

432

Backhoe Loader



C3.6 Stage V Engine

The Cat® C3.6 engine meets EU Stage V emission standards while delivering up to a 10% fuel efficiency improvement compared to the previous model. The aftertreatment system is completely maintenance free with Selective Catalytic Reduction (SCR), Diesel Exhaust Fluid (DEF) and a fit for life Diesel Particulate Filter (DPF) system. This new engine delivers power and torque density as per the C4.4 engine installed in the previous model.

Optimal Operator Comfort and Control

EH Seat Mounted Controls are standard on the 432. These give the operator better comfort and more flexibility by allowing the operator to control either hoe, loader or both from any seat position (front, rear or offset).

Interactive Display Screens

The choice of either a soft key or touchscreen display screen gives the operator information at the touch of their fingertips. Many customizable features including hoe response rate and modulation are now offered. Machine Security Software is embedded into the display screen as well as notifications on service intervals.

Powershift Transmission

The four speed powershift transmission, improves operator comfort by utilizing the Power Shuttle Lever to shift gears. There is no floor-mounted gear shift lever, adding to the already spacious work environment.

Excavator Style Boom

The Excavator Style Boom is iconic to the Cat backhoe loader (BHL). This gives the operator more dig depth and reach when working around obstacles meaning less repositioning of the machine is required.

Powerful and Efficient Hydraulics

The load sensing hydraulic system coupled with a variable displacement piston pump deliver powerful hydraulics when the operator really requires it.

Power Management Modes

The operator can choose between Eco Mode, Standard Mode or Standard Plus dependent on job and site conditions. Eco Mode will save the operator fuel, lowering their owning and operating costs, where Standard Plus Mode will give more speed and power when time or tough ground conditions demand this.

Product Link™

Product Link™ comes as standard on the Cat BHL. Many features exist through Product Link including fuel burn and location allowing the owner to access all data to help increase productivity while reducing costs.

432 Backhoe Loader Specifications

Engine

	EU Stage V (Standard)	EU Stage V (Optional)
Engine	C3.6 74.5 kW Electronic Turbo Intercooled	C3.6 82 kW Electronic Turbo Intercooled
Ratings at 2,200 rpm		
Gross Power SAE J1995	76 kW/103 hp	84 kW/114 hp
Gross Power ISO 14396	74 kW/101 hp	82 kW/111 hp
Net Power Rating @ 2,200 rpm		
SAE J1349	69 kW/92 hp	76 kW/103 hp
ISO 9249	68 kW/92 hp	76 kW/102 hp
Torque Rise (net)	48% @ 1,500 rpm	48% @ 1,500 rpm
Net Torque – SAE J1349	436 N·m	485 N·m
Bore	98 mm	98 mm
Stroke	120 mm	120 mm
Displacement	3.6 L	3.6 L

- Net power advertised is the power available at the flywheel when the engine is equipped with fan, air cleaner, muffler and alternator.
- No derating required up to 3048 m altitude. Auto derate protects hydraulic and transmission systems.
- Meets EU Stage V emission standards.

Transmission

Travel speeds of backhoe loader at full throttle, when equipped with 440/80-28 rear tires.

	Powershift Transmission (Standard)	Auto-Shift Transmission (Optional)	Auto-Shift Transmission with Lock-Up Torque Converter (Optional)
Forward			
1st	6 km/h	6 km/h	6 km/h
2nd	9.5 km/h	9.5 km/h	9.5 km/h
3rd	19.8 km/h	12.5 km/h	12.5 km/h
4th	40 km/h	19.8 km/h	19.8 km/h
5th	—	27.3 km/h	27.3 km/h
6th	—	40 km/h	40 km/h
Reverse			
1st	6 km/h	6 km/h	6 km/h
2nd	12.5 km/h	12.5 km/h	12.5 km/h
3rd	27.3 km/h	27.3 km/h	27.3 km/h
4th	—	—	—

432 Backhoe Loader Specifications

Axle Ratings

Front Axle, AWD	
Static	12 000 kg
Dynamic	6000 kg
Rear Axle	
Static	13 000 kg
Dynamic	7000 kg

Weights*

Operating Weight*	8322 kg	
Operating Weight (maximum) (ROPS capacity)	11 000 kg	
Cab, ROPS/FOPS	Standard	
Powershift Transmission	Standard	
Ride Control	15 kg	
Air Conditioning	45 kg	
All-Wheel Drive	Standard	
MP Bucket (1.03 m ³)		
with Fold-over Forks	860 kg	
without Fold-over Forks	611 kg	
Loader QC	185 kg	
4.3 m Extendible Stick (excludes front counterweight)	199 kg	
4.9 m Extendible Stick (excludes front counterweight)	355 kg	
Counterweights		
Base	115 kg	
Stackable, One	250 kg	
Maximum	485 kg	
Minimum Counterweight Recommendations – Standard Stick		
Loader Bucket	No QC	IT Loader with QC
GP	250 kg	485 kg
MP	0 kg	485 kg
Minimum Counterweight Recommendations – Extendible Stick		
Loader Bucket	No QC	IT Loader with QC
GP	485 kg	485 kg
MP	115 kg	485 kg

Total Gross Weight Not to Exceed 11 000 kg

*Machine Configuration – HRC 74.5 kW engine; 4.3 m standard stick hoe; standard cab with A/C; AWD powershift transmission; 1.03 m³ MP loader bucket; 600 mm standard duty hoe bucket; 340/80-18 and 440/80-28 tires; no counterweight; 80 kg operator; full fuel tank.

Hydraulic System

Type	Closed Center
Pump Type	Variable-Flow, Axial Piston
Pump Capacity @ 2,200 rpm	187 L/min
System Pressure	
Backhoe	250 bar
Loader	250 bar

Steering

Type	Front Wheel
Power Steering	Hydrostatic
AWD Cylinder, One (1) Double-acting	
Bore	65 mm
Stroke	106 mm
Rod Diameter	40 mm
Axle Oscillation	11 mm

Turning Circle

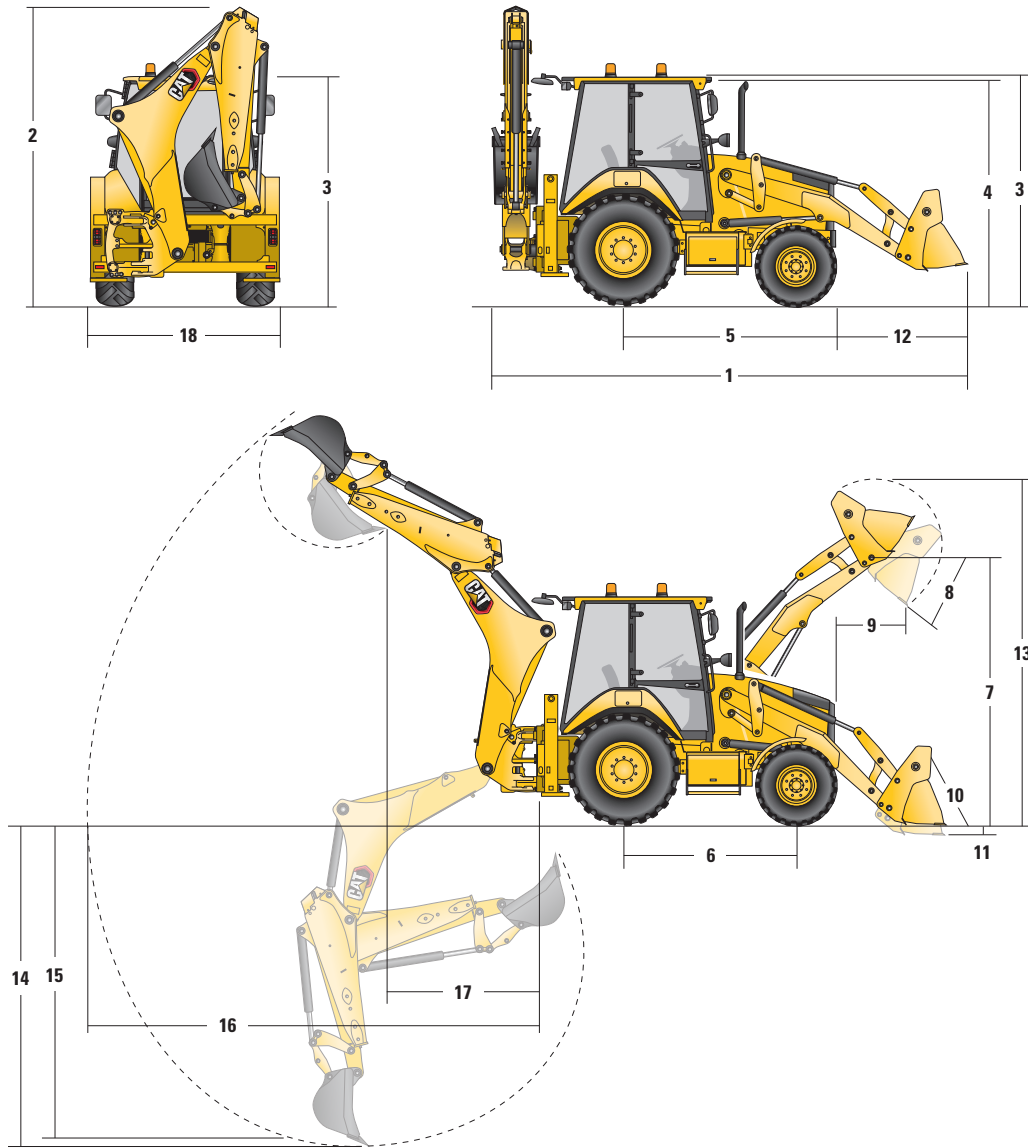
2WD/AWD (inner wheel not braked)	
Outside Front Wheels	8.205 m
Outside Widest Loader Bucket	10.745 m

Service Refill Capacities

Cooling System with A/C	18 L
Fuel Tank	160 L
Engine Oil with Filter	9 L
Diesel Exhaust Fluid	19 L
Transmission (Power Shuttle)	
2WD	18 L
AWD	18 L
Transmission (Powershift)	
AWD	19 L
Rear Axle	16 L
Planetaries	1.7 L
Front Axle (AWD)	11 L
Planetaries	0.7 L
Hydraulic System	95 L
Hydraulic Tank	42 L

432 Backhoe Loader Specifications

Machine Dimensions



	Parallel Lift Loader			Parallel Lift Loader with QC	
	GP – 1.0 m ³	MP – 1.03 m ³	MP with Forks – 1.03 m ³	GP/QC – 1.0 m ³	MP/QC – 1.03 m ³
1 Overall Length in Roading Position	5763 mm	5744 mm	5744 mm	5847 mm	5760 mm
Overall Transportation Length	5775 mm	5731 mm	5731 mm	5884 mm	5778 mm
2 Overall Transportation Height	3806 mm	3806 mm	3806 mm	3806 mm	3806 mm
Overall Width	2352 mm	2352 mm	2352 mm	2352 mm	2352 mm
3 Height to Top of Cab/Canopy	2822 mm	2822 mm	2822 mm	2822 mm	2822 mm
4 Height to Top of Exhaust Stack	2715 mm	2715 mm	2715 mm	2715 mm	2715 mm
5 Rear Axle Centerline to Front Grill	2705 mm	2705 mm	2705 mm	2705 mm	2705 mm
6 Wheelbase 2WD/AWD	2200 mm	2200 mm	2200 mm	2200 mm	2200 mm

Dimensions and performance specifications shown are for machines equipped with 12.5/80-18 SGL front tires, 16.9-28 rear tires, standard cab, 4.3 m standard stick with 600 mm standard duty bucket, and 1.03 m³ MP loader bucket and standard equipment unless otherwise specified.

432 Backhoe Loader Specifications

Loader Bucket Dimensions and Performance

	Parallel Lift Loader			Parallel Lift Loader with QC	
	GP – 1.0 m ³	MP – 1.03 m ³	MP with Forks – 1.03 m ³	GP/QC – 1.0 m ³	MP/QC – 1.03 m ³
Capacity (SAE rated)	1.0 m ³	1.03 m ³	1.03 m ³	1.03 m ³	1.03 m ³
Width	2406 mm	2406 mm	2406 mm	2406 mm	2406 mm
Lift Capacity at Maximum Height	3728 kg	3488 kg	3303 kg	3509 kg	3278 kg
Lift Breakout Force	54 791 N	53 252 N	51 536 N	51 669 N	50 841 N
Tilt Breakout Force	54 292 N	59 845 N	58 900 N	48 223 N	53 400 N
Tipping Load at Breakout Point	6695 kg	6674 kg	6518 kg	6157 kg	6339 kg
7 Maximum Hinge Pin Height	3462 mm	3462 mm	3462 mm	3462 mm	3462 mm
8 Dump Angle at Full Height	45°	45°	45°	45°	45°
Dump Height at Maximum Angle	2755 mm	2780 mm	2780 mm	2669 mm	2749 mm
9 Dump Reach at Maximum Angle	805 mm	732 mm	732 mm	838 mm	784 mm
10 Maximum Bucket Rollback at Ground Level	38°	39°	39°	39°	38°
11 Digging Depth	99 mm	132 mm	132 mm	137 mm	118 mm
Maximum Grading Angle	113°	116°	116°	112°	114°
12 Grill to Bucket Cutting Edge, Carry Position	1488 mm	1471 mm	1471 mm	1571 mm	1487 mm
13 Maximum Operating Height	4328 mm	4365 mm	4365 mm	4361 mm	4407 mm
Weight (does not include teeth)	427.5 kg	611.2 kg	705 kg	459 kg	697 kg

Backhoe Dimensions and Performance

	Standard Stick – 4.3 m	E-stick Retracted – 4.3 m	E-stick Extended – 4.3 m	E-stick Retracted – 4.9 m	E-stick Extended – 4.9 m
	14 Digging Depth, SAE Maximum	4298 mm	4301 mm	5292 mm	4636 mm
Digging Depth, Manufacturer's Maximum	4778 mm	4782 mm	5700 mm	5201 mm	6169 mm
15 Digging Depth, 2400 mm Flat Bottom	3915 mm	3919 mm	4987 mm	4293 mm	5373 mm
Digging Depth, 600 mm Flat Bottom	4255 mm	4259 mm	5254 mm	4611 mm	5632 mm
Digging Depth, 600 mm Flat Bottom, Manufacturer's	4753 mm	4758 mm	5700 mm	5164 mm	6150 mm
Reach from Rear Axle Centerline at Ground Line	6741 mm	6746 mm	7672 mm	7218 mm	8169 mm
16 Reach from Swing Pivot at Ground Line	5651 mm	5656 mm	6582 mm	6128 mm	7079 mm
Maximum Operating Height	5665 mm	5666 mm	6265 mm	6231 mm	6956 mm
Loading Height	3991 mm	4000 mm	4599 mm	4555 mm	5280 mm
17 Loading Reach	1690 mm	1639 mm	2501 mm	1559 mm	2319 mm
Swing Arc	180°	180°	180°	180°	180°
Bucket Rotation	205°	205°	205°	205°	205°
18 Stabilizer Overall Width	2352 mm	2352 mm	2352 mm	2352 mm	2352 mm
Bucket Dig Force	63 447 N	63 419 N	63 419 N	63 427 N	63 427 N
Stick Dig Force	42 835 N	43 548 N	31 743 N	47 251 N	35 180 N

432 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 ROPS and FOPS			Hydraulics		
Cab, Standard	✓		Variable Displacement Piston Pump	✓	
Cab, Deluxe		✓	Hydraulic Quick Disconnects		✓
Tires/Steering/Brakes			Side Shift Lock	✓	
All Wheel Drive	✓		Hydraulic Oil Cooler	✓	
100% Differential Lock	✓		Hydraulic Lines, One Way		✓
Hydraulic Boosted Brakes	✓		Hydraulic Lines, Two Way		✓
Tires 26 inch	✓		Loader Kickout, Float	✓	
Tires 28 inch		✓	Loader Kickout, Return to Dig	✓	
Engine/Transmission			Powered Side Shift		✓
Engine, C3.6 74.5 kW	✓		Ride Control		✓
Engine, C3.6 82 kW		✓	Continuous Flow	✓	
Battery, 750 CCA, Standard	✓		Programmable Auxiliary Flow	✓	
Battery, 750 CCA, Heavy Duty		✓	Booms, Sticks and Linkages		
Hinged Radiator Pack	✓		Stick Standard, 4.3 m	✓	
Auto Idle	✓		Stick Extending, 4.3 m		✓
Forward-Neutral-Reverse (FNR) on Loader Lever	✓		Stick Extending, 4.9 m		✓
Eco Mode	✓		Hoe Quick Coupler, Mechanical		✓
Standard Mode	✓		Hoe Quick Coupler, Hydraulic		✓
Standard + Mode	✓		Loader Quick Coupler, Hydraulic		✓
Engine Block Heater		✓	Transport Lock, Swing	✓	
Transmission Neutralizer	✓		Transport Lock, Boom	✓	
Transmission, Four Speed Powershift	✓		Other Attachments		
Transmission, Six Speed Automatic		✓	Counterweight, 115 kg		✓
Transmission, Six Speed with Lock-Up Torque Converter		✓	Counterweight, 240 kg		✓
Controls			Counterweight, 460 kg		✓
Controls, EH	✓		Front Fenders		✓
Pattern Selector (ISO/SAE)	✓		Street Pads, Stabilizers		✓
Power Steering, Hydrostatic	✓		External Tool Box	✓	
			Transport Tie Downs	✓	
			Electrical		
			Display Screen, Soft Key	✓	
			Display Screen, Touchscreen		✓
			Product Link Cellular		✓
			Product Link Satellite		✓
			Reversing Alarm	✓	
			Stabilizer Alarm	✓	
			Beacon, Rotating		✓
			Beacon, Strobe		✓

432 Backhoe Loader

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

© 2020 Caterpillar
All rights reserved

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

CAT, CATERPILLAR, LET'S DO THE WORK, their respective logos, "Caterpillar Yellow," the "Power Edge" and Cat "Modern Hex" trade dress as well as corporate and product identity used herein, are trademarks of Caterpillar and may not be used without permission.

AEHQ8250 (01-2020)
Build Number: 07
(Europe)

