

Cat®
924K

Wheel Loader

Features:

- **Optimized Z-bar Linkage** – The new optimized Z-bar linkage combines the digging efficiency of a traditional Z-bar with tool carrier capabilities for great performance and versatility. With parallel lift and high tilt forces throughout the working range you can safely and confidently handle loads with precise control. High Lift versions are also available.
- **Work Tools** – A new line of optimized Performance Series Buckets, pallet and construction forks as well as a wide range of work tools are available in a Pin-On or Fusion Coupler interface.
- **Powerful Predictable Hydraulics** – The system senses demand and adjusts flow and pressure to match. Working with buckets, forks and other work tools has never been more efficient.
- **Intelligent Power Management** – A smooth, step-less electronically controlled hydrostatic transmission provides adjustable power to the ground and superb groundspeed control for fast digging cycles and the flexibility to efficiently perform a multitude of tasks.
- **Cab and Controls** – Large, spacious cab features excellent visibility to the front and rear, extremely low sound levels and low-effort ergonomic joystick controls so you can concentrate on your work. In cab adjustments are easy with intuitive controls and an easy to read optional display.
- **Serviceability** – Extended service intervals and excellent service access make daily checks quick and easy allowing you to get to work sooner.

Specifications

Engine

Engine Model	Cat® C6.6 ACERT	
Maximum Gross Power		
ISO 14396	109 kW	146 hp
ISO 14396 (DIN)	109 kW	148 hp
Rated Net Power @ 1,800 rpm		
SAE J1349	105 kW	141 hp
ISO 9249/EEC 80/1269	106 kW	142 hp
ISO 9249 (DIN)	106 kW	144 hp
Maximum Gross Torque		
ISO 14396	725 N·m	534 ft-lb
Maximum Net Torque		
SAE J1349	699 N·m	515 ft-lb
ISO 9249/EEC 80/1269	706 N·m	520 ft-lb
Bore	105 mm	4 in
Stroke	127 mm	5 in
Displacement	6.6 L	402 in^3

- Engine meets EPA Tier 4 Interim/EU Stage IIIB emission standards.

Buckets

Bucket Capacities – General Purpose	1.9-2.5 m^3	2.5-3.2 yd^3
Bucket Capacities – Light Material	3.5-5.0 m^3	4.5-6.5 yd^3

Weights

Operating Weight – Standard Lift	12 868 kg	28,360 lb
Operating Weight – High Lift	13 166 kg	29,018 lb

- Specifications shown are for a machine equipped with a 1.9 m^3 (2.5 yd^3) general purpose Fusion bucket, bolt-on cutting edge, optional counterweights, additional guarding, 80 kg (176 lb) operator and Michelin 20.5 R25 (L-3) XHA2 tires.

Steering

Steering Articulation Angle (each direction)	40°	
Steering Cylinder, Double-Acting:		
Bore Diameter	70 mm	2.8 in
Rod Diameter	40 mm	1.6 in
Stroke	438 mm	17.2 in
Maximum Flow – Steering Pump	130 L/min	34 gal/min
Maximum Working Pressure – Steering Pump	24 130 kPa	3,500 psi
Maximum Steering Torque:		
0 degrees (straight machine)	50 375 N·m	37,155 ft-lb
40 degrees (full turn)	37 620 N·m	27,747 ft-lb
Steering Cycle Times (full left to full right):		
At 1,800 rpm: 90 rpm steering wheel speed	2.4 seconds	
Number of Steering Wheel Turns – full left to full right or full right to full left	3.5 turns	

Loader Hydraulic System

Maximum Flow – Implement Pump	150 L/min	40 gal/min
3rd Function Maximum Flow*	150 L/min	40 gal/min
4th Function Maximum Flow	75 L/min	20 gal/min
Maximum Working Pressure – Implement Pump	26 000 kPa	3,771 psi
Relief Pressure – Tilt Cylinder	28 000 kPa	4,061 psi
3rd Function Maximum Working Pressure	26 000 kPa	3,771 psi
4th Function Maximum Working Pressure	26 000 kPa	3,771 psi
Lift Cylinder, Double-Acting:		
Bore Diameter	110 mm	4.3 in
Rod Diameter	60 mm	2.4 in
Stroke	728 mm	28.7 in
Tilt Cylinder, Double-Acting:		
Bore Diameter	130 mm	5.1 in
Rod Diameter	70 mm	2.8 in
Stroke	555 mm	21.9 in

Hydraulic Cycle Times:	At 1,800 rpm	At 1,000 rpm
Raise (ground level to maximum lift)	5.5 seconds	9.6 seconds
Dump (at maximum lift height)	1.5 seconds	3.0 seconds
Float Down (maximum lift to ground level)	2.6 seconds	2.6 seconds
Total Cycle Time	9.5 seconds	15.2 seconds

*Adjustable from 20% to 100% of maximum flow through the secondary display, when equipped.

Service Refill Capacities

Fuel Tank	195 L	51.5 gal
Cooling System	30 L	7.9 gal
Engine Crankcase	20 L	5.3 gal
Transmission (gearbox)	8.5 L	2.2 gal
Axles:		
Front	21 L	5.5 gal
Rear	21 L	5.5 gal
Hydraulic System (including tank)	160 L	42.3 gal
Hydraulic Tank	90 L	23.8 gal

Transmission

Forward:		
Range 1*	1-13 km/h	0.6-8 mph
Range 2	13 km/h	8 mph
Range 3	27 km/h	17 mph
Range 4	40 km/h	25 mph
Reverse:		
Range 1*	1-13 km/h	0.6-8 mph
Range 2	13 km/h	8 mph
Range 3	27 km/h	17 mph
Range 4	40 km/h	25 mph

*Creeper control allows maximum speed range adjustability from 1 km/h (0.6 mph) to 13 km/h (8 mph) in Range 1 through the secondary display, when equipped. Factory default is 7 km/h (4.4 mph).

Tires

Standard Size	20.5 R25, radial (L-3)
Other Choices Include:	20.5 R25, radial (L-2)
	20.5 R25, radial (L-5)
	20.5-25 12PR (L-2)
	20.5-25 12PR (L-3)
	20.5-25 16PR (L-5)
	17.5 R25, radial (L-2)
	17.5 R25, radial (L-3)
	17.5 R25, radial (L-5)
	550/65 R25 radial (L-3)
	Skidder/Agriculture
	Flexports Gen II

- Other tire choices are available. Contact your Cat dealer for details.
- In certain applications, the loader's productive capabilities may exceed the tire's tonnes-km/h (ton-mph) capabilities.
- Caterpillar recommends that you consult a tire supplier to evaluate all conditions before selecting a tire model.

Cab

Sound Levels	66 dB(A) typical, 68 dB(A) guaranteed
ROPS	SAE J1040 MAY94, ISO 3471-1994
FOPS	SAE J/ISO 3449 APR98, Level II, ISO 3449 1992 Level II

- Cab and Rollover Protective Structures (ROPS) are standard in North America and Europe.
- When properly installed and maintained, the cab offered by Caterpillar, when tested with doors and windows closed as per work cycle procedures specified in ISO 6395 2008, results in operator sound exposure Leq (equivalent sound pressure level) of 66 dB(A) typically and 68 dB(A) guaranteed.

Operating Specifications

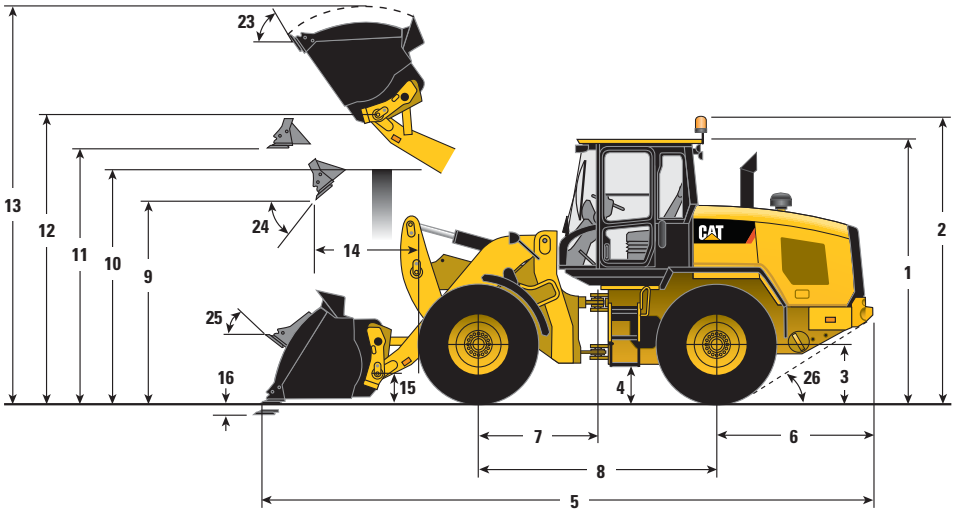
Tipping Load – Straight (ISO 14397-1)	8644 kg	19,051 lb
Tipping Load – Full Turn (ISO 14397-1)	7419 kg	16,352 lb
Clearance – Full Lift and 45 Degree Dump	2885 mm	9 ft 5 in
Reach – Full Lift and 45 Degree Dump	1024 mm	3 ft 4 in
Steering Articulation Angle (each direction)	40 degrees	

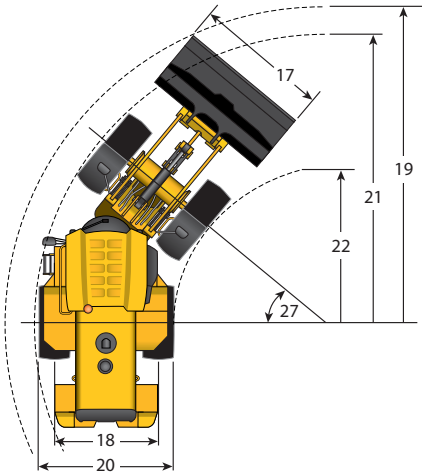
- Specifications shown are for a machine equipped with a 1.9 m^3 (2.5 yd^3) general purpose Fusion bucket, bolt-on cutting edge, optional counterweights, additional guarding, 80 kg (176 lb) operator and Michelin 20.5 R25 (L-3) XHA2 tires.

Axles

Front	Fixed
	Locking differential (standard)
Rear	Oscillating ±11 degrees
	Open differential (standard)
	Limited slip differential (optional)

Dimensions (All dimensions are approximate. Dimensions vary with bucket and tire choice.)





		Standard Lift		High Lift	
** 1	Height: Ground to Cab	3340 mm	(10'11")	3340 mm	(10'11")
** 2	Height: Ground to Beacon	3669 mm	(12'0")	3669 mm	(12'0")
** 3	Height: Ground Axle Center	685 mm	(2'2")	685 mm	(2'2")
** 4	Height: Ground Clearance	397 mm	(1'3")	397 mm	(1'3")
* 5	Length: Overall	7451 mm	(24'5")	8093 mm	(26'6")
6	Length: Rear Axle to Bumper	1986 mm	(6'6")	1986 mm	(6'6")
7	Length: Hitch to Front Axle	1500 mm	(4'11")	1500 mm	(4'11")
8	Length: Wheel Base	3000 mm	(9'10")	3000 mm	(9'10")
* 9	Clearance: Bucket at 45 degrees	2885 mm	(9'5")	3378 mm	(11'0")
** 10	Clearance: Loadover Height	3330 mm	(10'11")	3550 mm	(11'7")
** 11	Clearance: Level Bucket	3580 mm	(11'8")	4073 mm	(13'4")
** 12	Height: Bucket Pin	3907 mm	(12'9")	4400 mm	(14'5")
** 13	Height: Overall	5076 mm	(16'7")	5569 mm	(18'3")
* 14	Reach: Bucket at 45 degrees	1024 mm	(3'4")	1261 mm	(4'1")
15	Carry Height: Bucket Pin	458 mm	(1'6")	649 mm	(2'1")
** 16	Dig Depth	100 mm	(3.9")	135 mm	(5.3")
17	Width: Bucket	2550 mm	(8'4")	2550 mm	(8'4")
18	Width: Tread Center	1930 mm	(6'3")	1930 mm	(6'3")
19	Turning Radius: Over Bucket	5924 mm	(19'5")	6234 mm	(20'5")
20	Width: Over Tires	2540 mm	(8'4")	2540 mm	(8'4")
21	Turning Radius: Outside of Tires	5402 mm	(17'8")	5402 mm	(17'8")
22	Turning Radius: Inside of Tires	2851 mm	(9'4")	2851 mm	(9'4")
23	Rack Angle at Full Lift	54 degrees		51 degrees	
24	Dump Angle at Full Lift	50 degrees		49 degrees	
25	Rack Angle at Carry	45 degrees		49 degrees	
26	Departure Angle	33 degrees		33 degrees	
27	Articulation Angle	40 degrees		40 degrees	
	Operating Weight	12 868 kg	(28,360 lb)	13 166 kg	(29,018 lb)

*Vary with bucket.

**Vary with tire.

Dimensions listed are for a machine configured with 1.9 m^3 (2.5 yd^3) general purpose Fusion bucket, bolt-on cutting edge, optional counterweights, additional guarding, 80 kg (176 lb) operator and Michelin 20.5 R25 (L-3) XHA2 tires.

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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