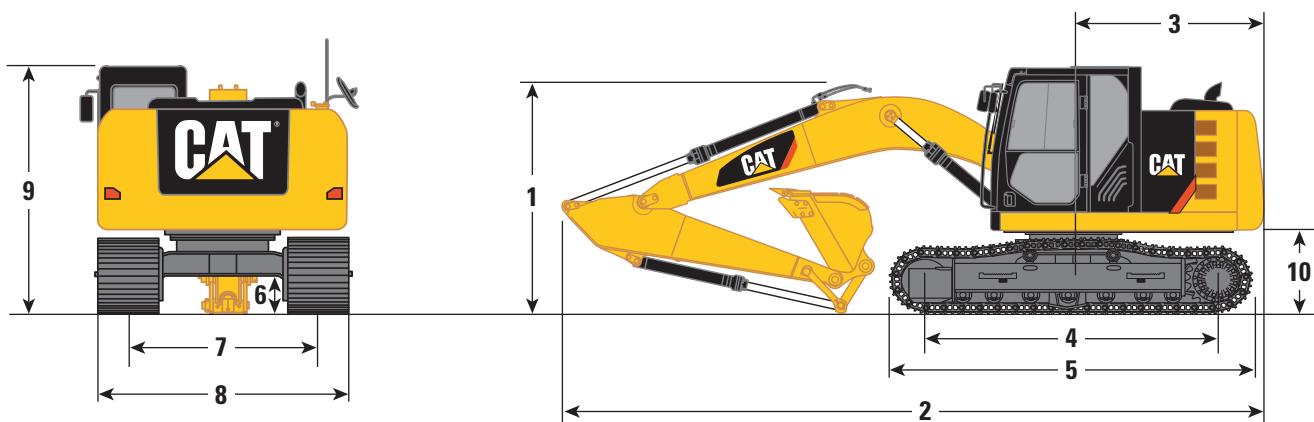


312E Hydraulic Excavator

Dimensions

All dimensions are approximate.



Stick	Reach Boom 4.65 m			Variable Angle Boom	
	R3.0	R2.5	2.1	R2.5	2.1
	mm	mm	mm	mm	mm
1 Shipping Height*	3060	3060	3060	3060	3060
Shipping Height at Boom Top	2830	2830	2830	2750	2490
Shipping Height with Guard Rail	3060	3060	3060	3060	3060
Shipping Height with Top Guard	2970	2970	2970	2970	2970
2 Shipping Length					
Standard Undercarriage	7680	7670	7690	7730	7770
Long Undercarriage	7670	7670	7690	7730	7770
Standard Undercarriage with Blade	7900	7890	7910	7950	7990
Long Undercarriage with Blade	7960	7950	7970	8010	8050
3 Tail Swing Radius	2160	2160	2160	2160	2160
4 Length to Center of Rollers					
Standard Undercarriage	2780	2780	2780	2780	2780
Long Undercarriage	3040	3040	3040	3040	3040
5 Track Length					
Standard Undercarriage	3490	3490	3490	3490	3490
Long Undercarriage	3750	3750	3750	3750	3750
6 Ground Clearance	440	440	440	440	440
7 Track Gauge	1990	1990	1990	1990	1990
8 Transport Width					
500 mm Shoes	2490	2490	2490	2490	2490
600 mm Shoes	2590	2590	2590	2590	2590
700 mm Shoes	2690	2690	2690	2690	2690
9 Cab Height	2770	2770	2270	2770	2770
Cab Height with Top Guard	2970	2970	2970	2970	2970
10 Counterweight Clearance**	890	890	890	890	890

*Including shoe lug height.

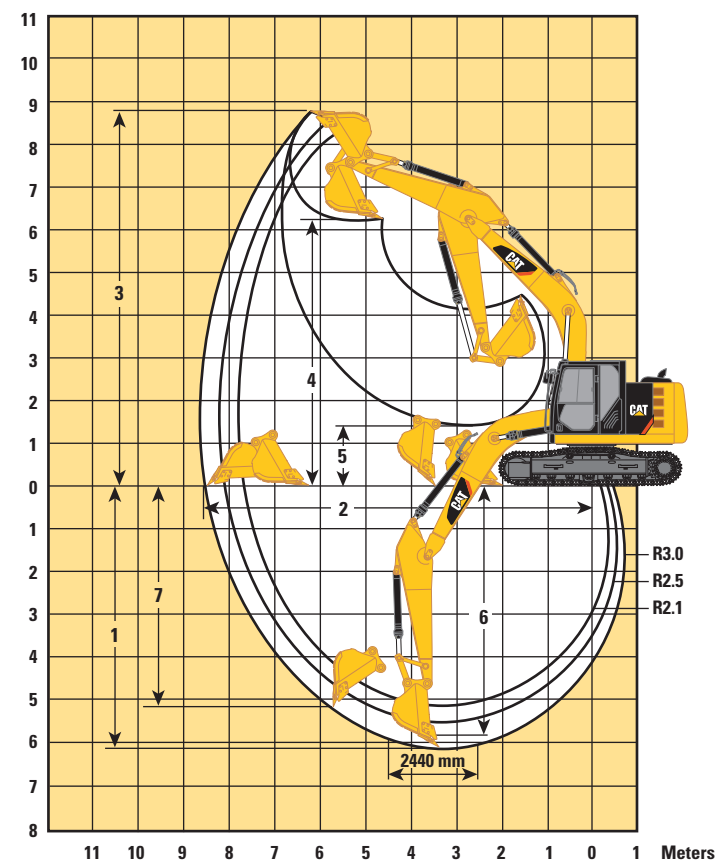
**Without shoe lug height.

312E Hydraulic Excavator

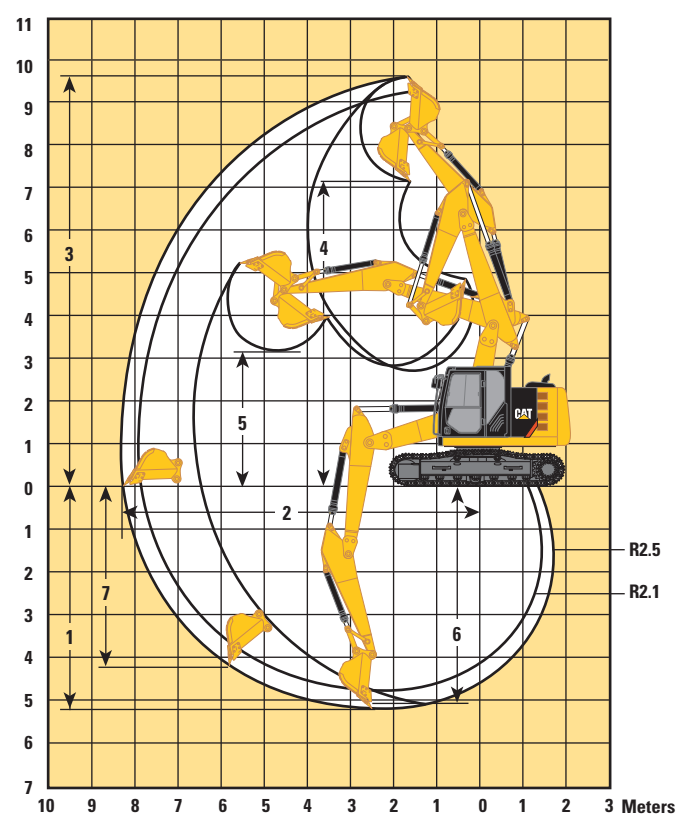
Working Ranges

All dimensions are approximate.

Meters



Meters



Stick	Reach Boom 4.65 m			Variable Angle Boom	
	R3.0	R2.5	R2.1	R2.5	R2.1
	mm	mm	mm	mm	mm
1 Maximum Digging Depth	6040	5540	5140	5210	4820
2 Maximum Reach at Ground Level	8620	8170	7790	8310	7920
3 Maximum Cutting Height	8710	8490	8230	9610	9250
4 Maximum Loading Height	6330	6100	5850	7160	6810
5 Minimum Loading Height	1530	2020	2420	2750	3110
6 Maximum Depth Cut for 2440 mm Level Bottom	5860	5330	4900	5090	4680
7 Maximum Vertical Wall Digging Depth	5200	4840	4380	4260	3840

312E Hydraulic Excavator

Operating Weight and Ground Pressure

Standard Undercarriage without Blade						
	700 mm Triple Grouser Shoes		600 mm Triple Grouser Shoes		500 mm Triple Grouser Shoes	
	kg	kPa	kg	kPa	kg	kPa
Reach Boom – 4.65 m						
R3.0	13 700	31.7	13 500	36.4	13 200	42.7
R2.5	13 600	31.4	13 400	36.1	13 200	42.7
R2.1	13 600	31.4	13 400	36.1	13 200	42.7
Variable Angle Boom						
R2.5	14 300	33.1	14 100	38.0	13 900	45.0
R2.1	14 300	33.1	14 100	38.0	13 900	45.0
Long Undercarriage without Blade						
	700 mm Triple Grouser Shoes		600 mm Triple Grouser Shoes		500 mm Triple Grouser Shoes	
	kg	kPa	kg	kPa	kg	kPa
Reach Boom – 4.65 m						
R3.0	14 100	30.0	13 800	34.2	13 500	40.2
R2.5	14 000	29.8	13 700	34.1	13 500	40.1
R2.1	14 000	29.8	13 730	34.1	13 480	40.1
Variable Angle Boom						
R2.5	14 700	31.3	14 400	35.7	14 200	42.3
R2.1	14 700	31.3	14 400	35.7	14 200	42.3
Standard Undercarriage with Blade						
	700 mm Triple Grouser Shoes		600 mm Triple Grouser Shoes		500 mm Triple Grouser Shoes	
	kg	kPa	kg	kPa	kg	kPa
Reach Boom – 4.65 m						
R3.0	14 500	33.5	14 300	38.6	14 000	45.3
R2.5	14 400	33.3	14 200	38.3	14 000	45.3
R2.1	14 500	33.5	14 200	38.3	14 000	45.3
Variable Angle Boom						
R2.5	15 200	35.1	14 900	40.2	14 700	47.6
R2.1	15 200	35.1	14 900	40.2	14 700	47.6
Long Undercarriage with Blade						
	700 mm Triple Grouser Shoes		600 mm Triple Grouser Shoes		500 mm Triple Grouser Shoes	
	kg	kPa	kg	kPa	kg	kPa
Reach Boom – 4.65 m						
R3.0	14 900	31.7	14 600	36.2	14 400	42.9
R2.5	14 800	31.5	14 500	36.0	14 300	42.6
R2.1	14 800	31.5	14 500	36.0	14 300	42.6
Variable Angle Boom						
R2.5	15 500	33.0	15 200	37.7	15 000	44.7
R2.1	15 530	33.0	15 250	37.8	1500	44.7

All weights are rounded up to nearest 100 kg including General Duty 0.65 m³ bucket (470 kg).

Variable Angle Boom weights include AUX Lines.

312E Hydraulic Excavator

Major Component Weights

	kg
Base Machine (with boom cylinder, without counterweight, front linkage and track)	5120
Undercarriage	
Long Undercarriage	2600
Standard Undercarriage	2380
Counterweight – 2.2 mt	2200
Boom (includes lines, pins and stick cylinder)	
Reach Boom – 4.65 m	1010
Variable Angle Boom	1740
Stick (includes lines, pins, bucket cylinder, and bucket linkage)	
R3.0	560
R2.5	480
R2.1	490
Track Shoe (Standard/per one track)	
500 mm Triple Grouser	1460
600 mm Triple Grouser	1700
700 mm Triple Grouser	1960
Track Shoe (Long/per one track)	
500 mm Triple Grouser	1560
600 mm Triple Grouser	1820
700 mm Triple Grouser	2100
Blade	
2500 mm	810
2600 mm	810
2700 mm	820

All weights are rounded up to nearest 10 kg except for quick coupler and buckets.
Base machine includes 75 kg operator weight, 90% fuel weight, and undercarriage with center guard.

Bucket and Stick Forces

Stick	Reach Boom 4.65 m			Variable Angle Boom	
	R3.0	R2.5	R2.1	R2.5	R2.1
	kN	kN	kN	kN	kN
General Duty Bucket					
Bucket Digging Force (ISO)	95	95	95	95	95
Stick Digging Force (ISO)	58	65	74	65	74
Heavy Duty Bucket					
Bucket Digging Force (ISO)	95	95	95	95	95
Stick Digging Force (ISO)	58	65	74	65	74
Severe Duty Bucket					
Bucket Digging Force (ISO)	95	95	95	95	95
Stick Digging Force (ISO)	58	65	74	65	74

312E Hydraulic Excavator

312E Reach Boom Lift Capacities



Load Point Height



Load at Maximum Reach



Load Radius Over Front



Load Radius Over Side

Boom – 4.65 m

Counterweight – 2.2 mt

Bucket – None

Stick – R3.0

Shoes – 700 mm triple grouser with step

		1.5 m		3.0 m		4.5 m		6.0 m		7.5 m				m
7.5 m	kg											*2550	*2550	4.37
6.0 m	kg											*2100	*2100	5.95
4.5 m	kg							*3150	2500			*2000	*2000	6.86
3.0 m	kg					*3900	3750	3350	2450			*2000	1750	7.35
1.5 m	kg			*7600	6400	*4950	3500	3250	2350	*2150	1650	*2050	1650	7.52
Ground Line	kg			*7850	5950	4750	3300	3150	2250			*2300	1650	7.38
–1.5 m	kg	*4500	*4500	9150	5850	4650	3200	3100	2200			2550	1800	6.91
–3.0 m	kg	*7500	*7500	*8550	5900	4650	3200	3100	2200			3100	2200	6.04
–4.5 m	kg			*6450	6100	*4050	3350					*4000	3350	4.53

Boom – 4.65 m

Counterweight – 2.2 mt

Bucket – None

Stick – R2.5

Shoes – 700 mm triple grouser with step

		1.5 m		3.0 m		4.5 m		6.0 m				m
6.0 m	kg					*3350	*3350			*2450	*2450	5.37
4.5 m	kg					*3550	*3550	3400	2500	*2250	2250	6.37
3.0 m	kg			*5850	*5850	*4350	3750	3350	2450	*2250	1950	6.90
1.5 m	kg			*8450	6250	4950	3500	3250	2350	*2350	1850	7.08
Ground Line	kg			*6900	5950	4800	3350	3150	2250	*2600	1850	6.93
–1.5 m	kg	*4900	*4900	*9250	5950	4700	3250	3150	2250	2850	2050	6.42
–3.0 m	kg	*8750	*8750	*8100	6000	4750	3300			3600	2550	5.47

Boom – 4.65 m

Counterweight – 2.2 mt

Bucket – None

Stick – R2.1

Shoes – 700 mm triple grouser with step

		1.5 m		3.0 m		4.5 m		6.0 m				m
6.0 m	kg					*3800	*3800			*3000	*3000	4.87
4.5 m	kg					*3900	3850			*2750	2450	5.95
3.0 m	kg			*6600	*6600	*4650	3650	3300	2400	*2700	2100	6.51
1.5 m	kg					4900	3450	3200	2300	2750	1950	6.70
Ground Line	kg			*6250	5900	4750	3300	3150	2250	2800	2000	6.54
–1.5 m	kg	*5300	*5300	*8900	5900	4700	3250	3150	2250	3150	2250	6.01
–3.0 m	kg			*7500	6050	4750	3300			4150	2900	4.98

*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.

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

312E Hydraulic Excavator

312E Reach Boom Lift Capacities



Load Point Height



Load at Maximum Reach



Load Radius Over Front



Load Radius Over Side

Boom – 4.65 m

Counterweight – 2.2 mt

Bucket – None

Stick – R3.0

Shoes – 500 mm triple grouser

		1.5 m		3.0 m		4.5 m		6.0 m		7.5 m				
														m
7.5 m	kg											*2550	*2550	4.37
6.0 m	kg											*2100	*2100	5.95
4.5 m	kg							*3150	2450			*2000	1950	6.86
3.0 m	kg					*3900	3650	3250	2350			*2000	1700	7.35
1.5 m	kg			*7600	6200	4850	3400	3150	2250	*2150	1600	*2050	1600	7.52
Ground Line	kg			*7850	5750	4600	3200	3000	2150			2250	1600	7.38
–1.5 m	kg	*4500	*4500	8850	5650	4500	3100	2950	2100			2450	1750	6.91
–3.0 m	kg	*7500	*7500	*8550	5700	4500	3100	3000	2100			2950	2100	6.04
–4.5 m	kg			*6450	5900	*4050	3250					*4000	3200	4.53

Boom – 4.65 m

Counterweight – 2.2 mt

Bucket – None

Stick – R2.5

Shoes – 500 mm triple grouser

		1.5 m		3.0 m		4.5 m		6.0 m				m
												
6.0 m	kg					*3350	*3350			*2450	*2450	5.37
4.5 m	kg					*3550	*3550	3300	2400	*2250	2200	6.37
3.0 m	kg			*5850	*5850	*4350	3600	3250	2350	*2250	1900	6.90
1.5 m	kg			*8450	6050	4800	3400	3150	2250	*2350	1800	7.08
Ground Line	kg			*6900	5750	4600	3200	3050	2200	2500	1800	6.93
–1.5 m	kg	*4900	*4900	8950	5750	4550	3150	3000	2150	2750	2000	6.42
–3.0 m	kg	*8750	*8750	*8100	5850	4600	3200			3500	2500	5.47

Boom – 4.65 m

Counterweight – 2.2 mt

Bucket – None

Stick – R2.1

Shoes – 500 mm triple grouser

		1.5 m		3.0 m		4.5 m		6.0 m				m
												
6.0 m	kg					*3800	3800			*3000	*3000	4.87
4.5 m	kg					*3900	3750			*2750	2400	5.95
3.0 m	kg			*6600	6550	*4650	3550	3200	2300	*2700	2050	6.51
1.5 m	kg					4750	3300	3100	2250	2650	1900	6.70
Ground Line	kg			*6250	5700	4550	3200	3050	2150	2700	1950	6.54
–1.5 m	kg	*5300	*5300	*8900	5700	4550	3150	3050	2150	3000	2150	6.01
–3.0 m	kg			*7500	5850	4600	3200			4000	2850	4.98

*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.

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312E Hydraulic Excavator

312E L Reach Boom Lift Capacities



Load Point Height



Load at Maximum Reach



Load Radius Over Front



Load Radius Over Side

Boom – 4.65 m

Counterweight – 2.2 mt

Bucket – None

Stick – R3.0

Shoes – 700 mm triple grouser with step

		1.5 m		3.0 m		4.5 m		6.0 m		7.5 m				m
7.5 m	kg											*2550	*2550	4.37
6.0 m	kg											*2100	*2100	5.95
4.5 m	kg							*3150	2550			*2000	*2000	6.86
3.0 m	kg					*3900	3850	*3450	2500			*2000	1800	7.35
1.5 m	kg			*7600	6550	*4950	3600	3700	2400	*2150	1700	*2050	1700	7.52
Ground Line	kg			*7850	6100	5550	3400	3600	2300			*2300	1700	7.38
–1.5 m	kg	*4500	*4500	*9350	6000	5450	3300	3550	2250			*2700	1850	6.91
–3.0 m	kg	*7500	*7500	*8550	6050	5450	3300	3600	2250			3550	2250	6.04
–4.5 m	kg			*6450	6250	*4050	3450					*4000	3400	4.53

Boom – 4.65 m

Counterweight – 2.2 mt

Bucket – None

Stick – R2.5

Shoes – 700 mm triple grouser with step

		1.5 m		3.0 m		4.5 m		6.0 m				m
6.0 m	kg					*3350	*3350			*2450	*2450	5.37
4.5 m	kg					*3550	*3550	*3550	2550	*2250	*2250	6.37
3.0 m	kg			*5850	*5850	*4350	3800	*3750	2500	*2250	2000	6.90
1.5 m	kg			*8450	6400	*5350	3600	3750	2400	*2350	1900	7.08
Ground Line	kg			*6900	6100	5550	3400	3650	2300	*2600	1900	6.93
–1.5 m	kg	*4900	*4900	*9250	6100	5500	3350	3600	2300	*3100	2100	6.42
–3.0 m	kg	*8750	*8750	*8100	6150	*5500	3400			4150	2650	5.47

Boom – 4.65 m

Counterweight – 2.2 mt

Bucket – None

Stick – R2.1

Shoes – 700 mm triple grouser with step

		1.5 m		3.0 m		4.5 m		6.0 m				m
6.0 m	kg					*3800	*3800			*3000	*3000	4.87
4.5 m	kg					*3900	*3900			*2750	2500	5.95
3.0 m	kg			*6600	*6600	*4650	3750	3800	2450	*2700	2150	6.51
1.5 m	kg					*5550	3500	3700	2350	*2850	2000	6.70
Ground Line	kg			*6250	6050	5500	3350	3600	2300	*3200	2050	6.54
–1.5 m	kg	*5300	*5300	*8900	6050	5500	3350	3600	2300	3600	2300	6.01
–3.0 m	kg			*7500	6200	*5100	3400			*4350	3000	4.98

*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.

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312E Hydraulic Excavator

312E L Reach Boom Lift Capacities



Load Point Height



Load at Maximum Reach



Load Radius Over Front



Load Radius Over Side

Boom – 4.65 m

Counterweight – 2.2 mt

Bucket – None

Stick – R3.0

Shoes – 500 mm triple grouser

		1.5 m		3.0 m		4.5 m		6.0 m		7.5 m				m
7.5 m	kg											*2550	*2550	4.37
6.0 m	kg											*2100	*2100	5.95
4.5 m	kg							*3150	2500			*2000	2000	6.86
3.0 m	kg					*3900	3750	*3450	2400			*2000	1750	7.35
1.5 m	kg			*7600	6350	*4950	3500	3600	2300	*2150	1650	*2050	1650	7.52
Ground Line	kg			*7850	5900	5350	3300	3500	2200			*2300	1650	7.38
–1.5 m	kg	*4500	*4500	*9350	5750	5250	3200	3400	2150			*2700	1800	6.91
–3.0 m	kg	*7500	*7500	*8550	5800	5250	3200	3450	2200			3400	2150	6.04
–4.5 m	kg			*6450	6000	*4050	3300					*4000	3300	4.53

Boom – 4.65 m

Counterweight – 2.2 mt

Bucket – None

Stick – R2.5

Shoes – 500 mm triple grouser

		1.5 m		3.0 m		4.5 m		6.0 m				m
6.0 m	kg					*3350	*3350			*2450	*2450	5.37
4.5 m	kg					*3550	*3550	*3550	2450	*2250	2250	6.37
3.0 m	kg			*5850	*5850	*4350	3700	3700	2400	*2250	1950	6.90
1.5 m	kg			*8450	6200	*5350	3450	3600	2300	*2350	1800	7.08
Ground Line	kg			*6900	5900	5400	3300	3500	2250	*2600	1850	6.93
–1.5 m	kg	*4900	*4900	*9250	5850	5300	3250	3500	2200	*3100	2000	6.42
–3.0 m	kg	*8750	*8750	*8100	5950	5350	3250			4000	2550	5.47

Boom – 4.65 m

Counterweight – 2.2 mt

Bucket – None

Stick – R2.1

Shoes – 500 mm triple grouser

		1.5 m		3.0 m		4.5 m		6.0 m				m
6.0 m	kg					*3800	*3800			*3000	*3000	4.87
4.5 m	kg					*3900	3800			*2750	2450	5.95
3.0 m	kg			*6600	*6600	*4650	3600	3650	2350	*2700	2100	6.51
1.5 m	kg					5500	3400	3550	2300	*2850	1950	6.70
Ground Line	kg			*6250	5850	5350	3250	3500	2200	3100	2000	6.54
–1.5 m	kg	*5300	*5300	*8900	5850	5300	3200	3500	2200	3500	2200	6.01
–3.0 m	kg			*7500	6000	*5100	3300			*4350	2900	4.98

*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.

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312E Hydraulic Excavator

312E Reach Boom Lift Capacities



Load Point Height



Load at Maximum Reach



Load Radius Over Front



Load Radius Over Side

Boom – 4.65 m

Counterweight – 2.2 mt

Bucket – None

Stick – R3.0

Shoes – 600 mm triple grouser – Blade Down

		1.5 m		3.0 m		4.5 m		6.0 m		7.5 m				m
7.5 m	kg											*2550	*2550	4.37
6.0 m	kg											*2100	*2100	5.95
4.5 m	kg							*3150	2850			*2000	*2000	6.86
3.0 m	kg					*3900	*3900	*3450	2800			*2000	*2000	7.35
1.5 m	kg			*7600	7500	*4950	4050	*3950	2650	*2150	1900	*2050	1900	7.52
Ground Line	kg			*7850	7000	*5750	3850	*4350	2550			*2300	1950	7.38
–1.5 m	kg	*4500	*4500	*9350	6900	*6100	3750	*4500	2500			*2700	2100	6.91
–3.0 m	kg	*7500	*7500	*8550	6950	*5750	3750	*3950	2550			*3600	2500	6.04
–4.5 m	kg			*6450	*6450	*4050	3900					*4000	3850	4.53

Boom – 4.65 m

Counterweight – 2.2 mt

Bucket – None

Stick – R2.5

Shoes – 600 mm triple grouser – Blade Down

		1.5 m		3.0 m		4.5 m		6.0 m				m
6.0 m	kg					*3350	*3350			*2450	*2450	5.37
4.5 m	kg					*3550	*3550	*3550	2850	*2250	*2250	6.37
3.0 m	kg			*5850	*5850	*4350	4250	*3750	2750	*2250	2250	6.90
1.5 m	kg			*8450	7350	*5350	4000	*4200	2650	*2350	2100	7.08
Ground Line	kg			*6900	*6900	*6000	3850	*4500	2600	*2600	2150	6.93
–1.5 m	kg	*4900	*4900	*9250	7000	*6150	3800	*4500	2550	*3100	2350	6.42
–3.0 m	kg	*8750	*8750	*8100	7100	*5500	3800			*4200	2950	5.47

Boom – 4.65 m

Counterweight – 2.2 mt

Bucket – None

Stick – R2.1

Shoes – 600 mm triple grouser – Blade Down

		1.5 m		3.0 m		4.5 m		6.0 m				m
6.0 m	kg					*3800	*3800			*3000	*3000	4.87
4.5 m	kg					*3900	*3900			*2750	*2750	5.95
3.0 m	kg			*6600	*6600	*4650	4200	*3950	2750	*2700	2400	6.51
1.5 m	kg					*5550	3950	*4300	2650	*2850	2250	6.70
Ground Line	kg			*6250	*6250	*6100	3800	*4550	2550	*3200	2300	6.54
–1.5 m	kg	*5300	*5300	*8900	6950	*6050	3750	*4000	2550	*3900	2550	6.01
–3.0 m	kg			*7500	7100	*5100	3850			*4350	3350	4.98

*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.

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

312E Hydraulic Excavator

312E L Reach Boom Lift Capacities



Load Point Height



Load at Maximum Reach



Load Radius Over Front



Load Radius Over Side

Boom – 4.65 m

Counterweight – 2.2 mt

Bucket – None

Stick – R3.0

Shoes – 600 mm triple grouser – Blade Down

		1.5 m		3.0 m		4.5 m		6.0 m		7.5 m				m
7.5 m	kg											*2550	*2550	4.37
6.0 m	kg											*2100	*2100	5.95
4.5 m	kg							*3150	2950			*2000	*2000	6.86
3.0 m	kg					*3900	*3900	*3450	2850			*2000	*2000	7.35
1.5 m	kg			*7600	*7600	*4950	4150	*3950	2750	*2150	1950	*2050	1950	7.52
Ground Line	kg			*7850	7200	*5750	3950	*4350	2650			*2300	2000	7.38
–1.5 m	kg	*4500	*4500	*9350	7050	*6100	3850	*4500	2600			*2700	2150	6.91
–3.0 m	kg	*7500	*7500	*8550	7100	*5750	3850	*3950	2600			*3600	2600	6.04
–4.5 m	kg			*6450	*6450	*4050	4000					*4000	3950	4.53

Boom – 4.65 m

Counterweight – 2.2 mt

Bucket – None

Stick – R2.5

Shoes – 600 mm triple grouser – Blade Down

		1.5 m		3.0 m		4.5 m		6.0 m				m
6.0 m	kg					*3350	*3350			*2450	*2450	5.37
4.5 m	kg					*3550	*3550	*3550	2900	*2250	*2250	6.37
3.0 m	kg			*5850	*5850	*4350	*4350	*3750	2850	*2250	*2250	6.90
1.5 m	kg			*8450	7550	*5350	4100	*4200	2750	*2350	2150	7.08
Ground Line	kg			*6900	*6900	*6000	3950	*4500	2650	*2600	2200	6.93
–1.5 m	kg	*4900	*4900	*9250	7150	*6150	3900	*4500	2650	*3100	2400	6.42
–3.0 m	kg	*8750	*8750	*8100	7250	*5500	3900			*4200	3000	5.47

Boom – 4.65 m

Counterweight – 2.2 mt

Bucket – None

Stick – R2.1

Shoes – 600 mm triple grouser – Blade Down

		1.5 m		3.0 m		4.5 m		6.0 m				m
6.0 m	kg					*3800	*3800			*3000	*3000	4.87
4.5 m	kg					*3900	*3900			*2750	*2750	5.95
3.0 m	kg			*6600	*6600	*4650	4300	*3950	2800	*2700	2450	6.51
1.5 m	kg					*5550	4050	*4300	2700	*2850	2300	6.70
Ground Line	kg			*6250	*6250	*6100	3900	*4550	2650	*3200	2350	6.54
–1.5 m	kg	*5300	*5300	*8900	7150	*6050	3850	*4000	2650	*3900	2650	6.01
–3.0 m	kg			*7500	7300	*5100	3950			*4350	3450	4.98

*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.

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

312E Hydraulic Excavator

312E Variable Angle Boom Lift Capacities



Load Point Height



Load at Maximum Reach



Load Radius Over Front



Load Radius Over Side

Boom – Variable Angle

Counterweight – 2.2 mt

Bucket – None

Stick – R2.5

Shoes – 500 mm triple grouser – Blade Down

		1.5 m		3.0 m		4.5 m		6.0 m				m
7.5 m	kg			*3050	*3050					*2950	*2950	3.79
6.0 m	kg			*4550	*4550	*2450	*2450			*2350	*2350	5.54
4.5 m	kg			*4800	*4800	*3100	*3100	*2250	*2250	*2200	*2200	6.51
3.0 m	kg	*10 850	*10 850	*4950	*4950	*3550	*3550	*2300	*2300	*2150	2050	7.03
1.5 m	kg	*4650	*4650	*6350	*6350	*4750	3800	*2600	2500	*2250	1900	7.21
Ground Line	kg	*4050	*4050	*6400	*6400	*6050	3550	*2950	2400	*2450	1950	7.06
–1.5 m	kg	*6100	*6100	*8450	6450	*6100	3500	*3400	2400	*2850	2100	6.57
–3.0 m	kg	*11 250	*11 250	*6950	6600	*4450	3550			*3650	2800	5.38

Boom – Variable Angle

Counterweight – 2.2 mt

Bucket – None

Stick – R2.1

Shoes – 500 mm triple grouser – Blade Down

		1.5 m		3.0 m		4.5 m		6.0 m				m
7.5 m	kg									*3800	*3800	2.99
6.0 m	kg			*5150	*5150	*2850	*2850			*2850	*2850	5.04
4.5 m	kg			*5050	*5050	*2700	*2700	*2650	2650	*2600	2550	6.09
3.0 m	kg	*10 500	*10 500	*4900	*4900	*4100	3950	*2750	2550	*2600	2200	6.64
1.5 m	kg			*6900	6700	*5100	3700	*3050	2450	*2700	2050	6.82
Ground Line	kg	*5250	*5250	*5700	*5700	*6450	3500	*3500	2400	*2950	2050	6.67
–1.5 m	kg	*7700	*7700	*7600	6450	*5750	3500	*3850	2400	*3500	2300	6.15
–3.0 m	kg	*14 350	*14 350	*6900	6600	*4500	3600			*4300	3450	4.66

*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. VA-cylinder is flexible. 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.

312E Hydraulic Excavator

312E L Variable Angle Boom Lift Capacities



Load Point Height



Load at Maximum Reach



Load Radius Over Front



Load Radius Over Side

Boom – Variable Angle

Counterweight – 2.2 mt

Bucket – None

Stick – R2.5

Shoes – 500 mm triple grouser – Blade Down

		1.5 m		3.0 m		4.5 m		6.0 m				m
												
7.5 m	kg			*3050	*3050					*2950	*2950	3.79
6.0 m	kg			*4550	*4550	*2450	*2450			*2350	*2350	5.54
4.5 m	kg			*4800	*4800	*3100	*3100	*2250	*2250	*2200	*2200	6.51
3.0 m	kg	*10 850	*10 850	*4950	*4950	*3550	*3550	*2300	*2300	*2150	2100	7.03
1.5 m	kg	*4650	*4650	*6350	*6350	*4750	3850	*2600	2550	*2250	1950	7.21
Ground Line	kg	*4050	*4050	*6400	*6400	*6050	3650	*2950	2450	*2450	2000	7.06
–1.5 m	kg	*6100	*6100	*8450	6650	*6100	3600	*3400	2450	*2850	2200	6.57
–3.0 m	kg	*11 250	*11 250	*6950	6750	*4450	3650			*3650	2900	5.38

Boom – Variable Angle

Counterweight – 2.2 mt

Bucket – None

Stick – R2.1

Shoes – 500 mm triple grouser – Blade Down

		1.5 m		3.0 m		4.5 m		6.0 m				m
												
7.5 m	kg									*3800	*3800	2.99
6.0 m	kg			*5150	*5150	*2850	*2850			*2850	*2850	5.04
4.5 m	kg			*5050	*5050	*2700	*2700	*2650	*2650	*2600	*2600	6.09
3.0 m	kg	*10 500	*10 500	*4900	*4900	*4100	4050	*2750	2650	*2600	2250	6.64
1.5 m	kg			*6900	6900	*5100	3800	*3050	2550	*2700	2100	6.82
Ground Line	kg	*5250	*5250	*5700	*5700	*6450	3600	*3500	2450	*2950	2150	6.67
–1.5 m	kg	*7700	*7700	*7600	6600	*5750	3550	*3850	2450	*3500	2400	6.15
–3.0 m	kg	*14 350	*14 350	*6900	6800	*4500	3700			*4300	3550	4.66

*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. VA-cylinder is flexible. The use of a work tool attachment point to handle/lift objects, could affect the machine lift performance.

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312E Hydraulic Excavator

Work Tool Offering Guide*

Boom Type	Reach Boom			Variable Angle Boom	
Stick Size	R3.0	R2.5	R2.1	R2.5	R2.1
Hydraulic Hammer	H110Es H115Es	H110Es H115Es	H110Es H115Es	H110Es H115Es***	H110Es H115Es***
Demolition and Sorting Grapple	G310B (pin-on only)	G310B	G310B		
Mobile Scrap and Demolition Shear	S320B**	S320B**	S320B**	S320B**	S320B**
Compactor (Vibratory Plate)	CVP75	CVP75	CVP75	CVP75	CVP75
Contractors' Grapple	G112B	G112B	G112B	G112B	G112B
Orange Peel Grapple					
Trash Grapple					
Dedicated Quick Coupler					

These work tools are available for the 312E.
Consult your Cat dealer for proper match.

*Matches are dependent on excavator configurations. Consult your Cat dealer for proper work tool match.

**Boom mount.

***Pin-on or CW coupler.

312E Hydraulic Excavator

Bucket Specifications and Compatibility

	Width	Capacity	Weight	Fill	Reach Boom			Variable Angle Boom	
	mm	m³	kg	%	3.0	2.5	2.1	2.5	2.1
Without Quick Coupler									
General Duty (GD)	600	0.31	315	100%	●	●	●	●	●
	750	0.41	362	100%	●	●	●	●	●
	900	0.53	411	100%	●	●	●	●	●
	1000	0.60	436	100%	●	●	●	●	●
	1100	0.68	470	100%	⊙	●	●	⊙	●
	1200	0.76	499	100%	X	X	X	X	X
Heavy Duty (HD)	450	0.20	276	100%	●	●	●	●	●
	1200	0.76	506	100%	X	X	X	X	X
Maximum load pin-on (payload + bucket)				kg	1745	1970	2125	1760	1895
With Quick Coupler (CW20/CW20s)									
General Duty (GD)	450	0.20	300	100%	●	●	●	●	●
	500	0.24	309	100%	●	●	●	●	●
	600	0.31	328	100%	●	●	●	●	●
	750	0.41	374	100%	●	●	●	●	●
	900	0.53	423	100%	●	●	●	●	●
	1000	0.60	452	100%	⊙	●	●	⊙	●
	1100	0.68	482	100%	⊖	⊙	●	⊖	⊙
	1200	0.76	511	100%	○	⊖	⊙	○	⊖
Heavy Duty (HD)	500	0.24	319	100%	●	●	●	●	●
	1200	0.76	511	100%	○	⊖	⊙	○	⊖
Maximum load with coupler (payload + bucket)				kg	1534	1759	1914	1549	1684

The above loads are in compliance with hydraulic excavator standard EN474, 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.

Bucket weight with Long tips.

*Densities with 3.0 m thumb stick do not consider thumb weight.

Maximum Material Density:

- 2100 kg/m³
- ⊙ 1800 kg/m³
- ⊖ 1500 kg/m³
- 1200 kg/m³
- X Not allowed per structures matching guide

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.