



Cat[®] 308E2 CR

MINI HYDRAULIC EXCAVATOR WITH SWING BOOM

FEATURES:

The Cat[®] 308E2 CR Mini Hydraulic Excavator delivers high performance, durability and versatility in a compact design to help you work in a variety of applications. The 308E2 CR features the following:

QUALITY

- The durable hoods and frame and the compact radius design of the 308E2 CR let you work comfortably and confidently in confined areas.
- The operator environment includes a high quality suspension seat, easy to adjust armrests and 100% pilot controls which offer consistent and long-lasting controllability.

EFFICIENCY

- High Definition Hydraulic System provides a load sensing and flow sharing capability leading to operational precision, efficient performance and greater controllability.
- Power on Demand provides optimal efficiency and performance the moment you need it. This automatic system ensures fuel efficiency through appropriate engine rating to meet all operational needs as required.

VERSATILITY

- Broad range of Cat Work Tools make the Cat Mini Excavator a versatile machine, able to meet the requirements of any job site.
- 180 degrees of bucket rotation provides greater material retention during truck loading and easier flat wall digging without having to reposition the machine.

PERFORMANCE

- Front shovel bucket orientation provides the operator with more ways to get the job done faster.
- COMPASS Control Panel is a standard feature that allows the operator to easily adjust auxiliary flows to achieve the optimal work tool performance, activate auto idle for improved fuel efficiency and utilize the security system to ensure protection of valuable assets with the simple touch of a button.
- The Site Reference System included in the COMPASS monitor provides output from pitch and roll sensors to aid in grading and level trenching. This impacts accuracy and productivity for job site finishing.
- Rearview camera improves operator productivity and efficiency through increased visibility, making work easier to complete.

SERVICEABILITY

- Convenient service and maintenance requirements include ease of access to daily check points, 500 hour engine oil and filter change period, 500 hour grease interval on front implement, S-O-SSM oil sampling valve and overall long term durability.

SAFETY

- All Cat Mini Excavators from 3.5 metric tons to 8 metric tons are ROPS, TOPS and Top Guard Level II certified and include the Cat Interlock (hydraulic lockout) System, a certified accumulator which allows for auxiliary pressure to be released, making connecting and disconnecting work tools safer and easier, and a travel alarm. All of these safety features are standard on the E2 model lineup (travel alarm optional in Europe).

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



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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	37.4 kN	8,408 lb
Low Speed	64.5 kN	14,500 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

Air Conditioning System

The air conditioning system on this machine contains the fluorinated greenhouse gas refrigerant R134a (Global Warming Potential = 1430). The system contains 1.3 kg (2.9 lb) of refrigerant which has a CO₂ equivalent of 1.9 metric tonnes (4,189 lb).

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 (280 bar/4,061 psi)	128 L/min	33.8 gal/min
Auxiliary Circuit – Secondary (280 bar/4,061 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

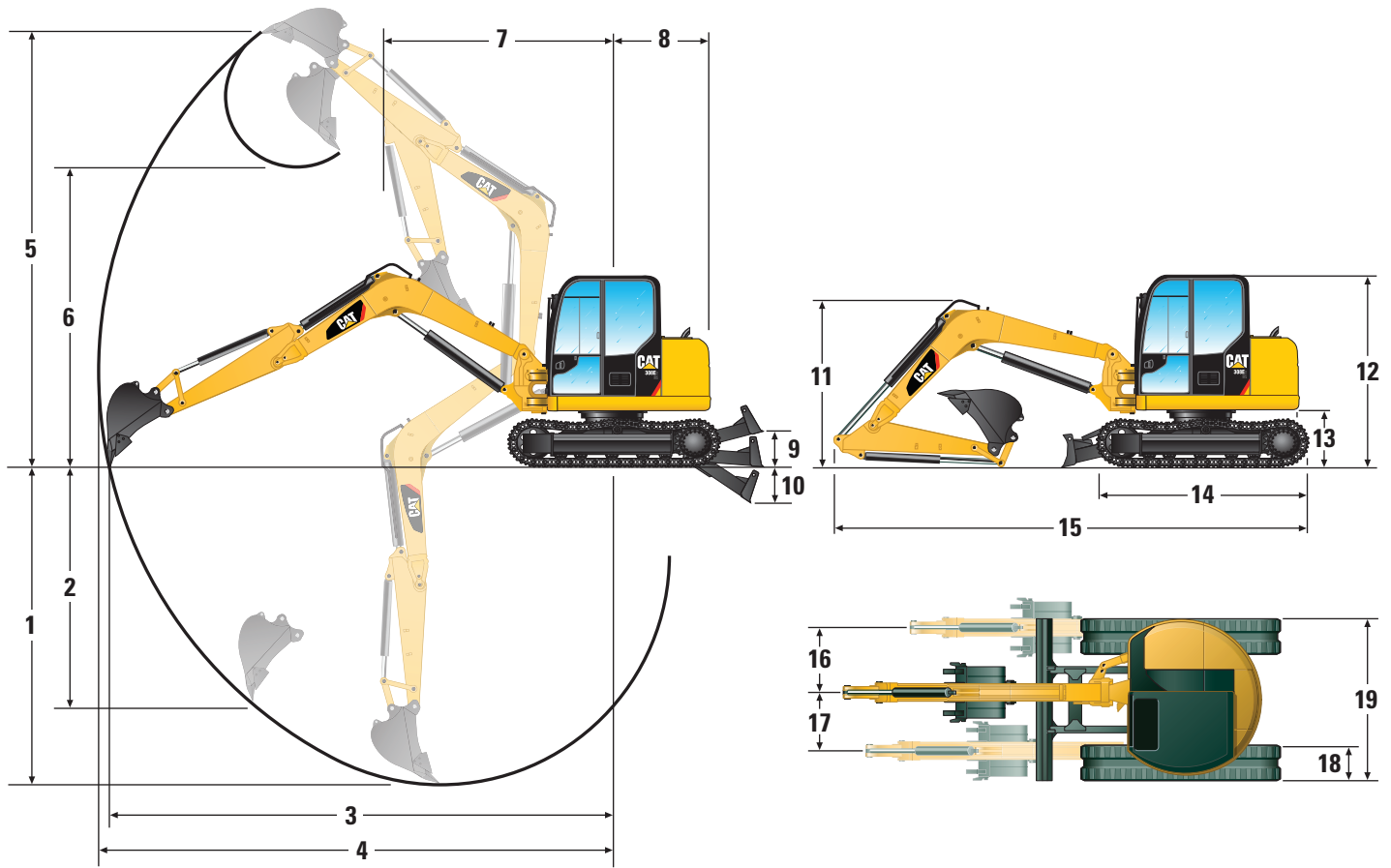
Cab

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

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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.

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STANDARD EQUIPMENT

ENGINE

- Cat C3.3B diesel engine (meets U.S. EPA Tier 4 Final/EU Stage IIIB emission standards)
- Automatic engine idle
- Automatic engine shut-off
- Automatic two speed travel
- Diesel Particulate Filter (North America only)
- Diesel Oxidation Catalyst (North America only)
- Fuel and water separator
- Power on demand

HYDRAULIC SYSTEM

- 1-way and 2-way (combined function)
- Accumulator
- Automatic swing parking brake
- Auxiliary hydraulic lines
- Adjustable auxiliary relief
- Auxiliary line quick disconnects
- Cat interlock system: hydraulic lockout
- Continuous auxiliary flow
- Ecology drain
- Hydraulic oil cooler
- High definition hydraulics
- Load sensing/flow sharing

OPERATOR ENVIRONMENT

- 100% pilot control ergonomic joysticks
- Adjustable armrests
- Air conditioning/heat

- COMPASS: complete, operation, maintenance, performance and security system
 - Multiple languages
- Cup holder
- High back suspension seat, heated
- Hydraulic neutral lockout bar
- Interior light
- Literature holder
- Pattern changer (optional in Europe)
- Radio (optional in Europe)
- Site reference system: leveling
- Tool storage area
- Travel control pedals with hand levers
- Washable floor mat
- Windshield wiper

UNDERCARRIAGE

- Dozer blade with float function
- Track, rubber belt, 450 mm (18 in) width
- Tie down eyes on track frame
- Towing eye on base frame

FRONT LINKAGE

- 180 degree bucket rotation
- Certified lifting eye on bucket linkage (optional in Europe)
- Front shovel capable
- Thumb ready stick

ELECTRICAL

- 12 volt electrical system
- 60 ampere alternator
- 650 CCA maintenance free battery
- Fuse box
- Ignition key start/stop switch
- Slow blow fuse
- Warning horn

LIGHTS AND MIRRORS

- Cab and boom light with time delay capability
- Mirror, rear view, cab left

SAFETY AND SECURITY

- Anti-theft system (COMPASS)
- Caterpillar Corporate "One Key" System
- Door locks
- Lockable fuel cap
- Rearview camera
- Retractable seat belt
- Roll Over Protective Structure (ROPS) (ISO 12117-2)
- Tip Over Protective Structure (TOPS) (ISO 12117)
- Top guard – ISO 10262 (Level II)
- Travel alarm (optional in Europe)

OPTIONAL EQUIPMENT

ENGINE

- Engine block heater

HYDRAULIC SYSTEM

- Quick coupler lines
- Boom lowering check valve*
- Stick lowering check valve*
- Secondary auxiliary hydraulic lines*

UNDERCARRIAGE

- Blade, weld on
- Track, triple grouser (steel), 450 mm (18 in)
- Track, triple grouser (steel) with rubber pad, 450 mm (18 in)
- Track, triple grouser (steel), 600 mm (24 in)

FRONT LINKAGE

- Quick coupler: manual or hydraulic
- Thumb
- Buckets
- Full range of performance matched work tools
 - Auger, hammer, shear, ripper

LIGHTS AND MIRRORS

- Mirror, cab rear

SAFETY AND SECURITY

- Battery disconnect
- Front wire mesh guard
- Front steel plate guard
- Rain guard

TECHNOLOGY

- Product Link™

OTHER ATTACHMENTS

- Counterweight, extra, 1121 kg (2,493 lb)*

*Standard on VAB configuration.

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