M316

Wheeled Excavator

Technical Specifications

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

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M316 Wheeled Excavator Specifications

Engine

Engine Model	Cat® 4.4	
Engine Power		
ISO 14396:2002	110 kW	148 hp
ISO 14396:2002 (metric)	150 hp (PS)	
Net Power		
ISO 9249:2007	104.9 kW	141 hp
ISO 9249:2007 (metric)	143 hp (PS)	
Bore	105 mm	4.1 in
Stroke	127 mm	5 in
Displacement	4.4 L	268.5 in^3
Biodiesel Capability	Up to B20(1)	
Number of Cylinders	4	

- Meets U.S. EPA Tier 4 Final and EU Stage V emission standards.
- Net power advertised is the power available at the flywheel when engine is equipped with fan, air cleaner, CEM exhaust gas aftertreatment, alternator, and cooling fan running at intermediate speed.
- Recommended for use up to 3000 m (9,843 ft) altitude with engine power derate above 3000 m (9,843 ft).
- Rated speed 2,000 rpm.

(1)Cat engines are compatible with the following renewable, alternative, and bio-fuels* with lower greenhouse gas emission impact:

✓ Up to B20 biodiesel (FAME)**

✓ Up to 100% HVO and GTL renewable fuels

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

***For use of higher blends, consult your Cat dealer.*

Transmission

Forward/Reverse		
1st Gear	10 km/h	6.2 mph
2nd Gear	35 km/h	21.7 mph
Creeper Speed		
1st Gear	5.5 km/h	3.4 mph
2nd Gear	15 km/h	9.3 mph
Drawbar Pull	102 kN	22,931 lbf
Maximum Gradeability at (17 300 kg/38,140 lb)	73.0%	

Service Refill Capacities

Fuel Tank (total capacity)	350 L	92.5 gal
Diesel Exhaust Fluid Tank	20 L	5.3 gal
Cooling System	24 L	6.3 gal
Engine Oil	13 L	3.4 gal
Hydraulic Tank	120 L	31.7 gal
Hydraulic System (including tank)	260 L	68.7 gal
Rear Axle Housing (differential)	14 L	4 gal
Front Steering Axle (differential)	10.5 L	2.8 gal
Final Drive (each)	2.5 L	0.7 gal
Powershift Transmission	2.5 L	0.7 gal

Swing Mechanism

Maximum Swing Speed	10.2 rpm	
Maximum Swing Torque	43.8 kN·m	32,305 lb-ft

Undercarriage

Ground Clearance	365 mm	14.4 in
Maximum Steering Angle	35°	
Oscillation Axle Angle	± 8.5°	
Minimum Turning Radius		
Outside of Tire	6300 mm	20.7 ft
Outside of Tire (plastic fender)	7550 mm	24.8 ft
End of VA Boom	7300 mm	23.9 ft
Undercarriage steps for parallel blade		
Standard	2545 mm	8.3 ft
Wide	2720 mm	8.9 ft
Plastic type fenders for front and rear tires, for parallel blade		
Standard	2550 mm	8.4 ft
Wide	2720 mm	8.9 ft

Operating Weights*

Minimum	17 000 kg	37,480 lb
Maximum	18 400 kg	40,560 lb
Typical configurations		
Variable Adjustable Boom**		
Rear Blade Only	17 200 kg	37,920 lb
Blade and Outriggers	18 150 kg	40,010 lb
Front and Rear Outriggers	18 400 kg	40,560 lb

*Operating weight includes full fuel tank, operator, bucket 700 kg (1,543 lb) and dual pneumatic tires. Weight varies depending on configuration.

**Typical configurations include 2500 mm (8'2") stick, 3300 kg (7,280 lb) counterweight, bucket and 220 kg (485 lb) quick coupler.

Major Component Weights

Booms (including VAB and stick cylinder, pins and standard hydraulic lines)		
Variable Adjustable Boom 5205 mm (17'1")	2200 kg	4,850 lb
Sticks (including cylinder, bucket linkage, pins and standard hydraulic lines)		
Stick 2200 mm (7'3")	790 kg	1,740 lb
Stick 2500 mm (8'2")	810 kg	1,790 lb
Counterweight		
3300 kg (7,280 lb)	3300 kg	7,280 lb
Undercarriage (including axles, standard tires and steps)		
Rear Blade	4450 kg	9,810 lb
Rear Blade/Front Outrigger	5400 kg	11,900 lb
Rear Outrigger/Front Blade	5400 kg	11,900 lb
Rear Outrigger/Front Outrigger	5650 kg	12,460 lb
Rear Blade Parallel	4960 kg	10,934 lb
Rear Blade Parallel with Trailer	5025 kg	11,078 lb
Front Blade/Rear Outrigger	5965 kg	13,151 lb
Front Blade/Rear Outrigger with Trailer:	6030 kg	13,294 lb
Buckets		
Pin-On Bucket GD 1200 mm (47"), 0.80 m^3 (1.05 yd^3)	680 kg	1,500 lb
Pin-On Bucket GD 1200 mm (47"), 0.91 m^3 (1.19 yd^3)	700 kg	1,540 lb
CW Bucket GD 1200 mm (47"), 0.91 m^3 (1.19 yd^3)	680 kg	1,500 lb
Quick Couplers		
CW30 Dedicated Quick Coupler	220 kg	490 lb
Pin Grabber Quick Coupler	300 kg	660 lb

Hydraulic System

Maximum Pressure – Implement Circuit		
Normal	35 000 kPa	5,076 psi
Heavy Lift	37 000 kPa	5,366 psi
Travel Circuit	35 000 kPa	5,076 psi
Maximum Pressure – Auxiliary Circuit		
High Pressure	35 000 kPa	5,076 psi
Medium Pressure	17 000 kPa	2,466 psi
Swing Mechanism	35 000 kPa	5,076 psi
Maximum Flow		
Implements	275 L/min	73 gal/min
Travel Circuit	190 L/min	50 gal/min
Auxiliary Circuit		
High Pressure	250 L/min	66 gal/min
Medium Pressure	55 L/min	14.5 gal/min
Swing Mechanism	106 L/min	28.0 gal/min
Cylinders		
Boom Cylinder – Bore	115 mm	5"
Boom Cylinder – Stroke	916 mm	3'0"
VAB Cylinder – Bore	140 mm	6"
VAB Cylinder – Stroke	743 mm	2'5"
Stick Cylinder – Bore	115 mm	5"
Stick Cylinder – Stroke	1147 mm	3'9"
Bucket Cylinder – Bore	100 mm	4"
Bucket Cylinder – Stroke	1055 mm	3'6"

Tires

Standard	10.00-20 (dual pneumatic)
Optional	11.00-20 (dual pneumatic) 315/70R22.5 (dual pneumatic without spacer) 445/70/R19.5 TL XF (single pneumatic)

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Dozer Blade

Blade Type	Radial	
Width	2540 mm	8'4"
Blade Roll-Over Height	540 mm	1'9"
Blade Total Height	580 mm	1'11"
Maximum Lowering Depth From Ground	120 mm	5"
Maximum Raising Height Above Ground	475 mm	1'7"

Emissions and Safety

Engine Emissions	Tier 4 Final and Stage V	
Vibration Levels		
Maximum Hand/Arm (ISO 5349-2001)	<2.5 m/s²	<8.2
Maximum Whole Body (ISO/TR 25398:2006)	<0.5 m/s²	<1.6
Seat Transmissibility Factor (ISO 7096:2000-spectral class EM5)	<0.7	

Standards

Brakes	ISO 3450:2011
Cab (ROPS)	ISO 12117-2:2008
FOPS (Falling Object Protective Structure) (optional top/front guards)	ISO 10262:1998 (Level II)
Cab/Sound Levels	Meets appropriate standards as listed below

Sound Performance

Operator Sound	
2000/14/EC	70 dB(A)
Spectator Sound	
2000/14/EC	102 dB(A)

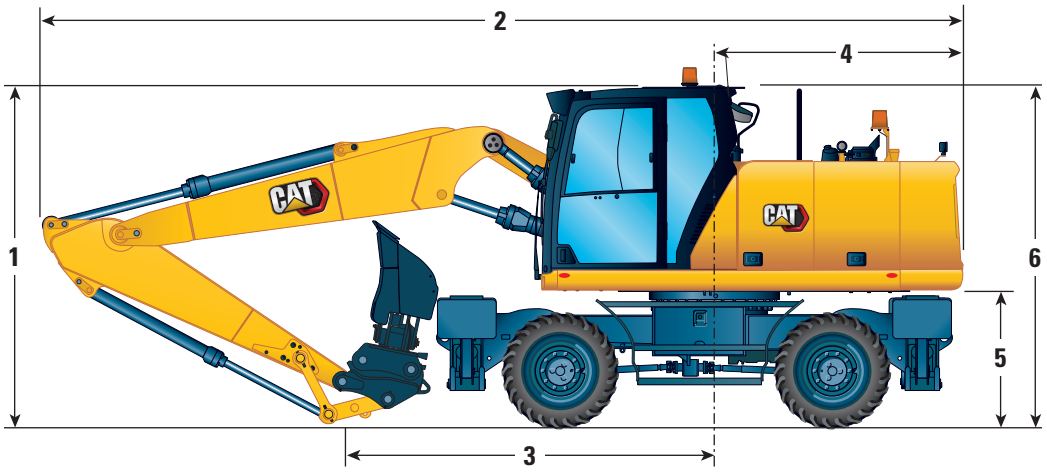
- Operator Sound – The operator sound level is measured according to the procedures specified in 2000/14/EC, for a cab offered by Caterpillar, when properly installed and maintained and tested with the door and windows closed.
- Exterior Sound – The labeled spectator sound power level is measured according to the test procedures and conditions specified in 2000/14/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 noisy environment(s).

Air Conditioning System

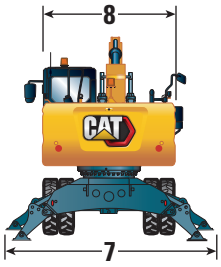
The air conditioning system on this machine contains the fluorinated greenhouse gas refrigerant R134a (Global Warming Potential = 1430). The system contains 0.85 kg of refrigerant, which has a CO_2 equivalent of 1.216 metric tonnes.

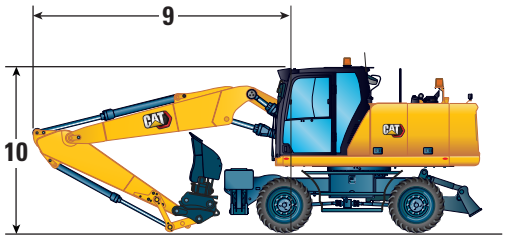
Dimensions

All dimensions are approximate. Values are with 10.00-20 dual pneumatic tires.



Boom Option	Variable Adjustable Boom 5205 mm (17'1")	
Stick Options	**2200 mm (7'3")**	**2500 mm (8'2")**
1 Shipping Height with Falling Object Guard (highest point between boom and cab)	3360 mm (11'0")	3360 mm (11'0")
Shipping Height without FOGS	3180 mm (10'5")	3210 mm (10'6")
2 Shipping Length	8630 mm (28'4")	8630 mm (28'4")
3 Support Point	3870 mm (12'8")	3530 mm (11'7")
4 Tail Swing Radius	2350 mm (7'9")	2350 mm (7'9")
5 Counterweight Clearance	1301 mm (4'3")	1301 mm (4'3")
6 Cab Height		
No Falling Object Guard	3194 mm (10'6")	3194 mm (10'6")
With Falling Object Guard	3356 mm (11'0")	3356 mm (11'0")
Overall Machine Width		
Width with Outriggers on Ground	3800 mm (12'6")	3800 mm (12'6")
Width with Outriggers Up	2540 mm (8'4")	2540 mm (8'4")
Width with Blade	2540 mm (8'4")	2540 mm (8'4")
7 Width with Outriggers Fully Down	3645 mm (12'0")	3645 mm (12'0")
Enclosure Height (doors)	2500 mm (8'2")	2500 mm (8'2")
8 Upperframe Width	2540 mm (8'4")	2540 mm (8'4")
Roading Position		
9 Steering Wheel to Linkage in Roading Position	2880 mm (9'5")	2870 mm (9'5")
10 Height in Roading Position	3930 mm (12'11")	3950 mm (13'0")





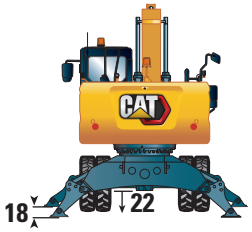
M316 Wheeled Excavator Specifications

Undercarriage Dimensions

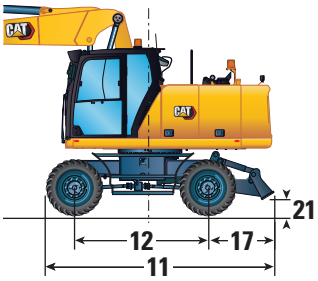
All dimensions are approximate. Values are with 10.00-20 dual pneumatic tires.

Undercarriage	Rear Blade	Rear Blade/ Front Outrigger	Rear Outrigger/ Front Blade	Rear Outrigger/ Front Outrigger
11 Overall Undercarriage Length	4360 mm (14'4")	4970 mm (16'4")	4970 mm (16'4")	4805 mm (15'9")
12 Wheel Base	2550 mm (8'4")	2550 mm (8'4")	2550 mm (8'4")	2550 mm (8'4")
13 Swing Bearing Center to Rear Axle Center	1100 mm (3'7")	1100 mm (3'7")	1100 mm (3'7")	1100 mm (3'7")
14 Swing Bearing Center to Front Axle Center	1450 mm (4'9")	1450 mm (4'9")	1450 mm (4'9")	1450 mm (4'9")
15 Rear Axle to Rear Outrigger (mid)	—	—	830 mm (2'9")	830 mm (2'9")
16 Front Axle to Front Outrigger (mid)	—	925 mm (3'0")	—	925 mm (3'0")
17 Rear Axle to Blade (end)	1270 mm (4'2")	1270 mm (4'2")	—	—
Front Axle to Blade (end)	—	—	1315 mm (4'4")	—
18 Maximum Outrigger Depth	—	115 mm (5")	115 mm (5")	115 mm (5")
19 Blade Width	2540 mm (8'4")	2540 mm (8'4")	2540 mm (8'4")	—
Maximum Blade Depth Below Ground	120 mm (5")	120 mm (5")	120 mm (5")	—
Ground Clearance				
Lowest Step Clearance	395 mm (1'4")	395 mm (1'4")	395 mm (1'4")	395 mm (1'4")
20 Outrigger Clearance	335 mm (1'1")	335 mm (1'1")	335 mm (1'1")	335 mm (1'1")
21 Blade Clearance	475 mm (8'4")	475 mm (8'4")	475 mm (8'4")	475 mm (8'4")
22 Axle Clearance	365 mm (1'2")	365 mm (1'2")	365 mm (1'2")	365 mm (1'2")

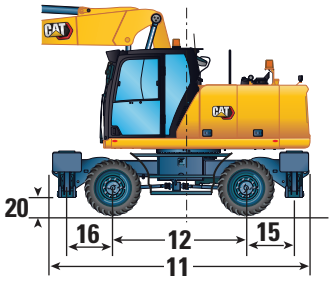
*Maximum tire clearance with outrigger fully down



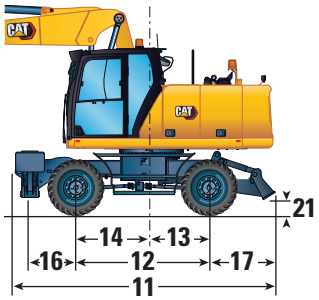
Undercarriage with dozer only



Undercarriage with 2 sets of outriggers

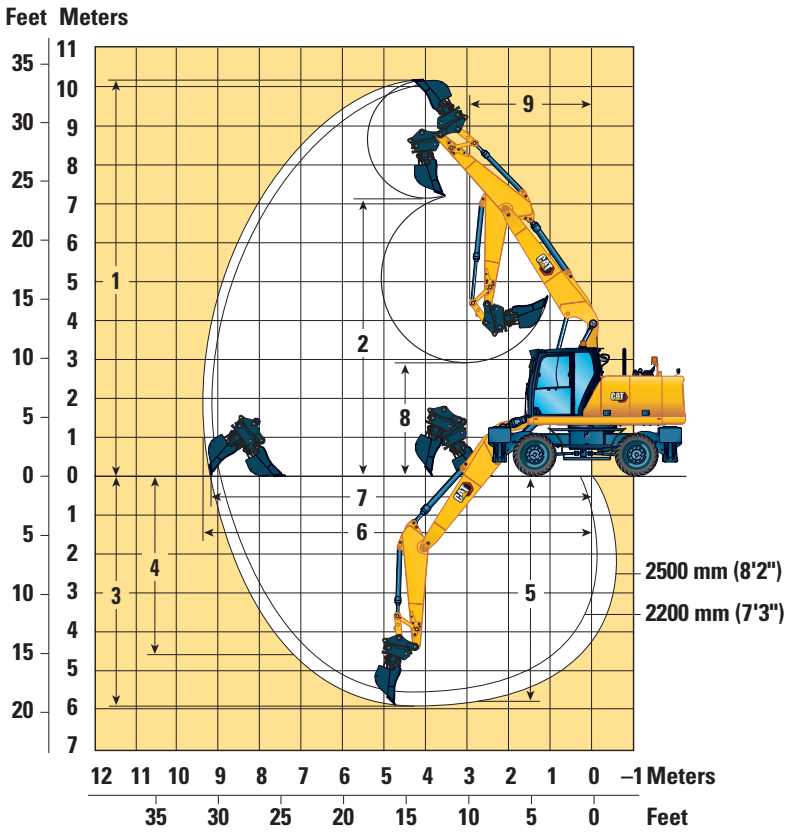


Undercarriage with 1 set of outriggers and dozer



Working Ranges

All Dimensions are approximate. Values are with 10.00-20 Dual Pneumatic Tires.



Boom Option	Variable Adjustable Boom 5205 mm (17'1")	
Stick Options	**2200 mm (7'3")**	**2500 mm (8'2")**
1 Maximum Cutting Height	10 110 mm (33'2")	10 240 mm (33'7")
2 Maximum Loading Height	7140 mm (23'5")	7280 mm (23'11")
3 Maximum Digging Depth	5630 mm (18'6")	5920 mm (19'5")
4 Maximum Vertical Wall Digging Depth	4410 mm (14'6")	4620 mm (15'2")
5 Maximum Depth Cut for 2440 mm (8'0") Level Bottom	5520 mm (18'1")	5810 mm (19'1")
6 Maximum Reach	9140 mm (30'0")	9390 mm (30'10")
7 Maximum Reach at Ground Line	8970 mm (29'5")	9220 mm (30'3")
8 Minimum Loading Height	3290 mm (10'10")	2940 mm (9'8")
9 Minimum Front Swing Radius	2950 mm (9'8")	2900 mm (9'6")
Bucket Forces (ISO)	119 kN (26,752 lbf)	119 kN (26,752 lbf)
Stick Forces (ISO)	75 kN (16,861 lbf)	69 kN (15,512 lbf)
Bucket Type	GD	GD
Bucket Capacity	0.8 m^3 (1.05 yd^3)	0.8 m^3 (1.05 yd^3)
Bucket Tip Radius (Pin-On)	1378 mm (4'6")	1378 mm (4'6")
Bucket Tip Radius (QC)	1484 mm (4'10")	1484 mm (4'10")

Range values are with dual pneumatic tires (10.00-20).
Range values are calculated with a GD bucket (CW) and CW-30 quick coupler with a tip radius of 1484 mm (4'10").
Force values are calculated with heavy lift on, a GD bucket (pin-on) and a tip radius of 1378 mm (4'6").

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Lift Capacities – Variable Adjustable Boom (5205 mm), 2200 mm Stick

All values are in kg, work tool: none, bucket cylinder and bucket linkage installed, counterweight: 3300 kg, heavy lift function on.

 Load at maximum reach (sticknose/bucket pin)
 Load over front
 Load over rear
 Load over side
 Load point height

		3000 mm			4500 mm			6000 mm			7500 mm						
	Undercarriage configuration																**mm**
7500 mm	Front empty – rear radial dozer – raised				*4950	4750	4250							*3800	*3800	3650	4890
	Front empty – rear radial dozer – lowered				*4950	*4950	4800							*3800	*3800	*3800	
	Front radial dozer – rear stab – lowered				*4950	*4950	*4950							*3800	*3800	*3800	
	Front stab – rear stab – lowered				*4950	*4950	*4950							*3800	*3800	*3800	
6000 mm	Front empty – rear radial dozer – raised				*4950	4800	4300	4300	2950	2650				*3150	2650	2350	6310
	Front empty – rear radial dozer – lowered				*4950	*4950	4800	4300	*4450	2950				*3150	*3150	2650	
	Front radial dozer – rear stab – lowered				*4950	*4950	*4950	*4450	*4450	*4450				*3150	*3150	*3150	
	Front stab – rear stab – lowered				*4950	*4950	*4950	*4450	*4450	*4450				*3150	*3150	*3150	
4500 mm	Front empty – rear radial dozer – raised				*5950	4550	4050	4250	2900	2600				*2900	2100	1900	7130
	Front empty – rear radial dozer – lowered				*5950	*5950	4550	4200	*5000	2900				*2900	*2900	2150	
	Front radial dozer – rear stab – lowered				*5950	*5950	*5950	*5000	*5000	4400				*2900	*2900	*2900	
	Front stab – rear stab – lowered				*5950	*5950	*5950	*5000	*5000	*5000				*2900	*2900	*2900	
3000 mm	Front empty – rear radial dozer – raised				6350	4150	3700	4050	2750	2450	2850	1900	1700	2800	1850	1650	7560
	Front empty – rear radial dozer – lowered				6300	*7150	4200	4050	*5300	2750	2850	*3400	1900	2800	*2800	1900	
	Front radial dozer – rear stab – lowered				*7150	*7150	6600	*5300	*5300	4250	*3400	*3400	3000	*2800	*2800	*2800	
	Front stab – rear stab – lowered				*7150	*7150	*7150	*5300	*5300	5100	*3400	*3400	*3400	*2800	*2800	*2800	
1500 mm	Front empty – rear radial dozer – raised				5950	3850	3350	3900	2550	2300	2800	1850	1650	2700	1800	1600	7660
	Front empty – rear radial dozer – lowered				5950	*7750	3850	3900	*5650	2600	2800	4200	1850	2700	*2900	1800	
	Front radial dozer – rear stab – lowered				*7750	*7750	6200	*5650	*5650	4050	*4350	4300	2950	*2900	*2900	2850	
	Front stab – rear stab – lowered				*7750	*7750	7650	*5650	*5650	4900	*4350	*4350	3500	*2900	*2900	*2900	
0 mm	Front empty – rear radial dozer – raised				5800	3650	3200	3800	2450	2200				2800	1850	1600	7450
	Front empty – rear radial dozer – lowered				5750	*7600	3700	3800	*5550	2500				2800	*3150	1850	
	Front radial dozer – rear stab – lowered				*7600	*7600	6050	*5550	*5550	3950				*3150	*3150	2900	
	Front stab – rear stab – lowered				*7600	*7600	7450	*5550	*5550	4800				*3150	*3150	*3150	
–1500 mm	Front empty – rear radial dozer – raised	*6050	*6050	5900	5750	3650	3200	3750	2450	2150				3150	2050	1800	6900
	Front empty – rear radial dozer – lowered	*6050	*6050	*6050	5750	*6650	3650	3750	*4850	2450				3100	*3650	2050	
	Front radial dozer – rear stab – lowered	*6050	*6050	*6050	*6650	*6650	6000	*4850	*4850	3950				*3650	*3650	3250	
	Front stab – rear stab – lowered	*6050	*6050	*6050	*6650	*6650	*6650	*4850	*4850	4750				*3650	*3650	*3650	
–3000 mm	Front empty – rear radial dozer – raised				*4800	3750	3300										
	Front empty – rear radial dozer – lowered				*4800	*4800	3750										
	Front radial dozer – rear stab – lowered				*4800	*4800	*4800										
	Front stab – rear stab – lowered				*4800	*4800	*4800										

*Indicates that the load is limited by hydraulic lifting capacity rather than tipping load.

Oscillating axle needs to be locked. Weight of all lifting accessories must be subtracted from the lifting capacities. All lift capacities calculated and rated per ISO 10567:2007. Rated loads do not exceed 87% of hydraulic lift capacity or 75% of tipping load. Heavy Lift Function ON. Lifting capacities are based on the machine standing on a firm uniform supporting surface. The load point is the center line of the bucket pivot mounting pin on the stick. Lift capacity is calculated with VA cylinder completely extracted. The use of a work tool attachment point to handle/lift objects, could affect the machine lift performance.

Always refer to the appropriate Operation and Maintenance Manual for specific product information.

Lift Capacities – Variable Adjustable Boom (17'1"), 7'3" Stick

All values are in lb, work tool: none, bucket cylinder and bucket linkage installed, counterweight: 7,280 lb, heavy lift function on.

 Load at maximum reach (sticknose/bucket pin)  Load over front  Load over rear  Load over side  Load point height

	Undercarriage configuration	10 ft			15 ft			20 ft			25 ft						ft
25 ft	Front empty – rear radial dozer – raised				*10,100	*10,100	9,100							*8,600	*8,600	8,500	15.55
	Front empty – rear radial dozer – lowered				*10,100	*10,100	*10,100							*8,600	*8,600	*8,600	
	Front radial dozer – rear stab – lowered				*10,100	*10,100	*10,100							*8,600	*8,600	*8,600	
	Front stab – rear stab – lowered				*10,100	*10,100	*10,100							*8,600	*8,600	*8,600	
20 ft	Front empty – rear radial dozer – raised				*10,900	10,300	9,300	*8,800	6,300	5,600				*6,900	6,000	5,300	20.47
	Front empty – rear radial dozer – lowered				*10,900	*10,900	10,300	*8,800	*8,800	6,300				*6,900	*6,900	6,000	
	Front radial dozer – rear stab – lowered				*10,900	*10,900	*10,900	*8,800	*8,800	*8,800				*6,900	*6,900	*6,900	
	Front stab – rear stab – lowered				*10,900	*10,900	*10,900	*8,800	*8,800	*8,800				*6,900	*6,900	*6,900	
15 ft	Front empty – rear radial dozer – raised				*12,800	9,800	8,800	9,100	6,200	5,600				*6,400	4,700	4,200	23.29
	Front empty – rear radial dozer – lowered				*12,800	*12,800	9,900	9,100	*10,800	6,200				*6,400	*6,400	4,700	
	Front radial dozer – rear stab – lowered				*12,800	*12,800	*12,800	*10,800	*10,800	9,500				*6,400	*6,400	*6,400	
	Front stab – rear stab – lowered				*12,800	*12,800	*12,800	*10,800	*10,800	*10,800				*6,400	*6,400	*6,400	
10 ft	Front empty – rear radial dozer – raised				13,700	9,000	8,000	8,800	5,900	5,200				*6,200	4,100	3,700	24.77
	Front empty – rear radial dozer – lowered				13,600	*15,400	9,000	8,700	*11,400	5,900				6,200	*6,200	4,200	
	Front radial dozer – rear stab – lowered				*15,400	*15,400	14,200	*11,400	*11,400	9,100				*6,200	*6,200	*6,200	
	Front stab – rear stab – lowered				*15,400	*15,400	*15,400	*11,400	*11,400	11,000				*6,200	*6,200	*6,200	
5 ft	Front empty – rear radial dozer – raised				12,800	8,300	7,300	8,400	5,500	4,900	6,000	4,000	3,500	6,000	3,900	3,500	25.13
	Front empty – rear radial dozer – lowered				12,800	*16,800	8,300	8,400	*12,200	5,600	6,000	*7,400	4,000	6,000	*6,400	4,000	
	Front radial dozer – rear stab – lowered				*16,800	*16,800	13,400	*12,200	*12,200	8,800	*7,400	*7,400	6,300	*6,400	*6,400	6,300	
	Front stab – rear stab – lowered				*16,800	*16,800	16,500	*12,200	*12,200	10,600	*7,400	*7,400	*7,400	*6,400	*6,400	*6,400	
0 ft	Front empty – rear radial dozer – raised				12,400	7,900	6,900	8,200	5,300	4,700				6,200	4,000	3,600	24.44
	Front empty – rear radial dozer – lowered				12,400	*16,500	7,900	8,100	*12,000	5,400				6,200	*6,900	4,100	
	Front radial dozer – rear stab – lowered				*16,500	*16,500	13,000	*12,000	*12,000	8,500				*6,900	*6,900	6,400	
	Front stab – rear stab – lowered				*16,500	*16,500	16,000	*12,000	*12,000	10,300				*6,900	*6,900	*6,900	
–5 ft	Front empty – rear radial dozer – raised	*13,900	*13,900	12,700	12,400	7,900	6,900	8,100	5,300	4,700				6,900	4,500	4,000	22.60
	Front empty – rear radial dozer – lowered	*13,900	*13,900	*13,900	12,300	*14,400	7,900	8,100	*10,500	5,300				6,900	*8,000	4,600	
	Front radial dozer – rear stab – lowered	*13,900	*13,900	*13,900	*14,400	*14,400	12,900	*10,500	*10,500	8,500				*8,000	*8,000	7,200	
	Front stab – rear stab – lowered	*13,900	*13,900	*13,900	*14,400	*14,400	*14,400	*10,500	*10,500	10,300				*8,000	*8,000	*8,000	
–10 ft	Front empty – rear radial dozer – raised				*10,200	8,100	7,100										
	Front empty – rear radial dozer – lowered				*10,200	*10,200	8,100										
	Front radial dozer – rear stab – lowered				*10,200	*10,200	*10,200										
	Front stab – rear stab – lowered				*10,200	*10,200	*10,200										

*Indicates that the load is limited by hydraulic lifting capacity rather than tipping load.

Oscillating axle needs to be locked. Weight of all lifting accessories must be subtracted from the lifting capacities. All lift capacities calculated and rated per ISO 10567:2007. Rated loads do not exceed 87% of hydraulic lift capacity or 75% of tipping load. Heavy Lift Function ON. Lifting capacities are based on the machine standing on a firm uniform supporting surface. The load point is the center line of the bucket pivot mounting pin on the stick. Lift capacity is calculated with VA cylinder completely extracted. The use of a work tool attachment point to handle/lift objects, could affect the machine lift performance.

Always refer to the appropriate Operation and Maintenance Manual for specific product information.

M316 Wheeled Excavator Specifications

Lift Capacities – Variable Adjustable Boom (5205 mm), 2500 mm Stick

All values are in kg, work tool: none, bucket cylinder and bucket linkage installed, counterweight: 3300 kg, heavy lift function on.

 Load at maximum reach (sticknose/bucket pin)
 Load over front
 Load over rear
 Load over side
 Load point height

	Undercarriage configuration	3000 mm			4500 mm			6000 mm			7500 mm						mm
																	
7500 mm	Front empty – rear radial dozer – raised				*4350	*4350	*4350							*3050	*3050	*3050	5280
	Front empty – rear radial dozer – lowered				*4350	*4350	*4350							*3050	*3050	*3050	
	Front radial dozer – rear stab – lowered				*4350	*4350	*4350							*3050	*3050	*3050	
	Front stab – rear stab – lowered				*4350	*4350	*4350							*3050	*3050	*3050	
6000 mm	Front empty – rear radial dozer – raised				*4300	*4300	*4300	*4050	3000	2700				*2600	2500	2200	6610
	Front empty – rear radial dozer – lowered				*4300	*4300	*4300	*4050	*4050	3000				*2600	*2600	2500	
	Front radial dozer – rear stab – lowered				*4300	*4300	*4300	*4050	*4050	*4050				*2600	*2600	*2600	
	Front stab – rear stab – lowered				*4300	*4300	*4300	*4050	*4050	*4050				*2600	*2600	*2600	
4500 mm	Front empty – rear radial dozer – raised				*5150	4650	4150	4300	2900	2600				*2450	2000	1800	7400
	Front empty – rear radial dozer – lowered				*5150	*5150	4650	4250	*4850	2950				*2450	*2450	2000	
	Front radial dozer – rear stab – lowered				*5150	*5150	*5150	*4850	*4850	4450				*2450	*2450	*2450	
	Front stab – rear stab – lowered				*5150	*5150	*5150	*4850	*4850	*4850				*2450	*2450	*2450	
3000 mm	Front empty – rear radial dozer – raised				6400	4250	3750	4100	2750	2450	2900	1900	1700	*2450	1800	1600	7810
	Front empty – rear radial dozer – lowered				6400	*6900	4250	4100	*5150	2750	2900	*3900	1950	*2450	*2450	1800	
	Front radial dozer – rear stab – lowered				*6900	*6900	6700	*5150	*5150	4250	*3900	*3900	3000	*2450	*2450	*2450	
	Front stab – rear stab – lowered				*6900	*6900	*6900	*5150	*5150	5150	*3900	*3900	3600	*2450	*2450	*2450	
1500 mm	Front empty – rear radial dozer – raised				6000	3900	3400	3950	2600	2300	2800	1850	1650	*2550	1700	1500	7900
	Front empty – rear radial dozer – lowered				6000	*7700	3900	3900	*5600	2600	2800	4200	1850	*2550	*2550	1700	
	Front radial dozer – rear stab – lowered				*7700	*7700	6250	*5600	*5600	4100	*4350	4300	2950	*2550	*2550	*2550	
	Front stab – rear stab – lowered				*7700	*7700	*7700	*5600	*5600	4950	*4350	*4350	3550	*2550	*2550	*2550	
0 mm	Front empty – rear radial dozer – raised				5800	3700	3200	3800	2450	2200	2750	1800	1600	2650	1750	1550	7700
	Front empty – rear radial dozer – lowered				5800	*7700	3700	3800	*5600	2500	2750	4150	1800	2650	*2800	1750	
	Front radial dozer – rear stab – lowered				*7700	*7700	6050	*5600	*5600	3950	*4150	*4150	2900	*2800	*2800	2800	
	Front stab – rear stab – lowered				*7700	*7700	7500	*5600	*5600	4800	*4150	*4150	3450	*2800	*2800	*2800	
–1500 mm	Front empty – rear radial dozer – raised	*6300	*6300	5850	5750	3650	3200	3750	2450	2150				2950	1950	1700	7170
	Front empty – rear radial dozer – lowered	*6300	*6300	*6300	5750	*6900	3650	3750	*5050	2450				2950	*3250	1950	
	Front radial dozer – rear stab – lowered	*6300	*6300	*6300	*6900	*6900	6000	*5050	*5050	3900				*3250	*3250	3050	
	Front stab – rear stab – lowered	*6300	*6300	*6300	*6900	*6900	*6900	*5050	*5050	4750				*3250	*3250	*3250	
–3000 mm	Front empty – rear radial dozer – raised				*5250	3700	3250	*3500	2500	2200							
	Front empty – rear radial dozer – lowered				*5250	*5250	3700	*3500	*3500	2500							
	Front radial dozer – rear stab – lowered				*5250	*5250	*5250	*3500	*3500	*3500							
	Front stab – rear stab – lowered				*5250	*5250	*5250	*3500	*3500	*3500							

*Indicates that the load is limited by hydraulic lifting capacity rather than tipping load.

Oscillating axle needs to be locked. Weight of all lifting accessories must be subtracted from the lifting capacities. All lift capacities calculated and rated per ISO 10567:2007. Rated loads do not exceed 87% of hydraulic lift capacity or 75% of tipping load. Heavy Lift Function ON. Lifting capacities are based on the machine standing on a firm uniform supporting surface. The load point is the center line of the bucket pivot mounting pin on the stick. Lift capacity is calculated with VA cylinder completely extracted. The use of a work tool attachment point to handle/lift objects, could affect the machine lift performance.

Always refer to the appropriate Operation and Maintenance Manual for specific product information.

Lift Capacities – Variable Adjustable Boom (17'1"), 8'2" Stick

All values are in lb, work tool: none, bucket cylinder and bucket linkage installed, counterweight: 7,280 lb, heavy lift function on.

 Load at maximum reach (sticknose/bucket pin)  Load over front  Load over rear  Load over side  Load point height

	Undercarriage configuration	10 ft			15 ft			20 ft			25 ft						ft
25 ft	Front empty – rear radial dozer – raised				*9,400	*9,400	9,300							*6,800	*6,800	*6,800	16.86
	Front empty – rear radial dozer – lowered				*9,400	*9,400	*9,400							*6,800	*6,800	*6,800	
	Front radial dozer – rear stab – lowered				*9,400	*9,400	*9,400							*6,800	*6,800	*6,800	
	Front stab – rear stab – lowered				*9,400	*9,400	*9,400							*6,800	*6,800	*6,800	
20 ft	Front empty – rear radial dozer – raised				*9,500	*9,500	9,400	*8,600	6,400	5,800				*5,800	5,600	5,000	21.49
	Front empty – rear radial dozer – lowered				*9,500	*9,500	*9,500	*8,600	*8,600	6,400				*5,800	*5,800	5,600	
	Front radial dozer – rear stab – lowered				*9,500	*9,500	*9,500	*8,600	*8,600	*8,600				*5,800	*5,800	*5,800	
	Front stab – rear stab – lowered				*9,500	*9,500	*9,500	*8,600	*8,600	*8,600				*5,800	*5,800	*5,800	
15 ft	Front empty – rear radial dozer – raised				*11,200	10,000	8,900	9,200	6,300	5,600				*5,400	4,500	4,000	24.18
	Front empty – rear radial dozer – lowered				*11,200	*11,200	10,000	9,200	*10,500	6,300				*5,400	*5,400	4,500	
	Front radial dozer – rear stab – lowered				*11,200	*11,200	*11,200	*10,500	*10,500	9,600				*5,400	*5,400	*5,400	
	Front stab – rear stab – lowered				*11,200	*11,200	*11,200	*10,500	*10,500	*10,500				*5,400	*5,400	*5,400	
10 ft	Front empty – rear radial dozer – raised				13,800	9,200	8,100	8,800	5,900	5,300	6,200	4,100	3,700	*5,400	3,900	3,500	25.59
	Front empty – rear radial dozer – lowered				13,800	*14,900	9,200	8,800	*11,200	6,000	6,200	*7,600	4,100	*5,400	*5,400	4,000	
	Front radial dozer – rear stab – lowered				*14,900	*14,900	14,400	*11,200	*11,200	9,200	*7,600	*7,600	6,500	*5,400	*5,400	*5,400	
	Front stab – rear stab – lowered				*14,900	*14,900	*14,900	*11,200	*11,200	11,000	*7,600	*7,600	*7,600	*5,400	*5,400	*5,400	
5 ft	Front empty – rear radial dozer – raised				13,000	8,400	7,400	8,500	5,600	5,000	6,100	4,000	3,500	*5,600	3,800	3,300	25.92
	Front empty – rear radial dozer – lowered				12,900	*16,600	8,400	8,400	*12,100	5,600	6,000	9,000	4,000	*5,600	*5,600	3,800	
	Front radial dozer – rear stab – lowered				*16,600	*16,600	13,500	*12,100	*12,100	8,800	*9,300	9,300	6,300	*5,600	*5,600	*5,600	
	Front stab – rear stab – lowered				*16,600	*16,600	16,600	*12,100	*12,100	10,600	*9,300	*9,300	7,600	*5,600	*5,600	*5,600	
0 ft	Front empty – rear radial dozer – raised				12,500	7,900	7,000	8,200	5,300	4,700	6,000	3,900	3,400	5,900	3,800	3,400	25.26
	Front empty – rear radial dozer – lowered				12,400	*16,700	8,000	8,200	*12,100	5,400	5,900	*7,800	3,900	5,900	*6,100	3,900	
	Front radial dozer – rear stab – lowered				*16,700	*16,700	13,000	*12,100	*12,100	8,500	*7,800	*7,800	6,200	*6,100	*6,100	6,100	
	Front stab – rear stab – lowered				*16,700	*16,700	16,100	*12,100	*12,100	10,300	*7,800	*7,800	7,500	*6,100	*6,100	*6,100	
–5 ft	Front empty – rear radial dozer – raised	*14,400	*14,400	12,600	12,400	7,800	6,900	8,100	5,200	4,600				6,500	4,300	3,800	23.49
	Front empty – rear radial dozer – lowered	*14,400	*14,400	*14,400	12,300	*15,000	7,900	8,100	*10,900	5,300				6,500	*7,200	4,300	
	Front radial dozer – rear stab – lowered	*14,400	*14,400	*14,400	*15,000	*15,000	12,900	*10,900	*10,900	8,400				*7,200	*7,200	6,800	
	Front stab – rear stab – lowered	*14,400	*14,400	*14,400	*15,000	*15,000	*15,000	*10,900	*10,900	10,300				*7,200	*7,200	*7,200	
–10 ft	Front empty – rear radial dozer – raised				*11,300	8,000	7,000	7200*	5,400	4,800							
	Front empty – rear radial dozer – lowered				*11,300	*11,300	8,000	*7,200	*7,200	5,500							
	Front radial dozer – rear stab – lowered				*11,300	*11,300	*11,300	*7,200	*7,200	*7,200							
	Front stab – rear stab – lowered				*11,300	*11,300	*11,300	*7,200	*7,200	*7,200							

*Indicates that the load is limited by hydraulic lifting capacity rather than tipping load.

Oscillating axle needs to be locked. Weight of all lifting accessories must be subtracted from the lifting capacities. All lift capacities calculated and rated per ISO 10567:2007. Rated loads do not exceed 87% of hydraulic lift capacity or 75% of tipping load. Heavy Lift Function ON. Lifting capacities are based on the machine standing on a firm uniform supporting surface. The load point is the center line of the bucket pivot mounting pin on the stick. Lift capacity is calculated with VA cylinder completely extracted. The use of a work tool attachment point to handle/lift objects, could affect the machine lift performance.

Always refer to the appropriate Operation and Maintenance Manual for specific product information.

M316 Wheeled Excavator Specifications

Bucket Specifications and Compatibility

Contact your Cat dealer for special bucket requirements.

		Width		Capacity		Weight		Fill	3300 kg (7,280 lb) Counterweight							
									Variable Angle Boom							
									2200 mm (7'3") Stick				2500 mm (8'2") Stick			
	Linkage	mm	in	m^3	yd^3	kg	lb	%	Free on wheels	Only dozer (blade) lowered	Dozer (blade) and two stabilizers (outrigger) lowered	Four stabilizers (outrigger) lowered	Free on wheels	Only dozer (blade) lowered	Dozer (blade) and two stabilizers (outrigger) lowered	Four stabilizers (outrigger) lowered
Pin-On (No Quick Coupler)																
General Duty	316	600	24	0.35	0.46	440	969	100	●	●	●	●	●	●	●	●
	316	900	36	0.62	0.81	546	1,203	100	⊖	●	●	●	⊖	◉	●	●
	316	1200	48	0.91	1.19	658	1,450	100	◇	○	●	●	◇	◇	●	●
	316	1300	51	1.00	1.31	695	1,532	100	X	◇	●	●	X	◇	●	●
Ditch Cleaning	316	2000	78	0.94	1.23	723	1,594	100	◇	◇	●	●	X	◇	●	●
Ditch Cleaning Tilt	316	2000	79	0.86	1.12	1028	2,266	100	X	◇	●	●	X	X	●	●
								kg	1540	1790	2973	3631	1456	1694	2825	3452
								lb	3,396	3,945	6,555	8,005	3,209	3,735	6,228	7,609
Maximum load with pin-on (payload + bucket)																
With Pin Grabber Coupler																
General Duty	316	600	24	0.35	0.46	440	969	100	●	●	●	●	◉	●	●	●
	316	900	36	0.62	0.81	546	1,203	100	◇	⊖	●	●	◇	○	●	●
	316	1200	48	0.91	1.19	658	1,450	100	X	◇	●	●	X	X	●	●
	316	1300	51	1.00	1.31	695	1,532	100	X	X	◉	●	X	X	◉	●
Ditch Cleaning	316	2000	78	0.94	1.23	723	1,594	100	X	X	●	●	X	X	◉	●
Ditch Cleaning Tilt	316	2000	79	0.86	1.12	1028	2,266	100	X	X	◉	●	X	X	⊖	●
								kg	1209	1459	2642	3300	1125	1363	2494	3121
								lb	2,666	3,216	5,825	7,276	2,480	3,006	5,499	6,880
Maximum load with coupler (payload + bucket)																

Maximum Material Density:

- ● 2100 kg/m^3 (3,500 lb/yd^3)
- ◉ 1800 kg/m^3 (3,000 lb/yd^3)
- ⊖ 1500 kg/m^3 (2,500 lb/yd^3)
- ○ 1200 kg/m^3 (2,000 lb/yd^3)
- ◇ 900 kg/m^3 (1,500 lb/yd^3)
- X Not Recommended

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.

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.

(continued on next page)

Bucket Specifications and Compatibility *(continued)*

Contact your Cat dealer for special bucket requirements.

		Width		Capacity		Weight		Fill	3300 kg (7,280 lb) Counterweight – Variable Angle Boom – 2200 mm (7'3") Stick				2500 mm (8'2") Stick			
									Free on wheels	Only dozer (blade) lowered	Dozer (blade) and two stabilizers (outrigger) lowered	Four stabilizers (outrigger) lowered	Free on wheels	Only dozer (blade) lowered	Dozer (blade) and two stabilizers (outrigger) lowered	Four stabilizers (outrigger) lowered
	Linkage	mm	in	m^3	yd^3	kg	lb	%								
With CW-30 Coupler																
General Duty	316	600	24	0.35	0.46	439	967	100	●	●	●	●	●	●	●	●
	316	750	30	0.49	0.64	475	1,047	100	◉	●	●	●	⊖	●	●	●
	316	900	36	0.62	0.81	534	1,177	100	○	⊖	●	●	○	⊖	●	●
	316	1100	43	0.80	1.04	593	1,307	100	◇	○	●	●	X	◇	●	●
	316	1200	48	0.90	1.18	646	1,423	100	X	◇	●	●	X	◇	●	●
	316	1300	51	1.00	1.31	677	1,492	100	X	◇	●	●	X	X	◉	●
Heavy Duty	316	1300	51	1.00	1.31	694	1,529	100	X	◇	●	●	X	X	◉	●
General Duty – Leveling Edge	316	996	39.2	0.70	0.93	586	1,291	100	◇	○	●	●	◇	○	●	●
	316	1200	47	0.91	1.19	672	1,481	100	X	◇	●	●	X	◇	●	●
	316	690	27	0.47	0.61	476	1,049	100	◉	●	●	●	⊖	●	●	●
	316	790	31	0.56	0.73	509	1,122	100	⊖	◉	●	●	○	◉	●	●
Ditch Cleaning Tilt	316	1800	72	0.78	1.02	1048	2,310	100	X	X	●	●	X	X	●	●
	316	2000	79	0.86	1.13	1111	2,449	100	X	X	◉	●	X	X	◉	●
Maximum load with coupler (payload + bucket)								kg	1328	1578	2761	3419	1244	1482	2613	3240
								lb	2,928	3,478	6,087	7,538	2,742	3,268	5,761	7,142
With CW-30S Coupler																
General Duty	316	600	24	0.35	0.46	423	932	100	●	●	●	●	●	●	●	●
	316	750	30	0.49	0.64	471	1,038	100	◉	●	●	●	⊖	●	●	●
	316	900	36	0.62	0.81	534	1,177	100	○	⊖	●	●	○	⊖	●	●
	316	1100	43	0.80	1.04	593	1,307	100	◇	○	●	●	X	◇	●	●
	316	1200	48	0.91	1.18	646	1,423	100	X	◇	●	●	X	◇	●	●
	316	1300	51	1.00	1.31	677	1,492	100	X	◇	●	●	X	X	◉	●
Heavy Duty	316	1200	48	0.91	1.18	663	1,461	100	X	◇	●	●	X	◇	●	●
	316	1300	51	1.00	1.31	695	1,531	100	X	◇	●	●	X	X	◉	●
Ditch Cleaning Tilt	316	2000	79	0.86	1.13	1092	2,407	100	X	X	◉	●	X	X	◉	●
Maximum load with coupler (payload + bucket)								kg	1336	1586	2769	3427	1252	1490	2621	3248
								lb	2,946	3,495	6,105	7,556	2,760	3,286	5,779	7,160

Maximum Material Density:

- ● 2100 kg/m^3 (3,500 lb/yd^3)
- ◉ 1800 kg/m^3 (3,000 lb/yd^3)
- ⊖ 1500 kg/m^3 (2,500 lb/yd^3)
- ○ 1200 kg/m^3 (2,000 lb/yd^3)
- ◇ 900 kg/m^3 (1,500 lb/yd^3)

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.

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.

(continued on next page)

Bucket Specifications and Compatibility *(continued)*

Contact your Cat dealer for special bucket requirements.

									3300 kg (7,280 lb) Counterweight							
									Variable Angle Boom							
									2200 mm (7'3") Stick				2500 mm (8'2") Stick			
		Width		Capacity		Weight		Fill	Free on wheels	Only dozer (blade) lowered	Dozer (blade) and two stabilizers (outrigger) lowered	Four stabilizers (outrigger) lowered	Free on wheels	Only dozer (blade) lowered	Dozer (blade) and two stabilizers (outrigger) lowered	Four stabilizers (outrigger) lowered
	Linkage	mm	in	m^3	yd^3	kg	lb	%								
With S60 Coupler																
Heavy Duty	0	1100	43	0.80	1.05	628	1,385	100	◇	○	●	●	X	◇	●	●
	0	1150	45	0.90	1.18	699	1,641	100	X	◇	●	●	X	◇	●	●
Maximum load with coupler (payload + bucket)								kg	1364	1614	2797	3455	1280	1518	2649	3276
								lb	3,008	3,557	6,167	7,617	2,821	3,347	5,840	7,221
No Machine Coupler, TRS14 CW30																
Grading – General Duty	316	1700	67	0.65	0.85	634	1,397	100	X	X	●	●	X	X	●	●
Trenching – General Duty	316	660	26	0.45	0.59	395	871	100	◇	⊖	●	●	X	○	●	●
Maximum load with pin-on (payload + bucket)								kg	818	1068	2251	2909	734	972	2103	2730
								lb	1,804	2,353	4,963	6,414	1,618	2,144	4,637	6,018
No Machine Coupler, TRS14 CW30S																
Grading – General Duty	316	1600	63	0.75	0.98	595	1,311	100	X	X	●	●	X	X	●	●
Maximum load with pin-on (payload + bucket)								kg	864	1114	2297	2955	780	1018	2149	2776
								lb	1,905	2,455	5,064	6,515	1,719	2,245	4,738	6,119
No Machine Coupler, TRS14 S60																
Grading – General Duty	316	1500	59	0.52	0.68	511	1,127	100	◇	○	●	●	X	○	●	●
	316	1500	59	0.65	0.85	535	1,179	100	X	◇	●	●	X	◇	●	●
	316	1600	63	0.75	0.98	576	1,270	100	X	X	●	●	X	X	●	●
Trenching – General Duty	316	540	21	0.33	0.43	320	706	100	◉	●	●	●	⊖	●	●	●
Maximum load with pin-on (payload + bucket)								kg	965	1215	2398	3056	881	1119	2250	2877
								lb	2,128	2,678	5,287	6,738	1,942	2,468	4,961	6,342

Maximum Material Density:

- ● 2100 kg/m^3 (3,500 lb/yd^3)
- ◉ 1800 kg/m^3 (3,000 lb/yd^3)
- ⊖ 1500 kg/m^3 (2,500 lb/yd^3)
- ○ 1200 kg/m^3 (2,000 lb/yd^3)
- ◇ 900 kg/m^3 (1,500 lb/yd^3)
- X Not Recommended

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.

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.

(continued on next page)

Bucket Specifications and Compatibility *(continued)*

Contact your Cat dealer for special bucket requirements.

									3300 kg (7,280 lb) Counterweight							
									Variable Angle Boom							
									2200 mm (7'3") Stick				2500 mm (8'2") Stick			
		Width		Capacity		Weight		Fill	Free on wheels	Only dozer (blade) lowered	Dozer (blade) and two stabilizers (outrigger) lowered	Four stabilizers (outrigger) lowered	Free on wheels	Only dozer (blade) lowered	Dozer (blade) and two stabilizers (outrigger) lowered	Four stabilizers (outrigger) lowered
	Linkage	mm	in	m^3	yd^3	kg	lb	%								
CW30, TRS14 CW30																
Grading – General Duty	316	1700	67	0.65	0.85	634	1,397	100	X	X	●	●	X	X	⦿	●
Trenching – General Duty	316	660	26	0.45	0.59	395	871	100	X	◇	●	●	X	X	●	●
Maximum load with coupler (payload + bucket)								kg	592	842	2025	2683	508	746	1877	2504
								lb	1,306	1,855	4,465	5,915	1,119	1,645	4,138	5,519
CW30S, TRS14 CW30S																
Grading – General Duty	316	1600	63	0.75	0.98	595	1,311	100	X	X	●	●	X	X	●	●
Maximum load with pin-on (payload + bucket)								kg	667	917	2100	2758	583	821	1952	2579
								lb	1,471	2,021	4,630	6,081	1,285	1,811	4,304	5,685
S60, TRS14 S60																
Grading – General Duty	316	1600	63	0.75	0.98	576	1,270	100	X	X	●	●	X	X	●	●
	316	1700	67	0.80	1.05	610	1,346	100	X	X	●	●	X	X	⦿	●
	316	1800	71	0.90	1.18	643	1,418	100	X	X	⦿	●	X	X	⊖	●
Trenching – General Duty	316	540	21	0.33	0.43	540	1,190	100	◇	⊖	●	●	X	○	●	●
Maximum load with coupler (payload + bucket)								kg	824	1074	2257	2915	740	978	2109	2736
								lb	1,817	2,367	4,976	6,427	1,631	2,157	4,650	6,031

Maximum Material Density:

- ● 2100 kg/m^3 (3,500 lb/yd^3)
- ⦿ 1800 kg/m^3 (3,000 lb/yd^3)
- ⊖ 1500 kg/m^3 (2,500 lb/yd^3)
- ○ 1200 kg/m^3 (2,000 lb/yd^3)
- ◇ 900 kg/m^3 (1,500 lb/yd^3)
- X Not Recommended

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.

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.

M316 Wheeled Excavator Specifications

Attachments Offering Guide

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

✓ Match | ☐ No Match | ✓* Working range front only | ● 1800 kg/m³ (3000 lb/yd³) | ○ 1200 kg/m³ (2000 lb/yd³)

PIN-ON ATTACHMENTS

Undercarriage		Rear Outrigger/ Front Blade		Rear Blade/ Front Outrigger		Rear Outrigger/ Front Outrigger		Rear Blade	
Counterweight		3300 kg (7,280 lb)		3300 kg (7,280 lb)		3300 kg (7,280 lb)		3300 kg (7,280 lb)	
Boom Type		Variable Adjustable Boom		Variable Adjustable Boom		Variable Adjustable Boom		Variable Adjustable Boom	
Stick Length		2200 mm (7'3")	2500 mm (8'2")	2200 mm (7'3")	2500 mm (8'2")	2200 mm (7'3")	2500 mm (8'2")	2200 mm (7'3")	2500 mm (8'2")
Hydraulic Hammers	H110 S	✓	✓	✓	✓	✓	✓	✓	✓
	H115 GC S	✓	✓	✓	✓	✓	✓	✓	✓
	H115 S	✓	✓	✓	✓	✓	✓	✓	✓
Demolition and Sorting Grapples	G313 GC	✓	✓	✓	✓	✓	✓	✓	✓
	G314	✓	✓	✓	✓	✓	✓	✓	✓*
	G317 GC	✓	✓	✓	✓	✓	✓		
Mobile Scrap and Demolition Shears	S3015	✓	✓	✓	✓	✓	✓	✓	✓
	S3015 Flat Top	✓	✓	✓	✓	✓	✓	✓	✓*
Compactors (Vibratory Plate)	CVP75	✓	✓	✓	✓	✓	✓	✓	✓
Orange Peel Grapples	GSH420-500	●	●	●	●	●	●	○	
	GSH420-600	●	●	●	●	●	●		
	GSH420-750	●	○	●	○	●	○		
	GSH520-500	●	●	●	●	●	●		
	GSH520-600	●	○	●	○	●	○		
	GSH520-750	○	○	○	○	○	○		
	GSV520 GC-400	●	●	●	●	●	●	○	○
	GSV520 GC-500	●	●	●	●	●	●	○	
	GSV520 GC-600	●	●	●	●	●	●		
	GSV520 GC-750	●	○	●	○	●	○		
	GSV520-400	●	●	●	●	●	●	○	○
	GSV520-500	●	●	●	●	●	●		
	GSV520-600	●	○	●	○	●	○		
	GSV520-750	●	○	●	○	●	○		

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Attachments Offering Guide *(continued)*

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

✓ Match ☐ No Match ✓* Working range front only

CAT PIN GRABBER COUPLER ATTACHMENTS

Undercarriage		Rear Outrigger/ Front Blade		Rear Blade/ Front Outrigger		Rear Outrigger/ Front Outrigger		Rear Blade	
Counterweight		3300 kg (7,280 lb)		3300 kg (7,280 lb)		3300 kg (7,280 lb)		3300 kg (7,280 lb)	
Boom Type		Variable Adjustable Boom		Variable Adjustable Boom		Variable Adjustable Boom		Variable Adjustable Boom	
Stick Length		2200 mm (7'3")	2500 mm (8'2")	2200 mm (7'3")	2500 mm (8'2")	2200 mm (7'3")	2500 mm (8'2")	2200 mm (7'3")	2500 mm (8'2")
Hydraulic Hammers	H110 S	✓	✓	✓	✓	✓	✓	✓	✓
	H115 GC S	✓	✓	✓	✓	✓	✓	✓*	✓*
	H115 S	✓	✓	✓	✓	✓	✓	✓	✓
Demolition and Sorting Grapples	G313 GC	✓	✓	✓	✓	✓	✓		
	G314	✓	✓	✓	✓	✓	✓		
Mobile Scrap and Demolition Shears	S3015	✓	✓	✓	✓	✓	✓		
	S3015 Flat Top	✓	✓	✓	✓	✓	✓		
Compactors (Vibratory Plate)	CVP75	✓	✓	✓	✓	✓	✓	✓	✓

CW-30S DEDICATED COUPLER ATTACHMENTS

Undercarriage		Rear Outrigger/ Front Blade		Rear Blade/ Front Outrigger		Rear Outrigger/ Front Outrigger		Rear Blade	
Counterweight		3300 kg (7,280 lb)		3300 kg (7,280 lb)		3300 kg (7,280 lb)		3300 kg (7,280 lb)	
Boom Type		Variable Adjustable Boom		Variable Adjustable Boom		Variable Adjustable Boom		Variable Adjustable Boom	
Stick Length		2200 mm (7'3")	2500 mm (8'2")	2200 mm (7'3")	2500 mm (8'2")	2200 mm (7'3")	2500 mm (8'2")	2200 mm (7'3")	2500 mm (8'2")
Hydraulic Hammers	H110 S	✓	✓	✓	✓	✓	✓	✓	✓
	H115 GC S	✓	✓	✓	✓	✓	✓	✓*	✓*
	H115 S	✓	✓	✓	✓	✓	✓	✓	✓
Demolition and Sorting Grapples	G313 GC	✓	✓	✓	✓	✓	✓	✓*	✓*
	G314	✓	✓	✓	✓	✓	✓	✓*	
	G317 GC	✓	✓	✓	✓	✓	✓		
Mobile Scrap and Demolition Shears	S3015	✓	✓	✓	✓	✓	✓	✓*	
	S3015 Flat Top	✓	✓	✓	✓	✓	✓	✓*	
Compactors (Vibratory Plate)	CVP75	✓	✓	✓	✓	✓	✓	✓	✓

(continued on next page)

Attachments Offering Guide *(continued)*

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

✓ Match ☐ No Match ✓* Working range front only

CW-30 DEDICATED COUPLER ATTACHMENTS

Undercarriage		Rear Outrigger/ Front Blade		Rear Blade/ Front Outrigger		Rear Outrigger/ Front Outrigger		Rear Blade	
Counterweight		3300 kg (7,280 lb)		3300 kg (7,280 lb)		3300 kg (7,280 lb)		3300 kg (7,280 lb)	
Boom Type		Variable Adjustable Boom		Variable Adjustable Boom		Variable Adjustable Boom		Variable Adjustable Boom	
Stick Length		2200 mm (7'3")	2500 mm (8'2")	2200 mm (7'3")	2500 mm (8'2")	2200 mm (7'3")	2500 mm (8'2")	2200 mm (7'3")	2500 mm (8'2")
Hydraulic Hammers	H110 S	✓	✓	✓	✓	✓	✓	✓	✓
	H115 GC S	✓	✓	✓	✓	✓	✓	✓	✓*
	H115 S	✓	✓	✓	✓	✓	✓	✓	✓
Demolition and Sorting Grapples	G313 GC	✓	✓	✓	✓	✓	✓	✓*	
	G313 GC-Fixed CAN	✓	✓	✓	✓	✓	✓	✓	✓*
	G314	✓	✓	✓	✓	✓	✓	✓*	
	G317 GC	✓	✓	✓	✓	✓	✓		
	G317 GC-Fixed CAN		✓		✓		✓		
Mobile Scrap and Demolition Shears	S3015	✓	✓	✓	✓	✓	✓		
	S3015 Flat Top	✓	✓	✓	✓	✓	✓	✓*	
Compactors (Vibratory Plate)	CVP75	✓	✓	✓	✓	✓	✓	✓	✓

S60 DEDICATED COUPLER ATTACHMENTS

Undercarriage		Rear Outrigger/ Front Blade		Rear Blade/ Front Outrigger		Rear Outrigger/ Front Outrigger		Rear Blade	
Counterweight		3300 kg (7,280 lb)		3300 kg (7,280 lb)		3300 kg (7,280 lb)		3300 kg (7,280 lb)	
Boom Type		Variable Adjustable Boom		Variable Adjustable Boom		Variable Adjustable Boom		Variable Adjustable Boom	
Stick Length		2200 mm (7'3")	2500 mm (8'2")	2200 mm (7'3")	2500 mm (8'2")	2200 mm (7'3")	2500 mm (8'2")	2200 mm (7'3")	2500 mm (8'2")
Hydraulic Hammers	H110 S	✓	✓	✓	✓	✓	✓	✓	✓
	H115 GC S	✓	✓	✓	✓	✓	✓	✓	✓
	H115 S	✓	✓	✓	✓	✓	✓	✓	✓
Demolition and Sorting Grapples	G313 GC	✓	✓	✓	✓	✓	✓	✓*	✓*
	G314	✓	✓	✓	✓	✓	✓	✓*	
	G317 GC		✓		✓		✓		
Mobile Scrap and Demolition Shears	S3015 Flat Top	✓	✓	✓	✓	✓	✓	✓*	
Compactors (Vibratory Plate)	CVP75	✓	✓	✓	✓	✓	✓	✓	✓

(continued on next page)

Attachments Offering Guide *(continued)*

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

✓ Match ☐ No Match ✓* Working range front only

TRS14-CW-30S ATTACHMENTS

Undercarriage		Rear Outrigger/ Front Blade		Rear Blade/ Front Outrigger		Rear Outrigger/ Front Outrigger		Rear Blade
Counterweight		3300 kg (7,280 lb)		3300 kg (7,280 lb)		3300 kg (7,280 lb)		3300 kg (7,280 lb)
Boom Type		Variable Adjustable Boom		Variable Adjustable Boom		Variable Adjustable Boom		Variable Adjustable Boom
Stick Length		2200 mm (7'3")	2500 mm (8'2")	2200 mm (7'3")	2500 mm (8'2")	2200 mm (7'3")	2500 mm (8'2")	2200 mm (7'3")
Hydraulic Hammers	H110 GC S		✓		✓		✓	
	H110 S	✓	✓	✓	✓	✓	✓	
	H115 S		✓		✓		✓	
Demolition and Sorting Grapples	G212 GC	✓	✓	✓	✓	✓	✓	
	G212 GC-fixed CAN	✓	✓	✓	✓	✓	✓	
	G213 GC	✓	✓	✓	✓	✓	✓	
	G213 GC-fixed CAN	✓	✓	✓	✓	✓	✓	
Compactors (Vibratory Plate)	CVP75	✓	✓	✓	✓	✓	✓	✓*

TRS14-CW-30 ATTACHMENTS

Undercarriage		Rear Outrigger/ Front Blade		Rear Blade/ Front Outrigger		Rear Outrigger/ Front Outrigger	
Counterweight		3300 kg (7,280 lb)		3300 kg (7,280 lb)		3300 kg (7,280 lb)	
Boom Type		Variable Adjustable Boom		Variable Adjustable Boom		Variable Adjustable Boom	
Stick Length		2200 mm (7'3")	2500 mm (8'2")	2200 mm (7'3")	2500 mm (8'2")	2200 mm (7'3")	2500 mm (8'2")
Hydraulic Hammers	H110 GC S	✓	✓	✓	✓	✓	✓
	H110 S	✓	✓	✓	✓	✓	✓
	H115 S		✓		✓		✓
Demolition and Sorting Grapples	G212 GC	✓	✓	✓	✓	✓	✓
	G212 GC-fixed CAN	✓	✓	✓	✓	✓	✓
	G213 GC	✓	✓	✓	✓	✓	✓
	G213 GC-fixed CAN	✓	✓	✓	✓	✓	✓
Compactors (Vibratory Plate)	CVP75	✓	✓	✓	✓	✓	✓

(continued on next page)

Attachments Offering Guide *(continued)*

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

✓ Match ☐ No Match ✓* Working range front only

TRS14-S60 ATTACHMENTS

Undercarriage		Rear Outrigger/ Front Blade		Rear Blade/ Front Outrigger		Rear Outrigger/ Front Outrigger		Rear Blade	
Counterweight		**3300 kg (7,280 lb)**		**3300 kg (7,280 lb)**		**3300 kg (7,280 lb)**		**3300 kg (7,280 lb)**	
Boom Type		**Variable Adjustable Boom**		**Variable Adjustable Boom**		**Variable Adjustable Boom**		**Variable Adjustable Boom**	
Stick Length		**2200 mm (7'3")**	**2500 mm (8'2")**	**2200 mm (7'3")**	**2500 mm (8'2")**	**2200 mm (7'3")**	**2500 mm (8'2")**	**2200 mm (7'3")**	**2500 mm (8'2")**
Hydraulic Hammers	H110 GC S	✓	✓	✓	✓	✓	✓	✓*	
	H110 S	✓	✓	✓	✓	✓	✓	✓	✓*
	H115 S	✓	✓	✓	✓	✓	✓	✓*	
Demolition and Sorting Grapples	G212 GC	✓	✓	✓	✓	✓	✓	✓*	
	G213 GC	✓	✓	✓	✓	✓	✓		
Compactors (Vibratory Plate)	CVP75	✓	✓	✓	✓	✓	✓	✓	✓

Standard and Optional Equipment

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

	Standard	Optional
BOOM, STICKS AND LINKAGES		
5205 mm (17'1") Variable Adjustable boom	✓	
2200 mm (7'3") stick		✓
2500 mm (8'2") stick		✓
Bucket linkage, 316-family without lifting eye		✓
Bucket linkage, 316-family with lifting eye		✓
CAT TECHNOLOGY		
Cat Product Link™	✓	
Remote Flash capability	✓	
Remote Troubleshoot capability	✓	
Compatibility with radios and base stations from Trimble		✓
Capability to install 3D grade systems from Trimble		✓
Cat Grade with 2D		✓
Cat Grade with Advanced 2D		✓
Cat Grade with 3D		✓
Cat Payload		✓
2D E-Fence		✓
ELECTRICAL SYSTEM		
LED lights on boom and cab	✓	
LED lights on chassis (left-hand, right-hand) and counterweight		✓
Programmable time-delay LED working lights	✓	
Roading and indicator lights, front and rear	✓	
Maintenance free batteries	✓	
Centralized electrical disconnect switch	✓	
Electrical refueling pump		✓

	Standard	Optional
ENGINE		
Cat C4.4 Single Turbo diesel engine – meets Tier 4 Final/Stage V emission standards	✓	
Power mode selector	✓	
One-touch low idle with automatic engine speed control	✓	
Automatic engine idle shutdown	✓	
Work up to 3000 m (9,842 ft) above sea level without engine power de-rating	✓	
52° C (125° F) high-ambient cooling capacity	✓	
Cold starting capability for –18° C (0° F)	✓	
Double element air filter with integrated precleaner	✓	
Electric fuel priming pump	✓	

(continued on next page)

M316 Standard and Optional Equipment

Standard and Optional Equipment *(continued)*

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

	Standard	Optional
HYDRAULIC SYSTEM		
Boom, stick and bucket drift reduction valves	✓	
Boom and stick lowering check valves	✓	
Electronic main control valve	✓	
Automatic hydraulic oil warm up	✓	
Element type main hydraulic filter	✓	
One-slider joysticks	✓	
Two-slider joysticks		✓
Advanced Tool Control (one/two way high-pressure flow with drift reduction)	✓	
Second high pressure auxiliary circuit (one/two way high-pressure flow)		✓
Medium pressure auxiliary circuit (one/two way medium-pressure flow)		✓
Heavy lift mode	✓	
Quick coupler circuit for Cat pin grabber and CW dedicated	✓	
SmartBoom™		✓
Ride control		✓
Cat tiltrotator support		✓
Joystick steering		✓
Separate dedicated swing pump	✓	
Automatic swing brake	✓	
Cat BIO HYDO™ Advanced biodegradable hydraulic oil		✓
Adjustable hydraulic aggressiveness	✓	
Pattern changer	✓	
SAFETY AND SECURITY		
Rear and right-side-view cameras	✓	
360° visibility		✓
Wide angle mirrors	✓	
Heated and remotely adjustable mirrors		✓
Travel alarm		✓
Signal/warning horn	✓	
Rotating beacon on cab and chassis		✓
Neutral lever (lock out) for all controls	✓	
Ground-level accessible secondary engine shutoff switch in cab	✓	
Bluetooth® receiver	✓	
Anti-skid plate and countersunk bolts on service platform	✓	

	Standard	Optional
SERVICE AND MAINTENANCE		
Sampling ports for Scheduled Oil Sampling (S·O·S℠)	✓	
Automatic lubrication system for implement and swing system		✓
UNDERCARRIAGE AND STRUCTURES		
All wheel drive	✓	
Automatic brake/axle lock	✓	
Creeper speed	✓	
Electronic swing and travel lock	✓	
Heavy-duty axles, advanced disc brake system and travel motor, adjustable braking force	✓	
Oscillating front axle, lockable, with remote greasing point	✓	
10.00-20 16 PR, dual tires		✓
11.00-20 dual tires		✓
315/70R22.5, no gap dual tires		✓
445/70R 19.5, single tires		✓
Steps with tool box in undercarriage (left and right)	✓	
Two-piece drive shaft	✓	
Two speed hydrostatic transmission	✓	
Undercarriage steps, for parallel blade		✓
Rear blade (radial) undercarriage		✓
Rear blade (radial)/front outrigger undercarriage		✓
Rear outrigger/front blade (radial) undercarriage		✓
Rear outrigger/front outrigger undercarriage		✓
Fenders, front and rear, synthetic		✓
Travel restraint bracket for grapple/clamshell		✓
3300 kg (7,280 lb) counterweight	✓	

Dealer Installed Kits and Attachments

Attachments may vary. Consult your Cat dealer for details.

CAB

- 75 mm (3") retractable seat belt

SAFETY AND SECURITY

- Bluetooth key fob

GUARDS

- Falling object guard system (not compatible with cab light cover, rain protector)
- Mesh guard full front (not compatible with cab light cover, rain protector)

M316 Cab Options

Cab Options

	Deluxe	Premium
Sound-suppressed ROPS cab	●	●
Heated seat with air-adjustable suspension	●	X
Heated and cooled seat with automatic adjustable suspension	X	●
Height-adjustable console, infinite with no tool	●	●
High-resolution 254 mm (10") LCD touchscreen monitor	●	●
Mechanical mirror	●	X
Electrical and adjustable heated mirror	X	●
Automatic bi-level air conditioner	●	●
Jog dial and shortcut keys for monitor control	●	●
Keyless push-to-start engine control	●	●
51 mm (2") orange seat belt	●	●
Unfastened seat belt warning	●	●
Bluetooth integrated radio (including USB, aux port and microphone)	●	●
2 × 12V DC outlets	●	●
Document storage	●	●
Cup and bottle holders	●	●
Openable two-piece front window (laminated)	●	○
Fixed one-piece front window (P5A classified)	X	○
Parallel wiper with washer	●	●
Fixed glass skylight	●	●
LED dome lights	●	●
Foot illumination	●	●
Roller rear sunscreen	X	●
Rear window emergency exit	●	●
Washable floor mat	●	●
Beacon ready	●	●
FOGS “ready”	●	●
Vandal guards “ready”	●	●
Two LED cab lights	●	●
Rain visor	●	●

● Standard

○ Optional

X Not available

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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.

AEXQ3018-02 (12-2021)
Replaces AEXQ3018-01
Build Number: 07B
(Eur)