

Cat® 323F SA

Special Alpine Hydraulic Excavator



Introduction

The Cat® 323F SA Hydraulic Excavator is the perfect choice for contractors who need maximum production coupled with best-in-class fuel efficiency. Powered by a C4.4 ACERT™ engine, the machine features a state-of-the-art hydraulic system and standard Cat Grade Control to do all your accurate digging.

Technology

- Get to grade quickly and accurately with standard Cat Grade Control, a simple-to-use system that provides real-time bucket tip positioning and cut-and-fill data right through the standard cab monitor.
- Get to grade up to 45% faster with less effort with Cat Grade with ASSIST, a system that automates work you typically do with manual controls.
- Easily upgrade to AccuGrade™, a 3D system that will help you make perfect cuts and contours on more complex jobs.

Performance

- Dig with maximum breakout force at all times regardless of engine speed and power mode.
- Lift objects smoothly and controllably without time limit using the optional heavy lift function.
- Stay productive with a smart emissions system that works without interruption.

Efficiency

- Meets EU Stage IV emission standards with 5% less fuel consumption than the Stage IIIB C6.6 ACERT engine.
- Actively manage fuel consumption in changing digging conditions using three selectable power modes.
- Take advantage of fuel-saving flexibility with up to B20 biofuel capability.

Versatility

- Maximize your uptime by speeding attachment changes with optional Cat couplers.
- Get to work more quickly with Cat tool control, an exclusive system that stores pressures and flows for up to 20 attachments.
- Expand your performance with optional auxiliary hydraulics and attachments from Cat Work Tools.

Maintenance

- Spend less time servicing the machine with extended maintenance intervals and a maintenance-free diesel particulate filter.
- Safely perform most routine maintenance like daily greasing and fluid taps from ground level.
- Access service compartments through wide doors that securely latch in place.

Comfort

- Work in quiet satisfaction with viscous mounts that limit cab vibration and special roof lining and sealing that reduce interior sound.
- Stay content with a consistent cab temperature provided by standard automatic climate control.
- All heated seats include a reclining back, upper and lower slide adjustments, and height and tilt angle adjustments.



323F SA (Special Alpine) Hydraulic Excavator Specifications

Undercarriage

- Stronger, heavier, narrower undercarriage than the 323F, with larger undercarriage components.
- Specifically designed for work in severe-duty underfoot conditions.
- Narrow gauge (shipping width 2500 mm) for easy transport.

Engine	
Engine Model	Cat C4.4 ACERT
Engine Power – ISO 14396	122 kW/164 hp/166 ps
Net Power – SAE J1349	120 kW/161 hp/163 ps
Engine rpm	
Operation	1,800 rpm
Travel	1,800 rpm
Bore	105 mm
Stroke	127 mm
Displacement	4.4 L

Weights	
Minimum Weight	24 400 kg
Maximum Weight	25 600 kg
• Minimum Operating Weight: Long narrow undercarriage, Reach boom 5.7 m, R2.5 stick, GD 1.3 m³ bucket and 550 mm triple grouser shoes. • Maximum Operating Weight: Long narrow undercarriage, VA boom, R2.9, GD 1.3 m³ bucket and 550 mm triple grouser shoes.	

Hydraulic System	
Main System – Maximum Flow (Total)	428 L/min
Swing System – Maximum Flow	214 L/min
Maximum Pressure – Equipment	35 000/38 000 kPa
Maximum Pressure – Travel	35 000 kPa
Maximum Pressure – Swing	25 000 kPa
Pilot System – Maximum Flow	24.3 L/min
Pilot System – Maximum Pressure	3920 kPa
Boom Cylinder – Bore	120 mm
Boom Cylinder – Stroke	1260 mm
Stick Cylinder – Bore	140 mm
Stick Cylinder – Stroke	1504 mm
B1 Bucket Cylinder – Bore	120 mm
B1 Bucket Cylinder – Stroke	1104 mm

Drive	
Maximum Travel Speed	4.6 km/h
Maximum Drawbar Pull	251 kN

Swing Mechanism	
Swing Speed	11.2 rpm
Maximum Swing Torque	72 kN·m

Service Refill Capacities	
Fuel Tank Capacity	310 L
DEF Tank Capacity	21 L
Cooling System	30 L
Engine Oil (with filter)	25 L
Swing Drive	8 L
Final Drive (each)	8 L
Hydraulic System Oil Capacity (including tank)	260 L
Hydraulic Tank Oil	153 L

Track	
Number of Shoes (each side)	45 pieces
Number of Track Rollers (each side)	7 pieces
Number of Carrier Rollers (each side)	2 pieces

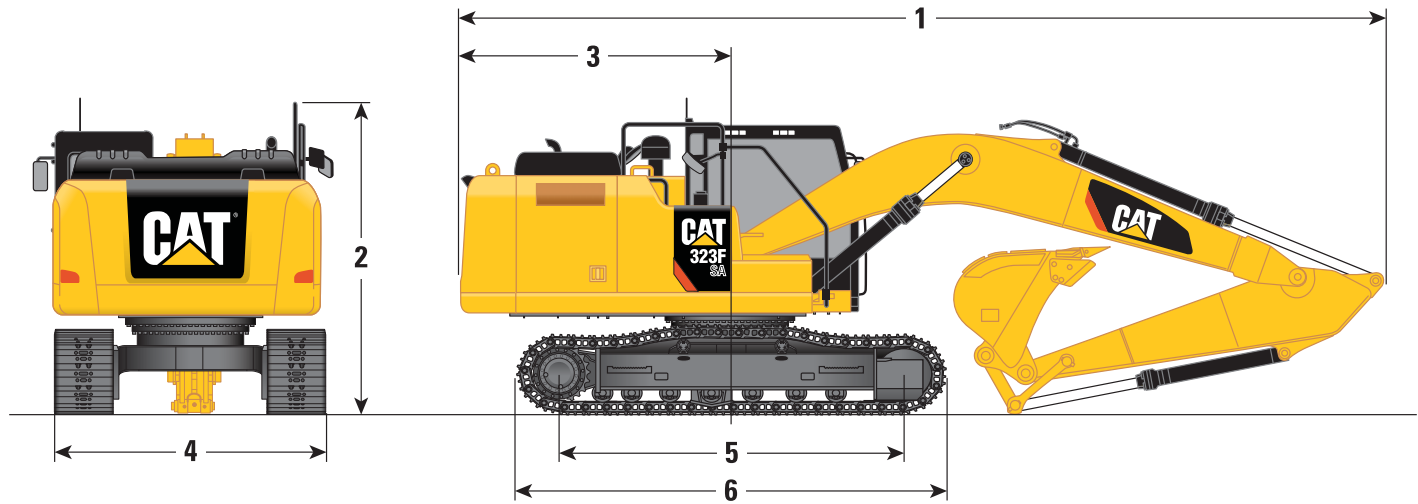
Sound Performance	
ISO 6396	
Operator Sound	68 dB(A)
ISO 6395	
Spectator Sound	99 dB(A)
• Operator Sound – The operator sound level is measured according to the procedures specified in ISO 6394:1998, for cab offered by Caterpillar, when properly installed and maintained and tested with doors and windows closed. • Exterior Sound – The labeled spectator sound power level is measured according to the test procedures and conditions specified in 2004/14/EC. • Hearing protection may be needed when operating with an open operator station and cab (when not properly maintained for doors/windows open) for extended periods or in a noisy environment.	

Standards	
Brakes	ISO 10265:2008
Cab/FOGS	ISO 10262:1998
Cab/ROPS	ISO 12117-2:2008

323F SA (Special Alpine) Hydraulic Excavator Specifications

323F SA Dimensions

All dimensions are approximate.



Boom Options	Reach Boom		Variable Angle Boom	
Stick Options	2.9 m	2.5 m	2.9 m	2.5 m
Bucket Options	1.19 m³	1.3 m³	1.3 m³	1.3 m³
Shipping Weight	24 424 kg	24 432 kg	25 582 kg	25 565 kg
1 Overall Length	9560 mm	9570 mm	9820 mm	9820 mm
2 Overall Height	3100 mm	3100 mm	3100 mm	3100 mm
3 Swing Radius	2830 mm	2830 mm	2830 mm	2830 mm
4 Overall Width – 550 mm	2500 mm	2500 mm	2500 mm	2500 mm
5 Length to Centers of Rollers	3490 mm	3490 mm	3490 mm	3490 mm
6 Length of Track	4360 mm	4360 mm	4360 mm	4360 mm

The operator station is ROPS certified up to a mass of 27 786 kg per ISO 12117-2:2008.

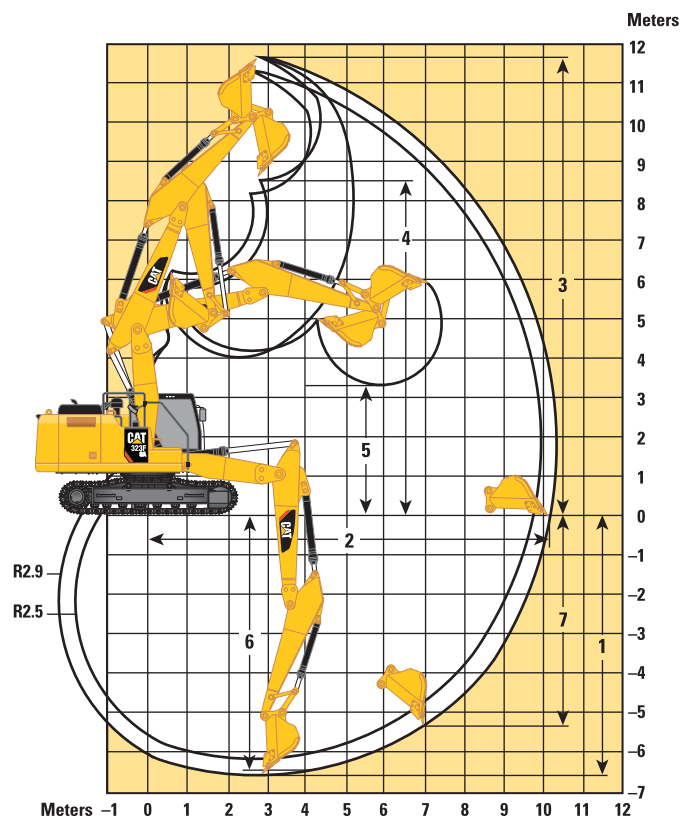
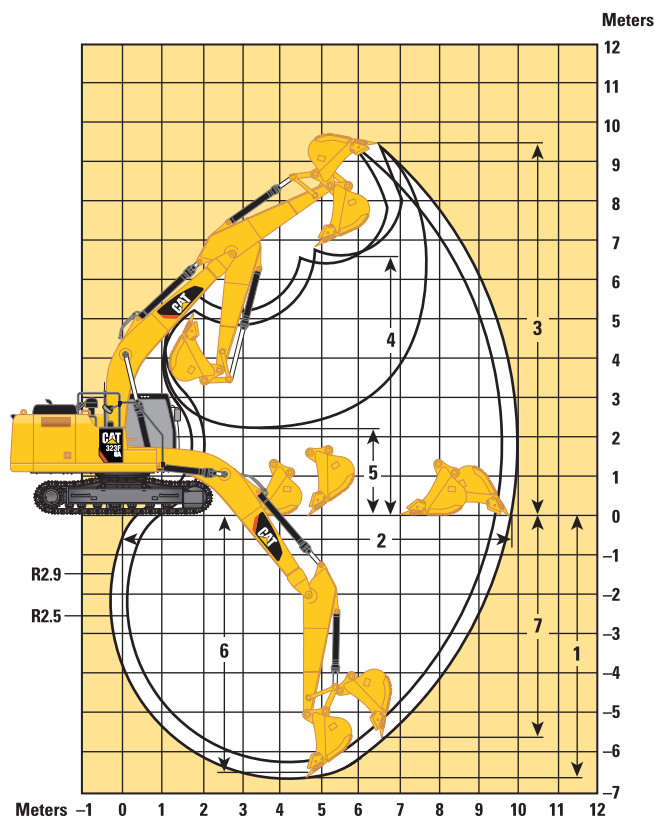
323F SA Bucket and Stick Forces

Stick	Reach Boom 5.7 m		Variable Angle Boom	
	R2.9	R2.5	R2.9	R2.5
	kN	kN	kN	kN
Bucket Digging Force (SAE)	126	126	126	126
Bucket Digging Force (ISO)	140	140	140	140
Stick Digging Force (SAE)	104	115	108	116
Stick Digging Force (ISO)	107	118	108	115

323F SA (Special Alpine) Hydraulic Excavator Specifications

323F SA Working Ranges

All dimensions are approximate.



Boom Options Stick Options	Reach Boom 5.7 m		Variable Angle Boom 2.4 m Stub/3.3 m Fore	
	R2.9	R2.5	R2.9	R2.5
1 Maximum Digging Depth	6640 mm	6220 mm	6610 mm	6200 mm
2 Maximum Reach at Ground Line	9840 mm	9440 mm	10 190 mm	9780 mm
3 Maximum Cutting Height	9520 mm	9320 mm	11 590 mm	11 250 mm
4 Maximum Loading Height	6580 mm	6380 mm	8480 mm	8140 mm
5 Minimum Loading Height	2260 mm	2680 mm	3340 mm	3740 mm
6 Maximum Depth Cut for 2440 mm Level Bottom	6470 mm	6020 mm	6510 mm	6090 mm
7 Maximum Vertical Wall Digging Depth	5610 mm	5210 mm	5270 mm	4870 mm
Bucket Type	GD	GD	GD	GD
Bucket Capacity	1.3 m ³	1.3 m ³	1.3 m ³	1.3 m ³