



Cat[®]

303.5E CR

MINI HYDRAULIC EXCAVATOR

FEATURES:

The Cat[®] 303.5E CR Mini Hydraulic Excavator delivers high performance in a compact design to help you work in the tightest applications. The 303.5E CR features the following:

- **Fingertip control for the boom swing and auxiliary hydraulic functions** makes operation easier while providing more room on the floor for the operator's feet.
- **Compact Radius Design** lets you work within confined areas. The radius of the upper body stays within 100 mm (4 in) of the undercarriage so the operator can concentrate on the work being done without having to worry about the back of the machine.
- **High digging forces, fast cycle times, and increased stability** boosts your productivity.
- **Over 200 degrees of bucket rotation** provides greater material retention during truck loading and easier flat wall digging without having to reposition the machine.
- **100% pilot controls and a load sensing hydraulic system.**

NEW STANDARD FEATURES ON THE 303.5E CR ARE MADE POSSIBLE WITH THE **COMPASS** (Complete Operation, Maintenance, Performance, And Security System) CONTROL PANEL:

- **Security System:** A standard anti-theft device uses a 5 digit alphanumeric password that is required to start the machine (when the security system is enabled).
- **Adjustable Work Tool Auxiliary Flow Control:** Simple adjustability of the hydraulic flow going down the boom and stick to the work tool. This is done by a simple selection from a flow of 1-15.
- **Continuous Flow:** Set the auxiliary flow in any direction and at any speed simply, safely, and easily on the right hand joystick.
- **Economy Mode:** Save up to 20% fuel while maintaining high productivity with a push of a button.

Specifications

Engine

Engine Model	Cat [®] C1.8	
Rated Net Power @ 2,400 rpm		
ISO 9249/EEC 80/1269	23.6 kW	31.6 hp
Gross Power		
ISO 14396	24.8 kW	33.3 hp
Bore	87 mm	3.4 in
Stroke	102.4 mm	4 in
Displacement	1.8 L	110 in ³

Weights*

Operating Weight with Canopy	3508 kg	7,734 lb
Operating Weight with Cab	3692 kg	8,139 lb

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

Travel System

Travel Speed – High	4.6 km/h	2.8 mph
Travel Speed – Low	2.6 km/h	1.6 mph
Max Traction Force – High Speed	16.9 kN	3,799 lb
Max Traction Force – Low Speed	31.0 kN	6,969 lb
Ground Pressure	32.1 kPa	4.7 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 2,400 rpm	87.6 L/min	23.1 gal/min
Operating Pressure – Equipment	245 bar	3,553 psi
Operating Pressure – Travel	245 bar	3,553 psi
Operating Pressure – Swing	181 bar	2,625 psi
Auxiliary Circuit – Primary		
(186 bar/2,734 psi)	60 L/min	15.9 gal/min
Auxiliary Circuit – Secondary		
(174 bar/2,524 psi)	27 L/min	7.1 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	9 rpm
Boom Swing – Left*	80°
Boom Swing – Right	50°

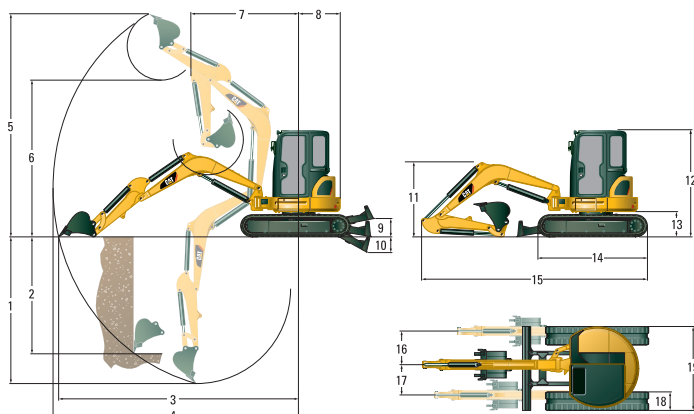
*Automatic swing break, spring applied, hydraulic release.

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



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Dimensions

	Standard Stick		Long Stick	
1	2880 mm	9'6"	3180 mm	10'4"
2	2320 mm	7'8"	2470 mm	8'2"
3	5060 mm	16'8"	5320 mm	17'6"
4	5200 mm	17'1"	5440 mm	17'10"
5	4920 mm	16'2"	5030 mm	16'6"
6	3520 mm	11'6"	3640 mm	11'11"
7	2060 mm	6'9"	2180 mm	7'2"
8	890 mm	2'11"	890 mm	2'11"
9	400 mm	1'4"	400 mm	1'4"
10	470 mm	1'7"	470 mm	1'7"
11	1420 mm	4'8"	1650 mm	5'4"
12	2500 mm	8'2"	2500 mm	8'2"
13	565 mm	1'10"	565 mm	1'10"
14	2220 mm	7'3"	2220 mm	7'3"
15	4730 mm	15'6"	4790 mm	15'9"
16	765 mm	2'6"	765 mm	2'6"
17	670 mm	2'2"	670 mm	2'2"
18	300 mm	1'0"	300 mm	1'0"
19	1780 mm	5'10"	1780 mm	5'10"

Lift Capacities at Ground Level*

Lift Point Radius		3000 mm (9'8")		4000 mm (13'1")	
		Front	Side	Front	Side
Blade Down	kg	1370	740	880	470
	(lb)	(2,940)	(1,590)	(1,890)	(1,010)
Blade Up	kg	770	680	490	440
	(lb)	(1,698)	(1,499)	(1,080)	(970)

*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 standard stick.

STANDARD EQUIPMENT

- 1-way and 2-way (combined function) auxiliary hydraulic lines
- Adjustable auxiliary flow control for work tools
- Adjustable wrist rests
- 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 FOPS ISO 10262 (Level 1) and Tip-Over Protection (TOPS) ISO 12117
- Coat hook
- COMPASS display panel
- Cup holder
- Continuous flow
- Control pattern changer (not available in Europe)
- Dozer blade with float function
- Economy mode setting for up to 20% fuel savings
- Floor mat
- Foot travel pedals
- Gauges or indicators for fuel level engine coolant temperature, hour meter, engine oil pressure, air cleaner, alternator and glow plugs, service interval
- Horn
- Hydraulic oil cooler
- Lifting eye on bucket linkage (standard equipment for all regions except Europe)
- Lockable storage box
- Low maintenance linkage pin joints
- Maintenance free battery
- Rubber track
- Retractable seatbelt
- Standard stick
- Suspension seat, vinyl covered
- "Thumb ready" sticks (standard equipment for all regions except Europe)
- Travel alarm (optional in Europe)

OPTIONAL EQUIPMENT

- Air conditioning
- Angle dozer blade with float function
- Beacon socket for canopy machines
- Boom check valve (Europe only)
- Boom mounted light
- Cab, radio ready with FOPS ISO 10262 (Level 1) and Tip-Over Protection (TOPS) ISO 12117 with heater/defroster, interior light and windshield wiper/washer
- Ecology drain valve for hydraulic tank
- High back suspension seat, fabric covered
- Hydraulic quick coupler lines
- Lifting eye on bucket linkage (optional in Europe, standard for all other regions)
- Long stick
- Mechanical quick coupler
- Mirrors for cab and canopy
- Seatbelt, 75 mm (3 in) wide (optional in Europe, standard in all other regions)
- Secondary auxiliary hydraulic lines
- Steel track and steel track with rubber pads

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