



Cat[®] 303E CR

MINI HYDRAULIC EXCAVATOR

FEATURES:

The Cat[®] 303E CR Mini Hydraulic Excavator delivers high performance, durability and versatility in a compact design to help you work in a variety of applications. The 303E CR features the following:

- **Comfortable operator station** includes a suspension seat, 76 mm (3 in) retractable seat belt, and a monitor display including fuel gauges and general diagnostics.
- **Key safety features come standard** including ROPS, TOPS and Top Guard Level 1 certification, as well as a travel alarm and the Cat interlock system.
- **With a width of 1550 mm (60 in) and weight of 3048 kg (6,721 lb)**, the 303E CR offers a robust compact radius design with excellent performance and stability.
- **Compact Radius Design** lets you work within confined areas. The radius of the upper body stays within the undercarriage so the operator can concentrate on the work being done without having to worry about the back of the machine.
- **High dig forces, fast cycle times and 200 degree bucket rotation angle** deliver the productivity that you demand.
- **Standard features including dozer blade float and automatic two speed** contribute to ease of machine operation and productivity.
- **Cat dealers offer you unmatched customer support** with excellent equipment management services, equipment maintenance and fast parts availability, resulting in optimized performance, reliability and profit.

Specifications

Engine

| | | |
|--|-----------|--------------------|
| Engine Model | Cat C1.3* | |
| Rated Net Power @ 2,400 rpm ISO 9249/EEC 80/1269 | 17.5 kW | 23.5 hp |
| Gross Power ISO 14396 | 18.5 kW | 24.8 hp |
| Bore | 78 mm | 3.1 in |
| Stroke | 88 mm | 3.5 in |
| Displacement | 1.3 L | 77 in ³ |

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

Weights*

| | | |
|--|---------|----------|
| Operating Weight with Canopy | | |
| Standard Stick | 3048 kg | 6,721 lb |
| Long Stick | 3090 kg | 6,813 lb |
| Standard Stick, Optional Counterweight | 3314 kg | 7,307 lb |
| Long Stick, Optional Counterweight | 3356 kg | 7,400 lb |
| Operating Weight with Cab | | |
| Standard Stick | 3267 kg | 7,204 lb |
| Long Stick | 3309 kg | 7,296 lb |
| Standard Stick, Optional Counterweight | 3533 kg | 7,790 lb |
| Long Stick, Optional Counterweight | 3575 kg | 7,883 lb |

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

Travel System

| | | |
|--|------------|----------|
| Travel Speed – High | 4.5 km/h | 2.8 mph |
| Travel Speed – Low | 2.4 km/h | 1.5 mph |
| Max Traction Force – High Speed | 15.2 kN | 3,417 lb |
| Max Traction Force – Low Speed | 30.9 kN | 6,947 lb |
| Ground Pressure with Canopy | | |
| Standard Stick | 30.4 kPa | 4.4 psi |
| Long Stick | 30.8 kPa | 4.5 psi |
| Standard Stick, Optional Counterweight | 33.0 kPa | 4.8 psi |
| Long Stick, Optional Counterweight | 33.5 kPa | 4.9 psi |
| Ground Pressure with Cab | | |
| Standard Stick | 32.6 kPa | 4.7 psi |
| Long Stick | 33.0 kPa | 4.8 psi |
| Standard Stick, Optional Counterweight | 35.2 kPa | 5.1 psi |
| Long Stick, Optional Counterweight | 35.6 kPa | 5.2 psi |
| Gradeability (Continuous Operation) | 20 degrees | |
| Gradeability (< 10 minutes Operation) | 30 degrees | |



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Service Refill Capacities

| | | |
|------------------|-------|----------|
| Cooling System | 4.7 L | 1.2 gal |
| Engine Oil | 5.7 L | 1.5 gal |
| Fuel Tank | 45 L | 11.6 gal |
| Hydraulic Tank | 47 L | 12.4 gal |
| Hydraulic System | 65 L | 17.2 gal |

Hydraulic System

| | | |
|--|----------|--------------|
| Load Sensing Hydraulics with Variable Displacement Piston Pump | | |
| Pump Flow at 2,400 rpm | 88 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/2,697 psi) | 60 L/min | 15.9 gal/min |
| Auxiliary Circuit – Secondary (174 bar/2,523 psi) | 27 L/min | 7.1 gal/min |
| Digging Force – Stick (Standard) | 16.6 kN | 3,732 lbf |
| Digging Force – Stick (Long) | 14.8 kN | 3,327 lbf |
| Digging Force – Bucket | 28.4 kN | 6,384 lbf |

Operating Specifications

| | | |
|--|---------|-------|
| Stick Length – Standard | 1260 mm | 50 in |
| Stick Length – Long | 1560 mm | 61 in |
| Machine Overhang | 0 mm | 0 in |
| Machine Overhang with Extra Counterweight | 115 mm | 5 in |

Swing System

| | |
|---------------------|-------|
| Machine Swing Speed | 9 rpm |
| Boom Swing – Left* | 80° |
| Boom Swing – Right | 50° |

*Automatic swing brake, spring applied, hydraulic release.

Blade

| | | |
|-------------|---------|-------|
| Width | 1550 mm | 60 in |
| Height | 335 mm | 13 in |
| Dig Depth | 472 mm | 19 in |
| Lift Height | 402 mm | 16 in |

Undercarriage

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

Certification – Cab and Canopy

| | |
|---------------------------------------|--------------------------|
| Roll Over Protective Structure (ROPS) | ISO 12117-2:2008 |
| Tip Over Protective Structure (TOPS) | ISO 12117:1997 |
| Top Guard | ISO 10262:1998 (Level I) |

Lift Capacities at Ground Level*

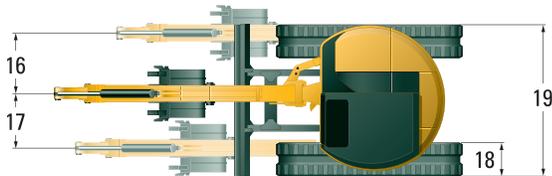
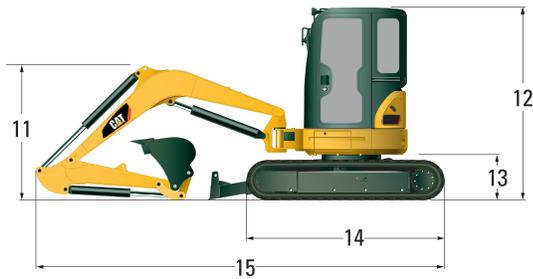
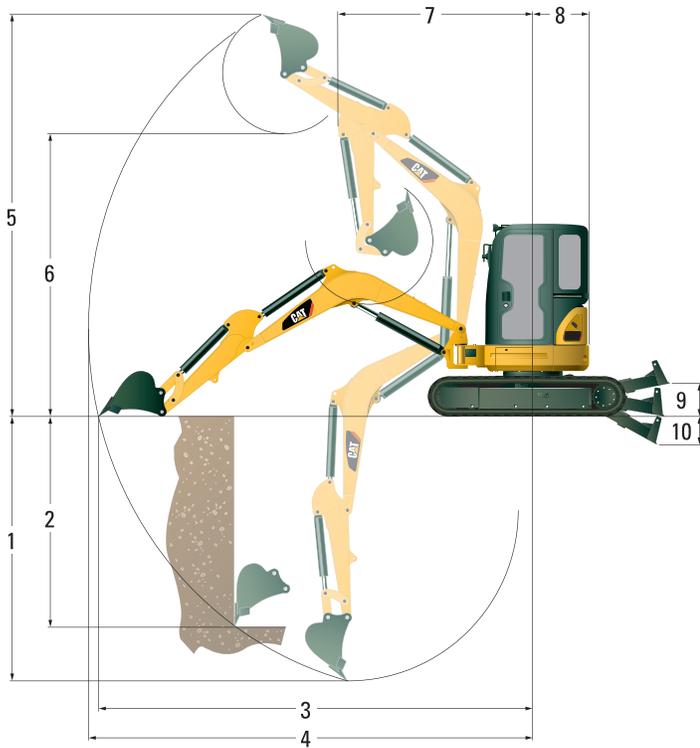
| Lift Point Radius | | 3000 mm (9'8") | | 4000 mm (13'1") | |
|-------------------|------|----------------|---------|-----------------|-------|
| | | Front | Side | Front | Side |
| Blade Down | kg | 1170 | 540 | 740 | 340 |
| | (lb) | (2,580) | (1,191) | (1,632) | (750) |
| Blade Up | kg | 650 | 490 | 410 | 300 |
| | (lb) | (1,433) | (1,080) | (904) | (662) |

*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 machine with cab, optional counterweight and standard stick.

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Dimensions (All dimensions are approximate.)

| | Standard Stick | | Long Stick | |
|--|----------------|-----|------------|-----|
| | mm | in | mm | in |
| 1 Dig Depth | 2750 | 108 | 2980 | 117 |
| 2 Vertical Wall | 1960 | 77 | 1750 | 69 |
| 3 Maximum Reach at Ground Level | 4810 | 189 | 4910 | 193 |
| 4 Maximum Reach | 4950 | 195 | 5040 | 198 |
| 5 Maximum Dig Height | 4530 | 178 | 4250 | 167 |
| 6 Maximum Dump Clearance | 3150 | 124 | 2970 | 117 |
| 7 Boom In Reach | 2110 | 83 | 2000 | 79 |
| 8 Tail Swing | 775 | 31 | 775 | 31 |
| Tail Swing with Extra Counterweight | 890 | 35 | 890 | 35 |
| 9 Maximum Blade Height | 402 | 16 | 400 | 16 |
| 10 Maximum Blade Depth | 472 | 19 | 470 | 19 |
| 11 Boom Height in Shipping Position | 1590 | 63 | 1600 | 63 |
| 12 Overall Shipping Height | 2500 | 98 | 2500 | 98 |
| 13 Swing Bearing Height | 565 | 22 | 565 | 22 |
| 14 Overall Undercarriage Length | 2080 | 82 | 2080 | 82 |
| 15 Overall Shipping Length | 4470 | 176 | 5030 | 198 |
| 16 Boom Swing Right | 825 | 32 | 825 | 32 |
| 17 Boom Swing Left | 610 | 24 | 610 | 24 |
| 18 Track Belt/Shoe Width | 300 | 12 | 300 | 12 |
| 19 Overall Track Width | 1550 | 60 | 1550 | 61 |



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STANDARD EQUIPMENT

- 1-way and 2-way (combined function) auxiliary hydraulic lines
- Adjustable armrests
- Alternator
- Automatic swing park brake
- Automatic two speed travel
- Auxiliary line quick disconnects
- Boom cylinder guard
- Cab mounted work light
- Canopy with Top Guard ISO 10262:1998 (Level 1), ROPS ISO 12117-2:2008 and TOPS ISO 12117:1997
- Coat hook
- Cup holder
- Control pattern changer
- Dozer blade with float function
- 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
- Product Link™
- Rubber track
- Retractable seatbelt
- Standard stick
- Suspension seat, vinyl covered
- “Thumb ready” sticks
- Travel alarm (optional in Europe)

OPTIONAL EQUIPMENT

- Beacon socket for canopy machines
- Boom mounted light
- Cab, Top Guard ISO 10262:1998 (Level 1), ROPS ISO 12117-2:2008 and TOPS ISO 12117:1997
- High back suspension seat, fabric covered
- Mechanical quick coupler
- Mirrors for cab and canopy
- Steel track

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