



Cat[®] 303.5E2 CR

MINI HYDRAULIC EXCAVATOR

FEATURES:

The Cat[®] 303.5E2 CR Mini Hydraulic Excavator delivers efficient performance, durability and versatility in a compact design to help you work in a variety of applications. The 303.5E2 CR features the following:

QUALITY

- The durable hoods and frame and the compact radius design of the 303.5E2 let you work comfortably and confidently in confined areas.
- The redesigned 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.
- Auto Idle allows the machine to automatically operate at a consistent lower engine speed when the hydraulics are not engaged for three seconds.

VERSATILITY

- Broad range of Cat Work Tools make the Cat Mini Excavator a versatile machine able to meet the requirements of any job site.
- Over 200 degrees of bucket rotation provides greater material retention during truck loading and easier flat wall digging without having to reposition the machine.

VERSATILITY (cont'd)

- 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 or economy mode for improved fuel efficiency and utilize the security system to ensure protection of valuable assets with the simple touch of a button.

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 1 certified and include the Cat Interlock (hydraulic lockout) System, a certified accumulator which allows for auxiliary pressure to be released, 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 C1.7	
Rated Net Power @ 2,200 rpm		
ISO 9249/EEC 80/1269	17.5 kW	23.5 hp
Gross Power		
ISO 14396	18.5 kW	24.8 hp
Bore	87 mm	3.4 in
Stroke	92.4 mm	3.6 in
Displacement	1.7 L	104 in ³

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

Weights*

Operating Weight with Canopy	3539 kg	7,803 lb
Operating Weight with Cab	3723 kg	8,209 lb

*Weight includes counterweight, rubber tracks, bucket, operator, full fuel and auxiliary lines.



303.5E2 CR Mini Hydraulic Excavator

Travel System

Travel Speed – High	4.6 km/h	2.9 mph
Travel Speed – Low	3.2 km/h	2.0 mph
Maximum Traction Force – High Speed	17.0 kN	3,822 lb
Maximum Traction Force – Low Speed	31.1 kN	6,992 lb
Ground Pressure – Canopy	30.1 kPa	4.4 psi
Ground Pressure – Cab	31.7 kPa	4.6 psi
Gradeability (maximum)	30°	

Service Refill Capacities

Cooling System	5.5 L	1.5 gal
Engine Oil	7.0 L	1.8 gal
Fuel Tank	46 L	12.2 gal
Hydraulic Tank	42.3 L	11.2 gal
Hydraulic System	65 L	17.2 gal

Hydraulic System

Load Sensing Hydraulics with Variable Displacement Piston Pump		
Pump Flow at 2,200 rpm	100 L/min	26.4 gal/min
Operating Pressure – Equipment	245 bar	3,553 psi
Operating Pressure – Travel	245 bar	3,553 psi
Operating Pressure – Swing	216 bar	3,132 psi
Auxiliary Circuit – Primary (186 bar/2,734 psi)	70 L/min	18.5 gal/min
Auxiliary Circuit – Secondary (174 bar/2,524 psi)	25 L/min	6.6 gal/min
Digging Force – Stick (standard)	18.9 kN	4,249 lb
Digging Force – Stick (long)	16.9 kN	3,799 lb
Digging Force – Bucket	33.0 kN	7,419 lb

Swing System

Machine Swing Speed	10 rpm
Boom Swing – Left (without stop)*	80°
Boom Swing – Left (with stop)*	55°
Boom Swing – Right	50°

*Automatic swing brake, spring applied, hydraulic release.

Operating Specifications

Stick Length – Standard	1260 mm	50 in
Stick Length – Long	1560 mm	61 in
Machine Overhang	0 mm	0 in

Undercarriage

Number of Carrier Rollers	1
Number of Track Rollers	4
Track Roller Type	Center Flange

Blade

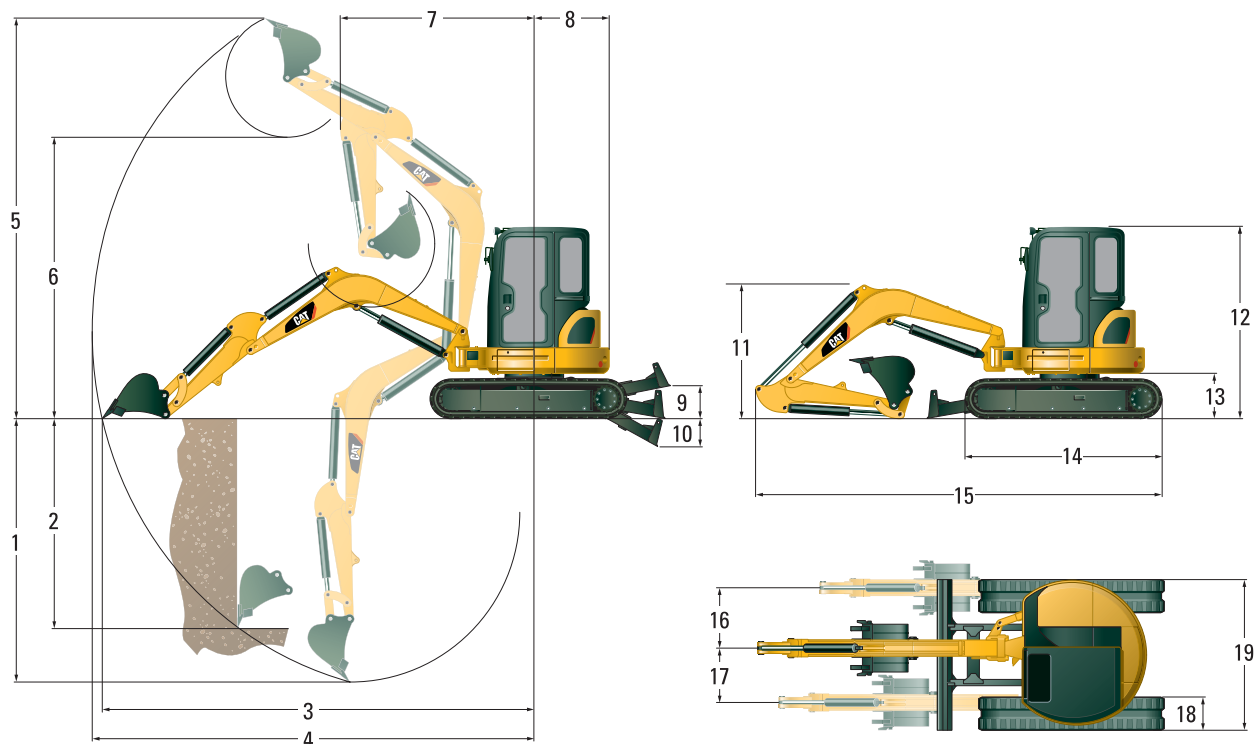
Width	1780 mm	70.0 in
Height	325 mm	12.8 in
Dig Depth	470 mm	18.5 in
Lift Height	400 mm	15.7 in

Lift Capacities at Ground Level*

Lift Point Radius		3000 mm (118 in)		4000 mm (157 in)	
		Front	Side	Front	Side
Blade Down	kg	1340	720	850	460
	(lb)	(2,955)	(1,588)	(1,874)	(1,014)
Blade Up	kg	750	660	470	420
	(lb)	(1,654)	(1,455)	(1,036)	(926)

*The above loads are in compliance 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 long stick.

303.5E2 CR Mini Hydraulic Excavator



Dimensions

	Standard Stick		Long Stick	
1 Dig Depth	2880 mm	113 in	3180 mm	125 in
2 Vertical Wall	2320 mm	91 in	2470 mm	97 in
3 Maximum Reach at Ground Level	5060 mm	199 in	5320 mm	209 in
4 Maximum Reach	5200 mm	205 in	5440 mm	214 in
5 Maximum Dig Height	4920 mm	194 in	5030 mm	198 in
6 Maximum Dump Clearance	3520 mm	139 in	3640 mm	143 in
7 Boom In Reach	2060 mm	81 in	2180 mm	86 in
8 Tail Swing	890 mm	35 in	890 mm	35 in
9 Maximum Blade Height	400 mm	16 in	400 mm	16 in
10 Maximum Blade Depth	470 mm	19 in	470 mm	19 in
11 Boom Height in Shipping Position	1420 mm	56 in	1650 mm	65 in
12 O/A Shipping Height	2500 mm	98 in	2500 mm	98 in
13 Swing Bearing Height	565 mm	22 in	565 mm	22 in
14 O/A Undercarriage Length	2220 mm	87 in	2220 mm	87 in
15 O/A Shipping Length	4730 mm	186 in	4790 mm	189 in
16 Boom Swing Right	765 mm	30 in	765 mm	30 in
17 Boom Swing Left	670 mm	26 in	670 mm	26 in
18 Track Belt/Shoe Width	300 mm	12 in	300 mm	12 in
19 O/A Track Width	1780 mm	70 in	1780 mm	70 in

303.5E2 CR Mini Hydraulic Excavator

STANDARD EQUIPMENT

- 1-way and 2-way (combined function) auxiliary hydraulic lines
- Accumulator
- Adjustable armrests
- Adjustable auxiliary flow control for work tools
- Alternator
- Anti-theft security system
- Automatic engine idle
- Automatic swing park brake
- Automatic two speed travel
- Auxiliary line quick disconnects
- Boom cylinder guard
- Cab mounted work light
- Canopy with Top Guard ISO 10262 (Level 1), ROPS ISO 12117-2 and TOPS ISO 12117
- Coat hook
- COMPASS display panel
- Continuous flow
- Control pattern changer (not available in Europe)
- Cup holder
- Dozer blade with float function
- Floor mat
- Foot travel pedals
- Fuel and water separator
- High definition hydraulics
- Horn
- Hydraulic lockout lever
- Hydraulic oil cooler
- Lifting eye on bucket linkage (standard equipment for all regions except Europe)
- Lockable storage box
- Long stick (optional in Europe)
- Low maintenance linkage pin joints
- Maintenance free battery
- Rear deflector
- Retractable seatbelt
- Rubber track
- Suspension seat, vinyl covered
- Thumb ready sticks (standard equipment for all regions except Europe)
- Travel alarm (optional in Europe)
- Travel control pedals with hand levers

OPTIONAL EQUIPMENT

- Air conditioning
- Angle dozer blade with float function
- Beacon socket for canopy machines
- Boom check valve
- Boom mounted light
- Cab, radio ready with Top Guard ISO 10262 (Level 1), ROPS ISO 12117-2 and TOPS ISO 12117 with heater/defroster, interior light, interlocking front window system and windshield wiper/washer
- Ecology drain valve for hydraulic tank
- High back suspension seat, fabric covered
- Hydraulic quick coupler lines
- Mirrors for cab and canopy
- Quick Coupler, mechanical or hydraulic
- Secondary auxiliary hydraulic lines
- Standard stick (Europe only)
- Steel track
- Stick check valve

For more complete information on Cat products, dealer services, and industry solutions, visit us on the web at www.cat.com

AEHQ7349 (12-14)

© 2014 Caterpillar
All Rights Reserved
Printed in U.S.A.

Materials and specifications are subject to change without notice. Featured machines in photos may include additional equipment. See your Cat dealer for available options.

CAT, CATERPILLAR, SAFETY.CAT.COM, their respective logos, "Caterpillar Yellow" and the "Power Edge" trade dress, as well as corporate and product identity used herein, are trademarks of Caterpillar and may not be used without permission.

