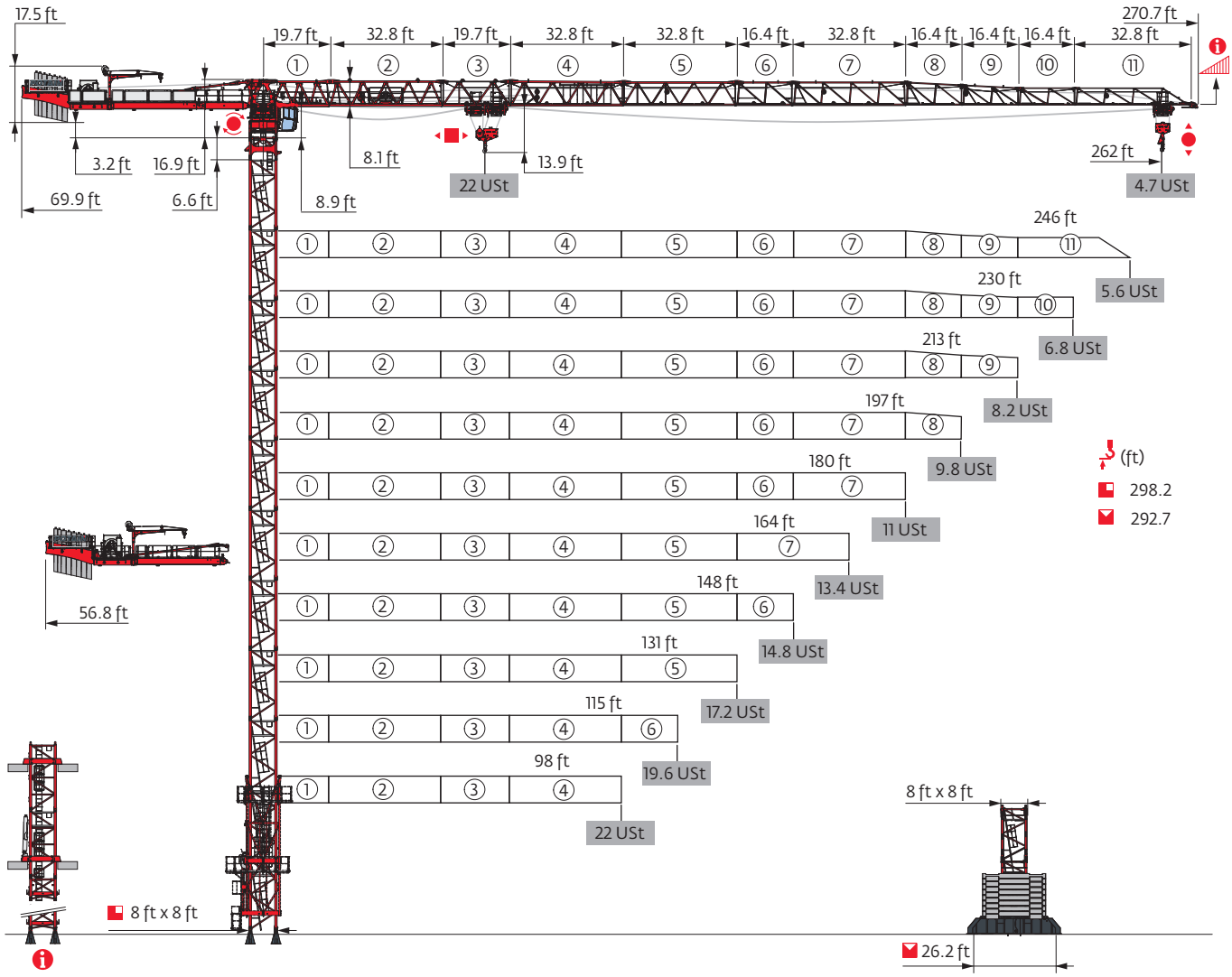
POTAIN®

MDT 569 M20



Potain Plus | Power Control | Top Site | Top Tracing 3

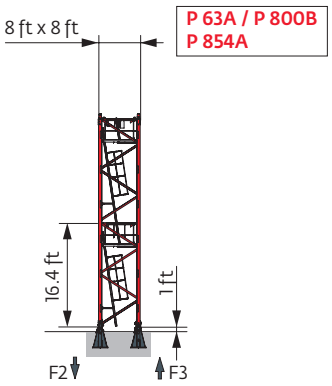
ASCE 7-10

Values have been rounded.

Mast - Reactions

8 ft - P 800B												
(ft)		98	115	131	148	164	180	197	213	230	246	262
(ft)		232.6	227	227	221.8	221.8	216.2	216.2	216.2	216.2	216.2	199.8
/P+ (ft)		232.6	227	227	221.8	221.8	216.2	216.2	216.2	216.2	216.2	199.8
6.6 ft		1	1	1	1	1	1	1	1	1	1	1
10.9 ft		0	1	1	2	2	0	0	0	0	0	0
16.4 ft		14	13	13	12	12	13	13	13	13	13	12
F2 (USt)	●	272	273	276	276	276	273	271	269	265	256	249
	■	351	332	338	334	330	325	330	332	347	354	312
F3 (USt)	●	178	178	173	172	169	171	168	168	163	156	150
	■	268	246	247	240	234	234	238	241	255	264	223

8 ft - P 854A												
(ft)		98	115	131	148	164	180	197	213	230	246	262
(ft)		298.2	298.2	298.2	292.7	298.2	292.7	292.7	292.7	287.4	281.8	276.3
/P+ (ft)		298.2	298.2	298.2	292.7	292.7	287.4	287.4	287.4	287.4	281.8	276.3
6.6 ft		1	1	1	1	1	1	1	1	1	1	1
10.9 ft		0	0	0	1	0	1	1	1	2	0	1
16.4 ft		18	18	18	17	18	17	17	17	16	17	16
F2 (USt)	●	344	350	353	351	348	346	347	348	351	335	344
	■	613	612	624	610	612	605	607	610	610	585	577
F3 (USt)	●	230	233	231	229	224	228	228	229	231	220	227
	■	510	505	513	499	498	498	499	501	500	480	471



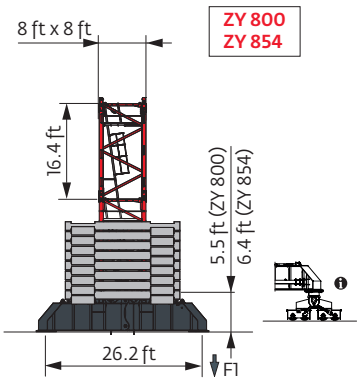
Note: When "ASCE" is noted in this data sheet it is referring to 115 mph Wind Zone, Exposure B, Design Wind Speed = 98 mph.
See back cover for design wind speed calculations.

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

Other mast compositions - Please consult us

8 ft - ZY 800 -											
(ft)	98	115	131	148	164	180	197	213	230	246	262
(ft)	215.2	209.7	220.8	220.8	215.2	215.2	209.7	209.7	209.7	209.7	198.8
/P+ (ft)	215.2	209.7	209.7	198.8	193.2	215.2	209.7	209.7	209.7	209.7	198.8
6.6 ft	1	1	1	1	1	1	1	1	1	1	1
10.9 ft	1	2	0	0	1	1	2	2	2	2	1
16.4 ft	12	11	13	13	12	12	11	11	11	11	11
F1 (USt) ●	147	146	151	153	148	152	150	150	155	151	153
F1 (USt) ■	141	131	146	152	140	153	149	150	161	167	154

8 ft - ZY 854 -											
(ft)	98	115	131	148	164	180	197	213	230	246	262
(ft)	292.7	292.7	292.7	287.1	287.1	287.1	281.8	281.8	281.8	276.3	265.4
/P+ (ft)	292.7	292.7	292.7	287.1	287.1	287.1	281.8	281.8	281.8	276.3	265.4
6.6 ft	1	1	1	1	1	1	1	1	1	1	1
10.9 ft	2	2	2	0	0	0	1	1	1	2	1
16.4 ft	16	16	16	17	17	17	16	16	16	15	15
F1 (USt) ●	221	222	226	221	220	223	218	218	225	219	207
F1 (USt) ■	309	311	320	303	304	309	300	303	313	308	281



Anchorages

Base ballast

(USt) / 8 ft - ZY 800 -

↕ (ft) \ ↔ (ft)	98	115	131	148	164	180	197	213	230	246	262
220.8			79.4	79.4							
215.2	79.4		79.4	79.4	66.1	79.4					
209.7	79.4	79.4	79.4	66.1	66.1	66.1	79.4	79.4	105.8	105.8	
198.8	79.4	79.4	66.1	66.1	66.1	66.1	79.4	79.4	92.6	105.8	119.1
182.4	66.1	66.1	66.1	52.9	66.1	66.1	79.4	79.4	92.6	92.6	105.8
166	52.9	66.1	52.9	52.9	66.1	66.1	79.4	79.4	92.6	92.6	105.8
149.6	52.9	52.9	52.9	39.7	66.1	66.1	79.4	66.1	92.6	92.6	105.8
133.2	39.7	52.9	39.7	39.7	52.9	52.9	79.4	66.1	79.4	79.4	92.6
116.8	39.7	39.7	39.7	39.7	52.9	52.9	79.4	66.1	79.4	79.4	92.6
100.4	39.7	39.7	39.7	39.7	52.9	52.9	79.4	66.1	79.4	79.4	92.6
84	39.7	39.7	39.7	39.7	52.9	52.9	79.4	66.1	66.1	79.4	79.4
67.6	39.7	39.7	39.7	39.7	52.9	52.9	79.4	66.1	66.1	66.1	79.4

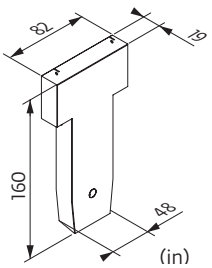
(USt) / 8 ft - ZY 854 -

↕ (ft) \ ↔ (ft)	98	115	131	148	164	180	197	213	230	246	262
292.7	224.9	211.6	211.6								
287.1	198.4	185.2	185.2	198.4	185.2	211.6					
281.8	185.2	172	172	185.2	172	198.4	198.4	198.4	224.9		
276.3	172	158.7	158.7	158.7	158.7	185.2	185.2	185.2	211.6	224.9	
265.4	145.5	132.3	132.3	132.3	119.1	145.5	145.5	158.7	172	185.2	185.2
249	105.8	92.6	92.6	92.6	79.4	105.8	105.8	105.8	119.1	132.3	132.3
232.6	92.6	92.6	79.4	79.4	66.1	79.4	79.4	79.4	92.6	92.6	105.8
216.2	79.4	79.4	66.1	66.1	66.1	66.1	79.4	79.4	92.6	92.6	105.8
199.8	66.1	66.1	66.1	52.9	52.9	52.9	66.1	66.1	92.6	92.6	105.8
183.4	52.9	52.9	52.9	39.7	52.9	52.9	66.1	66.1	92.6	92.6	105.8
167	52.9	52.9	52.9	39.7	52.9	52.9	66.1	66.1	79.4	79.4	92.6
150.6	39.7	39.7	39.7	39.7	52.9	52.9	66.1	66.1	79.4	79.4	92.6
134.2	39.7	39.7	26.5	39.7	52.9	52.9	66.1	52.9	79.4	79.4	92.6
117.8	26.5	39.7	26.5	26.5	52.9	52.9	66.1	52.9	66.1	66.1	79.4
101.4	26.5	39.7	26.5	26.5	52.9	52.9	66.1	52.9	66.1	66.1	79.4
85	26.5	39.7	26.5	26.5	52.9	52.9	66.1	52.9	66.1	66.1	79.4
68.6	26.5	39.7	26.5	26.5	52.9	52.9	66.1	52.9	52.9	66.1	66.1

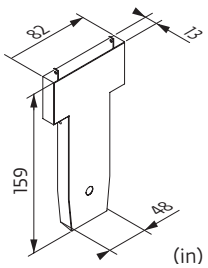
Counter-jib ballast

	132 HPL™			180 HPL™ GH		
↔	14,551 lb	10,362 lb	(lb)	14,551 lb	10,362 lb	(lb)
262 ft	5	2	93,476	6	0	87,303
246 ft	4	3	89,287	5	1	83,114
230 ft	4	3	89,287	5	1	83,114
213 ft	4	3	89,287	5	1	83,114
197 ft	6	0	87,303	4	2	78,925
180 ft	5	1	83,114	3	3	74,737
164 ft	6	2	108,027	7	0	101,854
148 ft	7	0	101,854	5	2	93,476
131 ft	5	2	93,476	6	0	87,303
115 ft	5	1	83,114	4	2	78,925
98 ft	3	3	74,737	4	1	68,564

CCP - 14,551 lb



CCQ - 10,362 lb



Load curves

(ft)			56	66	82	98	105	115	121	131	138	148	154	164	171	180	187	197	203	213	220	230	236	246	253	262	ft
	22 USt	11 USt																									
262	13.1 → 66.9	116.4 - 129.1	22	22	17.2	13.7	12.6	11.2	11	10.8	10.2	9.4	8.9	8.2	7.8	7.3	7	6.5	6.3	5.9	5.6	5.3	5.1	4.8	4.7	4.4	USt
	13.1 → 72.2	125 - 137.8	22	22	19	15.1	13.9	12.3	11.5	11	11	10.3	9.8	9.1	8.6	8	7.7	7.1	6.8	6.4	6.1	5.7	5.5	5.2	5	4.7	USt P+
246	13.1 → 68.9	120.4 - 133.1	22	22	17.9	14.3	13.2	11.7	11	11	10.6	9.7	9.2	8.6	8.2	7.6	7.3	6.8	6.5	6.1	5.9	5.6	5.4	5.1	USt		
	13.1 → 74.8	129.4 - 144.4	22	22	19.7	15.7	14.5	12.9	12	11	11	10.7	10.2	9.4	9	8.4	8	7.5	7.2	6.8	6.5	6.1	5.9	5.6	USt	P+	
230	13.1 → 78.4	137.3 - 151.3	22	22	20.9	16.8	15.5	13.9	12.9	11.7	11	11	10.8	10	9.6	8.9	8.5	8	7.7	7.3	7	6.6	USt				
	13.1 → 84.6	146.9 - 160.8	22	22	22	18.4	17	15.2	14.2	12.9	12.1	11	11	10.7	10.2	9.5	9	8.4	8.1	7.5	7.2	6.8	USt	P+			
213	13.1 → 85.6	150.7 - 166	22	22	22	18.7	17.3	15.5	14.5	13.2	12.4	11.3	11	11	10.7	10	9.6	9	8.6	8.2	USt						
	13.1 → 92.5	155.5 - 170.6	22	22	22	20.4	18.8	16.7	15.5	13.9	13	11.9	11.2	11	11	10.2	9.7	9.1	8.7	8.2	USt	P+					
197	13.1 → 90.2	158.9 - 175.1	22	22	22	19.9	18.5	16.6	15.5	14.1	13.2	12.1	11.5	11	11	10.6	10.2	9.6	USt								
	13.1 → 94.8	163.3 - 179.3	22	22	22	21.1	19.5	17.4	16.2	14.7	13.8	12.6	11.9	11	11	10.9	10.5	9.8	USt	P+							
180	13.1 → 93.2	163.7 - 180.4	22	22	22	20.6	19.1	17.2	16.1	14.6	13.7	12.6	11.9	11	11	11	USt										
	13.1 → 97.1	164.8 - 180.4	22	22	22	21.7	20	17.8	16.6	15	14.1	12.8	12.1	11.1	11	11	USt	P+									
164	13.1 → 99.4		22	22	22	22	20.7	18.6	17.4	15.8	14.9	13.7	13	12	USt												
	13.1 → 102		22	22	22	22	21.3	19.3	18.1	16.6	15.7	14.5	13.7	12.8	USt	P+											
148	13.1 → 100.1		22	22	22	22	20.8	18.7	17.5	15.9	15	13.8	USt														
	13.1 → 100.1		22	22	22	22	20.9	18.9	17.8	16.2	15.4	14.2	USt	P+													
131	13.1 → 100.1		22	22	22	22	20.9	18.8	17.6	16	USt																
	13.1 → 101.7		22	22	22	22	21.3	19.3	18.1	16.5	USt	P+															
115	13.1 → 101.4		22	22	22	22	21.1	19	USt																		
	13.1 → 101.4		22	22	22	22	21.1	19	USt	P+																	
98	13.1 → 98.4		22	22	22	22	USt																				
	13.1 → 98.4		22	22	22	22	USt	P+																			

= - 1.58 USt max.

(ft)			56	66	82	98	105	115	121	131	138	148	154	164	171	180	187	197	203	213	220	230	236	246	253	262	ft
	22 USt	11 USt																									
262	10.8 → 68.6	120.9 - 123.6	22	22	17.8	14.3	13.2	11.8	11	10.2	9.6	8.8	8.3	7.6	7.2	6.7	6.4	5.9	5.7	5.3	5	4.7	4.5	4.2	4.1	3.8	USt
	10.8 → 73.8	129.4 - 131.6	22	22	19.5	15.6	14.4	12.9	12	11	10.4	9.7	9.2	8.4	8	7.4	7.1	6.5	6.2	5.8	5.5	5.1	4.9	4.5	4.3	4.1	USt P+
246	10.8 → 70.5	125.1 - 128	22	22	18.5	14.8	13.7	12.3	11.5	10.7	10	9.2	8.7	8	7.6	7.1	6.7	6.3	6	5.6	5.4	5	4.8	4.5	USt		
	10.8 → 76.1	134 - 138.2	22	22	20.2	16.2	15	13.4	12.5	11.3	11	10.1	9.6	8.9	8.4	7.8	7.4	6.9	6.6	6.2	5.9	5.6	5.3	5	USt	P+	
230	10.8 → 79.7	142.3 - 145.5	22	22	21.3	17.2	16	14.3	13.4	12.2	11.5	10.8	10.3	9.5	9	8.4	8	7.5	7.2	6.8	6.5	6.1	USt				
	10.8 → 86.6	152.4 - 155.1	22	22	22	19	17.6	15.8	14.8	13.4	12.6	11.5	11	10.3	9.7	9	8.6	8	7.6	7.1	6.8	6.4	USt	P+			
213	10.8 → 87.6	156.8 - 160.8	22	22	22	19.2	17.9	16.1	15	13.7	12.9	11.9	11.3	10.7	10.2	9.5	9.1	8.6	8.2	7.7	USt						
	10.8 → 94.8	161.9 - 164.9	22	22	22	21	19.4	17.3	16.1	14.6	13.7	12.5	11.8	11	10.6	9.8	9.3	8.7	8.3	7.8	USt	P+					
197	10.8 → 93.2	167.1 - 170.9	22	22	22	20.7	19.2	17.3	16.2	14.8	13.9	12.8	12.2	11.3	11	10.3	9.9	9.3	USt								
	10.8 → 97.1	170.4 - 173.9	22	22	22	21.7	20.1	18	16.8	15.3	14.4	13.2	12.5	11.6	11	10.5	10.1	9.4	USt	P+							
180	10.8 → 95.8	172.1 - 176.1	22	22	22	21.4	19.9	17.9	16.8	15.3	14.4	13.3	12.6	11.7	11.1	10.7	USt										
	10.8 → 99.4	171.7 - 180.4	22	22	22	22	20.6	18.5	17.2	15.6	14.7	13.4	12.7	11.7	11.1	11	USt	P+									
164	10.8 → 103.7		22	22	22	22	21.8	19.6	18.4	16.8	15.9	14.6	13.9	12.9	USt												
	10.8 → 104.3		22	22	22	22	21.9	19.9	18.7	17.2	16.3	15.1	14.3	13.4	USt	P+											
148	10.8 → 102.4		22	22	22	22	21.4	19.3	18.1	16.5	15.6	14.4	USt														
	10.8 → 102.7		22	22	22	22	21.5	19.5	18.4	16.9	16	14.8	USt	P+													
131	10.8 → 102.7		22	22	22	22	21.5	19.4	18.2	16.6	USt																
	10.8 → 104.3		22	22	22	22	21.9	19.9	18.7	17.2	USt	P+															
115	10.8 → 103.7		22	22	22	22	21.7	19.6	USt																		
	10.8 → 103.7		22	22	22	22	21.8	19.6	USt	P+																	
98	10.8 → 98.4		22	22	22	22	USt																				
	10.8 → 98.4		22	22	22	22	USt	P+																			

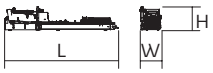
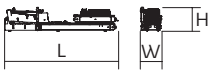
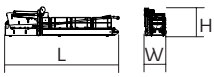
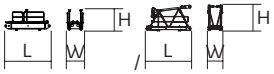
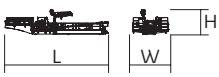
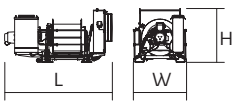
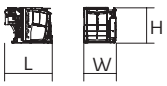
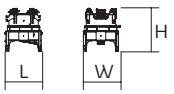
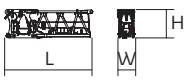
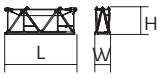
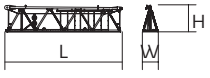
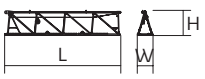
= - 0.71 USt max.

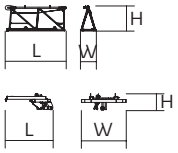
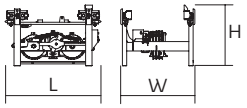
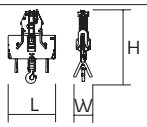
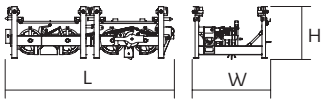
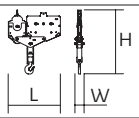
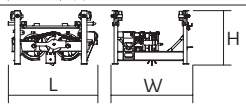
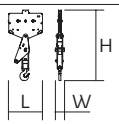
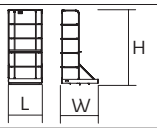
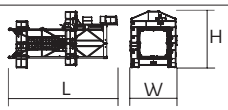
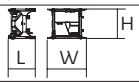
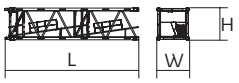
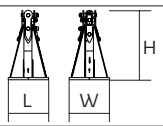
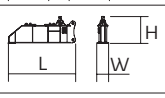
Dimensions and weight

Slewing crane part: 262 ft - 132 HPL™

x 9

x 8

Slewing crane part			L (ft)	W (ft)	H (ft)	lb (+/- 5%)
Counter-jib			39.4	7.2	8.2	29,690
			39.4	7.2	8.2	39,432
			39.1	7.2	9.2	29,573
			15 14.2	5.3 4.5	6.6 8.1	9,590 6,993
		132 HPL™ 180 HPL™ GH	53.3 53.3	18.6 21.9	12.9 12.9	32,902 34,458
		132 HPL™ 180 HPL™ GH	66.5 66.5	18.6 21.9	12.9 12.9	42,199 43,343
		132 HPL™	53.3	18.6	12.9	45,825
		132 HPL™	66.5	18.6	12.9	55,122
Hoisting winch (+ rope)		132 HPL™ 180 HPL™ GH	12.4 15.8	6.1 6.3	6.2 6.5	12,923 19,282
Cab		Ultra View	11	7.5	8.2	6,614
Towerhead		⍁8 ft	8.8	8.2	9.9	27,866
			21.9	8.2	9.9	34,480
Jib section		①	25.3	5.1	8.1	19,103
		②	34	7.4	8.1	18,122
		③	20.9	4.5	8	7,154
		④	34.1	4.5	7.8	9,466
		⑤ ⑦ ⑪	34.1 33.6 33.1	4.5 4.5 4.5	7.3 7.2 5.1	7,115 4,991 1,825

			L (ft)	W (ft)	H (ft)	lb (+/- 5%)
Jib section		⑥ ⑧ ⑨ ⑩ 22 USt	17.6 17.4 17.1 17 5.5	4.5 4.5 4.5 4.5 5.2	7.3 7 6.1 5.2 1.9	3,007 1,719 1,464 1,246 575
Trolley		22 USt	7.3	5.7	4.7	1,676
Pulley block		22 USt	5.1	1.9	8	1,874
Trolley		22 USt	12.5	5.6	4.1	2,469
Pulley block		22 USt	6.3	1.1	7.7	2,028
Trolley		11 USt	6.6	5.6	4.1	1,323
Pulley block		11 USt	4.1	1.1	8.5	1,345
Trolley inspection platform			3.1	3.4	7	125
Crane tower						
T 851		⍁ 8 ft	36.7	15.9	19	34,723
K 84/K 84-2		⍁ 8 ft	7.3	10.6	8.2	6,724
KRM 849B K 85/KR 84B2 KM 850.10B KM 850.14B K 85/KR 84A2 KMT 850.10A KMT 850.14A K 849A KMT 849A KR 849A KRMT 849A KRMT 849C KMT 850.10C		⍁ 8 ft	33.6 33.6 33.9 33.9 17.2 17.5 17.5 17.2 17.2 17.2 17.2 17.2 11.7 12	8.4 8.3 8.3 8.3 8.3 8.3 8.3 8.3 8.4 8.3 8.4 8.4 8.4 8.3	8.3 8.2 8.2 8.2 8.2 8.2 8.2 8.2 8.3 8.2 8.3 8.3 8.3 8.2	17,196 21,242 22,201 24,670 12,236 12,015 13,206 7,496 6,945 9,458 9,017 7,066 9,326
Fixing angles		P 63A / P 800B P 854A	2.5 3	2.5 3	4.2 4.9	1,025 2,072
1/2 Cross girder		ZY 800 ZY 854	18.6 18.7	3.2 3.2	6.3 7.4	10,406 14,176
Cross girder		ZY 800 ZY 854	39.2 39	4.6 4.7	6.3 7.4	22,212 30,865

Mechanisms

480 V - 60 Hz												hp	kW	
	132 HPL™ 50	fpm	164	213	299	449	612	82	108	153	230	305	132	98	3,507 ft
		USt	11	8.3	5.5	2.8	0.7	22	16.5	11	5.5	2.1			
	180 HPL™ 50 GH	fpm	210	256	333	494	640	107	131	174	271	320	180	132	3,937 ft
		USt	11	8.3	5.5	2.8	0.9	22	16.5	11	5.5	3.3			
	10 DVF 10 Optima	fpm	0 → 262 (22 USt) 0 → 328 (13.8 USt) 0 → 361 (6.9 USt)										10	7.4	
	RVF 174 Optima +	rpm	0 → 0.7										4 x 10	4 x 7.5	

IEC 60204-32	kVA	
480 V (+6% -10%) 60 Hz	132 HPL ™: 152 → 99 kVA 180 HPL ™ GH: 190 → 118 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.

- Jib elevation
- Standard equipment
- Options
- Potain Plus function: Plus load curves
- Hook heights with Plus load curves
- Reactions in service
- Reactions out of service
- Total ballast weight
- Lorry 44 ft
- Container High Cube 40 ft, and/or Flat Rack 20 ft
- Hoisting
- Trolleying
- 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.