides the lowest ground disturbance of all track options with excellent traction in conditions that are soft underfoot. The standard track offering is 450 mm (17.7 in) width.

Steel Track

Good for demolition and heavy duty applications. A triple grouser track is available in two width options: 450 mm (17.7 in) and 600 mm (23.6 in).

Steel Track with Rubber Pads

The 450 mm (17.7 in) wide shoe has four holes to attach the rubber pads to the steel track shoes. This option prevents damage to paved road surfaces and minimizes noise and vibration during travel while providing maximum stability.



Blade Widths

The dozer blade is an important and useful tool for the Hydraulic Mini Excavator used for backfilling trenches, levelling, landscaping and site clean up. There are two blade width options available to accommodate the differences in track widths.

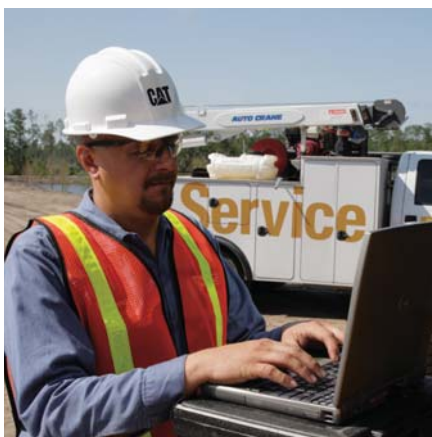
The blade comes standard with a replaceable weld-on dozer cutting edge constructed of hardened steel for longer life.

Tie Down Points

Large oval tie down points are located in two positions on the undercarriage for easy and safe machine tie down for transportation.

Engine and Serviceability

Superior power with easy access and minimal maintenance requirements keep you working.



Customer Support

Your Cat dealer is ready to assist you with your purchase decision and everything after.

- Financing packages are flexible to meet your needs
- Unmatched parts availability keeps you working
- Make comparisons of machines, with estimates of component life, preventative maintenance and cost of production
- For more information on Cat products, dealer services and industry solutions, visit www.cat.com



Engine

The Cat C3.3B electronic engine delivers clean, quiet operation with superior power and fuel efficiency while meeting U.S. EPA Tier 4 Final and EU Stage IIIB emission standards.

Easy Service

Convenient service features make maintenance easy, reducing your downtime:

- Lifting side hood allows access to air filter, main implement valve, 1-way/2-way auxiliary flow selector, accumulator, fuel filter and hydraulic tank. This eliminates the need to lift the cab when maintaining and servicing the machine.
- Swing open door provides access to major components and service points including engine oil check and fill, vertically mounted engine oil filter, starter motor and alternator.
- S-O-SSM oil sampling valve allows easy sampling of the hydraulic fluid for preventative maintenance.
- The 308E2 CR SB is Product LinkTM ready and the Cat Product Link system simplifies equipment fleet tracking. Using satellite or cellular technology, the system automatically reports information such as location, machine hours, active and logged service codes and security alarms.

Eco Mode

Do as much work in Eco Mode as standard mode while burning less fuel in most applications.



Work Tools

Matched to meet your application needs.

Wide Range of Work Tools

A wide range of Cat Work Tools have been designed specifically to get the best out of your machine and deliver excellent value through high productivity and long life.

Available work tools include:

- Buckets (heavy duty and heavy duty capacity)
- Tilting and Swing Ditch Cleaning Buckets
- Hydraulic Hammers
- Augers
- Vibratory Compactors
- Shears
- Dual Lock Mechanical Coupler
- Dual Lock Hydraulic Coupler

To maximize performance and productivity, Cat mechanical and hydraulic quick couplers are compatible with all standard work tools, enabling the operator to simply release one work tool and pick up another.

One-way flow (hammer) and two-way flow (auger) auxiliary lines with quick connectors are fitted as standard. This allows the machine to adapt to a wide variety of applications without re-configuring the auxiliary lines. Versatility is further enhanced with the option of a second auxiliary supply (for a rotating grapple).



308E2 CR SB Mini Hydraulic Excavator Specifications

Engine

Engine Model	Cat C3.3B*	
Rated Net Power @ 2,400 rpm		
ISO 9249/EEC 80/1269	48.5 kW	65 hp
Gross Power		
ISO 14396	49.7 kW	66.6 hp
Bore	94 mm	3.7 in
Stroke	120 mm	4.7 in
Displacement	3.33 L	203.2 in ³

* Meets U.S. EPA Tier 4 Final and EU Stage IIIB emission standards.

Weights

Operating Weight with Cab 8400 kg 18,519 lb

- Weight with rubber tracks, bucket, operator (75 kg/165 lb), full fuel and auxiliary lines.
- Weight varies depending on machine configuration.

Swing System

Machine Swing Speed	11 rpm	
Boom Swing – Left	60°	
Boom Swing – Right	50°	

- Automatic swing break, spring applied, hydraulic release.

Travel System

Travel Speed		
High	5.1 km/h	3.17 mph
Low	2.8 km/h	1.74 mph
Maximum Traction Force		
High Speed	64.5 kN	14,500 lb
Low Speed	37.4 kN	8,408 lb
Gradeability (maximum)	30°	
Ground Pressure	36.3 kPa	5.26 psi

- Each track is driven by one independent 2-speed motor.
- Drive modules are integrated into the roller frame for total protection.
- Straight line travel when tracking and operating the front linkage simultaneously.

Service Refill Capacities

Fuel Tank	125 L	33 gal
Cooling System	14 L	3.7 gal
Engine Oil	11.2 L	3.0 gal
Hydraulic Tank	82 L	21.7 gal
Hydraulic System	94 L	24.8 gal

Hydraulic System

Pump Flow at 2,000 rpm	150 L/min	39.6 gal/min
Operating Pressure – Equipment	28 000 kPa	4,061 psi
Operating Pressure – Travel	28 000 kPa	4,061 psi
Operating Pressure – Swing	24 000 kPa	3,481 psi
Auxiliary Circuit – Primary (186 bar/2,734 psi)	128 L/min	33.8 gal/min
Auxiliary Circuit – Secondary (174 bar/2,524 psi)	64 L/min	16.9 gal/min
Digging Force – Stick (standard)	40.1 kN	9,015 lb
Digging Force – Stick (long)	35.1 kN	7,891 lb
Digging Force – Bucket	60.2 kN	13,534 lb

- Load sensing hydraulics with variable displacement piston pump.

Blade

Width	2320 mm	91.3 in
Height	450 mm	17.7 in
Dig Depth	360 mm	14.2 in
Lift Height	380 mm	15.0 in

Cab

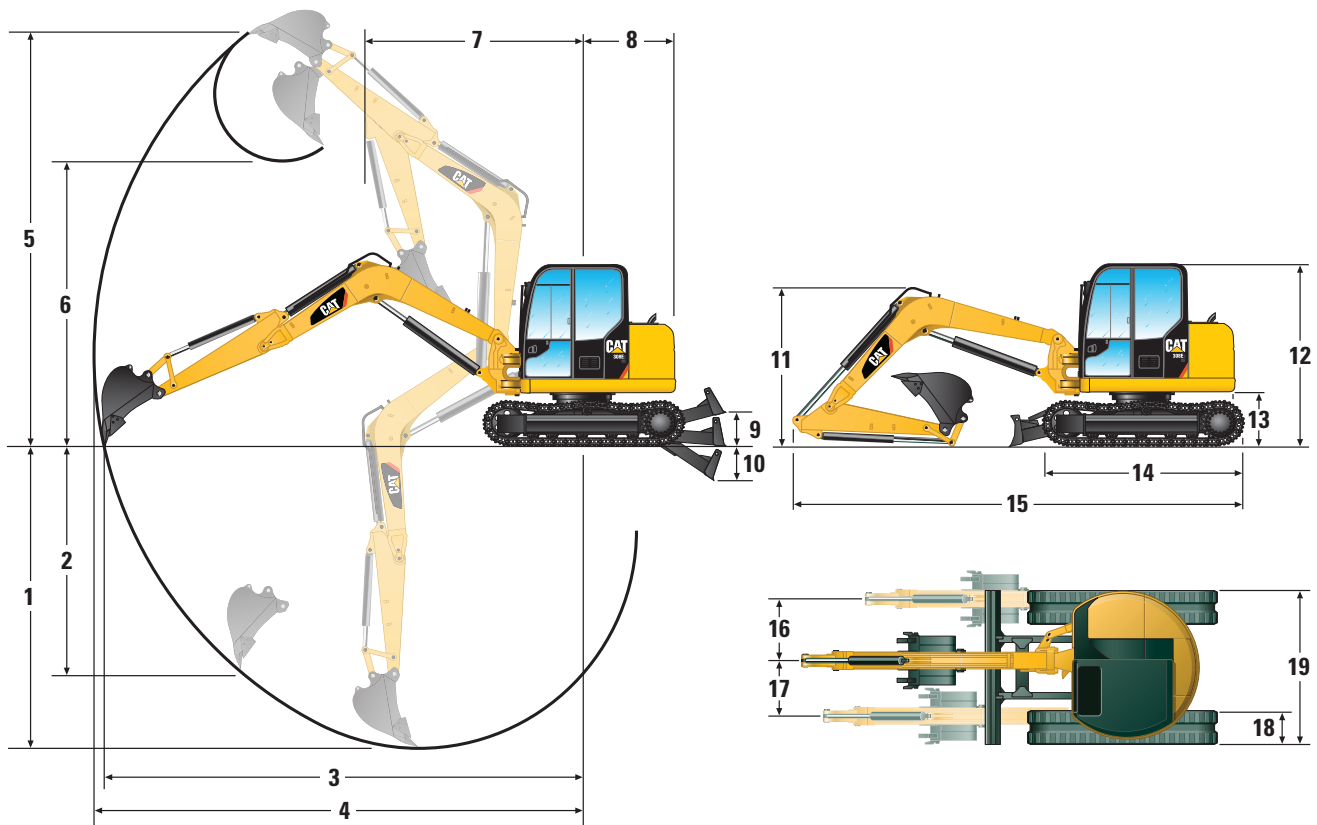
Dynamic Operator Sound Pressure	70 dB(A) ISO 6396	
Average Exterior Sound Pressure	99 dB(A) ISO 6395 – Dynamic Test	

Operating Specifications

Stick Length – Standard	1670 mm	5 ft 6 in
Stick Length – Long	2210 mm	7 ft 3 in
Machine Overhang	279.4 mm	11 in
Machine Overhang with Counterweight	406 mm	16 in
Counterweight	251 kg	551 lb

308E2 CR SB Mini Hydraulic Excavator Specifications

Dimensions



	Standard Stick		Long Stick	
1	4150 mm	13'7"	4690 mm	15'5"
2	2980 mm	9'9"	3550 mm	11'8"
3	6820 mm	22'9"	7350 mm	24'1"
4	7020 mm	23'0"	7540 mm	24'9"
5	6640 mm	21'9"	6990 mm	22'11"
6	4670 mm	15'4"	5010 mm	16'5"
7	2800 mm	9'2"	3280 mm	10'9"
8	1450 mm	4'9"	1450 mm	4'9"
9	420 mm	1'5"	420 mm	1'5"
10	320 mm	1'1"	320 mm	1'1"

	Standard Stick		Long Stick	
11	2280 mm	7'6"	2230 mm	7'4"
12	2550 mm	8'4"	2550 mm	8'4"
13	735 mm	2'5"	735 mm	2'5"
14	2903 mm	9'6"	2903 mm	9'6"
15	6380 mm	20'11"	6340 mm	20'10"
16	1010 mm	3'4"	1010 mm	3'4"
17	635 mm	2'1"	635 mm	2'1"
18	450 mm	1'6"	450 mm	1'6"
19	2320 mm	7'7"	2320 mm	7'7"

Lift Capacities at Ground Level*

Lift Point Radius		4000 mm (13'1")		6050 mm (19'10")	
		Front	Side	Front	Side
Blade Down	kg	3650	1710	1880	920
	lb	8,046	3,770	4,144	2,028
Blade Up	kg	1840	1530	970	820
	lb	4,056	3,373	2,138	1,808

* The above loads are consistent with hydraulic excavator lift capacity rating standard ISO 10567:2007 and they do not exceed 87% of hydraulic lifting capacity or 75% of tipping capacity. The excavator bucket weight is not included on this chart. Lifting capacities are for standard stick.

Standard Equipment

Standard equipment may vary. Consult your Cat dealer for details.

- 1-way and 2-way (combined function) auxiliary hydraulic lines
- Adjustable auxiliary flow control for work tools
- Adjustable wrist rests
- Air suspension, heated seat
- Alternator
- Anti-theft security system
- Automatic engine idle
- Automatic swing park brake
- Automatic two speed travel
- Auxiliary line quick disconnects
- Cab mounted work light
- Cab, ROPS ISO 12117-2 with radio ready mounting, A/C, heater/defroster, interior light and windshield wiper/washer
- Coat hook
- COMPASS display panel
- Cup holder
- Control pattern changer (not available in Europe)
- Continuous flow
- Dozer blade with float function
- Eco mode setting for up to 20% fuel savings
- Floor mat
- Foot travel pedals
- High ambient cooling (standard in all regions except Europe)
- Horn
- Hydraulic oil cooler
- Lifting bar on bucket linkage (standard in U.S. only)
- Low maintenance linkage pin joints
- Maintenance free battery
- Rearview mirror
- Retractable seatbelt
- Standard stick
- “Thumb ready” sticks (standard equipment for all regions except Europe)
- Travel alarm (optional in Europe)

308E2 CR SB Optional Equipment

Optional Equipment

Optional equipment may vary. Consult your Cat dealer for details.

- AM/FM radio with auxiliary input (optional in Europe, standard for all other regions)
- Block heater
- Boom and stick check valve
- Boom mounted light – right side
- Dozer blade with bolt on cutting edge
- Dual lock hydraulic coupler (available from dealer)
- Dual lock mechanical coupler (available from dealer)
- Ecology drain valve for hydraulic tank
- Extra counterweight for extreme lifting applications – 251 kg (553 lb)
- Footrest
- Front window mesh guard
- Front window steel bar guard
- Hydraulic quick coupler lines
- Lifting eye on bucket linkage (optional in all regions except the U.S.)
- Overhead guard (TOPGUARD Level 2)
- Rain guard
- Secondary auxiliary hydraulic lines
- Standard or long stick
- Track options:
 - Rubber belt – 450 mm (18 in)
 - Steel track – 450 mm (18 in)
 - Steel track – 600 mm (24 in)
 - Steel track with rubber pads – 450 mm (18 in)

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