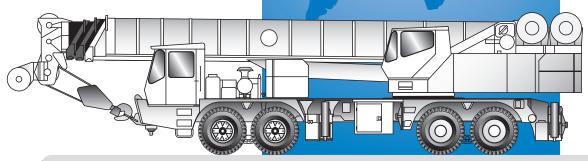


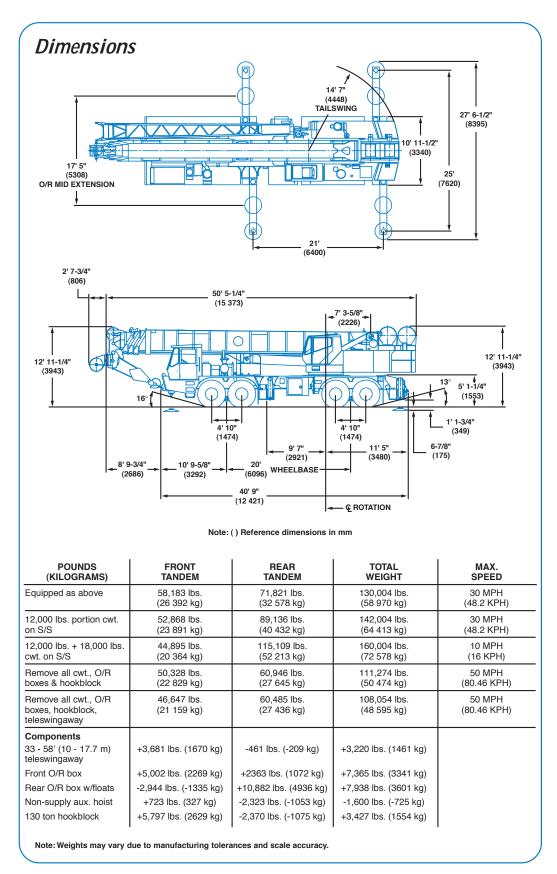


TM9120



Truck Mounted Hydraulic Crane

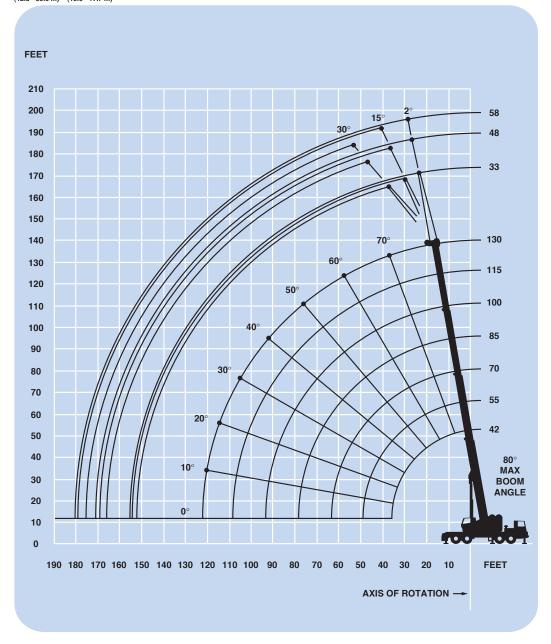


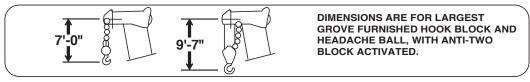




Working Range









Superstructure specifications

Boom

42 ft. - 130 ft. (12.8 m - 39.6 m) four-section full power boom. Maximum tip height: 139 ft. (42.4 m).

Telescoping Swingaway Extension

33 ft. to 58 ft. (10 m to 17.7 m) telescoping lattice swingaway boom extension offsettable at 2°, 15° or 30°. Stows alongside base boom section.

Maximum tip height: 195 ft. (59.4 m).

*Optional Fixed Swingaway Extension

33 ft. (10 m) lattice swingaway boom extension offsettable at 2°, 15° or 30°. Stows alongside base boom section. Maximum tip height: 171 ft. (52.1 m).

Jibs

23 ft. (7.0 m) base section combines with lattice inserts and point section for lengths of 74, 88, 102 and 116 ft. (22.6, 26.8, 31 and 35.3 m) offsettable at 10° , 17° and 30° . Maximum tip height: 248 ft. (75.6 m).

Boom Nose

Six low friction nylatron sheaves mounted on heavy duty tapered roller bearings with removable pin-type rope guards. *Optional removable auxiliary boom nose with removable pin-type rope guards.

Boom Elevation

One double acting hydraulic cylinder with integral holding valve provides elevation from -3° to 80°.

Load Moment & Anti-Two Block System

Standard load moment and anti-two block system with audio-visual warning and control lever lock-out. These systems provide electronic display of boom angle, length, radius, tip height, relative load moment, maximum permissible load and load indication and warning of impending two-block condition.

Cab

Full vision, all steel fabricated with acoustical lining and tinted safety glass throughout. Deluxe seat incorporates armrest mounted hydraulic joystick controls. Dash panel incorporates gauges for all engine functions. Other standard features include: sliding side and rear windows, electric windshield wash/wipe, circulating air fan, opening skylight with electric skylight wiper, fire extinguisher, and seat belt.

Swing

Ball bearing swing circle with 360° continuous rotation. Planetary swing with foot applied multi-disc wet brake. Spring applied, hydraulically released parking brake, plunger type, mechanical house lock, operated from cab. Maximum speed: 2.0 RPM.

Counterweight

Two piece: 18,000 lbs. (8165 kg) and 12,000 lbs. (5443 kg). Total: 30,000 lbs. (13 608 kg), power removable.

Engine

Cummins 6CTA8.3, 6-cylinder turbo-charged, after cooled diesel, 250 hp (186 kW) @ 2,200 RPM. Maximum torque: 716 ft. lbs. (971 Nm) @ 1,500 RPM.

Hydraulic System

Six main pumps with a combined capacity of 216 G.P.M. (818 LPM).

Precision four way double acting pilot operated control valves. Three individual valve banks permit simultaneous control of multiple crane functions.

Return line type filter with full flow by-pass protection and service indicator. Replaceable cartridge with micron filtration rating of ISO 4406 Class 17/14.

280 gallon (1060 L) reservoir.

Remote-mounted oil cooler with thermostatically controlled hydraulic motor driven fan.

System pressure test panel with ORSF type fittings.

HOIST SPECIFICATIONS

Variable displacement piston motor with pressure override for infinitely variable speed, powered in both up and down directions. Planetary reduction with automatic spring applied multi-disc brake. Grooved drum for improved spooling. Spring tension cable follower. Electronic hoist drum rotation indicator.

Main and Auxiliary Hoist

Make/Model		re HO50-26G
Maximum	Bottom layer	300 FPM
Single Line		(91 m/min)
Speed:	Intermediate layer	352 FPM
		(107 m/min)
	Top layer	405 FPM
		(123 m/min)
Maximum	Bottom layer	26,894 lbs.
Single Line	•	(12 199 kg)
Pull:	Intermediate layer	22,869 lbs.
	•	(10 373 kg)
	Top layer	19,893 lbs.
	1 ,	(9023 kg)
Maximum Permis	sible	22,760 lbs.
Line Pull w/5:1		(10 324 kg)
Strength Factor:		-
Maximum		1,000 ft. (307 m)
Rope Stowage:		1 in. (25.4 mm)

Note: 800 ft. (244 m) length of rope supplied with basic standard unit.

Note: Line speed is load dependent. Boosted flow is available to enhance line speed under load.

*Denotes optional equipment



Carrier specifications

Chassis

Triple box section frame fabricated from high strength, low alloy steel with removable outrigger housings.

Outrigger System

Hydraulic telescoping, single stage, double box beam outriggers with inverted jacks and integral holding valves. Three position setting: 0%, 50% and fully extended. Intermediate position pins manually. Quick release type outrigger floats 30.5 in. (775 mm) diameter. Standard fifth front stabilizer with 24 in. (635 mm) diameter float.

Maximum outrigger pad load: 154,167 lbs. (76 249 kg)

Outrigger Controls

Located in the superstructure cab and both sides of the carrier, require two hand operation. Crane level indicator (sight bubble) adjacent.

Engine

Cummins N14-460E six cylinder turbo-charged and after cooled diesel, 855 cu. in. (14 L) 460 hp (343 kW) @ 1,600 RPM, 350 hp (261 kW) @ 2,100 RPM.

Maximum torque: 1,550 ft. lbs. (2102 Nm) @ 1,200 RPM with engine brake and audio-visual engine distress system.

Fuel Tank Capacity

100 gallons (376 L).

Electrical System

Two 12 V - maintenance free batteries. 12 V lighting/ $24\,\mathrm{V}$ starting.

Drive

 8×4

Steering

Front axles, mechanical with hydraulic power assist controlled by steering wheel with auxiliary ground driven steer pump.

Transmission

Roadranger 10 speeds forward, 3 reverse.

Auxiliary Transmission

Roadranger 2 speed remote mounted.

Axles

Front: (2) beam type steering axles, 115 in. (2.92 m) track (14.00R24 tires). 114 in. (2.9 m) track (17.5R25 tires and 22/65R25 tires).

Rear: (2) planetary drive, 100 in. (2.54 m) track.

Brakes

Dual line air split system operating on all wheels. Spring-applied, air released parking brake operating on rear axles. Air dryer.

Tires

Front: 14.00R24 highway tread steel-belted radial singles. Rear: 14.00R24 highway tread steel belted radial duals.

*Optional Tires

Front: 14.00 x 24 (24PR) highway tread bias-ply singles. 17.5R25 highway tread tubeless singles. 22/65R25 tubeless singles.

Rear: 14.00 x 24 (24PR) highway tread bias-ply duals. 14.00 x 24 (20PR) lug type bias-ply duals.

Suspension

Front: Spring mounted tandem.

Rear: Solid mounted tandem with equalizing beam.

*Optional Suspension

Front: Solid mounted tandem with equalizing beam.

Lights

Full lighting package including turn indicators, head and tail lights, brake and hazard warning lights.

Cab

One man design, all steel fabricated with acoustical lining and tinted safety glass throughout. Deluxe fabric covered fully adjustable seat. Complete driving controls and engine instrumentation including tachometer, speedometer, voltmeter, water temp. oil pressure, fuel level, air pressure gauge with A/V warning and engine high temp./low oil pressure A/V warning. Other standard items include hot water heater/defroster, electric windshield wash/wipe, fire extinguisher, seat belt and door and window locks.

Maximum Speed

50 mph (80.46 kph)

Gradeability (Theoretical)

65%

Gross Vehicle Weight

BASIC STANDARD MACHINE (in travel mode) G.V.W.: 109,500 lbs. (49 669 kg)

Miscellaneous Standard Equipment

Full width aluminum fenders, dual rear view mirrors, electronic back-up alarm, sling/tool box, pump disconnect, emergency steering, tire inflation kit, air cleaner restriction indicator, front tow lugs, and component handling slings.

*Optional Equipment

- * 360° rotating beacon
- * Cab spotlight
- * Engine block heater
- * Hookblocks
- * Tool kit
- *Trailing boom kit

*Denotes optional equipment



Weight Reductions for Load Handling Devices

33 ft. (10 m) Fixed Boom Extension with 42 ft. - 130 ft. (12.8 m - 39.6 m) Boom

*Stowed 932 lbs. (423 kg)
*Erected 6,185 lbs. (2806 kg)

33 ft. - 58 ft. (10 m - 17.7 m) Tele Boom Extension with 42 ft. - 130 ft. (12.8 - 39.6 m) Boom

*Stowed 1,154 lbs. (523 kg)

*Erected (Retracted) 8,474 lbs. (3844 kg)

*Erected (Extended) 10,911 lbs. (4949 kg)

23 ft. (7.0 m) Boom Extension with 42 ft. - 130 ft. (12.8 m - 39.6 m) Boom

*Erected 4,566 lbs. (2071 kg)

Fixed Jibs with 28 ft. (8.5 m) Jib Extension and 42 ft. - 130 ft. (12.8 m - 39.6 m) Boom

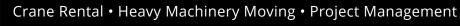
* 74 ft. Jib Erected	12,983 lbs.	(5889 kg)
* 88 ft. Jib Erected	17,146 lbs.	(7777 kg)
* 102 ft. Jib Erected	22,114 lbs.	(10 031 kg)
* 116 ft. Jib Erected	25,786 lbs.	(11 697 kg)
Fixed Jib Accessories	100 lbs.	(45 kg)

^{*}Reduction of main boom capacities:

When lifting over swingaway and/or jib combinations, deduct total weight of all load handling devices reeved over main boom nose directly from swingaway or jib capacity.

NOTE: All load handling devices and boom attachments are considered part of the load and suitable allowances MUST BE MADE for their combined weights. Weights are for Grove furnished equipment.

Auxiliary Boom Nose	260 lbs.	(118 kg)
Hookblocks and Headache Balls:		
+ 30 ton, 1 sheave	1,022 lbs.	(464 kg)
+ 45 ton, 2 sheave	1,002 lbs.	(455 kg)
+ 130 ton, 6 sheave	3,483 lbs.	(1580 kg)
+ 15 ton headache ball	803 lbs.	(364 kg)
+Refer to rating plate for actual weight.		



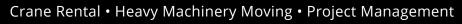


			Ç				
42 - 130 ft. 12.8 - 39.6 m)	30,000 lbs. (13 608 kg)	100%	360	2			
					Pounds		
		Fly Fully Retra	cted (Fly Lock Pi	n Disengaged)	ı	Fly Ex	tended
(Feet)	42	55	70	85	100	115	130
10	240,000 (72)						
12	209,500 (69)	124,500 (74.5)	123,500 (78)				
15	179,500 (64)	124,500 (71)	123,500 (75.5)	92,400 (79)			
20	131,000	124,500	111,500	78,600	69,000		
25	(55.5) 101,000	(65.5) 101,000	(71) 95,700	(75.5) 67,450	(78.5) 59,250	54,000	42,000
30	(46) 80,700 (33.5)	(59) 80,700 (52.5)	(66.5) 80,650 (62)	(72) 59,100 (68)	(75.5) 51,350 (72.5)	(78) 49,700 (75.5)	(80) 42,000 (79)
35	(33.3)	66,550 (45)	66,500 (57)	52,600 (64.5)	45,200 (69.5)	43,650 (73)	40,450 (75.5)
40		56,000 (36)	56,000 (52)	46,500 (60.5)	40,300 (66)	38,900 (70.5)	35,950 (73.5)
45		46,300	46,300	41,550	36,100	35,000	32,250
50		(23.5)	(46) 38,300 (39.5)	(56.5) 37,500 (52)	(62.5) 32,600 (59.5)	(67.5) 31,750 (64.5)	(71) 29,200 (68.5)
60			27,300 (20.5)	27,300 (42)	27,000 (52)	26,400 (59)	24,450 (63.5)
70			(20.0)	20,150 (29)	20,150 (43.5)	22,200 (52.5)	20,650 (58.5)
80				(20)	15,100 (33.5)	17,450 (45.5)	17,650 (52.5)
90					11,000 (18)	13,700 (37)	13,900 (46.5)
100					(10)	10,800 (26)	10,850 (39)
110						(20)	8,480 (30.5)
120							6,510 (16.5)
Minimum b	ooom angle (deg.)	for indicated leng	th (no load)				0
Maximum I	boom length (ft.) a	t 0 degree boom a	angle (no load)				130
,	Boom angles are ir	n degrees.					A6-829-010913
Boom Angle	42	55	70	85	100	115	130
0 °	37,350 (34.4)	24,550 (47.7)	16,000 (62.7)	10,500 (77.7)	6,630 (93.0)	5,930 (107.7)	4,130 (122.4)

NOTE: () Reference radii in feet.

A6-829-011003A

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			Q				
42 - 130 ft. 12.8 - 39.6 m)	12,000 lbs. (5443 kg)	100%	360°				
					Pounds		
		Fly Fully Retrac	cted (Fly Lock Pir	Disengaged)		Fly Ex	rtended
(Feet)	42	55	70	85	100	115	130
10	240,000 (72)						
12	208,500 (69)	124,500 (74.5)	123,500 (78)				
15	164,500 (64)	124,500 (71)	123,500 (75.5)	92,400 (79)			
20	118,500 (55.5)	118,000 (65.5)	111,500 (71)	78,600 (75.5)	69,000 (78.5)		
25	90,350	90,300	90,200	67,450	59,250	54,000	42,000
30	(46) 72,000	(59) 72,000 (52.5)	(66.5) 71,950	(72) 59,100	(75.5) 51,350 (73.5)	(78) 49,700	(80) 42,000 (70)
35	(33.5)	(52.5) 55,800	(62) 55,800	(68) 52,600	(72.5) 45,200	(75.5) 43,650	(79) 40,450
40		(45) 43,200	(57) 43,200	(64.5) 43,200	(69.5) 40,300	(73) 38,900	(75.5) 35,950
		(36) 34,500	(52) 34,500	(60.5) 34,500	(66) 34,500	(70.5) 35,000	(73.5) 32,250
45		(23.5)	(46) 28,100	(56.5) 28,100	(62.5) 28,100	(67.5) 31,750	(71) 29,200
50			(39.5)	(52)	(59.5)	(64.5)	(68.5)
60			19,400 (20.5)	19,400 (42)	19,400 (52)	22,500 (59)	22,650 (63.5)
70				13,700 (29)	13,700 (43.5)	16,150 (52.5)	16,300 (58.5)
80					9,690 (33.5)	11,700 (45.5)	11,800 (52.5)
90					6,720 (18)	8,420 (37)	8,500 (46.5)
100					(12)	5,860 (26)	5,940 (39)
110						(20)	3,900 (30.5)
120							2,240 (16.5)
Minimum	boom angle (deg.)	for indicated leng	gth (no load)				0
Maximum	boom length (ft.)	at 0 degree boom	angle (no load)				130
NOTE: ()	Boom angles are i	n degrees.					A6-829-01099
Boom Angle	42	55	70	85	100	115	130
0 °	37,350 (34.4)	24,550 (47.7)	16,000 (62.7)	10,500 (77.7)	5,960 (93.0)	4,260 (107.7)	1,890 (122.4)

NOTE: () Reference radii in feet.

A6-829-011003A

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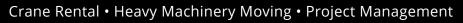


			(C)				
2 - 130 ft. .8 - 39.6 m)	0 lbs. (0 kg)	100%	360				
					Pounds		
		Fly Fully Retra	cted (Fly Lock Pi	n Disengaged)		Fly Ex	tended
(Feet)	42	55	70	85	100	115	130
10	237,500 (72)						
12	196,000 (69)	124,500 (74.5)	123,500 (78)				
15	154,500 (64)	124,500 (71)	123,500 (75.5)	92,400 (79)			
20	109,500 (55.5)	109,500 (65.5)	109,000 (71)	78,600 (75.5)	69,000 (78.5)		
25	83,300 (46)	83,250 (59)	83,150 (66.5)	67,450 (72)	59,250 (75.5)	54,000 (78)	42,000 (80)
30	61,550	61,550	61,550	59,100	51,350	49,700	42,000
35	(33.5)	(52.5) 45,900	(62) 45,900	(68) 45,900	(72.5) 45,200	(75.5) 43,650	(79) 40,450
40		(45) 35,000	(57) 35,000	(64.5) 35,000	(69.5) 35,000	(73) 37,950	(75.5) 35,950
		(36) 27,450	(52) 27,450	(60.5) 27,450	(66) 27,450	(70.5) 30,150	30,900
45		(23.5)	(46) 21.950	(56.5) 21.950	(62.5) 21.950	(67.5) 24.400	(71) 25.100
50			(39.5) 14,400	(52) 14,400	(59.5) 14,400	(64.5) 16,500	(68.5) 17,200
60			(20.5)	(42)	(52)	(59)	(63.5)
70				9,470 (29)	9,470 (43.5)	11,400 (52.5)	12,000 (58.5)
80					6,000 (33.5)	7,790 (45.5)	8,400 (52.5)
90					3,420 (18)	5,110 (37)	5,700 (46.5)
100						3,050 (26)	3,620 (39)
110							1,970 (30.5)
Minimum	boom angle (deg.)) for indicated leng	gth (no load)				17
Maximum	boom length (ft.)	at 0 degree boom	angle (no load)				115
NOTE: () I	Boom angles are	in degrees.					
							A6-829-011
Boom Angle	42	55	70	85	100	I 115	
0°	37,350 (34.4)	24,300 (47.7)	12,850 (62.7)	6,700 (77.7)	2,770 (93.0)	1,750 (107.7)	

NOTE: () Reference radii in feet.

A6-829-011003A

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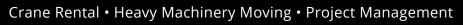


			C				
42 - 130 ft. (12.8 - 39.6 m)	30,000 lbs. (13 608 kg)	100%	Cente Over F				
					Pounds		
		Fly Fully Retrac	ted (Fly Lock Pir	n Disengaged)		Fly Ex	tended
(Feet)	42	55	70	85	100	115	130
10	240,000 (72)						
12	209,500 (69)	124,500 (74.5)	123,500 (78)				
15	179,500 (64)	124,500 (71)	123,500 (75.5)	92,400 (79)			
20	131,000	124,500	111,500	78,600	69,000		
25	(55.5) 101,000	(65.5) 101,000	(71) 95,700	(75.5) 67,450	(78.5) 59,250	54,000	42,000
	(46) 80,700	(59) 80,700	(66.5) 80,650	(72) 59,100	(75.5) 51,350	(78) 49,700	(80) 42,000
30	(33.5)	(52.5) 66,550	(62) 66,500	(68) 52,600	(72.5) 45,200	(75.5) 43,650	(79) 40,450
35		(45) 56,000	(57) 56,000	(64.5) 46,500	(69.5) 40,300	(73) 38,900	(75.5) 35,950
40		(36)	(52)	(60.5)	(6 6)	(70.5)	(73.5)
45		47,800 (23.5)	47,800 (46)	41,550 (56.5)	36,100 (62.5)	35,000 (67.5)	32,250 (71)
50			40,300 (39.5)	37,500 (52)	32,600 (59.5)	31,750 (64.5)	29,200 (68.5)
60			28,450 (20.5)	28,450 (42)	27,000 (52)	26,400 (59)	24,450 (63.5)
70				20,650 (29)	20,650 (43.5)	22,200 (52.5)	20,650 (58.5)
80				, ,	15,100 (33.5)	18,850 (45.5)	17,650 (52.5)
90					11,000 (18)	15,050 (37)	15,250 (46.5)
100						10,850 (26)	11,950 (39)
110						(==)	9,330 (30.5)
120							7,190 (16.5)
Minimum b	oom angle (deg.)	for indicated leng	th (no load)				0
Maximum b	ooom length (ft.) a	t 0 degree boom a	angle (no load)				130
	oom angles are in	degrees.					A6-829-010914
Boom Angle	42	55	70	85	100	115	130
0 °	37,350 (34.4)	24,550 (47.7)	16,000 (62.7)	10,500 (77.7)	6,630 (93.0)	5,930 (107.7)	4,130 (122.4)

NOTE: () Reference radii in feet.

A6-829-011003A

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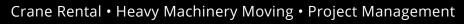


			(C				
42 - 130 ft. 12.8 - 39.6 m)	12,000 lbs. (5443 kg)	100%	Cente Over F				
				Pounds	s		
		Fly Fully Retra		Fly Ext	ended		
(Feet)	42	55	70	85	100	115	130
10	240,000 (72)						
12	208,500 (69)	124,500 (74.5)	123,500 (78)				
15	164,500 (64)	124,500 (71)	123,500 (75.5)	92,400 (79)			
20	118,500 (55.5)	118,000 (65.5)	111,500 (71)	78,600 (75.5)	69,000 (78.5)		
25	90,350 (46)	90,300 (59)	90,200 (66.5)	67,450 (72)	59,250 (75.5)	54,000 (78)	42,000 (80)
30	72,000 (33.5)	72,000 (52.5)	71,950 (62)	59,100 (68)	51,350 (72.5)	49,700 (75.5)	42,000 (79)
35		59,100 (45)	59,050 (57)	52,600 (64.5)	45,200 (69.5)	43,650 (73)	40,450 (75.5)
40		46,650 (36)	46,650 (52)	46,500 (60.5)	40,300 (66)	38,900 (70.5)	35,950 (73.5)
45		37,650 (23.5)	37,650 (46)	37,650 (56.5)	36,100 (62.5)	35,000 (67.5)	32,250 (71)
50			30,950 (39.5)	30,950 (52)	30,950 (59.5)	31,750 (64.5)	29,200 (68.5)
60			21,750 (20.5)	21,750 (42)	21,750 (52)	24,900 (59)	24,450 (63.5)
70			(20.0)	15,650 (29)	15,650 (43.5)	18,150 (52.5)	18,650 (58.5)
80				(23)	11,350 (33.5)	13,400 (45.5)	14,100 (52.5)
90					8,150 (18)	9,840 (37)	10,700 (46.5)
100						7,090 (26)	8,080 (39)
110						, ,	5,990 (30.5)
120							4,280 (16.5)
Minimum I	boom angle (deg.)	for indicated len	gth (no load)				0
Maximum	boom length (ft.) a	at 0 degree boom	angle (no load)				130
.,	Boom angles are i	n degrees.					A6-829-01100
Boom Angle	42	55	70	85	100	115	130
0 °	37,350 (34.4)	24,550 (47.7)	16,000 (62.7)	10,500 (77.7)	6,630 (93.0)	5,350 (107.7)	3,920 (122.4)

NOTE: () Reference radii in feet.

A6-829-011003A

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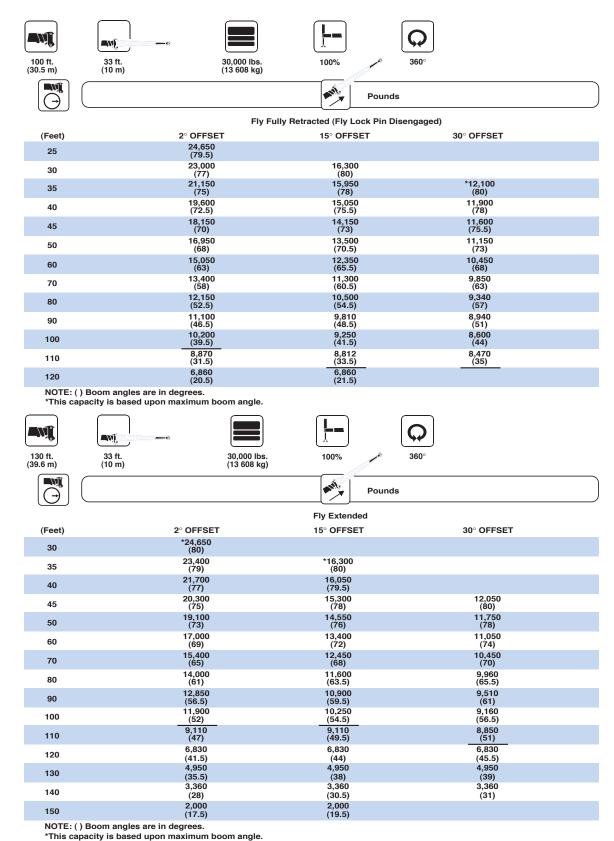
			Ç				
12 - 130 ft. 2.8 - 39.6 m)	0 lbs. (0 kg)	100%	Over F	Rear			
					Pounds		
		Fly Fully Retra	cted (Fly Lock Pi	n Disengaged)		Fly Ex	tended
(Feet)	42	55	70	85	100	115	130
10	237,500 (72)						
12	196,000 (69)	124,500 (74.5)	123,500 (78)				
15	154,500 (64)	124,500 (71)	123,500 (75.5)	92,400 (79)			
20	109,500	109,500	109,000	78,600	69,000		
25	(55.5) 83,300	(65.5) 83,250	(71) 83,150	(75.5) 67,450	(78.5) 59,250	54,000	42,000
30	(46) 66,150	(59) 66,200	(66.5) 66,100	(72) 59,100	(75.5) 51,350	(78) 49,700	(80) 42,000
35	(33.5)	(52.5) 49,350	49,350	(68) 49,350	(72.5) 45,200	(75.5) 43,650	(79) 40,450
		(45) 38,300	(57) 38,300	(64.5) 38,300	(69.5) 38,300	(73) 38,900	(75.5) 35,950
40		(36) 30,600	(52) 30,600	(60.5) 30,600	(66) 30,600	(70.5) 33,550	(73.5) 32,250
45		(23.5)	(46)	(56.5)	(62.5)	(67.5)	<u>(71)</u>
50			24,850 (39.5)	24,850 (52)	24,850 (59.5)	27,550 (64.5)	28,550 (68.5)
60			16,900 (20.5)	16,900 (42)	16,900 (52)	19,300 (59)	20,050 (63.5)
70				11,700 (29)	11,700 (43.5)	13,850 (52.5)	14,500 (58.5)
80					8,020 (33.5)	9,990 (45.5)	10,550 (52.5)
90					5,270 (18)	7,110 (37)	7,610 (46.5)
100						4,880 (26)	5,330 (39)
110						` '	3,510 (30.5)
120							2,030 (16.5)
Minimum I	ooom angle (deg.) for indicated len	gth (no load)				0
Maximum	boom length (ft.)	at 0 degree boom	angle (no load)				130
	Boom angles are	in degrees.					A6-829-011
Boom Angle	42	55	70	85	100	115	130
0 °	37,350 (34.4)	24,550 (47.7)	15,300 (62.7)	8,770 (77.7)	4,560 (93.0)	3,480 (107.7)	1,710 (122.4)

NOTE: () Reference radii in feet.

A6-829-011003A

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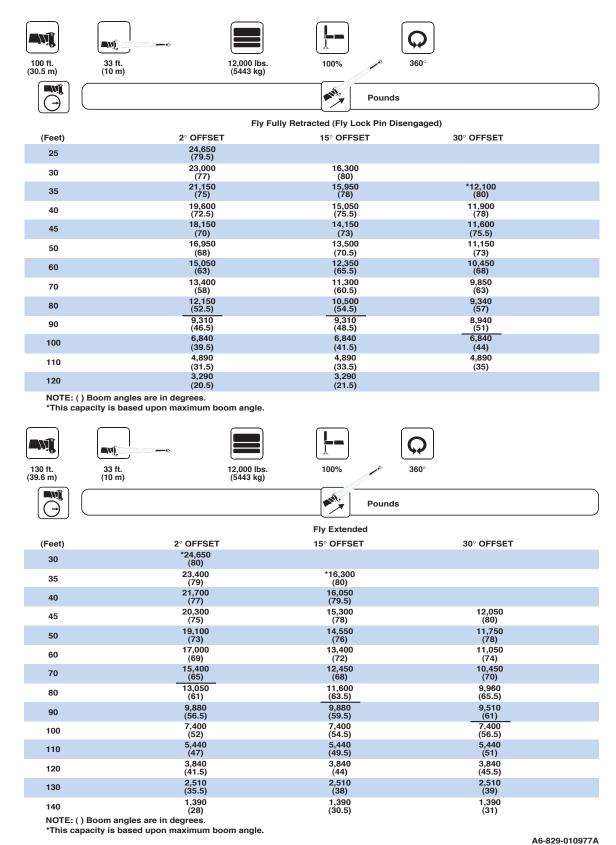


This capacity is based upon maximum boom angle.

A6-829-010976A

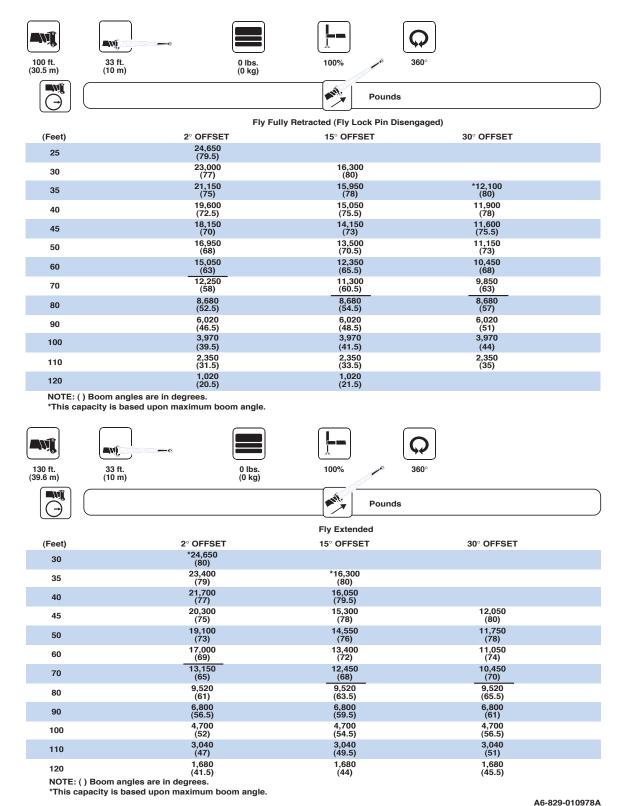
THIS CHART IS ONLY A GUIDE AND SHOULD NOT BE USED TO OPERATE THE CRANE. The individual crane's load chart, operating instructions and other instructional plates must be read and understood prior to operating the crane





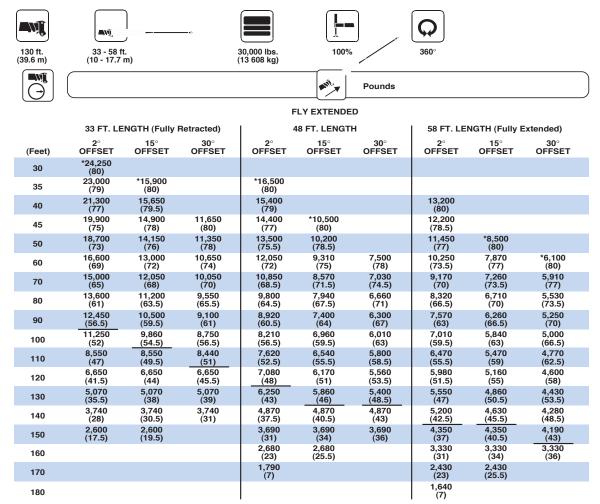
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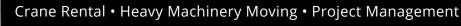


NOTE: () Boom angles are in degrees

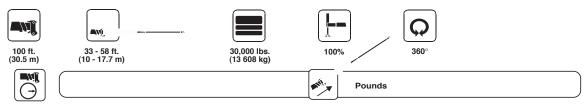
A6-829-010915C

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^{*}This capacity is based upon maximum boom angle.







FLY FULLY RETRACTED (FLY LOCK PIN DISENGAGED)

	33 FT. LE	NGTH (Fully I	Retracted)	4	18 FT. LENGTI	Н	58 FT. LENGTH (Fully Extended)		
(Feet)	2° OFFSET	15° OFFSET	30° OFFSET	2° OFFSET	15° OFFSET	30° OFFSET	2° OFFSET	15° OFFSET	30° OFFSET
25	24,250 (79.5)								
30	22,600 (77)	15,900 (80)		16,500 (79)					
35	20,750 (75)	15,550 (78)	*11,700 (80)	15,200 (77)			13,200 (78.5)		
40	19,200 (72.5)	14,650 (75.5)	11,500 (78)	14,050 (75)	10,500 (78.5)		12,100 (77)		
45	17,750 (70)	13,750 (73)	11,200 (75.5)	13,050 (73)	10,100 (76.5)		11,150 (75)	8,500 (79)	
50	16,500 (68)	13,050 (70.5)	10,750 (73)	12,200 (71)	9,540 (74.5)	7,700 (78.5)	10,500 (73)	8,120 (77)	
60	14,650 (63)	11,900 (65.5)	10,050 (68)	10,750 (66.5)	8,620 (70)	7,150 (74)	9,220 (69)	7,390 (73)	6,100 (77.5)
70	13,000 (58)	10,900 (60.5)	9,430 (63)	9,550 (62)	7,870 (65.5)	6,670 (69.5)	8,200 (64.5)	6,720 (69)	5,610 (73.5)
80	11,750 (52.5)	10,100 (54.5)	8,920 (57)	8,570 (57)	7,250 (61)	6,240 (64.5)	7,360 (60.5)	6,180 (64.5)	5,250 (69)
90	10,650 (46.5)	9,400 (48.5)	8,520 (51)	7,800 (52)	6,730 (56)	5,920 (59.5)	6,710 (56)	5,690 (60)	4,950 (64)
100	9,780 (39.5)	8,830 (41.5)	8,180 (44)	7,140 (46.5)	6,250 (50.5)	5,630 (54)	6,100 (51)	5,290 (55)	4,690 (59)
110	8,270 (31.5)	8,270 (33.5)	8,050 (35)	6,520 (40.5)	5,860 (44.5)	5,410 (47.5)	5,560 (46)	4,920 (49.5)	4,480 (53.5)
120	6,260 (20.5)	6,260 (21.5)		6,050 (34)	5,540 (37.5)	5,260 (40)	5,150 (40)	4,630 (44)	4,290 (47.5)
130				5,590 (25)	5,180 (28.5)	4,990 (30)	4,740 (33.5)	4,300 (37)	4,130 (40)
140				4,765 (9.5)			4,370 (25)	4,030 (28)	
150							4,060 (10)		

NOTE: () Boom angles are in degrees.
*This capacity is based upon maximum boom angle.

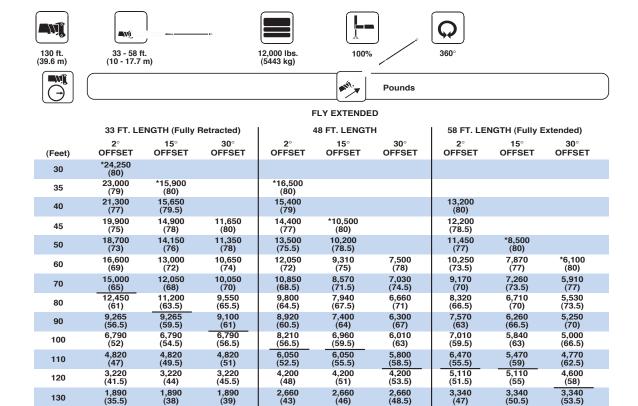
A6-829-010994

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1,370 (40.5)

1,370 (37.5) 1,370 (43) 1,850 (42.5) 1,850 (45.5)

NOTE: () Boom angles are in degrees.

140

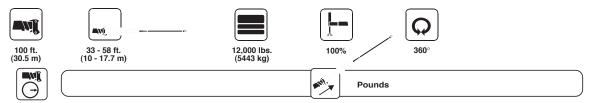
A6-829-010997

1,850 (48.5)

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^{*}This capacity is based upon maximum boom angle.





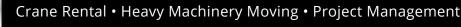
FLY FULLY RETRACTED (FLY LOCK PIN DISENGAGED)

	33 FT. LE	NGTH (Fully	Retracted)	4	48 FT. LENGT	Н	58 FT. LENGTH (Fully Extended)		
	2 °	15°	30 °	2°	15°	30 °	2°	15°	30 °
(Feet)	OFFSET	OFFSET	OFFSET	OFFSET	OFFSET	OFFSET	OFFSET	OFFSET	OFFSET
25	24,250 (79.5)								
30	22,600 (77)	15,900 (80)		16,500 (79)					
35	20,750 (75)	15,550 (78)	*11,700 (80)	15,200 (77)			13,200 (78.5)		
40	19,200 (72.5)	14,650 (75.5)	11,500 (78)	14,050 (75)	10,500 (78.5)		12,100 (77)		
45	17,750 (70)	13,750 (73)	11,200 (75.5)	13,050 (73)	10,100 (76.5)		11,150 (75)	8,500 (79)	
50	16,500 (68)	13,050 (70.5)	10,750 (73)	12,200 (71)	9,540 (74.5)	7,700 (78.5)	10,500 (73)	8,120 (77)	
60	14,650 (63)	11,900 (65.5)	10,050 (68)	10,750 (66.5)	8,620 (70)	7,150 (74)	9,220 (69)	7,390 (73)	6,100 (77.5)
70	13,000 (58)	10,900 (60.5)	9,430 (63)	9,550 (62)	7,870 (65.5)	6,670 (69.5)	8,200 (64.5)	6,720 (69)	5,610 (73.5)
80	11,750 (52.5)	10,100 (54.5)	8,920 (57)	8,570 (57)	7,250 (61)	6,240 (64.5)	7,360 (60.5)	6,180 (64.5)	5,250 (69)
90	8,710 (46.5)	8,710 (48.5)	8,520 (51)	7,800 (52)	6,730 (56)	5,920 (59.5)	6,710 (56)	5,690 (60)	4,950 (64)
100	6,250 (39.5)	6,250 (41.5)	6,250 (44)	7,140 (46.5)	6,250 (50.5)	5,630 (54)	6,100 (51)	5,290 (55)	4,690 (59)
110	4,290 (31.5)	4,290 (33.5)	4,290 (35)	5,780 (40.5)	5,780 (44.5)	5,410 (47.5)	5,560 (46)	4,920 (49.5)	4,480 (53.5)
120	2,690 (20.5)	2,690 (21.5)		4,160 (34)	4,160 (37.5)	4,160 (40)	4,910 (40)	4,630 (44)	4,290 (47.5)
130				2,820 (25)	2,820 (28.5)	2,820 (30)	3,500 (33.5)	3,500 (37)	3,500 (40)
140				1,690 (9.5)			2,310 (25)	2,310 (28)	
150							1,300 (10)		

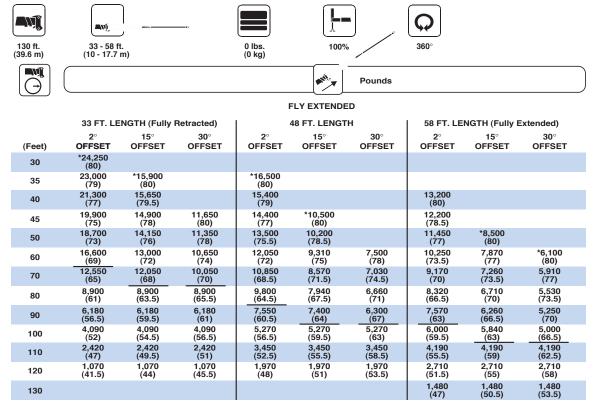
NOTE: () Boom angles are in degrees.
*This capacity is based upon maximum boom angle.

A6-829-010995

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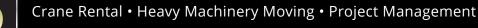


NOTE: () Boom angles are in degrees.

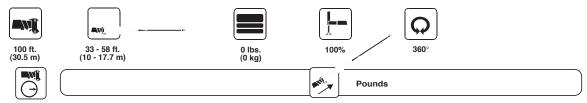
A6-829-010998

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^{*}This capacity is based upon maximum boom angle.







FLY FULLY RETRACTED (FLY LOCK PIN DISENGAGED)

	33 FT. LE	NGTH (Fully I	Retracted)	4	18 FT. LENGT	н	58 FT. LEI	NGTH (Fully E	xtended)
(Feet)	2° OFFSET	15° OFFSET	30° OFFSET	2° OFFSET	15° OFFSET	30° OFFSET	2° OFFSET	15° OFFSET	30° OFFSET
25	24,250 (79.5)								
30	22,600 (77)	15,900 (80)		16,500 (79)					
35	20,750 (75)	15,550 (78)	*11,700 (80)	15,200 (77)			13,200 (78.5)		
40	19,200 (72.5)	14,650 (75.5)	11,500 (78)	14,050 (75)	10,500 (78.5)		12,100 (77)		
45	17,750 (70)	13,750 (73)	11,200 (75.5)	13,050 (73)	10,100 (76.5)		11,150 (75)	8,500 (79)	
50	16,500 (68)	13,050 (70.5)	10,750 (73)	12,200 (71)	9,540 (74.5)	7,700 (78.5)	10,500 (73)	8,120 (77)	
60	14,650 (63)	11,900 (65.5)	10,050 (68)	10,750 (66.5)	8,620 (70)	7,150 (74)	9,220 (69)	7,390 (73)	6,100 (77.5)
70	11,650 (58)	10,900 (60.5)	9,430 (63)	9,550 (62)	7,870 (65.5)	6,670 (69.5)	8,200 (64.5)	6,720 (69)	5,610 (73.5)
80	8,090 (52.5)	8,090 (54.5)	8,090 (57)	8,570 (57)	7,250 (61)	6,240 (64.5)	7,360 (60.5)	6,180 (64.5)	5,250 (69)
90	5,430 (46.5)	5,430 (48.5)	5,430 (51)	7,050 (52)	6,730 (56)	5,920 (59.5)	6,710 (56)	5,690 (60)	4,950 (64)
100	3,380 (39.5)	3,380 (41.5)	3,380 (44)	4,940 (46.5)	4,940 (50.5)	4,940 (54)	5,780 (51)	5,290 (55)	4,690 (59)
110	1,750 (31.5)	1,750 (33.5)	1,750 (35)	3,240 (40.5)	3,240 (44.5)	3,240 (47.5)	3,890 (46)	3,890 (49.5)	3,890 (53.5)
120				1,880 (34)	1,880 (37.5)	1,880 (40)	2,350 (40)	2,350 (44)	2,350 (47.5)
130							1,080 (33.5)	1,080 (37)	1,080 (40)

NOTE: () Boom angles are in degrees *This capacity is based upon maximum boom angle.

A6-829-010996

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Boom Centered Over Rear





FLY FULLY RETRACTED (FLY LOCK PIN DISENGAGED)

(Feet)	Stationary Capacity	*1 MPH Capacity
10	118,500 (a)	83,500 (a)
12	109,000 (a)	76,950 (a)
15	83,700 (a)	68,600 (a)
20	55,350 (a)	55,350 (a)
25	40,500 (a)	40,500 (a)
30	31,400 (b)	31,400 (b)
35	25,100 (c)	25,100 (c)
40	19,800 (d)	19,800 (d)
45	15,850 (d)	15,850 (d)
50	12,750 (d)	12,750 (d)
55	10,250 (d)	10,250 (d)
60	8,200 (d)	8,180 (d)
65	6,480 (e)	6,110 (e)
70	5,020 (e)	4,360 (e)
75	3,770 (e)	2,860 (e)
80	2,680 (e)	1,550 (e)
85	1,730 (e)	

NO LOAD STABILITY DATA

Rear (No Load)	Main Boom 100 ft.
Minimum boom angle (degrees) for indicated length	19
Maximum boom length (feet) at 0° boom angle	85

Maximum Permissible Boom Lengths:

- (b) 55 ft. (c) 70 ft.
- (d) 85 ft.

*For 1 MPH pick and carry operation, boom must be centered over rear of machine, mechanical swing lock engaged and load restrained from swinging. When handling loads in the structural range, travel should be reduced to creep speed.

A6-829-011135A

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Boom Centered Over Rear





,	FIII I	v	RETRACTED	(FIV	LOCK	DIN	DISENG	AGED

Pounds

(Feet)	Stationary Capacity	*1 MPH Capacity
10	118,500 (a)	83,500 (a)
12	106,000 (a)	76,950 (a)
15	73,600 (a)	68,600 (a)
20	46,400 (b)	46,400 (b)
25	32,150 (b)	32,150 (b)
30	23,400 (c)	23,400 (c)
35	17,500 (c)	17,500 (c)
40	13,450 (c)	13,450 (c)
45	10,350 (c)	10,350 (c)
50	7,980 (c)	7,680 (e)
55	6,050 (c)	5,400 (e)
60	4,460 (c)	3,520 (e)
65	3,140 (e)	1,955 (e)
70	2,010 (e)	
75	1,040 (e)	

NO LOAD STABILITY DATA

	Rear (No Load)	Main Boom 100 ft.
ı	Minimum boom angle (degrees) for indicated length	38
	Maximum boom length (feet) at 0° boom angle	70

Maximum Permissible Boom Lengths:

(a) 42 ft.

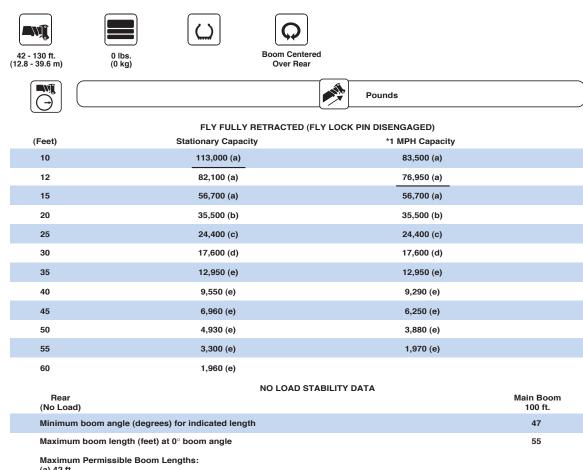
(b) 55 ft. (c) 70 ft. (d) 85 ft.

*For 1 MPH pick and carry operation, boom must be centered over rear of machine, mechanical swing lock engaged and load restrained from swinging. When handling loads in the structural range, travel should be reduced to creep speed.

A6-829-011139A

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(a) 42 ft.

(b) 55 ft.

(c) 70 ft. (d) 85 ft.

(e) 100 ft.

*For 1 MPH pick and carry operation, boom must be centered over rear of machine, mechanical swing lock engaged and load restrained from swinging. When handling loads in the structural range, travel should be reduced to creep speed.

A6-829-011140A

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Working range





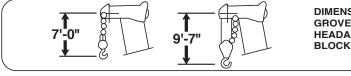




42 - 130 ft. (12.8 - 39.6 m)

23 - 116 ft. (7.0 - 35.3 m)

FEET 10° 60° 50° 40° 30° 10° 80° MAX воом ANGLE FEET AXIS OF ROTATION →



DIMENSIONS ARE FOR LARGEST GROVE FURNISHED HOOK BLOCK AND HEADACHE BALL, WITH ANTI-TWO BLOCK ACTIVATED.

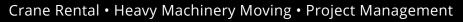


42 - 130 ft. (12.8 - 39.6 m)	23 ft. (7.0 m) (13 608 kg)	100%	360°	
			Pounds	
(Feet)	Main Boom	Angle	Capacity in	bs.
30	(79.5)	28,000	
35	(77.5)	25,180	
40	(75.5)	23,600	
45	(73.5)	20,900	
50	(71.5)	18,500	
60	(67.5)	14,650	
70	(63)		11,650	
80	(59)		9,400	
90	(54)		7,600	
100	(49)		6,000	
110	(43.5)	4,750	
120	(37)		3,700	
130	(29.5)	2,750	
140	(19)		2,000	-

NOTE: () Reference loaded main boom angle with fully extended boom.

A6-829-011189A

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Pounds

74 ft. JIB (28 ft. ext. + 46 ft. jib)								88 ft. JIB (28 ft. ext. + 60 ft. jib)					
10° OFFSET 17° OFFSET 30° OFFSET						10° OFFSET 17° OFFSET 30° OFFSI					SET		
Boom Angle	Rad. Ref. (ft.)*	Cap. lbs.**	Rad. Ref. (ft.)*	Cap. lbs.**	Rad. Ref. (ft.)*	Cap. lbs.**	Rad. Ref. (ft.)*	Cap. lbs.**	Rad. Ref. (ft.)*	Cap. lbs.**	Rad. Ref. (ft.)*	Cap. lbs.**	
80	46.0	9,000	50.1	8,850	59.2	8,330	51.4	7,080	57.9	6,480	70.3	5,950	
77.5	54.3	7,950	58.6	7,950	67.3	7,440	60.7	6,220	67.0	5,670	78.6	4,890	
75	62.7	7,900	67.2	7,610	75.5	7,120	70.0	6,200	76.1	5,380	87.2	4,730	
72.5	71.0	7,850	75.5	7,270	83.4	6,850	78.9	6,170	84.8	5,150	95.5	4,590	
70	79.0	7,800	83.9	6,990	91.2	6,640	87.9	6,140	93.4	4,970	103.4	4,470	
67.5	86.9	7,750	91.6	6,750	98.8	6,430	96.6	6,120	101.9	4,780	111.2	4,350	
65	94.7	7,700	99.4	6,530	106.2	6,230	105.0	6,020	110.0	4,630	118.8	4,270	
62.5	102.4	7,640	107.0	6,330	113.3	6,070	113.2	5,870	118.1	4,510	126.2	4,170	
60	109.7	6,810	114.3	6,160	120.3	5,370	121.3	5,240	125.8	4,390	133.2	4,090	
55	123.7	5,070	128.4	4,720	133.2	4,490	136.5	4,030	140.3	3,640	146.6	3,370	
50	136.7	3,660	141.0	3,450	145.0	3,330	150.5	2,760	153.6	2,580	158.8	2,490	
45	148.6	2,580	152.6	2,460	155.8	2,400	163.0	1,790	165.9	1,690	169.6	1,660	
40	159.4	1,750	163.0	1,690	165.2	1,670							

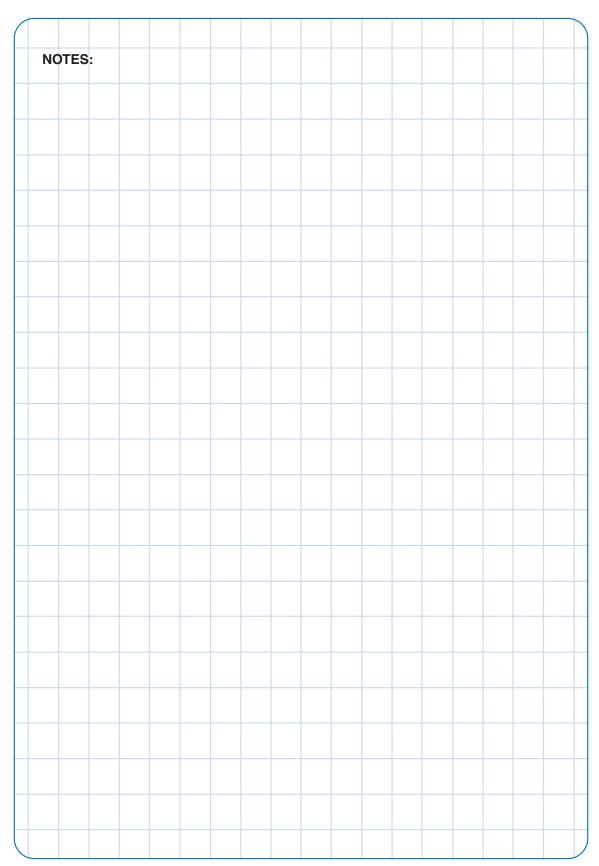
102 ft. JIB (28 ft. ext. + 74 ft. jib)								116 ft. JIB (28 ft. ext. + 88 ft. jib)					
	10° OFFSET 17° OFFSET						FSET	10° OF	FSET	17° OFFSET		30° OFFSET	
	Boom Angle	Rad. Ref. (ft.)*	Cap. lbs.**	Rad. Ref. (ft.)*	Cap. lbs.**	Rad. Ref. (ft.)*	Cap. lbs.**	Rad. Ref. (ft.)*	Cap. lbs.**	Rad. Ref. (ft.)*	Cap. lbs.**	Rad. Ref. (ft.)*	Cap. lbs.**
	80	58.1	5,590	64.8	4,890	78.7	3,510	62.8	3,680	73.2	3,460	89.6	2,920
	77.5	67.7	4,820	74.6	4,270	87.9	3,380	73.9	3,000	84.0	2,790	99.6	2,400
	75	77.3	4,570	84.1	4,260	96.8	3,250	84.7	2,780	94.6	2,600	109.5	2,250
	72.5	86.9	4,320	93.3	4,250	105.5	3,110	95.4	2,570	105.0	2,410	119.0	2,100
	70	96.3	4,110	102.5	4,060	114.1	2,970	105.8	2,410	115.1	2,260	128.3	1,990
	67.5	105.4	3,930	111.4	3,820	122.6	2,840	115.9	2,210	124.9	2,090	137.3	1,900
	65	114.3	3,760	120.0	3,620	130.6	2,750	125.8	2,100	134.4	1,990	145.9	1,830
	62.5	123.0	3,620	128.6	3,410	138.4	2,650	135.3	1,990	143.5	1,900	154.2	1,750
	60	131.3	3,520	136.7	3,210	145.9	2,550	144.5	1,960	152.3	1,880	162.2	1,720
	55	147.2	3,030	152.0	2,670	160.0	2,400	161.9	1,520	168.9	1,500	176.9	1,460
	50	161.9	1,960	166.2	1,820	172.6	1,780						
	45	175.1	1,060	178.8	1,020	183.9	1,000						

^{*}Reference radius refers to fully extended boom and appropriate jib length. **Capacities at loaded main boom angle.

A6-829-011832

THIS CHART IS ONLY A GUIDE AND SHOULD NOT BE USED TO OPERATE THE CRANE. The individual crane's load chart, operating instructions and other instructional plates must be read and understood prior to operating the crane.







Rated Lifting Capacities

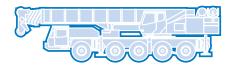
IMPORTANT NOTES:

WARNING: THIS CHART IS ONLY A GUIDE. The notes below are for illustration only and should not be relied upon to operate the crane. The individual crane's load chart, operating instructions and other instruction plates must be read and understood prior to operating the crane.

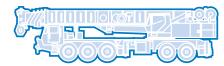
- 1. All rated loads meet ANSI/ASME B30.5, Mobile and Locomotive Cranes. Testing and development were performed to SAE J1063, Cantilevered Boom Crane Structures, Method of Test, and SAE J765, Crane Stability Test Code.
- 2. Rated loads include the weight of hookblock, slings and auxiliary lifting devices and their weights shall be subtracted from the listed rating to obtain the net load to be lifted. When more than the minimum required hoist reeving is used, the additional rope weight shall be considered part of the load to be handled.
- 3. Capacities appearing above the bold line are based on structural strength. Tipping should not be relied upon as a capacity indication.
- 4. The machine shall be leveled on a firm supporting surface. Depending on the nature of the supporting surface, it may be necessary to have structural supports under the outrigger floats or tires to spread the load to a larger bearing surface.
- 5. When either boom length or radius or both are between values listed, the smallest load shown at either the next larger radius or next longer or shorter boom length shall be used.
- 6. For outrigger operation, outriggers shall be properly extended with tires raised free of crane weight before operating the boom or lifting loads.



















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