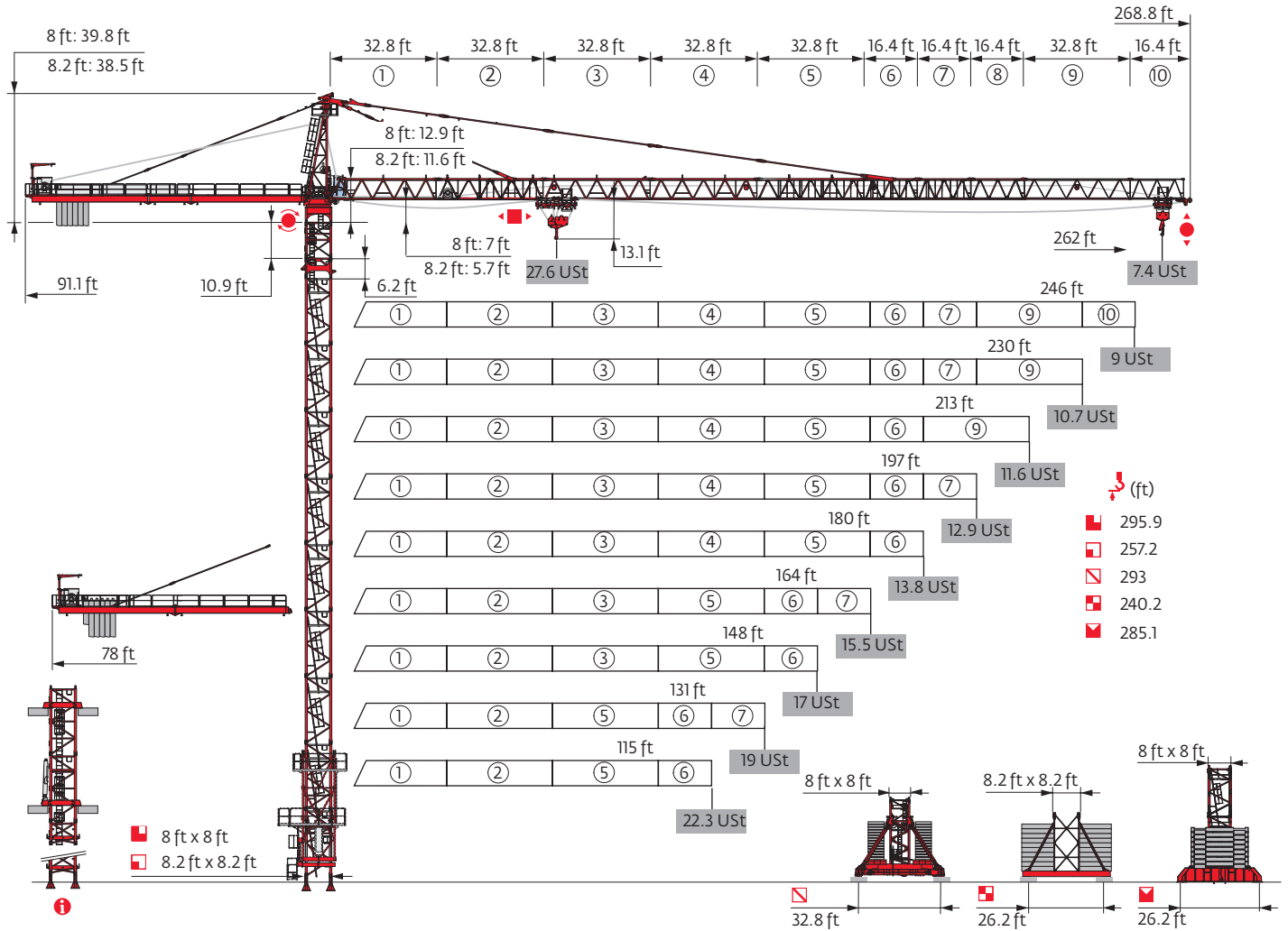


MD 689 M25



- (ft)
- 295.9
 - 257.2
 - 293
 - 240.2
 - 285.1

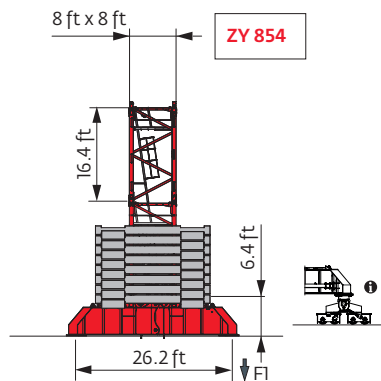
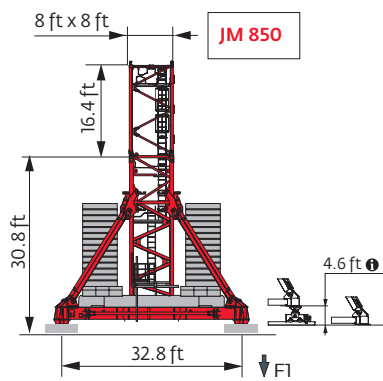
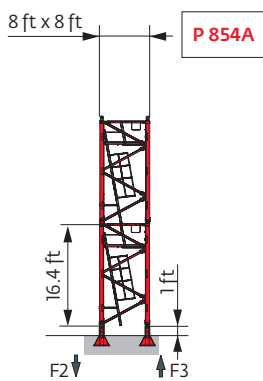
Potain Plus Power Control Top Site Top Tracing 3

Mast - Reactions

8 ft - P 854A										
Height (ft)	115	131	148	164	180	197	213	230	246	262
Height (ft)	295.9	295.9	295.9	295.9	295.9	290.7	290.7	290.7	279.5	279.5
Height/P _r (ft)	295.9	295.9	295.9	295.9	295.9	290.7	290.7	290.7	279.5	279.5
10.9 ft	1	1	1	1	1	1	1	1	1	1
6.2 ft	1	1	1	1	1	1	1	1	1	1
10.9 ft	2	2	2	2	2	0	0	0	2	2
16.4 ft	16	16	16	16	16	17	17	17	15	15
F2 (Ust)	● 382	383	385	385	389	381	382	378	376	382
	■ 610	614	613	606	623	588	593	591	570	603
F3 (Ust)	● 266	265	264	261	266	258	258	252	251	256
	■ 508	510	506	496	513	478	482	479	460	491

8 ft - JM 850										
Height (ft)	115	131	148	164	180	197	213	230	246	262
Height (ft)	287.7	287.7	293	293	287.7	293	287.7	287.7	287.7	271.3
Height/P _r (ft)	276.6	276.6	276.6	276.6	271.3	271.3	271.3	276.6	271.3	265.8
10.9 ft	1	1	1	1	1	1	1	1	1	1
6.2 ft	1	1	1	1	1	1	1	1	1	1
10.9 ft	0	0	2	2	0	2	0	0	0	0
16.4 ft	15	15	14	14	15	14	15	15	15	14
F1 (Ust)	● 166	167	173	169	165	171	166	168	174	163
	■ 215	217	228	224	219	229	219	218	225	213

8 ft - ZY 854										
Height (ft)	115	131	148	164	180	197	213	230	246	262
Height (ft)	285.1	285.1	285.1	285.1	279.5	279.5	279.5	279.5	268.7	274
Height/P _r (ft)	285.1	285.1	285.1	285.1	279.5	279.5	279.5	279.5	268.7	274
10.9 ft	1	1	1	1	1	1	1	1	1	1
6.2 ft	1	1	1	1	1	1	1	1	1	1
10.9 ft	2	2	2	2	0	0	0	0	2	1
16.4 ft	15	15	15	15	16	16	16	16	14	15
F1 (Ust)	● 222	223	225	224	221	219	219	219	214	228
	■ 287	290	289	284	278	275	278	278	268	300



8.2 ft - P 80A

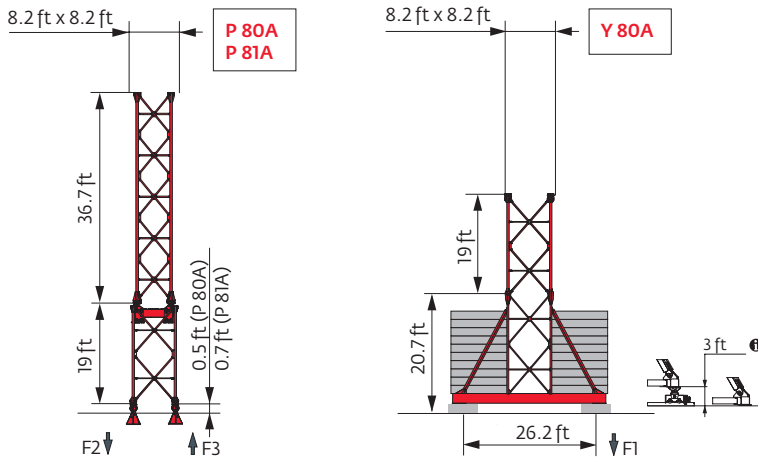
Height (ft)	115	131	148	164	180	197	213	230	246	262
\uparrow (ft)	219.5	219.5	219.5	219.5	219.5	219.5	219.5	219.5	219.5	200.5
\uparrow/P_+ (ft)	219.5	219.5	219.5	219.5	-	-	-	-	200.5	-
36.7 ft	1	1	1	1	1	1	1	1	1	1
	10	10	10	10	10	10	10	10	10	9
F2 (Ust)	● 250	251	253	252	246	243	245	248	250	248
	■ 179	182	181	175	189	185	189	188	202	195
F3 (Ust)	● 164	163	162	159	154	147	149	150	151	151
	■ 106	108	104	95	110	104	108	104	117	112

8.2 ft - P 81A

Height (ft)	115	131	148	164	180	197	213	230	246	262
\uparrow (ft)	257.2	257.2	257.2	257.2	257.2	257.2	257.2	238.5	238.5	238.5
\uparrow/P_+ (ft)	257.2	257.2	257.2	257.2	-	-	-	-	238.5	-
36.7 ft	1	1	1	1	1	1	1	1	1	1
	12	12	12	12	12	12	12	11	11	11
F2 (Ust)	● 275	276	278	277	270	266	268	260	270	273
	■ 262	266	265	258	270	266	270	228	243	272
F3 (Ust)	● 180	179	178	175	170	164	165	158	167	169
	■ 181	183	180	170	184	177	181	139	153	182

8.2 ft - Y 80A

Height (ft)	115	131	148	164	180	197	213	230	246	262
\uparrow (ft)	240.2	240.2	240.2	240.2	240.2	240.2	240.2	221.1	221.1	221.1
\uparrow/P_+ (ft)	240.2	221.1	221.1	221.1	-	-	-	-	221.1	-
36.7 ft	1	1	1	1	1	1	1	1	1	1
	10	10	10	10	10	10	10	9	9	9
F1 (Ust)	● 143	142	138	141	140	143	144	142	144	145
	■ 117	118	115	117	118	121	122	111	116	125





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.



i Motorized accesses: adapted mast compositions, base ballast and reactions.



Anchorage

i

Base ballast

 (Ust) / 8 ft - JM 850 - 										
▽\▽ (ft)	115	131	148	164	180	197	213	230	246	262
293		132.3	119.1		119.1					
287.7	119.1	119.1	105.8	92.6	105.8	105.8	105.8	105.8	119.1	
271.3	79.4	79.4	79.4	66.1	79.4	66.1	66.1	66.1	66.1	92.6
254.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9
238.5	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9
222.1	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9
↓ (ft)	205.7	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9
	189.3	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9
	172.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9
	156.5	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9
	140.1	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9
	123.7	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9
	107.3	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9
	90.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9

 (Ust) / 8 ft - ZY 854 - 										
▽\▽ (ft)	115	131	148	164	180	197	213	230	246	262
285.1	198.4	198.4	198.4	185.2						
279.5	185.2	185.2	172	158.7	185.2	172	172	158.7		
274	172	172	158.7	145.5	158.7	158.7	158.7	158.7		198.4
268.7	158.7	158.7	145.5	145.5	145.5	145.5	145.5	132.3	158.7	185.2
252.3	119.1	119.1	119.1	119.1	119.1	119.1	119.1	105.8	119.1	132.3
235.9	105.8	105.8	105.8	105.8	105.8	105.8	105.8	92.6	92.6	92.6
↓ (ft)	219.5	92.6	92.6	92.6	92.6	92.6	92.6	92.6	79.4	79.4
	203.1	92.6	79.4	79.4	79.4	79.4	79.4	79.4	66.1	66.1
	186.7	79.4	79.4	79.4	79.4	79.4	79.4	79.4	66.1	66.1
	170.3	79.4	79.4	79.4	79.4	79.4	79.4	79.4	66.1	66.1
	153.9	79.4	79.4	79.4	79.4	79.4	79.4	79.4	66.1	66.1
	137.5	79.4	79.4	79.4	79.4	79.4	79.4	79.4	66.1	66.1
	121.1	79.4	79.4	79.4	79.4	79.4	79.4	79.4	66.1	66.1
	104.7	79.4	79.4	79.4	79.4	79.4	79.4	79.4	66.1	66.1
	88.3	79.4	79.4	79.4	79.4	79.4	79.4	79.4	66.1	66.1

 (Ust) / 8.2 ft - Y 80A - 										
▽\▽ (ft)	115	131	148	164	180	197	213	230	246	262
240.2	105.8	105.8	92.6	105.8	92.6	105.8	105.8			
221.1	105.8	105.8	92.6	92.6	92.6	92.6	92.6	105.8	105.8	105.8
202.1	92.6	92.6	92.6	92.6	92.6	92.6	92.6	92.6	105.8	105.8
↓ (ft)	183.1	92.6	92.6	79.4	79.4	92.6	92.6	92.6	92.6	105.8
	164	92.6	92.6	79.4	79.4	79.4	92.6	92.6	92.6	92.6
	145.3	92.6	92.6	79.4	79.4	79.4	79.4	92.6	92.6	92.6
	126.3	92.6	92.6	79.4	79.4	79.4	79.4	79.4	92.6	92.6
	107.3	92.6	92.6	79.4	79.4	79.4	79.4	79.4	79.4	79.4
	88.3	92.6	92.6	79.4	79.4	66.1	79.4	79.4	79.4	79.4

Load curves



(ft)			72	82	89	98	115	121	131	148	154	164	180	187	197	213	220	230	236	246	253	262	ft	
	27.6 USt	13.8 USt																						
262	12.8 → 77.4 12.8 → 78.8	136.8 - 149.6 141.2 - 154.7	27.6	25.7	23.5	20.7	17.2	16	14.5	13.8	13.3	12.4	11	10.6	9.9	9	8.7	8.2	7.9	7.5	7.3	6.9	USt	
246	12.8 → 84.7 12.8 → 87.7	148.2 - 161.4 156.6 - 170.9	27.6	27.6	26.1	23	19	17.8	16.1	13.8	13.8	13.5	12	11.5	10.8	9.8	9.4	8.9	8.6	8.2	8	7.7	7.4	USt P+
230	12.8 → 90 12.8 → 92	158.9 - 172.7 167.7 - 182.9	27.6	27.6	27.6	24.8	20.6	19.3	17.5	15.1	14.3	13.8	13.1	12.5	11.8	10.7	10.3	9.8	9.4	9	8.7	8.4	USt	
213	12.8 → 87.8 12.8 → 92.2	159.1 - 173.9 168.2 - 182.6	27.6	27.6	27	24.2	20.3	19	17.4	15.1	14.3	13.8	13.2	12.7	11.9	10.9	10.5	10.1	9.7	9.3	9	8.7	8.4	USt P+
197	12.8 → 88.7 12.8 → 93.6	160.6 - 175 170.8 - 185.4	27.6	27.6	27.6	24.5	20.5	19.2	17.6	15.3	14.5	13.8	13.3	12.8	12.1	11.5	11	10.5	10.1	9.7	9.3	9	8.7	USt
180	12.8 → 88.3 12.8 → 91.8	159.9 - 174.2 167.3 - 180.4	27.6	27.6	27	24.4	20.4	19.1	17.5	15.2	14.4	13.8	13.2	12.7	12.1	11.5	11	10.5	10.1	9.7	9.3	9	8.7	USt P+
164	12.8 → 91.5 12.8 → 96.2		27.6	27.6	27.6	25.4	21.3	20	18.2	15.9	15	14	13.8	13.4	12.9	12.4	11.9	11.4	10.9	10.4	9.9	9.4	8.9	USt
148	12.8 → 90.3 12.8 → 93.6		27.6	27.6	27.6	25	21	19.7	18	15.6	15	14	13.8	13.4	12.9	12.4	11.9	11.4	10.9	10.4	9.9	9.4	8.9	USt P+
131	12.8 → 90.3 12.8 → 92.1		27.6	27.6	27.6	25	21	19.7	17.9	15.5	14.9	14.3	13.8	13.4	12.9	12.4	11.9	11.4	10.9	10.4	9.9	9.4	8.9	USt
115	12.8 → 91 12.8 → 92.9		27.6	27.6	27.6	25.2	21.1	19.7	18.4	16.1	15.3	14.2	13.8	13.4	12.7	11.6	10.7	10.3	9.8	9.4	9	8.7	8.4	USt P+

$W_{L2} = W_L - 1.51 \text{ USt max.}$



(ft)			72	82	89	98	115	121	131	148	154	164	180	187	197	213	220	230	236	246	253	262	ft	
	27.6 USt	13.8 USt																						
262	8.9 → 78.8 8.9 → 80.2	141.3 - 144.8 146.1 - 149.7	27.6	26.3	24.1	21.3	17.7	16.6	15.1	13.5	12.8	11.8	10.5	10	9.4	8.5	8.1	7.7	7.4	7	6.7	6.4	USt	
246	8.9 → 86.2 8.9 → 89.3	153.1 - 156.7 161.9 - 165.9	27.6	27.6	26.7	23.6	19.6	18.3	16.7	14.4	13.8	13	11.6	11.1	10.4	9.3	9	8.5	8.2	7.7	7.4	7.2	6.8	USt P+
230	8.9 → 91.7 8.9 → 93.7	164.3 - 168.3 173.7 - 178.1	27.6	27.6	27.6	24.7	21.2	19.9	18.1	15.7	14.9	13.8	12.7	12.1	11.4	10.3	9.9	9.4	8.9	8.5	8.1	7.7	7.4	USt
213	8.9 → 89.5 8.9 → 94	164.7 - 168.8 174.3 - 177.9	27.6	27.6	27.6	24.8	20.9	19.6	17.9	15.7	14.9	13.8	12.8	12.2	11.5	10.5	10.1	9.7	9.3	8.9	8.5	8.1	7.7	USt P+
197	8.9 → 90.3 8.9 → 95.4	166.3 - 170.6 176.9 - 180.6	27.6	27.6	27.6	25.1	21.1	19.8	18.1	15.8	15.1	14	12.9	12.4	11.7	10.8	10.3	9.8	9.4	9	8.7	8.4	8	USt
180	8.9 → 89.9 8.9 → 93.5	165.5 - 169.7 173.3 - 177.2	27.6	27.6	27.6	24.9	21	19.7	18	15.7	15	13.9	12.8	12.2	11.5	10.5	10.1	9.7	9.3	8.9	8.5	8.1	7.7	USt
164	8.9 → 93.2 8.9 → 98		27.6	27.6	27.6	26	21.9	20.5	18.8	16.4	15.6	14.5	13.8	13.2	12.5	11.8	11.2	10.6	10.1	9.6	9.1	8.6	8.1	USt P+
148	8.9 → 92 8.9 → 95.4		27.6	27.6	27.6	25.6	21.5	20.2	18.5	16.2	15	14	13.8	13.4	12.9	12.4	11.9	11.4	10.9	10.4	9.9	9.4	8.9	USt P+
131	8.9 → 92 8.9 → 93.8		27.6	27.6	27.6	25.6	21.5	20.2	18.5	16.2	15	14	13.8	13.4	12.9	12.4	11.9	11.4	10.9	10.4	9.9	9.4	8.9	USt
115	8.9 → 92.7 8.9 → 94.6		27.6	27.6	27.6	25.8	21.7	20.3	18.9	16.5	15.8	14.7	13.5	12.9	12.3	11.7	11.1	10.5	10.1	9.6	9.1	8.6	8.1	USt P+

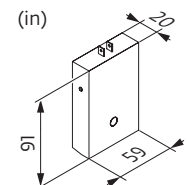
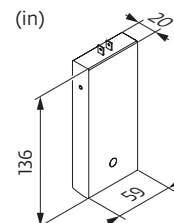
$W_{L2} = W_L - 0.41 \text{ USt max.}$

Jib weight & counter-jib ballast

(ft)	(lb) (+/- 5%)		100 LVF / 132 HPL™			180 HPL™ GH		
			13,228 lb	8,818 lb	(lb)	13,228 lb	8,818 lb	(lb)
262 ft	58,908	59,988	6	0	79,366	5	0	66,139
246 ft	56,593	57,673	6	0	79,366	5	0	66,139
230 ft	55,380	56,460	6	0	79,366	5	0	66,139
213 ft	52,900	53,980	4	2	70,548	3	2	57,320
197 ft	52,305	53,385	4	2	70,548	3	2	57,320
180 ft	49,824	50,905	4	1	61,729	3	1	48,502
164 ft	46,198	47,278	5	1	74,957	4	1	61,729
148 ft	43,718	44,798	3	3	66,139	2	3	52,911
131 ft	39,562	40,642	3	2	57,320	2	2	44,092
115 ft	37,082	38,162	2	3	52,911	1	3	39,683

CBC - 13,228 lb


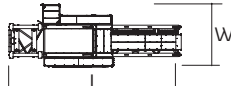
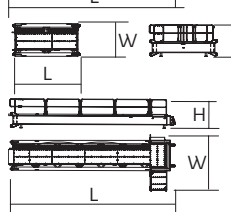
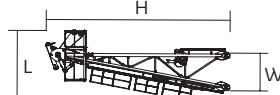

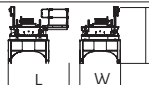
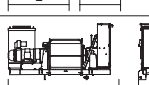
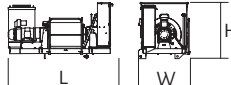
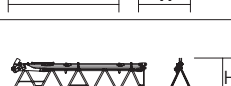
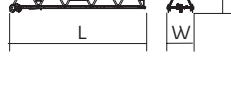



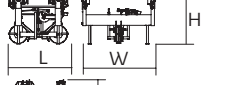
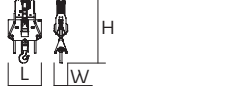
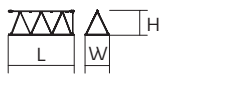
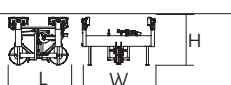
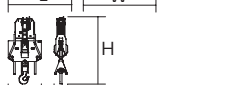
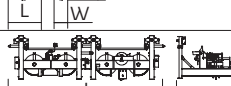
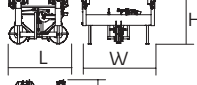
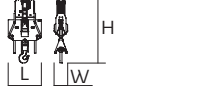
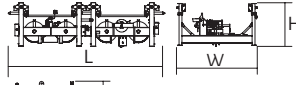
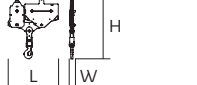

CBD - 8,818 lb



Dimensions and weight

Slewing crane part:  262 ft -  100 LVF



Slewing crane part		L (ft)	W (ft)	H (ft)	lb (+/- 5%)	
Counter-jib		38.4	13.5	6.4	14,308	
		13.8	6.6	6.4	4,365	
		36.2	11.7	6.8	10,858	
Cathead		11.6	6.5	32.3	18,221	
Cab	 Ultra View	16.4	8.2	9.1	4,134	
Towerhead		12.1	9.5	12.7	25,485	
		12.9	10	11.5	25,353	
Hoisting winch (+ rope)		11.2	5.2	5.7	9,016	
		12.4	6.1	6.2	11,387	
		15.8	6.3	6.5	19,279	
Jib section		① 34	6.2	8.3	11,241	
		② 10 DVF	33.9	6.2	7.7	10,944
		③	33.6	6.2	7.9	6,634
		④	33.6	6.2	7.6	6,105
		⑤	33.6	6.2	7.6	6,279
Jib section		⑥	33.5	6.2	6.6	3,075
		⑦	17.5	6.2	7.4	4,222
		⑧	17.2	6.2	6.7	2,476
		⑨	17.2	6.2	6.7	2,314
Trolley + Pulley block		5.9	7.4	4.7	1,676	
		3.9	1.4	7.8	1,874	
Trolley + Pulley block		13.5	7.2	3.8	2,635	
		6	1.1	7.7	1,995	
Crane tower						
Telescopic cage T 851		36.7	15.9	19	34,723	

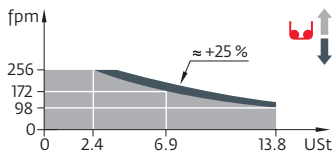
			L (ft)	W (ft)	H (ft)	I _b (+/- 5%)
K 85/K 85-2 Telescoping mast		□ 8 ft	7.3	10.7	8.2	7,937
Telescopic cage		□ 8.2 ft	24.3	12	19.1	13,669
Slider		□ 8.2 ft	36.4	6.9	6.9	15,653
Slider base		□ 8.2 ft	7.7	5.2	7.7	13,140
KM 850.10B KM 850.14B KMT 850.10A KMT 850.14A KMT 850.10C		□ 8 ft	33.9 33.9 17.5 17.5 12	8.3 8.3 8.3 8.3 8.3	8.2 8.2 8.2 8.2 8.2	22,201 24,670 12,015 13,206 9,326
R 86 R 87 R 87B R 88B		□ 8.2 ft	21 21 21 21	9.5 9.5 9.5 9.7	9.5 9.5 9.5 9.7	8,422 9,392 9,976 12,787
Fixing angles		P 854A P 80A P 81A ⓘ	3 2.6 -	3 2.6 -	4.9 4 -	2,072 4,343 -
Basic mast unit		Y 80A	19.7	9.8	9.8	16,314
Struts		Y 80A	18	1.4	1.2	1,764
1/2 Side member		Y 80A	18.4	3.8	2	2,205
Side member		Y 80A	38.9	3.8	2	4,630
Ballast support		Y 80A	15.3	1	2.2	595
Chassis beam		Y 80A	28.2	2.3	3.8	4,409
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		ZY 854	18.6	3.2	7.4	13,095
Cross girder		ZY 854	39	4.7	7.4	29,432

Mechanisms

480 V - 60 Hz													hp	kW	
	100 LVF 63 Optima	fpm	98	126	172	226	256	49	64	89	116	128	100	75	2,382 ft
		USt	13.8	10.4	6.9	3.4	2.4	27.6	20.7	13.8	6.9	6			
	132 HPL™ 63	fpm	133	172	243	363	502	67	87	125	185	251	132	98	2,815 ft
		USt	13.8	10.4	6.9	3.4	1.1	27.6	20.7	13.8	6.9	2.9			
180 HPL™ 63 GH	fpm	179	220	289	438	640	90	112	149	238	320	180	132	3,937 ft	
	USt	13.8	10.4	6.9	3.4	0.9	27.6	20.7	13.8	6.9	3.3				
	10 DVF 10 Optima	fpm	0 → 217 (27.6 USt) 0 → 262 (22 USt) 0 → 328 (13.8 USt) 0 → 361 (6.9 USt)									10	7.4		
	RVF 173 Optima+	rpm	0 → 0.8									3 x 10	3 x 7.5		

480 V (+6% -10%) 60 Hz	100 LVF: 117 → 77 kVA 132 HPL™ : 142 → 90 kVA 180 HPL™ GH : 181 → 109 kVA

100 LVF 63 Optima



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.

-
-
-
-
-
-
-
-
-
-
-
-
-
-
-
-
-

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

