



323 GC

Hydraulic Excavator

Technical Specifications

Configurations and features may vary by region. Please consult your Cat® dealer for availability in your area.

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323 GC Hydraulic Excavator Specifications

Engine

Engine Model	Cat® C7.1	
Net Power		
ISO 9249	117 kW	157 hp
ISO 9249 (DIN)	159 hp (metric)	
Engine Power		
ISO 14396	118 kW	158 hp
ISO 14396 (DIN)	160 hp (metric)	
Bore	105 mm	4 in
Stroke	135 mm	5 in
Displacement	7.01 L	428 in ³
Biodiesel capability	Up to B20 ⁽¹⁾	

- Meets Brazil MAR-1 and China Nonroad Stage III emission standards, equivalent to U.S. EPA Tier 3 and EU Stage IIIA.
- Recommended for use up to 4500 m (14,760 ft) altitude with engine power derate above 3000 m (9,840 ft).
- Advertised power is tested per the specified standard in effect at the time of manufacture.
- Net power advertised is the power available at the flywheel when the engine is equipped with fan, air intake system, exhaust system and alternator.
- Engine speed at 1,800 rpm.

⁽¹⁾Cat engines are compatible with diesel fuel blended with the following lower-carbon intensity fuels up to:

- ✓ 100% biodiesel FAME (fatty acid methyl ester)*
- ✓ 100% renewable diesel, HVO (hydrogenated vegetable oil) and GTL (gas-to-liquid) fuels

Refer to guidelines for successful application. Please consult your Cat dealer or “Caterpillar Machine Fluids Recommendations” (SEBU6250) for details.

*For use of blends higher than 20% biodiesel, consult your Cat dealer.

Swing Mechanism

Swing Speed	11.25 rpm	
Maximum Swing Torque	82.0 kN·m	60,300 lbf·ft

Weights

Operating Weight	22 600 kg	49,800 lb
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- Long undercarriage, Reach boom, R2.9 m (9'5") Optimized Reach stick, GD 1.3 m³ (1.70 yd³) bucket, 600 mm (24") triple grouser shoes and 4.7 mt (10,360 lb) counterweight.

Track

Standard Track Shoes Width	600 mm	24 in
Optional Track Shoes Width	790 mm	31 in
Number of Shoes (each side)	49	
Number of Track Rollers (each side)	8	
Number of Carrier Rollers (each side)	2	

Drive

Gradeability	35°/70%	
Maximum Travel Speed	5.7 km/h	3.5 mph
Maximum Drawbar Pull	205 kN	45,996 lbf

Hydraulic System

Main System – Maximum Flow – Implement	429 L/min	113 gal/min
Maximum Pressure – Equipment – Implement	35 000 kPa	5,075 psi
Maximum Pressure – Travel	34 300 kPa	4,974 psi
Maximum Pressure – Swing	26 800 kPa	3,886 psi
Boom Cylinder – Bore	120 mm	5 in
Boom Cylinder – Stroke	1260 mm	50 in
Stick Cylinder – Bore	135 mm	5 in
Stick Cylinder – Stroke	1504 mm	59 in
Bucket Cylinder – Bore	115 mm	5 in
Bucket Cylinder – Stroke	1104 mm	43 in

Service Refill Capacities

Fuel Tank Capacity	345 L	91.1 gal
Cooling System	25 L	6.6 gal
Engine Oil (with filter)	25 L	6.6 gal
Swing Drive	5 L	1.3 gal
Final Drive (each)	5 L	1.3 gal
Hydraulic System (including tank)	234 L	61.8 gal
Hydraulic Tank (including suction pipe)	115 L	30.4 gal

Standards

Brakes	ISO 10265:2008
Cab/ROPS	ISO 12117-2:2008
Cab/FOGS (optional)	ISO 10262:1998 Level II

Sound Performance

ISO 6395:2008 (external)	99 dB(A)
ISO 6396:2008 (inside cab)	71 dB(A)

- When properly installed and maintained, the cab offered by Caterpillar, when tested with doors and windows closed according to ANSI/SAE J1166 OCT98, meets OSHA and MSHA requirements for operator sound exposure limits in effect at time of manufacture.
- Hearing protection may be needed when operating with an open operator station and cab (when not properly maintained or doors/windows open) for extended periods or in a noisy environment.

323 GC Hydraulic Excavator Specifications

Operating Weights and Ground Pressures

	600 mm (24") Triple Grouser Shoes		790 mm (31") Triple Grouser Shoes	
	Weight	Ground Pressure	Weight	Ground Pressure
	kg (lb)	kPa (psi)	kg (lb)	kPa (psi)
Base Machine Configurations				
HD Base Frame with Track Rollers and Carrier Rollers				
4.7 mt (10,360 lb) Counterweight + Long Undercarriage Base Machine				
Reach Boom + 2.9 m (9'5") Optimized Bare Reach Stick + 1.3 m ³ (1.70 yd ³) GD Bucket	22 600 (49,800)	47 (6.8)	23 300 (51,400)	36.8 (5.3)

All operating weights include a 90% fuel tank with 75 kg (165 lb) operator.

Major Component Weights

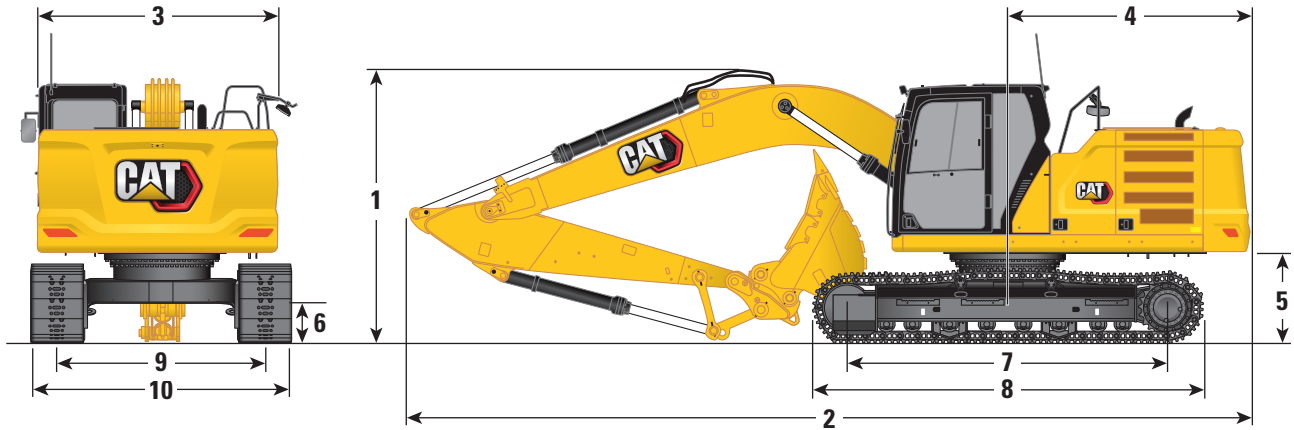
	kg	lb
Base Machine (with upper frame, long undercarriage, 4.7 mt [10,360 lb] counterweight – does not include boom, stick, bucket, boom cylinders, stick cylinder, bucket cylinder, tracks, 90% fuel tank and 75 kg [165 lb] operator)	15 600	34,400
Track Shoes:		
600 mm (24") Width, 10 mm (0.39") Thick, Triple Grouser Track Shoes	2690	5,900
790 mm (28") Width, 10 mm (0.39") Thick, Triple Grouser Track Shoes	3370	6,700
Two Boom Cylinders	340	700
Weight of 90% Fuel Tank and 75 kg (165 lb) Operator	310	700
Counterweight:		
4.7 mt (10,360 lb) Counterweight	4700	10,400
Swing Frame:		
HD Swing Frame	2120	4,700
Undercarriage:		
HD Base Frame with Standard Track Rollers and Standard Carrier Rollers	4470	9,900
Boom (including lines, pins, stick cylinder):		
Reach Boom 5.7 m (18'8")	1690	3,700
Sticks (including lines, pins, bucket cylinder, bucket linkage):		
Optimized Reach Stick R2.9B1 (9'6")	1080	2,400
Optimized Bare Reach Stick R2.9B1 (9'6")	1070	2,400
Buckets (without linkage):		
1.30 m ³ (1.48 yd ³) GD	900	2,000
1.30 m ³ (1.70 yd ³) HD	1070	2,400
1.19 m ³ (1.56 yd ³) HD	1000	2,200

Refer to page 6 for a complete list of bucket options.

323 GC Hydraulic Excavator Specifications

Dimensions

All dimensions are approximate and may vary depending on bucket selection.

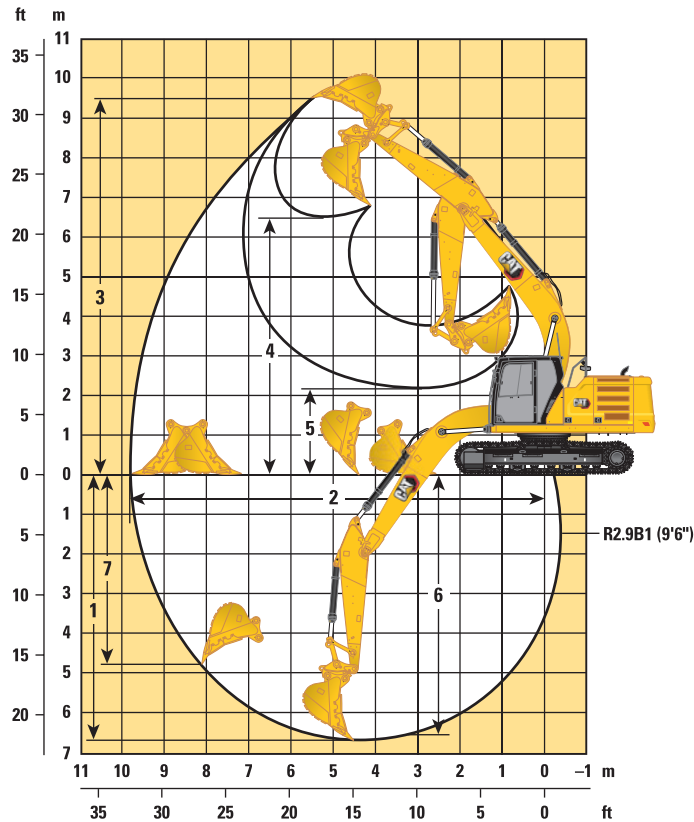


Boom Option	Reach Boom 5.7 m (18'8")	
Stick Option	Reach Stick R2.9B1 (9'6")	
1 Machine Height:		
Cab Height	2960 mm	9'9"
FOGS Height	3104 mm	10'2"
Handrail Height	2954 mm	9'8"
With Boom/Stick/Bucket Installed	3162 mm	10'4"
With Boom/Stick Installed	2913 mm	9'7"
With Boom Installed	2475 mm	8'1"
2 Machine Length:		
With Boom/Stick/Bucket Installed	9531 mm	31'3"
With Boom/Stick Installed	9499 mm	31'2"
With Boom Installed	8454 mm	27'9"
3 Upperframe Width	2780 mm	9'1"
4 Tail Swing Radius	2833 mm	9'4"
5 Counterweight Clearance	1048 mm	3'5"
6 Ground Clearance	468 mm	1'6"
7 Length to Center of Rollers	3650 mm	12'0"
8 Track Length	4450 mm	14'7"
9 Track Gauge	2380 mm	7'10"
10 Undercarriage Width:		
600 mm (24") Shoes	2980 mm	9'9"
790 mm (28") Shoes	3170 mm	10'4"
Bucket Type	GD	
Bucket Capacity	1.30 m ³	1.70 yd ³
Bucket Tip Radius	1584 mm	5'2"

323 GC Hydraulic Excavator Specifications

Working Ranges and Forces

All dimensions are approximate and may vary depending on bucket selection.



Boom Option	Reach Boom 5.7 m (18'8")	
Stick Option	Reach Stick R2.9B1 (9'6")	
1 Maximum Digging Depth	6730 mm	22'1"
2 Maximum Reach at Ground Line	9870 mm	32'5"
3 Maximum Cutting Height	9450 mm	31'0"
4 Maximum Loading Height	6490 mm	21'4"
5 Minimum Loading Height	2170 mm	7'1"
6 Maximum Depth Cut for 2440 mm (8'0") Level Bottom	6560 mm	21'6"
7 Maximum Vertical Wall Digging Depth	5610 mm	18'5"
Bucket Digging Force (ISO)	140 kN	31,520 lbf
Stick Digging Force (ISO)	107 kN	23,970 lbf
Bucket Type	GD	
Bucket Capacity	1.30 m ³	1.70 yd ³
Bucket Tip Radius	1584 mm	5'2"

323 GC Hydraulic Excavator Specifications

Bucket Specifications and Compatibility

	Linkage	Width		Capacity		Weight		Fill	Reach
		mm	in	m ³	yd ³	kg	lb	%	R2.9 (9'6")
Pin On (No Coupler)									
General Duty Excavation	B	1150	46	0.90	1.18	758	1,671	100	●
	B	1250	50	1.00	1.31	792	1,747	100	●
	B	1400	56	1.14	1.49	858	1,891	100	⊙
General Duty	B	1300	51	1.30	1.70	823	1,814	100	⊙
Heavy Duty	B	1050	43	1.00	1.31	884	1,948	100	●
	B	1200	49	1.19	1.56	955	2,105	100	⊖
	B	1300	52	1.30	1.70	1015	2,238	100	⊙
								kg	2960
								lb	6,526

Maximum load with pin-on (payload + bucket)

The above loads are in compliance with hydraulic excavator standard EN474-5:2006 + A3:2013, they do not exceed 87% of hydraulic lifting capacity or 75% of tipping capacity with front linkage fully extended at ground line with bucket curled.

Capacity based on ISO 7451:2007.

Bucket weight with General Duty tips.

Maximum Material Density:

- 2100 kg/m³ (3,500 lb/yd³)
- ⊙ 1800 kg/m³ (3,000 lb/yd³)
- ⊖ 1500 kg/m³ (2,500 lb/yd³)

Caterpillar recommends using appropriate work tools to maximize the value customers receive from our products. Use of work tools, including buckets, which are outside of Caterpillar's recommendations or specifications for weight, dimensions, flows, pressures, etc. may result in less-than-optimal performance, including but not limited to reductions in production, stability, reliability, and component durability. Improper use of a work tool resulting in sweeping, prying, twisting and/or catching of heavy loads will reduce the life of the boom and stick.

323 GC Hydraulic Excavator Specifications

Attachments Offering Guide

Not all attachments available in all regions. Consult your Cat dealer for specific configurations available in your region.

Match

† Allowed usage on machine less than 50%

PIN-ON ATTACHMENTS

Boom Type		Reach
Stick Length		R2.9 (9'6")
Hydraulic Hammers	H120 GC	✓
	H120 GC Side Mount	✓
	H120 GC S	✓
	H120 S	✓
	H130 S	✓†
Compactors (Vibratory Plate)	CVP110	✓

323 GC Standard and Optional Equipment

Standard and Optional Equipment

Standard and optional equipment may vary. Consult your Cat dealer for details.

	Standard	Optional		Standard	Optional
CAB			ENGINE		
ROPS	✓		Cat® C7.1 single turbo diesel engine	✓	
High-resolution 203 mm (8") LCD touchscreen monitor	✓		Two selectable modes	✓	
Auto bi-level air conditioner	✓		Auto engine speed control	✓	
Keyless push-to-start engine control	✓		Auto engine idle shutdown	✓	
Height-adjustable console	✓		4500 m (14,760 ft) altitude capability with engine power derate above 3000 m (9,840 ft)	✓	
Fixed left-side console	✓		52° C (125° F) high-ambient cooling capacity with derate	✓	
Mechanical-suspension seat	✓		-18° C (0° F) cold start capability	✓	
51 mm (2") seat belt	✓		-32° C (-25° F) cold start capability		✓
Console mounted radio (with Bluetooth® pairing and USB port)	✓		Sealed double element air filter with integrated pre-cleaner	✓	
24V DC outlet	✓		145 amp dual alternator	✓	
Document storage	✓		Electric fuel priming pump	✓	
Cup and bottle holders	✓		Two-stage fuel filtration system with water separator and indicator	✓	
Openable two-piece front window	✓		Electric cooling fans with auto-reverse function	✓	
Upper radial wiper with washer	✓		HYDRAULIC SYSTEM		
Openable steel skylight hatch	✓		Electronic main control valve – 1 way high pressure auxiliary circuit ready	✓	
LED dome light	✓		Tandem type electronic main pump	✓	
Roller front sunscreen	✓		Boom and stick regeneration circuits	✓	
Roller rear sunscreen		✓	Auto warm up	✓	
Rear window emergency exit	✓		Auto two-speed travel	✓	
Washable floor mat	✓		Boom and stick drift reduction valve	✓	
Beacon ready	✓		Combined flow/high-pressure auxiliary circuit		✓
Cat Stick Steer		✓	Element type main hydraulic filter	✓	
CAT TECHNOLOGY			Boom and stick hydraulic hammer lines		✓
Cat Product Link™	✓				
Auto hammer stop	✓				

(continued on next page)

Standard and Optional Equipment *(continued)*

Standard and optional equipment may vary. Consult your Cat dealer for details.

	Standard	Optional		Standard	Optional
UNDERCARRIAGE AND STRUCTURES			SERVICE AND MAINTENANCE		
Two-piece segmented track guiding guards	✓		Side entry to service platform	✓	
Bottom guards	✓		Grouped location of engine oil and fuel filters	✓	
Travel motor guards	✓		Scheduled Oil Sampling (S·O·S SM) ports	✓	
Swivel guard		✓	Ground-level and platform-level engine oil dipsticks	✓	
Grease lubricated track	✓		Integrated vehicle health management system		✓
4.7 mt (10,360 lb) counterweight	✓		SAFETY AND SECURITY		
600 mm (24") triple grouser track shoes		✓	Rearview camera and right-hand side mirror		✓
790 mm (28") triple grouser track shoes		✓	Right-hand-sideview camera		✓
Tie-down points on base frame	✓		Ground-level engine shutoff switch	✓	
BOOM, STICKS AND LINKAGES			Right-hand handrail and handhold	✓	
5.7 m (18'8") Reach boom	✓		Signaling/warning horn	✓	
2.9 m (9'6") Optimized Reach stick, B1 linkage	✓		Swing alarm		✓
2.9 m (9'6") Optimized Reach bare stick, B1 linkage		✓	Service platform with anti-skid plate and countersunk bolts	✓	
Bucket linkage, B1 family without lifting eye		✓	Hydraulic lock out lever neutralizes all controls	✓	
Bucket linkage, B1 family with lifting eye		✓	ELECTRICAL SYSTEM		
ELECTRICAL SYSTEM			Two 1,000 CCA maintenance free batteries	✓	
Two 1,000 CCA maintenance free batteries	✓		Programmable time-delay LED working lights	✓	
Programmable time-delay LED working lights	✓		LED chassis light, left-hand/right-hand boom lights, cab light – 1800 lumens	✓	
LED chassis light, left-hand/right-hand boom lights, cab light – 1800 lumens	✓		Centralized electrical disconnect switch	✓	
Centralized electrical disconnect switch	✓				

323 GC Dealer Installed Kits and Attachments

Dealer Installed Kits and Attachments

Attachments may vary. Consult your Cat dealer for details.

CAB

- Lower wiper
- Polycarbonate roof hatch

SAFETY AND SECURITY

- Falling object guard system
- Mesh guard full front
- Mesh guard lower half front
- Cab vandalism guard

SERVICE AND MAINTENANCE

- Grease gun holder

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

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

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