

Grove Maniowoc National Crane Potain

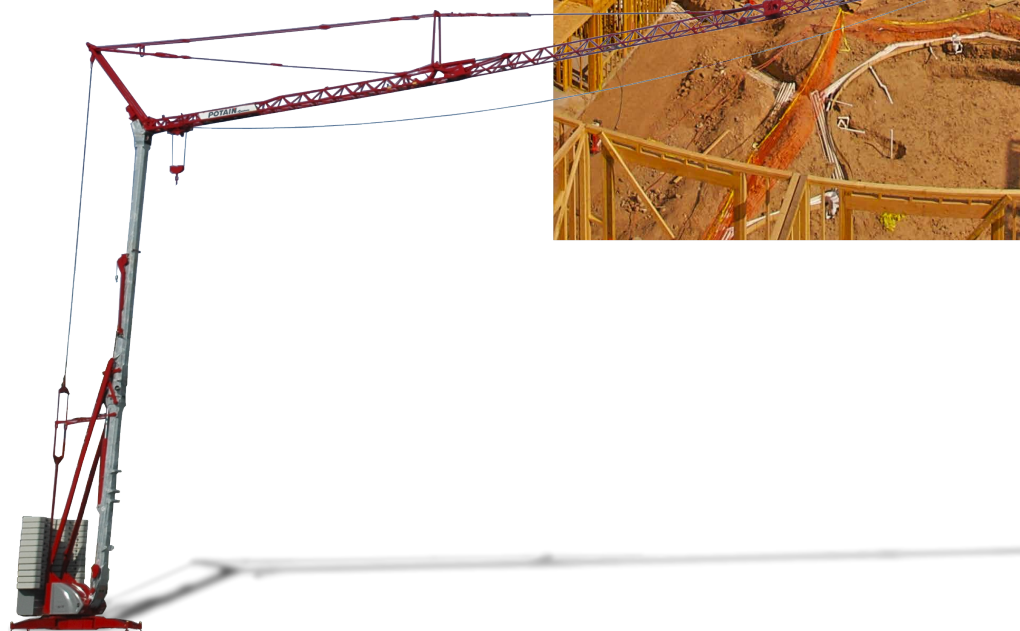


Potain Igo 50

Product Guide

Features

- 4000 kg (8818 lb) maximum capacity
- 1100 kg (2425 lb) capacity at 131 ft (40 m)
- 40 m (131 ft) maximum operating hook radius
- 33,8 m (111 ft) maximum hook height with jib set at 20°
- 23,2 m (76 ft) maximum hook height with jib horizontal



FEM 1.001-A3



Features



Efficiency and reliability

The Igo 50 has a simple and quick set up. While onsite, the crane works quietly, reducing interruption to the surrounding area.

Optional cab

Optional fixed height cab and access ladder allows operator to view the job site from a more advantageous position.



Variable frequency drives

Variable frequency drives provide a lower initial current rush and progressive speed change which can be supported by a smaller generator set than comparable cranes.



North American Highway Axle

Simplify road transport with the North American Highway Axle and adaptation kit 202. Multiple pin positions for optimal weight distribution, DOT compliance and an optional attachable 3rd axle make this an ideal solution for your transportation needs.

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Specifications



Jib

40 m (131 ft) radius standard bi-folding offsettable lattice jib. Removable jib extensions can allow additional horizontal jib operating radii of 28 m (92 ft) or 36 m (118 ft). Two (2) tie bar lines with adjustable lengths allow jib to be offset 8° and 20°. Folds to 14 m (46 ft) radius or 29,6 m (97 ft) radius. Two (2) erecting speeds controlled from the remote, opening and aligning are carried out automatically by two (2) hydraulic cylinders.



Mast

Galvanized folding mast with hydraulic cylinder for erection. Two (2) erecting speeds controlled from the remote. No locking necessary. 360° rotation possible during erection.



Chassis

Outriggers swing and lock into position. 4,5 m (14.8 ft) square outrigger spread with 2,5 m (8.2 ft) slewing radius. Level bubble integrated into the chassis. Outrigger pads are stowed on the crane during transport (540 x 410 mm [21 in x 16 in]). *Optional outrigger pads available at heights of 200 mm (7.9 in) and 400 mm (15.7 in).



*Ballast

5640 kg (12,434 lb) concrete ballast standard. Crane with standard ballast is able to be transported on several *axle sets. *Additional 22 800 kg (50,268 lb) concrete ballast optional.



Optional hydraulic ballasting derrick

Uses the hoisting winch to ballast the crane or dismantle/attach *fifth-wheel. Stows alongside the jib during transport.



Electrical requirement

480 volt, 60 Hz measured at the turntable. Earth rod and electric cable stowed on the crane during transport.



Reeving

SM/DM block for 2 or 4-part line. One pin removal to change between SM and DM. Pure SM1 (section of hook block removed) is possible with gain of 100 kg (220 lb) lifting capacity.



Controls

Wireless remote control provides information to the operator about **wind speed, radius, hook height, load, and moment. Lights and buzzers alert the operator when nearing limits of operation.

Auxiliary remote attached by umbilical cord ensures continual operation in case of battery or other malfunction of the wireless remote control.



*Optional Anemometer

Electronic wind speed meter to alert the operator of wind speed conditions. Provides selective display on the radio remote. Maximum in service wind speed is 72 km/h (45 mph) and maximum out of service wind speed is 150 km/h (93 mph).



Swing

RVF 51 Optima+ slewing mechanism with maximum swing speed of 0.8 RPM. Progressive control of speed with counter-slewing possible, anti-load swinging system makes aligning the load and jib easier. Multiple RPM speeds possible depending upon parameter selected.



Hoist

15 LVF 10 Optima: 15 HP variable frequency hoist with 1t (1.1 USt) line pull. 3 notch, progressive speed change according to the accelerating or decelerating ramps. Optima allows the hoist to adapt its speed to the weight of the load.



Trolley

3 DVF 5: 3 HP variable frequency hoist with 500 kg (1102 lb) line pull. 2 notch winch, progressive speed change according to acceleration or deceleration ramps controlled by the frequency converter.



Hydraulic equipment

Four (4) cylinders and two (2) pumps linked to solenoid valves. Two (2) cylinders for unfolding the jib, one (1) for slewing the derrick, and one (1) for raising the mast.



*Optional transport axle sets

Axle sets are available for both jobsite and highway applications. Jobsite axles are rated at either 10 kph (6 mph) or 25 kph (15.5 mph); highway axle set is rated at 80 kph (50 mph).

*Optional equipment

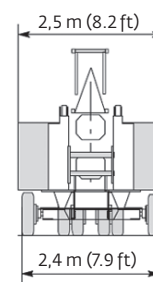
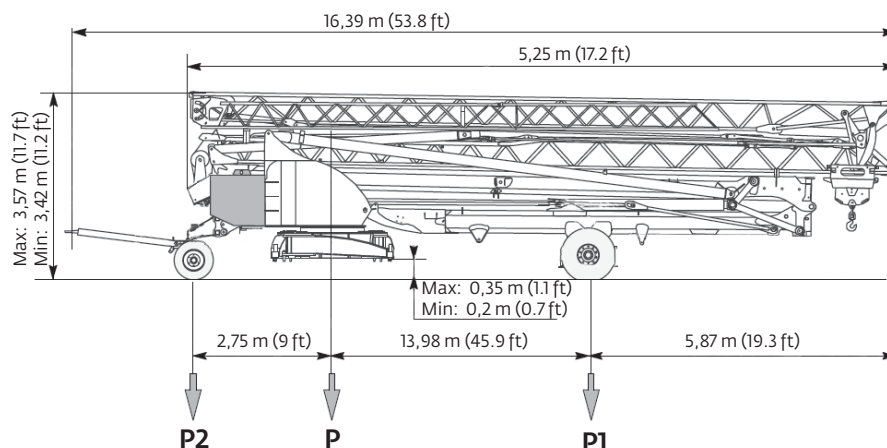
- * STANDARD NORTH AMERICAN SPECIFICATION: includes hydraulic ballasting derrick, high sole plates, Dialog Wind, 12 concrete counterweight slabs, pre-equipment for interference system and Top Zone.
- * High sole plates
- * Fixed height cab and access ladder
- * Transport axles and kits
- * Top Zone
- * Top Tracing
- * Dialog Wind

**Denotes optional equipment*

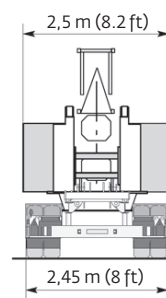
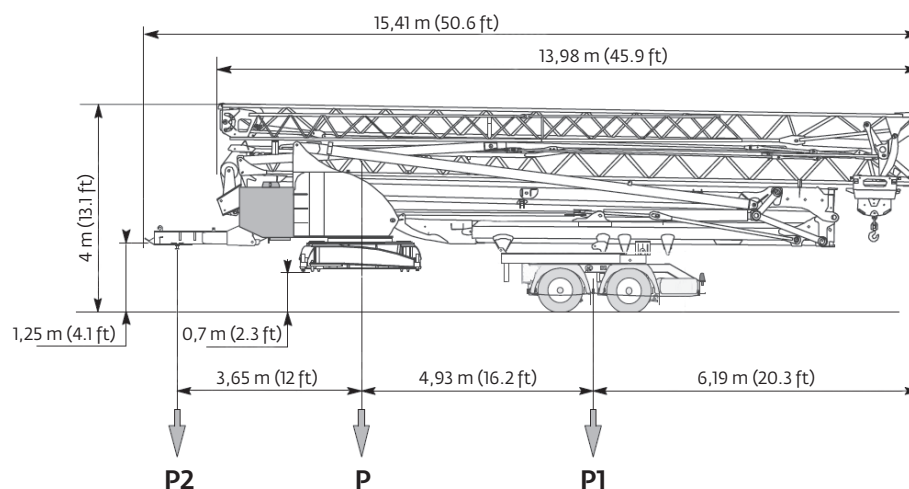


Transport

DJ100 / S120 10 km/h (6 mph)



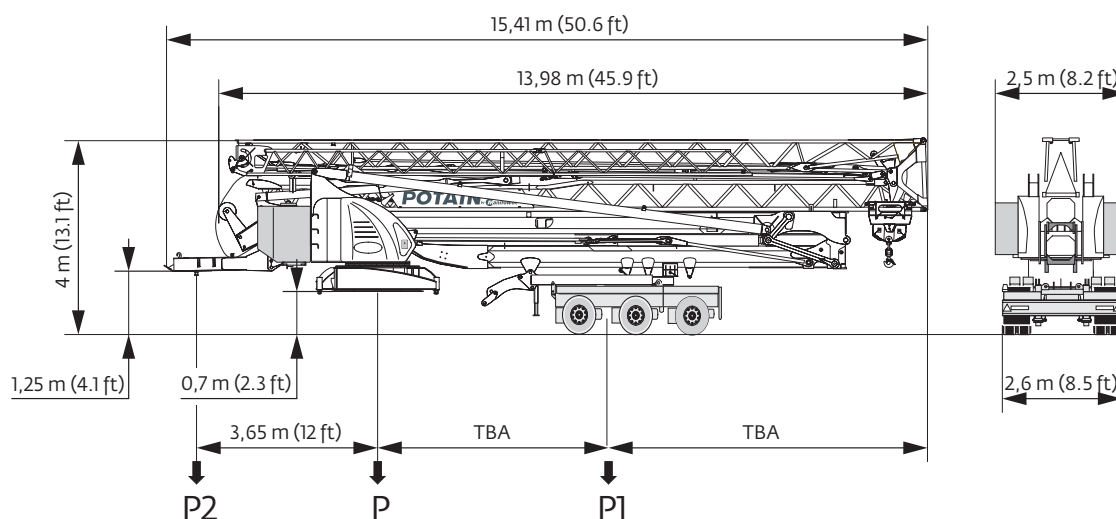
SL122 / J215M 80 km/h (50 mph)



NOTE: Dimensions and weights may vary due to manufacturing tolerances.

Transport

North American Highway Axle



*Other axle sets are available.

Chassis data (in transport position)

	DJ100/S120 25 kph (15.5 mph)		SL122/J215M 80 kph (50 mph)		North American Highway Axle	
	meters	feet	meters	feet	meters	feet
Overall length	16,39	53.8	15,41	50.6	15,41	50.6
Overall height	Max: 3,57 Min: 3,42	Max: 11.7 Min: 11.2	4	13.1	4	13.1
Overall width	2,5	8.2	2,5	8.2	2,6	8.2
Overhang	5,87	19.3	6,19	20.3	TBA	TBA

Weights

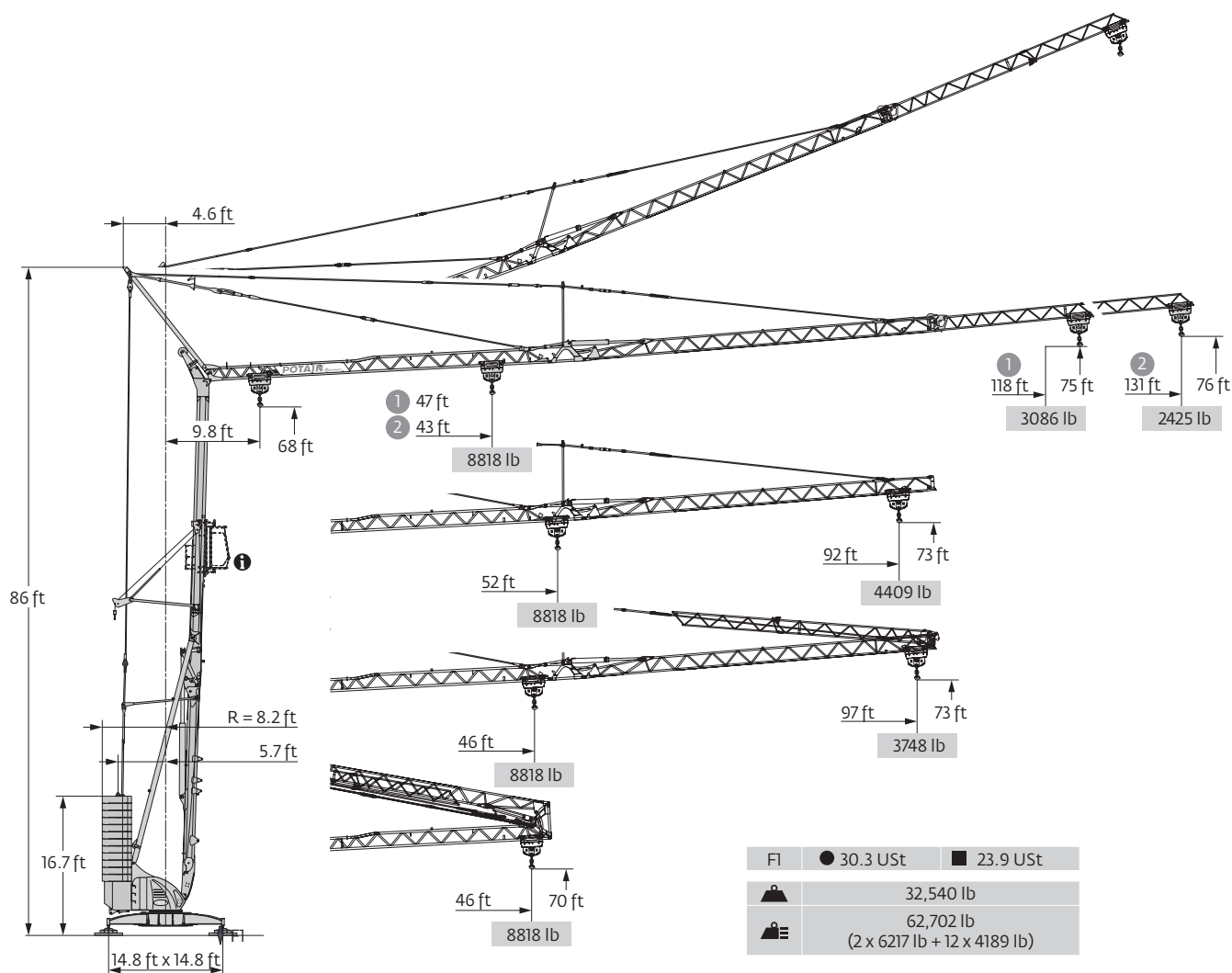
Crane weight less counterweight	14 760 kg	32,540 lb
Counterweight for operation	28 440 kg	62,700 lb
Crane with counterweight	43 240 kg	95,328 lb

Crane with transport equipment

	DJ100/S120 25 kph (15.5 mph)		SL122/J215M 80 kph (50 mph)		North American Highway Axle	
In transport with minimal counterweight:	kilograms	pounds	kilograms	pounds	kilograms	pounds
Gross (P)	21 655	47,741	23 650	52,139	TBA	TBA
Rear (P1)	11 725	25,849	15 400	33,951	TBA	TBA
Front (P2)	9930	21,892	8250	18,188	TBA	TBA
Counterweight in transport (2 blocks):	5640	12,434	5640	12,434	TBA	TBA

NOTE: Dimensions and weights may vary due to manufacturing tolerances.

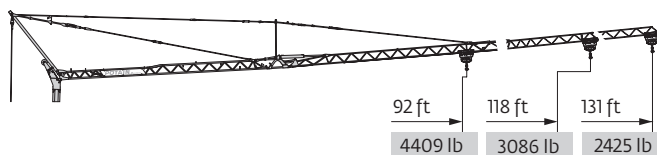
Dimensions



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Load charts

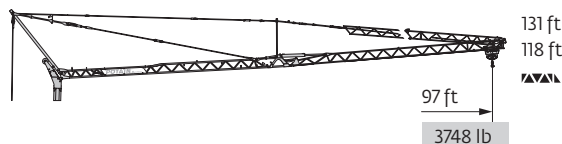


131 ft	10	▶	46	ft
▲▲▲			8818	lb
			4409	lb
			4409	lb

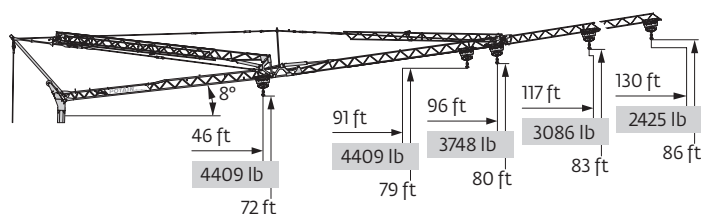
118 ft	10	▶	46	ft
▲▲▲			8818	lb
			4409	lb
			4409	lb

92 ft	10	▶	46	ft
▲▲▲			8818	lb
			4409	lb
			4409	lb

10	▶	43	46	49	52	56	59	62	66	75	79	82	89	98	105	115	121	131	ft
		8818	8080	7419	6845	6360	5930	5556	5214	4409	4134	3968	3616	3175	2932	2612	2436	2205	lb
										4409	4134	3968	3616	3175	2932	2612	2436	2205	lb
										4409	4233	3869	3417	3164	2844	2668	2425		lb
10	▶	47	49	52	56	59	62	66	72	79	83	87	89	98	105	115	118		ft
		8818	8311	7683	7132	6658	6239	5864	5225	4707	4409	4167	4079	3594	3318	2965	2866		lb
											4409	4167	4079	3594	3318	2965	2866		lb
											4409	4321	3825	3549	3197	3086			lb
10	▶			52	56	59	62	66	72	75	82	85	89	92					ft
				8818	8014	7485	7011	6592	5886	5578	5049	4828	4608	4409					lb
														4409					lb
														4409					lb



10	▶	46	49	52	56	59	62	66	72	81	82	85	89	97	ft
		8818	8058	7441	6911	6449	6041	5677	5060	4409	4332	4167	3946	3527	lb
										4409	4332	4167	3946	3527	lb
												4409	4178	3748	lb



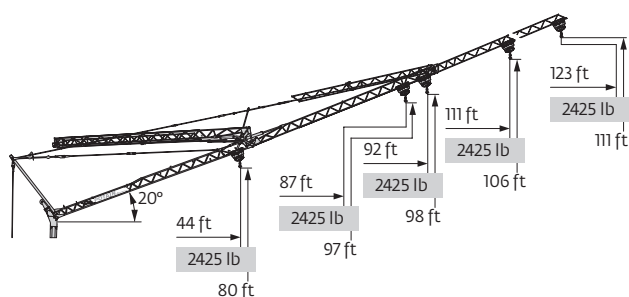
131 ft	10	▶	74	78	82	89	98	105	115	121	130	ft
▲▲▲			4409	4134	3924	3571	3131	2888	2579	2403	2205	lb
			4409	4189	3825	3373	3131	2811	2624	2425		lb

118 ft	10	▶		82	86	89	98	105	115	117	ft
▲▲▲				4409	4167	4023	3549	3274	2932	2866	lb
				4409	4266	3770	3494	3153	3086		lb

92 ft	10	▶				91	ft
▲▲▲						4409	lb
						4409	lb

131 ft	10	▶		80	84	89	96	ft
118 ft				4409	4167	3902	3527	lb
▲▲▲				4409	4123	3748		lb

131 ft	10	▶	46	ft
118 ft			4409	lb
92 ft			4409	lb



131 ft	10	▶									123	ft
▲▲▲											2205	lb
											2425	lb

118 ft	10	▶									111	ft
▲▲▲											2205	lb
											2425	lb

92 ft	10	▶				87	ft
▲▲▲						2205	lb
						2425	lb

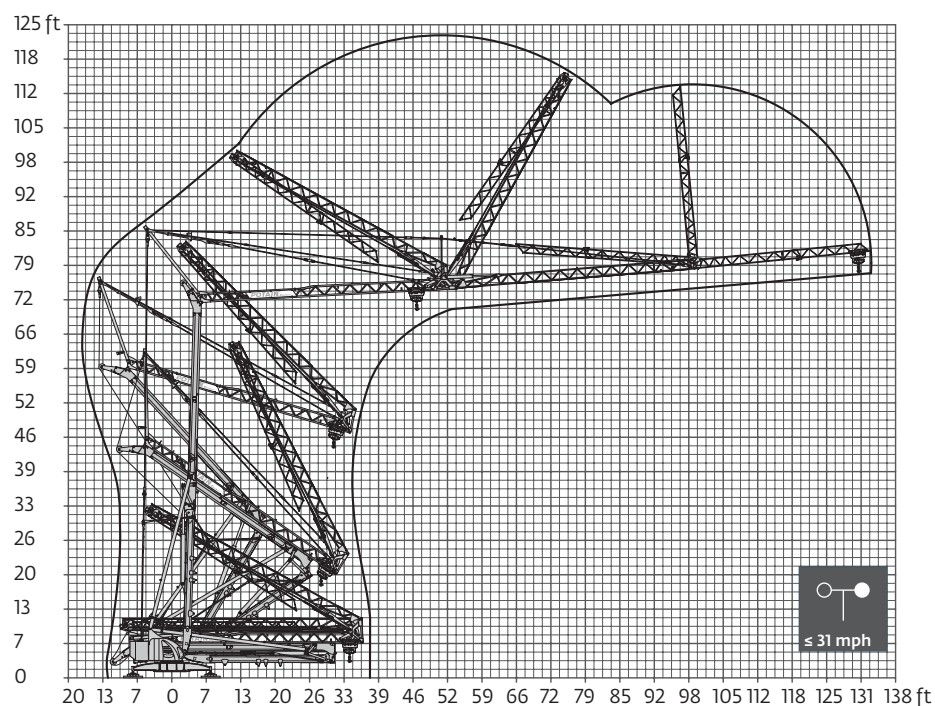
131 ft	10	▶				92	ft
118 ft						2205	lb
▲▲▲						2425	lb

131 ft	10	▶	44	ft
118 ft			2205	lb
92 ft			2425	lb

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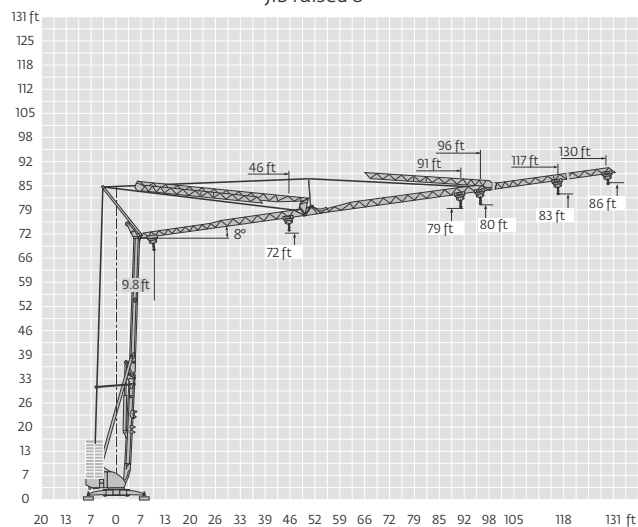


Crane profile

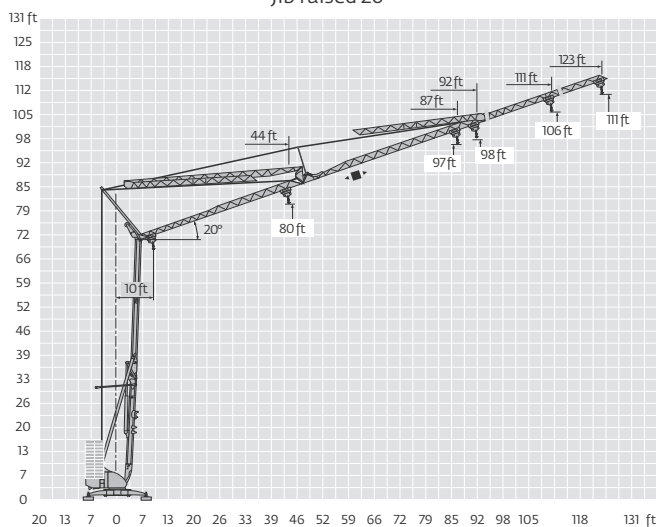


Igo 50: Raised jibs

Jib raised 8°



Jib raised 20°



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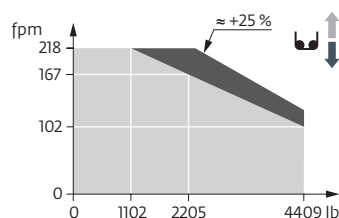
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Mechanisms

480 V - 60 Hz													hp	kW
	15 LVF 10 Optima	ft/min	12	59	102	167	218	6	30	51	84	108	15	11
		lb	4409	4409	4409	2205	1102	8818	8818	8818	4409	2205		
	3 DVF 5	ft/min	49 - 98 - 148 (0 → 2205 lb) 49 - 98 - 135 (2205 → 8818 lb)										3	2.2
	RVF 51 Optima+	rpm	0 → 0.8										5.5	4

 IEC 60204-32	kVA
400 V (+10% -10%) 50 Hz / 480 V (+6% -10%) 60 Hz	 → 17 kVA  → 19 kVA

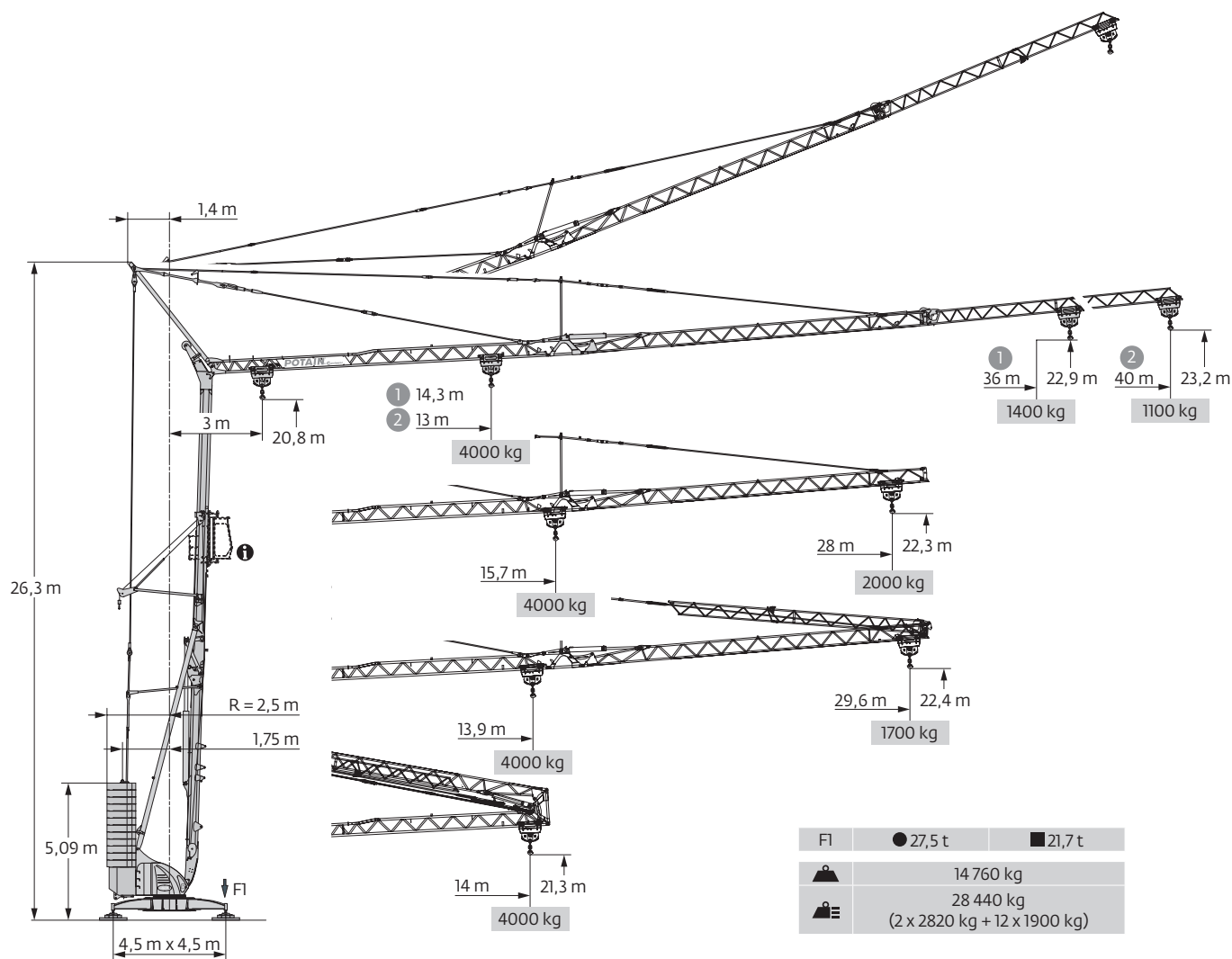
15 LVF 10 Optima



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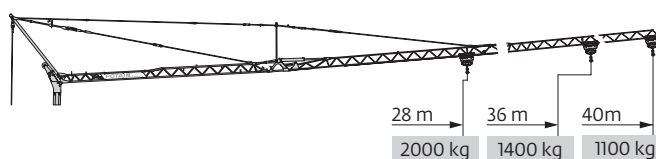
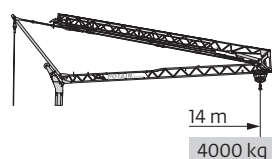
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Metric dimensions



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Metric load charts



40 m	3	▶	14	m
▲▲▲			4000	kg
			2000	kg
			2000	kg

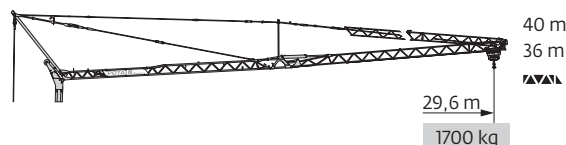
36 m	3	▶	14	m
▲▲▲			4000	kg
			2000	kg
			2000	kg

28 m	3	▶	14	m
▲▲▲			4000	kg
			2000	kg
			2000	kg

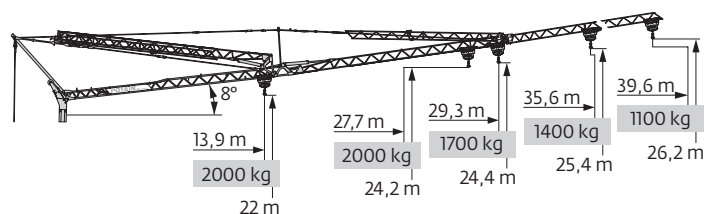
3	▶	13	14	15	16	17	18	19	20	23	24,2	25	27	30	32	35	37	40	m
		4000	3665	3365	3105	2885	2690	2520	2365	2000	1875	1800	1640	1440	1330	1185	1105	1000	kg
										2000	1875	1800	1640	1440	1330	1185	1105	1000	kg
											2000	1920	1755	1550	1435	1290	1210	1100	kg

3	▶	14,3	15	16	17	18	19	20	22	24	25,3	26,6	27	30	32	35	36	m
		4000	3770	3485	3235	3020	2830	2660	2370	2135	2000	1890	1850	1630	1505	1345	1300	kg
											2000	1890	1850	1630	1505	1345	1300	kg
												2000	1960	1735	1610	1450	1400	kg

3	▶			15,7	17	18	19	20	22	23	25	26	27	28	m
				4000	3635	3395	3180	2990	2670	2530	2290	2190	2090	2000	kg
														2000	kg
														2000	kg



3	▶	13,9	15	16	17	18	19	20	22	24,7	25	25,8	27	29,6	m	
▲▲▲			4000	3655	3375	3135	2925	2740	2575	2295	2000	1965	1890	1790	1600	kg
											2000	1965	1890	1790	1600	kg
												2000	1895	1700		kg



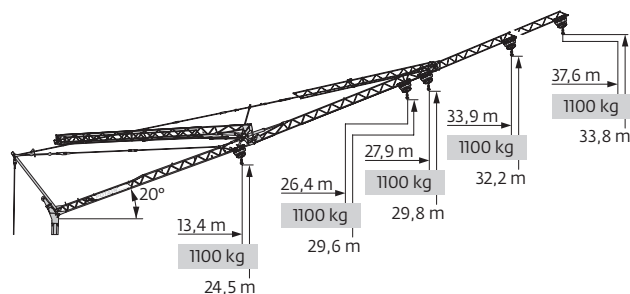
40 m	3	▶	22,7	23,9	25	27	30	32	35	37	39,6	m
▲▲▲			2000	1875	1780	1620	1420	1310	1170	1090	1000	kg
				2000	1900	1735	1530	1420	1275	1190	1100	kg

36 m	3	▶	25,1	26,3	27	30	32	35	35,6	m
▲▲▲			2000	1890	1825	1610	1485	1330	1300	kg
				2000	1935	1710	1585	1430	1400	kg

28 m	3	▶				27,7	m
▲▲▲						2000	kg
						2000	kg

40 m	3	▶	24,4	25,5	27	29,3	m
▲▲▲			2000	1890	1770	1600	kg
				2000	1870	1700	kg

40 m	3	▶	13,9	m
36 m			2000	kg
28 m			2000	kg



40 m	3	▶	37,6	m
▲▲▲			1000	kg
			1100	kg

36 m	3	▶	33,9	m
▲▲▲			1000	kg
			1100	kg

28 m	3	▶	26,4	m
▲▲▲			1000	kg
			1100	kg

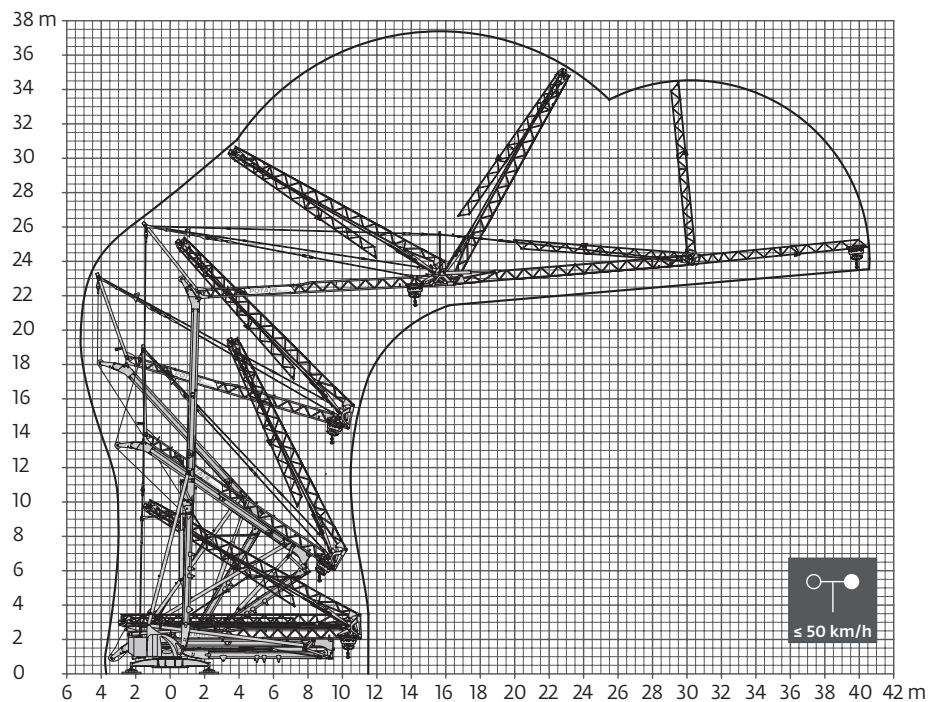
40 m	3	▶	27,9	m
▲▲▲			1000	kg
			1100	kg

40 m	3	▶	13,4	m
▲▲▲			1000	kg
			1100	kg

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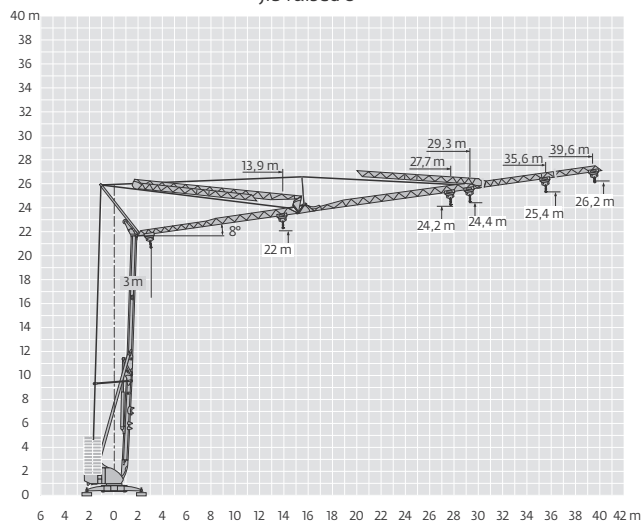


Metric crane profile

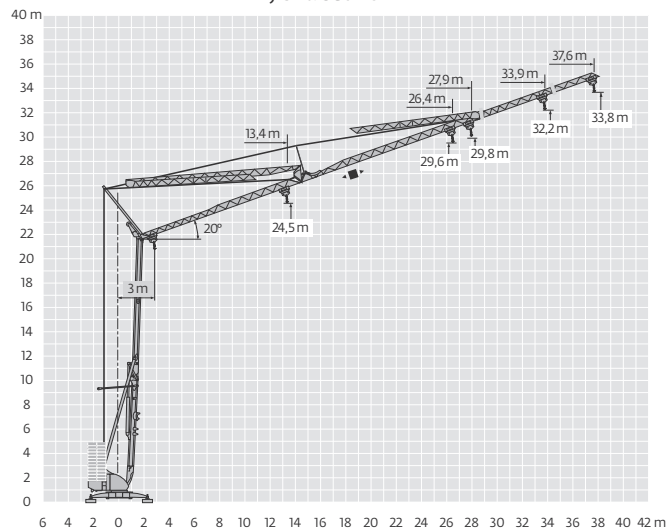


Igo 50: Raised jibs

Jib raised 8°



Jib raised 20°



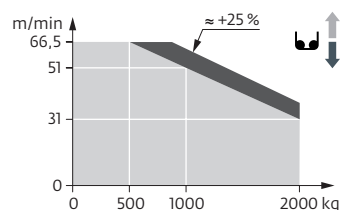
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Metric mechanisms

480 V - 60 Hz													hp	kW
	15 LVF 10 Optima	m/min	3,6	18	31	51	66,5	1,8	9	15,5	25,5	33	15	11
		kg	2000	2000	2000	1000	500	4000	4000	4000	2000	1000		
	3 DVF 5	m/min	15 - 30 - 45 (0 → 1000 kg) 15 - 30 - 41 (1000 → 4000 kg)										3	2,2
	RVF 51 Optima+	rpm	0 → 0,8										5,5	4

 IEC 60204-32	kVA
400 V (+10% -10%) 50 Hz / 480 V (+6% -10%) 60 Hz	 → 17 kVA  → 19 kVA

15 LVF 10 Optima



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Symbols glossary



Anemometer



Hydraulic equipment



Reactions in service



Slewing



Ballast



Jib



Reactions out of service



Slewing radius



Chassis



Mast



Reeving



Standard equipment



Consult us



Optional hydraulic ballasting derrick



Reeving 2-part



Total ballast weight



Controls



Optional transport axle sets



Reeving 4-part



Trolleying



Electrical equipment



Options



Required power



Weight without load, without ballast, without transport axles, with max. jib and standard height



Hoisting

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Manitowoc Cranes

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Brazil

Passo Fundo

China

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Zhangjiagang

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Niella Tanaro

Portugal

Baltar

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USA

Manitowoc

Port Washington

Shady Grove

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