

302.5C

Mini Hydraulic Excavator



Engine

Rated net power (ISO 9249)	18.6 kW	24.9 hp
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Weights

Operating weight with canopy	2745 kg	6,052 lb
Operating weight with cab	2850 kg	6,283 lb

- Weight with rubber tracks, bucket, operator, full fuel and auxiliary lines.
- Weight varies depending on machine configuration.

302.5C Mini Hydraulic Excavator

Designed to deliver reliable performance, versatility and ease of operation.

Comfort and Ease of Operation

Cab or canopy, the 302.5C offers a spacious and comfortable work area with expansive legroom. Features like automatic swing lock, power socket, suspension seat, ergonomic controls and well-positioned air vents add to a productive work environment. **pg. 4**

Performance and Versatility

High dig forces, fast cycle times and high bucket rotation angles deliver the productivity that customers demand. A choice of stick lengths, Cat® Work Tools and dozer float function makes the 302.5C Mini Hydraulic Excavator even more versatile. **pg. 5**

Low Operating Costs

Protected front linkage lines, extra thick side panels and protective counterweight help reduce impact damage and costly repairs. Service points are easily accessed through large rear doors and a 500-hour engine oil change period lowers operating costs. **pg. 6**

Engineered Durability –

The heavy-duty structures and clean lines of the Cat® 302.5C ensure long life and reduce maintenance costs in tough, demanding applications.



Customer Support

Cat dealers offer unmatched customer support with excellent equipment management services, equipment maintenance and fast parts availability, resulting in optimized performance, reliability and profit. **pg. 7**



Comfort and Ease of Operation

The spacious cab and easy operating controls are designed for comfort and productivity.



Operator Station. The large, spacious cab offers superior leg room, air circulation and an expansive viewing area, with flat glass throughout, for easy and inexpensive replacement.

Suspension Seat and Wrist Supports.

A suspension seat is standard and coupled with adjustable wrist supports, help increase operator comfort and reduce fatigue.



Low Effort Controls. Ergonomic, low effort controls offer greater operator comfort for increased productivity. Dozer lever mounted, two-speed travel control provides easy operation and increases foot room.

Line of Sight Instrumentation.

The operator has a clear view of the machine's monitoring system, ensuring fuel level, water temperature and warning lights are easily seen.

Lever Mounted Auxiliary and Boom Swing Controls. Moving the auxiliary boom swing functions from the cab floor enhances machine control and increases operator foot space.

Optional Air Conditioning or Fan and Sun Visor. Operator comfort can be further enhanced with the optional air conditioning or fan and sun visor packages.

Performance and Versatility

A wide range of buckets and hydraulically powered work tools optimize machine performance.

Digging Forces and Cycle Times.

High digging forces and fast cycle times ensure that the Cat® C-Series Mini Excavators deliver the productivity that customers demand.

Stick Options. A choice of standard or long stick enables matching of machine to application.



Bucket Angle. High rotation bucket angle combines good spoil retention and flat back trench characteristics.

Long Reach Dozer Blade. The long reach dozer blade assists with effective site clean-up.

Dozer Blade Float Function. The dozer blade float enables easy ground leveling for landscaping and finishing applications, as well as more efficient clean-up.



Work Tools. Caterpillar® offers a wide range of work tools to increase the machine's versatility. The work tools are designed to optimize performance and deliver excellent value through high productivity and long life.

Work tools include:

- Augers
- Buckets – digging, ditch cleaning, tilt ditch
- Hydraulic hammers



Auxiliary Lines and Connectors.

The auxiliary lines and connectors are fitted as standard, meaning the Cat 302.5C comes ready to work, enabling both hammer (one-way) and auger (two-way) tool operation.



Mechanical Quick Coupler. The Cat Quick Coupler makes frequent tool changes fast and easy. Compatible with all Cat Mini Hydraulic Work Tools, it features a strong, lightweight, low profile design with no debris traps for years of secure work tool changes.

Low Operating Costs

Downtime is kept to a minimum with easy access to convenient daily check points.



Front Linkage. Protected front linkage lines are routed above the boom and stick so the sides are clean to help reduce damage and downtime.



Service Access. Large, swing-out rear doors allow access to major components and service points within the engine enclosure, including:

- Air filter
- Engine oil check and fill
- Engine oil filter element
- Radiator reservoir tank, check and fill
- Vertically-mounted, spin-on fuel filter/water separator
- Windshield washer fluid tank



Lift Up Side Cover. Access to the implement valve and hydraulic tank is convenient through a lift up side cover.

Sight Gauge. A hydraulic oil sight gauge makes fluid level checks fast and easy.

S•O•SSM Valve. The S•O•S oil sampling valve allows easy sampling of hydraulic fluid for preventive maintenance.

500-Hour Oil Change. The 500-hour oil and filter change period helps keep operating costs down.

Customer Support

Industry-leading customer support is provided by the Cat® dealer network.

Selection. Make detailed comparisons of the machines under consideration before you purchase. Your Cat dealer can give you precise answers to your questions, as well as estimate component life, preventive maintenance cost and the true cost of lost production.

Purchase. Look past initial price. Consider the flexible financing options available, as well as day-to-day operating costs. Look at dealer services that can be included in the cost of the machine to yield lower equipment owning and operating costs over the long haul. Your Cat dealer can provide a package to meet your needs.

Operation. Improving operating techniques can boost your profits. Your Cat dealer has training literature, video tapes, classes and other ideas to help increase your productivity.

Equipment Maintenance Services. More and more equipment buyers are planning for effective maintenance before buying. Choose from your dealer's wide range of maintenance services at the time you purchase your new machine. Repair option programs guarantee the cost of repairs up front. Services that help optimize machine performance include:

- Customer Support Agreements
- S•O•SSM and Coolant Sampling and Technical Analysis
- Maintenance contracts
- Scheduled technical inspections



Unmatched Product Support. You will find nearly all parts at our dealer parts counter. Cat dealers use a world-wide computer network to find in-stock parts to minimize machine downtime.

Save money with genuine Cat Remanufactured parts. You receive the same warranty and reliability as new products at a cost savings of 40-70 percent.

Engine

Model	Mitsubishi S3L2 NA Diesel	
Rated net power (ISO 9249)	18.6 kW	24.9 hp
Gross power	19.9 kW	26.7 hp

- Meets EPA Tier 2 emissions requirements.
- Ratings at 2,300 rpm.

Weights

Operating weight with canopy	2745 kg	6,052 lb
Operating weight with cab	2850 kg	6,283 lb

- Weight with rubber tracks, bucket, operator, full fuel and auxiliary lines.
- Weight varies depending on machine configuration.

Engine Dimensions

Bore	78 mm	3.07 in
Stroke	92 mm	3.62 in
Displacement	1.3 L	80.4 in ³

Travel System

Travel speed – high	5 km/h	3.1 mph
Travel speed – low	2.5 km/h	1.6 mph
Max traction force – high speed	12.4 kN	2,788 lbf
Max traction force – low speed	23.6 kN	5,305 lbf
Gradeability (max)	30°	

Hydraulic System

Pump – gear (tandem)	31.2 L/min	8.2 gal/min
Pump – gear (single)	18.4 L/min	4.9 gal/min
Operating pressures – equipment	221 bar	3,205 psi
Operating pressure – travel	221 bar	3,205 psi
Operating pressure – swing	174 bar	2,524 psi
Auxiliary circuits – Primary (174 bar/2,524 psi)	64 L/min	16.9 gal/min
Auxiliary circuits – Secondary (174 bar/2,524 psi)	14.4 L/min	3.8 gal/min
Digging force – Stick, standard	15.3 kN	3,440 lbf
Digging force – Stick, long	13.1 kN	2,945 lbf
Digging force – Bucket	24.2 kN	5,440 lbf

Swing System

Type	Hydraulic motor-driven
Machine swing speed	9.5 rpm
Boom swing – left (without stop)	90°
Boom swing – left (with stop)	54°
Swing – right	48°

- Automatic swing brake, spring applied, hydraulic release.
- Centralized lubrication.

Sound Levels

Canopy	81 dB(A)
Cab	81 dB(A)

- Operator sound pressure levels measured per ISO 6396 (dynamic).

Electrical System

- 50-amp alternator
- 12-volt, 650 CCA, 52 amp/h
- Sealed electrical connectors

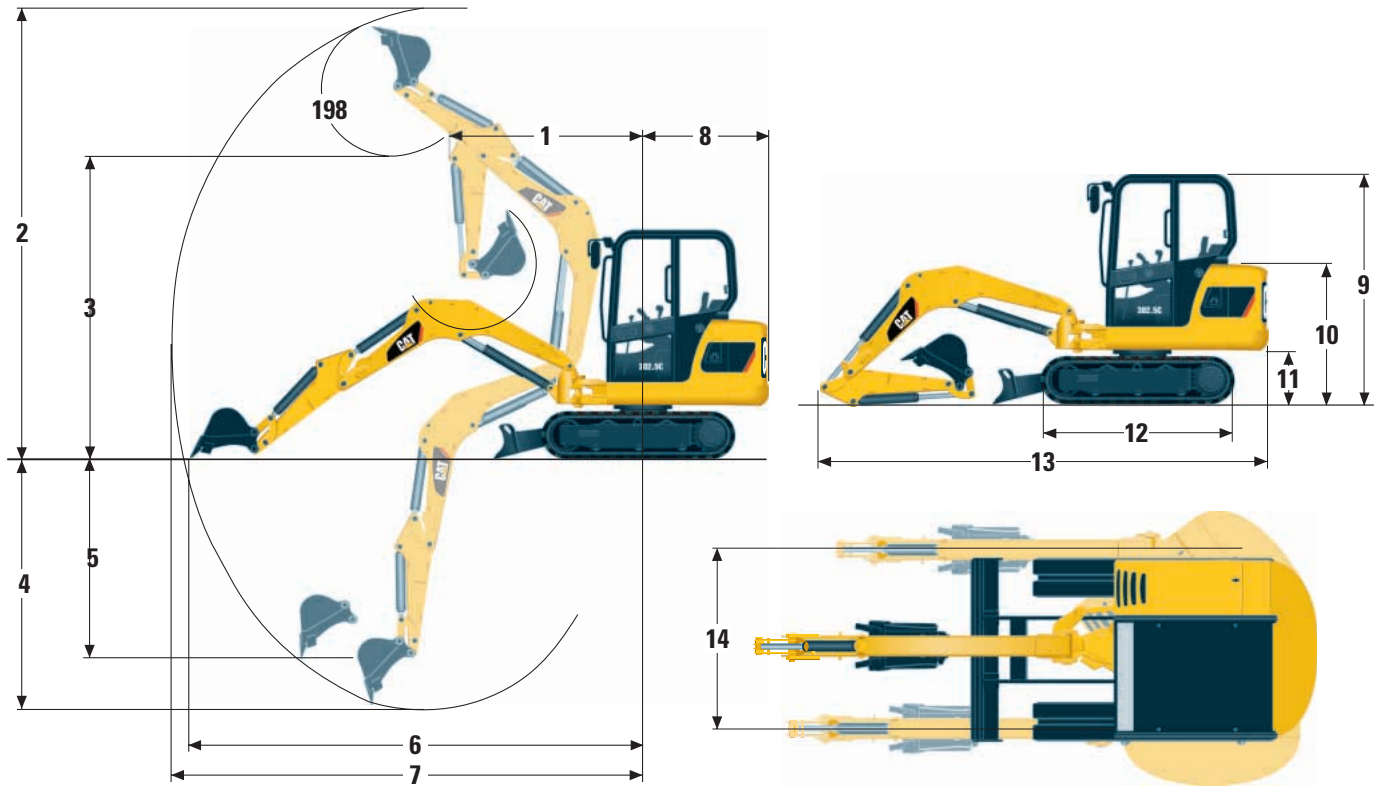
Blade

Width	1450 mm	57.1 in
Height	320 mm	12.6 in
Dig depth	420 mm	16.5 in
Lift height	285 mm	11.2 in

Service Refill Capacities

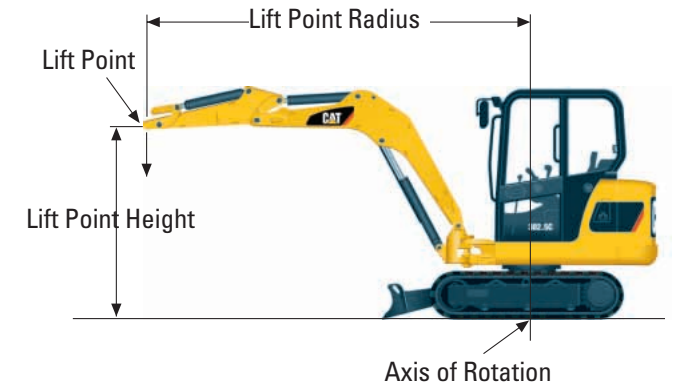
Cooling system	4.5 L	1.2 gal
Engine oil	6.4 L	1.7 gal
Fuel tank	38 L	10 gal
Hydraulic tank	36 L	9.5 gal
Hydraulic system	50 L	13.2 gal

Dimensions and Lift Capacities



	Standard Stick		Long Stick	
1	2640 mm	8'8"	2930 mm	9'7"
2	1920 mm	6'3"	2180 mm	7'2"
3	4545 mm	14'11"	4810 mm	15'9"
4	4670 mm	15'4"	4930 mm	16'2"
5	4355 mm	14'3"	4530 mm	14'10"
6	3110 mm	10'2"	3280 mm	10'9"
7	1875 mm	6'2"	1890 mm	6'2"
8	1280 mm	4'2"	1280 mm	4'2"
9	2300 mm	7'6"	2300 mm	7'6"
10	1405 mm	4'7"	1405 mm	4'7"
11	545 mm	1'9"	545 mm	1'9"
12	1925 mm	6'4"	1925 mm	6'4"
13	4515 mm	14'10"	4515 mm	14'10"
14	1110 mm	3'8"	1110 mm	3'8"

Track and blade width	1450 mm	4'9"
Gauge width	1150 mm	3'9"
Shoe width	300 mm	1'



With tracks level on the ground.

Lift Capacities at Ground Level	Over Front		Over Side		Over Front		Over Side	
Lift point radius	2500 mm	8'2"	2500 mm	8'2"	3500 mm	11'6"	3500 mm	11'6"
Blade down	1285 kg*	2,833 lb*	1090 kg	2,403 lb	816 kg*	1,799 lb*	671 kg	1,479 lb
Blade up	791 kg	1,744 lb	635 kg	1,400 lb	499 kg	1,100 lb	413 kg	911 lb

* Limited by hydraulic capacity rather than tipping load.

The above loads are in compliance with SAE hydraulic excavator lift capacity rating standard SAE J1097 and do not exceed 87% of hydraulic lifting capacity or 75% of tipping capacity.

Excavator bucket weight is not included on this chart. Lifting capacities are for standard stick.

Standard Equipment

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

Alternator

Auxiliary control switch, joystick-mounted (on/off)
Auxiliary lines circuit valve and controls
Auxiliary lines – one-way (hammer), two-way (auger) to the stick
Battery, maintenance-free
Boom cylinder guard
Boom swing control, joystick-mounted
Canopy with FOPS per ISO 10262 (Level I) and TOPS per ISO 12117
Coat hook
Cup holder
Dozer blade with float function
Floor mat
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
Linkage pin joints, low-maintenance
Mobile phone holder and power socket
Parking brake, swing, automatic
Rubber tracks, 300 mm (1 ft)
Seatbelt, 50 mm (2 in)
Seat, suspension, vinyl covered
Stick, standard
Storage box, lockable
Tank cover, lockable
Travel alarm
Travel pedals
Two-speed travel
Work light, cab mounted
Wristrests, adjustable

Optional Equipment

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

Air conditioning	Proportional auxiliary control, joystick-mounted
Boom check valve	Radio installation kit
Cab, fully glazed with FOPS per ISO 10262 (Level I), TOPS per ISO 12117	Radio/CD player
Heater/defroster, interior light, windshield wiper/washer	Seat, suspension, fabric covered
Control pattern changer	Seatbelt, 75 mm (3 in)
Engine oil, ecology drain valve	Steel tracks, 300 mm (1 ft)
Fan and sun visor installation	Stick, long
Front screen guard for cab and canopy	Stick, thumb ready
Hydraulic oil, biodegradable	Tool kit
Hydraulic tank, ecology drain valve	Work tools
Immobilizer system	
Light, boom-mounted	
Mechanical Quick Coupler	
Mirrors for cab and canopy	

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