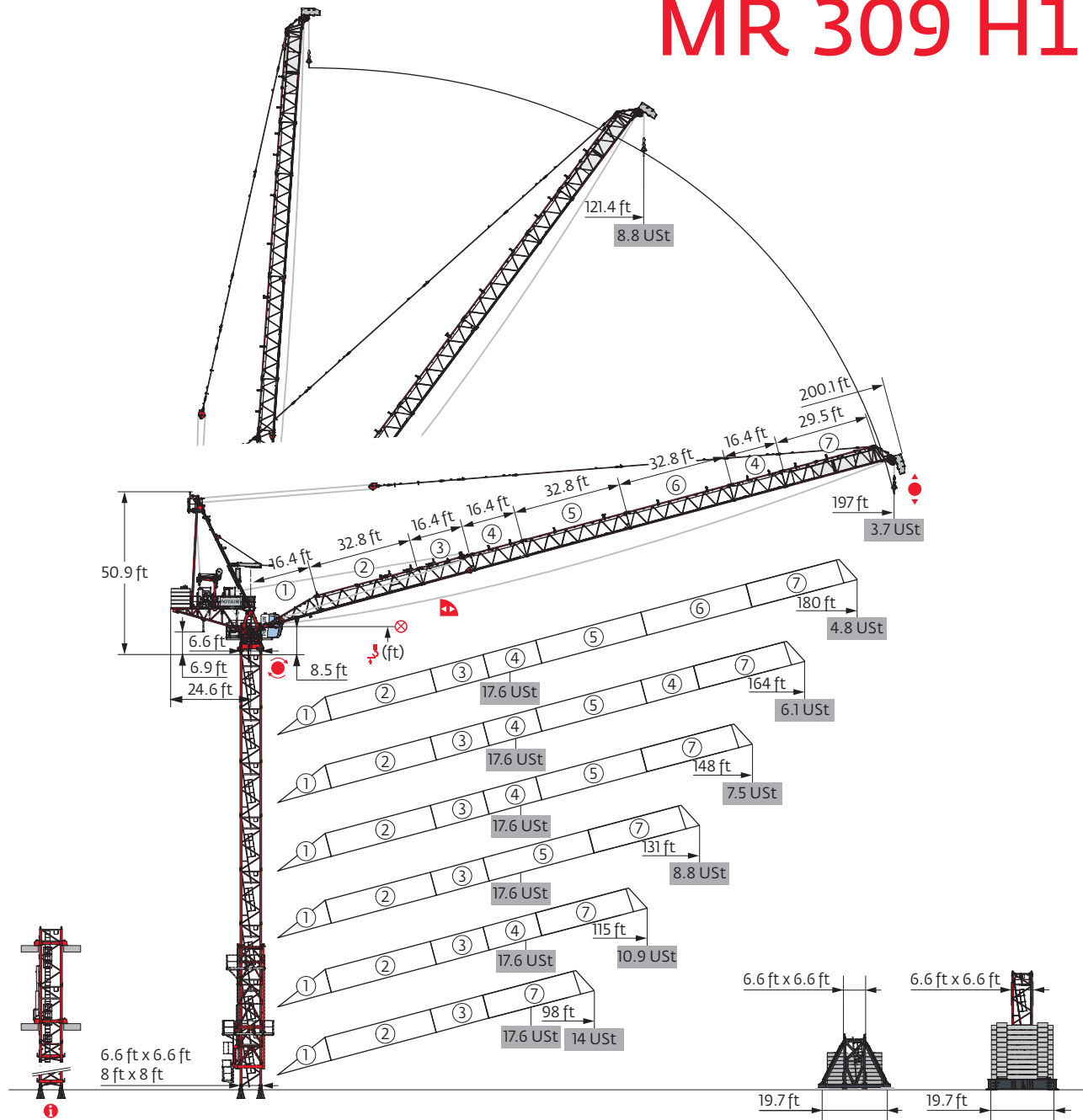


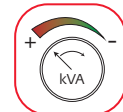
## MR 309 H16



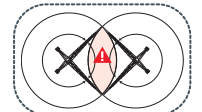
Potain Plus



Power Control



Anti-collision systems



Mast - Reactions

**6.6 ft - P 63A**

▲▼▲ (ft)	98	115	131	148	164	180	197
↕ (ft)	179.1	179.1	184.4	179.1	173.6	173.6	162.7
↕/P+ (ft)	179.1	179.1	184.4	179.1	173.6	173.6	162.7
	10.9 ft	2	2	1	2	0	2
	16.4 ft	7	7	8	7	8	6
	32.8 ft	1	1	1	1	1	1
F2 (Ust)	● 235	237	243	242	241	244	241
	■ 279	297	330	333	335	354	340
F3 (Ust)	● 174	176	180	180	179	181	181
	■ 220	237	268	272	274	292	281

**6.6 ft - V 60A -**

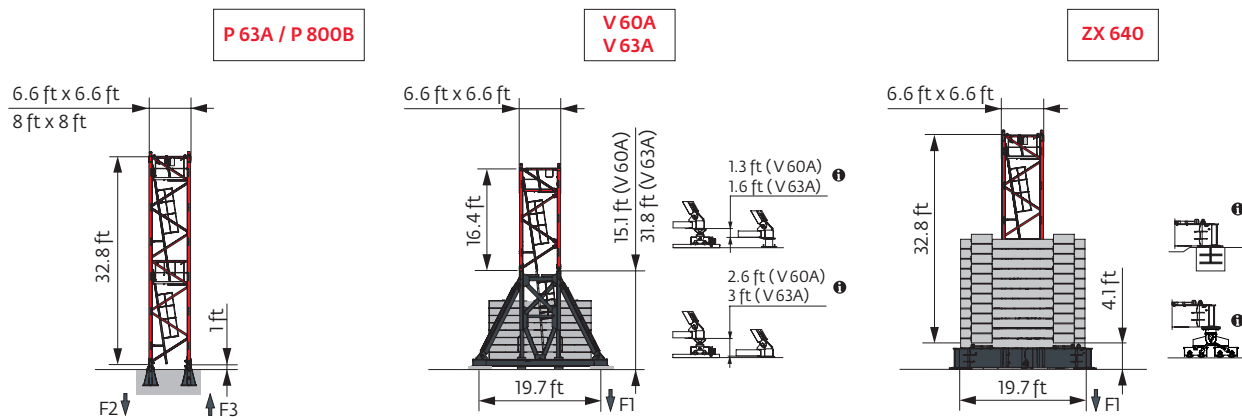
▲▼▲ (ft)	98	115	131	148	164	180	197
↕ (ft)	171.3	171.3	160.1	154.9	149.3	143.7	132.9
↕/P+ (ft)	171.3	171.3	160.1	154.9	149.3	143.7	132.9
	10.9 ft	0	0	2	0	1	2
	16.4 ft	9	9	7	8	7	6
F1 (Ust)	● 130	131	129	128	129	128	126
	■ 130	135	131	131	132	133	128

**6.6 ft - V 63A -**

▲▼▲ (ft)	98	115	131	148	164	180	197
↕ (ft)	165.7	171.3	171.3	171.3	165.7	165.7	160.4
↕/P+ (ft)	165.7	171.3	171.3	171.3	165.7	165.7	160.4
	10.9 ft	1	0	0	1	1	2
	16.4 ft	7	8	8	8	7	6
F1 (Ust)	● 129	135	135	137	141	145	144
	■ 127	140	146	156	158	169	170

**6.6 ft - ZX 640 -**

▲▼▲ (ft)	98	115	131	148	164	180	197
↕ (ft)	176.8	182.1	182.1	176.8	176.8	176.8	165.7
↕/P+ (ft)	176.8	182.1	182.1	176.8	176.8	176.8	165.7
	10.9 ft	0	2	2	0	0	2
	16.4 ft	8	7	7	8	8	6
	32.8 ft	1	1	1	1	1	1
F1 (Ust)	● 132	137	141	141	145	149	147
	■ 135	150	160	161	172	182	175



When "ASCE" is noted in this data sheet it is referring to 115 mph Wind Zone, Exposure B, Design Wind Speed = 98 mph. See back cover for design wind speed calculations.

**i** Other mast compositions - Please consult us.



Motorized accesses: adapted mast composition, base ballast and reactions.

8 ft - P 800B							
Span (ft)	98	115	131	148	164	180	197
$r_1$ (ft)	240.2	234.9	229.3	223.8	218.5	212.9	207.4
$r_2/P_2$ (ft)	240.2	234.9	229.3	223.8	218.5	212.9	207.4
10.9 ft	1	2	0	1	2	0	1
16.4 ft	5	3	7	5	3	6	5
6.6 ft	1	1	1	1	1	1	1
16.4 ft	8	9	6	7	8	6	6
F2 (Ust)	● 236	236	232	232	232	229	230
	■ 399	406	394	401	407	401	403
F3 (Ust)	● 163	163	160	160	160	158	160
	■ 327	334	323	330	336	331	334



Anchorage





Base ballast

 (USt) / 6.6 ft - V 60A - 

Δ (ft)	98	115	131	148	164	180	197
171.3	145.5	145.5					
160.1	132.3	145.5	145.5				
154.9	132.3	132.3	145.5	145.5			
149.3	132.3	132.3	132.3	145.5	145.5		
143.7	119.1	132.3	132.3	132.3	145.5	145.5	
132.9	119.1	119.1	119.1	132.3	132.3	145.5	145.5
116.5	105.8	105.8	105.8	119.1	119.1	119.1	132.3
100.1	92.6	92.6	92.6	105.8	105.8	105.8	119.1
83.7	79.4	79.4	92.6	92.6	92.6	105.8	105.8

 (USt) / 6.6 ft - V 63A - 

Δ (ft)	98	115	131	148	164	180	197
171.3	158.7	158.7	158.7				
165.7	145.5	145.5	158.7	158.7	172	185.2	
160.4	145.5	145.5	145.5	158.7	158.7	172	185.2
144	132.3	132.3	132.3	145.5	145.5	158.7	158.7
127.6	119.1	119.1	119.1	132.3	132.3	132.3	145.5
111.2	105.8	105.8	105.8	119.1	119.1	119.1	132.3
94.8	92.6	92.6	92.6	105.8	105.8	105.8	119.1
78.4	79.4	79.4	79.4	92.6	92.6	92.6	105.8



 (USt) / 6.6 ft - ZX 640 - 

Δ (ft)	98	115	131	148	164	180	197
182.1	154.3	165.4					
176.8	143.3	143.3	154.3	165.4	176.4	187.4	
165.7	132.3	143.3	143.3	143.3	154.3	165.4	187.4
149.3	121.3	121.3	132.3	132.3	143.3	143.3	154.3
132.9	110.2	110.2	110.2	121.3	121.3	132.3	143.3
116.5	99.2	99.2	99.2	110.2	110.2	121.3	121.3
100.1	77.2	88.2	88.2	88.2	99.2	99.2	110.2
83.7	66.1	77.2	77.2	77.2	88.2	88.2	99.2

Load curves



Δ (ft)	66	72	82	89	98	101.7	105	115	117.6	121	131	133.4	138	148	149.3	154	164	165.1	171	180	181	ft		
17.6 USt																								
8.8 USt																								
180	15.7 → 72.2	119.1 - 122.5	17.6	17.6	15.1	13.6	11.8	-	10.7	9.4	-	8.8	7.9	-	7.2	6.4	-	5.8	5.1	-	4.7	4.1	4.1	USt
	15.7 → 72.2	119.1 - 122.5	17.6	17.6	15.1	13.6	11.8	-	10.7	9.4	-	8.8	7.9	-	7.3	6.4	-	5.9	5.3	-	4.8	4.3	4.2	USt P+
164	15.1 → 73.8	122.3 - 125.9	17.6	17.6	15.5	14.1	12.2	-	11.1	9.7	-	8.9	8.2	-	7.6	6.7	-	6.2	5.5	5.4				USt
	15.1 → 73.8	122.3 - 125.9	17.6	17.6	15.5	14.1	12.2	-	11.1	9.7	-	8.9	8.2	-	7.6	6.8	-	6.3	5.6	5.5				USt P+
148	14.4 → 75.5	124.7 - 128.4	17.6	17.6	15.9	14.4	12.5	-	11.5	10	-	9.2	8.5	-	7.9	7	6.8						USt	
	14.4 → 75.5	124.7 - 128.4	17.6	17.6	15.9	14.4	12.5	-	11.5	10	-	9.2	8.5	-	7.9	7	6.9						USt P+	
131	13.5 → 75.5	127.4 - 131.3	17.6	17.6	16	14.6	12.7	-	11.7	10.3	-	9.5	8.8	8.6								USt		
	13.5 → 75.5	127.4 - 131.3	17.6	17.6	16	14.6	12.7	-	11.7	10.3	-	9.5	8.8	8.6								USt P+		
115	12.1 → 77.1		17.6	17.6	16.5	15.1	13.3	-	12.3	10.9	10.6												USt	
	12.1 → 77.1		17.6	17.6	16.5	15.1	13.3	-	12.3	10.9	10.6												USt P+	
98	10.2 → 78.7		17.6	17.6	16.9	15.6	14	13.5														USt		
	10.2 → 79.1		17.6	17.6	16.9	15.6	14	13.5														USt P+		











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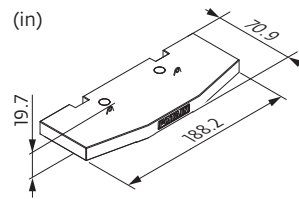
Δ (ft)	66	72	82	89	98	101.7	105	115	117.6	121	131	133.4	138	148	149.3	154	164	165.1	171	180	181	197	ft		
8.8 USt																									
197	15.4 → 121.4	8.8	8.8	8.8	8.8	8.8	-	8.8	8.8	-	8.8	7.8	-	7.3	6.5	-	6	5.3	-	4.9	4.4	-	3.5	USt	
	15.4 → 121.4	8.8	8.8	8.8	8.8	8.8	-	8.8	8.8	-	8.8	7.8	-	7.3	6.5	-	6.1	5.4	-	5.1	4.5	-	3.7	USt P+	
180	15.7 → 121.4	8.8	8.8	8.8	8.8	8.8	-	8.8	8.8	-	8.8	7.9	-	7.4	6.6	-	6.2	5.5	-	5.1	4.6	4.6			USt
	15.7 → 121.4	8.8	8.8	8.8	8.8	8.8	-	8.8	8.8	-	8.8	7.9	-	7.4	6.7	-	6.2	5.6	-	5.3	4.8	4.7			USt P+
164	15.1 → 124.7	8.8	8.8	8.8	8.8	8.8	-	8.8	8.8	-	8.8	8.3	-	7.7	7	-	6.6	6	5.9					USt	
	15.1 → 124.7	8.8	8.8	8.8	8.8	8.8	-	8.8	8.8	-	8.8	8.3	-	7.7	7.1	-	6.6	6.1	6					USt P+	
148	14.4 → 128	8.8	8.8	8.8	8.8	8.8	-	8.8	8.8	-	8.8	8.6	-	8.1	7.4	7.3							USt		
	14.4 → 128	8.8	8.8	8.8	8.8	8.8	-	8.8	8.8	-	8.8	8.6	-	8.1	7.5	7.4							USt P+		
131	13.5 → 133.4	8.8	8.8	8.8	8.8	8.8	-	8.8	8.8	-	8.8	8.8	8.8										USt		
	13.5 → 133.4	8.8	8.8	8.8	8.8	8.8	-	8.8	8.8	-	8.8	8.8	8.8										USt P+		
115	12.1 → 117.6	8.8	8.8	8.8	8.8	8.8	-	8.8	8.8	8.8													USt		
	12.1 → 117.6	8.8	8.8	8.8	8.8	8.8	-	8.8	8.8	8.8													USt P+		
98	10.2 → 101.7	8.8	8.8	8.8	8.8	8.8	8.8																USt		
	10.2 → 101.7	8.8	8.8	8.8	8.8	8.8	8.8																USt P+		



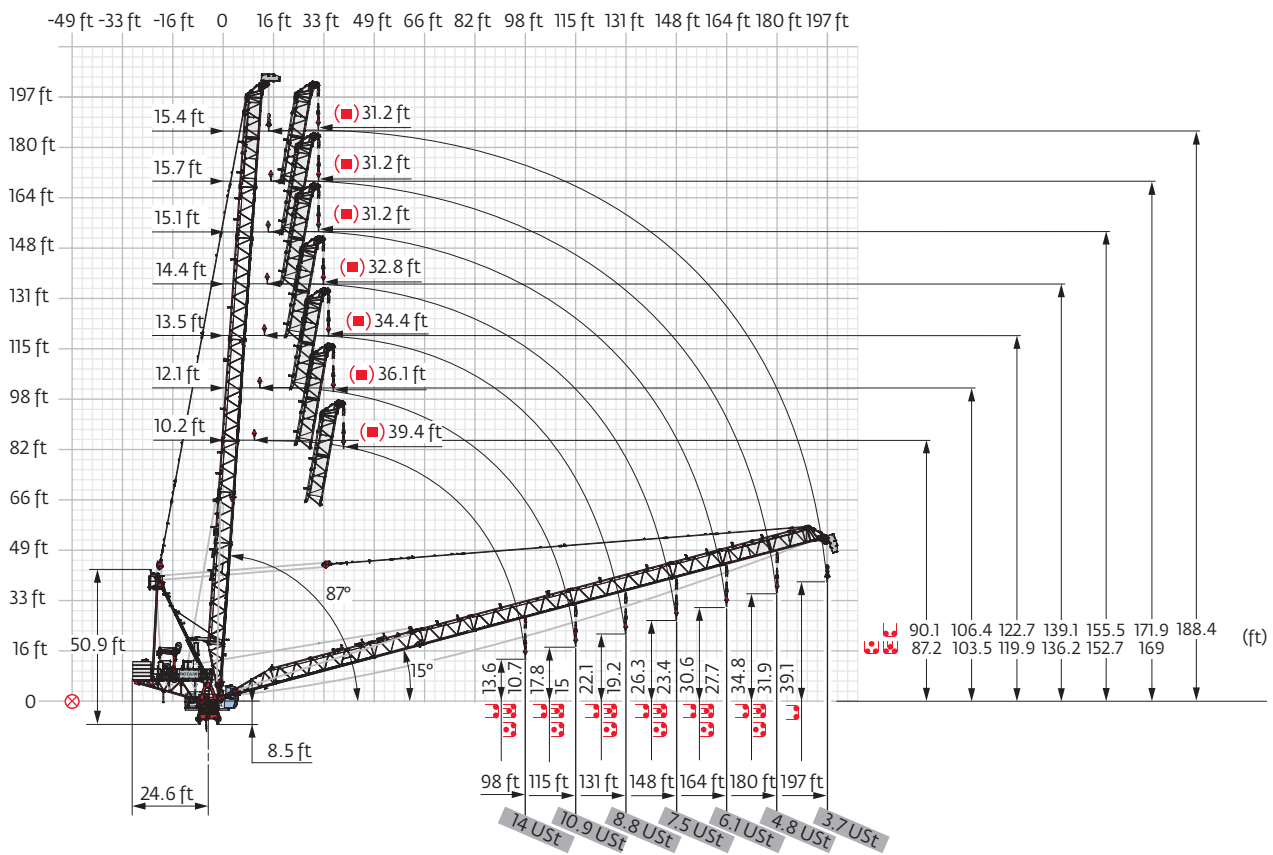
Jib weight & counter-jib ballast

	 (lb) (+/- 5%)			 (lb)
		 / 		
			15,873 lb	 (lb)
197 ft	24,030 (  )	14,771 / 9,259 (  )	5	79,366
180 ft	23,810	14,771 / 9,039	5	79,366
164 ft	22,487	14,771 / 7,716	5	79,366
148 ft	20,944	14,771 / 6,173	5	79,366
131 ft	18,739	9,700 / 9,039	5	79,366
115 ft	17,416	9,700 / 7,716	5	79,366
98 ft	15,873	9,700 / 6,173	5	79,366

CDJ - 15,873 lb



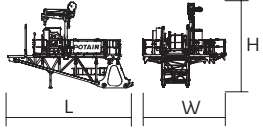
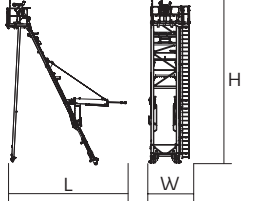

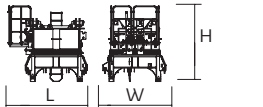
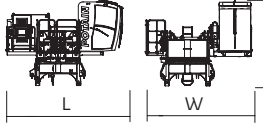

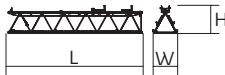

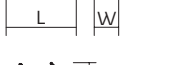

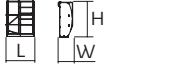

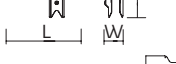
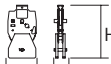
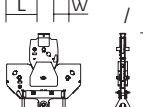
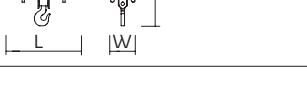

Luffing jib

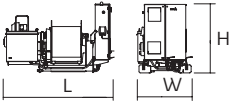
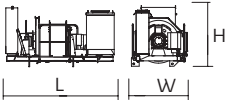
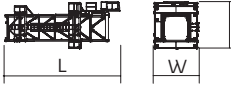
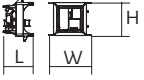
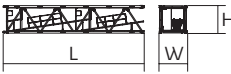


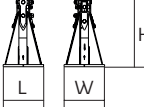

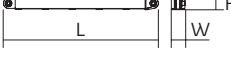
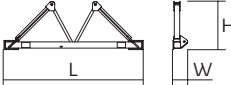




Dimensions and weight

Slewing crane part:  197 ft -  90 HPL™



Slewing crane part		L (ft)	W (ft)	H (ft)	lb (+/- 5%)
Counter-jib	 100 VVF	28.3	16.5	19.3	24,482
Strut		23.6	9	37.8	14,440
Cab	 Ultra View	17.1	6.4	8.2	4,079
Towerhead	 6.6 ft	10.2	8.1	9.7	20,944
		17.1	15.7	12.5	25,023
Jib section	 ①	19.3	7.2	6.1	3,086
	 ②	33.4	6.2	6.9	3,086
	 ⑤	33.4	6	6.6	2,866
	 ⑥	33.4	6	6.6	2,756
	 ⑦	31	6	6.6	3,086
	 ③	17	6	6.9	2,116
	 ④	17	6	6.6	1,521
		5.9	5.1	7.4	959
Jib nose inspection platform		4.7	2.5	6	187
Pulley block		4.1	1	4.4	342
		2 5.3	0.9 1.5	3.8 5.6	805 915
		5.3	1.5	7.8	1,720

Hoisting winch (+ rope)		90 HPL™ 132 HPL™	8.4 11.1	4.3 5.7	5.6 6.3	5,875 11,552
Luffing winch (+ rope)		100 VVF	10.6	5.5	5.9	7,948
<b>Crane tower</b>			<b>L (ft)</b>	<b>W (ft)</b>	<b>H (ft)</b>	<b>lb (+/- 5%)</b>
T 61 T 851		▧ 6.6 ft ▧ 8 ft	35.5 36.7	13.6 15.9	14.7 19	21,385 34,723
K80/KR60-2 Connecting mast		▧ 8/6.6 ft	7.3	10.7	8.1	8,852
K 649B KM 649E KRM 6410B KRM 849B		▧ 6.6 ft ▧ 6.6 ft ▧ 6.6 ft ▧ 8 ft	33.6 33.8 33.6 33.6	6.8 6.7 6.9 8.4	6.7 6.7 6.8 8.3	11,663 10,692 15,653 17,196
K 649A KMT 649A KR 649A KRMT 649A K 849A KMT 849A KR 849A KRMT 849A		▧ 6.6 ft ▧ 6.6 ft ▧ 6.6 ft ▧ 6.6 ft ▧ 8 ft ▧ 8 ft ▧ 8 ft ▧ 8 ft	17.2 17.2 17.2 17.2 17.2 17.2 17.2 17.2	6.8 6.8 6.9 6.9 8.3 8.4 8.3 8.4	6.7 6.7 6.8 6.8 8.2 8.3 8.2 8.3	6,184 5,666 7,165 6,724 7,496 6,945 9,458 9,017
K 649C KMT 649C KRMT 649C KRMT 849C		▧ 6.6 ft ▧ 6.6 ft ▧ 6.6 ft ▧ 8 ft	11.7 11.7 11.7 11.7	6.8 6.8 6.9 8.4	6.7 6.7 6.8 8.3	4,559 4,542 5,401 7,066
Fixing angles		P 63A / P 800B	2.5	2.5	4.2	1,025
Basic mast unit		V 60A V 63A	16.4 32.9	7.9 7.9	7.9 7.9	10,494 16,887
Struts		V 60A V 63A	14.8 14.8	1 1.1	1 1.1	1,036 1,235
Half-bearer		V 60A V 63A	22 22	2.3 2.3	7.6 7.6	4,057 4,101
1/2 Cross girder		ZX 640	14.3	3.3	5.1	7,319
Cross girder		ZX 640	30	3.9	5.1	15,168

Mechanisms

480 V - 60 Hz													hp	kW	
	90 HPL™ 40	fpm	133	174	249	366	548	69	90	130	190	274	90	66	1,768 ft
		USt	8.8	6.6	4.4	2.2	0.6	17.6	13.2	8.8	4.4	1.5			
	132 HPL™ 40	fpm	198	259	363	525	671	102	135	189	269	336	132	98	3,740 ft
		USt	8.8	6.6	4.4	2.2	0.8	17.6	13.2	8.8	4.4	2			
	100 VVF 50		2 min									100	75		
	RVF 172 Optima+	rpm	0 → 0.8									2 x 10	2 x 7.5		

IEC 60204-32		
480 V (+6% -10%) 60 Hz	90 HPL™ + 100 VVF: 171 → 95 kVA 132 HPL™ + 100 VVF: 205 → 112 kVA	

These mast combinations meet the EN 14439 and ASME B30.3-2016 specifications for “out of service” wind conditions, provided the illustrated wind speed matches required design wind speed for the location of the tower crane. The “out of service” design wind speed was determined in accordance with ASCE 7-10, Figure 26.5-1A. The wind velocity, used for this configuration was 98 mph (158 kph), which represents a nominal design 3-second wind gust at 33 ft (10 m) above ground for Exposure B category. A factor of 0.85 was applied to the 700-year ultimate design wind speed of 115 mph (185 kph), per ASCE 37-02, with the assumption that this crane is considered a temporary structure used during a construction period of 2 years or less.

- Standard equipment
- Options
- Potain Plus function: Plus load curves
- Hook heights with Plus load curves
- Reactions in service
- Reactions out of service
- Jib weight
- Total ballast weight
- Jib articulation axis
- Weather vaning position
- Lorry 44 ft
- Container High Cube 40 ft, and/or Flat Rack 20 ft
- Hoisting
- Luffing
- Slewing
- Travelling
- Required power
- Power Control Function: winch speeds adapted to the available power
- Consult us

This commercial document is not legally binding. For any technical information, please refer to the corresponding instructions.

