



320

Hydraulic Excavator

Technical Specifications

Engine

Engine Model	Cat® C4.4	
Engine Power (ISO 9249)	121 kW	162 hp
Engine Power (ISO 14396)	122 kW	164 hp
Bore	105 mm	4 in
Stroke	127 mm	5 in
Displacement	4.4 L	269 in ³

- The 320 meets U.S. EPA Tier 4 Final emission standards.
- Recommended for use up to 4500 m (14,764 ft) altitude with engine power derate above 3000 m (9,842.5 ft).
- Net power advertised is the power available at the flywheel when the engine is equipped with fan, air cleaner, muffler and alternator.
- Rating at 1,800 rpm.

Swing Mechanism

Swing Speed	11.30 rpm	
Maximum Swing Torque	74 kN·m	54,440 lbf·ft

Weights

Operating Weight	22 500 kg	49,600 lb
------------------	-----------	-----------

- Reach boom, R2.9 (9'6") stick, HD 1.19 m³ (1.56 yd³) bucket and 790 mm (31 in) triple grouser shoes.

Track

Standard Track Shoe 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

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

Hydraulic System

Main System – Maximum Flow – Implement	429 L/min (214.5 × 2 pumps)	113 gal/min (56.5 × 2 pumps)
Maximum Pressure – Equipment – Normal	35 000 kPa	5,075 psi
Maximum Pressure – Equipment – Lift Mode	38 000 kPa	5,510 psi
Maximum Pressure – Travel	34 300 kPa	4,974 psi
Maximum Pressure – Swing	26 800 kPa	3,886 psi
Boom Cylinder – Bore	120 mm	4.7 in
Boom Cylinder – Stroke	1260 mm	49.6 in
Stick Cylinder – Bore	140 mm	5.5 in
Stick Cylinder – Stroke	1504 mm	59.2 in
Bucket Cylinder – Bore	120 mm	4.7 in
Bucket Cylinder – Stroke	1104 mm	43.5 in

320 Hydraulic Excavator Specifications

Service Refill Capacities

Fuel Tank Capacity	345 L	86.6 gal
Cooling System	25 L	6.6 gal
Engine Oil	15 L	4.0 gal
Swing Drive (each)	5 L	1.3 gal
Final Drive (each)	5 L	1.3 gal
Hydraulic System (including tank)	234 L	61.8 gal
Hydraulic Tank	115 L	30.4 gal
DEF Tank	39 L	10.3 gal

Standards

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

Sound Performance

ISO 6395 (external)	99 dB(A)
ISO 6396 (inside cab)	70 dB(A)

- 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.

Operating Weight and Ground Pressure

	790 mm (31 in) Triple Grouser Shoes			
	Weight		Ground Pressure	
4.2 mt (9,300 lb) Counterweight + Base Machine				
Reach Boom + R2.9 (9'6") Stick + 1.19 m ³ (1.56 yd ³) HD Bucket	22 500 kg	49,600 lb	35.5 kPa	5.2 psi

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

320 Hydraulic Excavator Specifications

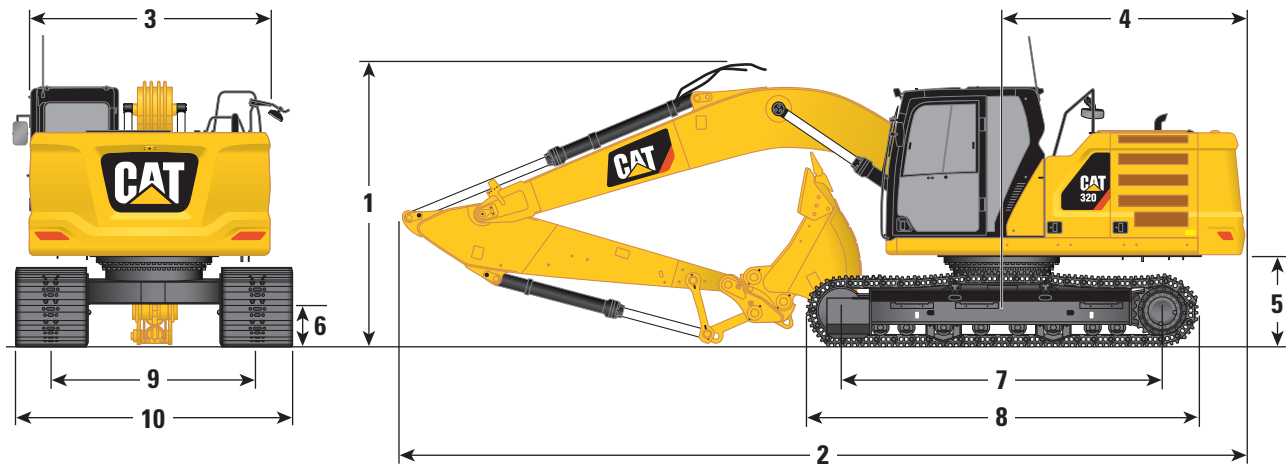
Major Component Weights

	kg	lb
Base Machine (with 4.2 mt [9,300 lb] counterweight, semi-HD swing frame, standard base frame with HD track rollers and standard carrier rollers for long undercarriage, without boom cylinder – does not include 90% fuel and 75 kg [165 lb] operator)	14 800	32,600
Track Shoes:		
790 mm (31 in) Width, 10 mm (0.39 in) Thick Triple Grouser Track Shoes for Long Undercarriage with Step Extension for ISO 2867:2011	3370	7,400
Two Boom Cylinders	340	750
Weight of 90% Fuel Tank and 75 kg (165 lb) Operator	310	680
Counterweights:		
4.2 mt (9,300 lb) Counterweight	4200	9,300
4.7 mt (10,400 lb) Counterweight (only for Super Long Reach)	4700	10,400
Swing Frame:		
Semi-HD Swing Frame	1910	4,210
Standard and Long Undercarriage:		
Standard Base Frame with HD Track Rollers and Standard Carrier Rollers for Long Undercarriage	4390	9,700
Booms (including lines, pins, stick cylinder):		
Reach Boom (5.7 m/18'8")	1710	3,800
Super Long Reach Boom (8.85 m/29'0")	2170	4,800
Sticks (including lines, pins, bucket cylinder, bucket linkage):		
Reach Stick (R2.9B1/9'6")	990	2,200
Super Long Reach Stick (6.28A/20'7")	1340	3,000
Buckets (without linkage):		
1.19 m ³ (1.56 yd ³) HD	960	2,100
1.0 m ³ (1.31 yd ³) HD	850	1,870
0.57 m ³ (0.75 yd ³) Ditch Cleaning	390	900
Quick Coupler:		
Pin Grabber QC	390	900

320 Hydraulic Excavator Specifications

Dimensions

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

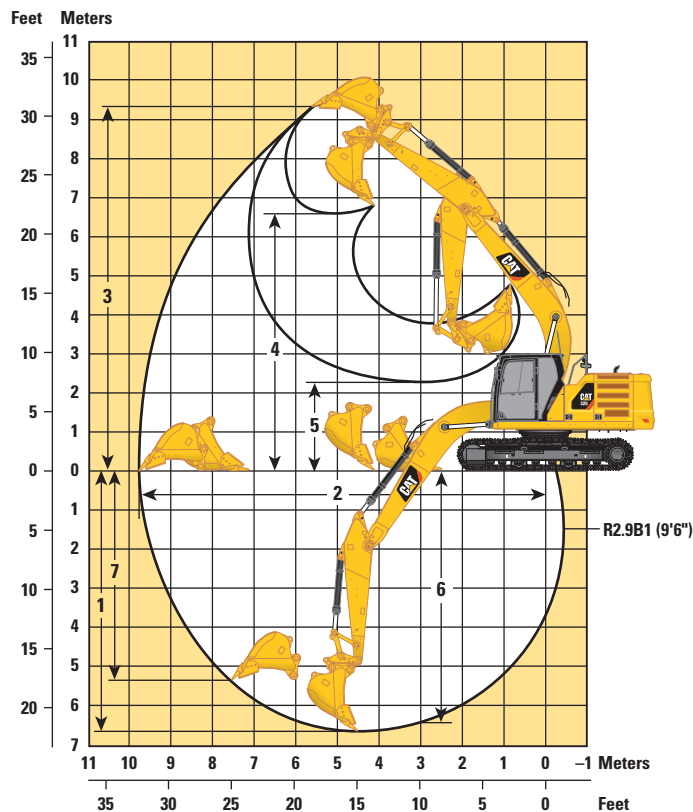


Boom Options	Reach Boom 5.7 m (18'8")		SLR Boom 8.85 m (29'0")			
Stick Options	Reach Stick R2.9B1 (9'6")		6.28A (20'7")		SLR Stick 6.28A (20'7")	
1 Machine Height:						
Top of Cab Height	2960 mm	9'9"	2960 mm	9'9"	2960 mm	9'9"
Top of FOGS Height	3100 mm	10'2"	3100 mm	10'2"	3100 mm	10'2"
Handrails Height	2950 mm	9'8"	2950 mm	9'8"	2950 mm	9'8"
With Boom/Stick/Bucket Installed	3160 mm	10'4"	3190 mm	10'6"	3190 mm	10'6"
With Boom/Stick Installed	2910 mm	9'7"	3070 mm	10'1"	3070 mm	10'1"
With Boom Installed	2480 mm	8'2"	2650 mm	8'8"	2650 mm	8'8"
2 Machine Length:						
With Boom/Stick/Bucket Installed	9530 mm	31'3"	12 750 mm	41'10"	12 750 mm	41'10"
With Boom/Stick Installed	9500 mm	31'2"	12 760 mm	41'10"	12 760 mm	41'10"
With Boom Installed	8450 mm	27'9"	8920 mm	29'3"	8920 mm	29'3"
3 Upperframe Width without Walkways	2780 mm	9'1"	2780 mm	9'1"	2780 mm	9'1"
4 Tail Swing Radius	2830 mm	9'3"	2830 mm	9'3"	2830 mm	9'3"
5 Counterweight Clearance	1050 mm	3'5"	1050 mm	3'5"	1050 mm	3'5"
6 Ground Clearance	470 mm	1'7"	470 mm	1'7"	470 mm	1'7"
7 Length to Center of Rollers	3650 mm	12'0"	3650 mm	12'0"	3650 mm	12'0"
8 Track Length	4450 mm	14'7"	4450 mm	14'7"	4450 mm	14'7"
9 Track Gauge	2380 mm	7'9"	2380 mm	7'9"	2380 mm	7'9"
Track Width:						
790 mm (31 in) Shoes	790 mm	31"	790 mm	31"	790 mm	31"
10 Undercarriage Width (with steps/without steps):						
790 mm (31 in) Shoes	3170 mm	10'5"	3170 mm	10'5"	3170 mm	10'5"
Bucket Type	HD		Ditch Cleaning (DC)		GD	
Bucket Capacity	1.14 m ³	1.50 yd ³	0.57 m ³	0.75 yd ³	0.53 m ³	0.69 yd ³
Bucket Tip Radius	1470 mm	4'10"	1070 mm	3'6"	1230 mm	4'0"

320 Hydraulic Excavator Specifications

Working Ranges

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

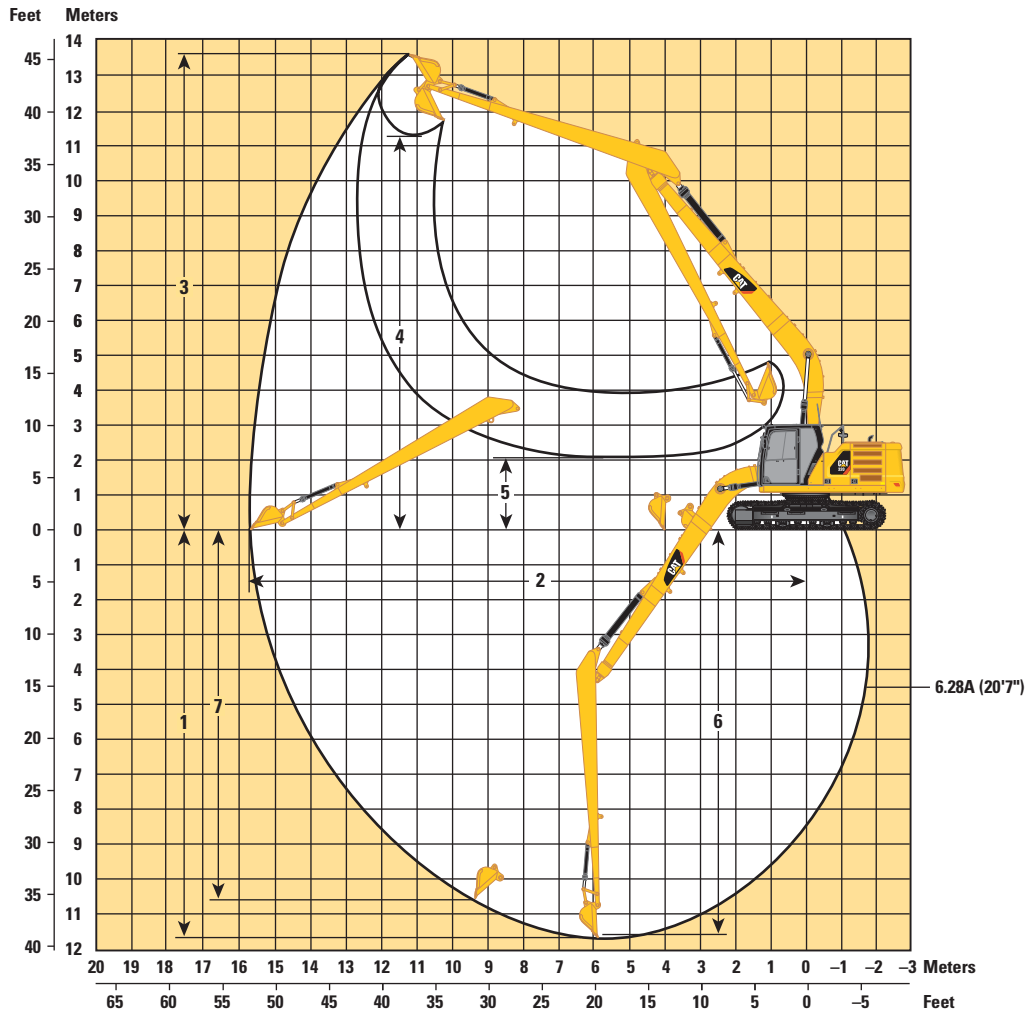


Boom Option	Reach Boom 5.7 m (18'8")	
Stick Option	Reach Stick R2.9B1 (9'6")	
1 Maximum Digging Depth	6620 mm	21'9"
2 Maximum Reach at Ground Line	9760 mm	32'0"
3 Maximum Cutting Height	9330 mm	30'7"
4 Maximum Loading Height	6590 mm	21'7"
5 Minimum Loading Height	2270 mm	7'5"
6 Maximum Depth Cut for 2440 mm (8'0") Level Bottom	6440 mm	21'2"
7 Maximum Vertical Wall Digging Depth	5360 mm	17'7"
Bucket Digging Force (ISO)	163 kN	36,711 lbf
Stick Digging Force (ISO)	109 kN	24,486 lbf
Bucket Type	HD	
Bucket Capacity	1.14 m ³	1.50 yd ³
Bucket Tip Radius	1470 mm	4'10"

320 Hydraulic Excavator Specifications

Working Ranges

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



Boom Option

SLR Boom
8.85 m (29'0")

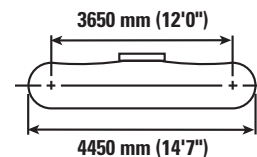
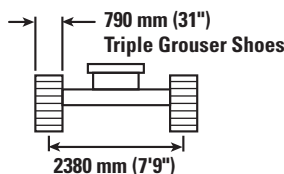
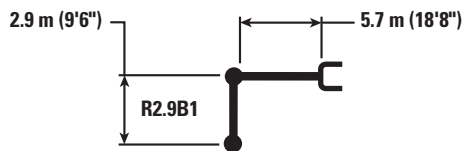
Stick Option














6.28A (20'7") **SLR Stick** **6.28A (20'7")**

1 Maximum Digging Depth	11 540 mm	37'10"	11 690 mm	38'4"
2 Maximum Reach at Ground Line	15 570 mm	51'1"	15 730 mm	51'7"
3 Maximum Cutting Height	13 540 mm	44'5"	13 610 mm	44'8"
4 Maximum Loading Height	11 440 mm	37'6"	11 290 mm	37'0"
5 Minimum Loading Height	2240 mm	7'4"	2080 mm	6'10"
6 Maximum Depth Cut for 2440 mm (8'0") Level Bottom	11 440 mm	37'6"	11 590 mm	38'0"
7 Maximum Vertical Wall Digging Depth	11 020 mm	36'2"	10 560 mm	34'8"
Bucket Digging Force (ISO)	62 kN	13,841 lbf	60 kN	13,549 lbf
Stick Digging Force (ISO)	49 kN	10,966 lbf	49 kN	10,935 lbf
Bucket Type	Ditch Cleaning (DC)		GD	
Bucket Capacity	0.57 m ³	0.75 yd ³	0.53 m ³	0.69 yd ³
Bucket Tip Radius	1070 mm	3'6"	1230 mm	4'0"

320 Hydraulic Excavator Specifications

Reach Boom Lift Capacities – Counterweight: 4.2 mt (9,300 lb) – without Bucket, Heavy Lift: On



		1.5 m/5.0 ft		3.0 m/10.0 ft		4.5 m/15.0 ft		6.0 m/20.0 ft		7.5 m/25.0 ft				m ft
														
7.5 m 25.0 ft	kg lb							*4950	*4950			*4300	*4300	6.15 20.00
6.0 m 20.0 ft	kg lb							*5450 *12,000	*5450 11,900			*3950 *8,750	*3950 *8,750	7.29 24.17
4.5 m 15.0 ft	kg lb							*6000 *13,050	5400 11,600	*5650 *12,400	3850 8,200	*3900 *8,550	3450 7,650	7.99 26.67
3.0 m 10.0 ft	kg lb					*8750 *18,900	7850 16,900	*6900 *14,950	5150 11,150	5750 12,350	3750 8,000	*4000 *8,750	3150 6,950	8.36 27.50
1.5 m 5.0 ft	kg lb					*10 650 *22,950	7350 15,850	7850 16,850	4950 10,650	5600 12,100	3600 7,800	*4250 *9,300	3050 6,700	8.45 28.33
0 m 0 ft	kg lb			*6600 *15,150	*6600 *15,150	*11 650 *25,200	7100 15,250	7650 16,450	4800 10,300	5550 11,900	3550 7,600	*4700 *10,300	3100 6,850	8.26 27.50
-1.5 m -5.0 ft	kg lb	*7050 *15,750	*7050 *15,750	*11 400 *25,850	*11 400 *25,850	*11 750 *25,500	7000 15,100	7550 16,250	4700 10,150	5500 11,850	3500 7,550	5250 11,550	3350 7,400	7.78 25.83
-3.0 m -10.0 ft	kg lb	*12 100 *27,100	*12 100 *27,100	*15 600 *33,800	13 650 29,200	*11 000 *23,800	7050 15,200	7600 16,350	4750 10,200			6200 13,700	3950 8,700	6.95 23.33
-4.5 m -15.0 ft	kg lb			*12 500 *26,700	*12 500 *26,700	*9000 *19,100	7250 15,650					*6800 *14,950	5400 12,150	5.60 18.33



ISO 10567



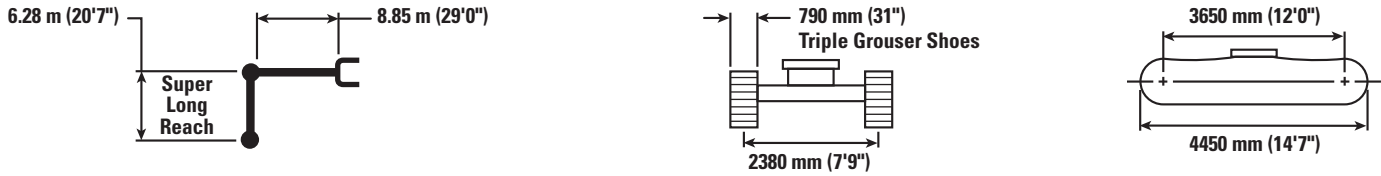
*Indicates that the load is limited by hydraulic lifting capacity rather than tipping load. The above loads are in compliance with hydraulic excavator lift capacity standard ISO 10567:2007. They do not exceed 87% of hydraulic lifting capacity or 75% of tipping load. Weight of all lifting accessories must be deducted from the above lifting capacities. Lifting capacities are based on the machine standing on a firm, uniform supporting surface. The use of a work tool attachment point to handle/lift objects, could affect the machine lift performance.














Lift capacity stays with ±5% for all available track shoes.

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

320 Hydraulic Excavator Specifications

Super Long Reach Boom Lift Capacities – Counterweight: 4.7 mt (10,400 lb) – without Bucket



		1.5 m/5.0 ft		3.0 m/10.0 ft		4.5 m/15.0 ft		6.0 m/20.0 ft		7.5 m/25.0 ft				m ft
														
12.0 m 40.0 ft	kg lb											*1300 *2,850	*1300 *2,850	10.35 33.33
10.5 m 35.0 ft	kg lb											*1200 *2,600	*1200 *2,600	11.66 38.33
9.0 m 30.0 ft	kg lb											*1150 *2,500	*1150 *2,500	12.66 41.67
7.5 m 25.0 ft	kg lb											*1100 *2,450	*1100 *2,450	13.41 44.17
6.0 m 20.0 ft	kg lb											*1100 *2,400	*1100 *2,400	13.97 45.83
4.5 m 15.0 ft	kg lb											*1100 *2,450	*1100 *2,450	14.34 47.50
3.0 m 10.0 ft	kg lb			*4700 *11,900	*4700 *11,900	*6050 *12,900	*6050 *12,900	*4450 *9,600	*4450 *9,600	*3600 *7,800	*3600 *7,800	*1150 *2,500	*1150 *2,500	14.55 48.33
1.5 m 5.0 ft	kg lb					*6750 *16,000	6550 14,150	*5250 *11,300	4500 9,750	*4100 *8,900	3350 7,200	*1200 *2,600	1150 2,500	14.60 48.33
0 m 0 ft	kg lb			*2050 *4,550	*2050 *4,550	*4700 *10,750	*4700 *10,750	*5900 *12,700	4100 8,800	*4550 *9,800	3050 6,600	*1300 *2,800	1100 2,450	14.49 47.50
-1.5 m -5.0 ft	kg lb	*2100 *4,600	*2100 *4,600	*2750 *6,100	*2750 *6,100	*4650 *10,550	*4650 *10,550	*6250 *13,550	3800 8,150	*4850 *10,450	2850 6,150	*1400 *3,000	1150 2,450	14.23 46.67
-3.0 m -10.0 ft	kg lb	*2850 *6,350	*2850 *6,350	*3550 *7,900	*3550 *7,900	*5200 *11,750	*5200 11,750	*6450 *13,900	3650 7,850	4750 10,200	2750 5,850	*1500 *3,300	1200 2,550	13.79 45.83
-4.5 m -15.0 ft	kg lb	*3700 *8,200	*3700 *8,200	*4450 *9,900	*4450 *9,900	*6100 *13,750	5500 11,800	*6400 *13,800	3650 7,800	4700 10,050	2700 5,750	*1700 *3,800	1250 2,750	13.17 43.33
-6.0 m -20.0 ft	kg lb	*4550 *10,150	*4550 *10,150	*5450 *12,200	*5450 *12,200	*7250 *16,350	5600 12,050	*6150 *13,250	3650 7,900	4700 10,100	2700 5,800	*2000 *4,500	1400 3,100	12.34 40.83
-7.5 m -25.0 ft	kg lb	*5500 *12,300	*5500 *12,300	*6600 *14,850	*6600 *14,850	*7300 *15,650	5800 12,500	*5650 *12,150	3800 8,150	*4550 *9,800	2750 5,950	*2550 *5,700	1650 3,650	11.24 36.67
-9.0 m -30.0 ft	kg lb			*8000 *17,500	*8000 *17,500	*6150 *13,100	6100 *13,100	*4850 *10,350	3950 8,550	*3950 *8,300	2900 6,300	*2700 *5,900	2100 4,700	9.80 31.67



ISO 10567



*Indicates that the load is limited by hydraulic lifting capacity rather than tipping load. The above loads are in compliance with hydraulic excavator lift capacity standard ISO 10567:2007. They do not exceed 87% of hydraulic lifting capacity or 75% of tipping load. Weight of all lifting accessories must be deducted from the above lifting capacities. Lifting capacities are based on the machine standing on a firm, uniform supporting surface. The use of a work tool attachment point to handle/lift objects, could affect the machine lift performance.

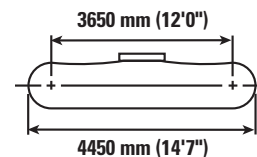
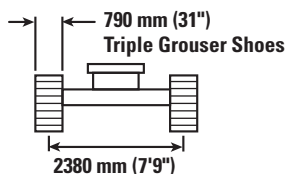
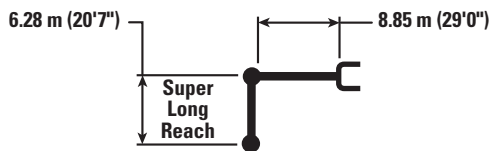
Lift capacity stays with ±5% for all available track shoes.

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

(continued on next page)

320 Hydraulic Excavator Specifications

Super Long Reach Boom Lift Capacities – Counterweight: 4.7 mt (10,400 lb) – without Bucket (continued)



		9.0 m/30.0 ft		10.5 m/35.0 ft		12.0 m/40.0 ft		13.5 m/45.0 ft				m ft
12.0 m 40.0 ft	kg lb									*1300 *2,850	*1300 *2,850	10.35 33.33
10.5 m 35.0 ft	kg lb			*2200 *4,750	*2200 *4,750					*1200 *2,600	*1200 *2,600	11.66 38.33
9.0 m 30.0 ft	kg lb			*2200 *4,800	*2200 *4,800	*2000 *3,700	2000 3,700			*1150 *2,500	*1150 *2,500	12.66 41.67
7.5 m 25.0 ft	kg lb			*2250 *4,950	*2250 *4,950	*2250 *4,900	1950 4,150			*1100 *2,450	*1100 *2,450	13.41 44.17
6.0 m 20.0 ft	kg lb			*2400 *5,200	*2400 *5,200	*2300 *5,000	1900 4,050	*1850 3,250	1500 3,100	*1100 *2,400	*1100 *2,400	13.97 45.83
4.5 m 15.0 ft	kg lb	*2800 *6,050	*2800 *6,050	*2600 *5,600	2350 5,000	*2400 *5,250	1850 3,900	*2300 *4,650	1450 3,050	*1100 *2,450	*1100 *2,450	14.34 47.50
3.0 m 10.0 ft	kg lb	*3100 *6,750	2800 6,000	*2800 *6,050	2200 4,700	*2550 *5,550	1750 3,700	2300 4,900	1400 2,950	*1150 *2,500	*1150 *2,500	14.55 48.33
1.5 m 5.0 ft	kg lb	*3450 *7,450	2600 5,550	*3000 *6,500	2050 4,350	*2700 *5,800	1650 3,500	2250 4,800	1350 2,800	*1200 *2,600	1150 2,500	14.60 48.33
0 m 0 ft	kg lb	*3750 *8,050	2400 5,150	3200 6,800	1900 4,100	2600 *5,600	1550 3,300	2200 4,650	1250 2,700	*1300 *2,800	1100 2,450	14.49 47.50
-1.5 m -5.0 ft	kg lb	3800 8,150	2250 4,800	3050 6,600	1800 3,850	2550 *5,450	1500 3,150	2150 4,600	1250 2,600	*1400 *3,000	1150 2,450	14.23 46.67
-3.0 m -10.0 ft	kg lb	3700 7,950	2150 4,600	3000 6,400	1750 3,700	2500 *5,350	1450 3,050	2100 *3,700	1200 2,600	*1500 *3,300	1200 2,550	13.79 45.83
-4.5 m -15.0 ft	kg lb	3650 7,850	2100 4,500	2950 6,350	1700 3,650	2450 *5,300	1400 3,050			*1700 *3,800	1250 2,750	13.17 43.33
-6.0 m -20.0 ft	kg lb	3650 7,850	2100 4,500	2950 6,400	1700 3,700	2500 *5,150	1450 3,150			*2000 *4,500	1400 3,100	12.34 40.83
-7.5 m -25.0 ft	kg lb	3700 *8,000	2150 4,650	3050 *6,450	1800 3,850					*2550 *5,700	1650 3,650	11.24 36.67
-9.0 m -30.0 ft	kg lb	*3150 *6,550	2300 5,000							*2700 *5,900	2100 4,700	9.80 31.67



ISO 10567



*Indicates that the load is limited by hydraulic lifting capacity rather than tipping load. The above loads are in compliance with hydraulic excavator lift capacity standard ISO 10567:2007. They do not exceed 87% of hydraulic lifting capacity or 75% of tipping load. Weight of all lifting accessories must be deducted from the above lifting capacities. Lifting capacities are based on the machine standing on a firm, uniform supporting surface. The use of a work tool attachment point to handle/lift objects, could affect the machine lift performance.

Lift capacity stays with ±5% for all available track shoes.

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

320 Hydraulic Excavator Specifications

Bucket Specifications and Compatibility – 320

	Linkage	Width		Capacity		Weight		Fill %	4.2 mt (9,300 lb) Counterweight	4.7 mt (10,400 lb) Counterweight
		mm	in	m ³	yd ³	kg	lb		Reach Boom	SLR Boom
									R2.9 (9'6")	6.28A (20'7")
Pin-On (No Quick Coupler)										
General Duty – Capacity (GDC)	B	600	24	0.55	0.72	619	1,363	100	●	
	B	750	30	0.75	0.98	710	1,566	100	●	
	B	900	36	0.95	1.24	787	1,735	100	●	
	B	1050	42	1.16	1.52	848	1,870	100	⊙	
	B	1200	48	1.38	1.80	926	2,041	100	⊖	
	B	1350	54	1.59	2.08	1004	2,213	100	X	
General Duty – Capacity (GDC) – Wide Tip	B	600	24	0.55	0.72	633	1,394	100	●	
	B	750	30	0.75	0.98	731	1,612	100	●	
	B	900	36	0.95	1.24	813	1,793	100	●	
	B	1050	42	1.16	1.52	895	1,973	100	⊙	
	B	1200	48	1.38	1.80	979	2,158	100	⊖	
	B	1350	54	1.59	2.08	1063	2,343	100	X	
Heavy Duty (HD)	B	600	24	0.46	0.61	649	1,431	100	●	
	B	750	30	0.64	0.84	748	1,649	100	●	
	B	900	36	0.81	1.06	826	1,821	100	●	
	B	1050	42	1.00	1.31	880	1,940	100	●	
	B	1200	48	1.19	1.56	972	2,141	100	⊙	
	B	1350	54	1.38	1.81	1054	2,322	100	X	
Heavy Duty – Power (HDP)	B	900	36	0.79	1.03	842	1,856	100	●	
	B	1050	42	0.96	1.26	907	1,999	100	●	
	B	1200	48	1.14	1.49	993	2,188	100	⊙	
Severe Duty (SD)	B	600	24	0.46	0.61	694	1,530	90	●	
	B	750	30	0.64	0.84	802	1,768	90	●	
	B	900	36	0.81	1.06	889	1,959	90	●	
	B	1050	42	1.00	1.31	964	2,125	90	●	
	B	1200	48	1.19	1.56	1053	2,320	90	⊙	
Severe Duty – Power (SDP)	B	900	36	0.79	1.03	908	2,001	90	●	
Extreme Duty (XD)	B	1100	43	1.00	1.31	1078	2,376	90	●	
	B	1250	49	1.19	1.56	1134	2,499	90	⊙	
Mud/Cleanup (M/CU)	B	1700	72	1.60	2.09	979	2,158	100	○	
Ditch Cleaning (DC)	B	1500	60	1.01	1.32	652	1,437	100	●	
	B	1800	72	1.24	1.62	740	1,631	100	⊙	
	B	2000	78	1.22	1.60	869	1,916	100	⊙	
Ditch Cleaning – Tilt (DCT)	B	1500	60	0.90	1.18	948	2,090	100	●	
	B	1800	72	1.11	1.45	1063	2,344	100	⊙	
	B	1800	72	1.40	1.83	1148	2,531	100	○	
	B	2000	79	1.23	1.61	1096	2,416	100	⊖	
	B	2000	79	1.23	1.61	1132	2,496	100	⊖	
General Duty (GD)	312	900	36	0.53	0.69	403	888	100		◇
Ditch Cleaning (DC) Long Reach	312	1200	48	0.57	0.74	386	851	100		◇
Maximum load with pin-on (payload + bucket)								kg	3010	800
								lb	6,636	1,764

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)
- 1200 kg/m³ (2,000 lb/yd³)
- ◇ 900 kg/m³ (1,500 lb/yd³)
- X Not Recommended

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.

320 Hydraulic Excavator Specifications

Bucket Specifications and Compatibility – 320 Long

	Linkage	Width		Capacity		Weight		Fill %	4.2 mt (9,300 lb) Counterweight	4.7 mt (10,400 lb) Counterweight
		mm	in	m ³	yd ³	kg	lb		Reach Boom	SLR Boom
									R2.9 (9'6")	6.28A (20'7")
With Cat Pin Grabber Coupler										
General Duty – Capacity (GDC)	B	600	24	0.55	0.72	619	1,363	100	●	
	B	750	30	0.75	0.98	710	1,566	100	●	
	B	900	36	0.95	1.24	787	1,735	100	⊙	
	B	1050	42	1.16	1.52	848	1,870	100	⊖	
	B	1200	48	1.38	1.80	926	2,041	100	○	
	B	1350	54	1.59	2.08	1004	2,213	100	◇	
General Duty – Capacity (GDC) – Wide Tip	B	600	24	0.55	0.72	633	1,394	100	●	
	B	750	30	0.75	0.98	731	1,612	100	●	
	B	900	36	0.95	1.24	813	1,793	100	⊙	
	B	1050	42	1.16	1.52	895	1,973	100	⊖	
	B	1200	48	1.38	1.80	979	2,158	100	○	
	B	1350	54	1.59	2.08	1063	2,343	100	◇	
Heavy Duty (HD)	B	600	24	0.46	0.61	649	1,431	100	●	
	B	750	30	0.64	0.84	748	1,649	100	●	
	B	900	36	0.81	1.06	826	1,821	100	●	
	B	1050	42	1.00	1.31	880	1,940	100	⊙	
	B	1200	48	1.19	1.56	972	2,141	100	○	
	B	1350	54	1.38	1.81	1054	2,322	100	○	
Heavy Duty – Power (HDP)	B	900	36	0.79	1.03	842	1,856	100	●	
	B	1050	42	0.96	1.26	907	1,999	100	⊙	
	B	1200	48	1.14	1.49	993	2,188	100	⊖	
Heavy Duty – Pin Grabber Performance (HD – PGP)	B	600	24	0.44	0.57	676	1,491	100	●	
	B	750	30	0.60	0.79	778	1,715	100	●	
	B	900	36	0.76	1.00	864	1,904	100	●	
	B	1050	42	0.93	1.22	928	2,045	100	⊙	
	B	1200	48	1.11	1.45	1016	2,239	100	⊖	
	B	1350	54	1.28	1.67	1104	2,432	100	○	
Severe Duty (SD)	B	600	24	0.46	0.61	694	1,530	90	●	
	B	750	30	0.64	0.84	802	1,768	90	●	
	B	900	36	0.81	1.06	889	1,959	90	●	
	B	1050	42	1.00	1.31	964	2,125	90	⊙	
	B	1200	48	1.19	1.56	1053	2,320	90	⊖	
Severe Duty – Power (SDP)	B	900	36	0.79	1.03	908	2,001	90	●	
Mud/Cleanup (M/CU)	B	1700	72	1.60	2.09	979	2,158	100	◇	
Ditch Cleaning (DC)	B	1500	60	1.01	1.32	652	1,437	100	⊙	
	B	1800	72	1.24	1.62	740	1,631	100	⊖	
	B	2000	78	1.22	1.60	869	1,916	100	⊖	
Ditch Cleaning – Tilt (DCT)	B	1500	60	0.90	1.18	948	2,090	100	⊙	
	B	1800	72	1.11	1.45	1063	2,344	100	○	
	B	1800	72	1.40	1.83	1148	2,531	100	◇	
	B	2000	79	1.23	1.61	1096	2,416	100	○	
	B	2000	79	1.23	1.61	1132	2,496	100	○	
	Maximum load with coupler (payload + bucket)								kg	2588
								lb	5,706	834

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)
- 1200 kg/m³ (2,000 lb/yd³)
- ◇ 900 kg/m³ (1,500 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.

320 Hydraulic Excavator Specifications

Attachments Offering Guide

PIN-ON ATTACHMENTS

Undercarriage		Long
Counterweight		4.2 mt (9,300 lb)
Boom Type		Reach Boom
Stick Length		2.9 m (9'6")
Hydraulic Hammers	H115Es	✓
	H120Es	✓
	H130Es	✓†
	B20	✓
Multi-Processors	MP318 CC Jaw	✓
	MP318 D Jaw	✓
	MP318 P Jaw	✓
	MP318 S Jaw	✓
	MP318 U Jaw	✓
Pulverizers	P215	✓
Demolition and Sorting Grapples	G315B	✓
	G315B WH	✓
Compactors (Vibratory Plate)	CVP110	✓
Mobile Scrap and Demolition Shears	S3025	✓
Orange Peel Grapples		✓
Contractors' Grapples		✓
Trash Grapples		✓
Thumbs		✓
Rakes		✓
Rippers		✓
Cat Pin Grabber Couplers		✓

†Allowed usage on machine less than 50%.

CAT PIN GRABBER COUPLER ATTACHMENTS

Undercarriage		Long
Counterweight		4.2 mt (9,300 lb)
Boom Type		Reach Boom
Stick Length		2.9 m (9'6")
Hydraulic Hammers	H115Es	✓†
	H120Es	✓†
	H130Es	✓†
	B20	✓†
Multi-Processors	MP318 CC Jaw	✓
	MP318 D Jaw	✓
	MP318 P Jaw	✓*
	MP318 S Jaw	✓
	MP318 U Jaw	✓
Pulverizers	P215	✓
Vibratory Plate Compactors	CVP110	✓
Mobile Scrap and Demolition Shears	S3025	✓*
Demolition and Sorting Grapples	G315B	✓
	G315B WH	✓*
Rakes		✓
Rippers		✓
Thumbs		✓

*Working range front only.

†Allowed usage on machine less than 50%.

BOOM-MOUNTED ATTACHMENTS

Undercarriage		Long
Counterweight		4.2 mt (9,300 lb)
Boom Type		Reach Boom
Mobile Scrap and Demolition Shears	S2050	✓
	S3035	✓

Standard and Optional Equipment

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

	Standard	Optional		Standard	Optional
ENGINE			UNDERCARRIAGE AND STRUCTURES		
Cat C4.4 Twin Turbo Tier 4 Final diesel engine	✓		Tie-down points on base frame	✓	
Three selectable power modes	✓		Track guiding guard, segmented two pieces	✓	
One-touch low idle with automatic engine speed control	✓		Track guiding guard, full length		✓
Automatic engine idle shutdown	✓		Standard bottom guards	✓	
Work up to 3000 m (9,842.5 ft) above sea level without engine power de-rating	✓		Heavy-duty bottom guards		✓
52° C (125° F) high-ambient cooling capacity	✓		Standard swivel guard	✓	
Cold starting capability for -32° C (-25° F)	✓		Standard travel motor guards	✓	
Double element air filter with integrated precleaner	✓		Heavy-duty travel motor guards		✓
Electric fuel priming pump	✓		Grease lubricated track links	✓	
On-demand electric cooling fans with auto-reverse function	✓		4200 kg (9,300 lb) counterweight	✓	
Biodiesel capability up to B20	✓		4700 kg (10,400 lb) counterweight for Super Long Reach		✓
HYDRAULIC SYSTEM			BOOM, STICKS AND LINKAGES		
Boom and stick regeneration circuits	✓		790 mm (31 in) triple grouser track shoes	✓	
Boom/stick lowering check valves		✓	5.7 m (18'8") Reach boom	✓	
Electronic main control valve	✓		2.9 m (9'6") Reach stick	✓	
Auto hydraulic oil warm up	✓		Super Long Reach 8.85 m (29'0") boom		✓
Automatic two-speed travel	✓		Super Long Reach 6.28 m (20'7") stick		✓
Boom and stick drift reduction valve	✓		Bucket linkage, B1-family with lifting eye, Cat GRADE	✓	
Element type main hydraulic filter	✓		Bucket linkage, A-family with lifting eye, SLR		✓
Slider joysticks	✓		ELECTRICAL SYSTEM		
Tandem type electronic main pump	✓		Machine electronic control module (×2)	✓	
Hammer return filter circuit		✓	1,000 CCA maintenance-free batteries (×2)	✓	
Advanced Tool Control (two pump, one/two way high-pressure flow)		✓	Centralized electrical disconnect switch	✓	
Medium pressure auxiliary circuit		✓	Programmable time-delay LED working lights	✓	
Quick coupler circuit for Cat Pin Grabber		✓	LED chassis light, LH and RH boom lights for Reach and SLR, cab lights	✓	
Fine swing control	✓				

(continued on next page)

320 Standard and Optional Equipment

Standard and Optional Equipment (continued)

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

	Standard	Optional		Standard	Optional
CAT CONNECT TECHNOLOGY			SERVICE AND MAINTENANCE		
Cat Product Link™	✓		Sampling ports for Scheduled Oil Sampling (S·O·S SM)	✓	
Cat GRADE with 2D (not available on SLR)	✓		Preventative Maintenance ready (QuickEvac™)		✓
Cat GRADE with Advanced 2D (not available on SLR)		✓	Grouped location for engine oil and fuel filters	✓	
Cat GRADE with 3D (not available on SLR)		✓	Ground level second dipstick for engine oil	✓	
Laser Catcher		✓	Radiator screen		✓
Cat Assist:	✓		SAFETY AND SECURITY		
– Boom Assist			Rearview and right-side-view cameras	✓	
– Bucket Assist			360° visibility		✓
– Swing Assist			Lift Assist	✓	
– Grade Assist			Cat asset tracker	✓	
Cat Payload:	✓		Neutral lever (lock out) for all controls	✓	
– Payload Information			Anti-skid plate and countersunk bolts on service platform	✓	
– Static Weigh			Ground-level accessible secondary engine shutoff switch in cab	✓	
– Auto Calibration			Bluetooth® receiver	✓	
2D E-fence	✓		RH handrail and hand hold (ISO 2867:2011 compliant)	✓	
Remote Flash capability	✓		Travel alarm	✓	
Remote Troubleshoot capability	✓				

320 Attachments

Dealer Installed Kit and Attachments

Attachments may vary. Consult your Cat dealer for details.

CAB

- Radial lower wiper for 70/30 with washer
- LH/RH electrical pedal for tool control
- Dual exit rear window kit
- Rain protector plus cab light cover
- Seat belt, retractable (75 mm/3 in width)

SAFETY AND SECURITY

- Bluetooth key fob

ELECTRICAL

- Jump start wiring
- LED premium lighting package

HYDRAULIC

- Advanced Tool Control (two pumps, one/two way high-pressure flow)
- Medium-pressure circuit
- Common Quick Coupler Circuit for Cat Pin Grabber

GUARDS

- Side rubber bumper
- FOGS (not compatible with cab light cover, rain protector)
- Mesh guard full front (not compatible with cab light cover, rain protector)
- Mesh guard lower half front
- Full protecting vandalism guard

Cab Options

	Deluxe
ROPS, standard sound suppression	●
High-resolution 254 mm (10 in) LCD touchscreen monitor	●
High-resolution 254 mm (10 in) LCD touchscreen monitor + additional monitor (only for use with Cat GRADE with Advanced 2D or Cat GRADE with 3D)	○
Automatic bi-level air conditioner	●
Jog dial and shortcut keys for monitor control	●
Keyless push-to-start engine control	●
Height-adjustable console, infinite with no tool	●
Air-adjustable seat suspension	●
51 mm (2 in) seat belt	●
Seat heater	●
Tilt-up left-side console	●
Bluetooth integrated radio with USB ports	●
2×12V DC outlets	●
Document storage	●
Cup and bottle holders	●
Two-piece front window, openable	●
Upper radial wiper with 70/30 with washer	●
Polycarbonate skylight hatch, openable	●
LED dome and lower interior lights	●
Roller front sunscreen	●
Roller rear sunscreen	○
Rain protector and cab light covers (only for use with 360° visibility)	●
Beacon ready	●
Washable floor mat	●
Storage tray in pump compartment	●
Straight travel pedal	○

● Standard

○ Optional

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

© 2019 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.

AEXQ2161-02 (01-2019)
Replaces AEXQ2161-01
Build Number: 07B
(North America)

