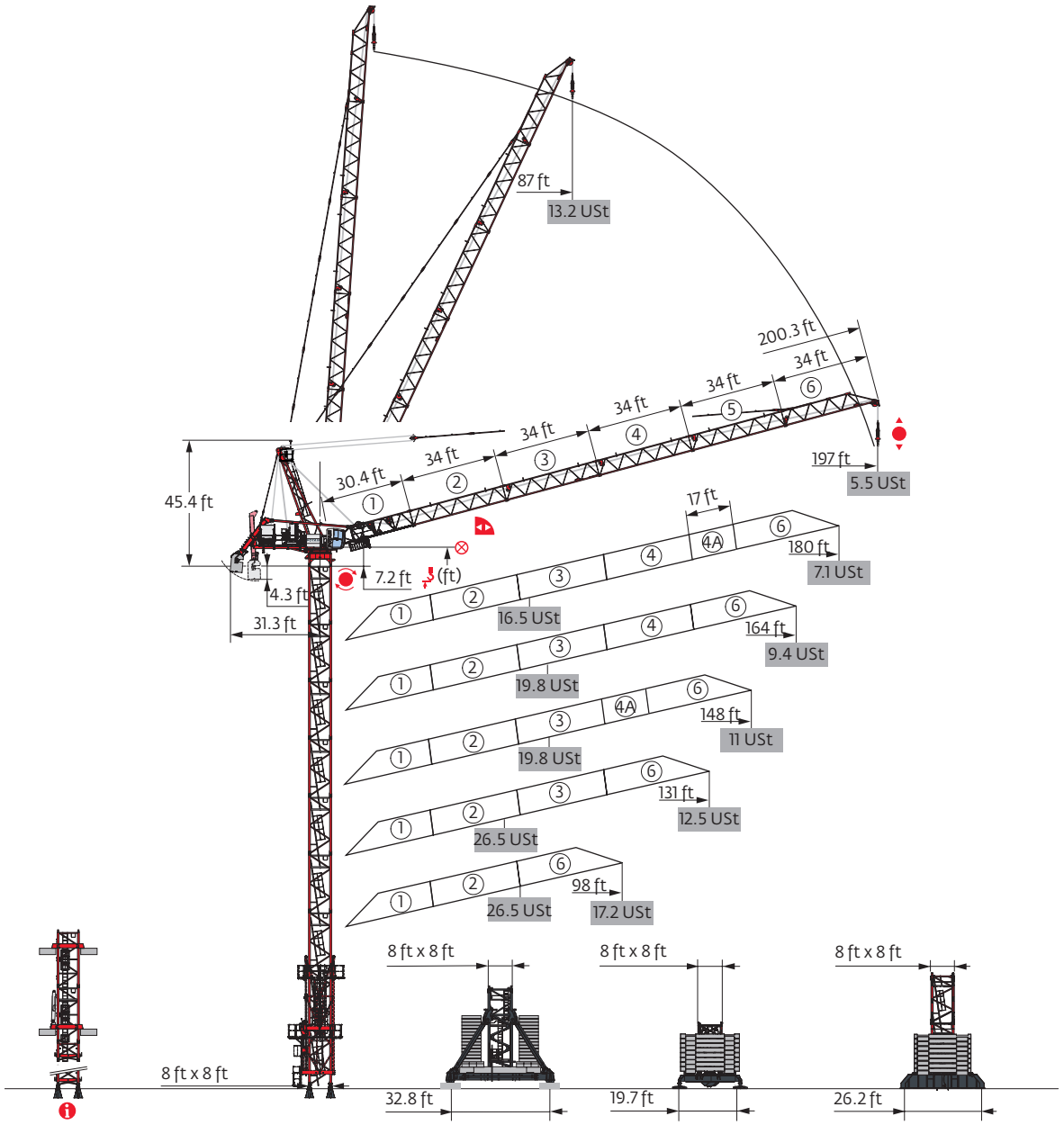
POTAIN®

MR 418 A



Power Control

Anti-collision system

ASCE 7-10

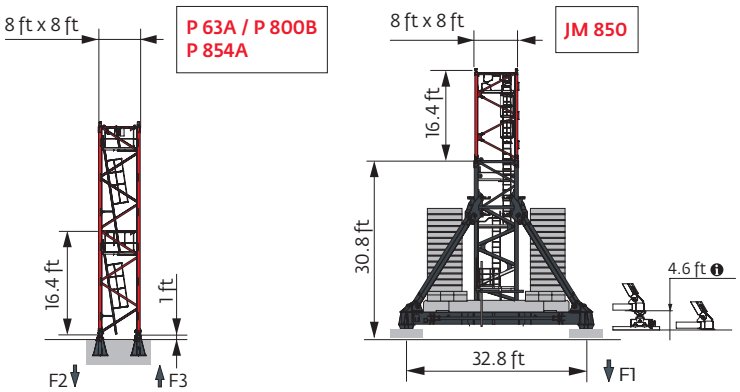
Values have been rounded.

Mast - Reactions

8 ft - P 800B							
(ft)		98	131	148	164	180	197
(ft)		226.4	215.2	204.4	204.4	188	188
10.9 ft		2	1	0	0	0	0
16.4 ft		12	12	12	12	11	11
F2 (USt)	●	251	245	260	251	251	246
	■	418	415	410	415	410	415
F3 (USt)	●	155	148	168	167	171	163
	■	335	332	328	330	330	332

8 ft - P 854A							
(ft)		98	131	148	164	180	197
(ft)		280.8	270	253.6	253.6	237.2	237.2
10.9 ft		1	0	0	0	0	0
16.4 ft		16	16	15	15	14	14
F2 (USt)	●	314	312	310	298	297	292
	■	624	620	592	601	589	591
F3 (USt)	●	204	202	207	201	207	199
	■	527	524	499	505	499	498

8 ft - JM 850 -							
(ft)		98	131	148	164	180	197
(ft)		283.5	277.9	267.1	267.1	250.7	250.7
10.9 ft		0	1	0	0	0	0
16.4 ft		15	14	14	14	13	13
F1 (USt)	●	178	183	185	179	177	177
	■	244	255	252	254	252	253



Note: 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.

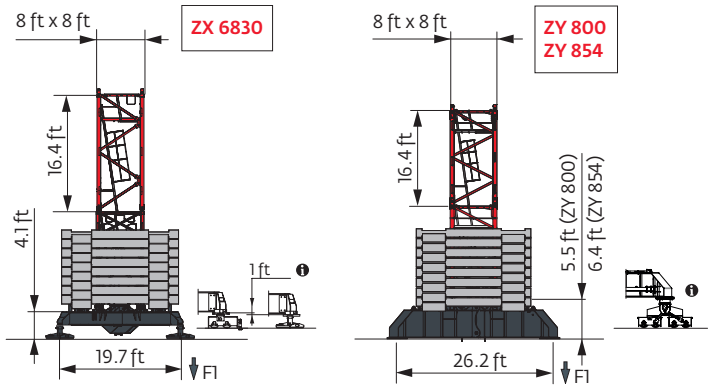
Other mast compositions - Please consult us.

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

8 ft - ZX 6830 -						
(ft)	98	131	148	164	180	197
(ft)	169.3	158.1	152.9	152.9	136.5	136.5
10.9 ft	1	0	1	1	1	1
16.4 ft	9	9	8	8	7	7
F1 (USt) ●	142	138	150	146	146	146
F1 (USt) ■	147	145	156	159	160	162

8 ft - ZY 800 -						
(ft)	98	131	148	164	180	197
(ft)	219.8	209	197.8	197.8	181.4	181.4
10.9 ft	1	0	2	2	2	2
16.4 ft	12	12	10	10	9	9
F1 (USt) ●	154	153	155	153	147	147
F1 (USt) ■	197	196	195	202	197	198

8 ft - ZY 854 -						
(ft)	98	131	148	164	180	197
(ft)	253.6	242.5	231.6	231.6	215.2	215.2
10.9 ft	1	0	2	2	2	2
16.4 ft	14	14	12	12	11	11
F1 (USt) ●	194	193	191	189	181	181
F1 (USt) ■	264	263	262	268	261	263



Anchorages

Base ballast

(USt) / 8 ft - JM 850 -

(ft)	98	131	148	164	180	197
283.5	224.9					
277.9	211.6	238.1				
267.1	185.2	211.6	238.1	238.1		
250.7	145.5	172	198.4	198.4	238.1	238.1
234.3	119.1	132.3	158.7	158.7	198.4	198.4
217.9	79.4	105.8	132.3	119.1	172	158.7
201.4	52.9	79.4	92.6	92.6	132.3	132.3
185	52.9	52.9	66.1	66.1	105.8	92.6
168.6	52.9	52.9	52.9	52.9	66.1	66.1
152.2 ↓	52.9	52.9	52.9	52.9	52.9	52.9
70.2	52.9	52.9	52.9	52.9	52.9	52.9

(USt) / 8 ft - ZX 6830 -

(ft)	98	131	148	164	180	197
169.3	144.4					
158.1	133.4	133.4				
152.9	133.4	133.4	155.4	155.4		
136.5	122.4	122.4	133.4	122.4	166.5	166.5
120.1	122.4	111.3	122.4	100.3	122.4	122.4
103.7	122.4	111.3	122.4	100.3	111.3	100.3
87.3	122.4	111.3	122.4	100.3	100.3	89.3
70.9	122.4	111.3	122.4	100.3	89.3	78.3

(USt) / 8 ft - ZY 800 -

(ft)	98	131	148	164	180	197
219.8	145.5					
209	119.1	145.5				
197.8	105.8	119.1	158.7	158.7		
181.4	66.1	92.6	119.1	119.1	158.7	158.7
165	39.7	66.1	79.4	79.4	132.3	119.1
148.6	39.7	39.7	52.9	52.9	92.6	92.6
132.2	39.7	39.7	52.9	39.7	66.1	52.9
115.8	39.7	39.7	52.9	39.7	39.7	39.7
99.4	39.7	39.7	52.9	39.7	39.7	26.5
83	39.7	39.7	52.9	39.7	26.5	13.2
66.6	39.7	39.7	52.9	39.7	26.5	13.2

(USt) / 8 ft - ZY 854 -

(ft)	98	131	148	164	180	197
253.6	238.1					
242.5	211.6	238.1				
231.6	185.2	211.6	238.1	238.1		
215.2	145.5	172	198.4	198.4	238.1	238.1
198.8	105.8	132.3	158.7	158.7	211.6	198.4
182.4	79.4	92.6	119.1	119.1	172	158.7
166	39.7	66.1	92.6	92.6	132.3	132.3
149.6	39.7	39.7	52.9	52.9	92.6	92.6
133.2	39.7	39.7	39.7	26.5	66.1	52.9
116.8	39.7	39.7	39.7	26.5	39.7	39.7
100.4	39.7	39.7	39.7	26.5	26.5	26.5
84	39.7	39.7	39.7	26.5	26.5	13.2
67.6	39.7	39.7	39.7	26.5	13.2	13.2

Load curves

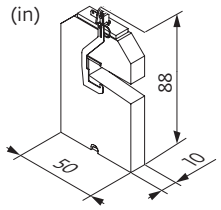
(ft)	56	66	72	82	89	98	105	115	121	131	138	148	154	164	171	180	187	197	ft
13.2 USt																			
197 19 → 87	13.2	13.2	13.2	13.2	13	11.7	10.9	9.9	9.4	8.6	8.2	7.6	7.2	6.7	6.5	6.1	5.8	5.5	USt
180 18 → 96	13.2	13.2	13.2	13.2	13.2	12.9	12.1	11.1	10.5	9.7	9.3	8.6	8.3	7.7	7.5	7.1	USt		
164 17 → 118	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2	12.9	11.9	11.2	10.5	10	9.4	USt				
148 16 → 123	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2	12.5	11.8	11	USt						
131 14 → 124	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2	12.5	USt								
98 12 → 98	13.2	13.2	13.2	13.2	13.2	13.2	USt												

(ft)	56	66	72	82	89	98	105	115	121	131	138	148	154	164	171	180	ft
26.5 USt																	
180 18 → 70	16.5	16.5	16	14.1	13	11.7	11	10	9.5	8.8	8.4	7.8	7.5	7.1	6.7	6.4	USt
164 17 → 77	19.8	19.8	19.8	18.7	17.2	15.3	14.3	13	12.2	11.2	10.6	9.8	9.4	8.7	USt		
148 16 → 77	19.8	19.8	19.8	18.6	17.3	15.5	14.6	13.3	12.6	11.7	11.1	10.4	USt				
131 14 → 62	26.5	24.8	22.5	19.6	18.1	16.1	15.1	13.7	12.9	11.8	USt						
98 12 → 66	26.5	26.5	23.9	20.9	19.3	17.2	USt										

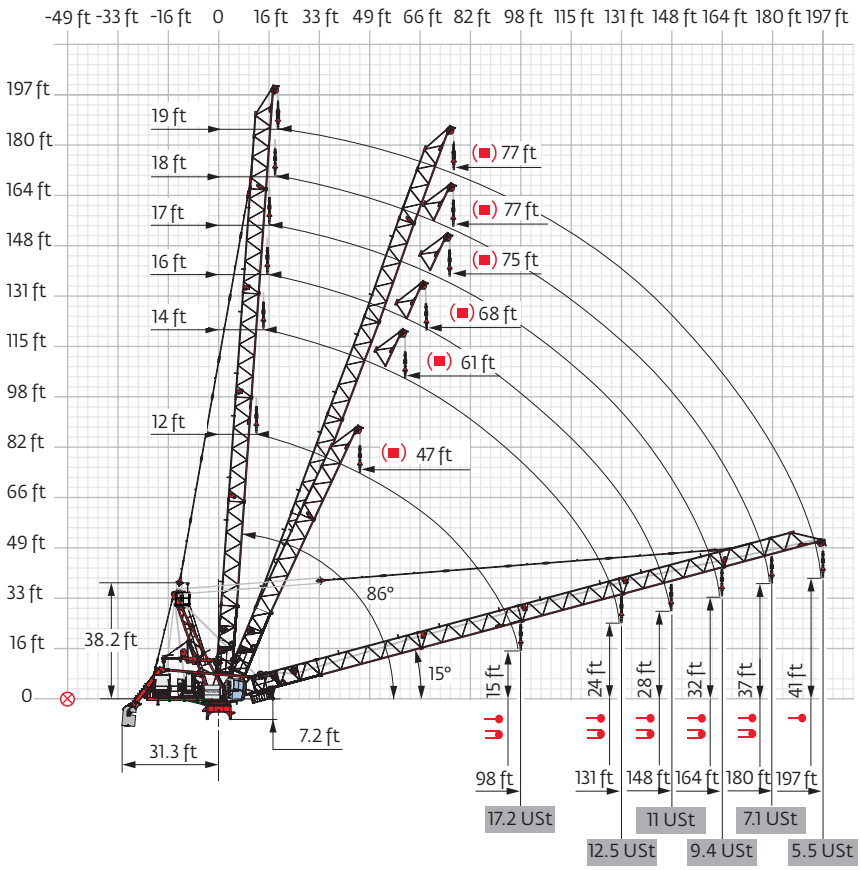
Jib weight & counter-jib ballast

	(lb) (+/- 5%)		9,700 lb	(lb)
197 ft	27,031	-	9	87,303
180 ft	26,605	27,818	9	87,303
164 ft	24,577	25,790	9	87,303
148 ft	23,772	24,985	9	87,303
131 ft	21,693	22,906	8	77,603
98 ft	18,592	19,804	7	67,902

9,700 lb



Luffing jib

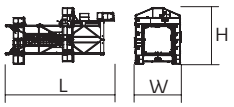
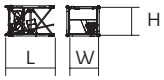
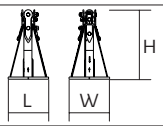
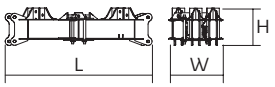
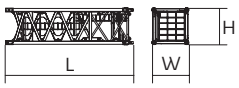
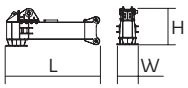
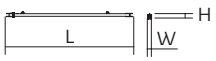
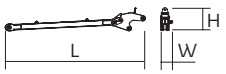
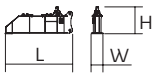
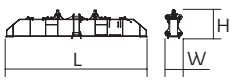
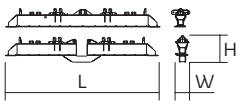


Dimensions and weight

Slewing crane part: 197 ft - - 180 HPL™

x 11
x 10

Slewing crane part		L (ft)	W (ft)	H (ft)	lb (+/- 5%)
Counter-jib (+ Grab rail + Platform)		21.1	20.8	6.9	9,270
Strut		9.6	7.7	38.8	12,670
Cab	Ultra View	14.5	6.5	8.2	3,616
Towerhead	⍁ 8 ft	10.1	10.7	11.1	23,082
Jib section	①	31.6	6.9	7.4	6,001
Jib section	② ③ ④ ⑤ ⑥	34.6 34.5 34.5 34.5 34.3	6.2 6.2 6.2 6.2 6.2	7.4 6.6 6.6 6.6 7.9	2,894 3,150 2,674 2,332 4,385
Jib section	④A	17.6	6.2	6.6	1,577
Pulley block	GH	2.9 5.1	1.8 1.5	8.4 8.2	2,601 1,521
Hoisting winch (+ rope)	180 HPL™ 320 LVF	16.1 18.4	7.5 7.1	6.3 7.8	22,630 31,063
Luffing winch (+ rope)	150 VVF	16	5.6	7.1	10,880
Rear left derrick arm (+ auxiliary winch + pulley block)		7.8	3.4	4.3	1,356
Front left derrick arm LWH		11.5	1.4	1.6	419
Articulated derrick arm		13.8	1	1.8	694
Derrick support		6.5	3.6	7.4	1,477

Crane tower			L (ft)	W (ft)	H (ft)	lb (+/- 5%)
Telescopic cage T 851		☐ 8 ft	36.7	15.9	19	34,723
K 85/KR 84B2 KRM 849B KM 850.10B KM 850.14B K 85/KR 84A2 KMT 849A KRMT 849A K 849A KR 849A KMT 850.10A KMT 850.14A		☐ 8 ft	33.6 33.6 33.9 33.9 17.2 17.2 17.2 17.2 17.2 17.5 17.5	8.3 8.4 8.3 8.3 8.3 8.4 8.4 8.3 8.3 8.3 8.3	8.2 8.3 8.2 8.2 8.2 8.3 8.3 8.2 8.2 8.2 8.2	21,242 17,196 22,201 24,670 12,236 6,945 9,017 7,496 9,458 12,015 13,206
KRMT 849C		☐ 8 ft	11.7	8.4	8.3	7,066
Fixing angles		P 63A / P 800B P 854A	2.5 3	2.5 3	4.2 4.9	1,025 2,072
Central cross (transport position)		JM 850	17.1	5.6	4.9	14,771
Basic mast unit		JM 850	28.7	8.2	8.2	32,187
Chassis girder		JM 850	17.1	3	5.1	7,055
Chassis ties		JM 850	23.6	0.8	1.1	551
Struts		JM 850	26.9	2.5	4.3	5,071
1/2 Cross girder		ZY800 ZY 854	18.6 18.7	3.2 3.2	6.3 7.4	10,406 14,176
Cross girder		ZY800 ZY 854	39.2 39	4.6 4.7	6.3 7.4	22,212 30,865
		ZX 6830	29.9 29.9	3.7 2.5	3.6 4.9	11,607 12,004

Mechanisms

480 V - 60 Hz													hp	kW	
	180 HPL™ 120	fpm	184	226	302	476	689	92	113	153	243	344	180	132	1,811 ft
		USt	13.2	9.9	6.6	3.3	1.7	26.5	19.8	13.2	6.6	3.5			
	320 LVF 120 Optima	fpm	331	427	581	797	833	166	213	312	400	417	320	240	2,710 ft
		USt	13.2	9.9	6.6	4.2	3.3	26.5	19.8	13.2	9.9	8.4			
	150 VVF 56		1 min 15 s										150	110	
	RVF 162 Optima +	rpm	0 → 0.9										2 x 7.5	2 x 5.5	

IEC 60204-32	kVA
480 V (+6% -10%) 60 Hz	180 HPL™ + 150 VVF: 278 → 146 kVA 320 LVF + 150 VVF: 390 → 202 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
- Reactions in service
- Reactions out of service
- Jib weight
- Total ballast weight
- Jib articulation axis
- Weathervaning 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