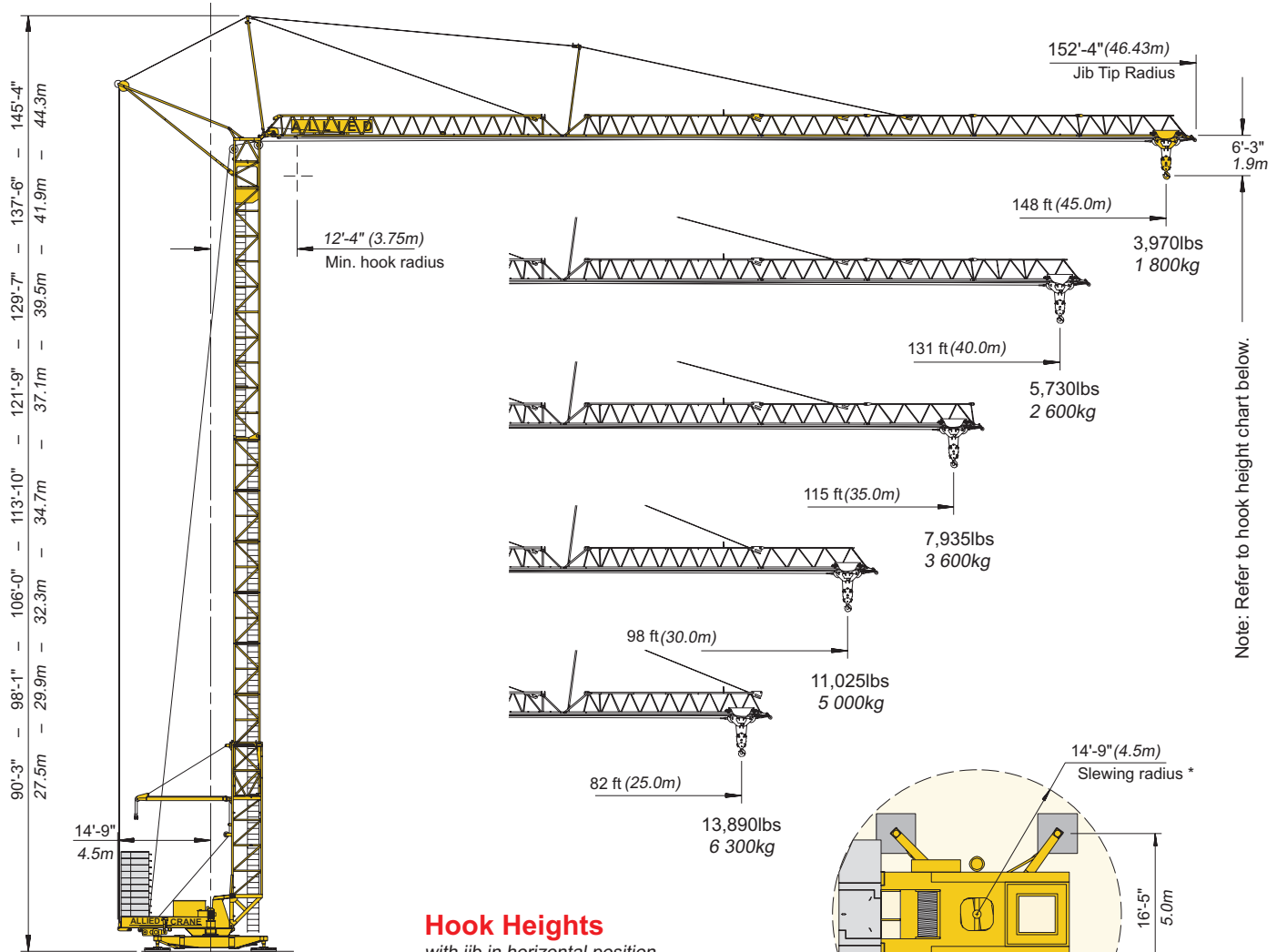


# LIEBHERR 97 K

## SELF-ERECTING CRANE



Note: Refer to hook height chart below.

**STATIONARY**  
on spindle jacks

**Jib Tip Radius**  
with jib in horizontal position

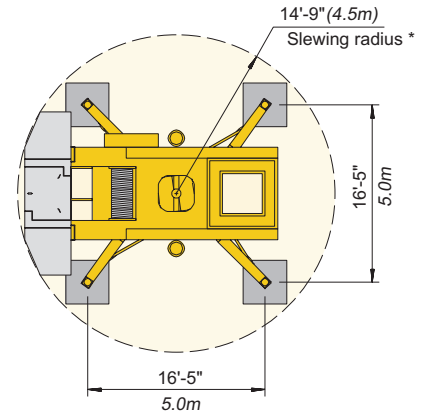
Hook Reach	Jib Tip Radius	
	ft	m
148 ft (45.0m)	152.3	46.43
131 ft (40.0m)	135.9	41.43
115 ft (35.0m)	119.5	36.43
98 ft (30.0m)	103.1	31.43
82 ft (25.0m)	86.7	26.43

**Hook Heights**

with jib in horizontal position

Tower Configuration	Hook Height	
	ft	m
Minimum	65.6	20.0
1 Tower Section	73.5	22.4
2 Tower Sections	81.4	24.8
3 Tower Sections	89.2	27.2
4 Tower Sections	97.1	29.6
5 Tower Sections	105.0	32.0
6 Tower Sections*	112.9	34.4
7 Tower Sections*	120.7	36.8

\*Note! A 6th and 7th tower section can be added ONLY when in 2-pat line, stationary operation.



**Plan View**

slewing platform on spindle jacks with counterweights

\*Note! Allow minimum of 24" (600mm) clearance between slewing radius and any obstructions.



**ALLIED CRANE LTD**

## 2-Part Line

with up to five tower sections installed [max. hook height 105 ft (32.0m)]

Hook Radius	Maximum Max Capacity – Radius	ft	48	57	67	77	82	87	94	98	103	110	115	126	131	143	148
		m	14.5	17.5	20.5	23.5	25.0	26.5	28.5	30.0	31.5	33.5	35.0	38.5	40.0	43.5	45.0
148 ft 45.0m	17,635 lbs – 47.9 ft 8,000 kg – 14.6m	lbs kg	17,635 8,000	14,000 6,350	11,430 5,185	9,580 4,345	8,840 4,010	8,200 3,720	7,450 3,380	6,965 3,160	6,525 2,960	6,005 2,725	5,655 2,565	4,960 2,250	4,695 2,130	4,165 1,890	<b>3,970</b> <b>1,800</b>
131 ft 40.0m	17,635 lbs – 54.5 ft 8000 kg – 16.6m	lbs kg	17,635 8000	16,435 7,455	13,470 6,110	11,355 5,150	10,505 4,765	9,755 4,425	8,895 4,035	8,335 3,780	7,825 3,550	7,230 3,280	6,835 3,100	6,030 2,735	<b>5,730</b> <b>2,600</b>		
115 ft 35.0m	17,635 lbs – 60.0 ft 8000kg – 18.3m	lbs kg	17,635 8000	17,635 8,000	15,335 6,955	12,975 5,885	12,025 5,455	11,200 5,080	10,240 4,645	9,610 4,360	9,050 4,105	8,375 3,800	<b>7,935</b> <b>3,600</b>				
98 ft 30.0m	17,635 lbs – 66.6 ft 8000kg – 20.3m	lbs kg	17,635 8,000	17,635 8,000	17,440 7,910	14,695 6,665	13,715 6,220	12,830 5,820	11,750 5,330	<b>11,025</b> <b>5,000</b>							
82 ft 25.0m	17,635 lbs – 67.3 ft 8,000kg – 20.5m	lbs kg	17,635 8,000	17,635 8,000	17,635 8,000	14,970 6,790	<b>13,890</b> <b>6,300</b>										

Note! When in 2-part line, stationary operation, a 6th and 7th tower section can be added. With a 6th tower section installed, the maximum capacity is decreased to 13,230 lbs (6 000 kg). With a 7th section installed, the maximum capacity is decreased to 11,025 lbs (5 000kg).

## 2-Part Line • Jib luffed at 30°

with up to 5 tower sections installed

Hook Radius	Maximum Max Capacity – Radius	ft	43	48	52	57	62	67	72	77	82	87	92	97	102	107	112
		m	13.0	14.5	16.0	17.5	19.0	20.5	22.0	23.5	25.0	26.5	28.0	29.5	31.0	32.5	34.0
112 ft 34.0m	17,635 lbs – 39.9 ft 8,000kg – 12.17m	lbs kg	16,150 7,285	13,945 6,325	12,245 5,555	10,880 4,935	9,755 4,425	8,820 4,000	8,025 3,640	7,350 3,335	6,770 3,070	6,250 2,835	5,800 2,630	5,390 2,445	5,025 2,280	4,705 2,135	<b>4,410</b> <b>2,000</b>
97 ft 29.5m	17,635 lbs – 45.1 ft 8000kg – 13.76m	lbs kg	17,635 8,000	16,470 7,470	14,505 6,580	12,930 5,865	11,640 5,280	10,570 4,795	9,655 4,380	8,875 4,025	8,200 3,720	7,605 3,450	7,075 3,210	<b>6,615</b> <b>3,000</b>			
82 ft 25.0m	17,635 lbs – 50.9 ft 8,000kg – 15.51m	lbs kg	17,635 8,000	17,635 8,000	16,955 7,690	15,145 6,870	13,655 6,195	12,425 5,635	11,375 5,160	10,485 4,755	<b>9,700</b> <b>4,400</b>						
67 ft 20.5m	17,635 lbs – 49.8 ft 8,000kg – 15.19m	lbs kg	17,635 8,000	17,635 8,000	16,525 7,495	14,760 6,695	13,325 6,045	<b>12,125</b> <b>5,500</b>									

Note! Maximum hook height with the jib in the luffed position is 164 ft (50.0m), i.e., 5 tower sections. Luffing is NOT available when using 4-part line operation.

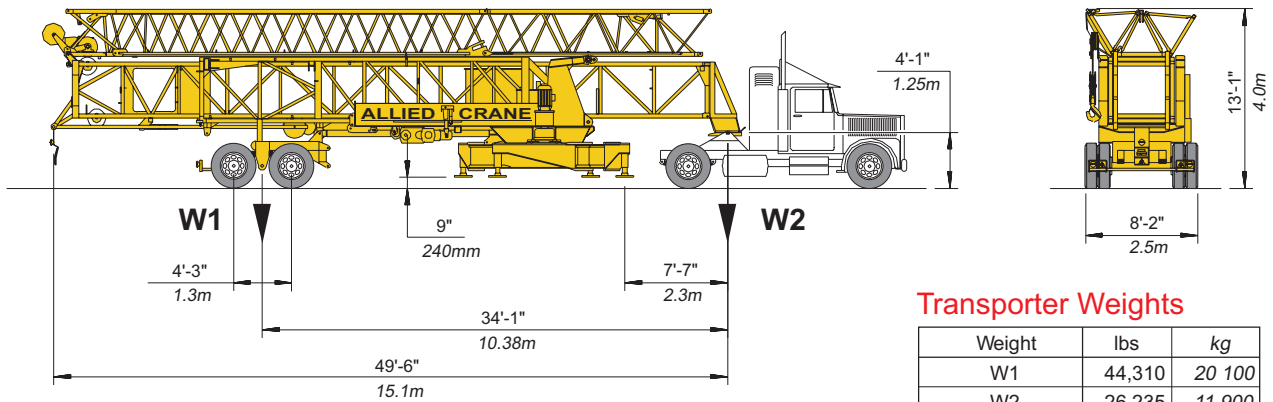
## Weight Specifications

Transport weight without counterweights	70,545 lbs	32,000 kg
Counterweights (total) [Refer to 97 K operations manual for specific information.]	85,540 lbs	38,800 kg
Dead weight without counterweights and load	68,340 lbs	31,000 kg
Jib extension ? #611 48'-11" x 3'-9" x 3'-9" 14.9m x 1.15m x 1.15m	5,290 lbs	2,400 kg
Jib extension ? #612 30'-11" x 3'-9" x 4'-2" 9.42m x 1.15m x 1.27m	2,205 lbs	1,000 kg

Jib extension ? #614 17'-1" x 3'-9" x 3'-7" 5.2m x 1.15m x 1.1m	770 lbs	350 kg
Jib extension ? #615 17'-1" x 3'-9" x 3'-7" 5.2m x 1.15m x 1.1m	770 lbs	350 kg
Jib extension ? #616 17'-1" x 3'-9" x 3'-7" 5.2m x 1.15m x 1.1m	550 lbs	250 kg
Jib extension ? #617 with sheave attachment #650 18'-1" x 3'-9" x 4'-11" 5.52m x 1.15m x 1.5m	605 lbs	275 kg
Tower section 8'-2" x 4'-3" x 4'-3" 2.5m x 1.3m x 1.3m	1,215 lbs	550 kg

Note! Weights and dimensions are approximate. Scale components prior to lifting. Dimensions expressed as Length x Width x Height.





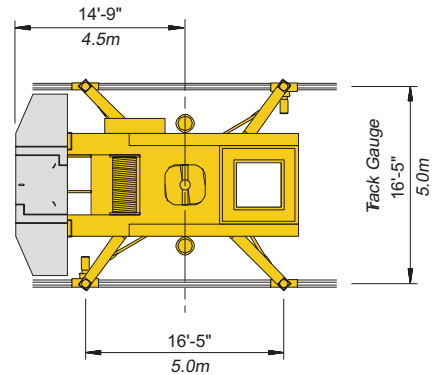
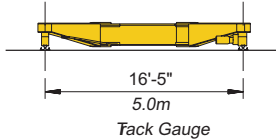
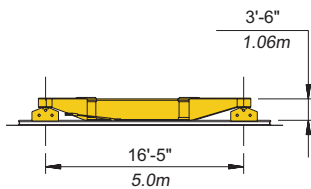
### Transporter Weights

Weight	lbs	kg
W1	44,310	20 100
W2	26,235	11 900
Total *	70,545	32 000

\* Includes towing axle, fifth wheel, jib sections and outriggers with spindle jacks. Does not include counterweights.

### TRANSPORT

Fifth-wheel unit without counterweights



### RAIL-TRAVELLING

## General Information

Maximum corner pressure( <i>crane in operation</i> )	101,170 lbs-force	450 kN
Maximum corner pressure( <i>crane out of operation</i> )	67,450 lbs-force	300 kN
Minimum radius of inner rail	39'-4"	12.0m
Minimum radius of outer rail	55'-9"	17.0m

Specifications subject to change without notice..



## Hoist Speed and Capacity

Hoist Unit LS 2100 (A) 431.000	2-Part Line				
	Gear	Capacity	Line Speed	Capacity	Line Speed
30 hp (22 kW) AC hoist unit 3-speed pole-changing motor Remote-controlled Electromagnetic gear shifting	1	up to 17,635 lbs	@ 9.2 fpm	up to 8 000 kg	@ 2.8 m/min
		up to 17,635 lbs	@ 46 fpm	up to 8 000 kg	@ 14 m/min
		up to 8,155 lbs	@ 92 fpm	up to 3 700 kg	@ 28 m/min
	2	up to 9,260 lbs	@ 21 fpm	up to 4 200 kg	@ 6.4 m/min
		up to 6,615 lbs	@ 1 05 fpm	up to 3 000 kg	@ 32 m/min
		up to 3,305 lbs	@ 2 10 fpm	up to 1 500 kg	@ 64 m/min
4-Part Line					
1	up to 26,455 lbs	@ 4.6 fpm	up to 12 000 kg	@ 1.4 m/min	
	up to 26,455 lbs	@ 23 fpm	up to 12 000 kg	@ 7 m/min	
	up to 16,315 lbs	@ 46 fpm	up to 7 400 kg	@ 14 m/min	
2	up to 18,520 lbs	@ 10.5 fpm	up to 8 400 kg	@ 3.2 m/min	
	up to 13,230 lbs	@ 52.5 fpm	up to 6 000 kg	@ 16 m/min	
	up to 6,615 lbs	@ 1 05 fpm	up to 3 000 kg	@ 32 m/min	

IMPORTANT! Capacities and line speeds indicated will vary depending on the amount of hoist wire rope installed. This crane model may be equipped with a hoist unit other than that specified in the data shown above. To verify, check serial number and refer to 97K operations manual for additional information.

## Motor Information

Drive Unit	Horsepower	Kilowatts	Speed	
Trolley	6.7 hp	5.0 kW	23 - 72 - 148 fpm	7.0 - 22.0 - 45.0 m/min
Swing (fluid coupling)	2 x 5.4 hp	2 x 4.0 kW	0.8 rpm	
Rail Travelling	2 x 5.4 hp	2 x 4.0 kW	0 - 98 fpm	0 - 30.0 m/min

## Power Requirements

480 Volts — 3-phase — 60-cycle — 150 Amperes service with 30 hp (22 kW) AC hoist unit

Specifications subject to change without notice.

